



TOWN OF STRATFORD
COMMUNITY CAMPUS SITE SERVICING
CONTRACT NO. 222617.00

ADDENDUM NO. 2

March 30, 2023

(To be added to and made part of the Tender Documents)

The following changes or modifications shall be made to the Tender Documents:

TO THE SPECIFICATIONS

Section 00 21 13 - Instruction to Tenderers

Page 1, delete item 2 and replace with the following:

2. The tender shall be submitted in a sealed envelope marked as follows:

TENDER FOR
Town of Stratford
Community Campus Site Servicing
Contract No. 222617.00

and must be delivered to the following address **up until 2:00:00 p.m.**, local time, on **April 13, 2023** hereinafter referred to as the Tender Closing.

Town of Stratford
234 Shakespeare Drive
Stratford, PEI C1B 2V8

Section 00 41 43 - Tender Form - Unit Rate

Page 3, add new item and renumber subsequent items:

17.7 Technical Specifications



Section 00 52 43 – Form of agreement

Page 1, delete page and replace with new page 1 attached.

Section 01 29 00 – Project Particulars and Measurement

Page 1, renumber item “1.2 Pay Items” to item “1.1 Pay Items”

Page 8, delete 1.1.21 item and replace with the following:

.21 Reinstatement:

- .1 Unit of Measurement: LUMP SUM (L.S.) or SQUARE METERS (m²)
- .2 This item includes: select borrow, granular base course material, prepare edges of existing pavement, curbing, sidewalk, signage, striping, overlapping of asphalt joints including milling, place, spread and roll asphalt to the compacted thickness indicated on the Drawings. The price shall also include reinstatement of all grass, topsoil, seed, fertilizer, shoulder surfaces and any other disturbed areas to a condition equal to or better than that which existed before construction. It also includes placing of 150mm topsoil from on site stockpile and hydroseeding of the fill areas indicated on drawing C01.

Section 26 05 01 - Electrical - General Requirements

Page 1, delete page and replace with new page 1 attached.

SECTION 26 05 10 – Basic Materials, Equipment and Wiring

Page 1, delete item 1.1.5 and replace with the following:

- .5 Furnish and install street lighting power, control equipment, concrete bases, transformer bases, poles and light fixtures as indicated.

Page 1, delete item 1.1.6 and replace with the following:

- .6 All materials, accessories and any other equipment necessary for the complete and proper installation of the conduit systems, conductors, sectionalizing cabinets, transformer pads, grade level splice boxes, secondary splice boxes, lighting system and telephone/TV boxes as indicated on the drawings shall be furnished by the Contractor.

Page 3, delete item 3.1 and replace with the following:

- | | |
|--|--|
| <p>3.1 INSTALLATION
OF SECTIONALIZING
CABINETS,
TRANSFORMER PADS
AND BOXES</p> | <p>.1 Install sectionalizing cabinets, transformer pads, grade-level pull boxes and secondary splice boxes as indicated on the drawings.</p> |
|--|--|



Section 26 56 19 -Street Lighting Equipment

Delete section in its entirety and replace with new section 26 56 19 attached.

Section 33 11 00 - Watermains

Page 14-15 Item 12 item and replace with the following:

12. Flush disinfectant solution from line after 24 hours. Under no circumstances shall disinfectant solution remain in the line longer than 48 hours. Add 1.0% hydrogen peroxide reducing agent to the disinfectant solution at point of discharge or within a retention facility such that the solution is disposed to the environment with a total chlorine residual no greater than 0.02 mg/L in accordance with the requirements of the Department of Environment. Check chlorine residuals before disposal and at regular intervals during disposal to ensure compliance. This de-chlorination requirement can only be excluded with the written consent of the Department of Environment.

TO THE DRAWINGS:

Drawing E01 - Distribution & Lighting System Layout

1. Delete drawing and replace with new drawing E01 attached.

Drawing E02 - Distribution & Lighting Schematic

1. Delete drawing and replace with new drawing E02 attached.

Drawing E03 - Distribution Details

1. Delete drawing and replace with new drawing E03 attached.

Drawing E04 - Lighting Details

1. Delete drawing and replace with new drawing E04 attached.

Drawing E05 - Lift Station Plan & Sections

1. Delete drawing and replace with new drawing E05 attached.

Drawing E06 - Lift Station Single Line Diagram & Details

1. Delete drawing and replace with new drawing E06 attached.

A handwritten signature in black ink that reads "Tim LeLacheur".

Tim LeLacheur, P.Eng.
CBCL Limited
March 30, 2023

General

Agreement: CCDC18-2001, Civil Works Contract, as amended below form the basis of this Agreement between the Owner and Contractor, including definitions of specific words and terms.

This Agreement made on the ____ day of _____ in the year ____.

BY AND BETWEEN

Town of Stratford

hereinafter called the "Owner"

and

hereinafter called the "Contractor"

The Owner and the Contractor agree as follows:

ARTICLE A1 - THE WORK

The Contractor shall:

.1 Perform the Work required by the Contract Documents for

Community Campus Site Servicing Contract No.222617.00

located at Stratford, PEI

for which the Agreement has been signed by the parties, and for which CBCL Limited

(Insert above the name of the Consultant)

is acting as and is hereinafter called the "Consultant"

and

.2 do and fulfill everything indicated by this Agreement, and

.3 commence the Work by the ___th day of _____ in the year 202 and attain Substantial Performance as certified by the Consultant by the ____ day of _____ in the year 202.

1.1 WORK INCLUDED
IN CONTRACT

- .1 Power service to sectionalizing cabinets and padmount transformers as indicated.
- .2 Installation of fiberglass sectionalizing cabinet as indicated. (Sectionalizing cabinet to be supplied by Maritime Electric).
- .3 Supply and installation of power and communications conduits as indicated.
- .4 Supply and installation of secondary splice boxes, fiberglass transformer pads and grade-level pull boxes as indicated.
- .5 Supply and installation of precast concrete power and communication manholes as indicated.
- .6 Supply and installation of communications grade level boxes as indicated. (Pedestals mounted on the boxes supplied by Bell Aliant).
- .7 Supply and installation of secondary power conductors as indicated.
- .8 Supply and installation of street lighting poles, light fixtures, power and control equipment, precast concrete light pole bases, transformer bases as indicated.

1.2 CODES AND
STANDARDS

- .1 Complete installation in accordance with CSA C22.1-2010, CSA C22.3 No.1, and C22.3 No.7:20, except where specified otherwise.
- .2 Comply with CSA Electrical Bulletins in force at time of tender submission, while not identified and specified by number in this Division, are to be considered as forming part of related CSA Part II standard.
- .3 Abbreviations for electrical terms: to CSA Z85-1963.
- .4 Work to be to approval and standard of Maritime Electric, Bell Aliant and Eastlink.

PART 1 - GENERAL

1.1 DESCRIPTION OF
WORK

- .1 Furnish and install a concrete base, transformer base, light pole and fixture at each location indicated on the drawings, complete with accessories as indicated herein and as indicated on the drawings.
- .2 All materials, accessories, and any other equipment necessary for the complete and proper installation of all light poles and fixtures included in this Contract shall be furnished by the Contractor.

PART 2 - PRODUCTS

2.1 STREET LIGHT
FIXTURES AND POLES

- .1 Luminaires:
 - .1 LED post-top lanterns with curved top, PUR312T series.
 - .2 55 watt LED lamp module.
 - .3 Optical tempered clear glass globe.
 - .4 Asymmetrical Distribution type 2.
 - .5 120 Volt
 - .6 Color Temperature: 3000K
 - .7 Color Rendering Index: 80
 - .8 Color - Textured Black
 - .9 Acceptable Manufacturer: LumenPulse
 - .2 Poles:
 - .1 27 seamless poles, 100 mm round extruded aluminum shaft welded to cast aluminum muffler base, maintenance opening with copper ground lug and ground bar, complete with anchor bolts, nuts, washers and base cover.
 - .2 Color - Textured Black
 - .3 Height - 5.5m (18ft)
 - .4 Acceptable Manufacturer: LumenPulse
-

2.2 STREET LIGHT
ACCESSORIES

- .1 Transformer Base:
 - .1 Color - Black
 - .2 Material - Aluminum
 - .3 Anchor bolt pattern to match light pole and concrete base.
 - .4 Acceptable Manufacturers:
 - .1 Valmont
 - .2 LytePoles
 - .3 Approved alternate
- .2 Transformer:
 - .1 Primary: 317V, Secondary: 120V
 - .2 250VA Rating
 - .3 Suitable for outdoor application

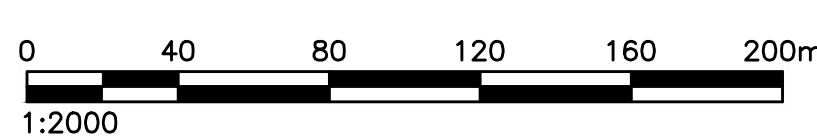
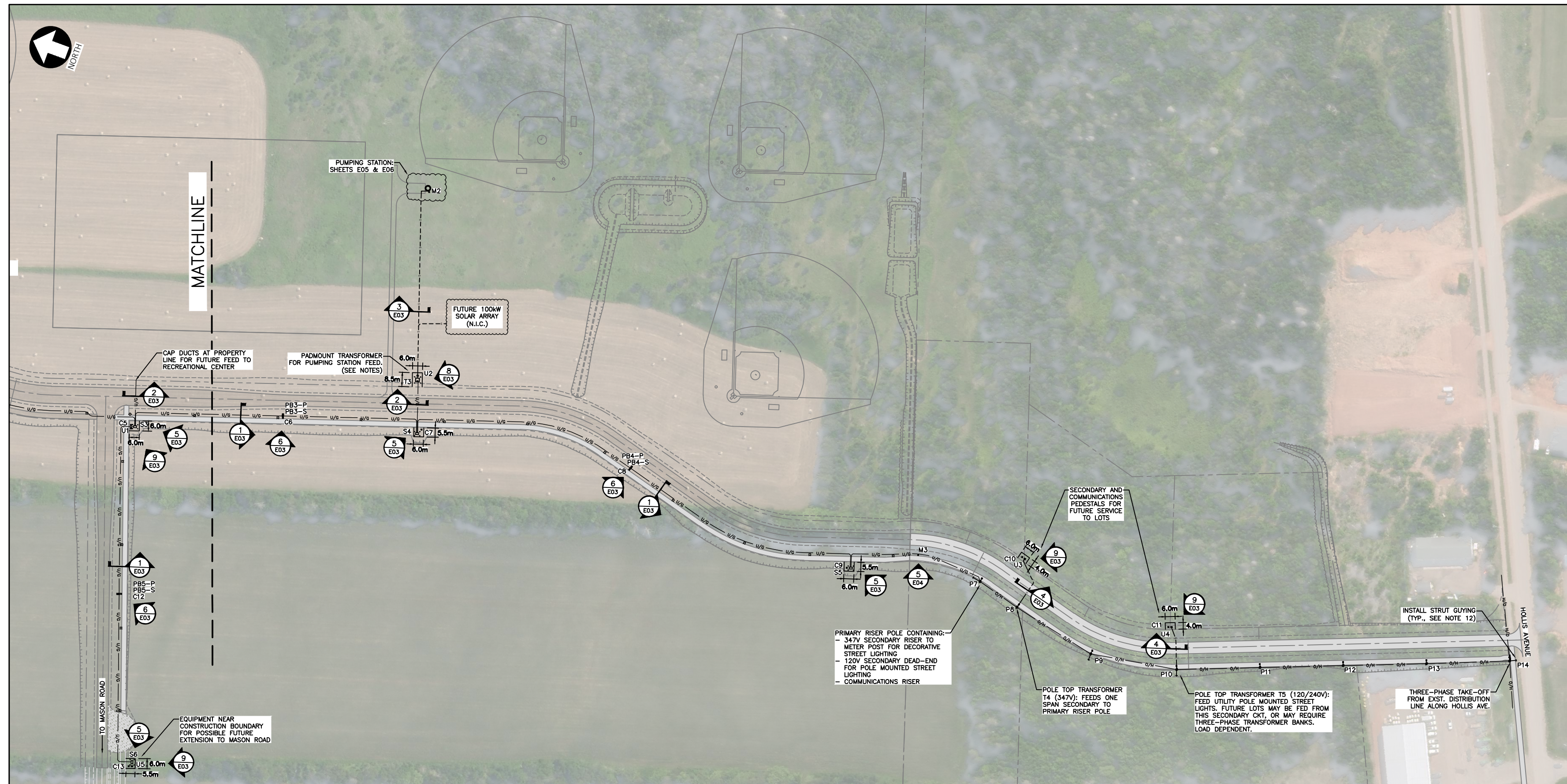
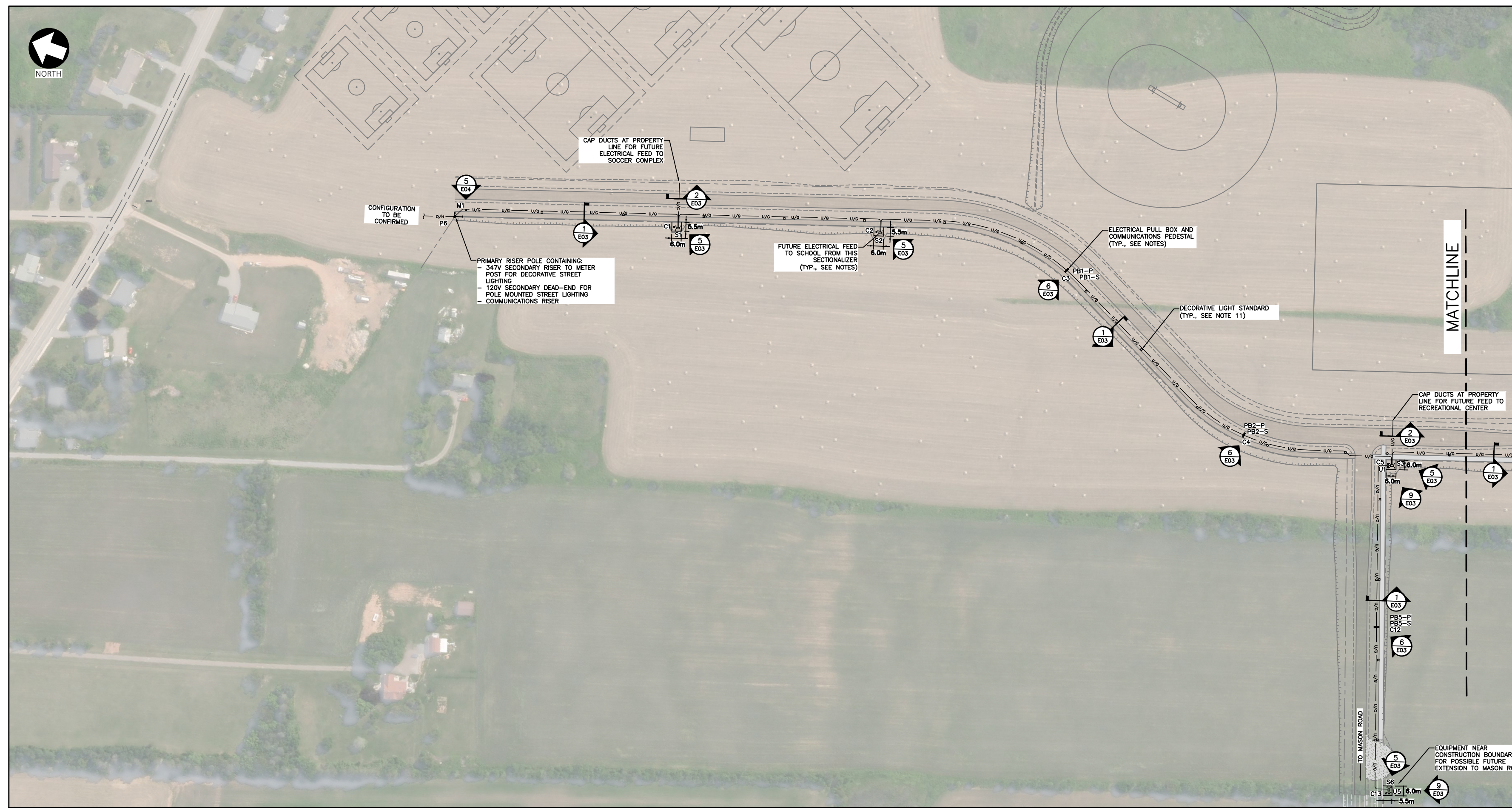
PART 3 - EXECUTION

3.1 INSTALLATION

- .1 Connect fixtures to lighting circuits as indicated.
- .2 Install each pole, base, and fixture properly and safely.
- .3 Install poles true and plumb, in accordance with manufacturer's instructions.
- .4 Ground all poles as indicated on drawings.
- .5 Install lighting contactor and photo control as indicated on drawings.

3.2 POLE AND
FIXTURE CLEANING

- .1 Contractor to clean all poles and fixtures one week prior to Substantial Completion.
- .2 Replace blemished, damaged, or unsatisfactory poles and fixtures as directed.



