INSTRUMENT LOOP DRAWINGS

1. GENERAL

1.1 References - General

.1 Refer to Section 17010.

1.2 Instrument Loop Drawings

.1 The following fourteen (14) Drawings show typical instrument loop wiring diagrams as referenced by this Specification Section. One (1) Drawing per loop will be completed by the Contractor and submitted for approval after award of Contract.

ILD-01	Instrument Loop Diagram - Optical Dissolved Oxygen Analyzer
ILD-02	Instrument Loop Diagram – Pneumatic Control Valve
ILD-03	Instrument Loop Diagram – Two Position Motorized Valve
ILD-04	Instrument Loop Diagram – Flow Transmitter
ILD-05	Instrument Loop Diagram – Field Mounted Process Switch
ILD-06	Instrument Loop Diagram – Ultrasonic Level Transmitter
ILD-07	Instrument Loop Diagram – Ferric Chloride Tank Level
ILD-08	Instrument Loop Diagram – Pressure Transmitter
ILD-09	Instrument Loop Diagram – Thermal Oxidizer F661-TO
ILD-10	Instrument Loop Diagram – Solenoid Valve
ILD-11	Instrument Loop Diagram – Sludge Pump
ILD-12	Instrument Loop Diagram – Fixed Speed Drive
ILD-13	Instrument Loop Diagram – Fermenter Mechanism Drive
ILD-14	Instrument Loop Diagram – Variable Speed Drive

