Application for Planning Approval

Land Use Planning and Approvals Act 1993

APPLICATION NO.

DA2025/026

LOCATION OF AFFECTED AREA

6 WOODRIEVE ROAD, BRIDGEWATER

DESCRIPTION OF DEVELOPMENT PROPOSAL

SELF STORAGE FACILITY

A COPY OF THE DEVELOPMENT APPLICATION MAY BE VIEWED AT www.brighton.tas.gov.au AND AT THE COUNCIL OFFICES, 1 TIVOLI ROAD, OLD BEACH, BETWEEN 8:15 A.M. AND 4:45 P.M, MONDAY TO FRIDAY OR VIA THE QR CODE BELOW. ANY PERSON MAY MAKE WRITTEN REPRESENTATIONS IN ACCORDANCE WITH S.57(5) OF THE LAND USE PLANNING AND APPROVALS ACT 1993 CONCERNING THIS APPLICATION UNTIL 4:45 P.M. ON **11/08/2025**. ADDRESSED TO THE CHIEF EXECUTIVE OFFICER AT 1 TIVOLI ROAD, OLD BEACH, 7017 OR BY EMAIL AT development@brighton.tas.gov.au. REPRESENTATIONS SHOULD INCLUDE A DAYTIME TELEPHONE NUMBER TO ALLOW COUNCIL OFFICERS TO DISCUSS, IF NECESSARY, ANY MATTERS RAISED.

JAMES DRYBURGH
Chief Executive Officer

SCAN ME

Brighton
going places

21st February 2025

Brighton Council Council
1 Tivoli Road
Old Beach TAS 7017

Re: Proposed Container Self Storage Facility
6 Woodrieve Road, Bridgewater

Dear General Manager,

Please find attached documents for a proposed container storage facility at 6 Woodrieve Road, Bridgewater.

The site CT182281/12 is a 6,493m2 block and is zoned General Industrial under the Tasmanian Planning Scheme. Storage is a permitted use in this zone. This site features two overlays, the Bushfire Prone Area Overlay, which does not apply to this use, and the Waterway and Coastal Protection overlay, which applies to the lower third of the site where the site falls towards the creek. The site has vacant industrial land to either side, and council land zone Public Open Space to the rear.

Site history:
The site has previously been subject to an enforcement notice regarding unapproved site works that introduced a large amount of fill to the site. This planning application (DA 2024/00104) is still under the latter stages of planning assessment, and we propose for all works associated with the correction of the unapproved fill will be completed prior to the submission of Building Permit Documents.

Proposed Development:
The development proposes the construction of a container storage facility completed over three stages. In total the application proposes the installation of 106 twenty foot containers, plus a common toilet facility, new concrete driveway apron, parking and site fencing. The total area of the containers will be 1,577.7m2 plus 12.8m2 for the toilet. This is a total floor area of 1,590.5m2, which is a site coverage of 24.5%.
The proposed operation is that the individual containers will be leased, with site access available via keycard/fob access.

Building Height:
The maximum building height is 3.15m.

Little Island Building Design
E: info@libd.com.au
www.libd.com.au
Ph: 0408 316 564

Setbacks:
The front setback is at more 10m throughout the development. There are no adjacent developments, so it is not possible to respond to their setbacks.

Landscaping:
Landscaping is to be provided across the entire front boundary, except for the driveway apron. A very small portion of this landscaping is narrower than 6m, just to one side of the driveway apron. This is due to the irregular shape of the front boundary, and is more than offset by wider areas of landscaping across the rest of the property.

Hours of Operation:
The site will be available 24 hours, 7 days a week to authorised persons only. The site will not be permanently occupied, bill have security monitoring via cameras. Security lighting and cameras will be a used to deter unwanted activity, particularly at night.

Staffing:
There will be no permanent staff presence. One staff member will attend site between 7am to 9pm to meet new clients and complete routine maintenance and cleaning.

Parking:
The parking and access code requires parking be provided for storage facility in accordance with 1 space/200m2 of site area. As approximately one third of this site is unable to be developed due to the extensive drainage easements, we have calculated this as the area outside of the easements. This area is 4,400m2, meaning 22 spaces would be required, and these have been provided. Due to the nature of the development, a large area of conventional parking would be impractical and inconvenient, so parking is provided alongside each aisle, allowing people to pull up alongside the container they wish to access. Three parking spaces are provided near the toilet for those needing to use the toilet facilities, staff, and people touring the facility, where parking in front of the containers might inconvenience other users. One of these spaces is a disabled space in accordance with AS1428.1.

Signage:
No signage is proposed in this application.

Staging:
It is proposed that the development is constructed in three stages. This is to allow the containers to be installed as they are leased and filled. The works associated with each stage are as follows:

Stage I Works:
- New Driveway Apron
- Front Car Parking (spaces 1-3)
- Toilet
- Boundary Fencing (temporary fencing will be installed to enclose any gaps left by undeveloped areas of the site)
- First 26 Containers
- Driveway between containers and parking in front of these containers.
- Temporary gravel exit driveway to allow one way traffic to exit.

Stage 2 Works:

- Next 31 Containers
- Driveway between containers and parking in front of these containers.
- Extension of temporary gravel exit driveway to allow one way traffic to exit.

Stage 3 Works:

- Final 49 Containers
- Remainder of driveway and parking spaces
- Removal of temporary exit driveway
- Landscaping of frontage.

Site Services:

The site is serviced by water, sewer and stormwater mains. Civil Engineering drawings will be supplied to confirm the lot connections.

Thank you for your consideration of this application and please do not hesitate to contact us with any questions.

Sincerely,

Alycia Mcconalogue
Building Designer

cc Rohan Spaulding

1st July 2025

Brighton Council Council
1 Tivoli Road
Old Beach TAS 7017

Re: DA 2025 / 00026 Proposed Container Self Storage Facility
6 Woodrieve Road, Bridgewater
RFI Response 02

Dear General Manager,

Please find attached revised drawings, modified in response to issues raised in our meeting in June. Also attached are revised civil drawings. These do not currently include stormwater detention, but we will be happy to provide this if council could clarify the detention requirements as previously discussed.

The revised scheme includes a front setback discretion, please find attached a response to the performance criteria below.

19.4.2 Setback

A1

Buildings must have setback from a frontage of:

(a) *not less than 10m;*

(b) *not less than existing buildings on the site; or*

(c) *not more or less than the maximum and minimum setbacks of the buildings on adjoining properties.*

Does not comply with (a), (b), or (c). The 10m setback has not been achieved, nor is it possible to match the setback of adjacent properties as the are not yet developed.

Little Island Building Design
E: info@libd.com.au
www.libd.com.au
Ph: 0408 316 564

P1

Buildings must have a setback from a frontage that provides adequate space for vehicle access, parking and landscaping, having regard to:

(a) the topography of the site;

(b) the setback of buildings on adjacent properties; and

(c) the safety of road users.

Due to the curve of the frontage, a small part of the development extends into the setback, but not in the part of the site used for site access, meaning that safe vehicle and pedestrian access can still be provided.

Due to the curve in the road, the building frontage would be unlikely to align with any adjacent development, meaning the discretion will not have negative impacts on streetscape. Parts of the development near to the side boundaries do achieve the 10m setback, so it is possible for a consistent building line to be achieved if future development of adjacent blocks build with a 10m setback.

Landscaping will be provided across the entire frontage of the site, minimising any visual impact of the discretionary part of the development.

Thank you for your ongoing assistance with this application and please do not hesitate to contact me for further information.

Sincerely,

Alycia Mcconalogue
Building Designer

cc Rohan Spaulding

REVISION SCHEDULE			
REV	DATE	STAGE	DETAILS
01	02.06.2024	CONCEPTS	DOMED ROOF TESTING
02	24.02.2025	PLANNING	FIRST PLANNING ISSUE
03	22.05.2025	PLANNING	PLANNING RF 01
04	01.07.2025	PLANNING	RECONFIGURED SITE LAYOUT/ROTATED CONTAINERS
05	22.07.2025	PLANNING	ADDITIONAL DIMENSIONS FOR PLANNING ASSESSMENT

STAGED PLANNING APPLICATION

PROPOSED SELF STORAGE FACILITY
6 WOODRIEVE ROAD, BRIDGEWATER

OWNER: R.J. & T.C. SPAULDING

TITLE: 182281/12
SITE AREA: 6,493m2
ZONING: GENERAL INDUSTRIAL
OVERLAYS: BUSHFIRE PRONE AREA, WATERWAY AND COASTAL PROTECTION AREA (PART SITE)

CLASS: 7b
WIND CLASSIFICATION: TBA
SOIL CLASSIFICATION: TBA
BAL RATING: EXEMPT - NOT APPLICABLE TO THIS USE
CORROSIVE ENVIRONMENT: TBA
FLOOR AREA: 1,830.7m2
SITE COVERAGE: 28.2%

DRAWING SCHEDULE:

PROJECT NO: LI24009
DATE: JULY 2025

LITTLE ISLAND BUILDING DESIGN
ph 0408 316 564
e: info@libd.com.au
a: PO Box 60 Claremont 7011
Accredited Building Designer:
Alycia Mcconalogue CC6943

4 WOODRIEVE ROAD
CT 176401/11

BENCH MARK
Large Nail
RL:39.90

39.50

BOTTOM OF BATTER

EXISTING WATER CONNECTION

COMPILED BOUNDARY
61°11'30" 91.38m

BANK

36.67

36.37
CM1

39.09

EXISTING SITE WORKS INCLUDING CREATION OF BATTERS AND REMOVAL OF FILL ASSESSED UNDER PREVIOUS DEVELOPMENT APPLICATION DA 2024 / 00104

NO NEW SITE WORKS ARE PROPOSED IN THE REAR EASEMENT AREA BY THIS DEVELOPMENT APPLICATION.

6 WOODRIEVE ROAD
CT 182281/12
6,493m2

AREA EXCLUDING EASEMENTS
4,400m2

PIPELINE EASEMENT
10.06m WIDE

PIPE 1
PIPE 2
PIPE 3

WATER MAINS

COMPILED BOUNDARY
317°27'40" 89.76m

BOTTOM OF BATTER

EXTENT OF DRAINAGE EASEMENTS SHOWN GREY

PIPELINE & DRAINAGE EASEMENT VARIABLE WIDTH

PIPELINE EASEMENT 4.00m WIDE

SEWER MAIN
PIPELINE & DRAINAGE EASEMENT 3.00m WIDE

BANK

38.42

32A COBBS HILL ROAD
PUBLIC OPEN SPACE
CT 140010/9

BENCH MARK
Large Nail#
RL:38.44

Bench Mark 3

Toe of Bank

Head Wall
Inv RL:34.81

MH1

36.88

MHE

CM3

36.70

36.53

FH

40.08

SV

40

SV

MHA

BDY A

BDY B

BDY C

Toe of Bank

Top of Bank

BDY D

Toe of Bank

38.71

TOP OF BATTER

38.16

UP

CM2

EXTENT OF WATERWAY AND COASTAL PROTECTION OVERLAY

FENCE

BANK

COMPILED BOUNDARY
231°54'20" 72.78m

BOTTOM OF BATTER

PIPELINE & DRAINAGE EASEMENT 3.00m WIDE

8 WOODRIEVE ROAD
CT 182281/13

Sewer Manhole
Top RL:40.25
In Inv RL:38.78
Out Inv RL:38.73

Sewer Manhole
Top RL:39.67
In Inv RL:38.27
Out Inv RL:38.26

Stormwater Manhole
Top RL:39.43
Inv RL:37.75

BM2

BM1

MHB

SV

SV

WOODRIEVE ROAD

Sewer Manhole
Top RL:38.53
In Inv RL:36.74
In Inv RL:36.64
In Inv RL:35.14
Out Inv RL:35.04

Stormwater Manhole
Top RL:38.51
In Inv RL:37.08
Out Inv RL:36.87

MHC

MHD

ET

FH

SV

SURVEY NOTES:
1. SURVEY COMPLETED BY SURVEY PLUS IN JANUARY 2024.
2. CONTOUR INTERVALS ARE 0.2m.
3. HORIZONTAL DATUM IS MGA (GDA94).
4. VERTICAL DATUM IS AHD.
5. SERVICES SHOWN ARE BASED ON VISIBLE ASSESSMENT AND INFRASTRUCTURE MAPPING. NO UNDERGROUND SERVICES INVESTIGATIONS HAVE BEEN COMPLETED.
6. BOUNDARIES HAVE NOT BEEN MARKED OR VERIFIED.

NOTES:
1. DO NOT SCALE OFF DRAWINGS.
2. ALL DIMENSIONS ARE TO BE VERIFIED ON SITE PRIOR TO WORKS COMMENCING.
3. IF THE EXISTING BUILDING FABRIC OR PLUMBING WORKS AND FOUND TO VARY FROM THOSE OUTLINED IN THESE DRAWINGS, THE BUILDER IS TO NOTIFY THE BUILDING SURVEYOR OR DESIGNER.
4. ALL BUILDING WORKS ARE TO COMPLY WITH NCC 2022 VOL.1 AND REFERENCED STANDARDS.
5. ALL PLUMBING WORKS ARE TO COMPLY WITH NCC 2022 VOL 3, AS 3500 AND COUNCIL REQUIREMENTS.
6. THE BUILDER IS TO ENSURE A COPY OF THE BUILDING SURVEYOR AND COUNCIL CERTIFIED PLANS ARE AVAILABLE ON SITE. THESE PLANS ARE NOT SUITABLE FOR USE UNTIL CERTIFIED IN ACCORDANCE WITH THE ABOVE.

EXISTING SITE PLAN

1:500@A3

L.I. LITTLE ISLAND BUILDING DESIGN

Accredited Building Designer
Alycia Mcconalogue CC6943
Ph: 0408 316 564
E: info@libd.com.au
W: www.libd.com.au

SURVEY LEGEND:

ET = Electrical Turret
FH = Fire Hydrant
SV = Stop Valve
UP = Unclassified Pit

CM1 = EX. CORNER MARK
Peg
RL:36.37

CM2 = EX. CORNER MARK
Peg
RL:38.27

CM3 = EX. CORNER MARK
Nail in Fence Post
RL:36.88

BM1 = OLD SURVEY MARK
R/Set in Kerb
RL:39.33

BM2 = OLD SURVEY MARK
R/Set in Kerb
RL:39.36

BM3 = OLD SURVEY MARK
R/Set in MH
RL:36.15

MH1 = Sewer Manhole
Top RL:36.16
In Inv RL:34.29
Out Inv RL:34.25

MHA = Stormwater Manhole
Top RL:39.83
In Inv RL:38.04
Out Inv RL:38.03

MHB = Stormwater Manhole
Top RL:39.35
In Inv RL:#.##
In Inv RL:37.67
Out Inv RL:37.48

MHC = Stormwater Manhole
Top RL:38.54
In Inv RL:36.60
Out Inv RL:36.56

MHD = Stormwater Manhole
Top RL:38.51
In Inv RL:36.64
In Inv RL:36.60
In Inv RL:35.64
Out Inv RL:35.58

MHE = Stormwater Manhole
Top RL:36.22
In Inv RL:35.47
In InvE RL:34.97
Out Inv RL:34.90

WATER MAIN
SEWER MAIN
STORMWATER MAIN

PLANNING DRAWINGS

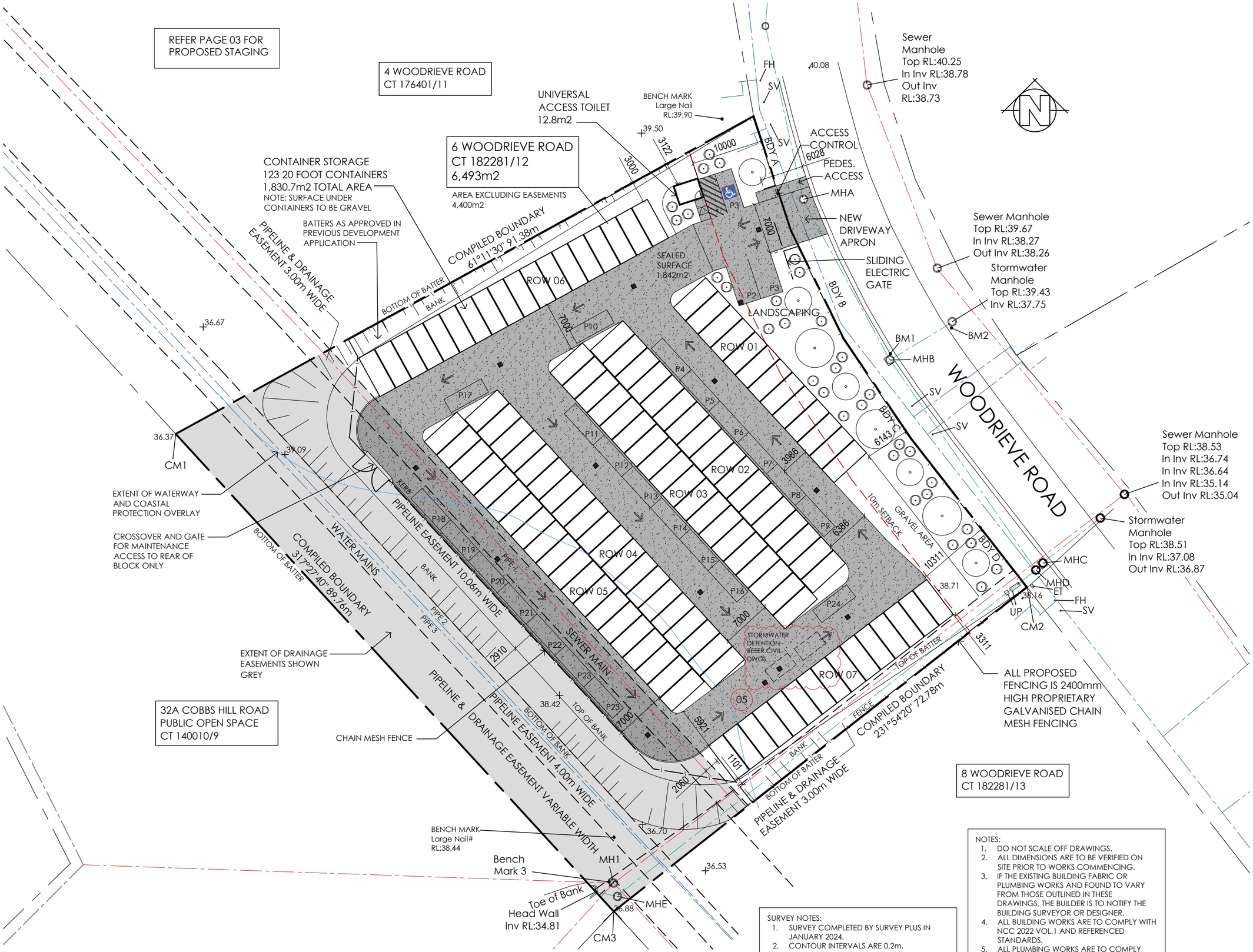
PROPOSED CONTAINER SELF STORAGE FACILITY
6 WOODRIEVE ROAD,
BRIDGEWATER

FOR:
R.J.& T.C. SPAULDING

Date:
22.07.2025

Project no/Drawing no: LI24009 - 01

Revision: 05



PROPOSED SITE PLAN

1:500@A3

NOTE: CONTOURS NOT SHOWN FOR CLARITY

SURVEY NOTES:

1. SURVEY COMPLETED BY SURVEY PLUS IN JANUARY 2024.
2. CONTOUR INTERVALS ARE 0.2m.
3. HORIZONTAL DATUM IS MGA (GDA94).
4. VERTICAL DATUM IS AHD.
5. SERVICES SHOWN ARE BASED ON VISIBLE ASSESSMENT AND INFRASTRUCTURE MAPPING. NO UNDERGROUND SERVICES INVESTIGATIONS HAVE BEEN COMPLETED.
6. BOUNDARIES HAVE NOT BEEN MARKED OR VERIFIED.

NOTES:

1. DO NOT SCALE OFF DRAWINGS.
2. ALL DIMENSIONS ARE TO BE VERIFIED ON SITE PRIOR TO WORKS COMMENCING.
3. IF THE EXISTING BUILDING FABRIC OR PLUMBING WORKS AND FOUND TO VARY FROM THOSE OUTLINED IN THESE DRAWINGS, THE BUILDER IS TO NOTIFY THE BUILDING SURVEYOR OR DESIGNER.
4. ALL BUILDING WORKS ARE TO COMPLY WITH NCC 2022 VOL.1 AND REFERENCED STANDARDS.
5. ALL PLUMBING WORKS ARE TO COMPLY WITH NCC 2022 VOL 3, AS 3500 AND COUNCIL REQUIREMENTS.
6. THE BUILDER IS TO ENSURE A COPY OF THE BUILDING SURVEYOR AND COUNCIL CERTIFIED PLANS ARE AVAILABLE ON SITE. THESE PLANS ARE NOT SUITABLE FOR USE UNTIL CERTIFIED IN ACCORDANCE WITH THE ABOVE.

L.I. LITTLE ISLAND BUILDING DESIGN

Accredited Building Designer
Alycia Mcconalogue CC6943
Ph: 0408 316 564
E: info@libd.com.au
W: www.libd.com.au

LEGEND:

B = Bollard
ET = Electrical Turret
FH = Fire Hydrant
SV = Stop Valve
UP = Unclassified Pit

CM1 = EX. CORNER MARK Peg RL:36.37

CM2 = EX. CORNER MARK Peg RL:38.27

CM3 = EX. CORNER MARK Nail in Fence Post RL:36.88

BM1 = OLD SURVEY MARK R/Set in Kerb RL:39.33

BM2 = OLD SURVEY MARK R/Set in Kerb RL:39.36

BM3 = OLD SURVEY MARK R/Set in MH RL:36.15

MH1 = Sewer Manhole Top RL:36.16 In Inv RL:34.29 Out Inv RL:34.25

MHA = Stormwater Manhole Top RL:39.83 In Inv RL:38.04 Out Inv RL:38.03

MHB = Stormwater Manhole Top RL:39.35 In Inv RL:#.## In Inv RL:37.67 Out Inv RL:37.48

MHC = Stormwater Manhole Top RL:38.54 In Inv RL:36.60 Out Inv RL:36.56

MHD = Stormwater Manhole Top RL:38.51 In Inv RL:36.64 In Inv RL:36.60 In Inv RL:35.64 Out Inv RL:35.58

MHE = Stormwater Manhole Top RL:36.22 In Inv RL:35.47 In InvE RL:34.97 Out Inv RL:34.90

WATER MAIN
SEWER MAIN
STORMWATER MAIN

PLANNING DRAWINGS

PROPOSED CONTAINER SELF STORAGE FACILITY
6 WOODRIEVE ROAD, BRIDGEWATER

FOR:
R.J.& T.C. SPAULDING

Date:
22.07.2025

Project no/Drawing no: LI24009 - 02

Revision: 05

STAGING

STAGE 1
DRIVEWAY APRON AND FRONT FENCING, LANDSCAPING, ALL INTERNAL ROADS AND DRAINAGE, TOILET AND 31 CONTAINERS

STAGE 2
39 CONTAINERS

STAGE 3
52 CONTAINERS

4 WOODRIEVE ROAD
CT 176401/11

6 WOODRIEVE ROAD
CT 182281/12
6,493m2

AREA EXCLUDING EASEMENTS
4,400m2

UNIVERSAL ACCESS TOILET
12.8m2

BENCH MARK
Large Nail
RL:39.90

CONTAINER STORAGE
123 20 FOOT CONTAINERS
1,830.7m2 TOTAL AREA
NOTE: SURFACE UNDER CONTAINERS TO BE GRAVEL

BATTERS AS APPROVED IN PREVIOUS DEVELOPMENT APPLICATION

PIPELINE & DRAINAGE EASEMENT 3.00m WIDE

COMPILED BOUNDARY
61°11'30" 91.38m

BOTTOM OF BATTER
BANK

SEALED SURFACE
1,842m2

ROW 01
ROW 02
ROW 03
ROW 04
ROW 05
ROW 06
ROW 07

P1 P2 P3 P4 P5 P6 P7 P8 P9 P10 P11 P12 P13 P14 P15 P16 P17 P18 P19 P20 P21 P22 P23 P24

LANDSCAPING

ACCESS CONTROL
PEDES. ACCESS
MHA
NEW DRIVEWAY APRON
SLIDING ELECTRIC GATE

FH
SV
40.08
39.50
36.67
36.37
37.09
38.71
38.16
38.42
36.70
36.53
38.88

BDY A
BDY B
BDY C
BDY D

Sewer Manhole
Top RL:40.25
In Inv RL:38.78
Out Inv RL:38.73

Sewer Manhole
Top RL:39.67
In Inv RL:38.27
Out Inv RL:38.26

Stormwater Manhole
Top RL:39.43
Inv RL:37.75

BM1
BM2
MHB

WOODRIEVE ROAD

Sewer Manhole
Top RL:38.53
In Inv RL:36.74
In Inv RL:36.64
In Inv RL:35.14
Out Inv RL:35.04

Stormwater Manhole
Top RL:38.51
In Inv RL:37.08
Out Inv RL:36.87

MHC
MHD
ET
FH
SV
UP
CM2

CM1

EXTENT OF WATERWAY AND COASTAL PROTECTION OVERLAY

CROSSOVER AND GATE FOR MAINTENANCE ACCESS TO REAR OF BLOCK ONLY

KERB
PIPELINE EASEMENT 10.06m WIDE
WATER MAINS
PIPE 1
PIPE 2
PIPE 3
BANK
BOTTOM OF BATTER
COMPILED BOUNDARY
317°27'40" 89.76m

SEWER MAIN

STORMWATER DETENTION - REFER CIVIL DWGS

10m SETBACK
GRAVEL AREA

EXTENT OF DRAINAGE EASEMENTS SHOWN GREY

32A COBBS HILL ROAD
PUBLIC OPEN SPACE
CT 140010/9

CHAIN MESH FENCE

PIPELINE & DRAINAGE EASEMENT VARIABLE WIDTH
PIPELINE EASEMENT 4.00m WIDE
BOTTOM OF BANK
TOP OF BANK

BENCH MARK
Large Nail#
RL:38.44

Bench Mark 3
MH1
Toe of Bank
Head Wall
Inv RL:34.81
MHE
CM3

TOP OF BATTER
FENCE
BANK
BOTTOM OF BATTER
PIPELINE & DRAINAGE EASEMENT 3.00m WIDE
COMPILED BOUNDARY
231°54'20" 72.78m

ALL PROPOSED FENCING IS 2400mm HIGH PROPRIETARY GALVANISED CHAIN MESH FENCING

8 WOODRIEVE ROAD
CT 182281/13

SURVEY NOTES:
1. SURVEY COMPLETED BY SURVEY PLUS IN JANUARY 2024.
2. CONTOUR INTERVALS ARE 0.2m.
3. HORIZONTAL DATUM IS MGA (GDA94).
4. VERTICAL DATUM IS AHD.
5. SERVICES SHOWN ARE BASED ON VISIBLE ASSESSMENT AND INFRASTRUCTURE MAPPING. NO UNDERGROUND SERVICES INVESTIGATIONS HAVE BEEN COMPLETED.
6. BOUNDARIES HAVE NOT BEEN MARKED OR VERIFIED.

NOTES:
1. DO NOT SCALE OFF DRAWINGS.
2. ALL DIMENSIONS ARE TO BE VERIFIED ON SITE PRIOR TO WORKS COMMENCING.
3. IF THE EXISTING BUILDING FABRIC OR PLUMBING WORKS AND FOUND TO VARY FROM THOSE OUTLINED IN THESE DRAWINGS, THE BUILDER IS TO NOTIFY THE BUILDING SURVEYOR OR DESIGNER.
4. ALL BUILDING WORKS ARE TO COMPLY WITH NCC 2022 VOL.1 AND REFERENCED STANDARDS.
5. ALL PLUMBING WORKS ARE TO COMPLY WITH NCC 2022 VOL 3, AS 3500 AND COUNCIL REQUIREMENTS.
6. THE BUILDER IS TO ENSURE A COPY OF THE BUILDING SURVEYOR AND COUNCIL CERTIFIED PLANS ARE AVAILABLE ON SITE. THESE PLANS ARE NOT SUITABLE FOR USE UNTIL CERTIFIED IN ACCORDANCE WITH THE ABOVE.

SITE PLAN

1:500@A3

NOTE: CONTOURS NOT SHOWN FOR CLARITY

L.I. LITTLE ISLAND BUILDING DESIGN

Accredited Building Designer
Alycia Mcconalogue CC6943
Ph: 0408 316 564
E: info@libd.com.au
W: www.libd.com.au

LEGEND:

B = BOLLARD
ET = Electrical Turret
FH = Fire Hydrant
SV = Stop Valve
UP = Unclassified Pit

CM1 = EX. CORNER MARK
Peg
RL:36.37

CM2 = EX. CORNER MARK
Peg
RL:38.27

CM3 = EX. CORNER MARK
Nail in Fence Post
RL:36.88

BM1 = OLD SURVEY MARK
R/Set in Kerb
RL:39.33

BM2 = OLD SURVEY MARK
R/Set in Kerb
RL:39.36

BM3 = OLD SURVEY MARK
R/Set in MH
RL:36.15

MH1 = Sewer Manhole
Top RL:36.16
In Inv RL:34.29
Out Inv RL:34.25

MHA = Stormwater Manhole
Top RL:39.83
In Inv RL:38.04
Out Inv RL:38.03

MHB = Stormwater Manhole
Top RL:39.35
In Inv RL:#.##
In Inv RL:37.67
Out Inv RL:37.48

MHC = Stormwater Manhole
Top RL:38.54
In Inv RL:36.60
Out Inv RL:36.56

MHD = Stormwater Manhole
Top RL:38.51
In Inv RL:36.64
In Inv RL:36.60
In Inv RL:35.64
Out Inv RL:35.58

MHE = Stormwater Manhole
Top RL:36.22
In Inv RL:35.47
In InvE RL:34.97
Out Inv RL:34.90

WATER MAIN
SEWER MAIN
STORMWATER MAIN

PLANNING DRAWINGS

PROPOSED CONTAINER SELF STORAGE FACILITY
6 WOODRIEVE ROAD,
BRIDGEWATER

FOR:
R.J.& T.C. SPAULDING

Date:
22.07.2025

Project no/Drawing no: LI24009 - 03

Revision: 05

DETAIL PLAN - TOILET AND DRIVEWAY

1:100@A3

L.I. LITTLE ISLAND BUILDING DESIGN

Accredited Building Designer
Alycia Mcconalogue CC6943
Ph: 0408 316 564
E: info@libd.com.au
W: www.libd.com.au

LEGEND:

B	BOLLARD
B/L	BOLLARD LIGHT
DP	DOWNPIPE
FW	FLOOR WASTE
GR	GRAB REAIL
HB	HAND BASIN
HWC	HOT WATER CYLINDER
I.O.	INSPECTION OUTLET
ORG	OVERFLOW RELIEF GULLY
S/L	SENSOR LIGHT
V	VENT
WC	WATER CLOSET
WP	WATERPROOF
WR	WATER RESISTANT
W.S.	WATER STOP

PLANNING DRAWINGS

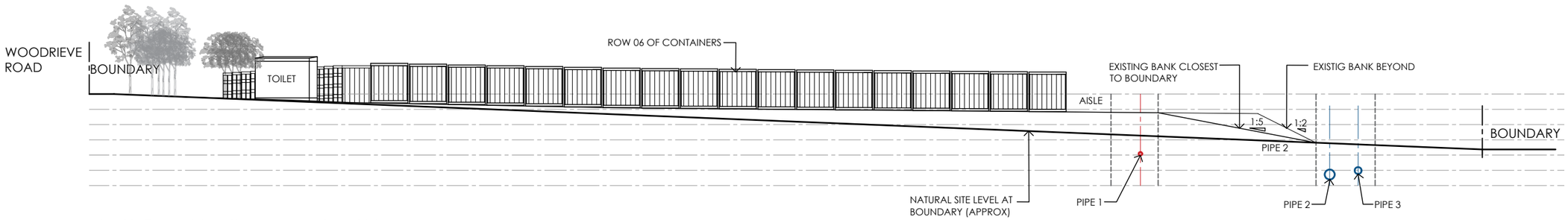
PROPOSED CONTAINER SELF STORAGE FACILITY
6 WOODRIEVE ROAD, BRIDGEWATER

FOR:
R.J.& T.C. SPAULDING

Date:
22.07.2025

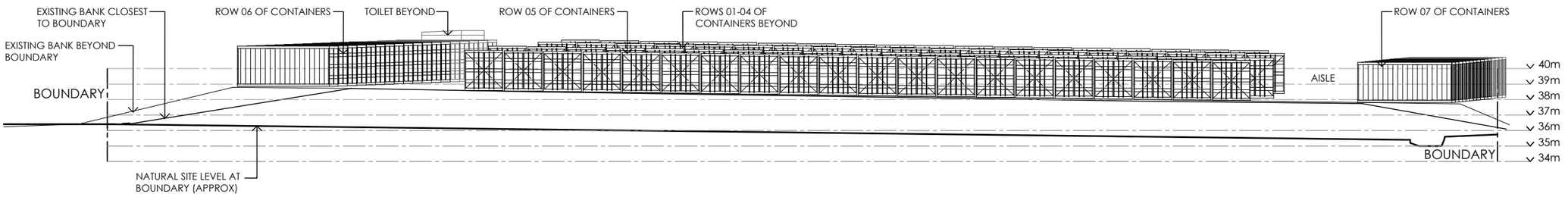
Project no/Drawing no: LI24009 - 04

Revision: 05



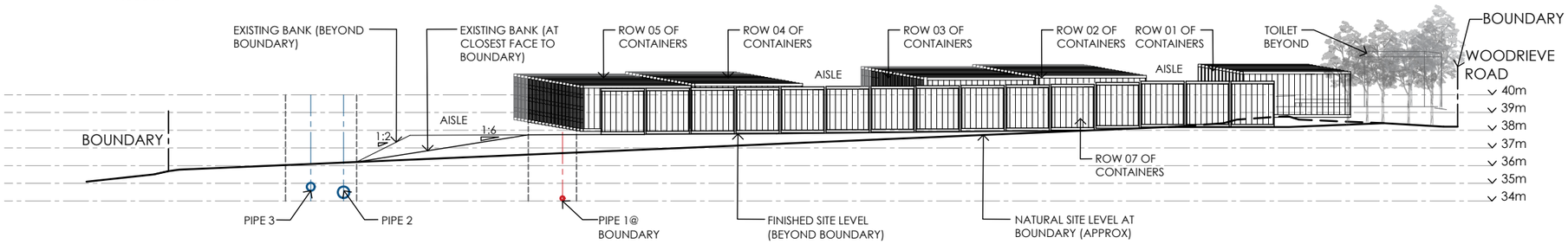
NORTH WEST ELEVATION

1:300@A3



NORTH WEST ELEVATION

1:300@A3



SOUTH EAST ELEVATION

1:300@A3

NORTH WEST ELEVATION (WOODRIEVE ROAD)

1:300@A3

NOTE: TREES SHOWN ARE AT AN ADVANCED AGE, NOT AT TIME OF PLANTING

L.I.

