



AGENDA ATTACHMENTS

3RD DECEMBER 2019

ORDINARY COUNCIL MEETING
BOTHWELL COUNCIL CHAMBERS

Table of Contents

AGENDA ITEM 10.1	3
RECEIVAL DRAFT MINUTES ORDINARY MEETING	
AGENDA ITEM 10.3	23
RECEIVAL DRAFT MINUTES CETNRAL HIGHLANDS VISTORS CENTRE MANAGEMENT COMMITTEE MEETING	
AGENDA ITEM 10.4	26
RECEIVAL DRAFT SPECIAL PLANNING COMMITTEE MEETING	
AGENDA ITEM 10.5	64
RECEIVAL DRAFT SWIMMING POOL COMMITTEE MEETING	
AGENDA ITEM 10.6	67
RECEIVAL DRAFT AUSTRALIA DAY COMMITTEE MEETING	
AGENDA ITEM 12.0	69
DERWENT CATCHMENT PROJECT REPORT	
AGENDA ITEM 14.1	87
DA2019/41: SUBDIVISION (2 LOTS): 381 MARLBOROUGH ROAD, BRONTE PARK	
AGENDA ITEM 14.2a	88
DA2019/62: RESOURCE DEVELOPMENT (AQUACULTURE) – HAMILTON RECIRCULATING AQUACULTURE SYSTEM HATCHERY: 56 & 90 WOODMOOR ROAD, OUSE	
AGENDA ITEM 14.2b	89
DA2019/62: RESOURCE DEVELOPMENT (AQUACULTURE) – HAMILTON RECIRCULATING AQUACULTURE SYSTEM HATCHERY: 56 & 90 WOODMOOR ROAD, OUSE	
AGENDA ITEM 14.2c	99
DA2019/62: RESOURCE DEVELOPMENT (AQUACULTURE) – HAMILTON RECIRCULATING AQUACULTURE SYSTEM HATCHERY: 56 & 90 WOODMOOR ROAD, OUSE	
AGENDA ITEM 14.2d	178
DA2019/62: RESOURCE DEVELOPMENT (AQUACULTURE) – HAMILTON RECIRCULATING AQUACULTURE SYSTEM HATCHERY: 56 & 90 WOODMOOR ROAD, OUSE	
AGENDA ITEM 14.2e	205
DA2019/62: RESOURCE DEVELOPMENT (AQUACULTURE) – HAMILTON RECIRCULATING AQUACULTURE SYSTEM HATCHERY: 56 & 90 WOODMOOR ROAD, OUSE	
AGENDA ITEM 14.2f	212
DA2019/62: RESOURCE DEVELOPMENT (AQUACULTURE) – HAMILTON RECIRCULATING AQUACULTURE SYSTEM HATCHERY: 56 & 90 WOODMOOR ROAD, OUSE	
AGENDA ITEM 14.2g	220
DA2019/62: RESOURCE DEVELOPMENT (AQUACULTURE) – HAMILTON RECIRCULATING AQUACULTURE SYSTEM HATCHERY: 56 & 90 WOODMOOR ROAD, OUSE	
AGENDA ITEM 14.3	224
DATA SHARE AGREEMENT	
AGENDA ITEM 16.5	291
SAFEGUARDING VOLUNTEERING IN TASMANIA PROJECT - EXPRESSION OF INTEREST AGENDA	
ITEM 16.6	303
TERMS OF REFERENCE CENTRAL HIGHLANDS VISITOR CENTRE MANAGEMENT COMMITTEE	

Central Highlands Council

DRAFT Minutes – ORDINARY MEETING – 19th November 2019

Draft Minutes of an Open Ordinary Meeting of Central Highlands Council held at Hamilton Council Chambers, on Tuesday 19th November 2019, commencing at 9am.

1.0 OPENING

The Mayor advises the meeting and members of the public that Council Meetings, not including Closed Sessions, are audio recorded and published on Council's Website.

Mayor L Triffitt opened the meeting at 9.00am.

2.0 PRESENT

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer (arrived at 9.30am), Clr A Bailey, Clr S Bowden, Clr A Campbell, Clr R Cassidy, Clr J Honner, Clr J Poore, Mrs Lyn Eyles (General Manager), Mr Adam Wilson (Deputy General Manager) and Mrs Michaela Herbert (Minutes Secretary).

3.0 APOLOGIES

NIL

4.0 PECUNIARY INTEREST DECLARATIONS

In accordance with Regulation 8 (7) of the Local Government (Meeting Procedures) Regulations 2015, the Mayor requests Councillors to indicate whether they or a close associate have, or are likely to have a pecuniary interest (any pecuniary or pecuniary detriment) or conflict of interest in any Item of the Agenda.

Clr J Honner 15.6 BYPASS ROAD 'WIHAREJA'

Clr A Archer 15.7 POLICY 2014-23 MAINTENANCE OF ROADS & BRIDGES BEHIND LOCKED GATES ON COUNCIL ROADS

Clr S Bowden 15.7 POLICY 2014-23 MAINTENANCE OF ROADS & BRIDGES BEHIND LOCKED GATES ON COUNCIL ROADS

5.0 CLOSED SESSION OF THE MEETING

Regulation 15 (1) of the *Local Government (Meeting Procedures) Regulations 2015* states that at a meeting, a council by absolute majority, or a council committee by simple majority, may close a part of the meeting to the public for a reason specified in sub-regulation (2).

As per *Regulation 15 (1) of the Local Government (Meeting Procedures) Regulations 2015*, this motion requires an absolute majority

Moved: Clr A Bailey

Seconded: Clr J Honner

THAT pursuant to *Regulation 15 (1) of the Local Government (Meeting Procedures) Regulations 2015*, Council, by absolute majority, close the meeting to the public to consider the following matters in Closed Session:

Item Number	Matter	<i>Local Government (Meeting Procedures) Regulations 2015</i>
1	Confirmation of the Closed Session Minutes of the Meeting held on 15 October 2019	15 (2)(g) – information of a personal and confidential nature or information provided to Council on the condition it is kept confidential

2	Confidential Report from the General Manager	Regulation 15 (2)(g) – information of a personal and confidential nature or information provided to Council on the condition it is kept confidential
3	Legal Update on Matters	Regulation 15 (4) (a) - a Council or Committee may close part of a meeting when it is acting or considering as referred to in subregulation (3) if it is to consider any matter relating to (a) legal action taken by, or involving, the council; or (b) possible future legal action that may be taken, or may involve, the council.
4	Tenders 02/19, 03/19 and 05/19	Regulation 15 (2) (d) – contracts, and tenders, for the supply of goods and services and their terms, conditions, approval and renewal
5	Consideration of Matters for Disclosure to the Public	Regulation 15 (8) - While in a closed meeting, the Council, or Council Committee, is to consider whether any discussions, decisions, reports or documents relating to that closed meeting are to be kept confidential or released to the public, taking into account privacy and confidentiality issues

CARRIED BY ABSOLUTE MAJORITY

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A Bailey, Clr S Bowden, Clr A Campbell, Clr R Cassidy, Clr J Honner and Clr J Poore.

Mrs Michaela Herbert left the meeting at 9.05am.

5.1 MOTION OUT OF CLOSED SESSION

Moved: Clr R Cassidy

Seconded: Clr J Honner

THAT the Council:

- (1) Having met and dealt with its business formally move out of the closed session; and
- (2) Resolved to report that it has determined the following:

Item Number	Matter	Outcome
1	Confirmation of the Closed Session Minutes of the Meeting held on 15 October 2019	Closed Session Minutes of 15 October 2019 were confirmed
2	Confidential Report from the General Manager	Council discussed and noted the contents of the report and the Mayor was authorised to release information on the new management of the Bothwell Medical Centre practice after a contract is signed.
3	Legal Update on Matters	Council noted the contents of the report and resolved not to appeal the Tribunal's decision on the Wild Drake Development at Lake Malbena
4	Tenders 02/19, 03/19 and 05/19	(a) Tender 02/19 Gowan Brae Bridge – That Council accepted the tender from TasSpan. (b) Tender 03/19 Dawson Road Bridge Underpinning – That Council accepted the tender from BridgePro (c) Tender 05/19 Gravel Crushing- That Council accepted the tender from Fieldwicks.
5	Consideration of Matters for Disclosure to the Public	Matters were considered

CARRIED BY ABSOLUTE MAJORITY

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A Bailey, Clr S Bowden, Clr A Campbell, Clr R Cassidy, Clr J Honner and Clr J Poore.

OPEN MEETING TO PUBLIC

The meeting opened to the public at 10.12am.

*Mrs Michaela Herbert returned to the meeting at 10.12am
Mrs Tracey Turale and Mrs Pip Allwright entered the meeting at 10.12am and left the meeting at 10.34am.
Clr A Archer left the meeting at 10.19am and returned at 10.22am.*

6.0 DEPUTATIONS

10.13am – 10.33am Members from HATCH (Mrs Tracey Turale and Mrs Pip Allwright) provided an update on the Food Connect Project in the Municipality as well as an update on other projects and what will be happening in the new year.

MOVE TO ITEM 16.12 BOTHWELL WATER

Moved: Clr J Honner

Seconded: Clr R Cassidy

THAT Council move to item 16.12 BOTHWELL WATER.

CARRIED

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A Bailey, Clr S Bowden, Clr A Campbell, Clr R Cassidy, Clr J Honner and Clr J Poore.

Mrs Lyn Eyles returned to the meeting at 10.35am.

16.12 BOTHWELL WATER

Discussed and Noted

MOVE TO ITEM 6.1 PUBLIC QUESTION TIME

Moved: Clr J Honner

Seconded: Clr A Bailey

THAT Council move to item 6.1 PUBLIC QUESTION TIME.

CARRIED

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A Bailey, Clr S Bowden, Clr A Campbell, Clr R Cassidy, Clr J Honner and Clr J Poore.

6.1 PUBLIC QUESTION TIME

NIL

7.0 MAYORAL COMMITMENTS

8 th October 2019	Business of Council
10 th October 2019	Business of Council
11 th October 2019	Business of Council
12 th October 2019	Business of Council re rate payer
14 th October 2019	STCA meeting Hobart
15 th November 2019	Ordinary Meeting of Council Bothwell
16 th October 2019	Meeting re GP services Brighton
17 th October 2019	Meeting with ratepayer
21 st October 2019	Councillors on site visit Tassal Hatcher Ranelagh
22 nd October 2019	ABC Radio Interview DPIPWE BIO Security Workshop – Bothwell Visit to Bothwell Medical Centre
23 rd October 2019	Meeting with Leader of Opposition Hon Rebecca White
24 th October 2019	Business of Council Telephone Meeting Deputy Mayor
25 th October 2019	Business of Council
26 th October 2019	Telephone meeting with Rate Payer
28 th October 2019	Meeting re Bothwell Medical Centre Meeting Legal Reps Hamilton Meeting with GM & Cllr Anita Campbell
29 th October 2019	Meeting with Premier Will Hodman re Medical Bothwell Medical Centre
30 th October 2019	Business of Council
31 st October 2019	Business of Council
1 st November 2019	Business of Council ABC Radio interview x 2 re Fire update Telephone meeting with the Deputy GM
2 nd November 2019	Meeting with a ratepayer
3 rd November 2019	Business of Council
5 th November 2019	Meeting with visiting GP Bothwell Medical Centre
6 th November 2019	Citizenships meeting Hamilton
7 th November 2019	Business of Council opening tenders
11 th November 2019	Business of Council opening tenders
12 th November 2019	Business of Council

NOTED

7.1 COUNCILLOR COMMITMENTS

Deputy Mayor J Allwright

17 th September 2019	Ordinary Council Meeting – Hamilton
15 th October 2019	Ordinary Council Meeting – Bothwell
21 st October 2019	Tassal visit – Huonville
22 nd October 2019	Audit Panel Meeting – Hamilton
28 th October 2019	Lake Malbena Workshop – Hamilton
30 th October 2019	Bushwatch Meeting – Gretna
7 th November 2019	Southern Fire Management – Lindisfarne
13 th November 2019	Tas Water meeting – Riverside, Launceston

Cllr J Honner

15 th October 2019	Ordinary Council Meeting – Bothwell
-------------------------------	-------------------------------------

Cllr A Campbell

15 th October 2019	Ordinary Council Meeting – Bothwell
21 st October 2019	Tassal tour
22 nd October 2019	Biosecurity workshop – Bothwell
28 th October 2019	Meeting with Susan Swart , Mayor and GM, re GP – Hamilton Meeting update from David Morris re Lake Malbena – Hamilton
5 th November 2019	meeting with Mayor, GM and HR plus and potential GP, Bothwell
14 th November 2019	meeting at Ouse with Mayor and Susan Swart re GP

NOTED

7.2 GENERAL MANAGER'S COMMITMENTS

15 th October 2019	Council Meeting Meeting Dr Gardner & Jane Rogers
17 th October 2019	Meeting Fae Robinson
21 st October 2019	On site visit Tassal Huon Valley
22 nd October 2019	Audit Panel Meeting Council Workshop
28 th October 2019	Meeting Susan Swart Meeting David Morris
30 th September 2019	Meeting Bushfire Recovery
5 th November 2019	Meeting Dr Kelly
6 th November 2019	Citizenship Ceremony

NOTED

7.3 DEPUTY GENERAL MANAGER'S COMMITMENTS

17 th October 2019	Meeting with Mrs Fae Robinson regarding Health and Wellbeing Plan
21 st October 2019	Meeting regarding LMI Claims Risk Analysis
22 nd October 2019	Audit Panel Meeting
23 rd October 2019	Glyphosate Information Session
29 th October 2019	HR software demo
30 th October 2019	Bushfire Recovery Forum with Dr Rob Gordon
31 st October 2019	Electric vehicle site Meeting Derwent Bridge
4 th November 2019	Local Government Shared Services Meeting
15 th November 2019	TTCI Training session - WHS
19 th November 2019	Ordinary Council Meeting – Hamilton

NOTED

8.0 NOTIFICATION OF COUNCIL WORKSHOPS HELD

22 nd October 2019	DPIPWE Bio-Security Workshop held at Bothwell
-------------------------------	---

NOTED

8.1 FUTURE WORKSHOPS

11 th February 2020	Council Workshop – Mobile coverage Central Highlands (Telstra Mr Patterson)
--------------------------------	---

NOTED

9.0 MAYORAL ANNOUNCEMENTS

The Mayor announced that Council will receive \$50,000.00 contribution from the State Government towards the Bothwell Medical Centre.

10.0 MINUTES

10.1 RECEIVAL DRAFT MINUTES ORDINARY MEETING

Moved: Cllr J Honner

Seconded: Cllr S Bowden

THAT the Draft Minutes of the Open Council Meeting of Council held on Tuesday 15th October 2019 be received.

CARRIED

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Cllr A Archer, Cllr A Bailey, Cllr S Bowden, Cllr A Campbell, Cllr R Cassidy, Cllr J Honner and Cllr J Poore.

Cllr J Poore left meeting at 10.46am.

10.2 CONFIRMATION OF MINUTES ORDINARY MEETING

Moved: Cllr J Honner

Seconded: Deputy Mayor J Allwright

THAT the Minutes of the Open Council Meeting of Council held on Tuesday 15th October 2019 be confirmed.

CARRIED

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Cllr A Archer, Cllr A Bailey, Cllr S Bowden, Cllr A Campbell, Cllr R Cassidy and Cllr J Honner.

10.3 RECEIVAL DRAFT MINUTES AUDIT PANEL MEETING

Moved: Deputy Mayor J Allwright

Seconded: Cllr J Honner

THAT the Draft Minutes of the Audit Panel Meeting held on Tuesday 22nd October 2019 be received.

CARRIED

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Cllr A Archer, Cllr A Bailey, Cllr S Bowden, Cllr A Campbell, Cllr R Cassidy and Cllr J Honner.

10.4 RECEIVAL DRAFT MINUTES WASTE COMMITTEE MEETING

Moved: Deputy Mayor J Allwright

Seconded: Cllr R Cassidy

THAT the Draft Minutes of the Waste Committee Meeting held on Wednesday 30th October 2019 be received.

CARRIED

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Cllr A Archer, Cllr A Bailey, Cllr S Bowden, Cllr A Campbell, Cllr R Cassidy and Cllr J Honner.

11.0 BUSINESS ARISING

- 14.1 Litter and Dumping Management System and MOU signed by General Manager
- 14.2 Correspondence sent to LGAT by Deputy General Manager
- 14.3 Manager Development & Environmental Services to commence negotiation of land transfer with property owner
- 15.4 Correspondence sent by Manager Works and Service
- 15.2 Manager Works and Service has ordered new equipment
- 16.1 Correspondence sent by Deputy General Manager
- 16.2 Correspondence sent by Mayor
- 16.3 Correspondence sent by Deputy General Manager
- 16.4 Correspondence sent by Deputy General Manager
- 16.7 Correspondence sent by Deputy General Manager
- 16.8 Correspondence sent by Deputy General Manager
- 16.9 Correspondence sent by Deputy General Manager
- 16.10 Policy updated on Council website
- 16.11 Correspondence sent by General Manager

NOTED

12.0 DERWENT CATCHMENT PROJECT REPORT

Moved: Deputy Mayor J Allwright

Seconded: Cllr J Honner

THAT the Derwent Catchment Project report be received.

CARRIED

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Cllr A Archer, Cllr A Bailey, Cllr S Bowden, Cllr A Campbell, Cllr R Cassidy and Cllr J Honner.

Cllr J Poore returned to the meeting at 10.47am.

13.0 FINANCE REPORT

Moved: Cllr R Cassidy

Seconded: Cllr S Bowden

THAT the Finance Report be received.

CARRIED

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Cllr A Archer, Cllr A Bailey, Cllr S Bowden, Cllr A Campbell, Cllr R Cassidy, Cllr J Honner and Cllr J Poore.

13.1 ANNUAL REPORT 2018/19

Moved: Clr J Honner

Seconded: Clr R Cassidy

THAT Council adopt the 2018/19 Annual Report as presented.

CARRIED

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A Bailey, Clr S Bowden, Clr A Campbell, Clr R Cassidy, Clr J Honner and Clr J Poore.

Mr Graham Rogers (Manager of Development and Environmental Services) entered the meeting at 10.52am.

14.0 DEVELOPMENT & ENVIRONMENTAL SERVICES

In accordance with Regulation 25(1) of the Local Government (Meeting Procedures) Regulations 2015, the Mayor advises that the Council intends to act as a Planning Authority under the Land Use Planning and Approvals Act 1993, to deal with the following items:

Moved: Clr J Poore

Seconded: Clr A Bailey

THAT the Development & Environmental Services Report be received.

CARRIED

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A Bailey, Clr S Bowden, Clr A Campbell, Clr R Cassidy, Clr J Honner and Clr J Poore.

14.1 DRAFT MEMORANDUM OF UNDERSTANDING : WASTE MANAGEMENT FOR THE SOUTHERN TASMANIAN REGION

Moved: Deputy Mayor J Allwright

Seconded: Clr A Bailey

THAT Council sign the MOU with LGAT and the Council's representatives being a member from the Development and Environmental Services Department.

CARRIED 7 / 2

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Bailey, Clr S Bowden, Clr A Campbell, Clr J Honner and Clr J Poore.

AGAINST the Motion:

Clr A Archer and Clr R Cassidy

Mr Matt ... entered the meeting at 11.04am. (TasWater Rep, need last name)

14.2 BOTHWELL TOWN HALL HIRE: GRAND HOUSES AND SCOTTISH TOWNS

Moved: Clr J Poore

Seconded: Clr R Cassidy

THAT Council waive the Hall hire fees for the Grand Houses and Scottish Towns Event.

CARRIED

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A Bailey, Clr S Bowden, Clr A Campbell, Clr R Cassidy, Clr J Honner and Clr J Poore.

Clr A Campbell left the meeting at 11.11am.

14.3 RECOMMENDATION FROM WASTE COMMITTEE MEETING

Moved: Clr J Poore

Seconded: Clr A Bailey

THAT Council defer this item to the Ordinary Meeting of Council in February.

CARRIED

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A Bailey, Clr S Bowden, Clr R Cassidy, Clr J Honner and Clr J Poore.

Clr A Campbell returned to the meeting at 11.12am.

Moved: Clr J Poore

Seconded: Clr A Bailey

THAT the DES Manager write to the Department of State Growth regarding the accumulation of rubbish on the corner of Highland Lakes Road.

CARRIED

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A Bailey, Clr S Bowden, Clr R Cassidy, Clr J Honner and Clr J Poore.

14.4 FIRES

Moved: Clr J Honner

Seconded: Clr A Campbell

THAT the information brochure entitled "A Guide to Using Fire Safety Outdoors, at home, in the bush or on holidays 2015-19 be:

- included in the Highlands Digest; and
- put on Councils Webpage

CARRIED

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A Bailey, Clr S Bowden, Clr A Campbell, Clr R Cassidy, Clr J Honner and Clr J Poore.

14.5 GOLDWIND AUSTRALIA PTY LTD: SURPLUS BLADE

Moved: Clr A Campbell

Seconded: Clr A Bailey

THAT Council defer this item until Ordinary Meeting of Council in December with the DES Manager to investigate options of placing the blade on a private property or near the Waddamana Power Station.

CARRIED

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A Bailey, Clr S Bowden, Clr A Campbell, Clr R Cassidy, Clr J Honner and Clr J Poore.

14.6 WASTE MANAGEMENT – GREEN WASTE SERVICE

Moved: Clr R Cassidy

Seconded: Clr A Archer

THAT the matter raised by Councillor Cassidy on the need for a green waste collection service be referred to the Waste Management Committee for consideration.

CARRIED

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A Bailey, Clr S Bowden, Clr A Campbell, Clr R Cassidy, Clr J Honner and Clr J Poore.

*Mr Mike Brewster, Ms Ruth Doughty entered the meeting at 11.42am.
Clr J Poore left the meeting at 11.42am.*

14.7 DES BRIEFING REPORT

PLANNING PERMITS ISSUED UNDER DELEGATION

The following planning permits have been issued under delegation during the past month.

NO PERMIT REQUIRED

DA NO.	APPLICANT	LOCATION	PROPOSAL
2019 / 00068	Longview Design & Drafting	5 Tomray Drive, Brandum	Dwelling (Replace Fire Damage Dwelling)
2019 / 00069	M P Beard	389 Barren Plains Road, Miena	Outbuilding
2019 / 00070	My Build Homes (Tasmania) P/L	26 Pauciflora Drive, London Lakes	Carport
2019 / 00071	J L Hills	6 Meredith Springs Road, Miena	Dwelling & Outbuilding
2019 / 00072	M S Mundy	2 Meredith Springs Road, Miena	Dwelling and Outbuilding
2019 / 00077	J V & P Rainbird	Marked Tree Road, Gretna (CT 171936/1)	Farm Shed

PERMITTED USE

DA NO.	APPLICANT	LOCATION	PROPOSAL
2019 / 00067	J M Stecko	45 Cider Gum Road, Miena	Change of Use to Visitor Accommodation
2019 / 00073	R & M Clark Super Pty Ltd	38 Flintstone Drive, Flintstone	Change of Use to Visitor Accommodation

DISCRETIONARY USE

DA NO.	APPLICANT	LOCATION	PROPOSAL
2019 / 00064	Broadbottom Pty Ltd	CT 166096/1 Lyell Highway, Gretna	Shearing Shed
2019 / 00065	J & C Cosgrove Family Trust	2240 Ellendale Road, Ouse	Change of Use to Visitor Accommodation
2019 / 00038	Another Perspective	45 Franklin Place, Hamilton	Dwelling and Outbuilding

IMPOUNDED DOGS

A Kelpie / Blue Heeler Cross was impounded on 16th October 2019 from a property at Marked Tree Road, Gretna. Dog was surrendered to Council and taken to Dogs Home on 21st October 2019.

