

STREET LIGHTING NOTES

- 1. UNLESS OTHERWISE INDICATED, ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CITY OF COQUITLAM CURRENT SUBDIVISION CONTROL BYLAWS... 2. THE CONTRACTOR SHALL REFER TO COQUITLAM RECORD DRAWINGS... 3. BCOneCall CALL BEFORE YOU DIG... 4. PRIOR TO STREET LIGHT BASE INSTALLATIONS... 5. THE CONTRACTOR SHALL NOTIFY PROVINCIAL AND CITY OF COQUITLAM INSPECTORS... 6. THE CIVIL/ELECTRICAL CONTRACTOR SHALL OBTAIN PERMITS... 7. THE TECHNICAL SAFETY BC (WAS BC SAFETY AUTHORITY) SHALL BE MADE AWARE... 8. ALL STREET LIGHT WIRING SHALL BE DESIGNED AND BUILT IN ACCORDANCE WITH CSA... 9. HYDRO SERVICE DIP CONNECTIONS SHALL BE PER BC HYDRO STANDARDS... 10. MINIMUM DEPTH FOR UNDERGROUND CONDUIT DUCTING SHALL BE 600-MM (MINIMUM) BELOW BOULEVARD AND SIDEWALKS... 11. ALL CONDUITS SHALL BE RIGID P.V.C MANUFACTURED IN ACCORDANCE WITH C.S.A. C22.2 No. 211.2 (NOT DBI)... 12. CONCRETE STREET LIGHT / SERVICE BASES WITH MORE THAN 2 CONDUITS SHALL BE NOTED ON THE PLANS... 13. UNLESS OTHERWISE INDICATED, ALL CONDUCTORS SHALL BE TYPE RW90 (MINIMUM)... 14. NEW STREET LIGHTING DESIGNS SHALL ONLY BE 120/240V... 15. UNLESS OTHERWISE INDICATED: ALL POLES, ARMS, SERVICE BASES, HAND ACCESS COVERS, SECURITY COVERS, AND RE-ENFORCED STEEL BACKING BARS... 16. ALL STREET LIGHT HAND-HOLE COVERS SHALL BE PROVIDED WITH SECURITY COVERS REINFORCED U-SHAPED REINFORCED BACKER BARS AND SECURITY BOLTS... 17. ALL THREADED BOLTS, NOT USED FOR ELECTRICAL CONNECTIONS, SHALL HAVE ANTI-SEIZE COMPOUND APPLIED... 18. PHOTO ELECTRIC CONTROL (PEC) SHALL ONLY BE SOLID-STATE DESIGN... 19. PEC CONDUCTORS SHALL BE #12 RW90, COLOURS: RED, BLACK AND WHITE... 20. LUMINAIRES SHALL BE WIRED WITH #12 RW90 CONDUCTORS... 21. LUMINAIRES ON BLACK CONDUCTOR ARE IDENTIFIED WITH A B DESIGNATION NEXT TO THE LUMINAIRES... 22. LUMINAIRES ON RED CONDUCTOR ARE IDENTIFIED WITH A R DESIGNATION NEXT TO THE LUMINAIRES... 23. EACH LUMINAIRE SHALL BE PROVIDED WITH A TRON HEB-AA FUSE-HOLDER... 24. EACH FUSE HOLDER SHALL BE PROVIDED WITH ONE 10-AMPERE BUSS KTR-TYPE FUSE... 25. ALL LUMINAIRE FIXTURES SHALL BE BONDED WITH A NUMBER 12 RW90 GREEN CONDUCTOR... 26. THE BOND STUD OPENING SHALL BE AT THE REAR OF THE POLE AND SHALL NOT BE ON THE FLANGE OF THE ACCESS HOLE OPENING... 27. THE INTERIOR COLOUR-FINISHED SURFACE SURROUNDING THE BOND STUD SHALL BE GROUND OFF TO THE GALVANIZING OR BARE STEEL... 28. THE BONDING STUD IN EACH POLE SHALL COMPRISE OF ONE 3/8-16 BOLT 1.5-INCHES LONG... 29. ALL POLES SHALL BE BONDED WITH A NO 8 RW90 BONDING CONDUCTOR... 30. ALL LARGE GAUGE, MULTIPLE CONDUCTOR SPLICES, WHICH MAY EXCEED THE LARGER WIRE NUTS... 31. ALL LARGE GAUGE (# 8 OR LARGER) SPLICES AND CONNECTIONS, WITHIN JUNCTION BOXES OR HAND ACCESS OPENINGS... 32. FUSE HOLDERS IN HAND HOLE ACCESS AND JUNCTION BOXES SHALL UTILIZE AN IDEAL INDUSTRIES OR BUCHANAN CONSTRUCTION PRODUCTS... 33. WIRING AND FUSE-HOLDERS IN POLE HAND ACCESS AND/OR JUNCTION BOXES SHALL BE MARKED WITH YELLOW WATER-PROOF WIRE MARKER TAGS... 34. ALL JUNCTION BOXES, IN SOFT BOULEVARD SHALL BE SUPPORTED/PROTECTED WITH A CONCRETE COLLAR... 35. JUNCTION BOXES SHALL BE PROVIDED WITH RPVC SUPPORT BARS TO SUPPORT THE ELECTRICAL CONNECTIONS AND FUSE HOLDERS... 36. JUNCTION BOXES WITH METALLIC LIDS (NEW OR EXISTING) SHALL BE BONDED WITH A NO 8 RW90 BONDING CONDUCTOR... 37. JUNCTION BOXES FOR ELECTRICAL APPLICATIONS (TRAFFIC SIGNALS, STREET LIGHTING, ETC.) - THE LIDS SHOULD BE ETCHED ELEC, JUNCTION BOXES FOR COMMUNICATIONS - THE LIDS SHOULD BE ETCHED COMM, ALL UPPERCASE LETTERS... 38. POLYMER 24 x 36 x 36 PULL BOXES SHALL BE INSTALLED AS SHOWN ON STANDARD DETAIL MMCD DRAWING E2.3 C/W BOLT DOWN 2 PIECE LIDS... 39. BOTTOM OF JUNCTION BOXES SHALL BE OPEN. BOTTOM SECTIONS SHALL BE SUPPORTED WITH CONCRETE BRICKS AND USE CRUSHED GRAVEL TO DRAIN WATER... 40. WIRING CONNECTIONS, SPLICES AND FUSE-HOLDERS IN JUNCTION BOXES SHALL BE KEPT OUT OF WATER... 41. ALL CONDUITS SHALL BE PROVIDED WITH A NYLON PULL LINE. CAPS SHALL HOLD THE NYLON CORD IN PLACE... 42. EMPTY CONDUITS / CONDUITS ONLY (CO) SHALL BE PROVIDED WITH NYLON PULL STRINGS AND KEPT IN PLACE WITH UNGLUED CAPS AT EACH END... 43. WATER OR OTHER OBSTRUCTIONS ARE NOT PERMITTED IN CONDUITS... 44. PER COQUITLAM SUBDIVISION BYLAWS, UNLESS VARIANCE IS ACCEPTED BY THE CITY THE MINIMUM SPACING BETWEEN STREET LIGHTS AND: a. TREES SHALL BE 6-METERS b. KIOSKS SHALL BE 3-METERS c. DRIVEWAYS SHALL BE 2-METERS (EXCLUDING THE FLARE) d. HYDRANTS SHALL BE 3-METERS e. MANHOLES, VALVE BOXES, SERVICE CONNECTIONS SHALL BE 2-METERS f. JUNCTION BOXES SHALL BE 2-METERS 47. STREET LIGHT BASE FLANGES SHALL BE LEVEL ON TWO HORIZONTAL AXIS. 48. STREET LIGHT BOLTS SHALL HAVE COLOUR-CODED NUT CAPS.

- 49. IT SHALL BE THE CONTRACTORS / DEVELOPERS RESPONSIBILITY TO SUBMIT THE ELECTRICAL PERMITS TO THE ASSIGNED COQUITLAM FIELD INSPECTOR... 50. DEVELOPERS ARE REQUIRED TO PAY A FLAT-RATE CHARGE TO CITY OF COQUITLAM FOR NEW BC HYDRO CONNECTION FEES... 51. THE ELECTRICAL CONTRACTOR SHALL PROVIDE THEIR ELECTRICAL PERMIT TO THE CITY OF COQUITLAM... 52. JUNCTION BOXES (IF USED), TOPS SHALL BE LEVEL ON 2 AXIS.

CONCRETE BASE NOTES

- 1. THE CONCRETE BASES SHALL BE PER MMCD 2019 STANDARDS AND PLANS... 2. THE CONCRETE BASE SHALL NOT BE FORMED ONSITE... 3. CONCRETE BASES FOR A SERVICE BASE: a. STREET LIGHTING: 40 AND 60-AMPERE PANELS... b. TRAFFIC SIGNAL: 100-AMPERE PANELS... c. PRIOR TO SERVICE BASE INSTALLATIONS... d. THE CONCRETE BASE SHALL BE INSTALLED TO ENSURE THE CONCRETE BASE IS PROPERLY ALIGNED... e. CITY OF COQUITLAM CIVIL INSPECTOR SHALL ATTEND... 4. THE CIVIL/ELECTRICAL CONTRACTOR SHALL ENSURE STREET LIGHT POLES... 5. CONCRETE BASES WITH MORE THAN 2 CONDUITS SHALL BE NOTED ON THE PLANS... 6. CONCRETE BASES SHALL BE PROVIDED WITH A V-GROOVE TO DISPERSE STANDING WATER... 7. CONCRETE BASE TOPS SHALL BE 7-CM (~2.5-INCHES) ABOVE FINAL GRADE CONCRETE BASES SHALL BE LEVEL ON TWO HORIZONTAL AXIS

SERVICE BASE / ELECTRICAL PANEL / EARTHING ELECTRODE

- 1. UNLESS OTHERWISE INDICATED, ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CITY OF COQUITLAM CURRENT SUBDIVISION CONTROL BYLAWS... 2. UNLESS OTHERWISE INDICATED, THE SERVICE BASE AND ACCESS COVERS ARE TO BE GALVANIZED... 3. THE SERVICE BASE ACCESS DOOR SHALL BE DOWNSTREAM OF TRAFFIC... 4. THE SERVICE BASE SHALL BE MOUNTED ON A PREFORMED CONCRETE BASE: a. THE CONCRETE BASE SHALL NOT BE FORMED ONSITE... b. THE CONCRETE BASE SHALL MEET OR EXCEED MMCD2009 SPECIFICATIONS... c. STREET LIGHTING CONCRETE BASES... d. TRAFFIC SIGNAL CONCRETE BASES... 5. THE LOCKING TAB ON THE SERVICE BASE PEDESTAL... 6. THE SERVICE BASE PEDESTAL SHALL BE PROVIDED WITH TWO 3/8-16 THREADED HOLES... 7. ALL THREADED BOLTS, NOT USED FOR ELECTRICAL CONNECTIONS... 8. THE SERVICE BASE COVER SHALL NOT BE A SNUG FIT... 9. THE SERVICE BASE SHALL BE PROVIDED WITH A BONDING TAB... 10. THE ELECTRICIAN SHALL PROVIDE A No. 8 GAUGE RW90 BOND WITH A RING LUG... 11. ELECTRICAL PANEL WITHIN THE SERVICE BASE SHALL BE: a. FABRICATED FROM STAINLESS STEEL OR ALUMINIUM... b. PROVIDED WITH A MAIN DISCONNECT... c. THE PHOTO-ELECTRIC CONTROL (PEC) CIRCUIT FUSING SHALL PER MMCD... d. THE PEC FUSE-HOLDER AND FUSE SHALL BE MOUNTED ON THE FRONT PANEL... e. THE PEC BYPASS SWITCH SHALL BE A HEAVY-DUTY... f. THE FRONT PANEL PEC FUSE-HOLDER AND THE PEC BYPASS SWITCH SHALL BE PROVIDED WITH LABELS... g. PROVIDED WITH AN SPD (SURGE PROTECTION DEVICE)... h. PANEL SHALL BEAR ELECTRICALLY APPROVED LABELS... i. FOR THE 40A AND 60A ELECTRICAL PANEL... 12. SURGE PROTECTION DEVICE SPECIFICATIONS: a. ELECTRICAL ACCREDITATIONS: CSA, ETL, CULUS, ETC. b. SYSTEM VOLTAGE AND FREQUENCY: 120/240V, 50/60 HERTZ c. MINIMUM DISCHARGE RATING: 20kA d. PROVIDED WITH LED STATUS INDICATORS... e. PREFERRED MANUFACTURERS: MERSEN AND SQUARE-D... 13. THE PEC CONDUCTORS SHALL BE #12 RW90, COLOURS: RED, BLACK AND WHITE... 14. THE CONTRACTOR SHALL ENSURE THE SERVICE BASE IS PROPERLY ORIENTATED... 15. STREET LIGHTS MOUNTED ON A SERVICE BASE SHALL BE WIRED PER MMCD DRAWINGS... 16. GAPS OR OPENINGS BETWEEN THE STREET LIGHT POLE BASE FLANGES... 17. HYDRO SERVICE (DIP) CONNECTIONS SHALL BE PER BC HYDRO STANDARDS... 18. THE ELECTRICAL CONTRACTOR SHALL PRE-TEST THE OPERATION OF THE ELECTRICAL PANEL WITHIN THE SERVICE BASE.

- SWITCH AND PEC FOR DAYTIME / NIGHTTIME SIMULATION... 19. THE EARTHING ELECTRODE SHALL BE SUPPLIED (TYPICALLY A PLATE) AND INSTALLED PER MMCD DRAWING E7.10: a. THE PLATE SHOULD BE IN NATURAL SOIL... b. WIRED WITH A BARE #6 EARTHING CONDUCTOR... c. THE PLATE MINIMUM DEPTH OF 900mm BELOW GRADE... d. ELECTRICAL / CIVIL CONTRACTOR TO PROVIDE PICTURES SHOWING DIMENSIONS...

LUMINAIRE FIXTURE NOTES

- CITY OF COQUITLAM USES MULTIPLE LED LUMINAIRE STYLES... 1. LUMINAIRE FIXTURES SHALL BEAR ELECTRICALLY APPROVED LABELS... 2. UNLESS OTHERWISE NOTED, LOCAL/RESIDENTIAL STREETS SHALL BE LED 3000-DEGREES KELVIN... 3. LUMINAIRES SHALL BE LED AND AS PER THE DESIGN DRAWINGS... 4. MULTI-USE PATHWAY (MUP), SIDEWALKS AND WALKWAY LIGHTING SHALL BE LED... 5. PHOTO ELECTRIC CONTROL (PEC) SHALL ONLY BE SOLID-STATE DESIGN... 6. THE PEC SOCKET SHALL BE PROVIDED WITH 7-CONTACTS... 7. PEC CONDUCTORS SHALL BE #12 RW90... 8. A NOTE SHALL BE PROVIDED TO INDICATE: PEC AIMED IN A NORTHERN DIRECTION... 9. LED LUMINAIRE FIXTURES SHALL BE PROVIDED WITH AN LED WATTAGE/LUMEN LABEL...

FINAL ISSUED FOR TENDER ELECTRICAL DRAWINGS TO BE ISSUED THROUGH AN ADDENDUM

LEGEND

- PROPOSED DAVIT STREETLIGHT POLE (9.0m) (SEE ELEVATION ON SHEET 3)
PROPOSED DAVIT STREETLIGHT POLE (6.6m) (SEE ELEVATION ON SHEET 3)
PROPOSED DOUBLE DAVIT STREETLIGHT POLE (9.0m) (SEE ELEVATION ON SHEET 10)
PROPOSED DOUBLE DAVIT STREETLIGHT POLE (6.6m) (SEE ELEVATION ON SHEET 3)
PROPOSED PATHWAY POLE (SEE ELEVATION ON SHEET 3)
EXISTING DAVIT STREETLIGHT POLE
EXISTING POST TOP POLE
FUTURE DAVIT STREETLIGHT POLE
PROPOSED POLYMER JUNCTION BOX (11"x18"x18", OPEN BOTTOM) C/W LID LABELED 'ELEC' AND STAINLESS STEEL PENTA BOLT
PROPOSED LARGE JUNCTION BOX (24"x36"x36", OPEN BOTTOM) C/W LID LABELED 'COMM' AND STAINLESS STEEL PENTA BOLT
EXISTING JUNCTION BOX
LUMINAIRE ON RED PHASE CONDUCTOR
LUMINAIRE ON BLACK PHASE CONDUCTOR
PROPOSED 3 No.6 RW90 ST. LTG. & 1 No.8 RW90 BOND IN 53mm RPVC
PROPOSED 2 No.6 RW90 ST. LTG. & 1 No.8 RW90 BOND IN 53mm RPVC
EXISTING 3 No.6 RW90 ST. LTG. & 1 No.8 RW90 BOND IN 35mm RPVC
EXISTING 2 No.6 RW90 ST. LTG. & 1 No.8 RW90 BOND IN 35mm RPVC
PROPOSED RPVC STUB OUT FOR FUTURE EXTENSION (CAP & MARK LOCATION)
PROPOSED 53mm RPVC CONDUIT ONLY
PROPOSED COMMUNICATIONS CONDUIT (CONDUIT SIZE AND NUMBER NOTED ON DRAWINGS)
PROPOSED 1.8m X 1.8m SQUARE DETECTOR LOOP
EXISTING BC HYDRO POLE C/W LEASE LIGHT

NOT FOR CONSTRUCTION 2025-01-15

BC CALL BEFORE YOU DIG logo with phone number 1-800-474-6886 and COQ. ASBULT No. EXXXX

Project information table including Benchmark, DMD & Associates logo, Coquitlam Engineering & Public Works logo, Permit to Practice details, and Project description: PIPELINE ROAD GUILDFORD WAY TO DAVID AVENUE STREET LIGHTING.

ROADWAY LIGHTING DESIGN CRITERIA PER: (CITY BYLAW 3558)

ROADWAY (NAME)	PIPELINE ROAD	
LAND USE CLASSIFICATION	RESIDENTIAL	
ROADWAY CLASSIFICATION & WIDTH	ARTERIAL (VARIES)	
PEDESTRIAN ACTIVITY	MEDIUM	
LUMINANCE RECOMMENDED/DELIVERED	0.9 cd/m ²	1.0 cd/m ²
UNIFORMITY RECOMMENDED/DELIVERED (AVG:MIN)	3.0:1	1.6:1
UNIFORMITY RECOMMENDED/DELIVERED (MAX:MIN)	5.0:1	3.5:1
LV RATIO RECOMMENDED/ DELIVERED (V:MAX:AVG)	0.3:1	0.3:1
LIGHT LOSS FACTOR	0.84	
SPACING	AS SHOWN	
EQUIPMENT		
FIXTURE TYPE: LED	WATTAGE: 28/41W	MTG. HEIGHT: 6.6m DIST TYPE: 2ES
IES FILE:	NXT-24S-350mA/525mA-2ES-4000K	MODEL: NXT-24S- SERIES
FIXTURE TYPE: LED	WATTAGE: 60W	MTG. HEIGHT: 6.6m DIST TYPE: 2ES
IES FILE:	NXT-36S-525mA-2ES-4000K	MODEL: NXT-36S- SERIES
FIXTURE TYPE: LED	WATTAGE: 78/100/117/135/158W	MTG. HEIGHT: 9m DIST TYPE: 2ES
IES FILE:	NXT-72M-350mA/450mA/525mA/600mA/700mA-2ES-4000K	MODEL: NXT-72M- SERIES

WALKWAY / BIKE LANES LIGHTING DESIGN CRITERIA PER: (CITY BYLAW 3558)

