

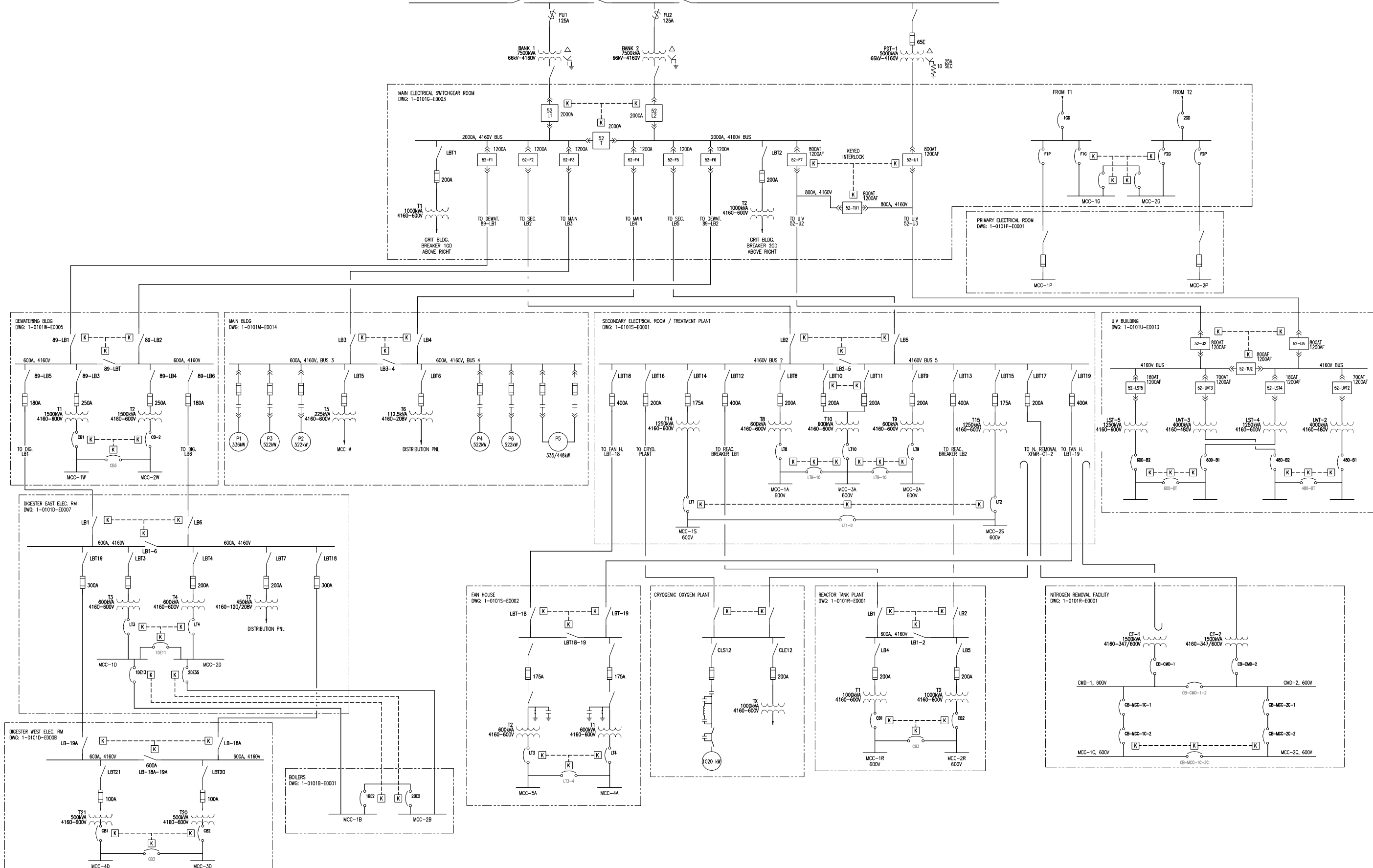
APPENDIX C – DRAWINGS

The following drawings are included

Item #	Drawing Number	Drawing Title
1.	1-0101A-E0003-001-03	NEWPCC Switching Diagram 4160 Electrical Distribution.
2.	1-0101D-E0007-001-01	NEWPCC Digesters Single Line Diagram East Electrical Room Distribution.
3.	1-0101G-E0003-001-07	NEWPCC Pre-Aeration & Grit Building Single Line Diagram 4160V Electrical Distribution.
4.	1-0101S-E0001-001-03	NEWPCC Secondary Clarifiers Single Line Diagram Electrical Distribution Blower Building Electrical Room.
5.	1-0101U-E0001-001-06	NEWPCC Secondary Effluent UV Disinfection Facility Electrical Single Line Diagram.
6.	1-0101U-E0013-001-01	NEWPCC UV Disinfection Single Line Diagram 4160V Electrical distribution.
7.	1017-C-7401	Metro NE Sewage Station Ground Plan and Ground Grid