LITTLE ISLAND BUILDING DESIGN

Accredited Building Designer
Alycia Mcconalogue CC6943
Ph: 0408 316 564
E: info@libd.com.au
W: www.libd.com.au

LEGEND:

B	BOLLARD
B/L	BOLLARD LIGHT
DP	DOWNPIPE
FW	FLOOR WASTE
GR	GRAB REAIL
HB	HAND BASIN
HWC	HOT WATER CYLINDER
I.O.	INSPECTION OUTLET
ORG	OVERFLOW RELIEF GULLY
S/L	SENSOR LIGHT
V	VENT
WC	WATER CLOSET
WP	WATERPROOF
WR	WATER RESISTANT
W.S.	WATER STOP

PLANNING DRAWINGS

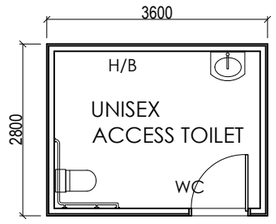
PROPOSED CONTAINER SELF STORAGE FACILITY
6 WOODRIEVE ROAD, BRIDGEWATER

FOR:
R.J.& T.C. SPAULDING

Date:
22.07.2025

Project no/Drawing no: LI24009 - 05

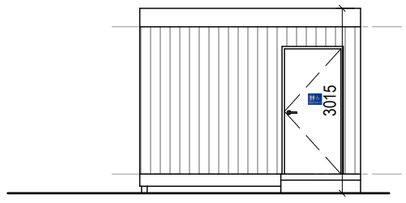
Revision: 05



TOILET FLOOR PLAN

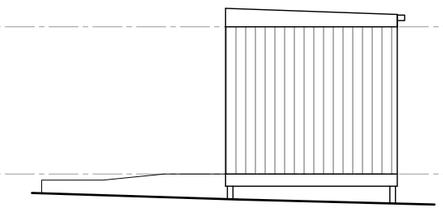
1:100@A3

ALL FIXTURES CONNECTED TO EXISTING SEWER LOT CONNECTION



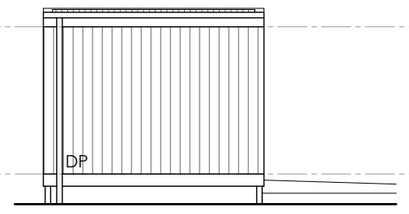
SE TOILET ELEVATION

1:100@A3



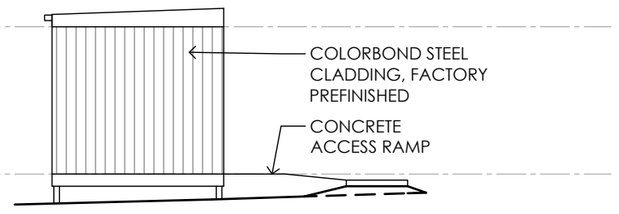
NE TOILET ELEVATION

1:100@A3



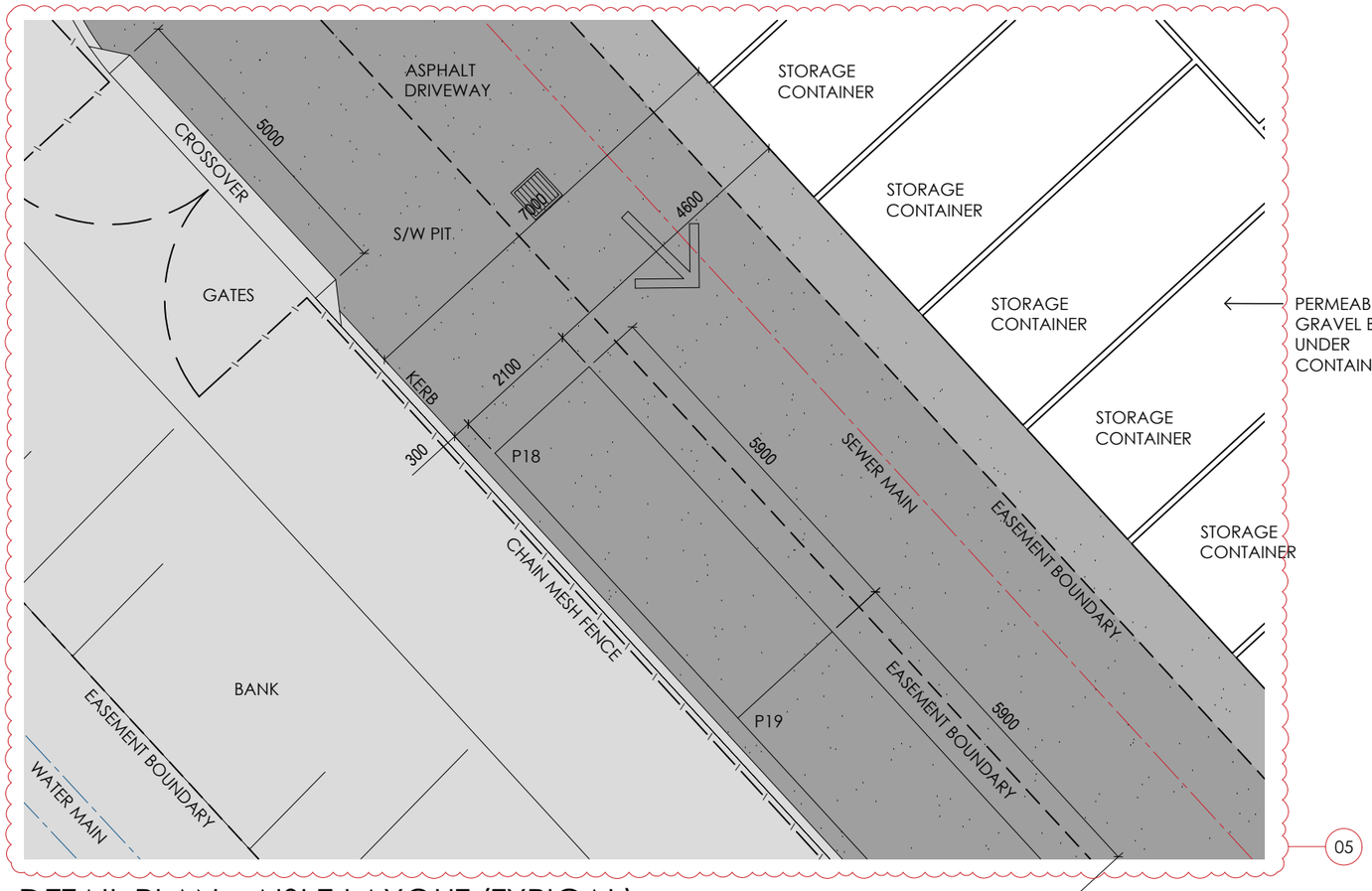
NW TOILET ELEVATION

1:100@A3



SW TOILET ELEVATION

1:100@A3



DETAIL PLAN - AISLE LAYOUT (TYPICAL)

1:100@A3

Accredited Building Designer
Alycia Mcconalogue CC6943
Ph: 0408 316 564
E: info@libd.com.au
W: www.libd.com.au

LEGEND:

B	BOLLARD
B/L	BOLLARD LIGHT
DP	DOWNPIPE
FW	FLOOR WASTE
GR	GRAB REAIL
HB	HAND BASIN
HWC	HOT WATER CYLINDER
I.O.	INSPECTION OUTLET
ORG	OVERFLOW RELIEF GULLY
S/L	SENSOR LIGHT
V	VENT
WC	WATER CLOSET
WP	WATERPROOF
WR	WATER RESISTANT
W.S.	WATER STOP

PLANNING DRAWINGS

PROPOSED CONTAINER SELF STORAGE FACILITY
6 WOODRIEVE ROAD, BRIDGEWATER

FOR:
R.J.& T.C. SPAULDING

Date:
22.07.2025

Project no/Drawing no: LI24009 - 06

Revision: 05

CIVIL / HYDRAULIC DRAWINGS
PROPOSED CONTAINER STORAGE FACILITY
6 WOODRIEVE ROAD, BRIDGEWATER, 7030

DRAWING SCHEDULE

SHEET	DRAWING TITLE	REV	DATE
C01	TITLE & OVERALL PLAN	3	21/07/2025
C02	NOTES & LEGEND	1	24/06/2025
C03	CIVIL & STORMWATER OVERALL	3	21/07/2025
C04	CIVIL & STORMWATER CARPARK	3	21/07/2025
C05	LONG SECTION 1	1	24/06/2025
C06	LONG SECTION 2	1	24/06/2025
C07	LONG SECTION 3	1	24/06/2025
C08	LONG SECTION 3	1	24/06/2025
C09	CROSS SECTIONS 1	1	24/06/2025
C10	CROSS SECTIONS 2	1	24/06/2025
C11	CONSTRUCTION DETAILS	3	21/07/2025
C12	CONSTRUCTION DETAILS 1	1	21/07/2025
C13	CONSTRUCTION DETAILS 2	0	14/07/2025

OVERALL PLAN
SCALE 1:500 (mm) (A1)

FYSH DESIGN
CIVIL HYDRAULIC

WARNING
BEWARE OF UNDERGROUND SERVICES
THE LOCATION OF UNDERGROUND SERVICES ARE APPROXIMATE ONLY AND THE EXACT POSITION SHOULD BE PROVEN ON SITE. NO GUARANTEE IS GIVEN THAT ALL SERVICES ARE SHOWN.

NOT FOR CONSTRUCTION

0 10 20 30 40 50
SCALE 1:500

DIAL BEFORE YOU DIG

REV	DESCRIPTION		DATE
3	FOR DEVELOPMENT APPROVAL	CF	21/07/2025
2	FOR DEVELOPMENT APPROVAL	CF	14/07/2025
1	FOR DEVELOPMENT APPROVAL	CF	24/06/2025
0	FOR DEVELOPMENT APPROVAL	CF	20/05/2025

BASE SURVEY SUPPLIED BY
SURVEY PLUS TAS
SURVEYED ON: 17/01/2024
HORIZONTAL DATUM: MGA GDA94
GRID: GDA94, ZONE 55
LEVEL DATUM: AHD

FYSH DESIGN
UNIT 4, 160 BUNGANA WAY
CAMBIDGE TAS
PH: 0414 149 394
ACCREDITATION: BSD LICENCE NO. 47981973

NORTH

CIVIL/HYDRAULICS - CONTAINER STORAGE FACILITY
CLIENT: R.J. & T.C. SPAULDING
6 WOODRIEVE ROAD, BRIDGEWATER TAS 7030
DRAWING TITLE
TITLE AND OVERALL PLAN

DESIGNED	DRAWN	SCALE
CHRIS FYSH	CHRIS FYSH	AS NOTED
PROJECT	SHEET NO.	REVISION
CKD-CIV-169	C01	3

LEGEND

NEW STORMWATER LINE(DN100 DWV SN6 @ MIN 1.0% GRADE

NEW DOMESTIC WATER

NEW DN100 DWV SN6 SEWER @ MIN 1.65% GRADE

NEW DN100 CHARGED STORMWATER LINE @ MIN 1.0% GRADE

SHAPED TABLE DRAIN

BOUNDARY LINE

EXISTING FENCE LINE

EXISTING OVERHEAD POWER LINE

EXISTING TELECOMMUNICATIONS LINE

EXISTING POWER POLE

NEW STORMWATER/SEWER MANHOLE

WATER VALVE

WATER METER

GENERAL NOTES

1. ALL PRIVATE PLUMBING WORKS SHALL GENERALLY BE IN ACCORDANCE WITH THE AS3500, NATIONAL CONSTRUCTION CODE VOL 3 (PLUMBING CODE OF AUSTRALIA), & THE IPWEA MUNICIPAL STANDARD SPECIFICATION AND DRAWINGS AS APPLICABLE.
2. UNLESS NOTED OTHERWISE THE CONTRACTOR IS REQUIRED TO OBTAIN ALL NECESSARY PERMITS FOR THE WORKS INCLUDING ANY WORKS IN THE ROAD RESERVATION AND ON ADJACENT PRIVATE PROPERTIES.
3. THE CONTRACTOR SHALL CONFIRM THE PRESENCE & LOCATION OF ALL EXISTING SERVICES ON THE SITE & WITHIN THE AREA OF WORKS & CLEARLY IDENTIFY ALL DANGEROUS SERVICES UNDERGROUND & OVERHEAD.
4. ALL DRAIN AND SERVICES TIE IN LEVELS & LOCATIONS ARE TO BE CONFIRMED BEFORE COMMENCEMENT OF CONSTRUCTION WORK.
5. UNLESS NOTED OTHERWISE ALL SERVICE CONNECTIONS TO COUNCIL OR WATER AUTHORITY SERVICE SHALL BE UNDERTAKEN BY THE COUNCIL OR WATER AUTHORITY AT THE CONTRACTOR'S COST.
6. ALL REDUNDANT SERVICE LINES SHALL BE CUT AND PLUGGED AT EXTERNAL BOUNDARIES. WITHIN THE SITE BOUNDARY ALL REDUNDANT SERVICES SHALL BE REMOVED AND DISPOSED OF.
7. REDUNDANT SERVICE TRENCHES SHALL BE BACKFILLED WITH FULLY COMPACTED MATERIAL APPROPRIATE FOR THE AREA OF THE DEVELOPMENT SITE.
8. ALL UNDERGROUND WATER AND SEWER WORKS MUST BE TESTED AND INSPECTED BY COUNCIL OR TASWATER PRIOR TO BACKFILL.
9. ALL PIPES UNDER TRAFFIC ABLE AREAS ARE TO BE BACK FILLED FULL DEPTH WITH 20MM F.C.R. AND FULLY COMPACTED.

SERVICES NOTES:

WATER SUPLY

1. ALL WATER WORKS IN PUBLIC AREAS ARE TO BE IN ACCORDANCE WITH WATER SUPPLY CODE WSA 03-2011-3.1 MRWA ED 2 AND TASWATER'S SUPPLEMENT.
2. ALL WATER SUPPLY WORKS IN PRIVATE AREAS SHALL BE IN ACCORDANCE WITH IN ACCORDANCE WITH WITH AS3500.1 & AS3500.4
3. ALL INTERNAL WATER SUPPLY SERVICES SHALL BE PLANNED AND INSTALLED BY THE PLUMBING CONTRACTOR IN ACCORDANCE WITH AS3500.
4. ALL HOT WATER LINES ARE TO BE FULLY LAGGED.
5. ALL HOT WATER SERVICES TO BE INSTALLED WITH TEMPERING DEVICES PROVIDING WATER AT NO GREATER THAN 45 DEGREES C. IN ACCORDANCE WITH THE REQUIREMENTS OF AS 3500.4.
6. ALL MODIFICATIONS AND ADDITIONS TO WATER SERVICES THAT CONNECT DIRECTLY ONTO TASWATER MAINS MUST BE CARRIED BY TASWATER AT THE CONTRACTOR'S COST.
7. ALL WATER SUPPLY PIPES ARE TO BE LOCATED WITH MINIMUM CLEARANCES TO OTHER SERVICES IN ACCORDANCE WITH THAT SPECIFIED IN THE WATER SUPPLY CODE WSA 03-2011-3.1 MRWA ED E - TABLE 5.5.

SERVICES NOTES:

SEWER

1. ALL SEWER WORKS IN PUBLIC AREAS ARE TO BE IN ACCORDANCE WITH WSA 02-2002-2.3 MRWA EDITION 1.0 AND TASWATER'S SUPPLEMENT.
2. ALL SEWER WORKS IN PRIVATE AREAS SHALL BE IN ACCORDANCE WITH AS3500.2.
3. UNLESS NOTED OTHERWISE ALL SEWER DRAINS SHALL BE PVC SEWER CLASS "SN8" TO AS1260.
4. ALL SEWER MANHOLE LIDS TO BE GATIC TYPE, HEAVY DUTY FOR TRAFFIC AREAS, LIGHT DUTY FOR NON TRAFFIC AREAS.
5. WHERE NECESSARY ALL EXISTING MANHOLE & PIT TOPS SHALL BE ADJUSTED TO SUIT NEW SURFACE LEVELS. PROVIDE AND INSTALL NEW APPROVED LIDS WHERE NECESSARY.
6. PROVIDE ALL NECESSARY TESTING & INSPECTION OPENINGS TO PIPE WORK. WHERE RELEVANT PROVIDE ADDITIONAL INSPECTION OPENINGS TO ALLOW IDENTIFICATION OF THE ORIGIN OF BLOCKAGES.
7. ALL MAINTENANCE STRUCTURES ARE TO BE IN ACCORDANCE WITH WSA SEW1300 DRAWING SERIES.
8. NEW SEWER MAIN DRAINS SHALL BE DN150 UPVC CLASS 'SN8' TO AS 1260 - U.N.O.
9. ALL PRIVATE SEWER DRAINS TO BE DN100 (UNO) PVC TO AS1260.
10. MANHOLES WITH INTERNAL DROPS SHALL BE 1200 INTERNAL DIAMETER MINIMUM.

WORKPLACE HEALTH & SAFETY NOTES:

BEFORE THE CONTRACTOR COMMENCES WORK THE CONTRACTOR SHALL UNDERTAKE A SITE SPECIFIC PROJECT PRE-START HAZARD ANALYSIS / JOB SAFETY ANALYSIS (JSA) WHICH SHALL IDENTIFY IN DOCUMENTED FORM;

- THE TYPE OF WORK.
- HAZARDS AND RISKS TO HEALTH AND SAFETY.
- THE CONTROLS TO BE APPLIED IN ORDER ELIMINATE OR MINIMIZE THE RISK POSED BY THE IDENTIFIED HAZARDS.
- THE MANNER IN WHICH THE RISK CONTROL MEASURES ARE TO BE IMPLEMENTED.

THESE ARE TO BE SUBMITTED TO THE SUPERINTENDENT AND/OR OTHER RELEVANT WORKPLACE SAFETY OFFICERS.

FOR THIS PROJECT; POSSIBLE HAZARDS INCLUDE (BUT ARE NOT LIMITED TO):

- EXCAVATION OF ANY TYPE & DEPTHS
- CONTAMINATED SOILS
- CONSTRUCTION IN GROUND WITH HIGH WATER TABLE
- FELLING / LOPPING &/OR REMOVAL OF EXISTING TREES/VEGETATION
- UNDERGROUND STRUCTURES (MANHOLES / SUMPS / ETC)
- CONFINED SPACES
- OVERHEAD POWER LINES
- UNDERGROUND STORMWATER, WATER AND SEWER PIPES
- TELECOMMUNICATION CABLES - BOTH UNDERGROUND & OVERHEAD
- ELECTRICAL/POWER CABLES - BOTH UNDERGROUND & OVERHEAD
- WORKING AT HEIGHTS
- WORKING WITH ASBESTOS CONTAINING MATERIALS
- TRAFFIC MANAGEMENT

EARTHWORKS & DRIVEWAY NOTES:

1. ALL EARTHWORKS SHALL BE IN ACCORDANCE WITH AS3798 "GUIDELINES ON EARTHWORKS FOR COMMERCIAL AND RESIDENTIAL DEVELOPMENTS".
2. ALL VEGETATION AND TOPSOIL SHALL BE STRIPPED AND GRUBBED IN THE AREA OF PROPOSED WORKS.
3. NEW OR MODIFIED DRIVEWAY CROSSINGS SHALL BE IN ACCORDANCE WITH IPWEA STANDARD DRAWING TSD-R09-v1 AND MUST BE INSPECTED AND APPROVED BY COUNCIL.
4. EXCAVATED AND IMPORTED MATERIAL USED AS FILL IS TO BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
5. FILL MATERIAL SHALL BE WELL GRADED AND FREE OF BOULDERS OR COBBLES EXCEEDING 150mm IN DIAMETER UNLESS APPROVED TO BE OTHERWISE.
6. FILL REQUIRED TO SUPPORT DRIVEWAYS INCLUDING FILL IN EMBANKMENTS THAT SUPPORT DRIVEWAYS SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS:
   - TOP SOIL AND ORGANIC MATTER SHALL BE STRIPPED TO A MINIMUM OF 100mm.
   - THE SUB GRADE SHALL HAVE A MINIMUM BEARING CAPACITY OF 100 kPa.
   - FILL IN EMBANKMENTS SHALL BE KEYED 150mm INTO NATURAL GROUND.
   - THE FILL SHALL BE COMPACTED IN HORIZONTAL LAYERS OF NOT MORE THAN 200mm.
   - EACH LAYER SHALL BE COMPACTED TO A MINIMUM DENSITY RATIO OF 95% STD, IT IS THE BUILDERS RESPONSIBILITY TO ENSURE THAT THIS IS ACHIEVED.
7. WHERE THE ABOVE REQUIREMENTS CANNOT BE ACHIEVED THE ENGINEER SHALL BE CONSULTED AND THE FORMATION SHALL BE PROOF ROLLED (UNDER SUPERVISION OF THE ENGINEER) TO CONFIRM AN APPROVED BASE.
8. CONCRETE PAVEMENTS SHALL BE CURED FOR A MINIMUM OF 3 DAYS USING A CURRENT BEST PRACTICE METHOD.
9. SAWN CONTROL JOINTS SHALL BE CONSTRUCTED AS SOON AS POSSIBLE WITHOUT RAVELLING THE JOINT, GENERALLY THIS SHALL BE WITHIN 24 HOURS.
10. BATTERS SHALL BE SET TO A SAFE ANGLE OF REPOSE IN ACCORDANCE WITH THE BCA VOL 2 AS INDICATED BELOW:

NOTE: WHERE SITE CONDITIONS ARE UNSUITABLE FOR A BATTERED BANK CONSULT THE DESIGNER OR ENGINEER FOR A SUITABLE RETAINING WALL DESIGN. EMBANKMENTS THAT ARE TO BE LEFT EXPOSED MUST BE STABILISED BY VEGETATION OR SIMILAR WORKS TO PREVENT SOIL EROSION.

SEE TABLE BELOW

SOIL TYPE (* REFER BCA 3.2.4)		EMBANKMENT SLOPES H:L	
		COMPACTED FILL	CUT
STABLE ROCK (A*)		2:3	8:1
SAND (A*)		1:2	1:2
SILT (P*)		1:4	1:4
CLAY	FIRM CLAY	1:2	1:1
	SOFT CLAY	NOT SUITABLE	2:3
SOFT SOILS (P)		NOT SUITABLE	NOT SUITABLE

GENERAL NOTES

1. THE LOCATION OF UNDERGROUND SERVICES ARE INDICATIVE ONLY. THE EXACT POSITION OF EACH SERVICE PRESENT SHOULD BE ESTABLISHED ON SITE WITH THE RESPECTIVE SERVICE OWNERS PRIOR TO COMMENCING CONSTRUCTION.
2. ALL WORKS SHALL BE IN ACCORDANCE WITH LGAT STANDARD DRAWINGS (U.N.O.)
3. ALL DIMENSIONS ARE IN METRES UNLESS NOTED OTHERWISE (U.N.O.)

CIVIL WORKS

1. THE CONTRACTOR SHALL PREPARE AND PROVIDE A SEDIMENT AND EROSION CONTROL PLAN FOR THE WORKS. NO WORK SHALL COMMENCE UNTIL THIS PLAN HAS BEEN APPROVED BY THE SUPERINTENDENT.
2. NO MACHINERY IS TO BE PLACED ON OR HAVE ACCESS TO ANY AREA OUTSIDE THE LIMIT OF WORKS UNLESS APPROVED BY THE PRINCIPAL.
3. THE LIMIT OF WORKS LINE SHALL BE TEMPORARILY FENCED WITH BUNTING BEFORE ANY WORKS COMMENCE.
4. ALL WORKS TO BE UNDERTAKEN IN ACCORDANCE WITH THE FOLLOWING DEPARTMENT OF STATE GROWTH SPECIFICATIONS:
   R21 - CLEARING AND GRUBBING, R22 - EARTHWORKS, R23 - SUBGRADE ZONE, R31 - OPEN DRAINS AND CHANNELS, R36 - KERB AND GUTTER, R40 - PAVEMENT BASE AND SUBBASE, R40.1 NOMINATION OF MATERIALS FORM, EXPLANATORY NOTES, R43 - PAVEMENT AND SHOULDER MAINTENANCE, R51 - SPRAYED BITUMINOUS SURFACING, R55 - ASPHALT PLACEMENT, R64 - PAVEMENT MARKING, R80 - MISCELLANEOUS CONCRETE SLABS.
5. NO CLEARING OF VEGETATION OR REMOVAL OF TOPSOIL IS PERMITTED IN ANY AREA NOT DIRECTLY RELATED TO THE CONSTRUCTION WORKS OR AS NOTED ON THE DRAWINGS OTHER THAN REMOVAL OF TREES IDENTIFIED AS IN A HAZARDOUS CONDITION.
6. ALL STRIPPED TOPSOIL IS TO BE STORED IN AN APPROVED MANNER FOR REHABILITATION WORKS AND VEGETATION RESEEDING.
7. SURFACE REINSTATEMENT & EROSION CONTROL.
   ALL DISTURBED AND BARE GROUND INCLUDING ALL CUT & FILL SURFACES SHALL BE REHABILITATED AS FOLLOWS:
   REPLACE TOPSOIL WITH THAT RESERVED WHEN THE SITE WAS STRIPPED (50 THICK). RE-SEED ALL DISTURBED GROUND USING SEED MIX APPROVED BY THE SUPERINTENDENT.
8. 14/7mm TWO COAT SEAL TO BE IN ACCORDANCE WITH DEPARTMENT OF STATE GROWTH STANDARD SPECIFICATION R51 - BITUMINOUS SURFACING.
9. SUBGRADE CBR FOR ROAD PAVEMENTS AND FOOTPATHS TO BE A MINIMUM OF 5%
10. ALL PAVEMENT MARKING TO BE STANDARD PAINT IN ACCORDANCE WITH DEPARTMENT OF STATE GROWTH SPECIFICATION R64 - PAVEMENT MARKING.
11. TRAFFIC MANAGEMENT PLAN INDICATING HOW, SAFE USE McROBIES RD WILL BE MAINTAINED DURING CONSTRUCTION SHALL BE SUBMITTED PRIOR TO COMMENCEMENT OF WORK.
12. CONCRETE FOOTPATH TO BE CONSTRUCTED IN ACCORDANCE WITH LGAT STANDARD DRAWINGS TSD-R11-V1.
13. CONCRETE KERBS TO BE CONSTRUCTED IN ACCORDANCE WITH LGAT STANDARD DRAWINGS TSD-R14-V1.