BILL OF MATERIALS			
UNDERGROUNDING	QTY.	UNITS.	NOTES
PVC 127mm	3200	m	PRIMARY DUCTS
PVC 100mm	7000	m	SECONDARY AND COMMUNICATIONS DUCTS
PVC 53mm	3000	m	STREET LIGHTING DUCTS
UTILITY BENDS & CONNECTORS	AS REQ.	EA.	1525mm & 915mm RAD. BENDS AS APPLICABLE (SEE NOTE 2)
50 X 150 mm PLANKS	AS REQ.	EA.	REFER TO E03 DUCTBANK DETAILS
HIGH VOLTAGE WARNING RIBBON	AS REQ.	EA.	REFER TO E03 DUCTBANK DETAILS
BOLLARDS & COVERS	32	EA.	4 PER PADMOUNT PRIMARY EQUIPMENT
ELECTRICAL	QTY.	UNITS.	NOTES
PRIMARY RISERS	2	EA.	AS PER MECL STANDARD
URD BOX	4	EA.	
SECONDARY RISER	3	EA.	PROVISION FOR 2 SERVICES (SOUTH), RE-FEED 1 EXST. SERVICE (NORTH)
UTILITY METER	1	EA.	PUMPING STATION: REFER TO SHEET E05 & E06
OTHER ITEMS (PUMPING)	1	LOT	REFER TO SHEETS E05 & E06
PULL BOXES	10	EA.	SEE NOTES 3, 7, & 16
CABLES	1	LOT	SECONDARY TO PUMPING STATION, REFER TO E02, E05, & E06
2/0 CU STRANDED BARE	1700	m	MAIN DUCTBANK RUN, PLUS EXTRA AS REQ. FOR PADMOUNT EQUIP. GROUND LOOP
GROUNDING RODS	75	EA.	PADMOUNTED EQUIPMENT (4 EACH), TRAIL LIGHT STANDARDS (1 EACH), METER POSTS, COMMUNICATIONS PEDESTALS (1 EACH)
#2 AWG CU STRANDED BARE	54	m	TRAIL LIGHT STANDARD GROUNDING, APPROX. (SEE NOTE 11)
STREET LIGHTING	QTY.	UNITS.	NOTES
METER/SERVICE POST	2	EA.	ONE PER U/G LIGHTING CIRCUIT (NEAR NORTH/SOUTH RISERS)
TRAIL LIGHT POLES	27	EA.	REFER TO E04 FOR DETAILED REQUIREMENTS
TRAIL POST-TOP LUMINAIRES	27	EA.	REFER TO E04 FOR DETAILED REQUIREMENTS
TRAIL LIGHT STANDARD BASE	27	EA.	ONE PER LIGHT STANDARD, REFER TO E04 FOR DETAILED REQUIREMENTS
URD/PEDESTAL	2	EA.	NEAR INTERSECTION (OPEN POINT) & CONSTRUCTION BOUNDARY
CABLES	1	LOT	REFER TO E02/E04 FOR DETAILED REQUIREMENTS
TRANSFORMER BASE	27	EA.	REFER TO E04 FOR DETAILED REQUIREMENTS
250VA 347/120V TRANSFORMER	27	EA.	REFER TO E04 FOR DETAILED REQUIREMENTS
COMMUNICATIONS	QTY.	UNITS.	NOTES
PEDESTALS	13	EA.	ESTIMATED QUANTITY FOR COMMUNICATIONS
COMMUNICATIONS RISER	5	EA.	ONE PER SECONDARY RISER FROM O/H SERVICES AND ONE PER PRIMARY RISER

NOTES:

- REFER TO CIVIL PLANS FOR DETAILS OF SITE LAYOUT. REFER TO TYPICAL ROAD CROSS-SECTIONS FOR STANDARD PLACEMENT OF UTILITY POLES AND DECORATIVE LIGHT STANDARDS.
- USE LONG SWEEP 1525mm RADIUS PVC CONDUIT UTILITY BENDS IN ALL RISER POLE VERTICAL TO HORIZONTAL TRANSITIONS, AND ALL HORIZONTAL TRANSITIONS TO PADMOUNT EQUIPMENT, 915mm BEND MAY BE USED.
- SECTIONALIZING CABINETS AND PULL BOXES ARE PLACED TO LIMIT CABLE PULLING DISTANCE AND ALLOW FOR EXPANSION IN FUTURE PHASES. PLACEMENT AND QUANTITY TO BE CONFIRMED BY MECL.
- ALL WORK SHALL BE CARRIED OUT IN CONFORMANCE WITH MARITIME ELECTRIC AND TELECOMMUNICATIONS STANDARDS.
- ALL COMMUNICATIONS PEDESTALS AND CABLES SUPPLIED AND INSTALLED BY TELECOMMUNICATIONS COMPANY. ALL BOXES UNDER PEDESTALS AND RISER MATERIALS TO BE SUPPLIED AND INSTALLED BY THE CONTRACTOR.
- ALL PRIMARY CABLES SUPPLIED AND INSTALLED BY MARITIME ELECTRIC.
- SECONDARY PEDESTALS, TRANSFORMER PADS, GROUNDING, BOLLARDS, AND PULL BOXES ARE TO BE SUPPLIED AND INSTALLED IN PLACE BY THE CONTRACTOR. SECTIONALIZING CABINETS AND PADMOUNT TRANSFORMERS ARE TO BE SUPPLIED BY MECL AND INSTALLED IN PLACE BY THE CONTRACTOR. ALL OVERHEAD MATERIALS TO BE SUPPLIED AND INSTALLED BY MECL (EXCL. RISER DUCTS AND OTHER MATERIALS).
- STUB UP ALL ELECTRICAL CONDUITS IN SECTIONALIZING CABINETS, TRANSFORMER PADS AND PULL BOXES, AS SPECIFIED BY MARITIME ELECTRIC. CONTRACTOR TO CONSULT WITH MARITIME ELECTRIC ON THE DELIVERY SCHEDULE FOR THE EQUIPMENT AND CONFIRM ARRANGEMENT OF THE CONDUITS WITHIN THE CABINETS.
- ALL PADMOUNT EQUIPMENT PLACEMENT AS PER MECL STANDARD E-90-03; PADMOUNT EQUIPMENT LOCATION DETAILS.
- ALL PADMOUNT PRIMARY EQUIPMENT TO HAVE BOLLARD INSTALLATION AS PER MARITIME ELECTRIC REQUIREMENTS. REFER TO SHEET E03 - DISTRIBUTION DETAILS.
- FOR STREET LIGHTING INFORMATION, INCLUDING SERVICE/METER POST INSTALLATION, SINGLE LINE DIAGRAM, AND STREET LIGHT CIRCUIT WIRING, REFER TO SHEET E04 - LIGHTING DETAILS.
- SIDEWALK STRUT GUYING SHOULD BE USED WHERE GUYS ARE SHOWN CROSSING TRAIL.
- GROUNDING SHALL BE IN ACCORDANCE WITH SECTION 10 OF THE LATEST CANADIAN ELECTRICAL CODE.
- METER AS PER MECL STANDARD. REFER TO UG-18-08.
- CONTRACTOR TO ARRANGE START-UP MEETINGS WITH CONSULTANT, MARITIME ELECTRIC, AND TELECOMMUNICATIONS COMPANIES BEFORE COMMENCING WORK.
- PULL BOX LOCATIONS INCLUDE ONE (1) ENCLOSURE FOR PRIMARY DUCTS AND ONE (1) ENCLOSURE FOR SECONDARY DUCTS. PRIMARY PULL BOX TO BE PLACED IN LINE WITH MAIN TRENCH. SECONDARY PULL BOX TO BE PLACED ADJACENT TO PRIMARY PULL BOX. SECONDARY DUCTS TO TRAVEL TO ADJACENT BOX, THEN REJOIN MAIN TRENCH ON OTHER SIDE. PULL BOX COVERS SHALL CONTAIN LABEL INDICATING "DANGER HIGH VOLTAGE" FOR PRIMARY, AND "DANGER LOW VOLTAGE" FOR SECONDARY.

LEGEND:

- OVERHEAD LINE
- U/G MAIN TRENCH
- U/G SECONDARY
- PROPERTY LINES
- POLE
- GUY & ANCHOR
- BOLLARD
- URD/SECONDARY PEDESTAL
- ▣ PULL BOX
- ▢ COMMUNICATIONS PEDESTAL
- ▤ SECTIONALIZING CABINET
- ▥ TRANSFORMER PAD
- UTILITY POLE MOUNT STREET LIGHT
- ⊠ TRAIL LIGHT STANDARD
- ⊙ METER POST

GENERAL NOTES:

- ALL DIMENSIONS IN METRIC UNLESS OTHERWISE NOTED.

NOT FOR CONSTRUCTION

No.	Description	Date	By
1	ISSUED FOR ADDENDUM #2	MAR 30/23	TSL
0	ISSUED FOR TENDER	MAR 17/23	TSL
A	ISSUED FOR MECL REVIEW	FEB 27/23	MWC

Revision or Issue

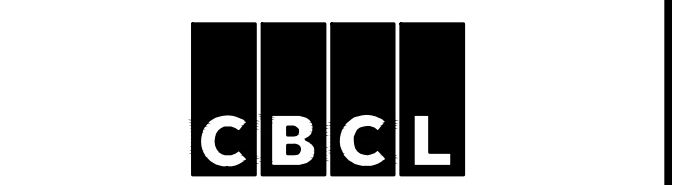


TOWN OF STRATFORD

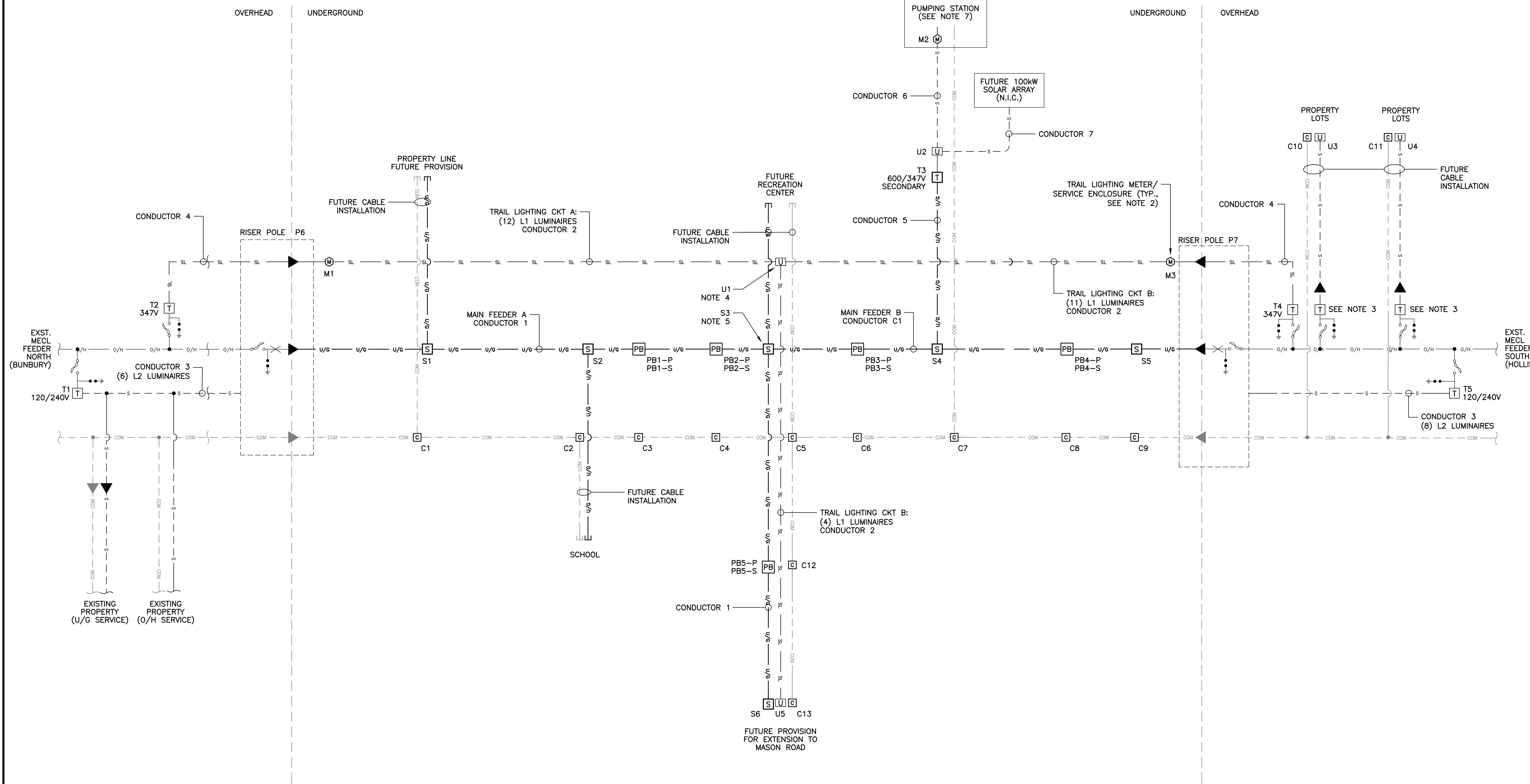
COMMUNITY CAMPUS

SITE SERVICING
ELECTRICAL

DISTRIBUTION & LIGHTING
SYSTEM LAYOUT



The Association of Professional Engineers of the Province of Prince Edward Island Value for the Year 2023 Randy O'Connor No. 1275 DATE: MARCH 30, 2023 LICENSED PROFESSIONAL ENGINEER Province of Prince Edward Island	Contract No: 222617.00 Date: FEB 2023 Scale: AS NOTED Designed: MEF Drawn: MEF Checked: MWC Approved: TSL Sheet No: 1 of 6 Drawing No: E01
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- LEGEND:**
- O/H — O/H PRIMARY
 - U/G — U/G PRIMARY
 - - - - - SECONDARY
 - SL — STREET LIGHTING
 - - - - - COMMUNICATIONS
 - ◀ — O/H TO U/G RISER
 - ⊗ — FUSED CUTOUT (AERIAL)
 - X — SWITCH
 - ⚡ — LIGHTNING ARRESTOR
 - U — SEC. PEDESTAL (URD)
 - PB — PULL BOX
 - C — COMMS PEDESTAL
 - S — SECTIONALIZING CABINET
 - T — TRANSFORMER
 - M — METER (POST/BLDG)

- NOTES:**
1. REFER TO SHEET E01 - DISTRIBUTION & LIGHTING SYSTEM LAYOUT FOR EQUIPMENT LOCATIONS.
 2. REFER TO SHEET E04 - LIGHTING DETAILS FOR LUMINAIRE INFORMATION AND DIAGRAMS.
 3. TRANSFORMERS TO BE INSTALLED AS REQUIRED FOR BUSINESS PARK SERVICES. SIZING TO BE DETERMINED BY CUSTOMER LOADS. 120V SERVICE MAY BE FED FROM EXISTING SECONDARY (STREET LIGHTING CIRCUIT) IF THREE-PHASE NOT REQUIRED.
 4. OPEN POINT IN URD TO SPLIT U/G STREET LIGHTING CKT A & B.
 5. OPEN POINT IN SECTIONALIZING CABINET TO SPLIT MAIN NORTH AND SOUTH CIRCUITS. ALLOWS SWITCHING OF LOADS BETWEEN BUNBURY AND HOLLIS FEEDERS, AND FUTURE MASON ROAD FEEDER.
 6. REFER TO SHEET FOR E03 - DISTRIBUTION DETAILS SOME EQUIPMENT DETAILS.
 7. REFER TO SHEETS E05 - LIFT STATION PLAN & SECTIONS & E06 - LIFT STATION SINGLE LINE DIAGRAM & DETAILS.

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1	ISSUED FOR ADDENDUM #2	MAR 30/23	TSL
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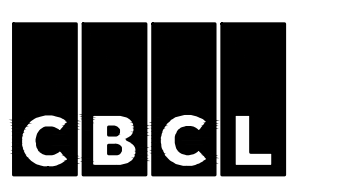
Revision or Issue

