SGW/TB
INITIAL ISSUE TO SGW.
04/11/15
14/06/16
SD
SGW/TB
SGW/TB
16/08/16
Water
OPT/RJ
SGW/GB
ADDED BATTERY FAILURE DI2-7 DC FAILURE NOW FROM UPS RELAY OUTPUT.
(PINK)
SD
22/04/17
ISSUED FOR REVIEW
SGW/TB
(PINK)
(PINK)
SGW/GB
SD
SGW/TB
REVISED SAR, DC OK & BATTERY OK CONTACTS NO TO NC.
(PINK)
<table>
<thead>
<tr>
<th>Description</th>
<th>Field</th>
<th>Device</th>
<th>Control &amp; Distribution Compartment</th>
<th>Telemetry Compartment</th>
</tr>
</thead>
<tbody>
<tr>
<td>5</td>
<td>Pump No. 1</td>
<td>BOX</td>
<td>BACK OF START</td>
<td>Brodersen RTU32E</td>
</tr>
<tr>
<td>6</td>
<td>Pump No. 2</td>
<td>BOX</td>
<td>BACK OF START</td>
<td>Digital Outputs DO0</td>
</tr>
<tr>
<td>7</td>
<td>Pump No. 3</td>
<td>BOX</td>
<td>BACK OF START</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Pump No. 4</td>
<td>BOX</td>
<td>BACK OF START</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>Pump No. 5</td>
<td>BOX</td>
<td>BACK OF START</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Pump No. 6</td>
<td>BOX</td>
<td>BACK OF START</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Pump No. 7</td>
<td>BOX</td>
<td>BACK OF START</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Pump No. 8</td>
<td>BOX</td>
<td>BACK OF START</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Pump No. 9</td>
<td>BOX</td>
<td>BACK OF START</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Pump No. 10</td>
<td>BOX</td>
<td>BACK OF START</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Pump No. 11</td>
<td>BOX</td>
<td>BACK OF START</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Pump No. 12</td>
<td>BOX</td>
<td>BACK OF START</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Pump No. 13</td>
<td>BOX</td>
<td>BACK OF START</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>Pump No. 14</td>
<td>BOX</td>
<td>BACK OF START</td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Pump No. 15</td>
<td>BOX</td>
<td>BACK OF START</td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Pump No. 16</td>
<td>BOX</td>
<td>BACK OF START</td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Pump No. 17</td>
<td>BOX</td>
<td>BACK OF START</td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Pump No. 18</td>
<td>BOX</td>
<td>BACK OF START</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Pump No. 19</td>
<td>BOX</td>
<td>BACK OF START</td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Pump No. 20</td>
<td>BOX</td>
<td>BACK OF START</td>
<td></td>
</tr>
</tbody>
</table>
**STANDARD WIRING COLOUR CODING**

<table>
<thead>
<tr>
<th>CIRCUIT / CABLE</th>
<th>COLOUR</th>
</tr>
</thead>
<tbody>
<tr>
<td>POWER</td>
<td>RED / WHITE / BLUE</td>
</tr>
<tr>
<td>3 PHASE LOW VOLTAGE POWER</td>
<td>RED / WHITE / BLUE</td>
</tr>
<tr>
<td>230 V AC ACTIVE CONTROL</td>
<td>RED</td>
</tr>
<tr>
<td>AC NEUTRAL</td>
<td>BLACK</td>
</tr>
<tr>
<td>ANALOGUE &amp; 4-20mA</td>
<td>WHITE</td>
</tr>
<tr>
<td>POSITIVE +</td>
<td>WHITE</td>
</tr>
<tr>
<td>NEGATIVE -</td>
<td>BLACK</td>
</tr>
<tr>
<td>24 V AC 1</td>
<td>BROWN</td>
</tr>
<tr>
<td>24 V AC 2</td>
<td>GRAY</td>
</tr>
<tr>
<td>24 V DC FROM EXTERNAL SUPPLY FOR INSTRUMENTATION AND CONTROL WIRING</td>
<td>ORANGE</td>
</tr>
<tr>
<td>24 V DC</td>
<td>ORANGE</td>
</tr>
<tr>
<td>0 V DC</td>
<td>PURPLE</td>
</tr>
<tr>
<td>12V DC, RED FROM RTU / ALARM DIALER</td>
<td>PINK</td>
</tr>
<tr>
<td>8 V DC</td>
<td>PINK</td>
</tr>
<tr>
<td>8 V DC</td>
<td>BLUE</td>
</tr>
<tr>
<td>VOLTAGE FREE Switching</td>
<td>WHITE</td>
</tr>
<tr>
<td>EARTH CONDUCTORS</td>
<td>GREEN/YELLOW</td>
</tr>
</tbody>
</table>

