NEW	ELECTRICAL LEGEND
A	610mm x 1220mm FLUORESCENT FIXTURE. LETTER DENOTES TYPE.
^ ////	610mm x 1220mm FLUORESCENT FIXTURE ON EMERGENCY LIGHTING CIRCUIT. LETTER DENOTES TYPE.
₿	DOWNLIGHT FIXTURE, LETTER DENOTES TYPE.
В⊘	DOWNLIGHT FIXTURE ON EMERGENCY LIGHTING CIRCUIT, LETTER DENOTES TYPE.
D	STRIP FIXTURE. LENGTH AS SHOWN. LETTER DENOTES TYPE.
G	WALL MOUNTED FIXTURE ON EMERGENCY LIGHTING CIRCUIT. LETTER DENOTES TYPE.
вв Q	WALL MOUNTED FIXTURE, LETTER DENOTES TYPE.
1-AF4 ■	EXTERIOR LIGHT STANDARD FIXTURE. LETTER DENOTES TYPE.
运	EXIT LIGHT, CEILING MOUNTED, C/W DIRECTIONAL ARROWS AS NOTED.
蔥	EXIT LIGHT, WALL MOUNTED, C/W DIRECTIONAL ARROWS AS NOTED.
os 🗹	DIMMER SWITCH. OS = OCCUPANCY SENSOR.
\$ os	120V OCCUPANCY SENSOR.
S	LOW VOLTAGE SWITCH.
©	LOW VOLTAGE DUAL TECHNOLOGY OCCUPANCY SENSOR, CEILING MOUNTED.
⊕	DAYLIGHT HARVESTING DIMMING PHOTOSENSOR.
1 D	EMERGENCY BATTERY UNIT WITH TWO (2) INTEGRAL HEADS AS SHOWN.
44	EMERGENCY TWIN REMOTE HEADS.
Ē	FIRE ALARM PULL STATION.
•	FIRE ALARM SPEAKER. CEILING MOUNTED TYPE.
•	FIRE ALARM SPEAKER. WALL MOUNTED TYPE.
≫	COMBINATION FIRE ALARM SPEAKER/STROBE. CEILING MOUNTED TYPE.
₩	COMBINATION FIRE ALARM SPEAKER/STROBE. WALL MOUNTED TYPE.
•	SMOKE DETECTOR, CEILING MOUNTED TYPE.
Фп	FIRE ALARM SMOKE DETECTOR, DUCT MOUNTED TYPE.
FACP	FIRE ALARM CONTROL PANEL.
€	PRESSURE SWITCH.
(FLOW SWITCH.
8	SUPERVISED VALVE.
IAM	FIRE ALARM INTELLIGENT ADDRESSABLE MODULE.
EOL	END OF LINE RESISTOR.
IS	FIRE ALARM ISOLATOR MODULE.
R	FIRE ALARM RELAY MODULE.

	NEW	ELECTRICAL LEGEND
	₽₽	15A, 120V, DUPLEX RECEPTACLE. LINE ACROSS INDICATES ELEVATED HEIGHT.
	₩	15A, 120V, DUPLEX RECEPTACLE ON DEDICATED CIRCUIT.
_	&	SPECIAL RECEPTACLE AS NOTED. 20A, 120V, 5—20R DUPLEX RECEPTACLE U.O.N. LINE ACROSS INDICATES ELEVATED HEIGHT.
	#	QUADPLEX, 15A, 120V, TWO (2) DUPLEX RECEPTACLES UNDER COMMON COVER PLATE.
	(15A, 120V, CEILING MOUNTED DUPLEX RECEPTACLE.
	(b)	15A, 120V, CEILING MOUNTED ISOLATED GROUND DUPLEX RECEPTACLE (ORANGE).
	⊗ BF	RECESSED FURNITURE BASEFEED FLOOR BOX.
	•	HARD WIRED CONNECTION TO EQUIPMENT.
	Φ▽	COMBINATION FLUSH FLOOR BOX.
		SURFACE MOUNTED ELECTRICAL PANEL.
	■ 1	TRANSFORMER (RATED AS SHOWN).
	Ťţ.	GROUND BUS BAR.
	×	JUNCTION BOX.
	由	UNIT HEATER, CEILING MOUNTED. RATED AS SHOWN.
		ELECTRIC BASEBOARD HEATING UNIT. RATED AS SHOWN.
	<u> </u>	ELECTRIC FORCE FLOW HEATING UNIT.
	Φ	LINE VOLTAGE THERMOSTAT.
	HP	MOTOR CONNECTION.
	\$ ^M	MOTOR RATED SWITCH.
	\$ ^K	KEY SWITCH.
	\$ TS	TIME SWITCH.
	\$ sc	SPEED CONTROL.
	ď	DISCONNECT SWITCH.
	U	MANUAL STARTER.
		MAGNETIC STARTER. (C DENOTES COMBINATION STARTER).
	TC	TIME CLOCK.
	DMS	DIGITAL MONITORING SYSTEM.
	(M)	UTILITY METER.
		U/G RACEWAY FOR POWER SERVICES.
•		