NOTED

*Clr J Poore returned to the meeting at 11.44am.
Mr Graham Rogers left the meeting at 11.45am.*

MOVE TO ITEM 6.0 DELEGATIONS

Moved: Clr R Cassidy

Seconded: Clr A Bailey

THAT Council move to item 6.0 DELEGATIONS.

CARRIED

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A Bailey, Clr S Bowden, Clr A Campbell, Clr R Cassidy, Clr J Honner and Clr J Poore.

6.0 DEPUTATIONS

11.45am – 12.25pm TasWater CEO Mr M Brewster – answered questions from Councillors regarding the Bothwell Township water supply as well as provided an overview of the work TasWater is doing in the Municipality.

Mr Mike Brewster, Ms Ruth Doughty and Mr Matt left the meeting at 12.26pm

15.0 WORKS & SERVICES

Moved: Clr J Honner

Seconded: Clr A Bailey

THAT the Works & Services Report be received.

CARRIED

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A Bailey, Clr S Bowden, Clr A Campbell, Clr R Cassidy, Clr J Honner and Clr J Poore.

Clr J Honner thanked the Manager of Works and Services Manager and the Works & Services Crew for the work they have done on the municipal gravel roads in keeping them well maintained.

15.1 ASPHALT WORKS – BOTHWELL RECREATION GROUND

Moved: Clr A Bailey

Seconded: Clr J Poore

THAT Council allow the asphalt to go ahead at the Bothwell Recreation Ground.

CARRIED

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A Bailey, Clr S Bowden, Clr A Campbell, Clr R Cassidy, Clr J Honner and Clr J Poore.

Mr Jason Branch (Manager of Works and Services) entered the meeting at 12.29pm.

15.2 BUDGET REALLOCATION

Moved: Clr J Honner

Seconded: Clr A Bailey

THAT Council reallocate \$50,000.00 from the proposed Wayatinah seals from capital roads to road repairs on Ellendale Road.

CARRIED

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A Bailey, Clr S Bowden, Clr A Campbell, Clr R Cassidy, Clr J Honner and Clr J Poore.

15.3 LARGE GUM TREE – 10 LAKE VIEW DRIVE, CRAMPS BAY

Moved: Clr A Campbell

Seconded: Clr R Cassidy

THAT based on the risk assessment conducted by Alister Hodgeman that no further action is taken on the tree.

CARRIED

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A Bailey, Clr S Bowden, Clr A Campbell, Clr R Cassidy, Clr J Honner and Clr J Poore.

15.4 TREES – QUEENS PARK, BOTHWELL

Moved: Clr Allwright

Seconded: Clr J poore

THAT:

- a) The Works Manager be given authority to engage a qualified arborist to undertake the required maintenance in the report work as soon as practicable.
- b) Council budget for the removal and replacement of one tree in 2021 and review as necessary each year.

CARRIED

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A Bailey, Clr S Bowden, Clr A Campbell, Clr R Cassidy, Clr J Honner and Clr J Poore.

15.5 NEW WATER CART – HAMILTON DEPOT

NOTED

15.6 BYPASS ROAD ‘WIHAREJA’

Moved: Clr R Cassidy

Seconded: Clr J Poore

THAT as per Council's letter dated the 27th of January 2018, Council may be open to consider the re-alignment of the road around the homestead provided there is no cost to Council and a development application is approved by Council.

CARRIED 6 / 3

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A Campbell, Clr R Cassidy, and Clr J Poore.

AGAINST the Motion:

Clr A Bailey, Clr S Bowden and Clr J Honner

Clr J Poore and Clr A Bailey left the meeting at 1.00pm

Clr J Poore returned to the meeting at 1.02pm.

Clr S Bowden and Clr A Archer declared an interest and left the meeting at 1.02pm

15.7 POLICY 2014-23 MAINTENANCE OF ROADS & BRIDGES BEHIND LOCKED GATES ON COUNCIL ROADS

Moved: Clr Cassidy

Seconded: Clr Allwright

THAT Council approve Policy 2014-23 Maintenance of Roads & Bridges behind locked gates on Council Roads.

CARRIED

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Campbell, Clr R Cassidy, Clr J Honner and Clr J Poore.

Clr A Bailey, Clr A Archer and Clr S Bowden returned to the meeting at 1.03pm.

15.8 POLICY 2015-39 GRADING OF SNOW OFF COUNCIL ROADS POLICY

Moved: Clr J Poore

Seconded: Clr A Bailey

THAT Council approve Policy 2015-39 Grading of Snow Off Council Roads Policy.

CARRIED

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A Bailey, Clr S Bowden, Clr A Campbell, Clr R Cassidy, Clr J Honner and Clr J Poore.

15.9 POLICY 2018-54 MINIMUM REQUIREMENTS FOR CONSIDERATION WHEN RECONSTRUCTING OR RESEALING COUNCIL'S ROAD NETWORK

Moved: Clr R Cassidy

Seconded: Clr J Poore

THAT Council revoke Policy 2018-54 Resealing Council's Road Network

CARRIED

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A Bailey, Clr S Bowden, Clr A Campbell, Clr R Cassidy, Clr J Honner and Clr J Poore.

15.10 PELHAM ROAD RECONSTRUCTION

THAT the matter was discussed and resolved.

Mr Jason Branch left the meeting at 1.15pm.

The meeting was adjourned at 1.15pm for lunch and resumed at 1.54pm.

16.0 ADMINISTRATION

16.1 AUSTRALIA DAY AWARDS 2020

Moved: Clr J Honner

Seconded: Clr J Poore

THAT the Australia Day Event be held at the Ellendale Hall on Sunday 26th January 2020.

CARRIED

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A Bailey, Clr S Bowden, Clr A Campbell, Clr R Cassidy, Clr J Honner and Clr J Poore.

16.2 SCHOOL PRESENTATION AWARDS

RESOLVED that the following Councillors attend the Annual School Presentations as follows:

Bothwell District High School at 1.30 pm Thursday, 12 December, 2019 - Mayor L Triffitt and Clr J Honner
Glenora District High School at 1.15 pm Tuesday, 17 December, 2019 – Deputy Mayor J Allwright
Ouse District Primary School at 1.00 pm Tuesday, 10 December 2019 – Mayor L Triffitt, Deputy Mayor J Allwright and Clr A Bailey
Westerway Primary School at 1.00 pm Tuesday, 17 December, 2019 – Mayor L Triffitt

16.3 RECOMMENDATIONS FROM THE AUDIT PANEL

Moved: Clr J Poore

Seconded: Deputy Mayor J Allwright

THAT Council adopt the following documents as recommended by the Audit Panel:

- Annual Report to Council
- Policy No. 2019 – 56 Cybersecurity Policy

CARRIED

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A Bailey, Clr S Bowden, Clr A Campbell, Clr R Cassidy, Clr J Honner and Clr J Poore.

16.4 DRAFT AMENDMENTS TO THE LOCAL GOVERNMENT (GENERAL) REGULATIONS 2015 - 337 CERTIFICATES

Moved: Clr J Honner

Seconded: Clr J Poore

THAT any feedback on the proposed draft amendments to the Local Government (General) Regulations 2015 - 337 Certificates be provided to the Deputy General Manager by Wednesday the 27 November 2019 so the Deputy General Manager can lodge the feedback with the Local Government Association of Tasmania by the 29 November.

CARRIED

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A Bailey, Clr S Bowden, Clr A Campbell, Clr R Cassidy, Clr J Honner and Clr J Poore.

16.5 REQUEST HAMILTON DISTRICT AGRICULTURAL SOCIETY

Moved: Clr A Bailey

Seconded: Clr S Bowden

THAT Council give permission for the Hamilton Show Committee to hold a clay target stand at the 2020 Hamilton Show subject to the following conditions:

- The Show Committee having all relevant insurances;
- The Committee considers buffer zones for animals; and
- The Committee complies with all relevant legal requirements

CARRIED

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A Bailey, Clr S Bowden, Clr A Campbell, Clr R Cassidy, Clr J Honner and Clr J Poore.

16.6 ELECTRIC HIGHWAY TASMANIA SITE AGREEMENT DERWENT BRIDGE

Moved: Clr J Poore

Seconded: Clr S Bowden

THAT Council approve the General Manager to sign the Lease Agreement between Electric Highway Tasmania and Central Highlands Council which will allow all parties to the agreement to work co-operatively on the installation, operation and maintenance of the charging station at Derwent Bridge with changes as suggested.

CARRIED

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A Bailey, Clr S Bowden, Clr A Campbell, Clr R Cassidy, Clr J Honner and Clr J Poore.

16.7 INLAND FISHERIES SERVICES SITE AGREEMENT BRONTE LAGOON

Moved: Clr A Bailey

Seconded: Clr J Honner

THAT Council approve the General Manager to sign the Lease Agreement between Inland Fisheries Services and Central Highlands Council which will allow all parties to the agreement to work co-operatively on the installation, operation and maintenance of a public toilet facility at the Bronte Lagoon boat ramp.

CARRIED

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A Bailey, Clr S Bowden, Clr A Campbell, Clr R Cassidy, Clr J Honner and Clr J Poore.

16.8 NATIONAL TIMBER COUNCILS ASSOCIATION STRATEGIC DIRECTIONS FOR 2018-2020

NOTED

16.9 2020 MUNICIPAL REVALUATIONS

NOTED

16.10 REQUEST FOR RATES REMISSION 01-0838-02982

Moved: Clr Allwright

Seconded: Clr Campbell

THAT Council remit the Solid Waste Garbage Fee of \$160.00 on property 01-0838-02982.

CARRIED

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A Bailey, Clr S Bowden, Clr A Campbell, Clr R Cassidy, Clr J Honner and Clr J Poore.

16.11 PLANNING MEETING NOMINATION

NOTED

16.12 BOTHWELL WATER

This item was discussed earlier in the meeting.

16.13 REMISSIONS UNDER DELEGATION

NOTED

16.14 STATE GRANTS COMMISSION DECISION CD20-01 - SOCIO-ECONOMIC FACTORS IN THE BASE GRANT MODEL TO REPLACE THE UNEMPLOYMENT COST ADJUSTOR

Moved: Clr R Cassidy

Seconded: Clr J Honner

THAT any feedback on the State Grants Commission Decision Paper be provided to the Deputy General Manager by Wednesday the 20 November 2019 so the Deputy General Manager can lodge the feedback with the Local Government Association of Tasmania by the 22 November 2019.

CARRIED

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A Bailey, Clr S Bowden, Clr A Campbell, Clr R Cassidy, Clr J Honner and Clr J Poore.

16.15 POLICY 2015-37 RECORDS MANAGEMENT POLICY

Moved: Clr J Honner

Seconded: Clr S Bowden

THAT Council approve Policy 2015-37 Records Management Policy

CARRIED

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A Bailey, Clr S Bowden, Clr A Campbell, Clr R Cassidy, Clr J Honner and Clr J Poore.

16.16 POLICY 2016-44 PURCHASING & PAYMENTS CONTROL POLICY

Moved: Clr S Bowden

Seconded: Clr A Archer

THAT Council approve Policy 2016-44 Purchasing & Payments Control Policy.

CARRIED

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A Bailey, Clr S Bowden, Clr A Campbell, Clr R Cassidy, Clr J Honner and Clr J Poore.

16.17 POLICY 2018-52 COMMUNITY BUS POLICY

Moved: Clr S Bowden

Seconded: Clr R Cassidy

THAT Council approve Policy No. 2018-52 Community Bus Policy with the amendment.

CARRIED

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A Bailey, Clr S Bowden, Clr A Campbell, Clr R Cassidy, Clr J Honner and Clr J Poore.

16.18 FENTONBURY WAR MEMORIAL

Moved: Clr J Honner

Seconded: Clr R Cassidy

THAT Council write to the Westerway Bush Watch thanking them for their offer to help refurbish the Fentonbury War Memorial.

CARRIED

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A Bailey, Clr S Bowden, Clr A Campbell, Clr R Cassidy, Clr J Honner and Clr J Poore.

16.19 POLICY 2013-18 EMPLOYEE RECRUITMENT & SELECTION POLICY

Moved: Clr J Honner

Seconded: Clr A Archer

THAT Council approve Policy 2013-18 Employee Recruitment & Selection Policy.

CARRIED

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A Bailey, Clr S Bowden, Clr A Campbell, Clr R Cassidy, Clr J Honner and Clr J Poore.

16.20 POLICY 2013-17 USE OF COUNCIL SPORTING FACILITIES POLICY

Moved: Clr A Archer

Seconded: Clr J Honner

THAT Council approve Policy 2013-17 Use of Council Sporting Facilities Policy with an amendment to clause 5.5.

CARRIED

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A Bailey, Clr S Bowden, Clr A Campbell, Clr R Cassidy, Clr J Honner and Clr J Poore.

16.21 SUSTAINABLE TOURISM FORUM

NOTED

16.22 ENTERPRISE MARKETING AND RESEARCH SERVICES (EMRS) LOCAL GOVERNMENT SURVEY

NOTED

17.0 SUPPLEMENTARY AGENDA ITEMS

Moved: Clr A Bailey

Seconded: Clr R Cassidy

THAT Council consider the matters on the Supplementary Agenda.

CARRIED

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A Bailey, Clr S Bowden, Clr A Campbell, Clr R Cassidy, Clr J Honner and Clr J Poore.

17.1 MEETING WITH HON MARK SHELTON MP

Moved: Clr J Poore

Seconded: Deputy Mayor J Allwright

THAT the General Manager be authorised to organise a meeting on Thursday the 12 December at 10.00am at the Bothwell Council Chambers for the Hon Mark Shelton MP to meet with the Mayor, Councillors and senior staff.

CARRIED

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A Bailey, Clr S Bowden, Clr A Campbell, Clr R Cassidy, Clr J Honner and Clr J Poore.

17.2 MEETING WITH NATIONAL WIND FARM COMMISSIONER

Moved: Clr R Cassidy

Seconded: Clr J Allwright

THAT the General Manager be authorised to organise a meeting on Thursday the 12 December at 11.00am at the Bothwell Council Chambers for the National Wind Farm Commissioner to meet with the Mayor, Councillors and senior staff.

CARRIED

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A Bailey, Clr S Bowden, Clr A Campbell, Clr R Cassidy, Clr J Honner and Clr J Poore.

17.3 LEASE OF LAND BEHIND FIRE STATION 964 ELLENDALE ROAD

Moved: Clr J Honner

Seconded: Clr R Cassidy

THAT Council approve the General Manager to sign an agreement for the lease of the land at 964 Ellendale Road for a period of five years and at a cost of \$1.00 per year to Mr Gavin Clark

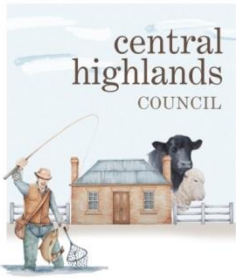
CARRIED

FOR the Motion:

Mayor L Triffitt, Deputy Mayor J Allwright, Clr A Archer, Clr A Bailey, Clr S Bowden, Clr A Campbell, Clr R Cassidy, Clr J Honner and Clr J Poore.

18.0 CLOSURE

Mayor L Triffitt closed the meeting at 2.52pm.



**MINUTES OF THE CENTRAL HIGHLANDS VISITOR CENTRE
MANAGEMENT COMMITTEE
MEETING HELD IN THE BOTHWELL VISITOR CENTRE
AT 4.30 PM ON
TUESDAY 20TH NOVEMBER 2019**

1.0 PRESENT

Clr Poore (Chairperson), Mr W Doran (Bothwell Historical Society), Mr K Allcock (Bothwell Historical Society) and Mr L Jeffery (Australasian Golf Museum), Ms J Kelly, Clr J Honner, Mr T Blake and Mr R Norrish.

IN ATTENDANCE

Mr A Wilson (Deputy General Manager) and Mrs K Brazendale (Minute Secretary)

APOLOGIES

Mr D Dyson (visitor from Bothwell Historical Society), Mr L Costello (Bothwell Tourism Committee) and Mrs L Eyles (General Manager)

2.0 CONFIRMATION OF MINUTES

Moved **L Jeffery**

Seconded **J Honner**

THAT the Draft Minutes of the Central Highlands Visitor Centre Management Committee Meetings held on Thursday 14 February 2019 to be confirmed.

Carried

FOR the Motion:

Clr Poore, W Doran, K Allcock and L Jeffery

3.0 BUSINESS ARISING

Heater and Display Cabinet

The heat pump has been installed. Grant application still pending, \$5,000 in budget to purchase cabinets. Fly Fishing Display has been set up and completed the large cabinet has been finished and looks great.

Chairman's Report

A reply has been received from the Tasmanian Museum, they would like us to display the 'Potters' items. Security system would be linked to the new area with the intent to have a list of phone numbers linked to the system for when the alarm was activated. Society front door needs to be made more secure to enable no exit.

The trout video is being played whilst the event is on in the area.

Bothwell Bi-Centenary

A quote has been requested for the mural, it's to be placed on a removable steel frame. The date of the function is yet to be confirmed, historic information is still being searched. If anyone has suggestions they are to be put forward.

4.0 NEW BUSINESS

Tourism Display area in Queens Park

Discussion were undertaken regarding the maintenance and up keep of the tourism display at Queens Park, Clr J Poore is going to have a look and let Council know if it requires any maintenance, he will clean and update documents inside the cabinet.

Update on proposed new Postcards

Mr D Dyson is undertaking new postcards with locations in the area. 6/8 postcards to be designed, he will produce a draft to show prior to proceeding with the printing, he is also updating the Bothwell Browsing brochure.

Purchase of Central Highlands t-shirts and caps

Id Clothing has been issued with a purchase Order from the Central Highlands Council for the purchase of tops with the Central Highlands, Tasmania logo. No caps have been purchased yet.

Revision of financial arrangements

Discussions around the financial arrangements with regard to Council taking the money for banking. 20% commission on golf museum products, the museum has a receipt book, this is also used for the Lakes Camp Sites, the volunteer manual also has all contact details if volunteers are unsure of what to use.

5.0 OTHER BUSINESS

Fridge Magnets, Patches, Stickers, Stubby Holders & Business Cards have been suggested for the Visitor centre to purchase and put on sale through the centre. Katrina is going to follow up with a quote for the products.

It was also discussed that the centre purchase name tags for the volunteers.

Volunteer numbers are working well, with more interest being discussed with locals.

The current opening hours are 11 am – 3pm

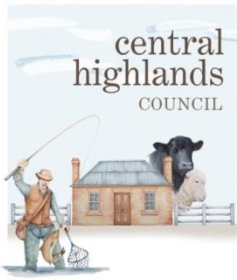
6.0 NEXT MEETING

To be confirmed (needs to be in conjunction with the Bothwell Council meetings to reduce travel for those attending the Visitor Centre meetings.)

7.0 CLOSURE

There being no further business Clr Poore thanked everyone for attending and closed the meeting at 5.30pm.

DRAFT



**NOTES OF THE SPECIAL PLANNING COMMITTEE MEETING
OF THE CENTRAL HIGHLANDS COUNCIL HELD
IN THE BOTHWELL COUNCIL CHAMBERS
AT 9.00AM ON TUESDAY 26th NOVEMBER 2019**

1.0 PRESENT

Clr Allwright (Chairperson), Mayor Triffitt, Clr Poore & Clr Bailey (Proxy)

IN ATTENDANCE

Clr Bowden, Clr Campbell, Clr Honner, Mrs L Eyles (General Manager), Ms J Tyson (Senior Planning Officer), Mr G Rogers (Manager DES) & Mrs J Housego (Minutes Secretary), P Headlam, M Headlam, D Jones, M Foster, D Foster, T Smith, B Headlam, J Headlam, W Jaygo, J Jago, P Devine, M McTye, A Williamson, S Riely, J O'Connor, F Read, C Selkirk, B Gleeson, J Jones

2.0 APOLOGIES

Clr Cassidy

3.0 PECUNIARY INTEREST DECLARATIONS

In accordance with Regulation 8 (7) of the Local Government (Meeting Procedures) Regulations 2015, the Chairman requests Councillors to indicate whether they or a close associate have, or are likely to have a pecuniary interest (any pecuniary or pecuniary detriment) in any item of the Agenda.

Nil

4.0 QUESTION TIME & DEPUTATIONS

The following people made deputations to DA 2019/62: Resource Development (Aquaculture) – Hamilton Reticulation Aquaculture System Hatchery: 56 & 90 Woodmoor Road, House:

Michael Foster, Deborah Foster, Peter Headlam, James Headlam, Peter Devine, Derek Jones, Tim Smith

Clr Cassidy arrived at 10.15am.

6.0 DA2019/62: RESOURCE DEVELOPMENT (AQUACULTURE) – HAMILTON RECIRCULATING AQUACULTURE SYSTEM HATCHERY: 56 & 90 WOODMOOR ROAD, OUSE

Report by

Jacqui Tyson (Senior Planning Officer)

Applicant

Tassal Operations Pty Ltd

Owners

Tassal Operations Pty Ltd - (90 Woodmoor Road, CT251957/1)

Triffett Holdings Pty Ltd - (56 Woodmoor Road, CT36657/2 and CT36657/5)

HEC (Hydro Tasmania) - (Part of lake foreshore, CT84290/1)

Lawrenny Water Trust - (Water race, CT122993/3)

Background – Other Permits

Council have considered other Development Applications relating to the subject land recently.

DA2019/25:

On the 18th June 2019 the Council approved a development application (DA2019/25) for the realignment of boundaries between three existing titles (CT251957/1, CT36657/2 and CT122993/3) that are part of this proposal. The proposal plans that form part of this DA show the new boundaries. Once the process is completed the hatchery will be sited on the new title owned by Tassal.

DA2019/20:

A development application for a pump station and irrigation infrastructure for 56 and 90 Woodmoor Road was approved under delegation in May 2019.

Proposal

Overview

The development application seeks approval for the establishment of a new freshwater recirculating aquaculture system hatchery facility for finfish (Atlantic salmon) and associated infrastructure at 56 and 90 Woodmoor Road, Ouse. The hatchery and associated infrastructure will occupy a footprint of approximately 7.8ha of the land.

The hatchery operation involves incubating eggs and then growing the young fish in freshwater tanks for 8-12 months, until they are ready to be transferred to saltwater fish farms around the State.

Recirculating aquaculture systems (RAS) are indoor, tank based systems in which fish are grown at high densities under controlled conditions. The water in the system is recirculated through the fish tanks and a series of water treatment methods used to remove waste products, before the cleaned water is returned to the fish tanks.

The proposed RAS comprises a series of recirculating concrete tanks, pumps and filters all housed in a steel-structured, temperature controlled building. The maximum standing biomass (quantity of fish held at one time) would be 750 tonnes with a maximum annual production of 1,400 tonnes of fish.

The wastewater flows from the proposed facility are predicted to be 158 ML per year. Wastewater will be treated and stored in a new purpose-built dam on the site and irrigated as part of an agricultural reuse scheme on an adjacent farming property.

The hatchery will operate 24 hours, 7 days a week to maintain continuous monitoring of fish health and growth. However, normal working hours for staff operations will be 7am to 6pm, 7 days. There will be staff onsite at all times, with onsite accommodation provided. This allows for efficient monitoring and action at all hours if necessary.

The elements of the proposal are described in more detail below.

Hatchery building and infrastructure

The hatchery will be housed in a large building with a floor area of approximately 13000m² (169.5m long and 78.3m wide). The building will have a gable roof with a maximum height of 8.7m from the finished surface level. The building will be finished in Colorbond, with 'Pale Eucalypt' coloured roof and 'Paperbark' coloured walls. Precast concrete will be used for the footings and the lower section of some walls. The administration section of the building will be constructed from painted concrete blockwork or panel.

The hatchery building will be located in the north eastern section of the site. The building will be setback 157m from the Lyell Highway and a minimum of 326m from the nearest side boundary, to the south east.