mA LOOP TERMINAL WIRING

- Prefix for mA Loop terminal
- Suffix for DC supply terminal
<table>
<thead>
<tr>
<th>No.</th>
<th>Item</th>
<th>Brand</th>
<th>Part Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>100A FUSE LINKS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>END STOP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>TERMINALS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>NAME PLATE HOLDER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>FAN GRILL &amp; FILTER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>PUMP SIZE 7.5kW - 32A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>FUSE TERMINAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>NAME PLATE HOLDER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>CRITEC TRANSIENT BARRIER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>FUSE TERMINAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>NAME PLATE HOLDER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>END STOP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>TERMINALS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>NAME PLATE HOLDER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>FAN GRILL &amp; FILTER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>PUMP SIZE 15kW TO 22kW - 90A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>PUMP SIZE 7.5kW - 32A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>FUSE TERMINAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>NAME PLATE HOLDER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>CRITEC TRANSIENT BARRIER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>FUSE TERMINAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>NAME PLATE HOLDER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>END STOP</td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>TERMINALS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>NAME PLATE HOLDER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>26</td>
<td>FAN GRILL &amp; FILTER</td>
<td></td>
<td></td>
</tr>
<tr>
<td>27</td>
<td>PUMP SIZE 15kW TO 22kW - 90A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>28</td>
<td>PUMP SIZE 7.5kW - 32A</td>
<td></td>
<td></td>
</tr>
<tr>
<td>29</td>
<td>FUSE TERMINAL</td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td>NAME PLATE HOLDER</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note 1:** This equipment is supplied by the manufacturer and is not detailed in the parts list.

**Note 2:** For motor terminal sizes, refer to motor catalogues.

**Note 3:** All requirements provided by equipment on this list.
MATERIAL: 3.0mm MARINE GRADE ALUMINIUM.
FINISH: 5060 PVC / NITRILE 6mm THICK OR EQUIVALENT.
CONSTRUCTION NOTES: IN ONE CONTINUOUS LENGTH.
HINGES: ALUMINIUM PREFORMED CHANNEL CONSTRUCTED Ø12 HOLE (ESCUTCHEON DOORS SHOWN DOTTED)
HANDLES: ALL LOCKS ARE SY3. BY MANUFACTURER ON DOORS.
GEAR PLATES: SYSTEM WITH ROLLER ENDS TO BE SUPPLIED TO BE SUPPLIED BY CLIENT REQUIRE 3 POINT LOCKING.
PLINTH: TO BE POWDER COATED COLORBOND WILDERNESS GREEN.
DOOR SEALS: 10 x 25 CABLE SUPPORT RAILS TO BE MOUNTED ON SIDE OF CABINET'S INTERIOR & ESCUTCHEON AS SHOWN.
ESCUTCHEON DOORS: 10 x 25 CABLE SUPPORT RAILS MOUNTED BEHIND. RETAINING CLIP (2 PLACES). TO BE FITTED WITH SLOTTED ROUND HEAD THUMB SCREWS WITH TO BE POWDER COATED WHITE & HAVE M4 CHROMED, UNDER FIXING SCREWS PINS & SPRING WASHERS WITH STAINLESS STEEL CHROME PLATED HINGES WITH LOCKING WASHERS UNDER FIXING SCREWS.
EXTERNAL VENTS: LOCKING ROD TYPE DOOR STAYS TO KEEP DOOR OPEN AT A MINIMUM OF 110 DEGREES.
DOOR STAYS: ALL EXTERNAL DOORS TO BE FITTED WITH MECHANICALLY BOLTING DOWN CABINET.
CABLE SUPPORTS: CABLE SUPPORT RAILS MOUNTED BEHIND. RETAINING CLIP (2 PLACES). TO BE FITTED WITH SLOTTED ROUND HEAD THUMB SCREWS WITH TO BE POWDER COATED WHITE & HAVE M4 CHROMED, UNDER FIXING SCREWS PINS & SPRING WASHERS WITH STAINLESS STEEL CHROME PLATED HINGES WITH LOCKING WASHERS UNDER FIXING SCREWS.
CONTROL & DISTRIBUTION GEAR TRAY - 1020mm HIGH x 910mm WIDE
TELEMETRY GEAR TRAY - 620mm HIGH x 880mm WIDE
GEAR TRAY TO BE 25mm FROM WALL.
VENTS ARE TO BE SEALED WITH TERMITE MESH.
INSERT FILTER & FIXINGS OR EQUIVALENT, B & R EXTERNAL VENT KIT IPVK SUPPLIED WITH GASKET.
STANDARD SEWERAGE PUMP STATION
PUMP STATION TO 22kW (SOFT STARTER)
BACK TO BACK - PUMP STATION CUBICLE
GENERAL ARRANGEMENT
CONSTRUCTION NOTES
STANDARD DRAWINGS
SOUTH GIPPSLAND WATER
PUMP STATION TO 22kW (SOFT STARTER)
BACK TO BACK - PUMP STATION CUBICLE
GENERAL ARRANGEMENT
CONSTRUCTION NOTES
STANDARD DRAWINGS
SOUTH GIPPSLAND WATER
METERING COMPARTMENT DETAILS