SERVICES NOTES:

STORMWATER

1. ALL STORMWATER WORKS TO BE IN ACCORDANCE WITH AS3500.3.
2. ALL STORM WATER PIPES LESS THAN DN300 TO BE UPVC CLASS "SN8" TO AS 1254 UNO.
3. ALL STORMWATER PIPES DN300 & LARGER TO BE 'BLACKMAX' UNO.
4. ALL SUBSOIL DRAINS SHALL COMPRISE DN80 CLASS 400 SN8 POLYETHYLENE PIPE TO AS2439.1 WITH PROPRIETARY POLYESTER PIPE FILTER SOCK SLEEVING AND FREEE DRAINING BEDDING MATERIAL.
5. PROVIDE ANCHOR BLOCKS IN ACCORDANCE WITH MSD SD-5005 WHERE PIPE GRADES EXCEED 15 %.
6. CONNECTIONS TO LIVE COUNCIL MAINS TO BE CARRIED OUT BY COUNCIL AT DEVELOPERS COST.
7. ALL DRAIN AND TRENCH CONSTRUCTION SHALL COMPLY WITH THE MUNICIPAL STANDARD DRG MSD SD 5001.
8. ALL MANHOLE LIDS IN TRAFFICABLE AREAS SHALL COMPLY WITH CLASS "C" LOAD RATING TO AUSTRALIAN STANDARD AS 3996.
PIT DIMENSIONS SHOWN HAVE BEEN DESIGNED BY PIT CAPACITY TABLES. THESE PITS MAY NEED TO BE INCREASED IN MINIMUM INTERNAL SIZE DUE TO THE DEPTH AS PER AS3500.3 AS PER TABLE BELOW WHICH IS THE CONTRACTORS RESPONSIBILITY TO ENSURE COMPLIANCE TO AS3500: (SEE ADJACENT)

DEPTH TO INVERT OF OUTLET	MINIMUM INTERNAL DIMENSIONS mm	
	WIDTH	LENGTH
≤600	450	450
>600 ≤900	600	600
>900 ≤1200	600	900
>1200	900	900

NOT FOR CONSTRUCTION

DIAL BEFORE YOU DIG

REV	DESCRIPTION		DATE
1	FOR DEVELOPMENT APPROVAL	CF	24/06/2025
0	FOR DEVELOPMENT APPROVAL	CF	20/05/2025

REV	DESCRIPTION	DATE

BASE SURVEY SUPPLIED BY SURVEY PLUS
SURVEYED ON: 22/07/2024
HORIZONTAL DATUM: MGA GDA94
GRID: GDA94, ZONE 55
LEVEL DATUM: AHD

FYSH DESIGN
CIVIL HYDRAULIC

FYSH DESIGN
UNIT 4, 160 BUNGANA WAY
CAMBIDGE TAS

PH: 0414 149 394

ACCREDITATION: BSD LICENCE NO. 479819732

NORTH

CIVIL/HYDRAULICS - CONTAINER STORAGE FACILITY

CLIENT: R.J. & T.C. SPAULDING
6 WOODRIEVE ROAD, BRIDGEWATER TAS 7030

DRAWING TITLE

NOTES AND LEGEND

DESIGNED	DRAWN	SCALE
CHRIS FYSH	CHRIS FYSH	AS NOTED
PROJECT	SHEET NO.	REVISION
CKD-CIV-169	C02	1

4 WOODRIEVE ROAD
BRIDGEWATER TAS 7030
CT 176401/11

DDA COMPLIANT TOILET

WOODRIEVE ROAD

EXISTING SEWER MANHOLE
ID A360249

NS39.397
DS40.036

NS39.822
DS40.040

NS39.891
DS39.894

EXISTING STORMWATER MANHOLE AS PER SURVEY DATA

NS39.738
DS39.873

NS39.558
DS40.047

ATLAN STORMSACK FILTRATION BAGS TO BE INSTALLED IN ALL PITS (TYPICAL)

BOUNDARY

BOTTOM OF BATTER

BANK

CAR PARK

NS39.459
DS40.183

MINOR CUT OFF /TABLE DRAIN TO BE PROVIDED AT BOTTOM OF EMBANKMENT TO ALLOW ANY OVERLAND FLOW PATH WATER THROUGH, ALSO TO PREVENT ANY SEDIMENT EGRESS INTO NEIGHBORING PROPERTIES

NS39.193
DS39.530

CENTERLINE ALIGNMENT DWAY 1

600x600x900 MIN CLASS D TRAFFICABLE STORMWATER PIT INSTALLED AS PER MANUFACTURERS SPECIFICATIONS

EXISTING WATER RETICULATION MAIN MSCL DN450 ASSET ID A403519

EXISTING STORMWATER MAIN

DN150 DWV PVC SN8 STORMWATER AT MIN. 1.0% FALL

BOUNDARY

EXISTING SEWER MANHOLE
ID A360238

EXISTING STORMWATER MANHOLES AS PER SURVEY DATA

6 WOODRIEVE ROAD
BRIDGEWATER TAS 7030
CT 182281/12

CENTERLINE ALIGNMENT DWAY 2

NS38.620
DS38.941

KERB

EXISTING SEWER GRAVITY MAIN PVC-U DN225 ID A360443

DN225 SN8 STORMPRO OR CLASS 4 PIPE STORMWATER AT MIN 0.5% FALL

CENTERLINE ALIGNMENT DWAY 3

DN300 SN8 STORMPRO OR CLASS 4 PIPE STORMWATER AT MIN 0.5% FALL

ADEQUATELY SIZED ATLAN 550mm FILTER WITHIN CONCRETE PIT(OR APPROVED EQUIVALENT) STORMWATER GROSS POLLUTANT / FILTRATION SYSTEM, REFER TO FYSH DESIGN STORMWATER REPORT DATED 14/07/2025 FOR AND DETAILS ON C12 & C13 FOR FURTHER DETAILS

EXISTING WATER BULK TRANSFER MAIN MSCL DN648 ASSET ID A204380

EXISTING WATER RETICULATION MAIN MSCL DN450 ASSET ID A204380

BANK

BOTTOM OF BATTER

10m EASEMENT

CENTERLINE ALIGNMENT DWAY 4

3m EASEMENT

DN100 DWV SN6 SEWER LINE @ MIN 1.65% GRADE FROM AMENITIES BUILDING

CENTERLINE ALIGNMENT DWAY 5

TOP OF BATTER

15000L BELOW GROUND CONCRETE INSITU (OR APPROVED EQUIVALENT STORMWATER DETENTION TANK, (4.5m LONG x 2.8m WIDE x 1.2m DEEP) WITH DN150 LOW FLOW ORIFICE, AND DN300 OVERFLOW WITH 900SQ GRATED OVERFLOW PIT INSTALLED AS PER DETAIL ON C11 DRAWING AND NCC2022, AS3500.3:2021

'PUBLIC OPEN SPACE' -
32A COBBS HILL RD
BRIDGEWATER TAS 7030

MINOR CUT OFF /TABLE DRAIN TO BE PROVIDED AT BOTTOM OF EMBANKMENT TO ALLOW ANY OVERLAND FLOW PATH WATER THROUGH, ALSO TO PREVENT ANY SEDIMENT EGRESS INTO NEIGHBORING PROPERTIES

Top of Bank

BOTTOM OF BANK

TOP OF BANK

EXISTING STORMWATER MAIN

EXISTING SEWER GRAVITY MAIN PVC-U DN225 ID A360444

BOUNDARY

MINOR CUT OFF /TABLE DRAIN TO BE PROVIDED AT BOTTOM OF EMBANKMENT TO ALLOW ANY OVERLAND FLOW PATH WATER THROUGH, ALSO TO PREVENT ANY SEDIMENT EGRESS INTO NEIGHBORING PROPERTIES

DN100 DWV SN6 SEWER LINE @ MIN 1.65% GRADE FROM AMENITIES BUILDING TO CONNECT TO EXISTING SEWER LOT CONNECTION, (A168841)

DN300 SN8 STORMPRO OR CLASS 4 PIPE STORMWATER AT MIN 0.5% FALL

NEW DN300 SN8 STORMPRO TO CONNECT TO EXISTING STORMWATER PROPERTY CONNECTION WITHIN PROPERTY BOUNDARY AS PER COUNCIL RECORDS, IN ACCORDANCE WITH LGAT V3 DRAWINGS TSD-SW25-V3

Toe of Bank

36.70

3m EASEMENT

EXISTING SEWER MANHOLE
ID A360240

EXISTING STORMWATER HEADWALL

EXISTING STORMWATER MANHOLE AS PER SURVEY DATA

EXISTING SEWER MANHOLE
ID A360239

EXISTING SEWER GRAVITY MAIN
PVC-U DN225 ID A360448

8 WOODRIEVE ROAD
BRIDGEWATER TAS 7030
CT 182281/12

GENERAL LAYOUT PLAN
SCALE 1:250 (mm)

0 5 10 15 20 25
SCALE 1:250

DIAL BEFORE YOU DIG

NOT FOR CONSTRUCTION

REV	DESCRIPTION		DATE
3	FOR DEVELOPMENT APPROVAL	CF	21/07/2025
2	FOR DEVELOPMENT APPROVAL	CF	14/07/2025
1	FOR DEVELOPMENT APPROVAL	CF	24/06/2025
0	FOR DEVELOPMENT APPROVAL	CF	20/05/2025

REV	DESCRIPTION	DATE

FYSH DESIGN
CIVIL HYDRAULIC

FYSH DESIGN
UNIT 4, 160 BUNGANA WAY
CAMBIDGE TAS

PH: 0414 149 394

ACCREDITATION: BSD LICENCE NO. 479819732

NORTH

CIVIL/HYDRAULICS - CONTAINER STORAGE FACILITY

CLIENT: R.J. & T.C. SPAULDING
6 WOODRIEVE ROAD, BRIDGEWATER TAS 7030

DRAWING TITLE
CIVIL AND STORMWATER PLAN

DESIGNED	DRAWN	SCALE
CHRIS FYSH	CHRIS FYSH	AS NOTED
PROJECT	SHEET NO.	REVISION
CKD-CIV-169	C03	3

4 WOODRIEVE ROAD
BRIDGEWATER TAS 7030
CT 176401/11

WOODRIEVE ROAD

PEDESTRIAN ACCESS

EXISTING 32mm PE100 TASWATER WATER PROPERTY CONNECTION AS PER SURVEY DATA AND LISTMAP DATA (A168853)

NEW DN25 PE100 DOMESTIC WATER SUPPLY LINE TO SUPPLY AMENITIES AREA

ORG REQUIRED AS PER AS3500.2:2021 TO BE MINIMUM 150mm BELOW LOWEST FIXTURE AND 75mm ABOVE FSL, TO BE PRIMED BY TAP OVER

DN100 DWV SN6 SEWER LINE @ MIN 1.65% GRADE FROM AMENITIES BUILDING

NEW 7.5m WIDE REINFORCED CONCRETE DRIVEWAY CROSSOVER TO BE INSTALLED IN ACCORDANCE WITH LGAT TSD-R09-V3 DRAWINGS AND BCC'S SATISFACTION

NATURE STRIP

OLD PROPERTY ACCESS

NS39.891
DS39.894

NS39.738
DS39.873

7.5m WIDE DRIVEWAY

BOUNDARY

NS39.822
DS40.040

DDA PARKING

PARKING 1

PARKING 2

NS39.459
DS40.183

NS39.558
DS40.047

CENTERLINE ALIGNMENT DWAY 1

6 WOODRIEVE ROAD
BRIDGEWATER TAS 7030
CT 182281/12

450sq. MIN CLASS D TRAFFICABLE STORMWATER PIT INSTALLED AS PER MANUFACTURERS SPECIFICATIONS

ATLAN STORMSACK FILTRATION BAGS TO BE INSTALLED IN ALL PITS (TYPICAL)

DN100 DWV PVC SN6 STORMWATER AT MIN. 1.0% FALL

ATLAN STORMSACK FILTRATION BAGS TO BE INSTALLED IN ALL PITS (TYPICAL)

NS39.397
DS40.036

DN150 DWV PVC SN8 STORMWATER AT MIN. 1.0% FALL

CENTERLINE ALIGNMENT DWAY 2

COMPACTED GRAVEL AREA FOR CONTAINERS

450sq. MIN CLASS D TRAFFICABLE STORMWATER PIT INSTALLED AS PER MANUFACTURERS SPECIFICATIONS

600x600x900 MIN CLASS D TRAFFICABLE STORMWATER PIT INSTALLED AS PER MANUFACTURERS SPECIFICATIONS

ASPAHLT DRIVEWAY AS PER DETAIL

DN150 DWV PVC SN8 STORMWATER AT MIN. 1.0% FALL

DN100 DWV SN6 SEWER LINE @ MIN 1.65% GRADE FROM AMENITIES BUILDING

CENTERLINE ALIGNMENT DWAY 1

REFER TO C03 FOR CONTINUATION

REFER TO C03 FOR CONTINUATION

GENERAL LAYOUT PLAN - CARPARK
SCALE 1:100 (mm)

SCALE 1:100

NOT FOR CONSTRUCTION

REV	DESCRIPTION		DATE
2	FOR DEVELOPMENT APPROVAL	CF	14/07/2025
1	FOR DEVELOPMENT APPROVAL	CF	24/06/2025
0	FOR DEVELOPMENT APPROVAL	CF	20/05/2025

REV	DESCRIPTION	DATE

FYSH DESIGN
CIVIL HYDRAULICS

FYSH DESIGN
UNIT 4, 160 BUNGANA WAY
CAMBIDGE TAS

PH: 0414 149 394

ACCREDITATION: BSD LICENCE NO. 479819732

NORTH

CIVIL/HYDRAULICS - CONTAINER STORAGE FACILITY

CLIENT: R.J. & T.C. SPAULDING
6 WOODRIEVE ROAD, BRIDGEWATER TAS 7030
DRAWING TITLE
CIVIL AND STORMWATER PLAN - CARPARK

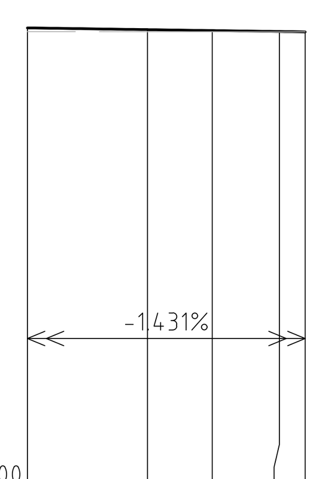
DESIGNED	DRAWN	SCALE
CHRIS FYSH	CHRIS FYSH	AS NOTED
PROJECT	SHEET NO.	REVISION
CKD-CIV-169	CIV169-C04	2

DIAL BEFORE YOU DIG

CHAINAGE	EXISTING SURFACE	DESIGN SURFACE	Centreline Cut/Fill
0.000	39.72	39.717	0.000
2.692	39.80	39.778	-0.018
3.629	39.81	39.799	-0.008
9.282	40.01	39.927	-0.080
9.941	39.94	39.942	0.005
10.000	39.93	39.941	0.010
10.449	39.88	39.935	0.052
12.204	39.70	39.910	0.214
15.580	39.49	39.861	0.368
16.291	39.46	39.851	0.394
16.764	39.43	39.844	0.412
20.000	39.35	39.798	0.446
21.392	39.25	39.778	0.478
25.353	39.19	39.722	0.528
25.728	39.14	39.716	0.533
25.758	39.14	39.716	0.533
25.788	39.14	39.715	0.533
30.000	39.12	39.655	0.526
31.692	39.12	39.631	0.507
32.058	39.12	39.626	0.505
34.721	39.09	39.588	0.499
34.823	39.09	39.586	0.498
34.826	39.09	39.586	0.498
34.857	39.09	39.586	0.498
38.470	39.08	39.534	0.449
38.895	39.08	39.528	0.443
40.000	39.08	39.512	0.426
40.112	39.09	39.510	0.425
40.277	39.08	39.508	0.424
45.549	39.12	39.433	0.323
45.557	39.11	39.432	0.322
46.749	39.13	39.415	0.295
47.451	39.13	39.405	0.279
47.460	39.14	39.405	0.279
50.000	39.15	39.369	0.223
52.468	39.15	39.334	0.184
54.354	39.14	39.307	0.163
54.670	39.14	39.302	0.159
54.672	39.14	39.302	0.159
54.676	39.14	39.302	0.159
60.000	39.09	39.226	0.123
63.497	39.08	39.176	0.092
65.134	39.07	39.152	0.077
68.415	39.06	39.105	0.048

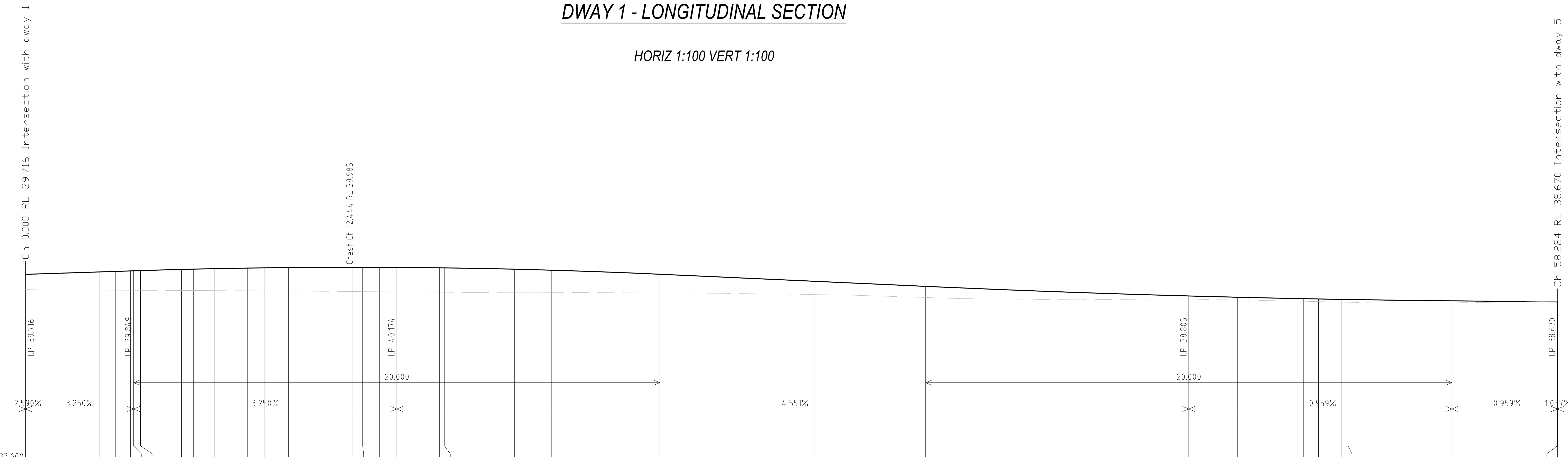
DWAY 1 - LONGITUDINAL SECTION

HORIZ 1:100 VERT 1:100



CHAINAGE	EXISTING SURFACE	DESIGN SURFACE	Centreline Cut/Fill
68.415	39.06	39.105	0.048
70.000	39.05	39.083	0.027
70.857	39.05	39.070	0.015
71.742	39.05	39.058	0.004
72.083	39.05	39.053	-0.001

MC01 LONGITUDINAL SECTION
HORIZONTAL 1:100VERTICAL 1:100



CHAINAGE	EXISTING SURFACE	DESIGN SURFACE	Centreline Cut/Fill
0.000	39.14	39.716	0.579
2.805	39.11	39.807	0.692
3.417	39.11	39.827	0.714
3.997	39.11	39.846	0.736
4.112	39.11	39.849	0.739
4.374	39.11	39.858	0.749
5.935	39.10	39.902	0.799
6.393	39.10	39.913	0.812
7.177	39.10	39.931	0.833
8.447	39.09	39.954	0.861
9.098	39.09	39.963	0.874
10.000	39.08	39.973	0.891
12.444	39.06	39.985	0.922
12.815	39.06	39.985	0.925
13.451	39.05	39.983	0.928
14.113	39.05	39.979	0.929
15.737	39.04	39.964	0.927
15.920	39.04	39.961	0.925
18.590	39.03	39.911	0.877
20.000	39.03	39.873	0.841
24.113	39.01	39.719	0.711
30.000	38.95	39.451	0.505
34.208	38.84	39.260	0.424
40.000	38.75	39.026	0.275
44.208	38.77	38.894	0.119
46.067	38.74	38.846	0.106
48.576	38.69	38.791	0.099
49.140	38.68	38.780	0.101
50.000	38.66	38.765	0.105
50.261	38.65	38.761	0.107
52.660	38.62	38.726	0.101
54.208	38.63	38.709	0.076
58.218	38.68	38.670	-0.011
58.224	38.68	38.670	-0.011

DWAY 2 - LONGITUDINAL SECTION

HORIZ 1:100 VERT 1:100

NOT FOR CONSTRUCTION

REV	DESCRIPTION		DATE
1	FOR DEVELOPMENT APPROVAL	CF	24/06/2025
0	FOR DEVELOPMENT APPROVAL	CF	20/05/2025

REV	DESCRIPTION	DATE

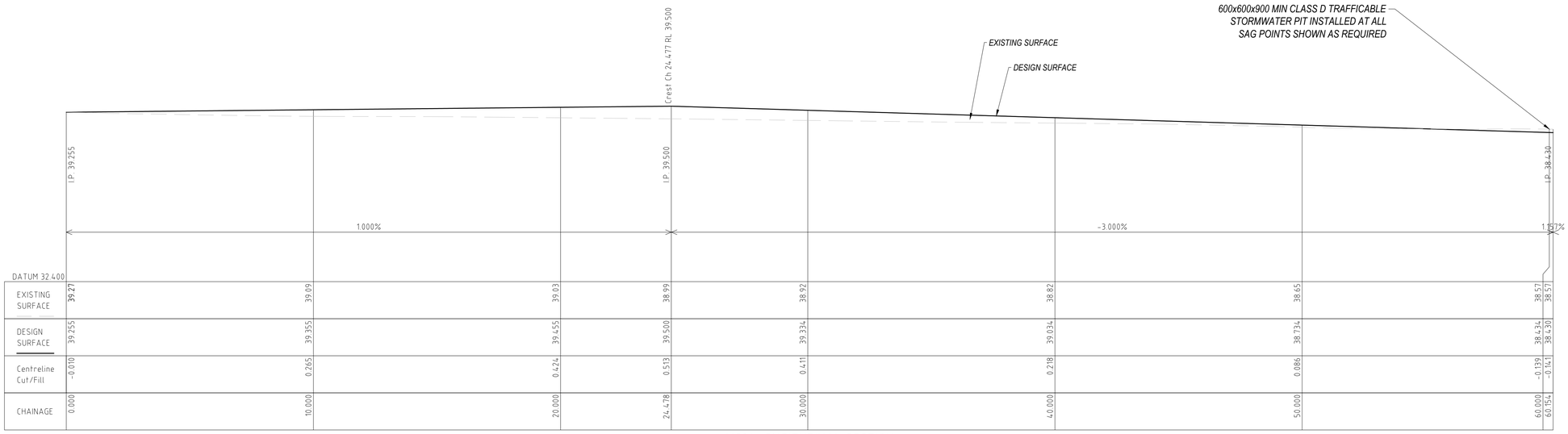
FYSH DESIGN
UNIT 4, 160 BUNGANA WAY
CAMBIDGE TAS
PH: 0414 149 394
ACCREDITATION: BSD LICENCE NO. 479819732

CIVIL/HYDRAULICS - CONTAINER STORAGE FACILITY

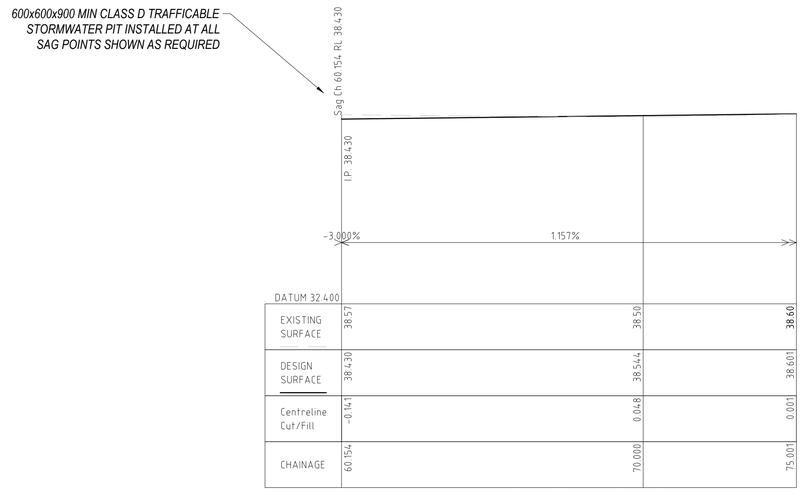
CLIENT: R.J. & T.C. SPAULDING
6 WOODRIEVE ROAD, BRIDGEWATER TAS 7030

DRAWING TITLE
LONG SECTION 1

DESIGNED	DRAWN	SCALE
CHRIS FYSH	CHRIS FYSH	AS NOTED
PROJECT	SHEET NO.	REVISION
CKD-CIV-169	C05	1



MC01 LONGITUDINAL SECTION
HORIZONTAL 1:100 VERTICAL 1:100



MC01 LONGITUDINAL SECTION
HORIZONTAL 1:100 VERTICAL 1:100

GRAVEL 1 SECTION - LONGITUDINAL SECTION

HORIZ 1:100 VERT 1:100

NOT FOR CONSTRUCTION

DIAL BEFORE YOU DIG

REV	DESCRIPTION		DATE
1	FOR DEVELOPMENT APPROVAL	CF	24/06/2025
0	FOR DEVELOPMENT APPROVAL	CF	20/05/2025

REV	DESCRIPTION	DATE

FYSH DESIGN
CIVIL HYDRAULIC

FYSH DESIGN
UNIT 4, 160 BUNGANA WAY
CAMBIDGE TAS

PH: 0414 149 394

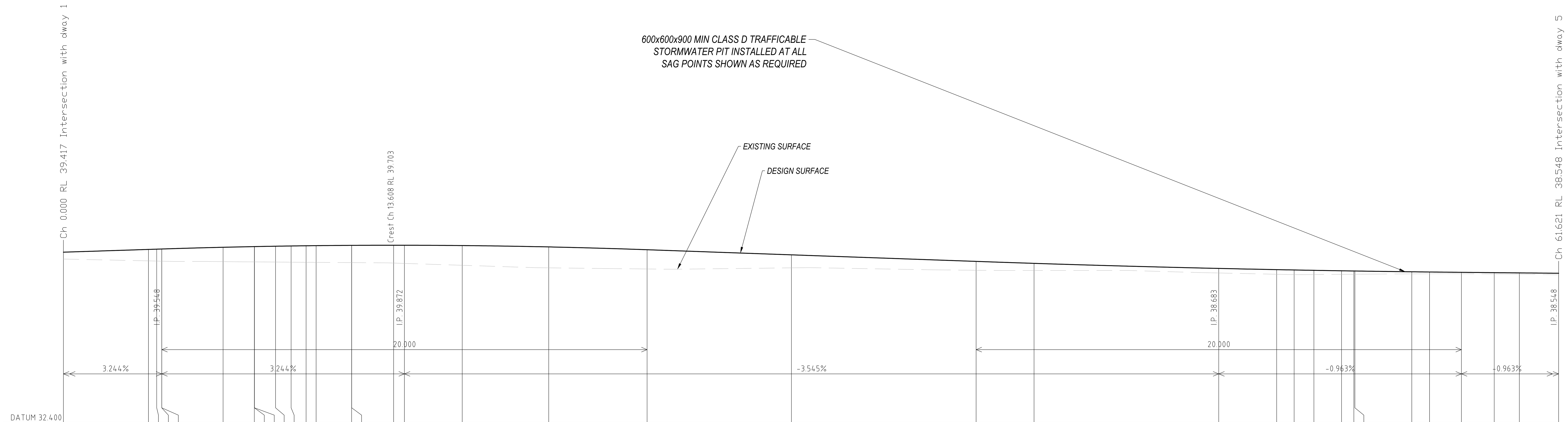
ACCREDITATION: BSD LICENCE NO. 479819732

CIVIL/HYDRAULICS - CONTAINER STORAGE FACILITY

CLIENT: R.J. & T.C. SPAULDING
6 WOODRIEVE ROAD, BRIDGEWATER TAS 7030

DRAWING TITLE
LONG SECTION 2

DESIGNED	DRAWN	SCALE
CHRIS FYSH	CHRIS FYSH	AS NOTED
PROJECT	SHEET NO.	REVISION
CKD-CIV-169	C06	1



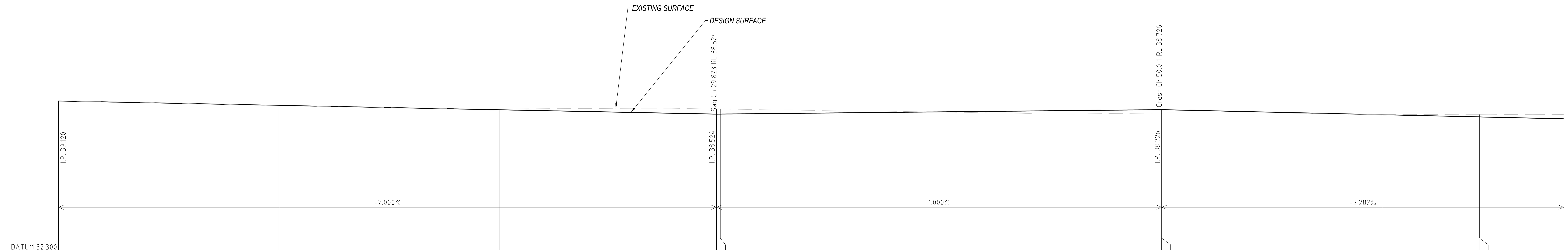
EXISTING SURFACE	39.13	39.06	39.05	39.05	39.05	39.03	39.02	39.02	39.02	39.01	39.00	39.00
DESIGN SURFACE	39.417	39.530	39.541	39.548	39.548	39.619	39.647	39.647	39.647	39.663	39.673	39.681
Centreline Cut/Fill	0.284	0.472	0.490	0.501	0.501	0.592	0.631	0.631	0.631	0.653	0.668	0.681
CHAINAGE	0.000	3.504	3.843	4.051	4.052	6.579	7.867	7.869	7.873	8.741	9.382	10.000

EXISTING SURFACE	39.00	38.99	38.99	38.97	38.95	38.88	38.77	38.72	38.77	38.67	38.66	38.56
DESIGN SURFACE	39.686	39.698	39.698	39.703	39.703	39.689	39.634	39.518	39.307	39.037	38.956	38.747
Centreline Cut/Fill	0.689	0.711	0.711	0.735	0.749	0.813	0.862	0.793	0.536	0.365	0.295	0.188
CHAINAGE	10.414	11.877	11.880	13.608	14.052	16.435	20.000	24.052	30.000	37.613	40.000	47.613

EXISTING SURFACE	38.51	38.49	38.49	38.50	38.51	38.51	38.52	38.53	38.53	38.52	38.51	38.48
DESIGN SURFACE	38.697	38.683	38.669	38.650	38.642	38.641	38.609	38.600	38.586	38.573	38.563	38.548
Centreline Cut/Fill	0.191	0.193	0.174	0.147	0.135	0.133	0.087	0.073	0.059	0.055	0.055	0.065
CHAINAGE	50.000	50.718	51.533	52.673	53.181	53.224	55.568	56.300	57.613	58.966	60.000	61.621

DWAY 3 - LONGITUDINAL SECTION

HORIZ 1:100 VERT 1:100



EXISTING SURFACE	39.12	38.90	38.76	38.76	38.75	38.62	38.57	38.57	38.51	38.51	38.51	38.51
DESIGN SURFACE	39.120	38.920	38.720	38.524	38.526	38.626	38.726	38.726	38.498	38.397	38.397	38.310
Centreline Cut/Fill	0.000	0.017	-0.044	-0.232	-0.228	0.009	0.155	0.155	-0.009	-0.116	-0.116	-0.200
CHAINAGE	0.000	10.000	20.000	29.823	30.000	40.000	50.000	50.011	60.000	64.398	64.415	68.234

DWAY 4 - LONGITUDINAL SECTION

HORIZ 1:100 VERT 1:100

NOT FOR CONSTRUCTION

DIAL BEFORE YOU DIG

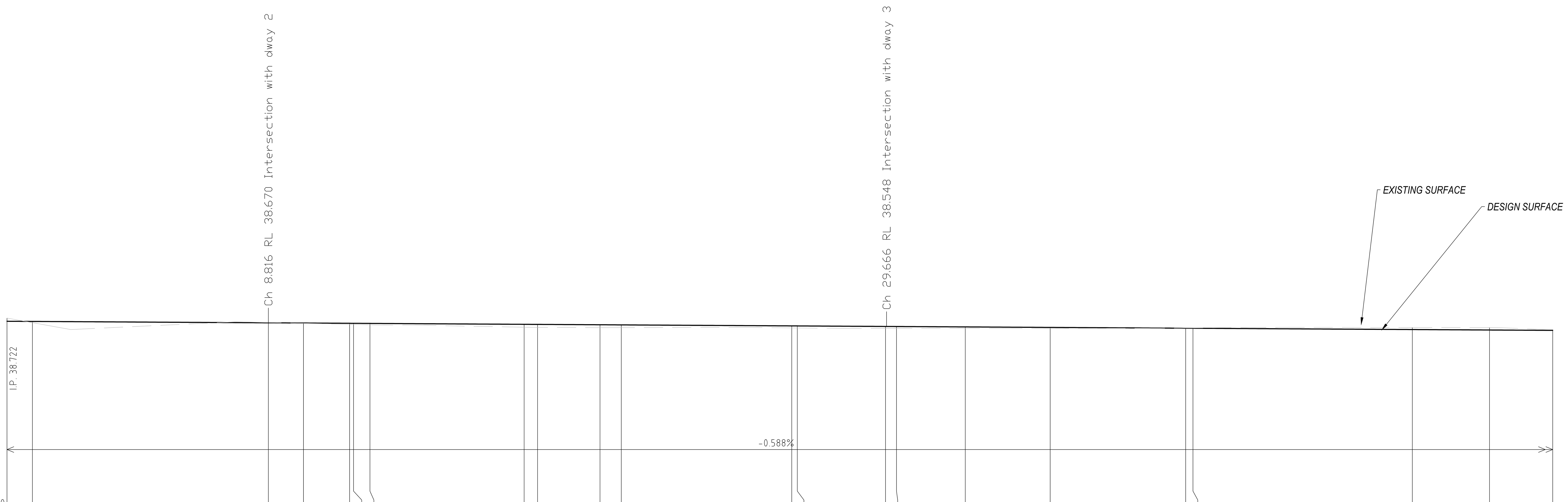
REV	DESCRIPTION		DATE
1	FOR DEVELOPMENT APPROVAL	CF	24/06/2025
0	FOR DEVELOPMENT APPROVAL	CF	20/05/2025

