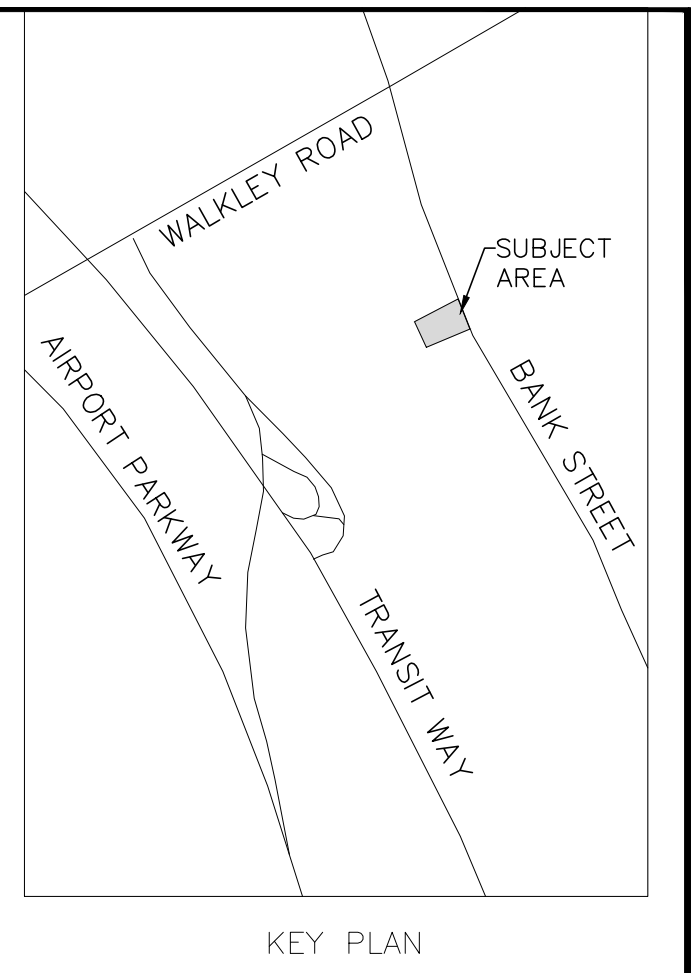
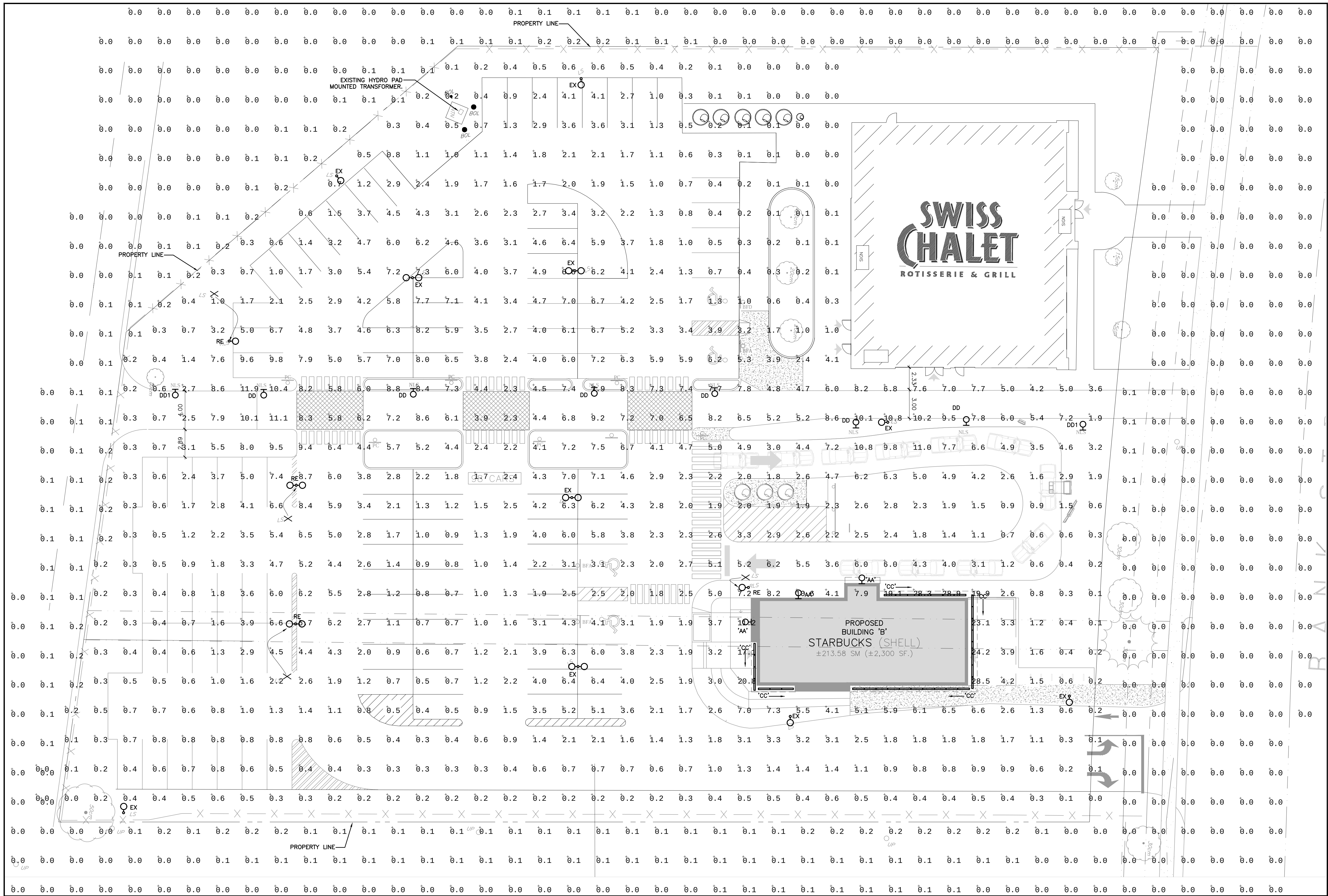