Electrical scheme with metering door and hinge assembly removed. Cables to metering door.

NEUTRAL LINK
FUSES
METERING COMPARTMENT DETAILS

PROTECTION OF IP23.
Pressed louvers with mesh backing to a minimum degree of ventilation requirements for metering compartment.

CUBICLE IP RATING: IP55

Sections shown with metering door and hinge assembly removed.

FRONT OF FUSES
ON METERING COMPARTMENT
DPI LOCK TO BE INSTALLED
METER PANEL
DOUBLE HINGE

BASE OF METER PANEL
FLOOR OF METER PANEL COMPARTMENT
TOP OF METER PANEL

PROTECTION OF IP23.
MINIMUM DEGREE OF MESH BACKING TO A

EM5100 METER

NEUTRAL LINK
FUSES
FRONT OF EM5100 METER
BASE OF METER PANEL
PROVISION FOR SEALING STUD
METER PANEL

SOUTH GIPPSLAND WATER
STANDARD SEWERAGE PUMP STATION
PUMP STATION TO 22kW (SOFT STARTER)
BACK TO BACK - PUMP STATION CUBICLE
METERING COMPARTMENT DETAILS

STANDARD DRAWINGS
SOUTH GIPPSLAND WATER
OPT/CT
OPT/RJ
SGW/TB
SGW/GB

ISSUED FOR REVIEW
1 18/07/16
SGW/TB
SGW/GB

RESIZED BATTERY COMPARTMENT, ADDED FLAT BAR TO PLINTH ENDS.

2 09/03/17
SGW/JF
SGW/GB
RESIZED IT GEAR TRAY FOR NEW ETHERNET SWITCH/MODEM DETAILS.

400Hx200W
PLATE
GEAR
IT

3 24/04/17
SGW/TB
SGW/GB
INITIAL ISSUE TO SGW.
CONSTRUCTION NOTES

FRONT ELEVATION

MATERIAL:
FINISH:
CONSTRUCTION NOTES
HINGES:
HANDLES:
GEAR PLATES:
PLINTH:
DOOR SEALS:
ESCUTCHEON DOORS:

3.0mm MARINE GRADE ALUMINIUM.
5060 PVC / NITRILE 6mm THICK OR EQUIVALENT.
IN ONE CONTINUOUS LENGTH.
ALUMINIUM PREFORMED CHANNEL CONSTRUCTED
(ESCUTCHEON DOORS SHOWN DOTTED)

ALL LOCKS ARE SY3.
BY MANUFACTURER ON DOORS.
SYSTEM WITH ROLLER ENDS TO BE SUPPLIED
TO BE SUPPLIED BY CLIENT REQUIRE 3 POINT LOCKING
TO BE POWDER COATED COLORBOND WILDERNESS GREEN.

