

TYPICAL PRECAST CONCRETE POLE (CLASSIC) - DIRECT BURIED



TYPICAL POST TOP MOUNTED LIGHT FIXTURE



TYPICAL POST TOP MOUNTED LIGHT FIXTURE

LEGEND	
THIS LEGEND REPRESENTS THE SYMBOLS COMMONLY USED. NOT ALL SYMBOLS MAY APPEAR ON THE DRAWINGS. SHOULD A SYMBOL BE FOUND ON THE DRAWING AND NOT APPEARING ON THE LEGEND, THE CONTRACTOR SHALL SUBMIT A QUESTION TO HAVE THE SYMBOL CLARIFIED IN AN ADDENDUM PRIOR TO SUBMITTING A BID.	
ABBREVIATIONS	
AE	APPROVED EQUAL
AFF	ABOVE FINISHED FLOOR
CB	CIRCUIT BREAKER
ER	EXISTING TO BE RELOCATED
EX	EXISTING TO REMAIN
JB	JUNCTION BOX
REL	RELOCATED ITEM IN NEW LOCATION
REM	EXISTING TO BE REMOVED IN ITS ENTIRETY
UNO	UNLESS NOTED OTHERWISE
LIGHTING FIXTURES	
	SINGLE POLE MOUNTED LIGHT FIXTURE
	TWIN POLE MOUNTED LIGHT FIXTURES TYPES AS PER DRAWINGS
	TRIPLE POLE MOUNTED LIGHT FIXTURE TYPES AND ORIENTATION AS PER DRAWINGS
	QUAD POLE MOUNTED LIGHT FIXTURES REFER TO DRAWINGS FOR TYPES
	POST TOP MOUNTED AREA LIGHT FIXTURES. LETTER DENOTES TYPE.
	WALL OR COLUMN MOUNTED LIGHTING FIXTURES. LETTER DENOTES TYPE.
B-1-2	LIGHTING CIRCUITING NOTE: B-PANELBOARD I.D., 1-BRANCH CIRCUIT, 2-LOCAL (SWITCH) CIRCUIT.
POWER LAYOUT	
	DISCONNECT SWITCH (DS)
	120V HARDWIRE CONNECTION
	208V, 1Ø HARDWIRE CONNECTION
	208V, 3Ø HARDWIRE CONNECTION
	600V, 3Ø HARDWIRE CONNECTION
	JUNCTION BOX

SITE STATISTICS - ENTIRE SITE					
AVERAGE	MINIMUM	MAXIMUM	MAX/AVG	AVG/MIN	MAX/MIN
0.51fc	0.0c	4.5fc	8.82	N/A	N/A

PARKING STATISTICS - ENTIRE PARKING AREA					
AVERAGE	MINIMUM	MAXIMUM	MAX/AVG	AVG/MIN	MAX/MIN
1.51fc	0.3fc	4.0fc	2.65	5.03	13.33

PARKING STATISTICS - CENTRAL PARKING AREA					
AVERAGE	MINIMUM	MAXIMUM	MAX/AVG	AVG/MIN	MAX/MIN
1.58fc	0.4fc	3.8fc	2.41	3.95	9.50

PARKING STATISTICS - PARKING IN FRONT OF BLOCKS 'A' - 'C'					
AVERAGE	MINIMUM	MAXIMUM	MAX/AVG	AVG/MIN	MAX/MIN
1.7fc	0.6fc	3.6fc	2.12	2.83	6.00

PARKING STATISTICS - PARKING IN FRONT OF BLOCK 'D'					
AVERAGE	MINIMUM	MAXIMUM	MAX/AVG	AVG/MIN	MAX/MIN
2.29fc	1.0fc	4.0fc	1.75	2.29	4.00

PARKING STATISTICS - PARKING IN FRONT OF BLOCK 'E'					
AVERAGE	MINIMUM	MAXIMUM	MAX/AVG	AVG/MIN	MAX/MIN
2.22fc	0.9fc	3.6fc	1.62	2.47	4.00

PARKING STATISTICS - PARKING IN FRONT OF BLOCK 'F'					
AVERAGE	MINIMUM	MAXIMUM	MAX/AVG	AVG/MIN	MAX/MIN
2.0fc	0.4fc	3.8fc	1.90	5.00	9.50

THE PHOTOMETRIC DATA USED AS INPUT FOR THESE CALCULATIONS IS BASED ON ESTABLISHED IES PROCEDURES AND PUBLISHED FIXTURE RATINGS. FIELD PERFORMANCE WILL DEPEND ON ACTUAL LAMP, BALLAST, ELECTRICAL AND SITE CHARACTERISTICS.