1 SITE PLAN
SPA SCALE: 1 :200

Luminaire Schedule								
Scene: Street light								
Symbol	Qty	Label	Arrangement	Total Lamp Lumens	LLF	Description	Tag	Lum. Watts Lum. Lumens
	7	EH14-FM-150PSMH	SINGLE	12500	0.850	EH14-FM-150PSMH	EX (EXISTING)	185 7337
	6	EH14-FM-150PSMH-2H	BACK-BACK	12500	0.850	EH14-FM-150PSMH	EX (EXISTING)	185 7337
	3	XTOR3B-W	SINGLE	N.A.	0.900	XTOR3B-W	AA	25.5 2710
	32	VIA5-AR02-LED-80-375-35-4FT	SINGLE	N.A.	0.900	VIA5-AR02-LED-80-375-35-4FT	CC	11.13 1499
	2	2MB-E	SINGLE	5588	0.900	For use with Series E Edge, Edge High Output	DD1	66 5588
	6	5S-E	SINGLE	12806	0.900	For use with Series E Edge, Edge High Output	DD	132.4 12806
	1	EH14-1-150PSMH_1	SINGLE	12500	0.850	EH14-1-150PSMH	EX (EXISTING)	185 8800

Calculation Summary								
Scene: Street light								
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min	
Beyond Property Line	Illuminance	Fc	0.03	0.2	0.0	N.A.	N.A.	
Site Plan Overall	Illuminance	Fc	3.11	28.9	0.0	N.A.	N.A.	

NOTES:
ALL LIGHTING FIXTURES ARE FULLY CUT OFF

NO	BY	DESCRIPTION	DATE
3	Q.V.	REISSUED AS PER CITY COMMENTS	12.JUN.2019
2	Q.V.	REVISED PER CITY COMMENTS	26.APR.2019
1	Q.V.	ISSUED FOR SPA	23.NOV.2018

