### STREET LIGHTING NOTES

- 1. UNLESS OTHERWISE INDICATED, ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CITY OF COQUITLAM CURRENT SUBDIVISION CONTROL BYLAWS, CITY OF COQUITLAM SUPPLEMENTARY SPECIFICATIONS AND DETAILED DRAWINGS, CITY OF COQUITLAM APPROVED MATERIALS AND PRODUCTS LISTINGS, AND 2019 MMCD PLATINUM EDITION.
- 2. THE CONTRACTOR SHALL REFER TO COQUITLAM RECORD DRAWINGS, FOR ALL CITY UTILITIES AND INFRASTRUCTURE, SERVICE LOCATIONS AND DETAILS. THE EXACT LOCATION OF THESE UTILITIES SHALL BE CONFIRMED ON SITE BY THE DESIGN ENGINEERS, CIVIL OR ELECTRICAL CONTRACTORS, AND WITH CITY OF COQUITLAM
- 3. BCOneCall call before you dig. The locations of existing underground utilities (fortis, bc hydro, shaw and telus) are shown in an approximation only, and have not been independently verified by the owner or its representatives. The contractor shall determine the exact location of all existing utilities, including city of coquitlam infrastructure prior to commencing work. The contractor shall agree to be fully responsible for any and all damages which may occur due to the contractor's failure to exactly locate and preserve all underground utilities.
- 4. PRIOR TO STREET LIGHT BASE INSTALLATIONS, THE CONTRACTOR SHALL ENSURE THAT ALL STREET LIGHT POLES, FIXTURES AND RELATED EQUIPMENT MEETS OR EXCEED BC HYDRO CLEARANCE STANDARDS FOR ABOVE AND BELOW GROUND INFRASTRUCTURES, TELUS OR SHAW, AND WORKSAFEBC CLEARANCE REQUIREMENTS FOR ALL OVERHEAD PRIMARY AND SECONDARY (120/240V) CONDUCTORS. CONTRACTOR IS RESPONSIBLE TO REPORT ANY CONFLICTS OR DISCREPANCIES TO THE CITY OF COQUITLAM, AND TO THE DESIGN ENGINEERS.
- 5. THE CONTRACTOR SHALL NOTIFY PROVINCIAL AND CITY OF COQUITLAM INSPECTORS 24 HOURS PRIOR TO COMMENCEMENT OF UNDERGROUND ELECTRICAL WORK.
- 6. THE CIVIL/ELECTRICAL CONTRACTOR SHALL OBTAIN PERMITS FROM THE CITY OF COQUITLAM, AND FROM TECHNICAL SAFETY BC (WAS BC SAFETY AUTHORITY).
- 7. THE TECHNICAL SAFETY BC (WAS BC SAFETY AUTHORITY) SHALL BE MADE AWARE OF THE (POSSIBLE) USE OF AN IRRIGATION SYSTEM WITHIN THE STREET LIGHT POLES. IRRIGATION POWER SHALL BE POWERED FROM METERED CIRCUITS.
- 8. ALL STREET LIGHT WIRING SHALL BE DESIGNED AND BUILT IN ACCORDANCE WITH CSA, CANADIAN ELECTRICAL CODE, PROVINCE OF BRITISH COLUMBIA AMENDMENTS AND ALL BULLETINS ISSUED BY TECHNICAL SAFETY BC (WAS BC SAFETY AUTHORITY), INCLUDING THE PROVINCIAL ELECTRICAL INSPECTION AMENDMENTS.
- 9. HYDRO SERVICE DIP CONNECTIONS SHALL BE PER BC HYDRO STANDARDS OR PER MMCD 2019. NOTE: HYDRO DIP SERVICES MUST USE A STEEL GUARD OVER RPVC
- 10. MINIMUM DEPTH FOR UNDERGROUND CONDUIT DUCTING SHALL BE 600-MM (MINIMUM) BELOW BOULEVARD AND SIDEWALKS, AND 900-MM (MINIMUM) BENEATH ASPHALT. PER CITY OF COQUITLAM SUBDIVISION AND DEVELOPMENT SERVICING BYLAWS.
- 11. ALL CONDUITS SHALL BE RIGID P.V.C MANUFACTURED IN ACCORDANCE WITH C.S.A. C22.2 No. 211.2 (NOT DBII).

CONDUITS. THE USE OF RIGID CONDUIT AND/OR RPVC TO RIGID CONDUIT FITTINGS IS NO LONGER PERMITTED.

- 12. CONCRETE STREET LIGHT / SERVICE BASES WITH MORE THAN 2 CONDUITS SHALL BE NOTED ON THE PLANS. AS AN EXAMPLE, "THIS BASE HAS (X) CONDUITS"
- 13. UNLESS OTHERWISE INDICATED, ALL CONDUCTORS SHALL BE TYPE RW90 (MINIMUM), STRANDED ALUMINUM, INSULATED, AND COLOUR CODED PER DRAWINGS.
- 14. ALL SPLICES INVOLVING ALUMINUM WIRE SHALL BE MADE WITH AN ALCU RATED SPLIT BOLT AND SHALL HAVE "PENETROX" JOINT COMPOUND.
- 15. NEW STREET LIGHTING DESIGNS SHALL ONLY BE 120/240V.

