

2-Mar-22 Lim, Michael

C:\Users\mim\Downloads\New_Archive_20220302\071815\WP.E.001 Four Booster Pump Station Single Line Diagram.dwg

NOTES

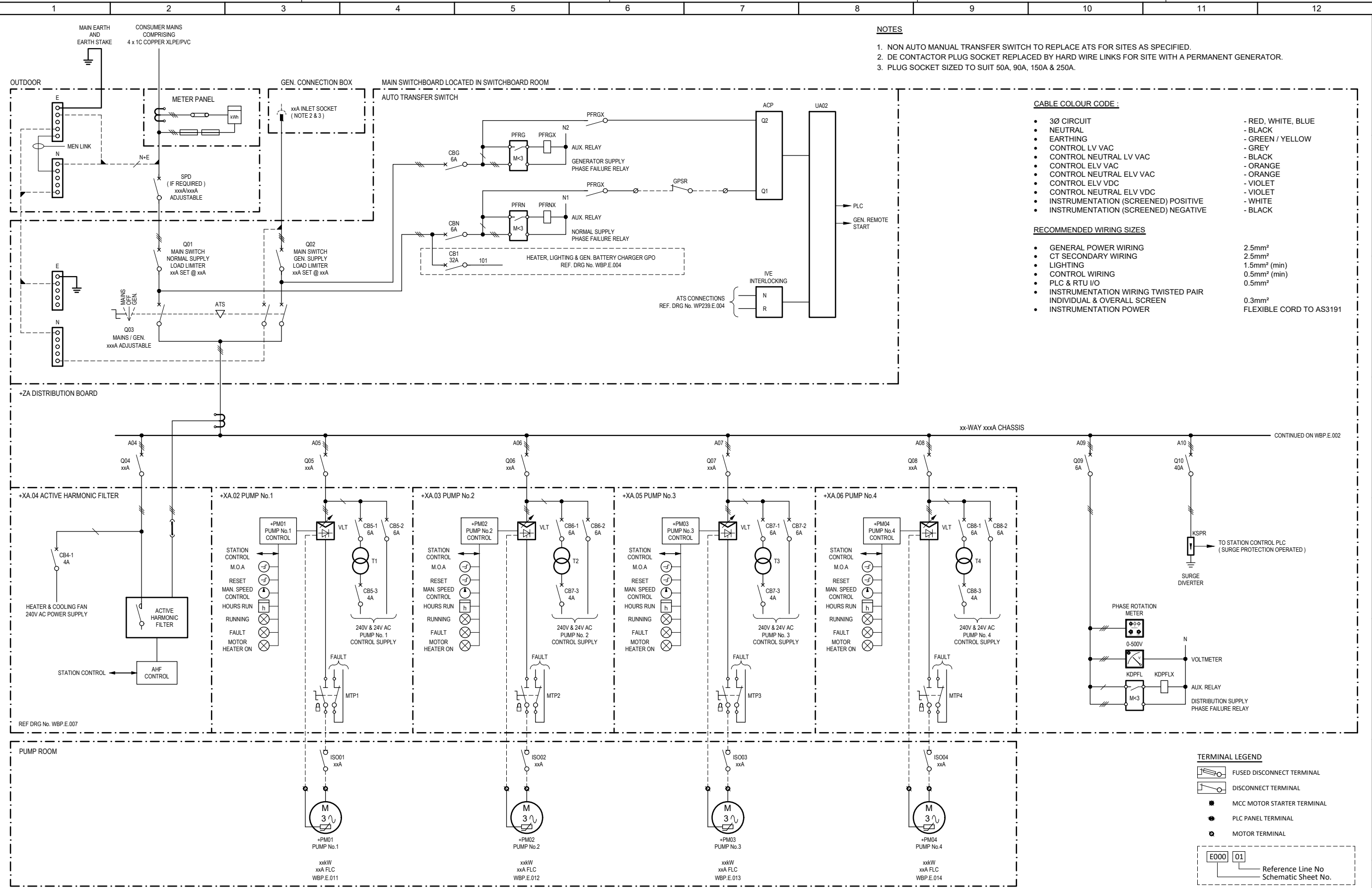
- NON AUTO MANUAL TRANSFER SWITCH TO REPLACE ATS FOR SITES AS SPECIFIED.
- DE CONTACTOR PLUG SOCKET REPLACED BY HARD WIRE LINKS FOR SITE WITH A PERMANENT GENERATOR.
- PLUG SOCKET SIZED TO SUIT 50A, 90A, 150A & 250A.

CABLE COLOUR CODE :

- 3Ø CIRCUIT - RED, WHITE, BLUE
- NEUTRAL - BLACK
- EARTHING - GREEN / YELLOW
- CONTROL LV VAC - GREY
- CONTROL NEUTRAL LV VAC - BLACK
- CONTROL ELV VAC - ORANGE
- CONTROL NEUTRAL ELV VAC - ORANGE
- CONTROL ELV VDC - VIOLET
- CONTROL NEUTRAL ELV VDC - VIOLET
- INSTRUMENTATION (SCREENED) POSITIVE - WHITE
- INSTRUMENTATION (SCREENED) NEGATIVE - BLACK

RECOMMENDED WIRING SIZES

- GENERAL POWER WIRING - 2.5mm²
- CT SECONDARY WIRING - 2.5mm²
- LIGHTING - 1.5mm² (min)
- CONTROL WIRING - 0.5mm² (min)
- PLC & RTU I/O - 0.5mm²
- INSTRUMENTATION WIRING TWISTED PAIR - 0.3mm²
- INDIVIDUAL & OVERALL SCREEN - 0.3mm²
- INSTRUMENTATION POWER - FLEXIBLE CORD TO AS3191



REV.	ZONE	REVISION	DATE	APP'D
2		DESIGN DRAWINGS STANDARDS REVISED 2021	20.05.21	M.L.
1		MINOR REVISION	12.09.19	M.L.
0		NEW DRAWING	17.05.19	J.M.

DESIGNED	DRAWN	SERVA
J.M. 17.05.19	M.L. 17.05.19	
DESIGN CHECK	DRAFT CHECK	SE WATER
J.S. 17.05.19		
APPROVED		

South East Water

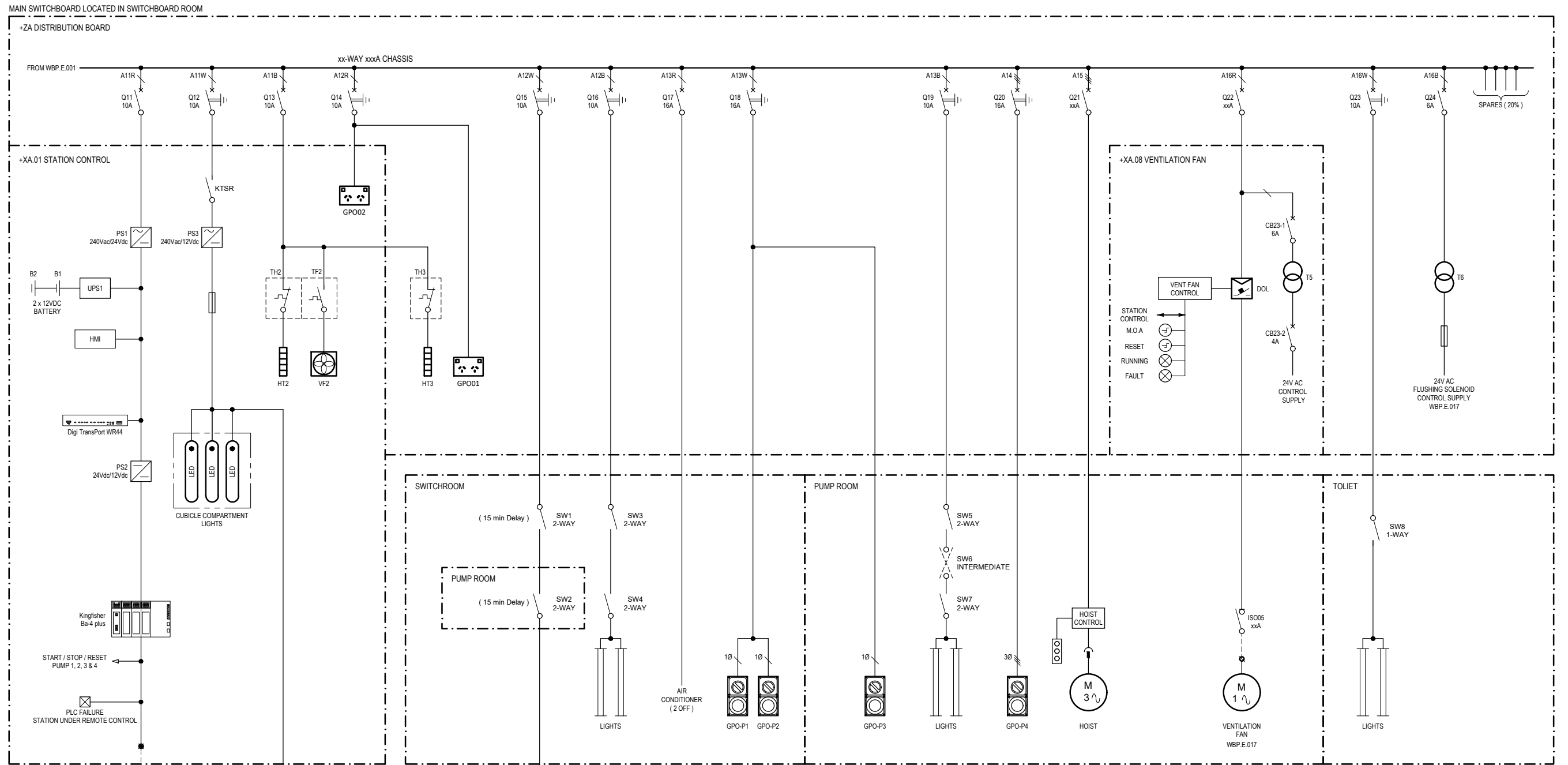
101 Wells Street
Frankston 3199

**WATER PUMP STATION
DESIGN DRAWINGS STANDARDS
FOUR WATER PUMP STATION
SINGLE LINE DIAGRAM**

DO NOT SCALE	
SCALE:	
DRAWING NUMBER	
WP.E.001	2
NUMERAL	REV

2-Mar-22 Lim, Michael

C:\Users\mim\Downloads\New_Archive_20220302\071615\WP.E.002 Four Booster Pump Station Single Line Diagram.dwg



TERMINAL LEGEND

	FUSED DISCONNECT TERMINAL
	DISCONNECT TERMINAL
	MCC MOTOR STARTER TERMINAL
	PLC PANEL TERMINAL
	MOTOR TERMINAL

NOTES
 1. THIS DRAWING IS TYPICAL ONLY. CONTRACTOR SHALL MODIFY TO SUIT THE EQUIPMENT OFFERED.

E000	01	Reference Line No
		Schematic Sheet No.

REV.	ZONE	REVISION	DATE	APP'D
3		DESIGN DRAWINGS STANDARDS REVISED 2021	20.05.21	M.L.
2		MINOR REVISION	12.09.19	M.L.
1		PS3 POWER SUPPLY ADDED (CUBICLE LIGHTS)	26.06.19	M.L.
0		NEW DRAWING	17.05.19	J.M.

DESIGNED J.M. 17.05.19	DRAWN M.L. 17.05.19	SERVA
DESIGN CHECK J.S. 17.05.19	DRAFT CHECK	SE WATER
APPROVED		

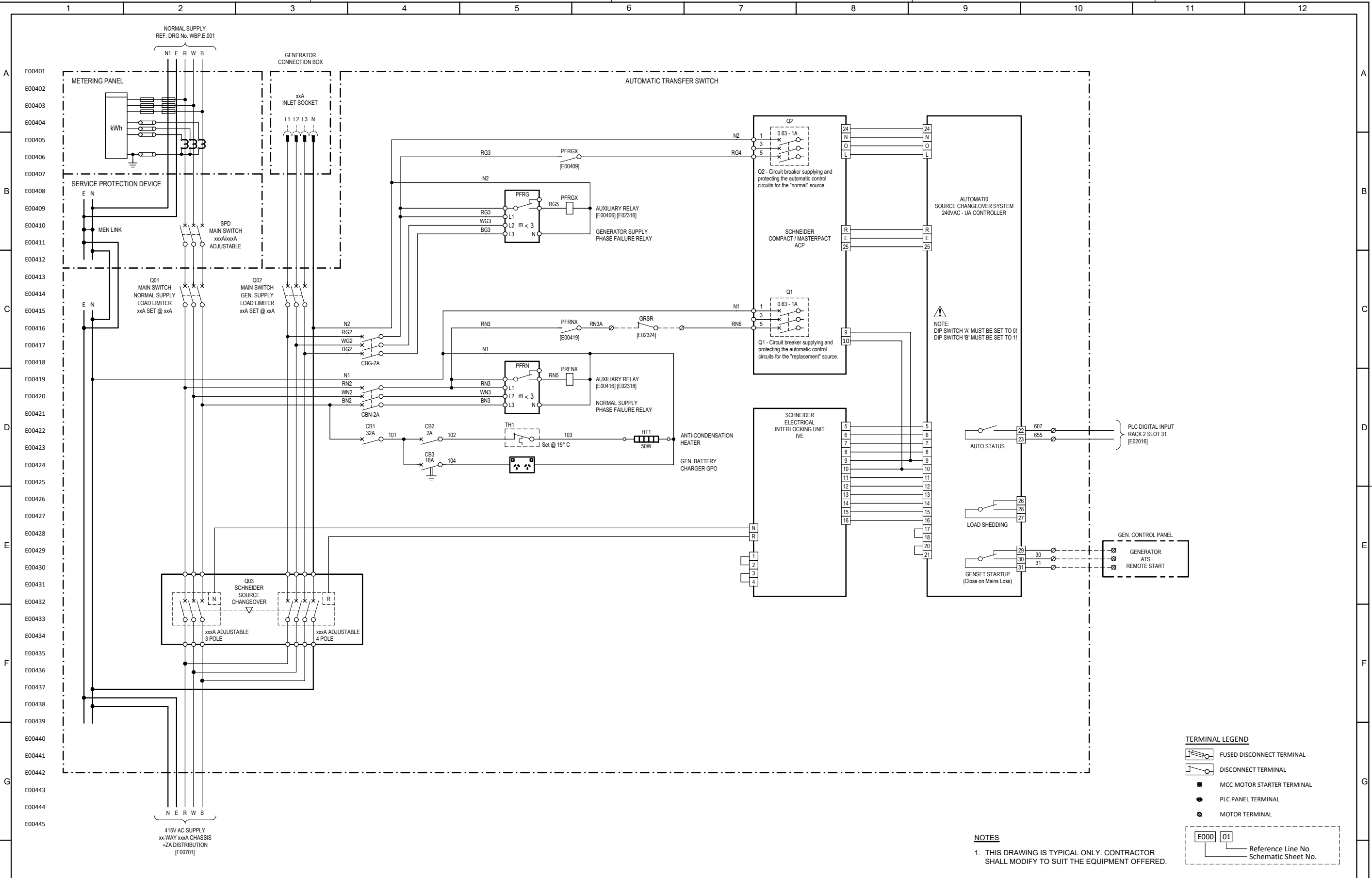
South East Water
 101 Wells Street
 Frankston 3199

**WATER PUMP STATION
 DESIGN DRAWINGS STANDARDS
 FOUR WATER PUMP STATION
 SINGLE LINE DIAGRAM**

DO NOT SCALE		
SCALE:		
DRAWING NUMBER		
WP.E.002		3
NUMERAL		REV

2-Apr-22 Lim, Michael

C:\Users\mim\Downloads\New_Archive_20220302\071815\WP.E.004 Auto Transfer Switch schematic.dwg



NOTES
 1. THIS DRAWING IS TYPICAL ONLY. CONTRACTOR SHALL MODIFY TO SUIT THE EQUIPMENT OFFERED.

TERMINAL LEGEND

- FUSED DISCONNECT TERMINAL
- DISCONNECT TERMINAL
- MCC MOTOR STARTER TERMINAL
- PLC PANEL TERMINAL
- MOTOR TERMINAL

Reference Line No Schematic Sheet No.

E000	01
------	----

REV.	ZONE	REVISION	DATE	APP'D
0		NEW DRAWING	15.07.21	M.L.

DESIGNED	DRAWN	SERVA
	M.L.	
	17.05.19	
DESIGN CHECK	DRAFT CHECK	SE WATER
APPROVED		

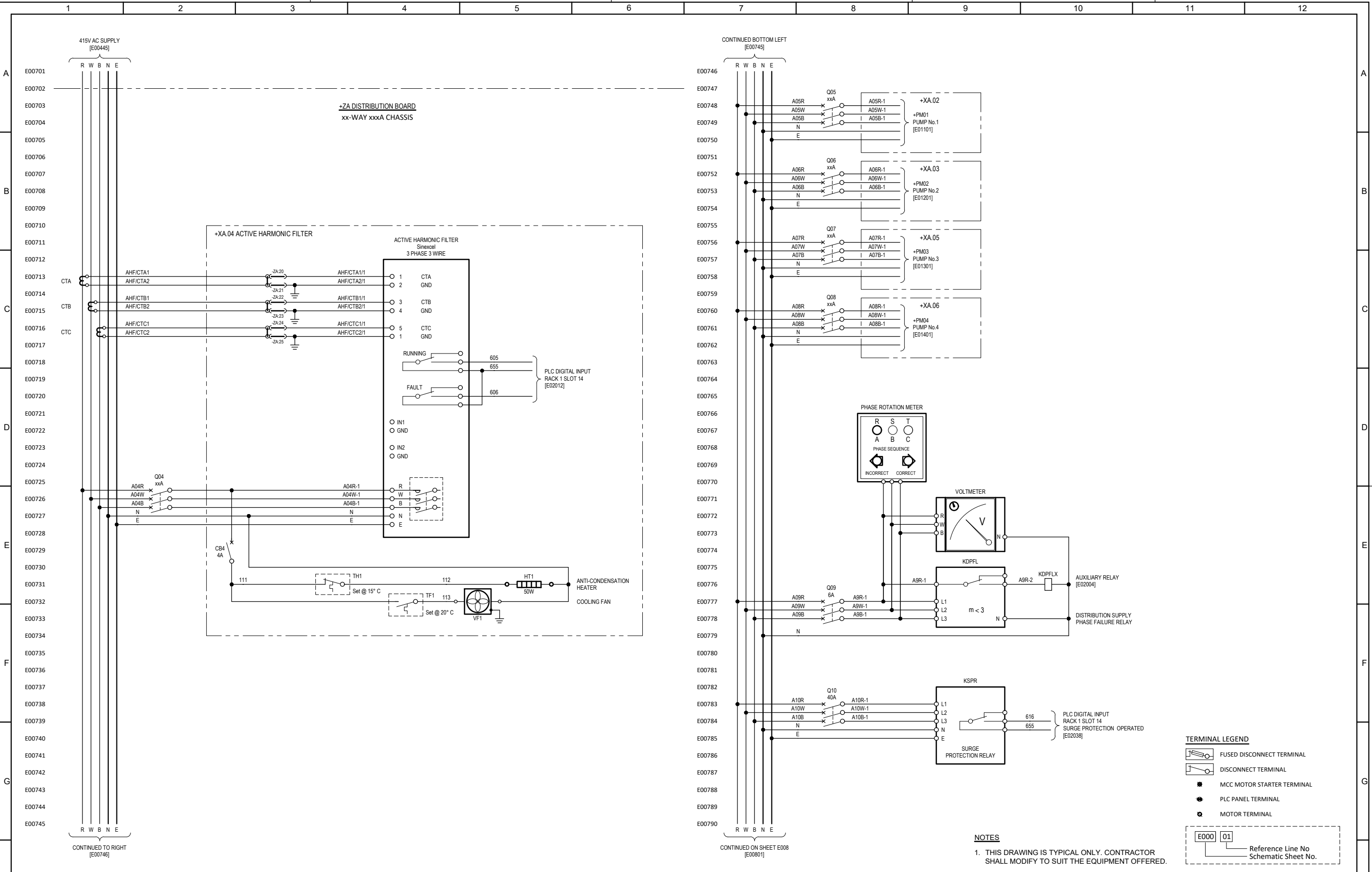
South East Water

101 Wells Street
Frankston 3199

**WATER PUMP STATION
 DESIGN DRAWINGS STANDARDS
 AUTOMATIC TRANSFER SWITCH
 SCHEMATIC DIAGRAM**

DO NOT SCALE	
SCALE:	
DRAWING NUMBER	
WP.E.004	0
NUMERAL	REV

2-Mar-22 Lim, Michael
C:\Users\mim\Downloads\New_Archive_20220302\071815\WPBP.E.007+ZA Distribution Power Supply.dwg



REV.	ZONE	REVISION	DATE	APP'D
2		DESIGN DRAWINGS STANDARDS REVISED 2021	20.05.21	M.L.
1		PHASE FAILURE FUSE REMOVED	26.06.19	M.L.
0		NEW DRAWING	17.05.19	J.M.