TOWN OF STRATFORD

COMMUNITY CAMPUS

SITE SERVICING
ELECTRICAL

**DISTRIBUTION & LIGHTING
SCHEMATIC**

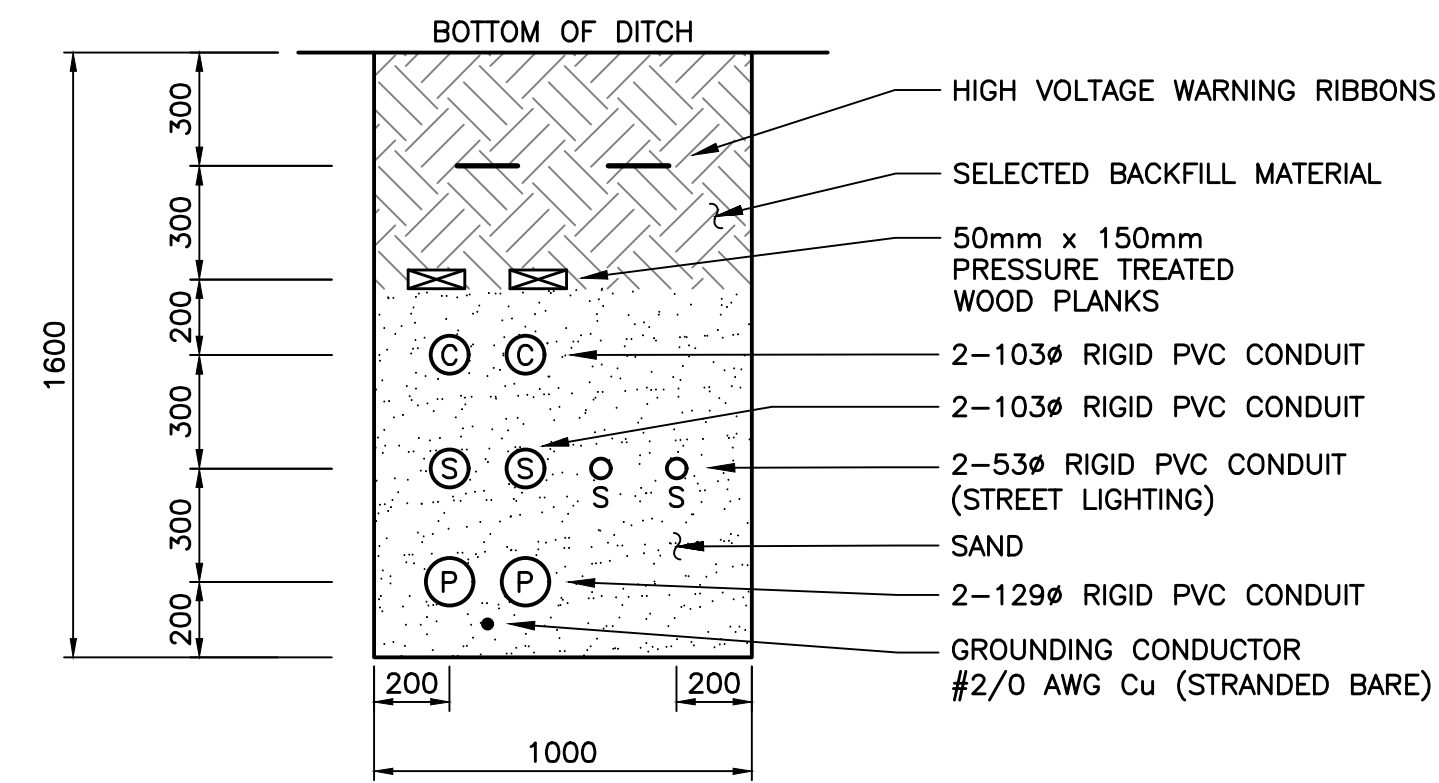


CKT	QTY.	TOTAL W	DIST. (m, APPROX.)
A (NORTH)	12	660	675
B (SOUTH/WEST)	15	825	770

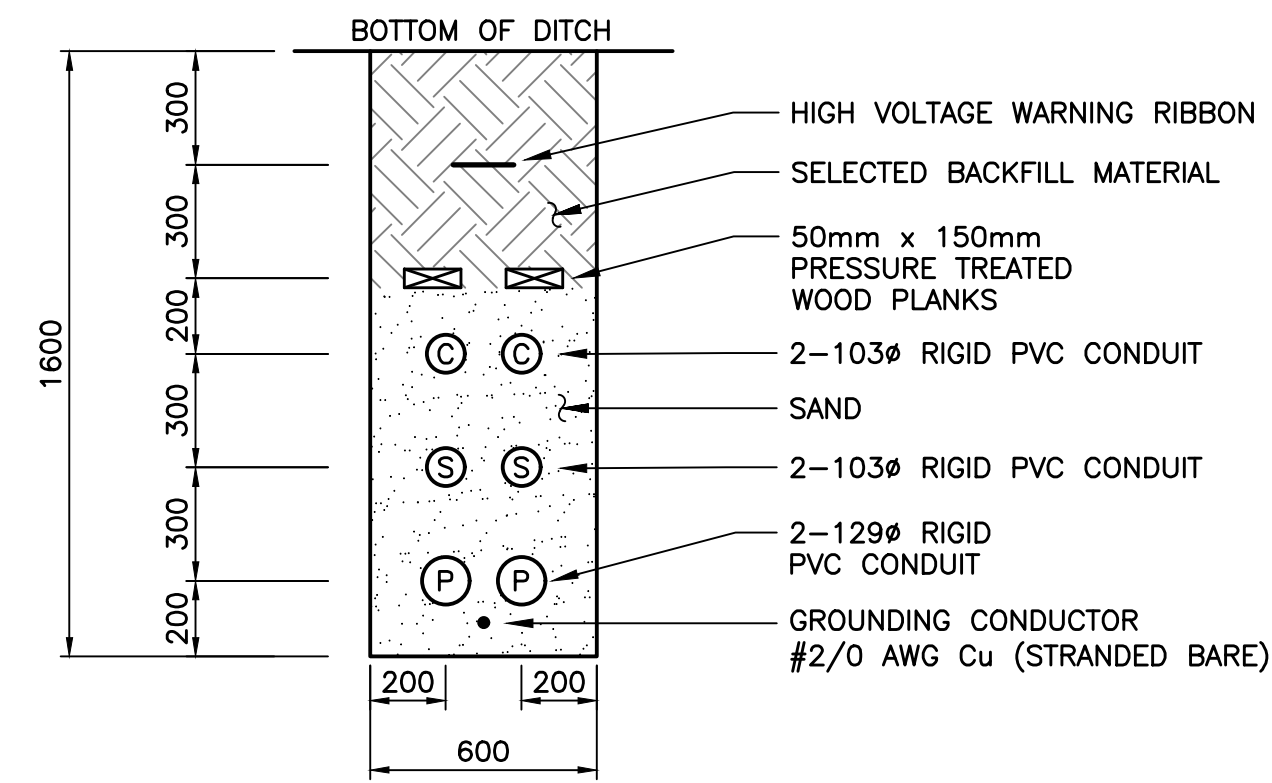
ID	DESCRIPTION	APPLICATIONS
1	15kV CLASS, U/G, AL, 3C-4/0 AWG	MAIN U/G FEEDERS
2	347V, U/G, CU, 2C-#6 AWG (INCL. 1C-#8 AWG BOND WIRE)	U/G TRAIL LIGHTING CIRCUITS A & B
3	120/240V, O/H, TRIPLEX, SIZE TBD	O/H SECONDARY CIRCUITS (STREET LIGHTING AND SERVICES)
4	347V, O/H, TRIPLEX, SIZE TBD	TRAIL LIGHTING O/H SECTION TO RISER
5	15kV CLASS, U/G, AL, TBD	PUMPING STATION/SOLAR ARRAY PRIMARY BRANCH
6	600/347V, U/G, CU, 4C-#2 AWG (INCL. 1C-#6 AWG BOND WIRE)	PUMPING STATION SECONDARY
7	600/347V, U/G, TBD	SOLAR ARRAY SECONDARY

 Randy O'Connor No. 1275	Contract No: 222617.00 Date: FEB 2023 Scale: AS NOTED
	Designed: MEF Checked: MWC Sheet No: 2 of 6

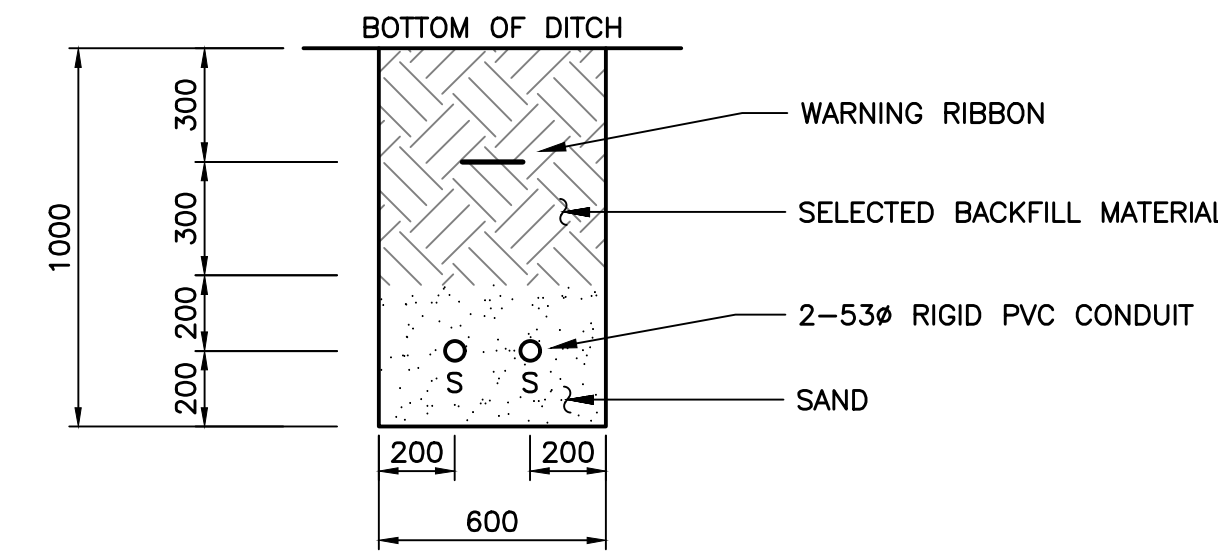
DATE: MARCH 30, 2023



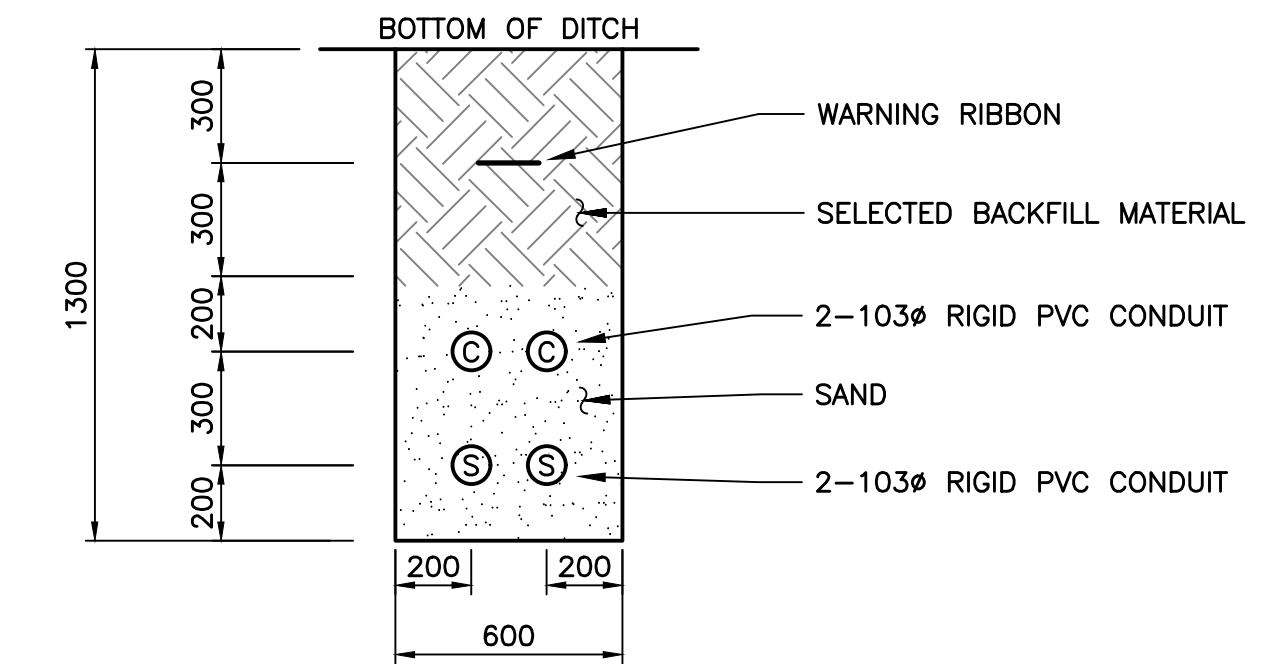
1 DETAIL—MAIN JOINT—USE TRENCH
1:20 (SEE NOTE 2)



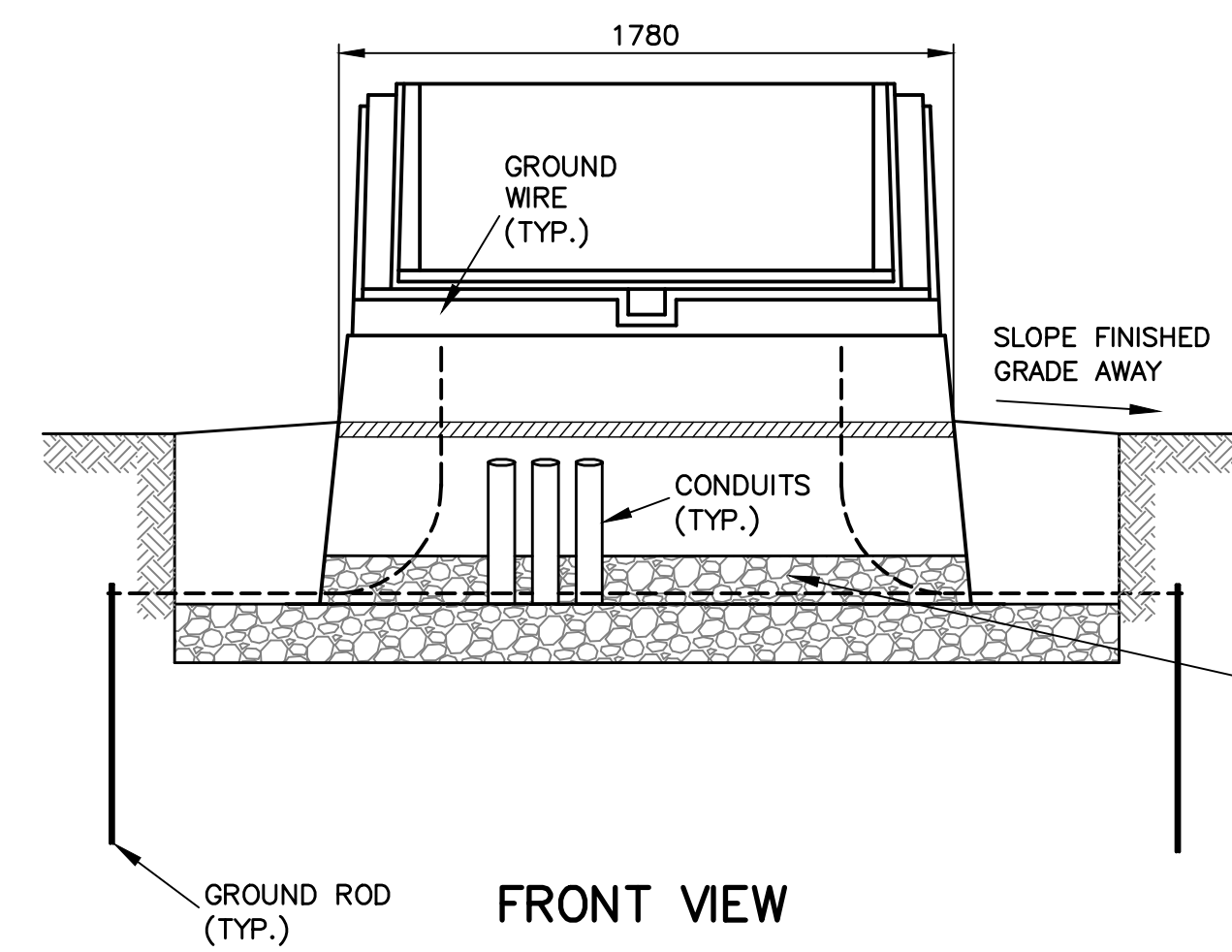
2 DETAIL—PRIMARY SERVICE LATERAL
1:20 (SEE NOTE 2)



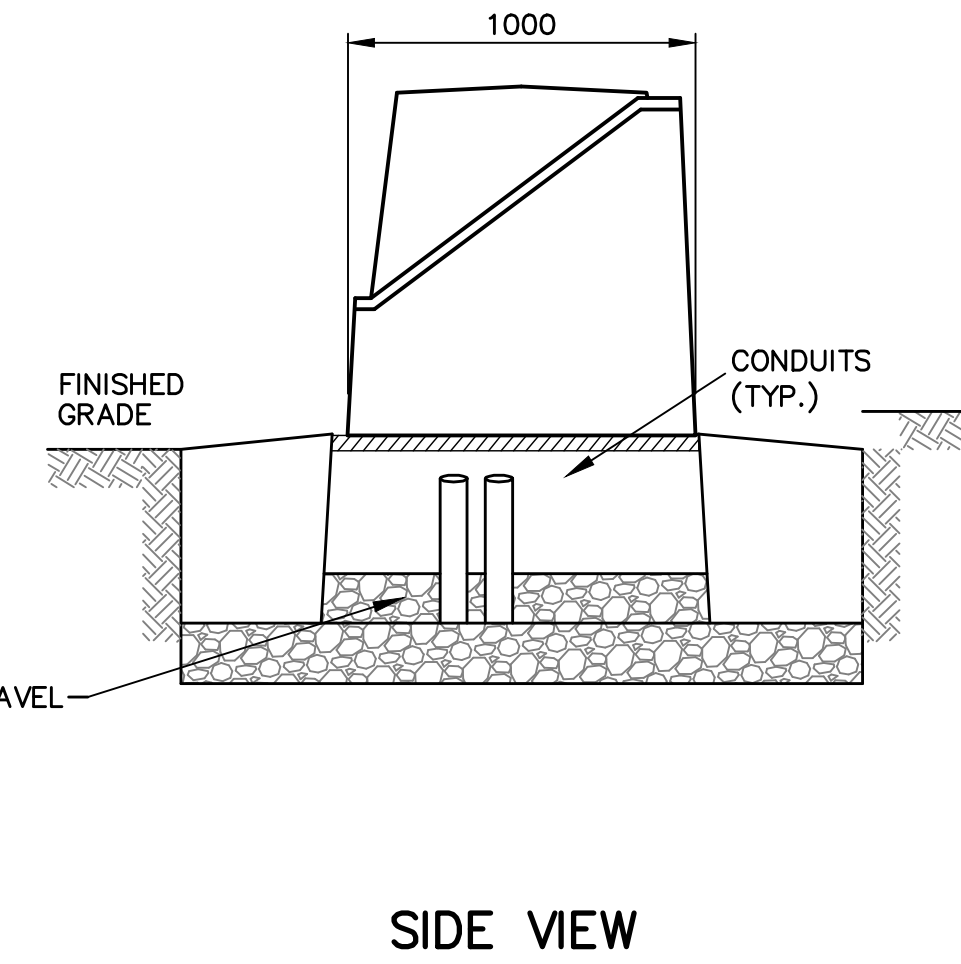
3 DETAIL—SECONDARY TRENCH (LIGHTING/PUMPING)
1:20 (SEE NOTE 2)