TO COQUITLAM TRAFFIC OPERATIONS

- 16. UNLESS OTHERWISE INDICATED: ALL POLES, ARMS, SERVICE BASES, HAND ACCESS COVERS, SECURITY COVERS, AND RE-ENFORCED STEEL BACKING BARS, SHALL BE GALVANIZED, PRIMED AND POWER-COATED COQUITLAM STANDARD GREEN RAL 6028.
- 17. ALL STREET LIGHT HAND-HOLE COVERS SHALL BE PROVIDED WITH SECURITY COVERS REINFORCED U-SHAPED REINFORCED BACKER BARS AND SECURITY BOLTS.
  - a. NOVA POLE OFFERS A REINFORCED COVER, REVERSE THREADED SECURITY BOLT, AND ROBUST BACKER BAR. CONTRACTOR SHALL PROVIDE ONE (1) TOOL BIT
  - b. THE ABOVE ITEM DOES NOT APPLY TO SPECIALTY POLES, SUCH AS PHILLIPS, LUMEC, QUATTRO, ETC. CONSULT THOSE COMPANIES FOR THEIR SECURITY
  - c. THE BULLDOG PRODUCTS AND WIRE SENTRY PRODUCTS ARE NO LONGER APPROVED FOR USE IN COQUITLAM.
- 18. ALL THREADED BOLTS, NOT USED FOR ELECTRICAL CONNECTIONS, SHALL HAVE ANTI-SEIZE COMPOUND APPLIED. THIS ALSO APPLIES TO SECURITY BOLTS NOTED ABOVE
- 19. PHOTO ELECTRIC CONTROL (PEC) SHALL ONLY BE SOLID—STATE DESIGN, WITH ELECTROMECHANICAL CONTACTS.
- 20. PEC CONDUCTORS SHALL BE #12 RW90, COLOURS: RED, BLACK AND WHITE. THE PEC CONDUCTORS SHALL BE A COMPLETE RUN, WITHOUT SPLICES, FROM THE PEC TO THE ELECTRICAL PANEL. BUNDLED SEPARATE OF THE STREET LIGHTING CONDUCTORS.
- 21. LUMINAIRES SHALL BE WIRED WITH #12 RW90 CONDUCTORS. BLACK AND WHITE FOR 120V SERVICE. BLACK AND RED FOR 240V SERVICE. WIRING BUNDLED SEPARATE
- OF THE PHOTO-ELECTRIC CONTROL (PEC) CONDUCTORS.
- 22. LUMINAIRES ON BLACK CONDUCTOR ARE IDENTIFIED WITH A B DESIGNATION NEXT TO THE LUMINAIRES
- 23. LUMINAIRES ON RED CONDUCTOR ARE IDENTIFIED WITH A R DESIGNATION NEXT TO THE LUMINAIRES
- 24. EACH LUMINAIRE SHALL BE PROVIDED WITH A TRON HEB-AA FUSE-HOLDER C/W 2 L-TYPE INSULATING BOOTS, OR PRE-APPROVED EQUIVALENT. THE FUSE-HOLDER SHALL BE ACCESSIBLE IN THE HAND-HOLE COVER.
- 25. EACH FUSE HOLDER SHALL BE PROVIDED WITH ONE 10-AMPERE BUSS KTK-TYPE FUSE (600V), WIRED IN THE LIVE CONDUCTOR(S). THE FUSE HOLDER SHALL BE ACCESSIBLE FROM THE HAND-HOLE ACCESS, OR JUNCTION BOX.
- 26. ALL LUMINAIRE FIXTURES SHALL BE BONDED WITH A NUMBER 12 RW90 GREEN CONDUCTOR. THIS CONDUCTOR SHALL TERMINATE INTO THE BONDING CONDUCTOR RUN AT THE BASE OF THE POLE.
- 27. THE BOND STUD OPENING SHALL BE AT THE REAR OF THE POLE AND SHALL NOT BE ON THE FLANGE OF THE ACCESS HOLE OPENING.
- 28. THE INTERIOR COLOUR—FINISHED SURFACE SURROUNDING THE BOND STUD SHALL BE GROUND OFF TO THE GALVANIZING OR BARE STEEL FOR THE ELECTRICAL BOND ADHERENCE. TO ENSURE A PROPER BOND AND REDUCE CORROSION OR RUSTING, THE BONDING STUD SHALL BE INSTALLED IMMEDIATELY AFTER THE GRINDING.
- 29. THE BONDING STUD IN EACH POLE SHALL COMPRISE OF ONE 3/8-16 BOLT 1.5-INCHES LONG, ONE SPLIT LOCK WASHER, AND TWO HEX NUTS. THE SPLIT LOCK-WASHER SHALL BE SLID ONTO THE BOLT ON THE INSIDE OF THE POLE, AND HELD TIGHTLY IN PLACE WITH THE FIRST NUT. THIS NUT SHALL BE TIGHTENED TO SPECIFICATION. THE RING TERMINAL SHALL BE SANDWICHED BETWEEN THE TWO HEX NUTS. THE LAST NUT HOLDS THE RING TERMINAL IN PLACE. ALL HARDWARE SHALL BE TIGHTENED TO SPECIFICATIONS.
- 30. ALL POLES SHALL BE BONDED WITH A NO 8 RW90 BONDING CONDUCTOR. THE CONTRACTOR SHALL SUPPLY A 4WAY PIGTAIL SPLICE TO THE POLE BOND, AND WITH A RING LUG TERMINAL BENEATH THE BONDING HARDWARE.
- 31. ALL LARGE GAUGE, MULTIPLE CONDUCTOR SPLICES, WHICH MAY EXCEED THE LARGER WIRE NUTS, SHALL UTILIZE SPLIT BOLT HARDWARE, DUCT SEALANT, AND WITH WEATHER—RESISTANT / WATER—PROOF CONNECTION MEANS. THE STANDARD HOUSE—HOLD "WIRE NUT" IS NOT WATER PROOF.
- 32. ALL LARGE GAUGE (# 8 OR LARGER) SPLICES AND CONNECTIONS, WITHIN JUNCTION BOXES OR HAND ACCESS OPENINGS, SHALL BE SEALED WITH TAPE CONSISTING OF
- BISHOP BI—SEAL PHÎLLIPS ROTRUNDÁ OR 3M SELF HOLDING TAPÉ; COVERED WITH PVC TAPE AND DIPPED IN 3M SCOTCHCOAT. OR PRE—APPROVED EQUIVALENT.

  33. FUSE HOLDERS IN HAND HOLE ACCESS AND JUNCTION BOXES SHALL UTILIZE AN IDEAL INDUSTRIES OR BUCHANAN CONSTRUCTION PRODUCTS 65 KIT WATER—PROOF FUSE HOLDER, OR APPROVED EQUIVALENT. EACH FUSE—HOLDER SHALL BE PROVIDED WITH ONE 10—A BUSS KTK—TYPE FUSE, WIRED IN THE LIVE CONDUCTOR(S). FOR 240V LINE TO LINE SERVICES, ONE TWO FUSE SHALL BE USED.
- 34. WIRING AND FUSE-HOLDERS IN POLE HAND ACCESS AND/OR JUNCTION BOXES SHALL BE MARKED WITH YELLOW WATER-PROOF WIRE MARKER TAGS, AND ATTACHED USING TIE-WRAPS. LABELLING SHALL BE WITH A WATERPROOF SHARPIE INK PEN.

35. ALL JUNCTION BOXES, IN SOFT BOULEVARD SHALL BE SUPPORTED/PROTECTED WITH A CONCRETE COLLAR. MINIMUM 200mm WIDE BY 150mm DEPTH, WITH REBAR.

- COLLAR TO SLOPE DOWN AWAY FROM BOX OPENING AT 3% TO DIRECT WATER AWAY FROM BOX OPENING. REFER TO COQUITLAM SUPPLEMENTAL SPECIFICATION DRAWING SS-E2.5 FOR DETAILS.

  36. JUNCTION BOXES SHALL BE PROVIDED WITH RPVC SUPPORT BARS TO SUPPORT THE ELECTRICAL CONNECTIONS AND FUSE HOLDERS (IF USED). THE RPVC BARS SHALL
- BE ATTACHED INTO THE JUNCTION BOX SIDEWALLS. THE ELECTRICAL CONNECTIONS AND FUSE-HOLDERS WILL BE HELD IN PLACE BY TIE-WRAPS
- 37. JUNCTION BOXES WITH METALLIC LIDS (NEW OR EXISTING) SHALL BE BONDED WITH A NO 8 RW90 BONDING CONDUCTOR WITH A SUITABLY SIZED RING LUG, AND STAINLESS STEEL HARDWARE. THE CONTRACTOR SHALL SUPPLY A PIGTAIL SPLICE FROM THE INTERNAL BONDING CONDUCTORS TO THE METALLIC LID BOND
- 38. 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.
- 39. POLYMER CONCRETE 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.
- REPLACE 150mm FINE DRAIN ROCK WITH 300mm FINE DRAIN ROCK.