SITE LIGHTING FIXTURE SCHEDULE	
1.	THE LIGHTING FIXTURES, BALLASTS AND LAMPS FOR THIS PROJECT HAVE BEEN SPECIFIED TO ENSURE THAT SPECIFIC AESTHETIC AND PERFORMANCE REQUIREMENTS WILL BE SATISFIED.
2.	THE SPECIFIED LIGHTING FIXTURES ARE ICA APPROVED DARK-SKY FRIENDLY FIXTURES AND CONSISTENT WITH LED GOALS & GREEN GLOBES CRITERIA FOR LIGHT POLLUTION REDUCTION. DIRECT GLARE WILL NOT BE OBSERVABLE (OUTSIDE THE ORIGINATING PROPERTY LIMITS) AT AN ANGLE GREATER THAN 85° FROM NADIR OF THE VERTICAL AXIS OF THE LIGHT SOURCE.
3.	ALL ALTERNATE FIXTURES TO THE PROPOSED FIXTURES SHALL HAVE IES FILES FOR FIXTURES FROM A REPUTABLE LAB WITH IES LAB CERTIFICATION. SHOULD A PROPOSED FIXTURE PERFORMANCE FAIL TO MEET THE MINIMUM REQUIREMENTS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ANY ADDITIONAL EQUIPMENT TO BRING THE LIGHTING LEVELS UP TO THE REQUIRED VALUES.
4.	INSTALLATION OF LIGHT FIXTURES SHALL BE ACCORDING TO MANUFACTURERS RECOMMENDATION AND ACCORDING TO CODE REQUIREMENTS.
5.	POLES LISTED BELOW ARE BASED ON STRESSCRETE DECORATIVE DIRECT BURIED POLES (THE TRADITIONAL - NON-FLUTED) FOR EXAMPLE PURPOSES. POLES SHALL BE SUBMITTED FOR ENGINEERS REVIEW C/W ENGINEERS STAMP. ALL POLES SHALL BE MOUNTED ON CONCRETE BASES AS NOTED IN SCHEDULE BELOW.

TYPE	DESCRIPTION	LAMP/WATTAGE	VOLTAGE
PT-T2-25	SINGLE, POST TOP MOUNTED, FULL CUT-OFF, LED AREA LIGHT, TYPE II OPTICS, CONSTRUCTED OF HINGED DIE-CAST ALUMINUM BASE HOUSING WITH HINGED DIE-CAST ALUMINUM TOP WITH CUPOLA COVER. PRECISE OPTICS FOR EFFICIENT LIGHT OUTPUT. LED DRIVER MOUNTED TO DIE-CAST ALUMINUM BACK HOUSING SUITABLE FOR -40° C TO 40° C ENVIRONMENTS. B2-U1-G1 (B.U.G. RATING), 3000K, COLOUR OF FIXTURE TO BE SELECTED BY OWNER. FIXTURE TO BE SUPPLIED C/W FIXTURE MOUNTED PHOTOCELL. MOUNT FIXTURE ON DIRECT BURIED DECORATIVE CONCRETE POLE 12" TALL FOR A MOUNTING HEIGHT OF 12' AFG (5.5m) FOR EXAMPLE STRESSCRETE CLASSIC CAT. No.: KCH12 OR EQUAL	2,300 NOMINAL 25W INPUT 3000K	TBC (120V)
PT-T2-40	SINGLE, POST TOP MOUNTED, FULL CUT-OFF, LED AREA LIGHT, TYPE II OPTICS, CONSTRUCTED OF HINGED DIE-CAST ALUMINUM BASE HOUSING WITH HINGED DIE-CAST ALUMINUM TOP WITH CUPOLA COVER. PRECISE OPTICS FOR EFFICIENT LIGHT OUTPUT. LED DRIVER MOUNTED TO DIE-CAST ALUMINUM BACK HOUSING SUITABLE FOR -40° C TO 40° C ENVIRONMENTS. B2-U1-G1 (B.U.G. RATING), 3000K, COLOUR OF FIXTURE TO BE SELECTED BY OWNER. FIXTURE TO BE SUPPLIED C/W FIXTURE MOUNTED PHOTOCELL. MOUNT FIXTURE ON DIRECT BURIED DECORATIVE CONCRETE POLE 18" TALL FOR A MOUNTING HEIGHT OF 18' AFG (5.5m) FOR EXAMPLE STRESSCRETE CLASSIC CAT. No.: KCH18 OR EQUAL	4,300 NOMINAL 40W INPUT 3000K	TBC (120V)
PT-T3-60	SINGLE, POST TOP MOUNTED, FULL CUT-OFF, LED AREA LIGHT, TYPE III DISTRIBUTION PATTERN OPTICS, CONSTRUCTED OF HINGED DIE-CAST ALUMINUM BASE HOUSING WITH HINGED DIE-CAST ALUMINUM TOP WITH CUPOLA COVER. PRECISE OPTICS FOR EFFICIENT LIGHT OUTPUT. LED DRIVER MOUNTED TO DIE-CAST ALUMINUM BACK HOUSING SUITABLE FOR -40° C TO 40° C ENVIRONMENTS. B2-U1-G2 (B.U.G. RATING), 3000K, COLOUR OF FIXTURE TO BE SELECTED BY OWNER. FIXTURE TO BE SUPPLIED C/W FIXTURE MOUNTED PHOTOCELL. MOUNT FIXTURE ON DIRECT BURIED DECORATIVE CONCRETE POLE 18" TALL FOR A MOUNTING HEIGHT OF 18' AFG (5.5m) FOR EXAMPLE STRESSCRETE CLASSIC CAT. No.: KCH18 OR EQUAL	6,000 NOMINAL 60W INPUT 3000K	TBC (120V)