DESIGNED J.M. 17.05.19	DRAWN M.L. 17.05.19	SERVA
DESIGN CHECK J.S. 17.05.19	DRAFT CHECK	SE WATER
APPROVED		

South East Water
101 Wells Street
Frankston 3199

**WATER PUMP STATION
DESIGN DRAWING STANDARDS**
+ZA DISTRIBUTION POWER SUPPLY
SCHEMATIC DIAGRAM

DO NOT SCALE	
SCALE:	
DRAWING NUMBER	
WP.E.007	2
NUMERAL	REV

NOTES
1. THIS DRAWING IS TYPICAL ONLY. CONTRACTOR SHALL MODIFY TO SUIT THE EQUIPMENT OFFERED.

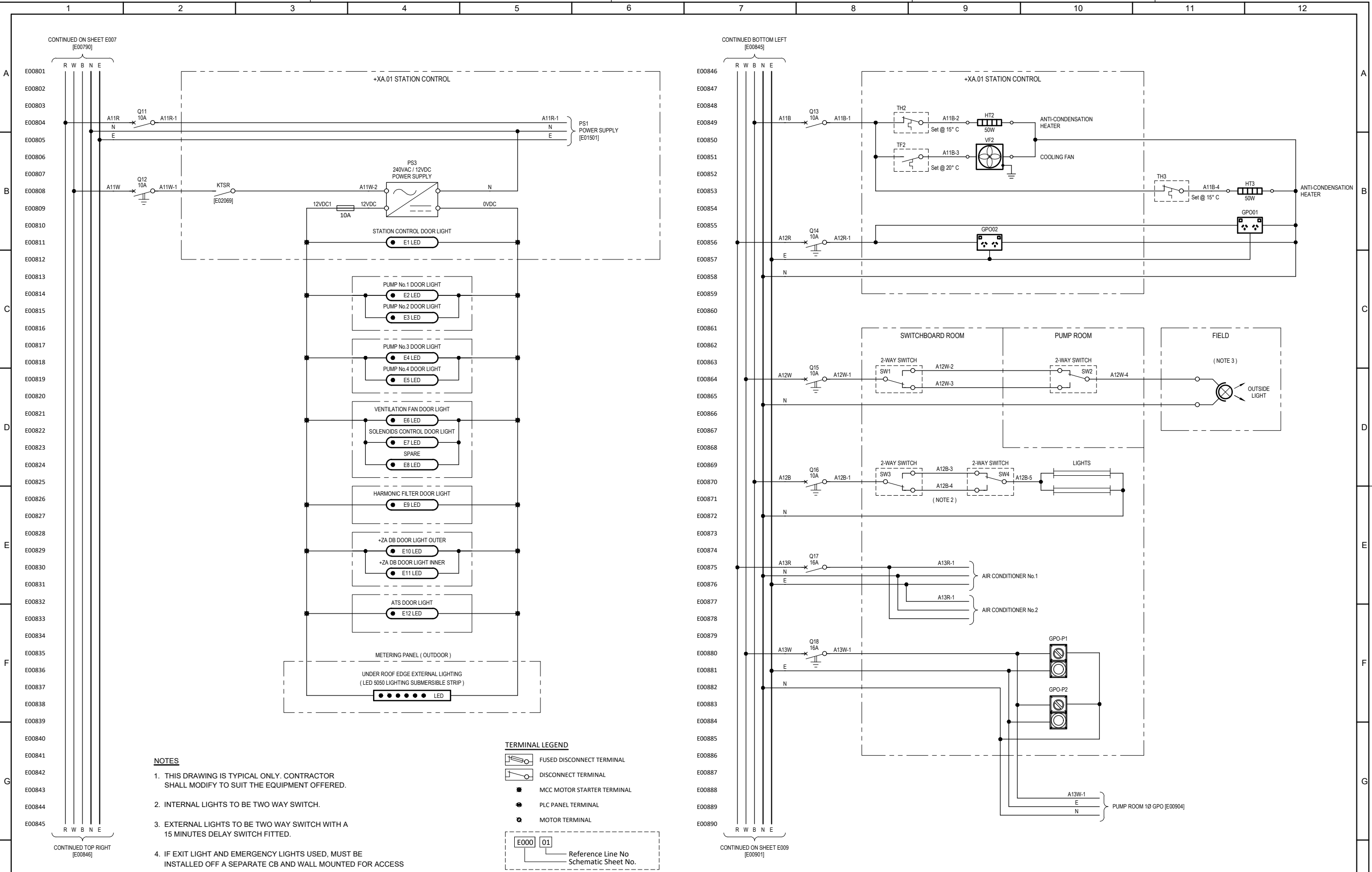
TERMINAL LEGEND

- FUSED DISCONNECT TERMINAL
- DISCONNECT TERMINAL
- MCC MOTOR STARTER TERMINAL
- PLC PANEL TERMINAL
- MOTOR TERMINAL

Reference Line No Schematic Sheet No.
E000 01

2-Apr-22 Lim, Michael

C:\Users\lim\Downloads\New_Archive_20220307\1815WB.P.E.008 +ZA Distribution Power Supply.dwg



- NOTES**
1. THIS DRAWING IS TYPICAL ONLY. CONTRACTOR SHALL MODIFY TO SUIT THE EQUIPMENT OFFERED.
 2. INTERNAL LIGHTS TO BE TWO WAY SWITCH.
 3. EXTERNAL LIGHTS TO BE TWO WAY SWITCH WITH A 15 MINUTES DELAY SWITCH FITTED.
 4. IF EXIT LIGHT AND EMERGENCY LIGHTS USED, MUST BE INSTALLED OFF A SEPARATE CB AND WALL MOUNTED FOR ACCESS

- TERMINAL LEGEND**
- FUSED DISCONNECT TERMINAL
 - DISCONNECT TERMINAL
 - MCC MOTOR STARTER TERMINAL
 - PLC PANEL TERMINAL
 - MOTOR TERMINAL

E000 01
Reference Line No
Schematic Sheet No.

REV.	ZONE	REVISION	DATE	APP'D
3		DESIGN DRAWINGS STANDARDS REVISED 2021	20.05.21	M.L.
2		RCD SYMBOL REVISED	12.09.19	M.L.
1		PS3 POWER SUPPLY ADDED (CUBICLE LIGHTS)	26.06.19	M.L.
0		NEW DRAWING	17.05.19	J.M.

DESIGNED	DRAWN	SERVA
J.M. 17.05.19	M.L. 17.05.19	
DESIGN CHECK	DRAFT CHECK	SE WATER
J.S. 17.05.19		
APPROVED		

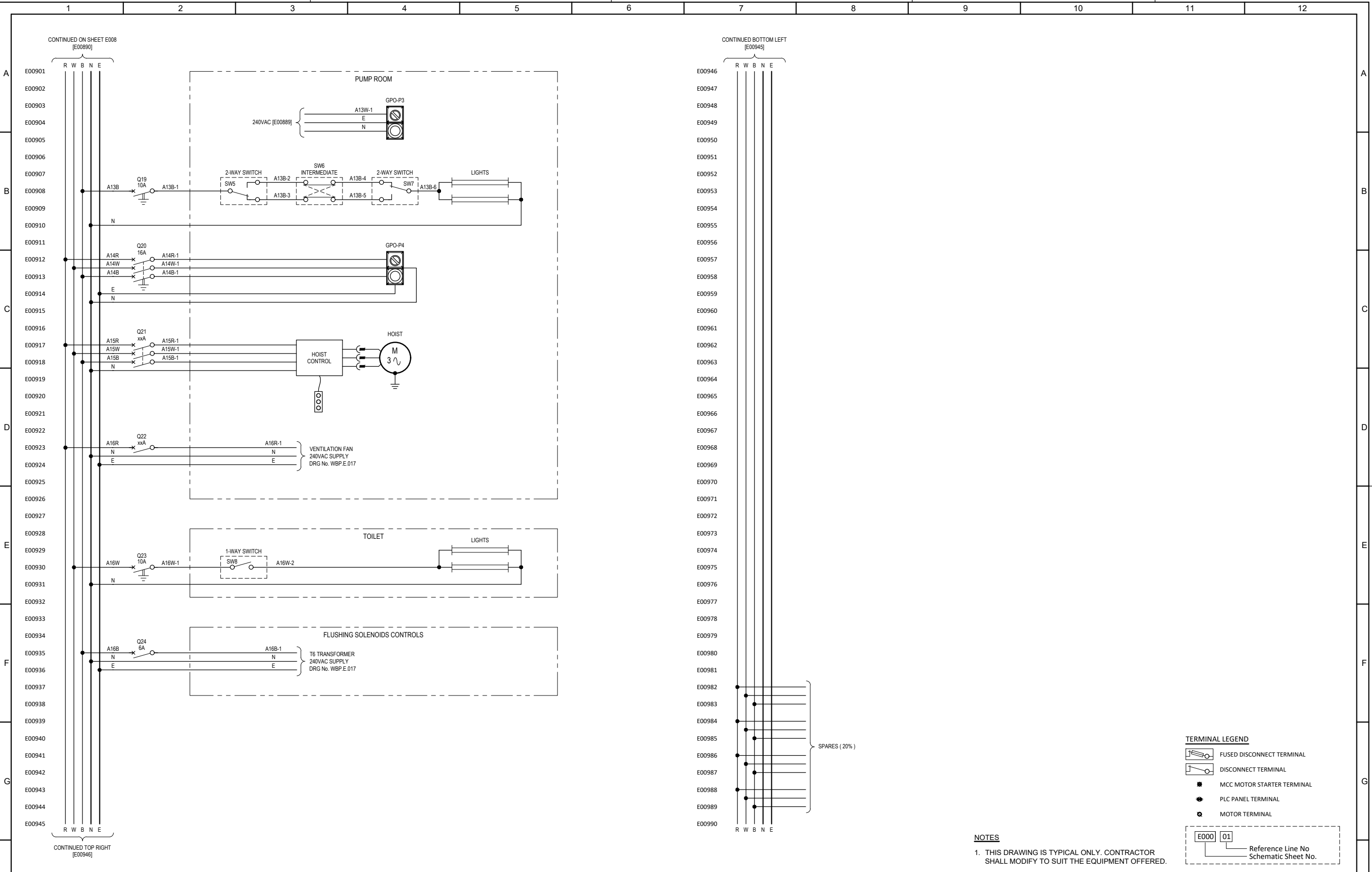
South East Water
101 Wells Street
Frankston 3199

WATER PUMP STATION
DESIGN DRAWING STANDARDS
+ZA DISTRIBUTION POWER SUPPLY
SCHEMATIC DIAGRAM

DO NOT SCALE		
SCALE:		
DRAWING NUMBER		
WP.E.008		3
NUMERAL	REV	

2-Apr-23 Lim, Michael

C:\Users\mim\Downloads\New_Archive_20220307\1815\WP.E.009+ZA Distribution Power Supply.dwg



NOTES
 1. THIS DRAWING IS TYPICAL ONLY. CONTRACTOR SHALL MODIFY TO SUIT THE EQUIPMENT OFFERED.

TERMINAL LEGEND

- FUSED DISCONNECT TERMINAL
- DISCONNECT TERMINAL
- MCC MOTOR STARTER TERMINAL
- PLC PANEL TERMINAL
- MOTOR TERMINAL

Reference Line No Schematic Sheet No.
 E000 01

REV.	ZONE	REVISION	DATE	APP'D
0		NEW DRAWING	15.07.21	

DESIGNED	DRAWN	SERVA
	M.L.	
DESIGN CHECK	DRAFT CHECK	SE WATER
APPROVED		

South East Water

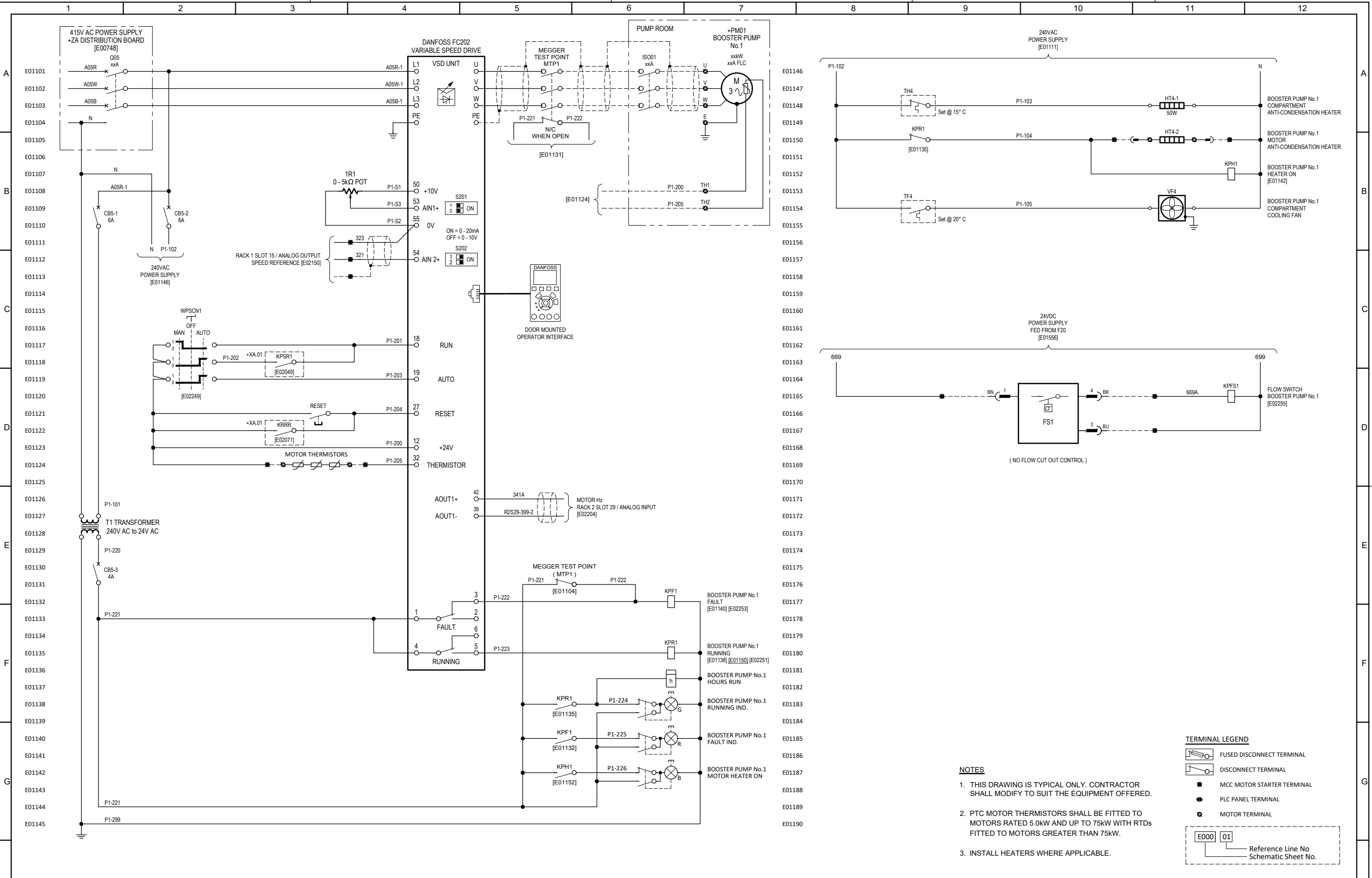
101 Wells Street
Frankston 3199

WATER PUMP STATION
DESIGN DRAWING STANDARDS
 +ZA DISTRIBUTION POWER SUPPLY
 SCHEMATIC DIAGRAM

DO NOT SCALE	
SCALE:	
DRAWING NUMBER	
WP.E.009	0
NUMERAL	REV

2-Apr-22 Lim, Michael

C:\Users\mim\Downloads\New_Archive_20220307071815\WP.E.011 +PM01 Pump No.1 Motor Starter.dwg



TERMINAL LEGEND

- FUSED DISCONNECT TERMINAL
- DISCONNECT TERMINAL
- MCC MOTOR STARTER TERMINAL
- PLC PANEL TERMINAL
- MOTOR TERMINAL

NOTES

- THIS DRAWING IS TYPICAL ONLY. CONTRACTOR SHALL MODIFY TO SUIT THE EQUIPMENT OFFERED.
- PTC MOTOR THERMISTORS SHALL BE FITTED TO MOTORS RATED 5.0kW AND UP TO 75kW WITH RTDs FITTED TO MOTORS GREATER THAN 75kW.
- INSTALL HEATERS WHERE APPLICABLE.

REFERENCE LINE NO SCHEMATIC SHEET NO.

E000 01

REV.	ZONE	REVISION	DATE	APP'D
3		VSD OUTPUTS REVISED	01.03.22	M.L.
2		DESIGN DRAWINGS STANDARDS REVISED 2021	20.05.21	M.L.
1		WIRE NUMBER REVISED	12.09.19	M.L.
0		NEW DRAWING	17.05.19	J.M.

DESIGNED	DRAWN	SERVA
J.M.	M.L.	
17.05.19	17.05.19	
DESIGN CHECK	DRAFT CHECK	SE WATER
J.S.		
17.05.19		
APPROVED		

South East Water

101 Wells Street
Frankston 3199

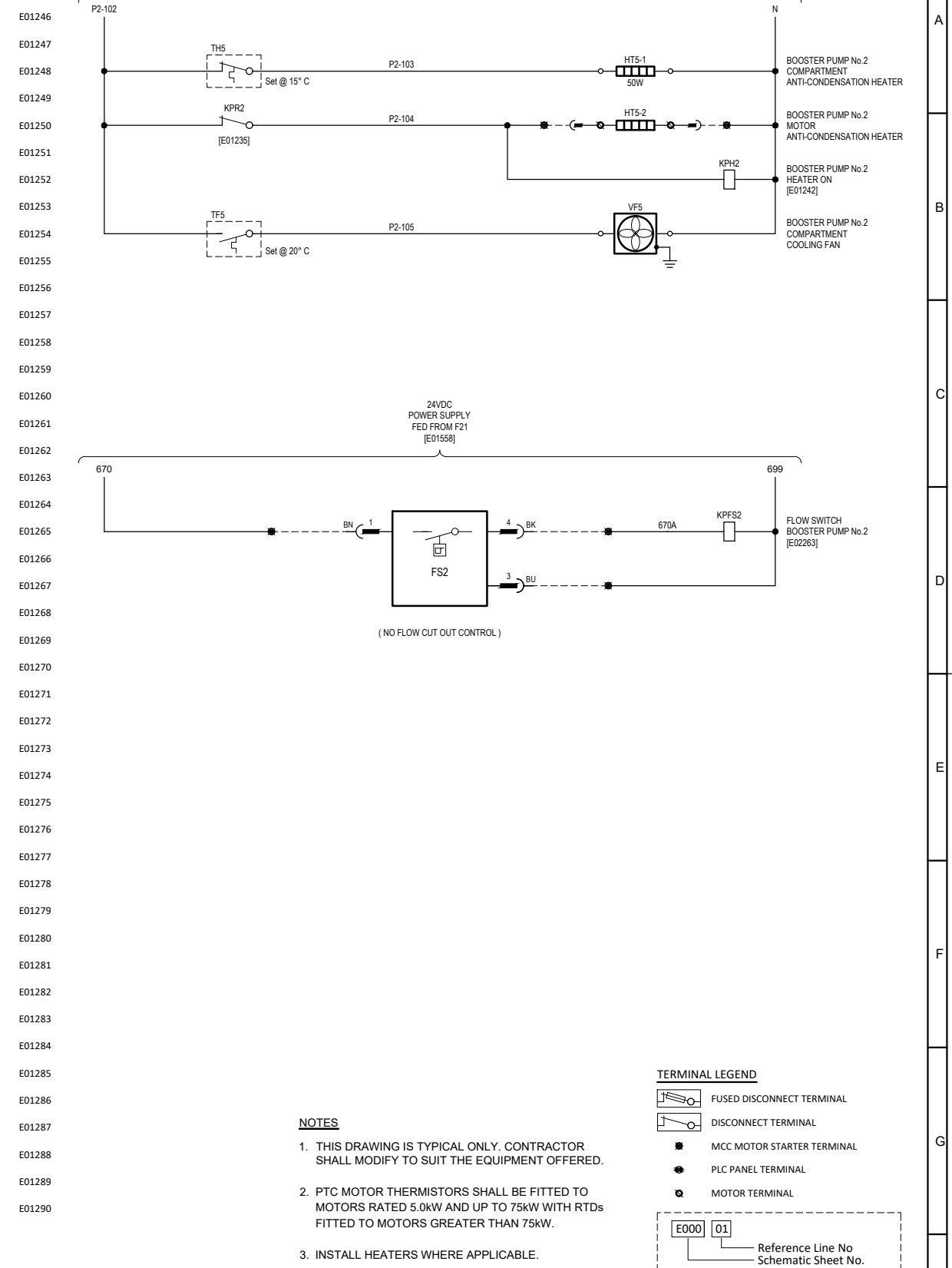
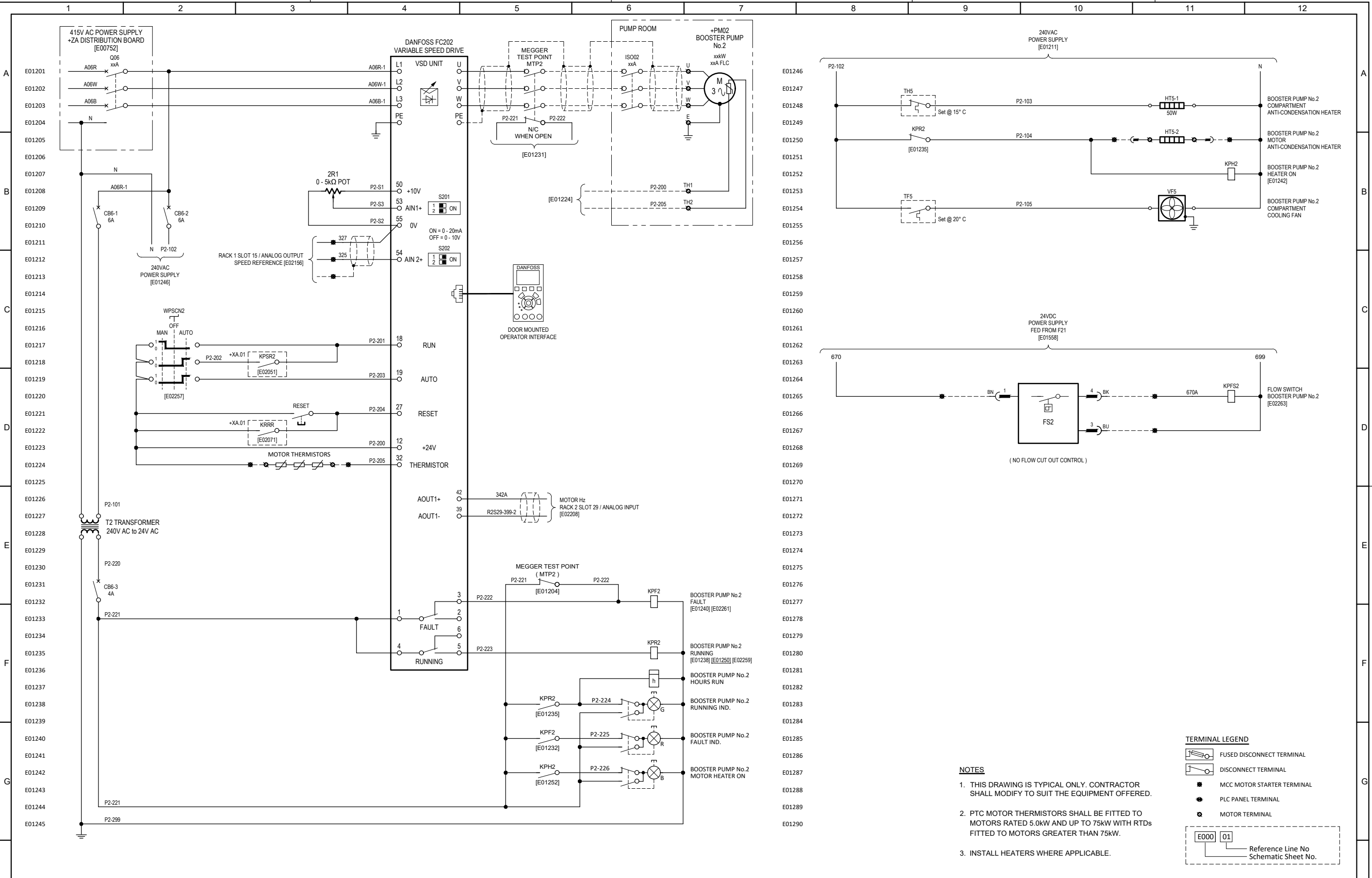
**WATER PUMP STATION
DESIGN DRAWING STANDARDS**

