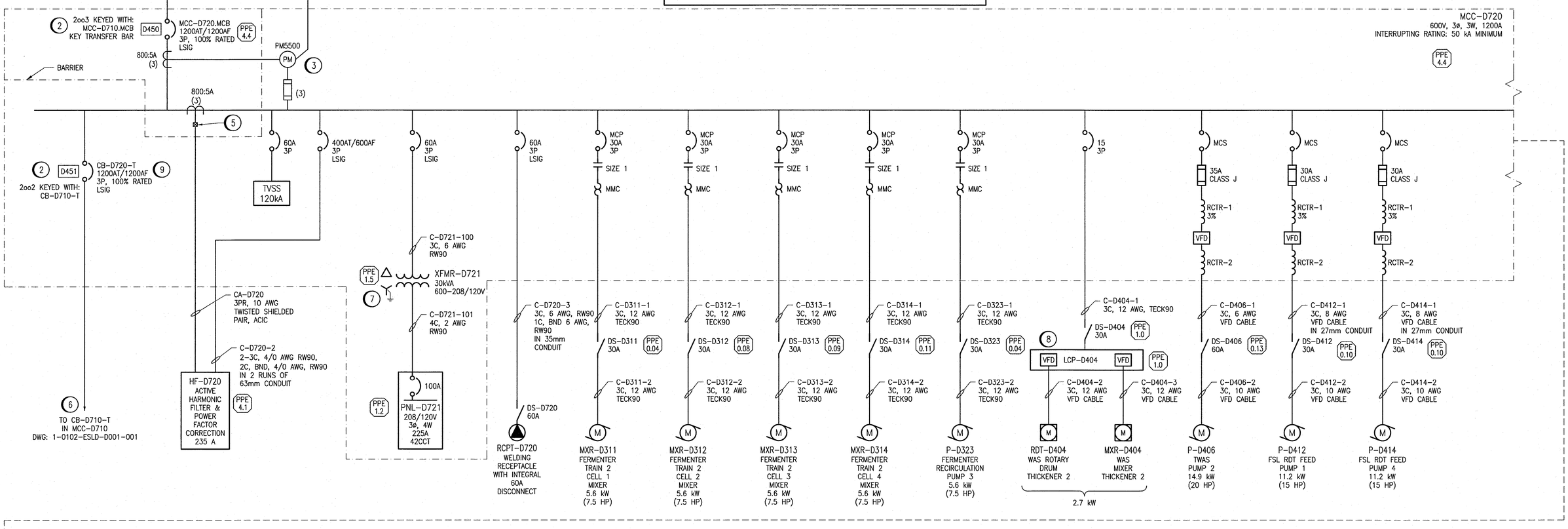
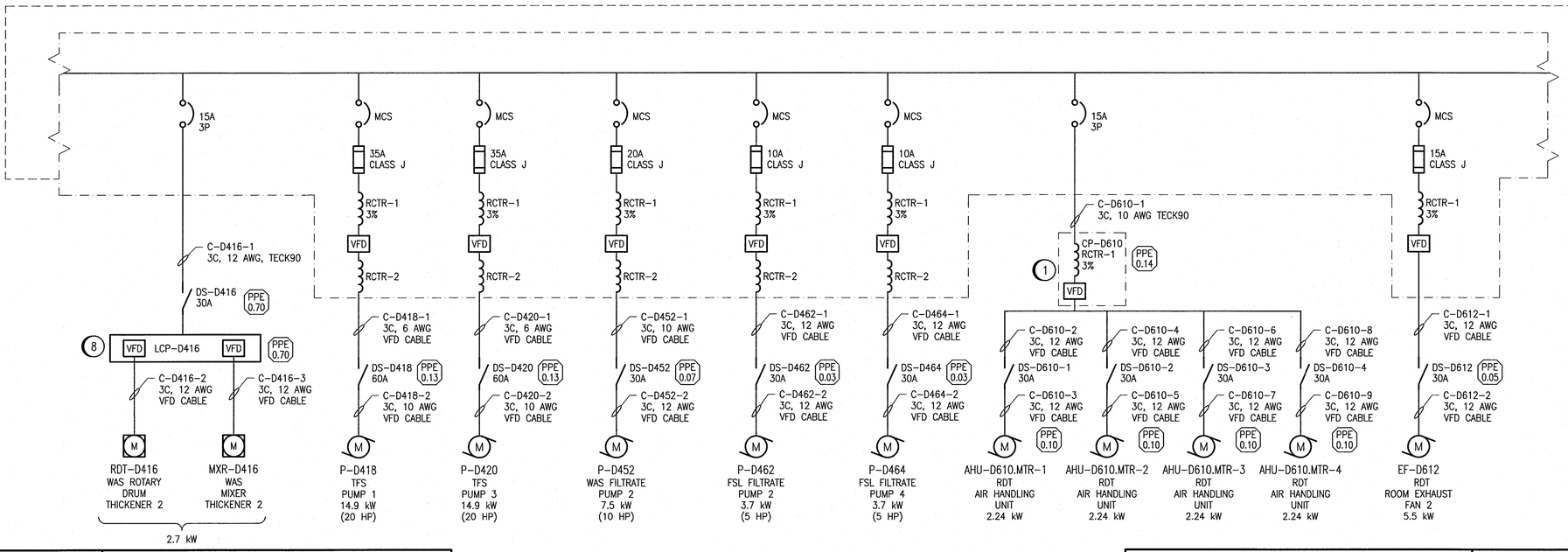
A1 SIZE – 594mm x 841mm

