

LIGHTIN	G DESIGN TABLE A	
ITEM	DESCRIP	TION
LIGHTING PROGRAM	AGI	32
STREET NAME(S)	PORTSIDI	E ROAD
LAND USE	INDUST	RIAL
ROADWAY CLASSIFICATION	COLLEC	TOR
PEDESTRIAN CONFLICT AREA	MEDIU	JM
LAMP WATTAGE & LIGHT SOURCE	113W LED	(4000K)
LIGHT LOSS FACTOR	0.8	
LUMINAIRE DISTRIBUTION TYPE	TYPE	3
LUMINAIRE BUG RATING	B3-U0-	G3
POLE SPACING (MAX)	45m (ONE	SIDED)
ILLUMINANCE DE	SIGN CRITERIA - ROA	DWAY
ITEM	RECOMMENDED VALUES	ACHIEVED VALUES
ILLUMINATION LEVEL (Eavg) IN LUX	9.0	13.4
UNIFORMITY RATIO (Eavg:Emin)	4.0:1	2.6:1
LUMINANCE DES	SIGN CRITERIA - ROAD	OWAY
ITEM	RECOMMENDED VALUES	ACHIEVED VALUES
LUMINANCE LEVEL (Lavg) IN cd/m <sup>2</sup>	0.6	0.6
UNIFORMITY RATIO (L <sub>avg</sub> /L <sub>min</sub> )	3.5:1	1.8:1
UNIFORMITY RATIO (L <sub>max</sub> /L <sub>min</sub> )	6.0:1	2.8:1
VEILING LUMINANCE RATIO (LV <sub>mav</sub> /L <sub>avg</sub> )	0.4:1	0.2:1
ILLUMINANCE	DESIGN CRITERIA - M	IUP
ITEM	RECOMMENDED VALUES	ACHIEVED VALUES
ILLUMINATION LEVEL (Eavg) IN LUX	5.0	6.2

LIGHTIN	NG DESIGN TABLE B		LIGHT	ING DESIGN TABLE C	
ITEM	DESCRIP	TION	ITEM	DESCRIP	TION
LIGHTING PROGRAM	AGI	32	LIGHTING PROGRAM	AGI	32
STREET NAME(S)	PORTSIDE ROA	D OVERPASS	STREET NAME(S)	PORTSIDE ROA	D EXTENSION
LAND USE	INDUST	RIAL	LAND USE	INDUST	RIAL
ROADWAY CLASSIFICATION	COLLEC	TOR	ROADWAY CLASSIFICATION	COLLEC	TOR
PEDESTRIAN CONFLICT AREA	MEDI	M	PEDESTRIAN CONFLICT AREA	MEDI	JM
LAMP WATTAGE & LIGHT SOURCE	105W LED	(3000K)	LAMP WATTAGE & LIGHT SOURCE	113W LED	(4000K)
LIGHT LOSS FACTOR	0.8		LIGHT LOSS FACTOR	0.8	
LUMINAIRE DISTRIBUTION TYPE	TYPE	: II	LUMINAIRE DISTRIBUTION TYPE	TYPE	E II
LUMINAIRE BUG RATING	B3-U0-	-G3	LUMINAIRE BUG RATING	B3-U0-	-G3
POLE SPACING (MAX)	88m (STAG	GERED)	POLE SPACING (MAX)	57m (ONE	SIDED)
ILLUMINANCE DE	ESIGN CRITERIA - ROA	DWAY	ILLUMINANCE I	DESIGN CRITERIA - ROA	DWAY
ITEM	RECOMMENDED VALUES	ACHIEVED VALUES	ITEM	RECOMMENDED VALUES	ACHIEVED VALUE
ILLUMINATION LEVEL (Eavg) IN LUX	9.0	14.9	ILLUMINATION LEVEL (Eavg) IN LUX	9.0	9.7
UNIFORMITY RATIO (Eavg:Emin)	4.0:1	1.9:1	UNIFORMITY RATIO (Eavg:Emin)	4.0:1	2.9:1
LUMINANCE DE	SIGN CRITERIA - ROAL	OWAY			
ITEM	RECOMMENDED VALUES	ACHIEVED VALUES	7		
LUMINANCE LEVEL (Lavg) IN cd/m <sup>2</sup>	0.6	1.1	7		
UNIFORMITY RATIO (Lavg/Lmin)	3.5:1	1.4:1	7		
UNIFORMITY RATIO (Lmax/Lmin)	6.0:1	2.1:1	]		
VEILING LUMINANCE RATIO (LV <sub>mav</sub> /L <sub>avg</sub> )	0.4:1	0.2:1	]		
ILLUMINANCE DESIG	SN CRITERIA - SIDEWA	LK			
ITEM	RECOMMENDED VALUES	ACHIEVED VALUES	]		
ILLUMINATION LEVEL (Eavg) IN LUX	5.0	9.9	]		
UNIFORMITY RATIO (Eavg:Emin)	5.0:1	2.3:1			

