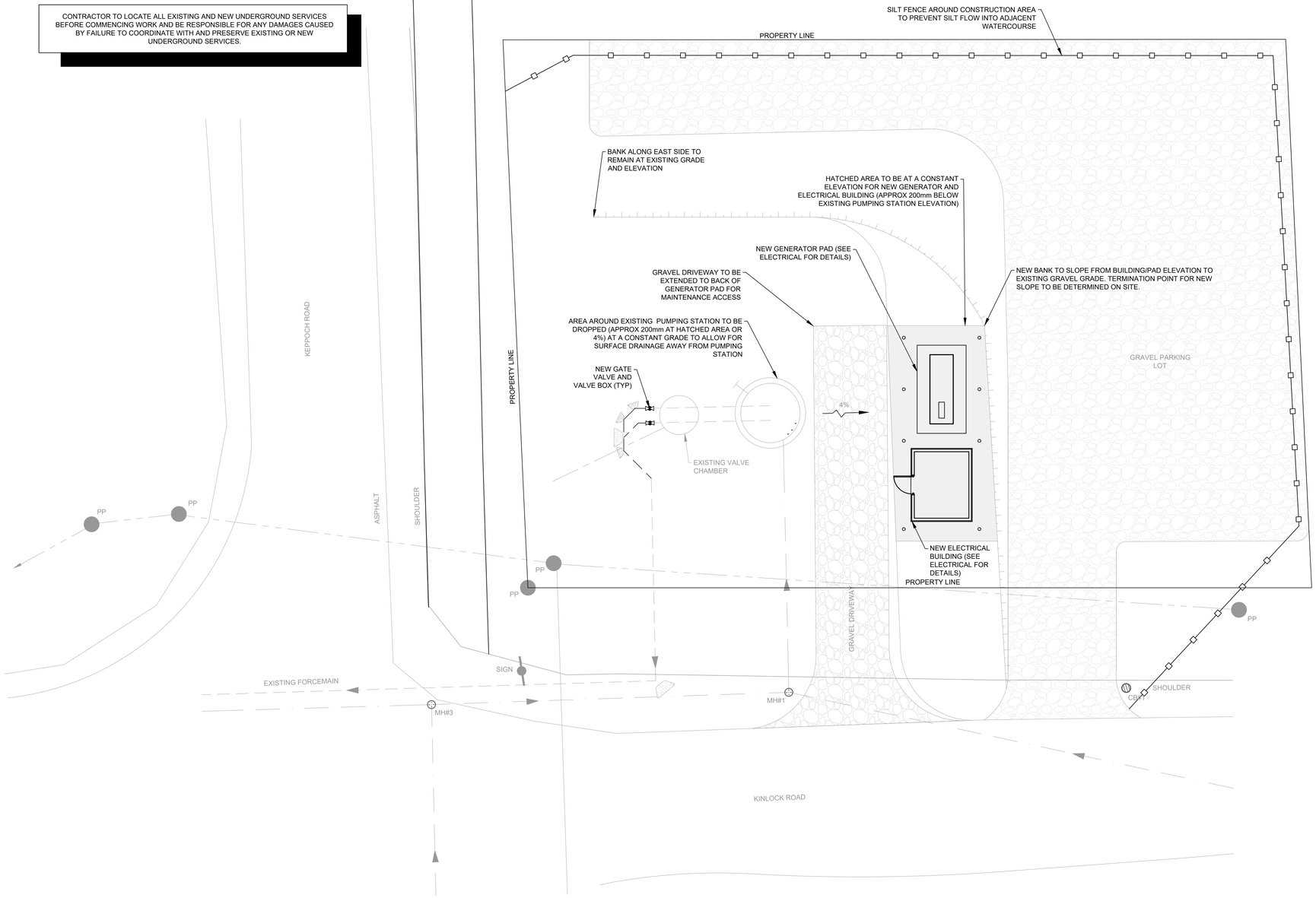
CONTRACTOR TO LOCATE ALL EXISTING AND NEW UNDERGROUND SERVICES BEFORE COMMENCING WORK AND BE RESPONSIBLE FOR ANY DAMAGES CAUSED BY FAILURE TO COORDINATE WITH AND PRESERVE EXISTING OR NEW UNDERGROUND SERVICES.



TRUE NORTH

1 / C100 NEW SITE PLAN
1:100

LEGEND:

- EXIST. PROPERTY LINE/BOUNDARY
- NEW SEWER LINE
- EXISTING SEWER LINE
- NEW FORCEMAIN
- EXISTING FORCEMAIN
- EXISTING SANITARY MANHOLE
- EXISTING CATCH BASIN
- GATE VALVE
- GRAVEL PARKING AREA/DRIVEWAY

GENERAL NOTES:

1. THE WORK SHALL BE IN ACCORDANCE WITH THE NATIONAL BUILDING CODE OF CANADA, LATEST EDITION AND APPLICABLE STANDARDS, UNLESS NOTED OTHERWISE ON THE DRAWINGS OR IN THE SPECIFICATIONS.
2. ALL WORK TO BE PERFORMED IN ACCORDANCE WITH PEI OCCUPATIONAL HEALTH & SAFETY ACT, FEDERAL, PROVINCIAL & MUNICIPAL BY-LAWS & REGULATIONS.
3. CONTRACTOR SHALL COORDINATE THIS WORK & COOPERATE WITH THE OWNER & AGENCIES HAVING JURISDICTION.
4. CONTRACTOR MUST VISIT THE SITE & BE FAMILIAR WITH EXISTING CONDITIONS.
5. ALL DIMENSIONS ARE IN METRIC UNITS U.N.O. & ALL ELEVATIONS ARE IN METRIC UNITS U.N.O.
6. VERIFY ALL DIMENSIONS AND REPORT ANY DISCREPANCIES TO THE CONSULTANT BEFORE PROCEEDING WITH THE WORK.
7. THE CIVIL DRAWINGS SHALL BE VIEWED IN CONJUNCTION WITH OTHER M&E DRAWINGS & THE SPECIFICATIONS.
8. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION & ELEVATIONS OF ALL EXISTING UTILITIES & SERVICES (SHOWN OR NOT SHOWN ON DRAWINGS) IN THE FIELD WITHIN THE CONTRACT LIMIT. INFORMATION SHOWN ON PLANS IS APPROXIMATE ONLY.
9. REPAIR ANY EXISTING UNDERGROUND SERVICES DAMAGED AS A RESULT OF THIS WORK AT NO COST TO THE OWNER. WORK SHALL BE CARRIED OUT TO THE SATISFACTION OF THESE AUTHORITIES. CONTACT UTILITIES BEFORE EXCAVATING.
10. PROVIDE TEMPORARY SUPPORT TO UTILITY POLES AS REQUIRED BY THE UTILITIES.
11. MAINTAIN TWO WAY TRAFFIC ON STREETS AT ALL TIMES DURING THIS CONTRACT. PROVIDE SIGNS, BARRICADES, FLAGGERS AS PER APPLICABLE REGULATIONS.
12. ALL TRENCHES WITHIN STREETS RIGHT OF WAYS MUST BE BACKFILLED AT THE END OF EACH DAY.
13. REPAIR & REINSTATE DISTURBED ASPHALT PAVEMENT, GRASSED & LANDSCAPED AREAS, SIGNS, RETAINING WALLS, ETC., DAMAGED BY WORK OF CONTRACT INCLUDING ALL AREAS IMPACTED BEYOND LIMIT OF CONTRACT.
14. TOPSOIL & SOD ALL GRASSED SURFACES.
15. ALL PAVEMENT MARKINGS & ARROWS TO BE IN ACCORDANCE WITH THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES FOR CANADA, LATEST EDITION.

TECHNICAL NOTES:

1. NOTIFY AUTHORITY HAVING JURISDICTION AND CONSULTANT FOR WORK RELATED TO MUNICIPAL SERVICES. COORDINATE CONSTRUCTION ACTIVITIES IN A MANNER TO MINIMIZE DISRUPTION TO SERVICES.
2. UNLESS INDICATED OR SPECIFIED, GRAVITY SANITARY SEWER PIPE TO BE PVC SDR-35. WHERE NEW SEWER LINES CONNECT TO EXISTING, CONFIRM ELEVATION OF EXIST. INVERTS PRIOR TO CONSTRUCTION. ADJUST INVERTS TO SUIT SITE CONDITIONS. ALL PIPING TO BE TESTED FOR LEAKS AND IN CONFORMANCE WITH APPLICABLE STANDARDS.
3. ASPHALT MIX DESIGN, PLACEMENT & RELATED WORK TO PEI DTI SPECIFICATIONS. ALL AGGREGATE, SELECT BORROW, BEDDING SAND & GRAVEL TO PEI DTI 2022 SPECIFICATIONS.
4. EXTERIOR CONCRETE WORK TO CONFORM TO A23.1, CLASS C-2 EXPOSURE, 7% AIR ENTRAINMENT, 32MPA MIN COMPRESSION STRENGTH. SEAL SURFACE WITH APPROVED SEALING COMPOUND.
5. WHERE REQUIRED, FORM BASIN / BENCHING AS NEEDED TO SUIT NEW PIPING LAYOUT. USE CONCRETE MIX MIN 32 MPA & MAX AGGREGATE SIZE OF 10mm. FORM TO HALF DIAMETER OF PIPE AND TROWEL SMOOTH
6. CONTRACTOR IS RESPONSIBLE FOR THE SUPPLY, INSTALLATION & TESTING OF ALL PIPES & APPURTENANCES AS PER APPLICABLE STANDARDS & AS REQUIRED BY REGULATIONS. CONTRACTOR TO ENSURE THAT THE COMPLETED WORK IS COMMISSIONED AND FULLY OPERATIONAL TO THE SATISFACTION OF THE TOWN & AUTHORITIES HAVING JURISDICTION.

ENVIRONMENTAL PROTECTION NOTES:

1. 1. INSTALLATION OF ENVIRONMENTAL CONTROLS SHALL BE A FIRST STEP IN THE CONSTRUCTION SEQUENCE, THEIR DESIGN, INSTALLATION & MAINTENANCE SHALL BE AS PER PEI DTI'S ENVIRONMENTAL PROTECTION PLAN & THE TOWN'S ENVIRONMENTAL STANDARDS.
2. ALL ENVIRONMENTAL CONTROLS (SILT FENCING, CHECK DAMS, SEDIMENT CONTROL PONDS, ETC.) SHALL BE IN PLACE PRIOR TO, DURING & AFTER PROJECT ACTIVITIES TO AVOID MIGRATION OF SILT OFFSITE.
3. CONSTRUCT & INSTALL AT TOE OF SLOPE AROUND PERIMETER OF ALL TEMPORARY & PERMANENT CONSTRUCTION AREAS INCLUDING AROUND STOCKPILES OF FILL SILT FENCES & EROSION CONTROL DEVICES.
4. ENSURE THAT RUNOFF IS DIRECTED THROUGH SEDIMENT COLLECTION PONDS.
5. INSTALL A LAYER OF MULCH OR AN EROSION CONTROL BLANKET TO ALL EXPOSED SLOPES THAT IS NOT IMMEDIATELY UNDER CONSTRUCTION APPLIED & MAINTAINED UNTIL THE AREA IS READY TO BE COMPLETED, SHAPED & STABILIZED WITH SEEDING, SOD OR RIPRAP.
6. SEED/SOD ALL EXPOSED & BARREN SOIL AS SOON AS POSSIBLE.
7. THE CONTRACTOR IS TO HAVE ON HAND, THE APPROPRIATE EMERGENCY RESPONSE PHONE NUMBERS AND CONTACTS TO ALERT THE APPROPRIATE AUTHORITIES OF POSSIBLE CONTAMINATION SHOULD A SPILL OCCUR. MAINTAIN PROPER SPILL KIT ONSITE.

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PROFESSIONAL ENGINEER — Nazmi Lawen — 344 — 30 JUNE 2022 — PROVINCE OF PRINCE EDWARD ISLAND

Client: Stratford Utility Corporation

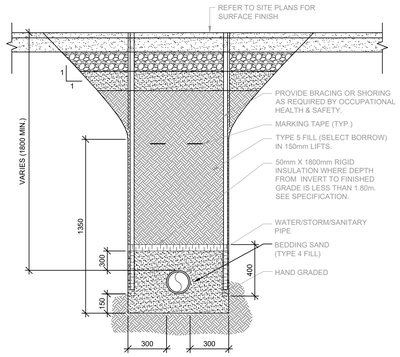
Project Title: Lift Station Upgrades
Corish Lift Station

Sheet Title: Site Plan

No.	Description	Date
0	Issued for Tender Review	2022-06-17
1	Issued for Tender	2022-06-30

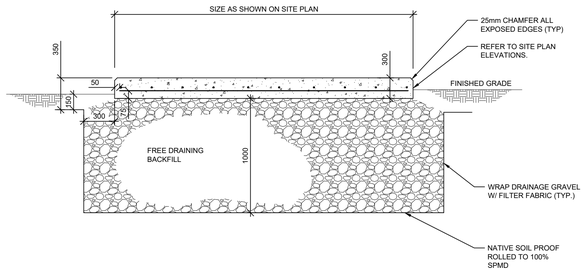
Date: 2022-06-30
Drn By: MK, E.I.T
Chk By: NL, P.Eng
Revision: 1
Project Number: 191191
Drawing Number: C100

NOTE:
1. USE BRACING SHIELD FOR TRENCHES WITHIN ROADWAYS TO REDUCE EXCAVATION WIDTH AND ASPHALT REPLACEMENT. ALL ASPHALT TO BE SAWCUT TO A DEPTH OF 125mm MIN. PRIOR TO EXCAVATION, WHERE APPLICABLE



1 C101 C101 SECTION: TYPICAL TRENCH
1:20

NOTE:
REINFORCE CONCRETE WITH 15M REBAR AT 400 O/C, E.W, BOTTOM. PROVIDE 75mm COVER ON BOTTOM MAT & 50mm COVER ON SIDES



2 C101 C101 SECTION: CONCRETE PAD
NTS

3 C101 C101 DETAIL: VALVE & VALVE BOX
N.T.S.

4 C101 C101 DETAIL: THRUST BLOCKS
NTS

MINIMUM CONTACT AREA FOR CONCRETE THRUST BLOCKS

PIPE DIA.	AREA, m² FOR SOIL SUPPORTING CAPACITY OF 100 kPa					
mm	CAP/PLUG	TEE	90 BEND	45 BEND	22.5 BEND	11.25 BEND
100	0.25	0.25	0.32	0.20	0.16	0.16
150	0.48	0.48	0.64	0.40	0.24	0.16
200	0.80	0.80	1.12	0.64	0.32	0.16
250	1.28	1.28	1.76	0.96	0.48	0.24
300	1.76	1.76	2.56	1.44	0.72	0.40
400	3.13	3.13	4.56	2.56	1.28	0.71

MINIMUM DISTANCE FROM FITTING TO UNDISTURBED GROUND

PIPE DIAMETER (mm)	DISTANCE (X), mm
100	450
150	450
200	450
250	600
300	750
400	1000

VERTICAL THRUST BLOCKS
THRUST COMPENSATED FOR BY MASS OF CONCRETE (m³)

PIPE DIAMETER (mm)	90 BEND	45 BEND	22.5 BEND	11.25 BEND
100	0.80	0.40	0.20	0.20
150	1.60	0.80	0.40	0.40
200	2.80	1.40	0.70	0.70
250	4.20	2.10	1.10	1.10
300	6.00	3.00	1.50	1.50
400	10.80	5.40	2.70	2.70

NOTES:
1. SEE DETAIL THIS SHEET FOR THRUST BLOCK CONFIGURATIONS.
2. THESE TABLES ARE BASED ON SOIL SUPPORTING CAPACITIES OF 100 kPa AND AN INTERNAL PIPE PRESSURE OF 1035 kPa. WHERE DIFFERENTIAL SUPPORTING CAPACITIES OR INTERNAL PRESSURES ARE ENCOUNTERED, CONTACT AREAS SHALL BE CALCULATED ACCORDINGLY. SAFE SUPPORTING CAPACITY SHALL BE DETERMINED BY THE DESIGN ENGINEER, AND SHALL INCLUDE AN APPROPRIATE FACTOR OF SAFETY.