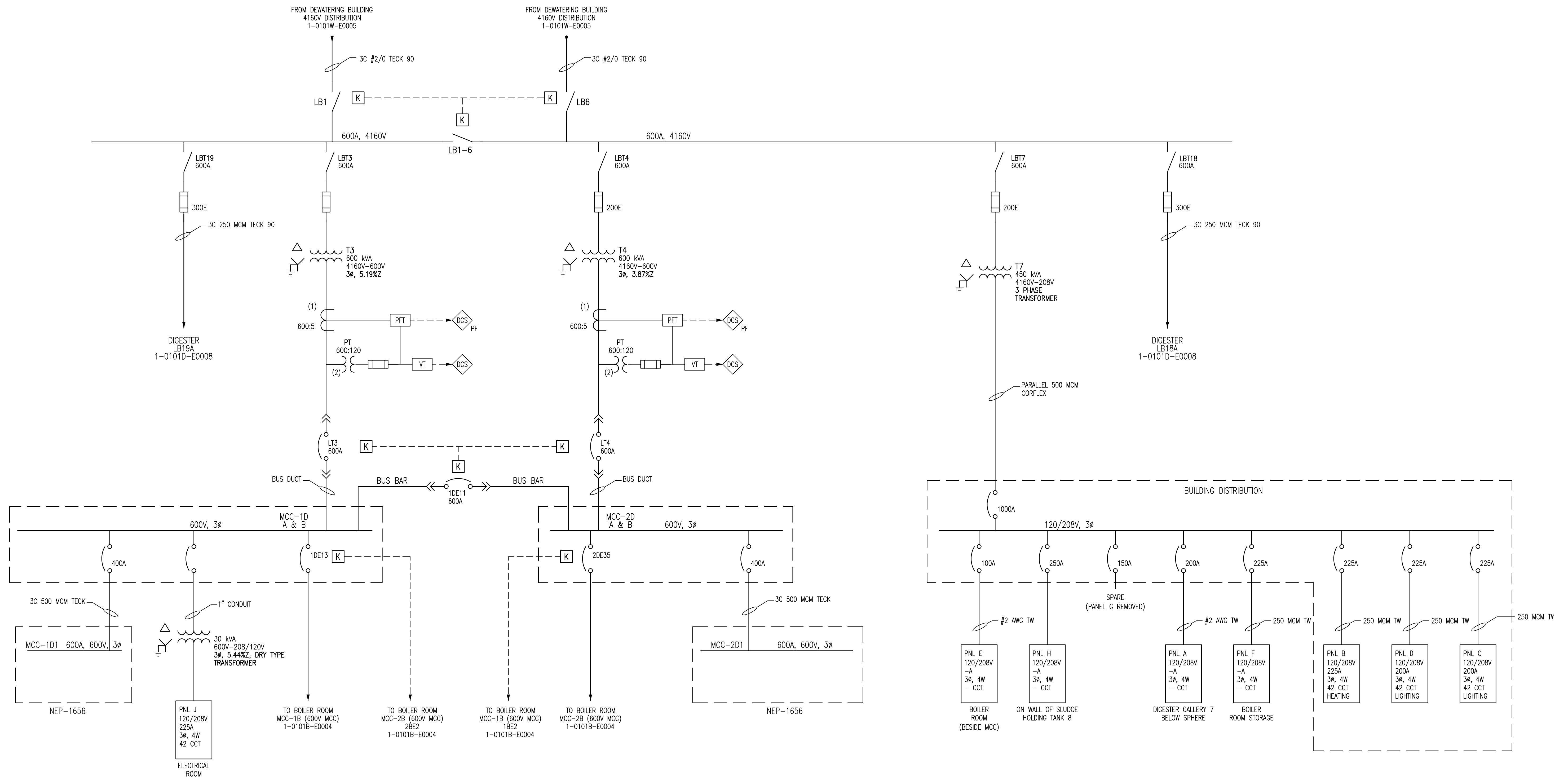
AS SHOWN - 84mm x 118mm

66 kV O/H LINE FROM WEST KILDONAN STORIE RD. R-839 R-838 R-837 66 kV O/H LINE WEST KILDONAN FERNBANK R-84



NOTES:
 1. THIS DRAWING SUPERCEDES DRAWING NEP-2052.
 2. THIS DRAWING WAS CREATED BASED UPON EXISTING DOCUMENTATION, AND A DETAILED SITE VERIFICATION WAS NOT PERFORMED AT THE TIME OF DRAWING CREATION. THE CITY OF WINNIPEG IS RESPONSIBLE FOR VERIFICATION OF THE ACCURACY OF THIS DRAWING.