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. REFER TO DRAWING 1-0102-ESLD-D001-001 FOR GENERAL NOTES.

SPECIFIC NOTES

1. VFD TO BE SUPPLIED BY THE AIR HANDLING UNIT VENDOR AS PART OF A PACKAGE SYSTEM. VFD TO BE IN A SEPERATE ENCLOSURE, WALL MOUNTED. E.C TO WIRE AND CONNECT SYSTEM COMPLETE WITH ALL INTERLOCKS AND CONTROLS.
2. PROVIDE KIRK KEY INTERLOCKS BETWEEN MAIN MCC BREAKERS AND TIE BREAKERS TO PREVENT CLOSING OF TIE BREAKERS WHEN 2 SEPARATE UTILITY SOURCES ARE FEEDING THE MCCs.
3. PROVIDE POWER TO POWER METERS FROM PNL-6S, CCT. 26. REFER TO AGAD-S001.
4. PERFORM CUSTOM MODIFICATION AND EXTENSION OF EXISTING COPPER BUSWORK, AND BUSWORK ENCLOSURES. CUT, MODIFY, AND EXTEND WESTINGHOUSE LoZ 1200A BUSWORK TO CONNECT THE BUSWORK INTO THE NEW MCC. PROVIDE NEW 3ϕ, COPPER, SCHNEIDER I-LINE BUSWAY AND BUSWAY TRANSITIONS, FOR ENTRY INTO MCC.
5. PROVIDE SHORTING TERMINAL BLOCKS FOR CURRENT TRANSFORMER CONNECTION TO ACTIVE HARMONIC FILTER.
6. CONDUIT / WIRING INTO TIE BREAKERS SHALL BE SIDE ENTRY INTO THE BOTTOM TIE BREAKER CELL.
7. PROVIDE SEPARATE 6 AWG RW90, GREEN INSULATED CONDUCTOR (RUN IN CONDUIT) FROM THE TRANSFORMER XO TERMINAL TO THE SYSTEM GROUND.
8. WIRE AND CONNECT SYSTEM IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. REVIEW REQUIREMENTS ON SHOPDRAWINGS.
9. SET THE LONG TIME TRIP TO 0.7 X 1200AT = 840AT.

REFERENCE DRAWINGS	DESCRIPTION
1-0102-ECBD-D002	ELECTRICAL, MCC-D720 LAYOUT AND SCHEDULE
1-0102-EAAA-A001	ELECTRICAL, LEGEND AND DETAILS

MAXIMUM LOAD ESTIMATE

	CONNECTED LOAD (A)	DEMAND FACTOR	DEMAND LOAD (A)
LIGHTING	0	1	0
HVAC	42	0.8	33.6
MISC.	15	0.5	7.5
PROCESS	381	0.8	305
TOTAL	438		346

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

NO.	REVISIONS	DATE	DESIGN	CHECK
00	ISSUED FOR CONSTRUCTION – 976-2016	2017/04/05	WE	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: 2014/02/16
DATE: 2017/04/05
CONSULTANT NO.: 474248

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

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-D720

CITY DRAWING NUMBER	SHEET	REV.	SIZE
1-0102-ESLD-D002	001	00	A1

LAST SAVE: 2017/03/28 – 8:10am
PATH: M:\614099\ENG\4TELE\DD – General DWG\REV\2017-04-05 Issued for Construction – 976-2016\D Fermenters-thickeners\DWG\1-0102-ESLD-D002-001.dwg

PLOT DATE: Mar 28, 2017 – 8:10am
FILE NAME:1-0102-ESLD-D002-001.dwg