ELEVATION

5 C101 C101 SILT FENCE DETAIL
1:20

DETAILS 10, 11 & 12 ARE TO BE READ IN CONJUNCTION WITH ENVIRONMENTAL PROTECTION NOTES. EROSION CONTROL MEASURES ARE TO BE IN PLACE BEFORE ANY WORK ON SITE BEGINS AND ARE TO REMAIN IN PLACE UNTIL THE WORK OF THIS TRADE PACKAGE IS STABILIZED, (NO SEDIMENTARY RUN OFF TO AREAS OFF SITE IS ACCEPTABLE.)

SECTION

6 C101 C101 SILT FENCE DETAIL
1:20

ANCHORING DETAIL

EMBEDDING DETAIL

7 C101 C101 EROSION CONTROL BERM
1:20

GENERAL NOTES:

1. CONTRACTOR SHALL COORDINATE THIS WORK AND COOPERATE WITH THE OWNER AND AGENCIES HAVING JURISDICTION.

2. CONTRACTOR MUST VISIT THE SITE AND BE FAMILIAR WITH EXISTING CONDITIONS.

3. VERIFY ALL DIMENSIONS AND REPORT ANY DISCREPANCIES TO THE CONSULTANT BEFORE PROCEEDING WITH THE WORK.

4. ALL DIMENSIONS AND ELEVATIONS ARE IN METRIC UNITS U.N.O.

5. PRIOR TO COMMENCING WORK, THE CONTRACTOR SHALL VERIFY THE EXACT LOCATION AND ELEVATIONS OF ALL EXISTING UTILITIES AND SERVICES (SHOWN OR NOT SHOWN ON DRAWINGS) IN THE FIELD WITHIN THE CONTRACT LIMIT. INFORMATION SHOWN ON PLANS IS APPROXIMATE ONLY.

6. UNDERGROUND WATER, SEWER, TELEPHONE AND POWER SERVICES EXIST BENEATH THE SITE. EXERCISE CAUTION IN EXCAVATION AND PROTECT FACILITIES FROM DAMAGE. CONTRACTOR TO REPAIR DAMAGES AT NO COST TO THE OWNER. WORK SHALL BE CARRIED OUT TO THE SATISFACTION OF THESE AUTHORITIES. CONTACT UTILITIES BEFORE EXCAVATING.

7. PRIOR TO CONSTRUCTION, CONTRACTOR MUST REVIEW THE DEPTH OF ALL NEW UNDERGROUND SERVICES AND ADJUST DEPTH OF ALL SERVICES INCLUDING SANITARY SEWER, U/G ELECTRICAL & COMMUNICATION, WHERE INTERFERENCE OCCURS. ADVISE & OBTAIN APPROVAL FROM CONSULTANT BEFORE PROCEEDING WITH ANY CHANGES. COSTS ASSOCIATED WITH THIS TO BE INCLUDED IN TENDER PRICE.

8. THE CONTRACTOR TO INCLUDE IN THE CONTRACT PRICE COSTS ASSOCIATED WITH OVER EXCAVATION, BACKFILLING AND REINSTATEMENT DUE TO POSSIBLE MISALIGNED EXISTING UNDERGROUND SERVICES.

9. PROVIDE TEMPORARY SUPPORT TO UTILITY POLES AS REQ'D BY THE UTILITIES. FINAL LOCATIONS OF RELOCATED UTILITY POLES TO BE CO-ORDINATED ON-SITE BETWEEN CONTRACTOR & UTILITIES. ENSURE NEW OVERHEAD WIRE PATHS MEET ALL REQUIRED CLEARANCES AS REQUIRED BY OH&S.

10. PERFORM WORK AND COMPLY WITH ALL FEDERAL, PROVINCIAL AND MUNICIPAL BY-LAWS AND REGULATIONS.

11. CONTRACTOR IS RESPONSIBLE FOR THE SUPPLY, INSTALLATION & TESTING FOR ANY ADDITIONAL MATERIALS & EQUIPMENT NOT SPECIFIED OR INDICATED ON THE DRAWINGS TO COMPLETE WORK ENSURING THAT ALL SYSTEMS ARE FULLY OPERATIONAL AND MEETING THE FUNCTIONAL REQUIREMENT OF THIS PROJECT.

12. CONTRACTOR IS RESPONSIBLE FOR THE SUPPLY, INSTALLATION AND TESTING OF ALL PIPES AND APPURTENANCES AS PER APPLICABLE STANDARDS & AS REQUIRED BY REGULATIONS FOR A COMPLETE OPERATIONAL SYSTEM.

13. REPAIR & REINSTATE DISTURBED ASPHALT PAVEMENT, GRASSED & LANDSCAPED AREAS, SIGNS, RETAINING WALLS, ETC., DAMAGED BY WORK OF CONTRACT INCLUDING ALL AREAS IMPACTED BEYOND LIMIT OF CONTRACT.

14. ADJUST TOP OF ALL CB & MH COVERS, WATER VALVES, CURB STOPS, AND ANY UTILITIES AFFECTED BY THE WORK OF THIS CONTRACT AND NECESSARY BY THE CONSULTANT/OWNER TO SATISFY SITE CONDITIONS.

SEWER SERVICES:

1. CONTRACTOR SHALL COORDINATE THIS WORK AND COOPERATE WITH THE OWNER, LOCAL AUTHORITY AND AGENCIES HAVING JURISDICTION.

2. CONTRACTOR IS RESPONSIBLE FOR THE SUPPLY, INSTALLATION & TESTING FOR ANY ADDITIONAL MATERIALS NOT LISTED OR INDICATED ON THE DRAWINGS TO PROVIDE THE COMPLETE WORK MEETING THE OPERATIONAL AND FUNCTIONAL REQUIREMENT OF THIS PROJECT. ALL COSTS RELATED TO THIS WORK SHALL BE INCORPORATED IN THE BID PRICE.

3. CONTRACTOR IS RESPONSIBLE FOR THE SUPPLY, INSTALLATION, AND TESTING OF ALL PIPES APPURTENANCES AS PER AWWA C651 AND THE REQUIREMENTS OF AGENCIES HAVING JURISDICTIONS FOR A COMPLETE OPERATIONAL SYSTEM.

ENVIRONMENTAL PROTECTION NOTES:

1. INSTALLATION OF ENVIRONMENTAL CONTROLS SHALL BE A FIRST STEP IN THE CONSTRUCTION SEQUENCE. THEIR DESIGN, INSTALLATION AND MAINTENANCE SHALL BE AS PER PEI DOT&PW'S ENVIRONMENTAL PROTECTION PLAN, SECTION 7.0 AND PROJECT SPECIFICATIONS.

2. CONSTRUCT AND INSTALL AT TOE OF SLOPE AROUND PERIMETER OF ALL TEMPORARY AND PERMANENT CONSTRUCTION AREAS INCLUDING AROUND STOCKPILES OF FILL SILT FENCES & EROSION CONTROL DEVICES. ALL ENVIRONMENTAL CONTROLS (E.G. SILT FENCING, CHECK DAMS, SEDIMENT COLLECTION PONDS, ETC.) SHALL BE IN PLACE PRIOR TO, DURING AND AFTER PROJECT ACTIVITIES TO AVOID OFFSITE SILTATION.

3. ENSURE THAT ALL SILT FENCES ARE IN PLACE AND MAINTAINED ON A DAILY BASIS TO PREVENT SEDIMENTS FROM THE WORK AREAS FROM ENTERING WATER COURSE. MAINTAIN FENCE AT ALL TIMES AND REPLACE IF DAMAGED. REMOVE ACCUMULATED SEDIMENTS TO PREVENT BLOCKAGE OF FENCES AND DAMS OR AS DIRECTED BY CONSULTANT. REMOVE AND REPLACE EROSION CONTROL STRUCTURES WHEN THEY BECOME CLOGGED WITH SOIL PARTICLES OR AS DIRECTED BY CONSULTANT REPAIR ALL DAMAGES CAUSED BY SOIL EROSION OR CONSTRUCTION ACTIVITIES AT OR BEFORE THE END OF EACH WORKING DAY.

4. WHERE REQUIRED, CONSTRUCT A SEDIMENT COLLECTION POND AT END OF THE OUTFALL & AT THE END OF THE DITCHES TO FILTER SEDIMENT FROM SURFACE RUNOFF BEFORE IT IS DISCHARGED TO WATERCOURSE.

5. ENSURE THAT RUNOFF IS DIRECTED THROUGH SEDIMENT COLLECTION PONDS.

6. DO NOT DISTURB EXISTING VEGETATION ANY MORE THAN NECESSARY TO COMPLETE EACH PHASE OF THE PROJECT.

7. INSTALL A LAYER OF MULCH OR AN EROSION CONTROL BLANKET TO ALL EXPOSED SLOPES THAT IS NOT IMMEDIATELY UNDER CONSTRUCTION APPLIED AND MAINTAINED UNTIL THE AREA IS READY TO BE COMPLETED, SHAPED AND STABILIZED WITH SEEDING, SOD OR RIP-RAP.

8. HYDRO SEED ALL EXPOSED AND BARREN SOIL AS SOON AS POSSIBLE.

9. ENVIRONMENTAL PROTECTION MEASURES SHALL BE CARRIED OUT TO THE SATISFACTION OF THE CONSULTANT &, AUTHORITIES HAVING JURISDICTION AND THE COST OF ALL THESE DEVICES & MEASURES SHALL BE INCLUDED IN THE CONTRACT PRICE.

10. REPORT ANY DOUBTFUL CONDITIONS REQUIRING DECISIONS & SECURE DIRECTIONS FROM THE CONSULTANT BEFORE PROCEEDING WITH THE WORK.

11. THE CONTRACTOR IS TO HAVE ON HAND, THE APPROPRIATE EMERGENCY RESPONSE PHONE NUMBERS AND CONTACTS TO ALERT THE APPROPRIATE AUTHORITIES OF POSSIBLE CONTAMINATION SHOULD A SPILL OCCUR.

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PROFESSIONAL ENGINEER — The Province of Prince Edward Island — Nazmi Lawen — 344 — 30 JUNE 2022 — DATE — PROVINCE OF PRINCE EDWARD ISLAND