**+XA.02 PUMP No.1 MOTOR STARTER
SCHEMATIC DIAGRAM**

DO NOT SCALE	
SCALE:	
DRAWING NUMBER	
WP.E.011	3
NUMERAL	
	REV

2-Apr-22 Lim, Michael

C:\Users\mim\Downloads\New_Archive_20220307071815\WP.E.012 -PM02 Pump No.2 Motor Starter.dwg



- NOTES**
- THIS DRAWING IS TYPICAL ONLY. CONTRACTOR SHALL MODIFY TO SUIT THE EQUIPMENT OFFERED.
 - PTC MOTOR THERMISTORS SHALL BE FITTED TO MOTORS RATED 5.0kW AND UP TO 75kW WITH RTDs FITTED TO MOTORS GREATER THAN 75kW.
 - INSTALL HEATERS WHERE APPLICABLE.

TERMINAL LEGEND

- FUSED DISCONNECT TERMINAL
- DISCONNECT TERMINAL
- MCC MOTOR STARTER TERMINAL
- PLC PANEL TERMINAL
- MOTOR TERMINAL

Reference Line No Schematic Sheet No.

REV.	ZONE	REVISION	DATE	APP'D
3		VSD OUTPUTS REVISED	01.03.22	M.L.
2		DESIGN DRAWINGS STANDARDS REVISED 2021	20.05.21	M.L.
1		WIRE NUMBER REVISED	12.09.19	M.L.
0		NEW DRAWING	17.05.19	J.M.

DESIGNED	DRAWN	SERVA
J.M.	M.L.	
17.05.19	17.05.19	
DESIGN CHECK	DRAFT CHECK	SE WATER
J.S.		
17.05.19		
APPROVED		

South East Water

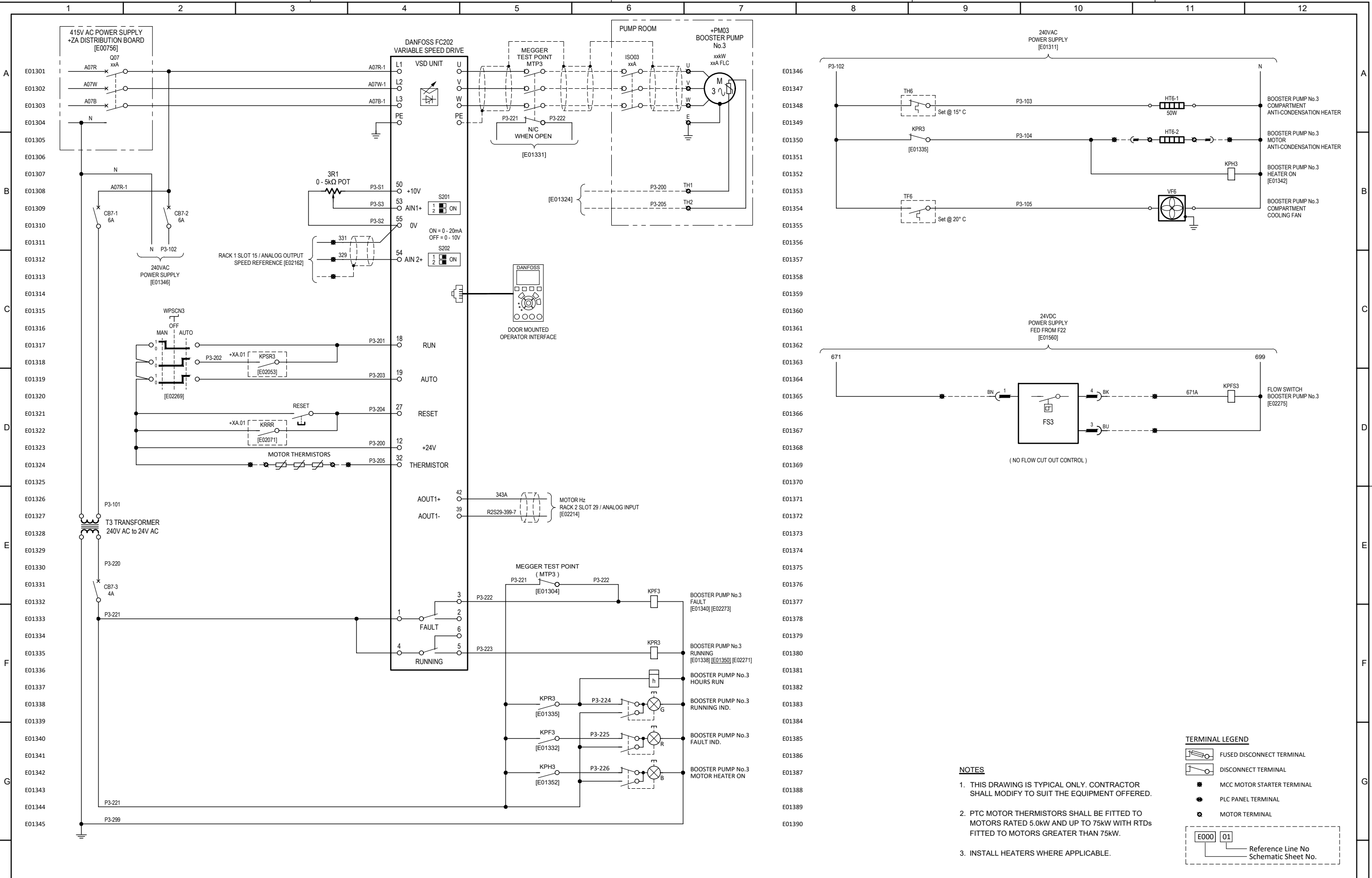
101 Wells Street
Frankston 3199

WATER PUMP STATION
DESIGN DRAWING STANDARDS
+XA.03 PUMP No.2 MOTOR STARTER
SCHEMATIC DIAGRAM

DO NOT SCALE	
SCALE:	
DRAWING NUMBER	
WP.E.012	3
NUMERAL	REV

2-Apr-22 Lim, Michael

C:\Users\mim\Downloads\New_Archive_20220307071815\WP.E.013 -PM03 Pump No.3 Motor Starter.dwg



- NOTES**
- THIS DRAWING IS TYPICAL ONLY. CONTRACTOR SHALL MODIFY TO SUIT THE EQUIPMENT OFFERED.
 - PTC MOTOR THERMISTORS SHALL BE FITTED TO MOTORS RATED 5.0kW AND UP TO 75kW WITH RTDs FITTED TO MOTORS GREATER THAN 75kW.
 - INSTALL HEATERS WHERE APPLICABLE.

TERMINAL LEGEND

- FUSED DISCONNECT TERMINAL
- DISCONNECT TERMINAL
- MCC MOTOR STARTER TERMINAL
- PLC PANEL TERMINAL
- MOTOR TERMINAL

REFERENCE LINE NO. SCHEMATIC SHEET NO.

E000 01

REV.	ZONE	REVISION	DATE	APP'D
3		VSD OUTPUTS REVISED	01.03.22	M.L.
2		DESIGN DRAWINGS STANDARDS REVISED 2021	20.05.21	M.L.
1		WIRE NUMBER REVISED	12.09.19	M.L.
0		NEW DRAWING	17.05.19	J.M.

DESIGNED J.M. 17.05.19	DRAWN M.L. 17.05.19	SERVA
DESIGN CHECK J.S. 17.05.19	DRAFT CHECK SE WATER	
APPROVED		

South East Water

101 Wells Street
Frankston 3199

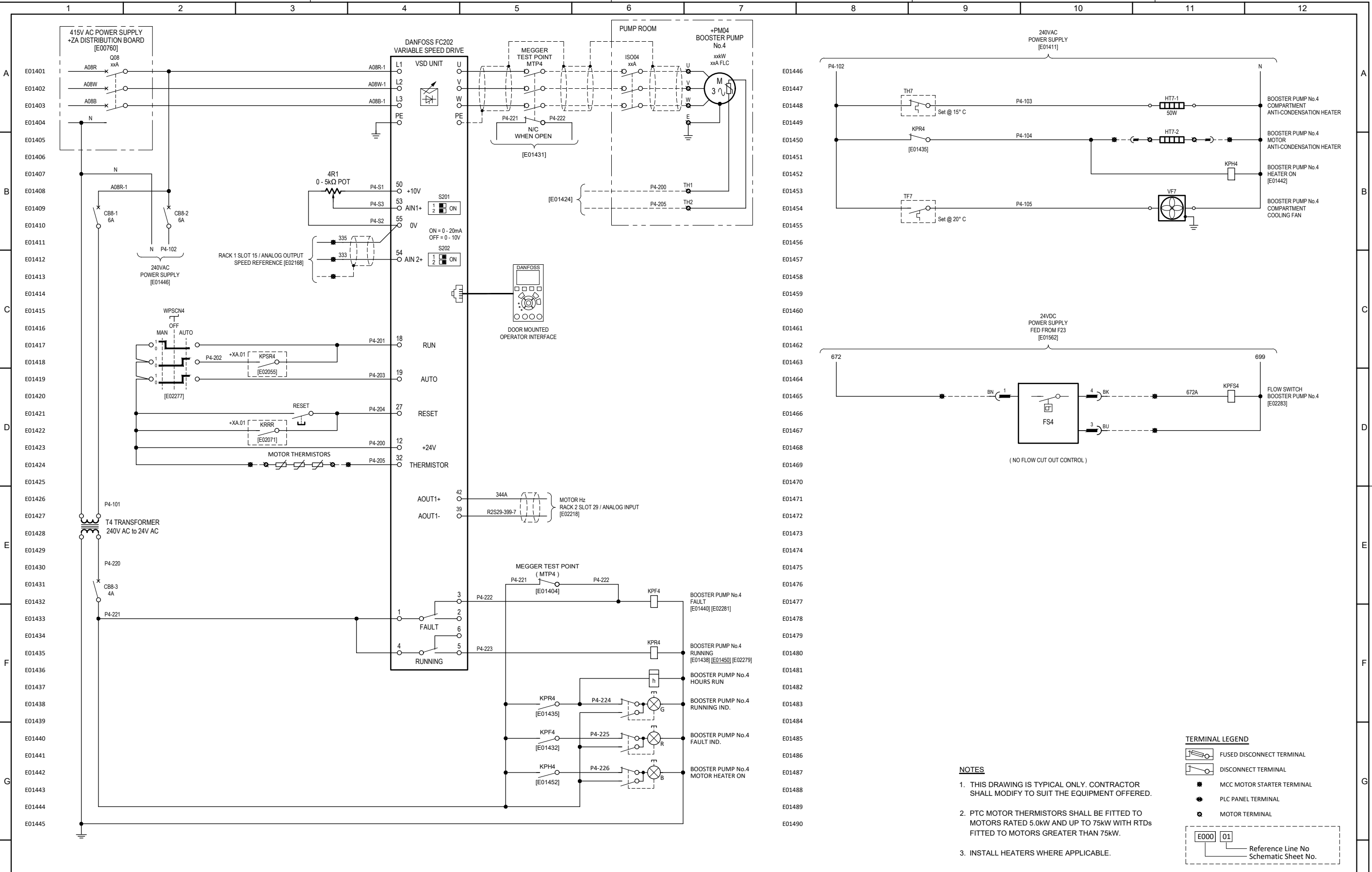
**WATER PUMP STATION
DESIGN DRAWING STANDARDS**

**+XA.05 PUMP No.3 MOTOR STARTER
SCHEMATIC DIAGRAM**

DO NOT SCALE		
SCALE:		
DRAWING NUMBER		
WP.E.013		3
NUMERAL		REV

2-Apr-22 Lim, Michael

C:\Users\lim\Downloads\New_Archive_20220307071815\WP.E.014 -PM04 Pump No.4 Motor Starter.dwg



DESIGNED	DRAWN	SERVA
J.M.	M.L.	
17.05.19	17.05.19	
DESIGN CHECK	DRAFT CHECK	SE WATER
J.S.		
17.05.19		
APPROVED		

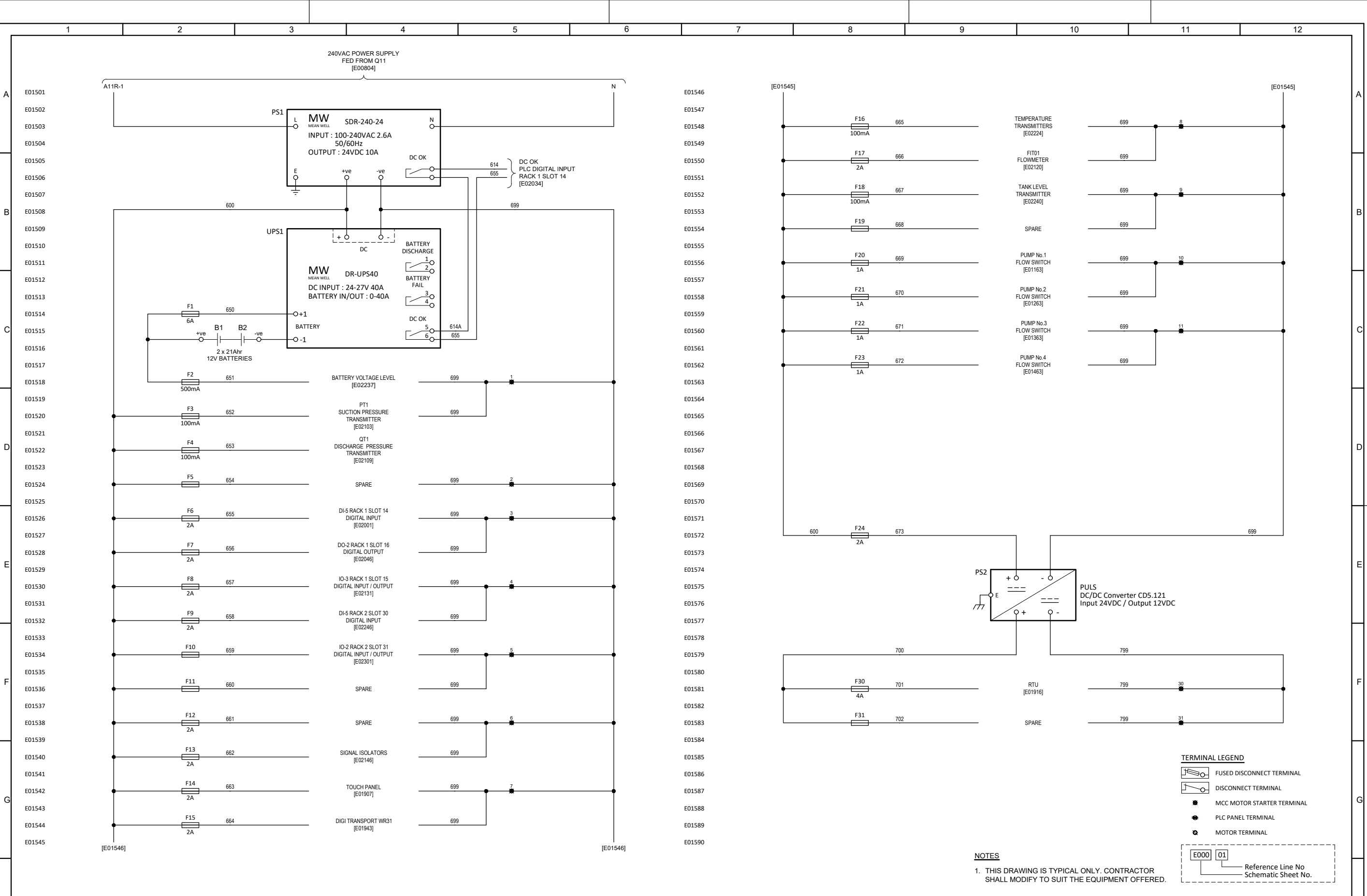
South East Water
 101 Wells Street
 Frankston 3199

WATER PUMP STATION
DESIGN DRAWING STANDARDS
 +XA.06 PUMP No.4 MOTOR STARTER
 SCHEMATIC DIAGRAM

DO NOT SCALE		
SCALE:		
DRAWING NUMBER		
WP.E.014		3
NUMERAL		REV

2-Apr-22 Lim, Michael

C:\Users\m\Downloads\New_Archive_20220307\1815\WP.E.015 24VDC & 12VDC Power Distribution.dwg



REV.	ZONE	REVISION	DATE	APP'D
1		DESIGN DRAWINGS STANDARDS REVISED 2021	20.05.21	M.L.
0		NEW DRAWING	17.05.19	J.M.

