

## LEGEND:

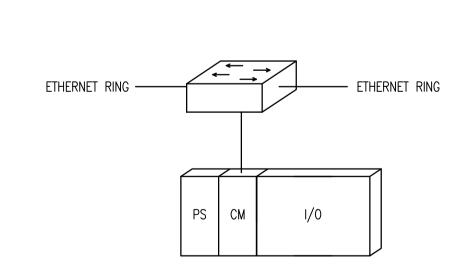
CM COMMUNICATION MODULE
CPU PROGRAMMABLE CONTROLLER
CENTRAL PROCESSING UNIT

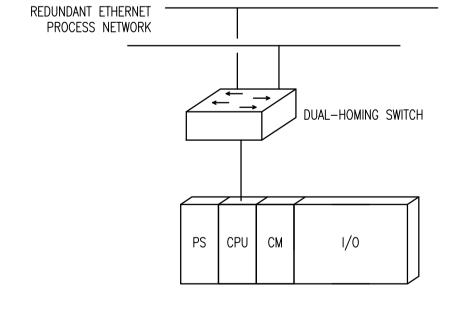
FBUS FIELDBUS
INST INSTRUMENT
MS MOTOR STARTER
NETW NETWORK
PS POWER SUPPLY

VFD VARIABLE FREQUENCY DRIVE

## I/O REQUIREMENTS

NODE	DI-120VAC	DI-24VDC	DO-24VDC	Al 4-20mA	AI HART	AO 4-20mA	AO HART	NETW MS	NETW VFD	FBUS
LOCAL I/O		32	16	16		8				
RIO NODE 1		16		8						
NETWORK								8	4	
FIELDBUS										





DETAIL 1 - ALTERNATE REMOTE I/O NETWORK CONNECTION

<u>DETAIL 2 - ALTERNATE PROCESS NETWORK CONNECTION</u>

## NOTES:

- THE CONFIGURATION SHOWN REPRESENTS THE GENERAL REQUIREMENTS FOR THE SYSTEM ARCHITECTURE. THE ACTUAL CONFIGURATION WILL VARY SLIGHTLY BASED UPON THE SPECIFIC VENDOR PROPOSAL.
- THE INTELLIGENT MCCS MUST BE CAPABLE OF COMMUNICATION WITH MULTIPLE PLC SYSTEMS SIMULTANEOUSLY.
- COMMUNICATION MODULES WITH INTEGRATED ETHERNET SWITCHES SHOWN. IF COMMUNICATION MODULES DO NOT HAVE INTEGRATED SWITCHES, PROVIDE ADDITIONAL EHTERNET SWITCHES AS SHOWN IN DETAIL 1.
- 4 ALTERNATELY, A DUAL-RING SWITCH MAY BE UTILIZIED FOR CONNECTION TO THE PROCESS NETWORK, AS SHOWN IN DETAIL 2.

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

					SNC+LAVALIN	SNC-LAVALIN INC.  148 Nature Park Way Winnipeg, MB, Canada R3P 0X7 204-786-8080	ENGINEER'S SEAL
					DESIGNED BY: C. REIMER	CHECKED BY: B. CLEVEN	<u>PRELIMINARY</u>
		DRAWN BY:			APPROVED BY:  C. REIMER	NOT TO BE USED FOR CONSTRUCTION	
			NIS BY:		RELEASED FOR CONSTRUCTION BY:		
	ICCUED FOR TENDER	2017 /10 /70	O ID		DATE: 2013/09/23	DATE:	
 00 NO.	ISSUED FOR TENDER REVISIONS	2013/10/30 DATE	CJR DESIGN	BJC CHECK	CONSULTANT NO.: 612620-	-0004-40DD-0006	

	Winnipeg	THE CITY OF WINNIPE WATER AND WASTE DEPARTMENT
,	wininpeg	
	la	TENNATED TOEATHERNY OVOTER

WASTEWATER TREATMENT SYSTEM

SYSTEM ARCHITECTURE
PROGRAMABLE CONTROLLER SYSTEM 3

CITY DRAWING NUMBER SHEET REV. SIZE OO1 OO A1