DRAWING LIST	
ES001	GENERAL NOTES, DRAWING LIST, LEGEND AND FIXTURE SCHEDULE
ES100	ELECTRICAL SITE PLAN LAYOUT - PHOTOMETRIC CALCULATIONS

PT-T4-40	SINGLE, POST TOP MOUNTED, FULL CUT-OFF, LED AREA LIGHT, TYPE IV DISTRIBUTION PATTERN OPTICS, CONSTRUCTED OF HINGED DIE-CAST ALUMINUM BASE HOUSING WITH HINGED DIE-CAST ALUMINUM TOP WITH CUPOLA COVER. PRECISE OPTICS FOR EFFICIENT LIGHT OUTPUT. LED DRIVER MOUNTED TO DIE-CAST ALUMINUM BACK HOUSING SUITABLE FOR -40° C TO 40° C ENVIRONMENTS. B1-U1-G1 (B.U.G. RATING), 3000K, COLOUR OF FIXTURE TO BE SELECTED BY OWNER. FIXTURE TO BE SUPPLIED C/W FIXTURE MOUNTED PHOTOCELL. MOUNT FIXTURE ON DIRECT BURIED DECORATIVE CONCRETE POLE 18" TALL FOR A MOUNTING HEIGHT OF 18' AFG (5.5m) FOR EXAMPLE STRESSCRETE CLASSIC CAT. No.: KCH18 OR EQUAL	4,200 NOMINAL 40W INPUT 3000K	TBC (120V)
PT-T5-75	SINGLE, POST TOP MOUNTED, FULL CUT-OFF, LED AREA LIGHT, TYPE IV OPTICS, CONSTRUCTED OF HINGED DIE-CAST ALUMINUM BASE HOUSING WITH HINGED DIE-CAST ALUMINUM TOP WITH CUPOLA COVER. PRECISE OPTICS FOR EFFICIENT LIGHT OUTPUT. LED DRIVER MOUNTED TO DIE-CAST ALUMINUM BACK HOUSING SUITABLE FOR -40° C TO 40° C ENVIRONMENTS. B2-U1-G1 (B.U.G. RATING), 3000K, COLOUR OF FIXTURE TO BE SELECTED BY OWNER. FIXTURE TO BE SUPPLIED C/W FIXTURE MOUNTED PHOTOCELL. MOUNT FIXTURE ON DIRECT BURIED DECORATIVE CONCRETE POLE 18" TALL FOR A MOUNTING HEIGHT OF 18' AFG (5.5m) FOR EXAMPLE STRESSCRETE CLASSIC CAT. No.: KCH18 OR EQUAL	6,500 NOMINAL 60W INPUT 3000K	TBC (120V)

**FULL CUTOFF PERFORMANCE** - FULL CUTOFF PERFORMANCE MEANS A LUMINAIRE DISTRIBUTION WHERE ZERO CANDLE INTENSITY OCCURS AT AN ANGLE AT OR ABOVE 90° ABOVE NADIR. ADDITIONALLY, THE CANDLE PER 1000 LAMP LUMENS DOES NOT NUMERICALLY EXCEED 10% (100 LUMENS) AT A VERTICAL ANGLE OF 80° ABOVE NADIR. THIS APPLIES TO ALL LATERAL ANGLES AROUND THE LUMINAIRE.

**CUTOFF PERFORMANCE** - CUTOFF PERFORMANCE MEANS A LUMINAIRE DISTRIBUTION WHERE THE CANDLE PER 1000 LAMP LUMENS DOES NOT NUMERICALLY EXCEED 2.5% (25 LUMENS) AT AN ANGLE ABOVE 90° ABOVE NADIR, AND 10% (100 LUMENS) AT A VERTICAL ANGLE 80° ABOVE NADIR. THIS APPLIES TO ALL LATERAL ANGLES AROUND THE LUMINAIRE.



