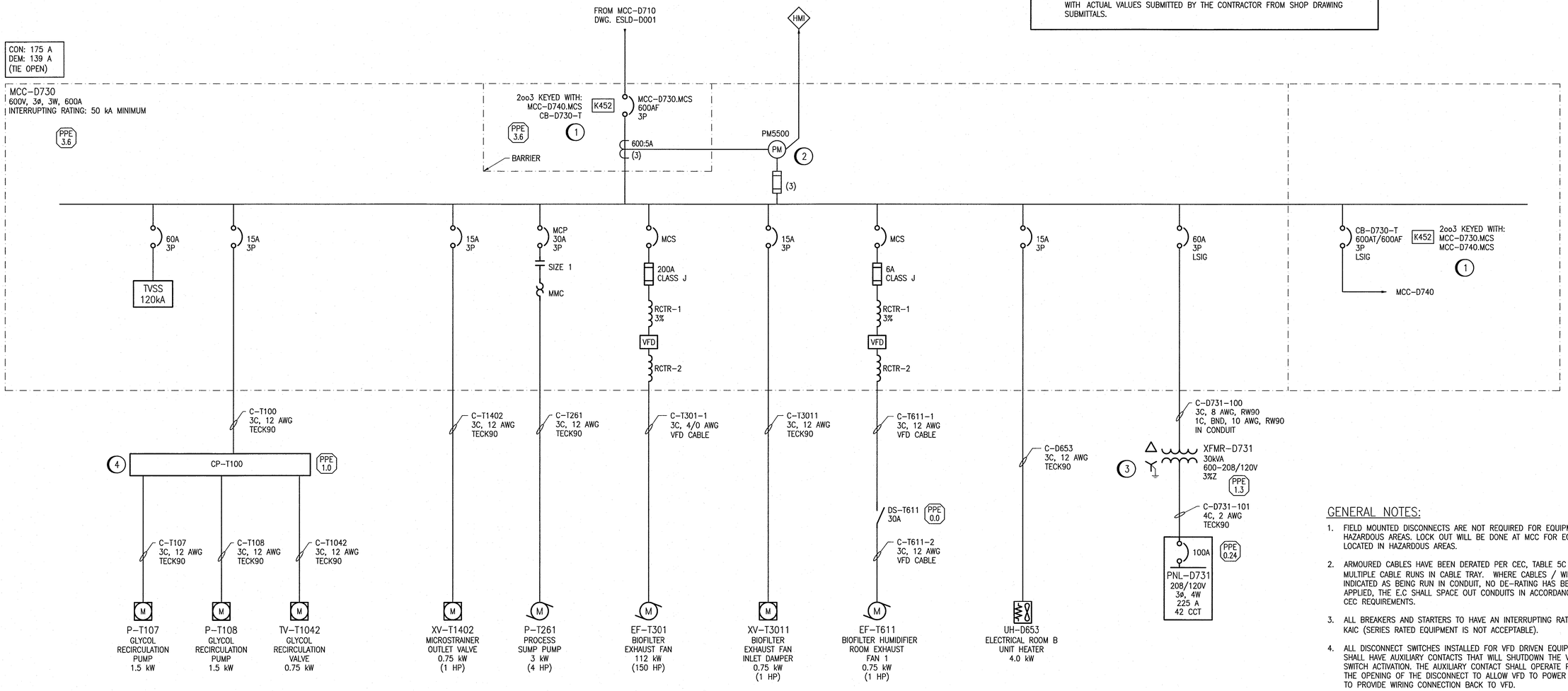
A1 SIZE – 594mm x 841mm

DISCLAIMER NOTES:

1. ARC FLASH VALUES ARE PRELIMINARY AND WILL BE FINALIZED AT A LATER DATE.
2. IMPEDANCE %Z FOR TRANSFORMER ARE ESTIMATED AND WILL BE CORRECTED WITH ACTUAL VALUES SUBMITTED BY THE CONTRACTOR FROM SHOP DRAWING SUBMITTALS.