The main hatchery building will contain the following:

- 3 egg incubation areas;
- A start feed tank room with 12 tanks (for the smallest hatched fish);
- 3 smolt tank rooms, with 9 tanks in each room;
- 4 biofilters, one for each smolt tank room and one for the start feed tank room;
- Plant room with oxygen and ozone generators;
- Feed storage room; and
- Office/administration area and staff amenities.

A range of ancillary infrastructure and associated buildings will be located within the curtilage of the hatchery building, mostly sited along the western elevation and northern end of the building. These include:

- Liquid oxygen stores;
- Chiller pump and switch room, housed in 12m long, 6m wide, 4.2m high Colorbond shed;
- Chiller system;
- Generator fuel storage;
- Generator;
- Maintenance workshop, housed in 20m long, 12m wide, 6.6m high Colorbond shed;
- Solids removal plant with tanks and a 17m long, 7m wide, 4.2m high open sided shed;
- Intake water treatment 'cook' system (to treat intake water from Meadowbank Lake);
- 3 treated intake water storage tanks;
- 2 high voltage power transformers; and
- 300 kL firefighting water storage tank and pump.

Water supply, Irrigation reuse and Dam

Fresh water for the hatchery will be drawn from Meadowbank Lake. The pump station (as approved in DA2019/20) will be located inside the property boundary, to the west of a group of existing pump stations situated around the drainage line near the boundary with 5987 Lyell Highway.

The new pump station will be housed within a small shed (3m long, 4m wide and 2.4m high). The shed will house two 45kw pumps, housed in concrete chambers below the natural ground level to minimise noise emissions. A power supply will be provided, with a new pole nearby on the subject land. The pump station will be capable of supplying up to 650 mega litres of water per annum, to the hatchery and irrigation network. The pump station is expected to work continuously for 6-8 months of the year during irrigation season and as needed during autumn/winter.

The water will then be transferred to the hatchery via a network underground pipes. Intake water will be treated in a plant to ensure it is safe for use and then stored in tanks before entering the fish tanks. The hatchery operation is expected to use around 0.4 mega litres of water per day, with an annual demand of less than 160 mega litres.

Waste water from the hatchery will be directed to a treatment plant and then to storage tanks, before discharge into a purpose-built reuse water dam to be constructed adjacent to the hatchery building. Wastewater is generated from the cleaning and flushing of the recirculation filtration system. The quantity of reuse water to be generated is around 158 mega litres per year or 18 cubic metres per hour.

Water from the reuse dam will then be mixed with fresh water from Meadowbank Lake and used to irrigate approximately 90 hectares of farm land on 56 and 90 Woodmoor Road through a permanent irrigation scheme of three centre pivot irrigators. The main pump station (located just south of the reuse dam) will power this operation. This pump station will also be housed within a small shed (approximately 3m long, 4m wide and 2.4m high).

The irrigation network will have a fail-safe design to prevent any back flow to Meadowbank Lake or the hatchery in power outages or the like. The irrigation arrangements will be subject to a legal agreement between Tassal and the landowners. The EPA will monitor the irrigation as part of the overall hatchery development.

The reuse dam will have a capacity of 120 mega litres. Construction of the dam requires approval from the Department of Primary Industries, Parks, Water and Environment under the *Water Management Act 1999*. In this case the Minister's delegate has advised that the consequence category of the dam is "Low" and has provided conditions to be included on any permit issued by Council.

Solid waste is collected by a contractor and taken to a licensed composting facility.

A summary flowchart of the hatchery water management process, copied from the Environmental Impact Statement, is provided in Figure 1 below.

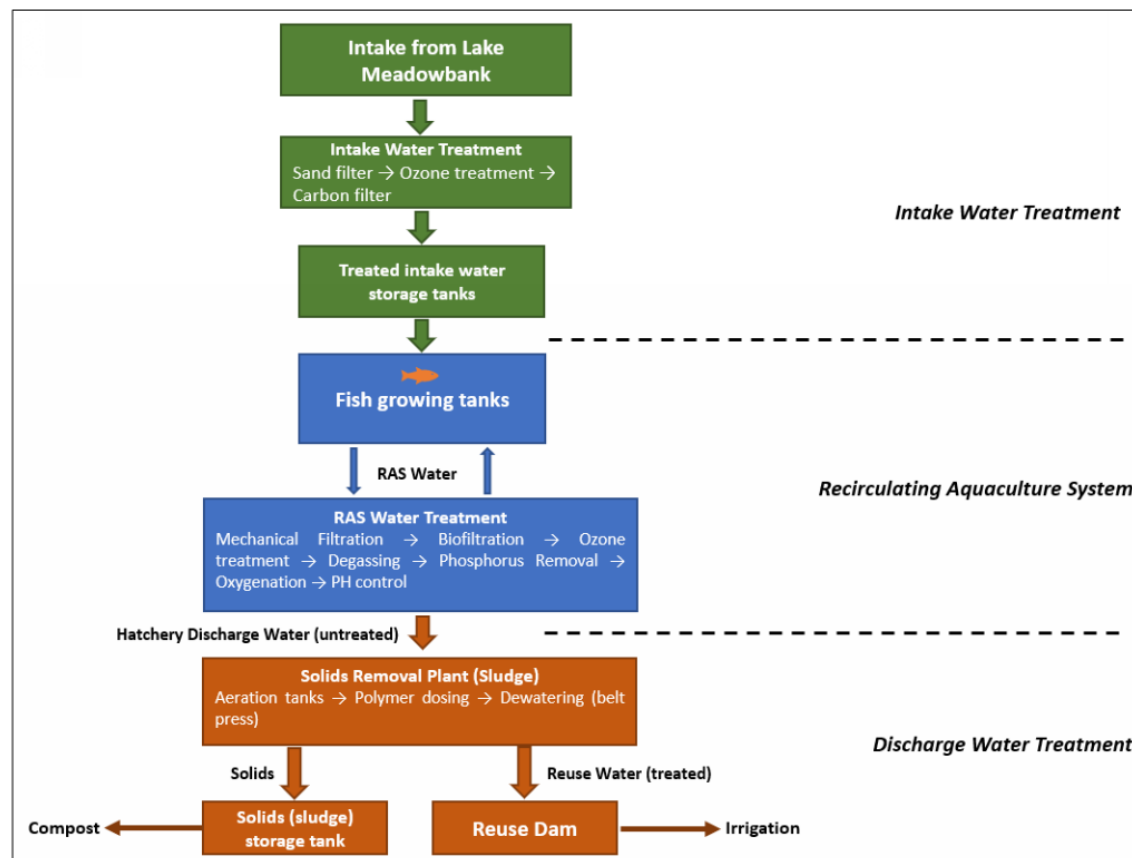


Fig 1. Hatchery summary flowchart (Source: Tassal EIS).

Earthworks and Landscaping

Construction of the hatchery building and surrounding curtilage will require significant earthworks, with up to 3.8m of cut from the western side of the site and up to 2.8m of fill on the eastern side. The cut will set the hatchery complex into the landscape.

Excess fill will be used to construct earth berms for noise and visual attenuation around the eastern and southern sides of the hatchery compound and the dam wall (see further below). No material will be taken offsite.

Significant landscaping is proposed, with trees to be planted along sections of the frontage and south eastern side boundary, on the earth berms around the hatchery building, along the access driveway and between the building and dam and the Lyell Highway. Over time, the landscaping will assist to soften the appearance of the hatchery building from the Lyell Highway and neighbouring properties.

Staff Accommodation

The proposal includes development of a single storey residential building for staff accommodation. The building includes a self-contained manager's apartment, four bedrooms with ensuites and communal living and kitchen space and decks.

The residence will be sited approximately 100m east of the hatchery building, 129m from the Lyell Highway frontage and over 250m from the south eastern side boundary.

The residence will have an onsite wastewater system. The residence will share the main entry from the Lyell Highway and a 7 space carpark will be provided.

Access and Parking

The proposed hatchery will utilise a new access from the Lyell Highway, initially approved in DA2019/25 for the realignment of the property boundaries.

The Traffic Impact Assessment and advice from the Department of State Growth indicates that a turn treatment is required for the hatchery development to ensure safe access for heavy vehicles. As such, the Department of State Growth has advised that a new access permit will be required for the alterations to the new access. Conditions addressing this matter are included below.

A bitumen internal road will be constructed to provide access to the accommodation dwelling and then continue to the hatchery, extending around the perimeter of the building.

The internal access road will be designed to accommodate heavy vehicles. There will be four (4) truck loading bays around the hatchery building.

A compacted gravel carpark for 17 cars will be provided at the northern end of the hatchery building.

Traffic

The traffic to be generated by the proposal includes:

- Light vehicles (staff, visitors and deliveries) – 20 cars day;
- Heavy vehicles
 - Feed delivery – 1 per week
 - Solid waste removal by contractor – 5 per week
 - Deliveries – 2-3 per week
 - Smolt transport to sea – 55 trucks per week for 12 weeks a year (three 4 week blocks in March-April, July-August and October-December).

The application is supported by a Traffic Impact Assessment (TIA), which concludes that the vehicle movements can be accommodated by the upgraded access and the surrounding road network.

As mentioned above, the key findings of the TIA include a recommendation that the access driveway be provided with a basic left turn (BAL) treatment to provide for deceleration of trucks accessing the site via left turn from the Lyell Highway. A condition to this effect is included in the recommendation.

Stormwater

Stormwater from the buildings and hardstand areas will be captured and directed to the existing dams on the land via pipes, pits and swale drains.

The new reuse dam will have a perimeter swale drain to capture overland runoff and divert it to existing natural watercourses, leading to the existing dam and eventually to Meadowbank Lake. This avoids the reuse dam overflowing from stormwater runoff.

Environmental matters

The key risks assessed by the EPA include the discharge water treatment, storage and reuse, noise and odour emissions and biosecurity risks. These matters are all addressed in detail in the Environmental Impact Statement (EIS) and other application documents.

The conditions imposed by the EPA include management and monitoring of these matters.

Application

The development application includes a comprehensive package of information, plans and supporting documents, listed below:

- Environmental Impact Statement (EIS) (Tassal Operations Pty Ltd, September 2019);
- Planning Report (AllUrbanPlanning, 5 September 2019);
- Plan set (Tassal, July 2019);
- Traffic Impact Assessment (Midson Traffic Pty Ltd, August 2019);
- Natural Values Assessment (Enviro-dynamics, 30th July 2019);
- Recycled Water Irrigation and Environmental Management Plan (Macquarie Franklin, September 2019);
- Preliminary Geotechnical Investigations – Hatchery Building (William C Cromer Pty Ltd, 19 August 2019);
- Groundwater Prospectivity (William C Cromer Pty Ltd, 7 August 2019);
- Site and Soil Evaluation Report for Domestic Wastewater Management (William C Cromer Pty Ltd, 17 July 2019);
- Air Emission Assessment (Tarkarri Engineering Pty Ltd, 17 September 2019);
- Noise Impact Assessment (Environmental Dynamics, 4 September 2019);
- Visual Impact Assessment (Environmental Dynamics, 30 August 2019);
- Bushfire Hazard Report (Andrew Welling, Enviro-dynamics, 28 August 2019);
- Aboriginal Heritage Assessment Report (Stuart Huys and Rocky Sainty, 25 April 2019); and
- Hamilton RAS Hatchery – Stakeholder Engagement Plan (Tassal)

Statutory Status - Level 2 Activity

Under Tasmania's Resource Management and Planning System, the State Environment Protection Authority (EPA) has statutory responsibility for environmental impact assessment of proposed developments and activities that may have significant impact on environmental quality. Development proposals for large industry (Level 2 Activities) are referred by Council to the Board of the EPA for environmental impact assessment and determination.

Environmental matters that may be considered by the Board in its assessment of a Level 2 Activity include, but are not limited to:

- Noise emissions
- Air emissions and air quality
- Natural values (including flora and fauna, weeds and diseases and geoconservation)
- Water emissions and quality (including stormwater management)
- Groundwater
- Waste management – including liquid and solid waste and controlled wastes
- Management of environmentally hazardous materials
- Land contamination
- Monitoring
- Decommissioning and rehabilitation

This proposal is a Level 2 Activity as it involves finfish farming, which has been added to the Level 2 Activities in Schedule 2 of the *Environmental Management and Pollution Control Act 1994*.

In this case the proposal has been assessed by the EPA as a class 2B activity. An Environmental Impact Assessment and associated documentation has been prepared by the applicant according to the EPA's general and project specific guidelines issued for this project in May 2019.

The EPA Board considered the proposal, including representations, at their meeting held on Monday 5th November 2019. The EPA later determined to grant an Environmental Licence, subject to conditions (ie approve the proposal). The licence will be issued by the Board, following the granting of a permit by the Planning Authority, if the proposal is approved. The Planning Authority must not include in the permit any condition which is inconsistent with, or which extends the operation of, any of the conditions of the environmental licence.

If the proposal is approved, the EPA will continue to monitor the activity regularly throughout the life of the hatchery, in accordance with the conditions of the Environmental Licence.

Use classification

The proposal involves more than one use class under the Central Highlands Interim Planning Scheme 2015.

Resource development for aquaculture is a Permitted use in the Zone. *Aquaculture* is a defined term, meaning:

Use of land to keep or breed aquatic animals, or cultivate or propagate aquatic plants, and includes the use of tanks or impoundments on land.

The irrigation of farm land is classed as Resource development for agricultural use, which is a No Permit required use in the Rural Resource Zone. *Agriculture* is a defined term, meaning:

Use of the land for propagating, cultivating or harvesting plants or for keeping and breeding of animals, excluding pets. It includes the handling, packing or storing of plant and animal produce for dispatch to processors. It includes controlled environment agriculture, intensive tree farming and plantation forestry.

The applicant takes the view that the irrigation infrastructure and dam could be further classified in the Utilities use class, as a minor utility, as the infrastructure is significant and it serves both the aquaculture and agriculture uses. Minor utility is defined as:

Use of land for utilities or local distribution or reticulation of services and associated infrastructure such as a footpath, cycle path, stormwater channel, water pipes, retarding basin, telecommunications lines or electricity substation and power lines up to but not exceeding 110Kv.

While this is a reasonable position, the author of this report prefers to take the approach of treating the irrigation infrastructure as part of the proposed Resource development *aquaculture* and *agriculture*, uses as it is largely ancillary to those elements of the proposal.

The proposed manager's residence/staff accommodation building is directly associated with and subservient to the hatchery. As such, it is categorised under the *Resource development* use class and is not considered as a separate *Residential* use.

Subject site and Locality.

56 and 90 Woodmoor Road are farms located on the northern side of Lake Meadowbank, approximately half way between the townships of Ouse and Hamilton.

The proposal site also includes part of the Meadowbank Lake foreshore, owned and managed by the Hydro Tasmania and part of a title containing an unused water race owned by the Lawrenny Water Trust. All owners are aware of this development application.

The land is located on the southern side of the Lyell Highway. The main development site is relatively flat, with elevations between 100-110m AHD. The development site is visually and topographically separated from Meadowbank Lake by the Sendace Hills and Tent Hill.

The locality is largely characterised by productive farming land. Some titles also developed with dwellings and/or for Visitor accommodation purposes.

Meadowbank Lake is located to the south west of the Land. Meadowbank Lake is owned and managed by Hydro Tasmania as part of the Derwent River hydropower scheme. Meadowbank Lake is a popular site for recreational purposes including boating, fishing and water skiing.

Hamilton is the nearest town, located approximately 4.5km to the east of the Land. Ouse is located 8.5km north west of the Land and Ellendale around 15km south.

Kimbolton coal mine is located on the northern side of the Lyell Highway, just to the north east of the Land.

Woodmoor Road which is a category 5 road for which the Central Highlands Council is the road authority. The Lyell Highway is a category 3 road for which the Department of State Growth is the road authority.

The site and surrounding land is zoned Rural Resource.

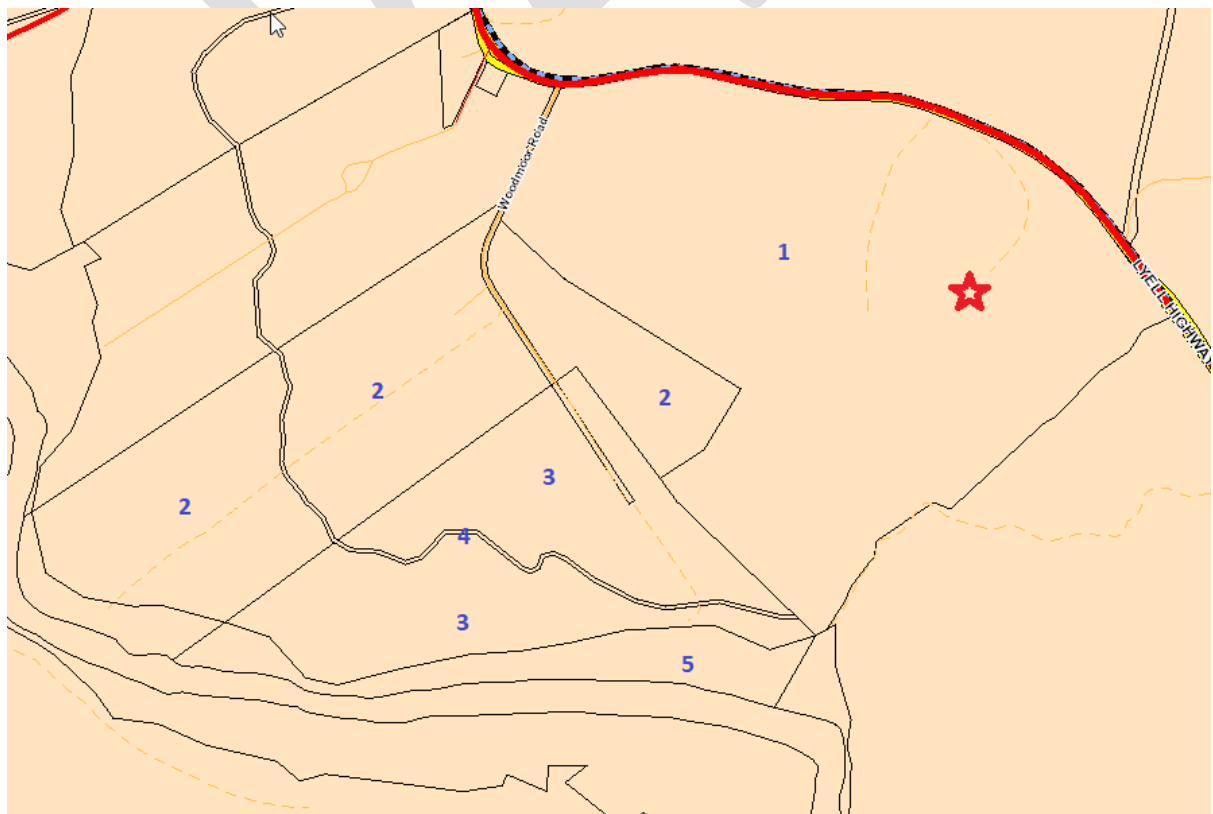


Fig 2. Location and zoning of the subject land and surrounds in the Rural Resource zone (Cream). The approximate location of the hatchery building is marked with a red star. The titles involved in the DA are marked with blue numbers: 1 – CT36657/2, part of 56 Woodmoor Road, 2 - CT36657/5, part of 56 Woodmoor Road, 3 – CT251957/1, 90 Woodmoor Road, 4 – CT122993/3, water race and 5 – CT84290/1, Hydro lake foreshore (Source: LISTmap).

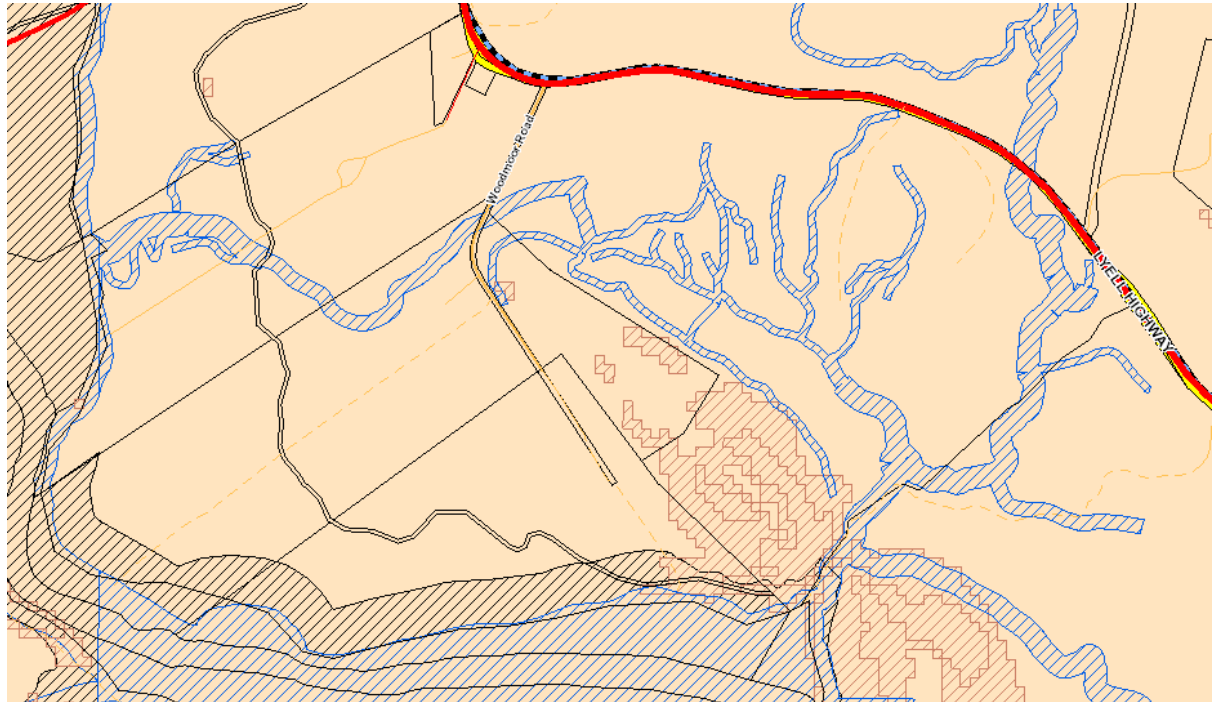


Fig 3. Zoning and planning overlays. The overlays include Waterway Protection Area (blue hatch), Landslide Hazard Areas (brown hatch) and the Lake Meadowbank Specific Area Plan (black hatch). (Source: LISTmap).



Fig 4. Aerial image of the subject sites and surrounding area (Source: LISTmap).

Exemptions

Nil

Special Provisions

Nil

Rural Resource Zone - Use standards

No use standards are applicable to this proposal.

Rural Resource Zone - Development standards

The proposal must satisfy the requirements of the relevant development standards of the Rural Resource Zone, as follows:

26.4.1 Building height To ensure that building height contributes positively to the rural landscape and does not result in unreasonable impact on residential amenity of land.		
Acceptable Solutions	Performance Criteria	OFFICER COMMENT
A1 Building height must be no more than: 8.5 m if for a residential use.	P1 Building height must satisfy all of the following: (a) be consistent with any Desired Future Character	The proposed hatchery building will have a maximum height of 8.7m and the oxygen tanks will have a height of 9.5m.

10 m otherwise.	<p>Statements provided for the area;</p> <p>(b) be sufficient to prevent unreasonable adverse impacts on residential amenity on adjoining lots by overlooking and loss of privacy;</p> <p>(c) if for a non-residential use, the height is necessary for that use.</p>	The proposal complies with the Acceptable Solution A1, as the height does not exceed 10m.
-----------------	---	---

26.4.2 Setback

To minimise land use conflict and fettering of use of rural land from residential use, maintain desirable characteristics of the rural landscape and protect environmental values in adjoining land zoned Environmental Management.