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DATE	NO.	REVISION
2022.06.28	1	ISSUED FOR SPA
2022.10.12	2	RE-ISSUED FOR SPA
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-	-	-

JOB NO.: 22-103  
DRAWN BY: J.R.  
SCALE: AS NOTED  
ISSUE DATE: October 12, 2022

CHEUNG DEVELOPMENT  
80 MAPLE STREET  
80 MAPLE STREET  
WELLINGTON, ON

ELECTRICAL  
GENERAL NOTES,  
LEGENDS AND  
SCHEDULES

ES001



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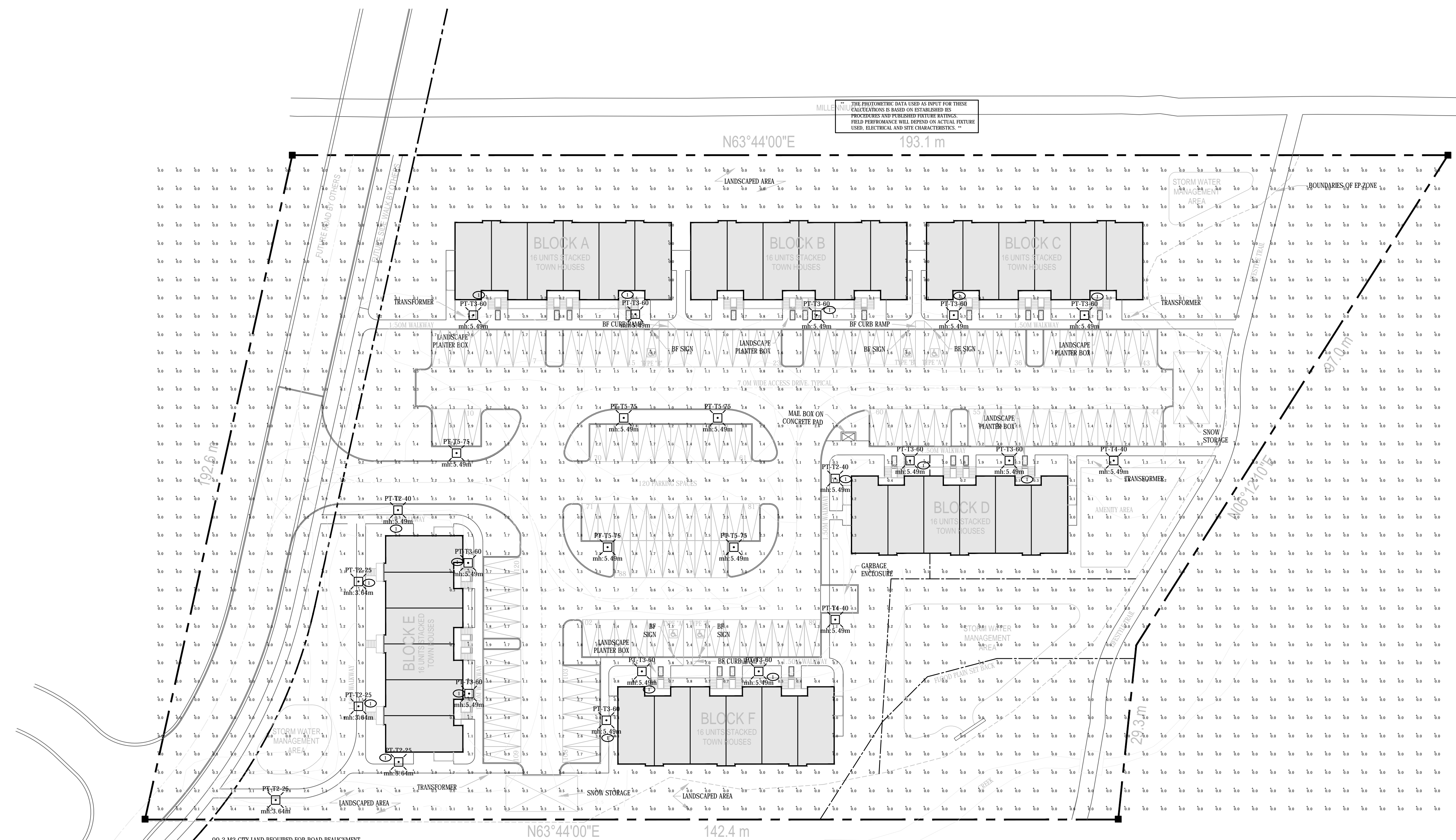
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CHEUNG DEVELOPMENT  
 80 MAPLE STREET  
 80 MAPLE STREET  
 WELLINGTON, ON

ELECTRICAL SITE  
 PLAN - SPA  
 PHOTOMETRIC  
 CALCULATION

**ES100**



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**GENERAL DRAWING NOTES**  
 ① CONTRACTOR TO PROVIDE CUSTOM SHIELD IN LANTERN HOUSING TO PREVENT LIGHT TRESPASS TOWARD RESIDENTIAL UNITS.