DESIGNED BY: DEB DRAWN BY: NTS CHECKED BY: [] APPROVED BY: []		RELEASED FOR CONSTRUCTION BY: [] DATE: 2006/07/07	
PROJECT: NORTH END WATER POLLUTION CONTROL CENTRE SHEET: 001		DRAWING NUMBER: 1-0101A-E0003 REV: 03 SIZE: A0	



NOTES:
 1. ALL CONDUIT IS GENERALLY RIGID ALUMINUM, UNLESS OTHERWISE NOTED.

1-0101A-E0003	4160V ELECTRICAL DISTRIBUTION SWITCHING DIAGRAM
1-0101A-E0004	ELECTRICAL SINGLE LINE DIAGRAM LEGEND & DETAILS
DRAWING NUMBER	REFERENCE DRAWINGS

B.M. ELEV.	FIELD BOOK #:	SNC-LAVALIN INC. 148 Nature Park Way Winnipeg, MB, Canada R3P 0X7 204-786-8080		ENGINEER'S SEAL
POSTED TO LBIS		DESIGNED BY	EXISTING	CHECKED BY
		DRAWN BY	DEB	APPROVED BY
01	REVISED DRAWING NUMBER; WAS 1-0101D-F-E0001	2008/03/03	EFB	HOR. SCALE
00	ISSUED FOR CITY USE	2007/07/05	CJR	NTS
PB	UPDATED 120/208V PANEL INFORMATION	2007/04/24	EFB	RELEASED FOR CONSTRUCTION
PA	ISSUED FOR REVIEW	2007/02/19	CJR	DATE
NO. REVISIONS	DATE	BY	DATE	DATE
			2006/07/07	
			FILENAME: 1-0101D-E0007-01-01D.dwg	