DESIGNED	DRAWN	SERVA
J.M.	M.L.	
17.05.19	17.05.19	
DESIGN CHECK	DRAFT CHECK	SE WATER
J.S.		
17.05.19		
APPROVED		

South East Water

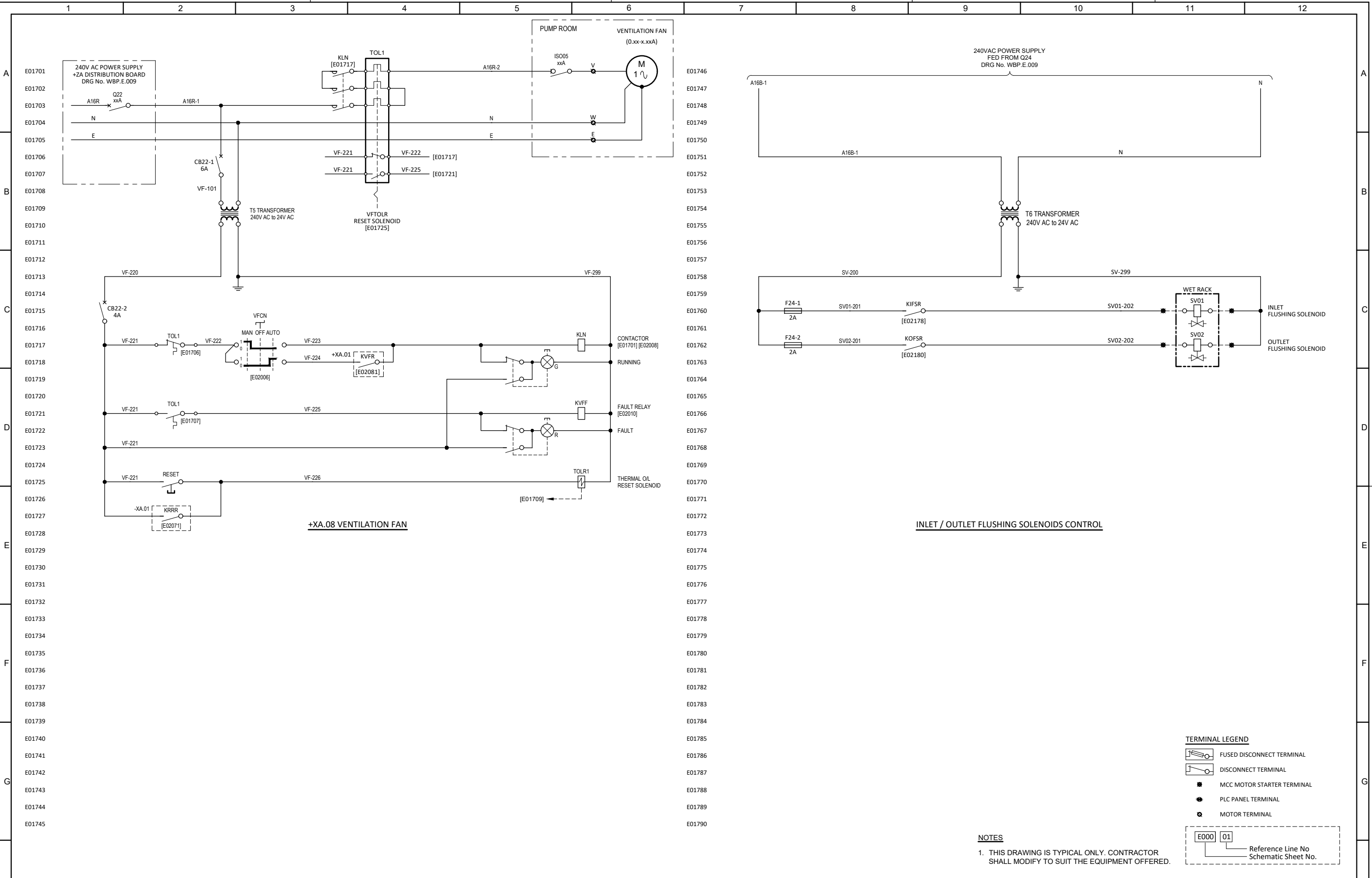
101 Wells Street
Frankston 3199

WATER PUMP STATION
DESIGN DRAWING STANDARDS
+XA.01 24VDC & 12VDC POWER DISTRIBUTION
SCHEMATIC DIAGRAM

DO NOT SCALE	
SCALE:	
DRAWING NUMBER	
WP.E.015	1
NUMERAL	REV

2-Apr-22 Lim, Michael

C:\Users\mim\Downloads\New_Archive_20220307\071815\WBP.E.017 Ventilation Fan & Flushing Solenoid.dwg



REV.	ZONE	REVISION	DATE	APP'D
2		DESIGN DRAWINGS STANDARDS REVISED 2021	20.05.21	M.L.
1		WIRE NUMBER REVISED	12.09.19	M.L.
0		NEW DRAWING	17.05.19	J.M.

DESIGNED	DRAWN	SERVA
J.M. 17.05.19	M.L. 17.05.19	
DESIGN CHECK	DRAFT CHECK	SE WATER
J.S. 17.05.19		
APPROVED		

101 Wells Street
 Frankston 3199

WATER PUMP STATION
DESIGN DRAWINGS STANDARDS
+XA.08 VENT FAN & FLUSHING SOLENOID
SCHEMATIC DIAGRAM

DO NOT SCALE	
SCALE:	
DRAWING NUMBER	
WP.E.017	2
NUMERAL	REV

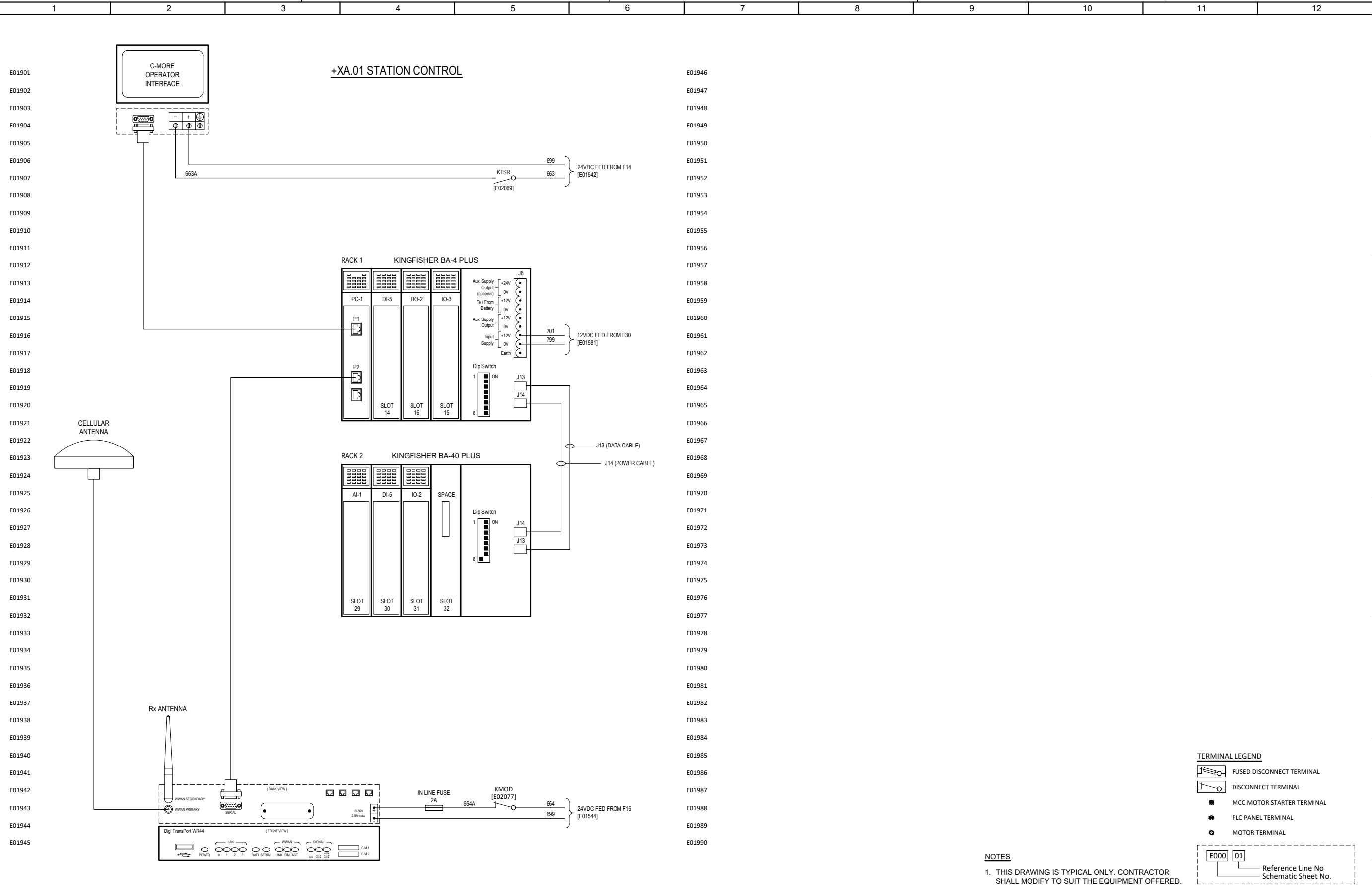
NOTES
 1. THIS DRAWING IS TYPICAL ONLY. CONTRACTOR SHALL MODIFY TO SUIT THE EQUIPMENT OFFERED.

TERMINAL LEGEND
 FUSED DISCONNECT TERMINAL
 DISCONNECT TERMINAL
 MCC MOTOR STARTER TERMINAL
 PLC PANEL TERMINAL
 MOTOR TERMINAL

E000 01
 Reference Line No
 Schematic Sheet No.

2-Apr-22 Lim, Michael

C:\Users\mim\Downloads\New_Archive_20220302\071815\WP.E.019 RTU & Modem Schematic.dwg



E01946
E01947
E01948
E01949
E01950
E01951
E01952
E01953
E01954
E01955
E01956
E01957
E01958
E01959
E01960
E01961
E01962
E01963
E01964
E01965
E01966
E01967
E01968
E01969
E01970
E01971
E01972
E01973
E01974
E01975
E01976
E01977
E01978
E01979
E01980
E01981
E01982
E01983
E01984
E01985
E01986
E01987
E01988
E01989
E01990

TERMINAL LEGEND

- FUSED DISCONNECT TERMINAL
- DISCONNECT TERMINAL
- MCC MOTOR STARTER TERMINAL
- PLC PANEL TERMINAL
- MOTOR TERMINAL

Reference Line No Schematic Sheet No.

E000 01

NOTES

1. THIS DRAWING IS TYPICAL ONLY. CONTRACTOR SHALL MODIFY TO SUIT THE EQUIPMENT OFFERED.

REV.	ZONE	REVISION	DATE	APP'D
1		DESIGN DRAWINGS STANDARDS REVISED 2021	20.05.21	M.L.
0		NEW DRAWING	17.05.19	J.M.

DESIGNED J.M. 17.05.19	DRAWN M.L. 17.05.19	SERWA
DESIGN CHECK J.S. 17.05.19	DRAFT CHECK	SE WATER
APPROVED		

South East Water

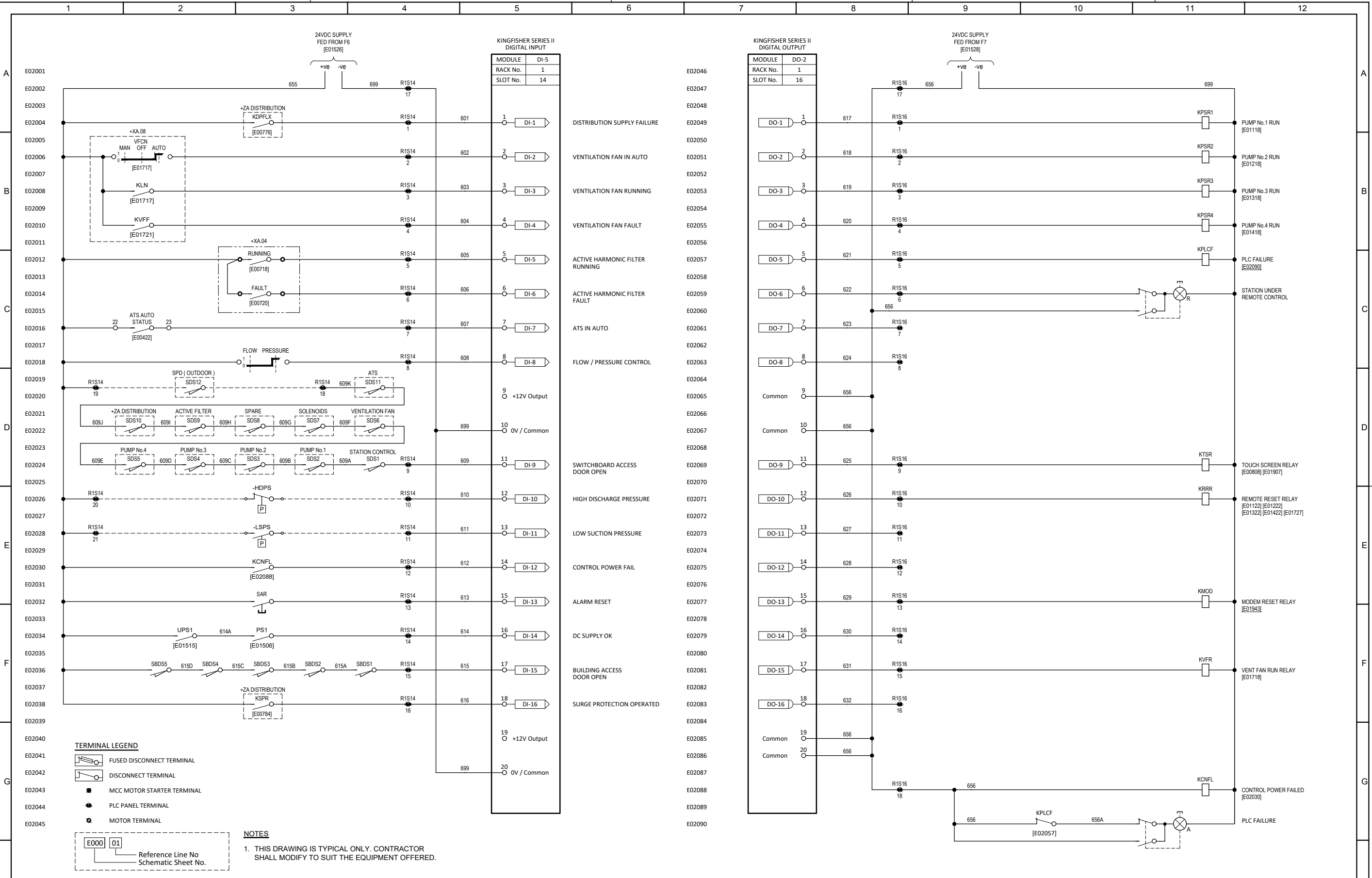
101 Wells Street
Frankston 3199

**WATER PUMP STATION
DESIGN DRAWING STANDARDS**

**+XA.01 RTU & MODEM
SCHEMATIC DIAGRAM**

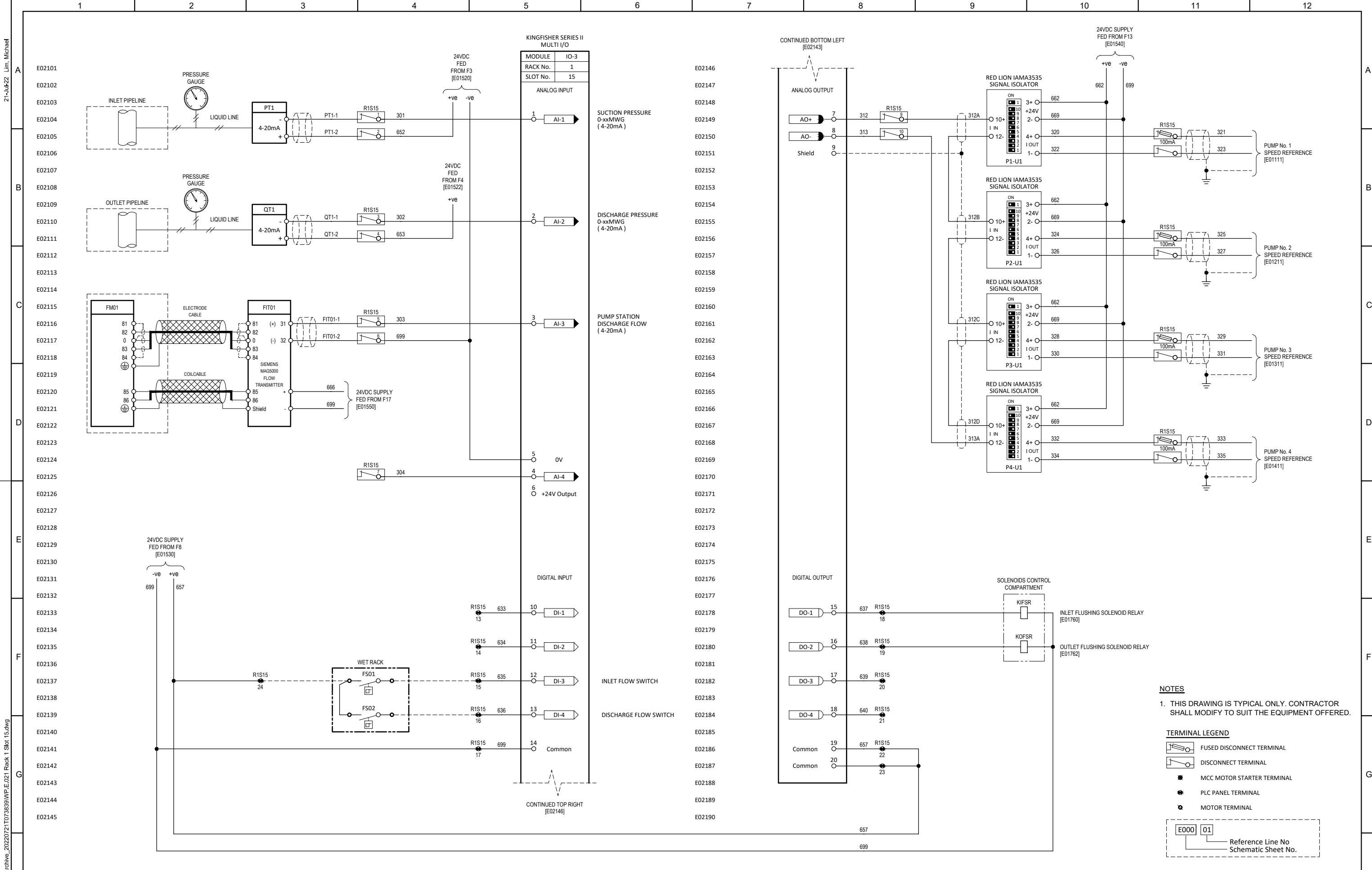
DO NOT SCALE	
SCALE:	
DRAWING NUMBER	
WP.E.019	1
NUMERAL	REV

2-Apr-22 Lim, Michael
C:\Users\mim\Downloads\New_Archive_20220307\1815\WP.E.020 Rack 1 Slot 14 & Slot 16.dwg



REV.	ZONE	REVISION	DATE	APP'D
2		MOTOR STARTER CROSS REFERENCES REVISED	01.03.22	M.L.
1		DESIGN DRAWINGS STANDARDS REVISED 2021	20.05.21	M.L.
0		NEW DRAWING	17.05.19	J.M.

DESIGNED J.M. 17.05.19	DRAWN M.L. 17.05.19	SERVA	<p>101 Wells Street Frankston 3199</p>	<p>WATER PUMP STATION DESIGN DRAWING STANDARDS +XA.01 RACK 1 SLOT 14 & SLOT 16 SCHEMATIC DIAGRAM</p>	DO NOT SCALE	
DESIGN CHECK J.S. 17.05.19	DRAFT CHECK	SE WATER			SCALE:	
APPROVED					DRAWING NUMBER WP.E.020	
					NUMERAL	REV



REV.	ZONE	REVISION	DATE	APPD
3		DIGITAL INPUTS DI-1 & DI-2 REMOVED	21.07.22	M.L.
2		MOTOR STARTER CROSS REFERENCES REVISED	01.03.22	M.L.
1		DESIGN DRAWINGS STANDARDS REVISED 2021	20.05.21	M.L.
0		NEW DRAWING	17.05.19	J.M.