4 DETAIL—SECONDARY SERVICE LATERAL
1:20 (SEE NOTE 2)

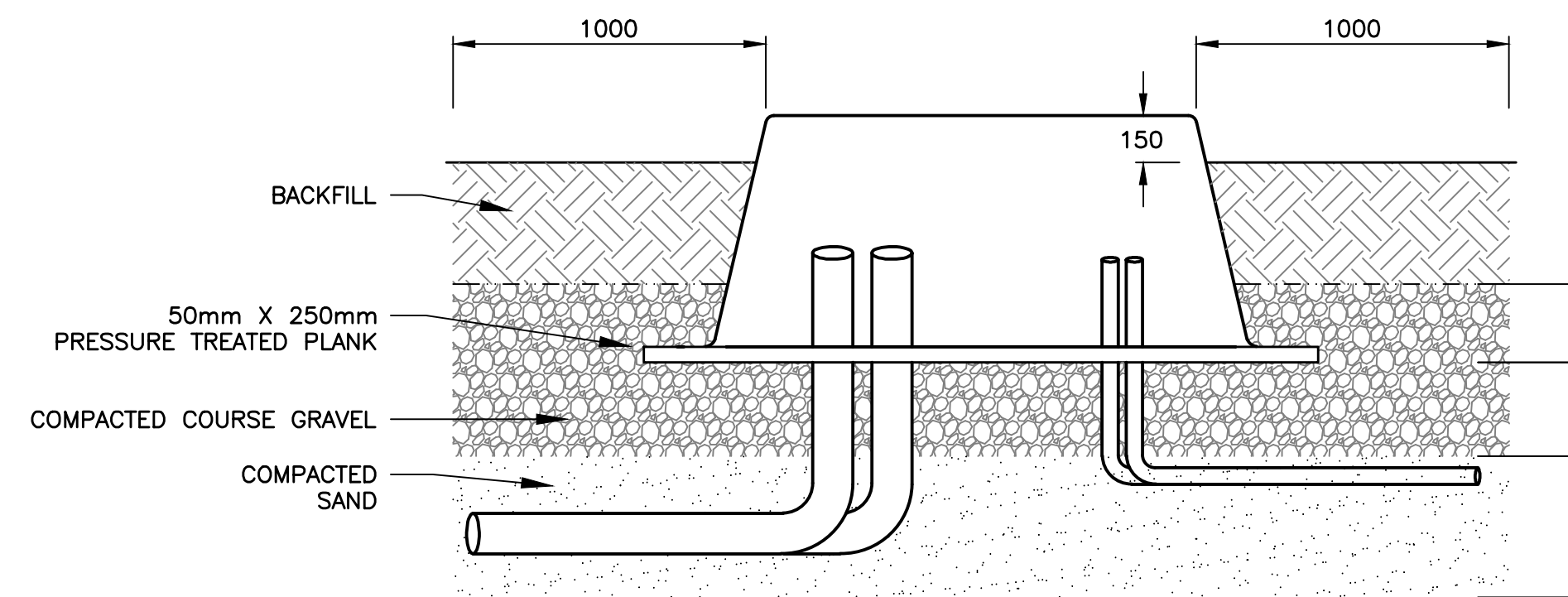


FRONT VIEW

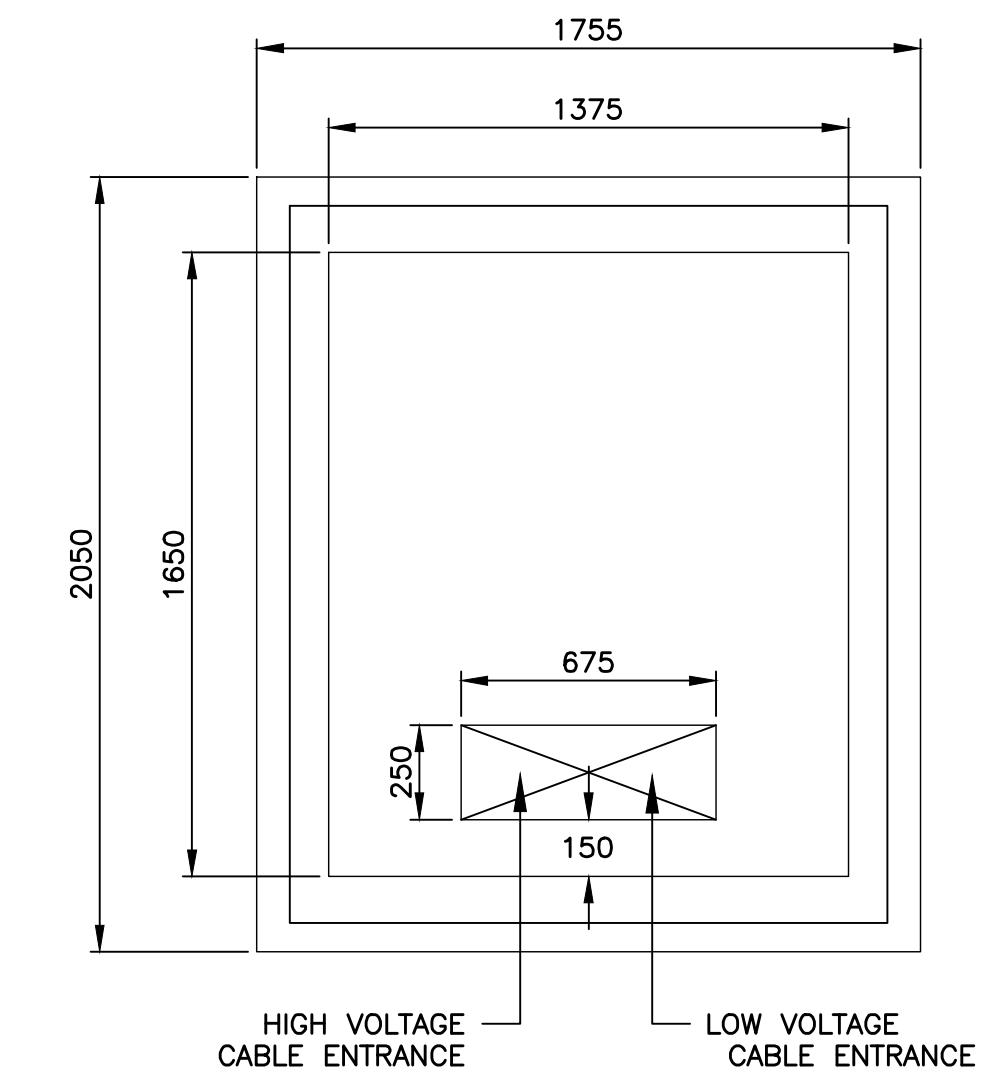


SIDE VIEW

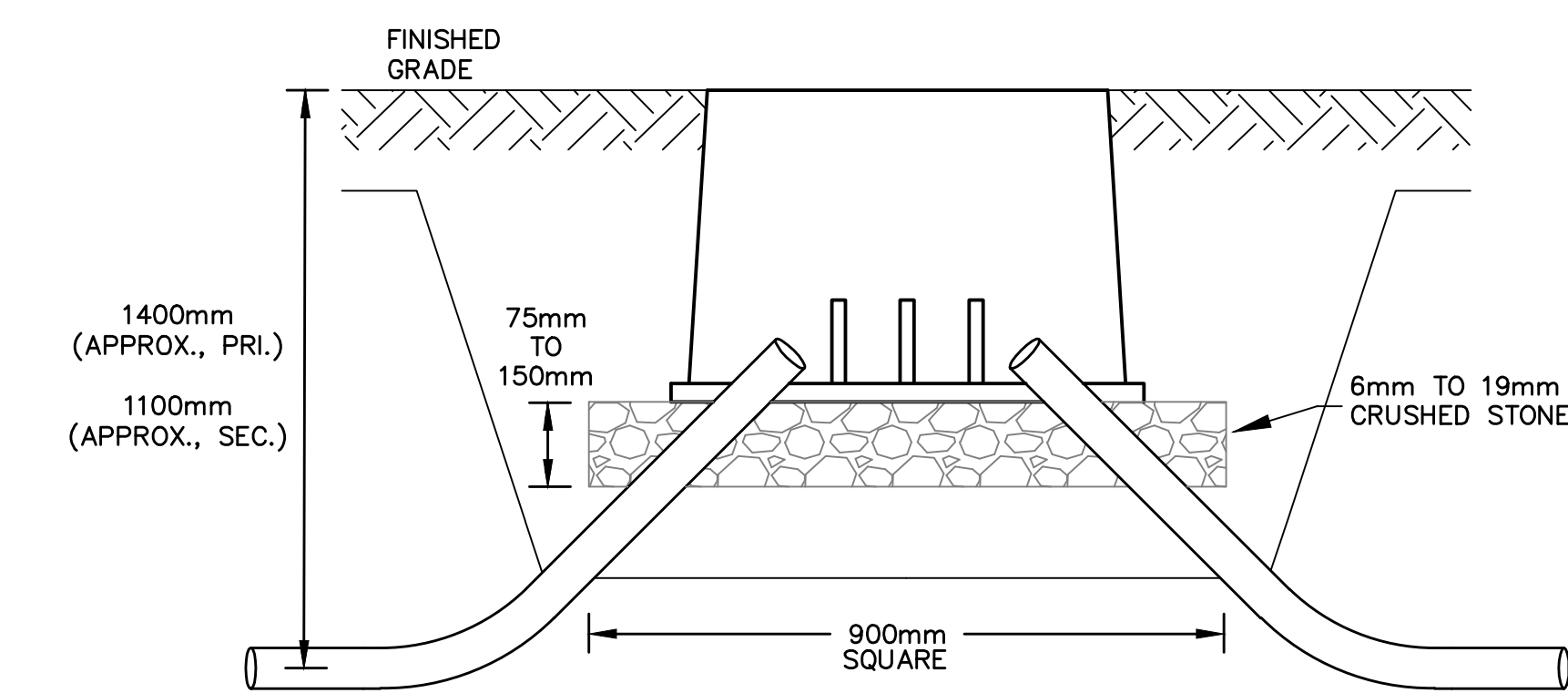
5 DETAIL—PRIMARY SECTIONALIZING CABINET & PAD
N.T.S. (SEE NOTES 3, 4, & 6)



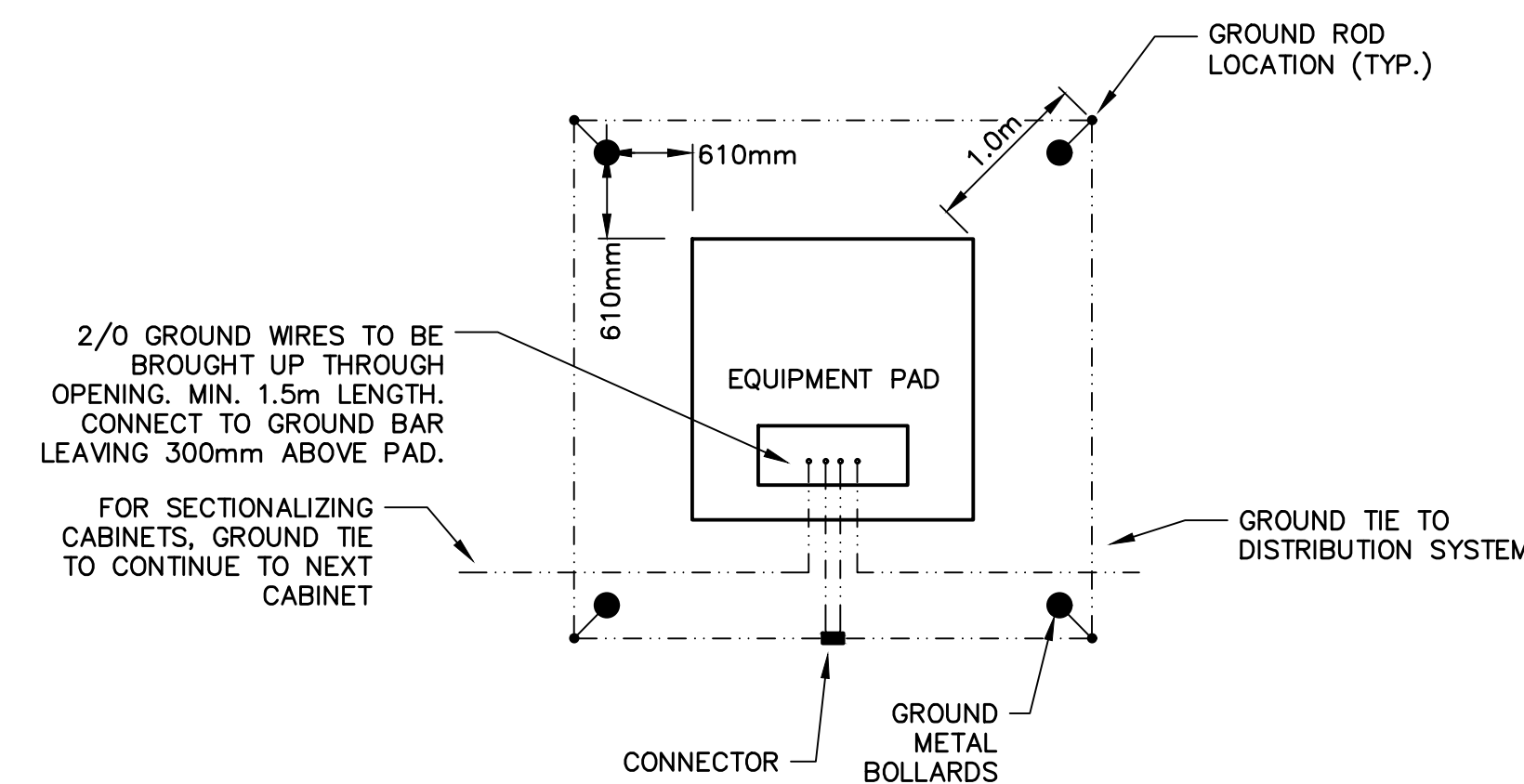
8 DETAIL—TRANSFORMER FIBREGLASS PAD
N.T.S. (SEE NOTES 6 & 8)



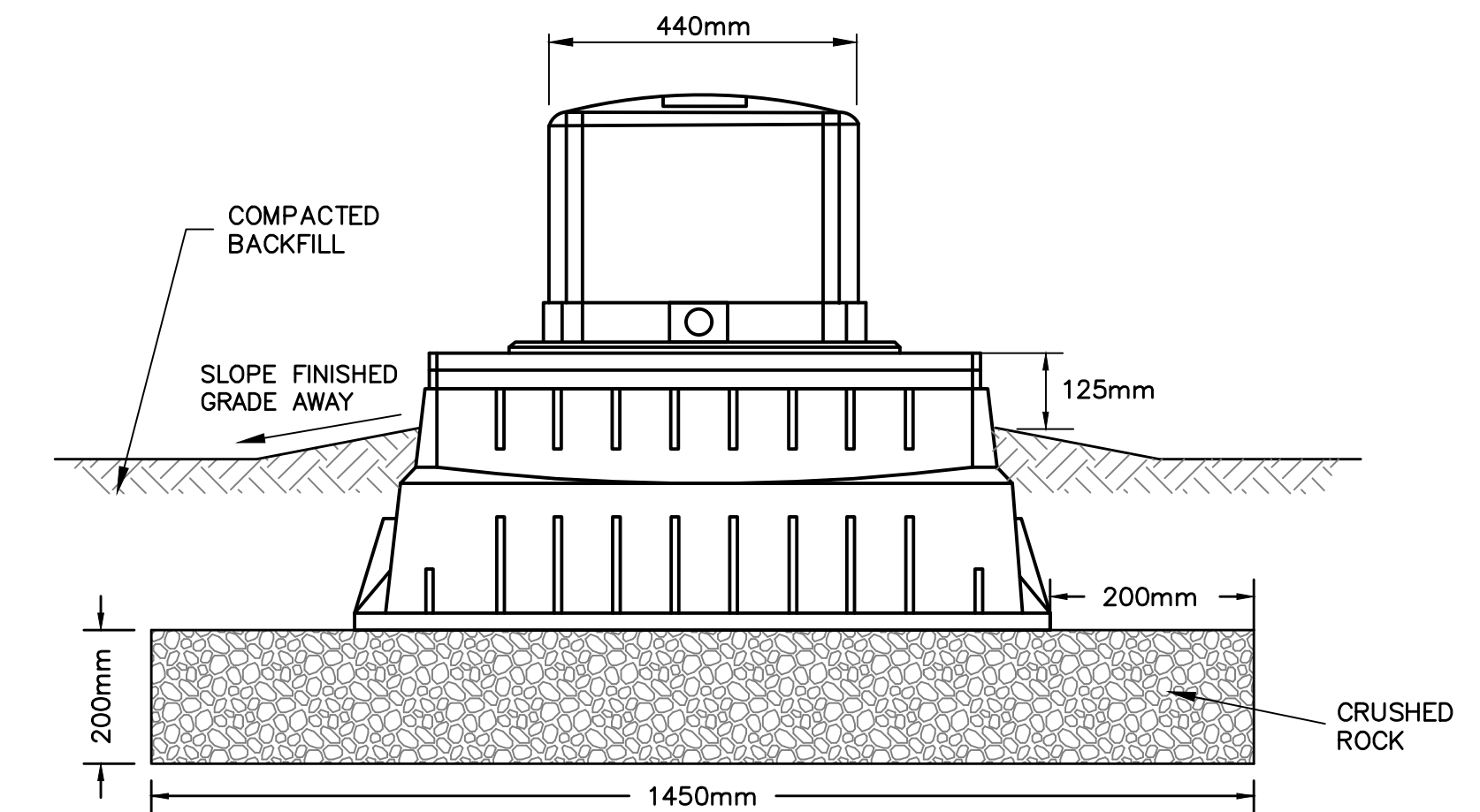
HIGH VOLTAGE CABLE ENTRANCE LOW VOLTAGE CABLE ENTRANCE



6 DETAIL—GRADE LEVEL ENCLOSURE (PULL BOX)
N.T.S. (SEE NOTE 5)



7 DETAIL—PADMOUNT EQUIPMENT INSTALLATION
N.T.S. (SEE NOTES 6 & 9)



9 DETAIL— SECONDARY PEDESTAL/URD
N.T.S. (SEE NOTE 7)

- NOTES:**
- ALL INSTALLATIONS TO MEET MECL STANDARDS.
 - REFER TO MECL STANDARD E-85-206: STANDARD TRENCHING DETAIL AND UG-92-01: UNDERGROUND CLEARANCES AT DITCHES IN R.O.W.
 - REFER TO MECL STANDARD UG-05-06: THREE PHASE HIGH VOLTAGE SECTIONALIZING CABINET (PRIMARY).
 - SECTIONALIZING CABINETS TO BE EQUIPPED WITH JUNCTIONS AND PARKING STANDS.
 - REFER TO MECL STANDARD E-99-01: GRADE LEVEL ENCLOSURES INSTALLATION DETAILS. SEPARATE ENCLOSURES REQUIRED FOR PRIMARY AND SECONDARY DUCTS.
 - REFER TO MECL STANDARD E-85-143: GROUNDING DETAILS FOR PAD MOUNTED TRANSFORMER, AND UG-18-01: GROUNDING DETAILS FOR SECTIONALIZING CABINET.
 - REFER TO MECL STANDARD UG-05-03: SECONDARY ABOVE GRADE ENCLOSURES/SECONDARY PEDESTALS.
 - REFER TO MECL STANDARD E-12-01: FIBERGLASS PAD 3 PHASE PADMOUNTED UP TO 750kVA.
 - REFER TO MECL STANDARDS E-85-144: PADMOUNT XFMR & SECTIONALIZING CABINET CONCRETE PROTECTIVE BOLLARDS AND E-18-100: SPECIFICATION FOR PLASTIC BOLLARD COVERS.