REVISIONS			

CONTRACTOR SHALL CHECK AND VERIFY
ALL DIMENSIONS ON SITE
DO NOT SCALE DRAWINGS

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PROJECT PROPOSED REDEVELOPMENT AT
1910 BANK STREET
STARBUCKS

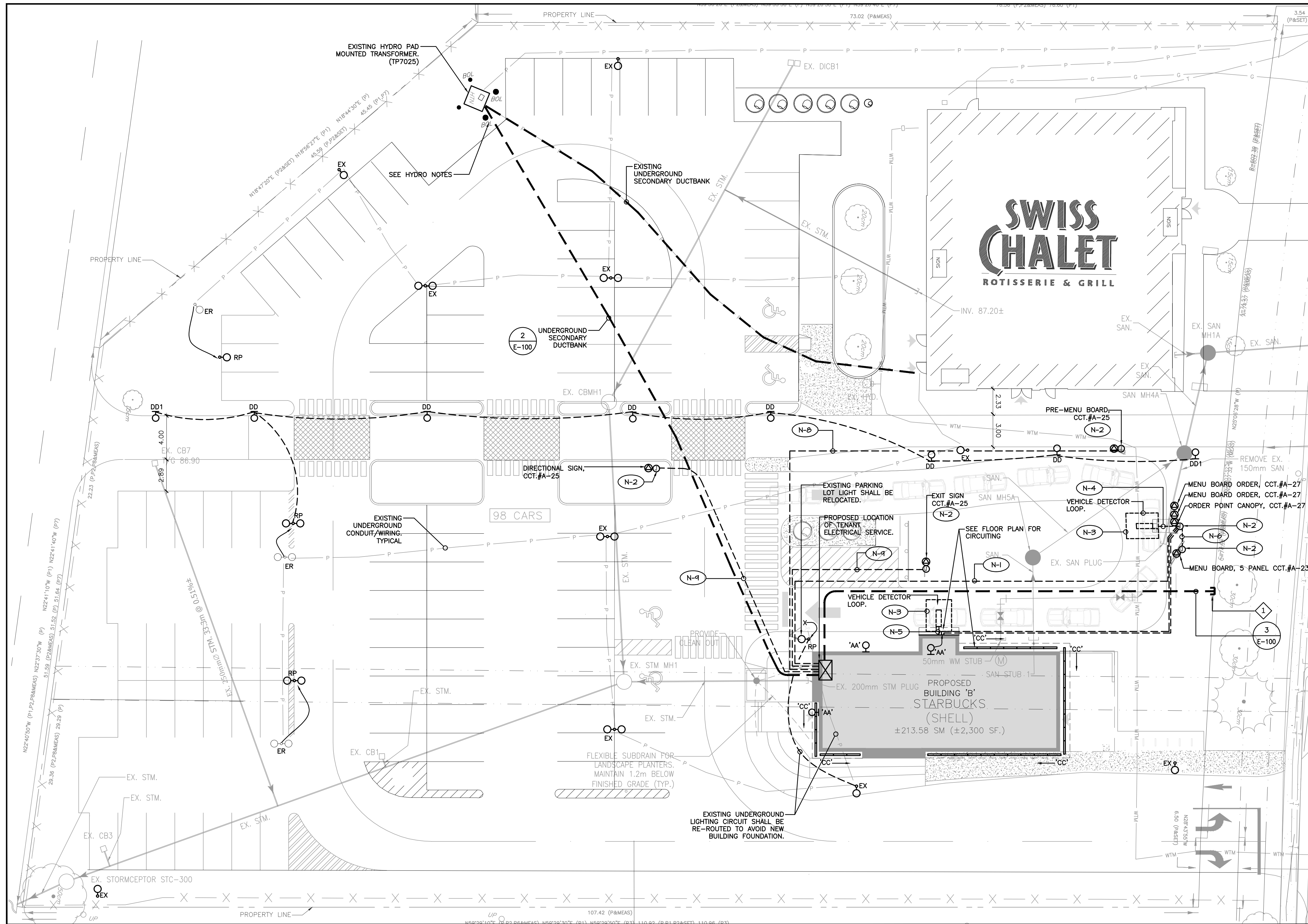
1910 BANK STREET OTTAWA, ON

DRAWING TITLE

**ELECTRICAL
SITE PLAN LIGHTING
CALCULATION**

DESIGNED BY	B.B.	COMM. NO.	18-085-014
CHECKED	Q.V./B.B.	DRAWING NO.	
SCALE	1 : 200		
DATE	OCTOBER 2018		

ESPA



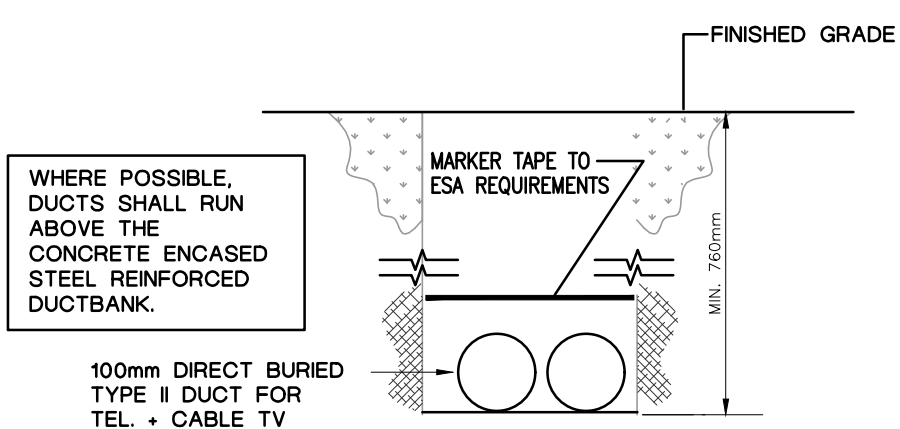
1 SITE PLAN
E-100 SCALE: 1 : 200

SITE PLAN NOTE #

- (N-1) PROVIDE 2" RIGID PVC U/G CONDUIT C/W PULL STRING FROM ELECTRICAL SERVICE LOCATION TO DRIVE-THRU DIGITAL ORDER SCREEN CONTROL BOX. CONTRACTOR TO PROVIDE FEEDERS. EXACT ROUTING TO BE DETERMINED ON SITE.
- (N-2) PROVIDE AND INSTALL NEW JUNCTION BOX WITH CIRCUIT 120V, 1PH, 20A AND NEW FEEDERS (2) #10 AWG AND (1) #12 AWG GND IN CONDUIT AS INDICATED.
- (N-3) NEW CAR DETECTION LOOP, MODEL HME VDL 100, TO BE CONFIRMED WITH STARBUCKS. COORDINATE ALL DETAILS ON SITE.