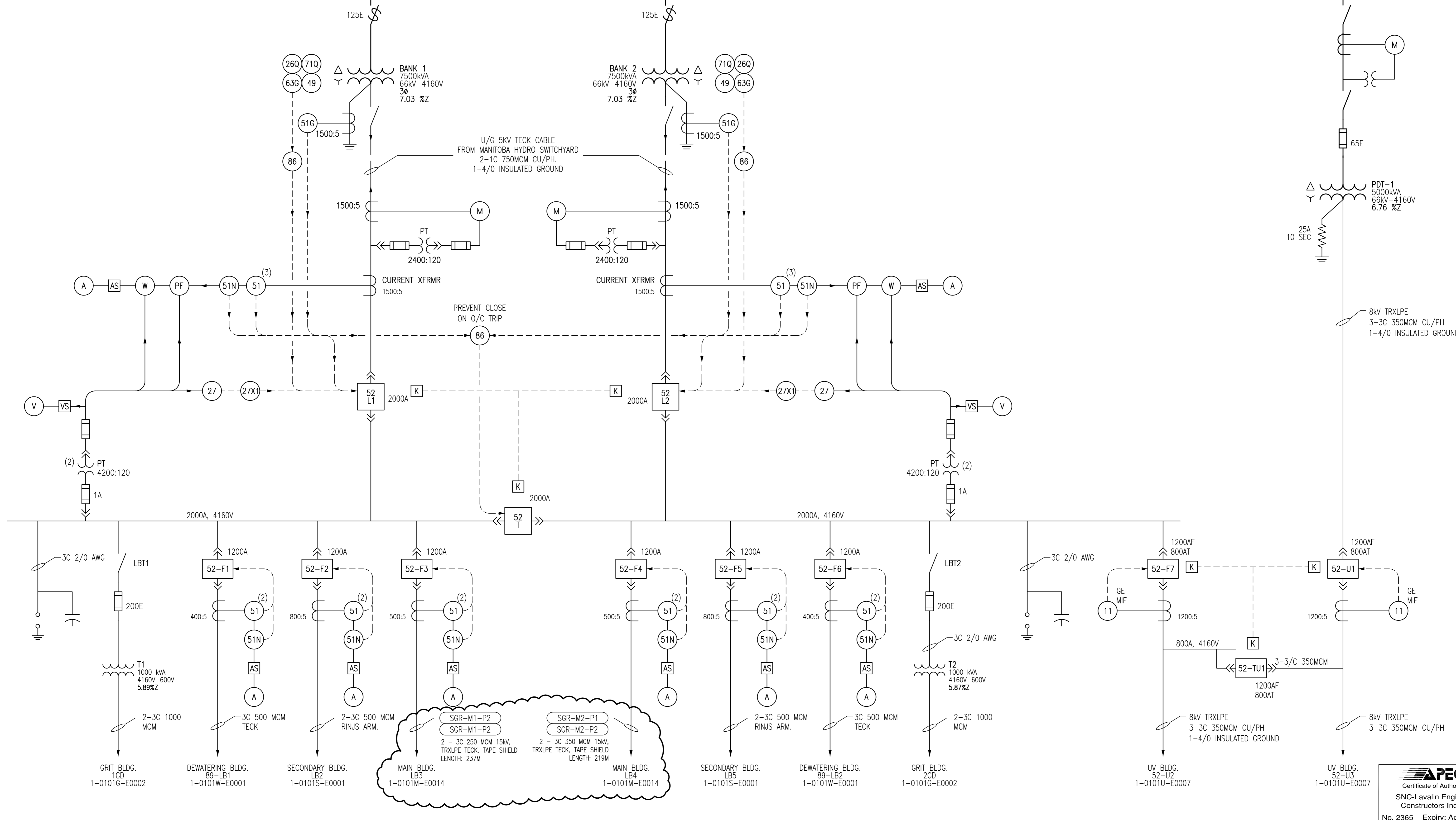
THE CITY OF WINNIPEG
 WATER AND WASTE DEPARTMENT

NORTH END WATER POLLUTION CONTROL CENTRE
 DIGESTERS
 SINGLE LINE DIAGRAM
 EAST ELECTRICAL ROOM DISTRIBUTION

CITY DRAWING NUMBER	SHEET	REV.	SIZE
1-0101D-E0007	001	01	D

WEST KILDONAN
STORIE RD. R-83
66KV
O/H LINE

WEST KILDONAN
FERNBANK R-84
66KV
O/H LINE



NOTES:
1. THE INSTANTANEOUS UNITS ARE DISABLED FOR ALL RELAYS ASSOCIATED WITH BREAKERS 51-L1 AND 52-L2.

LAST SAVE: 2012/04/02 - 11:58am
PATH: R:\DRAWINGS\WATER POLLUTION CONTROL CENTRE\MEP\ALL\CAD\1-0101G-E0003-001-07D.dwg

1-0101A-E0001	4160V ELECTRICAL DISTRIBUTION SWITCHING DIAGRAM
1-0101A-E0001	ELECTRICAL SINGLE LINE DIAGRAM LEGEND & DETAILS
DRAWING NUMBER	REFERENCE DRAWINGS

B.M. ELEV.		FIELD BOOK #:	
07	CORRECTING REF DRAWINGS	2012/04/02	SW
06	AS BUILT	2007/11/22	AEO
05	ISSUED FOR CONSTRUCTION	2007/08/16	YM
04	ADDED SURGE ARRESTORS AND CAPACITORS	2007/07/06	CJR
03	ISSUED FOR TENDER	2007/06/22	YM
02	ISSUED FOR REVIEW	2007/05/22	AO
01	ISSUED FOR REVIEW	2007/02/19	CJR
00	ISSUED FOR TENDER	2006/07/17	CJR
NO.	REVISIONS	DATE	BY

SNC • LAVALIN Engineers & Constructors		SNC • LAVALIN 148 Nature Park Way Winnipeg, Manitoba Canada R2P 0X7	
DESIGNED BY	EXISTING	CHECKED BY	CJR
DRAWN BY	DS	APPROVED BY	C. REIMER
HOR. SCALE	NTS	RELEASED FOR CONSTRUCTION	
VERTICAL		DATE	2006/07/07
DATE	2006/07/07	DATE	
FILENAME:	1-0101G-E0003-001-07D.dwg		