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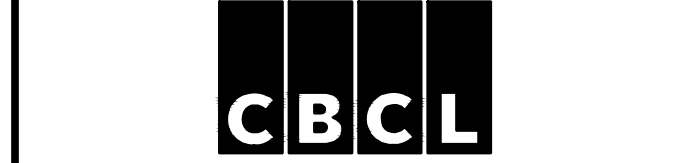
TOWN OF STRATFORD

COMMUNITY CAMPUS

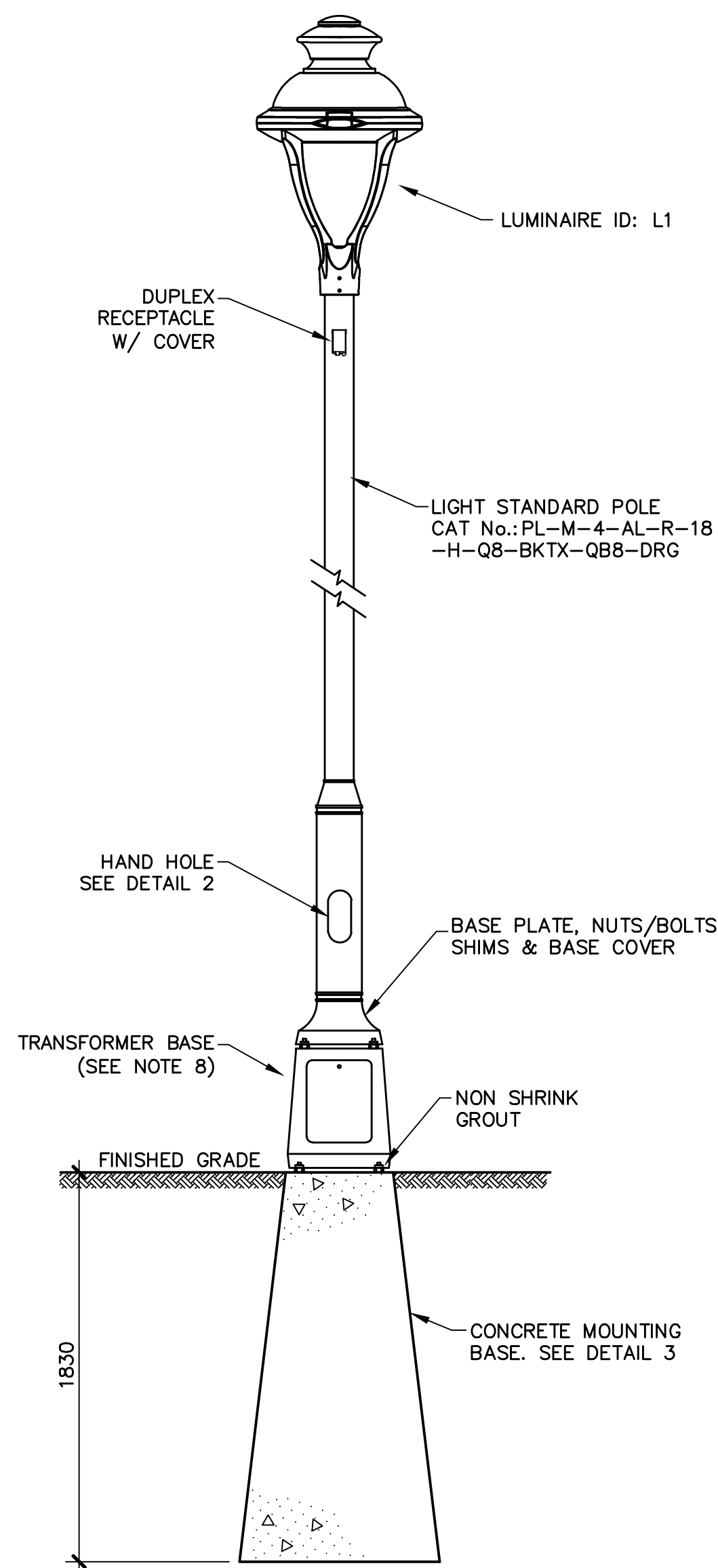
SITE SERVICING
ELECTRICAL

DISTRIBUTION DETAILS

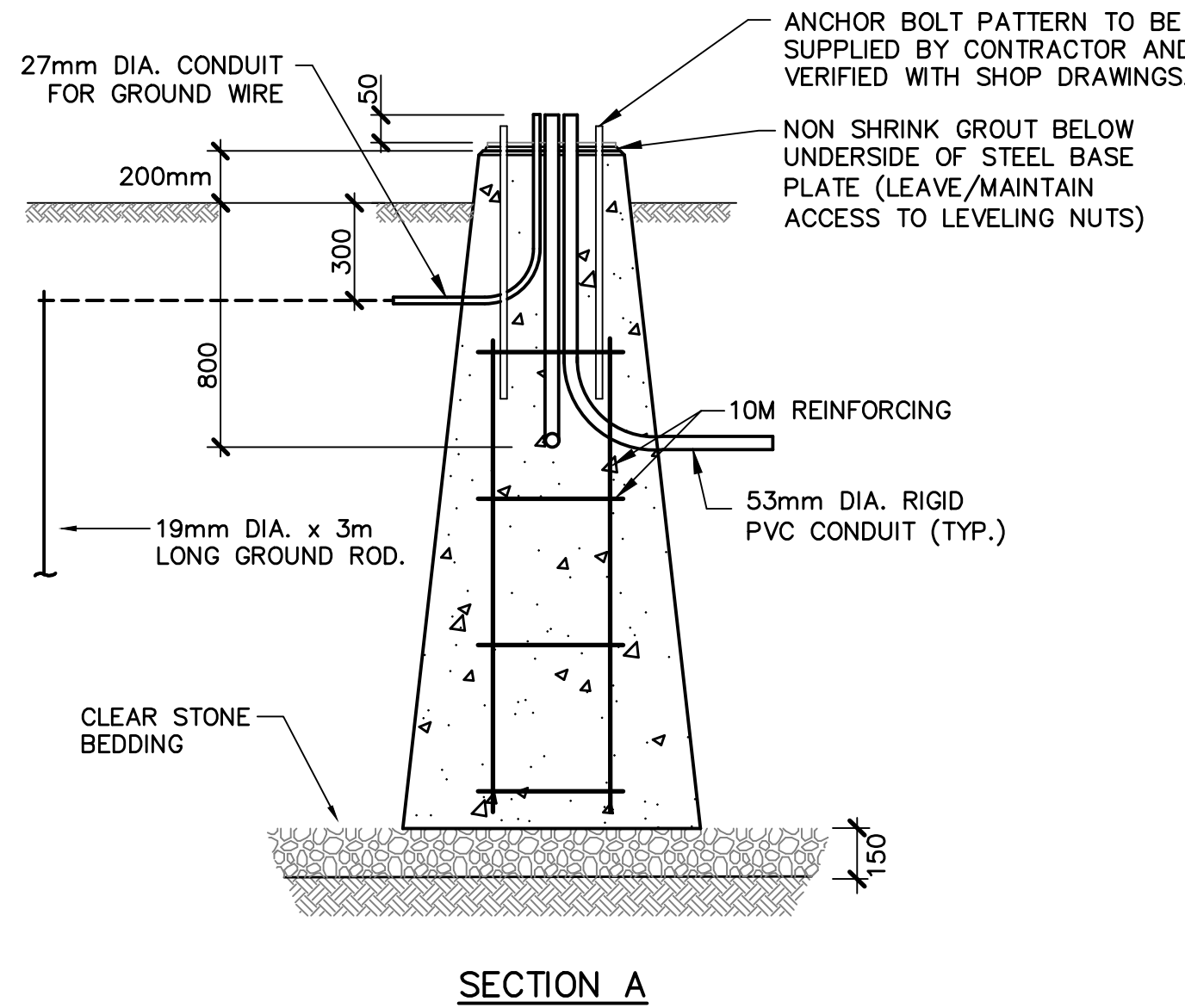
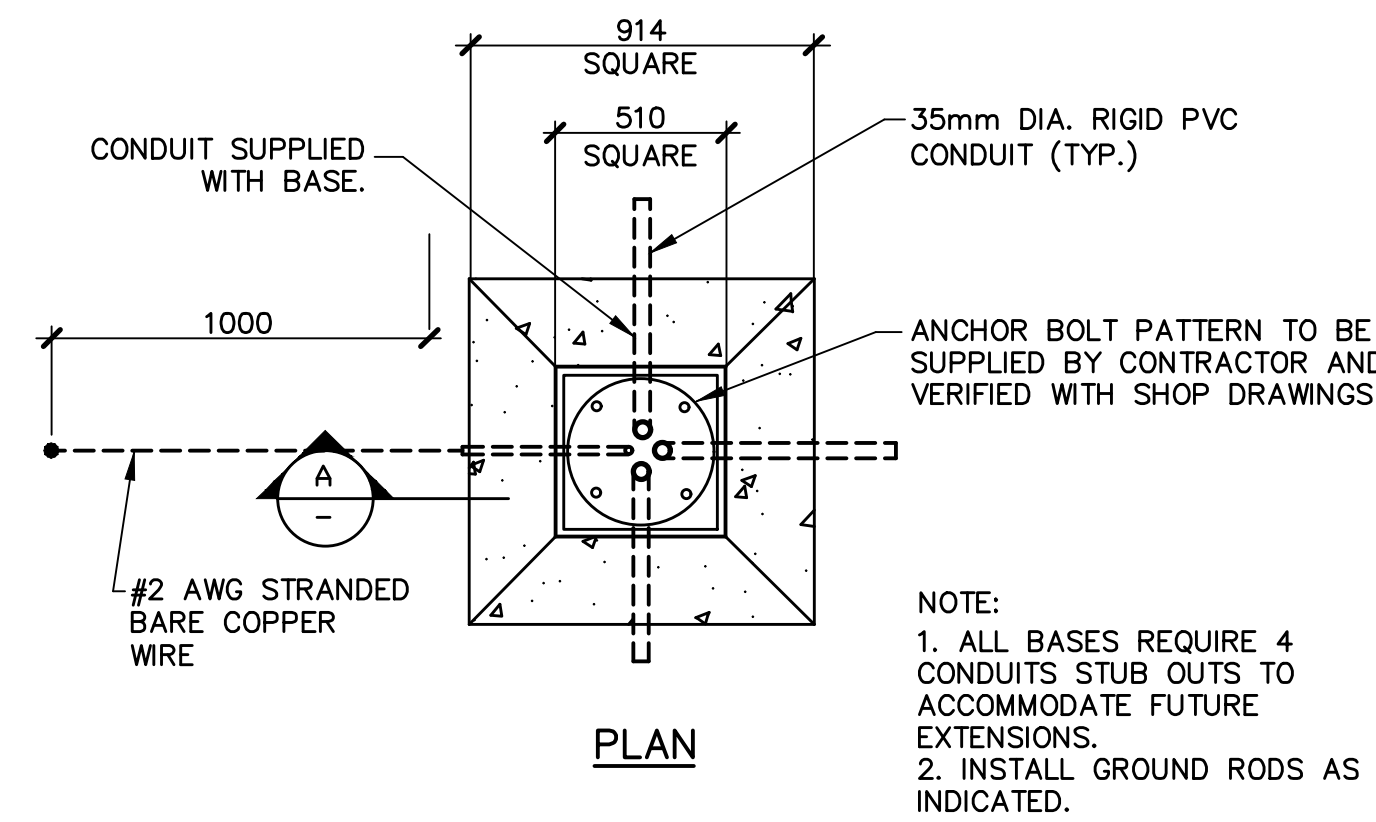
PHASE 1



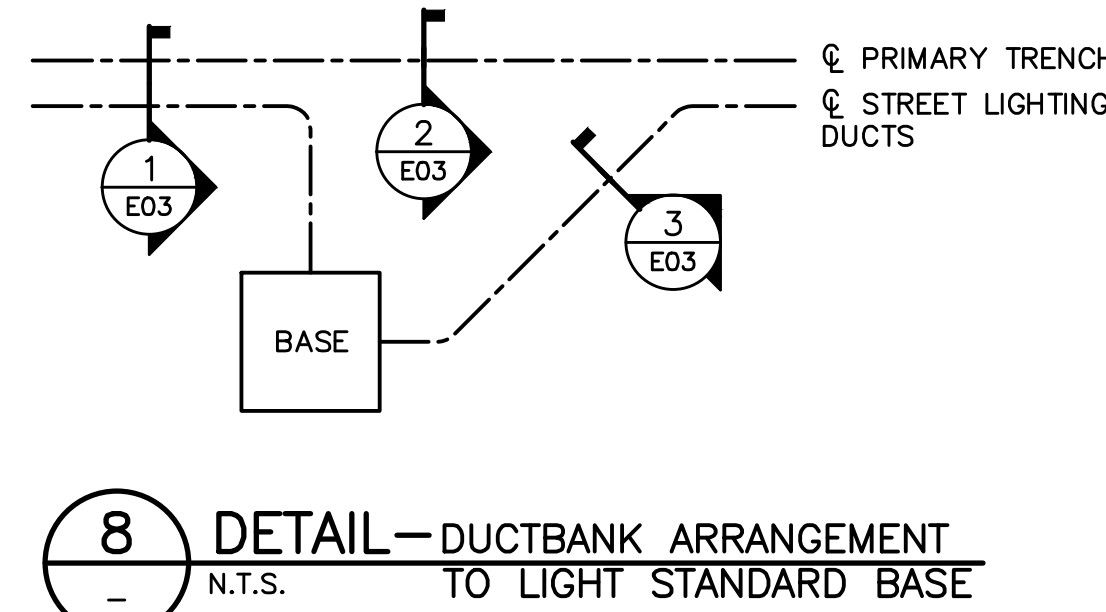
Contract No.	Scale
222617.00	AS NOTED
Date	Scale
FEB 2023	AS NOTED
Designed	Drawn
MEF	MEF
Checked	Approved
MWC	TSL
Sheet No.	Sheet No.
3	6
Date	Drawing No.
MARCH 30, 2023	E03



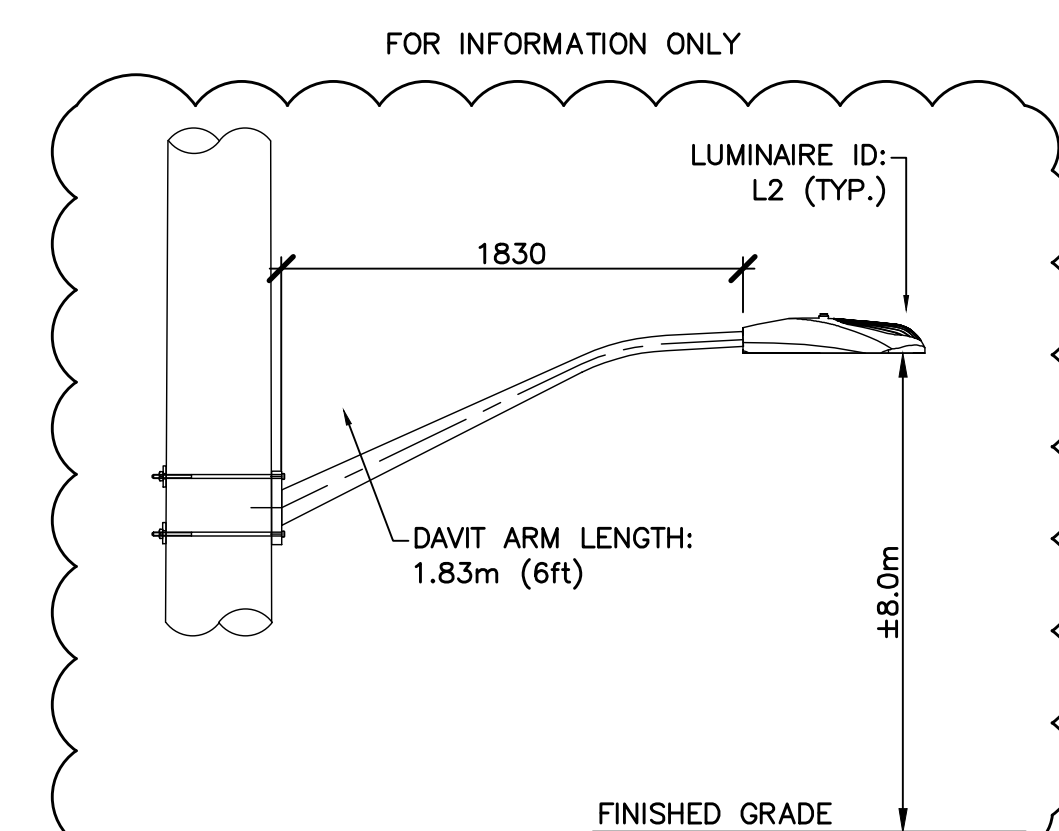
1 DETAIL—TRAIL LIGHTING POLE (TYP.)
N.T.S.



3 DETAIL—PRECAST LIGHT STANDARD BASE (TYP.)
N.T.S.



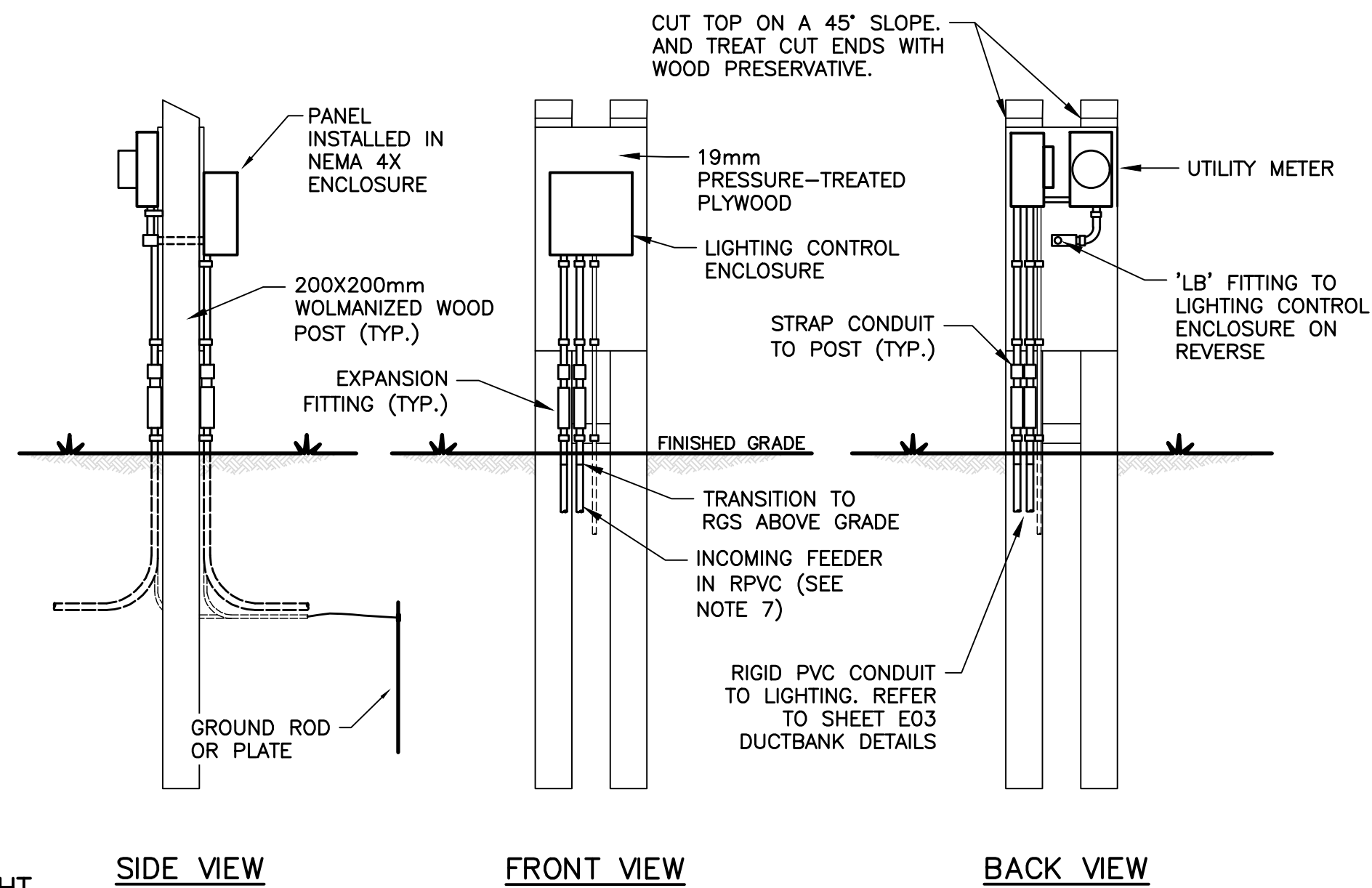
8 DETAIL—DUCTBANK ARRANGEMENT TO LIGHT STANDARD BASE
N.T.S.