- (N-4) PROVIDE 3/4" RIGID PVC U/G CONDUIT C/W PULL STRING FROM VEHICLE DETECTOR LOOP TO DIGITAL ORDER SCREEN CONTROL BOX. CONTRACTOR TO PROVIDE FEEDERS. EXACT ROUTING TO BE DETERMINED ON SITE.
- (N-5) PROVIDE 3/4" RIGID PVC U/G CONDUIT C/W PULL STRING FROM VEHICLE DETECTOR LOOP TO DRIVE-THRU POS WINDOW STUB UP. CONTRACTOR TO PROVIDE FEEDERS. EXACT ROUTING TO BE DETERMINED ON SITE.
- (N-6) PROVIDE 1" RIGID PVC U/G CONDUIT C/W PULL STRING FROM ELECTRICAL SERVICE LOCATION TO DRIVE-THRU MENU BOARD. EXACT ROUTING TO BE DETERMINED ON SITE.
- (N-7) PROVIDE (2) 1" RIGID PVC U/G CONDUIT C/W PULL STRING FROM DIGITAL ORDER SCREEN CONTROL BOX TO DRIVE-THRU POS WINDOW STUB UP. CONTRACTOR TO PROVIDE FEEDERS. EXACT ROUTING TO BE DETERMINED ON SITE.
- (N-8) PROVIDE 1" RIGID PVC U/G CONDUIT C/W PULL STRING FROM ELECTRICAL SERVICE LOCATION TO DRIVE-THRU PRE-MENU BOARD. EXACT ROUTING TO BE DETERMINED ON SITE.
- (N-9) PROVIDE 1" RIGID PVC U/G CONDUIT C/W PULL STRING FROM SIGNAGE TO ELECTRICAL SERVICE LOCATION. CONTRACTOR TO PROVIDE FEEDERS, EXACT ROUTING TO BE DETERMINED ON SITE.