ELECTRICAL	NEW	ELECTRICAL
LEGEND		LEGEND
15A, 120V, DUPLEX RECEPTACLE. LINE ACROSS INDICATES ELEVATED HEIGHT.	▼-	COMBINATION TELEPHONE/DATA OUTLET. LINE ACROSS INDICATES ELEVATED HEIGHT.
15A, 120V, DUPLEX RECEPTACLE ON DEDICATED CIRCUIT.	₩	COMBINATION TELEPHONE/DATA OUTLET. CEILING MOUNTED TYPE.
SPECIAL RECEPTACLE AS NOTED. 20A, 120V, 5–20R DUPLEX RECEPTACLE U.O.N. LINE ACROSS INDICATES ELEVATED HEIGHT.	AVO	AUDIO/VIDEO 1—GANG BOX RECESSED WALL OUTLET. (CONDUIT/BACK BOX ONLY, DEVICES AND WIRING BY OTHERS)
QUADPLEX, 15A, 120V, TWO (2) DUPLEX RECEPTACLES UNDER COMMON COVER PLATE.	ACM	2-GANG RECESSED A/V CONTROLLER. (CONDUIT/BACK BOX ONLY, DEVICES AND WIRING BY OTHERS)
15A, 120V, CEILING MOUNTED DUPLEX RECEPTACLE.	(EMPTY CONDUIT.
15A, 120V, CEILING MOUNTED ISOLATED GROUND DUPLEX RECEPTACLE (ORANGE).	<u> </u>	CABLE TRAY.
RECESSED FURNITURE BASEFEED FLOOR BOX.		U/G RACEWAY FOR COMMUNICATION SERVICES.
HARD WIRED CONNECTION TO EQUIPMENT.	MDH	MAGNETIC DOOR HOLDER.
COMBINATION FLUSH FLOOR BOX.	CA	CARD ACCESS (CONDUIT/BACK BOX ONLY, DEVICES AND WIRING BY OTHERS).
SURFACE MOUNTED ELECTRICAL PANEL.	IC	INTERCOM (CONDUIT/BACK BOX ONLY, DEVICES AND WIRING BY OTHERS).
TRANSFORMER (RATED AS SHOWN).	DC	DOOR CONTACT (CONDUIT/BACK BOX ONLY, DEVICES AND WIRING BY OTHERS).
GROUND BUS BAR.	ES	ELECTRIC STRIKE (CONDUIT/BACK BOX ONLY, DEVICES AND WIRING BY OTHERS).
JUNCTION BOX.	PT	POWER TRANSFER HINGE (CONDUIT/BACK BOX ONLY, DEVICES AND WIRING BY OTHERS).
UNIT HEATER, CEILING MOUNTED. RATED AS SHOWN.	REX	REQUEST TO EXIT (CONDUIT/BACK BOX ONLY, DEVICES AND WIRING BY OTHERS).