REV	DESCRIPTION	DATE

FYSH DESIGN
UNIT 4, 160 BUNGANA WAY
CAMBIDGE TAS
PH: 0414 149 394
ACCREDITATION: BSD LICENCE NO. 479819732

CIVIL/HYDRAULICS - CONTAINER STORAGE FACILITY
CLIENT: R.J. & T.C. SPAULDING
6 WOODRIEVE ROAD, BRIDGEWATER TAS 7030
DRAWING TITLE
LONG SECTION 3

DESIGNED	DRAWN	SCALE
CHRIS FYSH	CHRIS FYSH	AS NOTED
PROJECT	SHEET NO.	REVISION
CKD-CIV-169	C07	1



DATUM 32.400

EXISTING SURFACE	38.83	38.68	38.68	38.65	38.62	38.62	38.60	38.52	38.52	38.51	38.51
DESIGN SURFACE	38.722	38.717	38.670	38.663	38.654	38.653	38.650	38.620	38.617	38.604	38.600
Centreline Cut/Fill	-0.107	0.042	-0.011	0.009	0.036	0.038	0.047	0.098	0.101	0.096	0.091
CHAINAGE	0.000	0.858	8.816	10.000	11.554	11.689	12.240	17.442	17.895	20.000	20.719

EXISTING SURFACE	38.50	38.50	38.48	38.48	38.48	38.48	38.50	38.50	38.51	38.51	38.44
DESIGN SURFACE	38.566	38.565	38.548	38.546	38.532	38.515	38.488	38.487	38.443	38.428	38.416
Centreline Cut/Fill	0.066	0.067	0.065	0.063	0.050	0.031	-0.008	-0.011	-0.069	-0.081	-0.023
CHAINAGE	26.467	26.655	29.630	30.000	32.320	35.185	39.753	40.000	47.396	50.000	52.133

MC01 LONGITUDINAL SECTION
HORIZONTAL 1:100VERTICAL 1:100

DWAY 5 - LONGITUDINAL SECTION

HORIZ 1:100 VERT 1:100

NOT FOR CONSTRUCTION

DIAL BEFORE YOU DIG

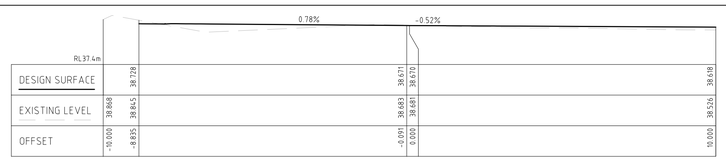
REV	DESCRIPTION		DATE
1	FOR DEVELOPMENT APPROVAL	CF	24/06/2025
0	FOR DEVELOPMENT APPROVAL	CF	20/05/2025

REV	DESCRIPTION	DATE

FYSH DESIGN
CIVIL HYDRAULIC
FYSH DESIGN
UNIT 4, 160 BUNGANA WAY
CAMBIDGE TAS
PH: 0414 149 394
ACCREDITATION: BSD LICENCE NO. 479819732

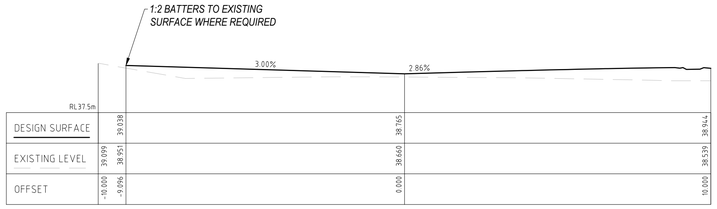
CIVIL/HYDRAULICS - CONTAINER STORAGE FACILITY
CLIENT: R.J. & T.C. SPAULDING
6 WOODRIEVE ROAD, BRIDGEWATER TAS 7030
DRAWING TITLE
LONG SECTION 4

DESIGNED	DRAWN	SCALE
CHRIS FYSH	CHRIS FYSH	AS NOTED
PROJECT	SHEET NO.	REVISION
CKD-CIV-169	C08	1



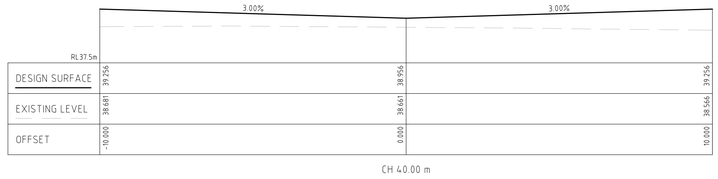
RL 37.4m										
DESIGN SURFACE		38.728				38.671	38.670			38.618
EXISTING LEVEL	38.868	38.845				38.683	38.681			38.524
OFFSET	-10.000	-8.835				-0.091	0.000			10.000

CH 58.22 m



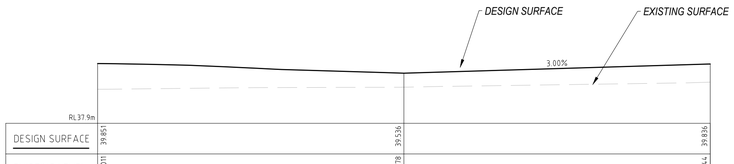
RL 37.5m										
DESIGN SURFACE		39.038				38.765				38.944
EXISTING LEVEL	39.999	38.951				38.660				38.539
OFFSET	-10.000	-9.996				0.000				10.000

CH 50.00 m



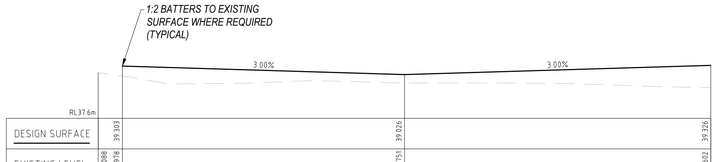
RL 37.5m										
DESIGN SURFACE		39.256				38.956				39.256
EXISTING LEVEL		38.681				38.661				38.566
OFFSET	-10.000					0.000				10.000

CH 40.00 m



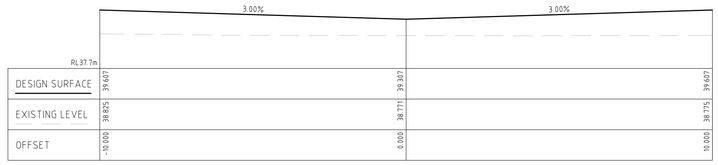
RL 37.9m										
DESIGN SURFACE		39.851				39.536				39.836
EXISTING LEVEL		39.011				39.078				39.244
OFFSET	-10.000					0.000				10.000

CH 40.00 m



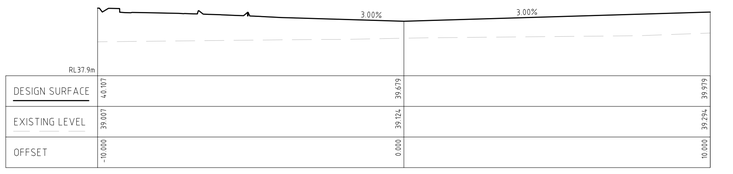
RL 37.6m										
DESIGN SURFACE		39.103				39.026				39.326
EXISTING LEVEL	39.089	38.978				38.751				38.602
OFFSET	-10.000	-9.212				0.000				10.000

CH 40.00 m



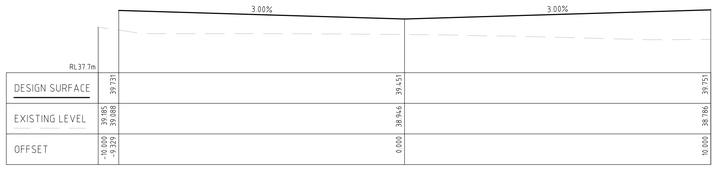
RL 37.7m										
DESIGN SURFACE		39.607				39.307				39.607
EXISTING LEVEL		38.825				38.771				38.775
OFFSET	-10.000					0.000				10.000

CH 30.00 m



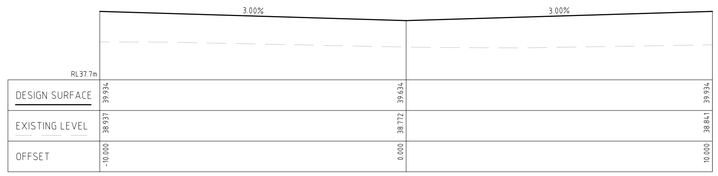
RL 37.9m										
DESIGN SURFACE		40.107				39.679				39.979
EXISTING LEVEL	39.007	39.124				39.124				39.274
OFFSET	-10.000					0.000				10.000

CH 30.00 m



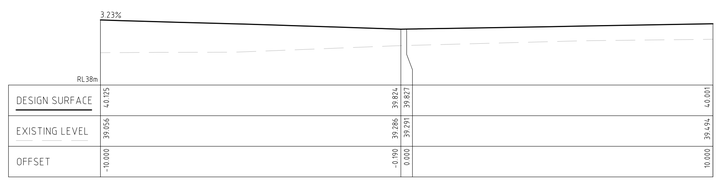
RL 37.7m										
DESIGN SURFACE		39.731				39.451				39.751
EXISTING LEVEL	39.185	39.088				38.946				38.786
OFFSET	-10.000	-9.329				0.000				10.000

CH 30.00 m



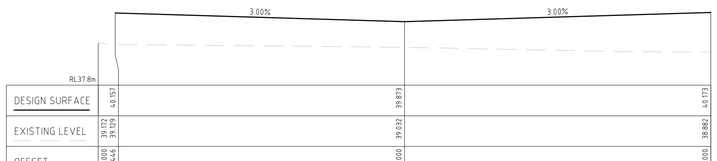
RL 37.7m										
DESIGN SURFACE		39.934				39.634				39.934
EXISTING LEVEL		38.937				38.772				38.841
OFFSET	-10.000					0.000				10.000

CH 20.00 m



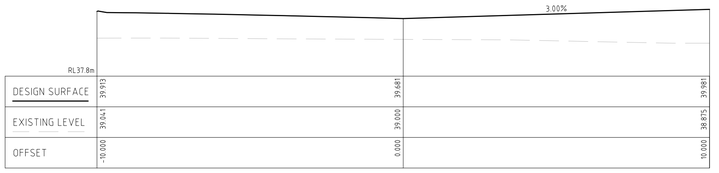
RL 38m										
DESIGN SURFACE	-40.125				39.824	39.827				-40.061
EXISTING LEVEL	39.656				39.286	39.291				39.494
OFFSET	-10.000				-6.100	0.000				10.000

CH 20.00 m



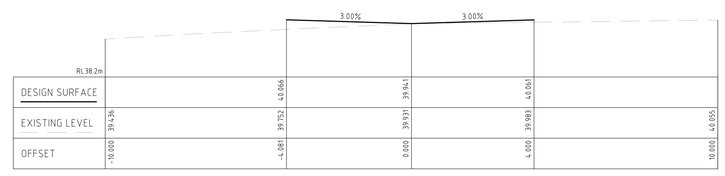
RL 37.8m										
DESIGN SURFACE	-40.157				39.873					-40.173
EXISTING LEVEL	39.172 39.179				39.532					38.882
OFFSET	-10.000	-9.446			0.000					10.000

CH 20.00 m



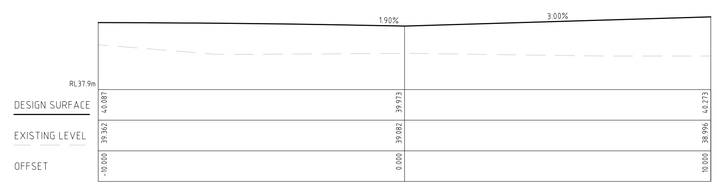
RL 37.8m										
DESIGN SURFACE		39.913				39.681				39.981
EXISTING LEVEL		39.641				39.000				38.875
OFFSET	-10.000					0.000				10.000

CH 10.00 m



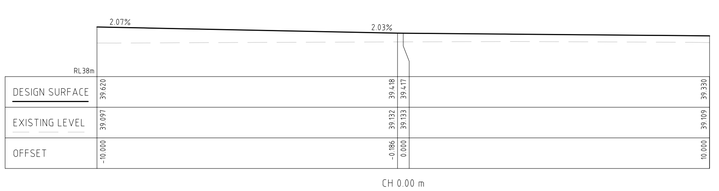
RL 38.2m										
DESIGN SURFACE		-40.066				39.941				-40.061
EXISTING LEVEL	39.436	39.752				39.931				39.983
OFFSET	-10.000	-4.081				0.000				10.000

CH 10.00 m



RL 37.9m										
DESIGN SURFACE	-40.087				39.913					-40.273
EXISTING LEVEL	39.362				39.682					38.956
OFFSET	-10.000				0.000					10.000

CH 10.00 m



RL 38m										
DESIGN SURFACE		39.620				39.418	39.417			39.330
EXISTING LEVEL		39.097				39.132	39.133			39.109
OFFSET	-10.000					-0.986	0.000			10.000

CH 0.00 m

DWAY 1 - CROSS SECTIONS

HORIZ 1:100 VERT 1:100

DWAY 2 - CROSS SECTIONS

HORIZ 1:100 VERT 1:100

DWAY 3 - CROSS SECTIONS

HORIZ 1:100 VERT 1:100

NOT FOR CONSTRUCTION

DIAL BEFORE YOU DIG

REV	DESCRIPTION		DATE	REV	DESCRIPTION	DATE
1	FOR DEVELOPMENT APPROVAL	CF	24/06/2025			
0	FOR DEVELOPMENT APPROVAL	CF	20/05/2025			

FYSH DESIGN
CIVIL HYDRAULIC

FYSH DESIGN
UNIT 4, 160 BUNGANA WAY
CAMBIDGE TAS

PH: 0414 149 394

ACCREDITATION: BSD LICENCE NO. 479819732

NORTH

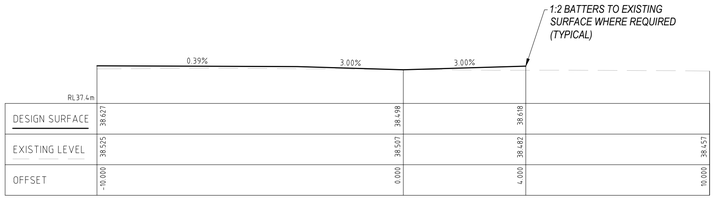
CIVIL/HYDRAULICS - CONTAINER STORAGE FACILITY

CLIENT: R.J. & T.C. SPAULDING
6 WOODRIEVE ROAD, BRIDGEWATER TAS 7030

DRAWING TITLE

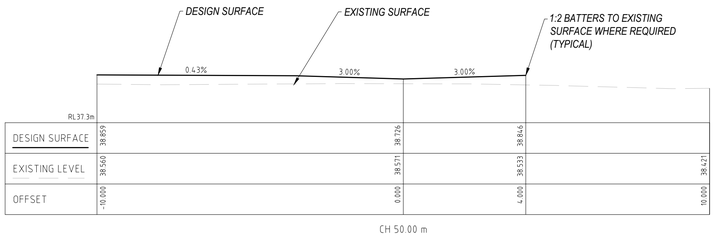
CROSS SECTIONS 1

DESIGNED	DRAWN	SCALE
CHRIS FYSH	CHRIS FYSH	AS NOTED
PROJECT	SHEET NO.	REVISION
CKD-CIV-169	C09	1



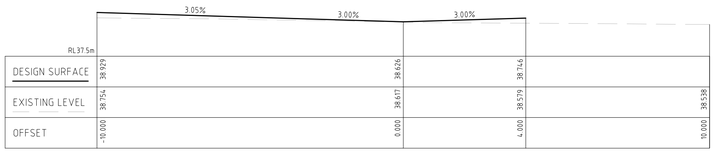
RL 37.4m				
DESIGN SURFACE	38.627	38.498	38.618	
EXISTING LEVEL	38.525	38.507	38.462	38.457
OFFSET	-10.000	0.000	4.000	10.000

CH 60.00 m



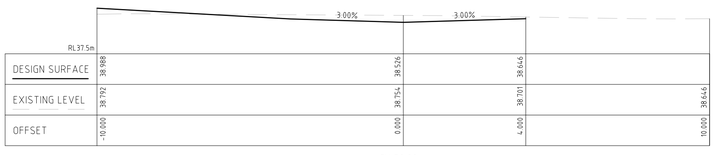
RL 37.3m				
DESIGN SURFACE	38.859	38.726	38.846	
EXISTING LEVEL	38.560	38.571	38.533	38.421
OFFSET	-10.000	0.000	4.000	10.000

CH 50.00 m



RL 37.5m				
DESIGN SURFACE	38.929	38.626	38.746	
EXISTING LEVEL	38.754	38.617	38.579	38.538
OFFSET	-10.000	0.000	4.000	10.000

CH 40.00 m

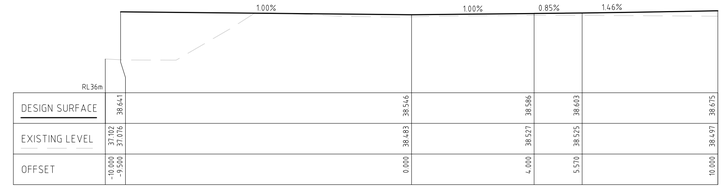


RL 37.5m				
DESIGN SURFACE	38.988	38.526	38.646	
EXISTING LEVEL	38.792	38.754	38.701	38.646
OFFSET	-10.000	0.000	4.000	10.000

CH 30.00 m

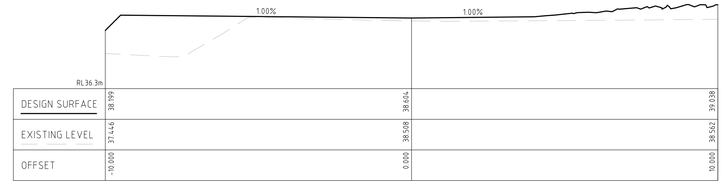
DWAY 4 - CROSS SECTIONS

HORIZ 1:100 VERT 1:100



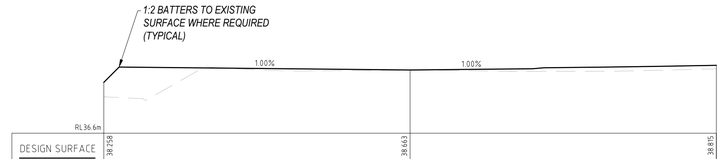
RL 36m					
DESIGN SURFACE	38.644	38.546	38.586	38.603	38.675
EXISTING LEVEL	37.182 37.036	38.483	38.527	38.525	38.497
OFFSET	-10.000 -3.500	0.000	4.000	5.570	10.000

CH 30.00 m



RL 36.3m			
DESIGN SURFACE	38.199	38.604	39.038
EXISTING LEVEL	37.446	38.598	38.562
OFFSET	-10.000	0.000	10.000

CH 20.00 m



RL 36.6m			
DESIGN SURFACE	38.258	38.663	38.815
EXISTING LEVEL	37.789	38.654	38.698
OFFSET	-10.000	0.000	10.000

CH 10.00 m

DWAY 5 - CROSS SECTIONS

HORIZ 1:100 VERT 1:100

NOT FOR CONSTRUCTION

DIAL BEFORE YOU DIG

REV	DESCRIPTION		DATE
1	FOR DEVELOPMENT APPROVAL	CF	24/06/2025
0	FOR DEVELOPMENT APPROVAL	CF	20/05/2025

REV	DESCRIPTION	DATE

FYSH DESIGN
CIVIL HYDRAULICS

FYSH DESIGN
UNIT 4, 160 BUNGANA WAY
CAMBIDGE TAS

PH: 0414 149 394

ACCREDITATION: BSD LICENCE NO. 479819732

NORTH

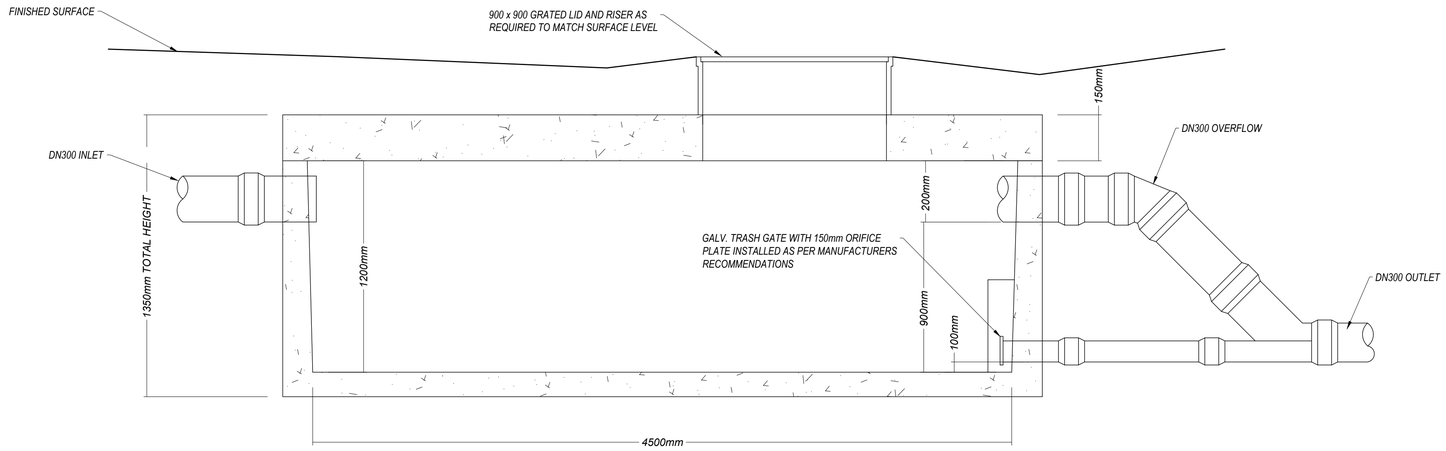
CIVIL/HYDRAULICS - CONTAINER STORAGE FACILITY

CLIENT: R.J. & T.C. SPAULDING
6 WOODRIEVE ROAD, BRIDGEWATER TAS 7030

DRAWING TITLE

CROSS SECTIONS 2

DESIGNED	DRAWN	SCALE
CHRIS FYSH	CHRIS FYSH	AS NOTED
PROJECT	SHEET NO.	REVISION
CKD-CIV-169	C10	1



CUSTOM INSITU DETENTION TANK DETAIL

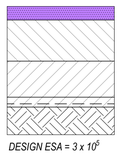
SCALE 1:10 (A1)

100mm NOM SIZE 20mm RED GRAVEL
BASE AND WEARING COURSE

300mm SUBBASE 1, 40mm FCR

100mm APPROVED SUBGRADE MIN CBR = 3% (PLEASE ADVISE IF GREATER THAN 3%
CBR FOR FURTHER INSTRUCTIONS) FOR CBR BETWEEN 3.5 & 7% ADD 150mm COMPACTED FCR

GRAVEL PAVEMENT DETAIL



40mm MIN. ASPHALT (DG10)

200mm BASE COURSE A
COMPACTED TO 98% MMDD

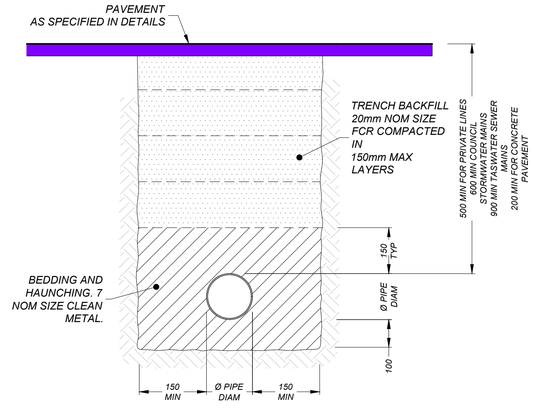
300mm SUBBASE 1
COMPACTED TO 95% MMDD
"TENSAR TX160" (IF REQUIRED)
"BIDIM A34" (IF REQUIRED)

APPROVED SUBGRADE. MIN CBR = 3%

DESIGN ESA = 3 x 10^5

ASPHALT PAVEMENT DETAIL

IMPORTANT NOTE: PAVEMENT DEPTHS AND DETAILS ARE NOT FINALISED AND SUBJECT TO GEOTECHNICAL TESTING TO OBTAIN DETAILS ON FILL. NOT TO BE USED FOR CONSTRUCTION



TYPICAL CROSS SECTION - TRAFFICABLE

SCALE 1:10 (A1)

NOT FOR CONSTRUCTION

DIAL BEFORE YOU DIG

REV	DESCRIPTION		DATE
3	FOR DEVELOPMENT APPROVAL	CF	21/07/2025
2	FOR DEVELOPMENT APPROVAL	CF	14/07/2025
1	FOR DEVELOPMENT APPROVAL	CF	24/06/2025
0	FOR DEVELOPMENT APPROVAL	CF	20/05/2025

REV	DESCRIPTION	DATE

FYSH DESIGN
CIVIL HYDRAULIC

FYSH DESIGN
UNIT 4, 160 BUNGANA WAY
CAMBIDGE TAS

PH: 0414 149 394

ACCREDITATION: BSD LICENCE NO. 479819732

NORTH

CIVIL/HYDRAULICS - CONTAINER STORAGE FACILITY

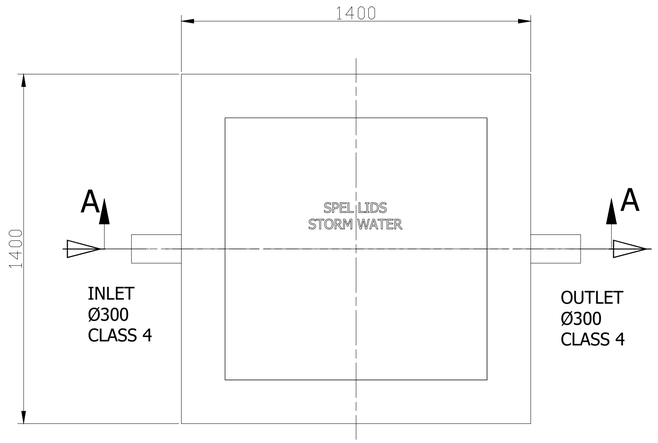
CLIENT: R.J. & T.C. SPAULDING
6 WOODRIEVE ROAD, BRIDGEWATER TAS 7030

DRAWING TITLE

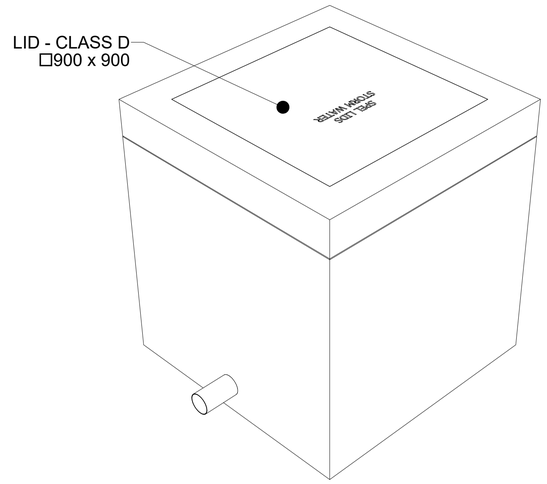
CONSTRUCTION DETAILS

DESIGNED	DRAWN	SCALE
CHRIS FYSH	CHRIS FYSH	AS NOTED
PROJECT	SHEET NO.	REVISION
CKD-CIV-169	C11	3

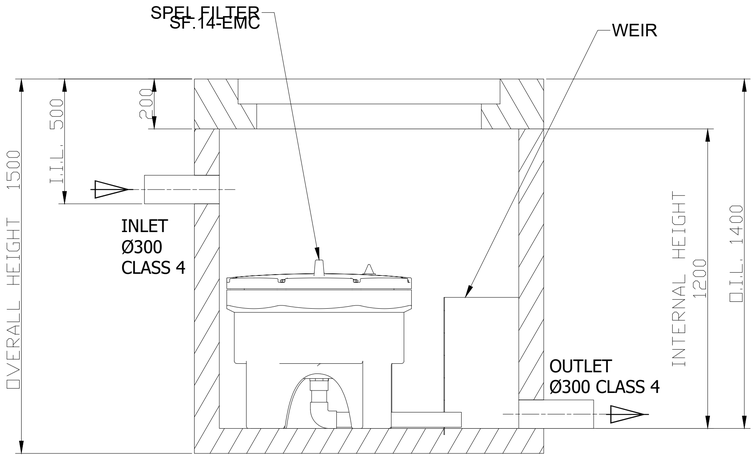
REVISION HISTORY				
REV	DESCRIPTION	BY	DATE	CHECKED BY
1	INITIAL RELEASE	P.Z.	16/03/2020	



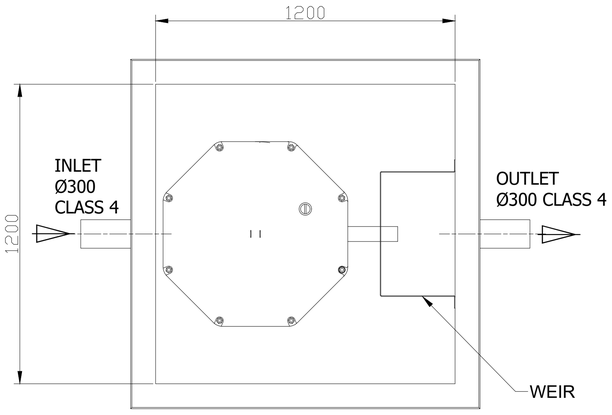
PLAN VIEW



ISOMETRIC VIEW



ELEVATION VIEW



PLAN VIEW
COVER & LID REMOVED FOR CLARITY

ATLAN / SPEL TREATMENT TRAIN DETAIL

NTS

REV	DESCRIPTION		DATE	REV	DESCRIPTION	DATE
1	FOR DEVELOPMENT APPROVAL	CF	21/07/2025			
0	FOR DEVELOPMENT APPROVAL	CF	14/07/2025			