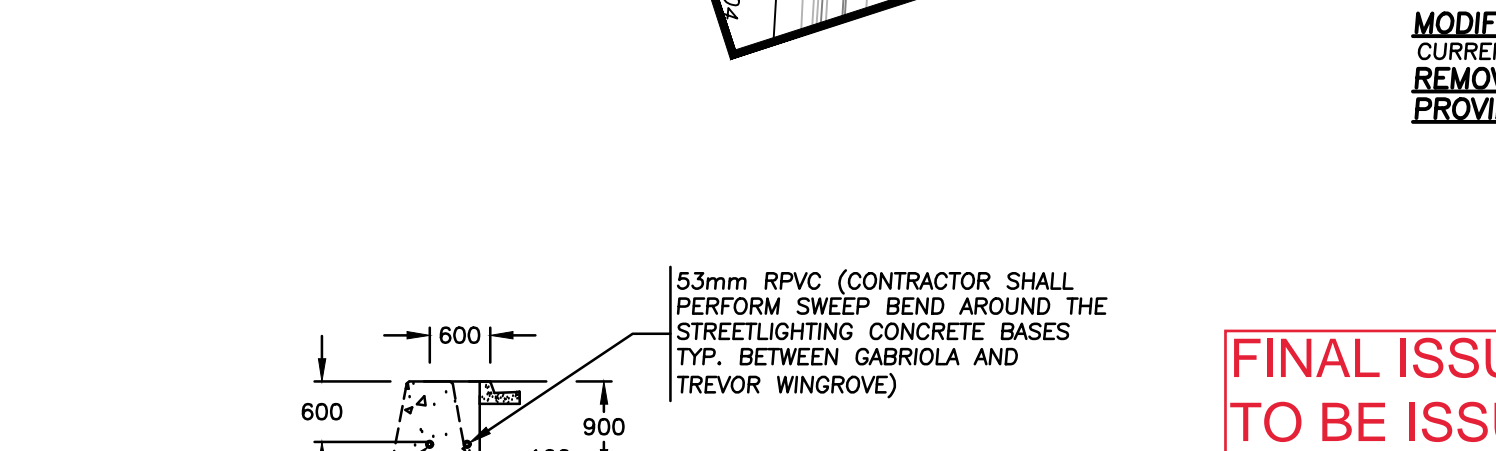
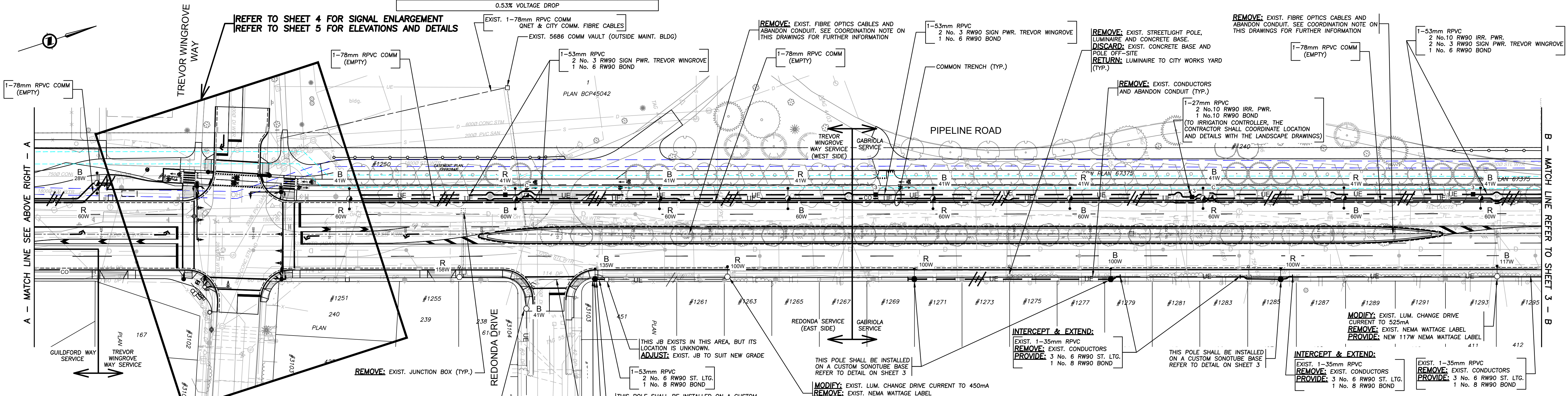
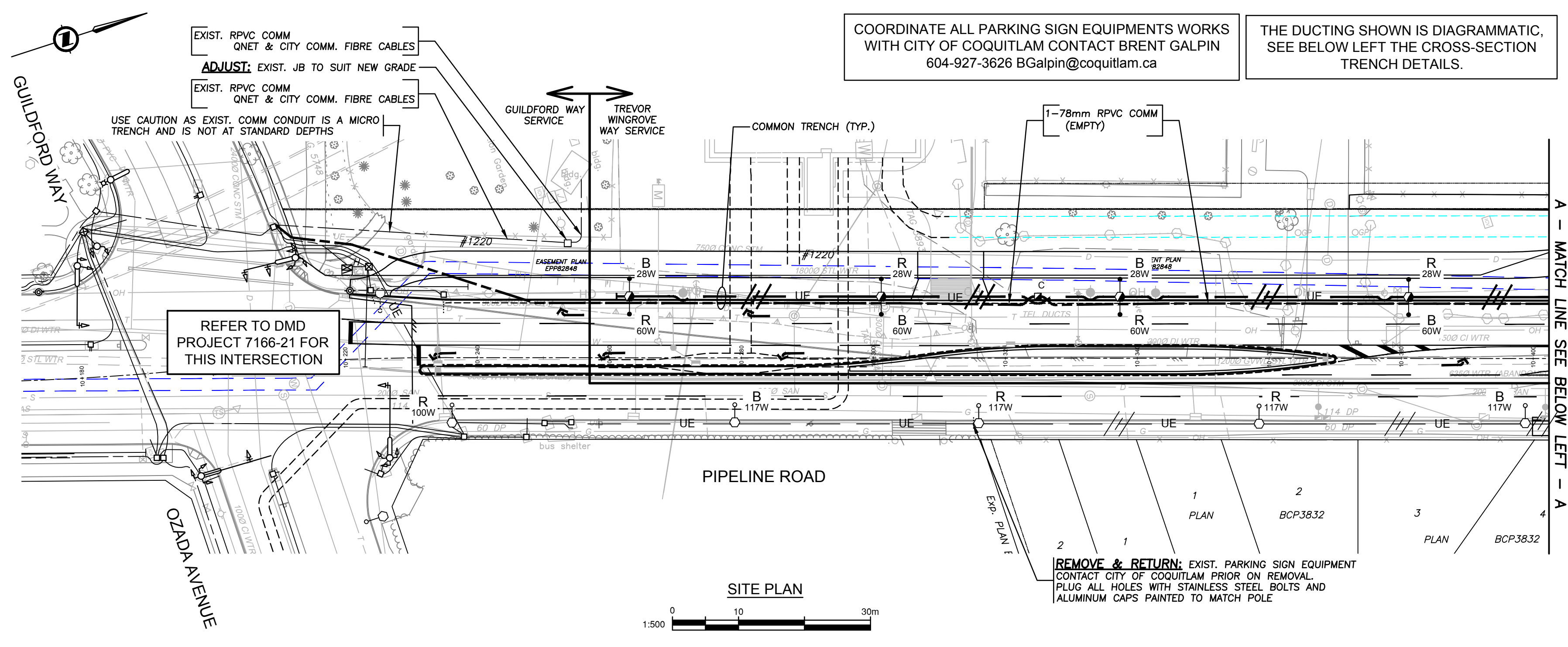
WALKWAY (NAME)	PIPELINE ROAD	
WALKWAY CLASSIFICATION	MEDIUM	
ILLUMINANCE RECOMMENDED/DELIVERED	5.0 LUX	5.5 LUX
UNIFORMITY RECOMMENDED/DELIVERED	5.0:1	2.2:1
LIGHT LOSS FACTOR	0.84	
SPACING (SINGLE SIDED)	AS SHOWN	
EQUIPMENT		
FIXTURE TYPE: LED	WATTAGE: 28W/41W	MTG. HEIGHT: 6.6m DIST TYPE: 2ES
IES FILE:	NXT-24S-350mA/525mA-2ES-4000K	MODEL: NXT-24S- SERIES
FIXTURE TYPE: LED	WATTAGE: 28W	MTG. HEIGHT: 5m DIST TYPE: 2ES
IES FILE:	NXT-24S-350mA-2ES-4000K	MODEL: NXT-24S- SERIES
FIXTURE TYPE: LED	WATTAGE: 60W	MTG. HEIGHT: 6.6m DIST TYPE: 2ES
IES FILE:	NXT-36S-525mA-2ES-4000K	MODEL: NXT-36S- SERIES

120V SERVICE LOAD (100A-120/240V SERVICE BASE AT 3107 REDONDA DR)

WATTAGE (W)	CCT.PHASE	EXISTING	REMOVED	NEW	TOTAL No. OF LIGHTS	CURRENT (A)
28W	R	6	0	0	6	1.40A
	B	6	1	0	5	1.17A
41W	R	0	0	0	0	0.00A
	B	0	0	1	1	0.34A
52W	R	0	0	0	0	0.00A
	B	3	0	0	3	1.30A
100W	R	0	0	1	1	0.83A
	B	0	0	0	0	0.00A
135W	R	0	0	0	0	0.00A
	B	0	0	1	1	1.13A
158W	R	1	0	0	1	1.32A
	B	1	1	0	0	0.00A

0.53% VOLTAGE DROP

EXISTING FIBRE OPTIC CABLES ON PIPELINE ROAD SHALL REMAIN IN OPERATION AND SHALL BE PROTECTED WHEN NECESSARY UNTIL THE NEW CONDUITS AND CABLES HAVE BEEN INSTALLED. THE CONTRACTOR SHALL COORDINATE WITH QNET AT LEAST 3 WEEKS PRIOR TO CONSTRUCTION. CONTACT BRENT GALPIN (604-927-3626 / bgalpin@coquitlam.ca) OR DWAIN ROOPER (604-927-3605 / drooper@coquitlam.ca) TO COORDINATE THE REMOVAL, CUT OVER, SPLICING AND CONNECTIONS. QNET WILL BE RESPONSIBLE FOR SUPPLYING AND INSTALLING THE NEW FIBER OPTIC CABLES AND SPLICE ENCLOSURES.



FINAL ISSUED FOR TENDER ELECTRICAL DRAWINGS TO BE ISSUED THROUGH AN ADDENDUM

NOT FOR CONSTRUCTION
2025-01-15

EXISTING STREET LIGHTING SHALL REMAIN IN OPERATION THROUGHOUT CONSTRUCTION. IF TRAFFIC SIGNAL DE-ENERGIZATION IS REQUIRED CONTRACTOR SHALL ENSURE FULL-TIME FLAGGING IS USED DURING ANY TRAFFIC SIGNAL DOWNTIME.

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

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.

LOCATING EQUIPMENT
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.

Benchmark:
Contractor to contact Telus, BC Hydro, FortisBC and BC one call prior to construction to confirm locations of utilities and appurtenances requiring adjustment.

DMD & Associates
Electrical Consultants Ltd.
#12-11508 104th Avenue, Surrey, BC, Canada V4N 0A3
www.dmdeng.com 604-589-9010
office@dmdeng.com Fax 604-589-9012
DMD PROJECT No. 7519-22-02 of 10

No.	Date	By	Revisions
15-01-2025	BG		DRAFT - ISSUED FOR TENDER
13-12-2024	BG		FIRST SUBMISSION

ACCEPTED FOR CONSTRUCTION
Date: _____
Manager of Development Servicing

Coquitlam
Engineering & Public Works
3000 Guildford Way, Coquitlam, B.C. V3B 7N2

PERMIT TO PRACTICE
Signature: _____
Date: 15-01-2025
PERMIT NUMBER: 1000771
The Association of Professional Engineers and Geoscientists of British Columbia

Design by	Date	Scale
BC	16-05-2018	1:500
Drawn by	Date	Sheet of
YJ	16-05-2018	2 OF 10
Checked by	Date	Eng. Project No.
NB	16-05-2018	
Approved by	Date	
	16-05-2018	

**PIPELINE ROAD
GUILDFORD WAY TO DAVID AVENUE
STREET LIGHTING**

File: 7519-22

**FINAL ISSUED FOR TENDER ELECTRICAL DRAWINGS
TO BE ISSUED THROUGH AN ADDENDUM**

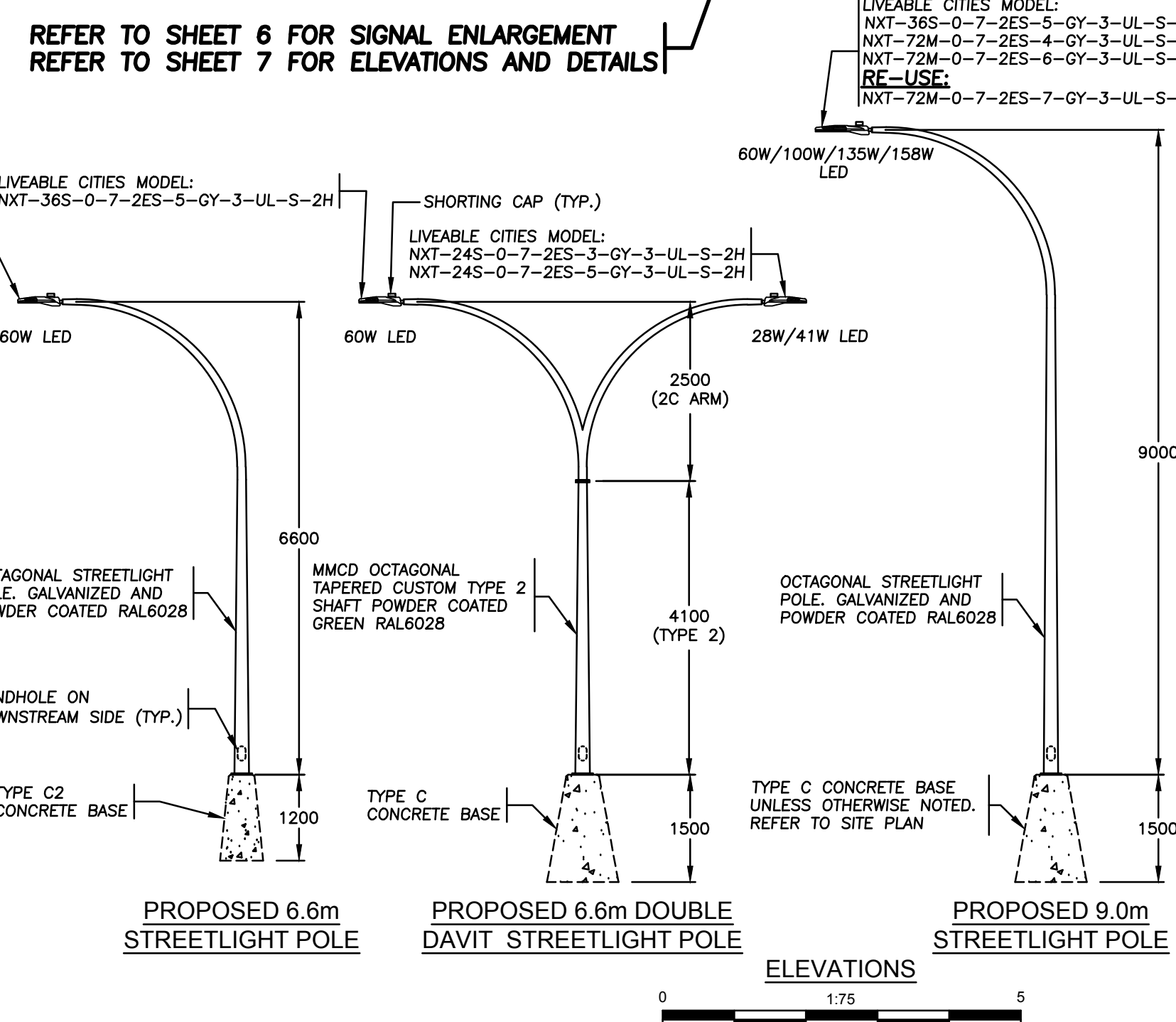
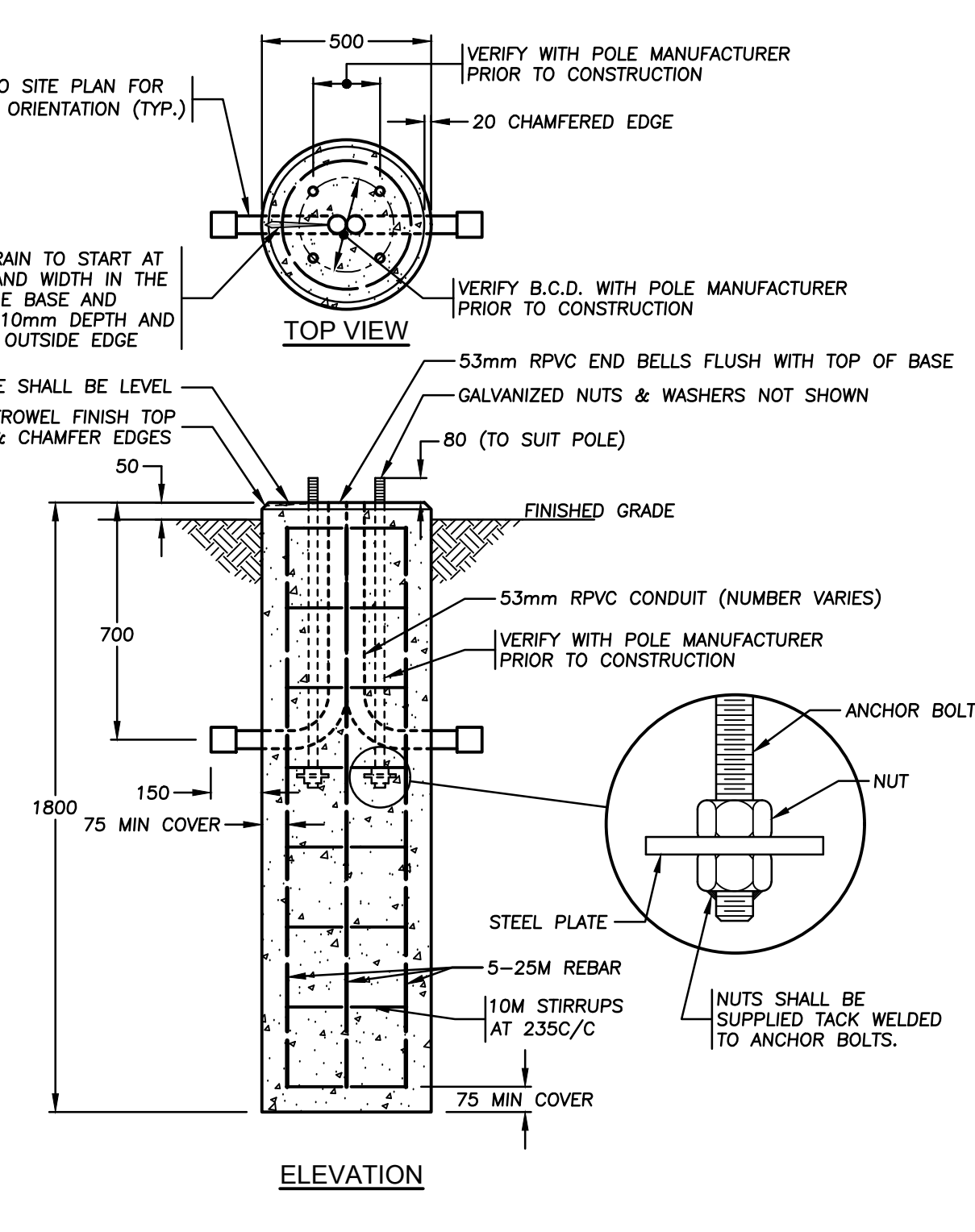
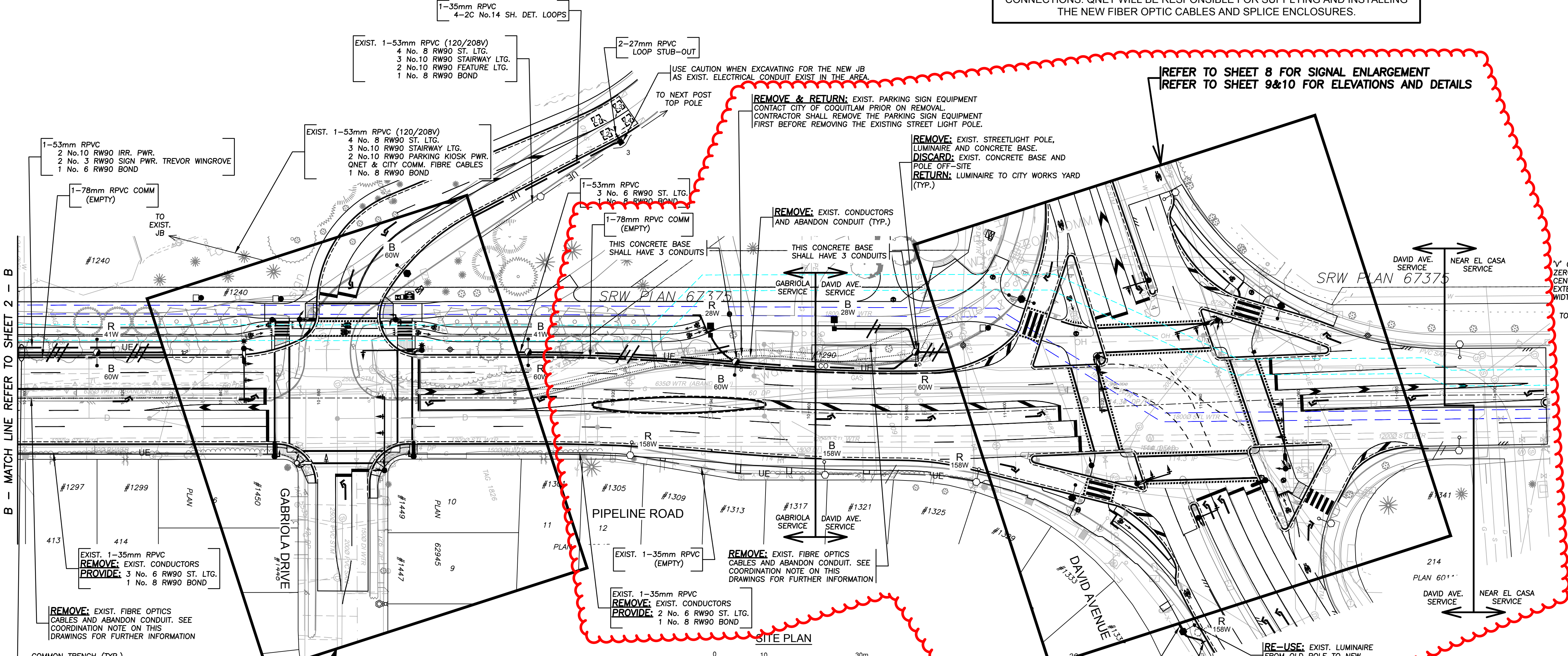
COORDINATE ALL PARKING SIGN EQUIPMENTS WORKS
WITH CITY OF COQUITLAM CONTACT BRENT GALPIN
604-927-3626 BGalpin@coquitlam.ca

EXISTING FIBRE OPTIC CABLES ON PIPELINE ROAD SHALL REMAIN IN OPERATION
AND SHALL BE PROTECTED WHEN NECESSARY UNTIL THE NEW CONDUITS AND
CABLES HAVE BEEN INSTALLED. THE CONTRACTOR SHALL COORDINATE WITH
QNET AT LEAST 3 WEEKS PRIOR TO CONSTRUCTION. CONTACT BRENT GALPIN
(604-927-3626 / bgalpin@coquitlam.ca) OR DWAIN ROPER (604-927-3605 /
droper@coquitlam.ca) TO COORDINATE THE REMOVAL, CUT OVER, SPLICING AND
CONNECTIONS. QNET WILL BE RESPONSIBLE FOR SUPPLYING AND INSTALLING
THE NEW FIBER OPTIC CABLES AND SPLICE ENCLOSURES.