  40. BOTTOM OF JUNCTION BOXES SHALL BE OPEN. BOTTOM SECTIONS SHALL BE SUPPORTED WITH CONCRETE BRICKS AND USE CRUSHED GRAVEL TO DRAIN WATER.
- 41. ALL BOLT DOWN JUNCTION BOX LIDS SHALL BE TIER 15 (20K) RATED OR GREATER.
- 42. WIRING CONNECTIONS, SPLICES AND FUSE-HOLDERS IN JUNCTION BOXES SHALL BE KEPT OUT OF WATER
- 43. ALL CONDUITS SHALL BE PROVIDED WITH A NYLON PULL LINE. CAPS SHALL HOLD THE NYLON CORD IN PLACE.
- 44. EMPTY CONDUITS / CONDUITS ONLY (CO) SHALL BE CAPPED AT EACH END
- 45. WATER OR OTHER OBSTRUCTIONS ARE NOT PERMITTED IN CONDUITS. CONDUITS WITH WATER OR OTHER OBSTRUCTIONS SHALL BE BLOWN CLEAR.
- 46. PER PER COQUITLAM SUBDIVISION BYLAWS, MINIMUM SPACING BETWEEN STREET LIGHTS AND:
  - a. TREES SHALL BE 6-METERS b. KIOSKS SHALL BE 3M
  - b. KIOSKS SHALL BE 3Mc. DRIVEWAYS SHALL BE 2—METERS (EXCLUDING THE FLARE)
  - d. HYDRANTS SHALL BE 3-METERS (EXCLUDING THE FLARE)
  - 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. COQUITLAM TRAFFIC OPERATIONS (OR ASSIGNED) WILL INSPECT THE INSTALLATIONS AND PROVIDE A DEFICIENCY LIST (IF NECESSARY). TRAFFIC OPERATIONS WILL ISSUE A REQUEST TO BC HYDRO FOR CONNECTIONS.
- 50. THE ELECTRICAL CONTRACTOR SHALL PROVIDE THEIR ELECTRICAL PERMIT TO THE CITY OF COQUITLAM, TRAFFIC OPERATIONS. ATTENTION: JARROD MITCHELL OR VLADAN POLEDICA.
- 51. JUNCTION BOXES (IF USED), SET STRAIGHT, TOPS PARALLEL TO GRADE OR SIDEWALKS AND SHALL BE LEVEL ON TWO AXIS.

#### CONCRETE BASE NOTES

- 1. THE CONCRETE BASES SHALL BE PER MMCD2009 STANDARDS AND PLANS. PROVIDED WITH APPROPRIATE CONDUITS PER ENGINEERING REQUIREMENTS
- 2. THE CONCRETE BASE SHALL NOT BE FORMED ONSITE, AND SHALL NOT BE FORMED BY THE ELECTRICAL CONTRACTOR. THE CONCRETE BASE SHALL BE PROVIDED FROM A PRECAST COMPANY, SUCH AS AE PRECAST, ARMTEC, LANGLEY CONCRETE, ETC.
- 3. CONCRETE BASES FOR A SERVICE BASE:
  - a. STREET LIGHTING: 40 AND 60-AMPERE PANELS, CONCRETE BASE WITH 5 OR MORE RPVC CONDUITS, PER CITY OF COQUITLAM SUPPLEMENTAL PLAN SS-E&.3,
  - b. TRAFFIC SIGNAL: 100-AMPERE PANELS, CONCRETE BASE WITH 2 53MM RPVC CONDUITS, PER CITY OF COQUITLAM SUPPLEMENTAL PLAN SS-E&.3, LOWER DETAIL

     RPIOR TO SERVICE PASE INSTALLATIONS, THE CONTRACTOR SHALL ENSURE THE CONCRETE PASE IS RECEIVED OF THE CONTRACTOR SHALL ENSURE THE CONCRETE PASE IS RECEIVED.
  - c. PRIOR TO SERVICE BASE INSTALLATIONS, THE CONTRACTOR SHALL ENSURE THE CONCRETE BASE IS PROPERLY ORIENTATED SUCH THAT THE SERVICE CONDUIT (SC) IS ALIGNED TO THE PROTECTED AREA WITHIN THE ELECTRICAL PANEL WITHIN THE SERVICE BASE. REFER TO COQUITLAM SUPPLEMENTAL DRAWINGS SS E7.3 AND E7.4
  - d. THE CONCRETE BASE SHALL BE INSTALLED TO ENSURE THE CONCRETE BASE IS PROPERLY ALIGNED FOR THE SERVICE BASE ACCESS DOOR. PER CITY OF COQUITLAM SUPPLEMENTAL PLAN SS-E7.3, THE SERVICE BASE ACCESS DOOR SHALL BE ON THE DOWNWARD SIDE OF TRAFFIC.
  - e. CITY OF COQUITLAM CIVIL INSPECTOR SHALL ATTEND WHEN THE CONCRETE BASE IS TO BE INSTALLED, TO CONFIRM COMPLIANCE TO CITY OF COQUITLAM REQUIREMENT, WITH 12 HOURS ADVANCE NOTIFICATION.
- 4. THE CIVIL/ELECTRICAL CONTRACTOR SHALL ENSURE STREET LIGHT POLES, FIXTURES AND RELATED EQUIPMENT MEETS OR EXCEEDS BC HYDRO AND WORKSAFEBC CLEARANCE REQUIREMENTS, FOR ALL OVERHEAD PRIMARY AND SECONDARY LINES. CONTRACTOR IS RESPONSIBLE TO REPORT ANY CONFLICTS OR DISCREPANCIES TO THE CITY OF COQUITLAM, AND TO THE DESIGN ENGINEERS
- 5. CONCRETE BASES WITH MORE THAN 2 CONDUITS SHALL BE NOTED ON THE PLANS. AS AN EXAMPLE, "THIS BASE HAS (X) CONDUITS"
- 6. CONCRETE BASES SHALL BE PROVIDED WITH A V-GROOVE TO DISPERSE STANDING WATER. IF A V-GROOVE IS NOT AVAILABLE, THEN ROUND FLAT STAINLESS STEEL WASHERS SHALL BE MOUNTED BETWEEN THE CONCRETE BASE AND THE BOTTOM OF THE SERVICE BASE. U-SHAPED SHIMS NOT ACCEPTABLE.
- 7. CONCRETE BASE TOPS SHALL BE 5-CM (~2-INCHES) ABOVE FINAL GRADE CONCRETE BASES SHALL BE LEVEL ON TWO HORIZONTAL AXIS

## SERVICE BASE NOTES

- 1. UNLESS OTHERWISE INDICATED, ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE CITY OF COQUITLAM CURRENT SUBDIVISION CONTROL BYLAWS, CITY OF COQUITLAM SUPPLEMENTARY SPECIFICATIONS AND DETAILED DRAWINGS, CITY OF COQUITLAM APPROVED MATERIALS AND PRODUCTS LISTINGS. MMCD 2019 MAY APPLY.
- 2. UNLESS OTHERWISE INDICATED, THE SERVICE BASE AND ACCESS COVERS ARE TO BE GALVANIZED, PRIMED AND POWDER—COATED IN COLOUR PER THE DESIGN PLANS. STANDARD COLOUR: GREEN PER RAL6028.
- 3. THE ACCESS DOOR FOR THE SERVICE BASE SHALL BE DOWNSTREAM OF TRAFFIC.

