NOTES:

1. WASTEWATER PUMPS WILL BE EQUIPPED WITH BEARING TEMPERATURE AND VIBRATION SENSORS (PUMP DRIVE END AND MOTOR NON-DRIVE END BEARINGS ONLY).
2. REDUCING ELBOW SUPPLIED BY THE PUMP MANUFACTURER
3. SUMP PUMP SHALL BE OPERATED WITH A VERTICAL MECHANICAL FLOAT SWITCH (VMF).
4. LEVELS ARE RELATIVE TO THE WET WELL INVERT ELEVATION.
5. PUMP HAS MOTOR (NON-DRIVE END) BEARING AND PUMP (DRIVE END) BEARING VIBRATION LOCKOUTS WIRED INTO THE READY CIRCUIT. THE VIBRATION LOCKOUTS ARE DISABLED AT THIS TIME.

TYPE CLARIFICATION LEGEND:

HH – HIGH HIGH ALARM
H – HIGH ALARM
L – LOW ALARM

NO.	DRAWING NUMBER	REFERENCE DRAWING TITLE
10		
9		
8		
7		
6		
5		
4		
3		
2		
1	1-0162L-P0001-001	PROCESS AND INSTRUMENTATION DIAGRAM – SHEET 1

REFERENCE DRAWINGS

ENGINEERS GEOSCIENTISTS MANITOBA
Certificate of Authorization
KGS Group
No. 245

B.M.
ELEV.

NO.	REVISIONS	DATE (YYYY-MM-DD)	BY
0	ISSUED FOR CONSTRUCTION	2023 03 24	

KGS GROUP

DESIGNED BY	K. RADTKE	CHECKED BY	
DRAWN BY	R. PERALTA	APPROVED BY	
SCALE: HORIZONTAL / VERTICAL	AS SHOWN	RELEASED FOR CONSTRUCTION	
DATE	2022 07 19	DATE	

PLOT DATE: 2023 03 24

ENGINEER'S SEAL
PROVINCE OF MANITOBA
J.V. SMITH
2023-03-24
REGISTERED PROFESSIONAL ENGINEER

CONSULTANT DRAWING NUMBER 22-0107-004_P01.03

BID OPPORTUNITY: 864-2022

Winnipeg

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT
ENGINEERING DIVISION

METCALFE LIFT PUMPING STATION
2022 UPGRADES
PROCESS
WASTEWATER PUMPING
PROCESS AND INSTRUMENTATION DIAGRAM

CITY DRAWING NUMBER 1-0162L-P0001-003

FILE PATH: P:\Projects\2022\22-0107-004\Dwg\Process\P&ID\
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