DESIGNED	DRAWN	SERWA
J.M. 17.05.19	M.L. 17.05.19	
DESIGN CHECK J.S. 17.05.19	DRAFT CHECK	SE WATER
APPROVED		

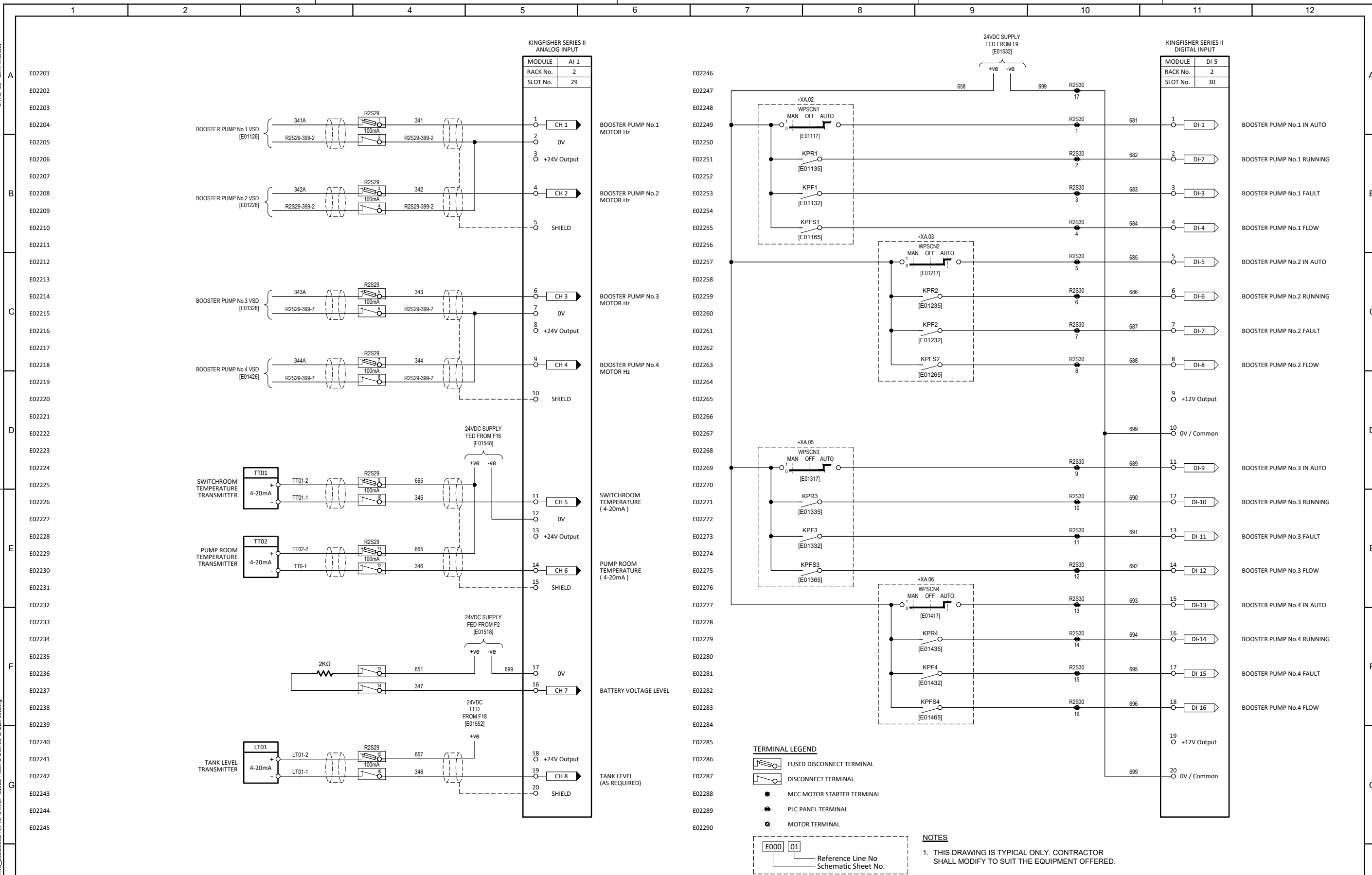
South East Water
 101 Wells Street
 Frankston 3199

WATER PUMP STATION
DESIGN DRAWING STANDARDS
 +XA.01 RACK 1 SLOT 15
SCHEMATIC DIAGRAM

DO NOT SCALE	
SCALE:	
DRAWING NUMBER	
WP.E.021	3
NUMERAL	REV

2-Apr-22 Lim, Michael

C:\Users\mim\Downloads\New_Archive_202203071815\WPBP.E.022 Rack 2 Slot 29 & Slot 30.dwg



REV.	ZONE	REVISION	DATE	APP'D
2		MOTOR STARTER CROSS REFERENCES REVISED	01.03.22	M.L.
1		DESIGN DRAWINGS STANDARDS REVISED 2021	20.05.21	M.L.
0		NEW DRAWING	17.05.19	J.M.

DESIGNED	DRAWN	SERVA
J.M.	M.L.	
17.05.19	17.05.19	
DESIGN CHECK	DRAFT CHECK	SE WATER
J.S.		
17.05.19		
APPROVED		

South East Water

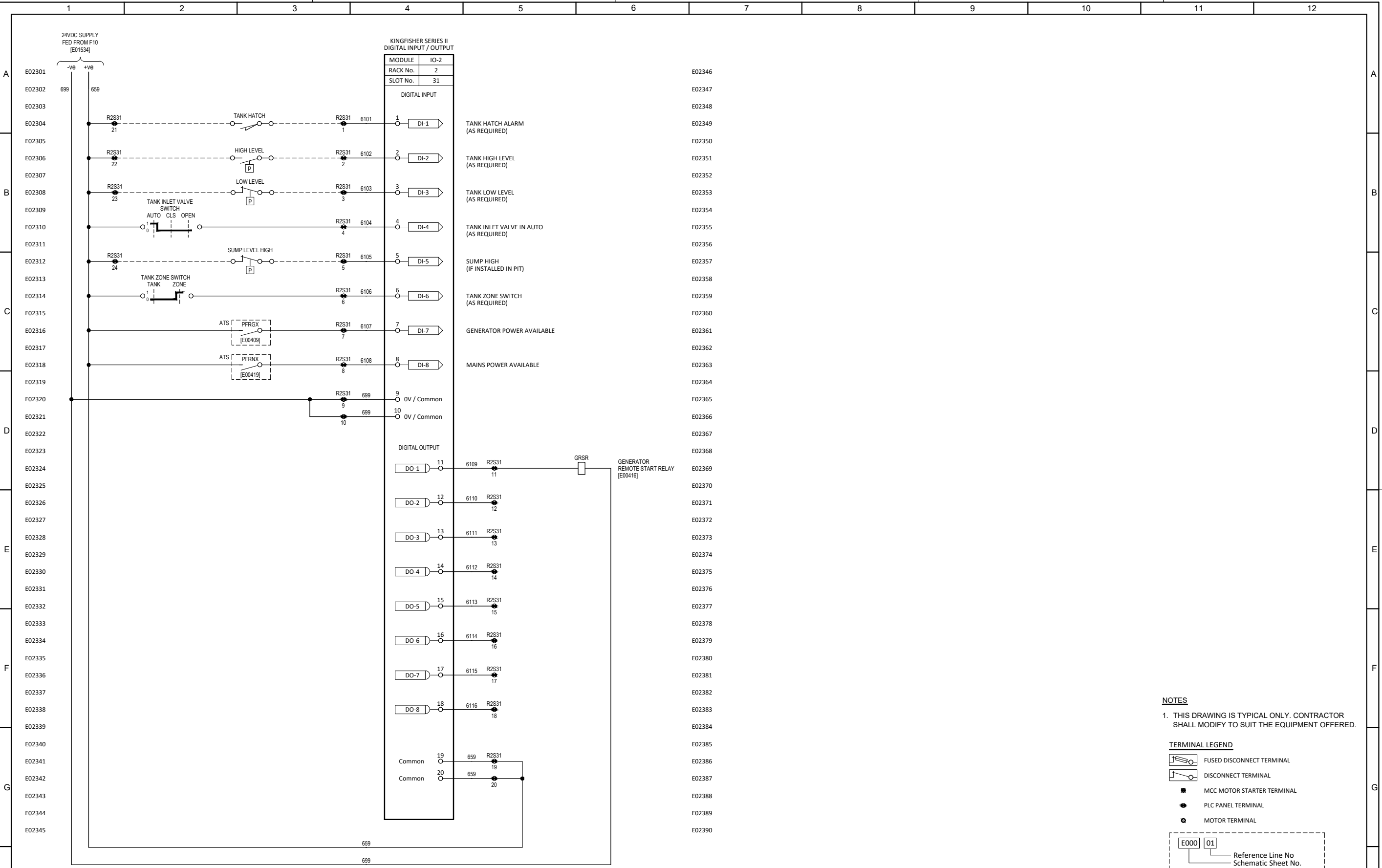
101 Wells Street
Frankston 3199

WATER PUMP STATION
DESIGN DRAWING STANDARDS
+XA.01 RACK 2 SLOT 29 & SLOT 30
SCHEMATIC DIAGRAM

DO NOT SCALE	
SCALE:	
DRAWING NUMBER	
WP.E.022	2
NUMERAL	REV

2-Mar-21 Lim, Michael

C:\Users\mim\Downloads\New_Archive_2020\02\07\1615\WPB-E.023 Rack 2 Slot 31.dwg



NOTES

- THIS DRAWING IS TYPICAL ONLY. CONTRACTOR SHALL MODIFY TO SUIT THE EQUIPMENT OFFERED.

TERMINAL LEGEND

- FUSED DISCONNECT TERMINAL
- DISCONNECT TERMINAL
- MCC MOTOR STARTER TERMINAL
- PLC PANEL TERMINAL
- MOTOR TERMINAL

Reference Line No Schematic Sheet No.

REV.	ZONE	REVISION	DATE	APP'D
0		NEW DRAWING	20.05.21	M.L.

DESIGNED J.M. 17.05.19	DRAWN M.L. 17.05.19	SERVA
DESIGN CHECK J.S. 17.05.19	DRAFT CHECK	SE WATER
APPROVED		

South East Water

101 Wells Street
Frankston 3199

**WATER PUMP STATION
DESIGN DRAWING STANDARDS**

+XA.01 RACK 2 SLOT 31
SCHEMATIC DIAGRAM

DO NOT SCALE	
SCALE:	
DRAWING NUMBER	
WP.E.023	0
NUMERAL	REV

2-Apr-22 Lim, Michael

C:\Users\mim\Downloads\New_Archive_2022\03\T071815\WP.E.030 Four Booster Pump Cubicle Construction notes.dwg

FOUR BOOSTER PUMP CUBICLE CONSTRUCTION NOTES :

1. SWITCHBOARD TO BE CONSTRUCTED FROM MARINE GRADE ALUMINIUM MINIMUM THICKNESS 3mm (H34 5005 GRADE)
ALL EXTERNAL WELDS SHALL BE CONTINUOUS FILLET WELDS
2. SWITCHBOARD CONSTRUCTION TO FORM 3a1h TO AS/NZS 3439.1 DEGREE OF PROTECTION IP56
3. ALL INTERNAL DOORS, PANELS, ESCUTCHEONS, GEAR TRAYS FROM 3mm MILD STEEL

ALL INTERNAL DOORS & ESCUTCHEONS TO BE FITTED WITH M6 EARTH STUDS

ALL GEAR TRAYS TO BE REMOVABLE UNLESS OTHERWISE NOTED
4. ALL EXTERIOR DOORS TO BE FITTED WITH :
 - a. HIGH DENSITY NEOPRENE SEALING STRIPS & ALUMINIUM RETAINING STRIPS
 - b. 100 x 40 x 20 RECESSED WELDED HANDLES - ALUMINIUM
 - c. DOOR STIFFENER
 - d. DOCUMENT HOLDER 280 x 280 x 60 (AS SHOWN)
5. DOOR LOCKING :
 - a. INTERNAL DOORS - MINI 'T' HANDLE KEYED TO CL001 (1/2 TURN)
 - b. EXTERNAL DOORS
 - (i) TOP LOCK - 100 NIGHTLATCH, ABLOY 201 CYLINDERS 5AP100 KEYING SYSTEM. M3 KEYS BY API SECURITY
 - (ii) BOTTOM LOCK - 213 DEADBOLT, ABLOY 201 CYLINDERS 5AP100 KEYING SYSTEM. M3 KEYS BY API SECURITY
 - (iii) TOP LOCK - 100 NIGHTLATCH, ABLOY 201 CYLINDERS VPIL KEYING SYSTEM. AA2445 KEYS SUPPLY AUTHORITY LOCK
 - (iv) BOTTOM LOCK - 213 DEADBOLT, ABLOY 201 CYLINDERS VPIL KEYING SYSTEM. AA2445 KEYS SUPPLY AUTHORITY LOCK
6. DOORS HINGES : LENLOCK STAINLESS STEEL LIFT OFF TYPE. TOP HINGE PIN 5mm LONGER THAN OTHERS
7. FIT ALL INTERNAL & EXTERNAL HINGED DOORS WITH STAINLESS STEEL DOOR STAYS (BOTTOM) TO SECURE IN THE OPEN POSITION.
ALL DOOR STAYS ARE TO BE ATTACHED TO THE SWITCHBOARD
8. MINIMUM OPENING FOR ALL EXTERNAL DOORS 120°
9. MINIMUM OPENING FOR ALL INTERNAL DOORS 105°
10. ALL EXTERNAL LOUVRES TO BE PRESSED IN THE ALUMINIUM ARE TO BE FITTED WITH 'ORNAMESE' ALUMINIUM MESHING
11. GLAND PLATES 3mm ALUMINIUM COLOUR MATCHED TO CABINET INTERNAL. NEOPRENE RUBBER SEAL TO BE FITTED ON LIP OF THE GLAND PLATES
12. NO SWITCHBOARD EQUIPMENT SHALL BE INSTALLED ON EXTERNAL SIDE WALLS
13. CUBICLE PLINTH - HOT DIPPED GALVANISED STEEL (75mm x 40mm x 5mm CHANNEL) TOE OUT ALL ROUND

PROVIDE 50mm x 65mm x 5mm PLATE WELDED ON EACH END (FRONT AND BACK) FOR RETAINMENT OF LIFTING ROD, BAR OR SLING
PROVIDE 50mm x 50mm x 5mm ANGLE CROSS BRACES
PROVIDE 100mm x 50mm ANCHOR (WITH 14mmØ ANCHOR HOLES) WELDED TO PLINTH
14. OUTER DOORS TO BE FITTED WITH NEOPRENE RUBBER SEALS

FINISH :

EXTERNAL : POWDER COATED RIVERGUM GREEN G62 TO AS2700 (GLOSS)

INTERNAL : INNER SURFACES - ORANGE X15 TO AS2700 (GLOSS)

INTERNAL : INNER DOORS, ESCUTCHEONS, GEAR TRAYS AND MOUNTING PLATES POWDER COAT COLOUR - GLOSS WHITE N14

ALL POWDER COATING SHALL BE A MINIMUM THICKNESS OF 75 MICRONS


GENERATOR CONNECTION BOX & METER CABINET

1. TO SLOP OUTSIDE ROOFS ON GENERATOR BOX AND METER CABINET. IF WALL MOUNTED TO STOP PEOPLE CLIMBING ON THE ROOF.

REV.	ZONE	REVISION	DATE	APP'D
1		GEN. BOX & METER CABINET NOTES ADDED	20.05.21	M.L.
0		NEW DRAWING	17.05.19	J.M.


DESIGNED J.M. 17.05.19	DRAWN M.L. 17.05.19	SERWA
DESIGN CHECK J.S. 17.05.19	DRAFT CHECK	SE WATER
APPROVED		

South East Water



101 Wells Street
Frankston 3199

WATER PUMP STATION
DESIGN DRAWING STANDARDS
FOUR WATER PUMP CUBICLE
CONSTRUCTION NOTES

DO NOT SCALE		
SCALE:		
DRAWING NUMBER		1
WP.E.030		
NUMERAL	REV	

2-Apr-22 Lim, Michael

LABEL SCHEDULE		
LABEL	ENGRAVING	DESCRIPTION
L1	SUPPLY CAPACITY CONTROL DEVICE	STAINLESS STEEL LABEL (S/S RIVETS)
L2	SUPPLY AUTHORITY ELECTRICITY METER	STAINLESS STEEL LABEL (S/S RIVETS)
L3	SOUTH EAST WATER LIMITED WPxxx xxx SITE ADDRESS xxx EMERGENCY PHONE 132812	STAINLESS STEEL LABEL (S/S RIVETS) 230Wmm x 80Hmm
L4	METERING CT CHAMBER	STAINLESS STEEL LABEL (S/S RIVETS)

NOTES :
1. ALL EXTERNAL LABELS TO STAINLESS STEEL FIXED WITH STAINLESS STEEL RIVETS SEALED WITH SILICONE ADHESIVE.

LABEL SCHEDULE		
LABEL	ENGRAVING	DESCRIPTION
L34	TEST THIS SIDE	WHITE LABEL / BLACK TEXT
L35	+XA.02 PUMP No.1	WHITE LABEL / BLACK TEXT
L36	+XA.03 PUMP No.2	WHITE LABEL / BLACK TEXT
L37	+XA.05 PUMP No.3	WHITE LABEL / BLACK TEXT
L38	+XA.06 PUMP No.4	WHITE LABEL / BLACK TEXT
L39	CABLE CHAMBER	WHITE LABEL / BLACK TEXT
L40	+ZA DISTRIBUTION BOARD	WHITE LABEL / BLACK TEXT
L41	+XA.01 STATION CONTROL	WHITE LABEL / BLACK TEXT
L42	SUPPLY CAPACITY CONTROL DEVICE	WHITE LABEL / BLACK TEXT
L43	METERING CT CHAMBER	WHITE LABEL / BLACK TEXT
L44	M.E.N LINK BEHIND DOOR	WHITE LABEL / BLACK TEXT
L45	SPARE	WHITE LABEL / BLACK TEXT
L46	+XA.08 VENTILATION FAN	WHITE LABEL / BLACK TEXT

LABEL SCHEDULE		
LABEL	ENGRAVING	DESCRIPTION
L63	CUBICLE HEATER / FAN	WHITE LABEL / BLACK TEXT
L64	CUBICLE GPO	WHITE LABEL / BLACK TEXT
L65	OUTSIDE LIGHT	WHITE LABEL / BLACK TEXT
L66	SWITCHROOM LIGHTS	WHITE LABEL / BLACK TEXT
L67	1 PHASE GPO's	WHITE LABEL / BLACK TEXT
L68	AIR CONDITIONER	WHITE LABEL / BLACK TEXT
L69	PS1	WHITE LABEL / BLACK TEXT
L70	UPS1	WHITE LABEL / BLACK TEXT
L71	PS2	WHITE LABEL / BLACK TEXT
L72	PS3	WHITE LABEL / BLACK TEXT
L73	CUBICLE LIGHTS 12VDC SUPPLY	WHITE LABEL / BLACK TEXT
L74	THERMOSTAT	WHITE LABEL / BLACK TEXT
L75	24VDC UPS SUPPLY	WHITE LABEL / BLACK TEXT
L76	12VDC SUPPLY	WHITE LABEL / BLACK TEXT
L77	RACK 1	WHITE LABEL / BLACK TEXT
L78	RACK 2	WHITE LABEL / BLACK TEXT
L79	TRANSFORMER 240V AC to 24V AC	WHITE LABEL / BLACK TEXT
L80	ANTI-CONDENSATION HEATER	WHITE LABEL / BLACK TEXT
L81	CB5-1 CB5-2	WHITE LABEL / BLACK TEXT
L82	CB5-3	WHITE LABEL / BLACK TEXT
L83	KPF1 KPR1 KPH1 KPFS1	WHITE LABEL / BLACK TEXT
L84	CB6-1 CB6-2	WHITE LABEL / BLACK TEXT
L85	CB6-3	WHITE LABEL / BLACK TEXT
L86	KPF2 KPR2 KPH2 KPFS2	WHITE LABEL / BLACK TEXT
L87	CB7-1 CB7-2	WHITE LABEL / BLACK TEXT
L88	CB7-3	WHITE LABEL / BLACK TEXT
L89	KPF3 KPR3 KPH3 KPFS3	WHITE LABEL / BLACK TEXT
L90	CB8-1 CB8-2	WHITE LABEL / BLACK TEXT
L91	CB8-3	WHITE LABEL / BLACK TEXT
L92	KPF4 KPR4 KPH4 KPFS4	WHITE LABEL / BLACK TEXT
L93	KLN	WHITE LABEL / BLACK TEXT
L94	KVFF	WHITE LABEL / BLACK TEXT
L95	CB22-1	WHITE LABEL / BLACK TEXT
L96	CB22-2	WHITE LABEL / BLACK TEXT

LABEL SCHEDULE			
LABEL	ENGRAVING	DESCRIPTION	
L97	F24-1 F24-2	WHITE LABEL / BLACK TEXT	
L98	KIFSR KOFSR	WHITE LABEL / BLACK TEXT	
L99	CB4	WHITE LABEL / BLACK TEXT	
L100	KDPFL KDPFLX	WHITE LABEL / BLACK TEXT	
L101	KSPR	WHITE LABEL / BLACK TEXT	
L102	NEUTRAL BAR	WHITE LABEL / BLACK TEXT	
L103	EARTH BAR	WHITE LABEL / BLACK TEXT	
L104	MAINS / GENERATOR	WHITE LABEL / BLACK TEXT	
L105	IVE INTERFACE UNIT	WHITE LABEL / BLACK TEXT	
L106	ACP CONTROL PLATE	WHITE LABEL / BLACK TEXT	
L107	PUMP ROOM LIGHTS	WHITE LABEL / BLACK TEXT	
L108	3 PHASE GPO's	WHITE LABEL / BLACK TEXT	
L109	HOIST	WHITE LABEL / BLACK TEXT	
L110	TOILET LIGHTS	WHITE LABEL / BLACK TEXT	
L111	GENERATOR BATTERY CHARGER GPO	WHITE LABEL / BLACK TEXT	
L112	CBG CBN	WHITE LABEL / BLACK TEXT	
L113	CB1 CB2 CB3	WHITE LABEL / BLACK TEXT	
L114	NORMALLY SUPPLY PHASE FAILURE PFRN PFRNX	WHITE LABEL / BLACK TEXT	
L115	GENERATOR SUPPLY PHASE FAILURE PFRG PFRGX	WHITE LABEL / BLACK TEXT	