PROVIDED FROM A PRECAST COMPANY, SUCH AS AE PRECAST, ARMTEC, LANGLEY CONCRETE, ETC.

- 4. THE SERVICE BASE SHALL BE MOUNTED ON A PRE-FORMED CONCRETE BASE:
  - a. THE CONCRETE BASE SHALL NOT BE FORMED ONSITE, AND SHALL NOT BE FORMED BY THE ELECTRICAL CONTRACTOR. THE CONCRETE BASE SHALL BE
  - b. STREET LIGHTING: 40 AND 60-AMPERE PANELS, CONCRETE BASE WITH 5 OR MORE RPVC CONDUITS, PER CITY OF COQUITLAM SUPPLEMENTAL PLAN SS-E7.3, UPPER DETAIL
  - c. TRAFFIC SIGNAL: 100-AMPERE PANELS, CONCRETE BASE WITH TWO 53MM RPVC CONDUITS, PER CITY OF COQUITLAM SUPPLEMENTAL PLAN SS-E7.3, LOWER
- THE SERVICE BASE SHALL BE MOUNTED ON A PRE-FORMED CONCRETE BASE: THE SERVICE BASE SHALL BE PROVIDED WITH TWO 3/8-16 THREADED HOLES IN THE UPPER FLANGE AND WITH MATING CLEARANCE HOLES ON THE COVER. THESE HOLES SHALL BE AT THE TOP, ONE HOLE ON EITHER SIDE OF THE LOCKING TAB. THE CONTRACTOR SHALL PROVIDE 2 EACH 3/8-16 STAINLESS STEEL BOLTS, FLAT WASHERS AND ANTI-SEIZING COMPOUND. THE CITY MAY INSTALL SECURITY BOLTS.
- 6. THE SERVICE BASE COVER SHALL NOT BE A SNUG FIT INTO THE SERVICE BASE OPENING. SOME LEEWAY SHALL BE PROVIDED TO FIT THE LOCKING TAB AND BOLTS THROUGH THE CLEARANCE OPENINGS.
- 7. THE LOCKING TAB SHALL BE OF A ROBUST DESIGN AND MANUFACTURE, AND SHALL ACCEPT A STANDARD CITY PADLOCK. A WCE BULLDOG PRODUCT SHALL NOT BE
- 3. THE SERVICE BASE SHALL BE PROVIDED WITH A BONDING TAB. THE COLOUR—FINISHED SURFACE SURROUNDING THE BOND TAB SHALL BE GROUND OFF TO GALVANIZING OR TO BARE STEEL FOR THE ELECTRICAL BOND ADHERENCE. TO ENSURE A PROPER BOND AND REDUCE CORROSION OR RUSTING, THE BONDING STUD SHALL BE INSTALLED IMMEDIATELY AFTER THE GRINDING.
- 9. UNLESS OTHERWISE INDICATED, ALL CONDUCTORS SHALL BE TYPE RW90 (MINIMUM), STRANDED COPPER, INSULATED, AND COLOUR CODED PER DRAWINGS.
- 10. THE ELECTRICIAN SHALL PROVIDE A NO 8 GAUGE RW90 BOND WITH A RING LUG FROM THIS TAB INTO THE ELECTRICAL PANEL ONTO THE BONDING BUSS. THE 3/8-16 BOLT SHALL CONSIST OF ONE 3/8-16 BOLT, SPLIT LOCK WASHER AND 2 HEX NUTS. THE RING TERMINAL IS SANDWICHED BETWEEN THE 2 NUTS. TIGHTEN TO SPECIFICATIONS
- 11. ELECTRICAL PANEL WITHIN THE SERVICE BASE SHALL BE:
  - a. FABRICATED FROM STAINLESS STEEL OR ALUMINUM. THE PANEL SHALL BE SET STRAIGHT, AND PARALLEL TO INTERNAL SERVICE BASE SURFACES. ALL FOUR MOUNTING TABS SHALL BE BOLTED ON TO THE UNISTRUT RAILS WITHIN THE SERVICE BASE PEDESTAL.
  - b. Provided with a main disconnect, 2P-40a, 2P-60a, or 2P-100a, 120/240v per the design plans. Branch breakers are generally required for the 100-ampere panels.
  - c. THE PHOTO—ELECTRIC CONTROL (PEC) CIRCUIT FUSING SHALL PER MMCD, USE A KTK10 (10—AMPERE) FUSE (600V), AND SUITABLE FRONT PANEL MOUNTED FUSE—HOLDER. PUSH—BUTTON CIRCUIT BREAKERS ARE NOT ACCEPTABLE.
  - d. THE PEC FUSE-HOLDER AND FUSE SHALL BE MOUNTED ON THE FRONT PANEL, NEAR THE H-O-A OR O-H-A 3-POSITION ROTARY SWITCH. THIS APPLIES TO 40A. 60A AND 100A ELECTRICAL PANELS
  - e. THE PEC BYPASS SWITCH SHALL BE A HEAVY-DUTY, 3-POSITION MAINTAINED, H-O-A OR O-H-A ROTARY SWITCH. TWO POSITION ROTARY SWITCH OR TOGGLE SWITCH, ARE NOT ACCEPTABLE.
  - f. THE FRONT PANEL PEC FUSE—HOLDER AND THE PEC BYPASS SWITCH SHALL BE PROVIDED WITH LABELS, DETAILS PER MMCD DRAWINGS.
  - g. PROVIDED WITH AN SPD (SURGE PROTECTION DEVICE), MOUNTED WITHIN THE ELECTRICAL PANEL, AND WITH FAULT PROTECTION (CIRCUIT BREAKERS, FUSING,
  - h. PANEL SHALL BEAR ELECTRICALLY APPROVED LABELS FOR USE IN CANADA. SUCH AS CSA, ETL, CULUS, SPECIAL INSPECTIONS, ETC.
  - i. FOR THE 40A AND 60A ELECTRICAL PANEL, REFER TO CITY OF COQUITLAM SUPPLEMENTAL DRAWING SS-E7.5

### 12. SURGE PROTECTION DEVICE SPECIFICATIONS:

- a. ELECTRICAL ACCREDITATIONS: CSA, ETL, CULUS, ETC.
- b. SYSTEM VOLTAGE AND FREQUENCY: 120/240V, 50/60 HERTZ

Manager of

Development Servicir

ETC.). DETAILED SURGE PROTECTION DEVICE SPECIFICATIONS FOLLOW.