DRAWING LIST

DRAWING No.	DESCRIPTION	SCALE
ESPA	ELECTRICAL SITE PLAN LIGHTING CALCULATION	1:200
E100	ELECTRICAL SITE PLAN LAYOUT	1:200

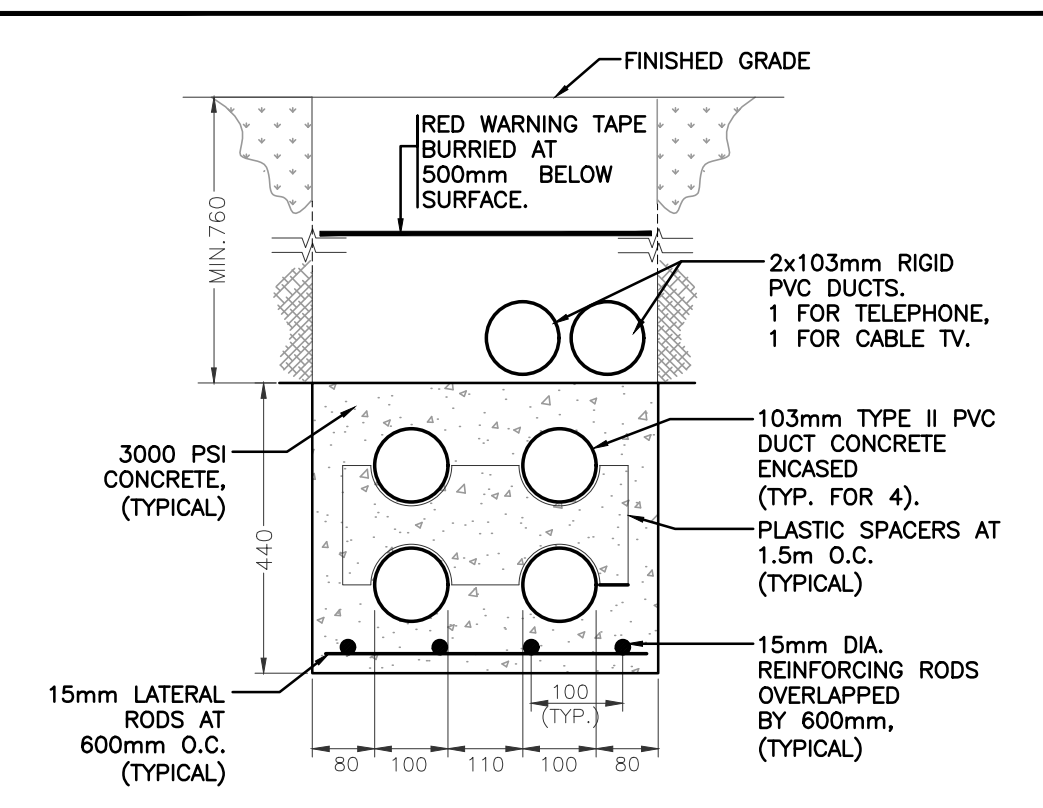


3 DIRECT BURIED CONDUITS DETAIL
E-100 SCALE: N.T.S.

LIGHTING FIXTURE SCHEDULE

TYPE	DESCRIPTION
'AA'	EXTERIOR LIGHTING FIXTURE, SURFACE WALL MOUNTED, FLAT LENS, FULLY CUT OFF, DARK SKY, 120V, 25.5W LED, AND 2710 LUMENS, SUITABLE FOR OUTDOOR.
'CC'	COOPER LIGHTING CAT.# LUMARK XTOR3B-W SERIES.
'DD'	JOYO LIGHTING CAT.# LE8832-XX-88MM-RE-ND-WET-GASKETTED.
'DD1'	CONTACT LIGHTING GURU, GLEN BOCINI AT: 416-275-86-91 OR AT 647-725-3275.
'F1'	LED PATHWAY LIGHT WITH 12FT. POLE, SINGLE HEAD LAMP, 66W, 7804 LUMEN, 4000K, TYPE V DISTRIBUTION, COLOR BY ARCHITECT. VOLTAGE TO MATCH EXISTING VOLTAGE/CONTROL. POLE SHALL BE 12FT HIGH.
	CREE LIGHTING CAT.# ARE-EDR-55-R5-12-E-UH-350-40.
	LED PATHWAY LIGHT WITH 12FT. POLE, SINGLE HEAD LAMP, 66W, 5588 LUMEN, 4000K, TYPE II DISTRIBUTION, COLOR BY ARCHITECT. VOLTAGE TO MATCH EXISTING VOLTAGE/CONTROL. POLE SHALL BE 12FT HIGH.
	CREE LIGHTING CAT.# ARE-EDR-2M-R5-12-E-UH-350-40.
	4FT LONG INDUSTRIAL LED T8 LAMPS, WIRE GUARD, 2-25 T8 LED LAMP, BALLAST TO SUIT T8 LED LAMPS. 120V AND ALL REQUIRED ACCESSORIES. WIRE GUARD
	LITHONIA LIGHTING CAT.# GENERAL PURPOSE CHANNELS C SERIES.