FYSH DESIGN
CIVIL HYDRAULIC

FYSH DESIGN
UNIT 4, 160 BUNGANA WAY
CAMBIDGE TAS

PH: 0414 149 394

ACCREDITATION: BSD LICENCE NO. 479819732

NORTH

CIVIL/HYDRAULICS - CONTAINER STORAGE FACILITY

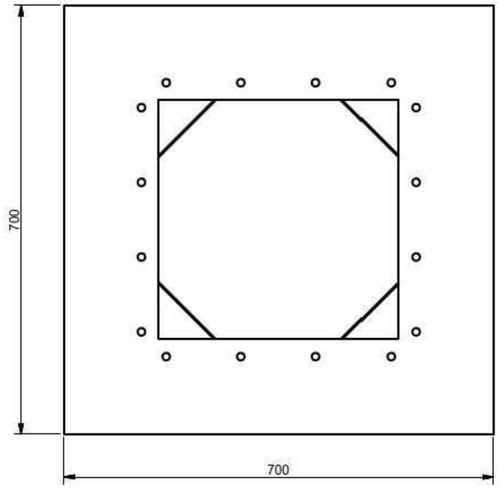
CLIENT: R.J. & T.C. SPAULDING
6 WOODRIEVE ROAD, BRIDGEWATER TAS 7030

DRAWING TITLE
CONSTRUCTION DETAILS 2

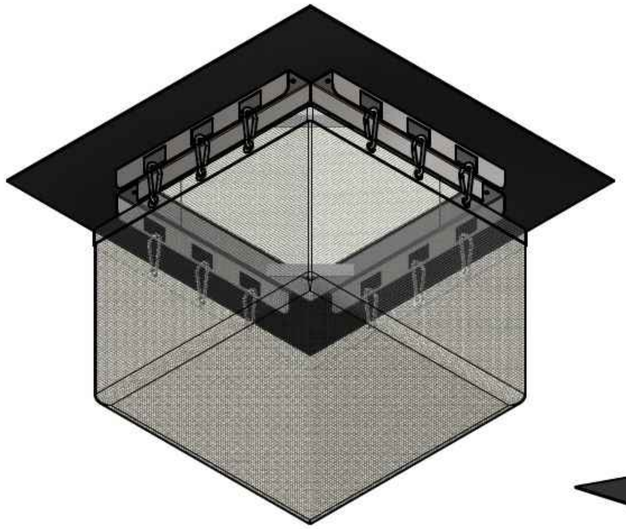
DESIGNED	DRAWN	SCALE
CHRIS FYSH	CHRIS FYSH	AS NOTED
PROJECT	SHEET NO.	REVISION
CKD-CIV-169	C12	1

DIAL BEFORE YOU DIG

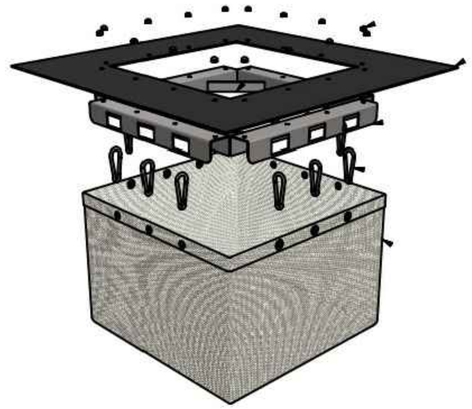
REVISION HISTORY				
REV	DESCRIPTION	DESIGNER	DATE	CHECKED BY
1	INITIAL RELEASE	M.M	25/03/2015	



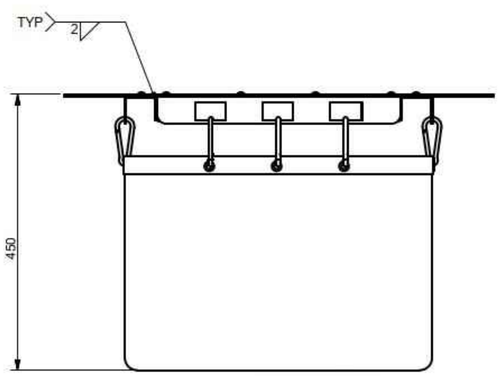
PLAN VIEW



ISOMETRIC VIEW
BOTTOM VIEW



ISOMETRIC VIEW
EXPLOSION



ELEVATION VIEW

CLIENT:	DISTRIBUTOR	CONFIDENTIAL - The drawings must not be disclosed to any third parties without written permission from SPEL Environmental Sydney. Unauthorised disclosure may result in prosecution. © SPEL Environmental - This drawing is the property of SPEL Environmental ABN: 83 151 832 629 and is subject to return on demand. It is submitted for the use only in connection with the proposal and contracts of SPEL Environmental with the expressed conditions that it is not to be reproduced or copied in any form. This data must only be used in accordance with our standard terms and conditions. © Copyright SPEL Environmental accepts no responsibility for any loss or damage resulting from any person acting on this information. The details and dimensions contained in this document may change, please check with SPEL Environmental for confirmation of current specifications.	Drawn M.M / Date 25/03/2015 CHECKED BY / Date Verified / Date Approved / Date Customer Code :	SPEL ENVIRONMENTAL INTEGRATED WATER SOLUTIONS 100 Silverwater Road Silverwater NSW 2128 PH: 1300 773 500 | E: sales@spel.com.au www.spel.com.au	TITLE SPEL STOMSACK FRAME 600 x 600 BASKET MOUNTING ASSEMBLY DRAWING REQUEST No. D20194 / SIZE A3 / SHEET 1 / REV 1 SCALE N.T.S / DWG No. SP15-BB4610-S

ATLAN / SPEL STORMSACK PIT INSERTS DETAIL

NTS

DIAL BEFORE YOU DIG

REV	DESCRIPTION	DATE	REV	DESCRIPTION	DATE
0	FOR DEVELOPMENT APPROVAL CF	14/07/2025			

FYSH DESIGN
CIVIL HYDRAULICS

FYSH DESIGN
UNIT 4, 160 BUNGANA WAY
CAMBIDGE TAS

PH: 0414 149 394

ACCREDITATION: BSD LICENCE NO. 479819732

NORTH

CIVIL/HYDRAULICS - CONTAINER STORAGE FACILITY

CLIENT: R.J. & T.C. SPAULDING
6 WOODRIEVE ROAD, BRIDGEWATER TAS 7030

DRAWING TITLE
CONSTRUCTION DETAILS 3

DESIGNED	DRAWN	SCALE
CHRIS FYSH	CHRIS FYSH	AS NOTED
PROJECT	SHEET NO.	REVISION
CKD-CIV-169	C13	0

STORMWATER REPORT

Proposed Container Storage Facility
RJ & TC Spaulding
Little Island Building Design

6 Woodrieve Road – Bridgewater

Fysh Design Reference: ***CKD-CIV-169***
For Development Approval Rev 1 Dated 21/07/2025

TABLE OF CONTENTS

FYSH DESIGN
CIVIL HYDRAULIC

1. INTRODUCTION AND SCOPE OF ENGAGEMENT

Fysh Design has been engaged to design a stormwater system for the proposed proposed storage facility development within the existing site at 6 Woodrieve Road Bridgewater. As a condition of the Brighton Council Planning Scheme – Stormwater water quality and quantity targets must meet water sensitive urban design demands and targets.

2. DETENTION MODEL

CATCHMENT MODEL

Total site area:	≈ 6493m2
Pre-Existing Proposed Undeveloped Area (pervious)	≈ 6493m2
Pre-Existing developed Area (Impervious)	≈ 0m2
Post-development Impervious areas *(roofs):*	≈ 3m^2
Post-development Impervious areas: *(Sealed Driveway & Container storage areas)*	≈ 3782m^2
Post-development Pervious undeveloped areas: *(Exposed Gravel and Landscaped areas)*	≈ 2708m2
Total proposed developed area:	**≈ 6493m2**

Coefficients of run-off adopted for design are as follows:

Pre-development site (undeveloped grass / dirt):	C = 0.30
Impervious areas (Roof):	C = 1.0
Impervious areas (Hardstand and Container area):	C = 0.9
Pervious areas:	C = 0.30
5-minute duration - 2% AEP Bridgewater:	I = 101mm/hr (Bridgewater BOM IFD)

Pre-Existing Run off calculations

$$\frac{(6493 \times 0.30) \times 101}{3600} = 54.65\ \mathrm{L/s}$$

Calculations have been based on the Modified Rational Method for stormwater run-off:

$$Q = \frac{C \times I \times A}{3600}$$

Where: Q = Design Volumetric Flow Rate [L/s]
C = Runoff Coefficient
I = Rainfall Intensity [mm/hr] (5 minute - 5% AEP storm)
A = Sum of all equivalent areas [m^2]

Post-Development:

$$Q_{Post} = \frac{(1.0 \times 3 + 0.9 \times 3782 + 0.30 \times 2708) \times 101}{3600} = \mathbf{118.34\ L/s}$$

As shown above the post development flow Q_{Post} is **63.**69 L/s additional than the permissible site discharge Q_{PSD}. and therefore, on-site detention (OSD) is required. To determine the volume of storage required to reduce the post development peak discharge to the permissible site discharge Autodesk Software - Storm and Sanitary Analysis was utilised.
The model simulated a 15000L (4500mm L x 2800mm W x 1200mm Deep) below ground in situ concrete detention tank collecting all concrete hardstand and compacted gravel runoff. Connected to the main stormwater drainage network for the site with an 150mm low flow orifice outlet and 900 x 900 grated surcharge to connect to proposed stormwater treatment interceptor.

The model simulated a linear rational method simulation of a 1 in 50 storm of 5 minutes. Intensity based off the current ARI's for Bridgewater. (Supplied from BOM's IFD tables for Bridgewater Tasmania, refer to figure 1). (The stormwater arrangement for the site is shown. The outflow hydrograph for the site, as shown in Figure 2 & 3, demonstrates the post-development peak discharge is below permissible site discharge at **54.65 L/s**.
(Refer to Figure 3 for proposed hydraulic layout showing stormwater point of discharge)

Table | Chart | Unit: mm/h

	Annual Exceedance Probability (AEP)						
Duration	63.2%	50%#	20%*	10%	5%	2%	1%
1 min	59.8	67.8	94.9	115	136	166	191
2 min	51.6	58.1	79.3	94.2	109	127	141
3 min	45.5	51.4	70.5	84.1	97.9	115	129
4 min	41.0	46.4	64.1	76.8	89.9	107	121
5 min	37.4	42.4	59.0	71.0	83.4	101	114
10 min	27.2	30.9	43.4	52.8	62.7	77.3	89.4
15 min	22.0	25.0	35.3	42.9	51.1	63.1	73.2
20 min	18.9	21.4	30.1	36.6	43.5	53.6	62.1
25 min	16.7	18.9	26.6	32.3	38.2	46.9	54.1
30 min	15.1	17.1	23.9	29.0	34.3	41.9	48.1
45 min	12.0	13.6	18.9	22.7	26.7	32.2	36.7
1 hour	10.2	11.6	16.0	19.1	22.3	26.7	30.1
1.5 hour	8.15	9.22	12.6	15.0	17.4	20.5	22.9
2 hour	6.94	7.85	10.7	12.7	14.6	17.1	19.0
3 hour	5.53	6.26	8.52	10.0	11.5	13.4	14.8
4.5 hour	4.39	4.98	6.79	7.98	9.11	10.6	11.7
6 hour	3.72	4.23	5.78	6.79	7.76	9.04	10.0
9 hour	2.92	3.33	4.58	5.40	6.19	7.26	8.08
12 hour	2.45	2.79	3.87	4.58	5.26	6.21	6.95
18 hour	1.88	2.15	3.00	3.58	4.15	4.95	5.57
24 hour	1.54	1.77	2.48	2.98	3.47	4.16	4.71
30 hour	1.32	1.51	2.13	2.56	2.99	3.61	4.09
36 hour	1.15	1.32	1.86	2.25	2.64	3.19	3.62
48 hour	0.922	1.06	1.50	1.81	2.14	2.58	2.94
72 hour	0.666	0.761	1.08	1.31	1.54	1.86	2.12
96 hour	0.524	0.598	0.841	1.02	1.20	1.44	1.64
120 hour	0.434	0.494	0.691	0.832	0.976	1.17	1.32
144 hour	0.373	0.423	0.588	0.703	0.820	0.979	1.11
168 hour	0.328	0.372	0.512	0.609	0.705	0.841	0.950

FIGURE 1: IFD DESIGN RAINFALL INTENSITY (MM/HR) USED FOR BRIDGEWATER

(Refer to Figure 3 for proposed hydraulic layout)

DETENTION TANK CALCULATION SHEET

Rainfall (mm/hr)	101.00	C
Roof (m2)	3.00	1.00
Impervious (m2)	3782.00	0.90
Pervious (m2)	2709.00	0.30
Tank area (m2)	Custom 1	
Orifice dia (mm)	150.00	

Existing site (m2)	6493.00	0.30
Pre-dev flow (L/s)	54.65	
Site allowable (L/s)	54.65	(leave blank if not given)

SUMMARY

Pre-development flow:	54.65	L/s
Tanks footprint area:	15.00	m2
Orifice Diameter:	150	mm
Maximum Flow Rate into tank:	118.48	L/s
Maximum Flow Rate out (site):	52.37	L/s
Time of Max Flow Rate out of tank:	7.78	minutes
Maximum head of storage in tank above orifice:	1184	mm
Maximum Storage during storm event:	17,760	Litres

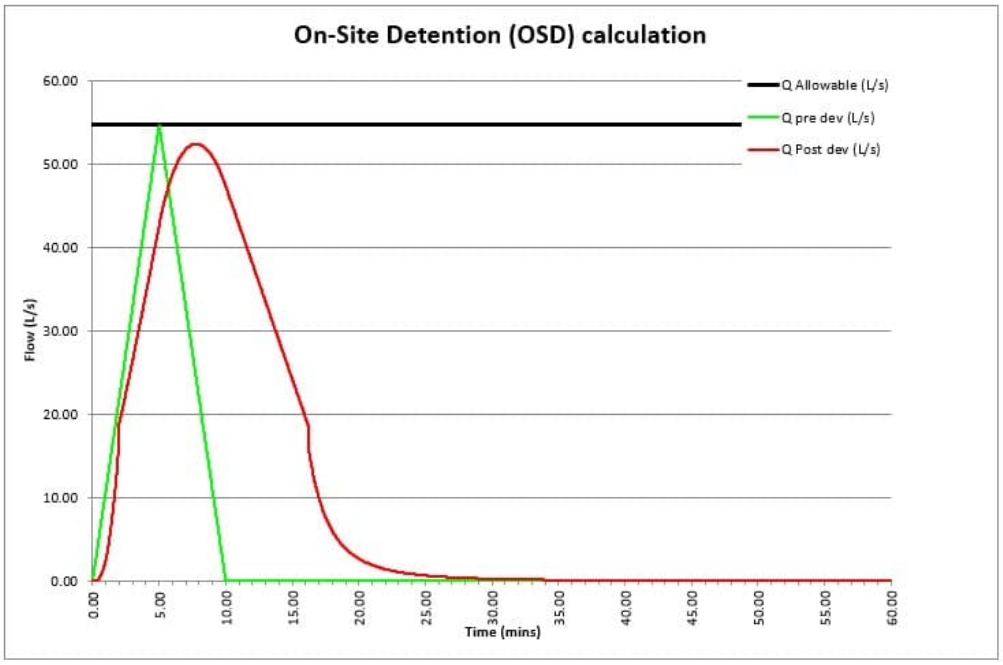


FIGURE 2: POST-DEVELOPMENT PROPOSED DEVELOPED AREAS VS EXISTING SITE OUTFLOW HYDROGRAPHS

FYSH DESIGN
CIVIL HYDRAULIC

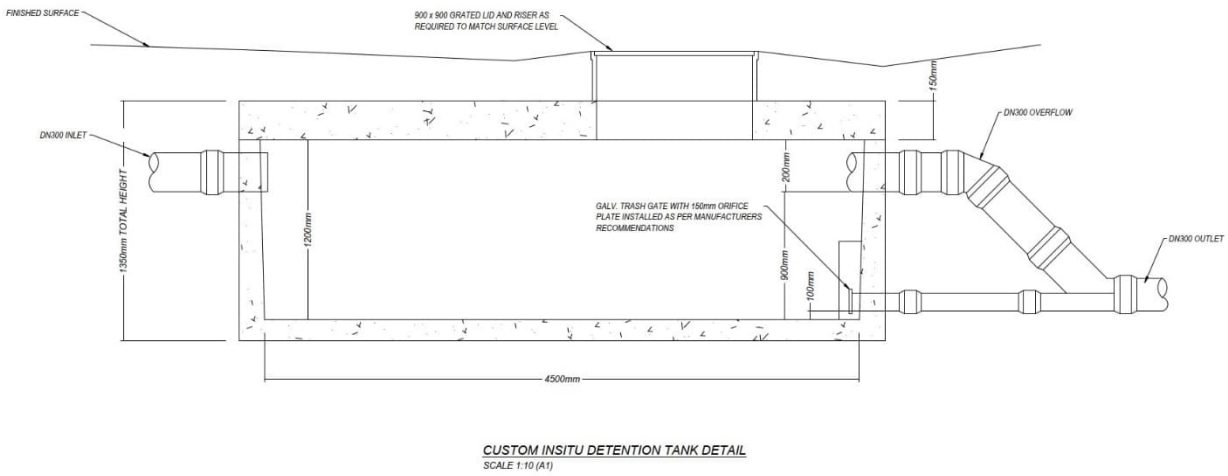


FIGURE 4: BELOW GROUND RAINWATER DETENTION TANK DETAIL

Storm Duration (mins)	*Rainfall Intensity (mm/hr) (2% AEP)*	*Peak Discharge (l/s)*	*Volume of storage required (m3)*
5	*101*	*52.37*	*15.00*
10	*77.30*	*38.19*	*12.00*
15	*63.1*	*33.15*	*11.20*
30	*41.9*	*24.98*	*9.70*

MULTIPLE STORM EVENT DETENTION MODEL RESULTS

3. DRAINAGE LAYOUT

A series of 150mm and 225mm gravity stormwater drainage lines and large grated pits are to drain the proposed roof and hardstand areas, driveway areas are drained via a series of 150mm, 225mm and 300mm drainage lines. Drainage lines from hardstand area are consolidated to a main 300mm line which is connected to the onsite below ground detention tank then outflows to the onsite stormwater treatment system, then discharging to existing stormwater connection point within the site. Refer to figure 5 for further details.

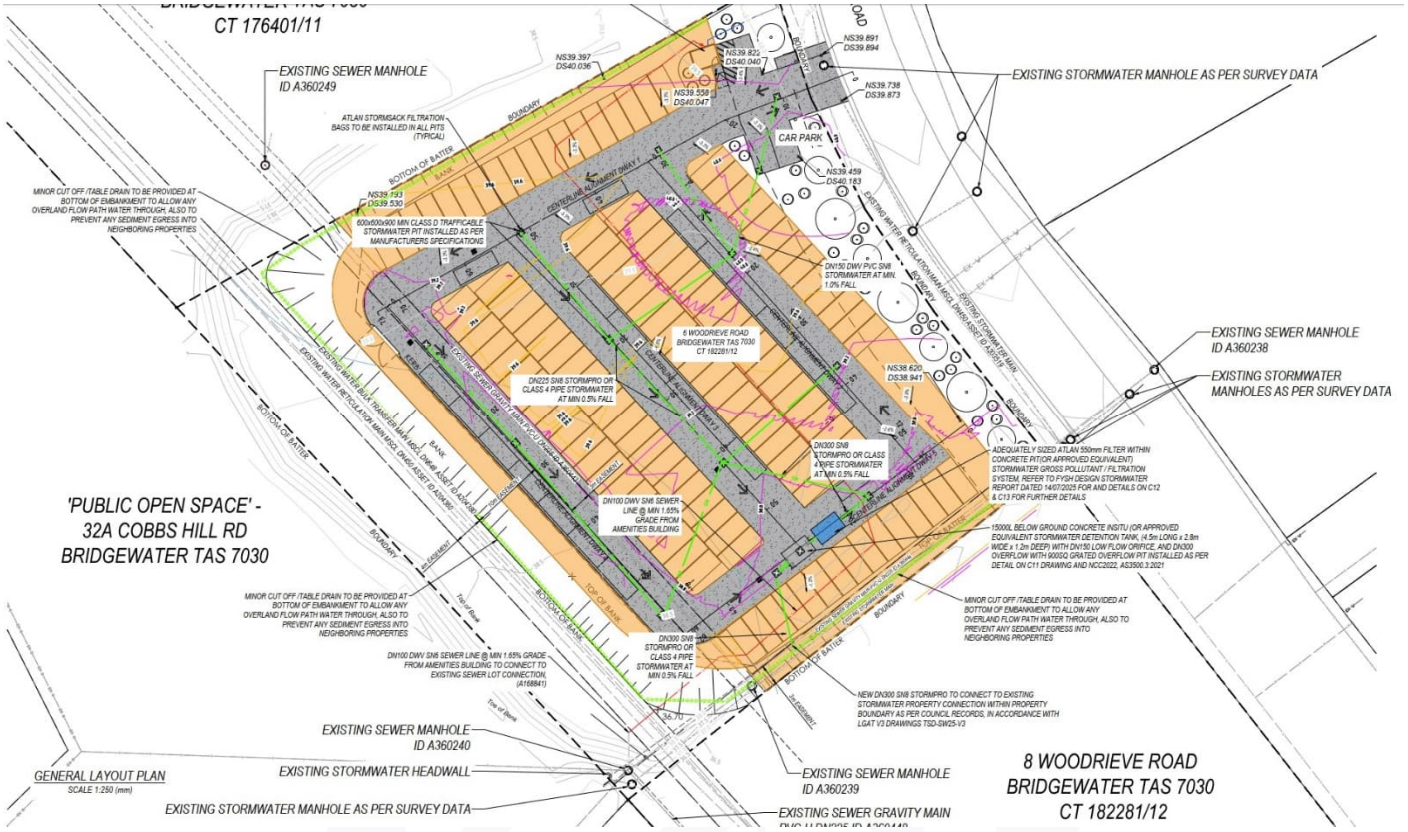


FIGURE 5: PROPOSED STORMWATER SITE LAYOUT

FYSH DESIGN
CIVIL HYDRAULIC

3b. Pipe Sizing

Pipe sizing calculations from proposed roof and hardstand catchments, pits located within pervious catchment areas have been sized to cope with a 2% AEP storm event on the Modified Rational Method and AS3500.3

*Note: only impervious roof, pervious hardstand and driveway and landscaped areas collected by roof and ground pit drainage will be factored in calculations

$$Q = \frac{C \times I \times A}{3600}$$

Where: Q = Design Volumetric Flow Rate [L/s]
C = Runoff Coefficient
I = Rainfall Intensity [mm/hr] (5 minute - 2% AEP storm
A = Sum of all equivalent areas [m^2]

$$Q_{Post} = \frac{(1.0 \times 3 + 0.90 \times 3782 + 0.3 \times 2709) \times 101}{3600} = 118.38 L/s$$

Max Calculated detained flows as shown above = 52.37L/s

Pipework Material Concrete with Colebrook-White roughness coefficient K = 0.6
(From AS3500.3 Table 5.4.11.2)

Minimum grade of pipework of 1% (HG 1:100)

Pipe size selected from AS3500.3 Figure 5.4.11.2(a)

Nearest available size Día outlet = 300mm

FYSH DESIGN
CIVIL HYDRAULIC

4. TREATMENT

A model for Urban Stormwater improvement conceptualisation (MUSIC Version 6.3.0) will be used to model the site roof drainage and impervious areas with effectiveness of various treatment devices to achieve the stormwater quality targets outlined in the State Stormwater Strategy (2010) of:

- An 80% reduction in the average annual load of total suspended solids (TSS)
- An 45% reduction in the average annual load of total phosphorous (TP)
- An 45% reduction in the average annual load of total nitrogen (TN)
- 90% Gross Pollutant Reduction

Figure 5 displays a site area breakdown modeled within the MUSIC software. (by others)

As shown in Figure 5, 7 x Atlan Stomsack pit inserts are to be installed in grated pits within driveway, gravel and hardstand areas. As well as a Atlan 550mm StormFilter system within a dedicated below ground chamber within the proposed site boundaries. MUSIC modelling can be provided to Council to ensure compliance with treatment targets once the detailed design has been completed.

Figure 6 displays MUSIC model outputs displaying stormwater node outputs and quality targets achieved (By Others)

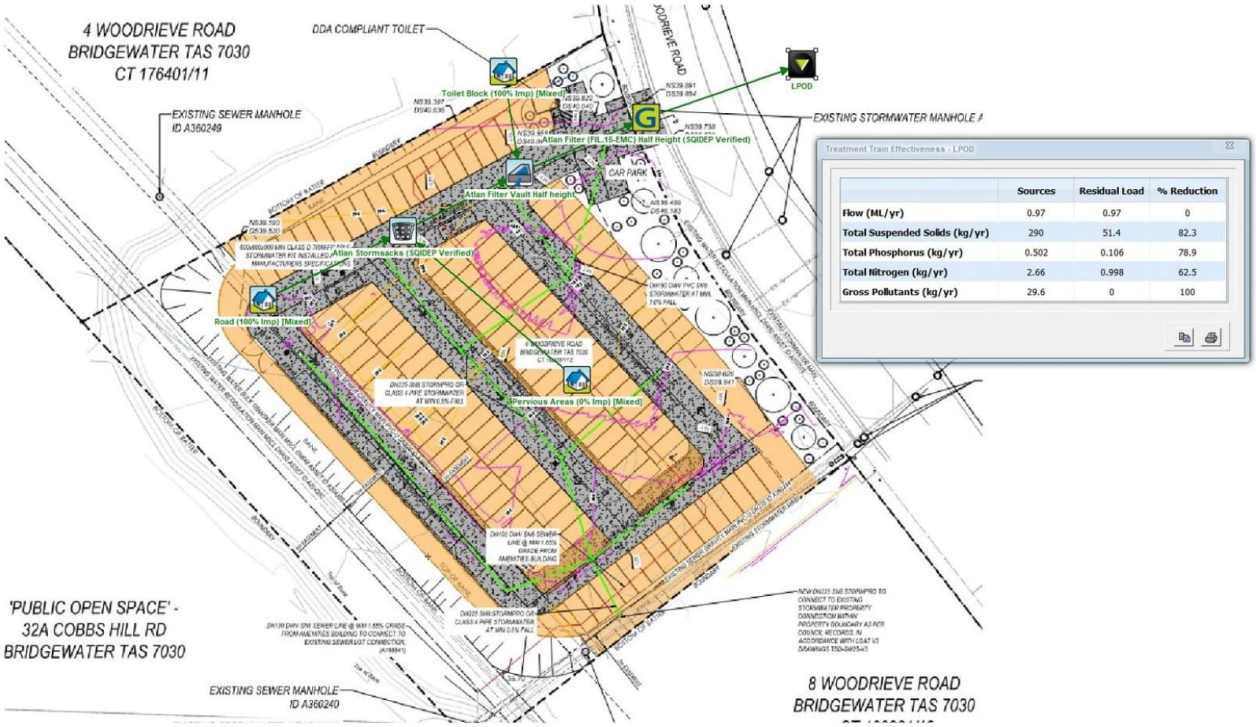
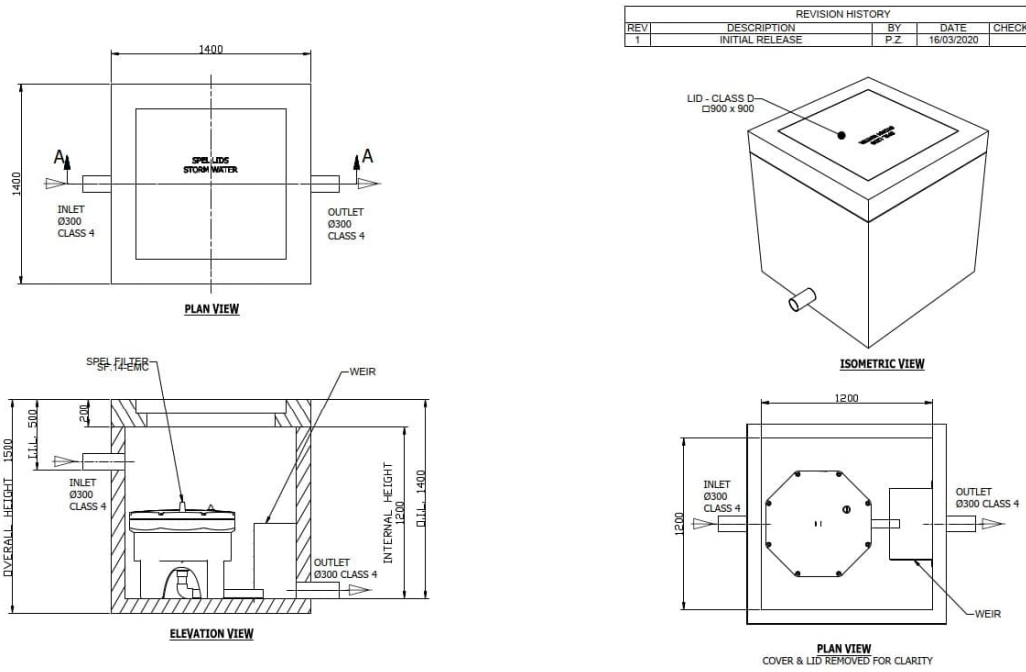


FIGURE 6: MUSIC MODEL



ATLAN / SPEL TREATMENT TRAIN DETAIL

FIGURE 7: TREATMENT FILTRATION VAULT DETAIL

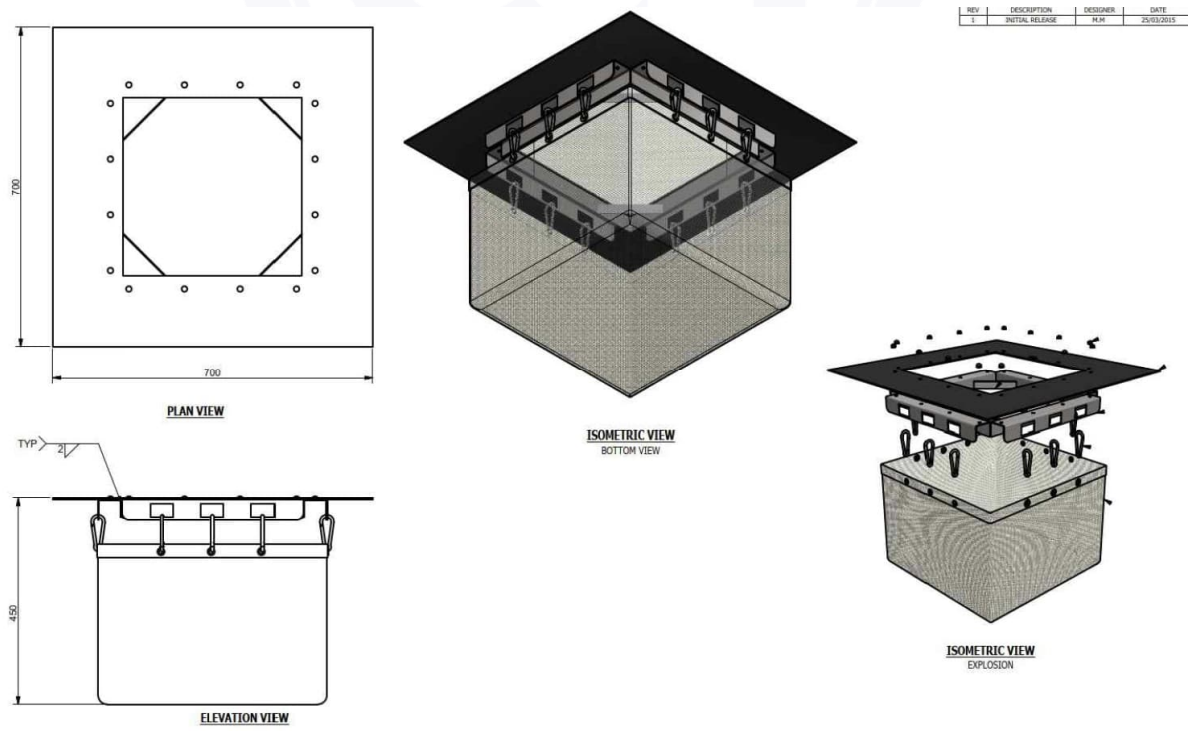


FIGURE 8: STOMSACK PIT FILTRATION BAGS

5. OVERLAND FLOW PATH MITIGATION

The site natural falls natural fall towards the southeast direction, the majority of overland flow run off would be cut off by Woodrieve road itself and its associated drainage where no overland flow would make its way onto the property.

The remained over overland flow path on the adjacent property would be diverted at the lower areas of the embankment batter with a diversion table drain allowing water to be diverted around the property, continuing its path southeast

6. MAINTENANCE

Maintenance requirements for below ground detention tank and grated stormwater pits.