ELECTRIC BASEBOARD HEATING UNIT. RATED AS SHOWN.	LS	LOOP SENSOR (CONDUIT/BACK BOX ONLY, DEVICES AND WIRING BY OTHERS).
ELECTRIC FORCE FLOW HEATING UNIT.	EVC	ELECTRICAL VEHICLE CHARGING STATION.
LINE VOLTAGE THERMOSTAT.	[EVC]	FUTURE ELECTRICAL VEHICLE CHARGING STATION. (CONDUIT/ROUGH IN ONLY).
MOTOR CONNECTION.	BIX	BIX BOARD. (SHOWN FOR REFERENCE ONLY).
MOTOR RATED SWITCH.	PS	REGULATED POWER SUPPLY.
KEY SWITCH.	TR	STEP-DOWN TRANSFORMER.
TIME SWITCH.	(vc)	AV CAMERA, CEILING MOUNTED TYPE. (SHOWN FOR REFERENCE ONLY, BY AV CONTRACTOR).
SPEED CONTROL.	<u>am</u>	AV MICROPHONE, CEILING MOUNTED TYPE. (SHOWN FOR REFERENCE ONLY, BY AV CONTRACTOR).
DISCONNECT SWITCH.	AS	AV SPEAKER, CEILING MOUNTED TYPE. (SHOWN FOR REFERENCE ONLY, BY AV CONTRACTOR).
MANUAL STARTER.	PS	PARTITION SENSOR, CEILING MOUNTED TYPE. (BACK BOX ONLY, DEVICES AND WIRING BY AV CONTRACTOR).
MAGNETIC STARTER. (C DENOTES COMBINATION STARTER).	\Diamond	LAVATORY/EMERGENCY STATION, BUTTON TYPE. 1-GANG BACKBOX.
TIME CLOCK.	Φ	LIGHT AND SOUNDER.
DIGITAL MONITORING SYSTEM.	•	RED/GREEN LOADING DOCK INDICATOR LIGHT. (CONDUIT, BACK BOX AND WIRING ONLY ONLY, DEVICES BY OTHERS).
UTILITY METER.	•	AMBER DRIVE IN STROBE LIGHT. (CONDUIT, BACK BOX AND WIRING ONLY ONLY, DEVICES BY OTHERS).
U/G RACEWAY FOR POWER SERVICES.	E.	BARRIER-FREE PUSH PLATE. (CONDUIT/BACK BOX ONLY, DEVICES AND WIRING BY OTHERS).
	***	START/STOP/REVERSE BUTTON. (CONDUIT, DEVICE AND WIRING INSTALLED BY ELECTRICAL CONTRACTOR, DEVICES BY OTHERS).
	□	CEILING MOUNTED CAMERA. (CONDUIT/BACK BOX ONLY, DEVICES AND WIRING BY OTHERS).
		CONDUIT OF EDIE