Acceptable Solutions	Performance Criteria	OFFICER COMMENT
<p>A1</p> <p>Building setback from frontage must be no less than:</p> <p>20 m.</p>	<p>P1</p> <p>Building setback from frontages must maintain the desirable characteristics of the surrounding landscape and protect the amenity of adjoining lots, having regard to all of the following:</p> <p>(a) the topography of the site;</p> <p>(b) the size and shape of the site;</p> <p>(c) the prevailing setbacks of existing buildings on nearby lots;</p> <p>(d) the location of existing buildings on the site;</p> <p>(e) the proposed colours and external materials of the building;</p> <p>(f) the visual impact of the building when viewed from an adjoining road;</p> <p>(g) retention of vegetation.</p>	<p>The proposed hatchery complex is setback approximately 157m and the staff accommodation is setback 129m from the Lyell Highway frontage.</p> <p>The proposed setbacks comply with the Acceptable Solution A1.</p>
<p>A2</p> <p>Building setback from side and rear boundaries must be</p>	<p>P2</p> <p>Building setback from side and rear boundaries must</p>	<p>The hatchery complex is sited 326m from the south</p>

<p>no less than:</p> <p>50 m.</p>	<p>maintain the character of the surrounding rural landscape, having regard to all of the following:</p> <ul style="list-style-type: none"> (a) the topography of the site; (b) the size and shape of the site; (c) the location of existing buildings on the site; (d) the proposed colours and external materials of the building; (e) visual impact on skylines and prominent ridgelines; (f) impact on native vegetation. 	<p>eastern side boundary and will be 116m from the western side boundary (once the boundary reorganisation titles are issued).</p> <p>The proposed staff accommodation is setback over 250m from the south eastern side boundary.</p> <p>The proposed setbacks comply with the Acceptable Solution A2.</p>
<p>A3</p> <p>Building setback for buildings for sensitive use must comply with all of the following:</p> <ul style="list-style-type: none"> (a) be sufficient to provide a separation distance from a plantation forest, Private Timber Reserve or State Forest of 100 m; (b) be sufficient to provide a separation distance from land zoned Significant Agriculture of 200 m. 	<p>P3</p> <p>Building setback for buildings for sensitive use (including residential use) must prevent conflict or fettering of primary industry uses on adjoining land, having regard to all of the following:</p> <ul style="list-style-type: none"> (a) the topography of the site; (b) the prevailing setbacks of existing buildings on nearby lots; (c) the location of existing buildings on the site; (d) retention of vegetation; (e) the zoning of adjoining and immediately opposite land; (f) the existing use on adjoining and immediately opposite sites; (g) the nature, frequency and intensity of emissions produced by primary industry uses on adjoining and immediately opposite lots; (h) any proposed attenuation measures; 	<p>This standard is not applicable to the proposal.</p> <p>The proposal does not include a sensitive use and is not within 100m of from a plantation forest, Private Timber Reserve or State Forest and is not within 200m of land zoned Significant Agriculture.</p>

	(i) any buffers created by natural or other features.	
A4 Buildings and works must be setback from land zoned Environmental Management no less than: 100 m.	P4 Buildings and works must be setback from land zoned Environmental Management to minimise unreasonable impact from development on environmental values, having regard to all of the following: (a) the size of the site; (b) the potential for the spread of weeds or soil pathogens; (c) the potential for contamination or sedimentation from water runoff; (d) any alternatives for development.	This standard is not applicable to the proposal. There is no land zoned Environmental Management near the site.

26.4.3 Design

To ensure that the location and appearance of buildings and works minimises adverse impact on the rural landscape.

Acceptable Solutions	Performance Criteria	OFFICER COMMENT
A1 The location of buildings and works must comply with any of the following: (a) be located within a building area, if provided on the title; (b) be an addition or alteration to an existing building; (c) be located in an area not require the clearing of native vegetation and not on a skyline or ridgeline.	P1 The location of buildings and works must satisfy all of the following: (a) be located on a skyline or ridgeline only if: (i) there are no sites clear of native vegetation and clear of other significant site constraints such as access difficulties or excessive slope, or the location is necessary for the functional requirements of infrastructure; (ii) significant impacts on the rural landscape are minimised through the height of the structure, landscaping and use of colours with a light reflectance value not	The proposal complies with the Acceptable Solution A1 (c). The development is not located on a skyline or ridgeline and does not require clearing of native vegetation.

	<p>greater than 40 percent for all exterior building surfaces;</p> <p>(b) be consistent with any Desired Future Character Statements provided for the area;</p> <p>(c) be located in an area requiring the clearing of native vegetation only if:</p> <p>(i) there are no sites clear of native vegetation and clear of other significant site constraints such as access difficulties or excessive slope, or the location is necessary for the functional requirements of infrastructure;</p> <p>(ii) the extent of clearing is the minimum necessary to provide for buildings, associated works and associated bushfire protection measures.</p>	
<p>A2 Exterior building surfaces must be coloured using colours with a light reflectance value not greater than 40 percent.</p>	<p>P2 Buildings must have external finishes that are non-reflective and coloured to blend with the rural landscape.</p>	<p>The hatchery building (and other smaller sheds) will be finished in Colorbond colours 'Pale Eucalypt' and 'Paperbark'</p> <p>The Light Reflectance Value of 'Paperbark' is 58 percent, exceeding 40 percent. Therefore assessment against the Performance Criteria is necessary.</p> <p>The building finishes are all non-reflective and the colours have been chosen specifically to blend with the surrounding rural landscape. The application includes a Visual Impact Assessment, which supports the chosen colours and finishes.</p> <p>The proposal complies with Performance Criteria P2.</p>
<p>A3 The depth of any fill or excavation must be no more than 2 m from natural ground level, except where required</p>	<p>P3 The depth of any fill or excavation must be kept to a minimum so that the development satisfies all of</p>	<p>The proposal will require approximately 3.8m of cut and 3m of fill as shown on the proposal plans.</p>

for building foundations.	<p>the following:</p> <p>(a) does not have significant impact on the rural landscape of the area;</p> <p>(b) does not unreasonably impact upon the privacy of adjoining properties;</p> <p>(c) does not affect land stability on the lot or adjoining areas.</p>	<p>Assessment against the Performance Criteria is necessary.</p> <p>(a) The proposed cut will effectively position the complex into the landscape. Excess fill will be used to create earth berms that will be landscaped, assisting to visually screen the site. A Visual Impact Assessment has been provided with the proposal, which includes assessment of the visual impact when viewed from the road and adjoining properties. The report finds that the overall landscape impact of the proposal will be neutral.</p> <p>(b) The proposed hatchery is sited over 320m and the managers residence over 250m from the nearest property to the south east. Landscaping will also be installed along the boundary and around the hatchery, providing further screening between the properties. Overall, it is considered that the proposal will not negatively impact the privacy of adjoining properties.</p> <p>(c) The proposed earthworks will be designed and built in accordance with qualified engineering advice. There is no identified land slide risk or land stability issues in the development area. The proposal will not impact the stability of the site or surrounding area.</p> <p>The proposal complies with Performance Criteria P3.</p>
---------------------------	--	--

Codes

E1 - Bushfire Prone Areas Code

The proposal is subject to the Bushfire Prone Areas Code because it is a hazardous use, defined in the Code as where:

- (a) *the amount of hazardous chemicals used, handled, generated or stored on a site exceeds the manifest quantity as specified in the Work Health and Safety Regulations 2012;*

or

- (b) *explosives are stored on a site and where classified as an explosives location or large explosives location as specified in the Explosives Act 2012.*

In this case the amount of hazardous chemicals stored onsite (compressed oxygen and methanol) exceeds the manifest quantity as specified in the Work Health and Safety Regulations 2012.

E1.5.2 Hazardous Uses Hazardous uses can only be located on land within a bushfire-prone area where tolerable risks are achieved through mitigation measures that take into account the specific characteristics of both the hazardous use and the bushfire hazard.		
Acceptable Solutions	Performance Criteria	OFFICER COMMENT
A1 No Acceptable Solution.	P1 A hazardous use must only be located in a bushfire-prone area if a tolerable risk from bushfire can be achieved and maintained, having regard to: (a) the location, characteristics, nature and scale of the use; (b) whether there is an overriding benefit to the community; (c) whether there is no suitable alternative lower-risk site; (d) the emergency management strategy and bushfire hazard management plan as specified in A2 and A3 of this Standard; and (e) other advice, if any, from the TFS.	The Bushfire Hazard Report (Andrew Welling, Enviro-dynamics, 28 August 2019) submitted with the application addresses the Performance Criteria P1 and determines that the proposal complies.
A2 An emergency management strategy, endorsed by the TFS or accredited person, that provides for mitigation measures to achieve and maintain a level of tolerable	P2 No Performance Criterion.	The Bushfire Hazard Report (Andrew Welling, Enviro-dynamics, 28 August 2019) submitted with the application addresses the Acceptable Solution A2 and determines that the proposal

<p>risk that is specifically developed to address the characteristics, nature and scale of the use having regard to:</p> <p>(a) the nature of the bushfire-prone vegetation including the type, fuel load, structure and flammability; and</p> <p>(b) available fire protection measures to:</p> <p>(i) prevent the hazardous use from contributing to the spread or intensification of bushfire;</p> <p>(ii) limit the potential for bushfire to be ignited on the site;</p> <p>(iii) prevent exposure of people and the environment to the hazardous chemicals, explosives or emissions as a consequence of bushfire; and</p> <p>(iv) reduce risk to emergency service personnel.</p>		complies.
<p>A3</p> <p>A bushfire hazard management plan that contains appropriate bushfire protection measures that is certified by the TFS or an accredited person.</p>	<p>P3</p> <p>No Performance Criterion.</p>	<p>A Bushfire Hazard Report including a bushfire hazard management plan (Andrew Welling, Enviro-dynamics, 28 August 2019) has been provided with the application in accordance with Acceptable Solution A3.</p>

E3 - Landslide Code

Part of the site around Tent Hill is covered by areas of Low and Medium Landslide Hazard risk.

The proposed hatchery and staff accommodation buildings are located well clear of the Landslide Hazard Areas.

The proposal does include an irrigation pipeline and access along the eastern side of Tent Hill, within areas of Low and Medium Landslide Hazard risk, so assessment against the relevant standard is required.

E3.7.1 Buildings and Works, other than Minor Extensions

To ensure that landslide risk associated with buildings and works for buildings and works, other than minor extensions, in Landslide Hazard Areas, is:

- (a) acceptable risk; or
- (b) tolerable risk, having regard to the feasibility and effectiveness of measures required to manage the landslide hazard.

Acceptable Solutions	Performance Criteria	OFFICER COMMENT
----------------------	----------------------	-----------------

A1 No Acceptable Solution.	P1 Buildings and works must satisfy all of the following: (a) no part of the buildings and works is in a High Landslide Hazard Area; (b) the landslide risk associated with the buildings and works is either: (i) acceptable risk; or (ii) capable of feasible and effective treatment through hazard management measures, so as to be tolerable risk.	Assessment against the Performance Criteria is required. (a) There are no areas of High Landslide Hazard on the site and therefore no works within such an area. (b) The works proposed within the Low and Medium landslide risk areas are minor and considered to be within the scope of acceptable risk.
--------------------------------------	---	--

E5 – Road and Railway Assets Code

The proposal is subject to this Code as it involves upgrade and intensification of the use of the existing access from the Lyell Highway, recently constructed as part of the reorganisation of boundaries under DA2019/25.

The Lyell Highway is a category 3 road for which the Department of State Growth is the road authority. Advice from the Department of State Growth has been received in regard to this application.

The application documents include a Traffic Impact Assessment (Midson Traffic Pty Ltd, August 2019).

The proposal is assessed against the relevant standards below.

E5.5.1 Existing road accesses and junctions		
To ensure that the safety and efficiency of roads is not reduced by increased use of existing accesses and junctions.		
Acceptable Solutions	Performance Criteria	OFFICER COMMENT
A2 The annual average daily traffic (AADT) of vehicle movements, to and from a site, using an existing access or junction, in an area subject to a speed limit of more than 60km/h, must not increase by more than 10% or 10 vehicle movements per day, whichever is the greater.	P2 Any increase in vehicle traffic at an existing access or junction in an area subject to a speed limit of more than 60km/h must be safe and not unreasonably impact on the efficiency of the road, having regard to: (a) the increase in traffic caused by the use; (b) the nature of the traffic generated by the use; (c) the nature and efficiency of the access or the junction; (d) the nature and category of the road; (e) the speed limit and traffic flow of the road; (f) any alternative	Assessment against the Performance Criteria is required. The Traffic Impact Assessment finds that the volume of traffic to be generated by the proposed use and development can be accommodated without safety issues or unreasonable impact to the safety of the road, provided that a basic left turn (BAL) treatment is provided, so that trucks entering the site can decelerate safely before turning. The Department of State Growth (road authority) has advised that a new access

	access to a road; (g) the need for the use; (h) any traffic impact assessment; and (i) any written advice received from the road authority.	works permit will be required before these works are undertaken. Conditions addressing these matters are included in the recommendation below.
--	--	---

E5.6.4 Sight distance

To ensure that accesses, junctions and level crossings provide sufficient sight distance between vehicles and between vehicles and trains to enable safe movement of traffic.

Acceptable Solutions	Performance Criteria	OFFICER COMMENT
A1 Sight distances at: (a) an access or junction must comply with the Safe Intersection Sight Distance shown in Table E5.1; and (b) rail level crossings must comply with AS1742.7 Manual of uniform traffic control devices - Railway crossings, Standards Association of Australia.	P1 The design, layout and location of an access, junction or rail level crossing must provide adequate sight distances to ensure the safe movement of vehicles, having regard to: (a) the nature and frequency of the traffic generated by the use; (b) the frequency of use of the road or rail network; (c) any alternative access; (d) the need for the access, junction or level crossing; (e) any traffic impact assessment; (f) any measures to improve or maintain sight distance; and (g) any written advice received from the road or rail authority.	The TIA assesses the sight distance for the access in section 4.4. The speed limit on this section of the Lyell Highway is 100km/h so the Safe Intersection Sight Distance shown in Table E5.1 is 250m. The TIA identifies that the available sight distance exceeds 300m in both directions, satisfying the Acceptable Solution A1.

E6 - Parking and Access Code

This Code applies to all use and development.

The proposal is assessed against the relevant use standards below.

E6.6.1 Number of Car Parking Spaces

To ensure that:

- (a) there is enough car parking to meet the reasonable needs of all users of a use or development, taking into account the level of parking available on or outside of the land and the access afforded by other modes of transport.
- (b) a use or development does not detract from the amenity of users or the locality by:
 - (i) preventing regular parking overspill;

(ii) minimising the impact of car parking on heritage and local character.		
Acceptable Solutions	Performance Criteria	OFFICER COMMENT
<p>A1 The number of on-site car parking spaces must be:</p> <p>(a) no less than the number specified in Table E6.1;</p> <p>except if:</p> <p>(i) the site is subject to a parking plan for the area adopted by Council, in which case parking provision (spaces or cash-in-lieu) must be in accordance with that plan;</p>	<p>P1 The number of on-site car parking spaces must be sufficient to meet the reasonable needs of users, having regard to all of the following:</p> <p>(a) car parking demand;</p> <p>(b) the availability of on-street and public car parking in the locality;</p> <p>(c) the availability and frequency of public transport within a 400m walking distance of the site;</p> <p>(d) the availability and likely use of other modes of transport;</p> <p>(e) the availability and suitability of alternative arrangements for car parking provision;</p> <p>(f) any reduction in car parking demand due to the sharing of car parking spaces by multiple uses, either because of variation of car parking demand over time or because of efficiencies gained from the consolidation of shared car parking spaces;</p> <p>(g) any car parking deficiency or surplus associated with the existing use of the land;</p> <p>(h) any credit which should be allowed for a car parking demand deemed to have been provided in association with a use which existed before the change of parking requirement, except in the case of substantial redevelopment of a site;</p> <p>(i) the appropriateness of a financial contribution in lieu of parking towards the cost of parking facilities or other transport facilities, where such facilities exist or are planned in the vicinity;</p> <p>(j) any verified prior payment of a financial contribution in lieu of parking for the land;</p> <p>(k) any relevant parking plan for the area adopted by Council;</p>	<p>Table E6.1 does not specify a number of car spaces for the Resource development use class.</p> <p>The proposal includes dedicated parking areas for the hatchery complex and staff accommodation that will be sufficient to meet the requirements of the use, as demonstrated in the TIA.</p> <p>The proposal meets the Acceptable Solution A1.</p>

	(l) the impact on the historic cultural heritage significance of the site if subject to the Local Heritage Code;	
E6.6.2 Number of Accessible Car Parking Spaces for People with a Disability To ensure that a use or development provides sufficient accessible car parking for people with a disability.		
Acceptable Solutions	Performance Criteria	OFFICER COMMENT
A1 Car parking spaces provided for people with a disability must: (a) satisfy the relevant provisions of the Building Code of Australia; (b) be incorporated into the overall car park design; (c) be located as close as practicable to the building entrance.	P1 No Performance Criteria.	The proposal includes accessible parking spaces in both of the proposed parking areas, in accordance with A1.

The proposed access and car parking has been designed to demonstrate comply with the relevant development standards including access design, passing bays, layout, lighting, landscaping and surface treatments.

Conditions are included in the recommendation below in regard to this matters.

E7 – Stormwater Management Code

This Code applies to all use and development. The proposal is assessed against the relevant standards below.

E7.7.1 Stormwater Drainage and Disposal To ensure that stormwater quality and quantity is managed appropriately.		
Acceptable Solutions	Performance Criteria	OFFICER COMMENT
A1 Stormwater from new impervious surfaces must be disposed of by gravity to public stormwater infrastructure.	P1 Stormwater from new impervious surfaces must be managed by any of the following: (a) disposed of on-site with soakage devices having regard to the suitability of the site, the system design and water sensitive urban design principles (b) collected for re-use on the site; (c) disposed of to public stormwater infrastructure via a pump system which is designed, maintained and	Stormwater will be managed onsite, with drainage to be directed to swale drains and then disperse to natural watercourses in accordance with the Performance Criteria.

	managed to minimise the risk of failure to the satisfaction of the Council.	
<p>A2</p> <p>A stormwater system for a new development must incorporate water sensitive urban design principles R1 for the treatment and disposal of stormwater if any of the following apply:</p> <p>(a) the size of new impervious area is more than 600 m²;</p> <p>(b) new car parking is provided for more than 6 cars;</p> <p>(c) a subdivision is for more than 5 lots.</p>	<p>P2</p> <p>A stormwater system for a new development must incorporate a stormwater drainage system of a size and design sufficient to achieve the stormwater quality and quantity targets in accordance with the State Stormwater Strategy 2010, as detailed in Table E7.1 unless it is not feasible to do so.</p>	<p>The proposed stormwater management system incorporates water sensitive urban design principles and complies with A2.</p>
<p>A3</p> <p>A minor stormwater drainage system must be designed to comply with all of the following:</p> <p>(a) be able to accommodate a storm with an ARI of 20 years in the case of non-industrial zoned land and an ARI of 50 years in the case of industrial zoned land, when the land serviced by the system is fully developed;</p> <p>(b) stormwater runoff will be no greater than pre-existing runoff or any increase can be accommodated within existing or upgraded public stormwater infrastructure.</p>	<p>P3</p> <p>No Performance Criteria.</p>	<p>The stormwater management system is designed to comply with the requirements of A3.</p>

E11 – Waterway and Coastal Protection Code

There are a number of Waterway Protection Areas on the site, following natural drainage lines.

Both the hatchery complex and staff accommodation buildings are located outside these overlay areas. There are access roads, pipelines and the dam located within Waterway Protection Areas.

As the proposal is a Level 2 activity, it is exempt from assessment under this Code in accordance with Clause E11.4.1 (a).

Lake Meadowbank Specific Area Plan

Part of the subject land is located within the Lake Meadowbank Specific Area Plan (SAP) overlay.

The purpose of this specific area plan is to provide for the use and development of the land immediately adjoining Lake Meadowbank for recreational purposes whilst maintaining environmental quality consistent with Local Area Objectives and Desired Future Character Statements for the area.

The proposed hatchery and majority of the associated infrastructure and development are located outside of the SAP area. The only parts of the proposal that are within the SAP area are a small section of irrigation pipe work and part of the area to be irrigated with reuse water. The pump station already approved in DA2019/20 is also within the SAP area.

F1.4 Use Table

The irrigation within the SAP area is considered to be part of the *Resource development* use class, specifically for agricultural use, which is Discretionary under the SAP use table. The proposal is considered to be suitable for the site as agricultural use is consistent with the existing use of the land and surrounding area and the values of Lake Meadowbank will be protected, as detailed in the application documents.

The proposed use of the approved pump station and water reticulation pipelines within the SAP area will serve the agriculture and aquaculture uses of the site. The SAP Use Table specifies that the *Resource development* use class is Discretionary, with the qualification '*Only if an agricultural use*'. The SAP does not specify the status of other sub uses of the *Resource development* use class, including aquaculture. There are no uses listed in the Prohibited section of the SAP Use Table, which means no uses are Prohibited in the SAP area.

To determine the status of aquaculture, it is therefore necessary to refer back to the Use table of the underlying zone, in this case the Rural Resource Zone. The status of the *Resource development* use class in the Rural Resource Zone Use Table, Clause 26.2 is:

No Permit Required Only if agriculture, bee keeping, crop production, forest operations in accordance with a Forest Practices Plan, horse stud or tree farming and plantation forestry in accordance with a Forest Practices Plan.

Permitted Except where No Permit Required or Discretionary

Discretionary Only if intensive animal husbandry

Aquaculture is not listed under the No Permit Required or Discretionary qualifications, so it falls in the Permitted use category.

As mentioned previously, the applicant considers that the irrigation infrastructure can be classified under the *Utilities* use class. *Utilities* is a Permitted use in the SAP Use Table.

Under either interpretation the proposed use and development can proceed within the Lake Meadowbank Specific Area Plan.

F1.5 Application Requirements

This section of the SAP requires an Aboriginal Heritage Assessment or statement from Aboriginal Heritage Tasmania to be provided with all discretionary Development Applications.

In this case the applicant has provided an Aboriginal Heritage Assessment Report completed by suitably qualified people (Stuart Huays, Archaeologist Cultural Heritage Management Australia and Rocky Sainty, Aboriginal Heritage Officer).

The site outcomes/recommendations from the Aboriginal Heritage Assessment are copied below:

Recommendation 1

No Aboriginal sites were identified during the field survey of the proposed Tassal fish farm hatchery development at 56 Woodmoor Road, Ouse. A search of the AHR shows that there are no registered Aboriginal sites that are located within or in the immediate vicinity of the study area, and it is assessed that there is a low potential for undetected Aboriginal heritage sites to be present.

On the basis of the above, it is advised that the proposed development will have no impacts on known Aboriginal sites, and therefore there are no Aboriginal heritage constraints, or legal impediments to the project proceeding.

Recommendation 2

It is assessed that there is generally a low potential for undetected Aboriginal heritage sites to occur within the study area. However, if, during the course of the proposed development works, previously undetected archaeological sites or objects are located, the processes outlined in the Unanticipated Discovery Plan should be followed (see section 11). A copy of the Unanticipated Discovery Plan (UDP) should be kept on site during all ground disturbance and construction work. All construction personnel should be made aware of the Unanticipated Discovery Plan and their obligations under the Aboriginal Heritage Act 1975 (the Act).

Recommendation 3

Copies of this report should be submitted to Aboriginal Heritage Tasmania (AHT) for review and comment.

The Aboriginal Heritage Assessment meets the requirements of F1.5 of the SAP.

F1.6 and F1.7 – Development Standards

The SAP provides standards relating to Camping Areas and Caravan Parks (F1.6) and Tourism Operations and Visitor accommodation (F1.7).

None of these standards are relevant to the assessment of this proposal.

Representations

The proposal was advertised for 28 days (as required for Level 2B proposals) from 8th December 2018 until 24th December 2018.

