•	7007	
•)
1	5	7
3	Ē	Š
		Ì
ı	i	j
		į

	INSTRUMENT AND DEVICE IDENTIFICATION TABLE						
	FIRST-LETTER	₹	SUCCEEDING-LETTERS				
	MEASURED OR INITIATING VARIABLE	MODIFIER	READOUT OR PASSIVE FUNCTION	OUTPUT FUNCTION	MODIFIER		
Α	ANALYSIS OR SAMPLER		ALARM, TROUBLE				
В	BURNER FLAME				CLOSE, DECREASE (1)		
С	CONDUCTIVITY			CONTROL			
D	DENSITY	DIFFERENTIAL			OPEN, INCREASE (1)		
E	VOLTAGE (EMF)		SENSOR (PRIMARY ELEMENT)				
F	FLOW RATE	RATIO (FRACTION)	FAILURE				
G	GAS		GLASS, VIEWING DEVICE, GUAGE (2)	GENERATOR (ULTRASONIC)			
Н	HAND (MANUAL)				HIGH		
1	CURRENT (ELECTRICAL)		INDICATE				
J	POWER	SCAN					
K	TIME	TIME RATE OF CHANGE		CONTROL STATION			
L	LEVEL		LIGHT (3)		LOW		
М	MOTOR	MOMENTARY	OPERATE, ON/OFF		MIDDLE, INTERMEDIATE		
N	MOISTURE			START			
0	TORQUE		ORIFACE, RESTRICTION	STOP, OVERLOAD			
Р	PRESSURE, VACUUM		POINT (TEST CONNECTION)				
Q	COMMON	INTEGRATE, TOTALIZE					
R	RADIOACTIVITY		RECORD				
S	SPEED, FREQUENCY	SAFETY		SWITCH			
Т	TEMPERATURE		TRANSMITTER				
U	MULTIVARIABLE		MULTIFUNCTION	MULTIFUNCTION	MULTIFUNCTION		
٧	VIBRATION, MECHANICAL ANALYSIS, VALVE, DAMPER (4)			VALVE, DAMPER, LOUVER			
W	WEIGHT, FORCE		WELL				
Χ	UNCLASSIFIED (5)	X AXIS	UNCLASSIFIED (5)	UNCLASSIFIED (5)	UNCLASSIFIED (5)		
Y	EVENT, STATE, OR PRESENCE	Y AXIS		RELAY, COMPUTE, CONVERT			
Z	POSITION	Z AXIS		DRIVER, ACTUATOR, UNCLASSIFIED FINAL CONTROL ELEMENT			

NOTES FOR INSTRUMENT AND DEVICE IDENTIFICATION TABLE:

- 1. WHEN THE B AND D LETTERS ARE TO REPRESENT AN OPEN AND CLOSED COMMAND OR POSITION, THEY ARE CURRENTLY OFTEN USED NOT AS A MODIFIER, BUT RATHER AS A READOUT OR OUTPUT FUNCTION. FOR EXAMPLE, SB RATHER THAN SCB.
- 2. IN CURRENT DRAWINGS, THE LETTER G IS OFTEN USED TO REPRESENT A GAUGE AS IN TG (TEMPERATURE GAUGE). HOWEVER, SINCE A TEMPERATURE GAUGE USUALLY HAS A SCALE TO READ A SPECIFIC TEMPERATURE, IT WOULD MORE CORRECTLY BE CALLED AN INDICATOR (TI). GAUGE IS INCLUDED FOR HISTORICAL REASONS.
- 3. ON CURRENT NEWPCC P&ID DRAWINGS, THE PILOT LIGHTS USUALLY OMIT THE L DESIGNATION. FOR EXAMPLE, A VALVE OPEN PILOT LIGHT IS DESIGNATED AS ZD. TECHNICALLY, THE APPROPRIATE IDENTIFIER IS ZLD, BUT ZD HAD BEEN MAINTAINED FOR HISTORICAL REASONS.
- 4. THE USE OF V AS AN INITIAL LETTER HAS BEEN INCORRECTLY USED IN THE PAST TO REPRESENT A VALVE OR A DAMPLER, AND AS IS MAINTAINED IN THE IDENTIFICATION TABLE DUE TO ITS COMMON USE AS SUCH. HOWEVER, THESE INSTRUMENTS SHOULD IDEALLY BE RENAMED TO THE APPROPRIATE IDENTIFIERS. FOR EXAMPLE, MOST VY INSTRUMENTS (PNEUMATIC RELAYS) ON THE CURRENT DRAWINGS COULD BE RELABELLED AS HY OR FY
- 5. THE LETTER X IS TO BE DEFINED AT THE TIME OF USE, AND MAY BE USED FOR MULTIPLE DEFINITIONS WHERE NO OTHER LETTER IS APPLICABLE.