Visual inspection is to be performed annually, ensuring sludge zones of the tank does not reach orifice height, regular monthly inspection of the low flow orifice outlet and galvanized trash guard for foreign debris to prevent blockage.
Vacuum tank silt and sediment from detention tank and pits approximately every 4-5 years
Regular inspections and clean outs of grated stormwater pits where required. This should be performed every 6 months to annually, dependent on-site conditions.

Maintenance requirements for Atlan treatment system.
Maintenance of the Atlan GPT pit inserts is simple effective and seldom requires confined space entry or specialized equipment, often being completed by hand without the need of vacuum equipment. Simply remove the Atlan GPT pit inserts from the pit with the tags provided and invert the bag into a waste bin. Inspect the liner and brush by hand or spray with a pressure washer if required to rejuvenate the filtration bag. Record the information and replace the filtration bag.
Inspection & Cleaning
The Atlan GPT pit inserts should be inspected at regular intervals from 1-2 months during the first year of installation to ensure optimum performance. The frequency at which the Atlan GPT pit inserts will need to be maintained will depend on site activities, land uses, catchment area and this size of Atlan GPT pit inserts installed, 1- 6 times annually (3-4 typ.).
For further information please refer to the Atlan GPT pit inserts Operations and Maintenance Manual.

6. CONCLUSION

This report has demonstrated that the proposed development at 6 Woodrieve Road Bridgewater complies with the stormwater quality and quantity conditions of Brighton Council Planning scheme requirements.
Please contact cfysh@fyshdesign.com.au if you require any additional information.

Yours sincerely

Chris Fysh

Director

Fysh Design

Building Services Designer Licence: 479819732
Mob: 0414 149 394
Email: cfysh@fyshdesign.com.au

Atlan
STORMWATER

IN PARTNERSHIP WITH

Fysh Design

TECH DATA SUBMISSION

6 Woodrieve Road, Bridgewater TAS, Australia

Created by:
Sam Williams
Atlan Stormwater

atlan.com.au

PHONE: 1300 773 500
EMAIL: sales@spel.com.au
OFFICE: 897 Wellington Road, Rowville, VIC 3178
ABN: 32 379 724 600
www.atlan.com.au

Submission Date: 14-07-2025

Chris Fysh
Fysh Design
160 Bungana Way
Cambridge TAS

RE: Project Tech Data for 6 Woodrieve Road, Bridgewater TAS, Australia

Dear Chris,

This document is to provide relevant tech data to be assessed by the client to prove that the stormwater systems proposed meet and exceed the requirements in the project design for the 6 Woodrieve Road, Bridgewater TAS, Australia project.

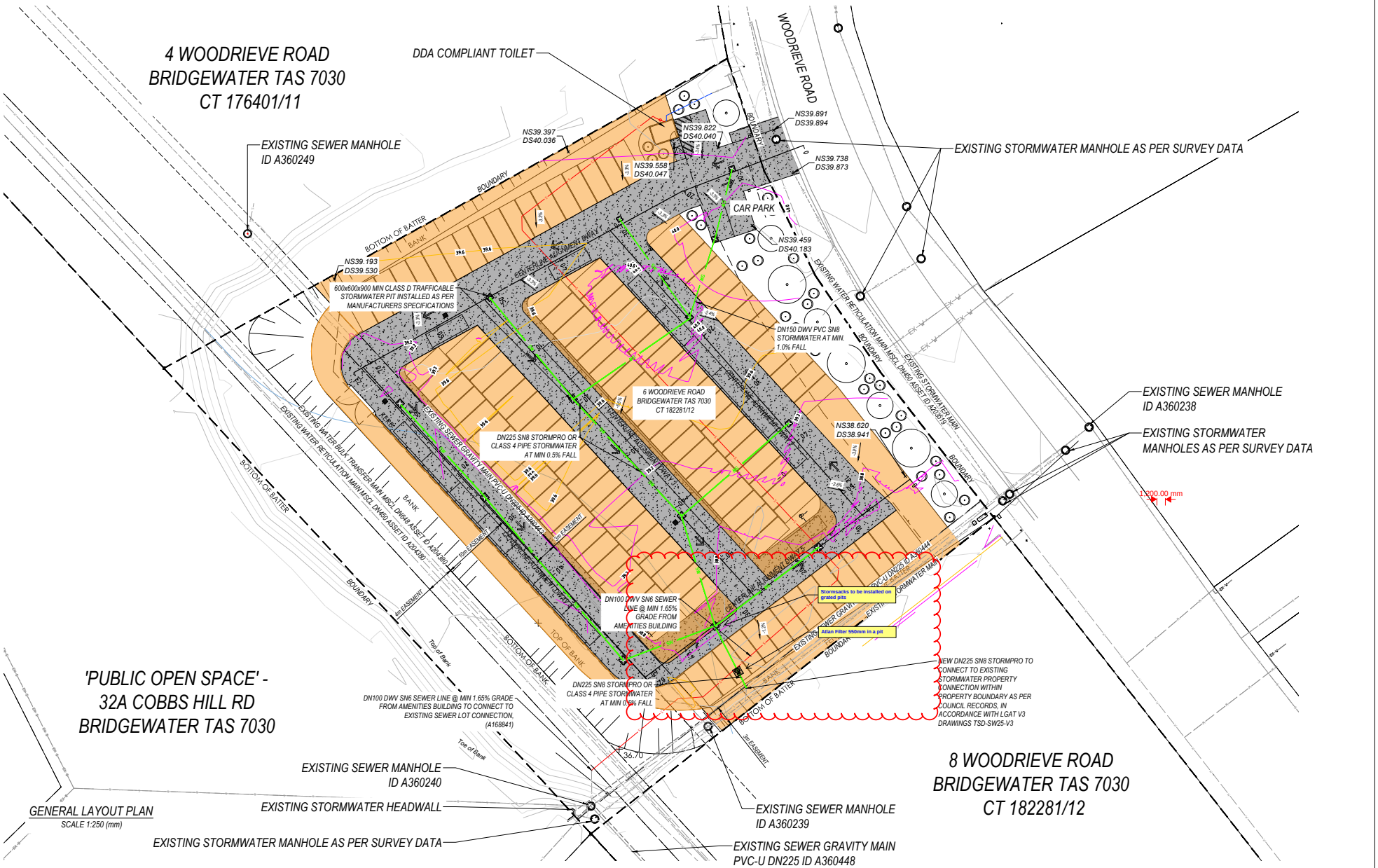
The information included is as follows:

Let me know if you have any questions or queries.

Best regards:
Sam Williams
0414 149 394
Atlan Stormwater

PHONE: 1300 773 500
EMAIL: sales@spel.com.au
OFFICE: 897 Wellington Road, Rowville, VIC 3178
ABN: 32 379 724 600
www.atlan.com.au

Appendix - Site Drawing Mark-up



NOT FOR CONSTRUCTION

REV	DESCRIPTION	DATE
1	FOR DEVELOPMENT APPROVAL	CF 24/06/2025
0	FOR DEVELOPMENT APPROVAL	CF 20/05/2025

FYSH DESIGN
UNIT 4, 160 BUNGANA WAY
CAMBIDGE TAS
PH: 0414 149 394
ACCREDITATION: BSD LICENCE NO. 479819732

NORTH

CIVIL/HYDRAULICS - CONTAINER STORAGE FACILITY

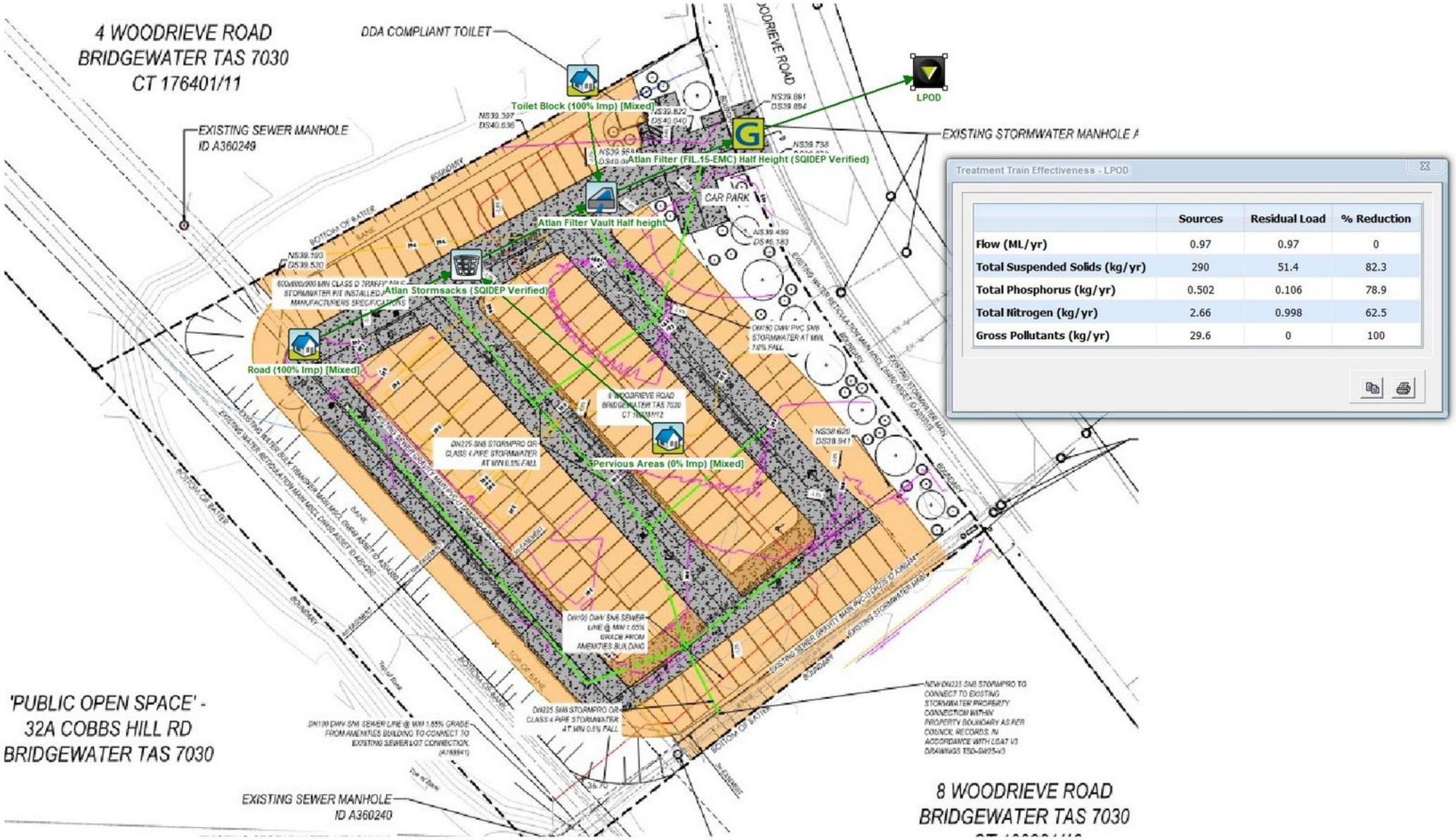
CLIENT: R.J. & T.C. SPAULDING
6 WOODRIEVE ROAD, BRIDGEWATER TAS 7030
DRAWING TITLE
CIVIL AND STORMWATER PLAN

DESIGNED	DRAWN
CHRIS FYSH	CHRIS FYSH
PROJECT	SHEET NO.
CKD-CIV-169	C03

SCALE AS NOTED
REVISION 1

PHONE: 1300 773 500
EMAIL: sales@spel.com.au
OFFICE: 897 Wellington Road, Rowville, VIC 3178
ABN: 32 379 724 600
www.atlan.com.au

Appendix – MUSIC Model



Treatment Train Effectiveness - LPOD

	Sources	Residual Load	% Reduction
Flow (ML/yr)	0.97	0.97	0
Total Suspended Solids (kg/yr)	290	51.4	82.3
Total Phosphorus (kg/yr)	0.502	0.106	78.9
Total Nitrogen (kg/yr)	2.66	0.998	62.5
Gross Pollutants (kg/yr)	29.6	0	100

TOLERANCE: All Dimensions to Closest 10 mm & +/- 30 mm

ALL INTERCONNECTING PIPEWORK, PITS AND ASSOCIATED DRAINAGE BY OTHERS

Brighton Council

REV	DATE	BY	DESCRIPTION	CHK
2	14-07-2025	OT		

FYSH DESIGN
CIVIL HYDRAULIC

CONFIDENTIAL - The drawings must not be disclosed to any third parties without written permission from ATLAN STORMWATER . Unauthorised disclosure may result in prosecution.
© ATLAN STORMWATER - This drawing is the property of ATLAN STORMWATER ABN: 83 151 832 629 and is subject to return on demand. It is submitted for the use only in connection with the proposal and contracts of ATLAN STORMWATER with the expressed conditions that it is not to be reproduced or copied in any form.
This data must only be used in accordance with our standard terms and conditions.
© Copyright
ATLAN STORMWATER accepts no responsibility for any loss or damage resulting from any person acting on this information.
The details and dimensions contained in this document may change, please check with ATLAN STORMWATER for confirmation of current specifications.

Drawn	Date
Check	Date
Verified	Date
Approved	Date

Atlan STORMWATER

PROJECT
6 Woodrieve Road, Bridgewater TAS

TITLE
MUSIC Modelling

SCALE	SIZE	SHEET	REV
N.T.S	A3	1 OF 1	2

CUSTOMER CODE : 25-80433 | DWG No.

C:\Users\Robin Radoc\OneDrive\Documents\Vault\Designs\ATLAN\03 - PROJECTS\YEAR 2023\NOVEMBER 2023\2357399 - STAGE 2 GREENLINK\2357399.C.01.10\2357399.C.01.10.GA (PIT 8 BIO).idw

PHONE: 1300 773 500
EMAIL: sales@spel.com.au
OFFICE: 897 Wellington Road, Rowville, VIC 3178
ABN: 32 379 724 600
www.atlan.com.au

Appendix – Treatment System Specifications

SQIDEP VERIFIED

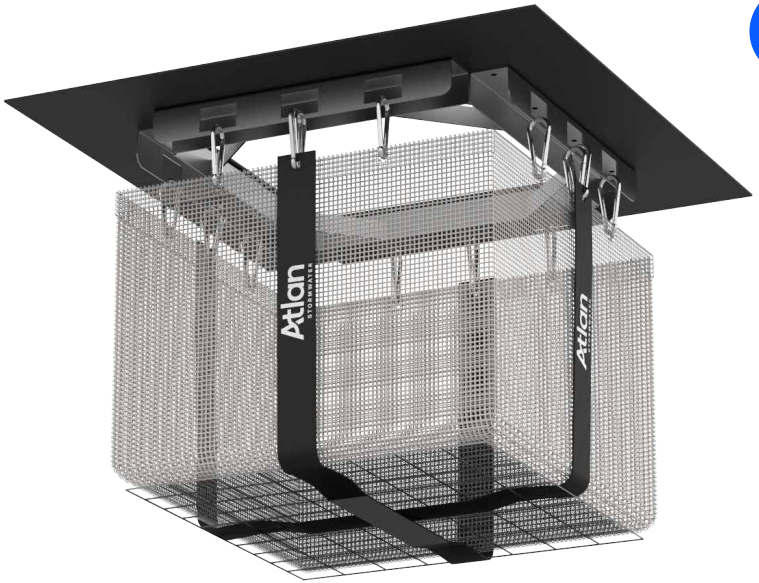
Atlan®
STORMWATER

StormSack

At-Source Gross Pollutant Trap

Efficient At-Source Gross Pollutant Capture

Designed to capture gross pollutants, sediment, litter, and oil and grease effectively within storm drains.



Retrofit Capability

Easily integrates into new or existing stormwater infrastructure, repurposing traditional systems to meet specific site water quality goals.

Engineered for Water Quality

Provides a decentralized stormwater treatment approach, aligning with LID (Low Impact Development) criteria for sustainable water management.

Adjustable Design

Features a typical adjustable frame range of 127mm and requires a minimum clearance of 50mm for optimal installation. Customise to suit your pit size.

Standard sizes include

- 450x450mm
- 600x600mm
- 900x600mm
- 900x900mm
- Custom sizes (i.e. 1200x900mm) can be manufactured on short lead times.

MUSIC Modelling

Can be modelled in MUSIC in conjunction with bioretention or other Atlan systems.

Ease of Maintenance

Pollutants are trapped just under the grate, making cleaning faster and simpler with conventional vacuum suction equipment.

The Atlan StormSack is specifically designed for the capture of gross pollutants, sediment, litter, and oil and grease. Ideally suited for storm drain retrofits, the StormSack's unique design allows maintenance to be performed using conventional vacuum suction equipment.

StormSack filtration solutions are highly engineered water quality devices that are deployed directly in the stormwater system to capture contaminants close the surface for ease of maintenance. Easily retrofitted into new or existing structures, StormSack filtration technology is a decentralized approach to stormwater treatment that essentially repurposes traditional site infrastructure and customizes it to meet specific site water quality goals. In this way, it satisfies important objectives of today's LID (Low Impact Development) criteria.

From an operations perspective, catch basins with StormSack filters are also easier and quicker to clean out because pollutants are trapped just under the grate.

Applications

- Council storm drain retrofits
- Commercial / retail / residential
- Litter prone urban areas
- Scrap metal / solid waste / oil storage
- Part of treatment train
- Construction sediment / erosion

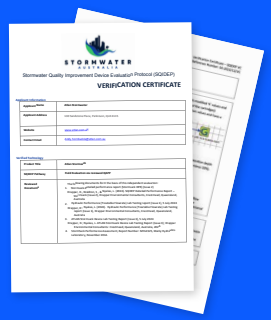
SQIDEP Tested Treatment Efficiencies*

POLLUTANT	EFFICIENCY
Gross Pollutants (GP)	100%
Total Suspended Solids (TSS)	45%
Total Phosphorus (TP)	47%
Total Nitrogen (TN)	25%

*Contact Atlan to confirm approved performance for the project LGA

Additional Research Removal Rates

POLLUTANT	EFFICIENCY
Microplastics	35-88%

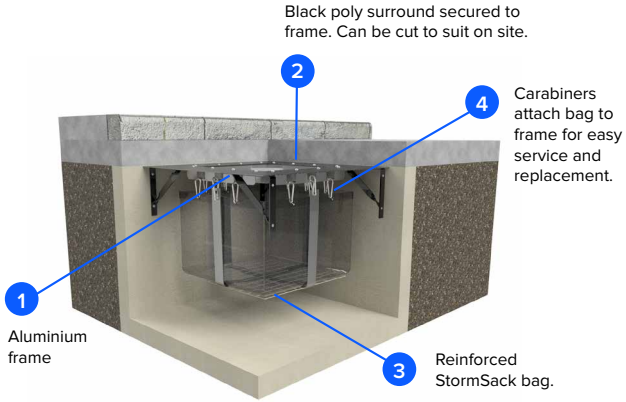


StormSack is SQIDEP approved after passing Stormwater Australia's rigorous testing and performance assessment process.

How it works

The StormSack provides effective filtration of solid pollutants and debris typical of urban runoff, while utilising existing or new storm drain infrastructure. The StormSack is designed to rest on the flanges of conventional catch basin frames and is engineered to suit typical project constraints.

Installation procedures include removing the storm grate, cleaning the frame of debris and solids, measuring catch basin clear opening and trimming flanges to rest on the grate support ledge. Install StormSack with splash guard under curb opening so the adjustable flanges are resting on the grate support ledge. Install corner filler pieces. Reinstall storm grate directly on support flanges rise shall be no more than 3mm.



Maintenance

Typically the StormSack is serviceable from ground level, and therefore maintenance does not require confined space entry. The unit is designed to be maintained in place with a vacuum hose attached to a sweeper or a vacuum truck.

AtlanFilter®

Cartridge filter for tertiary stormwater treatment

Advanced Filtration Technology

Utilises up-flow filtration to effectively capture pollutants such as sediment, hydrocarbons, heavy metals, phosphorus, nitrogen, and total suspended solids (TSS).

Compact Design

Compact footprint with fully customizable configurations, accommodating anywhere from 1 to an unlimited number of filter cartridges, making it ideal for constrained sites with minimal installation space.

High-Efficiency Inorganic Media

AtlanFilter's inorganic filter media ensures it doesn't leach nitrogen and other nutrients. Providing high removal efficiencies, the cartridge system is designed for high flow capacity and greater surface area for stormwater treatment.

Durable Construction

AtlanFilter's design has no moving parts which increases reliability, longevity and durability.

Versatile Applications

Suitable for manholes, OSD tanks, vaults, and both trafficable and non-trafficable zones, providing adaptable stormwater solutions.

Easy Installation and Maintenance

Lightweight, no-crane installation with straightforward maintenance and easy cartridge access for pollutant removal.

Flexible Flow Rate Capability

Offers 3 LPS for full height and 1.5 LPS for half height filters, with SQIDEP-verified performance.

Sustainable Performance

Inorganic media prevents nutrient leaching, ensuring efficient and reliable treatment outcomes.

Tertiary stormwater filtration cartridges

Our cartridge filter system, AtlanFilter®, is a tertiary stormwater filtration system that incorporates an upflow treatment process which maximises surface treatment area. Flow through the filter cartridges utilises a self-regulating siphon which results in a low maintenance and high performance treatment of stormwater runoff. The automatic backwash at the end of each storm event further lengthens the lifespan of the stormwater treatment filter.

Hydraulic pressure forces water through the filter media — causing a constant velocity throughout the filter area realising a consistent media contact time and therefore treatment. Upon completion of a stormwater treatment cycle, the filter backwashes and effectively dislodges particulates from the filtration layers.

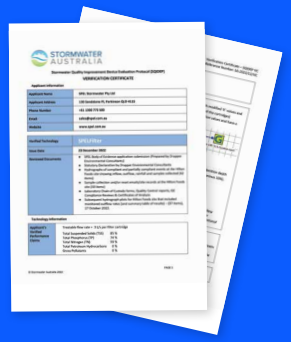
Applications

- Car parks & shopping centres
- Council depots
- Industrial estates
- Heavy vehicle maintenance
- Airport aprons & tarmacs
- Transport depots & loading bays
- Tunnels
- Highways & transport corridors
- Recycling yards

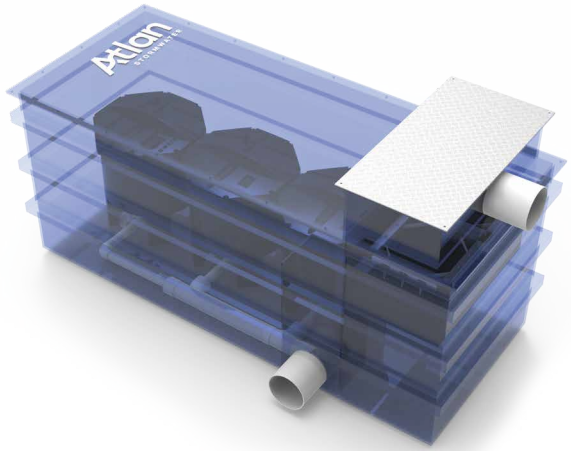
SQIDEP Tested Treatment Efficiencies*

POLLUTANT	EFFICIENCY
Total Suspended Solids (TSS)	85%
Total Phosphorus (TP)	74%
Total Nitrogen (TN)	59%

*Contact Atlan to confirm approved performance for the project LGA



AtlanFilter is SQIDEP approved after passing Stormwater Australia's rigorous testing and performance assessment process.



How it works

The AtlanFilter has an upflow treatment process that maximises surface area. The innovative cartridge filter system provides excellent pollutant removal in a small footprint.

Hydraulic pressure forces water through the filter media, which discharges through the centre tube and out through the outlet collection manifold.

Upon completion of a treatment cycle, each cartridge backwashes and effectively dislodges particulates from the filtration layers. This reestablishes filter media porosity. The dislodged particles accumulate on the vault floor for easy removal during maintenance.
AtlanFilter's design has no moving parts and generates a true siphon effect.

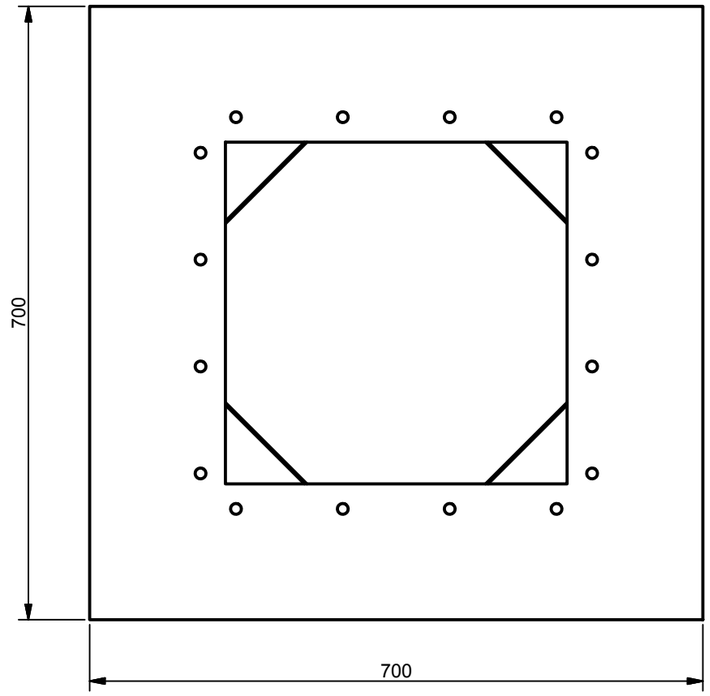
AtlanFilters are often installed downstream of nearby devices in a treatment train. For example, an Atlan GPT upstream greatly increases the life cycle interval of the AtlanFilter. These devices will remove larger gross pollutants, coarse sediments, total suspended solids and hydrocarbons - enabling the AtlanFilter to target fine particulate matter and nutrients.

ATLAN FILTER	FULL HEIGHT FIL-3.0	HALF HEIGHT FIL-1.5
Total height	860mm	660mm
Diameter	740mm	740mm
Minimum head required	850mm	550mm
Treatment flow rate	3.0L/s	1.5 L/s
Height of inlet ports above vault floor	250mm	250mm
Filtered water collection pipe diameter	50mm	50mm

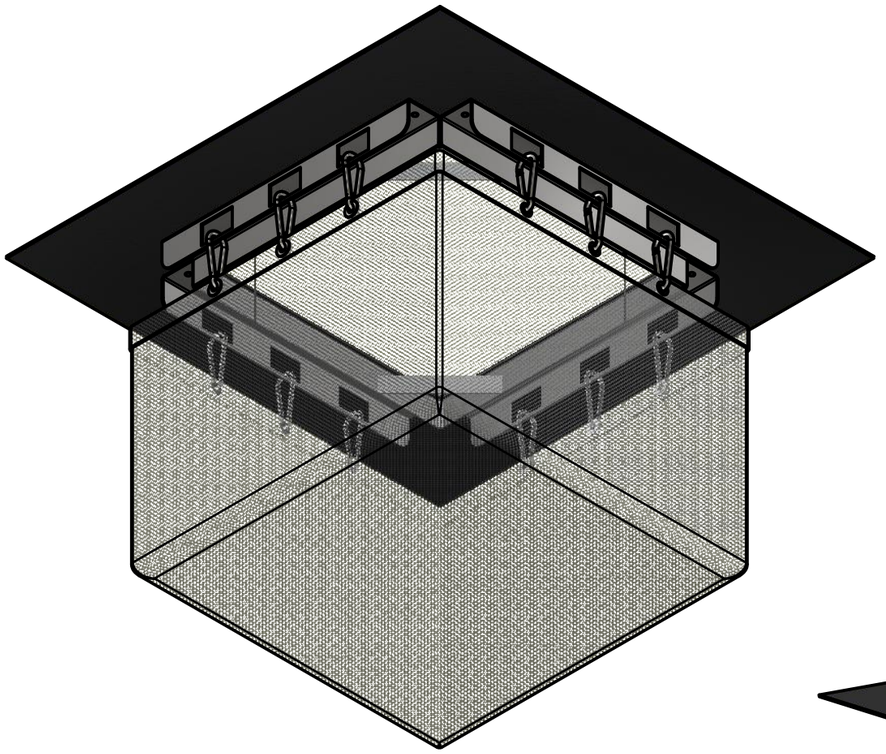
PHONE: 1300 773 500
EMAIL: sales@spel.com.au
OFFICE: 897 Wellington Road, Rowville, VIC 3178
ABN: 32 379 724 600
www.atlan.com.au

Appendix - Treatment System Drawings

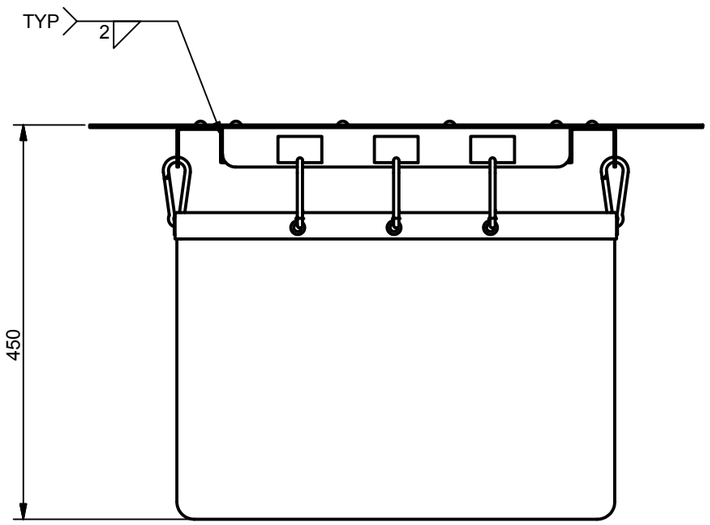
REVISION HISTORY				
REV	DESCRIPTION	DESIGNER	DATE	CHECKED BY
1	INITIAL RELEASE	M.M	25/03/2015	



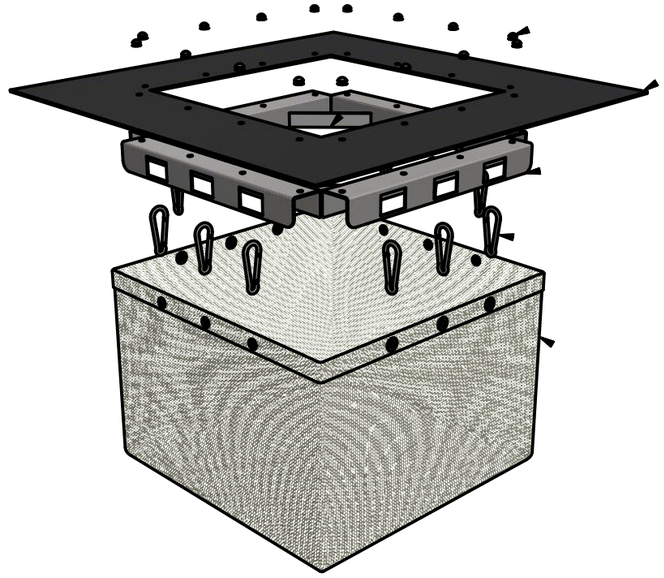
PLAN VIEW



ISOMETRIC VIEW
BOTTOM VIEW



ELEVATION VIEW



ISOMETRIC VIEW
EXPLOSION

CLIENT:

DISTRIBUTOR

CONFIDENTIAL - The drawings must not be disclosed to any third parties without written permission from SPEL Environmental Sydney. Unauthorised disclosure may result in prosecution.
© SPEL Environmental - This drawing is the property of SPEL Environmental ABN: 83 151 832 629 and is subject to return on demand. It is submitted for the use only in connection with the proposal and contracts of SPEL Environmental with the expressed conditions that it is not to be reproduced or copied in any form. This data must only be used in accordance with our standard terms and conditions.
© Copyright
SPEL Environmental accepts no responsibility for any loss or damage resulting from any person acting on this information. The details and dimensions contained in this document may change, please check with SPEL Environmental for confirmation of current specifications.