A total of eighty five (85) representations were received from members of the public. One of the representations was fully in support of the proposal. Some were partially supportive of the move toward a recirculating hatchery as an improvement to existing flow-through hatcheries in the area, though still had concerns about the specifics of this proposal.

Submissions were also received from agencies, including the Department of State Growth in regard to traffic and DPIPW in regard to the dam approval. Hydro Tasmania provided advice that they have no objection to the proposal.

The matters raised in the representations are presented in the table below. The issues relevant to the Council assessment are presented first and the environmental matters (addressed by the EPA) are then presented in approximate order of how often they were mentioned by representors.

As a Level 2 project, the issues raised in regard to environmental matters are assessed and monitored by the EPA. Appendix 2 of the EPA Environmental Assessment Report provides detailed breakdown of the representations. The Environmental Assessment Report and Environmental Licence conditions are appended to this report and are available online at <https://epa.tas.gov.au/assessment/assessments/tassal-operations-pty-ltd-hamilton-recirculatory-aquaculture-system-hatchery-ouse>

<p>Issue 1 Recreational Value of Meadowbank Lake</p> <p>Concerns that the proposal would impact the recreational and scenic values of the lake, including water quality, noise and visual amenity.</p> <p>Values identified in the submissions include:</p> <ul style="list-style-type: none"> • Water sports, particularly water skiing (clubs and others) • Fishing and trout stocks • Camping/holiday homes • General scenic/recreational value • Tourism value • Long term users • Access to lake side recreational area adjacent to the site 	
<p>Examples</p> <p><i>As a Recreational Fisherman and Camper who has used the area for many years I am concerned by the possibility of Lake Meadowbank and the Derwent River being contaminated by chemical biproducts.</i></p> <p>Such a reduction in the status of Meadowbank Lake and the region as a whole as a tourist, holiday or recreation destination would also have negative effects on any number of local businesses including service stations, accommodation providers, restaurants, food outlets, shops, farm shops and others. It only needs a single incident to sully the name of an area or region and forever cause people to link an area with a bad memory.</p> <p><i>The area is one on the prime visual ones in the Derwent Valley, and highly recognised as a popular picnic and recreational precinct. In particular, it is an important angling and water-skiing lake.</i></p> <p>As a family we have enjoyed Meadowbank Lake for many years as a water ski destination and holiday destination.</p>	<p>Officer comments</p> <p>The recreational values of Meadowbank Lake are recognised, supported and promoted by Council.</p> <p>The main hatchery complex will not be visible from Meadowbank Lake.</p> <p>The environmental management of the proposal under the EPA is expected to protect these values.</p> <p>With regard to the lake side recreational area located near the pump station and used by adjoining land owners – this site is located on Hydro owned land and access to it currently relies on land that is part of this application (currently 56 Woodmoor Road, future Tassal lot). Council have no jurisdiction over this situation.</p>
<p>Issue 2 Traffic and Access from Lyell Highway</p> <p>Concerns regarding the increased traffic to the site and safety of Lyell Highway.</p>	

Examples	Officer comments
<p>This facility would also increase heavy traffic on the already stressed Lyell Highway.</p> <p><i>6 Trucks at night and 12 during the day will have a huge impact on the amenity of the residences closest to the hatchery. This quantity relative to the current situation will result in a profound increase in traffic flow in the immediate area.</i></p>	<p>The proposal is accompanied by a Traffic Impact Assessment and has been considered by the road authority, Department of State Growth.</p> <p>The proposal is not expected to impact the safety or efficiency of the road, subject to the upgrade of the access point with a turn lane as required in the recommended conditions.</p>
<p>Issue 3 Internal access road</p> <p>Concerns relating to lack of information regarding the construction standard for the internal rural access road and impacts of these works.</p>	
Example	Officer comments
<p>Part of the DA is to create a pipeline and access road from the hatchery, around the side of Tent Hill to the lakes edge, to the pumpstation. This road is of major significance. It does not get a mention in this DA, nor the previous DAs!</p> <p>It is proposed to traverse across the Eastern side of Tent hill which is an extremely steep slope to the point that there is already evidence of land sliding.</p> <p>In order to retain the hill both above and below the road an extensive batter would be required.</p>	<p>The application does not include detailed plans of the internal access road to the pump station/lake side.</p> <p>A condition is included in the recommendation to require plans of the road to be submitted to Council for approval prior to construction.</p>
<p>Issue 4 Previous approvals</p> <p>Concerns regarding the previous DAs for the site for a pump station/irrigation infrastructure (DA2019/20) and boundary reorganisation (DA2019/25), including that the proposals should have all been included in one DA and that the separation of the DAs was misleading/non transparent.</p>	
Examples	Officer comments
<p>The fact that the previous two DAs were stepping stones was understood by many people since May, it was only at this point that the information became available for everybody to see.</p> <p><i>If Tassal had disclosed within the Pumpstation DA that the intended use of this pumpstation was for Aquaculture it would have been refused by council.</i></p> <p>Their previous planning applications in this area have not been transparent. They knew what their overall plans were all along but they have applied for things in small stages, each of which was likely to get approved whereas applying for the whole project at once may not have been. This suggests to me that the applicants may not be being transparent now.</p> <p><i>The current DA appears to be but the next one of a series made progressively by Tassal over the past six months or so (DAs 2019/20/25 and 62 etc) and which together might be seen as seeking approval for the overall development by</i></p>	<p>The concerns of the representor are noted and while it is evident that the three proposals (DA2019/20 – pump station/irrigation, DA2019/25 – boundary reorganisation and this DA) are related to some extent, it is considered that it is reasonable to consider them as separate valid applications.</p>

<p><i>stealth. There seems to be lack of consultation with the local property owners, and an almost deliberate covering up of any actual linkage between these various DAs.</i></p>	
<p>Issue 5 Use Class status and Lake Meadowbank SAP</p> <p>Concerns that the proposal uses an incorrect use class (Utilities) and that Aquaculture is prohibited within the Lake Meadowbank Specific Area Plan.</p>	
<p>Examples</p>	<p>Officer comments</p>
<p><i>Within this DA Tassal are seeking to change the classified use for the pumpstation from "Agriculture" to "Utilities". This is because under the "Specific Area Plan" (SAP) that applies to roughly 75 meters of the land surrounding the lake Aquaculture is NOT permitted. This means that if Tassal had disclosed within the Pumpstation DA that the intended use of this pumpstation was for Aquaculture it would have been refused by council.</i></p>	<p>The use classification and status of Resource development – aquaculture is considered in the body of this report.</p> <p>In summary, aquaculture is not prohibited in the Lake Meadowbank SAP and the use classification of the irrigation infrastructure does not impact whether this DA can be approved.</p>
<p>Issue 6 Pump station shed</p> <p>Concerns that the proposal includes a large pump station shed close to Lake Meadowbank.</p>	
<p>Examples</p>	<p>Officer comments</p>
<p>In this DA the pumpstation has grown to a whopping 20 x 12 x 4.8mtr High shed</p> <p><i>A pump shed of this proportion would be unprecedented on the lakes edge – and a complete eyesore which is completely inappropriate</i></p>	<p>There appears to have been some confusion regarding the size of the pump shed to be constructed adjacent to Meadowbank Lake.</p> <p>The pump shed near the lake shore will be a 3m x 4m and 2.8m high, similar to existing pump stations near the lake.</p> <p>The larger shed referred to in the representations (20m x 12m x 4.8m) is the chiller pump shed, to be located in the hatchery complex.</p>
<p>Issue 6 Tassal – Reputation</p> <p>Concerns regarding Tassal operations generally and the 'track record' of the company.</p>	
<p>Examples</p>	<p>Officer comments</p>
<p>My concern is regarding the very nature of the company involved. The effect of fish farm operations in Tasmania and world wide on the local environment has been widely negative, ranging from the poisoning of Macquarie Harbour to dead zones and the destruction of local environments, the diverting of water supplies and causing costs to local councils and people.</p> <p><i>Government bodies such as the EPA have demonstrated with salmon-farming in Macquarie Harbour and the Derwent Estuary that they are not able to adequately monitor or prevent harm arising from salmon farms.</i></p>	<p>This concern cannot be considered in the assessment of the Development Application.</p>

Issue 7**Application process/Consultation**

Concerns that pre-application consultation did not include many users/land owners around Lake Meadowbank.

Concerns that the process has been secretive/misleading.

Examples

I have very strong reservations about the process that Tassal have adopted to make this application and have serious doubts about all aspects of this plan.

At no point, have we been contacted by TASSAL or been involved in any consultation. This is a concern to us as we have a holiday home on the lake in close proximity to the proposal and are highly disappointed that we have not be included in any consultations whatsoever.

Officer comments

This concern is noted.

While it is unfortunate that some interested parties were not involved in pre-application consultation. However, this process is optional and does not form part of the statutory requirements for a proposal.

Issue 8**Inappropriate site**

Concerns regarding site selection and that alternatives should be considered.

Examples

Doesn't seem to be any reason why the hatchery needs to be located near Meadowbank Lake. Alternatives should be considered.

This hatchery should be built in a location away from the lake in a place where drainage is not into any major watercourse. Water can be easily piped to that location, possibly even from Meadowbank Lake, as long as the hatchery was far enough away from the lake or any major watercourse.

I feel that this location is unsuitable for this development.

Officer comments

Council must consider the proposal before it, there is no power to consider other sites or options.

The EIS provided by the applicant states that 14 sites were initially considered for this project and evaluated against various criteria, including infrastructure, economic and environmental variables. The proposed site met the desired characteristics to the greatest extent.

Issue 9**Visual Impacts**

Concerns regarding the visual impact of the proposal including:

- from the road/surrounding area
- from neighbouring properties
- from Meadowbank Lake; and
- light pollution at night.

Examples

I am concerned about the visual impact of the project, Firstly of an enormous shed and development in a fairly open area which is visible from many locations in the valley and is out of place in this largely rural area.

I object to the visual impact of the proposed large pumping shed very close to the lake. Small agricultural irrigation structures are to be expected in a rural area but this is large and very close to the lake.

Officer comments

The proposed development will certainly be visible from the road and neighbouring properties.

The design includes earth berms and landscaping to partially screen the hatchery complex. The colours of external building materials have been selected to blend with the surrounding landscape as much as possible.

	<p>The application documents include a visual impact assessment.</p> <p>With regard to views from Meadowbank Lake, the only part of the development that will be visible from the lake is the small pump station building.</p> <p>External lighting will be positioned and baffled to avoid light spill to neighbouring properties.</p> <p>Overall, it is considered that the visual impact of the proposal is mitigated to an acceptable degree.</p>
<p>Issue 10 Hydro – Management of Lake Meadowbank water levels and priority for users</p> <p>Concerns regarding how the water needs of the proposal will be balanced with other users during droughts or lake draw downs.</p>	
<p>Examples</p>	<p>Officer comments</p>
<p>It would be interesting to know how (and why) Hydro plan on managing Tassal and its water demands (at a rate of 650 ML/year) when the water resources are stretched.</p> <p>When Hydro choose to lower the level of Meadowbank Lake for maintenance of the dam wall or other reasons, as the water retracts the lake reverts back to the original route of the river over a few of days.</p> <p>Tassal are aware of this and seek to build a suction pipeline that will extend as far as it needs to ensure it can always suck water.</p> <p><i>What about water security for other users during droughts.</i></p> <p>Given that we now have extremes of climate occurring in Australia and water supplies may be limited in the future, should we be allowing more aquaculture to be located on our fresh water supplies in Tasmania?</p>	<p>Hydro Tasmania own and manage Meadowbank Lake, including rights to take water.</p> <p>Hydro Tasmania have advised that they have no objection to the proposal subject to the implementation of the monitoring and management measures proposed in the EIS and as required by the EPA.</p>
<p>Issue 11 Devalue properties</p> <p>Concerns that the proposal will devalue surrounding properties.</p>	
<p>Examples</p>	<p>Officer comments</p>
<p><i>Tassal's hatchery, as it stands, will devalue neighbouring properties immensely.</i></p> <p>I am also concerned about the impact this noise could have on the, as yet undeveloped, sites on my property. It could negatively affect their desirability and value.</p>	<p>The concern is noted, however property values are not a planning consideration.</p>
<p>Issue 12 Environmental Impacts on Water Quality</p>	

Concerns regarding the potential environmental impacts relating to the water quality of Lake Meadowbank and wider catchment area.

Specific concerns include:

- Leaching, run off and spray drift of recycled water
- Drinking water quality as a source for Hobart and locals
- Farming/irrigation water quality
- Increased nutrients leading to toxic algal blooms and/or increase in lake weeds
- Salinity/sodicity of soils and water
- Onsite wastewater treatment (for staff residence and amenities)

Examples	Officer comments
<p>Unfortunately, the reality of irrigation is that run-off will occur to some degree. Particularly on undulating ground typical of the Derwent Valley, water will follow the natural water courses of the ground – this is simply part of nature.</p> <p><i>Concerned by the possibility of Lake Meadowbank and the Derwent River being contaminated by chemical byproducts (ie Nitrates, Phosphorous and possibly some Antibiotics) associated with Fishery Operations.</i></p> <p>The proposal reveals that the terrain and the rock strata will inevitably mean that this product will find its way back to Meadowbank Lake</p> <p><i>Inadequate attention given to potential for runoff and spray drift entering the lake Throughout the EIS the proponent clearly implies that there is no possibility of run-off or spray drift of treated waste water entering into Meadowbank Lake.</i></p> <p>I do not want to be pumping tainted water for irrigation on my property.</p> <p><i>This is a plan to distribute the domestic water being used by humans in the hatchery and in the staff residence, onto the grounds surrounding the hatchery. This water will include human effluent and has the potential to make its way into the small dam or the drains leading to it or those drains that carry water to Meadowbank Lake.</i></p>	<p>The matters raised are in relation to environmental considerations, which have been assessed by the EPA.</p> <p>See Environmental Licence Conditions EF1-EF5, M1-M7 and SW1-2.</p>

Issue 13 Noise

Concerns regarding noise from the proposal, including the hatchery building, pump station and traffic.

Examples	Officer comments
<p><i>The noise produced from this pumpstation will have a devastating impact on the local environment and amenity, completely ruining the enjoyment of the neighbour's recreational area to the East and to anyone wishing to create a recreational area to the West. Its impact will be far reaching as it will be heard on the other side of the lake as well, particularly at Sound carries across water and the prevailing NW winds carry sound towards the closest residence.</i></p> <p>I am also concerned about noise from what will need to be a very large pumping system near the lake's edge. The noise, potentially 24 hours a day, will be transmitted over the lake</p>	<p>The matters raised are in relation to environmental considerations, which have been assessed by the EPA.</p> <p>See Environmental Licence Conditions N1-N5.</p>

<p>surface through the air affecting other lake users and the owners of homes, caravans and other accommodation in the area</p> <p><i>Also of concern is the noise from the 24 hour a day's pumping system. Again noise carries across the lake and we would like to be assured that adequate noise insulation would be part of the proposed development for the pump house.</i></p> <p>6 Trucks at night and 12 during the day will have a huge impact on the amenity of the residences closest to the hatchery.</p>	
<p>Issue 14 Odour</p> <p>Concerns regarding odour impacts from the proposal.</p>	
<p>Examples</p>	<p>Officer comments</p>
<p>Please consider the possible odour emissions in summer and how they might impact on those living close by and those visiting the recreational area.</p> <p><i>Of course, with a fish factory comes fish effluent and the remains of uneaten food, these produce a horrible odour!</i></p> <p>Being a fish farm, the hatchery will produce 3 sources of odour: The smell from fish effluent, the smell from the uneaten fish food and the smell from fish mortalities.</p>	<p>The matters raised are in relation to environmental considerations, which have been assessed by the EPA.</p> <p>See Environmental Licence Conditions A1-A5.</p>
<p>Issue 14 Flora and Fauna</p> <p>Concerns regarding impacts on flora and fauna in the area.</p>	
<p>Examples</p>	<p>Officer comments</p>
<p>Who will stop impacts of the hatchery on soil, flora and fauna?</p> <p><i>I am further concerned that impact assessments on flora and fauna etc. have been restricted to the immediate area of the proposed sheds etc. when the effects will be more widespread.</i></p> <p>Nowhere does it acknowledge the wildlife, the platypus, the wedge tailed eagles, the grey goshawk or the mammals that exist there. The roadworks have not considered any native vegetation.</p>	<p>The matters raised are in relation to environmental considerations, which have been assessed by the EPA.</p> <p>See Environmental Licence Condition FF1.</p>
<p>Issue 15 Emergency management/Unexpected occurrences</p> <p>Concerns regarding management of the site during emergencies such as a flood, fire or dam failure.</p> <p>Concerns regarding potential for accidents and the like.</p>	
<p>Examples</p>	<p>Officer comments</p>
<p>There are also weather extremes which will means reduced</p>	<p>The matters raised are in relation to</p>

<p>water (with Tassal wanting to use it at the expense other others) in times of drought and flooding which will cause pollution.</p> <p><i>The Proponents Environmental Assessments is based on History (Rainfall, Temperatures etc.) but with our climate changing rapidly statistics like these become unreliable. Extreme Weather Events that we now see all over Australia may dump five inches of rain in 24 hours in the dam or 40 Degree heat accompanied by 100km winds may start an unmanageable bushfire as seen a few years ago on the opposite side of the lake.</i></p> <p>Although the Proponents has included Fire prevention equipment and surplus water will they have enough manpower to protect a large facility from a wildfire. Very little help is available from other sources due to isolation.</p>	<p>environmental considerations, which have been assessed by the EPA.</p> <p>See Environmental Licence Condition OP2 - Contingency Management.</p>
--	--

Conclusion

The proposal for a recirculating aquaculture system hatchery and associated infrastructure and development at 56 and 90 Woodmoor Road, Ouse is assessed to comply with the applicable standards of the Rural Resource Zone and Codes of the *Central Highlands Interim Planning Scheme 2015* as outlined in the body of this report.

Aquaculture for finfish is a Level 2 Activity and environmental assessment of this proposal has been undertaken by the EPA, in accordance with the statutory requirement. The EPA have determined to grant an Environmental Licence for the proposed activity, subject to issuing of a permit by Council and conclusion of any appeals that may arise.

The proposal was advertised for public comment and eighty five (85) representations were received from the public. The concerns of the representors have been addressed in the EPA assessment and this report (where relevant to the planning consideration).

It is recommended that Council approve the development application, subject to conditions.

Legislative Context

The purpose of the report is to enable the Planning Authority to determine the Development Application DA2019/62 in accordance with the requirements of the Land Use Planning and Approvals Act 1993 (LUPAA). The provisions of LUPAA require a Planning Authority to take all reasonable steps to ensure compliance with the Planning Scheme.

This report details the reasons for the officers Recommendation. The Planning Authority must consider the report but is not bound to adopt the Recommendation. Broadly, the Planning Authority can either: (1) adopt the Recommendation, (2) vary the Recommendation by adding, modifying or removing recommended conditions or (3) replacing an approval with a refusal.

Any decision that is an alternative to the Recommendation requires a full statement of reasons to ensure compliance with the Judicial Review Act 2000 and the Local Government (Meeting Procedures) Regulations 2015. Section 25 (2) of the Local Government (Meeting Procedures) Regulations 2015 states:

25 (2): *The general manager is to ensure that the reasons for a decision by a council or council committee acting as a planning authority are recorded in the minutes of the meeting.*

Options

The Planning Authority must determine the Development Application DA2019/62 in accordance with one of the following options:

1. Approve in accordance with the Recommendation:-

In accordance with section 57 of the Land Use Planning and Approvals Act 1993 the Planning Authority Approve the Development Application for the Hamilton Recirculating Aquaculture System Hatchery at 56 and 90 Woodmoor Road, Ouse (CT251957/1, CT36657/2, CT36657/5, CT84290/1 and CT122993/3) subject to conditions in accordance with the Recommendation.

2. Approve with altered conditions:-

In accordance with section 57 of the Land Use Planning and Approvals Act 1993 the Planning Authority Approve the Development Application for the Hamilton Recirculating Aquaculture System Hatchery at 56 and 90 Woodmoor Road, Ouse (CT251957/1, CT36657/2, CT36657/5, CT84290/1 and CT122993/3), subject to conditions as specified below.

Should Council opt to approve the Development Application subject to conditions that are different to the Recommendation the modifications should be recorded below, as required by Section 25(2) of the Local Government (Meeting Procedures) Regulations 2015:

Alteration to Conditions:-

3. Refuse to grant a permit:-

In accordance with section 57 of the Land Use Planning and Approvals Act 1993 the Planning Authority Refuse the Development Application for the Hamilton Recirculating Aquaculture System Hatchery at 56 and 90 Woodmoor Road, Ouse (CT251957/1, CT36657/2, CT36657/5, CT84290/1 and CT122993/3), for the reasons detailed below.

Should the Planning Authority opt to refuse to grant a permit contrary to the officer Recommendation, the reasons for the decision should be recorded below, as required by Section 25(2) of the Local Government (Meeting Procedures) Regulations 2015:

Reasons :-

RECOMMENDATION FROM PLANNING COMMITTEE

Moved **Clr Poore**

Seconded **Clr Bailey**

THAT the Planning Committee recommends approval in accordance with Option 1:

1. Approve in accordance with the Recommendation:-

In accordance with section 57 of the Land Use Planning and Approvals Act 1993 the Planning Authority Approve the Development Application for the Hamilton Recirculating Aquaculture System Hatchery at 56 and 90 Woodmoor Road, Ouse (CT251957/1, CT36657/2, CT36657/5, CT84290/1 and CT122993/3) subject to conditions in accordance with the Recommendation.

Recommended Conditions

General

- 1) The use or development must be carried out substantially in accordance with the application for planning approval, the endorsed drawings and with the conditions of this permit and must not be altered or extended without the further written approval of Council.
- 2) This permit shall not take effect and must not be acted on until 15 days after the date of receipt of this letter or the date of the last letter to any representor, whichever is later, in accordance with section 53 of the Land Use Planning and Approvals Act 1993.

Approved Use

- 3) The staff accommodation is approved as ancillary to the *Resource development (aquaculture)* use only. It must not be used for any other purpose or intensified without prior Council approval.

External finishes

- 4) All external building materials associated with the development are to be of types and colours specified in the approved plans, unless otherwise approved.
- 5) All external metal building surfaces must be clad in non-reflective pre-coated metal sheeting or painted to the satisfaction of the Council's Senior Planning Officer.

Landscaping

- 6) Before any work commences submit a landscape plan prepared by a landscape architect or other suitable person must be submitted to and approved by Council's Senior Planning Officer. The landscape plan must show the areas to be landscaped, the form of landscaping, plants species, estimates of mature height and growth habit and any required maintenance. The landscaping plan shall form part of the permit when approved.
- 7) The landscaping works must be completed in accordance with the endorsed landscape plan and to the satisfaction of Council's Senior Planning Officer within six (6) months of the first use of the development. All landscaping must continue to be maintained to the satisfaction of Council's General Manager.

Parking & Access

- 8) At least seventeen (17) parking spaces for the hatchery and six (6) parking spaces for the staff accommodation must be provided on the land at all times for the use of the occupiers in accordance with Standards Australia (2004): Australian Standard AS 2890.1 - 2004 – Parking Facilities Part 1: Off Street Car Parking; Standards Australia, Sydney.
- 9) Unless approved otherwise by Council's General Manager the internal private driveway and areas set-aside for parking and associated access and turning must be provided in accordance with the endorsed drawings, Standards Australia (2004): Australian Standard AS 2890.1 - 2004 – Parking Facilities Part 1: Off Street Car Parking; Standards Australia, Sydney and include all of the following;
 - A minimum trafficable width of 3m.
 - Provision for two way traffic.
 - Constructed with a durable all weather pavement.
 - Drained to an approved stormwater system.
 - Line-marking or some other means to show the parking spaces.
- 10) Adequate manoeuvring space must be provided in accordance with Standards Australia (2002): Australian Standard AS 2890.2 – 2002, Parking facilities - Part 2: Off-Street, Commercial vehicle facilities, Standards Australia, Sydney to ensure that heavy trucks or articulated vehicles may leave the site in a forward direction.