REFER TO PROJECT NO. 115670559, 61473
FOR EXIST. TOWN CENTRE PARK
LIGHTING AND DIGITAL SIGNAGE

SONOTUBE FOUNDATION NOTES:

1. ALL HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH CAN/CSA G14-M92
2. APPLY LUBRIPLATE OR OTHER SUITABLE GREASE TO EXPOSED PORTION OF ANCHOR BOLTS AND NUTS PRIOR TO POLE INSTALLATION
3. CONCRETE TO HAVE A MINIMUM STRENGTH OF 30MPa AT 28 DAYS.
4. FOOTINGS ARE DESIGNED FOR SOILS WITH A MINIMUM ALLOWABLE BEARING PRESSURE OF 125KPa.
5. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.
6. ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MINISTRY STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (2012 ISSUE) UNLESS OTHERWISE NOTED ON THESE DRAWINGS OR IN THE SPECIAL PROVISIONS.
7. BACKFILL SHALL BE S.G.S.B. IN ACCORDANCE WITH SECTION 202 OF BC MoT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION. BACKFILL SHALL BE PLACED AND COMPACTED IN LAYERS NO MORE THAN 150mm THICK TO 100% STANDARD PROCTOR MAXIMUM DENSITY (ASTM D-698).
8. CONTRACTOR SHALL PROVIDE ALL MEANS NECESSARY TO ENSURE THAT EXCAVATIONS SHALL REMAIN DRY DURING CONSTRUCTION.
9. ALL EXPOSED EDGES SHALL BE CHAMFERED 20 x 20 U.N.O.
10. CONFIRM ANCHOR BOLTS AND THEIR PLAN ORIENTATION PRIOR TO SETTING IN CONCRETE FORMS.



**NOT IN SCOPE:
REVISED DRAWINGS
TO FOLLOW**

120V SERVICE LOAD
(100A-120/240V SERVICE BASE AT GABRIOLA DR AND PIPELINE RD)

WATTAGE (W)	CCT.PHASE	EXISTING	REMOVED	NEW	TOTAL No. OF LIGHTS	CURRENT(A)
28W	R	0	0	1	1	0.23A
	B	0	0	0	0	0.00A
41W	R	0	0	4	4	1.37A
	B	0	0	5	5	1.71A
60W	R	0	0	6	6	3.00A
	B	0	0	6	6	3.00A
92W	R	0	0	2	2	1.53A
	B	0	0	2	2	1.53A
100W	R	0	0	3	3	2.50A
	B	0	0	3	3	2.50A
117W	R	0	0	0	0	0.00A
	B	0	0	1	1	0.98A
131W	R	1	1	0	0	0.00A
	B	1	1	0	0	0.00A
158W	R	0	0	1	1	1.32A
	B	0	0	0	0	0.00A

1.00% VOLTAGE DROP

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

LOCATING EQUIPMENT
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.

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.

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.

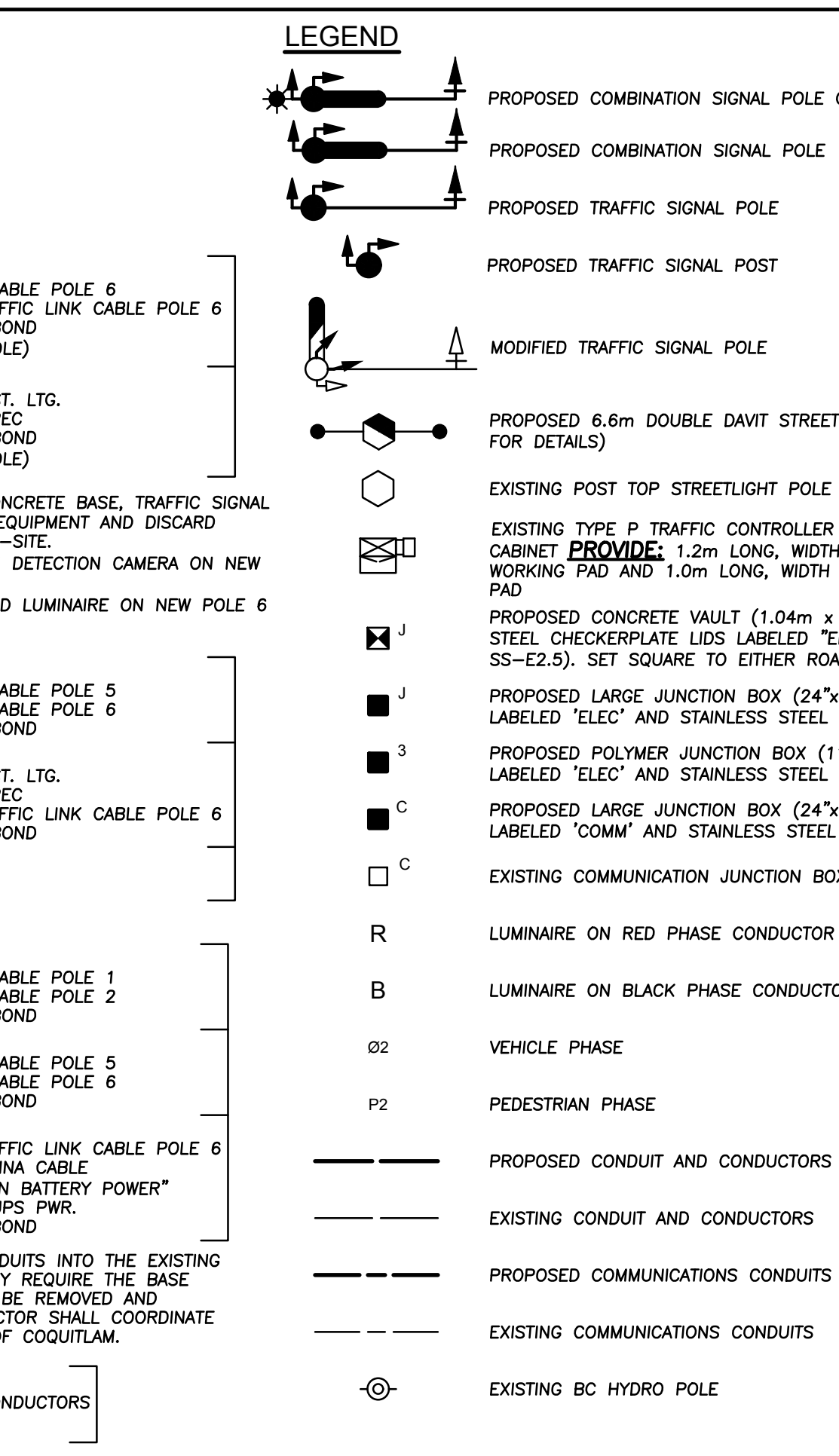
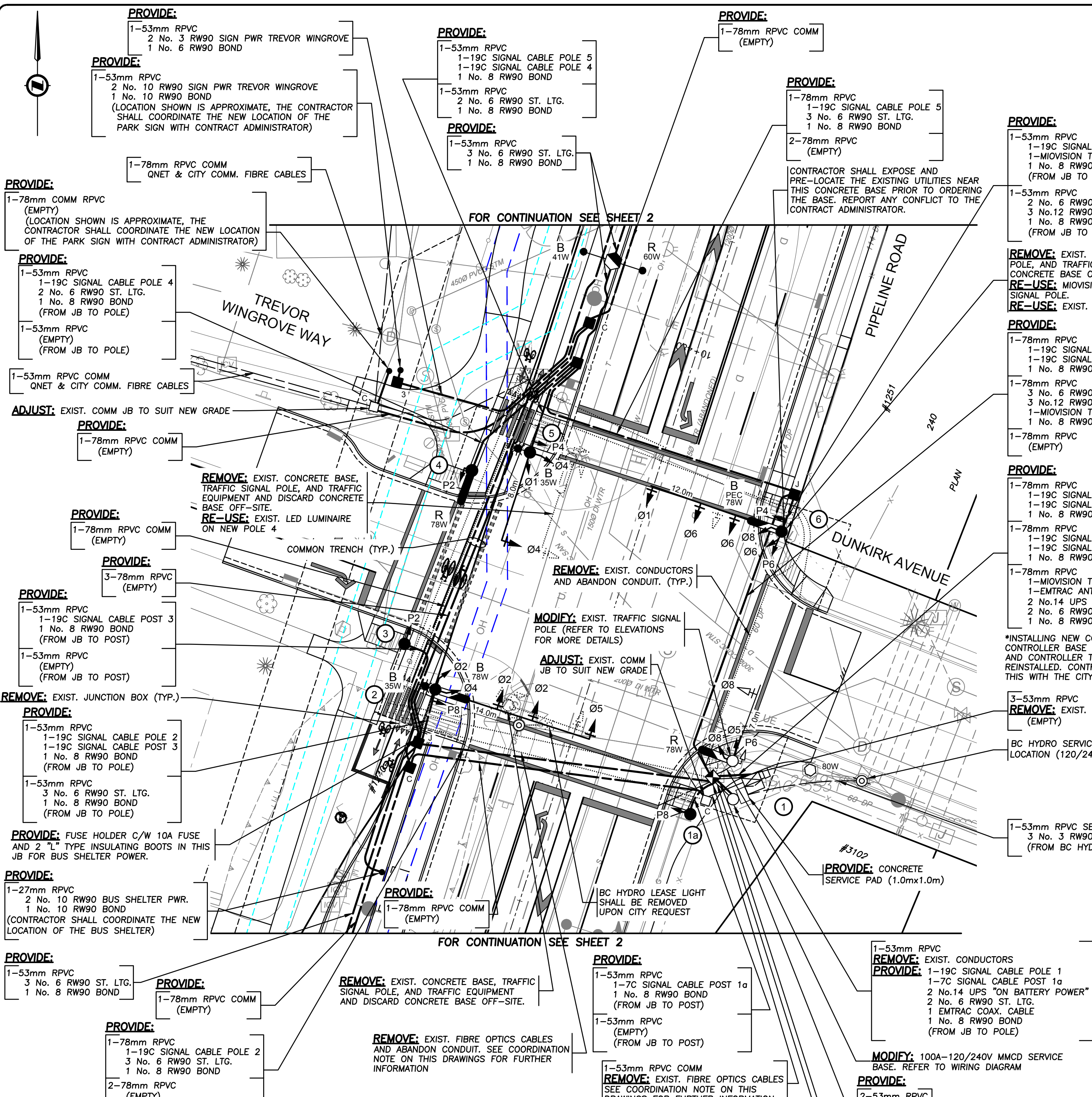
NOT FOR CONSTRUCTION
2025-01-15

THE DUCTING SHOWN IS DIAGRAMMATIC, SEE CROSS-SECTION TRENCH DETAILS ON SHEET 2.

EXISTING STREET LIGHTING SHALL REMAIN IN OPERATION THROUGHOUT CONSTRUCTION. IF TRAFFIC SIGNAL DE-ENERGIZATION IS REQUIRED CONTRACTOR SHALL ENSURE FULL-TIME FLAGGING IS USED DURING ANY TRAFFIC SIGNAL DOWNTIME.

BC CALL BEFORE YOU DIG
1-800-474-6886
or by CELLULAR #8888
Veracore Alert 257-940

COQ. ASBULT No. **EXXXX**



- ### TRAFFIC SIGNAL NOTES
- ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE (IN ORDER OF PRECEDENCE) WITH THE SUPPLEMENTAL SPECIFICATIONS, MASTER MUNICIPAL CONSTRUCTION DOCUMENT, 2019 ISSUE AND THE CURRENT MOTH STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION UNLESS OTHERWISE NOTED ON DESIGN DRAWINGS.
 - CONDUCTORS INSIDE POLES SHALL BE:
 - No. 14 RW90 X-LINK FOR SIGNALS
 - No. 12 RW90 X-LINK FOR ALL OTHERS
 - A TRON HEB AS WEATHERPROOF FUSE HOLDER, C/W A 10A BUSS KIT FUSE AND 2 'L' TYPE INSULATING BOOTS, SHALL BE INSTALLED IN EACH LUMINAIRE & SIGN LIVE CONDUCTOR, IN THE HANDLE.
 - EXACT POSITION OF ALL EQUIPMENT WILL BE LAYED OUT BY THE CITY REPRESENTATIVE.
 - ALL SINGLE CONDUCTORS SHALL BE STRANDED COPPER, TYPE RW90 INSULATED AND COLOR CODED.
 - EMPTY CONDUITS SHALL HAVE A NO. 8 HB POLY YELLOW/GRN MK PULL STRING AND CAPPED AT BOTH ENDS AS PER COQUITLAM SUPPLEMENTARY DRAWING SS-E2.5.
 - WHERE INDIVIDUAL CONDUCTORS OR CABLES ARE RUN, ALL OF THE COMMON CIRCUITS SHALL BE BUNDLED, TY-RAPPED TOGETHER WITH IDENTIFICATION TAGS IN ALL JUNCTION BOXES, VAULTS, HAND HOLES, CONTROLLER AND ACCESS POINTS AS NOTED IN THE MMCD. TAGS SHALL BE MARKED AS FOLLOWS CABLE N/W POLE, STREET LIGHTING CCTS R OR B, PHOTOCELL, CONTROLLER POWER, WITH BLACK INDELEBIL MARKING PEN. TAGS TO BE ATTACHED NO FURTHER THAN 75mm FROM WIRE OR CABLE TERMINATION POINT.
 - TRAFFIC SIGNAL NEUTRALS SHALL BE KEPT SEPARATE FROM STREET LIGHTING NEUTRAL CONDUCTORS.
 - ALL SIGNAL HEADS AND LUMINAIRES SHALL BE BONDED WITH A SEPARATE NO.12 RW90 CONDUCTOR (GREEN) AT THE HANDLE, AS REQUIRED.
 - EQUIPMENT MODELS SPECIFIED SHALL BE CONFIRMED WITH THE CITY IMMEDIATELY PRIOR TO THEIR PURCHASE TO ENSURE THAT THEY ARE CORRECT AND CURRENT. CUTSHEETS, EQUIPMENT, MAKE, MODEL & SERIAL LIST TO BE PROVIDED FOR EACH SIGNAL LOCATION.
 - ALL CONDUITS ENTERING POLES AND CABINETS SHALL BE SEALED WITH "DUCT SEAL".
 - SEE B.C. HYDRO STANDARDS FOR SERVICE CONNECTION DETAILS.
 - CONTRACTOR SHALL CONFIRM EXACT SERVICE LOCATIONS WITH B.C. HYDRO PRIOR TO CONSTRUCTION.
 - CONTRACTOR IS REQUIRED TO PROVIDE 72 HOURS NOTICE PRIOR TO ANY CONSTRUCTION.
 - TRAFFIC SIGNAL IS REQUIRED TO CITY STANDARDS. (M.O.T.)
 - ALL POLES, ARMS, SERVICE BASES, ETC. TO BE GALVANIZED, PRIMED AND POWDER-COATED IN COLOUR. EQUIVALENT TO COQUITLAM STANDARD GREEN RAL 6028, UNLESS OTHERWISE NOTED OR APPROVED.
 - INSTALL BELL END FITTING ON ALL CONDUITS ENTERING JUNCTION BOXES.
 - INSTALL HANGER BAR & TY-RAP WIRES TO BAR IN JUNCTION BOXES AS PER MMCD DRAWING COQUITLAM SUPPLEMENTARY DRAWING SS-E2.5
 - ALL CONDUITS SHALL BE BURIED MINIMUM 600mm DEEP. A 'BURIED CABLE' MAKE TAPE SHALL BE INSTALLED 300mm ABOVE CONDUIT IN ALL TRENCHES. DETECTABLE (METALIC) TAPE TO BE USED ABOVE CONDUIT IN TRENCHES CONTAINING ONLY INTERCONNECT CONDUIT.
 - BOND ALL STEEL JUNCTION BOX LIDS.
 - CONTRACTOR SHALL REPLACE ALL ASPHALT, CONCRETE SIDEWALKS AND WHEELCHAIR RAMPS REMOVED FOR THE INSTALLATION OF THE SIGNAL AND COMM EQUIPMENT, AND RESTORE TO THE SAME OR BETTER CONDITION.
 - BACKBOARDS WITH PLUMBIZER GAPS OR KNOCKOUT SECTIONS WILL NOT BE ACCEPTED FOR ANY HEAD MOUNTED WITH OTHER THAN PLUMBIZER STYLE HARDWARE.
 - ALL ELECTRICAL PRODUCTS SHALL BEAR CSA/ETC APPROVALS OR BC ELECTRICAL INSPECTION PRIOR TO INSTALLATION.
 - SIGNAL WIRING SHALL BE TAGGED AND LABELED USING PANDUIT MP250-C TAGS AND THE APPROPRIATE PANDUIT INDELEBIL MARKER.
 - SECURITY HARDWARE TO BE USED ON ALL POLES, SECURITY BITS ARE TO BE SUBMITTED TO THE CITY AFTER SIGNAL HAS BEEN FULLY COMPLETED.
 - ALL GROUND PLATES AND GROUND PLATE CONDUCTORS ARE TO HAVE A MINIMUM OF 5 METERS CLEARANCE BETWEEN THEM.
 - CONCRETE VAULTS AND JUNCTION BOXES LOCATED IN NON-PAVED OR NON-SIDEWALK AREAS ARE TO BE PROTECTED FROM MOWER OR EROSION/VEGETATION DAMAGE WITH A 200mm WIDE x 150mm DEEP CONCRETE COLLAR FLUSH WITH TOP EDGES OF THE TOP OF THE BOX LID. COLLAR TO SLOPE DOWN AWAY FROM BOX OPENING AT 3% TO DIRECT WATER AWAY FROM BOX OPENING. REFER TO COQUITLAM SUPPLEMENTARY SPECIFICATION FOR DETAILS.
 - JUNCTION BOXES IN SIDEWALK AREAS SHALL BE SUPPORTED BY CONCRETE MATERIALS ON ALL SIDES WITH A 200mm WIDE x 150mm DEEP CONCRETE COLLAR FLUSH WITH TOP OF SIDEWALK AND THE TOP OF THE BOX LID.
 - JUNCTION BOXES FOR ELECTRICAL APPLICATIONS (TRAFFIC SIGNALS, STREET LIGHTING, ETC.) - THE LIDS SHOULD BE ETCHED ELEC, JUNCTION BOXES FOR COMMUNICATIONS - THE LIDS SHOULD BE ETCHED COMM, ALL UPPERCASE LETTERS.
 - POLYMER CONCRETE 24 x 36 x 36 PULL BOXES SHALL BE INSTALLED AS SHOWN ON STANDARD DETAIL MMCD DRAWING E2.5 C/W BOLT DOWN LID. REPLACE 300mm COARSE DRAIN ROCK WITH 300mm FINE DRAIN ROCK.
 - BOTTOM OF JUNCTION BOXES SHALL BE OPEN. BOTTOM SECTIONS SHALL BE SUPPORTED WITH CONCRETE BRICKS AND USE CRUSHED GRAVEL TO DRAIN WATER.
 - ALL BOLT DOWN JUNCTION BOX LIDS SHALL BE TIER 15 (20K) RATED.
 - THE CONTRACTOR SHALL SUPPLY AND INSTALL THE EMTRAC ANTENNA BRACKET WITH NEOPRENE GASKET MATERIAL TO FORM A SEAL BETWEEN BRACKET AND POLE. NEOPRENE SHALL BE FULLY ENCLOSED WITHIN OUTER EDGES OF THE BRACKET SUCH THAT NONE IS VISIBLE AFTER THE BRACKET IS MOUNTED. EMTRAC ANTENNA CABLE SHALL RUN CONTINUOUS WITH NO SPLICES FROM CONTROLLER TO THE EMTRAC ANTENNA. TERMINATION OF CABLE TO BE DONE BY COBRA ELECTRIC.

FINAL ISSUED FOR TENDER ELECTRICAL DRAWINGS TO BE ISSUED THROUGH AN ADDENDUM

ALL EQUIPMENT IS EXISTING EXCEPT WHERE NOTED

NOT FOR CONSTRUCTION
2025-01-15

120V SERVICE LOAD

(100A-120/240V SERVICE BASE AT TREVOR WINGROVE WAY / DUNKIRK AVE AND PIPELINE RD)

WATTAGE (W)	CCT.PHASE	EXISTING	REMOVED	NEW	TOTAL No. OF LIGHTS	CURRENT(A)
28W	R	0	0	2	2	0.47A
	B	0	0	3	3	0.70A
35W	R	0	0	0	0	0.00A
	B	0	0	2	2	0.58A
41W	R	0	0	2	2	0.68A
	B	0	0	2	2	0.68A
60W	R	0	0	5	5	2.50A
	B	0	0	4	4	2.00A
78W	R	0	0	2	2	1.30A
	B	0	0	2	2	1.30A
92W	R	0	0	2	2	1.53A
	B	0	0	2	2	1.53A
158W	R	1	1	0	0	0.00A
	B	1	1	0	0	0.00A

0.53% VOLTAGE DROP

CAUTION!
EXCAVATION NEAR OVERHEAD UTILITY POLE

ANY UNDERGROUND EXCAVATION WITHIN SOIL FOUNDATION INTERACTION AREA REQUIRES TEMPORARY UTILITY POLE SUPPORT. REFER TO ES5 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

NO MORE THAN 2 FUSES ARE ALLOWED PER POLE. THE CONTRACTOR SHALL COMMON THE LIGHTING THROUGH OFF THE SAME FUSE WHEN THERE ARE A ST LTG, PED LTG AND ILLUMINATED STREET NAME SIGN ON THE SAME POLE

EXISTING FIBRE OPTIC CABLES ON PIPELINE ROAD SHALL REMAIN IN OPERATION AND SHALL BE PROTECTED WHEN NECESSARY UNTIL THE NEW CONDUITS AND CABLES HAVE BEEN INSTALLED. THE CONTRACTOR SHALL COORDINATE WITH QNET AT LEAST 3 WEEKS PRIOR TO CONSTRUCTION. CONTACT BRENT GALPIN (604-927-3626 / bgalpin@coquitlam.ca) OR DWAIN ROPER (604-927-3605 / droper@coquitlam.ca) TO COORDINATE THE REMOVAL, CUT OVER, SPLICING AND CONNECTIONS. QNET WILL BE RESPONSIBLE FOR SUPPLYING AND INSTALLING THE NEW FIBER OPTIC CABLES AND SPLICE ENCLOSURES.