DENTIFIER	DEFINITION	IDENTIFIER	
AAH	ANALYSIS ALARM — HIGH	PSHH	PRESSURE SV
ААНН	ANALYSIS ALARM — HIGH—HIGH	PSL	PRESSURE SV
AE	ANALYSIS ELEMENT	PSV	PRESSURE SA
AIT	ANALYSIS INDICATING TRANSMITTER (ANALYTIC INST.)	PT	PRESSURE TR
AK	ANALYSIS (AMPLER) CONTROL STATION	PY	PRESSURE RE
ASH ASHH	ANALYSIS SWITCH — HIGH ANALYSIS SWITCH — HIGH—HIGH	SI SK	SPEED INDICA
ASY	ANALYSIS SAFETY RELAY	ST	SPEED TRANS
AT	ANALYSIS TRANSMITTER (ANALYTIC INST.)	TE	TEMPERATURE
BK	BURNER CONTROL STATION	TG	TEMPERATURE
BS	BURNER FLAME SWITCH	TI	TEMPERATURE
BV	BURNER VALVE	TIC	TEMPERATURE
DE	DENSITY ELEMENT	TIT	TEMPERATURE
DR	DENSITY RECORDER	TR	TEMPERATURE
DX	DENSITY TRANSMITTER DENSITY SOURCE (X = SOURCE)	TSH TSL	TEMPERATURE TEMPERATURE
EE	VOLTAGE ELEMENT/TRANSFORMER	П П	TEMPERATURE
El	VOLTAGE INDICATOR	TV	TEMPERATURE
ET	VOLTAGE TRANSMITTER	TW	TEMPERATURE
FE	FLOW ELEMENT	TY	TEMPERATURE
FG	FLOW METER ULTRASONIC GENERATOR	XE	VELOCITY ELE
Fl	FLOW INDICATOR	XI	VELOCITY INDI
FIC	FLOW INDICATING CONTROLLER	XK	UNCLASSIFIED
FIT	FLOW INDICATING TRANSMITTER	XT	POWER FACTO
FQI	FLOW TOTALIZING INDICATOR	XT	VELOCITY TRA
FQY	FLOW TOTALIZING / INTEGRATING RELAY	XX	UNCLASSIFIED
FR	FLOW RECORDER	YS	COMPUTER SV
FRC FRQ	FLOW RECORDING CONTROLLER FLOW RECORDING TOTALIZER	YSA YSL	STATE SAFETY
FSL	FLOW SWITCH LOW	ZI	STATE SAFETY POSITION INDI
FT	FLOW TRANSMITTER	ZS	POSITION SWI
FV	FLOW VALVE	ZSB	POSITION SWI
FY	FLOW COMPUTER / RELAY	ZSDL	POSITION SWI
GE	GAS ELEMENT	ZSH	POSITION SWI
GS	GAS SWITCH MODULE	ZSL	POSITION SWI
HK	HAND CONTROL STATION	ZT	POSITION TRA
HS	HAND SWITCH	NOTES E	OR INSTR
HSS	HAND SAFETY SWITCH		<u> </u>
HV IS	HAND VALVE CURRENT SWITCH		T IDENTIFIER LE
IE IE	CURRENT SWITCH CURRENT ELEMENT/TRANSFORMER		BLE IS DERIVED AND IS NOT EXI
	CURRENT INDICATOR	IADLE, /	AND IS NOT EX
IY	CURRENT RELAY		
KY	TIMER RELAY		
LCV	LEVEL CONTROL VALVE		
LE	LEVEL ELEMENT		
LI	LEVEL INDICATOR		
LIC	LEVEL INDICATING CONTROLLER		
LIT	LEVEL INDICATING TRANSMITTER		
LR	LEVEL RECORDER		
LSL LSH	LEVEL SWITCH LOW LEVEL SWITCH HIGH		
LSHL	LEVEL SWITCH HIGH/LOW		
LT	LEVEL TRANSMITTER	-	
LV	LEVEL VALVE	-	
LY	LEVEL RELAY (I/I CONVERTER)		
МВ	MOTOR DECREASE OR REVERSE		
MD	MOTOR INCREASE OR FORWARD		
MF	MOTOR FAILURE		
ММ	MOTOR RUN	_	
NS	MOISTURE SWITCH	_	
PCV	PRESSURE CONTROL VALVE	_	
PE	PRESSURE ELEMENT	\dashv	
PG	PRESSURE GAUGE	_	
PI	PRESSURE INDICATING CONTROLLER	\dashv	
PIC	PRESSURE INDICATING CONTROLLER	_	
	DDESCLIDE INDICATING TRANSMITTER		
PIT	PRESSURE INDICATING TRANSMITTER PRESSURE RECORDER	_	
	PRESSURE INDICATING TRANSMITTER PRESSURE RECORDER PRESSURE SWITCH	_	