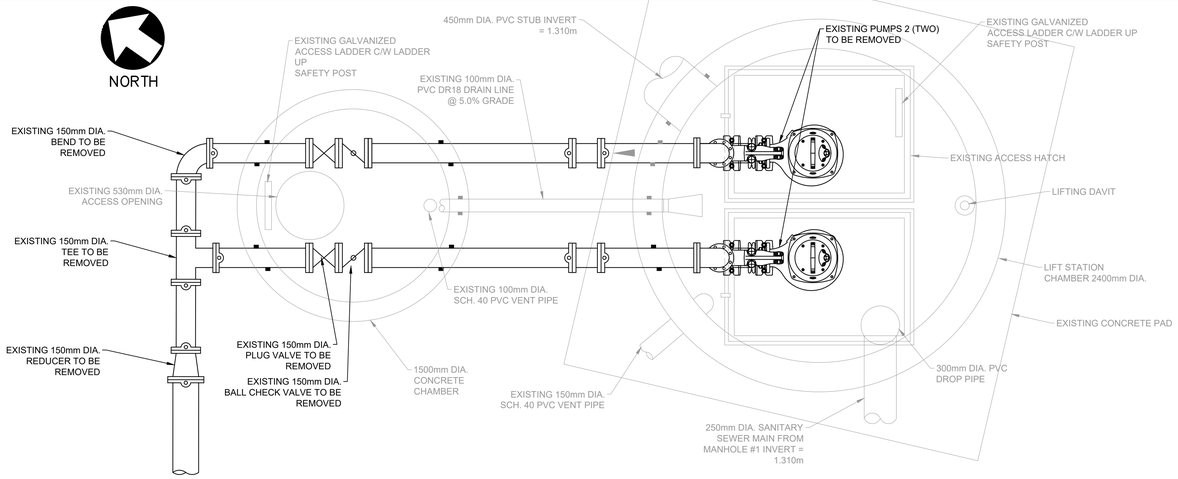
Client: Stratford Utility Corporation

Project Title: Lift Station Upgrades
Corish Lift Station

Sheet Title: Site Details & Notes

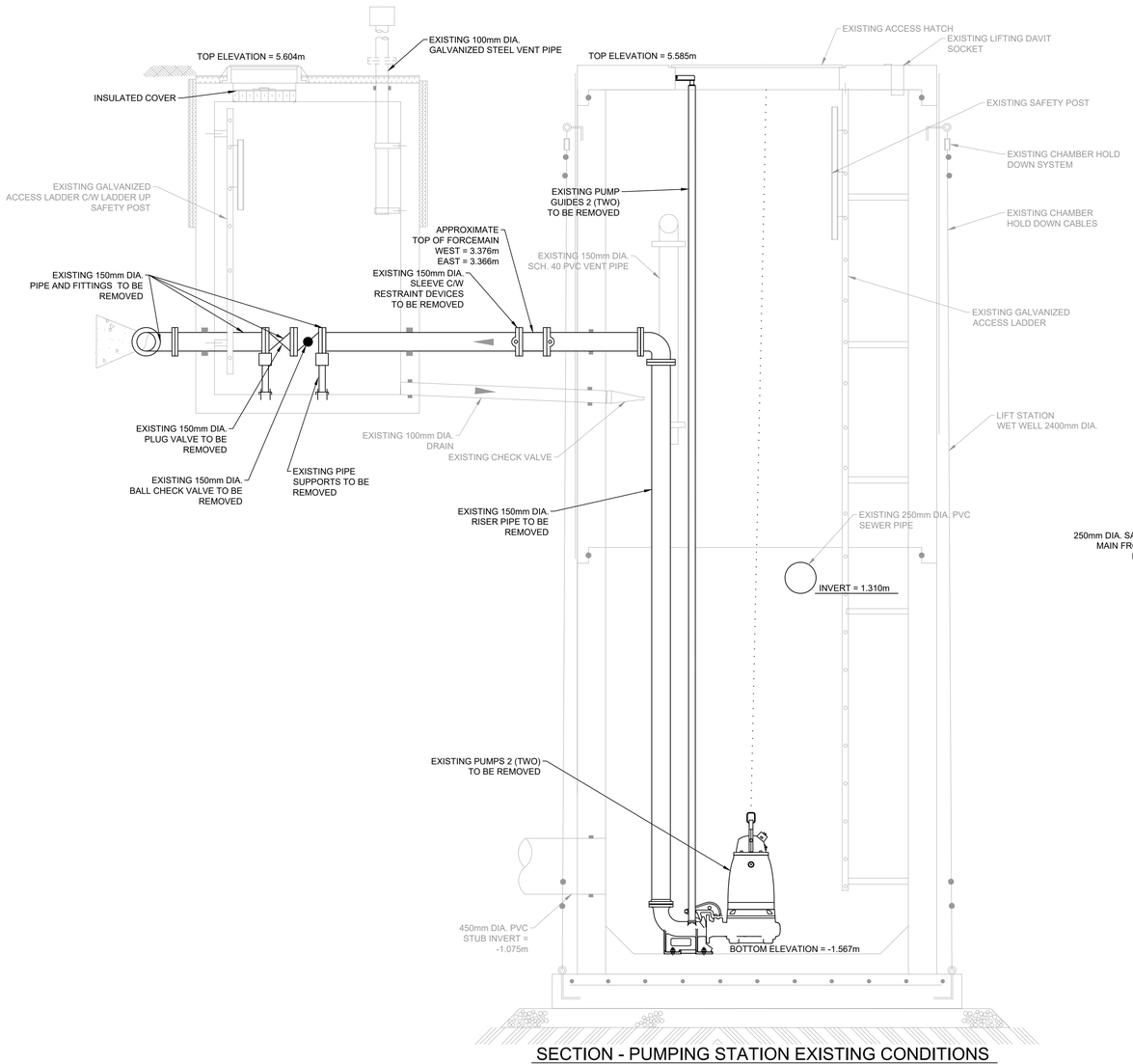
No.	Description	Date
0	Issued for Tender Review	2022-06-17
1	Issued for Tender	2022-06-30

Date: 2022-06-30
Drn By: MK, E.I.T
Chk By: NL, P.Eng
Revision: 1
Project Number: 191191
Drawing Number: C101

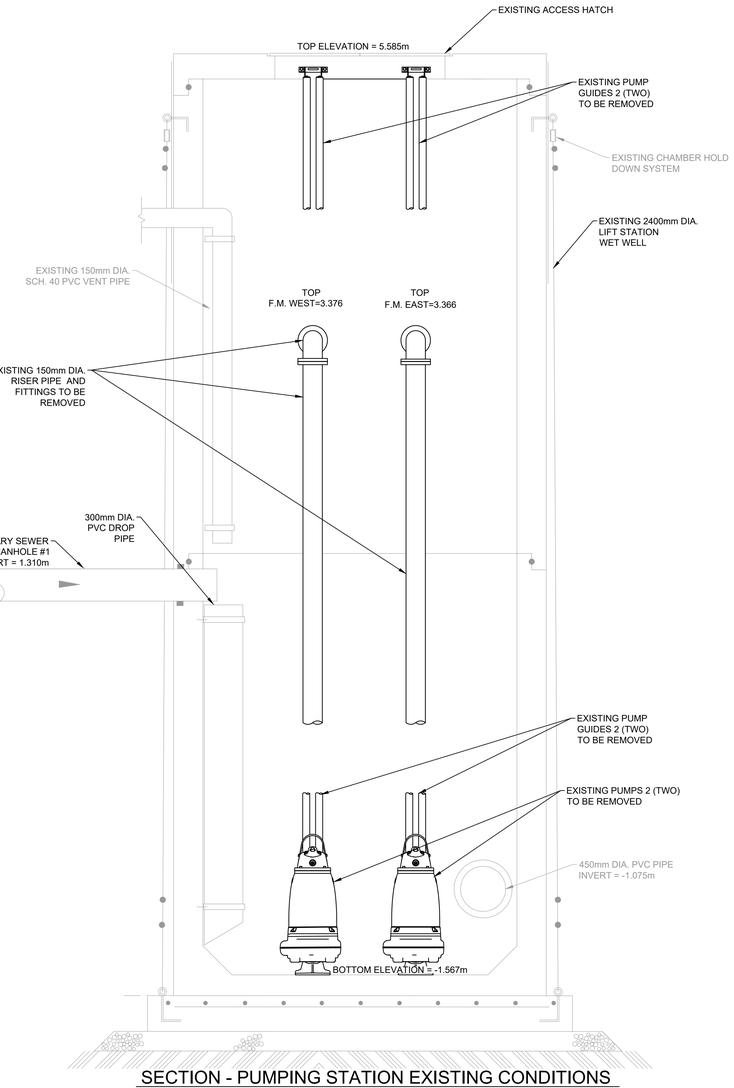


PLAN VALVE CHAMBER AND LIFT STATION EXISTING CONDITIONS
1:20

EXISTING CONDITIONS ARE BASED ON AS-BUILT DRAWINGS PROVIDED BY CLIENT. CONTRACTOR TO CONFIRM ALL EXISTING CONDITIONS ON SITE PRIOR TO START OF CONSTRUCTION.



SECTION - PUMPING STATION EXISTING CONDITIONS
1:20



SECTION - PUMPING STATION EXISTING CONDITIONS
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THE ASSOCIATION OF PROFESSIONAL ENGINEERS AND GEOSCIENTISTS PRINCE EDWARD ISLAND
VALID FOR THE YEAR 2022
John Bibin
No. 1279
DATE: June 9, 2022
LICENSED PROFESSIONAL ENGINEER
PROVINCE OF PRINCE EDWARD ISLAND

Client: STRATFORD UTILITY CORPORATION

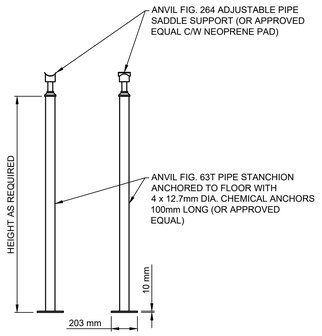
Project Title: LIFT STATION UPGRADE
CORISH LIFT STATION

Sheet Title: LIFT STATION AND VALVE CHAMBER
EXISTING CONDITIONS AND REMOVALS

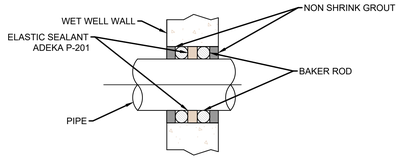
No.	Description	Date
0	ISSUED FOR TENDER REVIEW	2022-06-17
1	ISSUED FOR TENDER	2022-06-30

Date: MARCH 2022
Drn By: DWD
Chk By: SL
Revision: -

Project Number: 191191
Drawing Number: M100

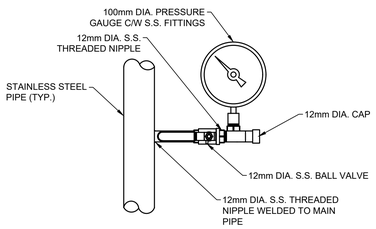


PIPE SUPPORT DETAIL



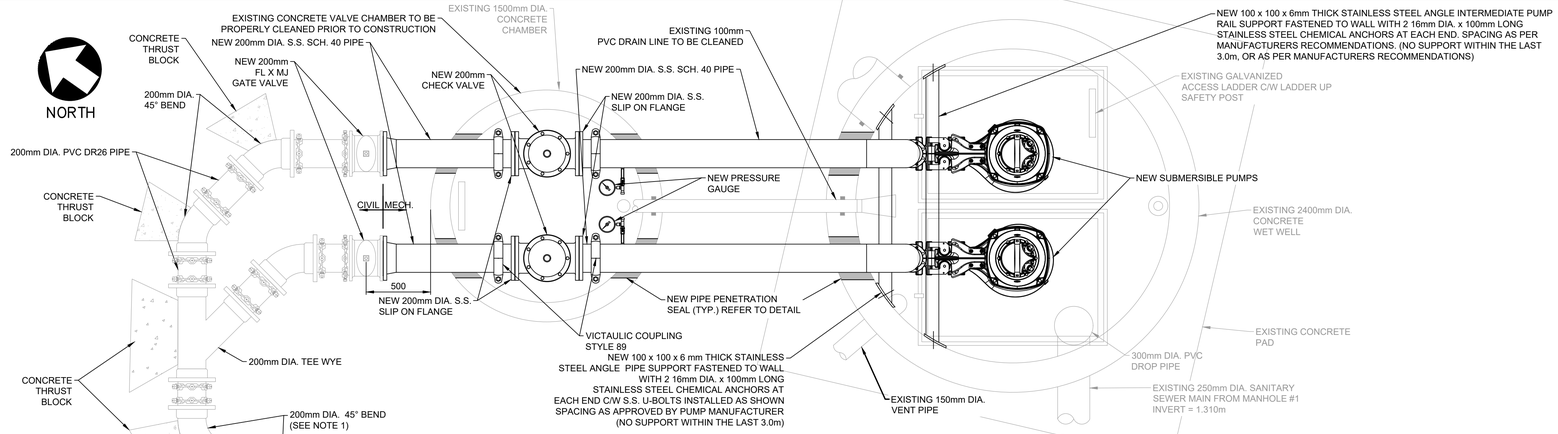
PIPE THROUGH WET WELL

N.T.S.



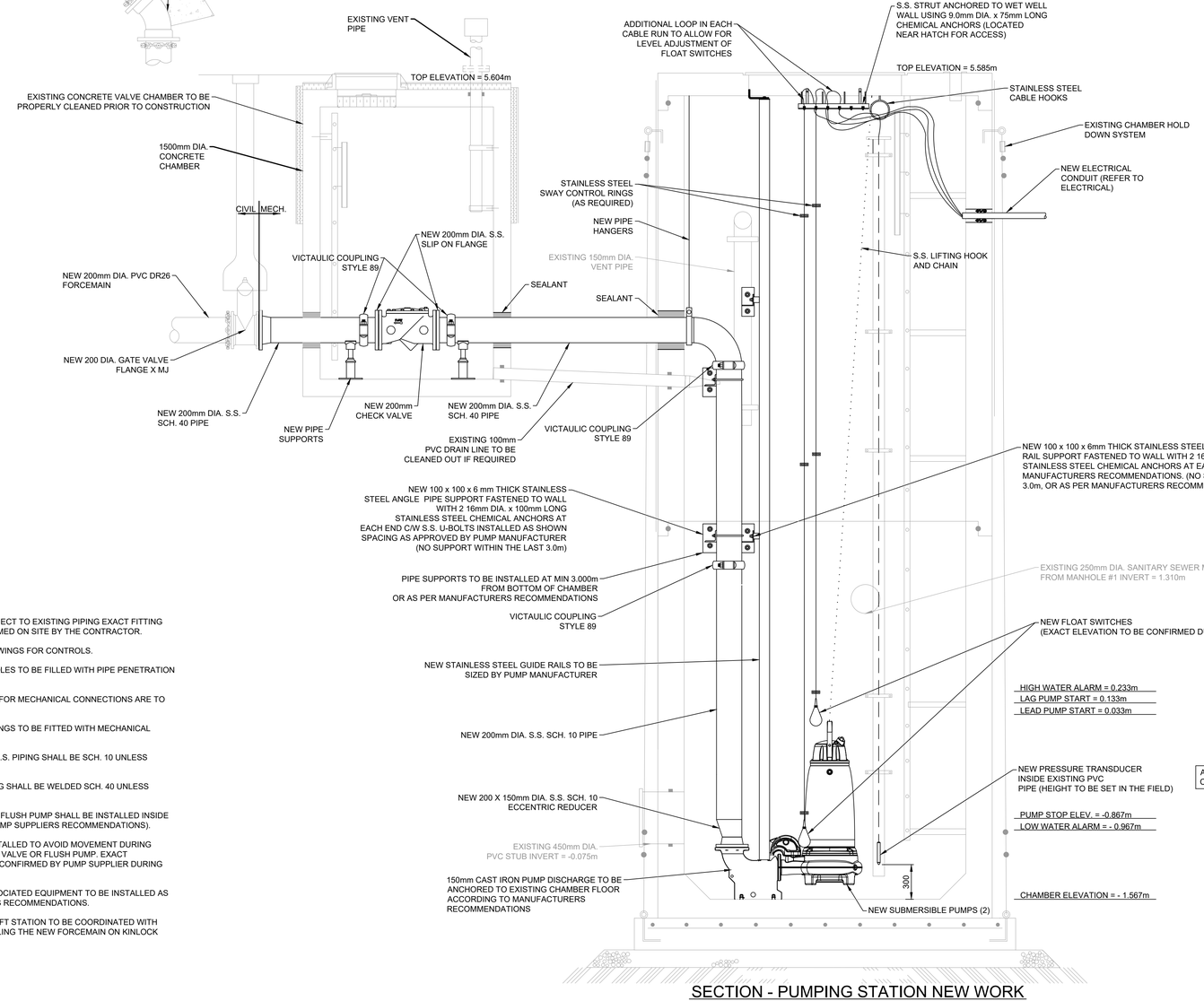
TYPICAL INSTALLATION - PRESSURE GAUGE

N.T.S.



PLAN VALVE CHAMBER AND LIFT STATION - NEW WORK

1:20



SECTION - PUMPING STATION NEW WORK

1:20

NOTES:

1. IF REQUIRED TO CONNECT TO EXISTING PIPING EXACT FITTING ANGLE TO BE CONFIRMED ON SITE BY THE CONTRACTOR.
2. SEE ELECTRICAL DRAWINGS FOR CONTROLS.
3. ALL CORE DRILLED HOLES TO BE FILLED WITH PIPE PENETRATION SEALS.
4. ALL NUTS AND BOLTS FOR MECHANICAL CONNECTIONS ARE TO BE 316 S.S.
5. PVC FORCEMAIN FITTINGS TO BE FITTED WITH MECHANICAL JOINT RESTRAINTS.
6. ALL ABOVE GROUND S.S. PIPING SHALL BE SCH. 10 UNLESS OTHERWISE NOTED.
7. ALL BURIED S.S. PIPING SHALL BE WELDED SCH. 40 UNLESS OTHERWISE NOTED.
8. ONE FLUSH VALVE OR FLUSH PUMP SHALL BE INSTALLED INSIDE WET WELL (AS PER PUMP SUPPLIERS RECOMMENDATIONS).
9. FLOATS SHALL BE INSTALLED TO AVOID MOVEMENT DURING OPERATION OF FLUSH VALVE OR FLUSH PUMP. EXACT LOCATIONS SHALL BE CONFIRMED BY PUMP SUPPLIER DURING COMMISSIONING.
10. NEW PUMPS AND ASSOCIATED EQUIPMENT TO BE INSTALLED AS PER MANUFACTURERS RECOMMENDATIONS.
11. COMMISSIONING OF LIFT STATION TO BE COORDINATED WITH CONTRACTOR INSTALLING THE NEW FORCEMAIN ON KINLOCK ROAD.