- NOTES:
- 1 PROVIDE 2-4" UNDERGROUND DIRECT BURIED FOR TELEPHONE SERVICE. COORDINATE WITH LOCAL BELL REPRESENTATIVE AND TERMINATE CONDUITS AT PROPERTY LINE FOR LATER EXTENSION BY BELL. BELL CONTACT MR. PHIL RICHARDS. TEL# 613-742-1815



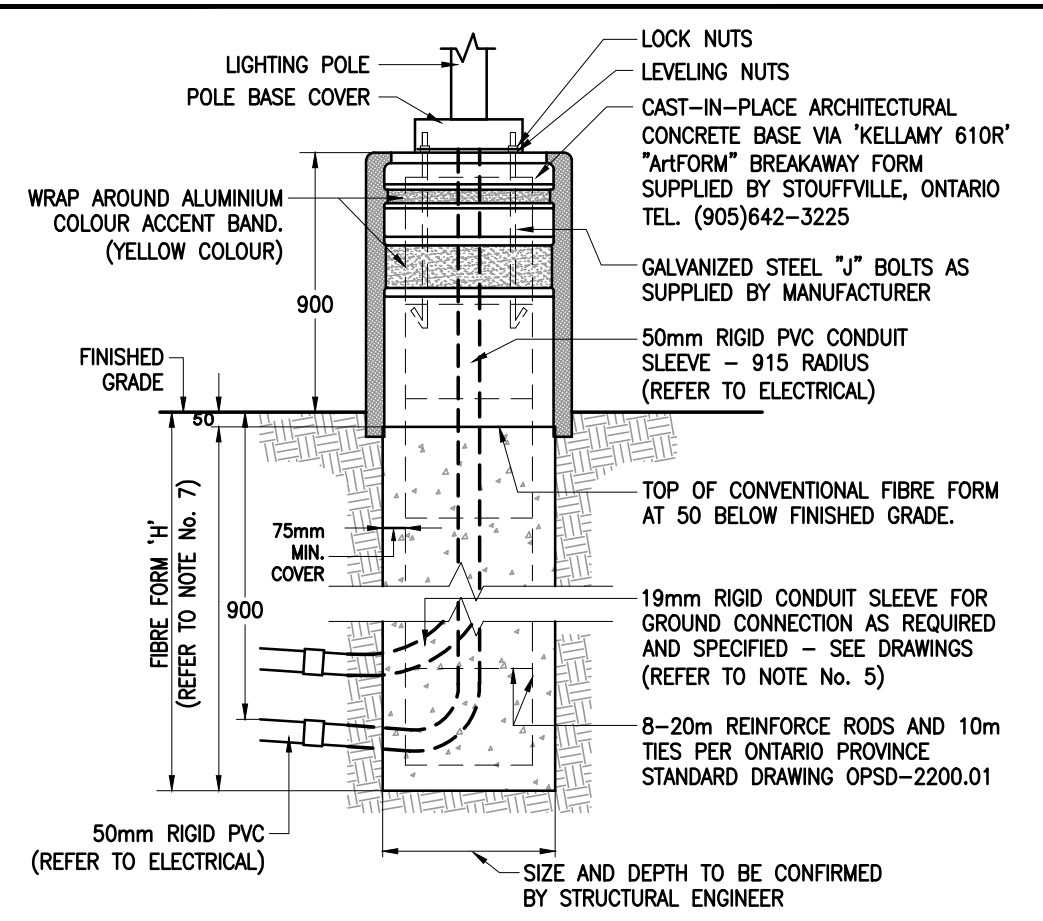
2 SECONDARY DUCTBANK DETAIL
E-100 SCALE: N.T.S.