LOCATING EQUIPMENT

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.

EXISTING STREET LIGHTING SHALL REMAIN IN OPERATION THROUGHOUT CONSTRUCTION. IF TRAFFIC SIGNAL DE-ENERGIZATION IS REQUIRED CONTRACTOR SHALL ENSURE FULL-TIME FLAGGING IS USED DURING ANY TRAFFIC SIGNAL DOWNTIME.

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.

DO NOT USE THIS DRAWING FOR PAVEMENT MARKINGS

ALL JUNCTION BOX LOCATIONS AND CONDUIT ROUTING ARE DIAGRAMMATIC AND ARE NOT TO SCALE. CONTRACTOR TO AVOID UNDERGROUND CONFLICTS AND NOT INSTALL ANYTHING ON PRIVATE PROPERTY.

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.

1-800-474-6886
or by CELLULAR #888
Vancouver Area 257-840

CALL AT LEAST TWO FULL WORKING DAYS BEFORE YOU PLAN TO DIG

COQ. ASBULT No.

EXXXX

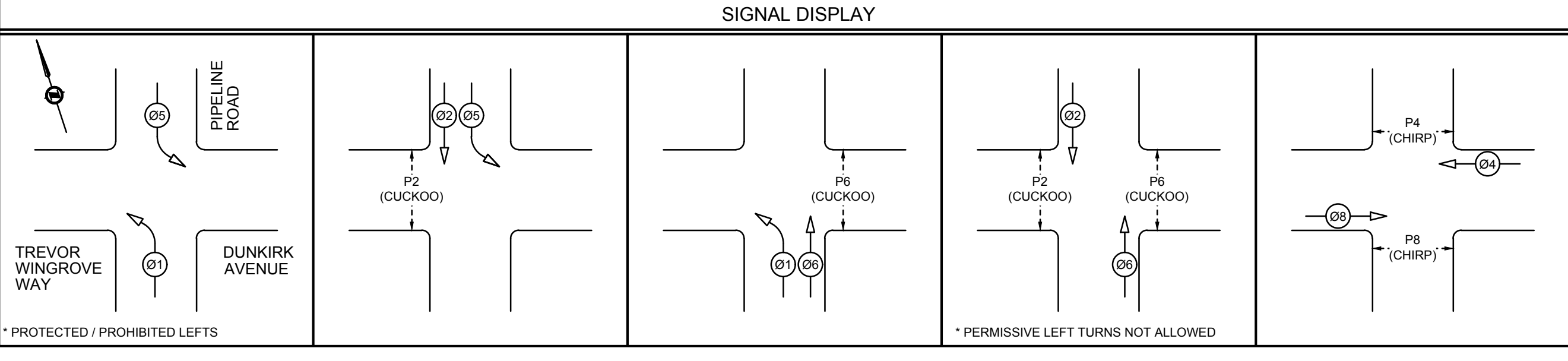
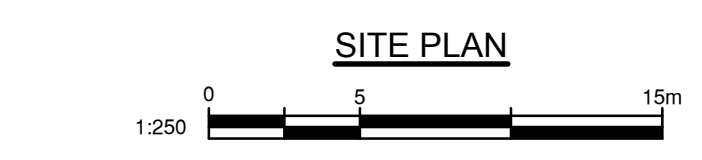
INTERSECTION DESIGN CRITERIA

PER: (CITY BYLAW 3558)

INTERSECTION (NAME)	PIPELINE ROAD	TREVOR WINGROVE WAY / DUNKIRK AVE
LAND USE CLASSIFICATION	RESIDENTIAL	RESIDENTIAL
ROADWAY CLASSIFICATION & WIDTH	ARTERIAL	COLLECTOR
PEDESTRIAN ACTIVITY LEVEL	MEDIUM	MEDIUM
ILLUMINANCE RECOMMENDED/DELIVERED	22.0 LUX	26.1 LUX
UNIFORMITY RECOMMENDED/DELIVERED	3.0:1	2.4:1
LIGHT LOSS FACTOR		0.84
SPACING		AS SHOWN

EQUIPMENT			
FIXTURE TYPE: LED	WATTAGE: 78W	MTG. HEIGHT: 9.5m	DIST TYPE: 2ES
IES FILE:	NXT-72M-350mA-2ES-4000K	MODEL: NXT-72M - SERIES	
FIXTURE TYPE: LED	WATTAGE: 78W	MTG. HEIGHT: 9.0m	DIST TYPE: 2ES
IES FILE:	NXT-72M-350mA-2ES-4000K	MODEL: NXT-72M - SERIES	
FIXTURE TYPE: LED	WATTAGE: 80W	MTG. HEIGHT: 7.5m	DIST TYPE: 2ES
IES FILE:	NXT-72M-350mA-2ES-4000K	MODEL: NXT-72M - SERIES	
FIXTURE TYPE: LED	WATTAGE: 80W	MTG. HEIGHT: 6.0m	DIST TYPE: 2ES
IES FILE:	NXT-36S-700mA-2ES-4000K	MODEL: NXT-36S - SERIES	
FIXTURE TYPE: LED	WATTAGE: 35W	MTG. HEIGHT: 4.5m	DIST TYPE: 2ES
IES FILE:	NXT-24S-450mA-2ES-4000K	MODEL: NXT-24S - SERIES	

* BASE ON A 20-YEAR FIXTURE LIFE AND 10-YEAR CLEANING CYCLE



Benchmark:

Contractor to contact Telus, BC Hydro, FortisBC and BC one call prior to construction to confirm locations of utilities and appurtenances requiring adjustment.

Plot Date: January 15, 2025

DMD & Associates
Electrical Consultants Ltd.

#12-11508 104th Avenue, Surrey, BC, Canada V4N 0A3
www.dmdeng.com 604-589-9010
office@dmdeng.com Fax 604-589-9012

DMD PROJECT No. 7519-22-04 of 10

No.	Date	By	Revisions
15-01-2025	BG	DRAFT - ISSUED FOR TENDER	
19-12-2024	BG	FIRST SUBMISSION	

ACCEPTED FOR CONSTRUCTION

Date: _____

Manager of Development Servicing

Coquitlam
Engineering & Public Works

3000 Guildford Way, Coquitlam, B.C. V3B 7N2

PERMIT TO PRACTICE

Signature: _____

Date: 15-01-2025

PERMIT NUMBER: 1000771

The Association of Professional Engineers and Geoscientists of British Columbia

Seal:

Design by	Date	Scale
BG	16-05-2018	1:250
Drawn by	Date	Sheet of
YJ	16-05-2018	4 OF 10
Checked by	Date	Eng. Project No.
NB	16-05-2018	
Approved by	Date	
	16-05-2018	

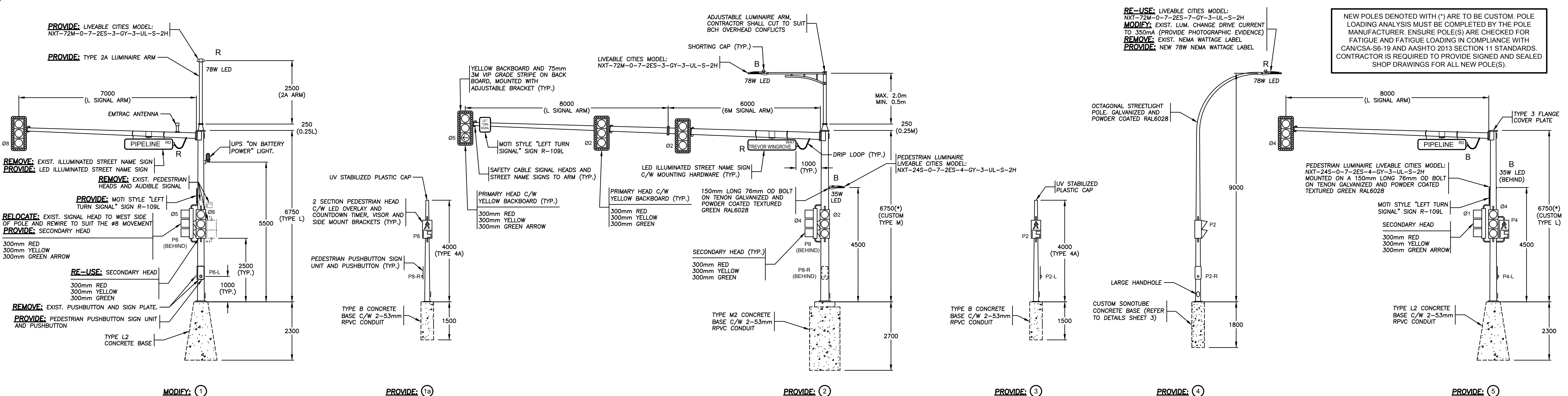
Project

PIPELINE ROAD TREVOR WINGROVE WAY

Description

TRAFFIC SIGNAL MODIFICATIONS

File: 7519-22-TS



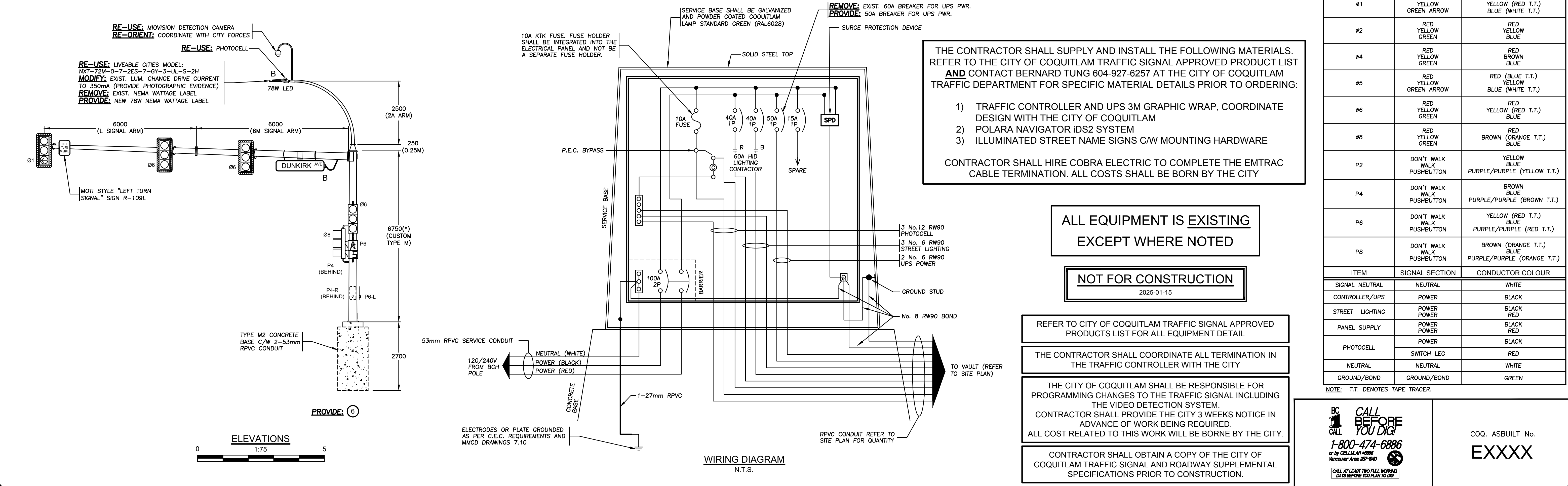
ALL SIGNAL DISPLAY SHALL HAVE TUNNEL VISORS

ALL SIGNAL AND PEDESTRIAN DISPLAYS SHALL BE LED

PLUG OLD HOLE WITH STAINLESS STEEL BOLTS AND ALUMINUM CAPS. PAINT TO MATCH POLES

NO MORE THAN 2 FUSES ARE ALLOWED PER POLE. THE CONTRACTOR SHALL COMMON THE LIGHTING TOGETHER OFF THE SAME FUSE WHEN THERE ARE A ST LTG, PED LTG AND ILLUMINATED STREET NAME SIGN ON THE SAME POLE

FINAL ISSUED FOR TENDER ELECTRICAL DRAWINGS TO BE ISSUED THROUGH AN ADDENDUM



THE CONTRACTOR SHALL SUPPLY AND INSTALL THE FOLLOWING MATERIALS. REFER TO THE CITY OF COQUITLAM TRAFFIC SIGNAL APPROVED PRODUCT LIST AND CONTACT BERNARD TUNG 604-927-6257 AT THE CITY OF COQUITLAM TRAFFIC DEPARTMENT FOR SPECIFIC MATERIAL DETAILS PRIOR TO ORDERING:

- 1) TRAFFIC CONTROLLER AND UPS 3M GRAPHIC WRAP, COORDINATE DESIGN WITH THE CITY OF COQUITLAM
- 2) POLARA NAVIGATOR IDS2 SYSTEM
- 3) ILLUMINATED STREET NAME SIGNS C/W MOUNTING HARDWARE

CONTRACTOR SHALL HIRE COBRA ELECTRIC TO COMPLETE THE EMTRAC CABLE TERMINATION. ALL COSTS SHALL BE BORN BY THE CITY

ALL EQUIPMENT IS EXISTING EXCEPT WHERE NOTED

NOT FOR CONSTRUCTION
2025-01-15

REFER TO CITY OF COQUITLAM TRAFFIC SIGNAL APPROVED PRODUCTS LIST FOR ALL EQUIPMENT DETAIL

THE CONTRACTOR SHALL COORDINATE ALL TERMINATION IN THE TRAFFIC CONTROLLER WITH THE CITY

THE CITY OF COQUITLAM SHALL BE RESPONSIBLE FOR PROGRAMMING CHANGES TO THE TRAFFIC SIGNAL INCLUDING THE VIDEO DETECTION SYSTEM. CONTRACTOR SHALL PROVIDE THE CITY 3 WEEKS NOTICE IN ADVANCE OF WORK BEING REQUIRED. ALL COST RELATED TO THIS WORK WILL BE BORNE BY THE CITY.

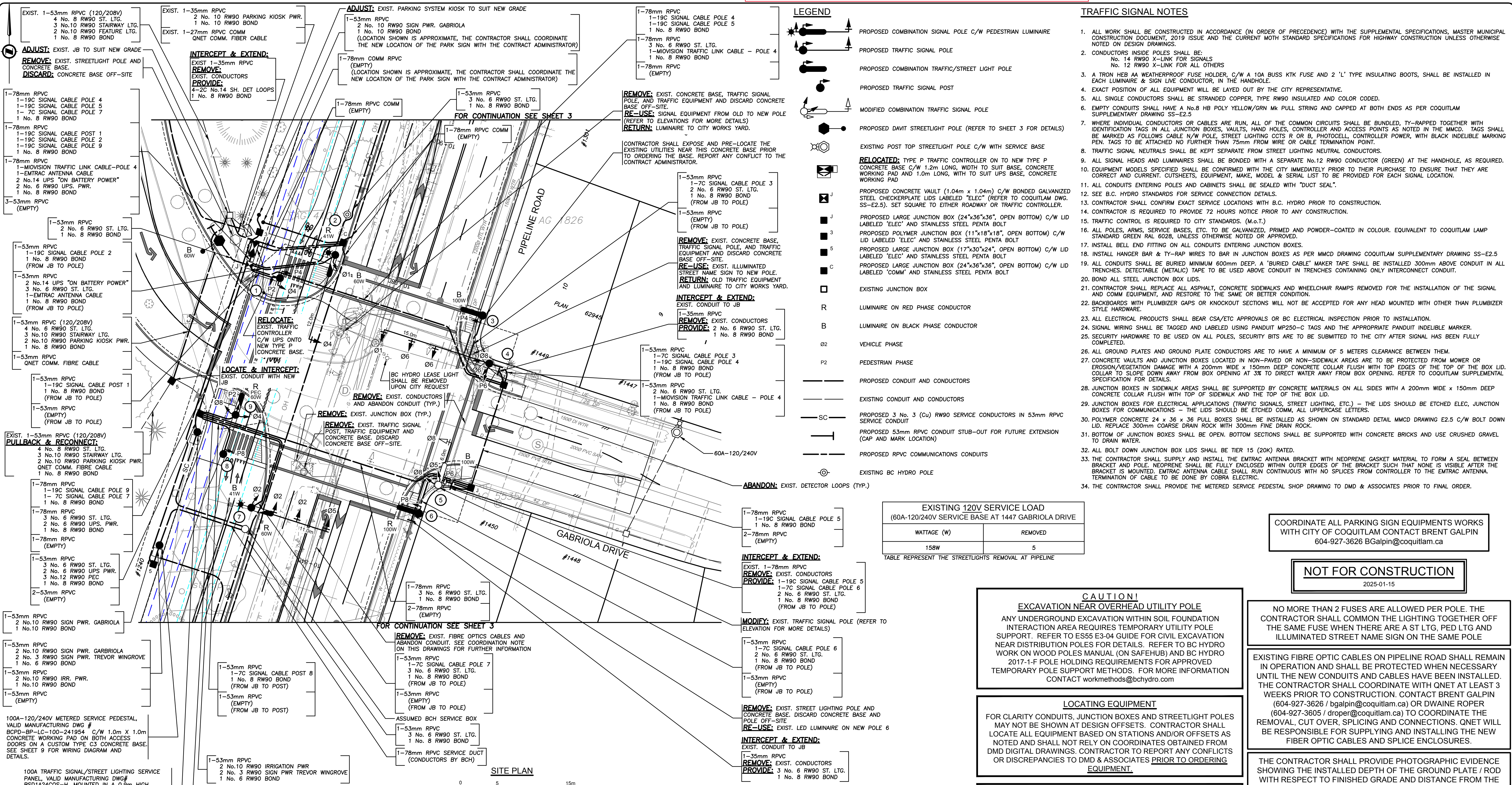
CONTRACTOR SHALL OBTAIN A COPY OF THE CITY OF COQUITLAM TRAFFIC SIGNAL AND ROADWAY SUPPLEMENTAL SPECIFICATIONS PRIOR TO CONSTRUCTION.

CONDUCTOR COLOUR CODE (FROM HANDHOLE TO SIGNAL)		
ITEM	SIGNAL SECTION	CONDUCTOR COLOUR
#1	RED	RED (BLUE T.T.)
	YELLOW GREEN ARROW	YELLOW (RED T.T.) BLUE (WHITE T.T.)
#2	RED	RED YELLOW BLUE
	YELLOW GREEN	BROWN BLUE
#4	RED	RED (BLUE T.T.)
	YELLOW GREEN ARROW	YELLOW BLUE (WHITE T.T.)
#6	RED	YELLOW (RED T.T.)
	YELLOW GREEN	BLUE
#8	RED	BROWN (ORANGE T.T.)
	YELLOW GREEN	BLUE
P2	DON'T WALK WALK PUSHBUTTON	YELLOW BLUE PURPLE/PURPLE (YELLOW T.T.)
P4	DON'T WALK WALK PUSHBUTTON	BROWN BLUE PURPLE/PURPLE (BROWN T.T.)
P6	DON'T WALK WALK PUSHBUTTON	YELLOW (RED T.T.) PURPLE/PURPLE (RED T.T.)
P8	DON'T WALK WALK PUSHBUTTON	BROWN (ORANGE T.T.) BLUE PURPLE/PURPLE (ORANGE T.T.)
ITEM	SIGNAL SECTION	CONDUCTOR COLOUR
SIGNAL NEUTRAL	NEUTRAL	WHITE
CONTROLLER/UPS	POWER	BLACK
STREET LIGHTING	POWER	BLACK
	POWER	RED
PANEL SUPPLY	POWER	BLACK
	POWER	RED
PHOTOCELL	POWER	BLACK
	SWITCH LEG	RED
NEUTRAL	NEUTRAL	WHITE
GROUND/BOND	GROUND/BOND	GREEN

NOTE: T.T. DENOTES TAPE TRACER.