ISSUED FOR TENDER

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THE ASSOCIATION OF PROFESSIONAL ENGINEERS OF PRINCE EDWARD ISLAND
Permit to Practice
Scott Brown
No. 1279
DATE: June 30 2022
LICENSED PROFESSIONAL ENGINEER
PROVINCE OF PRINCE EDWARD ISLAND

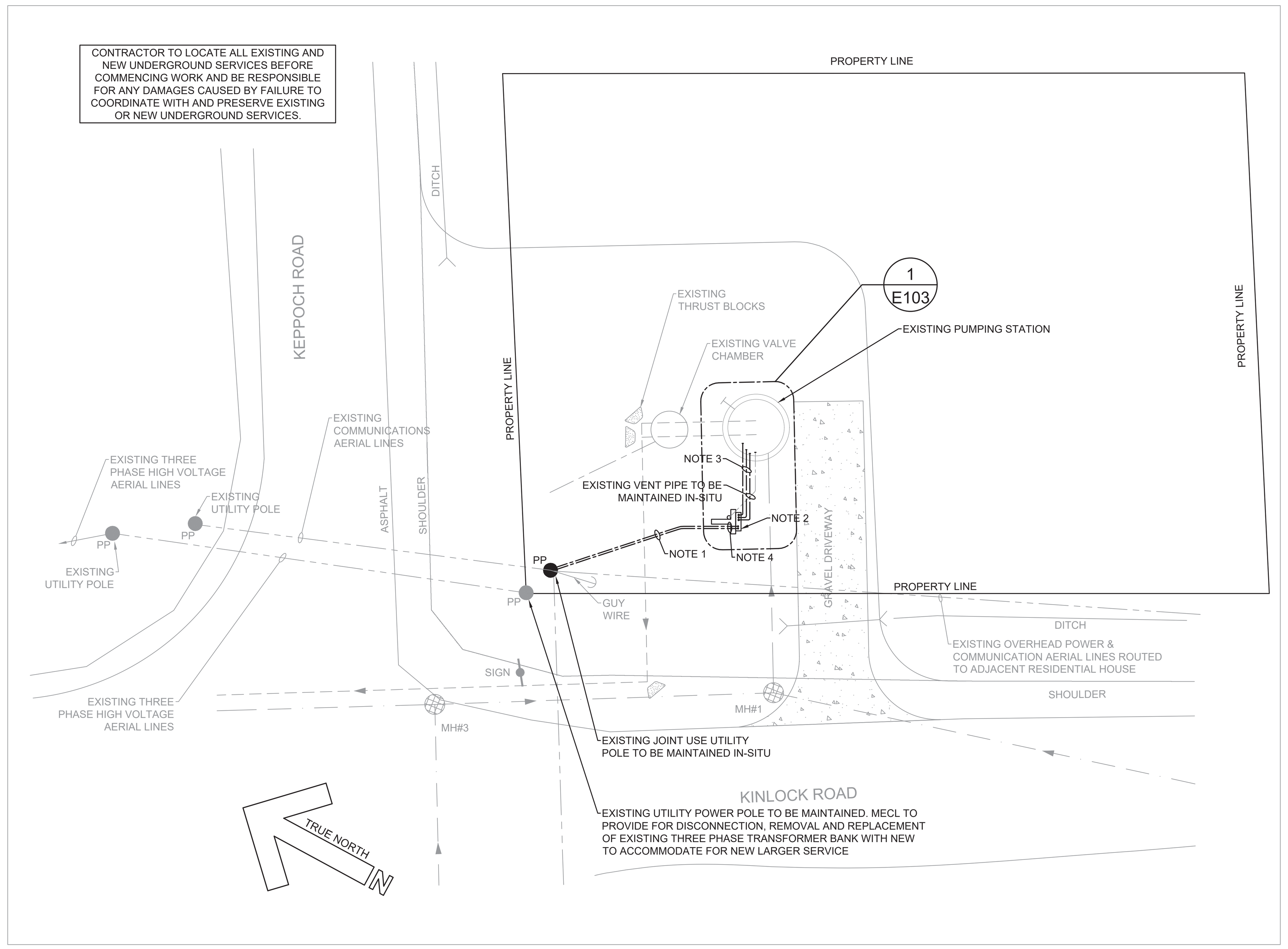
Client: STRATFORD UTILITY CORPORATION

Project Title: LIFT STATION UPGRADE
CORISH LIFT STATION

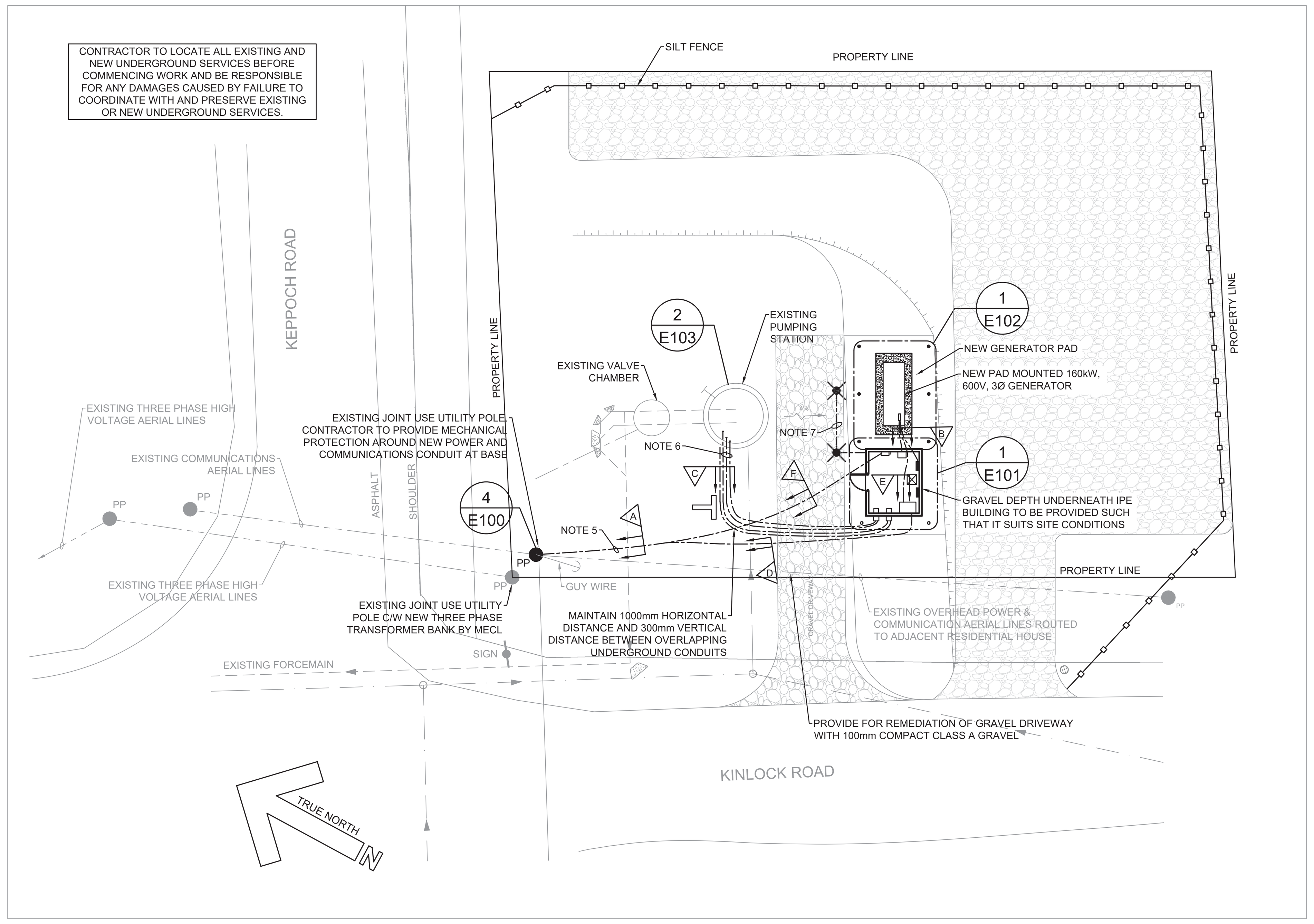
Sheet Title: LIFT STATION AND VALVE CHAMBER NEW WORK

No.	Description	Date
0	ISSUED FOR TENDER REVIEW	2022-06-17
1	ISSUED FOR TENDER	2022-06-30

Date: MARCH 2022
Drn By: DWD
Chk By: SL
Revision: -
Project Number: 191191
Drawing Number: M101



1
E100
EXISTING SITE PLAN
1:200



2
E100
NEW SITE PLAN
1:200

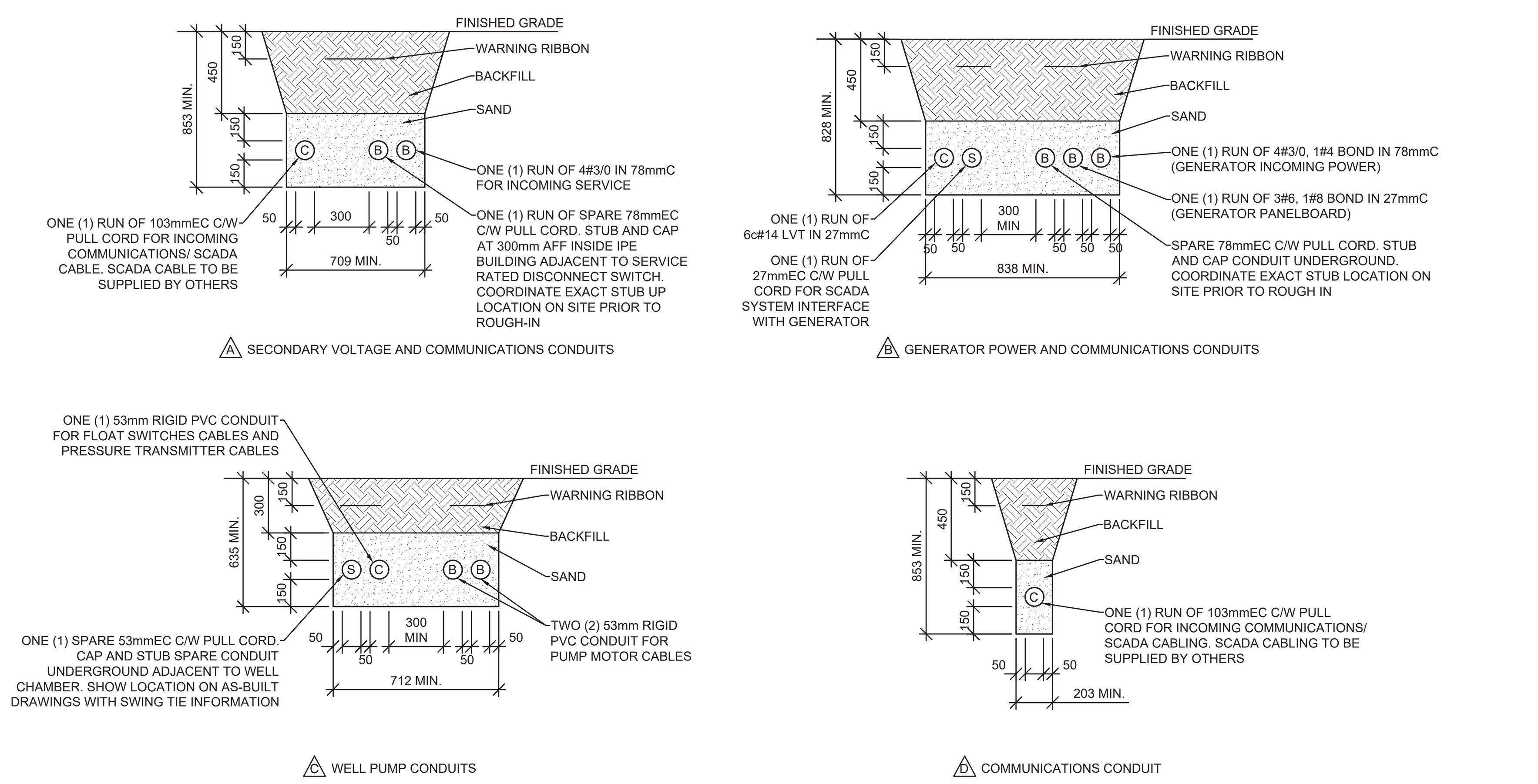
GENERAL LEGEND	
	LIGHT LINEWEIGHT INDICATES EXISTING TO REMAIN
	HEAVY LINEWEIGHT INDICATES NEW WORK
	AERIAL SERVICE LINES
	UNDERGROUND WIRING
	SURFACE MOUNTED WIRING
A1-2a	INDICATES CIRCUIT #2 IN PANEL 'A1' a- INDICATES LUMINAIRE SWITCHING FOR LIGHTING CIRCUITS
PP	EXISTING UTILITY SERVICE POLE
	UTILITY METER
	GROUND ROD
20,WP	DUPLEX RECEPTACLE 20 - INDICATES CSA 5-20R RECEPTACLE WP - INDICATES WEATHERPROOF
'A'	ELECTRICAL PANEL, SURFACE MOUNTED 'A' - INDICATES PANEL DESIGNATION
	SINGLE PHASE MOTOR
	THREE PHASE MOTOR
XX F-XX	DISCONNECT SWITCH XX - INDICATES SWITCH RATING F-XX - INDICATES FUSE SIZE
	DIRECT CONNECTION
T RA	LINE VOLTAGE THERMOSTAT, SUPPLIED, INSTALLED AND WIRED BY DIV.26. RA - REVERSE ACTING THERMOSTAT
UH-1	FORCE FLOW UNIT HEATER, SUPPLIED, INSTALLED AND WIRED BY DIV. 26
	MANUAL MOTOR SWITCH
#	LUMINAIRE, CEILING MOUNTED # - INDICATES TYPE IN LUMINAIRE SCHEDULE
#	LUMINAIRE, WALL MOUNTED # - INDICATES TYPE IN LUMINAIRE SCHEDULE
$	SINGLE POLE SWITCH
	DUAL HEAD EMERGENCY LIGHTING UNIT