ABBREVIATIONS:

HT – HEIGHT
GFI – GROUND FAULT INTERRUPTER
WP – WEATHER PROOF

CONDUIT SLEEVE.

U.O.N. – UNLESS OTHERWISE NOTED
N.T.S – NOT TO SCALE
N.I.C. – NOT IN CONTRACT

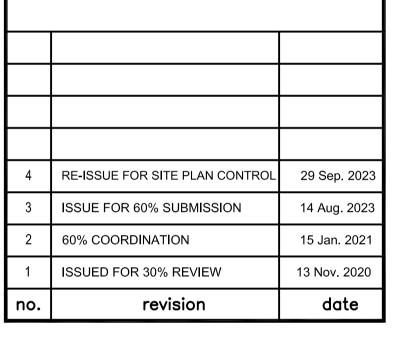
C/W - COMPLETE WITH
U/G - UNDER GROUND
POW - POWER SERVICES COMMS — COMMUNICATION SERVICES

AFF — ABOVE FINISHED FLOOR

C — CEILING MOUNTED



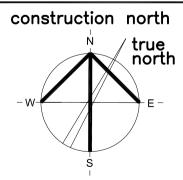




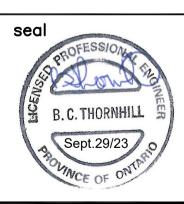


project **PUROLATOR DISTRIBUTION KANATA**

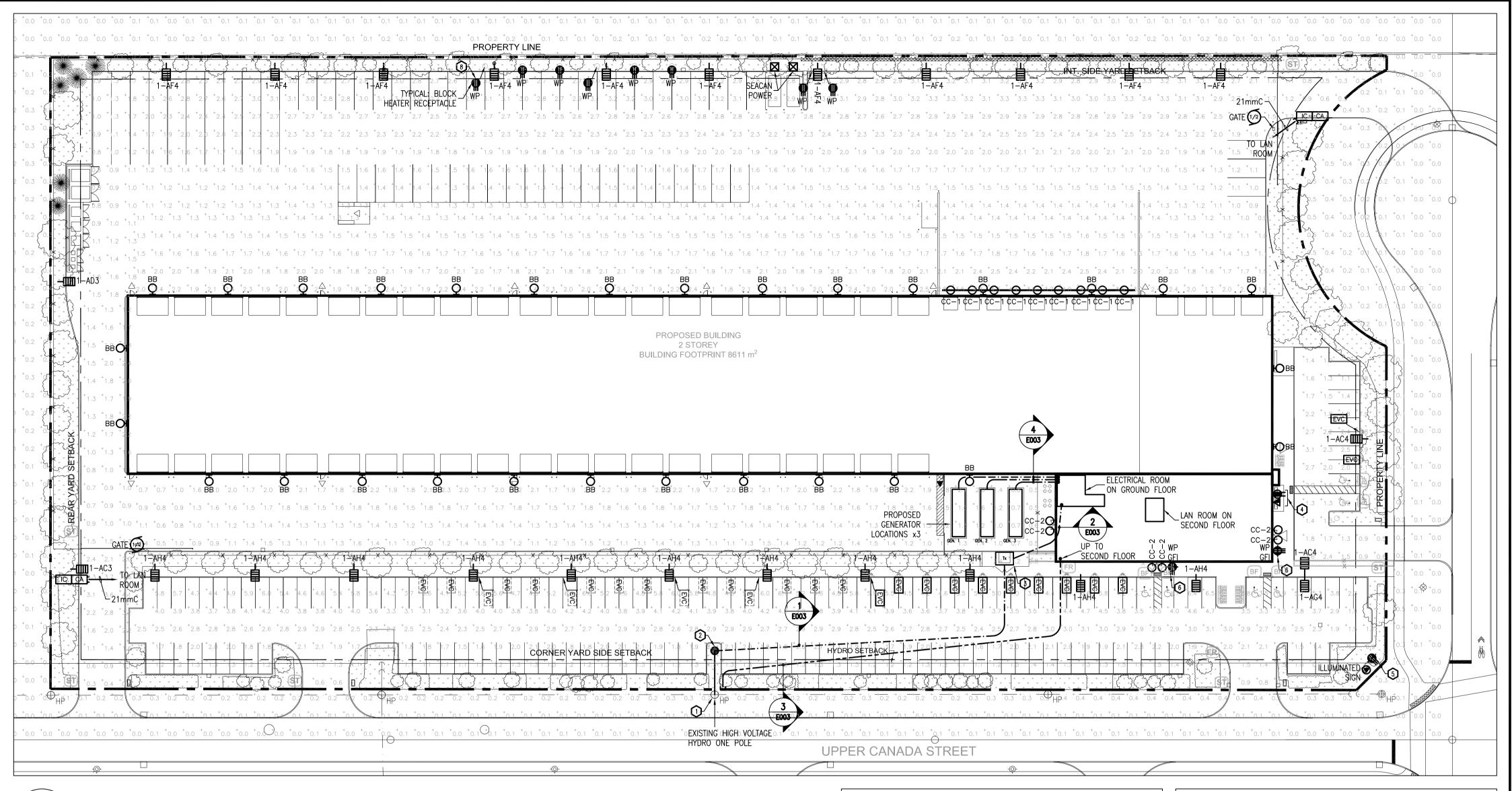
1400 UPPER CANADA STREET, KANATA, ONTARIO construction north seal



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1. 0-10V DENOTES 0-10V DIMMING CONTROL