HYDRO NOTES:

PRIOR TO COMMENCEMENT OF CONSTRUCTIONS ELECTRICAL CONTRACTOR SHALL CONTACT JEFF CASS AT HYDRO OTTAWA, TEL. 613-880-2277. CONTACT MR. CASS 2 MONTHS PRIOR TO THE START OF THE PROJECT. THIS CONTRACTOR SHALL EXCAVATE AT FIRST 1.5M AT THE TRANSFORMER LOCATION AND STUB OUT A 4 INCH DUCT. CONTRACTOR WILL NOT ALLOW TO EXCAVATE WITHIN GROUNDING GRID AT TRANSFORMER LOCATION.

NOTES RE. ELECTRICAL SERVICE:

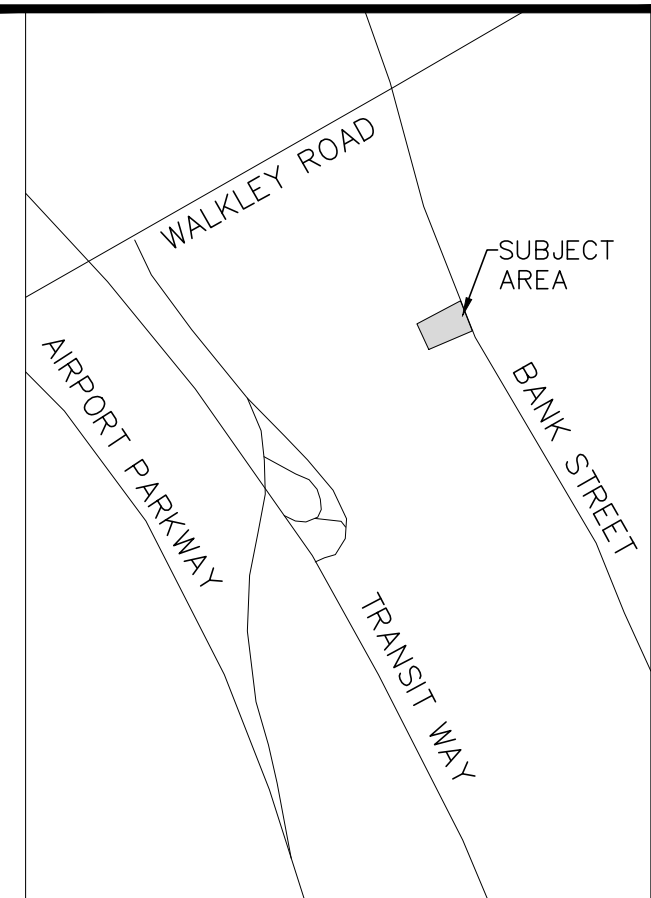
- HYDROOTTAWA WILL BE RESPONSIBLE FOR THE FOLLOWING WORKS:
 - 1 SUPPLY AND INSTALLATION OF PRIMARY CABLES INCLUDING CONNECTIONS AT TRANSFORMER (PRIMARY AND SECONDARY SIDES).
 - 2 SUPPLY AND INSTALLATION OF THE TRANSFORMER.
 - 3 SUPPLY AND INSTALLATION OF HYDRO METER.
 - 4 SUPPLY OF PT'S AND OT'S.
 - 5 SUPPLY AND INSTALLATION OF PRIMARY PROTECTIVE EQUIPMENT (HYDRO POLE'S SWITCH, FUSES AND ARRESTERS).
 - 6 PREPARATION OF EASEMENT DOCUMENTS FOR EASEMENT IF REQUIRED.
- OWNER'S CONTRACTOR (DIV. 16) SHALL BE RESPONSIBLE FOR FOLLOWING WORKS:
 - 1 SUPPLY AND INSTALLATION OF PRIMARY DUCT BANK, TRANSFORMER PAD, GROUNDING, PROTECTIVE BOLLARDS AS PER POWER STREAM'S DETAILS. ALL WORKS TO COMPLY WITH AND BE INSPECTED BY LOCAL HYDRO.
 - 2 COORDINATE QUANTITY AND EXACT LOCATION OF PROTECTION BOLLARDS AROUND THE TRANSFORMER WITH HYDRO.
 - 3 SUPPLY AND INSTALLATION OF SECONDARY DUCT BANK TO ELECTRICAL ROOM. WORK SHALL BE INSPECTED BY ESA.
 - 4 SUPPLY AND INSTALLATION OF SECONDARY CABLES INCLUDING CONNECTION AT MAIN SERVICE PANEL. PROVIDE 6m CABLES SLACK AT TRANSFORMER END. PROVIDE COMPRESSION TYPE LUGS (NEMA 2 HOLES) FOR SECONDARY CABLES. CONNECTIONS TO TRANSFORMER WILL BE BY LOCAL HYDRO.
 - 5 SUPPLY AND INSTALLATION OF METER SODOM OR CABINET TO SUIT HYDRO'S REQUIREMENTS.
 - 6 INSTALLATION OF CT'S AND PT'S FOR HYDRO METERING PURPOSES.
 - 7 GROUNDING IN ELECTRICAL ROOMS AS PER SPECIFICATIONS. CONNECT GROUNDING SYSTEM IN ELECTRICAL ROOM TO TRANSFORMER PAD USING 2 #3/0 BARE COPPER.
 - 8 UPON COMPLETION OF PROJECT, ELECTRICAL CONTRACTOR SHALL HIRE A SURVEYOR TO PROVIDE AS-BUILT OF THE WORK ON SITE.
- ALLOW IN CONTRACT TO SHUTDOWN EXISTING TRANSFORMER FOR TIE-IN NEW SERVICE. COORDINATE WITH THE OWNER AND TENANT FOR WRITTEN APPROVAL PRIOR TO COMMENCE ANY EXCAVATION. PROVIDE BACKUP GENERATOR FOR EXISTING SWISSCHALET TENANT AT FULL LOAD CAPACITY (300KVA), DURING POWER SHUTDOWN. MINIMIZE SHUTDOWN AS MUCH AS POSSIBLE.