- c. MINIMUM DISCHARGE RATING: 20KA

  d. PROVIDED WITH LED STATUS INDICATORS, VISIBLE WHEN THE SERVICE BASE OR ELECTRICAL PANEL IS REMOVED. WITHOUT THE USE OF TOOLS.
- e. PREFERRED MANUFACTURERS: MERSEN AND SQUARE-D. ALL OTHERS SHALL BE PRE-APPROVED.
- 13. THE PEC FUSE—HOLDER AND FUSE SHALL BE MOUNTED ON THE FRONT PANEL, NEAR THE HOA OR OHA ROTARY SWITCH. THIS APPLIES TO 40A, 60A AND 100A ELECTRICAL PANELS.
- 14. THE PEC BYPASS SWITCH SHALL PER MMCD, A HEAVY—DUTY, 3—POSITION MAINTAINED, HOA OR OHA ROTARY SWITCH. A 2—POSITION ROTARY OR TOGGLE SWITCHES ARE NOT ACCEPTABLE.

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

- 15. THE FRONT PANEL PEC FUSE-HOLDER AND THE PEC BYPASS SWITCH SHALL BE PROVIDED WITH LABELS, DETAILS PER MMCD DRAWINGS.
- 16. THE PHOTO-ELECTRIC CONTROL (PEC) CIRCUIT FUSING SHALL PER MMCD, USE A 10-AMPERE KTK TYPE FUSE (600V), AND SUITABLE FRONT PANEL MOUNTED

FUSE-HOLDER. PUSH-BUTTON CIRCUIT BREAKERS ARE NOT ACCEPTABLE.

- 17. PEC CONDUCTORS SHALL BE #12 RW90, COLOURS: RED, BLACK AND WHITE. THE PEC CONDUCTORS SHALL BE A COMPLETE RUN, WITHOUT SPLICES, FROM THE PEC TO THE ELECTRICAL PANEL. BUNDLED SEPARATE OF THE STREET LIGHTING CONDUCTORS.
- 18. THE CONTRACTOR SHALL ENSURE THE SERVICE BASE IS PROPERLY ORIENTATED SUCH THAT THE SERVICE CONDUIT (SC) IS ALIGNED TO THE PROTECTED AREA WITHIN
- 19. STREET LIGHTS MOUNTED ON A SERVICE BASE SHALL BE WIRED PER MMCD DRAWINGS. LUMINAIRE CONDUCTORS SHALL BE GROUPED TOGETHER, AND SEPARATE OF TH
- PEC WIRING. GROUPING SHALL BE DONE WITH ELECTRICIANS TAPE.

  20. GAPS OR OPENINGS BETWEEN THE STREET LIGHT POLE BASE FLANGES, THE OPENINGS FOR THE NUTS AND BOLTS, TO THE TOP OF THE SERVICE BASE, SHALL BE
- SEALED WITH RTV SEALANT.

  21. HYDRO SERVICE (DIP) CONNECTIONS SHALL BE PER BC HYDRO STANDARDS OR PER MMCD (CURRENT EDITION). NOTE: HYDRO DIP SERVICES SHALL USE A STEEL
- 22. THE ELECTRICAL CONTRACTOR SHALL PRE-TEST THE OPERATION OF THE ELECTRICAL PANEL WITHIN THE SERVICE BASE. THIS INCLUDES TESTING THE OHA/HOA SWITCH AND PEC FOR DAYTIME / NIGHTTIME SIMULATION. THE ELECTRICAL CONTRACTOR SHALL PROVIDE AN EMAIL TO TRAFFIC OPERATIONS STAFF TO ADVISE THE SERVICE
- 23. THE EARTHING ELECTRODE SHALL BE SUPPLIED (TYPICALLY A PLATE) AND INSTALLED PER MMCD DRAWING E7.10:

GUARD OVER RPVC CONDUITS. THE USE OF RIGID CONDUIT AND/OR RPVC TO RIGID CONDUIT FITTINGS IS NO LONGER PERMITTED.

a. THE PLATE SHOULD BE IN NATURAL SOIL, NO ROCKS, NO SAND.

BASE HAS BEEN DULY TESTED AND READY FOR CONNECTION.

- b. WIRED WITH A BARE #6 EARTHING CONDUCTOR. FROM THE ELECTRICAL PANEL PROTECTED AREA, TO THE PLATE ELECTRODE TAB, WITH AN ILSCO #BGC-1DB CLAMP, SUITABLE FOR DIRECT BURIAL IN EARTH.
- c. THE PLATE MINIMUM DEPTH OF 900mm BELOW GRADE AND 200mm FROM CONCRETE BASE(S).
- d. ELECTRICAL / CIVIL CONTRACTOR TO PROVIDE PICTURES SHOWING DIMENSIONS PER MMCD DRAWING E7.10. PICTURES TO BE SUPPLIED OR EMAILED TO CITY OF COQUITLAM CIVIL INSPECTORS, AND/OR TO TRAFFIC OPERATIONS SECTION STAFF.

### LUMINAIRE FIXTURE NOTES

CITY OF COQUITLAM USES MULTIPLE LED LUMINAIRE STYLES. SOME LUMINAIRE INFORMATION IS BELOW.

- 1. LUMINAIRE FIXTURES SHALL BEAR ELECTRICALLY APPROVED LABELS FOR USE IN CANADA. SUCH AS CSA, CEC, ULC, SPECIAL INSPECTIONS, ETC.
- 2. UNLESS OTHERWISE NOTED, LOCAL/RESIDENTIAL STREETS SHALL BE LED 3000-DEGREES KELVIN, AND 4000-DEGREES KELVIN FOR ALL OTHERS.
- 3. LUMINAIRES SHALL BE LED AND AS PER THE DESIGN DRAWINGS.
- 4. MULTI-USE PATHWAY (MUP), SIDEWALKS AND WALKWAY LIGHTING SHALL BE LED, 3000-DEGREES KELVIN, PER CITY OF COQUITLAM APPROVED PRODUCTS LIST. LED WATTAGES, POLE STYLE AND HEIGHT, POLE COLOUR AND CONCRETE BASE PER DESIGN PLANS.
- 5. THE PEC SOCKET SHALL BE PROVIDED WITH 7-CONTACTS (SMART LIGHTING PROVISIONS).
- 6. A NOTE SHALL BE PROVIDED TO INDICATE: PEC AIMED IN A NORTHERN DIRECTION.
- LED LUMINAIRE FIXTURES SHALL BE PROVIDED WITH AN LED WATTAGE/LUMEN LABEL (BLACK LETTERING ON WHITE BACKGROUND). LABEL SHALL BE VISIBLE FROM THE GROUND.