GENERAL NOTES:

1. FIELD MOUNTED DISCONNECTS ARE NOT REQUIRED FOR EQUIPMENT HAZARDOUS AREAS. LOCK OUT WILL BE DONE AT MCC FOR EQUIPMENT LOCATED IN HAZARDOUS AREAS.
2. ARMOURED CABLES HAVE BEEN DERATED PER CEC, TABLE 5C FOR MULTIPLE CABLE RUNS IN CABLE TRAY. WHERE CABLES / WIRES ARE INDICATED AS BEING RUN IN CONDUIT, NO DE-RATING HAS BEEN APPLIED, THE E.C SHALL SPACE OUT CONDUITS IN ACCORDANCE WITH CEC REQUIREMENTS.
3. ALL BREAKERS AND STARTERS TO HAVE AN INTERRUPTING RATING OF 50 KAIC (SERIES RATED EQUIPMENT IS NOT ACCEPTABLE).
4. ALL DISCONNECT SWITCHES INSTALLED FOR VFD DRIVEN EQUIPMENT SHALL HAVE AUXILIARY CONTACTS THAT WILL SHUTDOWN THE VFD UPON SWITCH ACTIVATION. THE AUXILIARY CONTACT SHALL OPERATE PRIOR TO THE OPENING OF THE DISCONNECT TO ALLOW VFD TO POWER DOWN. EC TO PROVIDE WIRING CONNECTION BACK TO VFD.
5. MCC-D730 IS TO BE LOCATED IN ELECTRICAL ROOM B (EGAD-D002) IN THE FERMENTER AREA AND IS TO FEED LOADS IN THE BIOFILTER AREA. REFER TO EGAD-T001 AND EGAD-T002.

SPECIFIC NOTES

1. PROVIDE KIRK KEY INTERLOCK BETWEEN MAIN MCC BREAKERS AND TIE BREAKER TO PREVENT CLOSING OF TIE BREAKER WHEN 2 SEPARATE UTILITY SOURCES ARE FEEDING THE MCCs.
2. PROVIDE POWER TO POWER METERS FROM PNL-6S, CCT. 26. REFER TO DWG AGAD-S001 FOR LOCATION OF PNL-6S.
3. PROVIDE SEPARATE 6 AWG RW90, GREEN INSULATED CONDUCTOR (RUN IN CONDUIT) FROM THE TRANSFORMER XO TERMINAL TO THE SYSTEM GROUND.
4. PACKAGED UNIT TO INCLUDE MOTOR STARTERS / VFDs, OVERCURRENT, OVERLOAD PROTECTION, CONTROLS FOR ALL MOTORS. CONTRACTOR TO FIELD WIRE / CONNECT LOADS TO THE CONTROL PANEL. THIS INCLUDES, BUT IS NOT LIMITED TO MOTORS, MOTORIZED VALVES, SOLENOID VALVES, INSTRUMENTATION, ETC. COORDINATE REQUIREMENTS WITH THE EQUIPMENT VENDOR, AND INCLUDE ALL CABLING AND CONNECTIONS.

REFERENCE DRAWINGS	DESCRIPTION
1-0102-ECBD-D003	MCC-D730 & MCC-D740 LAYOUT AND SCHEDULE
1-0102-EAAA-A001	ELECTRICAL, LEGEND AND DETAILS

APEGM Certificate of Authorization
SNC-Lavalin Inc.
No. 4489

NO.	REVISIONS	DATE	DESIGN	CHECK
00	ISSUED FOR CONSTRUCTION – 976-2016	2017/04/05	VVE	DEB

CH2MHILL. SNC·LAVALIN KGS GROUP

DESIGNED BY: V. ELIMBAN	CHECKED BY: E. RYCZKOWSKI
DRAWN BY: MJ. PERSSON	APPROVED BY: D. BECKER
SCALE: NTS	ISSUED FOR CONSTRUCTION BY: J. SHUMKA
DATE: 2016/06/16	DATE: 2017/04/05
CONSULTANT NO.: 474248	

ENGINEER'S SEAL
PROVINCE OF MANITOBA
D.E. BECKER
Member 23646
REGISTERED PROFESSIONAL ENGINEER
April 5/2017

Winnipeg
THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

SOUTH END WATER POLLUTION CONTROL CENTRE
SEWPCC UPGRADING/EXPANSION PROJECT
ELECTRICAL – SINGLE LINE DIAGRAM
FERMENTERS/THICKENERS
MOTOR CONTROL CENTRE MCC-D730

CITY DRAWING NUMBER	SHEET	REV.	SIZE
1-0102-ESLD-D003	001	00	A1

PLOT DATE: Mar 28, 2017 – 8:10am
FILE NAME: 1-0102-ESLD-D003.dwg

LAST SAVE: 2017/03/28 – 8:10am
PATH: M:\614099\4ENG\47ELE\DD – General DWG\REV\2017-04-05 Issued for Construction – 976-2016\D Fermenters-thickeners\DWG\1-0102-ESLD-D003.dwg