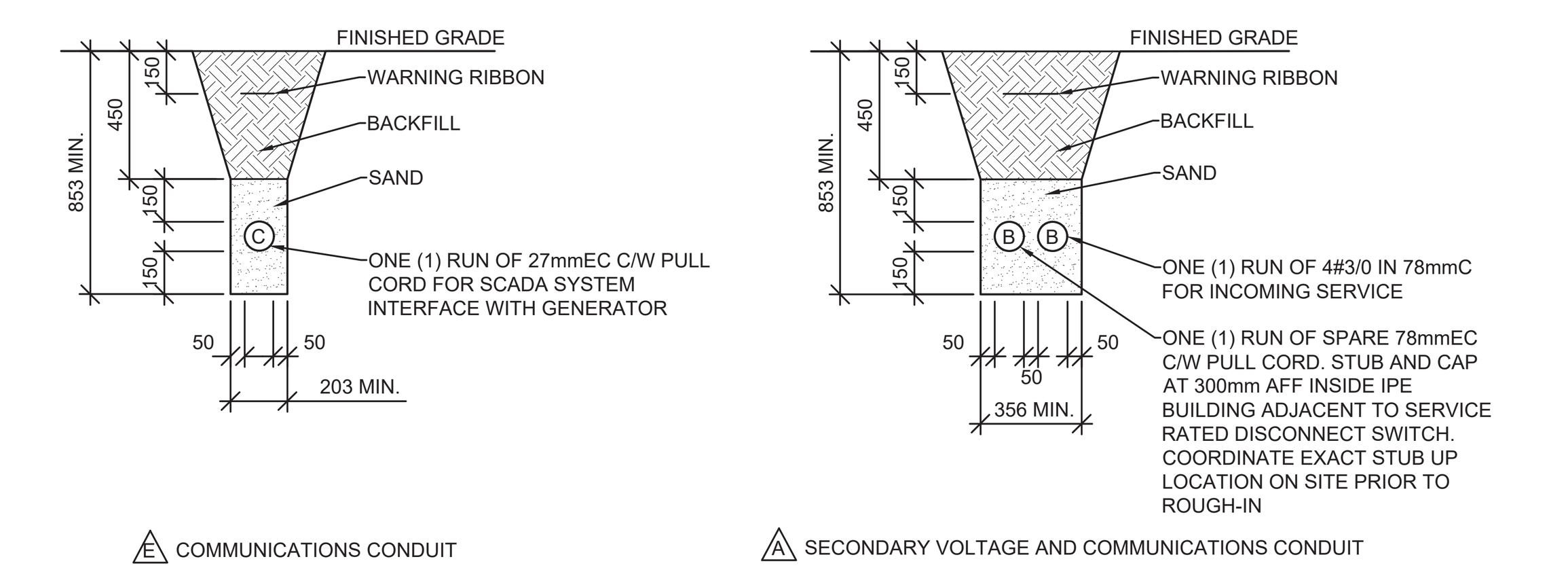
GENERAL NOTES:

1. ALL EXPOSED SURFACE MOUNTED WIRING TO BE COMPLETED WITH PVC CONDUIT AND PVC JUNCTION BOXES OR TECK CABLE.
2. CONTRACTOR TO LOCATE ALL EXISTING AND NEW UNDERGROUND SERVICES BEFORE COMMENCING WORK AND BE FULLY RESPONSIBLE FOR ANY DAMAGES CAUSED BY FAILURE TO COORDINATE WITH AND PRESERVE ANY AND ALL UNDERGROUND SERVICES. DIMENSIONS OF THE SITE PLAN ARE NOT EXACT AND ARE SHOWN FOR INFORMATION ONLY. CONTRACTOR IS TO OBTAIN AND VERIFY EXACT DIMENSIONS ON SITE. ALL COSTS RELATING TO EXISTING SITE CONDITIONS ARE TO BE INCLUDED IN THE TENDER PRICE.
3. CONTRACTOR TO SCHEDULE AND COORDINATE WITH THE GENERAL CONTRACTOR AND TOWN OF STRATFORD THE TEMPORARY SHUTDOWN OF THE EXISTING ELECTRICAL DISTRIBUTION SYSTEM TO ENSURE NO DISRUPTION OF THE SYSTEM.

NOTES:

1. CONTRACTOR TO CUT THROUGH EXISTING GRASSED AREA AND EXCAVATE AS REQUIRED TO FACILITATE OPEN TRENCHING TO DISCONNECT AND REMOVE ALL EXISTING EXPOSED CONDUITS, UNDERGROUND CONDUITS AND ALL ASSOCIATED UNDERGROUND WIRING ROUTED FROM EXISTING UTILITY POWER POLE TO EXISTING PUMP ENCLOSURE MOUNTED TO BRICK WALL. CONTRACTOR TO PROVIDE FOR REPAIR, REINSTATEMENT AND SODDING OF EXISTING GRASSED AREA DAMAGED BY WORK OF CONTRACT AS REQUIRED.
2. EXISTING ENCLOSURE C/W 100A CIRCUIT BREAKER, UTILITY METER AND PUMPS CONTROLLER TO BE DISCONNECTED AND REMOVED. TURN OVER EXISTING ENCLOSURE, 100A CIRCUIT BREAKER AND OBSOLETE PUMP CONTROLLERS TO TOWN OF STRATFORD. COORDINATE REMOVAL OF EXISTING UTILITY METER WITH MECL.
3. CONTRACTOR TO CUT THROUGH EXISTING GRASSED AREA AND EXCAVATE AS REQUIRED TO FACILITATE OPEN TRENCHING TO DISCONNECT AND REMOVE EXISTING UNDERGROUND CONDUITS AND ALL ASSOCIATED POWER AND CONTROLS WIRING ROUTED FROM EXISTING ENCLOSURE TO OBSOLETE 30HP PUMPS LOCATED WITHIN WELL CHAMBER. MAINTAIN EXISTING CONDUIT SLEEVES THROUGH CHAMBER AS REQUIRED TO ROUTE NEW POWER AND CONTROLS CONDUITS. OTHERWISE, PROVIDE FOR INFILL. CONTRACTOR TO PROVIDE FOR REPAIR, REINSTATEMENT AND SODDING OF EXISTING GRASSED AREA DAMAGED BY WORK OF CONTRACT AS REQUIRED.
4. EXISTING BRICK WALL AND FOUNDATION TO BE MAINTAINED IN-SITU.
5. CONTRACTOR TO CUT THROUGH EXISTING GRASSED AREA AND EXCAVATE AS REQUIRED TO FACILITATE OPEN TRENCHING TO ROUTE NEW UNDERGROUND SECONDARY VOLTAGE AND COMMUNICATIONS CONDUITS FROM EXISTING UTILITY POWER POLE TO MAIN SERVICE RATED DISCONNECT SWITCH AND SCADA/PLC CABINET LOCATED IN IPE BUILDING. CONTRACTOR TO PROVIDE FOR REPAIR AND REINSTATEMENT ALL DISTURBED AREA DAMAGED BY THE WORK OF THIS CONTRACT.
6. CONTRACTOR TO CUT THROUGH EXISTING GRASSED AREA AND EXCAVATE AS REQUIRED TO FACILITATE OPEN TRENCHING TO ROUTE NEW UNDERGROUND POWER AND CONTROLS CONDUITS ASSOCIATED WITH WELL PUMPS FROM THE EXISTING WELL CHAMBER TO THEIR ASSOCIATED PVC JUNCTION BOXES MOUNTED TO THE EXTERIOR FACADE OF THE IPE BUILDING. CONTRACTOR TO PROVIDE FOR PACKING AND GROUTING OF EXISTING SLEEVES WITHIN EXISTING WELL CHAMBER AROUND NEW CONDUITS AS REQUIRED. ALL PATCHING AND REINSTATEMENT OF EXISTING CONCRETE WELL CHAMBER TO BE COMPLETED BY OTHERS. CONTRACTOR TO EXTEND NEW PUMP LEAD CABLES SUPPLIED AND INSTALLED WITH THE WELL PUMPS AND FLOATSWITCH AND PRESSURE TRANSMITTER LEAD CABLES SUPPLIED AND INSTALLED BY OTHERS THROUGH NEW 53mm UNDERGROUND CONDUITS. CONTRACTOR TO ENSURE PUMP LEAD CABLES, FLOAT SWITCH AND PRESSURE TRANSMITTER LEAD CABLES LENGTH ARE C/W SUFFICIENT SLACK TO SUIT REQUIRED LENGTHS FROM WELL CHAMBER TO IPE BUILDING. EXACT LENGTH OF CABLES TO BE CONFIRMED ON SITE.
7. CONNECT 1#1/0 BARE GROUND CONDUCTOR TO TWO 3m LONG MANUFACTURED GROUND RODS DRIVEN INTO THE GROUND 1m FROM THE BUILDING FOUNDATION AND SEPARATED 3m APART IN ACCORDANCE WITH CSA 22.1-21 SECTION 10.



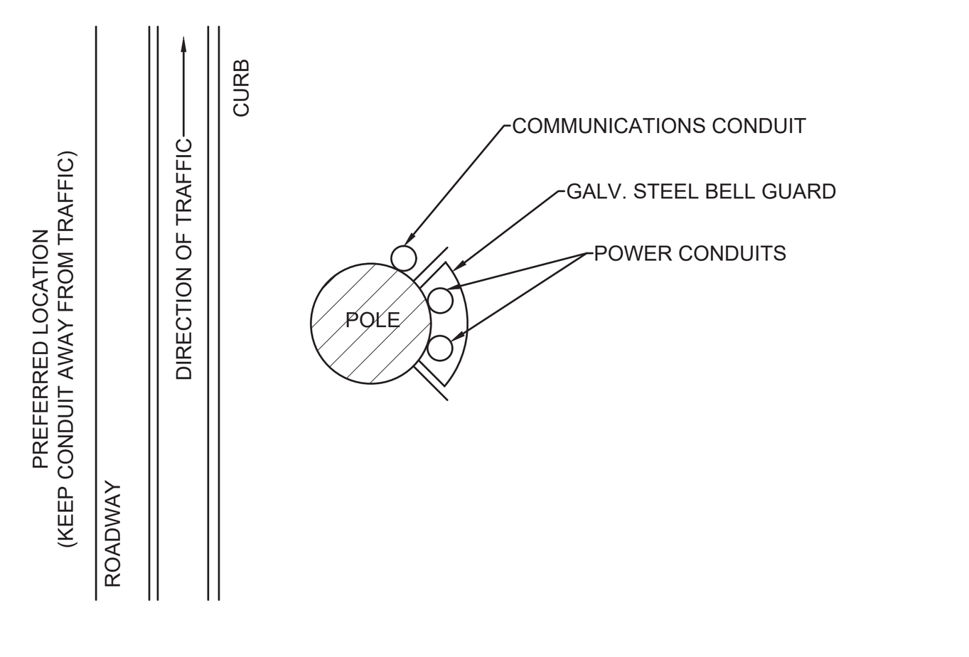


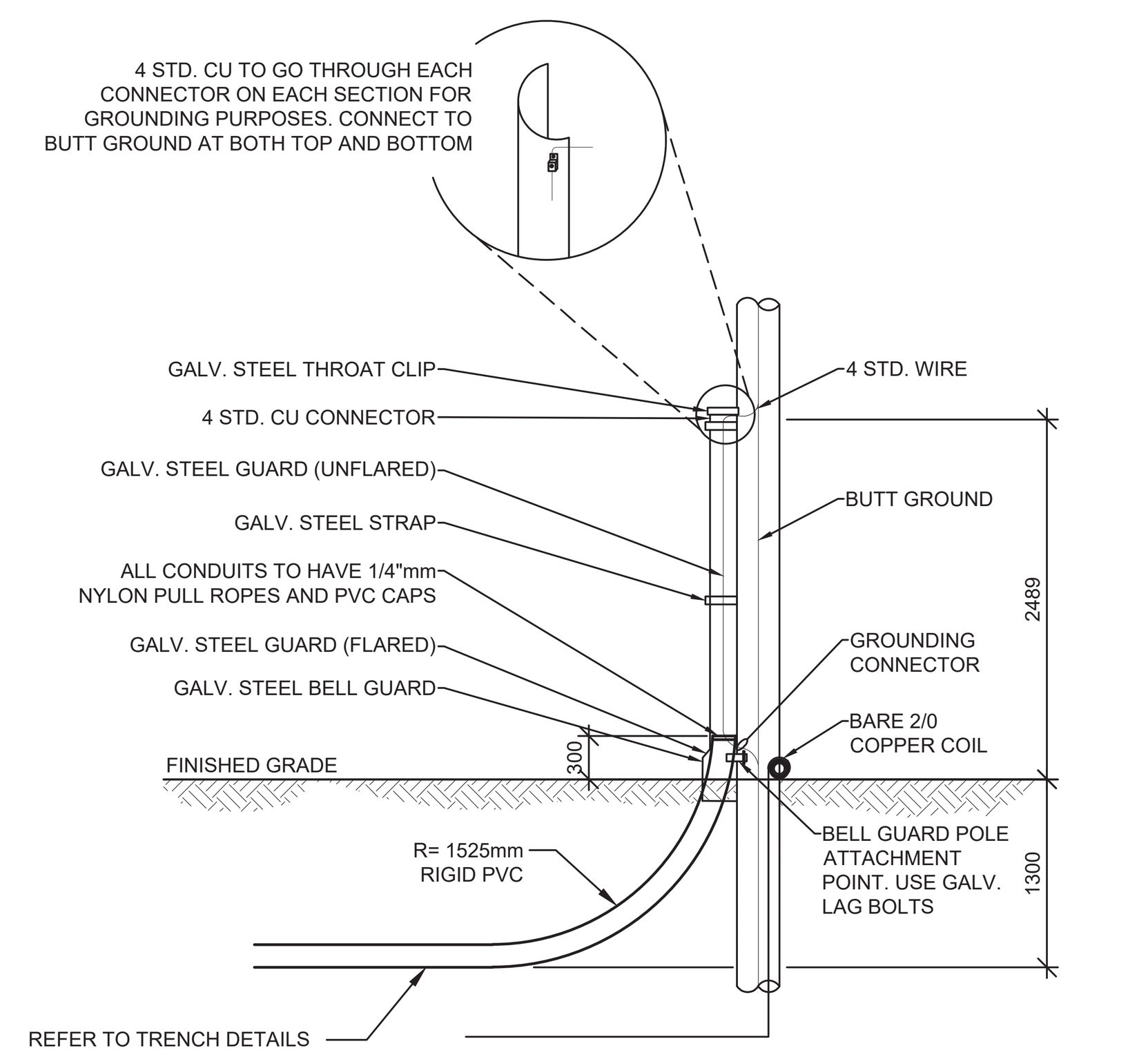
DETAIL NOTES:

1. B = SECONDARY VOLTAGE OR BRANCH CIRCUIT CONDUIT. QUANTITY AND SIZE AS INDICATED.
2. C = CONTROLS/COMMUNICATION CONDUIT
3. S = SPARE COMMUNICATIONS CONDUIT
4. BACKFILLING OF TRENCH IN LAYERS NOT EXCEEDING 300mm (MECHANICALLY TAMPED).
5. USE NEW SOIL FREE FROM LARGE ROCKS OR DEBRIS FOR BACKFILL.
6. IF SITE CONDITIONS PROHIBIT TRENCH AS PER THIS DRAWING, ADVISE CONSULTANT.
7. CONTRACTOR TO PROVIDE A MINIMUM OF 48 HOURS WRITTEN NOTICE TO UTILITY CONSTRUCTION INSPECTOR PRIOR TO SCHEDULED BACKFILLING OF WORK. BACKFILLING NOT PERMITTED UNTIL APPROVED BY UTILITY.
8. 6mm DIA. NYLON ROPE INSTALLED IN ALL DUCTS.
9. ALL CONDUITS TO BE LABELED WITH WEATHER PROOF TAGS INDICATION THE DESTINATION OF THE CONDUITS.