PEVICE IDENTIFIERS		INSTRUMENT IDENTIFICATION MODIFIER		
DENTIFIER	DEFINITION	IDENTIFIER	DEFINITION	
PSHH	PRESSURE SWITCH HIGH (2ND STAGE)	(N)	N MULTIPLE INSTRUMENTS	
PSL	PRESSURE SWITCH LOW	AA	AUDIBLE ALARM	
PSV	PRESSURE SAFETY VALVE (RELIEF)	A/M	AUTO / MANUAL	
PT	PRESSURE TRANSMITTER	C/L	COMPUTER / LOCAL	
PY	PRESSURE RELAY (I/I CONVERTER)	CLS	CLOSE	
SI	SPEED INDICATOR	C/O	COMPUTER / OFF	
SK	SPEED CONTROL STATION	COB	COMPUTER / OFF / BYPASS	
ST	SPEED TRANSMITTER	COH	COMPUTER / OFF / HAND	
TE	TEMPERATURE ELEMENT			
TG	TEMPERATURE GAUGE	COT	COMPUTER / OFF / TIME DISTRIBUTED CONTROL SYSTEM	
TI	TEMPERATURE INDICATOR	DCS		
TIC	TEMPERATURE INDICATING CONTROLLER	DS F/S	DECREASE SPEED	
TIT	TEMPERATURE INDICATING TRANSMITTER	E/S	EMERGENCY STOP	
TR	TEMPERATURE RECORDER	FOR	FORWARD / OFF / REVERSE	
TSH	TEMPERATURE SWITCH HIGH	H/A	HAND / AUTO	
TSL	TEMPERATURE SWITCH LOW	НОА	HAND / OFF / AUTO	
π	TEMPERATURE TRANSMITTER	HOR	HAND / OFF / REMOTE	
TV	TEMPERATURE VALVE	I/D	INCREASE / DECREASE	
TW	TEMPERATURE THERMOWELL	INT/EXT	INTERNAL / EXTERNAL	
TY	TEMPERATURE RELAY (SOLENOID VALVE OR M/P)	IS	INCREASE SPEED	
XE	VELOCITY ELEMENT	LCP	LOCAL CONTROL PANEL	
XI	VELOCITY INDICATOR	LD	LOCKABLE DISCONNECT	
XK	UNCLASSIFIED CONTROL STATION (X = FIRE)	LJB	LOCAL JUNCTION BOX	
XT	POWER FACTOR TRANSMITTER	L/0	LOCAL / OFF	
XT	VELOCITY TRANSMITTER $(X = VELOCITY)$	LOR	LOCAL / OFF / REMOTE	
XX	UNCLASSIFIED (XX = ALARM ANNUNCIATOR)	LOS	LOCK OFF STOP	
YS	COMPUTER SWITCH	L/R	LOCAL / REMOTE	
YSA	STATE SAFETY ALARM	LSR	LOCAL / STOP / REMOTE	
YSL	STATE SAFETY LIGHT	MCC	MOTOR CONTROL CENTER	
ZI	POSITION INDICATOR	0/A	OFF / AUTO	
ZS	POSITION SWITCH	0/C	OPEN / CLOSE	
ZSB	POSITION SWITCH CLOSED (LIMIT SWITCH)	0/M	OFF / MAINTENANCE	
ZSDL	POSITION SWITCH OPEN (LIMIT SWITCH)	0/0	OFF / ON	
ZSH	POSITION SWITCH HIGH	OPN	OPEN	
ZSL	POSITION SWITCH LOW	RST	RESET	
ZT	POSITION TRANSMITTER	RTD	RESISTIVE TEMPERATURE DEVICE	
NOTEO E		SEL	SELECTOR	
NOTES F	OR INSTRUMENT FIELD DEVICE IDENTIFIERS:	S/F	SLOW / FAST	
1. THE LAS	T IDENTIFIER LETTER IS IN SOME CASES OPTIONAL (EG. FSL)	SOF	SLOW / OFF / FAST	
	BLE IS DERIVED FROM THE INSTRUMENT & DEVICE IDENTIFICATION	SOL	SOLENOID	
	AND IS NOT EXHAUSTIVE.	S/S	START / STOP	
	· - ·	S/W	SUMMER / WINTER	
		TAH	TEMPERATURE ALARM HIGH	
		TAL	TEMPERATURE ALARM LOW	
		TSH	TEMPERATURE SWITCH HIGH	
		TSL	TEMPERATURE SWITCH LOW	
		T/C	THERMOCOUPLE	
		VIB	VIBRATION	