BC CALL BEFORE YOU DIG
1-800-474-6886
or by CELLULAR 4886
Vancouver Area 257-8440
CALL AT LEAST TWO FULL WORKING DAYS BEFORE YOU PLAN TO DIG

COQ. ASBULT No.
EXXXX



- TRAFFIC SIGNAL NOTES**
- ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE (IN ORDER OF PRECEDENCE) WITH THE SUPPLEMENTAL SPECIFICATIONS, MASTER MUNICIPAL CONSTRUCTION DOCUMENT, 2019 ISSUE AND THE CURRENT MOTH STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION UNLESS OTHERWISE NOTED ON DESIGN DRAWINGS.
 - CONDUCTORS INSIDE POLES SHALL BE:
No. 14 RW90 X-LINK FOR SIGNALS
No. 12 RW90 X-LINK FOR ALL OTHERS
 - A TRON HEB AS WEATHERPROOF FUSE HOLDER, C/W A 10A BUSS KIT FUSE AND 2 "L" TYPE INSULATING BOOTS, SHALL BE INSTALLED IN EACH LUMINAIRE & SIGN LIVE CONDUCTOR, IN THE HANDHOLE.
 - EXACT POSITION OF ALL EQUIPMENT WILL BE LAYED OUT BY THE CITY REPRESENTATIVE.
 - ALL SINGLE CONDUCTORS SHALL BE STRANDED COPPER, TYPE RW90 INSULATED AND COLOR CODED.
 - EMPTY CONDUITS SHALL HAVE A NO. 8 HB POLY YELLOW/GRN MK PULL STRING AND CAPPED AT BOTH ENDS AS PER COQUITLAM SUPPLEMENTARY DRAWING SS-E2.5.
 - WHERE INDIVIDUAL CONDUCTORS OR CABLES ARE RUN, ALL OF THE COMMON CIRCUITS SHALL BE BUNDLED, TY-RAPPED TOGETHER WITH IDENTIFICATION TAGS IN ALL JUNCTION BOXES, VAULTS, HAND HOLES, CONTROLLER AND ACCESS POINTS AS NOTED IN THE MMCD. TAGS SHALL BE MARKED AS FOLLOWS CABLE N/W POLE, STREET LIGHTING CCTS R OR B, PHOTOCELL, CONTROLLER POWER, WITH BLACK INDELEBIL MARKING PEN. TAGS TO BE ATTACHED NO FURTHER THAN 75mm FROM WIRE OR CABLE TERMINATION POINT.
 - TRAFFIC SIGNAL NEUTRALS SHALL BE KEPT SEPARATE FROM STREET LIGHTING NEUTRAL CONDUCTORS.
 - ALL SIGNAL HEADS AND LUMINAIRES SHALL BE BONDED WITH A SEPARATE No.12 RW90 CONDUCTOR (GREEN) AT THE HANDHOLE, AS REQUIRED.
 - EQUIPMENT MODELS SPECIFIED SHALL BE CONFIRMED WITH THE CITY IMMEDIATELY PRIOR TO THEIR PURCHASE TO ENSURE THAT THEY ARE CORRECT AND CURRENT. CUTSHEETS, EQUIPMENT, MAKE, MODEL & SERIAL LIST TO BE PROVIDED FOR EACH SIGNAL LOCATION.
 - ALL CONDUITS ENTERING POLES AND CABINETS SHALL BE SEALED WITH "DUCT SEAL".
 - SEE B.C. HYDRO STANDARDS FOR SERVICE CONNECTION DETAILS.
 - CONTRACTOR SHALL CONFIRM EXACT SERVICE LOCATIONS WITH B.C. HYDRO PRIOR TO CONSTRUCTION.
 - CONTRACTOR IS REQUIRED TO PROVIDE 72 HOURS NOTICE PRIOR TO ANY CONSTRUCTION.
 - TRAFFIC SIGNAL IS REQUIRED TO CITY STANDARDS. (M.O.T.)
 - ALL POLES, ARMS, SERVICE BASES, ETC. TO BE GALVANIZED, PRIMED AND POWDER-COATED IN COLOUR. EQUIVALENT TO COQUITLAM LAMP STANDARD GREEN RAL 6028, UNLESS OTHERWISE NOTED OR APPROVED.
 - INSTALL BELL END FITTING ON ALL CONDUITS ENTERING JUNCTION BOXES.
 - INSTALL HANGER BAR & TY-RAP WIRES TO BAR IN JUNCTION BOXES AS PER MMCD DRAWING COQUITLAM SUPPLEMENTARY DRAWING SS-E2.5
 - ALL CONDUITS SHALL BE BURIED MINIMUM 600mm DEEP. A "BURIED CABLE" MAKE TAPE SHALL BE INSTALLED 300mm ABOVE CONDUIT IN ALL TRENCHES. DETECTABLE (METALIC) TAPE TO BE USED ABOVE CONDUIT IN TRENCHES CONTAINING ONLY INTERCONNECT CONDUIT.
 - BOND ALL STEEL JUNCTION BOX LIDS.
 - CONTRACTOR SHALL REPLACE ALL ASPHALT, CONCRETE SIDEWALKS AND WHEELCHAIR RAMPS REMOVED FOR THE INSTALLATION OF THE SIGNAL AND COMM EQUIPMENT, AND RESTORE TO THE SAME OR BETTER CONDITION.
 - BACKBOARDS WITH PLUMBIZER GAPS OR KNOCKOUT SECTIONS WILL NOT BE ACCEPTED FOR ANY HEAD MOUNTED WITH OTHER THAN PLUMBIZER STYLE HARDWARE.
 - ALL ELECTRICAL PRODUCTS SHALL BEAR CSA/ETC APPROVALS OR BC ELECTRICAL INSPECTION PRIOR TO INSTALLATION.
 - SIGNAL WIRING SHALL BE TAGGED AND LABELED USING PANDUIT MP250-C TAGS AND THE APPROPRIATE PANDUIT INDELEBIL MARKER.
 - SECURITY HARDWARE TO BE USED ON ALL POLES, SECURITY BITS ARE TO BE SUBMITTED TO THE CITY AFTER SIGNAL HAS BEEN FULLY COMPLETED.
 - ALL GROUND PLATES AND GROUND PLATE CONDUCTORS ARE TO HAVE A MINIMUM OF 5 METERS CLEARANCE BETWEEN THEM.
 - CONCRETE VAULTS AND JUNCTION BOXES LOCATED IN NON-PAVED OR NON-SIDEWALK AREAS ARE TO BE PROTECTED FROM MOWER OR EROSION/VEGETATION DAMAGE WITH A 200mm WIDE x 150mm DEEP CONCRETE COLLAR FLUSH WITH TOP EDGES OF THE TOP OF THE BOX LID. COLLAR TO SLOPE DOWN AWAY FROM BOX OPENING AT 3% TO DIRECT WATER AWAY FROM BOX OPENING. REFER TO COQUITLAM SUPPLEMENTAL SPECIFICATION FOR DETAILS.
 - JUNCTION BOXES IN SIDEWALK AREAS SHALL BE SUPPORTED BY CONCRETE MATERIALS ON ALL SIDES WITH A 200mm WIDE x 150mm DEEP CONCRETE COLLAR FLUSH WITH TOP OF SIDEWALK AND THE TOP OF THE BOX LID.
 - JUNCTION BOXES FOR ELECTRICAL APPLICATIONS (TRAFFIC SIGNALS, STREET LIGHTING, ETC.) - THE LIDS SHOULD BE ETCHED ELEC, JUNCTION BOXES FOR COMMUNICATIONS - THE LIDS SHOULD BE ETCHED COMM, ALL UPPERCASE LETTERS.
 - POLYMER CONCRETE 24 x 36 x 36 PULL BOXES SHALL BE INSTALLED AS SHOWN ON STANDARD DETAIL MMCD DRAWING E2.5 C/W BOLT DOWN LID. REPLACE 300mm COARSE DRAIN ROCK WITH 300mm FINE DRAIN ROCK.
 - BOTTOM OF JUNCTION BOXES SHALL BE OPEN. BOTTOM SECTIONS SHALL BE SUPPORTED WITH CONCRETE BRICKS AND USE CRUSHED GRAVEL TO DRAIN WATER.
 - ALL BOLT DOWN JUNCTION BOX LIDS SHALL BE TIER 15 (20K) RATED.
 - CONTRACTOR SHALL SUPPLY AND INSTALL THE ENTRAC ANTENNA BRACKET WITH NEOPRENE GASKET MATERIAL TO FORM A SEAL BETWEEN BRACKET AND POLE. NEOPRENE SHALL BE FULLY ENCLOSED WITHIN OUTER EDGES OF THE BRACKET SUCH THAT NONE IS VISIBLE AFTER THE BRACKET IS MOUNTED. ENTRAC ANTENNA CABLE SHALL RUN CONTINUOUS WITH NO SPLICES FROM CONTROLLER TO THE ENTRAC ANTENNA. TERMINATION OF CABLE TO BE DONE BY COBRA ELECTRIC.
 - CONTRACTOR SHALL PROVIDE THE METERED SERVICE PEDESTAL SHOP DRAWING TO DMD & ASSOCIATES PRIOR TO FINAL ORDER.

COORDINATE ALL PARKING SIGN EQUIPMENTS WORKS WITH CITY OF COQUITLAM CONTACT BRENT GALPIN 604-927-3626 BGalpin@coquitlam.ca

NOT FOR CONSTRUCTION
2025-01-15

NO MORE THAN 2 FUSES ARE ALLOWED PER POLE. THE CONTRACTOR SHALL COMMON THE LIGHTING THROUGH OFF THE SAME FUSE WHEN THERE ARE A ST LTG, PED LTG AND ILLUMINATED STREET NAME SIGN ON THE SAME POLE

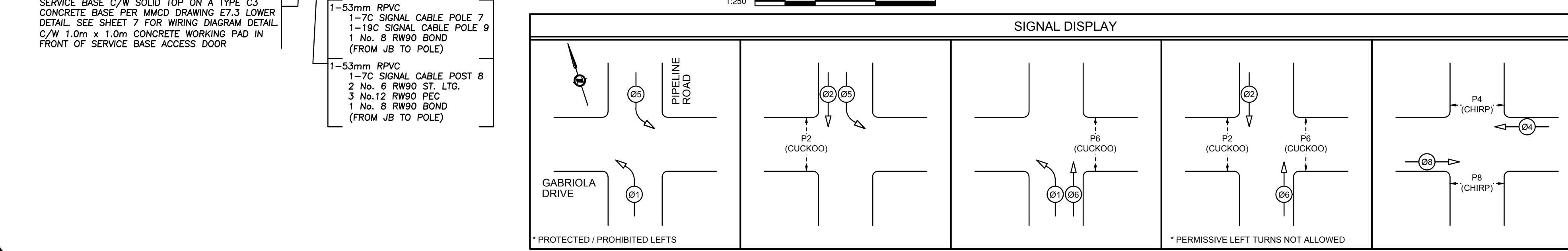
EXISTING FIBRE OPTIC CABLES ON PIPELINE ROAD SHALL REMAIN IN OPERATION AND SHALL BE PROTECTED WHEN NECESSARY UNTIL THE NEW CONDUITS AND CABLES HAVE BEEN INSTALLED. THE CONTRACTOR SHALL COORDINATE WITH QNET AT LEAST 3 WEEKS PRIOR TO CONSTRUCTION. CONTACT BRENT GALPIN (604-927-3626 / bgalpin@coquitlam.ca) OR DWAIN ROPER (604-927-3605 / droper@coquitlam.ca) TO COORDINATE THE REMOVAL, CUT OVER, SPLICING AND CONNECTIONS. QNET WILL BE RESPONSIBLE FOR SUPPLYING AND INSTALLING THE NEW FIBER OPTIC CABLES AND SPLICE ENCLOSURES.

THE CONTRACTOR SHALL PROVIDE PHOTOGRAPHIC EVIDENCE SHOWING THE INSTALLED DEPTH OF THE GROUND PLATE / ROD WITH RESPECT TO FINISHED GRADE AND DISTANCE FROM THE CONCRETE BASE AS DETAILED IN THE MMCD.

EXISTING STREET LIGHTING SHALL REMAIN IN OPERATION THROUGHOUT CONSTRUCTION. IF TRAFFIC SIGNAL DE-ENERGIZATION IS REQUIRED CONTRACTOR SHALL ENSURE FULL-TIME FLAGGING IS USED DURING ANY TRAFFIC SIGNAL DOWNTIME.

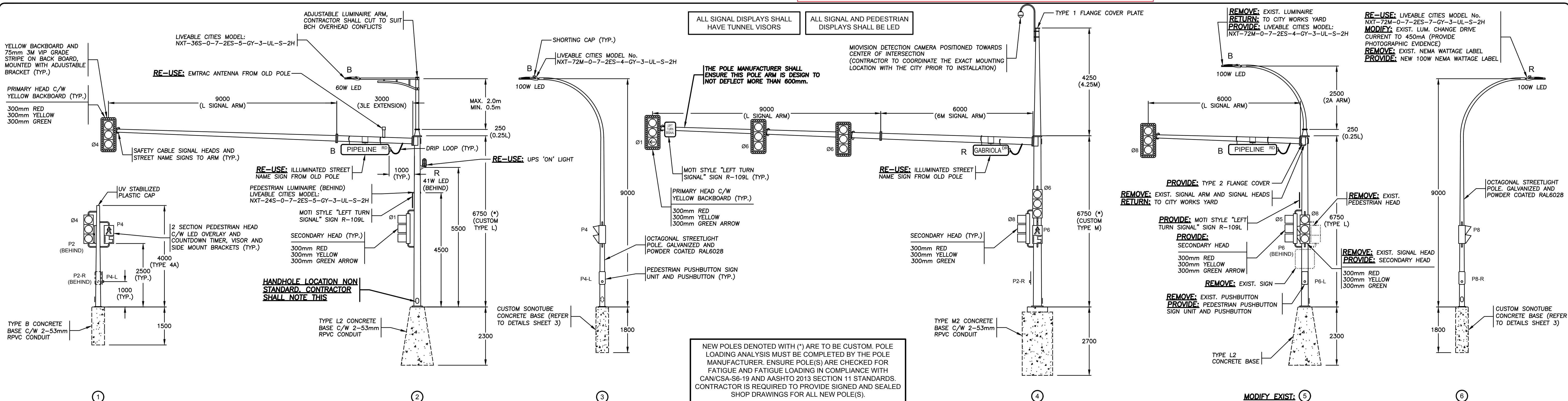


COQ. ASBULT No. **EXXXX**

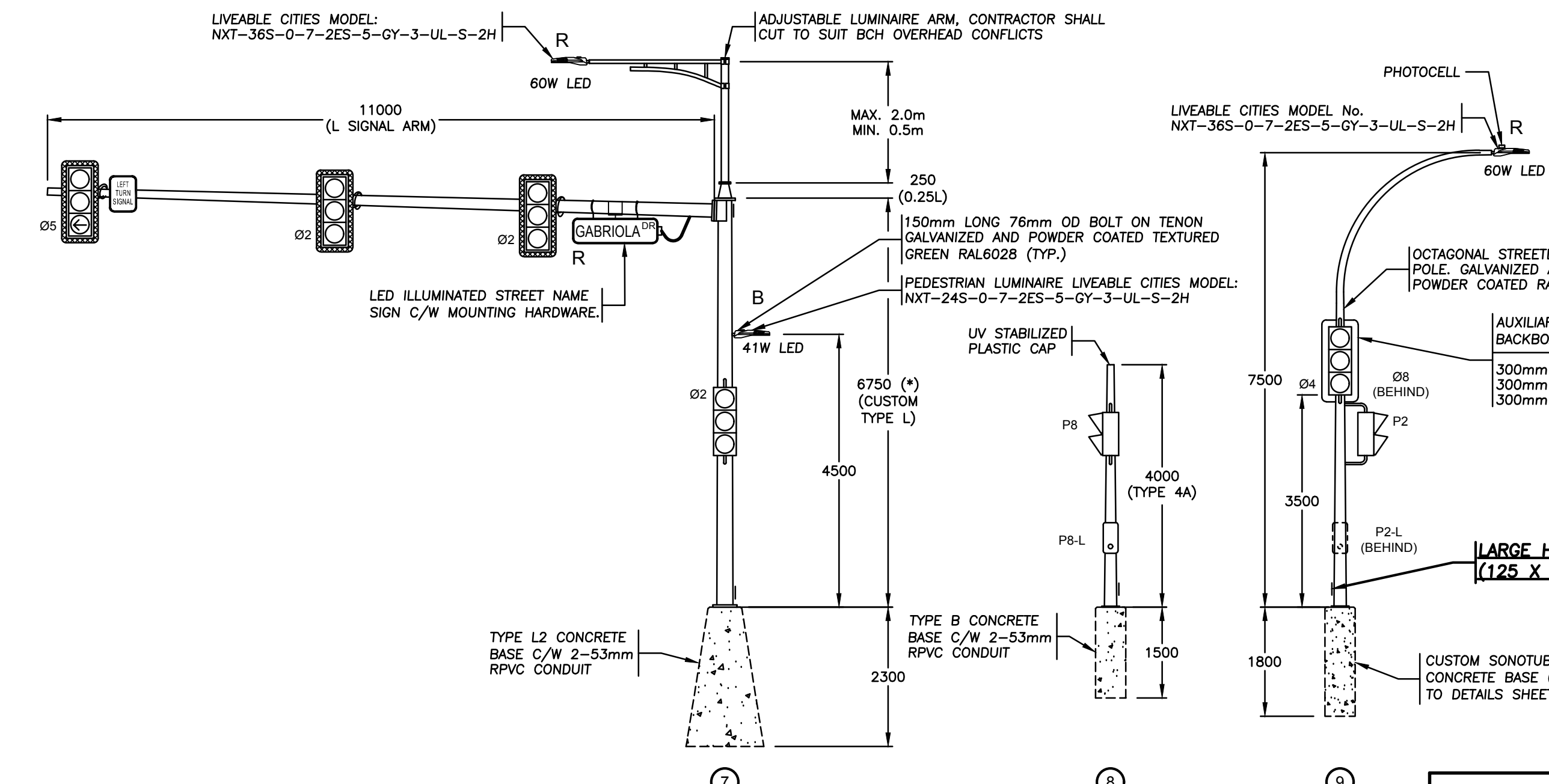


<p>Benchmark:</p> <p>DMD & Associates Electrical Consultants Ltd. #12-11558 104th Avenue, Surrey, BC, Canada V4N 0A3 www.dmdeng.com 604-589-9010 office@dmdeng.com Fax 604-589-9012 DMD PROJECT No. 7519-22-06 of 10</p>	<p>ACCEPTED FOR CONSTRUCTION Date: _____</p> <p>Manager of Development Servicing</p>	<p>Coquitlam Engineering & Public Works 3000 Guildford Way, Coquitlam, B.C. V3B 7N2</p>	<p>PERMIT TO PRACTICE</p> <p>Signature: _____</p> <p>Date: 15-01-2025</p> <p>PERMIT NUMBER: 1000771 The Association of Professional Engineers and Geoscientists of British Columbia</p>	<p>Design by: BC Date: 16-05-2018 Scale: 1:250</p> <p>Drawn by: YJ Date: 16-05-2018 Sheet of: 6 OF 10</p> <p>Checked by: NB Date: 16-05-2018 Eng. Project No. _____</p> <p>Approved by: _____ Date: 16-05-2018</p>	<p>Project: PIPELINE ROAD GABRIOLA DRIVE TRAFFIC SIGNAL MODIFICATIONS</p> <p>Description: _____</p> <p>File: 7519-22-TS</p>
---	--	--	---	--	--

Plot Date: January 15, 2025



NEW POLES DENOTED WITH (*) ARE TO BE CUSTOM. POLE LOADING ANALYSIS MUST BE COMPLETED BY THE POLE MANUFACTURER. ENSURE POLE(S) ARE CHECKED FOR FATIGUE AND FATIGUE LOADING IN COMPLIANCE WITH CAN/CSA-S6-19 AND AASHTO 2013 SECTION 11 STANDARDS. CONTRACTOR IS REQUIRED TO PROVIDE SIGNED AND SEALED SHOP DRAWINGS FOR ALL NEW POLE(S).