TYPE	DESCRIPTION	LAMPS	LED DIMMING DRIVER	DIMMING RANGE	VOLT	MOUNTING	REMARKS
-AC4	POLE MOUNTED FIXTURE EQUAL TO SIGNIFY GARDCO 'ECF-S' SERIES	1-73W LED	0-10V	10-100%	347	SQUARE STEEL POLE 6.096m ABOVE GRADE	 9949 LUMENS, 4000K, 70 CRI, TYPE IV DISTRIBUTION. FULL CUT-OFF, BACK LIGHT SHIELDING, C/W 1m MOUNTING ARM. BLACK FINISH, MOUNTING HEIGHT INCLUDES HEIGHT OF BASE.
-AC3	POLE MOUNTED FIXTURE EQUAL TO SIGNIFY GARDCO 'ECF-S' SERIES	1-56W LED	0-10V	10-100%	347	SQUARE STEEL POLE 6.096m ABOVE GRADE	 7426 LUMENS, 4000K, 70 CRI, TYPE III DISTRIBUTION. FULL CUT-OFF, C/W 1m MOUNTING ARM. BLACK FINISH, MOUNTING HEIGHT INCLUDES HEIGHT OF BASE.
-AD3	POLE MOUNTED FIXTURE EQUAL TO SIGNIFY GARDCO 'ECF—S' SERIES	1-56W LED	0-10V	10-100%	347	SQUARE STEEL POLE 10.5m ABOVE GRADE	- SAME AS TYPE 1-AC3, BUT MOUNTED AT 10.5m.
1-AF4	POLE MOUNTED FIXTURE EQUAL TO SIGNIFY GARDCO 'ECF—S' SERIES	1-178W LED	0-10V	10-100%	347	SQUARE STEEL POLE 10.5m ABOVE GRADE	 24405 LUMENS, 4000K, 70 CRI, TYPE IV DISTRIBUTION. FULL CUT-OFF, BACK LIGHT SHIELDING, C/W 1m MOUNTING ARM BLACK FINISH, MOUNTING HEIGHT INCLUDES HEIGHT OF BASE.
I-AG4	POLE MOUNTED FIXTURE EQUAL TO SIGNIFY GARDCO 'ECF-S' SERIES	1-159W LED	0-10V	10-100%	347	SQUARE STEEL POLE 6.096m ABOVE GRADE	 20880 LUMENS, 4000K, 70 CRI, TYPE IV DISTRIBUTION. FULL CUT-OFF, BACK LIGHT SHIELDING. C/W 1m MOUNTING ARM. BLACK FINISH, MOUNTING HEIGHT INCLUDES HEIGHT OF BASE.
I-AH4	POLE MOUNTED FIXTURE EQUAL TO SIGNIFY GARDCO 'ECF—S' SERIES	1-159W LED	0-10V	10-100%	347	SQUARE STEEL POLE 6.096m ABOVE GRADE	- SAME AS TYPE 1-AG4, BUT WITHOUT BACK LIGHT SHIELDING.
BB	BUILDING MOUNTED FIXTURE EQUAL TO SIGNIFY GARDCO '121' SERIES	55W LED	0-10V	10-100%	347	SURFACE WALL MOUNTED 6.25m AFF U.O.N.	 5476 LUMENS, 4000K, 70 CRI, TYPE IV DISTRIBUTION. FULL CUT-OFF, BLACK FINISH. FACTORY INSTALLED INFRA RED OCCUPANCY SENSOR
CC-1	102mm ROUND DOWNLIGHT FIXTURE EQUAL TO SIGNIFY LIGHTOLIER C4RA SERIES.	6W LED	0-10V	10-100%	347	RECESSED CANOPY 5.13m AFF U.O.N.	- 500 LUMENS, 4000K, 90 CRI, SPECULAR FINISH WHITE FLANGE, MEDIUM BEAM.
CC-2	102mm ROUND DOWNLIGHT FIXTURE EQUAL TO SIGNIFY LIGHTOLIER C4RA SERIES.	6W LED	0-10V	10-100%	347	RECESSED CANOPY 2.7m AFF U.O.N.	- SAME AS TYPE, CC-1 BUT MOUNTED AT 2.7m AFF.

2. PROVIDE HAND-HELD WIRELESS CONFIGURATION REMOTE FOR SUCCESSFUL IMPLEMENTATION OF PROGRAMMING, A MINIMUM OF TWO (2) HAND-HELD REMOTES ARE REQUIRED.