- 11) The loading and unloading of goods from commercial vehicles must only be carried out on the land in accordance with Standards Australia (2002): Australia Standard AS 2890.2 – 2002, Parking facilities - Part 2: Off-Street, Commercial vehicle facilities, Sydney.
- 12) All areas set-aside for parking and associated turning, loading and unloading areas and access must be completed before the use commences or the building is occupied and must continue to be maintained to the satisfaction of the Council's General Manager.
- 13) Prior to any works commencing, design drawings of the proposed internal rural access road are to be submitted to and approved by Council's General Manager.
- 14) All works required by a Traffic Impact Assessment (TIA) in respect of access to the land must be completed to the satisfaction of Council's General Manager before the use commences, specifically a basic left turn (BAL) treatment is to be provided from the Lyell Highway in accordance with the requirements of the Department of State Growth.

Access to State Roads

- 15) All work on or affecting the State Road, including drainage, must be carried out in accordance with a valid permit provided by the Transport Division of the Department of State Growth. No works on the State Road shall commence until the Minister's consent has been obtained and a permit issued in accordance with the Roads and Jetties Act 1935 (contact permits@stategrowth.tas.gov.au.)

Stormwater

- 16) Drainage from the proposed development must drain to a legal discharge point to the satisfaction of Council's General Manager.

Services

- 17) The developer must pay the cost of any alterations and/or reinstatement to existing services, Council infrastructure or private property incurred as a result of the development. Any work required is to be specified or undertaken by the authority concerned.

Aboriginal Heritage

- 18) The recommendations of the Aboriginal Heritage Assessment Report Final Version 1 (Cultural Heritage Management Australia, 25/4/2019) must be implemented during construction, including:
 - If during the course of the proposed development works, previously undetected archaeological sites or objects are located, the processes outlined in the Unanticipated Discovery Plan should be followed;
 - A copy of the Unanticipated Discovery Plan (UDP) should be kept on site during all ground disturbance and construction work; and
 - All construction personnel should be made aware of the Unanticipated Discovery Plan and their obligations under the Aboriginal Heritage Act 1975.

Dam Works

- 19) The permit holder must submit a Notice of Intent (Attachment 1) to commence dam works (see Note 2) to the Department (see Note 1) before dam works commence. Dam works must not commence prior to the nominated start date on this notice, unless otherwise authorised by the Department.
- 20) The Notice of Intent to commence dam works must be signed by the permit holder, the person constructing the dam (the contractor) and the site supervising engineer, confirming that these persons have read and understand the permit and conditions.
- 21) Dam works must be carried out in accordance with the Water Management (Safety of Dams) Regulations 2015 and the Water Management Act 1999.
- 22) The works must be carried out in accordance with the following report:

- 23) Notwithstanding condition 4, the dam must contain a clay and or HDPE liner which must have a maximum in-situ permeability of 1×10^{-9} m/s throughout the full depth of the liner. In-situ testing for verification of permeability must be carried out in accordance with AS1289.
- 24) A person with a minimum of Class 1 competence (the "site engineer") (see Note 3) must be in charge of all earth works and be responsible for:
- Conducting quality control tests and sampling in the field;
 - Verification of all quality control testing; and
 - Completion of documentation of all relevant activities including engineering design,
- construction and quality assurance activities.
- 25) Within 14 days of the completion of dam works the permit holder must submit to the Department a "Work-as-Executed" report, prepared by the site engineer, setting out as-constructed details of compliance with conditions including all items required to be supervised by the site engineer at Condition 5.

Note: Conditions 18 – 24 above provided by the Water Management and Assessments Branch, Department of Primary Industries, Parks, Water & Environment (Contact: anna.harper@dpipwe.tas.gov.au or 6165 3019).

The following advice applies to this permit:

- a) This permit does not imply that any other approval required under any other legislation has been granted.
- b) This Planning Permit is in addition to the requirements of the Building Act 2016. Approval in accordance with the Building Act 2016 is required to be obtained prior to construction.

Notes relating to Dam Conditions:

Note 1: References to the "Department" mean the Department of Primary Industries, Parks, Water and Environment or its successor responsible for administration of the Water Management Act 1999. Where a permit condition requires a submission to, or authorisation from, the Department, the relevant contact officer is the Section Head Dams Administration Water Management and Assessment Branch

Note 2: "dam works" includes clearing, scraping and excavations at the dam site, other than test pits.

Note 3: Site Engineer means a person with a minimum of Class 2 competence, as prescribed under the Water Management (Safety of Dams) Regulations 2015.

Carried

For the Motion: Clr Allwright, Clr Poore, Clr Bailey

Against the Motion: Mayor Triffitt

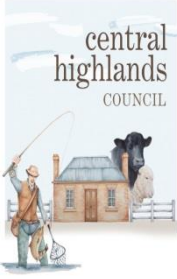
7.0 OTHER BUSINESS

Nil

8.0 CLOSURE

There being no further business the meeting closed at 10.35am

DRAFT



BOTHWELL SWIMMING POOL **MINUTES**

Minutes of the Bothwell Swimming Pool Committee held at the Council Chambers, Bothwell on Wednesday 27th November 2019 commencing at 9.30am.

1.0 PRESENT:

Mayor L Triffitt (Chairperson), Clr J Poore, Clr A Campbell, Mrs L Eyles (General Manager), Mr J Branch (Works Supervisor),

(In attendance: Jodi Hill (minute secretary), Mrs B Armstrong(EHO)

The chairperson took the chair and welcomed everybody to the meeting at 9.35am.

2.0. APOLOGIES:

Mrs N Davey, Mr G Rogers, Mrs B White, Miss T Lewis

3.0. PECUNIARY INTEREST DECLARATIONS

In accordance with Regulation 8 (7) of the Local Government (Meeting Procedures) Regulations 2015, the Chairperson requests Councillors to indicate whether they or a close associate have, or are likely to have pecuniary interest (any pecuniary or pecuniary detriment) in any item of the Agenda.

NIL

4.0. CONFIRMATION OF MINUTES 24.09.18

Moved: Clr J Poore

Seconded: Mayor L Triffitt

THAT the minutes from the meeting of Wednesday 24th September 2018 be passed as a true record of that meeting.

Carried

For the Motion: Mayor L Triffitt, Clr J Poore & Clr A Campbell

5.0. BUSINESS ARISING

Jodi advised that Graham Rogers had reported that the canteen/kitchen upgrade at the Bothwell swimming pool has been completed, the BBQ has been cleaned and ready for use, painting around the pool is being done Friday 29th December 2019.

Graham has asked if shade cloth repairs or renewal (over toddler pool) and a new shade cloth over the main pool be included for budget deliberation in 2020/2021.

Recommendation

Moved Clr J Poore

Seconded Clr A Campbell

THAT the recommendation of 2 quotes be obtained for the replacement of shade cloth over baby pool and main pool for 2020/2021 Budget.

Carried

For the Motion: Mayor L Triffitt, Clr J Poore & Clr A Campbell

Opening Hours & Fee Structure

The opening hours for the 2018/2019 Season were as follows:

School Holiday Period

Monday to Sunday – 11.00am to 6.00pm / 6.30pm-8.00pm (Weather and attendance permitting) ½ hour Tea Break if working to 8.00pm.

Non-School Holiday Period

Monday to Friday – 3.00pm to 6.00pm / 6.30pm/8.00pm (Weather and attendance permitting) ½ hour Tea Break if working to 8.00pm.

Saturday & Sunday – 11.00am to 6.00pm / 6.30pm-8.00pm (Weather and attendance permitting) ½ hour Tea Break if working to 8.00pm.

The fee structure for the 2018/2019 was as follows:

Entry

Junior Day Pass (any or all sessions) - \$4.00

Adult Day Pass (any or all sessions) - \$5.00

Afternoon/Evening Adult Ticket- \$3.00

Afternoon/Evening Junior/Pensioner Ticket- \$2.00

Season Voucher

Family - \$143.00

Family Concession - \$ 105.00

Adult - \$79.00

Adult Concession - \$50.00

Junior /Pensioner Season Ticket- \$44.00

Sporting Groups/Clubs-Hourly Hire \$50.00- (Lifeguard will need to be present and paid by Hirer)

Recommendation

Moved Clr J Poore

Seconded Clr A Campbell

THAT:

(a) The above opening hours and fee structure be adopted for 2019/2020.

(b) The pool season open from 9th December 2019 to 9th March 2020.

Carried

For the Motion: Mayor L Triffitt, Clr J Poore & Clr A Campbell

Bev Armstrong (EHO) to check canteen kitchen for food licencing and sample swimming pool water before opening season.

Jodi advised that Georgia Pennicott has been appointed as Pool Lifeguard for 2019/2020 season and Georgia Bryant is doing training to obtain her Lifeguard certificate at Hobart Aquatic Centre on 13th December 2019 (for backup lifeguard for season). We also have John Hall from Royal Life Saving Society as backup if needed.

Ms N Davey (Principal BDHS) has requested that the school have permission to use the pool from 16th December 2019 to 18th December 2019 for school activities.

Recommendation

Moved Clr A Campbell

Seconded Clr J Poore

THAT the Bothwell DHS be given permission to use the pool from the 16th December 2019 to 18th December 2019.

Carried

For the Motion: Mayor L Triffitt, Clr J Poore & Clr A Campbell

Works and Services to work with DES to monitor chemicals and running of pool for season.

Jodi to discuss with Georgia Pennicott when to hold a sausage sizzle or maybe a Xmas event with Santa.

Jodi to advertise in Highland Digest and place posters around Businesses.

6.0. NEXT MEETING The next meeting of the Bothwell Swimming Pool is to be held at the Bothwell Council Chambers at a date to be advised.

7.0. CLOSURE There being no further business the chairperson thanked members for their attendance and closed the meeting at 10.00 am.

MINUTES

AUSTRALIA DAY COMMITTEE MEETING

26TH November 2019

Minutes of the meeting for the Australia Day Committee held at the Hamilton Council Chambers on 26th November 2019 commencing at 1.06 p.m.

ATTENDEES Mayor L M Triffitt and Cllr T Bailey

APOLOGIES Cllr A Campbell

IN ATTENDANCE Katrina Brazendale (Minute Secretary)

TIME AND LOCATION

The Australia Day Event this year will be held at the Ellendale Hall on Sunday 26th January 2020, commencing at 10.30 to 12.00 noon the same as previous years. The Hall has been confirmed as booked. The Mayor and Katrina will have a look at the venue closer to the event.

FOOD

Hamilton Inn has been confirmed with a follow up closer to the date for numbers.

MUSIC

Lynda Gray will be attending.

OTHER BUSINESS

A grant application was submitted to Department of Premier and Cabinet – Australia Day Grant Program for the supply of merchandise, Katrina is currently following up the outcome of this application.

Discussions around ways to promote and increase nominations for Australia Day and nominations for this year will be accepted until Thursday morning (28th November 2019).

That a recommendation goes to Council for the upcoming meeting seeking an increase in the Australia Day budget from \$1,000 to \$1,500. With the allocation being already pencil marked for catering and music.

MINUTES
AUSTRALIA DAY COMMITTEE MEETING
26TH November 2019

GIFT

The Mayor previously recommended that the recipients would receive a Bottle-brush plant from the nursery along with an engraved pen from the men's shed. The Mayor has requested a price on a wooden trophy with an engraved glass panel.

Prices on the items are to be obtained once the outcome of the budget allocation is approved.

CLOSURE 1.45 p.m.



The Derwent Catchment Project

Increasing Productivity. Restoring Landscapes



June – November 2019

Activity Report for Central Highlands Council

**This report falls primarily under strategic plan Goal 4 Natural Environment—
Encourage responsible management of the natural resources and assets in
the Central Highlands and the following strategies:**

4.1 Continue to fund and support the Derwent Catchment Project

4.4 Continue the program of weed reduction in the Central Highlands

4.5 Ensure the Central Highlands Emergency Management Plan is reviewed regularly to
enable preparedness for natural events and emergencies

4.6 Strive to provide a clean and healthy environment

4.7 Support and assist practical programs that address existing environmental problems and
improve the environment

General Business

This report covers the activities of the Derwent Catchment Project from July through to November and is intended as an end of year summary of works. Although works will continue over the festive season we wanted to provide you with an overall summary before the holiday period.

Building a program of on-ground action

The current Derwent Catchment Project strategic plan was developed when Josie first started 5 years ago, and we are pleased to announce that the organisation has successfully achieved most of the original objectives. It is time for a new plan! This year we held a workshop to prioritise actions that have been formalised in our new strategic plan for 2019-2024. One of the focuses of the new plan will be to build on Council's investment to attract funding from industry and other sources.

Over the last 5 years the Derwent Catchment Project has seen a **tenfold increase in the amount of funding we have attracted into the region**. Last year we managed to close a million dollars' worth of NRM programs across the Derwent Valley and Central Highlands. The projection for this financial year is similar with investment coming largely through successful grant applications.



Spring celebration and fundraiser 2019

Every year we gather the community together to celebrate Spring and the start of the productive season. As part of the event we share a 3-course meal and hold a charity auction to raise money to support our work in the Catchment. The last 3 events have been held in Hamilton or Bothwell and this year the event was held in

the hop kiln at Valleyfield in New Norfolk. Eve attracted some great donations from businesses and community across the Catchment with this year's event that attracted a lively crowd of 88 people despite the rainy weather! Valleyfield's delightful coach house and hop kiln was kindly donated by Emily Warner and Matt Bradshaw. Will Chapman and Matt Stone served us delicious fare from Matt's well-equipped food van, Mossa Cucina. Cade Ebdon from Livestock Consulting was again a highlight, using his stock auctioneer prowess to encourage the highest bidder to put their hand up. The silent auction ran in the background during the night offering packages of donations such as 'Mediterranean Style' which offered an antique French cheeseboard; Ouse River Wines and a selection of Tasmanian cheeses.

We were delighted to raise close to \$10,000. The money was used to purchase a 4WD drive ute for our on-ground works team to continue and enhance our ability to deliver revegetation, weed control and river restoration projects across the catchment.

Bothwell Bushfest

Josie and Eve held a DCP stall at this year's Bushfest in Bothwell. Eve had a go at MC for the day on Saturday greatly enjoying the diversity of stalls and an opportunity to talk to the wide range of people who attended the day. Unfortunately, on Sunday we did not run our stall as Eve was sick.

The weed display attracted attention with many people asking about foxgloves which were eye catching! There were many questions about how to control other common weeds and what to plant to fill the gaps. There was also interest in the Tyenna Willow warriors and the associated Fisheries

Habitat Improvement Fund project. Anglers were keen to discuss where the funds for the fund were being invested and we had a couple of new people express interest in becoming part of the volunteer component of the program.

Bothwell update

Starting in June Josie has been working with Jason Branch on a tree replacement program to fill in the gaps around the streets of Bothwell. The replacement program will include 60 trees (blackwoods and black gums) and 25 native shrubs. There has also been a small native planting at the cemetery to finish screening out the units. T

The Bothwell Native Garden has been planted and we are currently developing the interpretation material for the garden which we hope to finish for January. Maintenance and on-going works to complete this garden are continuing.

Emergency response support and building resilience

Fire management workshop

In July Eve attended a bushfire workshop held in Hobart and organised by DPIPW fire management staff. She presented a short talk about the effect of the recent fires on the Miena cider gum and also the need for better cross-tenure fire management support, particularly for large landowners next to the world heritage area.

Fire management meeting with the Minster

In August Eve attended an on farm meeting the Minster Mark Shellon (Emergency Services), concerned landholders, Tasmanian Fire Service Chief (Chris Arnold) and staff from the Tasmanian Land Conservancy Reserve management team to discuss concerns from the 2019 summer bushfires and look at collaborative solutions going forward. One of the outcomes from the meeting was the recognition for the need for improved cross tenure fire management facilitation to support to private landholders who want to undertake fuel reduction burning that contributes to landscape hazard reduction.

Regional Fire Management Council

Eve was invited and recently joined the Regional Fire Management Council for the Southern Midlands which incorporates the Central Highlands. In this meeting forum the priorities for fire management are decided for the region. Evie's main contribution to this is on the cross-tenure management for fire. It is recognised that cross tenure fire management has barriers and needs to

be improved and we hope as a catchment organisation with many types of members we can contribute to more effective cross tenure management.

Landcare conference – 25 years of Landcare

Eve presented a talk about the Derwent Catchment Project and it's role in supporting landholders post flood. There was significant positive feedback from the audience regarding the DCP model which through Council support can leverage investment into the catchment for landcare and more specifically flood recovery projects such as the Ouse River ALRS and the Community Resilience grant for the Lachlan area. There are now some community education resources available on floods and recovery on the Derwent Catchment Project You Tube channel. Including a video on 'Why willows are bad'.

<https://www.youtube.com/channel/UCQgIMcC7dqKVpp19CMOupnA>

Climate workshops for Local Government

Josie and Eve have attended workshops run by STCA looking at climate profiles to support southern Tasmanian councils to understand local climate hazards. This project is backed by research from Climate Futures Tasmania (UTAS) to develop local climate profiles based on each council's strategic, operational and jurisdictional needs. This is an important issue particularly for Central Highlands because of the increased risk of fire and we will arrange to give a presentation to Council in the new year and Eve will discuss this with you at the next meeting.

Weed Management

Employment of On-ground works team

Glenn Szalman was appointed the position of On-ground Works Team Leader. Glenn has run his own land management business previously and is a keen angler. He has an intimate knowledge of the region and its river landscapes. Morgan McPherson was also employed to support Glenn with the on-ground works this season. Our intention is to set up the process required to attract a local trainee in this position in the long-term.

Glen and Morgan have started CHC spray works and have also been working at Tarraleah on the broom and treating weed outliers. They have also been undertaking contract weed control work at the Cattle Hill Windfarm as well as some revegetation works. They have been maintaining plantings

at Dunrobin Park and redoing the nursery irrigation which has been causing trouble with leaks for some time.

CHC Weed Management Meeting

The annual Central Highlands Weed Meeting was held in September and was attended by all key stakeholders. Good progress is being made by all parties towards achieving the aims of the Central Highlands Weed Management Plan. The bushfires impacted on the capacity of a number of larger land managers that were involved in firefighting during the weed season. On-going investment into the program was confirmed and a coordinated effort will continue this year to ensure progress against the targets within the plan. There was renewed commitment from Crown Land Services and TasNetworks and increased investment from Hydro Tasmania, part in response to the broom and orange hawkweed plans DCP developed.

Highlands Broom Plan

This project evolved out of an increasing recognition that broom is thriving in certain locations across the highlands. We have been successful in our grant application to the Parks & Wildlife Working Neighbours Program to address this situation. In June a 3-day detailed survey was undertaken to establish a strategic weed management plan with actions for each of the key infestation sites. A core component of the plan will be to work with landholders and State agencies to develop a long-term co-investment strategy. Funding is available to undertake emergency containment works at Bronte and Tarraleah. Outlier control works at areas identified in the survey as being closest to the World Heritage Area (such as any Broom found at Butlers Gorge) will also be undertaken as part of this program.

Of particular importance are the three areas of extensive infestation at Tarraleah, Bronte and Dee Lagoon. In July we have had some traction with a control trial at the Bronte site and there has also been a program undertaken at Dee Lagoon supported by Hydro Tasmania, TasNetworks and Sustainable Timber Tasmania. The main broom outliers are at Brady's Lake and the Fourteen Mile Road. A new outlier site has also been located at Derwent Bridge which is currently being treated by PWS. The Central Highlands Weed Management Program has successfully treated outliers and this plan will help inform further control.

In August we completed the Highlands Broom Report. The next stage will be to undertake control in Spring around Tarraleah to protect the Tarraleah Conservation Area. The Report includes a co-investment plan which will be submitted to the next Weed Action Fund (currently being administered by the Biosecurity Tasmania DPIPW) round to support cooperative containment in

the Central Highlands. The on-ground works crew are also implementing control works this season

Broom in the edges of native vegetation at Tarraleah. a. Broom has invaded up to 80m into open woodland in paddocks with grazing and b. there is scattered broom on the regenerating edges of the Tarraleah



to reduce broom on the Tarraleah area as part of funding attached to this plan.

Orange Hawkweed

In June we developed Action Statement to document the current understanding of the distribution of orange hawkweed in the Central Highlands and near and within the World Heritage Area. The review has shown that:

- At outlying sites with active control, the species was absent, or restricted to a few isolated plants
- At larger sites (Butlers Gorge and Shannon) the species is still present, but over a much-reduced area
- Where there has been a lapse in control efforts (Crown Land at the Shannon) the species is present at higher densities
- Evidence of some spread with four new sites confirmed - two identified through survey (Maydena and Steppes Reserve), a third on private land near Bothwell confirmed through herbarium records and a fourth reported from Cattle Hill Wind Farm.

The Action Statement for Orange Hawkweed in the Central Highlands was completed in July. This document will be used to support a bid for funding as part of a broader Orange Hawkweed project being developed by NRM South. It is hoped that an Orange Hawkweed project will be supported by the recently announced Weed Action Fund, administered by Biosecurity Tasmania on behalf of the

State Government. The Action Statement is still currently being used to support a collaborate cross-tenure project as part of the Weed Action Fund round 2 which will have scope to support larger projects.

Glyphosate workshop

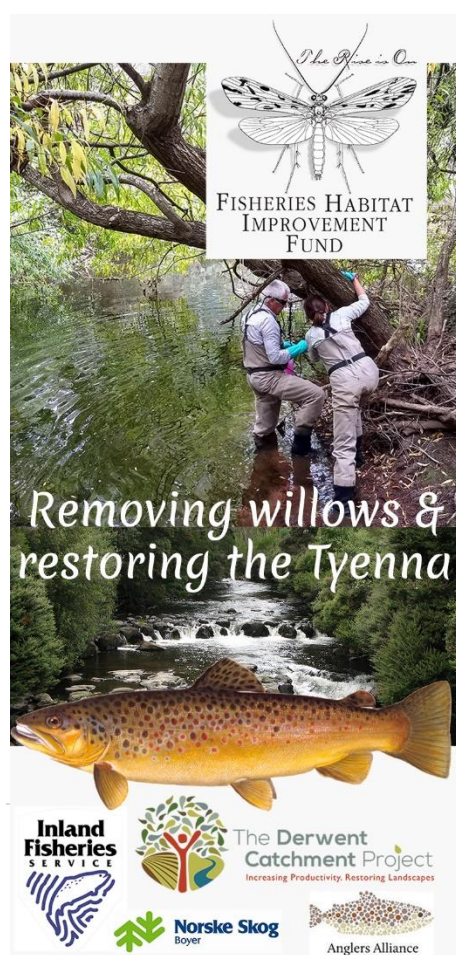
Eve attended a workshop run by ServeAg that focused on the history of use of glyphosate and the scientific evidence that indicates there are no links between cancer and glyphosate. The session also looked at the importance of integrated weed management options. Eve will be working with Jason Branch to look at how Council can implement integrated weed management to ensure best practice.

Environmental conservation, river restoration and maintenance works

Healthy Rivers Action Plan for the Derwent Catchment

Throughout October and November we started working with the Derwent Estuary Program (they are a group of scientists who work across the saltwater portion of the Derwent) to develop a practical water quality improvement action plan for the catchment. Research has shown that there is a decline in water quality in the main trunk of the Derwent and this has been evidenced through taste and odor issues in Hobart's water. The aim of the Healthy Rivers Action Plan for the Derwent Catchment will be to attract funding for community engagement, practical land management and water quality monitoring as the Tamar Estuaries and Esk River (TEER) Water Quality Improvement

Plan has done in the North of Tasmania. The TEER plan has received millions of dollars from the State and Australian Governments to support work with industry, on-farm and throughout the community to improve catchment management. Our plan will be practical, action based and will use current science to inform appropriate actions. We will ensure meaningful community engagement is embedded into the plan. To date we have developed the structure of the plan with broad content requirements. We will keep Council informed as this project progresses.