LABEL SCHEDULE		
LABEL	ENGRAVING	DESCRIPTION
L52	+XA.04 ACTIVE HARMONIC FILTER	WHITE LABEL / BLACK TEXT
L53	INLET / OUTLET FLUSHING SOLENOIDS CONTROL	WHITE LABEL / BLACK TEXT
L54	AUTOMATIC TRANSFER SWITCH	WHITE LABEL / BLACK TEXT
L55	VOLTMETER	WHITE LABEL / BLACK TEXT
L56	PHASE ROTATION METER	WHITE LABEL / BLACK TEXT
L57	MAIN SWITCH NORMAL SUPPLY LOAD LIMITER	WHITE LABEL / BLACK TEXT
L58	MAIN SWITCH GENERATOR SUPPLY LOAD LIMITER	WHITE LABEL / BLACK TEXT
L59	UA CONTROLLER	WHITE LABEL / BLACK TEXT
L60	DISTRIBUTION SUPPLY PHASE FAILURE	WHITE LABEL / BLACK TEXT
L61	SURGE PROTECTION RELAY	WHITE LABEL / BLACK TEXT
L62	CUBICLE LIGHTS	WHITE LABEL / BLACK TEXT

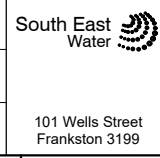
LABEL SCHEDULE		
LABEL	ENGRAVING	DESCRIPTION
L27	DANGER HAZARDOUS VOLTAGE WITHIN LICENCED PERSONS ONLY	RED LABEL / WHITE TEXT FOR DRIVES AND LIVE EXPOSED BARS OR TERMINALS
L28	WARNING HAZARDOUS VOLTAGE WITHIN AUTHORISED PERSONS ONLY	RED LABEL / WHITE TEXT FOR IP2X SHARED POWERED CUBICLES
L29	HAZARD 	YELLOW LABEL / BLACK LINES
L30	WARNING THIS PREMISES CONTAINS AN ELECTRICITY GENERATION SYSTEM ISOLATE SUPPLY AT GENERATOR	GREEN LABEL / WHITE TEXT FOR PANELS WITH ONSITE GENERATORS INSTALLED
L31	DANGER MULTIPLE SUPPLIES WITHIN ISOLATE ALL SUPPLIES BEFORE WORKING INSIDE THIS CUBICLE	RED LABEL / WHITE TEXT
L32	CAUTION PUMPS CAN BE REMOTELY STARTED VIA TELEMETRY SYSTEM ISOLATE BEFORE WORKING ON PUMPS OR STARTERS STARTERS MAY AUTO RESET	RED LABEL / WHITE TEXT
L33	WARNING MEGGER TEST POINT ISOLATE BEFORE TESTING OR EQUIPMENT DAMAGE WILL OCCUR	RED LABEL / WHITE TEXT

LABEL SCHEDULE		
LABEL	ENGRAVING	DESCRIPTION
L47	MANUAL SPEED CONTROL RESET RUNNING FAULT MOTOR HEATER ON	WHITE LABEL / BLACK TEXT
L48	FLOW / PRESSURE CONTROL ALARM RESET PLC FAILURE STATION UNDER REMOTE CONTROL	WHITE LABEL / BLACK TEXT
L49	KPSR1 KPSR2 KPSR3 KPSR4 KPLCF KTSR KRRR KMOD KVFR KONFL	WHITE LABEL / BLACK TEXT

C:\Users\mim\Downloads\New_Archive_20220307\1815\WP.E.031 Four Booster Pump Cubicle Label Schedule.dwg

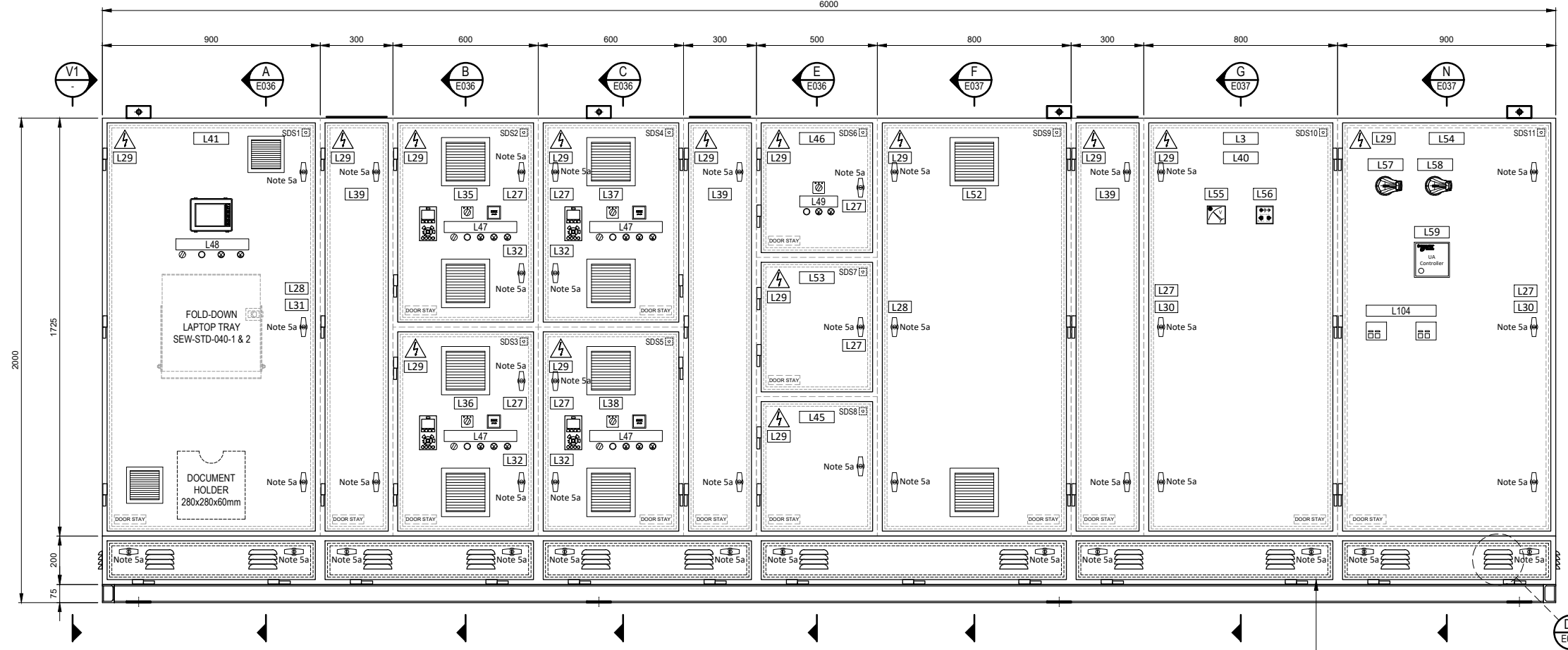
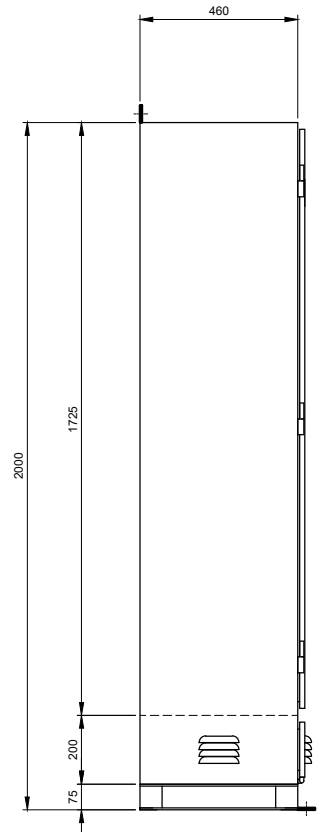
REV.	ZONE	REVISION	DATE	APP'D
2		DESIGN DRAWINGS STANDARDS REVISED 2021	20.05.21	M.L.
1		LABEL SCHEDULE REVISED	12.09.19	M.L.
0		NEW DRAWING	17.05.19	J.M.

DESIGNED J.M. 17.05.19	DRAWN M.L. 17.05.19	SERWA
DESIGN CHECK J.S. 17.05.19	DRAFT CHECK	SE WATER
APPROVED		



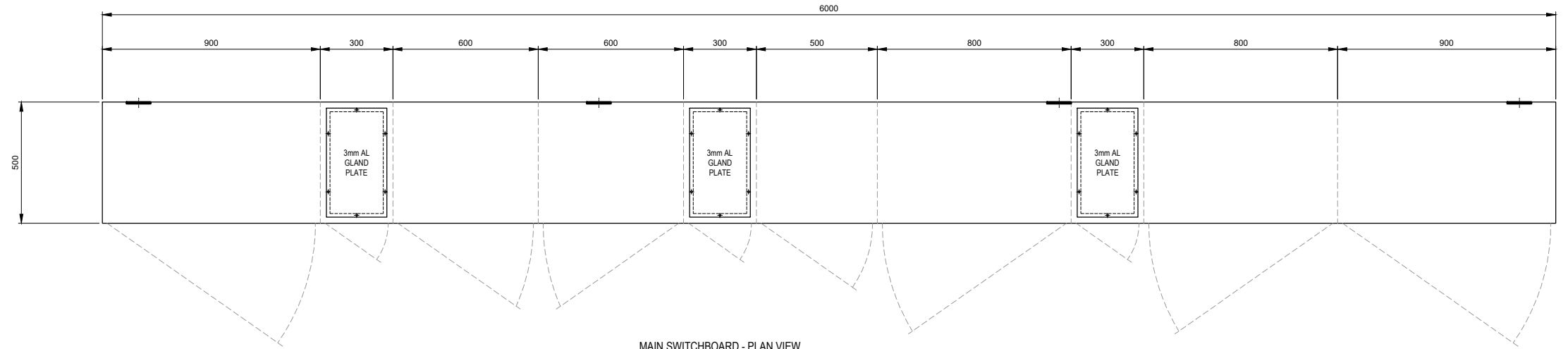
**WATER PUMP STATION
DESIGN DRAWING STANDARDS
FOUR WATER PUMP CUBICLE
LABEL SCHEDULE**

DO NOT SCALE		
SCALE:		
DRAWING NUMBER		
WP.E.031		2
NUMERAL		REV



MAIN SWITCHBOARD - FRONT ELEVATION
(DOORS ON)

- NOTES :
- SWITCHBOARD CONSTRUCTION TO COMPLY WITH AS61439.



MAIN SWITCHBOARD - PLAN VIEW

REV.	ZONE	REVISION	DATE	APP'D
2		DESIGN DRAWINGS STANDARDS REVISED 2021	20.05.21	M.L.
1		SWITCHBOARD HEIGHT REVISED	12.09.19	M.L.
0		NEW DRAWING	17.05.19	J.M.

DESIGNED J.M. 17.05.19	DRAWN M.L. 17.05.19	SERWA
DESIGN CHECK J.S. 17.05.19	DRAFT CHECK	SE WATER
APPROVED		

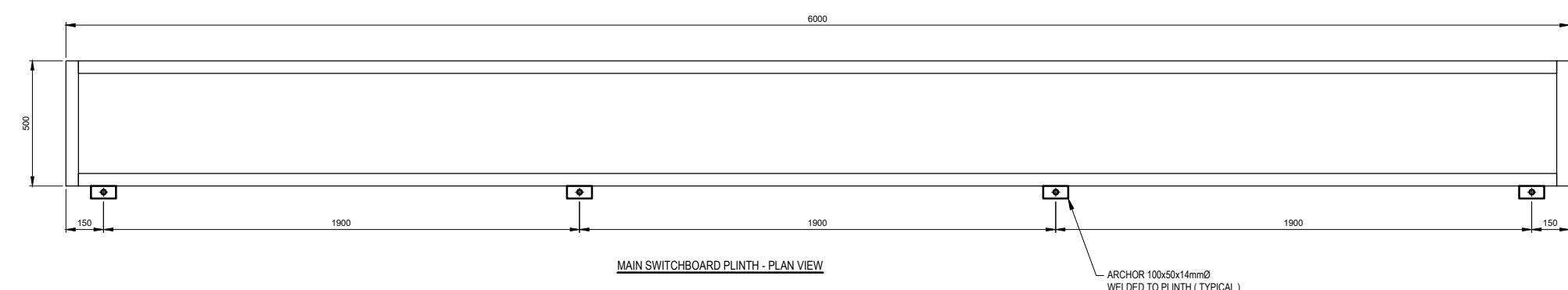
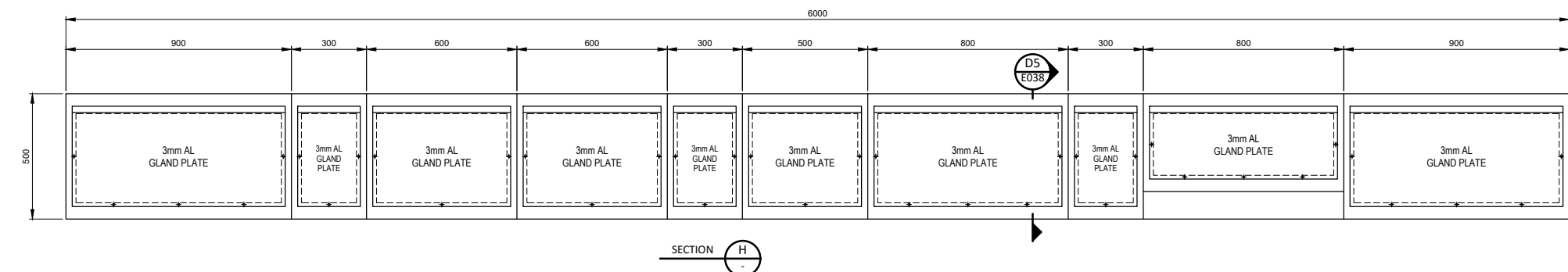
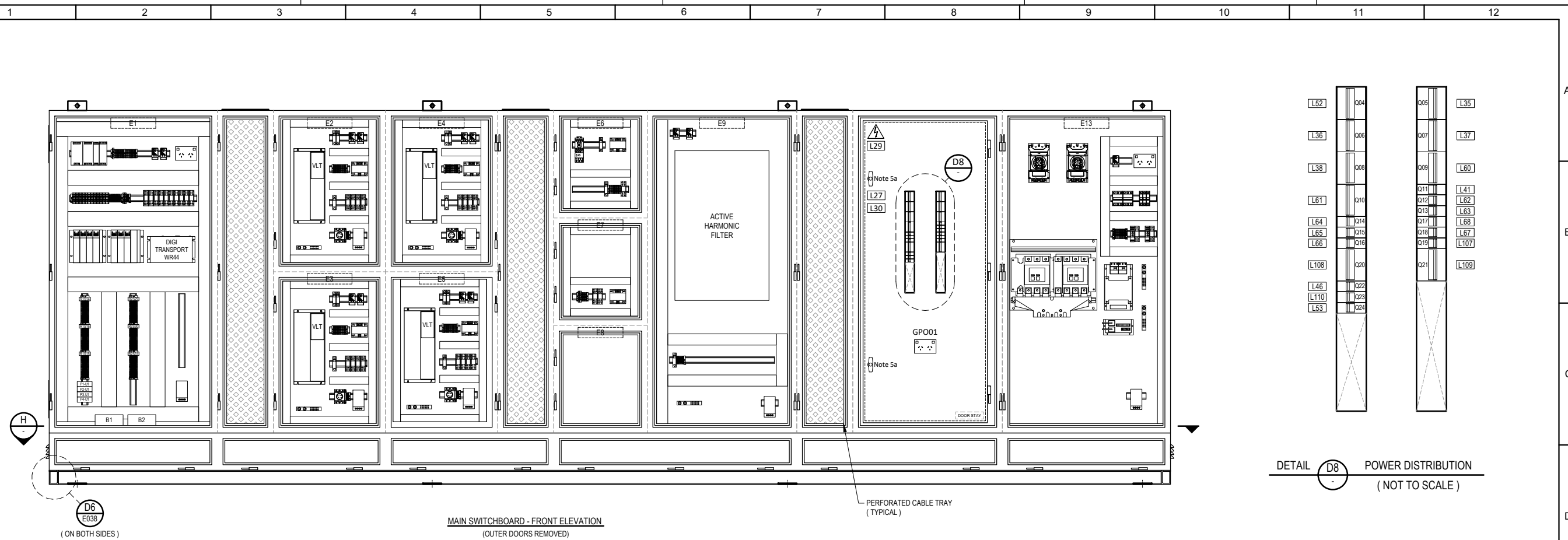
South East Water
101 Wells Street
Frankston 3199

WATER PUMP STATION
DESIGN DRAWING STANDARDS
FOUR WATER PUMP CUBICLE
GENERAL ARRANGEMENT (SHEET 1 OF 9)

DO NOT SCALE		
SCALE:		
DRAWING NUMBER		
WBP.E.032		2
NUMERAL		REV

2-Apr-22 Lim, Michael

C:\Users\mim\Downloads\New_Archive_20220302\071815\WP.E.033 Four Booster Pump Cubicle General Arrangement 2 of 9.dwg



REV.	ZONE	REVISION	DATE	APP'D
2		DESIGN DRAWINGS STANDARDS REVISED 2021	20.05.21	M.L.
1		SWITCHBOARD HEIGHT REVISED	12.09.19	M.L.
0		NEW DRAWING	17.05.19	J.M.

DESIGNED J.M. 17.05.19	DRAWN M.L. 17.05.19	SERVA
DESIGN CHECK J.S. 17.05.19	DRAFT CHECK	SE WATER
APPROVED		

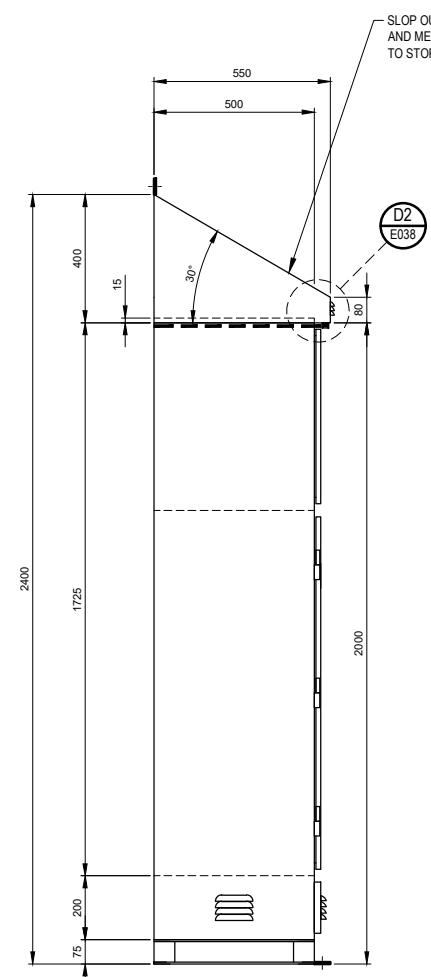
South East Water
101 Wells Street
Frankston 3199