INTERSECTION DESIGN CRITERIA PER: (CITY BYLAW 3558)		
INTERSECTION (NAME)	PIPELINE ROAD	GABRIOLA DRIVE
LAND USE CLASSIFICATION	RESIDENTIAL	RESIDENTIAL
ROADWAY CLASSIFICATION & WIDTH	ARTERIAL	COLLECTOR
PEDESTRIAN CONFLICT	MEDIUM	MEDIUM
ILLUMINANCE RECOMMENDED/DELIVERED	22.0 LUX	27.6 LUX
UNIFORMITY RECOMMENDED/DELIVERED	3.0:1	1.8:1
LIGHT LOSS FACTOR		0.84
SPACING	AS SHOWN	
EQUIPMENT		
FIXTURE TYPE: LED	WATTAGE: 100W	MTG. HEIGHT: 9.5m DIST TYPE: 2ES
IES FILE:	NXT-72M-450mA-2ES-4000K	MODEL: NXT-72M- SERIES
FIXTURE TYPE: LED	WATTAGE: 100W	MTG. HEIGHT: 9.0m DIST TYPE: 2ES
IES FILE:	NXT-72M-450mA-2ES-4000K	MODEL: NXT-72M- SERIES
FIXTURE TYPE: LED	WATTAGE: 60W	MTG. HEIGHT: 7.5m DIST TYPE: 2ES
IES FILE:	NXT-36S-525mA-2ES-4000K	MODEL: NXT-36S- SERIES
FIXTURE TYPE: LED	WATTAGE: 60W	MTG. HEIGHT: 9.0m DIST TYPE: 2ES
IES FILE:	NXT-36S-525mA-2ES-4000K	MODEL: NXT-36S- SERIES

* BASE ON A 20-YEAR FIXTURE LIFE AND 10-YEAR CLEANING CYCLE

THE CONTRACTOR SHALL SUPPLY AND INSTALL THE FOLLOWING MATERIALS. REFER TO THE CITY OF COQUITLAM TRAFFIC SIGNAL APPROVED PRODUCT LIST AND CONTACT BERNARD TUNG 604-927-6257 AT THE CITY OF COQUITLAM TRAFFIC DEPARTMENT FOR SPECIFIC MATERIAL DETAILS PRIOR TO ORDERING:

- POLARA NAVIGATOR IDS2 SYSTEM
- ILLUMINATED STREET NAME SIGNS C/W MOUNTING HARDWARE
- MIOVISION EQUIPMENT C/W MOUNTING BRACKET AND CABLE

CONTRACTOR SHALL HIRE COBRA ELECTRIC TO COMPLETE THE EMTRAC CABLE TERMINATION. ALL COSTS SHALL BE BORN BY THE CITY

REFER TO CITY OF COQUITLAM TRAFFIC SIGNAL APPROVED PRODUCTS LIST FOR ALL EQUIPMENT DETAIL

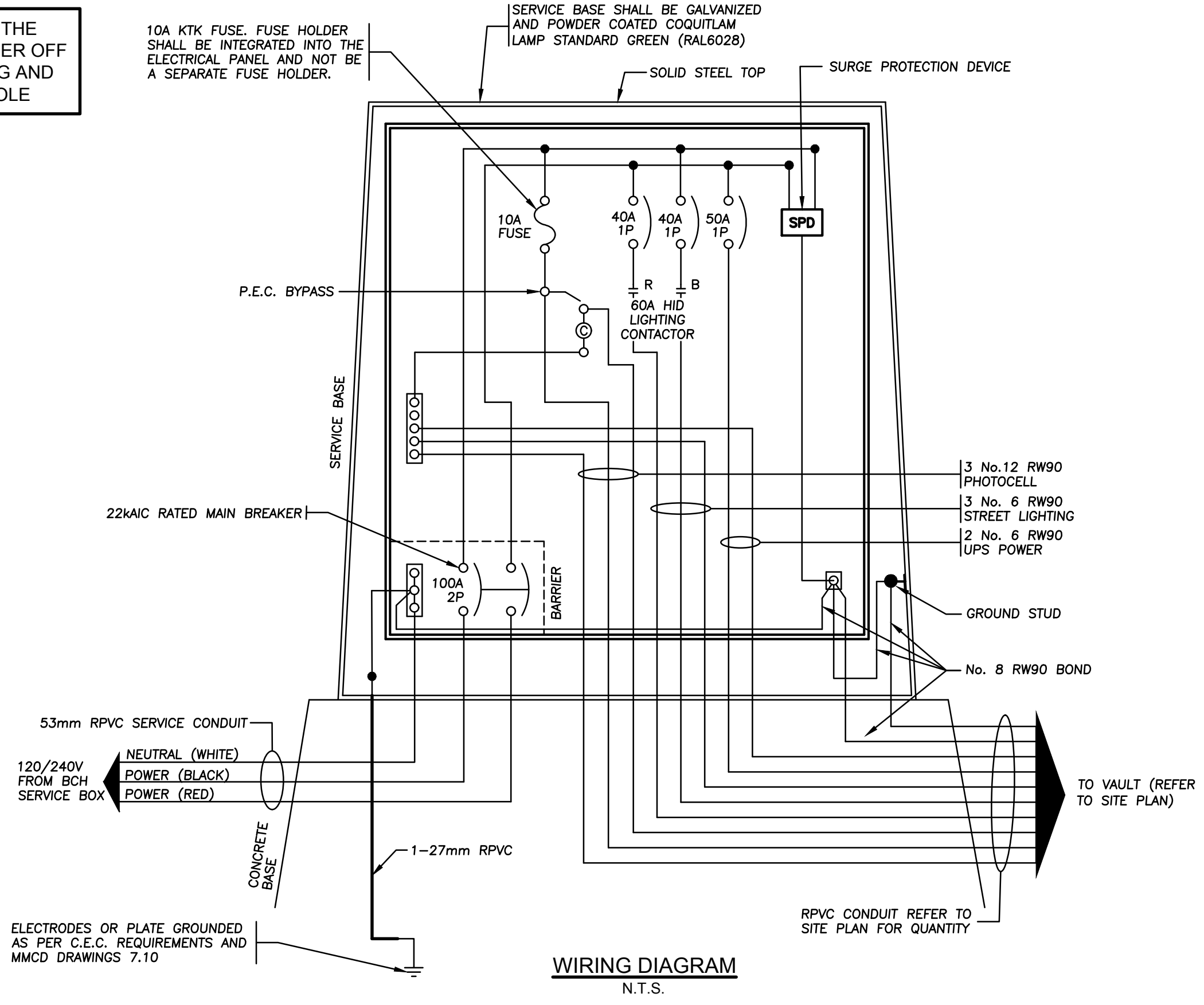
THE CONTRACTOR SHALL COORDINATE ALL TERMINATION IN THE TRAFFIC CONTROLLER WITH THE CITY

THE CITY OF COQUITLAM SHALL BE RESPONSIBLE FOR PROGRAMMING CHANGES TO THE TRAFFIC SIGNAL INCLUDING THE VIDEO DETECTION SYSTEM. CONTRACTOR SHALL PROVIDE THE CITY 3 WEEKS NOTICE IN ADVANCE OF WORK BEING REQUIRED. ALL COST RELATED TO THIS WORK WILL BE BORNE BY THE CITY.

CONTRACTOR SHALL OBTAIN A COPY OF THE CITY OF COQUITLAM TRAFFIC SIGNAL AND ROADWAY SUPPLEMENTAL SPECIFICATIONS PRIOR TO CONSTRUCTION.

CONDUCTOR COLOUR CODE (FROM HANDHOLE TO SIGNAL)		
ITEM	SIGNAL SECTION	CONDUCTOR COLOUR
#1	RED	RED (BLUE T.T.)
	YELLOW	YELLOW (RED T.T.)
	GREEN	BLUE (WHITE T.T.)
#2	RED	RED
	YELLOW	BROWN
#4	RED	RED
	YELLOW	BROWN
#5	RED	RED (BLUE T.T.)
	YELLOW	BLUE (WHITE T.T.)
#6	RED	RED
	YELLOW	BROWN
#8	RED	RED (ORANGE T.T.)
	YELLOW	BLUE
P2	DON'T WALK PUSHBUTTON	PURPLE/PURPLE (YELLOW T.T.)
P4	DON'T WALK PUSHBUTTON	BROWN BLUE
P6	DON'T WALK PUSHBUTTON	PURPLE/PURPLE (BROWN T.T.)
P8	DON'T WALK PUSHBUTTON	PURPLE/PURPLE (RED T.T.)
P8	DON'T WALK PUSHBUTTON	PURPLE/PURPLE (ORANGE T.T.)
ITEM	SIGNAL SECTION	CONDUCTOR COLOUR
SIGNAL NEUTRAL	NEUTRAL	WHITE
CONTROLLER/UPS	POWER	BLACK
STREET LIGHTING	POWER	BLACK
PANEL SUPPLY	POWER	RED
PHOTOCELL	POWER	BLACK
	SWITCH LEG	RED
NEUTRAL	NEUTRAL	WHITE
GROUND/BOND	GROUND/BOND	GREEN

NOTE: T.T. DENOTES TAPE TRACER.



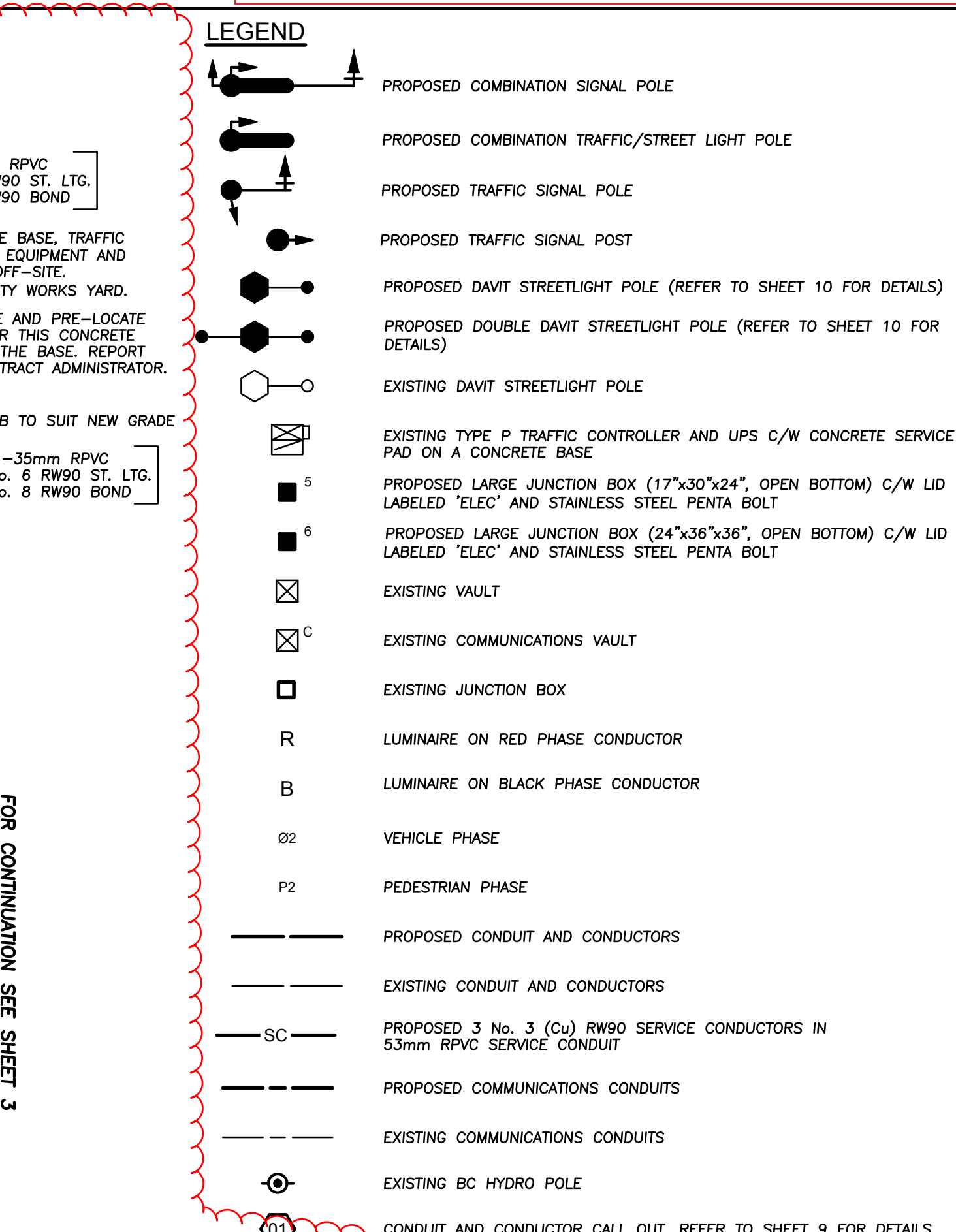
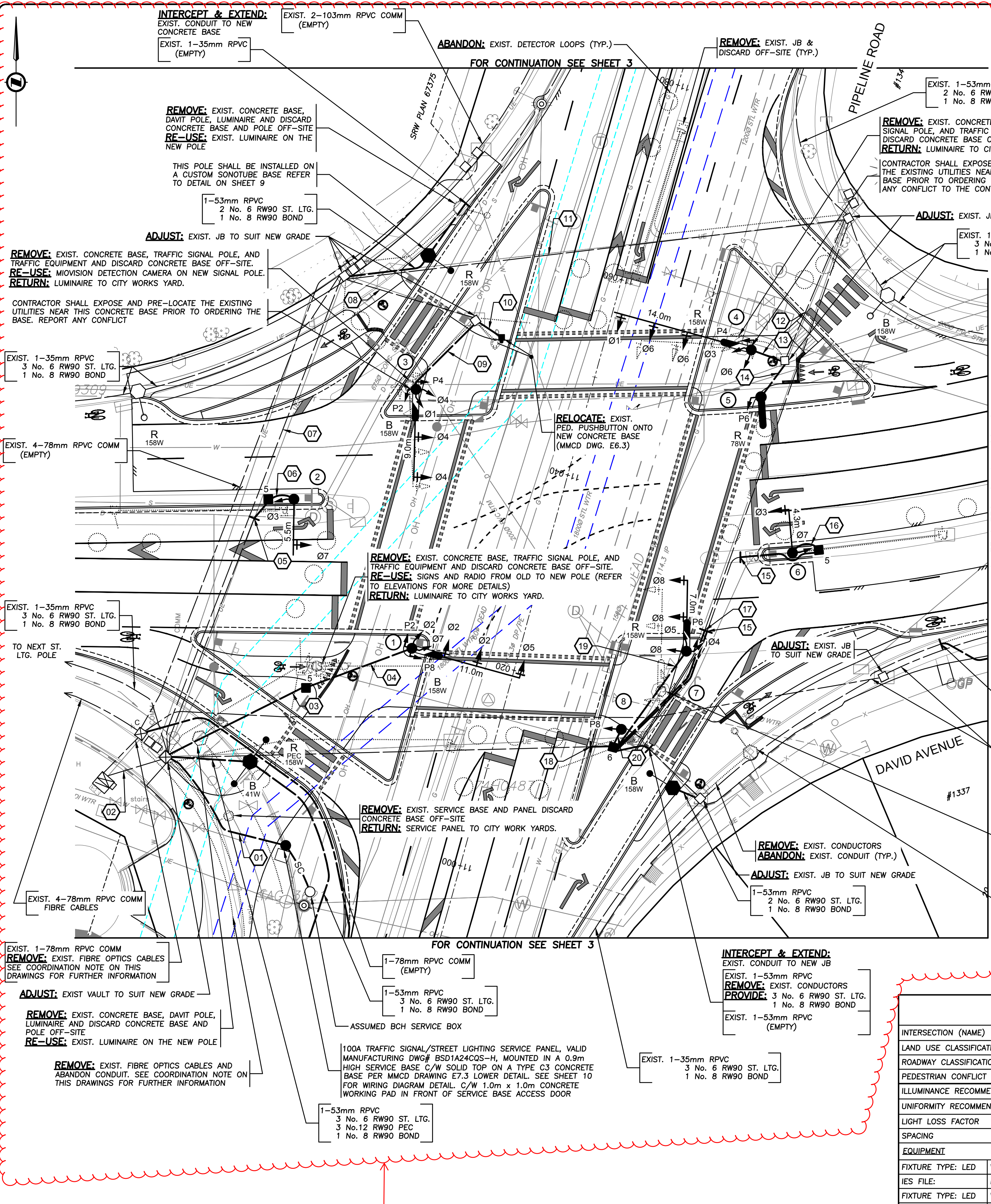
NOT FOR CONSTRUCTION
2025-01-15