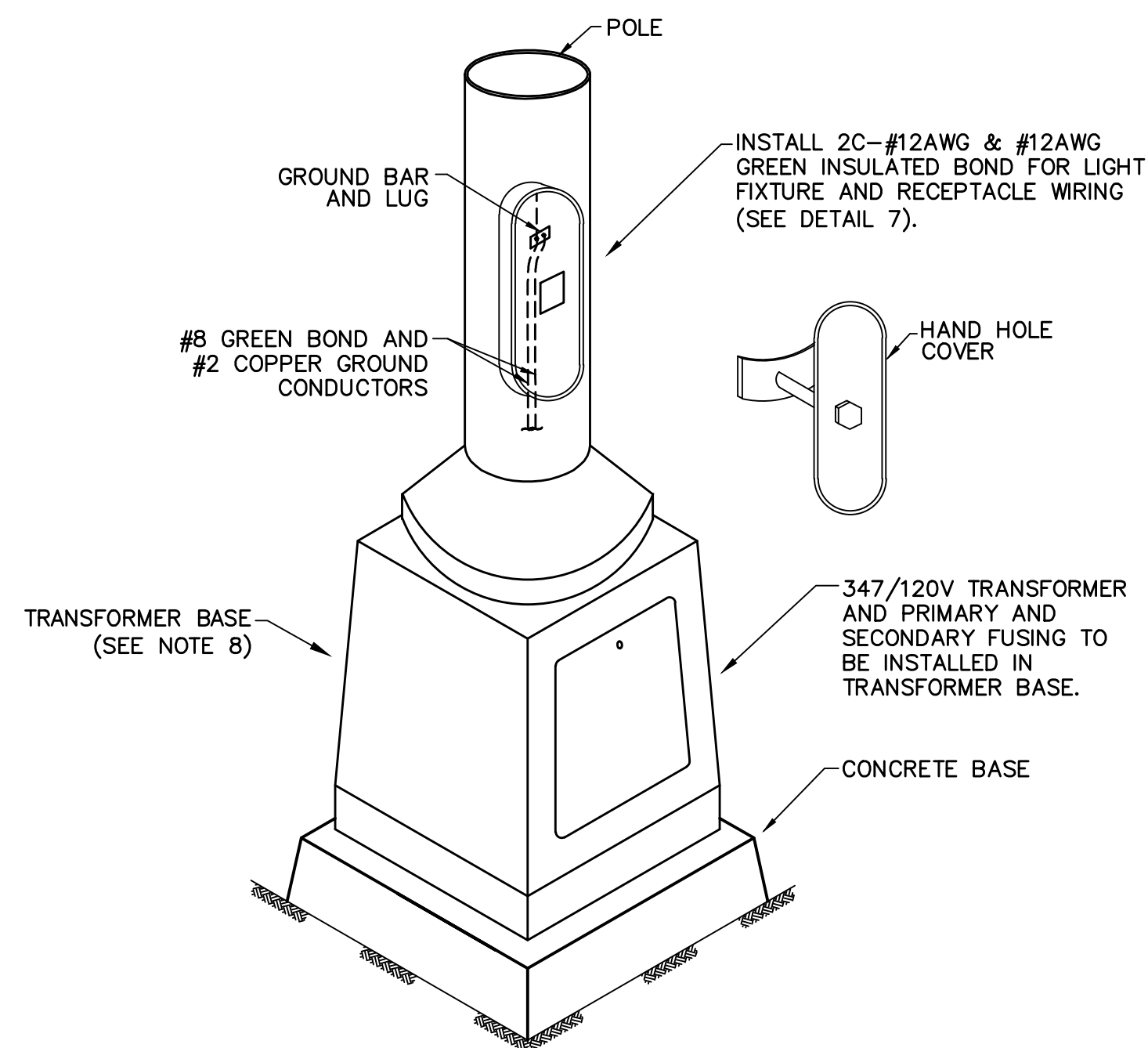
4 DETAIL—UTILITY POLE MOUNTED ROADWAY LIGHT BY MECL
N.T.S.

LABEL	Symbol	Qty	APPLICATION	Description	Lum. Watts	Lum. Lumens
L1	□	27	TRAIL	LUMENPULSE: PUR312T-120-CSL-S60-30K-CRI 80-2	55	4430
L2	■	14	UTILITY POLE MOUNTED	44 WATT MIN., TYPE 2, 3000K (TYP., BY UTILITY)	44	5000 (APPROX.)

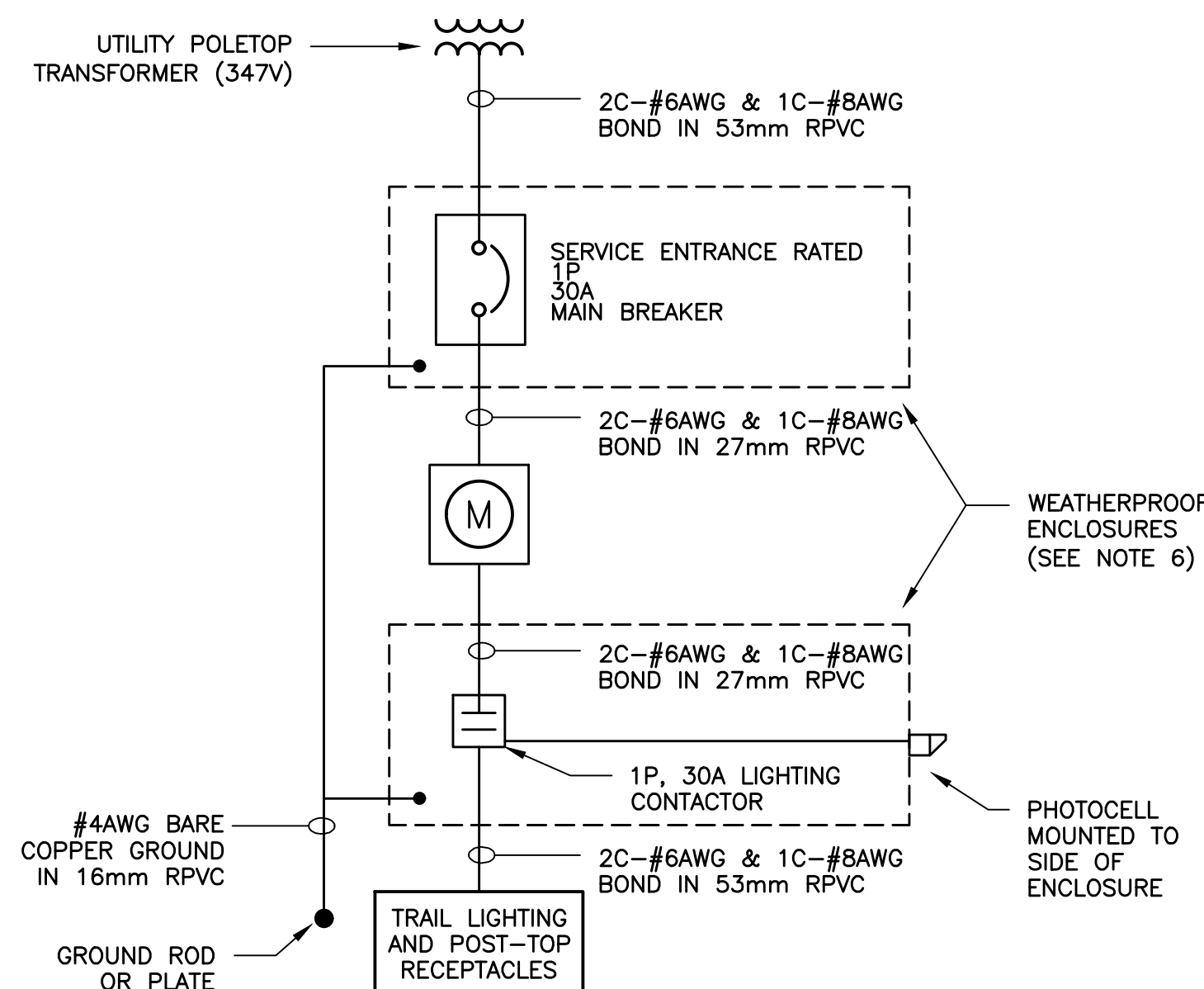
TRAIL LIGHT POLE SCHEDULE							
POLE ID	CKT	X	Y	POLE ID	CKT	X	Y
LP1	B	394199.8447	685823.6613	LP15	B	394123.0738	686283.2136
LP2	B	394183.4384	685870.9468	LP16	A	394114.8134	686307.7744
LP3	B	394176.5037	685910.2464	LP17	A	394102.4739	686354.9140
LP4	B	394185.9640	685959.2390	LP18	A	394109.7547	686404.0035
LP5	B	394199.0086	686007.5071	LP19	A	394131.6051	686448.9743
LP6	B	394199.1330	686057.0874	LP20	A	394153.8591	686493.7495
LP7	B	394183.3630	686104.3990	LP21	A	394168.6036	686541.4129
LP8	B	394167.3900	686151.7790	LP22	A	394164.0388	686590.9002
LP9	B	394151.4170	686199.1590	LP23	A	394148.1821	686638.2465
LP10	B	393953.7850	686227.9621	LP24	A	394132.2091	686685.6265
LP11	B	394000.6081	686244.4345	LP25	A	394116.2361	686733.0065
LP12	B	394135.4450	686246.5390	LP26	A	394100.2082	686780.3678
LP13	B	394047.7485	686261.0249	LP27	A	394084.0930	686828.4781
LP14	B	394094.9370	686277.6864				



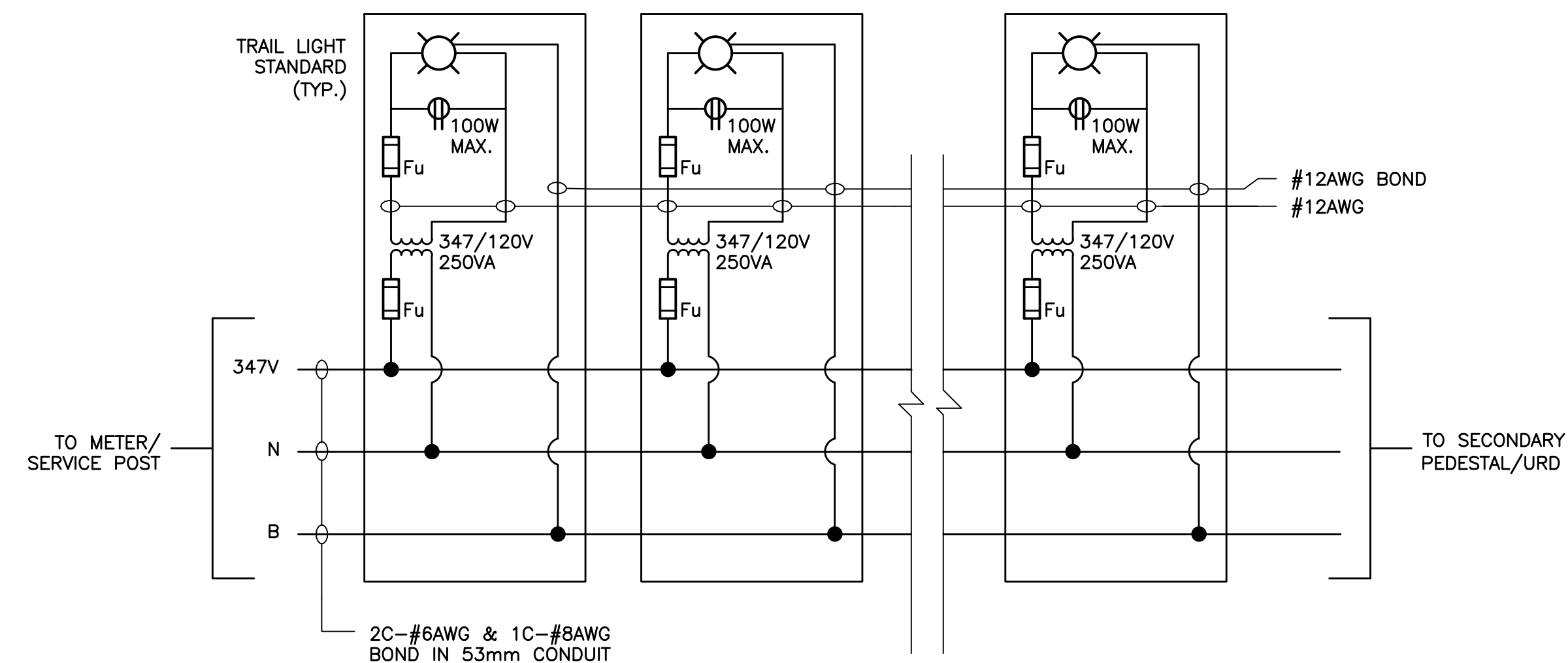
5 DETAIL—TYPICAL LIGHTING METER POST (SEE NOTE 6)
1:30



2 DETAIL—TRAIL LIGHTING POLE & TRANSFORMER BASE APPROXIMATE CONFIGURATION
N.T.S.



6 DETAIL—TYPICAL SINGLE LINE DIAGRAM
N.T.S.



7 DETAIL—LIGHTING CIRCUIT WIRING DIAGRAM
N.T.S.

NOTES:

- PEDESTRIAN CONFLICT FOR THE TRAIL IS VERY LOW DUE TO SEPARATION FROM ROADWAY. PEDESTRIAN CONFLICT IS ANTICIPATED TO BE MEDIUM AT CROSSWALKS AND LOCATIONS WHERE DRIVEWAY EXIST/WILL BE CONSTRUCTED IN FUTURE PHASES. THE DESIGN FOR PHASE 1 PROVIDES SUFFICIENT LIGHTING DISTRIBUTION FOR THE VERY LOW CONFLICT TRAIL AREAS. IT IS RECOMMENDED THAT INTERSECTION LIGHTING AND CROSSWALK LIGHTING BE REVISITED DURING LATER PHASES WHERE HIGHER PEDESTRIAN ACTIVITY MAY BE EVIDENT.
- DAVIT ARM LENGTH: 1.83m (6')
- DESIGN LIGHT LOSS FACTOR (LLF): 0.80
- TILT = 2.5° FOR UTILITY POLE MOUNTED FIXTURES.
- DECORATIVE LIGHT STANDARD SPACING: APPROX. 50m (REFER TO SHEET E01 - DISTRIBUTION & LIGHTING SYSTEM LAYOUT).
- INSTALLATION OF SERVICE EQUIPMENT SHALL COMPLY WITH MECL SERVICE ENTRANCE STANDARDS. COORDINATE INSTALLATION WITH UTILITY. HAVE INSTALLATION INSPECTED AND CERTIFIED. PAY ALL ASSOCIATED FEES.
- REFER TO MECL STANDARD UG-18-05: SECONDARY RISER ON PRIMARY VOLTAGE POLE TO METER POST.
- TRANSFORMER BASE BOLT CIRCLES TO MATCH LIGHT POLE AND PRECAST FOUNDATION ANCHOR BOLT PATTERNS. COLOR TO MATCH LIGHT POLE.

NOT FOR CONSTRUCTION

No.	Description	Date	By
1	ISSUED FOR ADDENDUM #2	MAR 30/21	TSL
0	ISSUED FOR TENDER	MAR 17/23	TSL