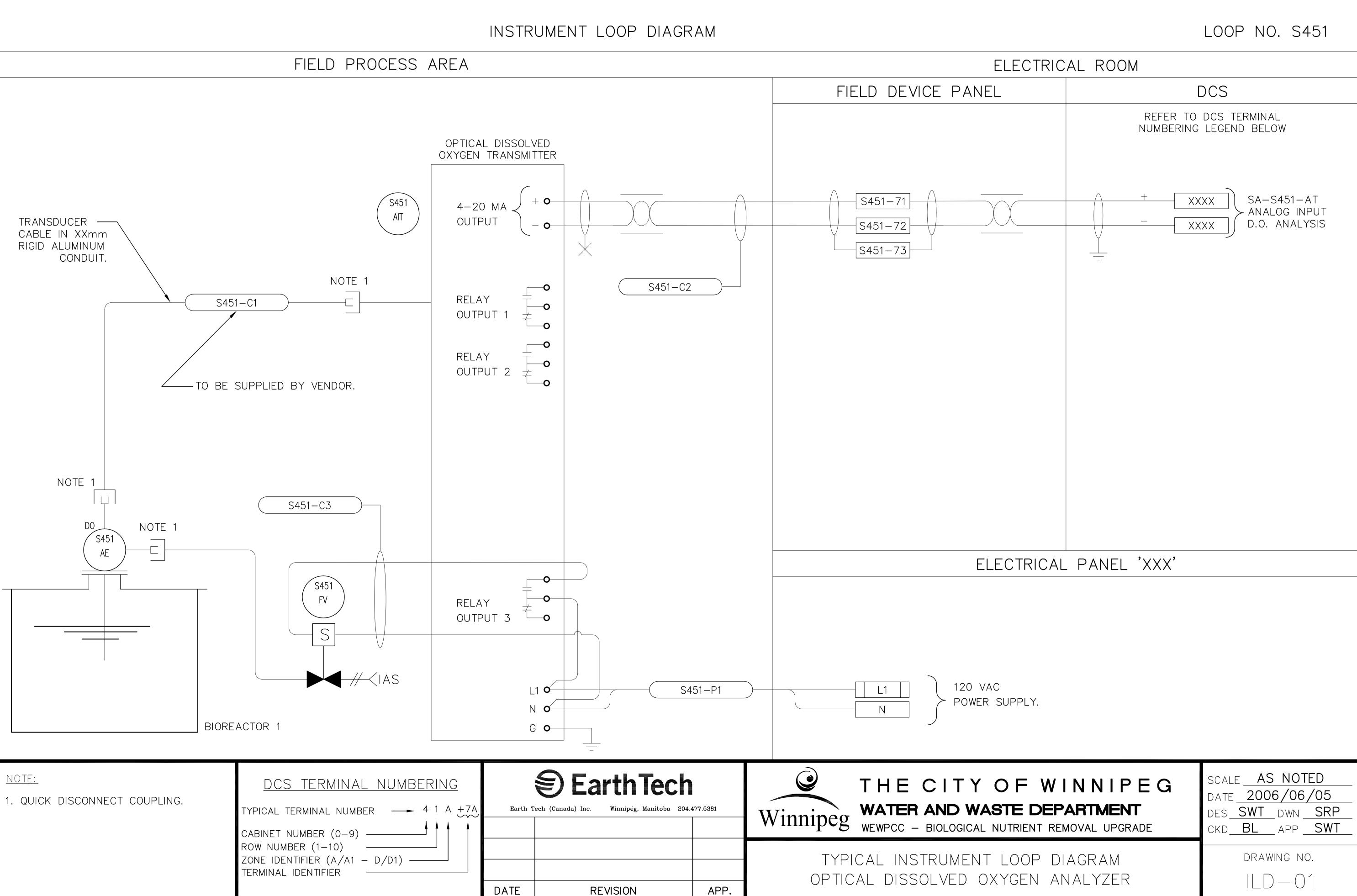
2. **PRODUCTS**

.1 Not used

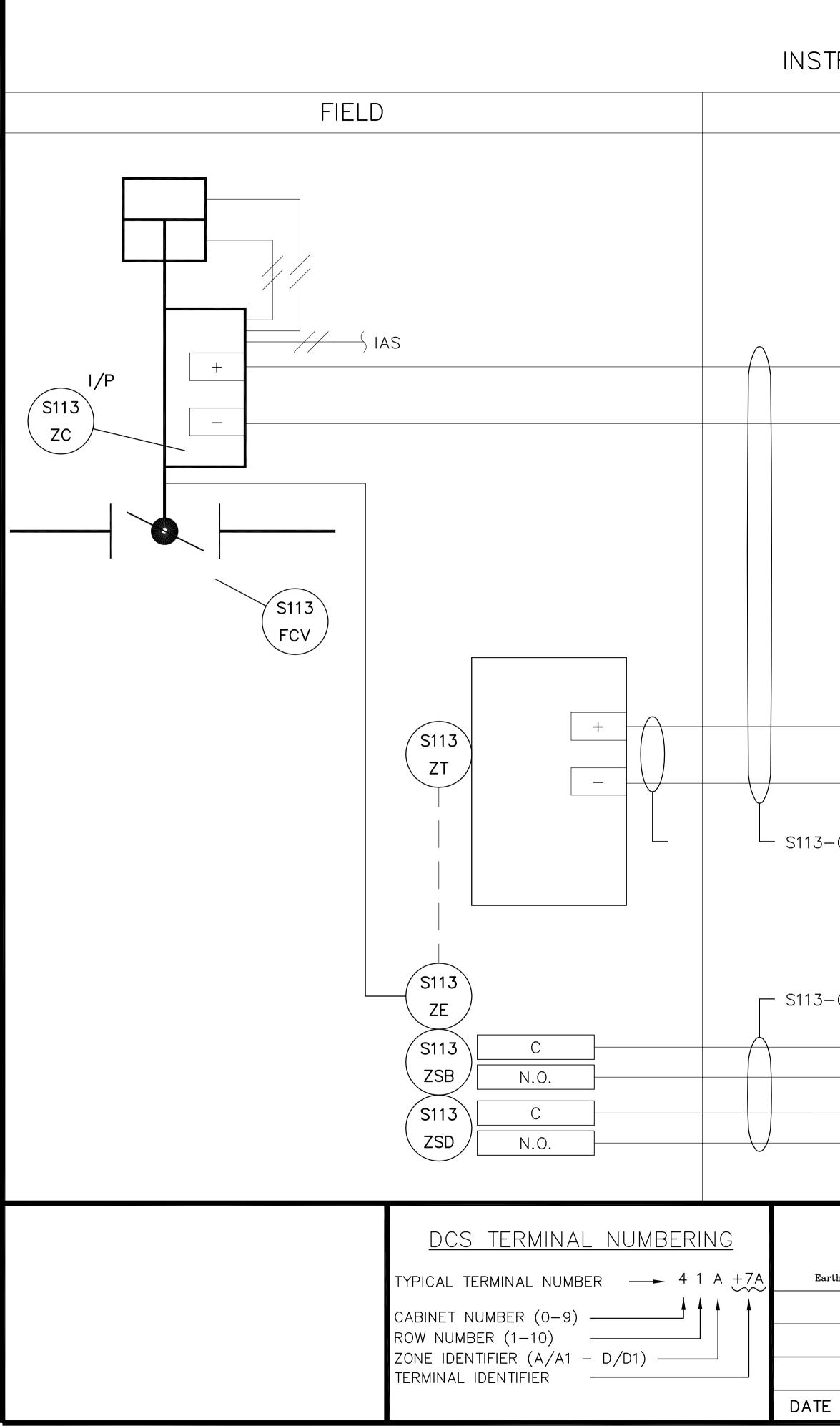
3. EXECUTION

.1 Not used

END OF SECTION

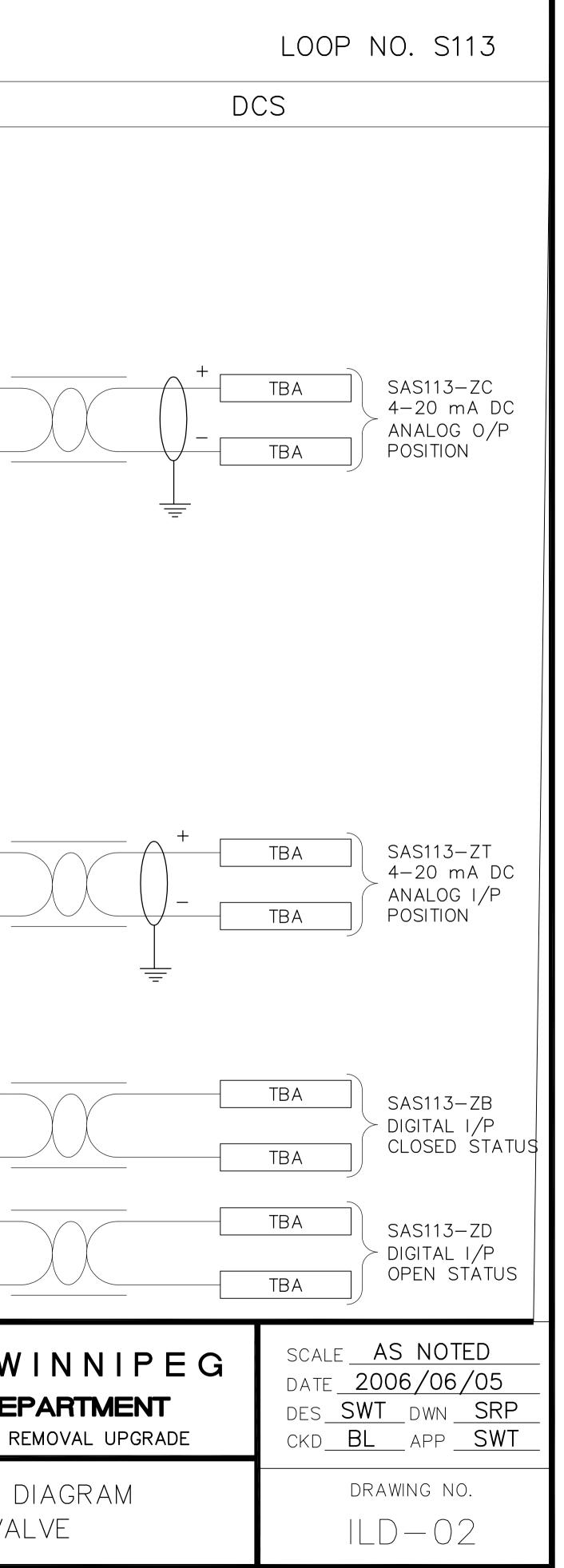


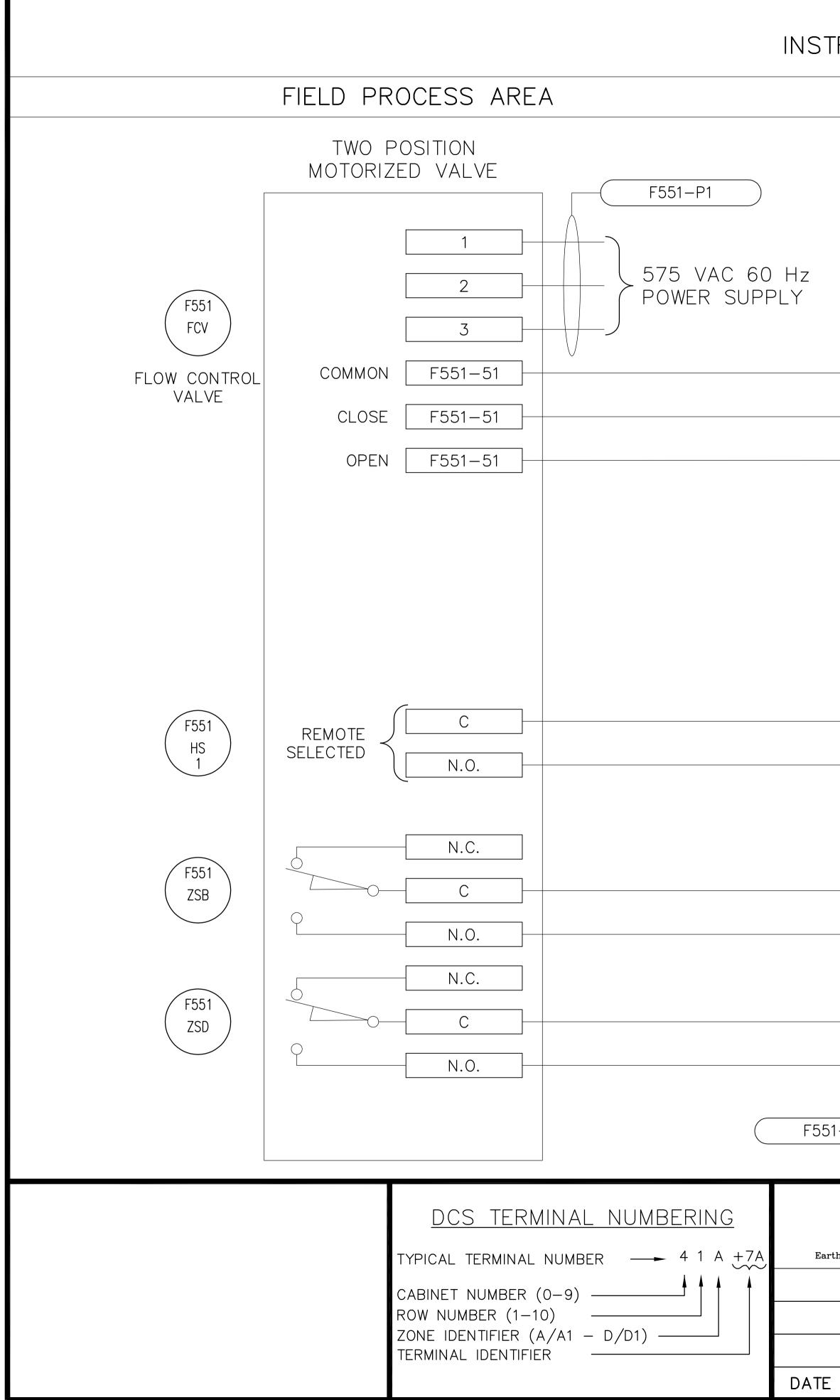
06/06/06 03:52pm sondra.polten L:\work\76000\76063\02-Design\I&C\17702 - ILD Drawings\add 4\ILD-01.DWG Layout:Layout1



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INSTRUMENT LOOP DIAGRAM FIELD DEVICE PANEL S113-74 S113-75 S113-73A S113-73B S113-70 S113-71 FUSE - S113-70 └── S113−C1 24 VDC POWER SUPPLY _ S113-72 S113-24 □ S113-C2 S113-25 S113-26 S113-27 EarthTech THE CITY OF WINNIPEG WATER AND WASTE DEPARTMENT Winnipeg Winnipeg, Manitoba 204.477.5381 Earth Tech (Canada) Inc. WEWPCC – BIOLOGICAL NUTRIENT REMOVAL UPGRADE TYPICAL INSTRUMENT LOOP DIAGRAM PNEUMATIC CONTROL VALVE REVISION APP.