# LEGEND

- PROPOSED DAVIT STREETLIGHT POLE (6.6m 60W/69W LED TYPE 2ES DISTRIBUTION) ON A 0.9m 40A MMCD SERVICE BASE C/W SURGE PROTECTOR ON A TYPE C3 CONCRETE BASE AND CONCRETE WORKING PAD (1m x 1m x 100mm) (SEE ELEVATION ON SHEET 2)

  PROPOSED DAVIT STREETLIGHT POLE (7.5m 60W LED TYPE 2ES DISTRIBUTION) ON A TYPE C2 CONCRETE BASE (SEE ELEVATION
- ON SHEET 2)

  PROPOSED PATHWAY POLE (5.0m 20W LED TYPE 2ES DISTRIBUTION) ON A TYPE C2 CONCRETE BASE (SEE ELEVATION ON SHEET 2)
- )---o FUTURE DAVIT STREETLIGHT POLE
- PROPOSED POLYMER COMMUNICATIONS JUNCTION BOX (24 x 36 x 36, 36" DEEP TOTAL, OPEN BOTTOM) C/W LID LABELED "COMM" AND STAINLESS STEEL PENTA BOLTS
- R LUMINAIRE ON RED PHASE CONDUCTOR
- B LUMINAIRE ON BLACK PHASE CONDUCTOR
- (01) LUMINAIRE NUMBER
- UE PROPOSED 3 No.4 AL RW90 ST. LTG. & 1 No.6 AL RW90 BOND IN 53mm RPVC
- UE PROPOSED 2 No.4 AL RW90 ST. LTG. & 1 No.6 AL RW90 BOND IN 53mm RPVC
- PROPOSED 53mm RPVC STUB OUT FOR FUTURE EXTENSION (CAP & MARK LOCATION)
- —— CO —— PROPOSED 53mm RPVC CONDUIT ONLY
- DS —— PROPOSED 53mm DIP SERVICE C/W 3 No. 6 RW90 SERVICE CONDUCTORS
- PROPOSED 1-78mm RPVC COMMUNICATIONS CONDUIT

PROPOSED BC HYDRO POLE

-(O)- EXISTING BC HYDRO POLE

NOT FOR CONSTRUCTION

2025-12-16



COQ. ASBUILT No.

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

DMD & Associates
Electrical Consultants Ltd.
#12-17358 104A Avenue, Surrey, BC, Canada V4N 5M3
www.dmdeng.com 604/589-9010
office@dmdeng.com Fax 604/589-9012
DMD PROJECT No. 7295-21-01 of 04

DMD

. 16-12-2025 JM ISSUED FOR TENDER
No. Date By Revisions

PERMIT TO PRACTICE
Signature:

16-12-2025

PERMIT NUMBER: 1000771

The Association of Professional Engineers

and Geoscientists of British Columbia



Design by Date

JM 09-06-2021

Drawn by Date

YJ 09-06-2021

Checked by Date

DIS 09-06-2021

Approved by Date

NB 09-06-2021

Scale

21 - Sheet of

21 1 0F 4

Eng. Project No.