3
E100
TRENCH DETAILS
NTS

SERVICE TYPE	# OF CONDUITS
SECONDARY 3 PHASE	2-78mm





DETAIL NOTES:

1. ON JOINT USE POLES THE ELECTRICAL SERVICE CONDUIT MUST BE RUN 915mm ABOVE THE COMMUNICATION AND SPARE PLANT. THE GROUNDING AND NEUTRAL MUST BE THE SAME.
2. ALL MATERIALS TO BE PROVIDED BY THE CONTRACTOR
3. 3. CONTRACTOR TO PROVIDE A MINIMUM OF 24 HOURS WRITTEN NOTICE TO UTILITY CONSTRUCTION INSPECTOR PRIOR TO SCHEDULED BACKFILLING OF WORKS. BACKFILLING NOT PERMITTED UNTIL APPROVED BY UTILITY.
4. LOCATION OF DUCTS AT BASE OF POLE TO BE SPECIFIED BY UTILITY.
5. KEEP CONDUITS 150mm APART ON POLE.
6. OVERLAP CABLE GUARD 50mm.
7. ALL CONDUITS TO HAVE 6mm NYLON PULL ROPES AND PVC CAPS MUST BE PLACED ON BOTH ENDS TO PREVENT THE ENTRANCE OF WATER.
8. RIGID PVC SWEEPS ARE TO HAVE A RADIUS OF 1525mm AND TO BE USED ON THE USABLE AND THE SPARE CONDUITS.
9. THE 2/0 BARE COPPER CONDUCTOR TO BE RUN IN THE TRENCH SHALL HAVE 6000mm COILED AT THE BASE OF THE POLE.

4
E100
THREE PHASE UNDERGROUND RISER POLE DETAIL
1:50

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PROFESSIONAL ENGINEER — Elliot S. Coles — 1620 — PROVINCE OF PRINCE EDWARD ISLAND — 06-30-2022

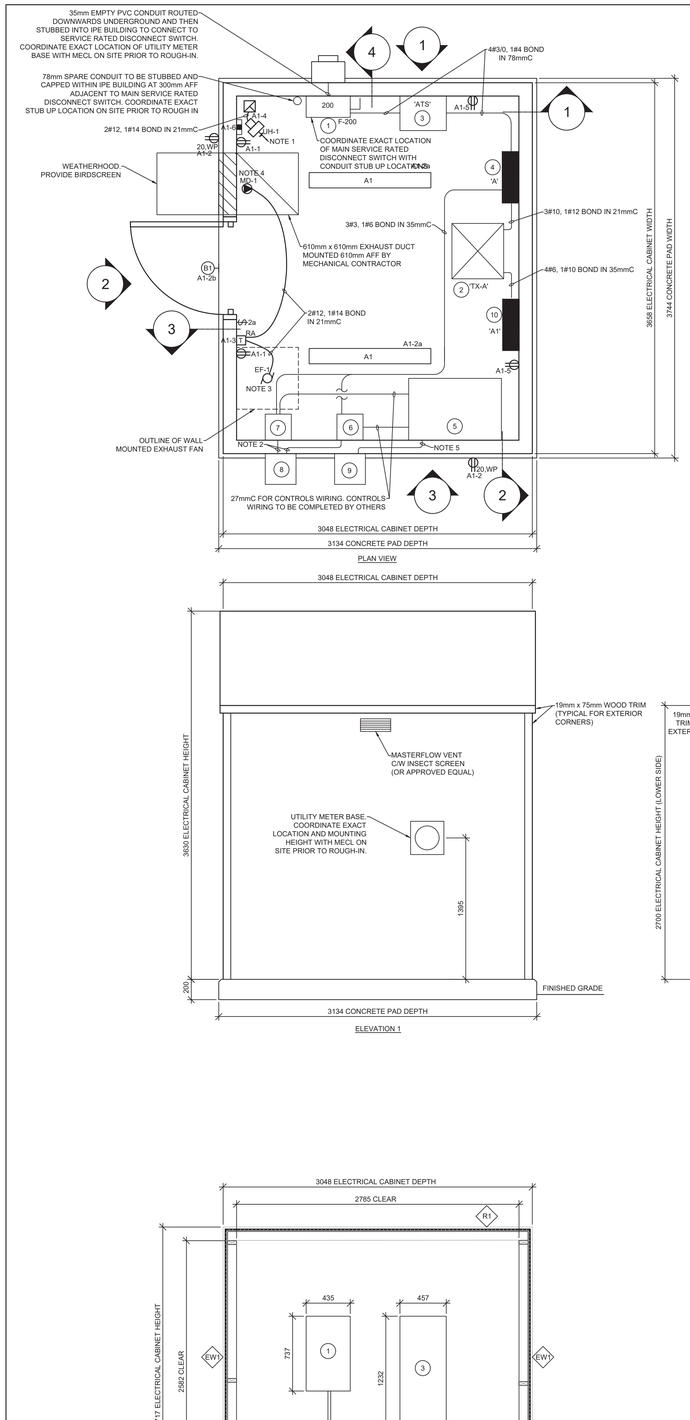
Client: Stratford Utility Corporation

Project Title: Lift Station Upgrades
Corish Lift Station

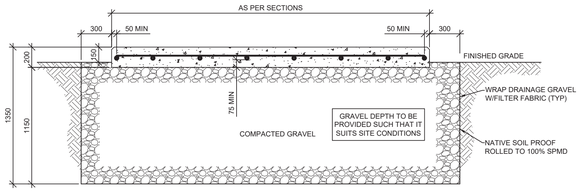
Sheet Title: Existing & New Site Plan, Details, Legend & Notes

No.	Description	Date
0	Issued for Tender Review	2022-06-17
1	Issued for Tender	2022-06-30

Date: 2022-06-30
Drn By: M.E.M., C.E.T. / E.A., E.I.T.
Chk By: E.S.C., P.ENG
Revision: 1
Project Number: 191191
Drawing Number: E100



1	200A SERVICE RATED MAIN DISCONNECT SWITCH FUSED AT 200A AND C/W NEUTRAL KIT
2	FLOOR MOUNTED15 kVA, 600V-120/208V, THREE PHASE, DELTA-WYE STEP DOWN TRANSFORMER 'TX-A'
3	200A, 600V WALL MOUNTED AUTOMATIC TRANSFER SWITCH 'ATS'
4	200A MLO, 600V, THREE PHASE, FOUR WIRE, 42 CIRCUIT PANELBOARD 'A'
5	SCADA AND PLC CABINET, SUPPLIED, INSTALLED BY MECHANICAL CONTRACTOR AND PROGRAMMED BY OTHERS
6	VFD ASSOCIATED WITH WELL PUMP #1, SUPPLIED, INSTALLED AND WIRED BY DIV. 26
7	VFD ASSOCIATED WITH WELL PUMP #2, SUPPLIED, INSTALLED AND WIRED BY DIV. 26
8	304mm (w) x 304mm (l) x 150mm (d) POWER JUNCTION BOX MOUNTED AT 610mm ABOVE FINISHED GRADE. JUNCTION BOX TO BE PVC RATED
9	304mm (w) x 304mm (l) x 150mm (d) CONTROLS JUNCTION BOX MOUNTED AT 610mm ABOVE FINISHED GRADE. JUNCTION BOX TO BE PVC RATED
10	60A RATED, 120/208V, THREE PHASE, FOUR WIRE, 24 CIRCUIT PANELBOARD 'A1'

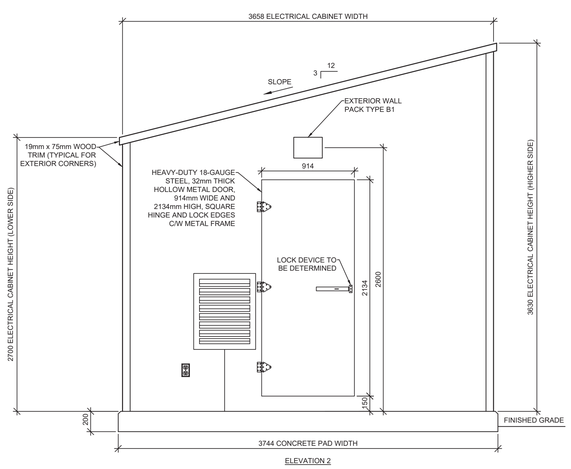


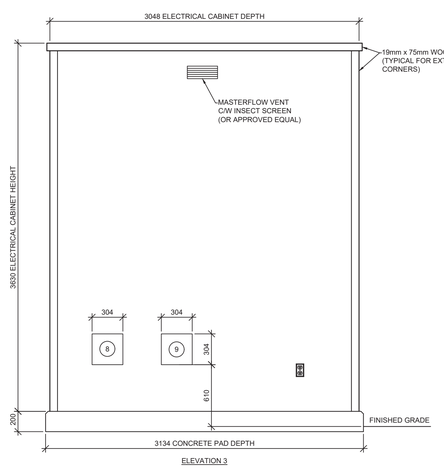
GENERAL NOTES

1. REFER TO LUMINAIRE SCHEDULE ON DRAWING E104 FOR ADDITIONAL INFORMATION ON LIGHTING FIXTURES.
2. REFER TO MECHANICAL SCHEDULES ON DRAWING E104 FOR ADDITIONAL INFORMATION ON MECHANICAL SYSTEMS.
3. REFER TO EXTERIOR WALL SCHEDULE AND ROOF TYPE SCHEDULES FOR ADDITIONAL INFORMATION ON EXTERIOR AND ROOF TYPE STRUCTURES.

NOTES

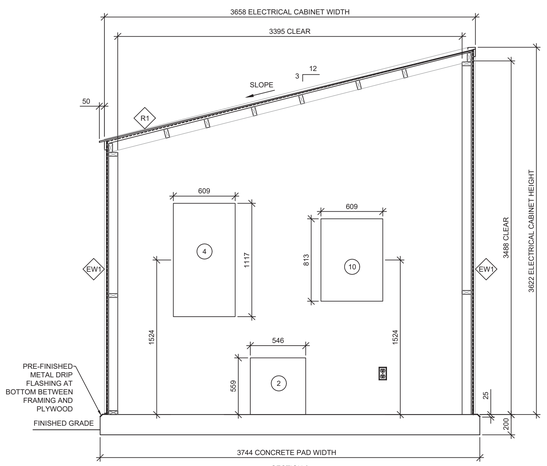
1. CEILING MOUNTED UNIT HEATER TO BE SUPPLIED, INSTALLED AND WIRED BY DIV. 26. CEILING MOUNTED UNIT HEATER TO BE C/W BUILT-IN THERMOSTAT. CONTRACTOR TO WIRE CEILING MOUNTED UNIT HEATER THROUGH A MANUAL MOTOR SWITCH LOCATED ADJACENT TO UNIT HEATER WITH 2#12, 1#14 BOND IN 21mmC. COORDINATE EXACT LOCATION AND SUSPENSION HEIGHT OF UNIT HEATER ON SITE PRIOR TO ROUGH-IN.
2. TWO (2) 53mm PVC CONDUITS TO BE ROUTED FROM POWER JUNCTION BOX UNDERGROUND AND THEN STUBBED INTO IPE BUILDING UNDERNEATH THE TWO (2) VFD'S AND EXTENDED TO THE VFD'S AS REQUIRED. COORDINATE EXACT STUB UP LOCATION WITH LOCATION OF VFD'S ON SITE. EXACT LOCATION OF VFD'S TO BE COORDINATED AND CONFIRMED WITH THE TOWN OF STRATFORD.
3. WALL MOUNTED EXHAUST FAN TO BE SUPPLIED AND INSTALLED BY DIV. 23 AND WIRED BY THE DIV. 26 THROUGH A LINE VOLTAGE REVERSE ACTING THERMOSTAT WITH 2#12, 1#14 BOND IN 21mmC PENETRATING THROUGH CEILING. REVERSE ACTING THERMOSTAT TO BE SUPPLIED,INSTALLED AND WIRED BY DIV. 26. PROVIDE LOW VoC MASTIC COMPOUND FOR ALL EXTERIOR PENETRATIONS. EXHAUST FAN TO BE C/W BUILT-IN UNFUSED DISCONNECT SWITCH. COORDINATE EXACT LOCATION OF EXHAUST FAN 'EF-1' WITH MECHANICAL CONTRACTOR ON SITE PRIOR TO ROUGH-IN.
4. MOTORIZED DAMPER TO BE SUPPLIED AND INSTALLED BY DIV. 23 AND WIRED BY DIV. 26 WITH 2#12, 1#14 BOND IN 21mmC TO LINE VOLTAGE REVERSE ACTING THERMOSTAT. MOTORIZED DAMPER TO BE ENERGIZED WITH THE ACTIVATION OF EXHAUST FAN 'EF-1'. REFER TO DETAIL 1/E104 FOR ADDITIONAL INFORMATION ON THE WIRING SCHEMATIC.
5. 53mmC PVC CONDUIT TO BE ROUTED FROM CONTROLS JUNCTION BOX UNDERGROUND AND THEN STUBBED AND CAPPED INTO IPE BUILDING UNDERNEATH SCADA/PLC CABINET. COORDINATE EXACT STUB UP LOCATION WITH LOCATION OF SCADA/PLC CABINET ON SITE. EXACT LOCATION OF SCADA/PLC CABINET TO BE COORDINATED AND CONFIRMED WITH THE TOWN OF STRATFORD.