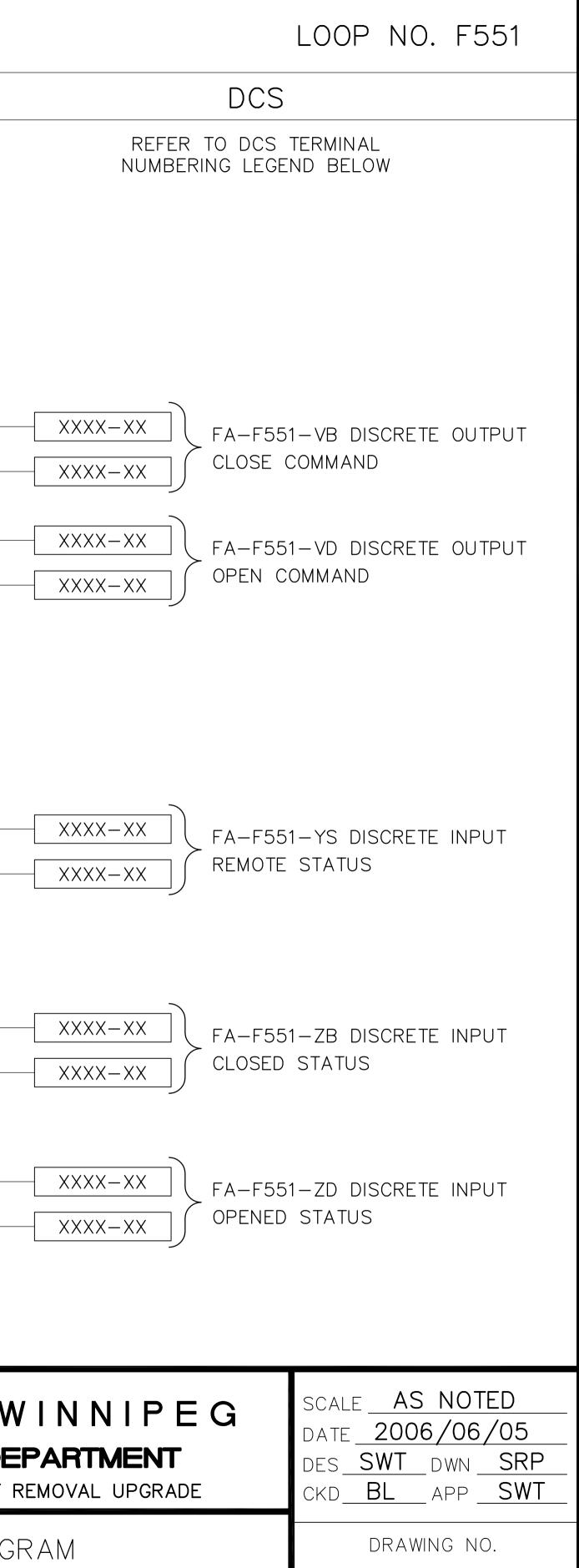




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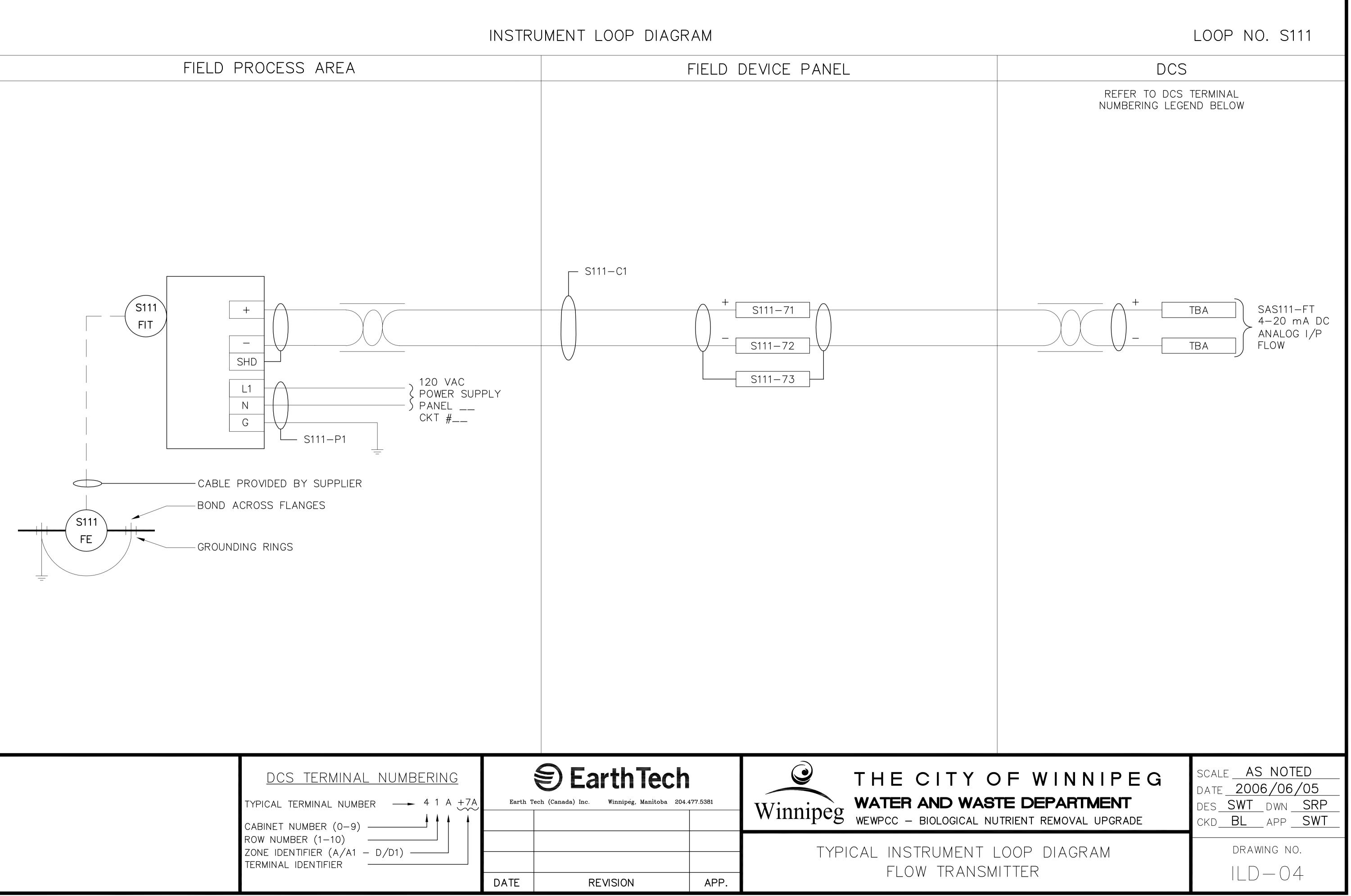
INSTRUMENT LOOP DIAGRAM