ENGINEER'S SEAL

ORIGINAL DRAWING SEALED BY:
C. J. REIMER

2007/12/14
REV. 06

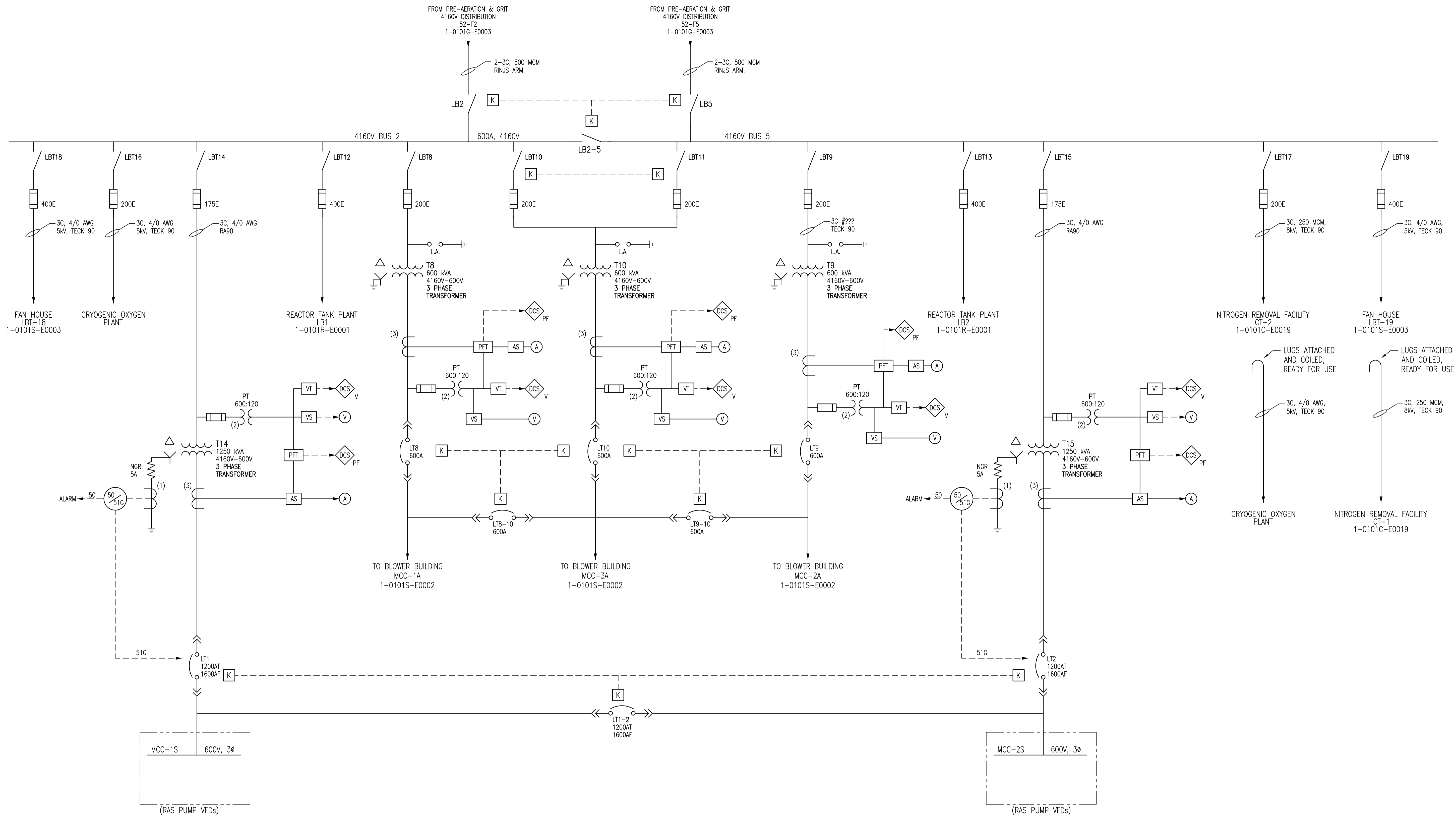
CLOUDED CHANGES ONLY

THE CITY OF WINNIPEG
WATER AND WASTE DEPARTMENT

NORTH END WATER POLLUTION CONTROL CENTRE
PRE-AERATION & GRIT BUILDING
SINGLE LINE DIAGRAM
4160V ELECTRICAL DISTRIBUTION

CITY DRAWING NUMBER	SHEET	REV.	SIZE
1-0101G-E0003	001	07	D





LAST SAVE: 2010/09/14 - 9:18am
 PATH: M:\503394\ENGR\47ELE\DD - General DWG\REV\2010-09-14 Issued for City Use (2007 AutoCAD Format)\1-0101S-E001-01-03.dwg