### OVERHEAD POWER LINE CONFLICTS

CONTRACTOR SHALL CONFIRM ON SITE PRIOR TO CONSTRUCTION THAT POLES & EQUIPMENT WILL MEET WorkSafeBC CLEARANCE REQUIREMENTS FOR OVERHEAD PRIMARY AND SECONDARY LINES. CONTRACTOR TO REPORT ANY CONFLICTS OR DISCREPANCIES TO DMD & ASSOCIATES PRIOR TO ORDERING POLES AND INSTALLING CONCRETE BASES.

## CHECK BEFORE YOU DIG

CONTRACTOR SHALL REFER TO MUNICIPAL RECORD / CIVIL DESIGN DRAWINGS FOR ALL OTHER UTILITIES, SERVICE LOCATIONS, AND DETAILS. THE EXACT LOCATION OF THESE UTILITIES SHALL BE DETERMINED ON SITE BY THE CONTRACTOR. CONTRACTOR TO REPORT ANY CONFLICTS OR DISCREPANCIES TO DMD & ASSOCIATES PRIOR TO ORDERING BASES.

FOR CLARITY CONDUITS, JUNCTION BOXES AND STREETLIGHT POLES MAY NOT BE SHOWN AT DESIGN OFFSETS. CONTRACTOR SHALL LOCATE ALL EQUIPMENT BASED ON STATIONS AND/OR OFFSETS AS NOTED AND SHALL NOT RELY ON COORDINATES OBTAINED FROM DMD DIGITAL DRAWINGS. CONTRACTOR TO REPORT ANY CONFLICTS OR DISCREPANCIES TO DMD & ASSOCIATES PRIOR TO ORDERING EQUIPMENT.

TO BE ADJUSTED DURING 100% DESIGN

## LOCATING EQUIPMENT

### CAUTION! EXCAVATION NEAR OVERHEAD UTILITY POLE

ANY UNDERGROUND EXCAVATION WITHIN SOIL FOUNDATION INTERACTION AREA REQUIRES TEMPORARY UTILITY POLE SUPPORT. REFER TO ES55 E3-04 GUIDE FOR CIVIL EXCAVATION NEAR DISTRIBUTION POLES FOR DETAILS. REFER TO BC HYDRO WORK ON WOOD POLES MANUAL (ON SAFEHUB) AND BC HYDRO 2017-1-F POLE HOLDING REQUIREMENTS FOR APPROVED TEMPORARY POLE SUPPORT METHODS. FOR MORE INFORMATION CONTACT workmethods@bchydro.com

<u>LEGEND</u>	
×	PROPOSED DAVIT STREETLIGHT POLE (8.1m- LED LUMINAIRE, WAT C/W SERVICE PANEL & METER ON A CITY OF RICHMOND TYPE P1 C WORKING PAD (1000mm (L) X 100mm (D) X 600mm (W)). (+) INDICAT FOOTING BASE AS PER MINISTRY STANDARD SPEC SP63J-1.1.4
	PROPOSED DAVIT STREETLIGHT POLE (9.0m - LED LUMINAIRE, WAT ON A CITY OF RICHMOND TYPE P1 CONCRETE BASE.
$\bigcirc \bigcirc$	EXISTING DAVIT STREETLIGHT POLE (9.1m C/W LED LUMINAIRE). RE LUMINAIRE AND INSTALL NEW AS PER TABLE A.
JB	PROPOSED PLASTIC JUNCTION BOX (NOVA POLE P28-JB-B00-0I BO) P28-CO-ST-B00-01 GALV. STEEL LID)
$\boxtimes$	EXISTING ELECTRICAL KIOSK
□ ЈВ	EXISTING JUNCTION BOX
/	PROPOSED 2 No. 6 RW90 LTG. AND 1 No. 8 BOND IN 1-35mm RPVC
<i></i> //	PROPOSED 3 No. 6 RW90 LTG. AND 1 No. 8 BOND IN 1-35mm RPVC
<u> </u>	PROPOSED 53mm RPVC STUB OUT (CAP AND MARK LOCATION)
	EXISTING CONDUIT AND CONDUCTORS
A, B, C	LUMINAIRE ON PHASE A, B OR C CONDUCTOR (347/600V)
R, B	LUMINAIRE ON PHASE R OR B CONDUCTOR (120/240V)