BC CALL BEFORE YOU DIG
1-800-474-6886
or by CELLULAR #888
Vancouver Area 257-840

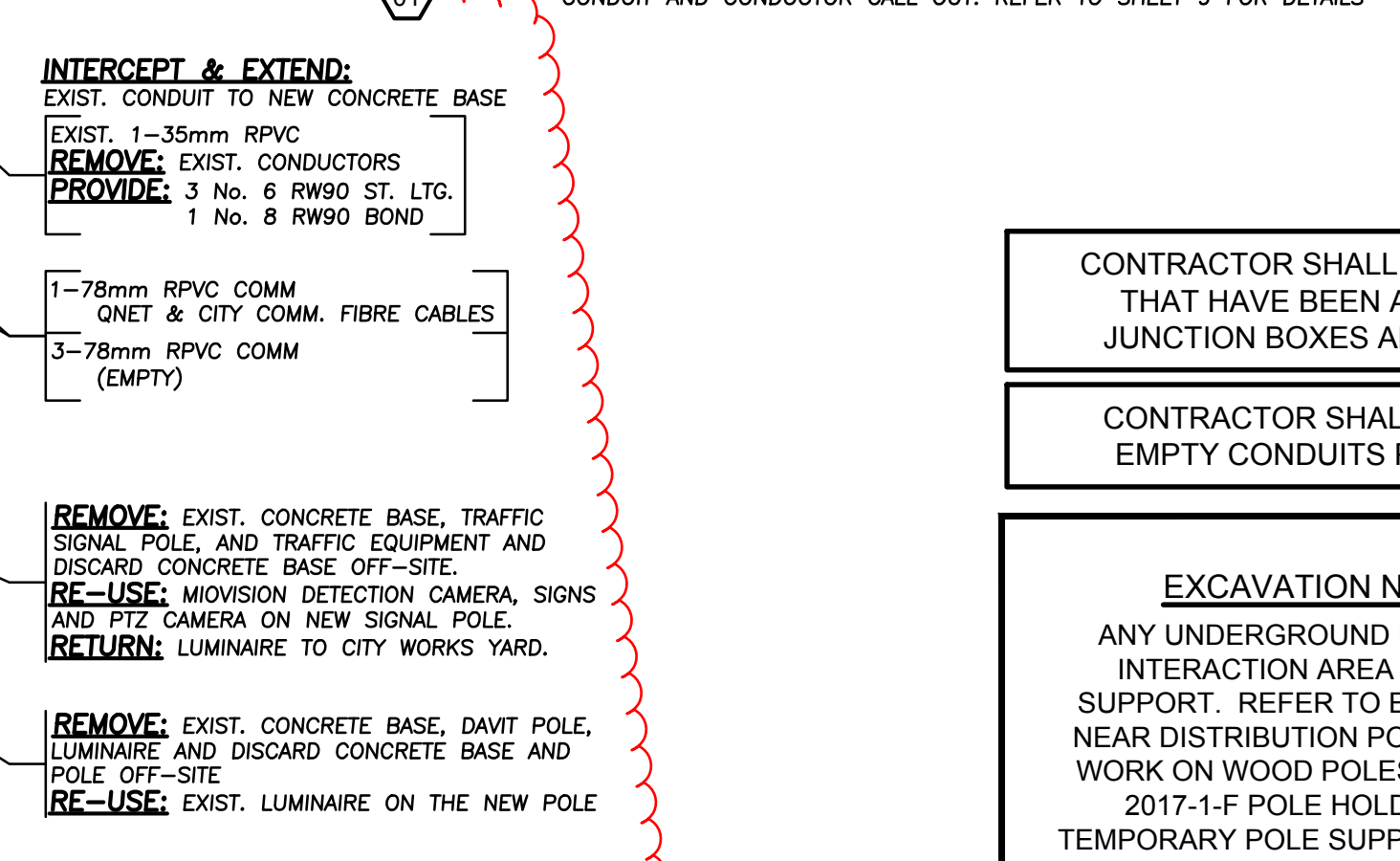
COQ. ASBULT No. **EXXXX**

CALL AT LEAST TWO FULL WORKING DAYS BEFORE YOU PLAN TO DIG

FINAL ISSUED FOR TENDER ELECTRICAL DRAWINGS TO BE ISSUED THROUGH AN ADDENDUM



- TRAFFIC SIGNAL NOTES**
- ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE (IN ORDER OF PRECEDENCE) WITH THE SUPPLEMENTAL SPECIFICATIONS, MASTER MUNICIPAL CONSTRUCTION DOCUMENT, 2019 ISSUE AND THE CURRENT MOTH STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION UNLESS OTHERWISE NOTED ON DESIGN DRAWINGS.
 - CONDUCTORS INSIDE POLES SHALL BE: No. 14 RW90 X-LINK FOR SIGNALS, No. 12 RW90 X-LINK FOR ALL OTHERS
 - A TRON HEB AA WEATHERPROOF FUSE HOLDER, C/W A 10A BUSS KIT FUSE AND 2 'L' TYPE INSULATING BOOTS, SHALL BE INSTALLED IN EACH LUMINAIRE & SIGN LIVE CONDUCTOR, IN THE HANDHOLE.
 - EXACT POSITION OF ALL EQUIPMENT WILL BE LAYED OUT BY THE CITY REPRESENTATIVE.
 - ALL SINGLE CONDUCTORS SHALL BE STRANDED COPPER, TYPE RW90 INSULATED AND COLOR CODED.
 - EMPTY CONDUITS SHALL HAVE A No.8 HB POLY YELLOW/GRN Mk PULL STRING AND CAPPED AT BOTH ENDS AS PER COQUITLAM SUPPLEMENTARY DRAWING SS-E2.5
 - WHERE INDIVIDUAL CONDUCTORS OR CABLES ARE RUN, ALL OF THE COMMON CIRCUITS SHALL BE BUNDLED, TY-RAPPED TOGETHER WITH IDENTIFICATION TAGS IN ALL JUNCTION BOXES, VAULTS, HAND HOLES, CONTROLLER AND ACCESS POINTS AS NOTED IN THE MMCD. TAGS SHALL BE MARKED AS FOLLOWS CABLE N/W POLE, STREET LIGHTING CCTS R OR B, PHOTOCELL, CONTROLLER POWER, WITH BLACK INDELEBIL MARKING PEN. TAGS TO BE ATTACHED NO FURTHER THAN 75mm FROM WIRE OR CABLE TERMINATION POINT.
 - TRAFFIC SIGNAL NEUTRALS SHALL BE KEPT SEPARATE FROM STREET LIGHTING NEUTRAL CONDUCTORS.
 - ALL SIGNAL HEADS AND LUMINAIRES SHALL BE BONDED WITH A SEPARATE No.12 RW90 CONDUCTOR (GREEN) AT THE HANDHOLE, AS REQUIRED.
 - EQUIPMENT MODELS SPECIFIED SHALL BE CONFIRMED WITH THE CITY IMMEDIATELY PRIOR TO THEIR PURCHASE TO ENSURE THAT THEY ARE CORRECT AND CURRENT. CUTSHEETS, EQUIPMENT, MAKE, MODEL & SERIAL LIST TO BE PROVIDED FOR EACH SIGNAL LOCATION.
 - ALL CONDUITS ENTERING POLES AND CABINETS SHALL BE SEALED WITH 'DUCT SEAL'.
 - SEE B.C. HYDRO STANDARDS FOR SERVICE CONNECTION DETAILS.
 - CONTRACTOR SHALL CONFIRM EXACT SERVICE LOCATIONS WITH B.C. HYDRO PRIOR TO CONSTRUCTION.
 - CONTRACTOR IS REQUIRED TO PROVIDE 72 HOURS NOTICE PRIOR TO ANY CONSTRUCTION.
 - TRAFFIC CONTROL IS REQUIRED TO CITY STANDARDS. (M.o.T.)
 - ALL POLES, ARMS, SERVICE BASES, ETC. TO BE GALVANIZED, PRIMED AND POWDER-COATED IN COLOUR. EQUIVALENT TO COQUITLAM LAMP STANDARD GREEN RAL 6028, UNLESS OTHERWISE NOTED OR APPROVED.
 - INSTALL BELL END FITTING ON ALL CONDUITS ENTERING JUNCTION BOXES.
 - INSTALL HANGER BAR & TY-RAP WIRES TO BAR IN JUNCTION BOXES AS PER MMCD DRAWING COQUITLAM SUPPLEMENTARY DRAWING SS-E2.5
 - ALL CONDUITS SHALL BE BURIED MINIMUM 600mm DEEP. A 'BURIED CABLE' MAKER TAPE SHALL BE INSTALLED 300mm ABOVE CONDUIT IN ALL TRENCHES. DETECTABLE (METALIC) TAPE TO BE USED ABOVE CONDUIT IN TRENCHES CONTAINING ONLY INTERCONNECT CONDUIT.
 - BOND ALL STEEL JUNCTION BOX LIDS.
 - CONTRACTOR SHALL REPLACE ALL ASPHALT, CONCRETE SIDEWALKS AND WHEELCHAIR RAMPS REMOVED FOR THE INSTALLATION OF THE SIGNAL AND COMM EQUIPMENT, AND RESTORE TO THE SAME OR BETTER CONDITION.
 - BACKBOARDS WITH PLUMBIZER GAPS OR KNOCKOUT SECTIONS WILL NOT BE ACCEPTED FOR ANY HEAD MOUNTED WITH OTHER THAN PLUMBIZER STYLE HARDWARE.
 - ALL ELECTRICAL PRODUCTS SHALL BEAR CSA/ETC APPROVALS OR BC ELECTRICAL INSPECTION PRIOR TO INSTALLATION.
 - SIGNAL WIRING SHALL BE TAGGED AND LABELED USING PANDUIT MP250-C TAGS AND THE APPROPRIATE PANDUIT INDELEBIL MARKER.
 - SECURITY HARDWARE TO BE USED ON ALL POLES, SECURITY BITS ARE TO BE SUBMITTED TO THE CITY AFTER SIGNAL HAS BEEN FULLY COMPLETED.
 - ALL GROUND PLATES AND GROUND PLATE CONDUCTORS ARE TO HAVE A MINIMUM OF 5 METERS CLEARANCE BETWEEN THEM.
 - CONCRETE VAULTS AND JUNCTION BOXES LOCATED IN NON-PAVED OR NON-SIDEWALK AREAS ARE TO BE PROTECTED FROM MOWER OR EROSION/VEGETATION DAMAGE WITH A 200mm WIDE x 150mm DEEP CONCRETE COLLAR FLUSH WITH TOP EDGES OF THE TOP OF THE BOX LID. COLLAR TO SLOPE DOWN AWAY FROM BOX OPENING AT 3% TO DIRECT WATER AWAY FROM BOX OPENING. REFER TO COQUITLAM SUPPLEMENTAL SPECIFICATION FOR DETAILS.
 - JUNCTION BOXES IN SIDEWALK AREAS SHALL BE SUPPORTED BY CONCRETE MATERIALS ON ALL SIDES WITH A 200mm WIDE x 150mm DEEP CONCRETE COLLAR FLUSH WITH TOP OF SIDEWALK AND THE TOP OF THE BOX LID.
 - JUNCTION BOXES FOR ELECTRICAL APPLICATIONS (TRAFFIC SIGNALS, STREET LIGHTING, ETC.) - THE LIDS SHOULD BE ETCHED ELEC, JUNCTION BOXES FOR COMMUNICATIONS - THE LIDS SHOULD BE ETCHED COMM, ALL UPPERCASE LETTERS.
 - POLYMER CONCRETE 24 x 36 x 36 PULL BOXES SHALL BE INSTALLED AS SHOWN ON STANDARD DETAIL MMCD DRAWING E2.5 C/W BOLT DOWN LID. REPLACE 300mm COARSE DRAIN ROCK WITH 300mm FINE DRAIN ROCK.
 - BOTTOM OF JUNCTION BOXES SHALL BE OPEN. BOTTOM SECTIONS SHALL BE SUPPORTED WITH CONCRETE BRICKS AND USE CRUSHED GRAVEL TO DRAIN WATER.
 - ALL BOLT DOWN JUNCTION BOX LIDS SHALL BE TIER 15 (20K) RATED.
 - THE CONTRACTOR SHALL SUPPLY AND INSTALL THE EMTRAC ANTENNA BRACKET WITH NEOPRENE GASKET MATERIAL TO FORM A SEAL BETWEEN BRACKET AND POLE. NEOPRENE SHALL BE FULLY ENCLOSED WITHIN OUTER EDGES OF THE BRACKET SUCH THAT NONE IS VISIBLE AFTER THE BRACKET IS MOUNTED. EMTRAC ANTENNA CABLE SHALL RUN CONTINUOUS WITH NO SPLICES FROM CONTROLLER TO THE EMTRAC ANTENNA. TERMINATION OF CABLE TO BE DONE BY COBRA ELECTRIC.



INTERSECTION DESIGN CRITERIA PER: (CITY BYLAW 3558)

INTERSECTION (NAME)	PIPELINE ROAD	DAVID AVENUE
LAND USE CLASSIFICATION	RESIDENTIAL	RESIDENTIAL
ROADWAY CLASSIFICATION & WIDTH	ARTERIAL	ARTERIAL
PEDESTRIAN CONFLICT	MEDIUM	MEDIUM
ILLUMINANCE RECOMMENDED/DELIVERED	26.0 LUX	30.2 LUX
UNIFORMITY RECOMMENDED/DELIVERED	3.0:1	2.0:1
LIGHT LOSS FACTOR	0.84	
SPACING	AS SHOWN	
EQUIPMENT		
FIXTURE TYPE: LED	WATTAGE: 158W	MTG. HEIGHT: 9.5m DIST TYPE: 4AH
IES FILE:	NXT-72M-700mA-4AH-4000K	MODEL: NXT-72M- SERIES
FIXTURE TYPE: LED	WATTAGE: 158W	MTG. HEIGHT: 9.0m DIST TYPE: 2ES
IES FILE:	NXT-72M-700mA-2ES-4000K	MODEL: NXT-72M- SERIES
FIXTURE TYPE: LED	WATTAGE: 158W	MTG. HEIGHT: 7.5m DIST TYPE: 4AH
IES FILE:	NXT-72M-700mA-4AH-4000K	MODEL: NXT-72M- SERIES
FIXTURE TYPE: LED	WATTAGE: 78W	MTG. HEIGHT: 9.0m DIST TYPE: 2ES
IES FILE:	NXT-72M-350mA-2ES-4000K	MODEL: NXT-72M- SERIES

* BASE ON A 20-YEAR FIXTURE LIFE AND 10-YEAR CLEANING CYCLE

CONTRACTOR SHALL CUT OUT ALL REDUNDANT CONDUITS THAT HAVE BEEN ABANDONED THAT ENTER EXISTING JUNCTION BOXES AND GROUT OVER OLD ENTRY HOLES

CONTRACTOR SHALL CLEAN OUT AND CLEAR ALL JB'S & EMPTY CONDUITS PRIOR TO INSTALLING NEW CABLES

CAUTION!
EXCAVATION NEAR OVERHEAD UTILITY POLE
ANY UNDERGROUND EXCAVATION WITHIN SOIL FOUNDATION INTERACTION AREA REQUIRES TEMPORARY UTILITY POLE SUPPORT. REFER TO ESS5 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

LOCATING EQUIPMENT
FOR CLARITY CONDUITS, JUNCTION BOXES AND STREETLIGHT POLES MAY NOT BE SHOWN AT DESIGN OFFSETS. CONTRACTOR SHALL LOCATE ALL EQUIPMENT BASED ON STATIONS AND/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.

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.

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.

NOT FOR CONSTRUCTION
2025-01-15

THE CONTRACTOR SHALL PROVIDE PHOTOGRAPHIC EVIDENCE SHOWING THE INSTALLED DEPTH OF THE GROUND PLATE / ROD WITH RESPECT TO FINISHED GRADE AND DISTANCE FROM THE CONCRETE BASE AS DETAILED IN THE MMCD.

EXISTING STREET LIGHTING SHALL REMAIN IN OPERATION THROUGHOUT CONSTRUCTION. IF TRAFFIC SIGNAL DE-ENERGIZATION IS REQUIRED CONTRACTOR SHALL ENSURE FULL-TIME FLAGGING IS USED DURING ANY TRAFFIC SIGNAL DOWNTIME.

EXISTING FIBRE OPTIC CABLES ON PIPELINE ROAD SHALL REMAIN IN OPERATION AND SHALL BE PROTECTED WHEN NECESSARY UNTIL THE NEW CONDUITS AND CABLES HAVE BEEN INSTALLED. THE CONTRACTOR SHALL COORDINATE WITH QNET AT LEAST 3 WEEKS PRIOR TO CONSTRUCTION. CONTACT BRENT GALPIN (604-927-3626 / bgalpin@coquitlam.ca) OR DWAIN ROPER (604-927-3605 / droper@coquitlam.ca) TO COORDINATE THE REMOVAL, CUT OVER, SPLICING AND CONNECTIONS. QNET WILL BE RESPONSIBLE FOR SUPPLYING AND INSTALLING THE NEW FIBER OPTIC CABLES AND SPLICE ENCLOSURES.

DO **NOT** USE THIS DRAWING FOR PAVEMENT MARKINGS

ALL JUNCTION BOX LOCATIONS AND CONDUIT ROUTING ARE DIAGRAMMATIC AND ARE NOT TO SCALE. CONTRACTOR TO AVOID UNDERGROUND CONFLICTS AND NOT INSTALL ANYTHING ON PRIVATE PROPERTY.

BC CALL BEFORE YOU DIG
1-800-474-6886
or by CELLULAR 4888
Vancouver Area 257-840

COQ. ASBULT No. **EXXXX**

CALL AT LEAST TWO FULL WORKING DAYS BEFORE YOU PLAN TO DIG

NOT IN SCOPE: REVISED DRAWINGS TO FOLLOW

Benchmark: _____

DMD & Associates Electrical Consultants Ltd.
112-1158 104th Avenue, Surrey, BC, Canada V4N 0A3
www.dmdeng.com 604-589-9010
office@dmdeng.com Fax 604-589-9012
DMD PROJECT No. 7519-22-08 of 10

ACCEPTED FOR CONSTRUCTION Date: _____
Manager of Development Servicing _____

Coquitlam Engineering & Public Works
3000 Guildford Way, Coquitlam, B.C. V3B 7N2

PERMIT TO PRACTICE
Signature: _____
Date: 15-01-2025
PERMIT NUMBER: 1000771
The Association of Professional Engineers and Geoscientists of British Columbia

Design by: BG Date: 16-05-2018 Scale: 1:250
Drawn by: YJ Date: 16-05-2018 Sheet of: 8 OF 10
Checked by: NB Date: 16-05-2018 Eng. Project No. _____
Approved by: _____ Date: 16-05-2018

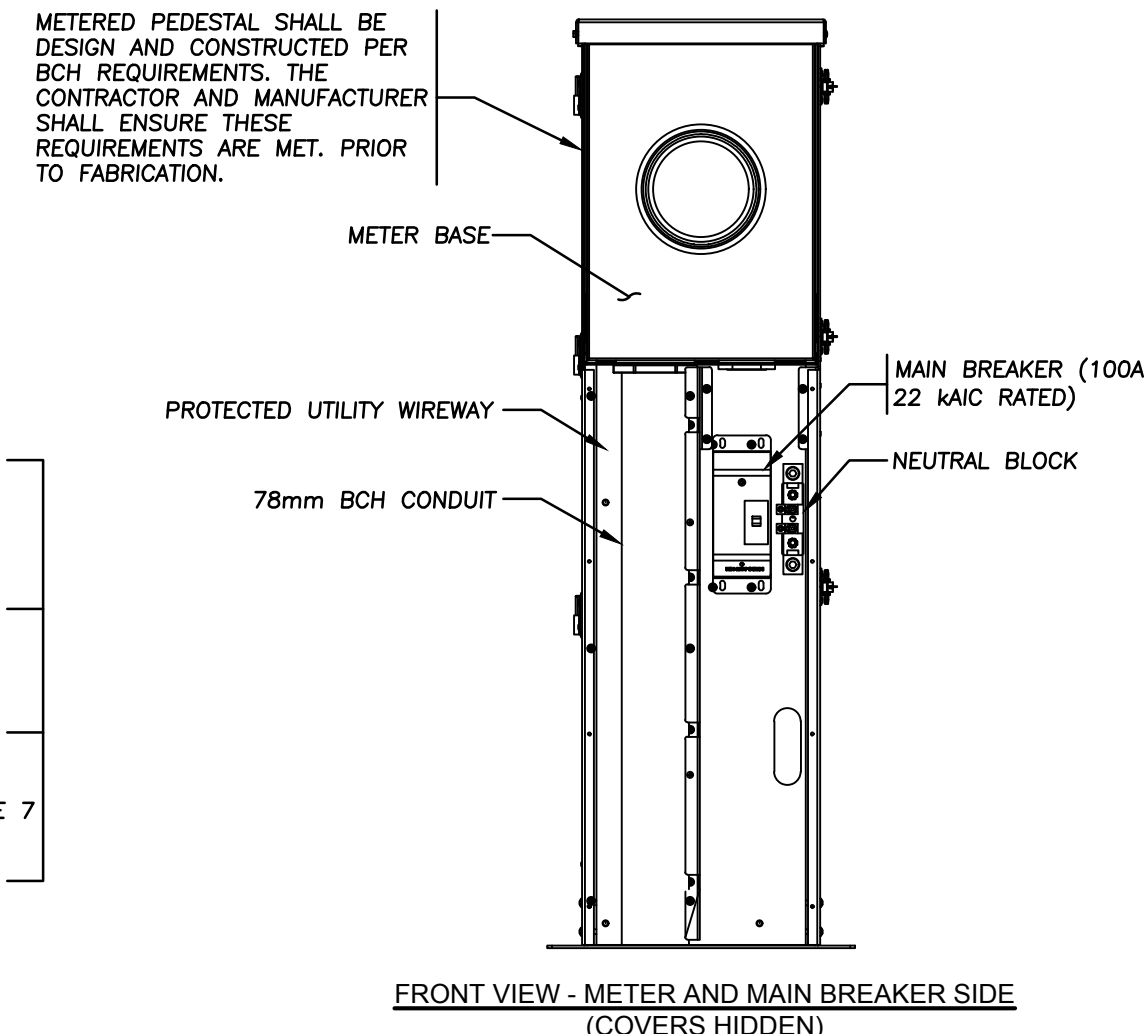
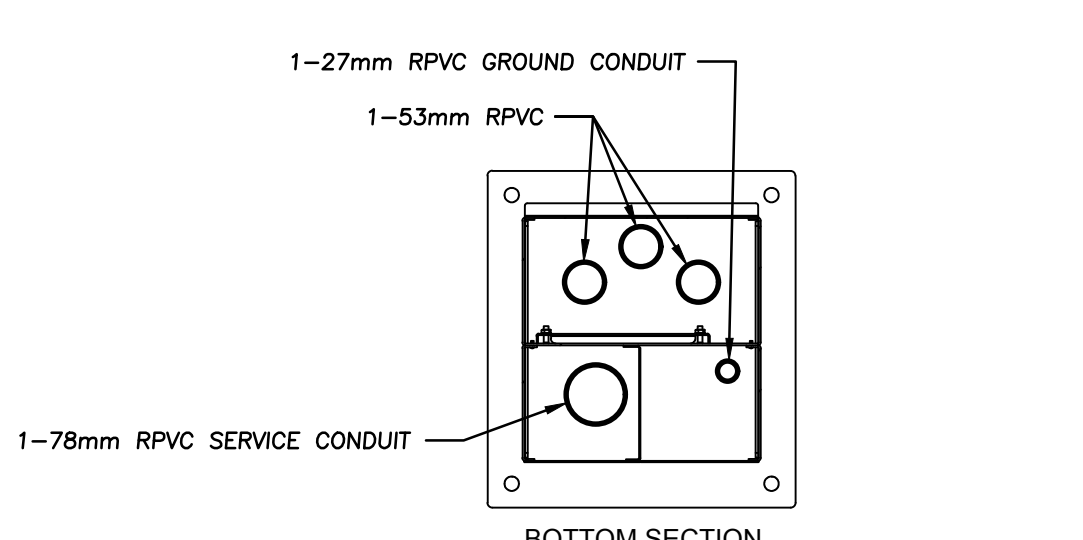
Project: **PIPELINE ROAD DAVID AVENUE TRAFFIC SIGNAL MODIFICATIONS**
Description: _____
File: 7519-22-TS

Plot Date: January 15, 2025

- 01 1-53mm RPVC
3 No. 4 RW90 ST. LTG.
2 No. 6 RW90 UPS PWR.
3 No.12 RW90 PEC
1 No. 8 RW90 BOND
- 02 2-53mm RPVC (EMPTY)
- 03 1-78mm RPVC
REMOVE: EXIST. CONDUCTORS
PROVIDE: 1-19C SIGNAL CABLE POLE 3
1-19C SIGNAL CABLE POLE 4
1-7C SIGNAL CABLE POLE 2
1 No. 8 RW90 BOND
- 04 1-78mm RPVC
REMOVE: EXIST. CONDUCTORS
PROVIDE: 1-19C SIGNAL CABLE POLE 1
1-19C SIGNAL CABLE POLE 2
1-7C SIGNAL CABLE POLE 6
1 No. 8 RW90 BOND
- 05 1-78mm RPVC
REMOVE: EXIST. CONDUCTORS
PROVIDE: 2-MISSION TRAFFIC LINK CABLE POLE 3, POLE 7
1 EMTRAC ANTENNA CABLE
2 No.14 UPS "ON BATTERY POWER"
1 CATSE ETHERNET PTZ. CABLE
1 CATSE RADIO ANTENNA CABLE
2 No. 6 RW90 UPS. PWR.
1 No. 8 RW90 BOND
- 06 1-78mm RPVC
REMOVE: EXIST. CONDUCTORS
PROVIDE: (EMPTY)
- 07 1-53mm RPVC
1-19C SIGNAL CABLE POLE 1
1-EMTRAC ANTENNA CABLE
1 CATSE RADIO ANTENNA CABLE
1 No. 8 RW90 BOND
- 08 1-53mm RPVC
2 No. 6 RW90 ST. LTG.
2 No.14 UPS "ON BATTERY POWER"
1 No. 8 RW90 BOND
- 09 1-53mm RPVC (EMPTY)
- 10 1-53mm RPVC
1-19C SIGNAL CABLE POLE 1
1-EMTRAC ANTENNA CABLE
1 CATSE RADIO ANTENNA CABLE
1 No. 8 RW90 BOND
- 11 1-53mm RPVC
2 No. 6 RW90 ST. LTG.
2 No.14 UPS "ON BATTERY POWER"
1 No. 8 RW90 BOND
- 12 1-53mm RPVC
1-19C SIGNAL CABLE POLE 1
1-EMTRAC ANTENNA CABLE
1 CATSE RADIO ANTENNA CABLE
1 No. 8 RW90 BOND
- 13 1-53mm RPVC
2 No. 6 RW90 ST. LTG.
2 No.14 UPS "ON BATTERY POWER"
1 No. 8 RW90 BOND
- 14 1-53mm RPVC (EMPTY)
- 15 1-53mm RPVC
1-19C SIGNAL CABLE POLE 1
1-EMTRAC ANTENNA CABLE
1 CATSE RADIO ANTENNA CABLE
1 No. 8 RW90 BOND
- 16 1-53mm RPVC
2 No. 6 RW90 ST. LTG.
2 No.14 UPS "ON BATTERY POWER"
1 No. 8 RW90 BOND
- 17 1-53mm RPVC (EMPTY)
- 18 1-53mm RPVC
1-19C SIGNAL CABLE POLE 1
1-EMTRAC ANTENNA CABLE
1 CATSE RADIO ANTENNA CABLE
1 No. 8 RW90 BOND
- 19 1-53mm RPVC
2 No. 6 RW90 ST. LTG.
2 No.14 UPS "ON BATTERY POWER"
1 No. 8 RW90 BOND
- 20 1-53mm RPVC (EMPTY)

- 12 1-78mm RPVC
REMOVE: EXIST. CONDUCTORS
PROVIDE: 1-19C SIGNAL CABLE POLE 4
1 No. 8 RW90 BOND
- 13 1-53mm RPVC
1-19C SIGNAL CABLE POLE 4
2 No. 6 RW90 ST. LTG.
1 No. 8 RW90 BOND
- 14 1-53mm RPVC
1-7C SIGNAL CABLE POLE 5
1 No. 8 RW90 BOND
- 15 1-53mm RPVC
1-7C SIGNAL CABLE POLE 5
2 No. 6 RW90 ST. LTG.
1 No. 8 RW90 BOND
- 16 1-53mm RPVC (EMPTY)
- 17 1-53mm RPVC
1-7C SIGNAL CABLE POLE 6
1 No. 8 RW90 BOND
- 18 1-53mm RPVC (EMPTY)
- 19 1-53mm RPVC
1-19C SIGNAL CABLE POLE 6
1 No. 8 RW90 BOND
- 20 1-53mm RPVC (EMPTY)
- 21 1-53mm RPVC
1-19C SIGNAL CABLE POLE 6
1 No. 8 RW90 BOND
- 22 1-53mm RPVC (EMPTY)
- 23 1-53mm RPVC
1-19C SIGNAL CABLE POLE 7
1-7C SIGNAL CABLE POLE 8
1 No. 8 RW90 BOND
- 24 1-53mm RPVC
1-19C SIGNAL CABLE POLE 7
1-7C SIGNAL CABLE POLE 8
1 No. 8 RW90 BOND
- 25 1-53mm RPVC
2 No. 6 RW90 ST. LTG.
1-MISSION TRAFFIC LINK CABLE POLE 7
1 CATSE ETHERNET PTZ. CABLE
1 No. 8 RW90 BOND
- 26 1-53mm RPVC
1-7C SIGNAL CABLE POLE 8
1 No. 8 RW90 BOND
- 27 1-53mm RPVC (EMPTY)
- 28 1-53mm RPVC
1-19C SIGNAL CABLE POLE 3
1-19C SIGNAL CABLE POLE 4
1-MISSION TRAFFIC LINK CABLE POLE 3
1 No. 8 RW90 BOND
- 29 1-53mm RPVC
2 No. 6 RW90 ST. LTG.
2 No.14 RW90 ppb-P4
1 No. 8 RW90 BOND
- 30 1-53mm RPVC
2 No.14 RW90 ppb-P4
1 No. 8 RW90 BOND
- 31 1-53mm RPVC
REMOVE: EXIST. CONDUCTORS
PROVIDE: 1-19C SIGNAL CABLE POLE 4
1 No. 8 RW90 BOND
- 32 1-53mm RPVC
REMOVE: EXIST. CONDUCTORS
PROVIDE: 3 No. 4 RW90 ST. LTG.
1 No. 8 RW90 BOND
- 33 1-53mm RPVC
REMOVE: EXIST. CONDUCTORS
PROVIDE: (EMPTY)