**WATER PUMP STATION
DESIGN DRAWING STANDARDS
FOUR WATER PUMP CUBICLE
GENERAL ARRANGEMENT (SHEET 2 OF 9)**

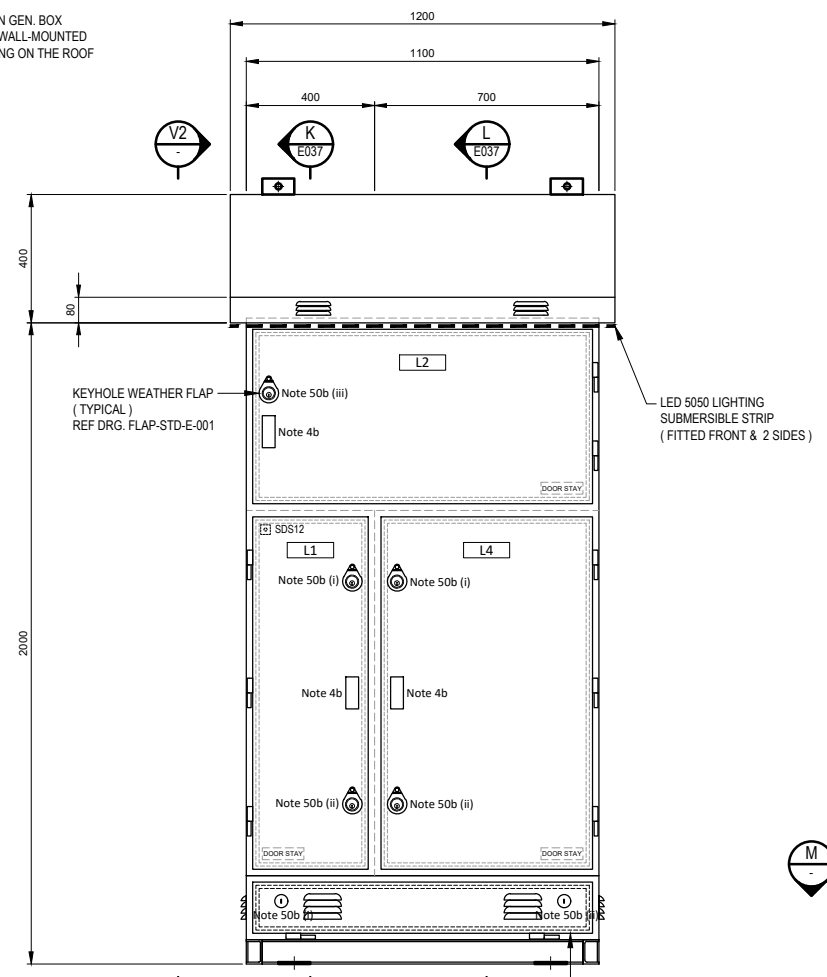
DO NOT SCALE		
SCALE:		
DRAWING NUMBER		WP.E.033
NUMERAL		
		2
		REV

2-Mar-22 Lim, Michael

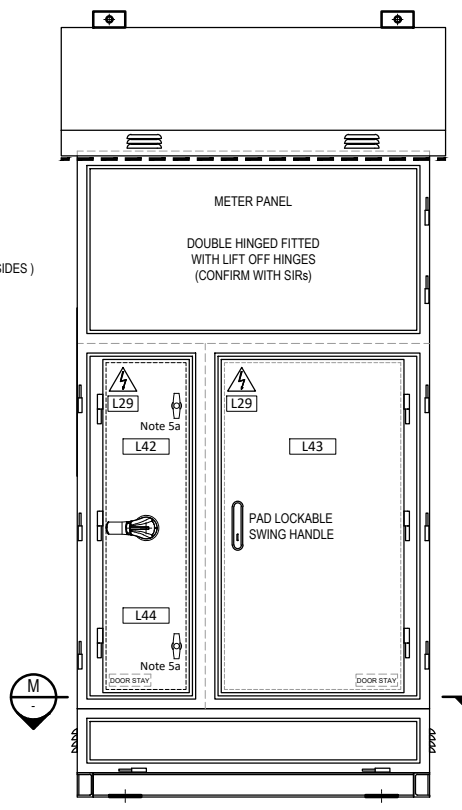
C:\Users\mim\Downloads\New_Archive_20220302\071615\WP.E.034 Four Booster Pump Cubicle General Arrangement 3 of 9.dwg



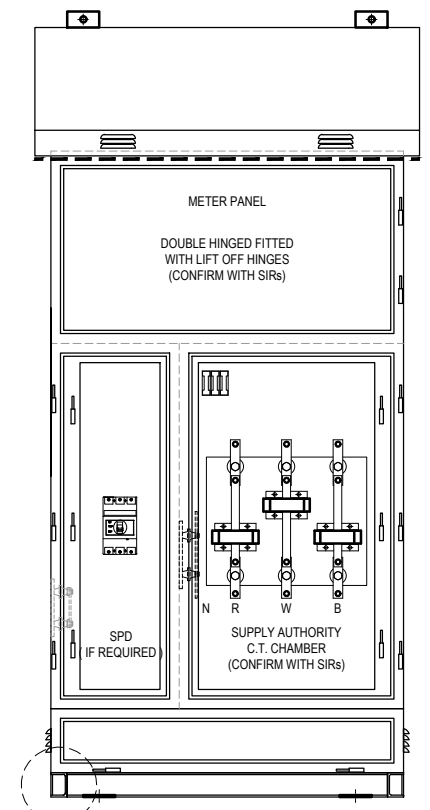
VIEW V2



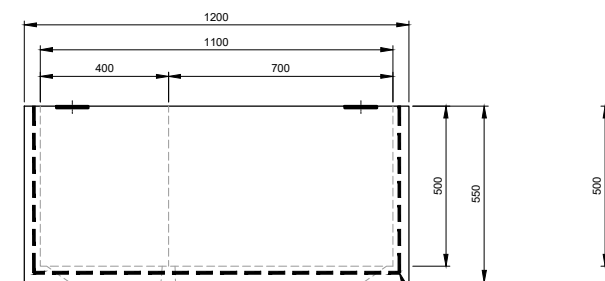
METERING PANEL - FRONT ELEVATION (DOORS ON)



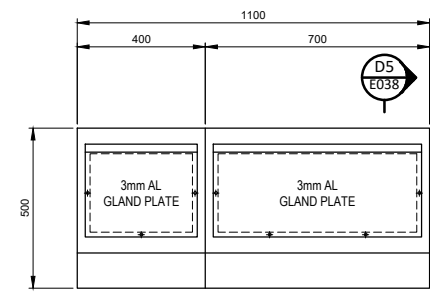
METERING PANEL - FRONT ELEVATION (OUTER DOORS REMOVED)



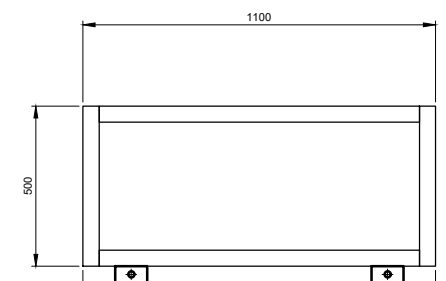
METERING PANEL - FRONT ELEVATION (ALL DOORS REMOVED)



METERING PANEL - PLAN VIEW



SECTION M-M



METERING PANEL PLINTH - PLAN VIEW

REV.	ZONE	REVISION	DATE	APP'D
3		DESIGN DRAWINGS STANDARDS REVISED 2021	20.05.21	M.L.
2		SWITCHBOARD HEIGHT REVISED	12.09.19	M.L.
1		PS3 POWER SUPPLY ADDED (CUBICLE LIGHTS)	26.06.19	M.L.
0		NEW DRAWING	17.05.19	J.M.

DESIGNED J.M. 17.05.19	DRAWN M.L. 17.05.19	SERVA
DESIGN CHECK J.S. 17.05.19	DRAFT CHECK	SE WATER
APPROVED		

South East Water
101 Wells Street
Frankston 3199

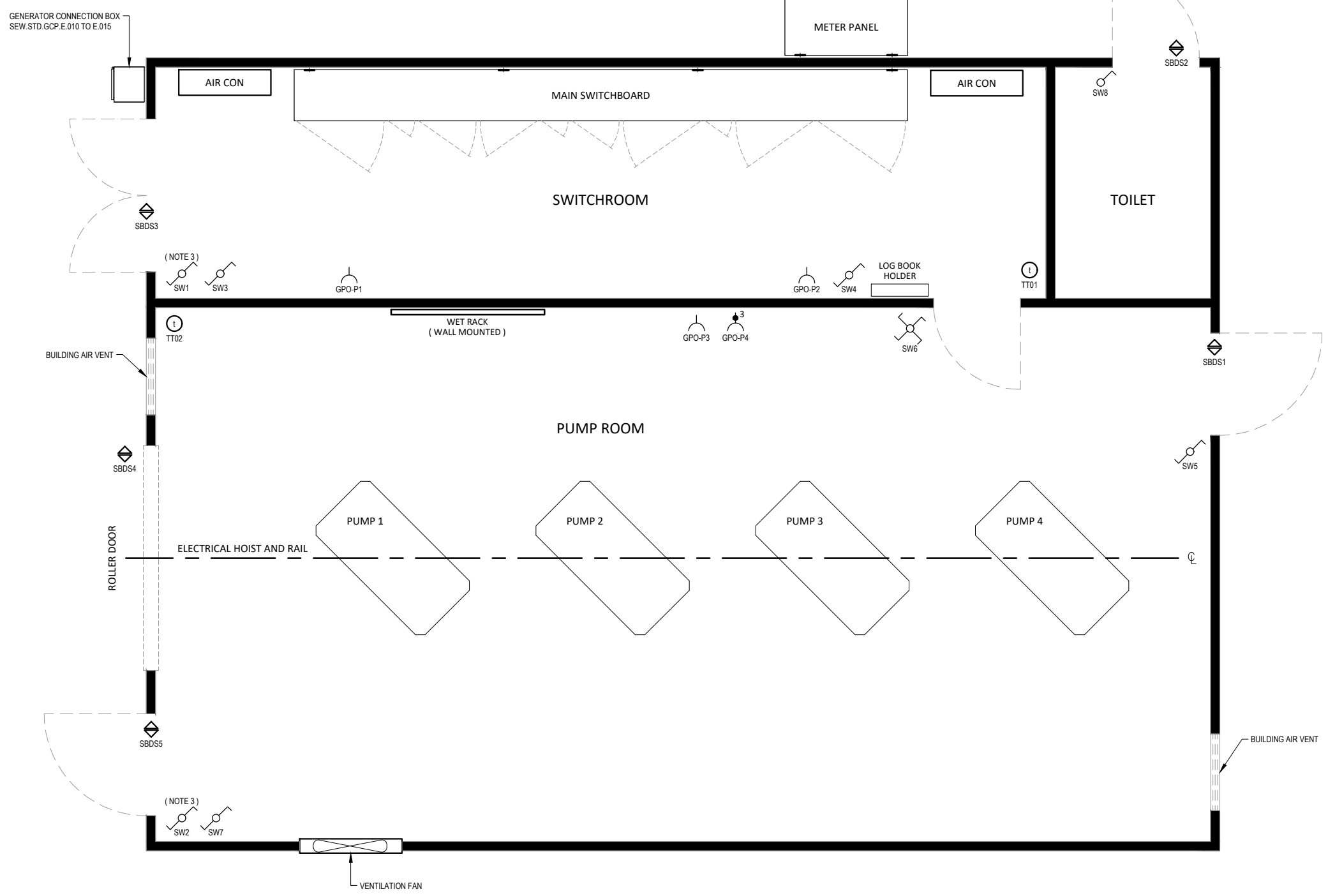
WATER PUMP STATION
DESIGN DRAWING STANDARDS
FOUR WATER PUMP CUBICLE
GENERAL ARRANGEMENT (SHEET 3 OF 9)

DO NOT SCALE		
SCALE:		
DRAWING NUMBER		3
WP.E.034		
NUMERAL	12	REV

A3

2-Apr-22 Lim, Michael

C:\Users\mim\Downloads\New_Archive_20220302\071815\WP.E.035 Four Booster Pump Cubicle General Arrangement 4 of 9.dwg



NOTES

1. LIGHTS TO BE ACCESSIBLE FROM A STEP LADDER.
2. INTERNAL LIGHTS TO BE TWO WAY SWITCH.
3. EXTERNAL LIGHTS TO BE TWO WAY SWITCH WITH A 15 MINUTES DELAY SWITCH FITTED.
4. IF EXIT LIGHT AND EMERGENCY LIGHTS USED, MUST BE INSTALLED OFF A SEPARATE CB AND WALL MOUNTED FOR ACCESS

LEGEND

- TWO WAY SWITCH
- ONE WAY SWITCH
- INTERMEDIATE SWITCH
- 1 PHASE GPO
- 3 PHASE GPO
- BUILDING ACCESS DOOR SWITCH
- ROOM TEMPERATURE TRANSMITTER

PUMPING STATION BUILDING LAYOUT - SAMPLE ONLY
(NOT TO SCALE)

REV.	ZONE	REVISION	DATE	APP'D
2		DESIGN DRAWINGS STANDARDS REVISED 2021	20.05.21	M.L.
1		SWITCHBOARD HEIGHT REVISED	12.09.19	M.L.
0		NEW DRAWING	17.05.19	J.M.

DESIGNED J.M. 17.05.19	DRAWN M.L. 17.05.19	SERVA
DESIGN CHECK J.S. 17.05.19	DRAFT CHECK	SE WATER
APPROVED		

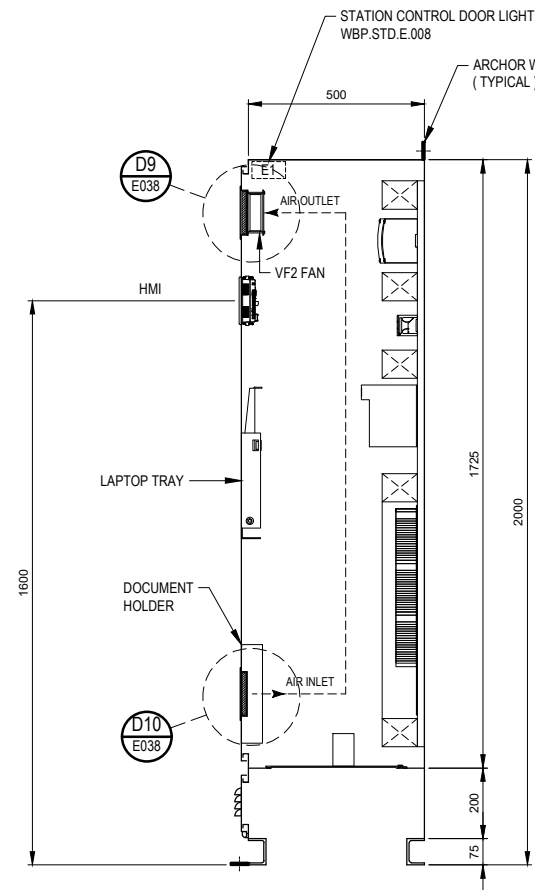
South East Water
101 Wells Street
Frankston 3199

**WATER PUMP STATION
DESIGN DRAWING STANDARDS
FOUR WATER PUMP CUBICLE
GENERAL ARRANGEMENT (SHEET 4 OF 9)**

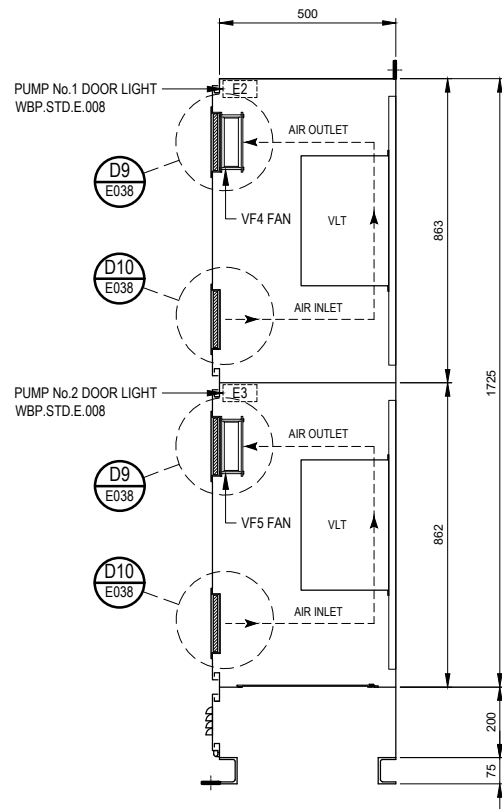
DO NOT SCALE	
SCALE:	
DRAWING NUMBER	
WP.E.035	2
NUMERAL	REV

2-Mar-22 Lim, Michael

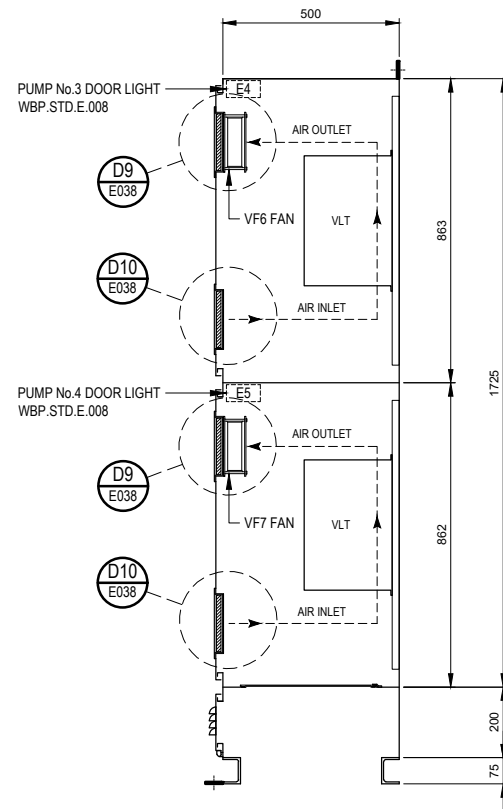
C:\Users\mim\Downloads\New_Archive_20220302\1071815\WP.E.036 Four Booster Pump Cubicle General Arrangement 5 of 9.dwg



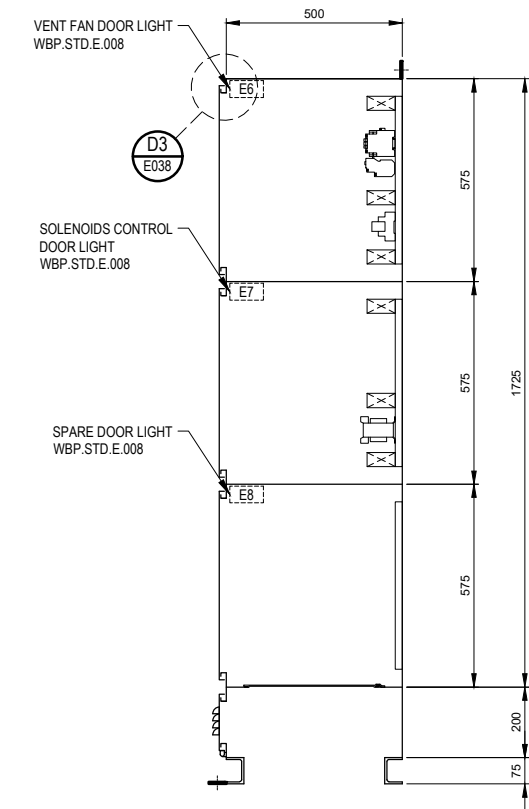
SECTION A
STATION CONTROL
E032



SECTION B
PUMP No. 1 & 2
E032



SECTION C
PUMP No. 3 & 4
E032



SECTION E
VENTILATION FAN &
SOLENOIDS CONTROL
E032

REV.	ZONE	REVISION	DATE	APP'D
3		DESIGN DRAWINGS STANDARDS REVISED 2021	20.05.21	M.L.
2		SWITCHBOARD HEIGHT REVISED	12.09.19	M.L.
1		PS3 POWER SUPPLY ADDED (CUBICLE LIGHTS)	26.06.19	M.L.
0		NEW DRAWING	17.05.19	J.M.

DESIGNED	DRAWN	SERVA
J.M. 17.05.19	M.L. 17.05.19	
DESIGN CHECK	DRAFT CHECK	SE WATER
J.S. 17.05.19		
APPROVED		

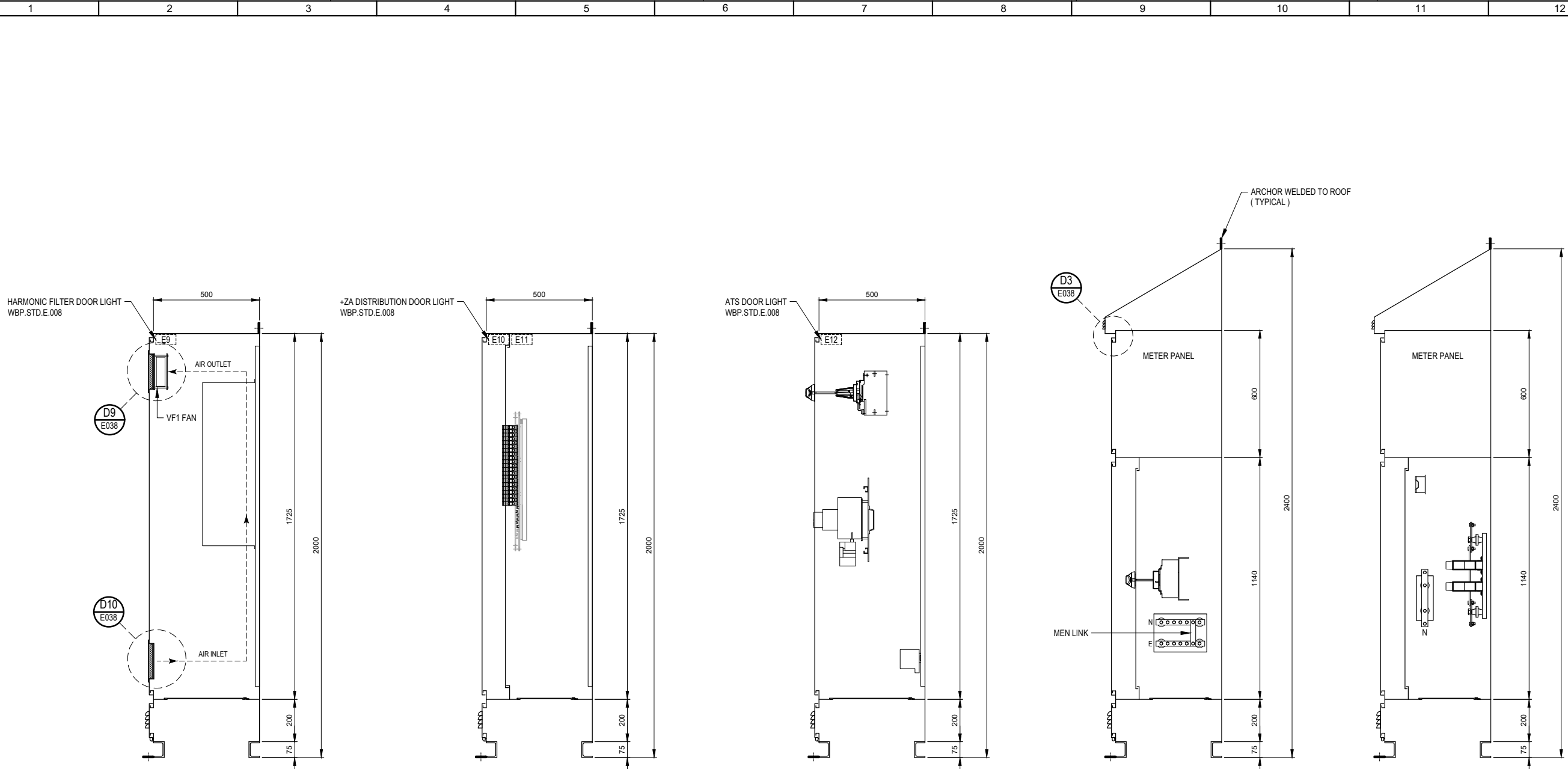
South East Water
101 Wells Street
Frankston 3199

WATER PUMP STATION
DESIGN DRAWING STANDARDS
FOUR WATER PUMP CUBICLE
GENERAL ARRANGEMENT (SHEET 5 OF 9)

DO NOT SCALE		
SCALE:		
DRAWING NUMBER		3
WP.E.036		
NUMERAL	REV	

2-Mar-22 Lim, Michael

C:\Users\mim\Downloads\New_Archive_20220302\071815\WP.E.037 Four Booster Pump Cubicle General Arrangement 6 of 9.dwg



SECTION F
ACTIVE HARMONIC FILTER

SECTION G
+ZA DISTRIBUTION & MAIN SUPPLY

SECTION N
AUTO TRANSFER SWITCH

SECTION K
SPD (IF REQUIRED)

SECTION L
METER PANEL & C.T. CHAMBER

REV.	ZONE	REVISION	DATE	APP'D
2		DESIGN DRAWINGS STANDARDS REVISED 2021	20.05.21	M.L.
1		SWITCHBOARD HEIGHT REVISED	12.09.19	M.L.
0		NEW DRAWING	17.05.19	J.M.