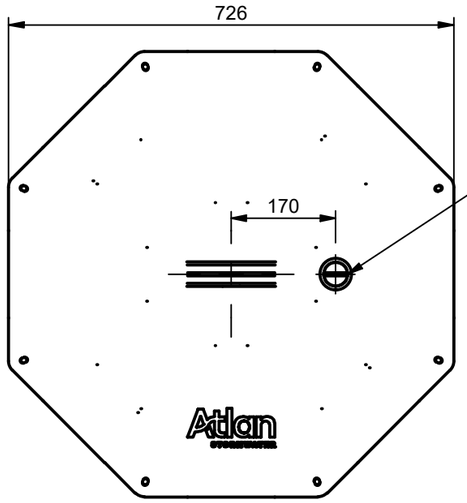
Drawn M.M	Date 25/03/2015
CHECKED BY	Date
Verified	Date
Approved	Date
Customer Code :	

SPEL ENVIRONMENTAL
INTEGRATED WATER SOLUTIONS
100 Silverwater Road Silverwater NSW 2128
PH: 1300 773 500 | E: sales@spel.com.au
www.spel.com.au

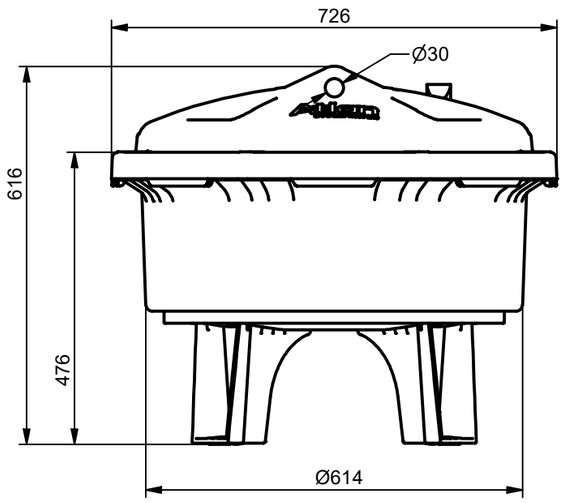
TITLE
SPEL STOMSACK
FRAME 600 x 600
BASKET MOUNTING ASSEMBLY DRAWING

REQUEST No.	SIZE	SHEET	REV
D20194	A3	1	1

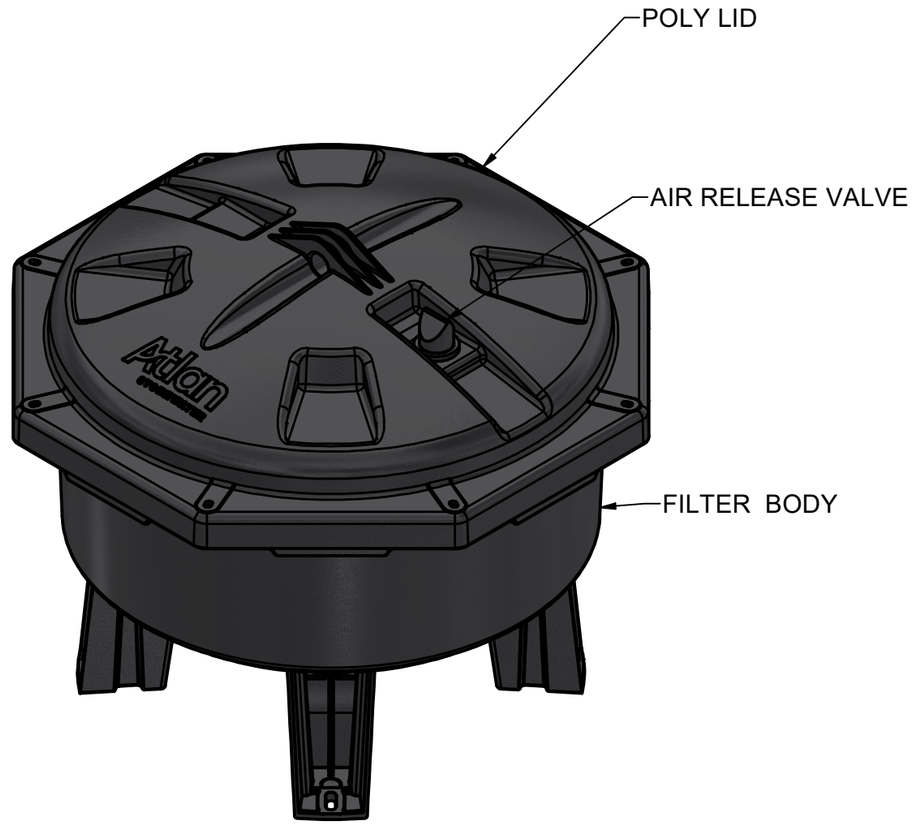
SCALE	DWG No.
N.T.S	SP15-BB4610-S



PLAN VIEW



ELEVATION VIEW



ISOMETRIC VIEW

TOLERANCE: All Dimensions to Closest 10 mm & +/- 30 mm

ALL INTERCONNECTING PIPEWORK, PITS AND ASSOCIATED DRAINAGE BY OTHERS

REV	DATE	BY	DESCRIPTION	CHK
1	15/04/2025	R.J.	INITIAL RELEASE	P.Z.

CLIENT:

CONFIDENTIAL - The drawings must not be disclosed to any third parties without written permission from ATLAN STORMWATER . Unauthorized disclosure may result in prosecution.
© ATLAN STORMWATER - This drawing is the property of ATLAN STORMWATER ABN: 83 151 832 629 and is subject to return on demand.It is submitted for the use only in connection with the proposal and contracts of ATLAN STORMWATER with the expressed conditions that it is not to be reproduced or copied in any form. This data must only be used in accordance with our standard terms and conditions.
© Copyright
ATLAN STORMWATER accepts no responsibility for any loss or damage resulting from any person acting on this information. The details and dimensions contained in this document may change, please check with ATLAN STORMWATER for confirmation of current specifications.

Drawn	R.J.	Date 15/04/2025
Check	P.Z.	Date
Verified		Date
Approved		Date
Request No.		

ATLAN STORMWATER

PROJECT :

TITLE
ATLANFILTER
MODEL : FIL-1.5
GENERAL ARRANGEMENT

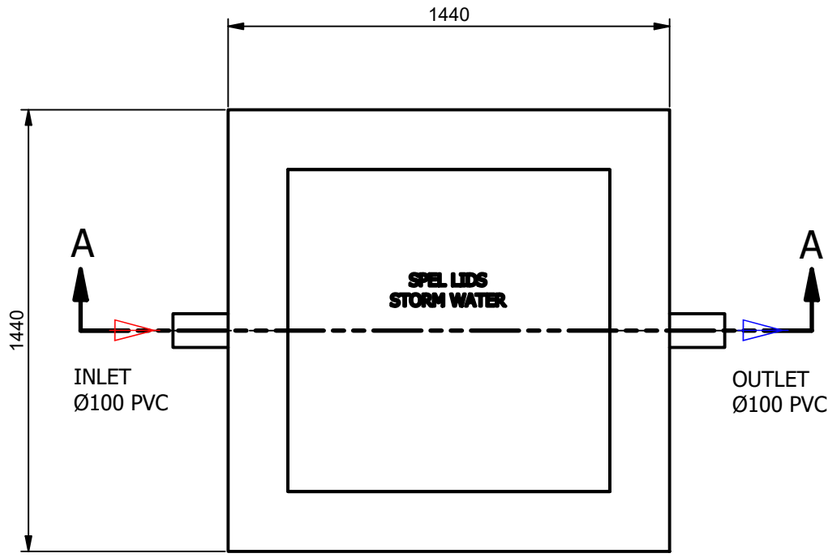
SCALE	SIZE	SHEET	REV
N.T.S	A3	1	1

CUSTOMER CODE :

DWG No. FIL-1.5

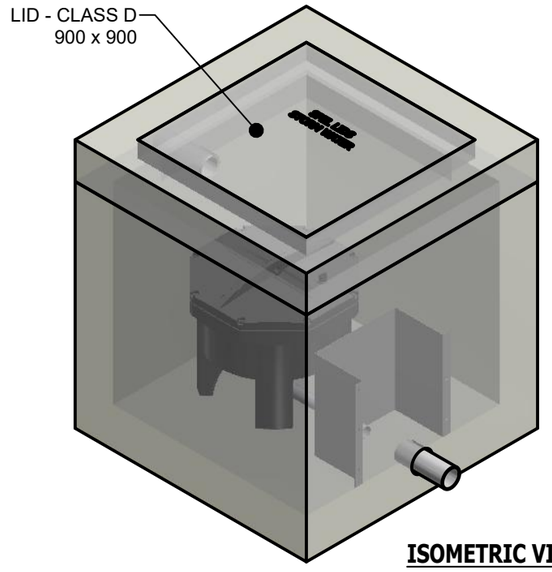
C:\Users\Robin Radoc\OneDrive\Documents\Vault\Designs\ATLAN\01 - STANDARDS\ATLAN FILTER\FIL-1.5.EMC-M\FIL-1.5.idw

ISSUE FOR APPROVAL
NOT FOR CONSTRUCTION

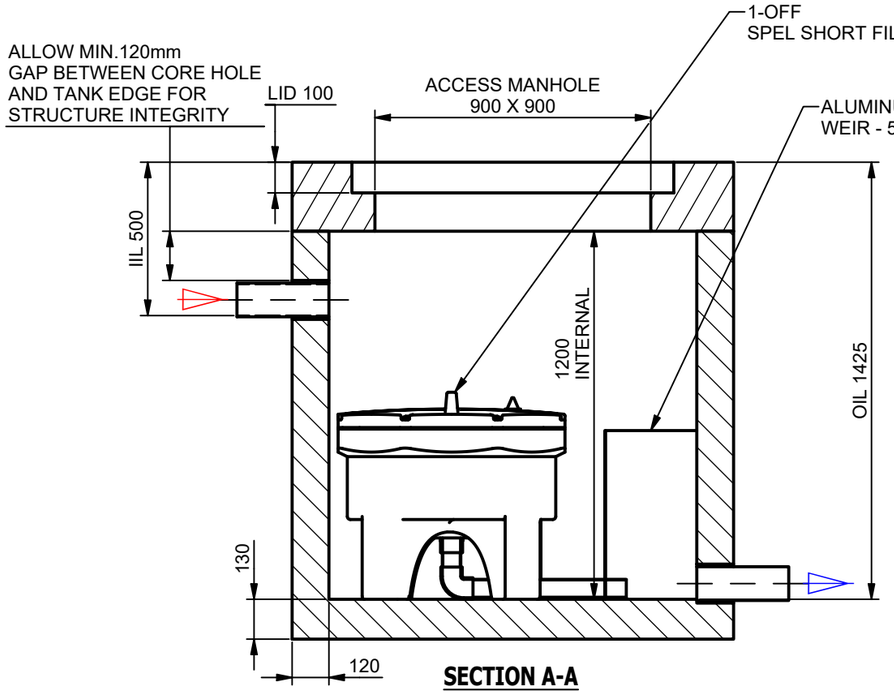


PLAN VIEW

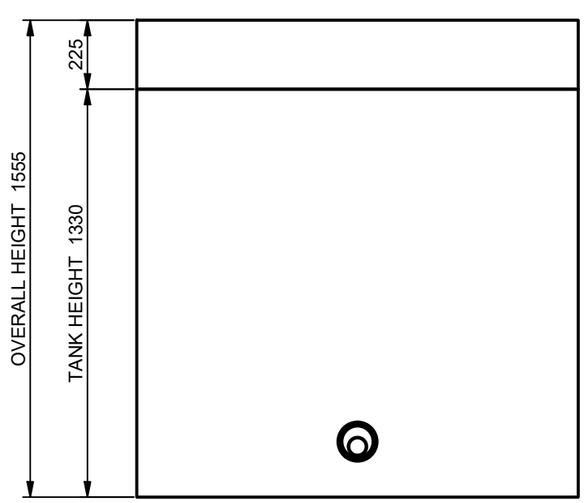
Site Level Confirmation		
Finished Surface Level (FSL)	RL:	
Access Cover Thickness		mm
Inlet Invert Level	RL:	
Outlet Invert Level	RL:	
Company:		
Name:		
Date:		



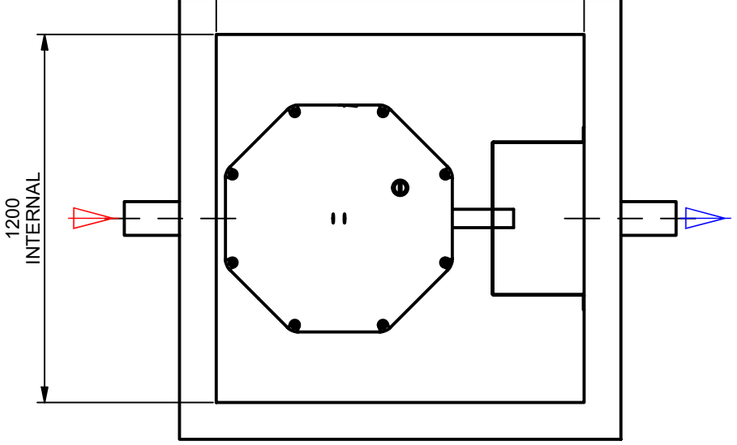
ISOMETRIC VIEW



SECTION A-A



END VIEW



PLAN VIEW
(LID REMOVED FOR CLARITY)

TOLERANCE: All Dimensions to Closest 10 mm & +/- 30 mm

ALL INTERCONNECTING PIPEWORK, PITS AND ASSOCIATED DRAINAGE BY OTHERS

REV	DATE	BY	DESCRIPTION	CHK
1	07/07/2022		INITIAL RELEASE	

CLIENT:

CONFIDENTIAL - The drawings must not be disclosed to any third parties without written permission from SPEL STORMWATER . Unauthorised disclosure may result in prosecution.
© SPEL STORMWATER - This drawing is the property of SPEL STORMWATER ABN: 83 151 832 629 and is subject to return on demand. It is submitted for the use only in connection with the proposal and contracts of SPEL STORMWATER with the expressed conditions that it is not to be reproduced or copied in any form. This data must only be used in accordance with our standard terms and conditions.
© Copyright
SPEL STORMWATER accepts no responsibility for any loss or damage resulting from any person acting on this information. The details and dimensions contained in this document may change, please check with SPEL STORMWATER for confirmation of current specifications.

Drawn	R.R.	Date 07/07/2022
Check		Date
Verified		Date
Approved		Date
Request No.	RN217865	

spelstormwater
joy in water
spel.com.au

PROJECT

TITLE
SPEL FILTER SYSTEM
SF.1212/01-15.CON
1 SPEL SHORT FILTER CARTRIDGE
GENERAL ARRANGEMENT

SCALE	SIZE	SHEET	REV
N.T.S	A3	1	1

CUSTOMER CODE :
DWG No. SP22-SF35550-P

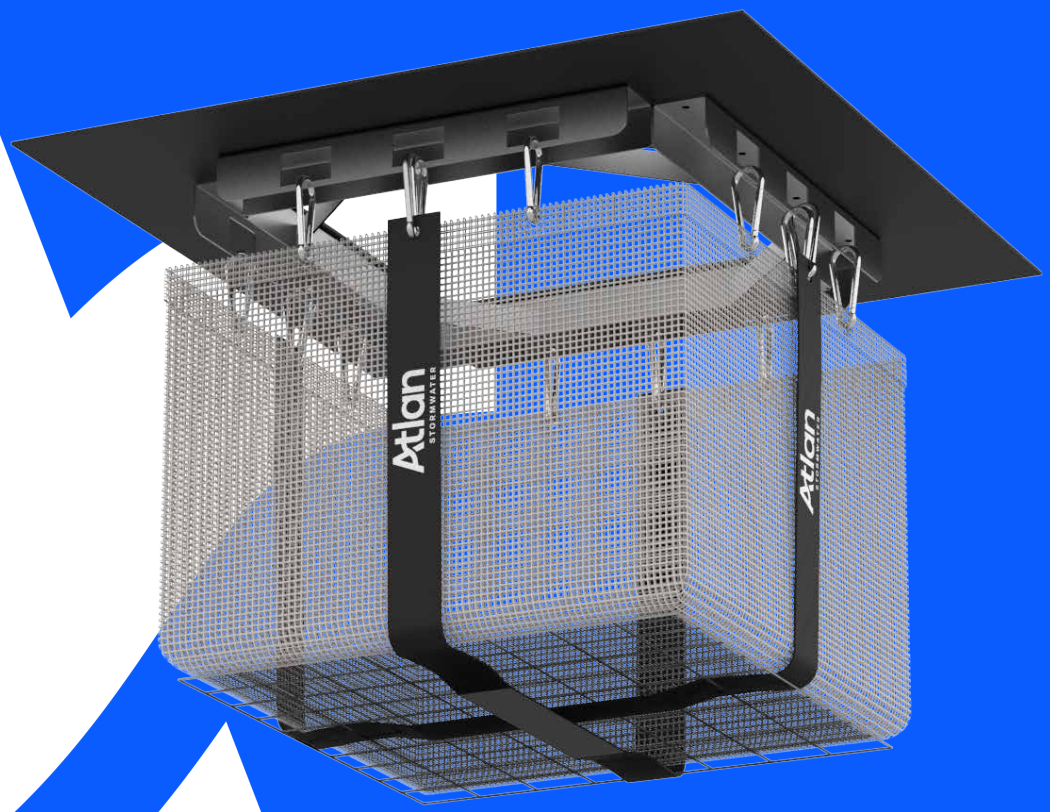
C:\Users\robin\Documents\Vault\Designs\SPEL\PRODUCTS\FILTER\EMC-45L\STANDARD\01 FILTER\CONCRETE\PROJECTS\DT-RFI-060722\SP22-SF35550-P (SHORT FILTER).idw

PHONE: 1300 773 500
EMAIL: sales@spel.com.au
OFFICE: 897 Wellington Road, Rowville, VIC 3178
ABN: 32 379 724 600
www.atlan.com.au

Appendix - Maintenance

OPERATION & MAINTENANCE MANUAL

StormSack



atlan.com.au

Atlan
STORMWATER

INTRODUCTION

Maintenance of the Atlan StormSack is essential to preservation of its condition to ensure lifetime operational effectiveness.

The Atlan StormSack is a highly engineered water quality device that is deployed directly in the stormwater system as primary treatment to capture contaminants close to the surface for ease of maintenance.

To ensure full operational capacity, it is vital to ensure that the pollutants it captures are periodically removed, and filtration components are thoroughly cleaned.

This manual should be used in conjunction with the relevant site traffic management and safety plans, as well as any other provided documentation from Atlan.

The Atlan StormSack provides effective filtration of solid pollutants and debris typical of urban runoff, while utilising the existing or new storm drain infrastructure. The StormSack is designed to rest on the flanges of conventional catch basin frames and is engineered for most hydraulic and cold climate conditions.

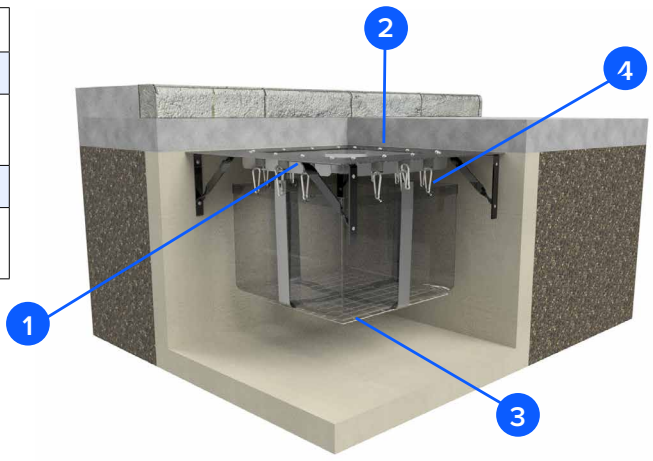
Typically the StormsSack is serviceable from the street level, and therefore maintenance does not usually require confined space entry into the catch basin structure. The unit is designed to be maintained in place with a vacuum hose attached to a sweeper or sucker truck.

COMPONENTS

- Adjustable Flange Deflector: Black HDPE attached to support frame
- Catchment Bag: 200micron woven poly fabric
- Support Hardware: Stainless steel 304
- Bag Support: Stainless steel 304 mesh
- Replaceable Oil Boom: Polypropylene 3 inch (76 mm) diameter (optional add-on)

Application	Regulatory Issue	Target Pollutants
Council Storm Drain Retrofits	At-source litter capture	Sediment, Litter, O&G
Commercial/Retail/Residential	Stormwater Compliance	Sediment, Litter, O&G
Litter Prone Urban Areas	Cost effective litter control	Litter ≥ 5 mm
Scrap Metal/Solid Waste/Oil Storage/Etc	Industrial Multi-Sector General Permit	Gross Pollutants, O&G
Part of Treatment Train	Council Stormwater Quality Improvement Targets	Sediment, Litter, O&G
Construction Sediment/Erosion	Sediment Control Plan	Sediment/Erosion Control

Features	
1.	Aluminium frame
2.	Black poly surround secured to frame • Can be cut to suit on site
3.	Reinforced StormSack bag
4.	Carabiners attach bag to frame for easy service and replacement



Standard StormSack to suit Pit Sizes
450x450mm
600x600mm
900x600mm
900x900mm

Custom sizes (i.e. 1200x900mm) can be manufactured on short lead times.

HEALTH & SAFETY

IMPORTANT: A full site based risk assessment should be completed prior to commencing work on your Atlan StormSack.

PERSONAL HEALTH & SAFETY

When carrying out maintenance operations of the Atlan StormSack all contractors and staff personnel must comply with all current workplace health and safety legislation. The below measures should be adhered as practically as possible:

- Comply with all applicable laws, regulations and standards.
- All those involved are informed and understand their obligations in respect of the workplace health and safety legislation.
- Ensure responsibility is accepted by all employees to practice and promote a safe and healthy work environment.

PERSONAL PROTECTIVE EQUIPMENT

When carrying out maintenance operations of the Atlan StormSack, wearing the appropriate personal protective equipment is vital to reducing potential hazards. Personal protective equipment in this application includes:

- Eye protection
- Safety apron
- Fluorescent safety vest
- Form of skin protection
- Puncture resistant gloves
- Steel capped safety boots

CAPTURED POLLUTANTS

The material captured by the Atlan StormSack can be harmful and needs to be handled correctly. The nature and amount of the captured pollutants depends on the characteristics of the site.

Pollutants can include from organic material such as leaves and sticks through to debris such as plastics, glass and other foreign objects such as syringes.

EQUIPMENT HANDLING

Handling activities such as a removing the drain grate a well as managing pedestrians and other non-worker personnel at the site should be exercised in accordance with specified safety procedures and guidelines.

CONFINED SPACES

Confined space entry procedures are not covered in this manual. It is requested that all personnel carrying out maintenance of the Atlan StormSack must evaluate their own needs for confined space entry and compliance with occupational health and safety regulations. Non trained staff are not permitted to participle in any confined space entries.

When maintenance operations cannot be carried out from the surface and there is a need to enter confined space, only personnel that currently hold a Confined Space Entry Permit are allowed to enter the confined space.

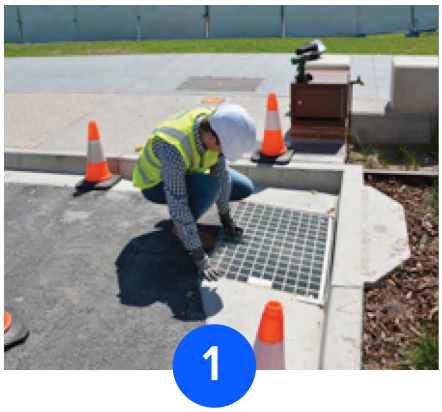
TRAFFIC MANAGEMENT

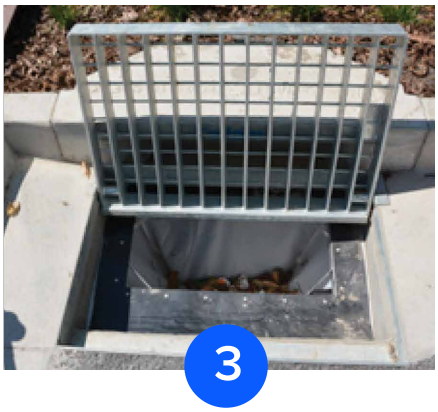
Typically stormwater gully pits are situated on roads and carparks, or adjacent to roads in a footpath or swale. As traffic requirements vary depending on the circumstance of the site, separate traffic control plans should be prepared for each site.

The specific road safety requirements for each site can be obtained from the relevant road authority to ensure all maintenance operations comply with the laws and regulations. State government publications can also be useful to find out the signage requirements, placement of safety cones and barricades that are required when working on public roads.

MAINTENANCE OF THE ATLAN STORMSACKS IS A SPECIALIST ACTIVITY

When carrying out maintenance operations of the Atlan StormSack, factors such as equipment handling methods, pollutants and site circumstances can impose potential risks to the maintainer and nearby civilians.





OPERATIONS

GENERAL MONITORING

The Atlan StormSack must be checked on a regular basis to analyse whether it requires maintenance or cleaning. As gully pit grates are usually quite heavy, it is vital to exercise the correct lifting techniques and also ensure that the area surrounding the open pit is shielded from access of non-work personnel.

To ensure optimal performance of the Atlan StormSack, the material collected by the filter bag should not exceed the level of approximately a half to two thirds of the total bag depth. When this material collected is showing signs of exceeding this level they should be scheduled to be emptied.

It is also recommended that additional monitoring is conducted following moderate to extreme rainfall events, especially when previous months have had little or no rainfall.

GULLY PIT COVER REMOVAL

Opening a hinged pit cover

1. Insert the lifting hooks beneath the grate.
2. Check hinge points are not damaged and debris is not caught in the hinge area.
3. Fully open pit grate, ensuring that the grate will stay in the open position without any external forces applied. Grates that do not remain open without being held, should be removed or secured during maintenance activities.

Opening a non-hinged pit cover

1. Place lifting hooks beneath grate, where possible in the four corners of the grate. Concrete lids may have Gatic lifting points, a key arrangement or holes in the lid, which may require special equipment such as Gatic lifters. Alternatively if safe to do so grip the grade with your hands.
2. Position each person on either side of the grate.
3. Lift the grate, ensuring that good heavy lifting posture is used at all times.
4. Place the grate on angle on the gutter, to allow for the lifting hooks to be removed.
5. For extremely heavy one-piece grates and concrete Gatic covers, insert the lifters in place and slide the lids back.

REPAIRS

Depending on the extent of the damage to the Atlan StormSack unit, it can usually be repaired.

Filter Bag Tears

Small tears to the filter bag can be repaired by either sewing the tear back together with additional fabric to increase the strength of the stitching, or by sewing a patch of filter material onto the filter bag.

Spill Procedures

In the event of a spill discharging into a gully pit, all effected sediment must be removed from the filter bags and the filter bags are to be removed and replaced with new filter bags.

Replacement Parts

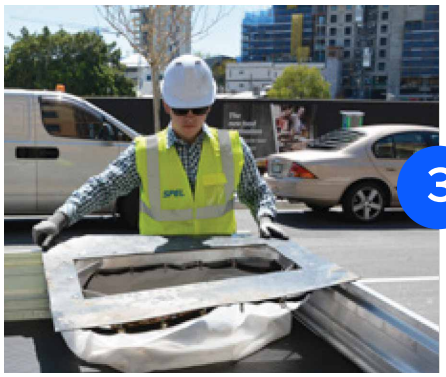
If large tears or irreparable damage to the frame and structure are present, it is advisable to replace the components.

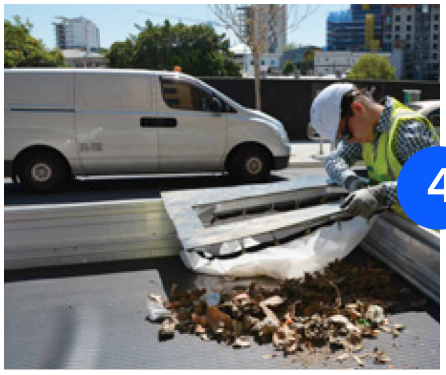
All required spare parts can be sourced directly from Atlan Stormwater.

CLEANING METHODS

CLEANING USING AN VACUUM TRUCK

1. Open gully pit.
2. Place the vacuum hose, suck out all of the sediment, organic leaf material, litter and other materials that were collected in the filter bag.
3. Allow the filter bag to be sucked up in the vacuum hose for a few seconds to allow for the filter mesh pores to be cleaned.
4. Use the vacuum hose to remove any build-up of material around the overflows and in the bottom of the pit.
5. Remove filter back from pit.
6. Remove any sediment and litter caught in the gully pit grate.
7. Back opening channels are to be cleared of any debris to ensure flow is not hindered.
8. Thoroughly examine the structural integrity of the filter bag and frame.
9. Reinstate filter bag and gully pit covers.





CLEANING BY HAND

CAUTION: Correct PPE must be warn - refer to page three. Remain alert for dangerous objects and wildlife.

1. Open gully pit.
2. Using the correct lifting technique, lift the StormSack out by the diagonal lifting corners fitted to the frame. For extremely heavy and overfilled bags either use a hydraulic lifting arm to lift the StormSack, or remove excess material using a shovel or etc. Take care not to damage the bag when removing litter form the bag.
3. Lift the StormSack clear of the stormwater pit and position over the collection bin or vehicle.
4. Lift and empty the bag by holding the bottom lifting loops only.
5. Brush the StormSack with a stiff brush to remove the sediment from the filter pores.
6. Thoroughly examine the structural integrity of the filter bag and frame.
7. Reinstate StormSack and gully pit covers.

MATERIAL DISPOSAL

Collected materials can be potentially harmful to humans and the environment. Once all captured material from the Atlan StormSack has been removed, it must be taken off site and disposed of at a transfer station or a similar approved disposal site.

BLOCKAGE TROUBLESHOOTING

In the unlikely event of surface flooding around a gully pit which has a Atlan StormSack fitted, the following steps should be carried out:

- Check the overflow bypass.
- If overflow is clear and surface flooding still exists remove the Atlan StormSack and check the outlet pipe for blockages.
- Removal of the Atlan StormSack can be difficult if clogged with sediment and holding water.
- If the filter is clogged brush the side walls to dislodge particles trapped at the interface allowing water to flow through the filter.
- If the outlet pipe is blocked a vacuum truck may be required to unblock it. Litter can be removed from the Atlan StormSack using the vacuum truck before removal. If a vacuum truck is not available please follow the hand maintenance cleaning steps prior to unblocking the outlet pipe.

OPERATION & MAINTENANCE MANUAL

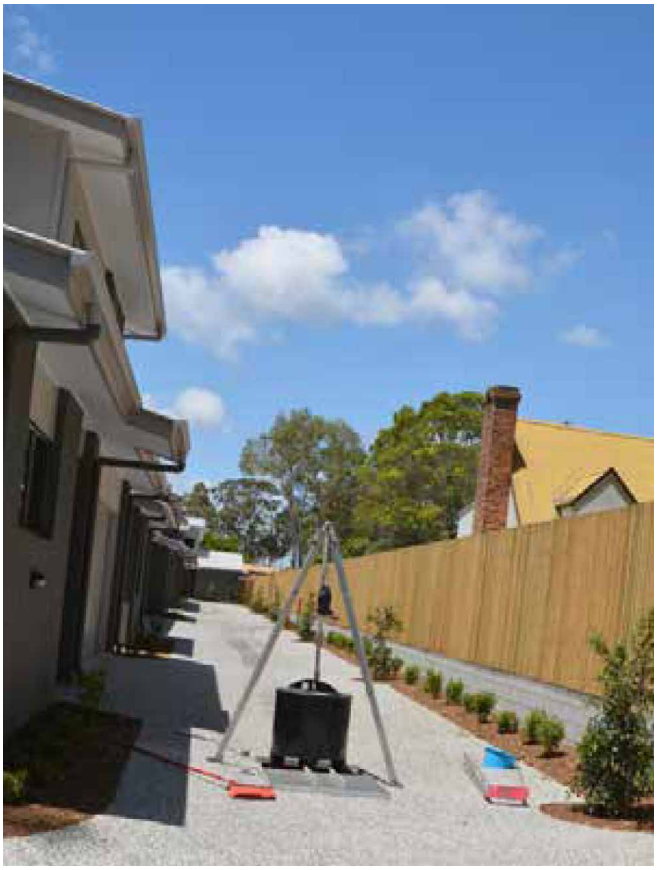
AtlanFilter

(Formerly SPELFilter)

atlan.com.au

Atlan
STORMWATER

CONTENTS



INTRODUCTION

Understanding how to correctly and safely maintain the AtlanFilter (formerly SPELFilter) is essential for the preservation of the filter's condition and its operational effectiveness. The AtlanFilter is a highly engineered stormwater filtration device designed to remove sediments, heavy metals, nitrogen and phosphorus from stormwater runoff.