GENERAL NOTES

- 1. ROUTING OF THE INCOMING BURIED SERVICES IS A PROPOSED DIAGRAMMATIC ROUTING. COORDINATE WITH CIVIL DRAWINGS, LANDSCAPE DRAWINGS AND HYDRO ONE ON SITE PRIOR TO COMMENCING WORK TO FINALIZE ROUTING.
- 2. THE UTILITY CONTRACTOR SHALL MAKE ARRANGEMENTS FOR A SITE MEETING WITH THE GENERAL CONTRACTOR, HYDRO ONE AND THE ELECTRICAL CONTRACTOR PRIOR TO INSTALLATION OF BUILDING POWER SUPPLY INFRASTRUCTURE. THE PURPOSE OF THE MEETING IS TO COORDINATE THE WORK, REVIEW THE RESPONSIBILITIES OF HYDRO ONE THE GENERAL CONTRACTOR, THE UTILITY CONTRACTOR AND THE ELECTRICAL CONTRACTOR TO ENSURE THAT THE INSTALLATION OF THE TRANSFORMER AND CABLE DUCTS ADHERE TO HYDRO ONE SPECIFICATIONS AND ESA REQUIREMENTS.
- 3. SITE CONDUITS FOR LIGHTING AND RECEPTACLES ARE NOT SHOWN. UTILITY AND ELECTRICAL CONTRACTORS ARE TO PROVIDE LAYOUT AND COORDINATE.
- 4. PROVIDE MINIMUM #8 AWG CONDUCTOR SIZE FOR SITE LIGHTING. ALL
- 5. SIZE RECEPTACLE CONDUCTORS FOR VOLTAGE DROP AT 80% CIRCUIT LOADING AND PROVIDE A MINIMUM WIRE SIZE OF #6 AWG.

LIGHTING CONDUITS SHALL BE MINIMUM 53mm RIGID PVC.

- 6. PROVIDE A PRIMARY GROUND GRID BURIED BENEATH THE EXTERIOR OPEN PARKING AREAS OR GROUND LOOP AROUND PERIMETER OF BUILDING AND SITE DEPENDING ON LOCAL SOILS RESISTIVITY AND THE RESULTS OF THE GROUND POTENTIAL RISE (GPR) STUDY. REFER TO SPECIFICATIONS SECTION 26 05 27.
- 7. COORDINATE MOUNTING HEIGHTS OF BUILDING MOUNTED LIGHT FIXTURES WITH ARCHITECTURAL ELEVATION DETAILS.
- 8. PROVIDE ELECTRIC VEHICLE CHARGING STATIONS WHERE SHOWN C/W ALL COMPONENTS FOR A COMPLETE WORKING SYSTEM. REFER TO SPECIFICATIONS. PROVIDE 1-53mmC FOR POWER AND 1-53mmC FOR COMMUNICATIONS FROM BASE ELECTRICAL ROOM TO EACH CHARGING STATION.

