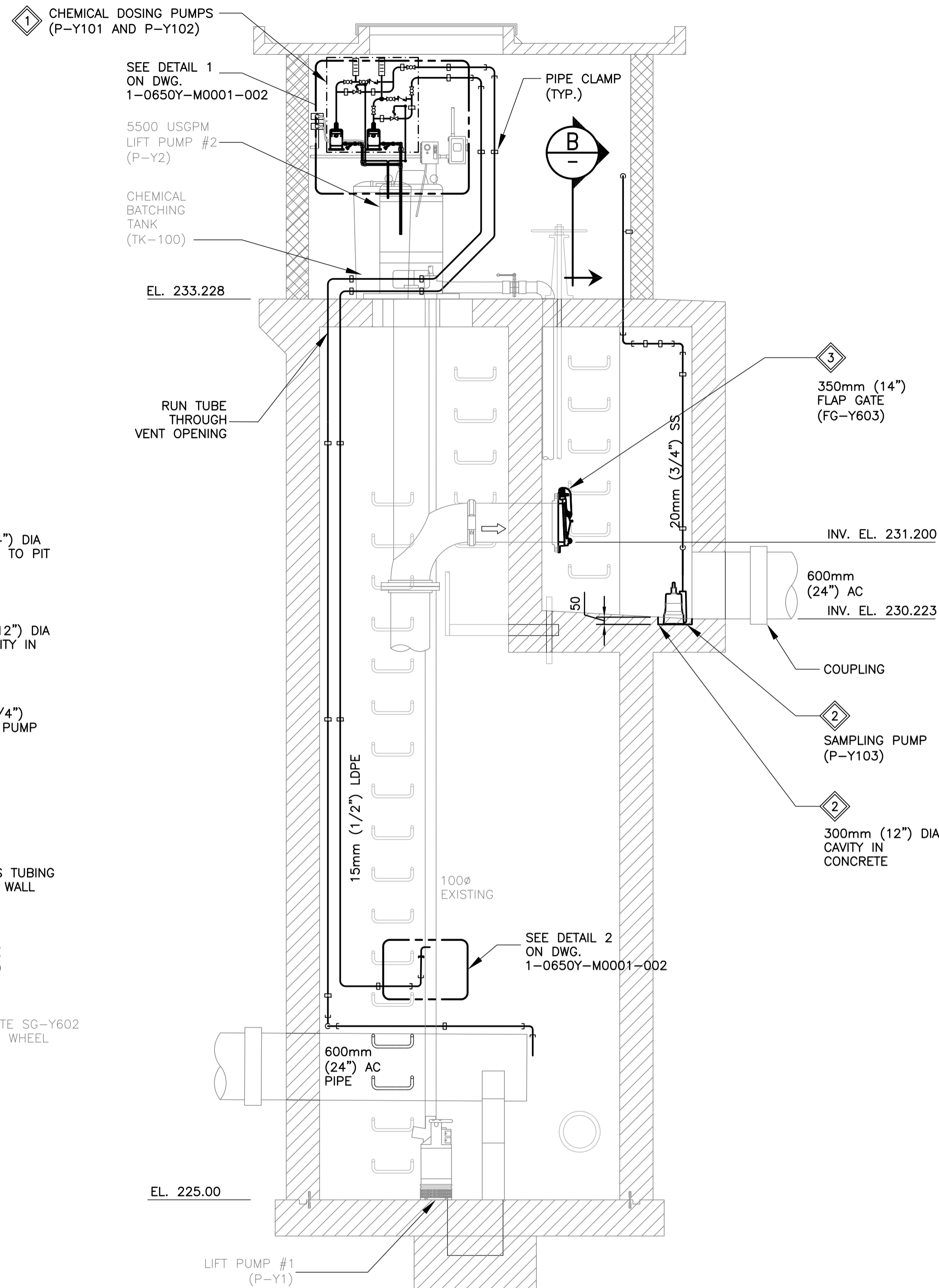


PLAN - DRAINAGE LIFT STATION
SCALE: 1:20



SECTION A-A
SCALE: 1:30

GENERAL NOTES:

- SUPPLY ALL EQUIPMENT AND MATERIALS SPECIFIED OR APPROVED EQUALS IN ACCORDANCE WITH B7.
- FIELD VERIFY ALL DIMENSIONS AND FIELD ROUTE TUBING.
- THE DE-CHLORINATION SYSTEM IS DESIGNED TO BE ABLE TO AUTOMATICALLY DECHLORINATE A MAXIMUM DRAINAGE FLOW RATE OF 23L/S AT 2PPM CHLORINE UTILIZING THE EXISTING LIFT PUMP P-Y1 AND THE NEW CHEMICAL DOSING PUMP P-Y101.
- THE DE-CHLORINATION SYSTEM IS DESIGNED TO BE ABLE TO AUTOMATICALLY DECHLORINATE A MAXIMUM DRAINAGE FLOW RATE OF 300L/S AT 2PPM CHLORINE UTILIZING THE EXISTING LIFT PUMP P-Y2 AND THE NEW CHEMICAL DOSING PUMP P-Y102.
- FOR ACCESS TO SUCTION AND DISCHARGE CHAMBERS, LIFT PUMPS P-Y1 AND P-Y2 MUST BE SHUT-OFF AND TEMPORARY DRAINAGE PUMP PROVIDED (MAX. 5-DAYS).