		FIELD DE	EVICE PANI	EL	
Z		F551	<u>-50</u> <u>H</u>	120 VAC	
/		F55	1−51 N / F	120 VAC Power supply	
	\wedge				
		F551	-57		
		F551	-58		
		F551	-55		
		F551	-56		
		F551	-18		
		F551	-19		
		F551	-62		
		F551	-63		
			-60		
		F33	1-61		
F551-C1					
			5		
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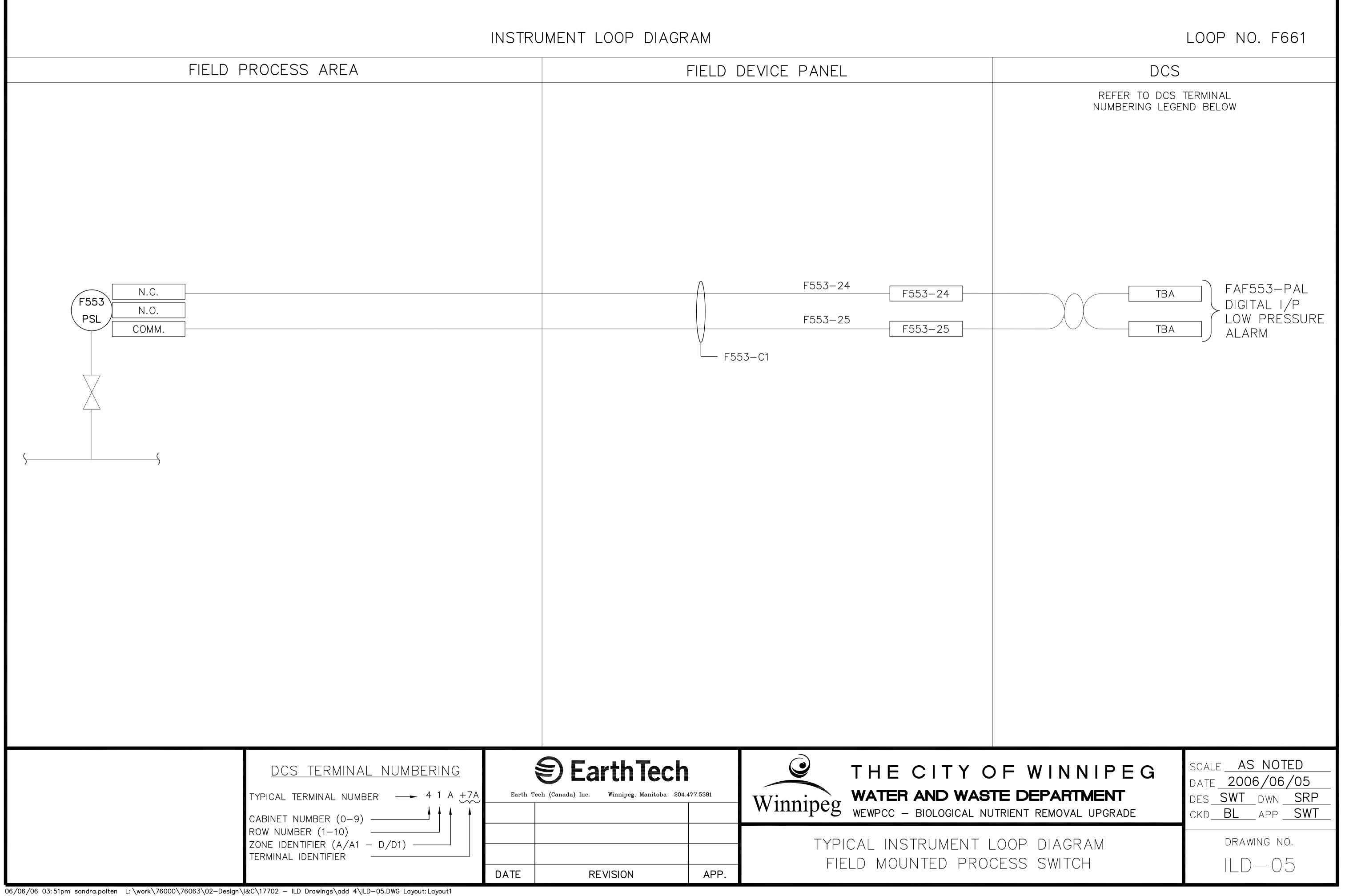


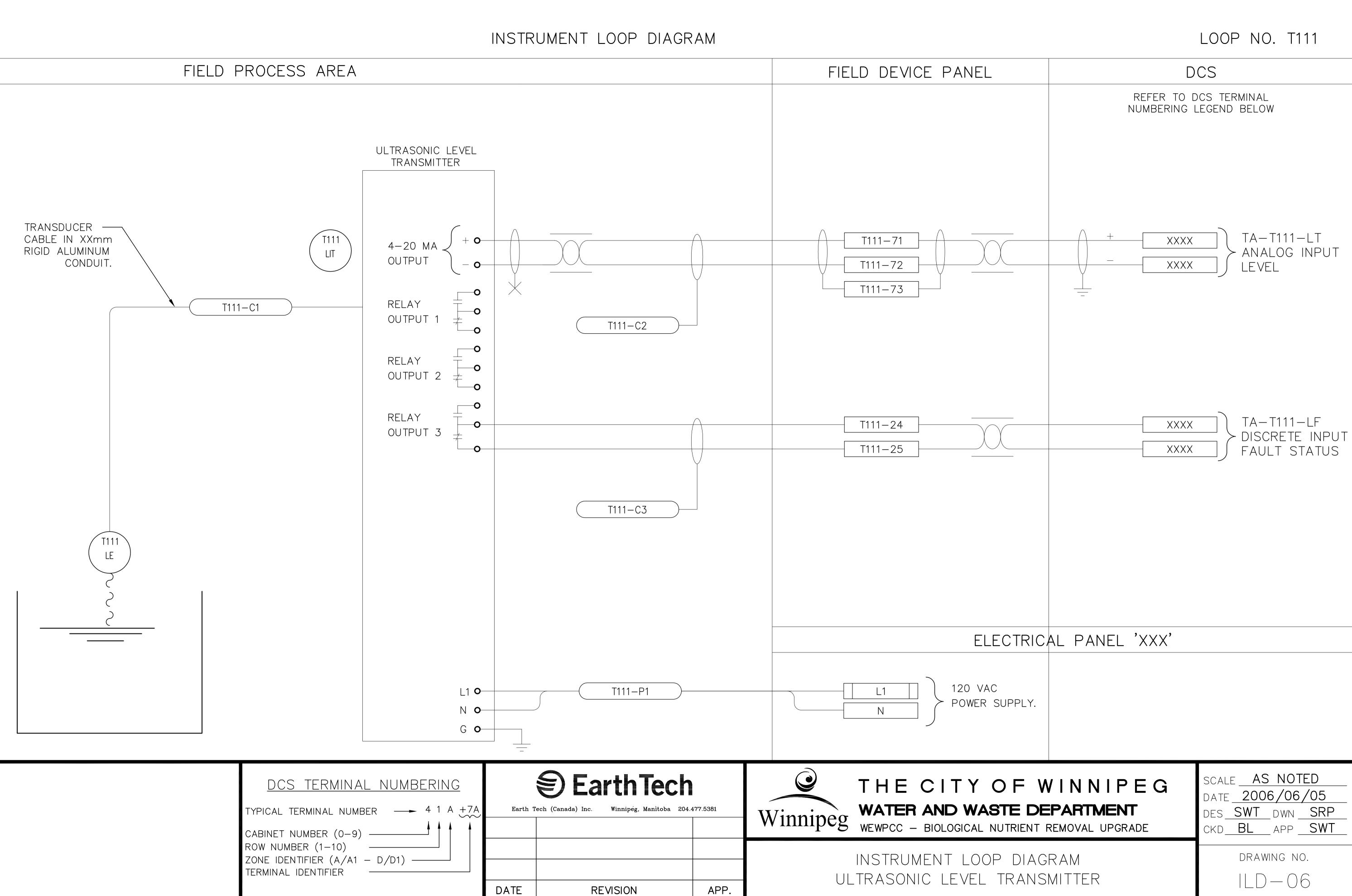
|LD - 03|

VALVE



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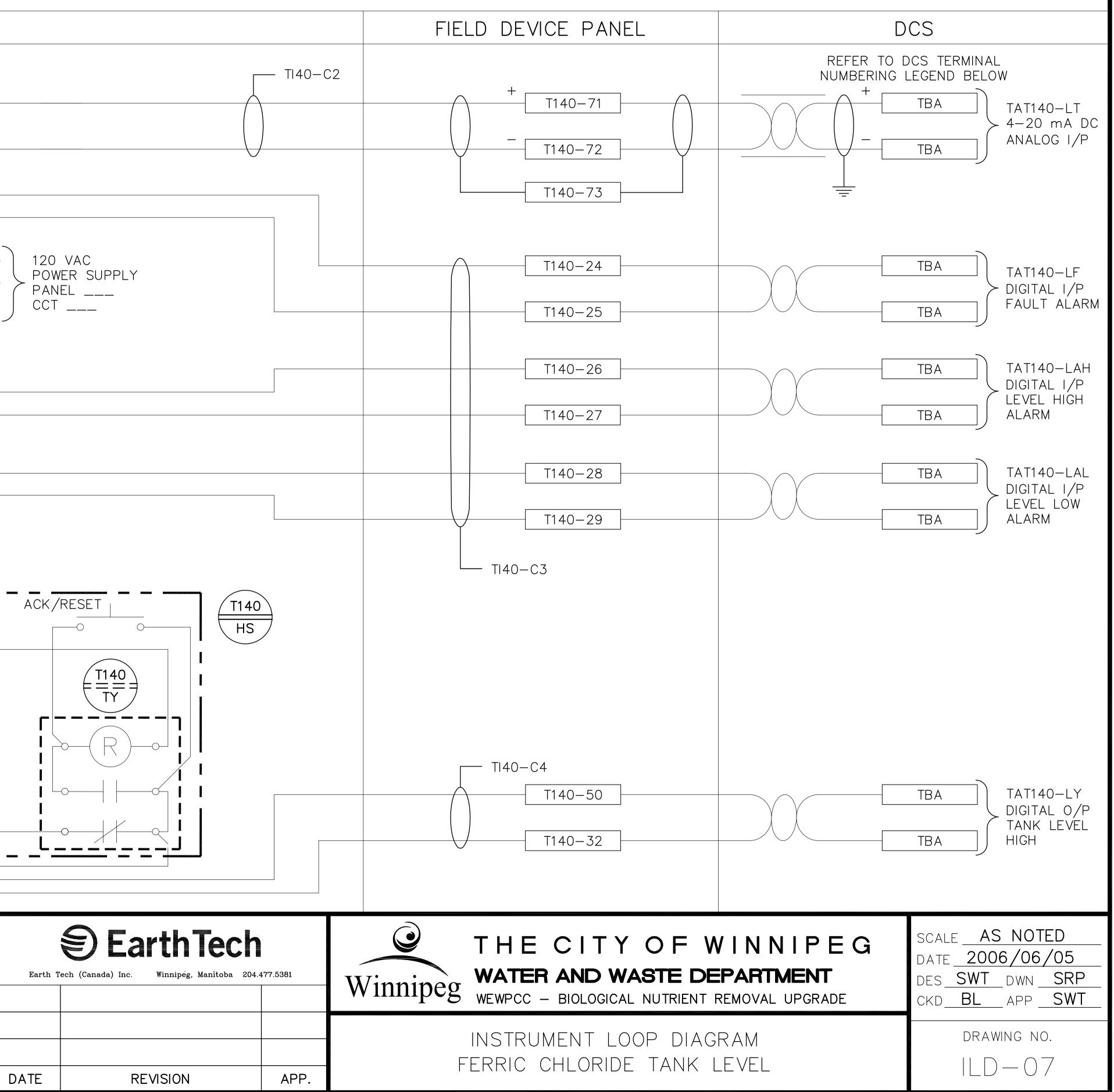