Revision or Issue



TOWN OF STRATFORD

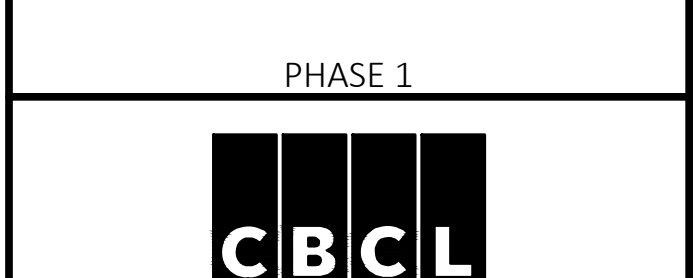
COMMUNITY CAMPUS

SITE SERVICING

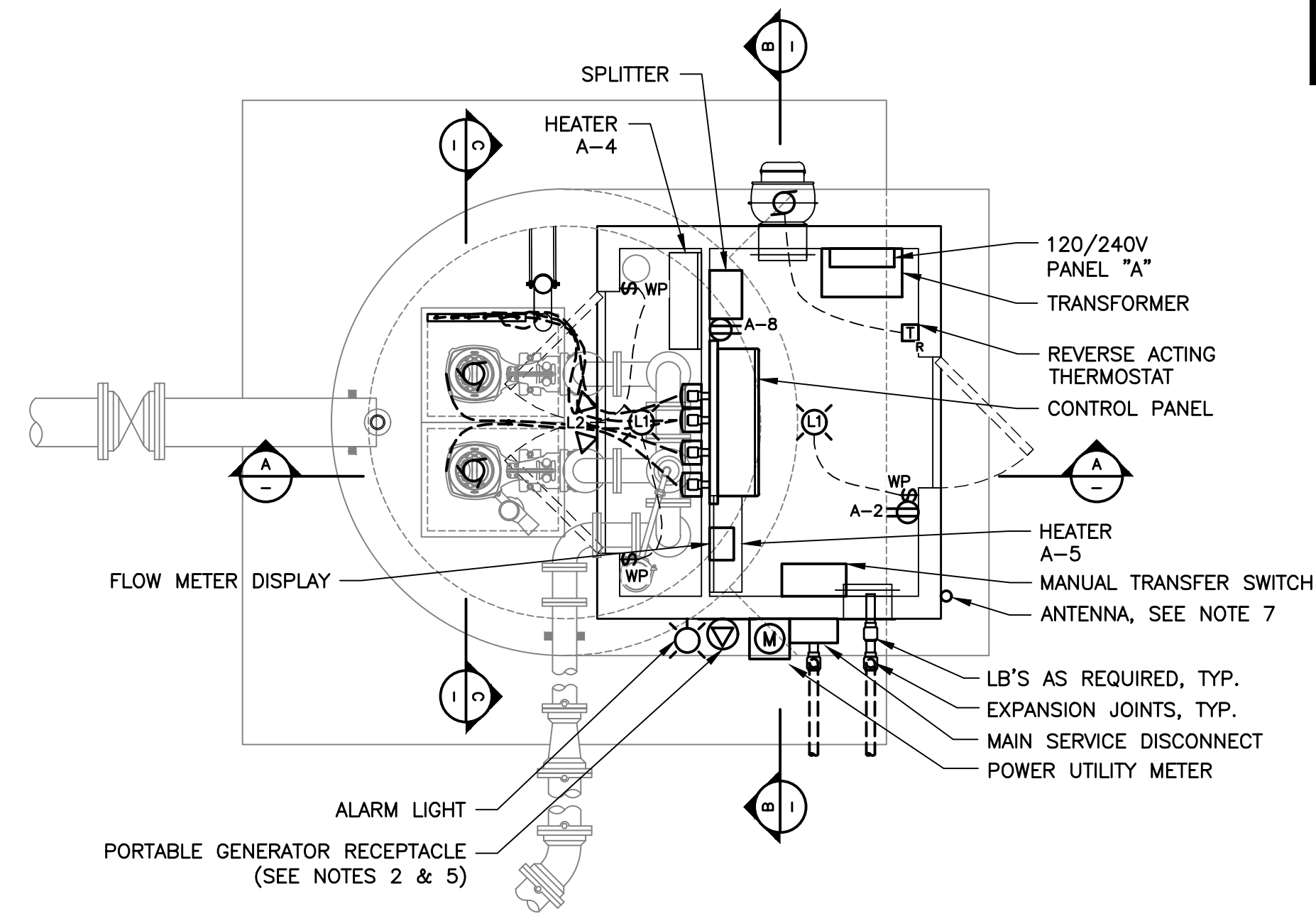
ELECTRICAL

LIGHTING DETAILS

PHASE 1

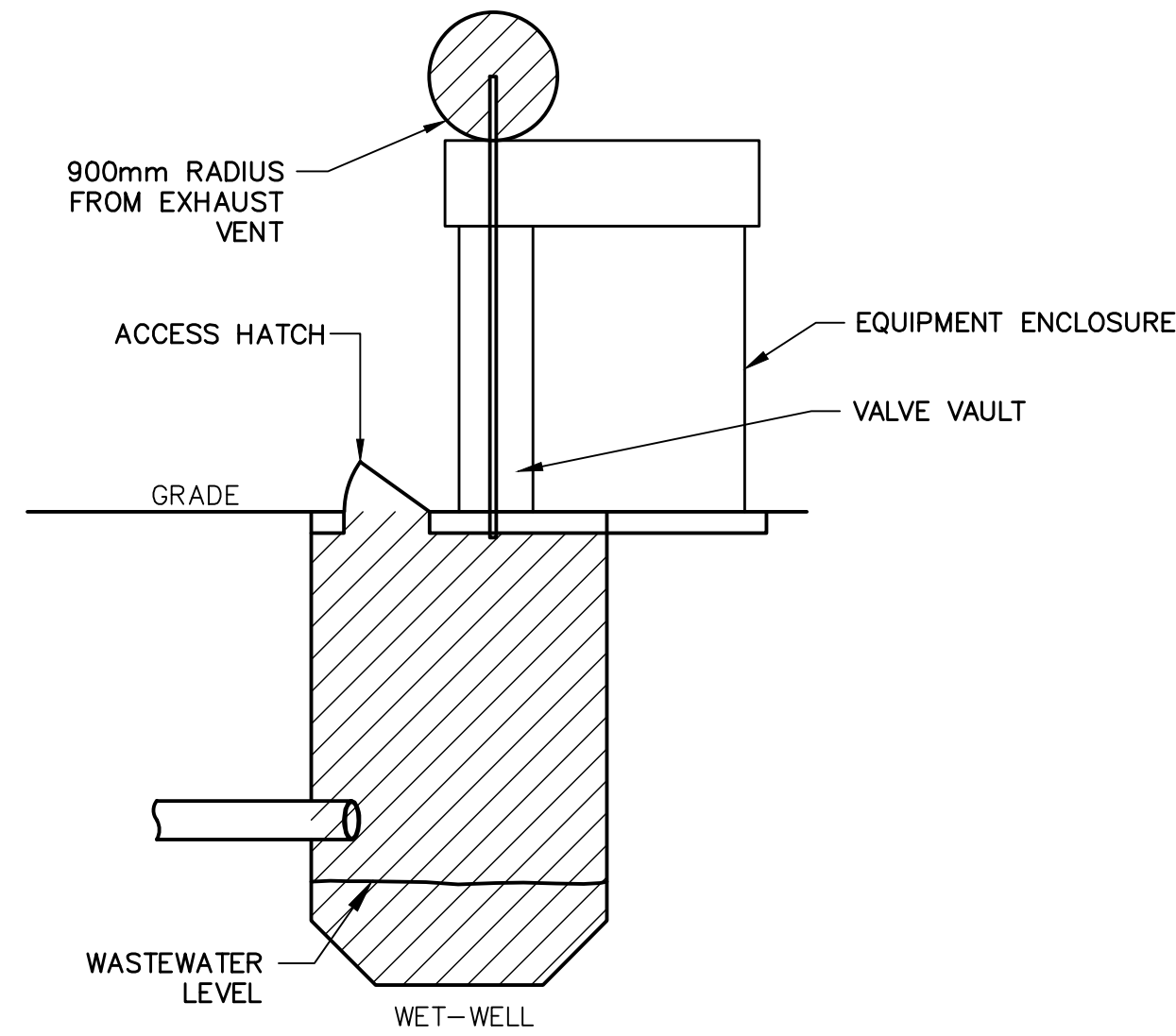


The Association of Professional Engineers of the Province of Prince Edward Island Value for the Year 2023 Randy O'Connor No. 1275 DATE: MARCH 30, 2023 LICENSED PROFESSIONAL ENGINEER Province of Prince Edward Island	Contract No. 222617.00 Date: MAR 2023 Scale: AS NOTED Drawn: MEF Approved: TSL Sheet No. 4 of 6 Drawing No. E04
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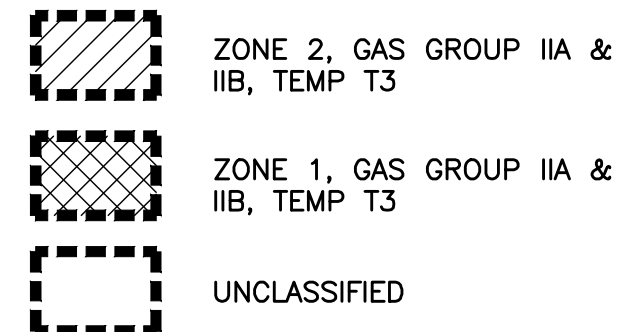


PLAN - SEWAGE LIFT STATION
1:30

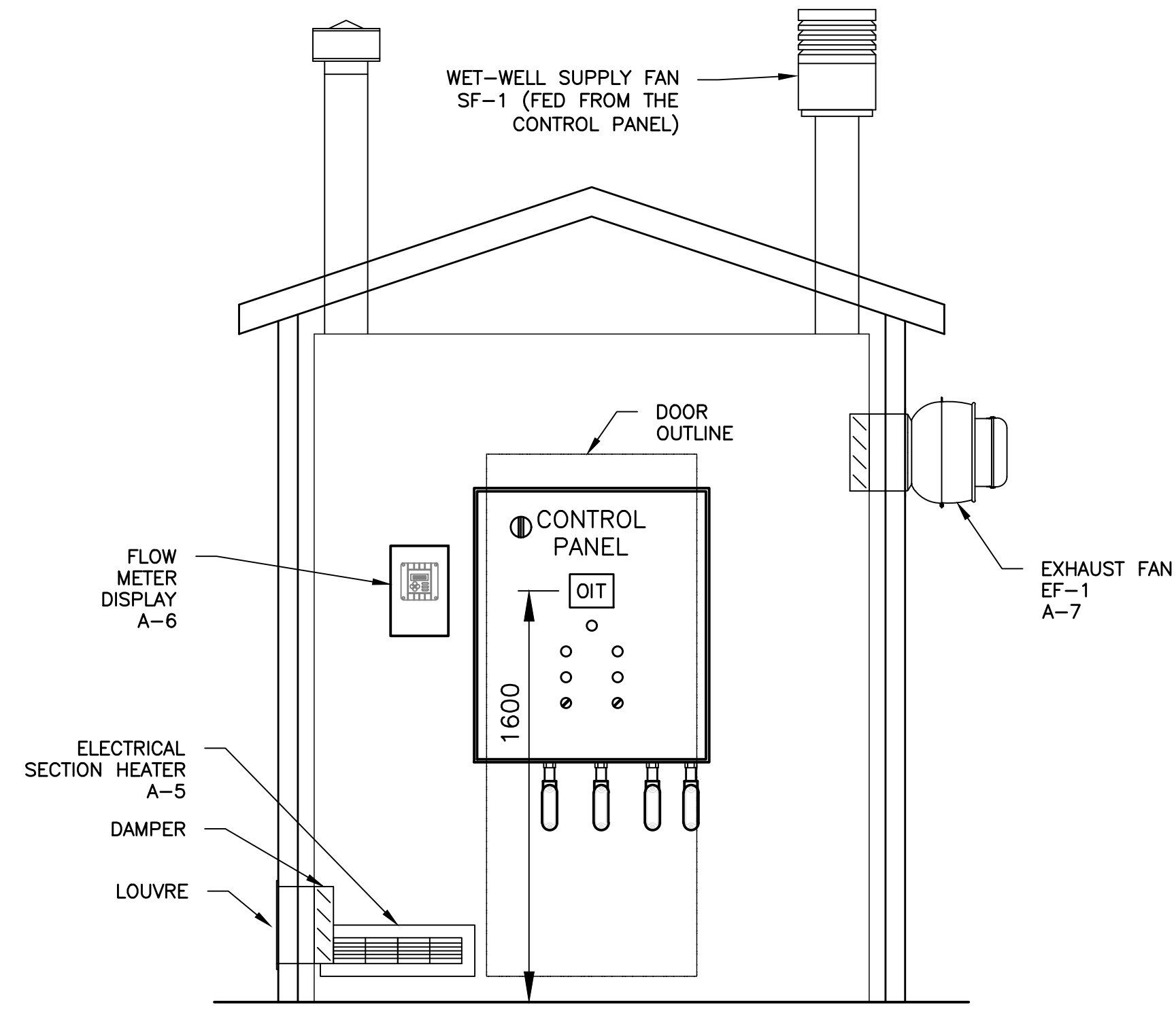
LIFT STATION WET-WELL DESIGNATED AS A ZONE 2 HAZARDOUS AREA. THE AREA AROUND EACH ACCESS HATCH IS UNCLASSIFIED.
THE AREA EXTENDING 0.9m RADIUS FROM A VENT PIPE SITUATED OVER THE SERVICE ENCLOSURE SHALL BE DESIGNATED AS A ZONE 2 HAZARDOUS AREA.



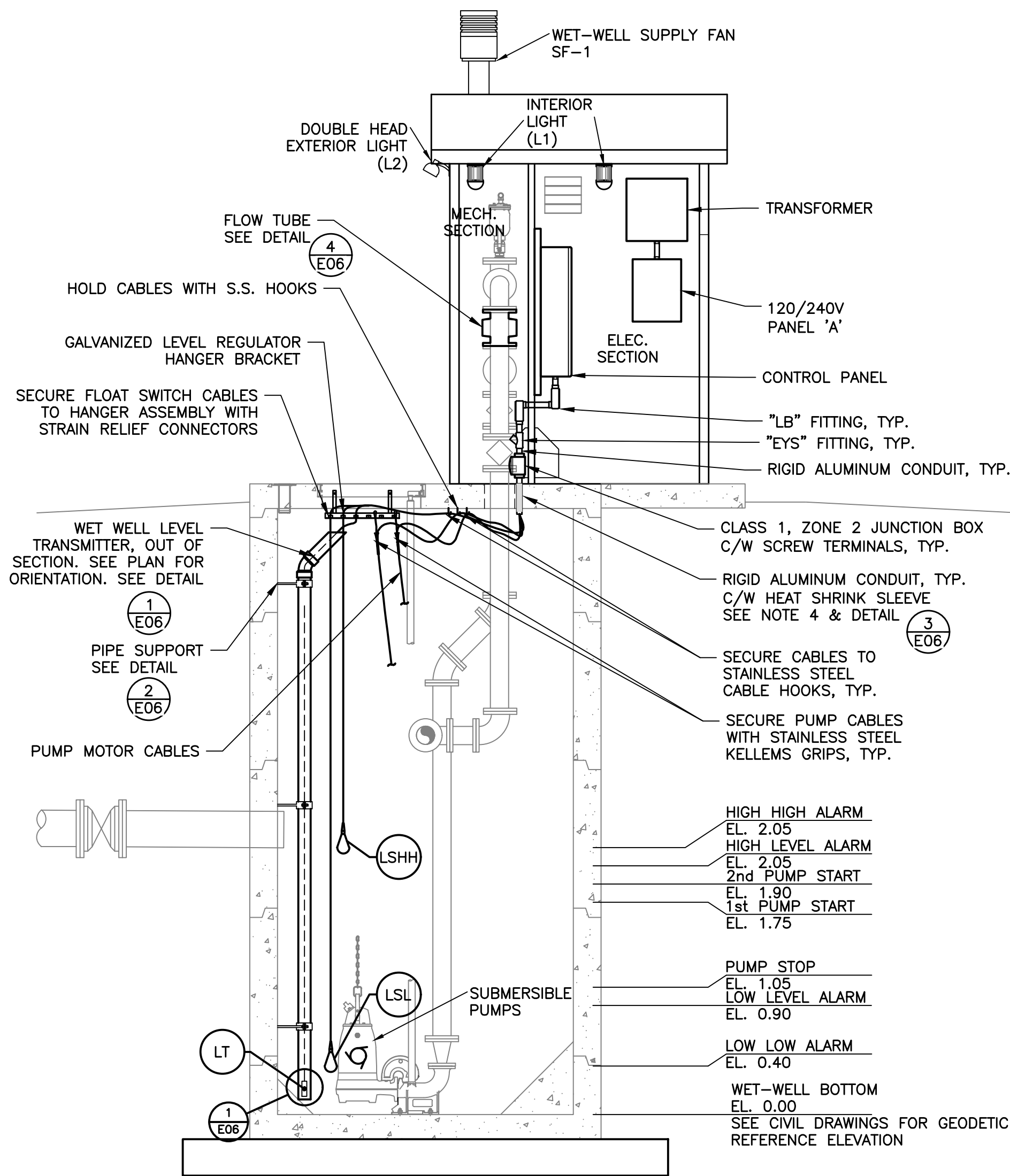
HAZARDOUS AREAS LEGEND



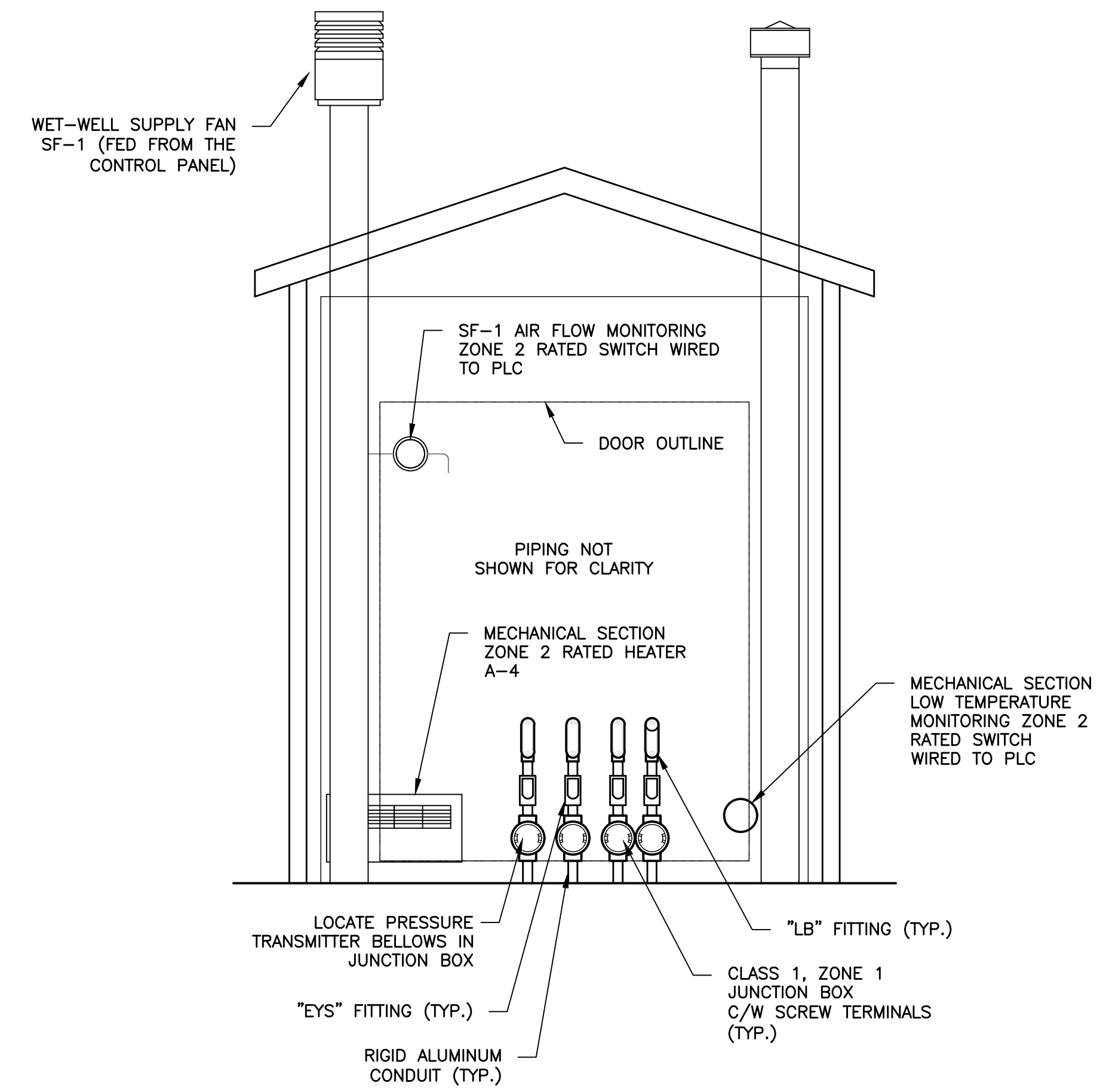
1 **DETAIL - HAZARD AREA CLASSIFICATION**
N.T.S.



B **SECTION - SERVICE ENCLOSURE (ELECTRICAL)**
1:20



A **SECTION - LIFT STATION**
1:30



C **SECTION - SERVICE ENCLOSURE (MECHANICAL)**
1:20

NOTES:

- UNLESS OTHERWISE NOTED, ALL EQUIPMENT SHOWN IS NEW.
- GENERATOR RECEPTACLE AND MATCHING PLUG, MELTRIC 37-98147 C/W BACK BOX, ANGLE ADAPTER AND WEATHER COVER.
- REFER TO SPECIFICATION 26 90 00 FOR CONTROL PANEL.
- ALL PENETRATIONS INTO THE WET-WELL FROM THE EQUIPMENT ENCLOSURE SHALL BE SEALED AND GAS TIGHT WITH NON-SHRINK GROUT.
- SUPPLY AND INSTALL LAMICOID NAMEPLATE AT THE PORTABLE GENERATOR RECEPTACLE INDICATING "600V, 3Ø PORTABLE GENERATOR" AND "NEUTRAL FLOATING ONLY AT THE GENERATOR".
- CONFIRM LEVEL SET POINTS FOR EACH STATION WITH ENGINEER PRIOR TO INSTALLATION OF LEVEL CONTROLS.
- GROUND ANTENNA MAST AND CABLE IN ACCORDANCE WITH THE CANADIAN ELECTRICAL CODE AND ELECTRICAL INSPECTION AUTHORITY HAVING JURISDICTION.