KEYNOTES:

- CHEMICAL DOSING SYSTEM INSTALLATION:**
 - INSTALL A NEW SUCTION / RE-CIRCULATION LINE FROM EACH NEW CHEMICAL DOSING PUMP (P-Y101 AND P-Y102) TO THE EXISTING CHEMICAL BATCHING TANK TK-Y100 AS PER THE PUMP MANUFACTURER'S INSTALLATION MANUAL.
 - THE NEW FEP TUBING ON THE DISCHARGE OF NEW CHEMICAL DOSING PUMPS P-Y102 TERMINATE INTO THE OUTLET OF THE 600MM SUCTION CHAMBER INLET PIPE (SEE SECTION A). RUN THE 12MM LDPE TUBING ALONG THE CROWN OF THE 600MM PIPE AND INTO THE INLET UTILIZING A 90° ELBOW.
- SAMPLING SYSTEM INSTALLATION:**
 - CORE A 300MM DIA X 38MM DEPTH CAVITY NEAR THE INVERT OF THE 600MM DISCHARGE CHAMBER OUTLET PIPE AS SHOWN IN SECTION A.
 - PLACE THE NEW SAMPLING PUMP P-Y103 (TSURUMI 1/4 HP F-13 WITH 3/4IN ADAPTER OR APPROVED EQUAL IN ACCORDANCE WITH B7) INTO THE NEWLY CORED CAVITY. ANCHOR THE NEW SAMPLING PUMP P-Y103 SECURELY TO THE WALL USING SUITABLE MEANS.
 - CONNECT THE POWER SUPPLY FOR THE NEW SAMPLING PUMP P-Y103 TO CCT #10 OF THE NEW PANELBOARD PNL-Y10 COMPLETE WITH ON-OFF PUSHBUTTON. SECURE THE POWER CABLE TO THE WALL USING SUITABLE MOUNTS. REFER TO 1-0650Y-E0003-001 FOR ELECTRICAL INSTALLATION DETAILS.
 - PROVIDE NEW 20MM TUBING FROM THE DISCHARGE END OF THE NEW SAMPLING PUMP P-Y103 UP TO THE DRAINAGE LIFT STATION FLOOR AS SHOWN IN SECTION A. SECURE THE TUBING WITH SUITABLE MOUNTS. PROVIDE TUBING FOR SAMPLE COLLECTION AS SHOWN ON 1-0650Y-M0001-002 SECTION B.
- FLAP GATE INSTALLATION:**
 - GRIND TO SOLID METAL (GISM) THE END OF THE 350MM DISCHARGE PIPE FROM EXISTING LIFT PUMP P-Y2. FILLET WELD A NEW 350MM NOM. ASTM A105N CS, CL150, RF. SO FLANGE.
 - BOLT ON A NEW 350MM FRESNO SERIES MODEL 50C CAST IRON FLAP GATE (FG-Y603 OR APPROVED EQUAL IN ACCORDANCE WITH B7), FLANGE MOUNTED WITH BRONZE SEALS TO ANSI 150# FLANGE WITH ASTM A193 GR88 BOLTS, ASTM A194 GR 8 HEAVY HEX NUTS AND WASHERS.
- DEMOLITION OF EXISTING CHEMICAL DOSING SYSTEM AND SAMPLING PUMP:**
 - DISCONNECT AND REMOVE THE EXISTING CHEMICAL DOSING PUMP AND ASSOCIATED MOUNTING. RETURN THE CHEMICAL DOSING PUMP TO THE CITY AND DISPOSE OF MOUNTING.
 - DISCONNECT, REMOVE, AND DISPOSE OF THE EXISTING WATER SAMPLING PUMP AND ASSOCIATED MOUNTING, TUBING, AND FITTINGS.
 - THE EXISTING CHEMICAL BATCHING TANK TK-Y100 TO REMAIN.

LEGEND:

- - - EXISTING EQUIPMENT
- NEW EQUIPMENT

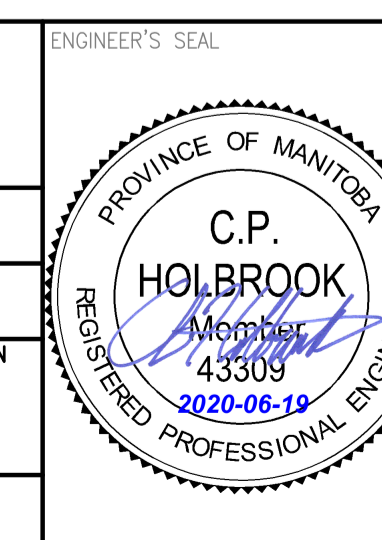
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3	1-0650Y-E0003-001	ELECTRICAL - DRAINAGE LIFT STATION - POWER PLAN AND DETAILS
2	1-0650Y-M0001-002	MECHANICAL - DRAINAGE LIFT STN - EQPT & PIPING - PLAN, SECTION & DETAILS
1	1-0650A-D0001-001	COVER SHEET
NO.	DRAWING NUMBER	REFERENCE DRAWING TITLE



B.M. ELEV.	-
DESIGNED BY:	C. HOLBROOK
CHECKED BY:	R. CHEN
DRAWN BY:	J.F. SESE
APPROVED BY:	C. HOLBROOK
SCALE:	AS NOTED
ISSUED FOR CONSTRUCTION	DATE: 2020-06-18
DATE:	2020-06-18
CONSULTANT NO.:	19-0107-005_M01
NO. REVISIONS	DATE DESIGN CHECK

KGS GROUP

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APPROVED BY: C. HOLBROOK
SCALE: AS NOTED
ISSUED FOR CONSTRUCTION
DATE: 2020-06-18
CONSULTANT NO.: 19-0107-005_M01



THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

HURST PUMPING STATION
STRUCTURAL REPAIRS AND DRAINAGE BUILDING UPGRADES
MECHANICAL
DRAINAGE LIFT STATION
EQUIPMENT AND PIPING - PLAN, SECTION AND DETAILS

CITY DRAWING NUMBER: 1-0650Y-M0001
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