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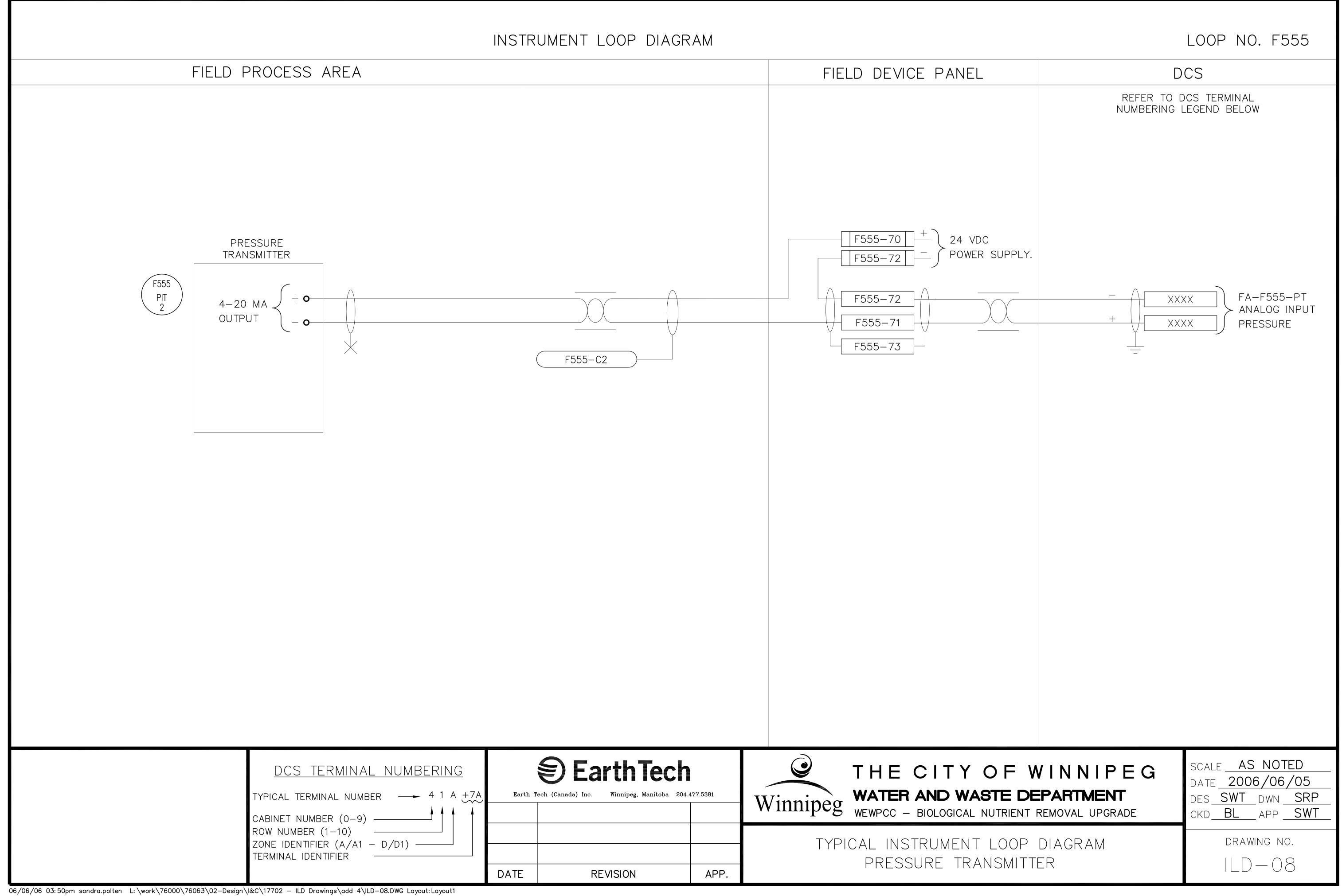
FIELD PROCESS AREA +_ C. TRANSMITTER FAULT N.C. T140 L1 LIT Ν TI40-C1 G CABLE PROVIDED BY SUPPLIER └_T140-P1 ____ T140 С LSH N.C. T140 LE 「T140[`] С N.C. LSL 120 VAC POWER SUPPLY PANEL ____, CCT ____ LOADING STATION CONTROL PANEL T140-P2 Ν T140 T140-50 LA T140-51 TANK LEVEL HIGH HORN T140-32 LOADING STN. T140 \ √ T140-32 TANK LAH BEACON T140 - 4LLH I DCS TERMINAL NUMBERING ___ 4 1 A +7A TYPICAL TERMINAL NUMBER CABINET NUMBER (0-9) -ROW NUMBER (1-10) ------ZONE IDENTIFIER (A/A1 - D/D1) -TERMINAL IDENTIFIER

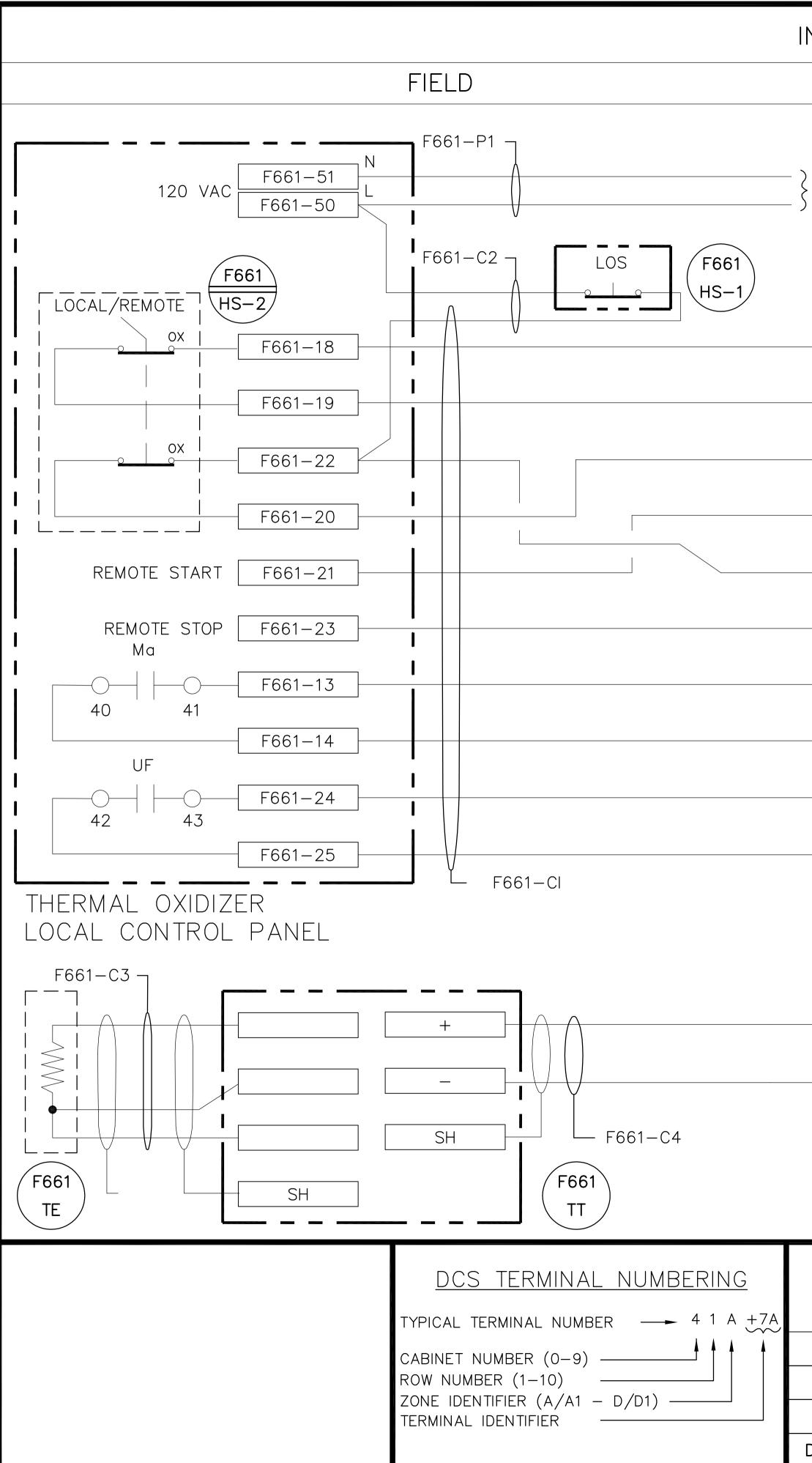
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INSTRUMENT LOOP DIAGRAM