00 ISSUED FOR REVIEW

NO. REVISIONS

INSTRUME	ENT IDENTIFICATION MODIFIER
IDENTIFIER	DEFINITION
(N)	N MULTIPLE INSTRUMENTS
ĀĀ	AUDIBLE ALARM
A/M	AUTO / MANUAL
C/L	COMPUTER / LOCAL
CLS	CLOSE
C/O	COMPUTER / OFF
COB	COMPUTER / OFF / BYPASS
СОН	COMPUTER / OFF / HAND
COT	COMPUTER / OFF / TIME
DCS	DISTRIBUTED CONTROL SYSTEM
DS	DECREASE SPEED
E/S	EMERGENCY STOP
FOR	FORWARD / OFF / REVERSE
H/A	HAND / AUTO
HOA	HAND / OFF / AUTO
HOR	HAND / OFF / REMOTE
I/D	INCREASE / DECREASE
INT/EXT	INTERNAL / EXTERNAL
IS	INCREASE SPEED
LCP	LOCAL CONTROL PANEL
LD	LOCKABLE DISCONNECT
LJB	LOCAL JUNCTION BOX
L/0	LOCAL / OFF
LOR	LOCAL / OFF / REMOTE
LOS	LOCK OFF STOP
L/R	LOCAL / REMOTE
LSR	LOCAL / STOP / REMOTE
MCC	MOTOR CONTROL CENTER
0/A	OFF / AUTO
0/C	OPEN / CLOSE
0/M	OFF / MAINTENANCE
0/0	OFF / ON
OPN	OPEN
RST	RESET
RTD	RESISTIVE TEMPERATURE DEVICE
SEL S /F	SELECTOR SLOW / FAST
S/F S0F	SLOW / FAST SLOW / OFF / FAST
SOL	SOLENOID
S/S	START / STOP
S/W	SUMMER / WINTER
TAH	TEMPERATURE ALARM HIGH
TAL	TEMPERATURE ALARM LOW
TSH	TEMPERATURE SWITCH HIGH
TSL	TEMPERATURE SWITCH LOW

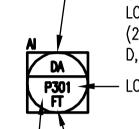
INSTRUMENT FIELD DEVICE NUMBERING

 INSTRUMENT IDENTIFICATION — PROCESS AREA IDENTIFIER — LOOP OR DEVICE NUMBER (001-999)

> — INSTRUMENT ID — MAX. OF 4 LETTERS AS PER IDENTIFICATION TABLE

- DEVICE SUFFIX FOR MULTIPLE DEVICES ON THE SAME LOOP

CONTROL SYSTEM (DCS) POINT TAG NUMBERING

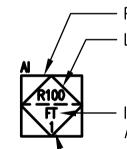


COMPUTER SYSTEM EQUIPMENT LOCATION IDENTIFIER (2 LETTERS: DA=PROCESS AREA D, PCU PANEL A)

— LOOP OR DEVICE NUMBER (001 - 999)

- INSTRUMENT OR DEVICE IDENTIFICATION - PROCESS AREA IDENTIFIER

PLC POINT TAG **NUMBERING**



— PROCESS AREA IDENTIFIER \sim LOOP OR DEVICE NUMBER (001-999)

- INSTRUMENT ID - MAX. OF 4 LETTERS AS PER IDENTIFICATION TABLE

— DEVICE SUFFIX FOR MULTIPLE DEVICES ON THE SAME LOOP

PLC EQUIPMENT IDENTIFIER (UP TO 3 LETTERS)

— LOOP OR DEVICE NUMBER (001 – 999)

- INSTRUMENT OR DEVICE IDENTIFICATION - PROCESS AREA IDENTIFIER

B.M ELE		FIELD BOOK #:						ENGINEER'S SEAL	
	STED TO LBIS				SNC • Engine	LAVALIN cers & Constr	SNC - LAVALIN 200-1000 Nose Avenue Thropog, Marilabe Consider RSJ 397		
					DESIGNED BY	ER	CHECKED BY		ŀ
					DRAWN BY	DS	APPROVED BY	PRFLIMINARY	
03	REVISED BY EARTHTECH		05/01/21	DL	HOR. SCALE	NTS	RELEASED FOR	<u> </u>	١
02	ISSUED FOR REVIEW		04/11/25	CJR		шэ	CONSTRUCTION		l
01	ISSUED FOR REVIEW		04/10/14	CJR	VERTICAL				ŀ

04/06/01 CJR DATE **2004 01 23** DATE

DATE BY FILENAME: 1-0100A-D-A0001-002-03D.dwg



THE CITY OF WINNIPEG Winnipeg WATER AND WASTE DEPARTMENT

NORTH END WATER POLLUTION CONTROL CENTRE

PROCESS AND INSTRUMENT DIAGRAMS LEGEND AND DETAILS

CITY DRAWING NUMBER