The filters can be housed in either a concrete or fibreglass structure that evenly distributes the flow between cartridges.

Flow through the filter cartridges is gravity driven and self-regulating, which makes the AtlanFilter system a low maintenance, high performance stormwater treatment device.

This guide will provide the necessary steps that are to be taken to correctly and efficiently ensure the life of the AtlanFilter product.

Figure 1 - AtlanFilters in a concrete chamber / vault

FEATURES

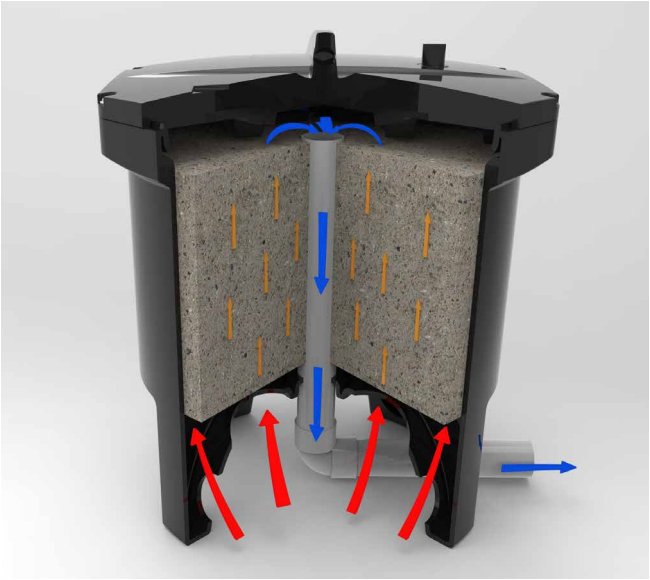


Figure 2 - Diagram of water flow through AtlanFilter

The AtlanFilter has a patented design that facilitates influent flow over the entire surface area of the media, providing consistent pollutant removal within a small footprint.

The AtlanFilter provides highly effective media filtration using gravity flow conditions, without the need for moving parts or floating valves. This eliminates the risk of mechanical failure, such as stuck valves and seizing components during its service life. This provides highly robust treatment performance.

Hydraulic head provided by a suitably sized weir in the filter vault forces stormwater through the filter media via the inlet ports underneath the filter cartridge.

Refer to the table below for minimum head required for the AtlanFilter cartridges to assist in sizing the weir.

The water to be treated enters the AtlanFilter cartridge via an upwards direction as the water level builds up around the AtlanFilter. This 'up flow' reduces the amount of sediment that could enter the media cartridge, as the sediment is allowed to drop to the vault floor under gravity. Any remaining sediment in the water is introduced through the filter media under hydraulic pressure and is filtered.

Water is filtered through the media, where dissolved and particulate Total Nitrogen and Total Phosphorus are removed via reaction with the media, in addition to the removal of Total Suspended Solids / sediment.

AtlanFilter Media Self-Backwash feature

A one-way air release valve located at the top of the filter cartridge allows air to escape as the cartridge fills up with water. This creates a siphonic flow condition as the air is completely evacuated from inside the AtlanFilter cartridge. Siphonic flow conditions are maintained until such time the water level outside of the cartridge falls beneath the inlet ports underneath the filter. At this moment, the water level inside the AtlanFilter cartridge is higher than the surrounding water level.

The water inside the AtlanFilter cartridge is then expelled upon the break of the siphon, and the water flows down and out of the inlet ports under gravity, onto the vault floor.

This is a highly effective backwash of the media and allows the expulsion of a high proportion of sediment out from the AtlanFilter media. The expelled sediment can be removed either manually or with a vacuum from the vault floor.

This backwash effect allows the media to remain highly conductive and is the key to the industry leading longevity of the AtlanFilter cartridge system, which does not need replacement for at least 5 years, and typically will achieve up to 6-8years of service, subject to the AtlanFilter being regularly maintained in accordance with this guideline and in accordance with the specific needs of the catchment.

Figure 3 - Typical Outlet Weir Wall

FEATURES

Self Supporting Feet

Each AtlanFilter cartridge stands on 4 feet, which negates the need for the construction of a false floor in the vault. The feet are bolted to the vault floor with the supplied stainless steel angles and M10 bolts. The feet allow a clear height from the vault floor up to the inlet ports of 240mm. The absence of a false floor allows plenty of room for backwashed sediment to evacuate from underneath the cartridges and thereby avoid blocking the inlet ports to the AtlanFilter from sediment buildup. It is for this reason that Atlan recommended the sediment buildup not exceed 150mm above the vault floor, so as to avoid blocking the inlet ports of the AtlanFilter. Blockage of the inlet ports due to sediment accumulation in the vault floor will cause the AtlanFilter to go into bypass and be ineffective. Hence it is important to keep up to date with monitoring and maintaining the AtlanFilter vault.

Figure 4 - Bolting the feet.

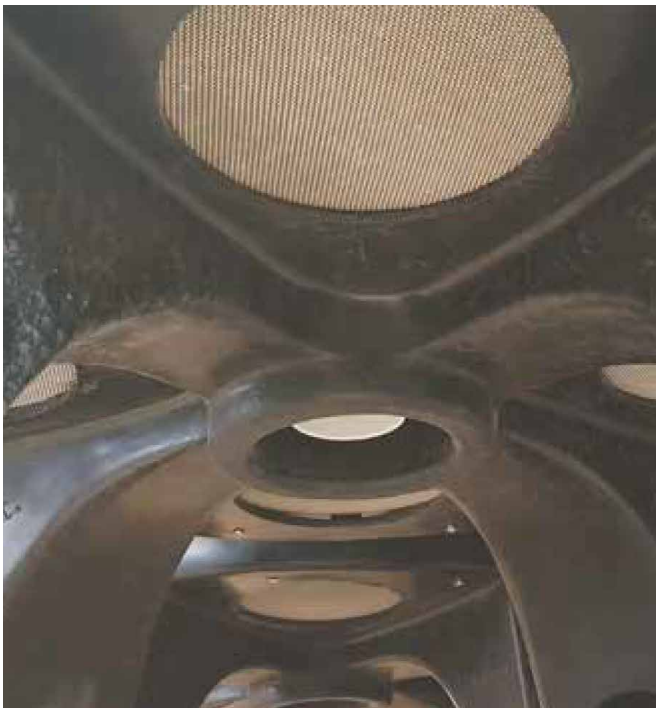


Figure 5 - Underside of the AtlanFilter showing the screened inlet ports and the connection for the outlet pipe in the middle.

Figure 6 - the top of the AtlanFilter showing the location of the one way air valve.

SIZES

Atlan Stormwater manufactures two height cartridges for varying site constraints as shown below. Each cartridge is designed to treat stormwater at a flow rate of 1.5 litres per second and 3.0 litres per second for the half height cartridge (model no. FIL-1.5) and full-height cartridge (model no. FIL-3.0) respectively.

	Full Height FIL-3.0	Half Height FIL-1.5
AtlanFilter total height	860mm	660mm
AtlanFilter Diameter	740mm	740mm
Minimum Head required	850mm	550mm
Treatment flow rate	3.0 L/s	1.5 L/s
Height of inlet ports above vault floor	250mm	250mm
Filtered water collection pipe diameter	50mm	50mm

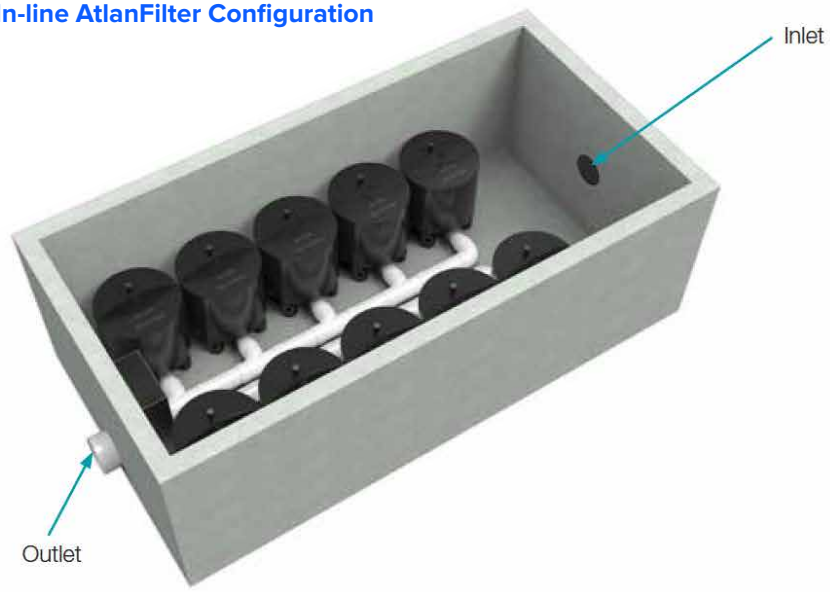
AtlanFilter Full Height - FIL-3.0

AtlanFilter Half Height - FIL1.5

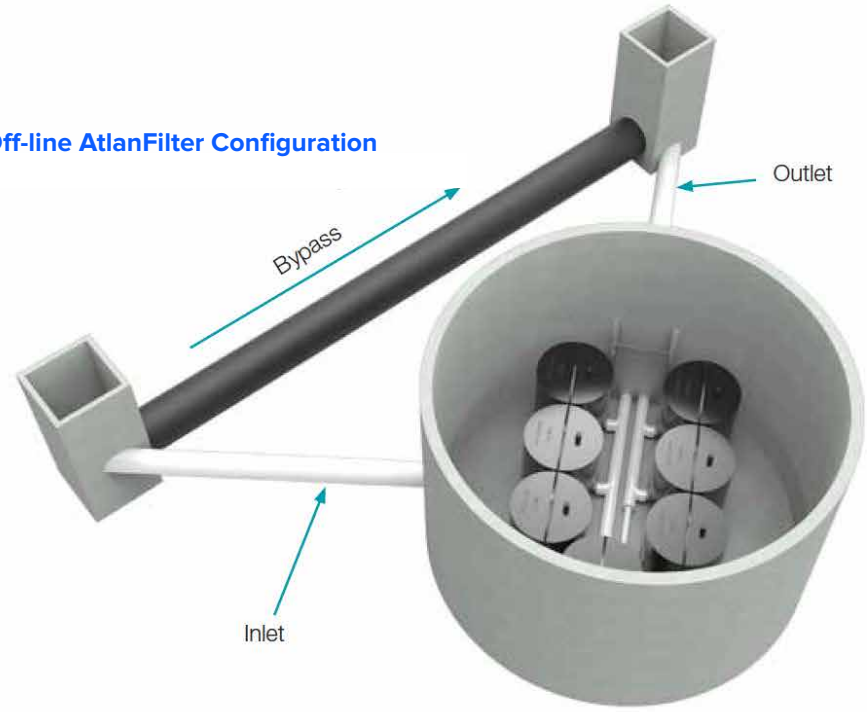
SYSTEM CONFIGURATION

AtlanFilter cartridges are installed in concrete or fibreglass tanks commonly referred to as ‘vaults’. The vault selection and configuration are based on site characteristics and/or constraints; computational stormwater quality modelling; and selected AtlanFilter models. Typical AtlanFilter system configurations are shown below.

In-line AtlanFilter Configuration



Off-line AtlanFilter Configuration



HEALTH AND SAFETY

A. Personal health & safety

When carrying out the necessary installation operations of the AtlanFilter all contractors and staff personnel must comply with all current workplace health and safety legislation.

The below measures should be adhered to as practically as possible.

- Comply with all applicable laws, regulations and standards.
- All those involved are informed and understand their obligations in respect of the workplace health and safety legislation.
- Ensure responsibility is accepted by all employees to practice and promote a safe and healthy work environment.

B. Personal protective equipment/safety equipment

When carrying out the necessary installation operations of the AtlanFilter, wearing the appropriate personal protective equipment and utilising the adequate safety equipment is vital to reducing potential hazards.

Personal protective equipment / safety equipment in this application includes:

- Eye protection
- Safety apron
- Fluorescent safety vest
- Form of skin protection
- Puncture resistant gloves
- Steel capped safety boots
- Ear muffs
- Hard hat/s
- Sunscreen

C. Confined space

In the event access is required into the vault, confined space permits will be required which is not covered in this Guide. Typical equipment required for confined space entry include:

- Harness
- Gas detector
- Tripod
- Spotter

D. Traffic Control

It is not uncommon for Atlan Filter cartridges to be installed underneath trafficable areas. Minimum traffic control measures will need to be put in place in accordance with traffic control plans set out by respective local and state road authorities.

Vaults are to be treated as confined space.

Entry by permit only.

Monitor weather conditions prior to operation maintenance. Do not enter a vault during an episode of heavy rain as this can create a risk of drowning.

MAINTENANCE FREQUENCY

The AtlanFilter's design allows for a greater life span when frequently maintenance. Maintenance is broken up into three categories which include:

- Standard inspection
- General cleaning
- Cartridge replacement.

Standard Inspection

Standard inspections are conducted at regular four month intervals. At this time, an approved trained maintenance officer or Atlan representative shall undertake all measures outlined in Maintenance Procedure, Standard Inspection.

General Cleaning

At the end of each standard inspection, trigger measures will identify if general cleaning is required.

General cleaning will need to be executed immediate during standard inspections if the follow triggers are satisfied:

- Build-up of debris/pollutants within the vault greater than 150mm;
- Accumulation of debris/pollutants on the outlet chamber of the AtlanFilter vault;
- After large storm events, tidal or flooding impacts at the request of the owner;

Cartridge Replacement

Stormwater treatment is dependent on the effectiveness of the AtlanFilter cartridge system. As the AtlanFilter ages, pollutants will inundate the cartridge and ultimately reduce the treatment flow rate. At this point, a AtlanFilter flow test apparatus will be utilities to determine if replacement cartridges are required.

Based on the [site] concept modelling (MUSIC) and previous industry experience, we estimate the life of the AtlanFilter to be between 6 - 8 years. As a minimum requirement, each AtlanFilter cartridge should be replaced within 10 years.

The life cycle of the AtlanFilter can be impacted if standard inspections and general maintenance is not undertaken in accordance with this operation and maintenance Guide.

Other factors that will affect the above life cycle of the AtlanFilter include:

- Installation of cartridge system during construction phase and impacted by construction sediment loads;
- Neglecting to install pre-treatment using an industry approved GPT or a surface inlet pit trash bag such as the Atlan StormSack.
- Unforeseen environmental hazards affecting the AtlanFilter functionality.

MAINTENANCE PROCEDURES

Stormwater pollutants captured and retained by the AtlanFilter system need to be periodically removed to ensure environmental values are upheld. All associated maintenance works is heavily dependent on the site's operational activities and generated stormwater pollutants. To ensure the longevity of the installed AtlanFilter treatment system, it is imperative that the procedures detailed in this Guide are followed and all appropriate measures are actioned immediately.

Standard inspection

The standard inspection requires personal experience of Atlan products to visual inspection the vault and filter conditions.

Confined space requirements may not be required if a full inspection and assessment of each AtlanFilter can be achieved at surface level without being deemed a confined space entry.

The standard inspection requires personal experience of Atlan products to visual inspection the vault and filter conditions.

Confined space requirements may not be required if a full inspection and assessment of each AtlanFilter can be achieved at surface level without being deemed a confined space entry.

Site Inspection Procedures

1. Implement pre-start safety measures

Ensure that the area in which operational works are to be carried out is cordoned off, to prevent unauthorised access. Adequate safety barriers must be erected.

Area in which work is to be carried out must be clean, safe and hazard free. (Refer to figure 4.)

2. Set-up gantry tripod above manhole

Assemble and position the gantry above the manhole safely and as practically as possible. Attach the winch or chain block to the gantry for lifting the Atlan Filters.

Perform safety procedures ie. Attach harnesses etc. (if confined space).

3. Open manhole lid

Once you have set up the Gantry and ensured that the area is safe to operate in, you can proceed to open the manhole lid, using lid lifters.

4. Conduct gas tests

(If tank is classed confined space)

Once the lids have been removed to a safe distance to prevent tripping, you must then proceed to conduct gas tests. Perform necessary gas tests according to the confined space regulations.

5. Once confined space has been deemed safe to operate in, enter tank safely

Once you have carried out the required gas test and the work area is deemed safe, you may then enter the pit via a ladder or winch system to assess the work area you will be operating in. Ensure all confined space

6. AtlanFilter system assessment

Perform a review of the AtlanFilter system using the AtlanFilter assessment report/checklist. Sign off and forward a copy of the report to property manager and Atlan representative.

7. Reinstate AtlanFilter system and disposal

At the completion of the site inspection, ensure the site is reinstated back to its initial state and all pollutants are removed from the site in line with pollutant disposal procedures.

8. Sign off and forward a copy of the report to property manager and Atlan representative

GENERAL CLEANING

Vacuum out of Filter tank, removal, and disposal of pollutants at the completion of a standard inspection, general cleaning may be deemed necessary immediately or scheduled for a future date. Steps undertaken for general cleaning should be in general accordance with the procedure outlined below but not limited.

1. Implement pre-start safety measures

Ensure that the area in which operational works are to be carried out is cordoned off, to prevent unauthorised access. Adequate safety barriers must be erected.

Area in which work is to be carried out must be clean, safe and hazard free. (Refer to figure 4.)

2. Set-up gantry tripod above manhole

Assemble and position the gantry above the manhole safely and as practically as possible. Attach the winch or chain block to the gantry for lifting the AtlanFilters.

Perform safety procedures ie. attach harnesses etc. (if confined space).

3. Open manhole lid

Once you have sent up the Gantry and ensured that the area is safe to operate in, you can proceed to open the manhole lid, using lid lifters.

4. Conduct gas tests

(If tank is classed confined space)

Once the lids have been removed to a safe distance to prevent tripping, you must then proceed to conduct gas tests. Perform necessary gas tests according to the confined space regulations.

5. Once confined space has been deemed safe to operate in, enter tank safely

Once you have carried out the required gas test and the work area is deemed safe, you may then enter the pit via a ladder or winch system to assess the work area you will be operating in. Ensure all confined space

6. AtlanFilter system assessment

Perform a review of the AtlanFilter system using the AtlanFilter assessment report/checklist.

7. Pollutant removal from tank

Perform clean-up using a licenced vacuum truck contractor or wet/dry vacuum, depending on level of sediment built up and/or tank size.

8. Reinstate AtlanFilter system and disposal

At the completion of the site inspection, ensure the site is reinstated back to its initial state and all pollutants are removed from the site in line with pollutant disposal procedures.

9. Sign off and forward a copy of the report to property manager and Atlan representative

CARTRIDGE RECYCLING AND REPLACEMENT

AtlanFilter cartridges can be swapped out for new cartridges. The spent AtlanFilter cartridges can be collected from site and sent to Atlan Stormwater's facilities, where the spent media will be removed from the cartridge in factory conditions and disposed of in accordance with environmental regulations.

The AtlanFilter cartridge will be recharged with new media, thereby recycling and repurposing the cartridge.

AtlanFilter replacement procedures may vary depending on the configuration of the AtlanFilters, the type of vault and engineers' specs. Replacement instructions for manhole AtlanFilter systems and precast vault AtlanFilter systems are contained in this section.

At the completion of a standard inspection, AtlanFilter replacement may be deemed necessary immediately or scheduled for a future date. Steps undertaken for cartridge replacement should be in general accordance with the procedure outlined below but not limited.

1. Implement pre-start safety measures

Ensure that the area in which operational works are to be carried out is cordoned off, to prevent unauthorised access. Adequate safety barriers must be erected.

Area in which work is to be carried out must be clean, safe and hazard free.

2. Set-up gantry tripod above manhole

Assemble and position the gantry above the manhole safely and as practically as possible. Attach the winch or chain block to the gantry for lifting the AtlanFilters.

Perform safety procedures ie. attach harnesses etc. (if confined space).

3. Open manhole lid

Once you have sent up the gantry and ensured that the area is safe to operate in, you can proceed to open the manhole lid, using lid lifters.

4. Conduct gas tests

(If tank is classed confined space)

Once the lids have been removed to a safe distance to prevent tripping, you must then proceed to conduct gas tests. Perform necessary gas tests according to the confined space regulations.

5. Once confined space has been deemed safe to operate in, enter tank safely

Once you have carried out the required gas test and the work area is deemed safe, you may then enter the pit via a ladder or winch system to assess the work area you will be operating in. Ensure all confined space procedures are followed.

6. Remove exhausted cartridges

Disconnect all internal pipe work from inside the vault. Unbolt anti-floatation measures and remove cartridges from the vault using Gantry Tripod method.

7. Pollutant removal

Using a wet/dry vacuum or sucker truck, suck out all the residual pollutant from the vault.

8. Install pipework and AtlanFilters

Please refer to the below standard install diagrams for the AtlanFilters. Then refer to your site specific drawings, as site requirements may require something different to the standard layout. Lower filters into tank, position into place, connect filter outlet pipework with the supplied fittings.

9. Install anti–floatation system

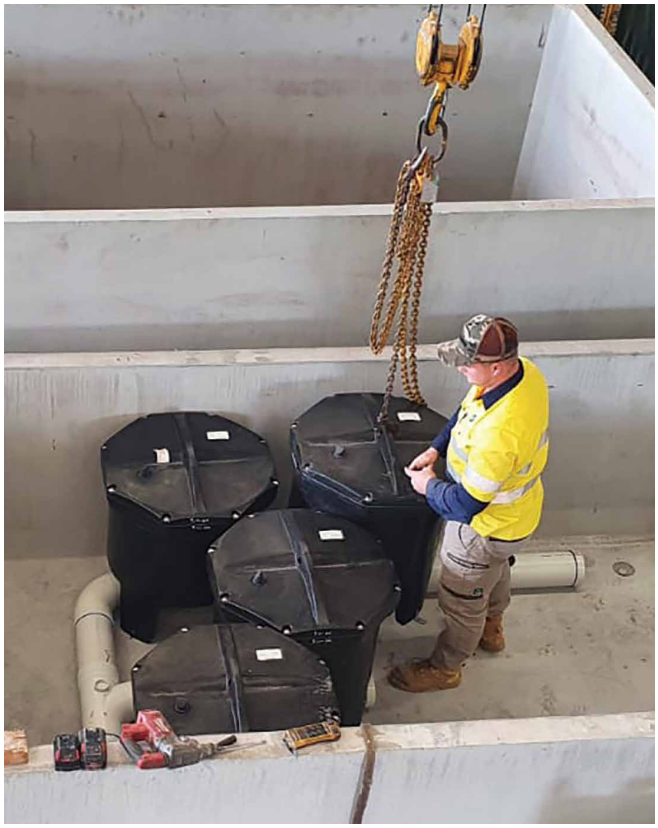
Please refer to the detailed drawings showing how the anti-floatation (anchor) bars are to be installed.

10. Sign off and forward a copy of the report to property manager and Atlan representative

SITE EXIT & CLEAN UP

At the end of the scheduled maintenance, approved contractors or Atlan maintenance crew are required to reinstate the site to pre-existing conditions. Steps included but limited to are:

- Ensure all access covers are securely inserted back into their frames;
- Remove and dispose collected pollutants from the site in accordance with local regulator authorities;
- Retrieve all traffic control measures and maintenance tools; and
- Return all exhausted and/or damaged Atlan products to Atlan Stormwater to begin recycling program.



PHONE: 1300 773 500
EMAIL: sales@spel.com.au
OFFICE: 897 Wellington Road, Rowville, VIC 3178
ABN: 32 379 724 600
www.atlan.com.au

Appendix - System Warranty

WARRANTY

THE ATLANFILTER & STORMSACK PRODUCT

Manufacturer's Warranty

Solely a warranty on the structural integrity of the supplied Atlan Filters & StormSacks. This warranty is automatic with supply and last 5 years on Atlan Filters & 2 Year on Atlan StormSacks

Operational Warranty

For as long as the Atlan products were commissioned at the time of construction completion and there is an active maintenance contract currently in place with Atlan, Atlan warrants that the operating components of the Atlan Stormwater treatment system are in full operatable condition.

Atlan Filter Operational Warranty Caveats;

1. Warranty will not apply if Atlan Filters are subjected to construction silt load
2. Warranty only applied to projects that have StormSacks fitted in all upstream pits or an Atlan approved GPT
3. Atlan have an active maintenance contract in place for the site

StormSack Operational Warranty Caveats;

1. Warranty does not apply to StormSack bags damaged by cigarette butt burns
2. Warranty doesn't apply to damage caused by vandalism
3. Warranty doesn't apply if Atlan does not have an active maintenance contract in place

Commissioning is a standard requirement of the Operational Warranty and is intended to ensure that all Atlan products are installed correctly and they are in a clean operatable condition at the time of site hand over/ construction completion. As part of the Commissioning process an Atlan representative will attend site, inspect and provide a report of approval. This report can be provided to any involved parties for their general records. This report of approval is also generally used by the installer as a record to say that they have installed as per manufacturer's specifications and requirements. If the client chooses to forfeit the Atlan onsite Commissioning, Atlan has no operational warranty obligation in this instance.

The Atlan Maintenance Contract is a maintenance program offered by Atlan for all sites and all Atlan products and is also a standard requirement of the Operational Warranty. Included in the maintenance program, Atlan technicians conduct scheduled periodic maintenance inspections to ensure the Atlan products are operating in accordance to their to requirements and provide a report on their findings. Based on the report will further action additional to the contract be required if there is repairs, rectifications or extensive cleans etc needed to restore the Atlan products back to full operating condition. For as long as there is an active maintenance contract in place with Atlan, Atlan will guarantee that the Atlan products are operating in their designed manner. If the client chooses to tender out/award the Maintenance and Operational Warranty to another service provider, this is fine with Atlan and it is now the new service providers responsibility to warrant that the operating components of the Atlan Stormwater treatment system are in full operatable condition. Atlan has no operational warranty obligation in this instance.

Atlan
STORMWATER

atlan.com.au
1300 773 500 | SALES@ATLAN.COM.AU

Amended Submission to Planning Authority Notice

Application details

Council Planning Permit No.	DA 2025/26
Council notice date	4/03/2025
TasWater Reference No.	TWDA 2025/00205-BTN
Date of response	09/07/2025 ~~27/05/2025~~ ~~12/03/2025~~
TasWater Contact	Timothy Carr
Phone No.	0419 306 130

Response issued to

Council name	BRIGHTON COUNCIL
Contact details	development@brighton.tas.gov.au

Development details

Address	6 WOODRIEVE RD, BRIDGEWATER
Property ID (PID)	9639793
Description of development	Self Storage Facility - Staged

Schedule of drawings/documents

Prepared by	Drawing/document No.	Revision No.	Issue date
Little Island Building Design	Proposed Site Plan – LI24009-02	04 ~~03~~ ~~02~~	01/07/2025 ~~22/05/2025~~ ~~20/02/2025~~
Little Island Building Design	Site Plan – LI24009-03	04 ~~03~~ ~~02~~	01/07/2025 ~~22/05/2025~~ ~~20/02/2025~~

Conditions

Pursuant to the *Water and Sewerage Industry Act* 2008 (TAS) Section 56P(1) TasWater imposes the following conditions on the permit for this application:

CONNECTIONS, METERING & BACKFLOW

1. A suitably sized water supply with a metered connection and sewerage system and connections to the development must be designed and constructed to TasWater's satisfaction and be in accordance with any other conditions in this permit.

   Advice; *the water meter is to be located, as for TasWater to have unfettered access at all times.*

2. Any removal/supply and installation of water meters and/or the removal of redundant and/or installation of new and modified property service connections must be carried out by TasWater at the developer's cost.

3. Prior to commencing construction of the development, any water connection utilised for construction must have a backflow prevention device and water meter installed, to the satisfaction of TasWater.

INFRASTRUCTURE

4. Prior to applying for a Certificate for Certifiable Works, the developer must physically locate all existing infrastructure to provide sufficient information for accurate design and physical works to be undertaken.

5. Plans submitted with the application for Certificate(s) for Certifiable Work (Building and/or Plumbing) must, to the satisfaction of TasWater show, all existing, redundant and/or proposed property services and mains.

6. Prior to undertaking any works related to water and sewerage, physical markers must be in place that clearly identify where water and/or sewer connections are to be made in accordance with any approved plan to TasWater's satisfaction.

7. The developer must take all precautions to protect existing TasWater infrastructure. Any damage caused to existing TasWater infrastructure during the construction period must be promptly reported to TasWater and repaired by TasWater at the developer's cost.

8. Ground levels over the TasWater assets and/or easements must not be altered without the written approval of TasWater.

PRIVATE STORMWATER

9. The private stormwater drainage and pits must be located outside of the sewer easement.

56W CONSENT

10. When applying for a Certificate for Certifiable Work (Building) and/or (Plumbing), the application documentation must include an application to TasWater, pursuant to section 56W of the Water and Sewerage Industry Act 2008, for its consent in respect of that part of the development which is built within a TasWater easement or over or within two metres of TasWater infrastructure.

DEVELOPMENT ASSESSMENT FEES

11. The applicant or landowner as the case may be, must pay a development assessment fee of $242.85 to TasWater, as approved by the Economic Regulator and the fees will be indexed, until the date paid to TasWater.

The payment is required within 30 days of the issue of an invoice by TasWater.

Advice

General

For information on TasWater development standards, please visit
https://www.taswater.com.au/building-and-development/technical-standards
For application forms please visit
https://www.taswater.com.au/building-and-development/development-application-form

Service Locations

Please note that the developer is responsible for arranging to locate the existing TasWater infrastructure and clearly showing it on the drawings. Existing TasWater infrastructure may be located by a surveyor and/or a private contractor engaged at the developers cost to locate the infrastructure.

(a) A permit is required to work within TasWater's easements or in the vicinity of its infrastructure. Further information can be obtained from TasWater.
(b) TasWater has listed a number of service providers who can provide asset detection and location services should you require it. Visit https://www.taswater.com.au/building-and-development/service-locations for a list of companies.
(c) Sewer drainage plans or Inspection Openings (IO) for residential properties are available from your local council.

NOTE: In accordance with the WATER AND SEWERAGE INDUSTRY ACT 2008 - SECT 56ZB A regulated entity may charge a person for the reasonable cost of –

(a) a meter; and

(b) installing a meter.

56W Consent

The plans submitted with the application for the Certificate for Certifiable Work (Building) and/or (Plumbing) will need to show footings of proposed buildings located over or within 2.0m from TasWater pipes and will need to be designed by a suitably qualified person to adequately protect the integrity of TasWater's infrastructure, and to TasWater's satisfaction, be in accordance with AS3500 Part 2.2 Section 3.8 to ensure that no loads are transferred to TasWater's pipes. These plans will need to also include a cross sectional view through the footings which clearly shows;

(a) Existing pipe depth and proposed finished surface levels over the pipe;

(b) The line of influence from the base of the footing must pass below the invert of the pipe and be clear of the pipe trench and;

(c) A note on the plan indicating how the pipe location and depth were ascertained.

(d) The location of the property service connection and sewer inspection opening (IO).

Declaration

The drawings/documents and conditions stated above constitute TasWater's Submission to Planning Authority Notice.