Tyenna River Recovery program

In June the Liawenee Trout Weekend provided a great opportunity to talk with the fishing community about the Tyenna River project. We held a stall with the Fisheries Habitat Improvement Fund showcasing the river recovery project and with the brochure pictured, managed to attract 20 new volunteers for our Willow Warriors program. We also produced and provided a brochure on 'Why willows are bad!' which was very popular. Now a video as well.

With fantastic weather and a great crew of people in July the Willow Warriors planted 700 native rushes, shrubs and trees along a stretch of the Tyenna River replacing recently removed willows. The willows, removed by the landholders at the Westerway Raspberry Farm, had been restricting access to the river and impacting on fish habitat. As they grow, our native plantings will help to shade the river, stabilise the banks (as the willow roots break down) and improve river health.

There were both new faces and seasoned Willow Warriors at the working bee and the many hands made light work of a big job. Participants had a chance to give back to one of Tasmania's premier trout-fishing rivers and the landholders that provide access to it.

The revegetation undertaken at the July working bee was inundated a few times by rising river levels, however they continue to grow well, and most are still in place.

In October we were invited to submit an application under the MP Community Environment Program grants for on-ground works. We have requested \$12,000 to implement willow control, revegetation and working bees as part of the Tyenna River Recovery Plan which is current under development with the support of the Fisheries Habitat Improvement Fund.

The Tyenna Willow Warriors, working with the Derwent Catchment Project and the Clarkes of Lanoma Estate, controlled willows along 300m of the Tyenna River in November. This effort was focused on an area that had been revegetated with native plants in a previous working bee. These plantings were watered, as although there was rain overnight, the soil was still very dry. These plantings are growing well despite numerous inundations over the winter months, with sturdy mesh cages allowing for water to move over the plants without damage. At lunch time the group had a chance to learn more about the water bugs found in the Tyenna from John Gooderham and Trish Clements. Volunteers helped Trish and John sample the river and identify the water bugs collected.

Fisheries Habitat Improvement Fund – the desktop planning for the development of the Tyenna River Restoration Plan is underway and on-ground surveys are due to be completed this week. A plan will be completed early in the new year to help target works.

Ouse River

In July follow up was undertaken with all landholders and reassessment of initial plantings. In August Glenn worked with landholders at priority sites to remove guards and stakes from failed plantings and replant with native tubestock from the Hamilton nursery. In October Glenn and Jim Allwright the Deputy Mayor replanted the Golf Club with larger shrubs and trees protecting them with wire reinforced cages.

Meadowbank Action Statement – a ‘10-year plan of activity’

In 2018-19 the first version of the Lake Meadowbank Working Neighbours NRM Plan was developed with input from landholders with properties adjacent to the Lake, addressing NRM issues such as erosion, weeds and farm run-off. In 2019-20 this Plan will be revised through community consultation and relationship management between landholders and Hydro Tasmania staff, facilitated by the Derwent Catchment Project, to help address a boarder range of issues related to shared Lake frontage.



Through the development of a Communication Plan and a two staged Community Consultation process the Derwent Catchment Project will work with Hydro and its neighbours to improve relationships and guide catchment management and encourage private landholders surrounding the Lake to work with Hydro toward shared NRM goals.

Miena cider gum strategic management plan and implementations



The development of this plan with funding from Hydro Tasmania, was to improve the condition of Miena cider gum on Hydro land at Arthurs Flume. The key threats at Arthurs Flume include wildlife browsing, wildfire, climate change and insect pests. The management interventions recommended include: browsing protection measures; mulching around flagship old trees to reduce stress in heat waves; and development and implementation of insect monitoring and control guidelines; a wildlife management plan; a fire management plan; a working neighbours' program to build resilience at a landscape level; and to undertake further seed collection to ensure a

genetically representative collection is in long-term storage at the Tasmanian Seed Conservation Centre. The plan outlines 5 and 10-year key performance indicators and a monitoring plan to measure progress against the objective and management interventions which are recommended to address the key threats at the site.

One of the biggest threats to the survival of the Miena cider gum is browsing, particularly by possums. The aim of this project is to reduce canopy browsing pressure at the Arthur's Flume subpopulation by implementing a browsing protection trial targeting mature and juvenile Miena cider gum trees. In June twenty-two old trees were banded using polycarbonate and one cage was installed to protect a smaller tree. Detailed monitoring was also undertaken and will be followed up yearly to assess changes in health.

At the end of October an escape burn at Tods Corner significantly impacted the Miena Cider Gum subpopulation. This was the 4th out of the 5 best remaining stands to be affected by fire in the last 12 months. This recent fire is an unfortunate event as we were preparing to work with the adjacent landholders on developing a shared fire management plan for the region which may have prevented this from happening.

This season's program will respond to the fire that occurred at the site in early November. DCP will browsing protection measures on old trees that have been burnt as well as implementing recommendations from the Arthurs Flume Miena Cider Gum Conservation Plan 2019-2029. We will undertake the following works in 19/20:

- Install 20 polycarbonate tree collars for large old burnt trees;
- Develop a working neighbours' program; and
- Develop a wildlife management plan.

Agricultural sustainability

Open Gates – Dairy Cares for the Derwent

The Open Gates project at Clearview has progressed with the first water sampling being taken from below the dairy to monitor the nutrient run-off and to record improvements in water quality once wetlands have been built and riparian zones planted. A wetland design was finalized in July which will include a semi-constructed wetland, in-ditch wetlands and riparian planting. On-ground works and planting will begin in early summer when the ground is drier.

In August a restoration plan for Clearview at Gretna was developed. The key areas requiring replanting range from streamside/drainage lines to shelterbelts to reduce energy and soil loss from winds and provide shelter to stock. The plan identifies riparian plantings and shelter belt locations based on sustainability and production needs. Revegetation works at the site have recently commenced.

Effluent Day

DCP staff attended the Effluent Day hosted by Dairy Tas which covered important aspects of managing and utilising animal waste on farm. The key messages can be distilled to the 3 s's:

- Storage (make sure you have enough storage capacity)
- Solids (manage them!)
- Sufficient reuse area



In August – September - Significant planting (940 plants so far) has been undertaken at Clearview Dairy as part of this program. Revegetation at the site will encompass 2.5 ha of shelter belts

and riparian plantings when completed.

Energy Day at Ivanhoe Farm

As part of the Open Gates project we funded a Southern 'All About Energy' workshop. This workshop was developed by Dairy Tas and the major energy providers and previously ran in the North of the State. There was an excellent turn out of farmers from the Central Highlands and Derwent Valley. The workshop focused on irrigation efficiency; how to successfully incorporate renewables; billing and metering queries and advice from independent energy advisers and brokers.

August – November

On going water monitoring for this project has been undertaken at 4 sites – 3 in the Central Highlands and 1 in the Derwent Valley. The aim of this monitoring is as a management tool for the associated farms.

We have also started measuring out the works for the planned wetland systems at Clearview to reduce nutrient run-off potential. The works are planned to occur in December. This process is being filmed and will be presented as a how to guide for using wetland systems to slow nutrient movement.

Pasture Information Network – supporting dryland grazers in the Derwent Catchment

This project will provide funding to work with dryland graziers in the Derwent Catchment for the next four years. The project includes costed demonstration sites on land management practices to reduce soil erosion on North-facing slopes via pasture species selection/nutrient management and the use of perennial shrubs. Workshops including a Dryland Grazing Management Course; nutrient management; managing variable soils & forage shrubs will also be held annually. Field days on North-facing slopes management; trees on farms; de-stocking/drought management options; climate resilience and whole farm planning will be offered. We will also be running a mentor program where people seeking to upskill will be provided a local mentor to support them. We will redevelop the Pasture Hub website to synthesise all the learnings from the practical programs which has not been done with projects like this before. The Pasture Hub website will include pasture management support translated into step by step guides, blogs, podcasts, note sheets and short videos. Case studies and research information will also be shared. We are very pleased to be in the final stages of administration and hope to sign a contract by the end of the year.

Meat & Livestock Australia Producer Demonstration Sites – Forage shrubs

We have ordered Mediterranean saltbush (*Atriplex halimus*) seed for the trial which will be starting in Autumn 2020. Karen is growing 15,000 plugs in the nursery for planting and the rest will be direct drilled. Project planning and communication reports have been provided recently to MLA to support the project going forward.

Grants roundup

Building Better Regions Grant

We have received funding under the Building Better Regions Grant to develop a strategic plan for growth in the agricultural and tourism sectors in the Derwent Valley. The Derwent Valley community have developed a shared vision of sustainable growth to build jobs and business opportunities while maintaining the liveability of the remote, clean and green area in which they live. The Our Valley 2030: Derwent Valley Community Strategic Plan developed a shared vision for the future of the Valley in which sustainable development tourism and agriculture play key roles. The Valley's tourism and agricultural sectors have opportunities in common through cultivating shared markets, though they can also indirectly threaten one another with concerns identified for biosecurity, land degradation and river health. Through collaborative action planning in a series of workshops focused on opportunities and threats shared by these sectors we will investigate how to best ensure a well-supported growth strategy for long term resilience in the Valley's community, environment and economy.

Planning for sustainable growth in Agriculture and Tourism

The first workshop as part of the development of a plan for Sustainable tourism and agricultural growth in the Derwent Valley funded by the Building Better Regions fund was held at Currunga Farm on the 10th October 2019. Seventeen participants representing a range of large commercial tourism and agricultural businesses in the Valley attended. The agricultural businesses represented include producers with the following commodities - hops, wine grapes, brewing, soft fruits, elderflowers, cherries, dryland grazing and irrigated dairy. The tourism businesses included representatives from Mt Field National Park, B&B, tearooms, farm stay, adventure tourism and a hotelier. Inland Fisheries Service (anglers) and



Derwent Valley Council representatives also attended. This workshop provided opportunities for networking between sectors with business owners sharing information on their products and connecting services with needs.

One of the threats to sustainability of cross sector growth that was identified by participants was a need for increased cooperation between Derwent Valley and Central Highlands Councils. The Derwent Valley Council is supporting this plan. We have significant interest from businesses and community in the Central Highlands and see numerous benefits in cross boundary planning. These benefits and the outcome of the first workshop will be presented to Council shortly.

The agreed vision for the plan resulting from this workshop is: A vibrant Valley with working partnerships between agricultural and tourism businesses supporting growth while ensuring livability, and a resilient economy, environment and community.

Magali will now undertake a detailed Strengths, Weaknesses, Opportunities and Threats (SWOT) analysis using the information captured at the workshop. We will also be undertaking one on one interviews for those who could not make the workshop. We will also be holding workshop on the four topics for regional action planning which will be scheduled in February. The draft plan will be available mid-March for comments. Eve will present more about this project at the next Council meeting in December.

Meat and Livestock Australia - Forage shrubs

This project will demonstrate and assess the potential of perennial forage shrubs to contribute to useful fodder to address the Winter feed gap on marginal land (North-facing slopes). It will also conduct a costed proof of concept for the establishment of forage shrubs on North-facing slopes comparing planting seedlings to direct seeding methods across 3 demonstration sites. Derwent Catchment Project will facilitate a peer learning group of core producers who drive demonstration site design, establishment and monitoring. This peer learning approach will be used to produce a proof of concept to increase uptake by the 11 core producers to incorporate the use of perennial forage shrubs on marginal areas of their grazing systems. Successful (4-year grant with option of extension for a further two years)

Agri-best practice in the Derwent – Regional Land Partnerships - \$1.2 million informally approved awaiting contract

TIA smart farms – regenerative agriculture statewide project included as active service delivery partner – part of larger \$4 million grant - Pending

English Broom Plan A plan and initial control for English Broom in the Highlands \$24,000 successful

Weed action fund grants and advice

African feathergrass survey and plan - \$5000 successful

Elisha's Tears control with Bobbie Shoobridge successful

We also provided advice and letters of support for other applicants including a successful applications in the Highlands close to the TWWHA boundary.

Tyenna River Recovery –

\$12,000 – MP Community Environment Program – submitted

We thank you for your ongoing support,

Josie Kelman 0427 044 700 or facilitator@derwentcatchment.org

Eve Lazarus 0429 170 048 or projects@derwentcatchment.org

This plan was prepared for Central Highlands Council as a proposed subdivision application to the Central Highlands Council and should not be used for any other purpose. The dimensions, areas and total number of lots shown hereon are subject to field survey and also to the requirements of council and any other authority which may have requirements under any relevant legislation. In particular, no reliance should be placed on the information on this plan for any financial dealings involving the land. This note is an integral part of this plan.

Ref. CHC_BRONTE

659.861 AHD



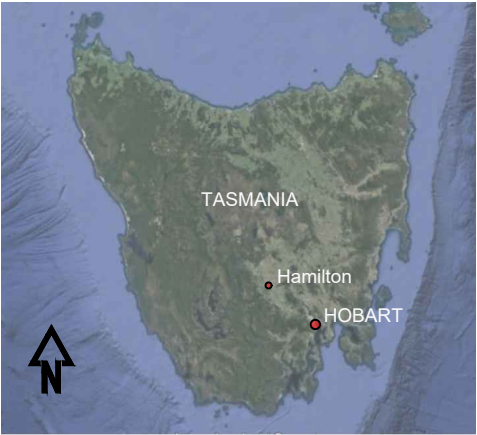
DA2019/62 - Tassal Application Documents

The following documents/reports are part of the Tassal Development Application.

These documents are available by request or can be accessed online at

<https://epa.tas.gov.au/assessment/assessments/tassal-operations-pty-ltd-hamilton-recirculatory-aquaculture-system-hatchery-ouse>

- Hamilton HRAS Environment Impact Statement
- Appendix A – Natural Values Assessment
- Appendix B – Irrigation Environmental Management Plan
- Appendix C – Proposed Dam Consequence Category Assessment
- Appendix D – Soil Evaluation and System Design for Domestic Wastewater Management
- Appendix E – Clay availability and Permeability for Dam Construction
- Appendix F – Traffic Impact Assessment
- Appendix H – Tassal Stakeholder Engagement Plan
- Appendix I – Planning report
- Appendix J – Preliminary Geotechnical Investigations
- Appendix K – Bushfire Risk Assessment Report
- Appendix L – Groundwater Prospectivity
- Appendix M – Aboriginal Heritage Assessment
- Appendix N – Air Emission Assessment
- Appendix O – Proposed Groundwater Monitoring Bores
- Appendix P – Noise Impact Assessment
- Appendix Q – Visual Impact Assessment



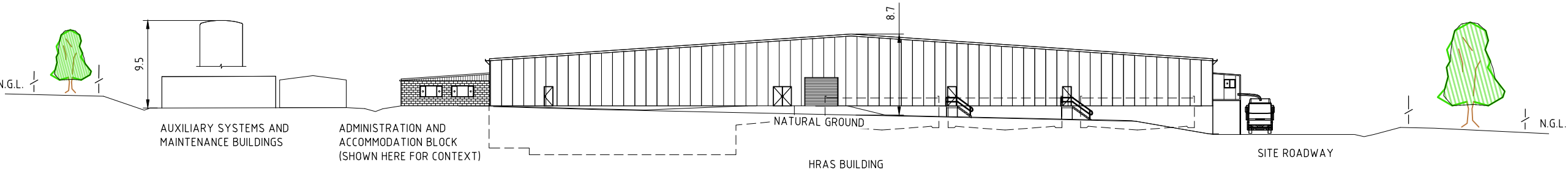
LOCATION PLAN 01
NTS



LOCATION PLAN 02
NTS

- LEGEND**
- RURAL FENCE
 - .-.- SECURITY FENCE
 - PROPERTY BOUNDARY
 - SITE ROADWAY
 - RURAL ACCESS ROAD
 - PLANTED TREES

HAMILTON PROPERTY - PROPOSED COMPOUND LAYOUT PLAN
SCALE 1:5000



ELEVATION A
1:500

NOTE:
1. TYPICAL SECTION ONLY

DRAWING STATUS IS PRELIMINARY
MAY BE SUBJECT TO CHANGE

G	CO-ORDINATES ADDED	J.O.C	-
F	LOCATION PLAN 2 AMENDED, OVERALL HEIGHTS AMENDED	J.O.C	-
E	TITLE BLOCK UPDATED, MINOR AMENDMENTS	J.O.C	-
D	DAM SIZE FINALISED, COMPOUND FINALISED	J.O.C	-
C	DAM MOVED TO NORTHERN LOCATION, HRAS BUILDING MOVED ADJACENT, AUX SERVICES MOVED	J.O.C	-
B	MINOR AMENDMENT	J.O.C	-
A	PRELIMINARY	J.O.C	-
REV	DESCRIPTION	APP	DATE

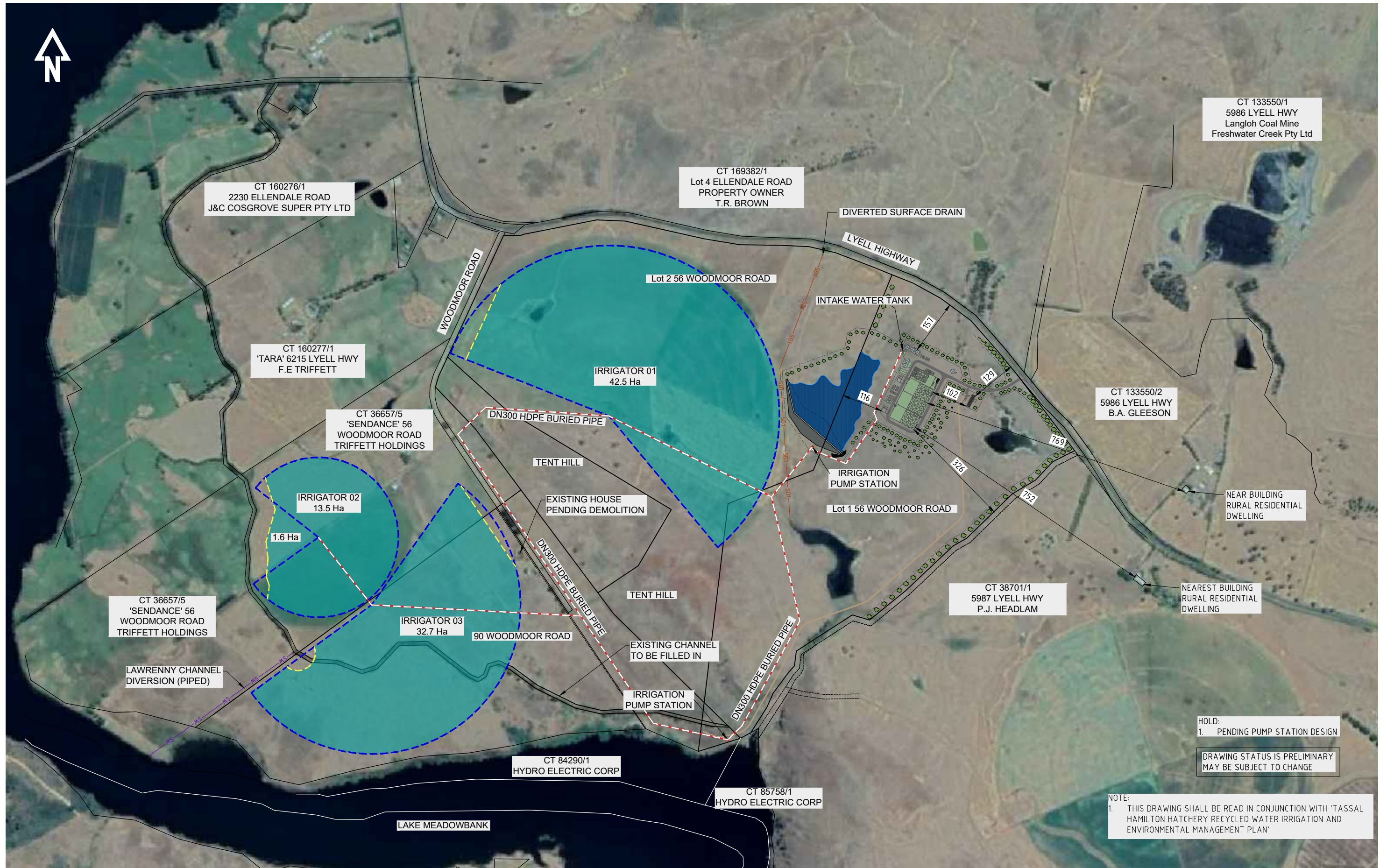


TASSAL GROUP LIMITED.
TASSAL OPERATIONS PTY LTD.
ACN 106 324 127 ABN 38 106 324 127
2 SALAMANCA SQUARE, HOBART, TAS., 7000
PHONE: 1300 66 0491 FACSIMILE: 1300 88 0179
EMAIL: tassal@tassal.com.au WEBSITE: www.tassal.com.au

PROJECT
HAMILTON RAS
LOT 1, 56 WOODMOOR ROAD
OUSE, TASMANIA 7140
AUSTRALIA

TITLE
PROPERTY AND SITE PLAN
GENERAL ARRANGEMENT
-
-

0 50m 100m 150m 200m	A3
STATUS PRELIMINARY ONLY NOT TO BE USED FOR CONSTRUCTION	
SCALE 1:5000 UNO DO NOT SCALE OFF DRAWING	
DRAWING No. HRAS-G-01	REV. G



CT 133550/1
5986 LYELL HWY
Langloh Coal Mine
Freshwater Creek Pty Ltd

CT 169382/1
Lot 4 ELLENDALE ROAD
PROPERTY OWNER
T.R. BROWN

CT 160276/1
2230 ELLENDALE ROAD
J&C COSGROVE SUPER PTY LTD

CT 160277/1
'TARA' 6215 LYELL HWY
F.E TRIFFETT

CT 36657/5
'SENDANCE' 56
WOODMOOR ROAD
TRIFFETT HOLDINGS

CT 36657/5
'SENDANCE' 56
WOODMOOR ROAD
TRIFFETT HOLDINGS

CT 84290/1
HYDRO ELECTRIC CORP

CT 85758/1
HYDRO ELECTRIC CORP

CT 38701/1
5987 LYELL HWY
P.J. HEADLAM

CT 133550/2
5986 LYELL HWY
B.A. GLEESON

NEAR BUILDING
RURAL RESIDENTIAL
DWELLING

NEAREST BUILDING
RURAL RESIDENTIAL
DWELLING

HOLD:
1. PENDING PUMP STATION DESIGN

DRAWING STATUS IS PRELIMINARY
MAY BE SUBJECT TO CHANGE

NOTE:
1. THIS DRAWING SHALL BE READ IN CONJUNCTION WITH 'TASSAL
HAMILTON HATCHERY RECYCLED WATER IRRIGATION AND
ENVIRONMENTAL MANAGEMENT PLAN'

REV.	DESCRIPTION	J.O.C.	DATE
B	PROPERTY DETAILS AMENDED, IRRIGATION AREA AMENDED, DRAINS ADDED, PIPE ALIGNMENT AMENDED	J.O.C.	-
A	PRELIMINARY	J.O.C.	-
REV.	DESCRIPTION	APP.	DATE