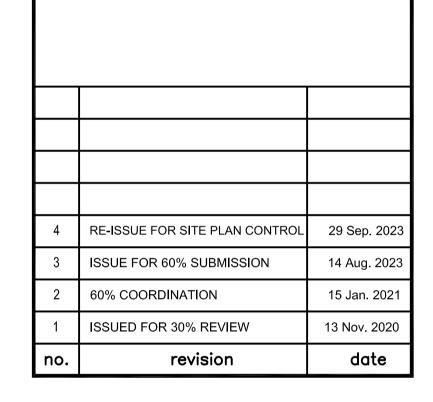
DRAWING NOTES

- PROVIDE OVERHEAD SERVICE CABLES FROM HYDRO ONE POLE TO CUSTOMER OWNED POLE ON PROPERTY AS SHOWN. ALLOW FOR AN ADDITIONAL SUFFICIENT AMOUNT OF CABLES COILED FOR UTILITY CONNECTIONS. HYDRO ONE TO MAKE FINAL CONNECTIONS AND PROVIDE TERMINATIONS AT HYDRO
- PROVIDE 16.8m (55'-0") CLASS L CONCRETE POLE USI#HA-550-L-1-PG AND LOAD BREAK 3 POLE GANG OPERATED SWITCH. POLE TO BE BURIED MINIMUM 2.59m (8'-6") IN THE GROUND WITH ENGINEERED BASE TO SUIT EQUIPMENT WEIGHT. PROVIDE USI W SERIES ENTRY BOXES AND RUN LOAD WIRING INSIDE POLE. TRANSITION FROM OVERHEAD SERVICES TO LOAD BREAK SWITCH AND DIP BACK DOWN TO UNDERGROUND SERVICE AT THIS LOCATION. PROVIDE GROUNDING AND CABLE GUARDS AS PER SPECIFICATIONS AND AS PER OESC REQUIREMENTS.
- 3 PROVIDE NEW CUSTOMER OWNED TRANSFORMER C/W 2108mm x 2235mm USI-E-13PS PRECAST BASE. PROVIDE PRIMARY GROUNDING AS PER OESC BULLETIN 36-10-22 FOR TAMPER RESISTANT EQUIPMENT. COORDINATE WORK WITH HYDRO ONE AND INSPECTION AUTHORITY. PROVIDE PROTECTIVE BOLLARDS AROUND TRANSFORMER EQUAL TO USI E-90 SERIES.
- PROVIDE RECEPTACLE AND DATA OUTLET WITHIN EXTERIOR PARCEL LOCKER. CONDUITS TO RUN UNDERGROUND FROM ELECTRICAL ROOM AND LAN ROOM AND COME UP THROUGH CONCRETE PAD BELOW LOCKER.
- 5 PROVIDE RECEPTACLE ON ILLUMINATED SIGN FOR SEASONAL LIGHTS.
- 6 PROVIDE RECEPTACLE NEXT TO CANOPY FOR SEASONAL LIGHTS.
- 7 NOT USED.
- (8) TYPICAL: BLOCK HEATER RECEPTACLES SHALL HAVE IPLC#M210TM INTELLIGENT PARKING LOT CONTROLLER INSTALLED. RECEPTACLES SHALL BE INSTALLED C/W HEAVY DUTY CAST ALUMINUM WEATHERPROOF WHILE IN USE COVERS. FURNISH OWNER WITH IPLC DATA-MATE SOFTWARE.

Statistics									
Description	Symbol	Avg		Max		Min		Max/Min	Avg/Min
Compound North	+	1.8	fc	4.3	fc	0.9	fc	4.8:1	2.0:1
Compound South	+	1.5	fc	2.4	fc	0.5	fc	4.8:1	3.0:1
East Parking Lot	+	1.7	fc	3.1	fc	0.6	fc	6.2:1	3.4:1
South Parking Lot	+	2.9	fc	6.6	fc	0.6	fc	11.0:1	4.8:1
Trailer Parking	+	2.0	fc	3.4	fc	0.1	fc	34.0:1	20.0:1
West Drive Aisle	+	1.7	fc	4.6	fc	0.3	fc	15.3:1	5.7:1
Off Property	1 +	0.1	fc	0.5	fc	0.0	fc	N/A	N/A









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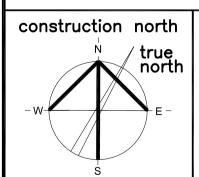
1785 Woodward Drive

