1 / E1.1 1:50

TRANSDUCER MOUNTING DETAIL

4 / -- 1:5

NOTES:

1. UTILIZE ALUMINUM STRUT FASTENED USING STAINLESS STEEL HARDWARE TO ACCOMODATE CABLE ROUTING. CABLE SUPPORTS SHALL HAVE A MAXIMUM SPACING OF 600MM WHEN HORIZONTAL. VERTICAL CABLE SUPPORTS SHALL HAVE A MAXIMUM SPACING OF 1200MM.
2. STX CONNECTORS SHALL BE USED WITHIN CHAMBERS,
3. AVOID ROUTING CABLE BEHIND LADDER ACCESS. KEEP MINIMUM ONE CABLE DIAMETER SEPARATION BETWEEN DISSIMILAR VOLTAGES.

AREA CLASSIFICATION:

1. THE AREA INSIDE THE: PUMP, FLAP GATE AND SLUICE GATE CHAMBERS IS TO BE CONSIDERED A HAZARDOUS ENVIRONMENT. ALL INSTALLATION AND MATERIALS TO MEET REQUIREMENTS SET OUT BY CANADIAN ELECTRICAL CODE (CEC) AND OTHER RELEVANT STANDARDS.
2. HAZARDOUS MATERIAL: STORM SEWER WATER
3. AREA TYPE: STORM WATER PUMPING STATION WET WELL
4. CEC SECTION 18 AREA RATING: ZONE 2 (DIVISION 2)
5. WIRING METHODS:
   - TECK CABLE WITH "HL RATING"
   - RIGID ALUMINIUM PVC COATED (RA PVC, "ROBROY")
6. SEALING METHODS:
   - TECK CABLE: SEE ZONE 2 CABLE SEALING DETAIL
   - RA PVC: POURED EYS SEALS OUTSIDE OF THE RATED AREA. INSTALLATION ONLY PERMITTED WHERE CABLING DOES NOT NEED THE ABILITY TO BE REPLACED.
   - PRE-MANUFACTURED CABLE: SEE ZONE 2 CABLE SEALING DETAIL

A / -- 1:50

B / -- 1:50

KEY NOTES:

1. CORE AND SLEEVE WITH ROXTEC R5 OR EQUAL.
2. RIGID STEEL SLEEVE CAST INTO CONCRETE.
3. 150mm CONCRETE PAD WITH 100mm OVERHANG FRONT AND SIDES. 10mm REBAR; 300mm ON CENTER.
4. CABLE PASS THROUGH, ROXTEC RM EX MODULE OR EQUAL. COORDINATE SIZE WITH SELECTED CABLE DIAMETER(S).
5. ROXTEC R EX FRAME OR EQUAL. COORDINATE OUTSIDE DIAMETER WITH CAST IN PLACE CONDUIT.
6. EQUIPMENT SHOWN FOR CONNECTION INTENT. SEE SPECIFIC EQUIPMENT MOUNTING DETAILS FOR FURTHER REQUIREMENTS.

TYPICAL CEC SECTION 18 ZONE 2 CABLE SEALING

6 / -- 1:15

METRIC
WHOLE NUMBERS INDICATE MILLIMETRES
DECIMALIZED NUMBERS INDICATE METRES

ENGINEERS GEOSCIENTISTS MANITOBA
Certificate of Authorization
MPE ENGINEERING
No. 5643

WARNING

IF POWER EQUIPMENT OR EXPLOSIVES ARE TO BE USED FOR EXCAVATION ON THIS PROJECT THE CONTRACTOR MUST:

1) NOTIFY THE GAS COMPANY OF THE PROPOSED LOCATION OF EXCAVATION.

2) TAKE PRECAUTION TO AVOID DAMAGE TO GAS COMPANY INSTALLATIONS.

SEE PROVINCIAL REGULATION 210/72 FOR DETAILS

LOCATION APPROVED
UNDERGROUND STRUCTURES

SUPV. U/G STRUCTURES COMMITTEE — DATE

NOTE:

LOCATION OF UNDERGROUND STRUCTURES AS SHOWN ARE BASED ON THE BEST INFORMATION AVAILABLE BUT NO GUARANTEE IS GIVEN THAT ALL EXISTING UTILITIES ARE SHOWN OR THAT THE GIVEN LOCATIONS ARE EXACT. CONFIRMATION OF EXISTENCE AND EXACT LOCATION OF ALL SERVICES MUST BE OBTAINED FROM THE INDIVIDUAL UTILITIES BEFORE PROCEEDING WITH CONSTRUCTION.

B.M.
ELEV.

| NO. | REVISIONS | DATE | BY |
|---|---|---|---|
| 1 | ISSUED FOR TENDER | 2019-09-10 | M.J.B. |

MPE Engineering Ltd.

| | | | |
|---|---|---|---|
| DESIGNED BY | D.G. | CHECKED BY | D.J.H. |
| DRAWN BY | N.O.W. | APPROVED BY | P.P.G. |
| SCALE: HORIZONTAL / VERTICAL | AS SHOWN | RELEASED FOR CONSTRUCTION | |
| DATE | 2019-9-11 | DATE | |

PLOT DATE: 2019 09 16

ORIGINAL SEALED BY PETER GOERTZEN 2019-09-16

CONSULTANT DRAWING NUMBER E1.2

Winnipeg

# THE CITY OF WINNIPEG

WATER AND WASTE DEPARTMENT
ENGINEERING DIVISION

BURROWS OUTFALL GATE CHAMBER UPGRADES

## VAULT LAYOUT AND SECTION

CITY DRAWING NUMBER 1-03000-E0003-001

SHEET 15 OF 20

BID OPPORTUNITY: 913-2019

FILE PATH: \\mhdc02\data\84\00 City of Winnipeg\002 - Burrows Outfall Gate Chamberts Upgrades\Autodesk\ACAD\
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