1-0101G-E0003	GRIT BUILDING 4160V SINGLE LINE
1-0101A-E0003	4160V ELECTRICAL DISTRIBUTION SWITCHING DIAGRAM
1-0101A-E0004	ELECTRICAL SINGLE LINE DIAGRAM LEGEND & DETAILS
DRAWING NUMBER	REFERENCE DRAWINGS

NO.	REVISIONS	DATE	DESIGN	CHECK
03	ADDED NITROGEN REMOVAL FEEDERS	2010/09/01	-	CJR
02	ISSUED FOR REVIEW	2010/07/14	-	CJR
01	REVISED DRAWING NUMBER; WAS 1-0101S-F-E000	2008/03/03	-	EFB
PA	ISSUED FOR REVIEW	2007/02/19	-	CJR

SNC-LAVALIN INC.
 148 Nature Park Way
 Winnipeg, MB, Canada R3P 0X7
 204-786-8000

DESIGNED BY: EXISTING
 CHECKED BY: CJR

DRAWN BY: DEB
 APPROVED BY:

SCALE: NTS
 RELEASED FOR CONSTRUCTION

DATE: 2006/07/07
 BY:

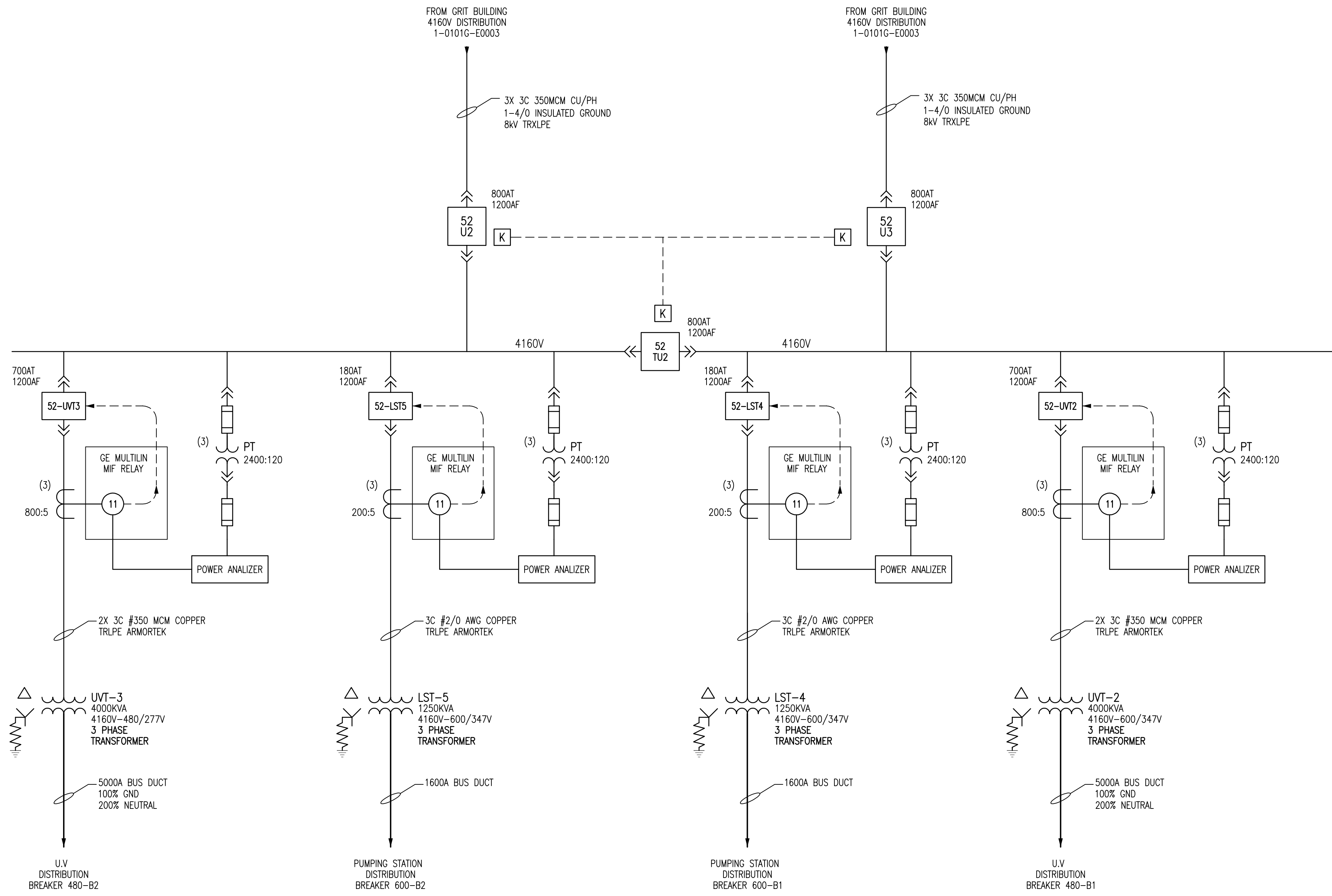
CONSULTANT NO.:

ENGINEER'S SEAL

THE CITY OF WINNIPEG
 WATER AND WASTE DEPARTMENT

NORTH END WATER POLLUTION CONTROL CENTRE
 SECONDARY CLARIFIERS
 SINGLE LINE DIAGRAM
 ELECTRICAL DISTRIBUTION
 BLOWER BUILDING ELECTRICAL ROOM

CITY DRAWING NUMBER: 1-0101S-E0001
 SHEET: 001
 REV: 03
 SIZE: A1



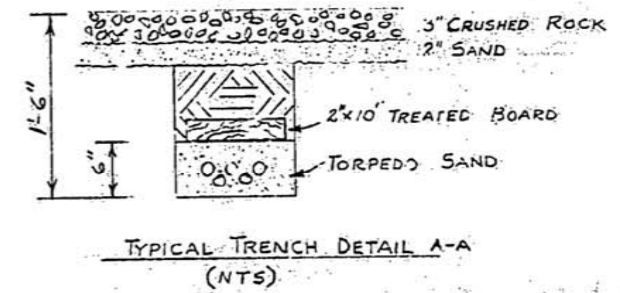
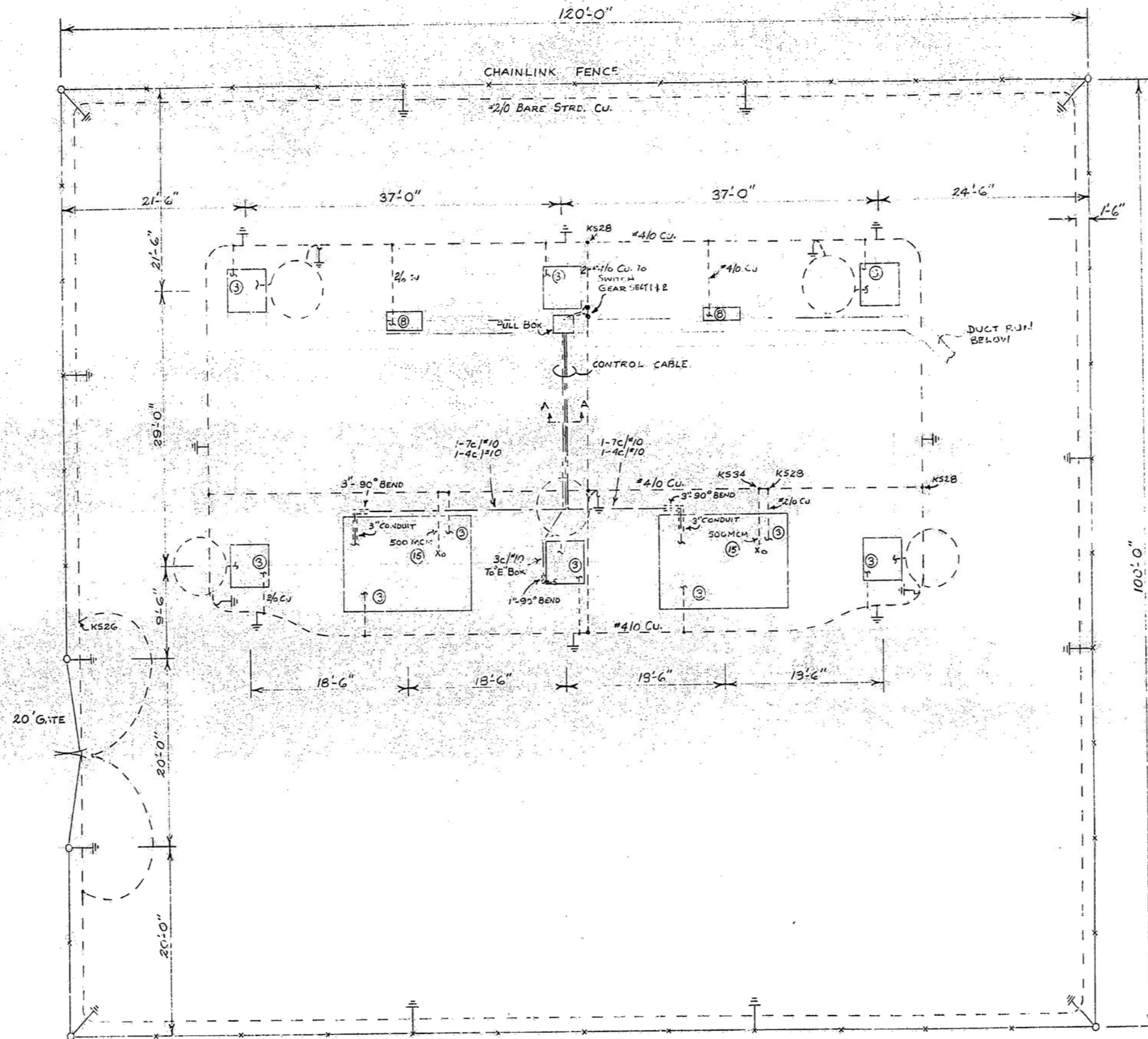
66303D-CE2.01 1-0101G-E0003 1-0101A-E0004	U.V DISINFECTATION ELECTRICAL SINGLE LINE DIAGRAM PRE-AERATION & GRIT BLDG SINGLE LINE DIAGRAM 4160 ELEC. DIST. ELECTRICAL SINGLE LINE DIAGRAM LEGEND & DETAILS
DRAWING NUMBER	REFERENCE DRAWINGS