# <u>NOTES</u>

1. ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MASTER MUNICIPAL CONSTRUCTION DOCUMENTS AND SPECIFICATIONS, THE CANADIAN ELECTRICAL CODE (UNLESS OTHERWISE NOTED).

2. ALL STREETLIGHTS ARE TO BE 1.5m CLEAR OF ALL DRIVEWAYS.

3. ALL CONDUCTORS SHALL BE RW90 XLPE STRANDED COPPER. COLOUR CODED AS NOTED.

### EXISTING STREET LIGHTING SHALL REMAIN IN OPERATION THROUGHOUT CONSTRUCTION.

No.	DATE	BY	CHK'D	
	2022-09-08	DSM	DSM	ISSUED FOR IDR
А	2022-11-11	DSM	DSM	INDICATIVE DESIGN SUBMISSION



JMINAIRE, WATTAGE AS PER TABLE A) OND TYPE P1 CONCRETE BASE C/W V)). (+) INDICATES TYPE E1 SPREAD SP63J-1.1.4

LUMINAIRE, WATTAGE AS PER TABLE A)

LUMINAIRE). REMOVE EXISTING

28-JB-B00-0I BOX SECTION WITH

347/600V

PERMIT TO PRACTICE

NUMBER: 1000771

NOT FOR CONSTRUCTION

ENGINEERS AND GEOSCIENTISTS BRITISH COLUMBIA

2022-08-09

REVISION McElhanney Ltd Suite 2300 Central City Tower 13450 - 102 Avenue Surrey, BC V3T 5X3 Tel: (604)596-0391 STREET LIGHTING PORTSIDE ROAD TO BLUNDELL ROAD RICHMOND, BC PROJECT No. DWG. No. REVISION

7476b-22-01 of 05 356-135-EL-101

CANCEL PRINTS BEARING PREVIOUS LETTER

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DMD

DMD & Associates

**Electrical Consultants Ltd.** 

DON MCLEAN

DON MCLEAN

DON MCLEAN

CRYSTA ANDREWS

SEPTEMBER 07, 2022

1:500

www.dmdeng.com

DESIGNED

DRAWN

CHECKED

E.O.R.