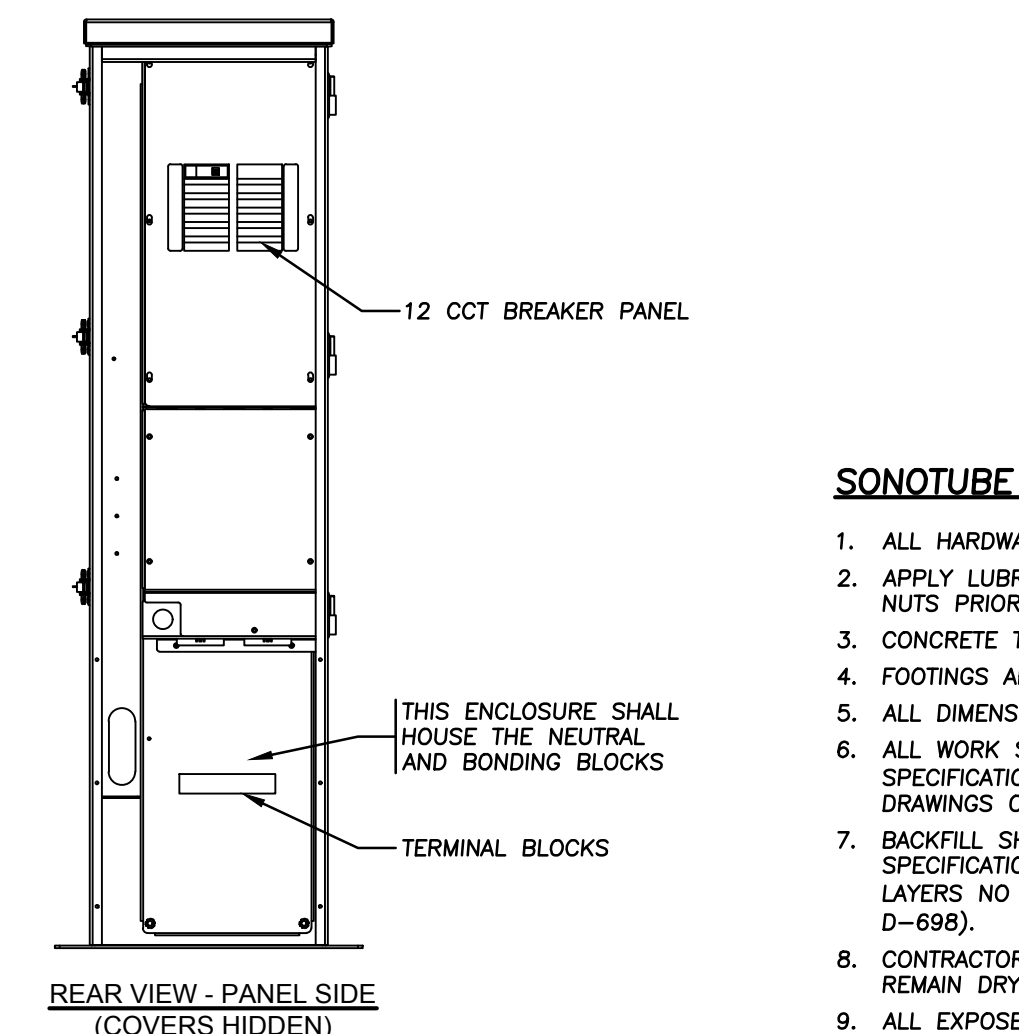
METERED PEDESTAL SHALL BE INSTALLED ON A CUSTOM TYPE C3 CONCRETE BASE. THE CONTRACTOR SHALL ENSURE ANCHOR BOLT LOCATION ALIGN WITH THE PEDESTAL AND ARE SIZED IS PER THE MANUFACTURERS SPECIFICATIONS. THE CONTRACTOR SHALL COORDINATED THE CONDUIT LAYOUT TO SUIT THE METERED PEDESTAL.



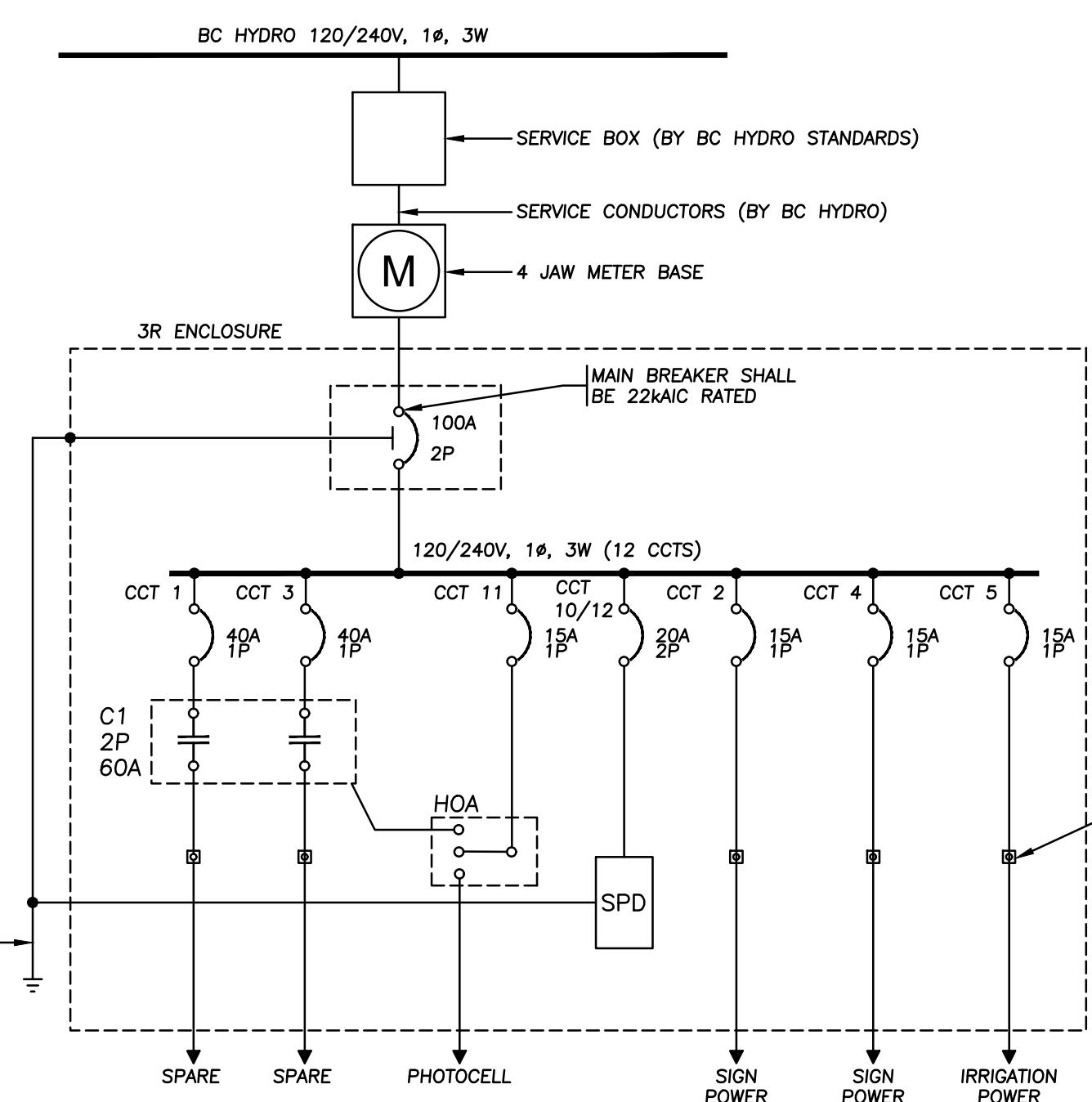
120V SERVICE LOAD
(100A-120/240V SERVICE BASE AT DAVID AVE AND PIPELINE RD)

WATTAGE (W)	CCT.PHASE	EXISTING	REMOVED	NEW	TOTAL No. OF LIGHTS	CURRENT(A)
28W	R	0	0	0	0	0.23A
	B	0	0	1	1	
41W	R	0	0	0	0	0.00A
	B	0	0	1	1	
60W	R	0	0	1	1	0.50A
	B	0	0	0	0	
78W	R	10	0	1	11	7.15A
	B	9	0	0	9	
92W	R	2	0	0	2	1.53A
	B	2	0	0	2	
158W	R	11	1	0	10	13.17A
	B	12	1	0	11	

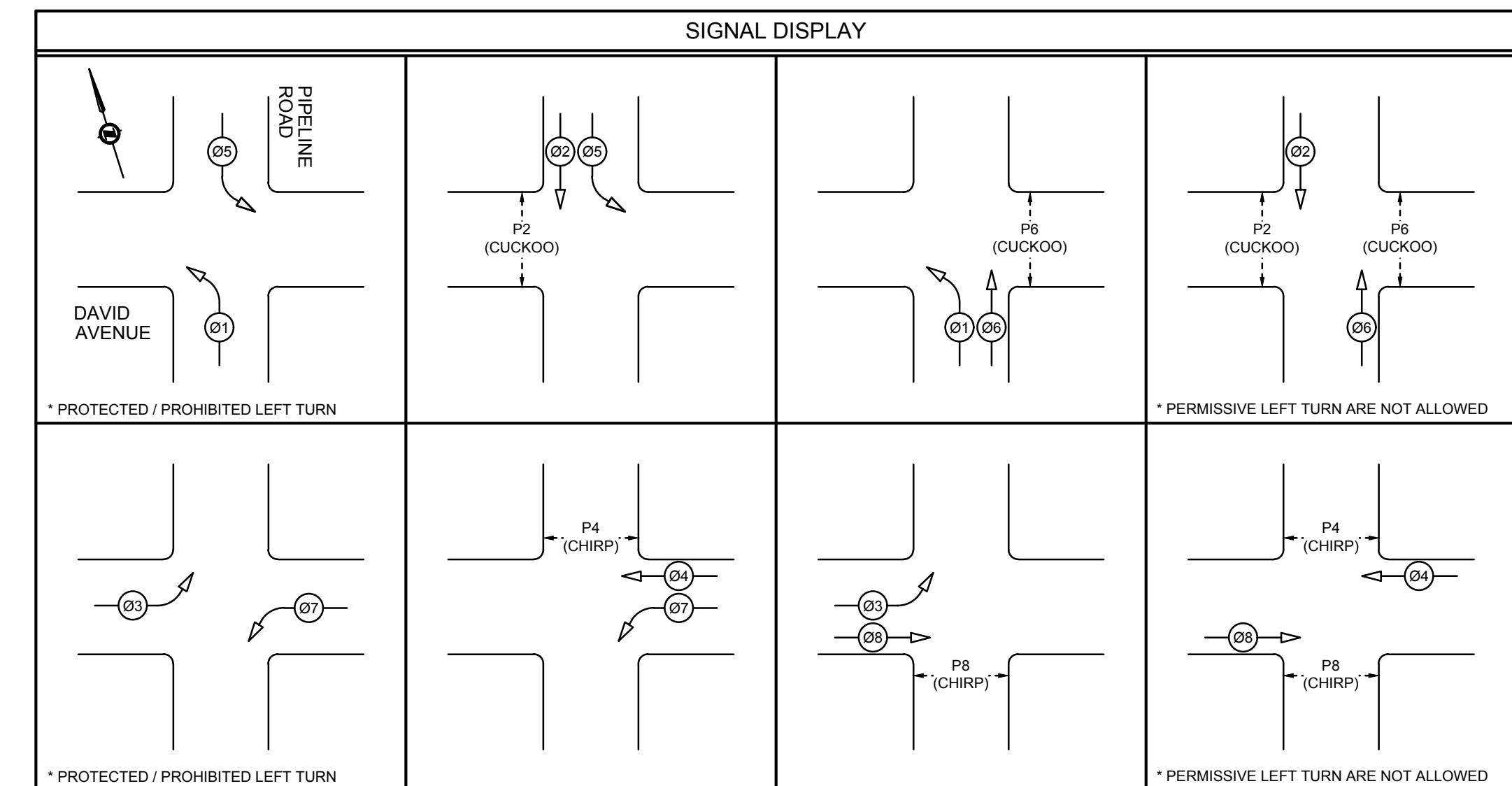
2.74% VOLTAGE DROP



METERED PEDESTAL AT GABRIOLA DETAIL
N.T.S.

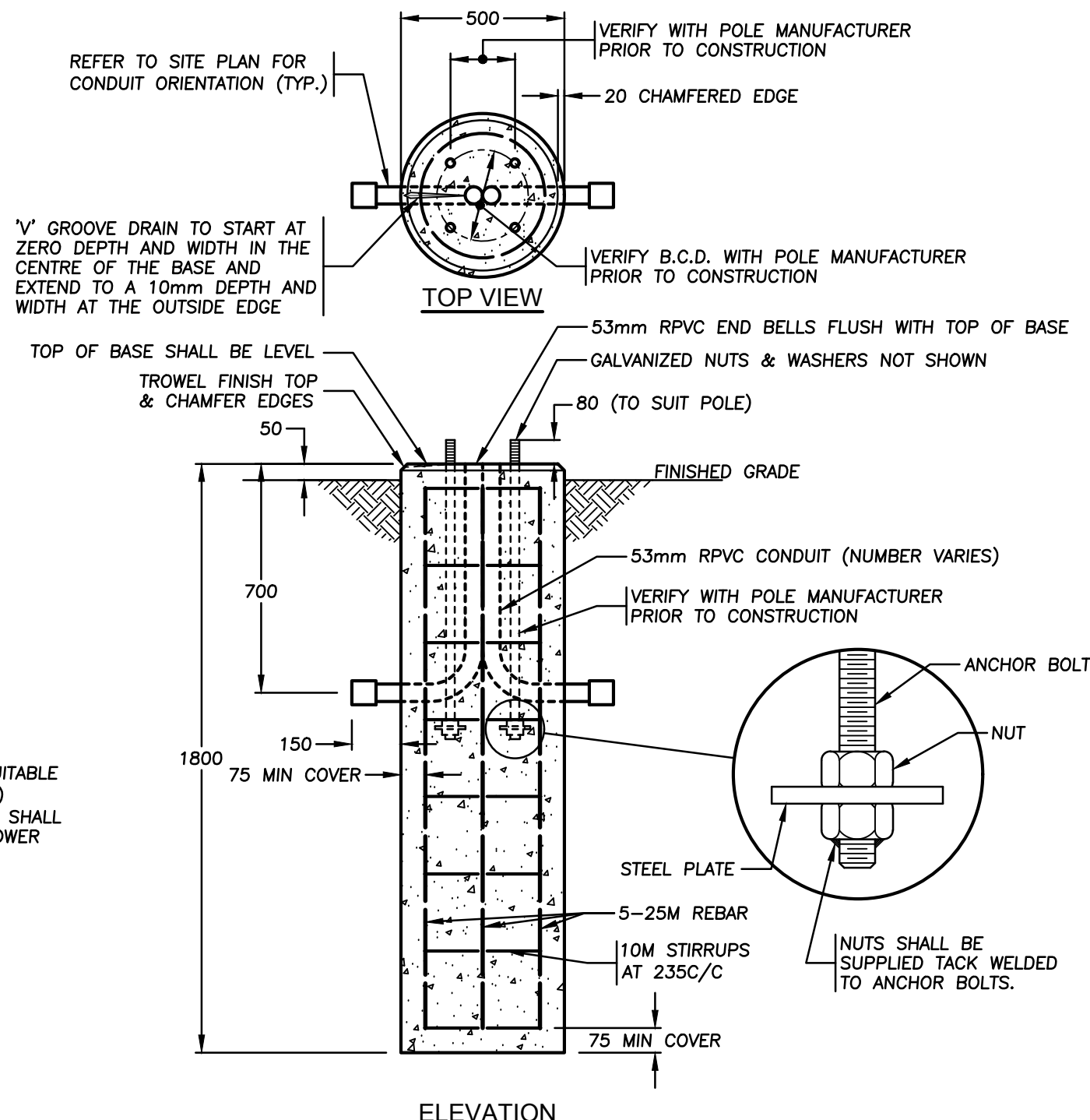


METERED PEDESTAL SINGLE LINE DIAGRAM
N.T.S.



SONOTUBE FOUNDATION NOTES:

- ALL HARDWARE SHALL BE GALVANIZED IN ACCORDANCE WITH CAN/CSA G14-M92
- APPLY LUBRICATE OR OTHER SUITABLE GREASE TO EXPOSED PORTION OF ANCHOR BOLTS AND NUTS PRIOR TO POLE INSTALLATION
- CONCRETE TO HAVE A MINIMUM STRENGTH OF 30MPa AT 28 DAYS.
- FOOTINGS ARE DESIGNED FOR SOILS WITH A MINIMUM ALLOWABLE BEARING PRESSURE OF 125kPa.
- ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE NOTED.
- ALL WORK SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE MINISTRY STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION (2012 ISSUE) UNLESS OTHERWISE NOTED ON THESE DRAWINGS OR IN THE SPECIAL PROVISIONS.
- BACKFILL SHALL BE S.G.S.B. IN ACCORDANCE WITH SECTION 202 OF BC MOTI STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION. BACKFILL SHALL BE PLACED AND COMPACTED IN LAYERS NO MORE THAN 150mm THICK TO 100% STANDARD PROCTOR MAXIMUM DENSITY (ASTM D-698).
- CONTRACTOR SHALL PROVIDE ALL MEANS NECESSARY TO ENSURE THAT EXCAVATIONS SHALL REMAIN DRY DURING CONSTRUCTION.
- ALL EXPOSED EDGES SHALL BE CHAMFERED 20 x 20 U.N.O.
- CONFIRM ANCHOR BOLTS AND THEIR PLAN ORIENTATION PRIOR TO SETTING IN CONCRETE FORMS.



CONDUCTOR COLOUR CODE (FROM HANDHOLE TO SIGNAL)		
ITEM	SIGNAL SECTION	CONDUCTOR COLOUR
#1	RED	RED (BLUE T.T.)
	YELLOW	YELLOW (RED T.T.)
	GREEN ARROW	BLUE (WHITE T.T.)
#2	RED	RED
	YELLOW GREEN	YELLOW BLUE
#3	RED	RED (BLUE T.T.)
	YELLOW GREEN ARROW	BROWN (ORANGE T.T.) BLUE (WHITE T.T.)
#4	RED	RED BROWN
	YELLOW GREEN	BLUE
#5	RED	RED (BLUE T.T.)
	YELLOW GREEN ARROW	YELLOW BLUE (WHITE T.T.)
#6	RED	RED YELLOW (RED T.T.)
	YELLOW GREEN	BLUE
#7	RED	RED (BLUE T.T.)
	YELLOW GREEN ARROW	BLUE (WHITE T.T.)
#8	RED	RED (ORANGE T.T.)
	YELLOW GREEN	BROWN
P2	DON'T WALK WALK PUSHBUTTON	YELLOW BLUE PURPLE/PURPLE (YELLOW T.T.)
	P4	DON'T WALK WALK PUSHBUTTON
P6	DON'T WALK WALK PUSHBUTTON	YELLOW (RED T.T.) PURPLE/PURPLE (RED T.T.)
	P8	DON'T WALK WALK PUSHBUTTON
ITEM	SIGNAL SECTION	CONDUCTOR COLOUR
SIGNAL NEUTRAL	NEUTRAL	WHITE
CONTROLLER/UPS	POWER	BLACK
STREET LIGHTING	POWER	BLACK RED
PANEL SUPPLY	POWER	BLACK RED
	POWER	BLACK
PHOTOCELL	POWER	BLACK
NEUTRAL	SWITCH LEG	RED
	NEUTRAL	WHITE
GROUND/BOND	GROUND/BOND	GREEN

NOTE: T.T. DENOTES TAPE TRACER.

NOT FOR CONSTRUCTION
2025-01-15

FINAL ISSUED FOR TENDER ELECTRICAL DRAWINGS TO BE ISSUED THROUGH AN ADDENDUM

Benchmark:	 DMD & Associates Electrical Consultants Ltd. #12-17358 104th Avenue, Surrey, BC, Canada V4N 0A3 www.dmdeng.com 604-589-9010 office@dmdeng.com Fax 604-589-9012 DMD PROJECT No. 7519-22-09 of 10	ACCEPTED FOR CONSTRUCTION Date: _____ 15-01-2025 BG DRAFT - ISSUED FOR TENDER No. Date By Revisions	Coquitlam Engineering & Public Works 3000 Guildford Way, Coquitlam, B.C. V3B 7N2	PERMIT TO PRACTICE Signature: _____ Date: 15-01-2025 PERMIT NUMBER: 1000771 The Association of Professional Engineers and Geoscientists of British Columbia	Seal: Design by: BC Date: 16-05-2018 Scale: _____ Drawn by: YJ Date: 16-05-2018 Sheet of: 9 OF 10 Checked by: NB Date: 16-05-2018 Eng. Project No. _____ Approved by: _____ Date: 16-05-2018	Project: PIPELINE ROAD DAVID AVENUE Description: TRAFFIC SIGNAL MODIFICATIONS File: 7519-22-TS COQ. ASBULT No. EXXXX
------------	---	---	--	---	--	---

Plot Date: January 15, 2025