B.M. ELEV.	FIELD BOOK #:			SNC-LAVALIN INC. 148 Nature Park Way Winnipeg, MB, Canada R3P 0X7 204-786-8080		ENGINEER'S SEAL
POSTED TO LBIS		DESIGNED BY	EXISTING	CHECKED BY	CJR	
		DRAWN BY	DEB	APPROVED BY		
01	REVISED DRAWING NUMBER; WAS 1-0101U-F-E0007	2008/03/03	EFB	HOR. SCALE	NTS	RELEASED FOR CONSTRUCTION
00	ISSUED FOR CITY USE	2007/07/05	CJR	VERTICAL		
PA	ISSUED FOR REVIEW	2007/02/19	CJR	DATE	2006/07/07	DATE
NO. REVISIONS	DATE	BY	FILENAME: 1-0101U-E0013-001-01D.dwg			

THE CITY OF WINNIPEG
 WATER AND WASTE DEPARTMENT

NORTH END WATER POLLUTION CONTROL CENTRE
 UV DISINFECTATION
 SINGLE LINE DIAGRAM
 4160V ELECTRICAL DISTRIBUTION

CITY DRAWING NUMBER	SHEET	REV.	SIZE
1-0101U-E0013	001	01	D



REFERENCE DRAWINGS

FENCE GROUNDING DETAILS	1017-C-7401 SHEET 2
SWITCH & STEEL GROUNDING DETAILS	" SHEET 3
POTHEAD SUPPORT & CONTROL CABLE BOX GROUNDING DETAILS	3035-D-2617

LEGEND
 () NUMBER ENCLOSED INDICATES FEET OF CONDUCTOR ABOVE GRADE
 - - - - - INDICATES CONTROL CABLES
 - - - - - INDICATES AC SUPPLY FOR STATION LIGHTS.

DRAWN FOR W.O.#17624

FEB 77	1	W.O. 46714. GROUNDING D.C.P.'S	TS	<i>[Signature]</i>	NOTED	MANITOBA HYDRO ENGINEERING DIVISION METRO. NE. SEWAGE STATION GROUND PLAN & GROUND GRID
78-10-25	2	W.O. 19307 CANCELS W.O. 46714.	TS	<i>[Signature]</i>	CIVIL	
					ELECTRICAL	
					MECHANICAL	
					CONSTRUCTION	
					DISTRIBUTION	
					CHIEF DESIGN	
					DIRECTOR	
					APPROVED	
DATE	No.	REVISIONS	BY	APP.		DATE: OCT/69 SCALE: 1=10 DRAWN: HD CHECKED: <i>[Signature]</i> 1017-C-7401 SHEET 1 OF 3 SHEETS