21 - Scale

21 - Sheet of

CEDAR DRIVE
GILLEYS TRAIL TO THE SOUTH 1km

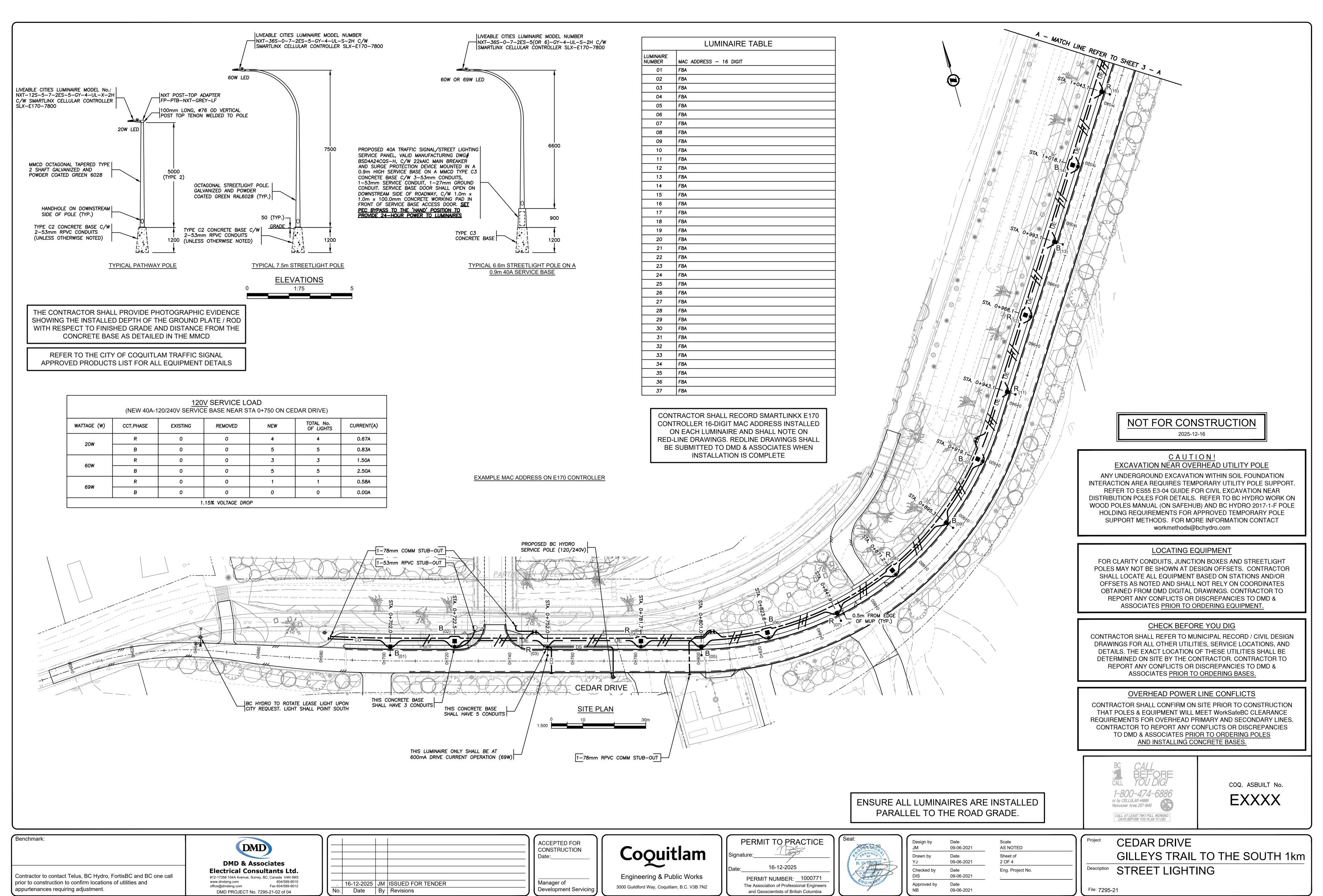
Description STREET LIGHTING

File: 7295-21

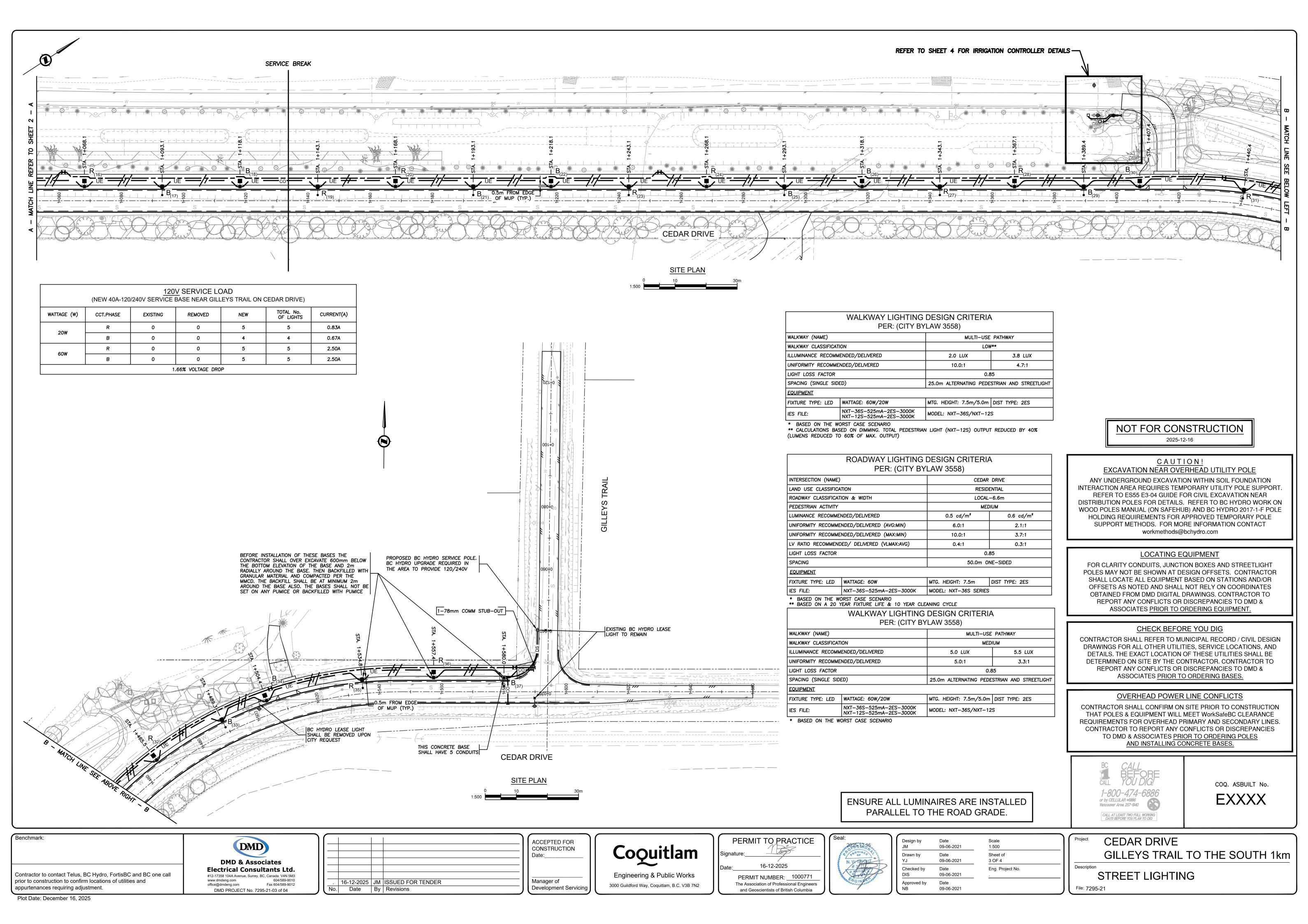
Plot Date: December 16, 2025

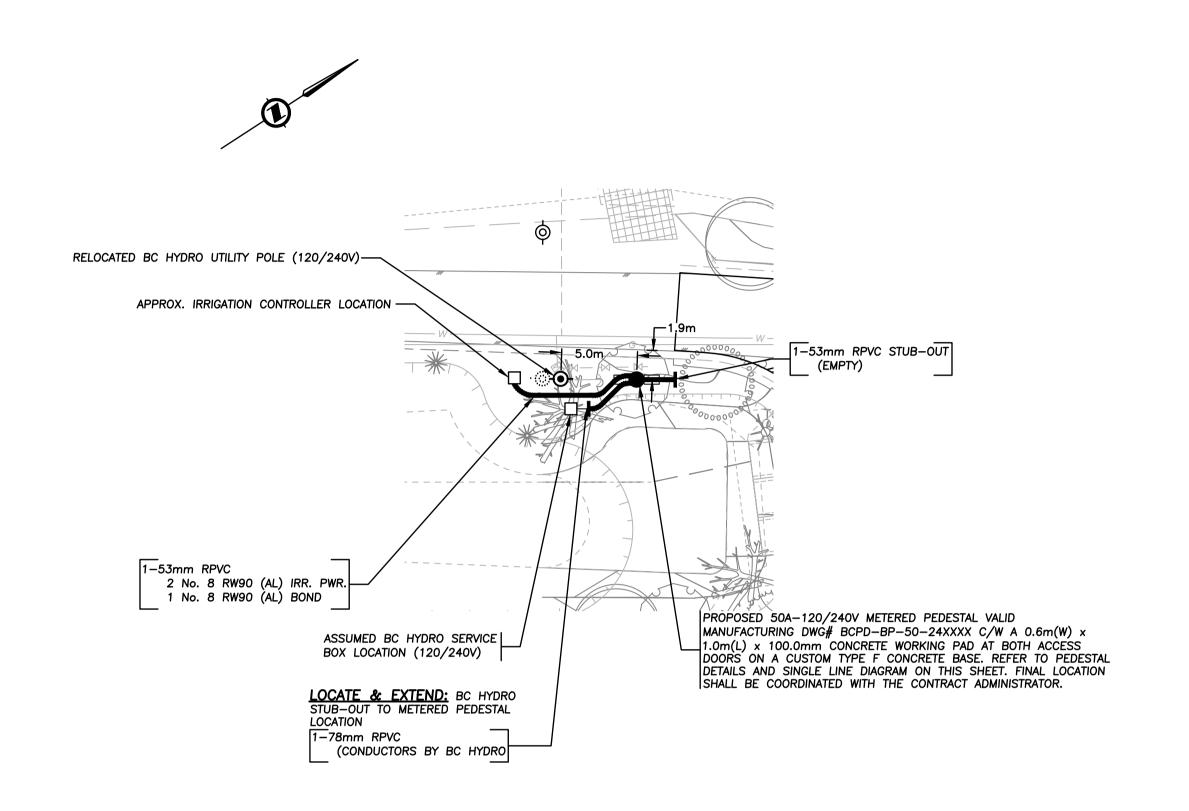
appurtenances requiring adjustment.