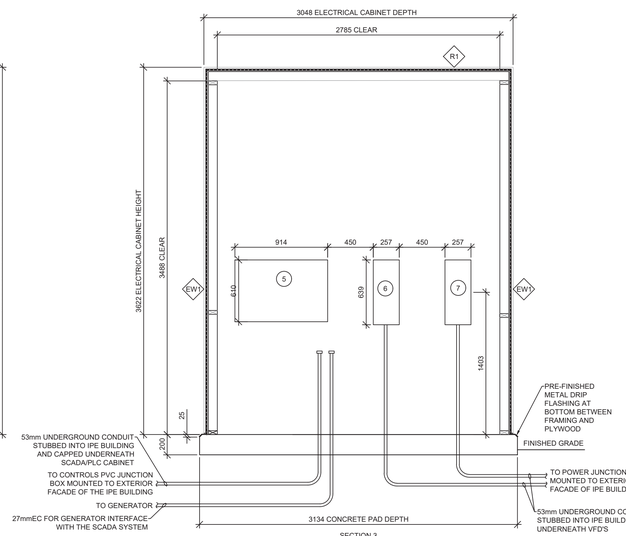


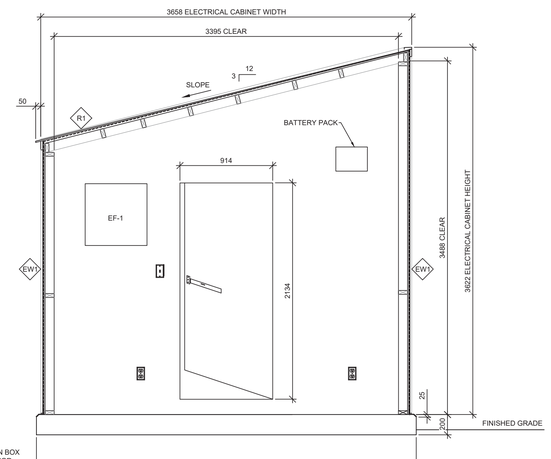


EXTERIOR WALL SCHEDULE	
TYPE	DESCRIPTION
EW1	- VICWEST 22mm CORRUGATED PACIFIC TURQUOISE (QC56156) 24 GUAGE - HENRY BLUE SKIN VP160 SELF-ADHERING NON-PERMEABLE AIR BARRIER MEMBRANE - 25mm RIGID INSULATION, R5 - 13mm PLYWOOD SHEATHING - 50mm x 152mm WOOD STUD AT 406mm O.C. C/W R24 BATT INSULATION - 6mil POLY VAPOUR BARRIER (FULLY LAPPED AND SEALED) - 19mm PLYWOOD PAINTED WITH INTUMESCENT PAINT

ROOF TYPE SCHEDULE	
TYPE	DESCRIPTION
R1	- VICWEST 22mm CORRUGATED STONE GREY (QC56071) - 24 GUAGE ROOFING HENRY BLUESKIN VP 160 SELF ADHERING NON-PERMEABLE MEMBRANE - 13mm PLYWOOD SHEATHING - WOOD TRUSSES AT 609mm O.C. DESIGN BY A TRUSS MANUFACTURER AND SEALED BY AN ENGINEER TO PRACTICE IN PEI. MEET ALL SNOW AND WIND LOADS - R60 BLOWN IN INSULATION, APPROX. 508 - 19mm WOOD STRAPPING AT 406mm O.C - 6mil POLY VAPOUR BARRIER (FULLY LAPPED AND SEALED) - 19mm PLYWOOD PAINTED WITH INTUMESCENT PAINT







1 E101 IPE BUILDING 1:25

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PROFESSIONAL ENGINEER — Erick S. Colosi — 1620 — Oct. 30, 2022 — PROVINCE OF PRINCE EDWARD ISLAND

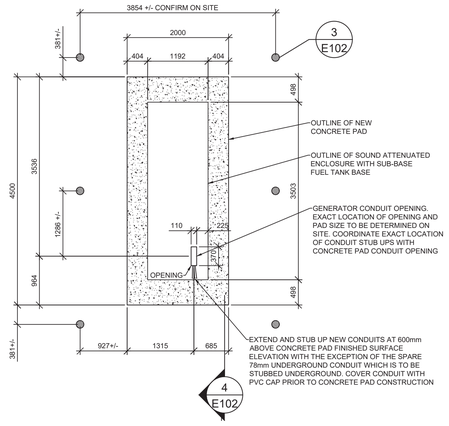
Client: Stratford Utility Corporation

Project Title: Lift Station Upgrades
Corish Lift Station

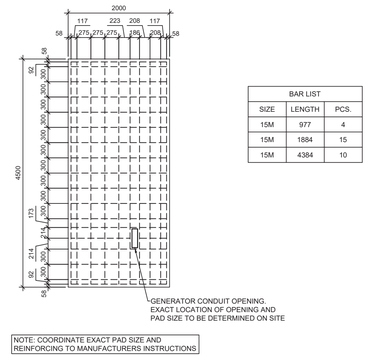
Sheet Title: IPE Building Details

No.	Description	Date
0	Issued for Tender Review	2022-06-17
1	Issued for Tender	2022-06-30

Date: 2022-06-30
Drn By: M.E.M., C.E.T. / E.A., E.I.T.
Chk By: E.S.C., P.ENG
Revision: 1
Project Number: 191191
Drawing Number: E101



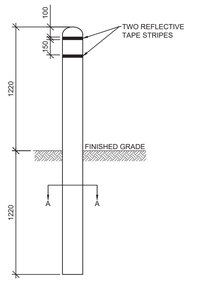
1 E102 PLAN: GENERATOR CONCRETE PAD
1:50



BAR LIST		
SIZE	LENGTH	PCS.
15M	977	4
15M	1884	15
15M	4384	10

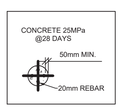
NOTE: COORDINATE EXACT PAD SIZE AND REINFORCING TO MANUFACTURERS INSTRUCTIONS

2 E102 PLAN: GENERATOR CONCRETE PAD REINFORCING
1:50



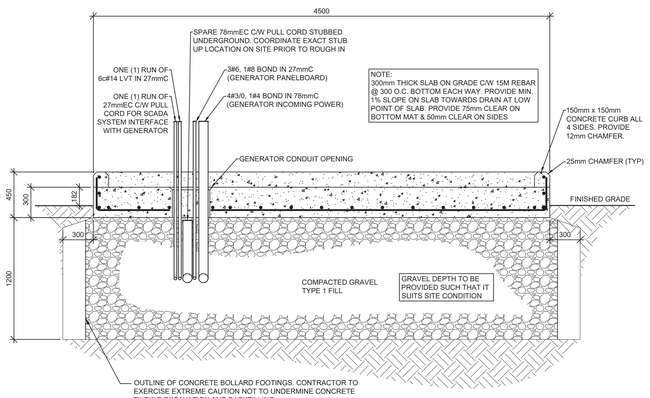
NOTES:

1. ORIENTATION OF PAD MUST ALLOW 10'-0" OF WORKING SPACE IN FRONT OF PAD FOR OPERATION.
2. BOLLARDS MUST HAVE PLASTIC COVER WITH REFLECTIVE TAPE. YELLOW COVERS REQUIRED FOR AREAS INTENDED FOR VEHICLE TRAFFIC/PARKING.
3. REINFORCING STEEL SET 1200mm IN GROUND. USE SONO TUBE FOR FORM. NO METAL ON BOLLARD EXTERIOR UNLESS GROUNDED.
4. BOLLARDS LOCATED AROUND STANDBY GENERATOR TO BE INSTALLED 1200mm BELOW FINISHED GRADE AND 1200mm ABOVE FINISHED GRADE.



SECTION A-A

3 E102 DETAIL: EXTERIOR BOLLARD
1:25



GENERAL NOTES:

1. CONTRACTOR MUST VISIT SITE PRIOR TO SUBMITTING PRICE IN ORDER TO BECOME FAMILIAR WITH EXISTING CONDITIONS.
2. COLD WEATHER CONCRETE SHALL BE PLACED AND PROTECTED IN ACCORDANCE WITH THE REQUIREMENTS OF CSA A23.1 AND TO THE REQUIREMENTS OF ACI-306R. PROVIDE HEATED ENCLOSURES AND/OR INSULATED TARPS AS REQUIRED TO MAINTAIN MINIMUM 10°C CONCRETE SURFACE TEMPERATURE FOR A PERIOD OF 5 DAYS FOLLOWING CONCRETE PLACEMENT. PROVIDE CONTROLLED COOL DOWN PERIOD TO PREVENT SURFACE CRACKING AT END OF PROTECTION PERIOD.
3. ENSURE THAT NO CONCRETE IS PLACED ON OR AGAINST FROZEN SUBGRADE, FORMWORK, OR REINFORCING STEEL. CONTRACTOR IS RESPONSIBLE FOR REMOVAL OF ALL FROZEN MATERIAL UNDER NEW SLAB AND BOLLARDS. REPLACE WITH SUITABLE UNFROZEN MATERIAL AS REQUIRED.
4. CONTRACTOR TO COORDINATE LOCATION OF OPENING IN PAD WITH CONSULTANT PRIOR TO CONSTRUCTION.

CONCRETE NOTES:

1. CONCRETE = 32 MPa @ 28 DAYS MINIMUM.
2. PROVIDE 75mm CLEAR ON BOTTOM MAT.
3. PROVIDE 50mm CLEAR ON SIDES.
4. REINFORCING 400 MPa YIELD.
5. ALL MEASUREMENTS ARE IN mm.

ELECTRICAL NOTES:

1. CONTRACTOR TO CUT THROUGH EXISTING GRASSED AREA AND EXCAVATE AS REQUIRED TO FACILITATE OPEN TRENCHING TO INSTALL NEW UNDERGROUND CONDUITS STUBBED AT 600mm ABOVE CONCRETE PAD FINISHED SURFACE ELEVATION. SEAL CONDUIT WITH PVC CAP PRIOR TO CONCRETE PAD CONSTRUCTION.
2. CONTRACTOR TO COORDINATE TRENCHING WITH BOLLARD FOOTINGS.

4 E102 SECTION: GENERATOR CONCRETE PAD
1:25

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PROFESSIONAL ENGINEER
ERIC S. COLES
1820
PROVINCE OF PRINCE EDWARD ISLAND
Oct. 30, 2022

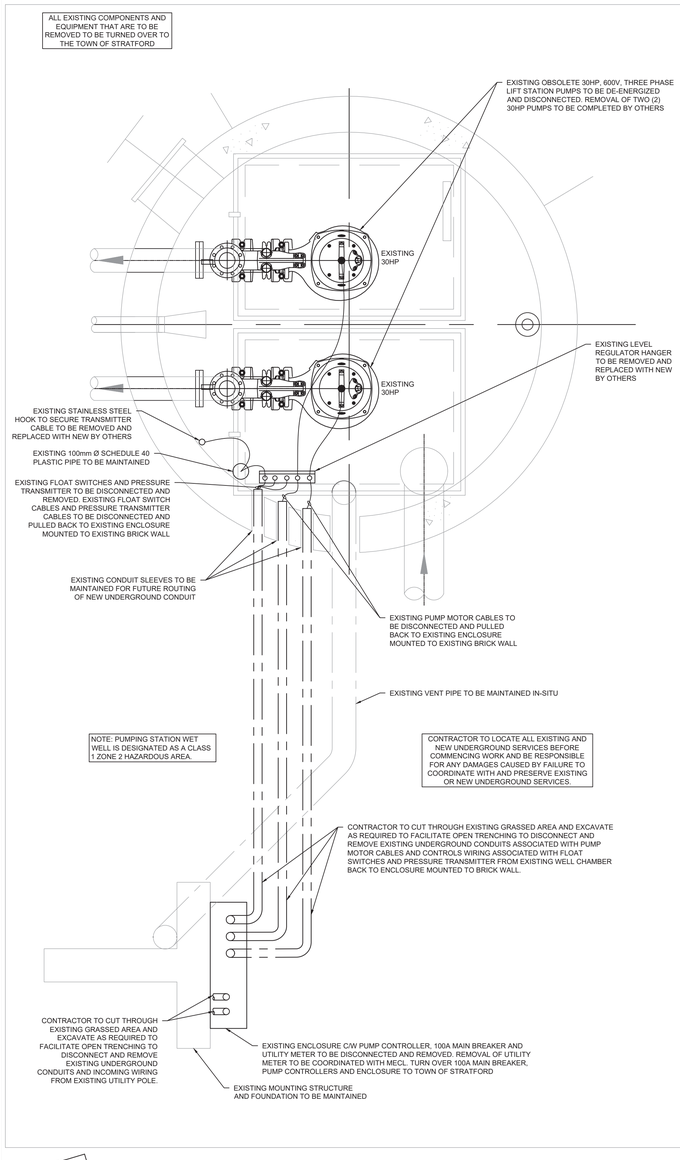
Client: Stratford Utility Corporation

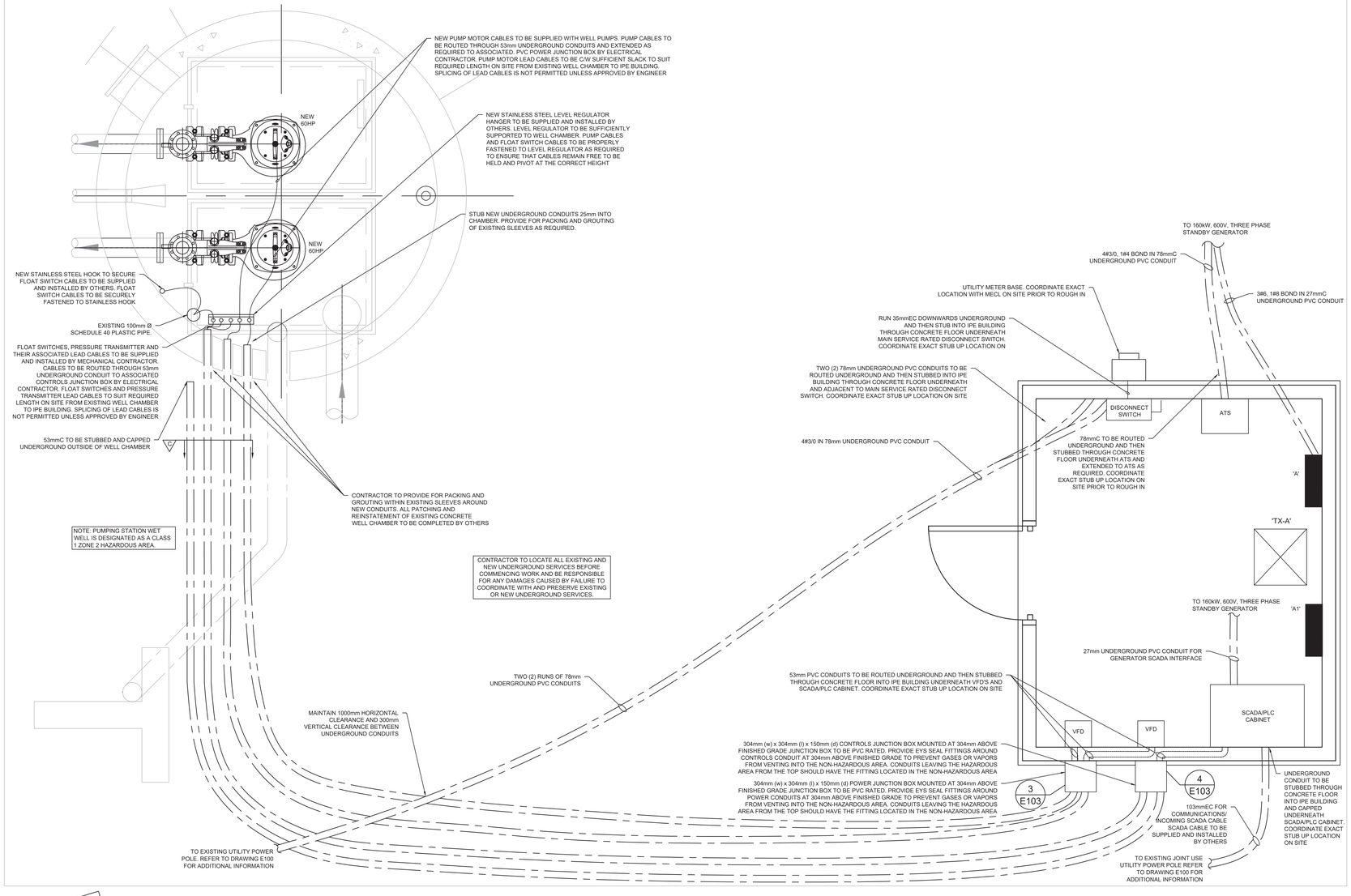
Project Title: Lift Station Upgrades
Corish Lift Station