VENT
FAN
"A"
SASPM0006
"A"
SASPM0006
"F"
SASPM0006
"F"
SASPM0006
"B"
SASPM0006
"B"
SASPM0006
"C"
SASPM0006
"C"
SASPM0006
"D"
SASPM0006
"D"
SASPM0006
"E"
SASPM0006
"E"
SASPM0006

VENTS ARE TO BE SEALED WITH TERMITE MESH.
INSERT FILTER & FIXINGS OR EQUIVALENT,
B & R EXTERNAL VENT KIT IPVK SUPPLIED WITH GASKET,
A MINIMUM OF 110 DEGREES.
LOCKING ROD TYPE DOOR STAYS TO KEEP DOOR OPEN AT
ALL EXTERNAL DOORS TO BE FITTED WITH MECHANICALLY
WITH LOCKING WASHERS UNDER FIXING SCREWS.
GRADE 316 STAINLESS STEEL HINGES & PINS
WITH RETAINING CLIP THUMBS SCREWS
SLOTTED ROUND HEAD M4 CHROMED,
EXTERNAL VENTS:
DOOR STAYS:
CABLE SUPPORTS:
OF CABINET'S INTERIOR & ESCUTCHEON AS SHOWN.
10 x 25 CABLE SUPPORT RAILS TO BE MOUNTED ON SIDE
ELEVATION
RIGHT HAND SIDE
ELEVATION
LEFT HAND SIDE
ELEVATION
FRONT ELEVATION
PLAN VIEW
RIGHT HAND SIDE
ELEVATION

BOLTING DOWN CABINET.
PLINTH BOLT POINTS FOR
CONNECTION BOX
GENERATOR

STANDARD SEWERAGE PUMP STATION
PUMP STATION TO 22kW (SOFT STARTER)
SIDE BY SIDE - PUMP STATION CUBICLE - J/B RHS
GENERAL ARRANGEMENT

STANDARD DRAWINGS
SOUTH GIPPSLAND WATER

OPT/CT
OPT/RJ
SGW/TB
SGW/GB

ISSUED FOR REVIEW
1 18/07/16
SGW/TB
SGW/GB
RESIZED BATTERY COMPARTMENT, ADDED FLAT BAR TO PLINTH ENDS.
2 03/08/16
SGW/TB
SGW/GB
ADDED NOTE : VENTS ARE TO BE SEALED WITH TERMITE MESH.
3 09/03/17
SGW/JF
SGW/GB
RESIZED IT GEAR TRAY FOR NEW ETHERNET SWITCH/MODEM DETAILS.

South
Gippsland Water

WONTHAGGI - St Elena Court Sewer Pump Station
S_WON_C_STESPS
South
1300 851 636
WONTHAGGI - St Elena Court Sewer Pump Station
S_WON_C_STESPS
Gippsland
Water

IP RATING:
CUBICLE TO BE CONSTRUCTED TO IP56 RATING.
CONSTRUCTION NOTES

FRONT ELEVATION

MATERIAL:

FINISH:

CONSTRUCTION NOTES

HINGES:

HANDLES:

GEAR PLATES:

PLINTH:

DOOR SEALS:

ESCUTCHEON DOORS:

3.0mm MARINE GRADE ALUMINIUM.

5060 PVC / NITRILE 6mm THICK OR EQUIVALENT.

IN ONE CONTINUOUS LENGTH.

ALUMINIUM PREFORMED CHANNEL CONSTRUCTED

(ESCUTCHEON DOORS SHOWN DOTTED)

ALL LOCKS ARE SY3. BY MANUFACTURER ON DOORS.

SYSTEM WITH ROLLER ENDS TO BE SUPPLIED

TO BE SUPPLIED BY CLIENT REQUIRE 3 POINT LOCKING

TO BE POWDER COATED COLORBOND WILDERNESS GREEN.

VENT

FAN

"A"

SASPM0017

"A"

SASPM0017

CABLE SUPPORT RAILS MOUNTED BEHIND.

RETAINING CLIP (2 PLACES). TO BE FITTED WITH

SLOTTED ROUND HEAD THUMB SCREWS WITH

TO BE POWDER COATED WHITE & HAVE M4 CHROMED,

EXTERNAL VENTS:

DOOR STAYS:

CABLE SUPPORTS:

OF CABINET'S INTERIOR & ESCUTCHEON AS SHOWN.