Benchmark:

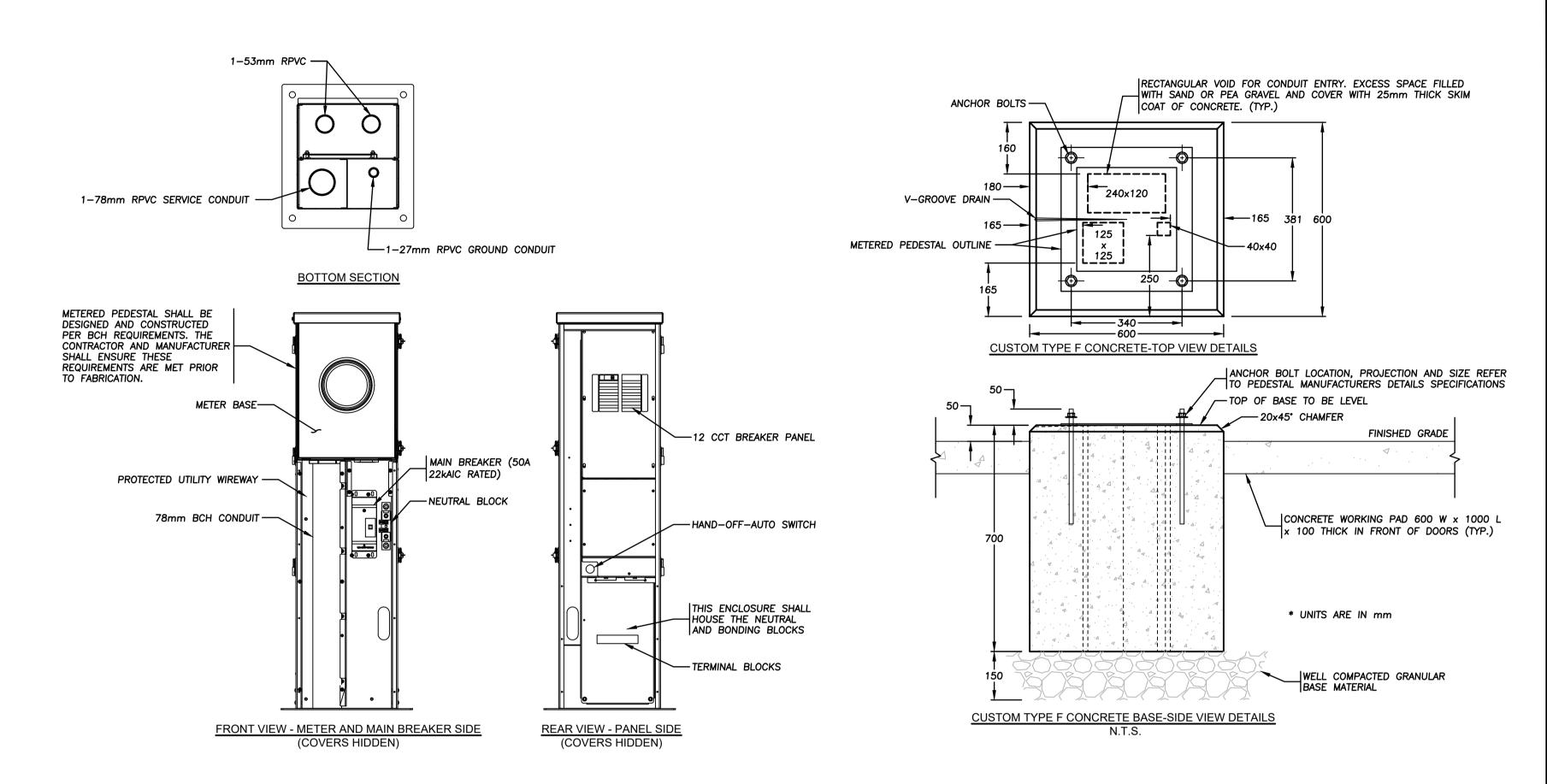


Plot Date: December 16, 2025

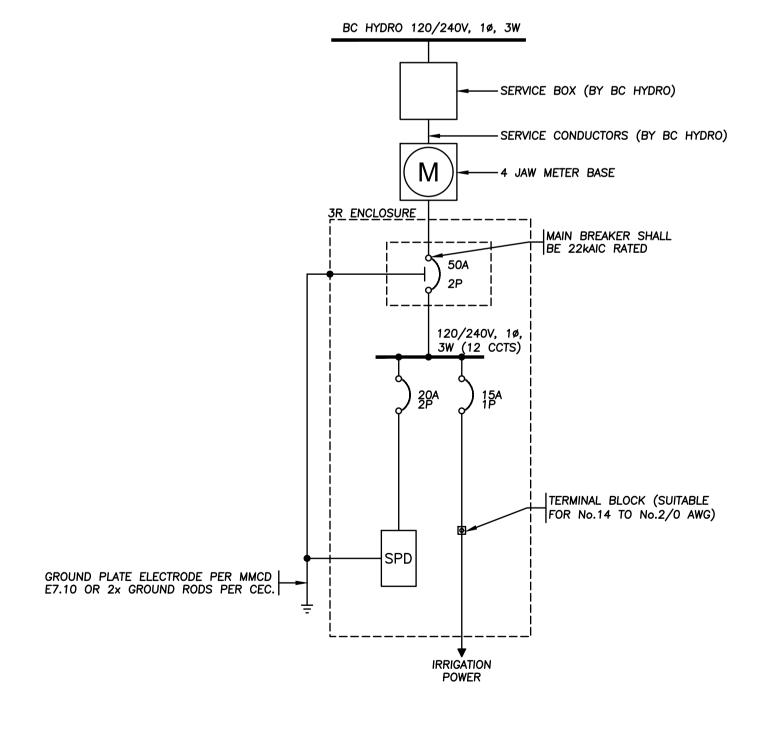




SITE PLAN



METERED PEDESTAL AND CONCRETE BASE DETAIL N.T.S.



REFER TO SHEETS 2 & 3 FOR STREET LIGHTING DETAILS

NOT FOR CONSTRUCTION
2025-12-16

BC CALL
BEFORE
CALL YOU DIG!

1-800-474-6886
or by CELLULAR •6886
Vancouver Area 257-1940

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

File: 7295-21

COQ. ASBUILT No.

METERED PEDESTAL SINGLE LINE DIAGRAM

Benchmark:

DMD

DMD

DMD & Associates

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.

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

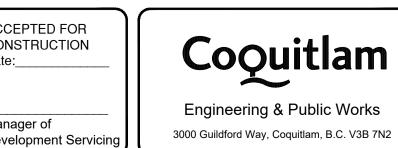
www.dmdeng.com 604/589-9010

office@dmdeng.com Fax 604/589-9012

DMD PROJECT No. 7295-21-04 of 04

Plot Date: December 16, 2025

  -  -					ACCEPTED FO CONSTRUCTI Date:
-					
	. 16-12-2025	JM	ISSUED FOR TENDER	_	Manager of Development S
N	lo. Date	Ву	Revisions		Development S



Ì	ſ	PERMIT TO PRACTICE					
	Signa	1					
	Date:	16-12-2025					
		PERMIT NUMBER: 1000771					
		The Association of Professional Engineers					
ı		and Geoscientists of British Columbia					

7	Seal:	
1	2025-12-16	
.	OG SECONDE SEE	
١	N. W. SPOHI	
۱	C. SHITTIS ST	
١	ENGIN PER SON	
J		

Design by Date JM 09-06-2021		Scale AS NOTED
Drawn by YJ	Date 09-06-2021	Sheet of 4 OF 4
Checked by Date DIS 09-06-2021		Eng. Project No.
Approved by NB	Date 09-06-2021	

Project CEDAR DRIVE
GILLEYS TRAIL TO THE SOUTH 1km

Description IRRIGATION CONTROLLER POWER