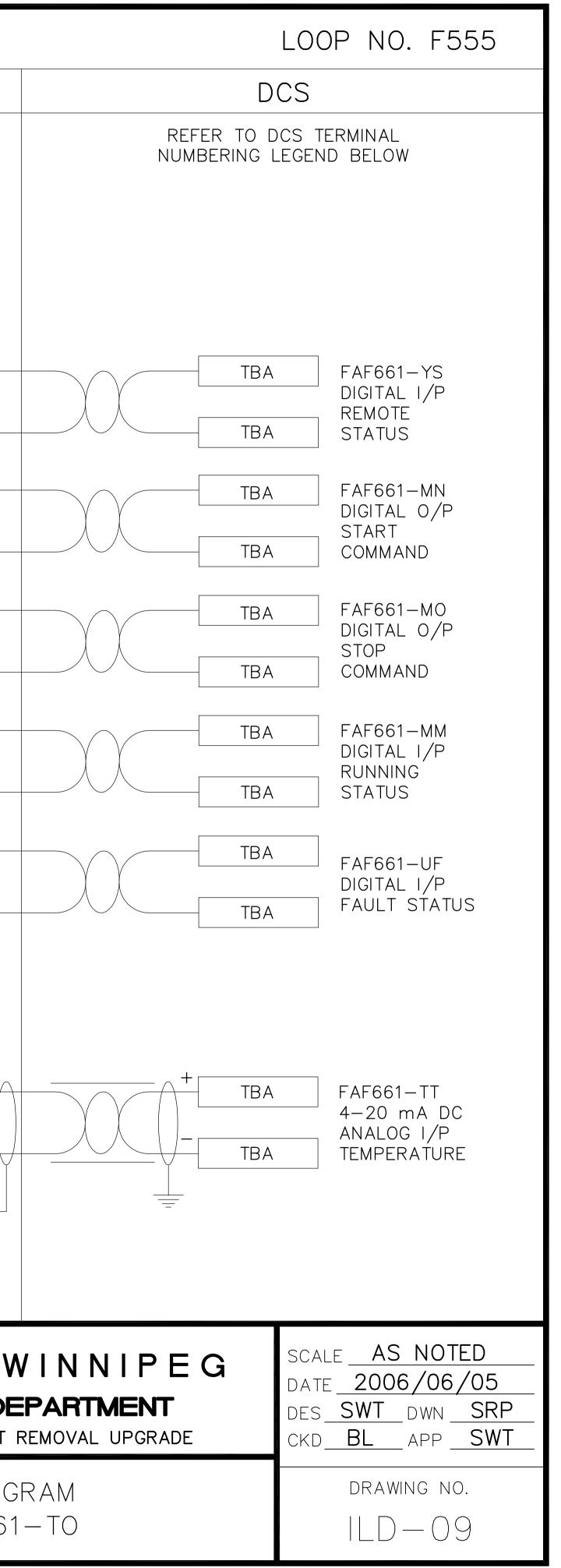
LOOP NO. T140

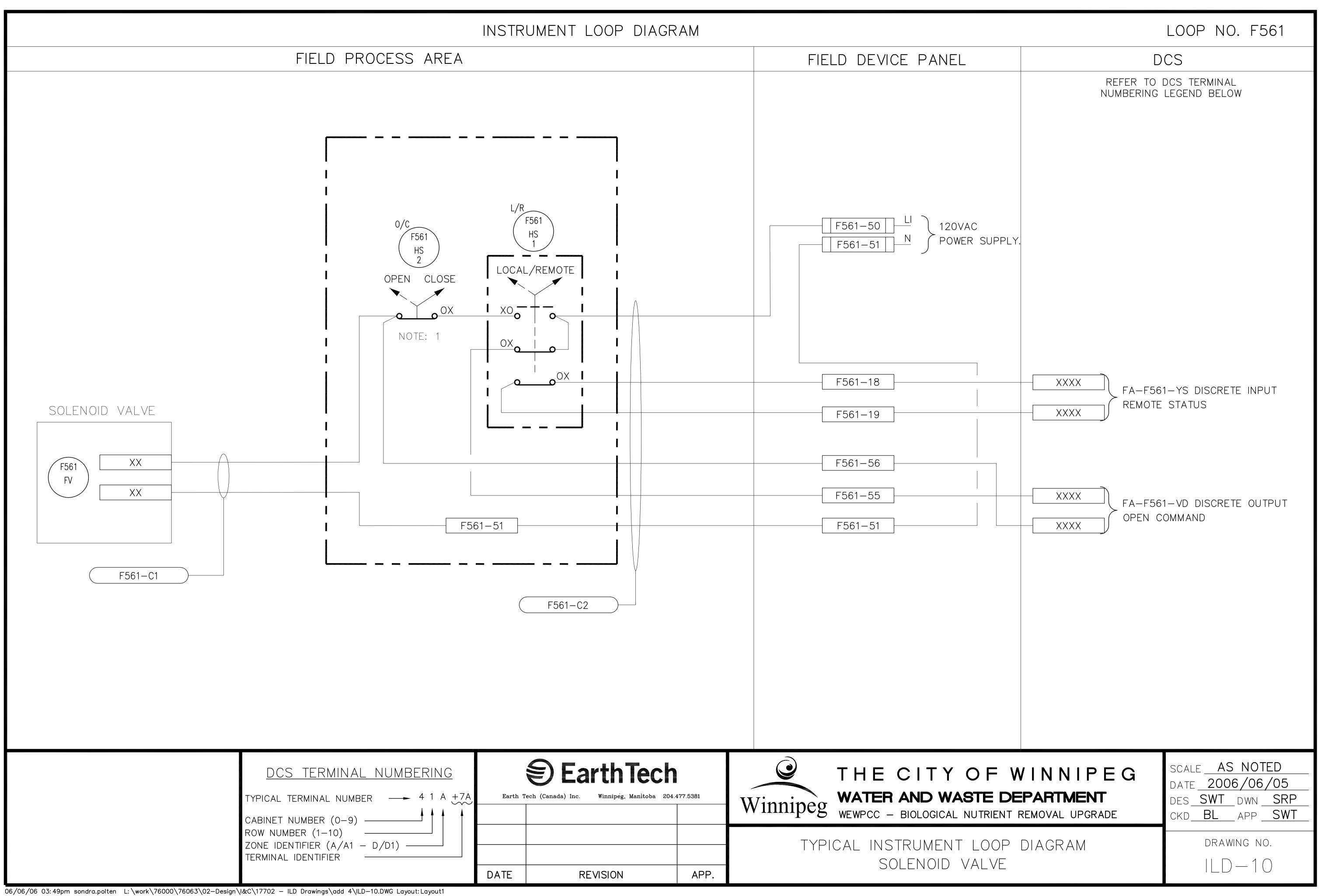




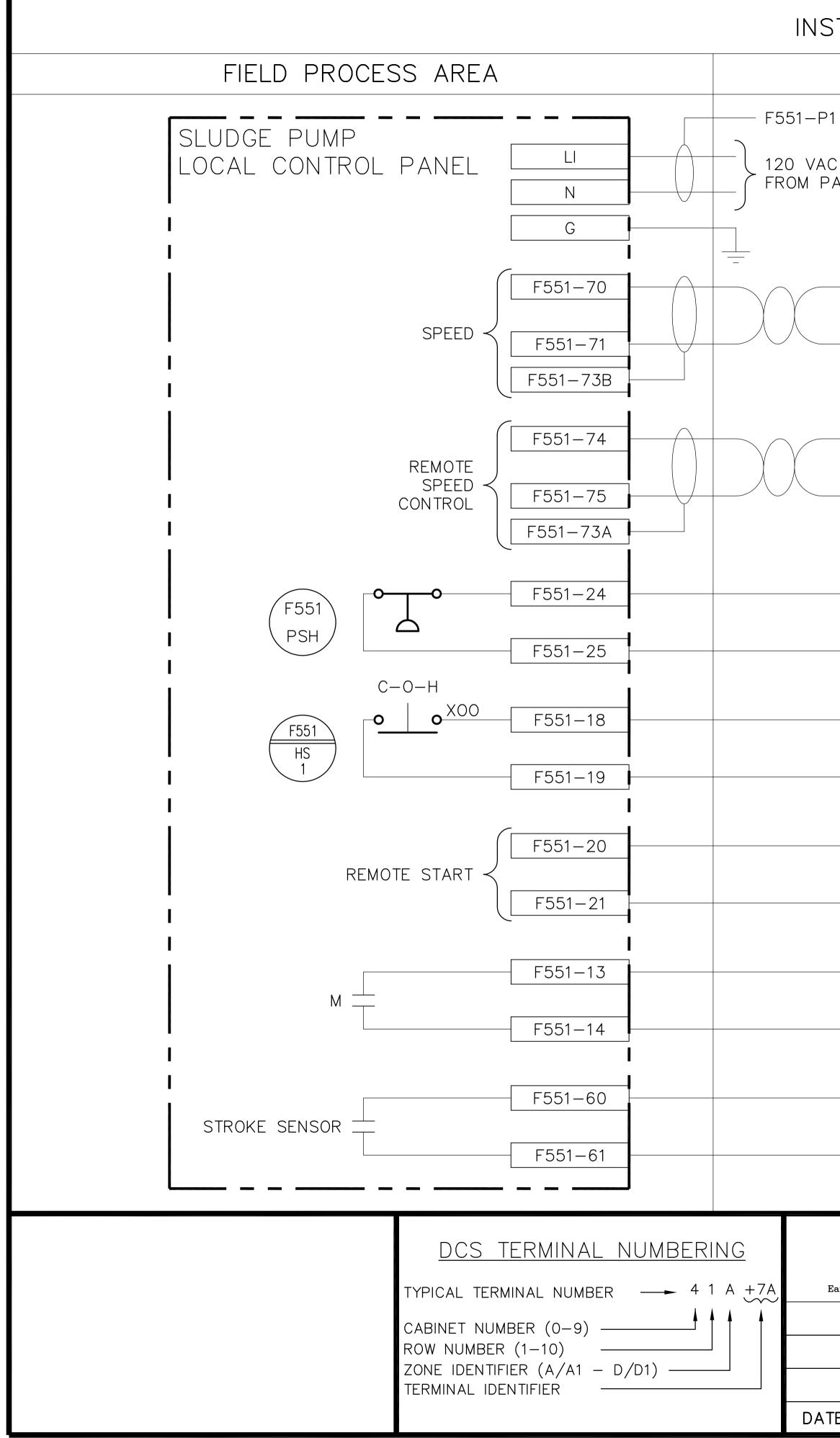
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INSTRUMENT LOOP DIAGRAM	
	FIELD DEVICE PANEL
<pre> 2 120 VAC SUPPLY FROM 5 LIGHTING PANEL, CCT</pre>	
	F661-18
	F661-19
	F661-20
	F661-21
	F661-22
	F661-23
	F661-13
	F661-14
	F661-24
	F661-25
	+ F661-71 - F661-72 F661-73
SEarthTech Earth Tech (Canada) Inc. Winnipeg, Manitoba 204.477.5381	Winnipeg THE CITY OF WATER AND WASTE D WEWPCC - BIOLOGICAL NUTRIENT
DATE REVISION APP.	INSTRUMENT LOOP DIAG THERMAL OXIDIZER F66





<u>DCS TERMINAL NUMBERING</u>
TYPICAL TERMINAL NUMBER $$ 4 1 A $\pm 7A$
CABINET NUMBER (0-9) ROW NUMBER (1-10) ZONE IDENTIFIER (A/A1 - D/D1) TERMINAL IDENTIFIER



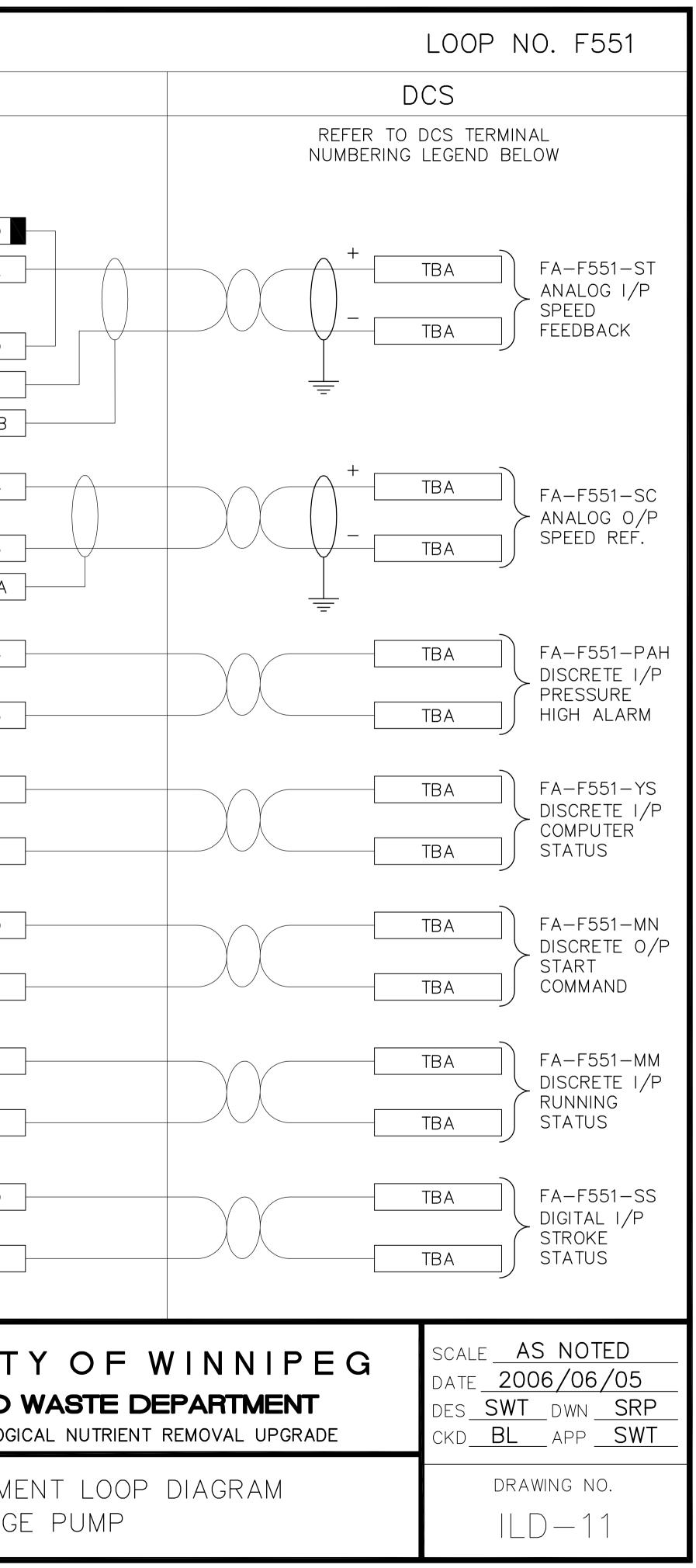
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INSTRUMENT LOOP DIAGRAM