10 x 25 CABLE SUPPORT RAILS TO BE MOUNTED ON SIDE

ELEVATION

RIGHT HAND SIDE

ELEVATION

LEFT HAND SIDE

ELEVATION

PLAN VIEW

LEFT HAND SIDE

ELEVATION

FRONT ELEVATION

RIGHT HAND SIDE

ELEVATION

South Gippsland Water

STANDARD DRAWINGS

SOUTH GIPPSLAND WATER

OPT/CT

OPT/RJ

SGW/TB

SGW/GB

0

25/05/16

SGW/TB

SGW/GB

ISSUED FOR REVIEW

1

18/07/16

SGW/TB

SGW/GB

RESIZED BATTERY COMPARTMENT, ADDED FLAT BAR TO PLINTH ENDS.

2

03/08/16

SGW/JF

SGW/GB

ADDED NOTE : VENTS ARE TO BE SEALED WITH TERMITE MESH.

3

09/03/17

SGW/JF

SGW/GB

RESIZED IT GEAR TRAY FOR NEW ETHERNET SWITCH/MODEM DETAILS.

4

24/04/17

SGW/TB

SGW/GB

INITIAL ISSUE TO SGW.
METERING COMPARTMENT DETAILS

Settings shown with metering door and hinge assembly removed.

Cubicle IP RATING: IP55

Sections shown with metering door and hinge assembly removed.

CLIENT LOGO

DESIGN CONSULTANT

REVISION

DRAWING No

TITLE

SCALE

APPROVED

PROJECT DIRECTOR

PROJECT MANAGER

DESIGN REVIEW

REVIEWED

DRAFTING CHECK

DRAWN

LOCATION

PROJECT

DESIGNED

REV NO

DATE

P.DIR

APP'D

South Gippsland Water

STANDARD SEWERAGE PUMP STATION

PUMP STATION TO 22kW (SOFT STARTER)

SIDE BY SIDE - PUMP STATION CUBICLE - L/H S

METERING COMPARTMENT DETAILS

STANDARD DRAWINGS

SOUTH GIPPSLAND WATER

OPT/CT

OPT/RJ

SGW/TB

SGW/GB

ISSUED FOR REVIEW

1

18/07/16

SGW/TB

SGW/GB

RESIZED BATTERY COMPARTMENT ADDED FLAT BAR TO PLINTH ENDS.

2

09/03/17

SGW/JF

SGW/GB

RESIZED IT GEAR TRAY FOR NEW ETHERNET SWITCH/MODEM DETAILS.

3

24/04/17

SGW/TB

SGW/GB

INITIAL ISSUE TO SGW.
NOTE:
UNLESS OTHERWISE INDICATED,
ALL DUCT RAIL TO BE STOOD OFF FROM
GEAR TRAY BY A NOMINAL 40mm.
ITEM 68 PLACED ON
FLOOR OF IT COMPARTMENT

25 x 60 DUCTING

ITEM 68 PLACED ON
FLOOR OF IT COMPARTMENT
CONTROL AND DISTRIBUTION COMPT
GEAR TRAY

NOTE: ALL GEAR TRAYS AND TOP HAT TO BE POWDER COATED WHITE

MOUNTING HOLES
GEAR TRAYS TO HAVE 4 MOUNTING HOLES IN EACH CORNER

GEAR TRAY

IT GEAR TRAY
400H x 200W

TELEMETRY GEAR TRAY
620H x 880W

JUNCTION BOX GEAR TRAY
300H x 290W

South Gippsland Water
STANDARD DRAWINGS

SOUTH GIPPSLAND WATER
OPT/CT
OPT/RJ
SGW/TB
SGW/GB

0 30/09/15 SGW/TB SGW/GB ISSUED FOR REVIEW
1 16/07/16 SGW/TB SGW/GB GENERAL REVISION
2 09/03/17 SGW/TB SGW/GB RESIZED IT GEAR TRAY FOR NEW ETHERNET SWITCH/MODEM DETAILS
3 24/04/17 SGW/TB SGW/GB INITIAL ISSUE TO SGW