Sheet Title: Generator Pad Details

No.	Description	Date
0	Issued for Tender Review	2022-06-17
1	Issued for Tender	2022-06-30

Date: 2022-06-30
Drn By: M.E.M., C.E.T. / E.A., E.I.T.
Chk By: E.S.C., P.ENG
Revision: 1
Project Number: 191191
Drawing Number: E102



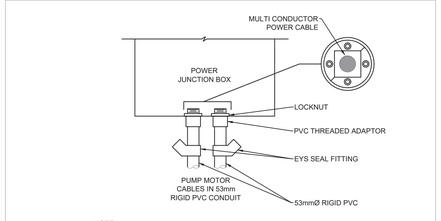


TRUE NORTH

1 E103 DEMOLITION PLAN - PUMPING STATION
1:20

TRUE NORTH

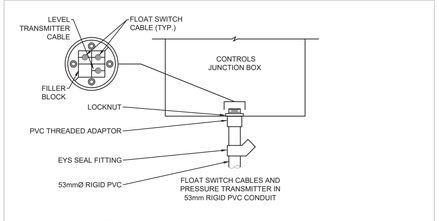
2 E103 RENOVATION PLAN - PUMPING STATION
1:20



NOTE:

1. CONTRACTOR TO VERIFY CABLE DIAMETERS AND LENGTH WITH PUMP SUPPLIER PRIOR TO ORDERING COMPONENT PARTS.

3 E103 DETAIL - SEAL FITTINGS FOR CONDUIT RUNS TO PUMPING STATION
N.T.S.



NOTE:

1. CONTRACTOR TO VERIFY CABLE DIAMETERS AND LENGTH OF FLOAT SWITCH AND PRESSURE TRANSMITTER SUPPLIER PRIOR TO ORDERING COMPONENT PARTS.

4 E103 DETAIL - SEAL FITTINGS FOR CONDUIT RUNS TO PUMPING STATION
N.T.S.

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PROFESSIONAL ENGINEER — In Accordance With The Provisions Of The Engineering Profession Act — Eric S. Coles — 1820 — Oct. 31, 2022 — PROVINCE OF PRINCE EDWARD ISLAND

Client: Stratford Utility Corporation

Project Title: Lift Station Upgrades
Corish Lift Station

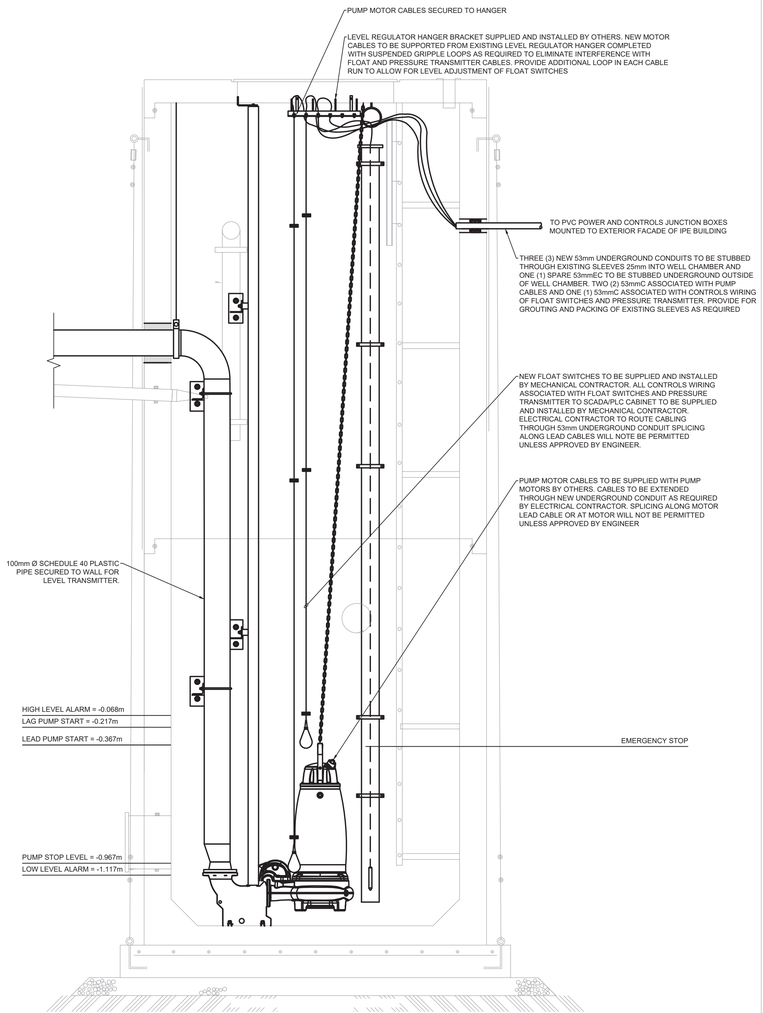
Sheet Title: Demolition & Renovation:
Existing Pumping Station

No.	Description	Date
0	Issued for Tender Review	2022-06-17
1	Issued for Tender	2022-06-30

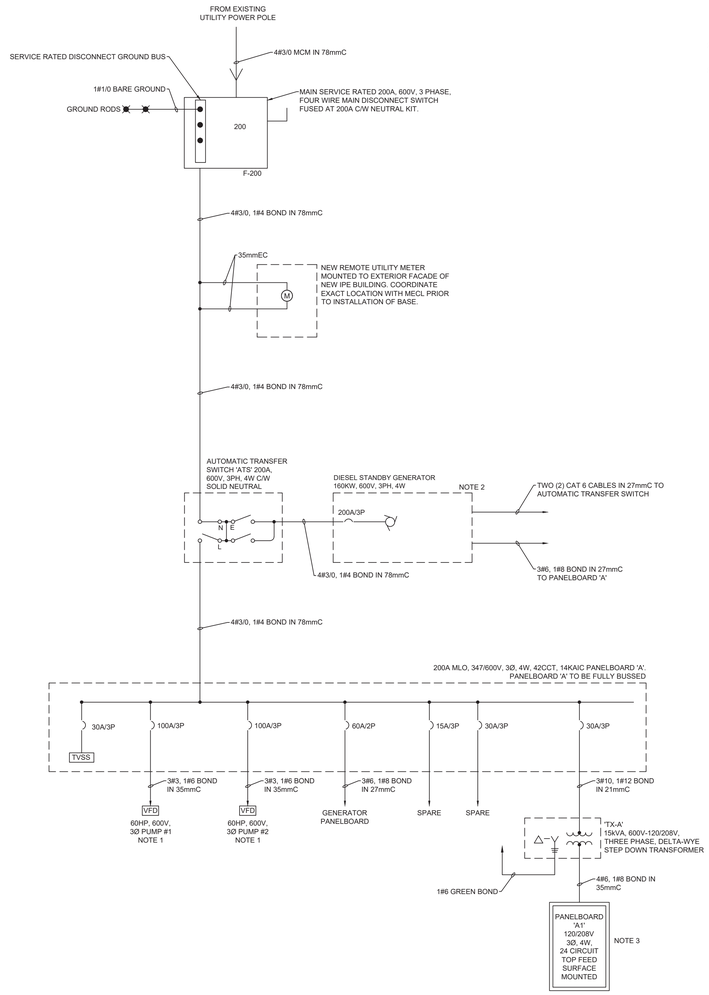
Date: 2022-06-30
Drn By: M.E.M., C.E.T. / E.A., E.I.T.
Chk By: E.S.C., P.ENG

Revision: 1

Project Number: 191191
Drawing Number: E103



1 E104 SECTION - PUMPING STATION
N.T.S.



NOTES

1. PUMPS #1 AND #2 ARE NOT TO BE ACROSS THE LINE STARTED AND ARE TO BE INTERLOCKED SUCH THAT THERE IS NO TIME WHEN BOTH PUMPS START UP SIMULTANEOUSLY. VFD'S ARE TO PROGRAMMED TO ALLOW A SOFT STARTING OF BOTH LEAD AND LAG PUMPS IN SUCH A WAY THE GENERATOR IS NOT OVERLOADED.
2. GENERATOR HAS NOT BEEN SIZED TO ACCOMMODATE FOR ACROSS THE LINE STARTING OF BOTH PUMPS.
3. PANELBOARD 'A1' TO BE COMPLETED WITH FIVE (5) 15A/1P CIRCUIT BREAKER LOCATED IN POSITIONS 1, 3, 4, 5, 6 AND 7 AND ONE (1) 20A/1P CIRCUIT BREAKER LOCATED IN POSITION 2, FIVE (5) SPARE 15A/1P CIRCUIT BREAKERS AND THREE (3) 20A/1P CIRCUIT BREAKERS. PANELBOARD 'A1' TO BE FULLY BUSSED. THE REMAINING BREAKERS ARE TO BE PROVISIONAL SPACES FOR FUTURE ADDITIONS AS REQUIRED.

2 E104 POWER SINGLE LINE DIAGRAM
N.T.S.

LUMINAIRE SCHEDULE			
TYPE	DESCRIPTION	SOURCE	MOUNTING
A1	1220mm LONG, SURFACE MOUNTED LED STRIP FIXTURE, C/W FROSTED ACRYLIC ROUND DIFFUSED LENS AND GENERAL DISTRIBUTION, WHITE FINISH, 120V DRIVER LITHONIA #CSS L48 4000LM MVOLT 35K 80CRI METALUX #4SNLED-LD5-41SL-LW-UNV-L835-CD1-U CSI #FSS440L835-UNV-DIM DELVIRO #ZIP 4 30 35K U FR WH V N N	LED 4000 LUMENS 35W L75@ 120,000h CRI 80 3500K	SURFACE MOUNTED UNDERSIDE OF EXPOSED STEEL JOIST
B1	11.1" (W) X 8.1" (H) X 3.2" (D), EXTERIOR LED WALL PACK C/W DIE-CAST ALUMINUM HOUSNG, SEALED AGAINST MOISTURE, IP66 RATED, FORWARD THROW DISTRIBUTION C/W PHOTOCELL BUTTON, BLACK FINISH, 120V DRIVER. LITHONIA #WPX1 LED P1 40K MVOLT DBLXD PE COOPER #XTOR3B W BK PC1 KEENE #PW30 NW GI 8 BZ ELITE #OWP FC 116 LED 3500L DIM10 MVOLT 40K BK PHC	LED 2900 LUMENS 47W L90 AT 100,000h 80 CRI 4000K	WALL MOUNTED TO EXTERIOR FAÇADE OF IPE BUILDING. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT ON SITE PRIOR TO ROUGH-IN.

ELECTRIC UNIT HEATER - SPECS											
TAG	LOCATION	QUANTITY	MAKE	MODEL	CAPACITY (kW)	AIR SIDE DATA			VOLT	PHASE	NOTES
						FLOW (CFM)	EAT (°C)	LAT (°C)			
UH-1	IPE BUILDING	1	STELPRO	RUH2TCHAR	2.0	350.0	7.5	17.5	208	1	C/W BUILT-IN THERMOSTAT

EXHAUST FAN SCHEDULE										
TAG	PURPOSE	TYPE	LOCATION	AIRFLOW (CFM)	TSP (IN W.G.)	VOLTAGE	PHASE	MOTOR (HP)	STANDARD OF ACCEPTANCE	NOTES
EF-1	COOLING FAN	WALL EXHAUST FAN	LIFT STATION BUILDING	1600	0.25	120	1	¼	COOK 20XMW	SINGLE SPEED, GRAVITY BACKDRAFT DAMPER, PLENUM BOX WITH BIRDSCREEN ON INTERIOR, PROVIDE LOUVRED OUTLET WITH WEATHER HOOD

STANDALONE MOTORIZED DAMPER SCHEDULE											
TAG	TYPE	LOCATION	MANUFACTURER	MODEL	WIDTH (IN)	HEIGHT (IN)	AIRFLOW (CFM)	VELOCITY (FPM)	PD (IN W.G.)	ACTUATION	ACTUATOR TORQUE (IN-LB)	COMMENTS
MD-1	5" LOW-LEAKAGE RECTANGULAR OPPOSED BLADE	LIFT STATION INTAKE DUCT	VENTEX	4100-OB	24	24	1830	458	0.02	OPEN/CLOSE	32.00	OPEN ON REVERSE ACTING THERMOSTAT CALL

LOUVRE SCHEDULE									
TAG	TYPE	LOCATION	MANUFACTURER	MODEL	WIDTH (IN)	HEIGHT (IN)	AIRFLOW (CFM)	VELOCITY (FPM)	PD (IN W.G.)	COMMENTS
L-1	6" STORMPROOF LOUVRE-RECTANGULAR	LIFT STATION WALL	VENTEX	2635/2635	24	24	1830	882	0.13	VENTILATION INTAKE, PROVIDE SIMILARLY SIZED INSULATED DUCT DOWN TO FLOOR LEVEL, WALL HOOD OR ROOFTOP GOOSENECK WOULD ALSO BE ACCEPTABLE.

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PROFESSIONAL ENGINEER — Province of Prince Edward Island — Erik S. Colesl — 1620 — Oct. 30, 2022

Client: Stratford Utility Corporation

Project Title: Lift Station Upgrades
Corish Lift Station

Sheet Title: New Pumping Station Section, Details & Schedules

No.	Description	Date
0	Issued for Tender Review	2022-06-17
1	Issued for Tender	2022-06-30

Date: 2022-06-30
Drn By: M.E.M., C.E.T. / E.A., E.I.T.
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