FIELD DEVICE PANEL

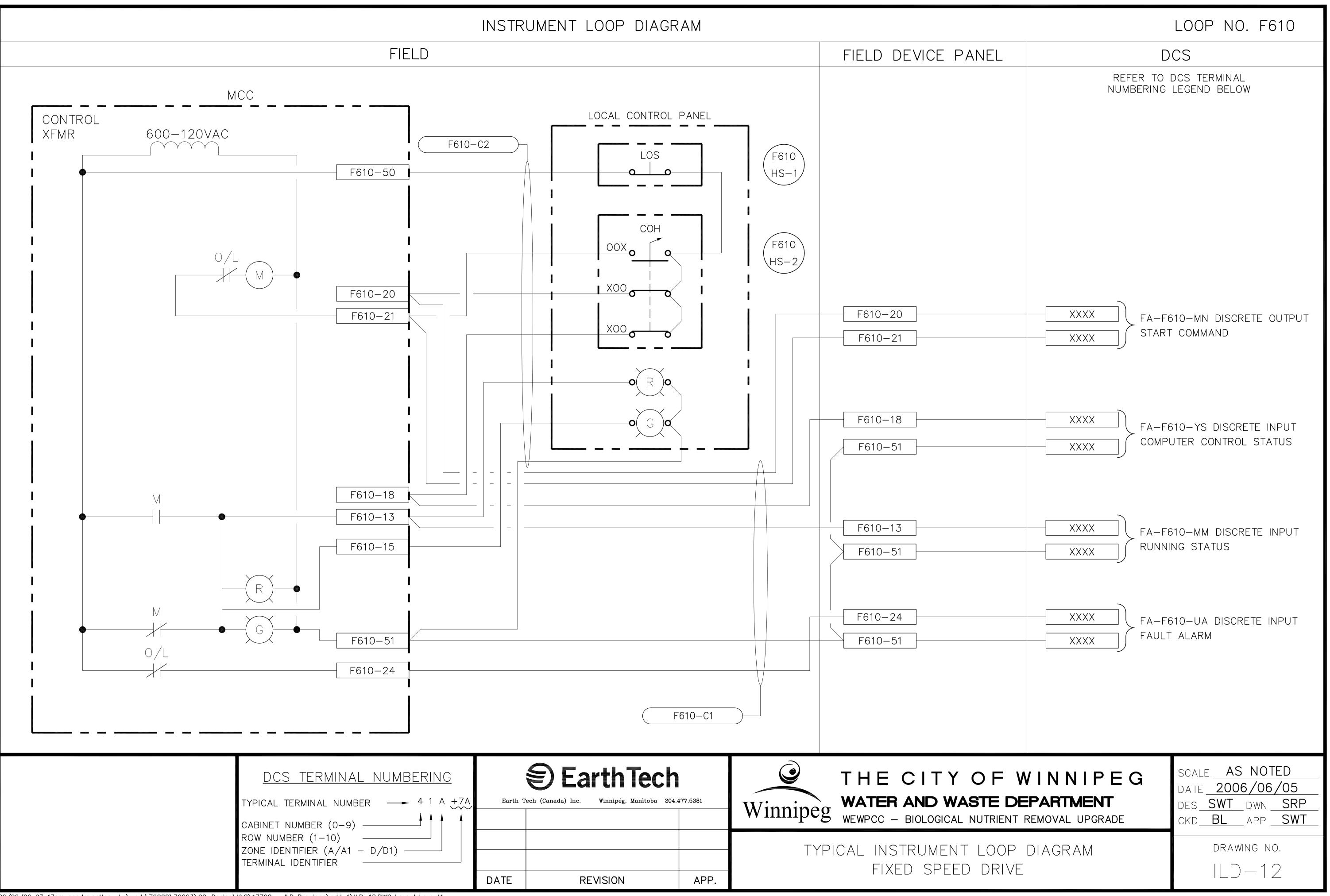
VAC POWER SUPPLY PANEL, CCT F551-C1	$POWER SUPPLY \begin{pmatrix} + & FUSE \\ F551-70 \\ - & F551-72 \end{pmatrix}$
	F551-70 F551-71 F551-73B
	F551-74 F551-75 F551-73A
F551-C2	F551-24 F551-25
	F551-18 F551-19
	F551-20 F551-21
	F551-13 F551-14
	F551-60 F551-61
Searth Tech	THE CITY OF

Earth I	'ech (Canada) Inc. Winnipeg, Manitoba 204.4	177.5381	Winnipeg WATER AND WASTE WEWPCC - BIOLOGICAL NUTRI
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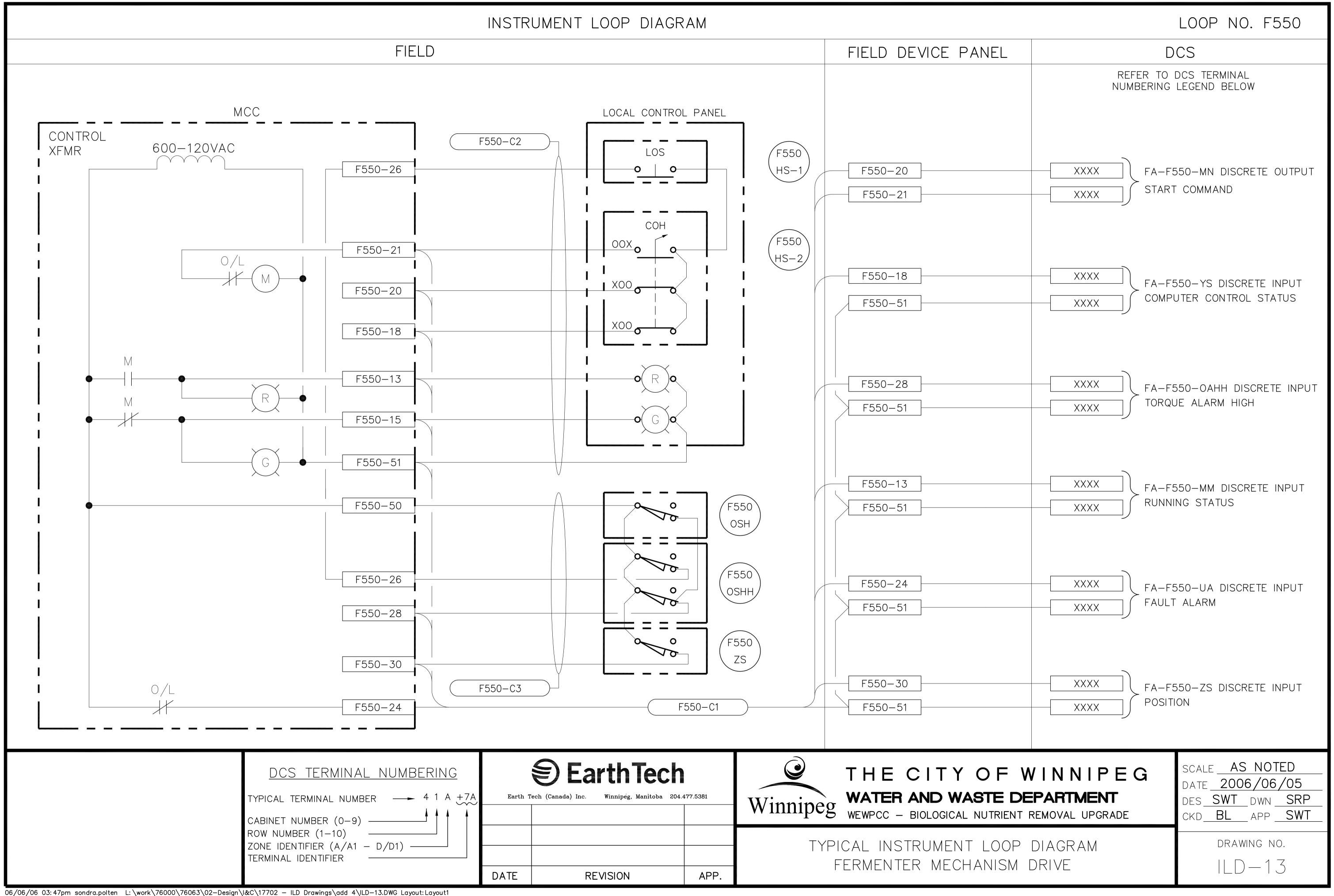








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FIELD VFD CONTROL PANEL VARIABLE SPEED DRIVE AI1+ SPEED REFERENCE AI1-P-250 VFD A01+ DRIVE SPEED OUTPUT A01-– P250–C4 +24 VDC DI1 START START DI2 INTERLOCK LOCAL SPEED DI5 SELECTED — Р250-С3 N.C. RUNNING С N.O. N.C. FAULT С N.O. U2 U1 575 VAC 60 Hz V2 Μ V1 POWER SUPPLY W2 W1 DCS TERMINAL NUMBERING ____ 4 1 A +7A TYPICAL TERMINAL NUMBER CABINET NUMBER (0-9) -ROW NUMBER (1-10) ------ZONE IDENTIFIER (A/A1 - D/D1) -TERMINAL IDENTIFIER

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