LEGEND:

- WP WEATHERPROOF
- ⊕ 120V, 15A GRADE DUPLEX RECEPTACLE
- \$ 120V, 20A SINGLE POLE SWITCH
- T_R THERMOSTAT
- ⊙ LIGHTING FIXTURE TYPE AS INDICATED
- ⊙ FLOOD LIGHTING FIXTURE TYPE AS INDICATED
- ⊙ SINGLE PHASE MOTOR
- ⊙ THREE PHASE MOTOR
- ⊙ GENERATOR RECEPTACLE
- M METER

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No.	Description	Date	By
1	ISSUED FOR ADDENDUM #2	MAR 30/23	TSL
0	ISSUED FOR TENDER	MAR 17/23	TSL

Revision or Issue

TOWN OF STRATFORD

COMMUNITY CAMPUS

SITE SERVICING
ELECTRICAL

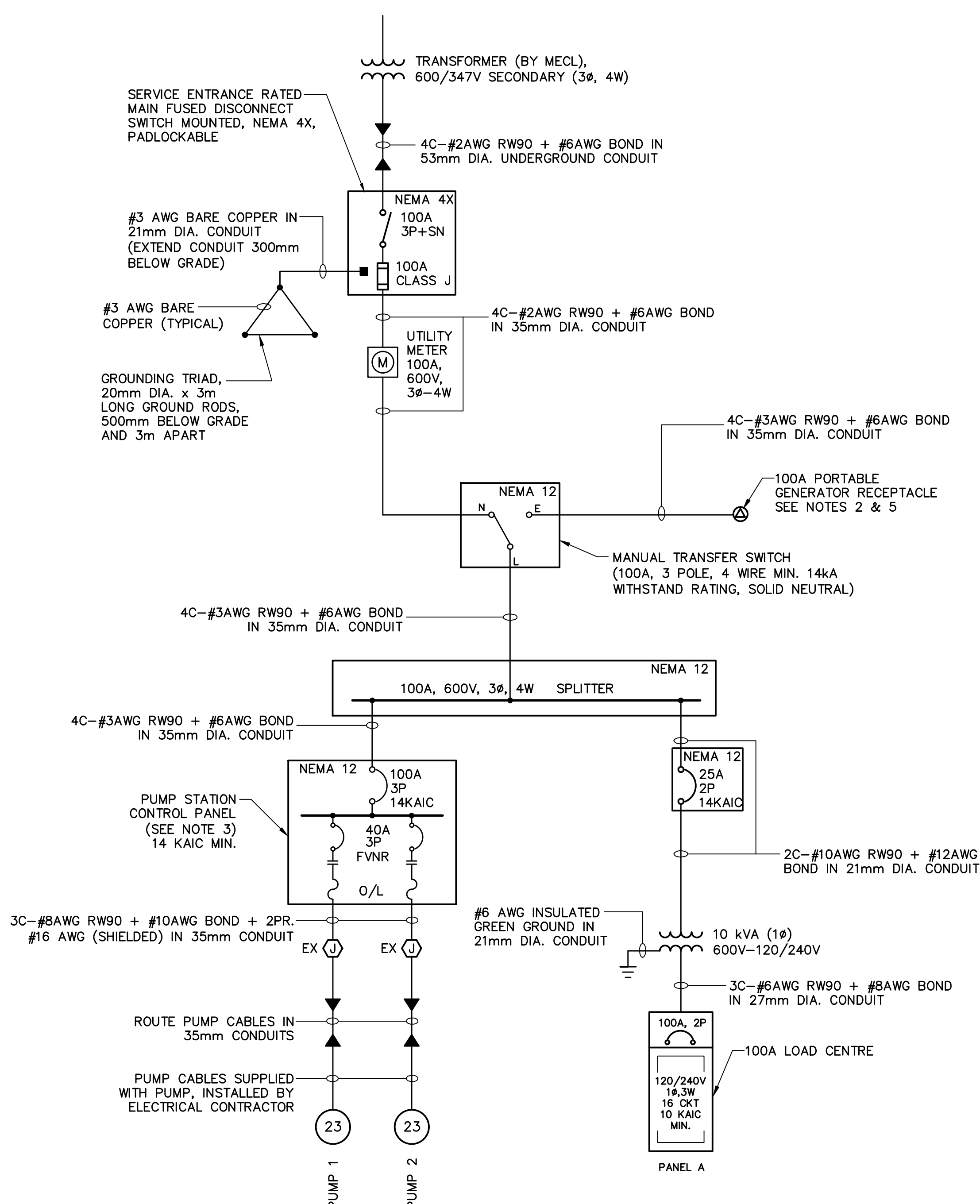
LIFT STATION PLAN & SECTIONS

CBCL

The Association of Professional Engineers of the Province of Prince Edward Island, Valid for the Year 2023

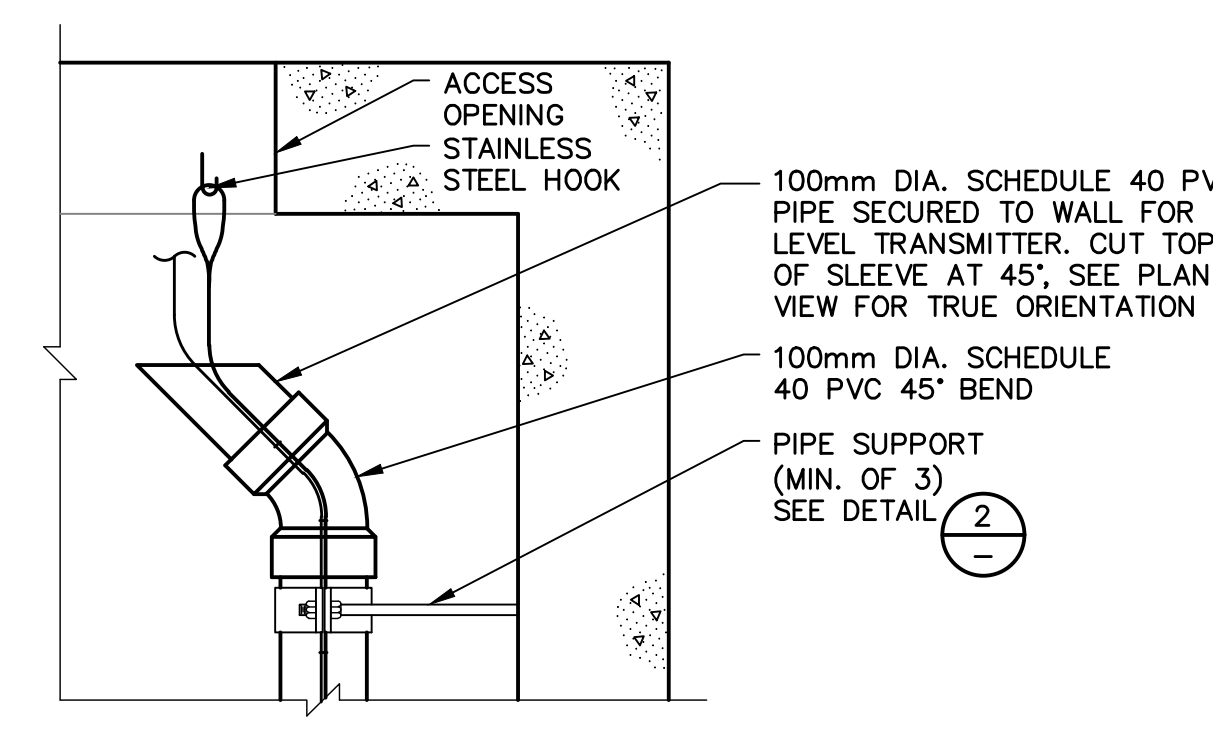
Contract No. 222617.00
Scale AS NOTED
Date MAR. 2023
Designed CD
Checked RO
Sheet No 5 of 6
Drawing No
DATE: MARCH 30, 2023
LICENCED PROFESSIONAL ENGINEER
Randy O'Connor
No. 1275

E05

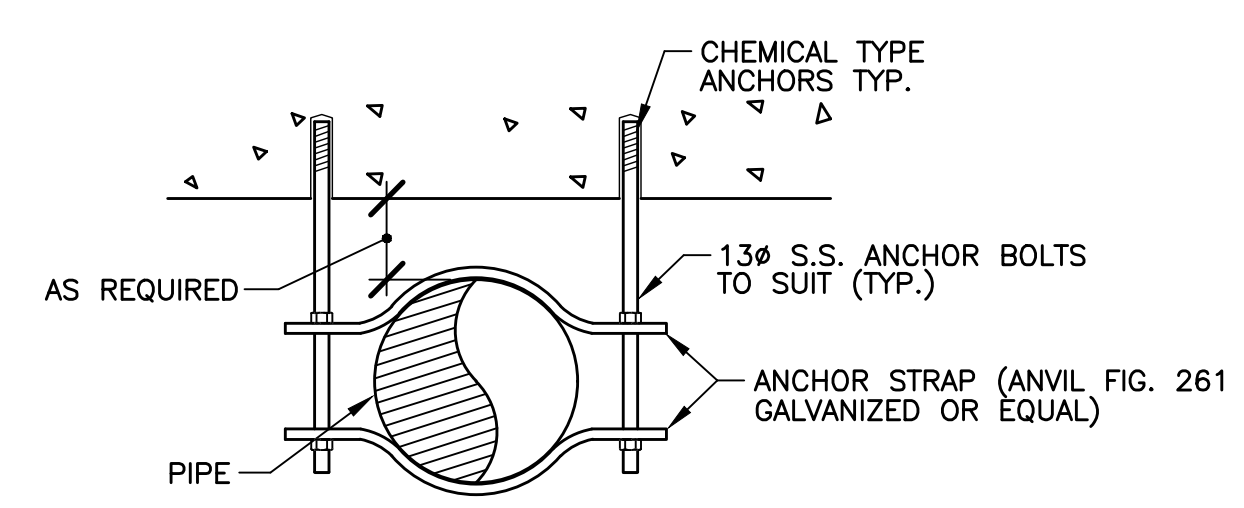


SINGLE LINE DIAGRAM
N.T.S.

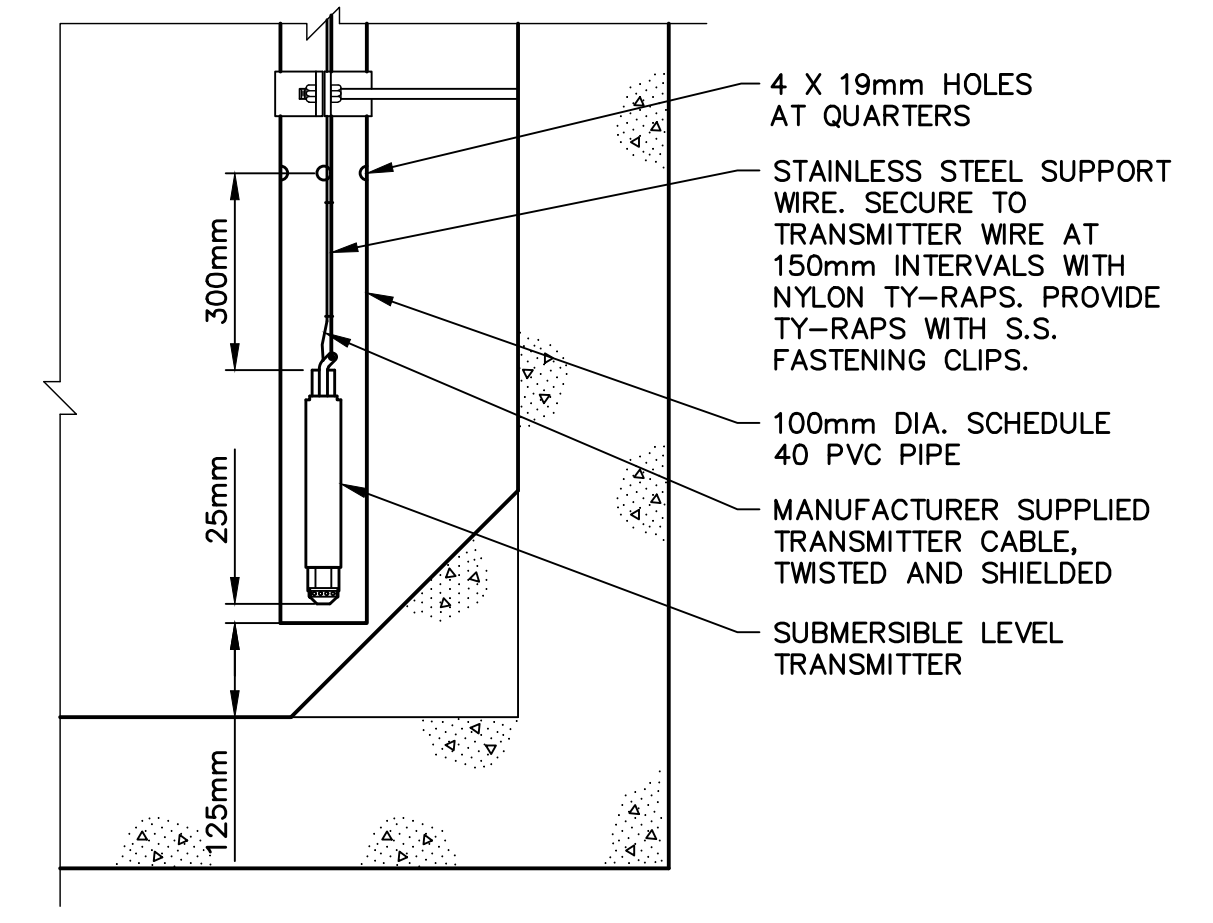
REMARKS	POWER: 120/240, 1P, 3W	PANEL: PANEL A	SYM. I.C.: 10,000	AMPS	REMARKS
	No. of CCTS.: 16	LOCATION: EQUIPMENT ENCLOSURE	MAINS: 100A	AMPS	
		FED FROM: TRANSFORMER	ENTER AT: -	MTG. -	
	DESIGNATION	LOAD	CIR.		DESIGNATION
	LIGHTS - INTERIOR	100	1	15A	RECEPTACLE
	LIGHTS - EXTERIOR	100	3	15A	ELECTRIC HEATER (MECHANICAL SIDE)
	ELECTRIC HEATER (ELECTRICAL SIDE)	1000	5	15A	FLOW METER
	VENTILATION FAN (ELECTRICAL SIDE)	150	7	15A	RECEPTACLE
	SPARE		9	15A	SPARE
	SPACE		11		SPACE
	SPACE		13		SPACE
	SPACE		15		SPACE
	PHASE A - TOTAL				
	PHASE B - TOTAL				
	TOTAL LOAD: _____ KW, _____ AMP.				
	REMARKS: ① PANEL c/w MAIN BREAKER ② PANEL GFCI BREAKER				



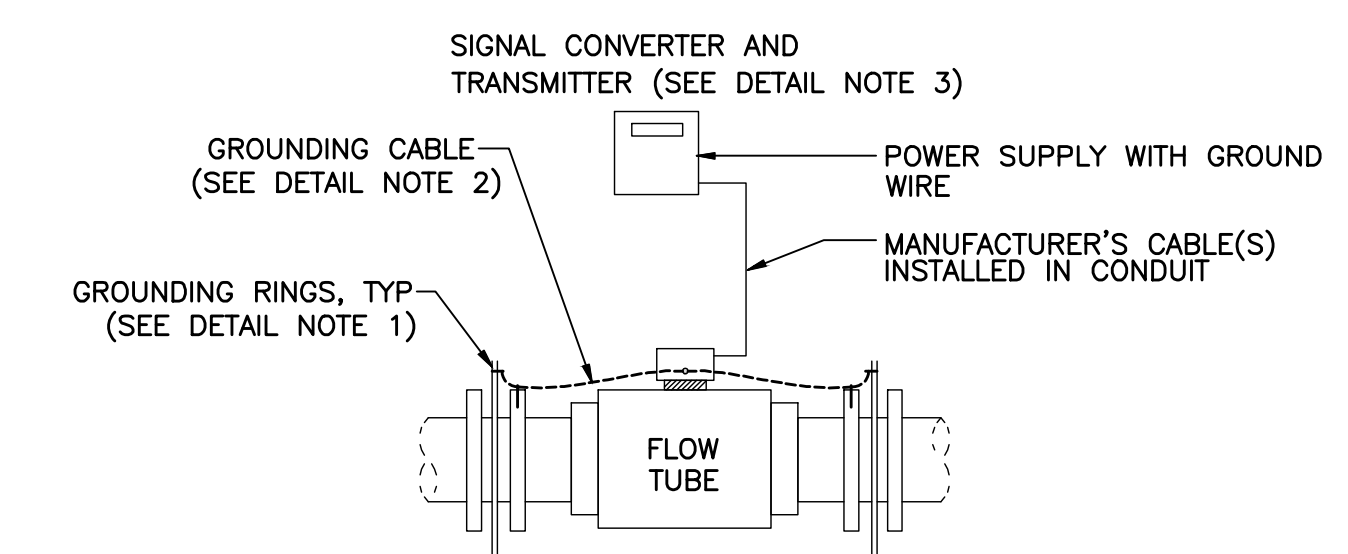
1 DETAIL - WET WELL LEVEL TRANSMITTER
N.T.S.



2 DETAIL - PIPE SUPPORT
N.T.S.



3 DETAIL - TYPICAL CONDUIT STUB UP AND HEAT SHRINK SLEEVE
N.T.S.



4 DETAIL - MAGNETIC FLOW METER INSTALLATION (REMOTE TRANSMITTER)
N.T.S.

DETAIL NOTES:

- MAGNETIC FLOW METERS SHALL BE INSTALLED WITH GROUNDING RINGS AND PROPER GROUNDING.
- GROUNDING CABLE SHALL BE #10 AWG INSULATED. IF THE LENGTH OF CABLE EXCEEDS 1.8m IT SHALL BE INSTALLED IN A 21mm CONDUIT.
- THE SIGNAL CONVERTER AND TRANSMITTER SHALL BE REMOTELY MOUNTED. REFER TO DRAWINGS FOR TRANSMITTER LOCATIONS.
- FOR SPECIAL CASES SUCH AS PIPELINES WITH CATHODIC PROTECTION, INSTALL GROUNDING PER MANUFACTURER'S RECOMMENDATIONS.

NOTES:
1. SEE ALL DRAWINGS FOR ADDITIONAL NOTES & DETAILS.

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1	ISSUED FOR ADDENDUM #2	MAR 30/23	TSL
0	ISSUED FOR TENDER	MAR 17/23	TSL
No.	Description	Date	By

Revision or Issue

TOWN OF STRATFORD

COMMUNITY CAMPUS

SITE SERVICING

ELECTRICAL

LIFT STATION SINGLE LINE DIAGRAM & DETAILS

THE ASSOCIATION OF PROFESSIONAL ENGINEERS OF THE PROVINCE OF ONTARIO

Randy O'Connor
No. 1275

DATE: MARCH 30, 2023

LICENSED PROFESSIONAL ENGINEER

Contract No. 222617.00
Scale AS NOTED

DESIGNED CD
CHECKED RO
Sheet No. 6 of 6

DRAWING No. E06