DATE

SEAL

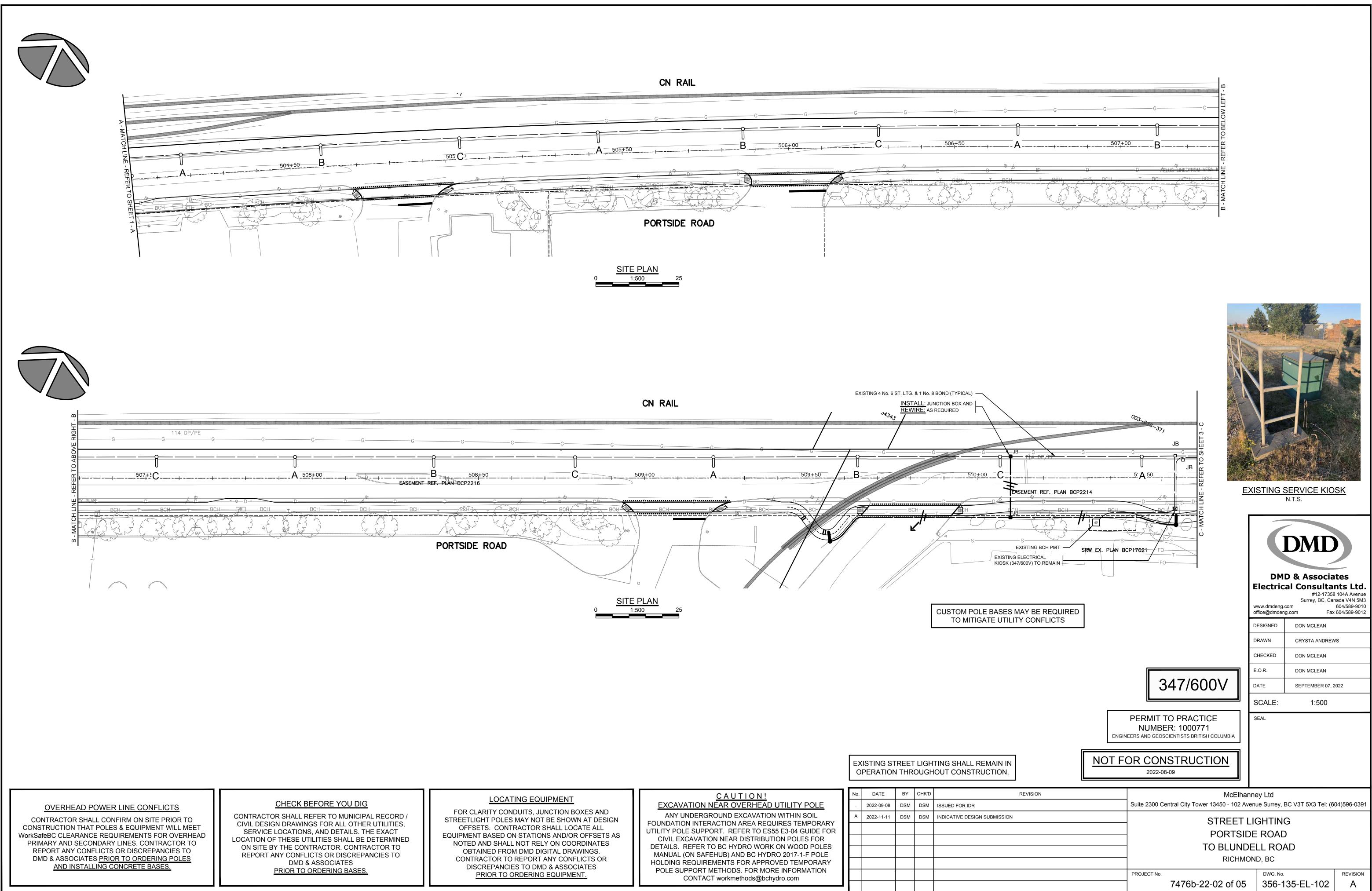
SCALE:

office@dmdeng.com

#12-17358 104A Avenue Surrey, BC, Canada V4N 5M3

604/589-9010

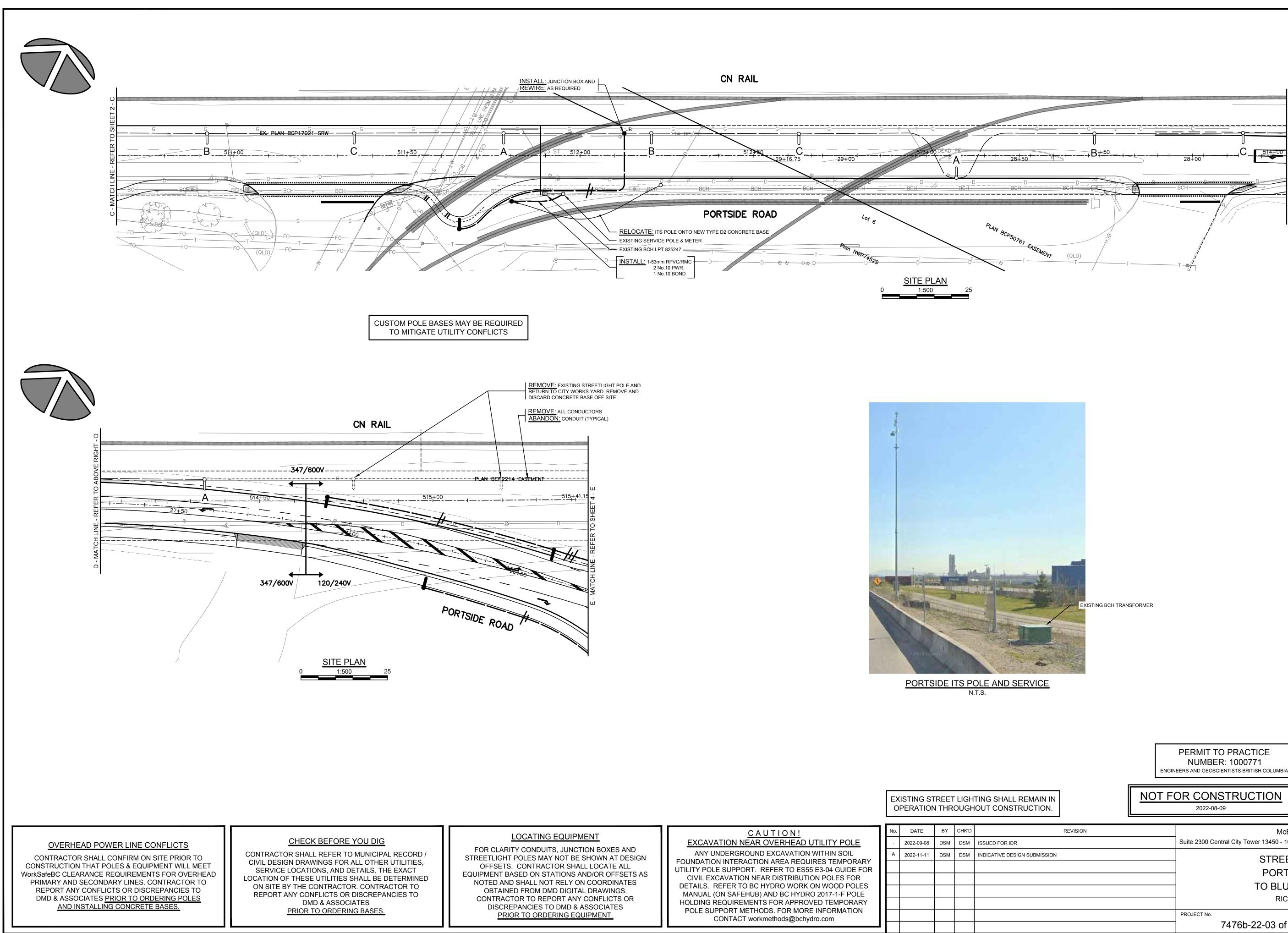
Fax 604/589-9012



						IOUT CONSTRUCTION.
LOCATING EQUIPMENT	<u>C A U T I O N !</u> EXCAVATION NEAR OVERHEAD UTILITY POLE	N	lo. DATE	BY DSM	CHK'D DSM	ISSUED FOR IDR
TY CONDUITS, JUNCTION BOXES AND POLES MAY NOT BE SHOWN AT DESIGN	ANY UNDERGROUND EXCAVATION WITHIN SOIL FOUNDATION INTERACTION AREA REQUIRES TEMPORARY	_,	A 2022-03-08	DSM	DSM	INDICATIVE DESIGN SUBMISSION
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CANCEL PRINTS BEARING PREVIOUS LETTER



EXISTING BCH TRANSFORMER EXISTING BCH TRANSFOR
DRAWN CRYSTA ANDREWS   PORTSIDE ITS POLE AND SERVICE DON MCLEAN
N.T.S.
E.O.R. DON MCLEAN
DATE SEPTEMBER 07, 2022
SCALE: AS NOTED
PERMIT TO PRACTICE NUMBER: 1000771 ENGINEERS AND GEOSCIENTISTS BRITISH COLUMBIA   SEAL     EXISTING STREET LIGHTING SHALL REMAIN IN   NOT FOR CONSTRUCTION
OPERATION THROUGHOUT CONSTRUCTION.
No. DATE BY CHK'D REVISION   McElhanney Ltd
2022-09-08     DSM     DSM     ISSUED FOR IDR     Suite 2300 Central City Tower 13450 - 102 Avenue Surrey, BC V3T 5X3 Tel: (604)596-0391
A 2022-11-11 DSM DSM INDICATIVE DESIGN SUBMISSION STREET LIGHTING
PORTSIDE ROAD
TO BLUNDELL ROAD RICHMOND, BC
PROJECT No.     DWG. No.     REVISION       7476b-22-03 of 05     356-135-EL-103     A
CANCEL PRINTS BEARING PREVIOUS LETTER