Ottawa, ON K2C 0P9

www.mckeeottawa.ca

CANADA Tel.:(613) 723-9585 Fax.:(613) 723-9584

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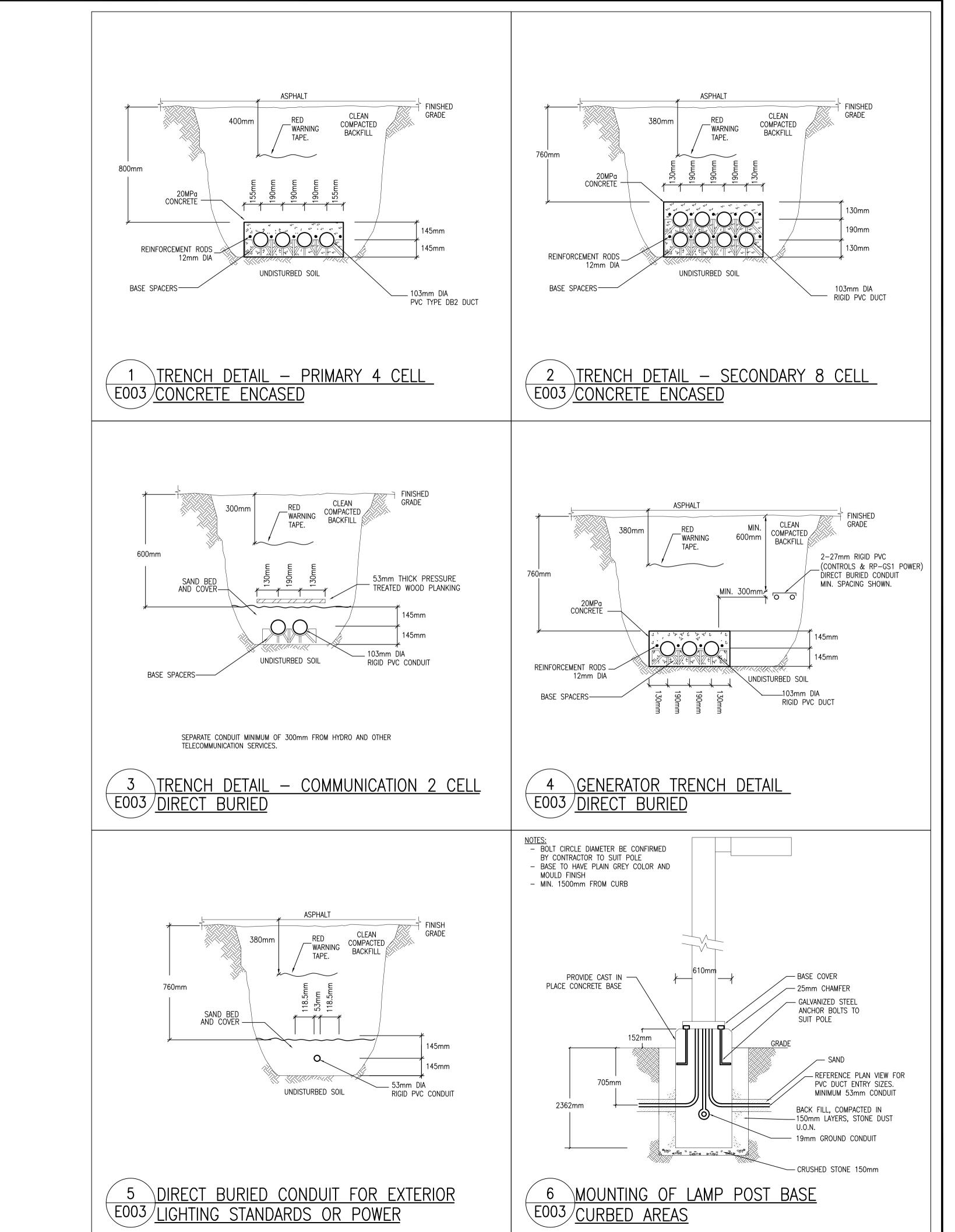


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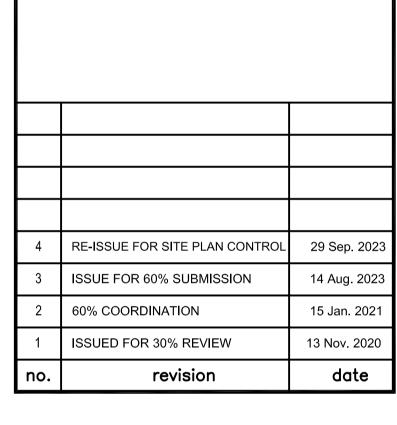
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date Jan. 2020	checked by			
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PLAN NO.: 18260







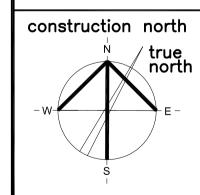




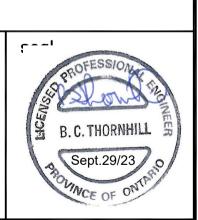
R.J. McKEE
ENGINEERING LTD.
1785 Woodward Drive
Ottawa, ON K2C 0P9

CANADA Tel.:(613) 723-9585 Fax.:(613) 723-9584 www.mckeeottawa.ca

1400 UPPER CANADA STREET, KANATA, ONTARIO



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date Jan. 2020	checked by B.T.					
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