DESIGNED J.M. 17.05.19	DRAWN M.L. 17.05.19	SERVA
DESIGN CHECK J.S. 17.05.19	DRAFT CHECK	SE WATER
APPROVED		

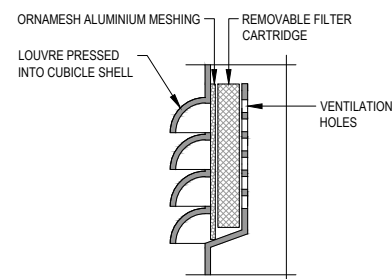
South East Water
101 Wells Street
Frankston 3199

WATER PUMP STATION
DESIGN DRAWING STANDARDS
FOUR WATER PUMP CUBICLE
GENERAL ARRANGEMENT (SHEET 6 OF 9)

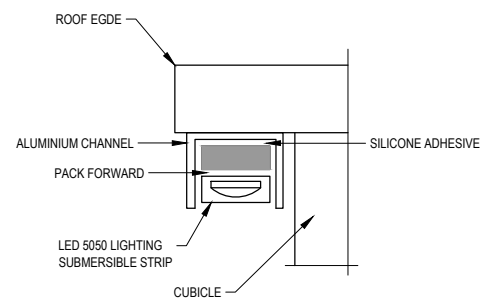
DO NOT SCALE		
SCALE:		
DRAWING NUMBER		2
WP.E.037		
NUMERAL		REV

2-Apr-22 Lim, Michael

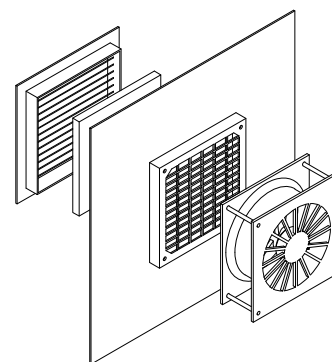
C:\Users\mim\Downloads\New_Archive_20220307\071815\WP.E.038 Four Booster Pump Cubicle General Arrangement 7 of 9.dwg



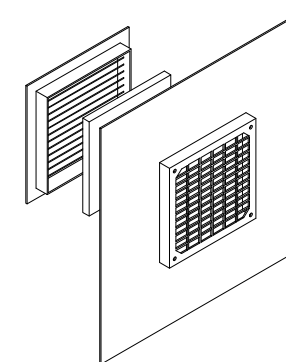
DETAIL **D1** VENTILATION LOUVRE (TYPICAL)
E032 (NOT TO SCALE)



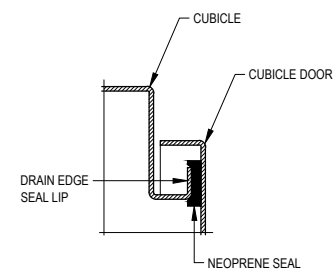
DETAIL **D2** LED UNDER ROOF EXTERNAL LIGHTING STRIP
E034 (NOT TO SCALE)



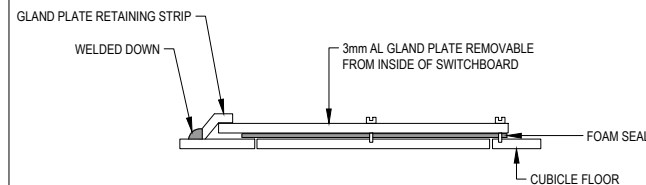
DETAIL **D9** FILTER FAN (TYPICAL)
E036 & E037 (ISOMETRIC VIEW - NTS)



DETAIL **D10** EXHAUST FILTER (TYPICAL)
E036 & E037 (ISOMETRIC VIEW - NTS)

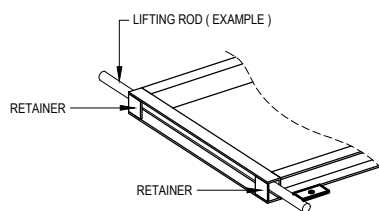


DETAIL **D3** EXTERNAL DOOR SEALING (TYPICAL)
E036 & E037 (NOT TO SCALE)



SECTION **D5** INTERNAL GLAND PLATES (TYPICAL)
E033 & E034 (NOT TO SCALE)

GLAND PLATE SEALING.
FIT THE RAISED LIP TO THE REAR OF THE SWITCHBOARD AND THE GLAND PLATE WILL SLIDE UNDER THE LIP AND SCREW DOWN ON THE SIDE AND FRONT.
GLAND PLATE TO HAVE FOAM SEAL ON ALL SIDES.



DETAIL **D6** PLINTH LIFTING RETAINERS (TYPICAL)
E033 & E034 (NOT TO SCALE)

LIFTING ROD, BAR OR SLING RETAINERS 50Wx65Hx5mm PLATE WELDED ON EACH END.

REV.	ZONE	REVISION	DATE	APP'D
1		DESIGN DRAWINGS STANDARDS REVISED 2021	20.05.21	M.L.
0		NEW DRAWING	17.05.19	J.M.

DESIGNED J.M. 17.05.19	DRAWN M.L. 17.05.19	SERVA
DESIGN CHECK J.S. 17.05.19	DRAFT CHECK	SE WATER
APPROVED		



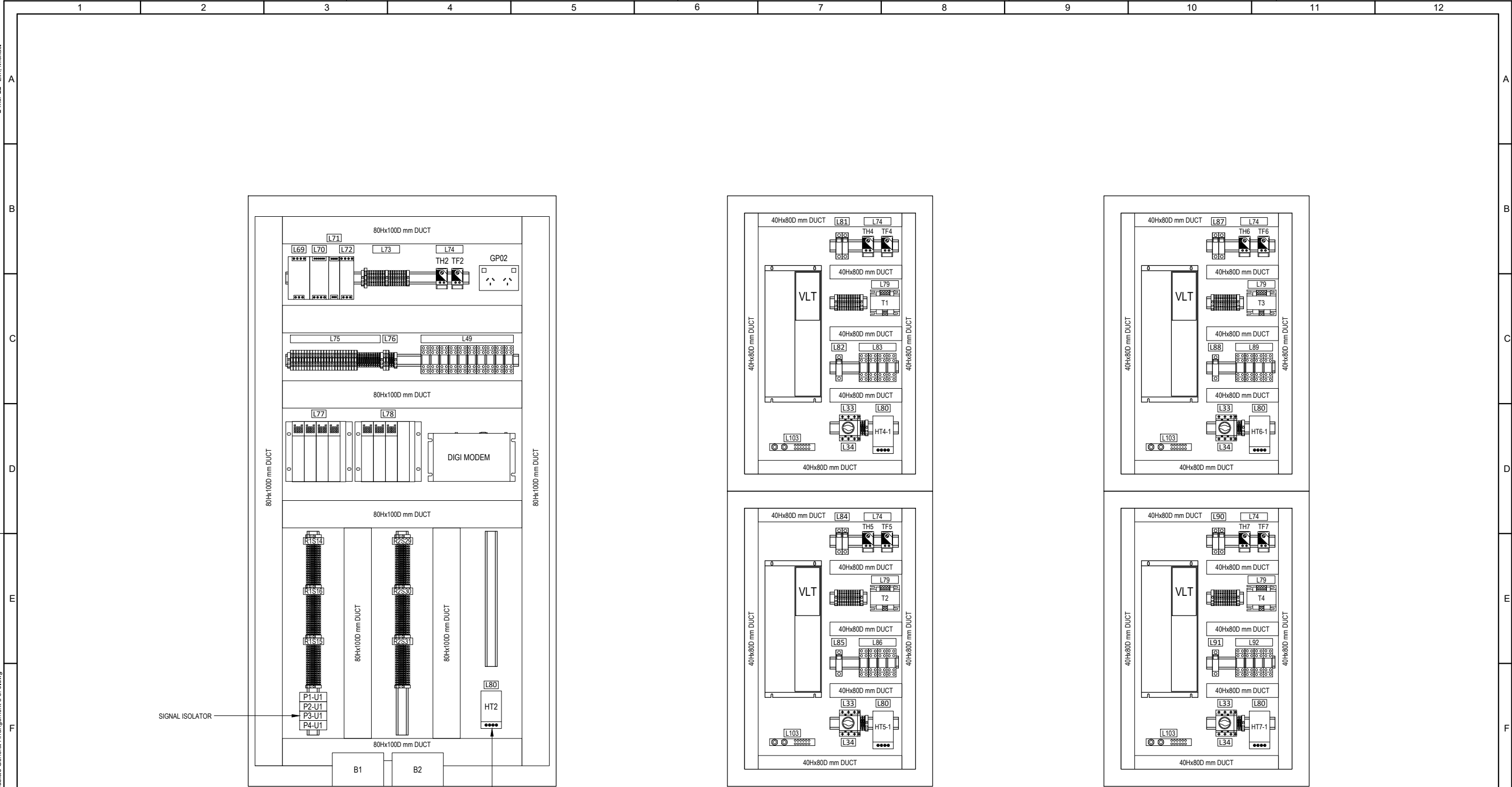
101 Wells Street
Frankston 3199

WATER PUMP STATION
DESIGN DRAWING STANDARDS
FOUR WATER PUMP CUBICLE
GENERAL ARRANGEMENT (SHEET 7 OF 9)

DO NOT SCALE		
SCALE:		
DRAWING NUMBER		1
WP.E.038		
NUMERAL	REV	

2-Mar-22 Lim, Michael

C:\Users\mim\Downloads\New_Archive_20220302\T071815\WP.E.039 Four Booster Pump Cubicle General Arrangement 8 of 9.dwg



SIGNAL ISOLATOR

2 x 12VDC 21Ahr
BATTERY
STATION CONTROL
GEAR TRAY
(NOT TO SCALE)

ANTI-CONDENSATION HEATER
NSYCR50WU2C ClimaSys PTC heating resistance
50W, 110-250V insulate (TYPICAL)

PUMP No.1 & 2
GEAR TRAY
(NOT TO SCALE)

PUMP No.3 & 4
GEAR TRAY
(NOT TO SCALE)

REV.	ZONE	REVISION	DATE	APP'D
2		DESIGN DRAWINGS STANDARDS REVISED 2021	20.05.21	M.L.
1		MOUNTING BLOCK & TRAY REVISED. ADDED SHT 2 (E040)	26.08.19	J.S.
0		NEW DRAWING	17.05.19	J.S.

DESIGNED	DRAWN	SERWA
	M.L.	17.05.19
DESIGN CHECK	DRAFT CHECK	SE WATER
J.S.		
APPROVED		

South East Water

101 Wells Street
Frankston 3199

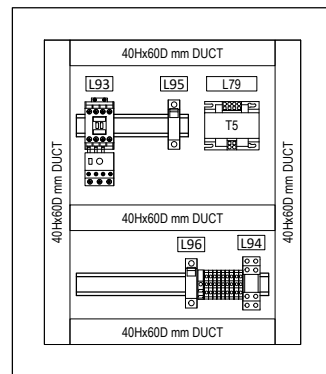
**WATER PUMP STATION
DESIGN DRAWING STANDARDS
FOUR WATER PUMP CUBICLE
GENERAL ARRANGEMENT (SHEET 8 OF 9)**

DO NOT SCALE		
SCALE:		
DRAWING NUMBER		
WP.E.039	2	
NUMERAL		REV

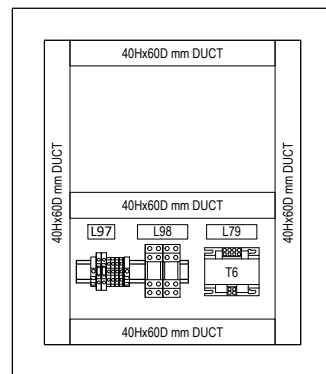
A3

2-Apr-22 Lim, Michael

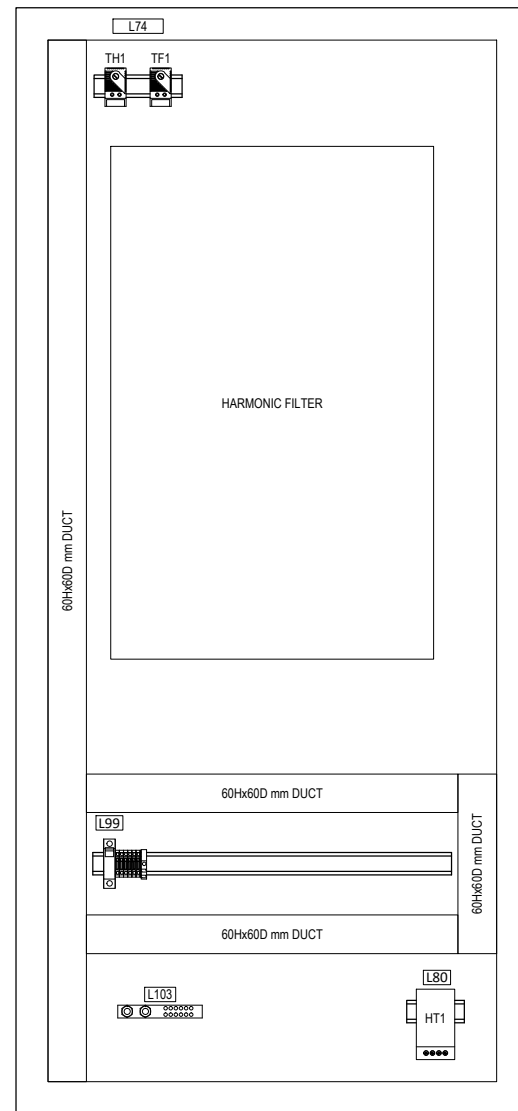
C:\Users\mim\Downloads\New_Archive_20220302\T071815\WP.E.040 Four Booster Pump Cubicle General Arrangement 9 of 9.dwg



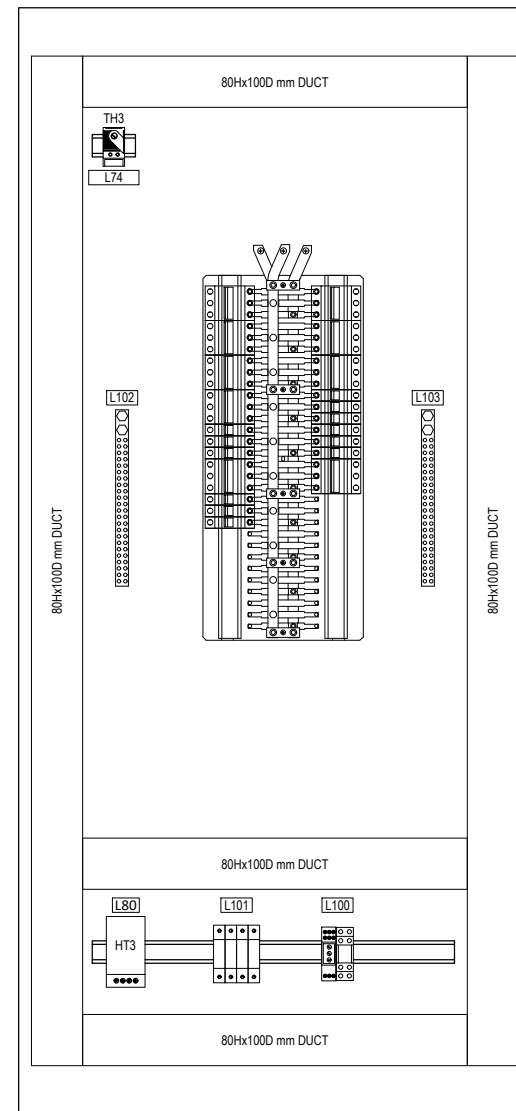
VENTILATION FAN GEAR TRAY (NOT TO SCALE)



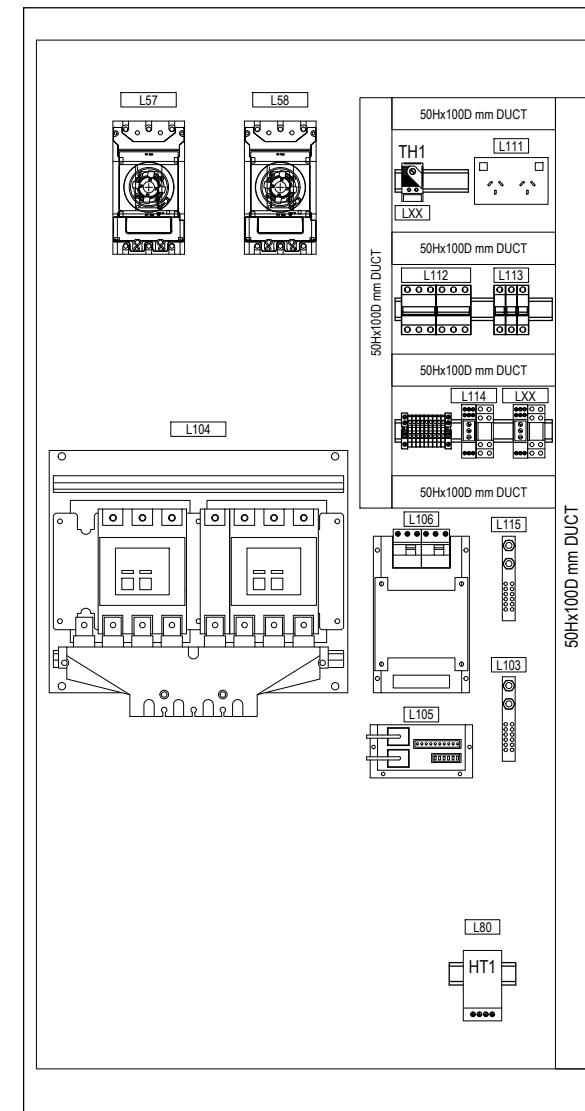
FLUSHING SOLENOIDS CONTROL GEAR TRAY (NOT TO SCALE)



ACTIVE HARMONIC FILTER GEAR TRAY (NOT TO SCALE)



+ZA DISTRIBUTION GEAR TRAY (NOT TO SCALE)



AUTOMATIC TRANSFER SWITCH GEAR TRAY (NOT TO SCALE)

REV.	ZONE	REVISION	DATE	APP'D
1		DESIGN DRAWINGS STANDARDS REVISED 2021	20.05.21	M.L.
0		NEW DRAWING	26.08.19	J.S.

DESIGNED	DRAWN	SERWA
	M.L.	17.05.19
DESIGN CHECK	DRAFT CHECK	SE WATER
J.S.		
		17.05.19
APPROVED		

South East Water

101 Wells Street
Frankston 3199

WATER PUMP STATION
DESIGN DRAWING STANDARDS
 FOUR WATER PUMP CUBICLE
 GENERAL ARRANGEMENT (SHEET 9 OF 9)

DO NOT SCALE		
SCALE:		
DRAWING NUMBER		
WP.E.040		1
NUMERAL		REV