- NOTE:
- CONCRETE BASES FOR LUMINAIRES TO BE SUPPLIED AND INSTALLED BY THIS ELECTRICAL CONTRACTOR.

POLE LENGTH (m)	BASE BURIAL DEPTH (m)	REIN. ROD LENGTH (m)
3.0	1.50	1.35
5.6	2.15	2.00
7.0	2.15	2.00
7.5	2.15	2.00
8.7	2.45	2.30
9.0	2.45	2.30
10.5	2.60	2.45
12.0	2.75	2.60
13.6	2.90	2.75
15.1	3.05	2.90

4 TYPICAL CONCRETE BASE FOR LUMINAIRE
E-100 SCALE: N.T.S.



KEY PLAN

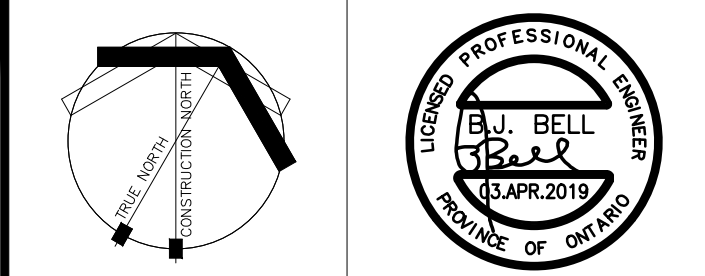
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2	Q.V.	REVISED PER CITY COMMENTS	26.APR.2019
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NO.	BY	DESCRIPTION	DATE
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REVISIONS

CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS ON SITE. DO NOT SCALE DRAWINGS.

h HAMMERSCHLAG & JOFFE INC.
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E: dwg@hamjoff.com



PROJECT PROPOSED REDEVELOPMENT AT
1910 BANK STREET
STARBUCKS
1910 BANK STREET OTTAWA, ON

ELECTRICAL SITE PLAN - LAYOUT

DESIGNED BY	B.B.	COMM. NO.	18-085-014
CHECKED	Q.V./B.B.	DRAWING NO.	E100
SCALE	AS NOTED		
DATE	OCTOBER 2018		