SIGNATURE	DATE
DRAWN B.W.	JULY 2019
DESIGNED	
APPROVED	

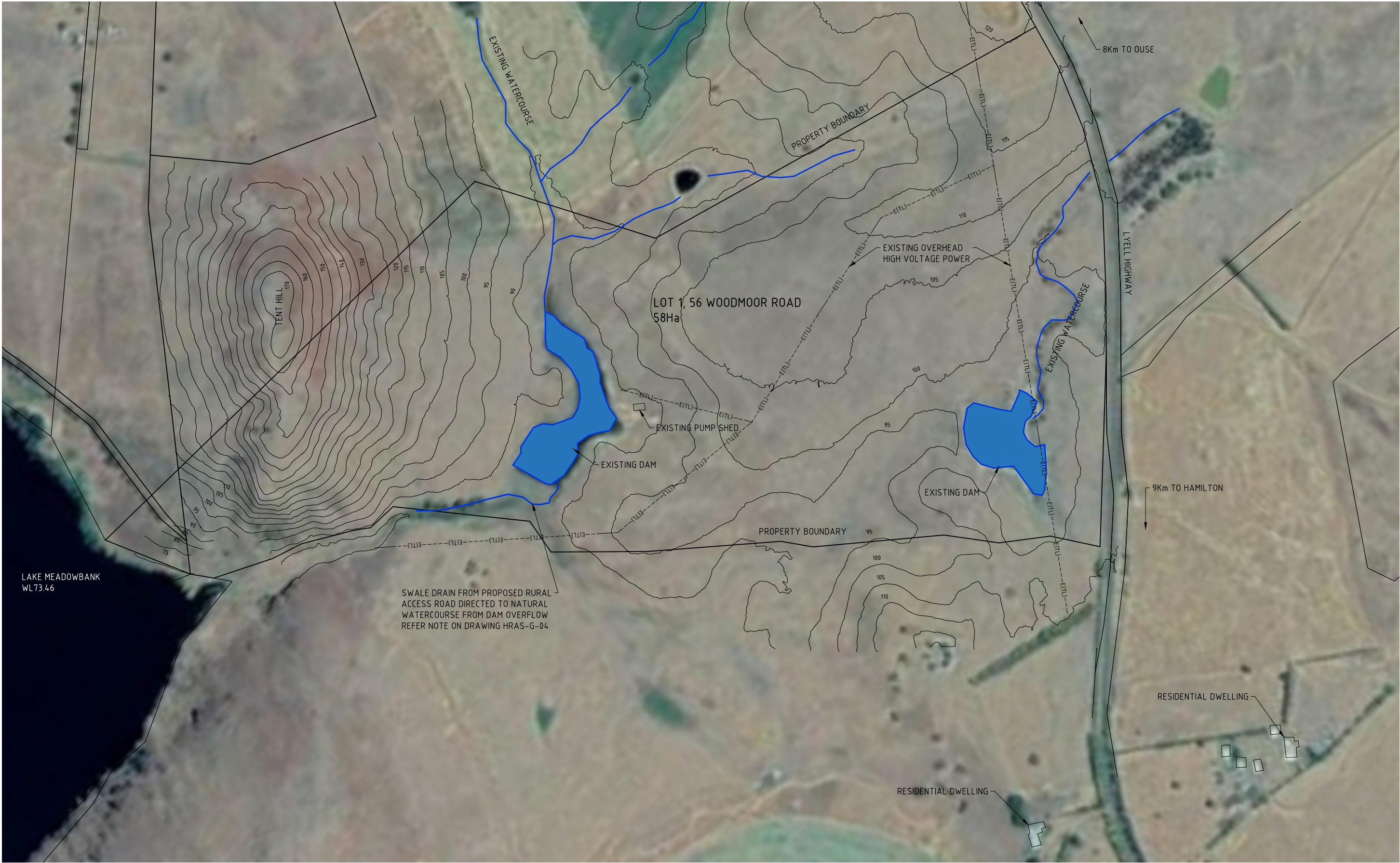


TASSAL GROUP LIMITED.
TASSAL OPERATIONS PTY LTD.
ACN 106 324 127 ABN 38 106 324 127
2 SALAMANCA SQUARE, HOBART, TAS., 7000
PHONE: 1300 66 0491 FACSIMILE: 1300 88 0179
EMAIL: tassal@tassal.com.au WEBSITE: www.tassal.com.au

PROJECT
HAMILTON RAS
LOT 1, 56 WOODMOOR ROAD
OUSE, TASMANIA 7140
AUSTRALIA

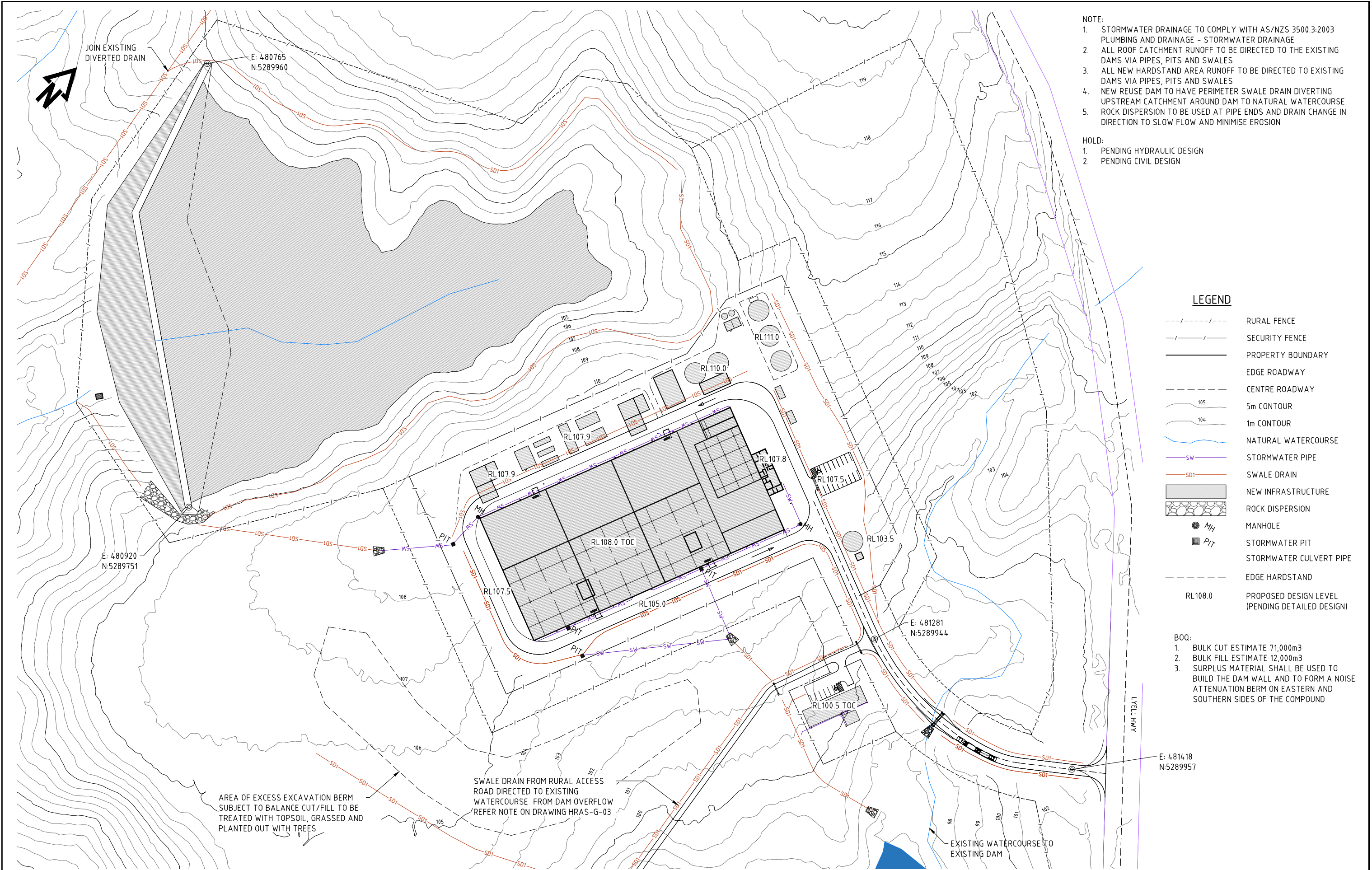
TITLE
PROPERTY AND SITE PLAN
IRRIGATION ARRANGEMENT
ADJOINING PROPERTY INFORMATION
-

0 100m 200m 300m 400m	A3
STATUS PRELIMINARY ONLY NOT TO BE USED FOR CONSTRUCTION	
SCALE (A3) 1:10,000 UNO DO NOT SCALE OFF DRAWING	
DRAWING No. HRAS-G-02	REV. B



DRAWING STATUS IS PRELIMINARY
MAY BE SUBJECT TO CHANGE

				SIGNATURE		DATE	 © 2019 Hamilton Mulliperrins RAS02024 Logo TASSAL.png © TASSAL GROUP LIMITED, ACN 106 324 127, 2008 ALL RIGHTS RESERVED.	TASSAL GROUP LIMITED. TASSAL OPERATIONS PTY LTD. ACN 106 324 127 ABN 38 106 324 127 2 SALAMANCA SQUARE, HOBART, TAS., 7000 PHONE: 1300 66 0491 FACSIMILE: 1300 88 0179 EMAIL: tassal@tassal.com.au WEBSITE: www.tassal.com.au	PROJECT HAMILTON RAS LOT 1, 56 WOODMOOR ROAD OUSE, TASMANIA 7140 AUSTRALIA	TITLE PROPERTY AND SITE PLAN TOPOGRAPHY, NATURAL DRAINAGE AND EXISTING INFRASTRUCTURE	 DIMENSIONS IN METRES		A3	
		DRAWN		B.W.	JULY 2019	STATUS PRELIMINARY ONLY NOT TO BE USED FOR CONSTRUCTION								
		DESIGNED				SCALE 1:5000 UNO					DO NOT SCALE OFF DRAWING			
		APPROVED				DRAWING No.					HRAS-G-03			
A	PRELIMINARY			J.O.C.		-							REV.	A
REV.	DESCRIPTION			APP.		DATE								



- NOTE:
1. STORMWATER DRAINAGE TO COMPLY WITH AS/NZS 3500.3:2003 PLUMBING AND DRAINAGE - STORMWATER DRAINAGE
 2. ALL ROOF CATCHMENT RUNOFF TO BE DIRECTED TO THE EXISTING DAMS VIA PIPES, PITS AND SWALES
 3. ALL NEW HARDSTAND AREA RUNOFF TO BE DIRECTED TO EXISTING DAMS VIA PIPES, PITS AND SWALES
 4. NEW REUSE DAM TO HAVE PERIMETER SWALE DRAIN DIVERTING UPSTREAM CATCHMENT AROUND DAM TO NATURAL WATERCOURSE
 5. ROCK DISPERSION TO BE USED AT PIPE ENDS AND DRAIN CHANGE IN DIRECTION TO SLOW FLOW AND MINIMISE EROSION

- HOLD:
1. PENDING HYDRAULIC DESIGN
 2. PENDING CIVIL DESIGN

LEGEND

- /---/--- RURAL FENCE
- /-/- SECURITY FENCE
- PROPERTY BOUNDARY
- EDGE ROADWAY
- CENTRE ROADWAY
- 105 5m CONTOUR
- 104 1m CONTOUR
- NATURAL WATERCOURSE
- SW STORMWATER PIPE
- SD1 SWALE DRAIN
- NEW INFRASTRUCTURE
- ROCK DISPERSION
- MH MANHOLE
- PIT STORMWATER PIT
- STORMWATER CULVERT PIPE
- EDGE HARDSTAND
- RL108.0 PROPOSED DESIGN LEVEL (PENDING DETAILED DESIGN)

- BOQ:
1. BULK CUT ESTIMATE 71,000m3
 2. BULK FILL ESTIMATE 12,000m3
 3. SURPLUS MATERIAL SHALL BE USED TO BUILD THE DAM WALL AND TO FORM A NOISE ATTENUATION BERM ON EASTERN AND SOUTHERN SIDES OF THE COMPOUND

REV	DESCRIPTION	J.O.C	APP	DATE
B	DETAILS AND DRAINS AMENDED	-	-	-
A	PRELIMINARY FOR APPROVAL	-	-	-

SIGNATURE

DATE

DRAWN B.W

JULY 2019

DESIGNED

APPROVED

TASSAL GROUP LIMITED.

TASSAL OPERATIONS PTY LTD.

ACN 106 324 127 ABN 38 106 324 127

2 SALAMANCA SQUARE, HOBART, TAS., 7000

PHONE: 1300 66 0491 FACSIMILE: 1300 88 0179

EMAIL: tassal@tassal.com.au WEBSITE: www.tassal.com.au

PROJECT

HAMILTON RAS

LOT 1, 56 WOODMOOR ROAD

OUSE, TASMANIA 7140

AUSTRALIA

TITLE

PROPERTY AND SITE PLAN

STORMWATER DRAINAGE

GENERAL ARRANGEMENT

0 20m 40m 60m 80m

STATUS PRELIMINARY ONLY

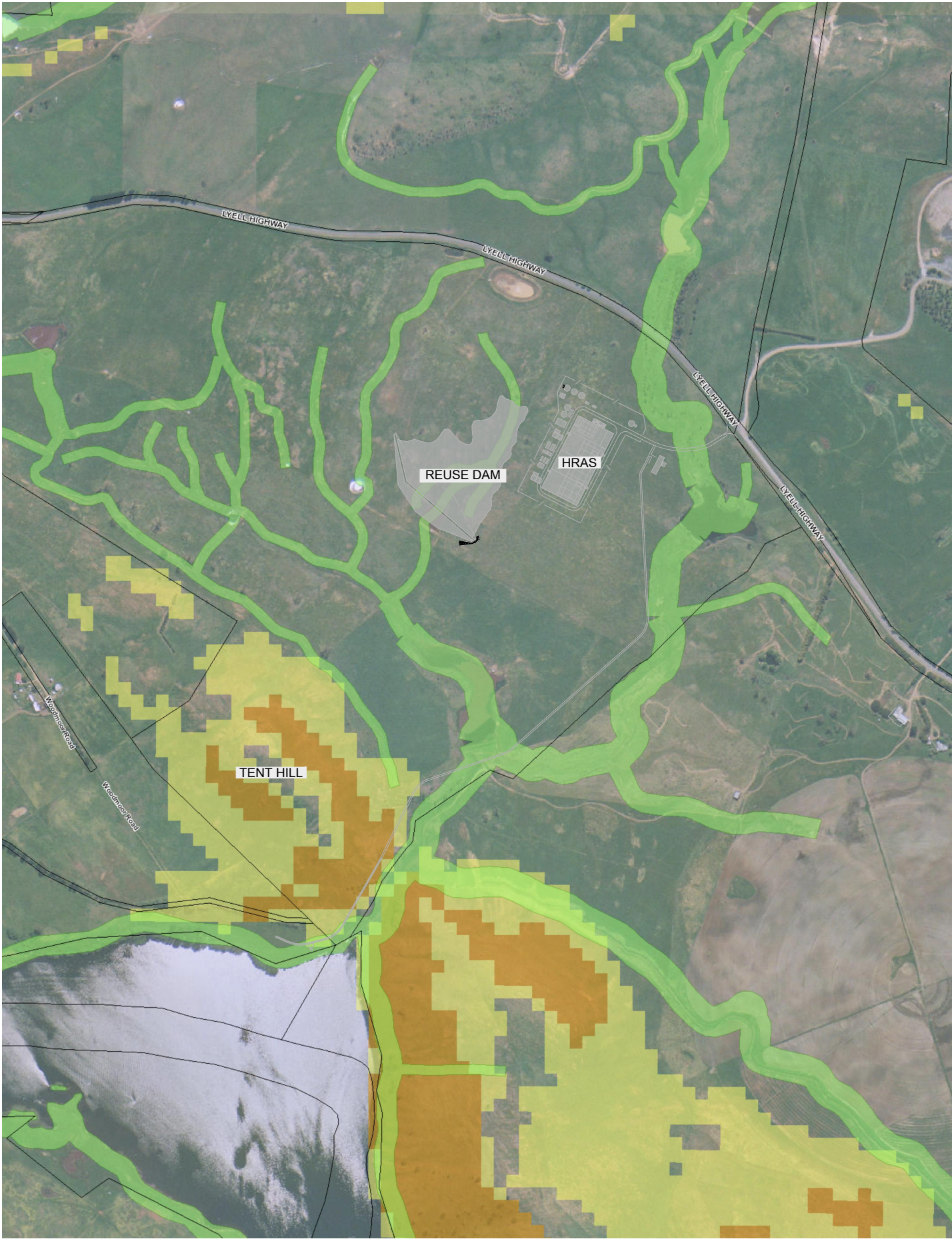
NOT TO BE USED FOR CONSTRUCTION

SCALE 1:2000 UNO

DO NOT SCALE OFF DRAWING

DRAWING No. HRAS-G-04

REV. B



Listmap

Legend

Roads - Road Name Annotation

Annotation

Cadastral Parcels



Waterway and Coastal Protection Area Guidance Map

Buffer area

Wetland

Landslide Planning Map - Hazard Bands 20131022

Low

Medium

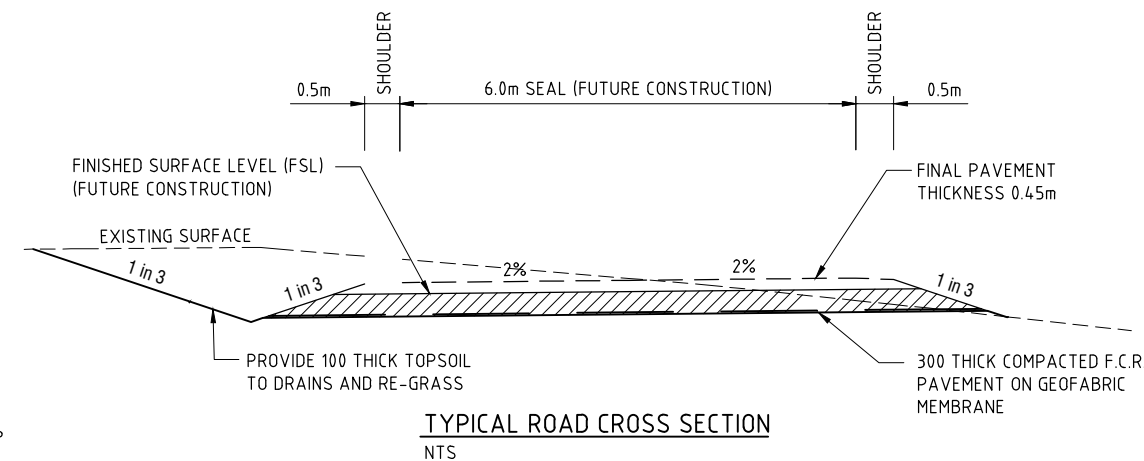
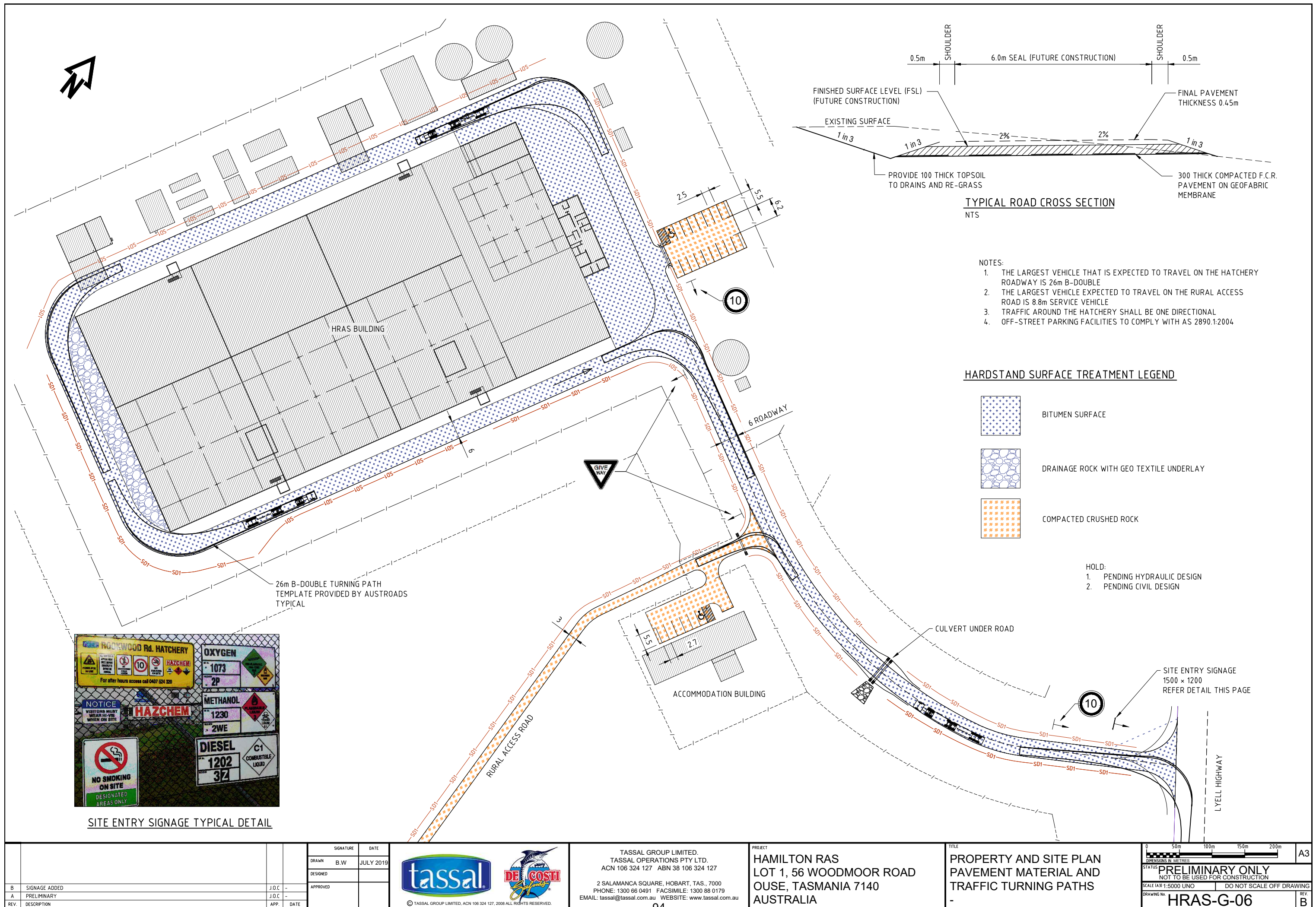
Medium to Active

High

State Aerial Photo



				SIGNATURE		DATE			TASSAL GROUP LIMITED. TASSAL OPERATIONS PTY LTD. ACN 106 324 127 ABN 38 106 324 127		PROJECT		TITLE		0 DIMENSIONS IN METRES		A3
				DRAWN		B.W	JULY 2019		2 SALAMANCA SQUARE, HOBART, TAS., 7000 PHONE: 1300 66 0491 FACSIMILE: 1300 88 0179 EMAIL: tassal@tassal.com.au WEBSITE: www.tassal.com.au		HAMILTON RAS LOT 1, 56 WOODMOOR ROAD OUSE, TASMANIA 7140 AUSTRALIA		PROPERTY AND SITE PLAN WATERWAY PROTECTION AND LANDSLIDE HAZARD		STATUS PRELIMINARY ONLY NOT TO BE USED FOR CONSTRUCTION		
A		PRELIMINARY		J.O.C		-									SCALE 1:3125		
REV		DESCRIPTION		APP		DATE			© TASSAL GROUP LIMITED, ACN 106 324 127, 2008 ALL RIGHTS RESERVED.						DO NOT SCALE OFF DRAWING		REV
															HRAS-G-05		A



- NOTES:
1. THE LARGEST VEHICLE THAT IS EXPECTED TO TRAVEL ON THE HATCHERY ROADWAY IS 26m B-DOUBLE
 2. THE LARGEST VEHICLE EXPECTED TO TRAVEL ON THE RURAL ACCESS ROAD IS 8.8m SERVICE VEHICLE
 3. TRAFFIC AROUND THE HATCHERY SHALL BE ONE DIRECTIONAL
 4. OFF-STREET PARKING FACILITIES TO COMPLY WITH AS 2890.1:2004

HARDSTAND SURFACE TREATMENT LEGEND

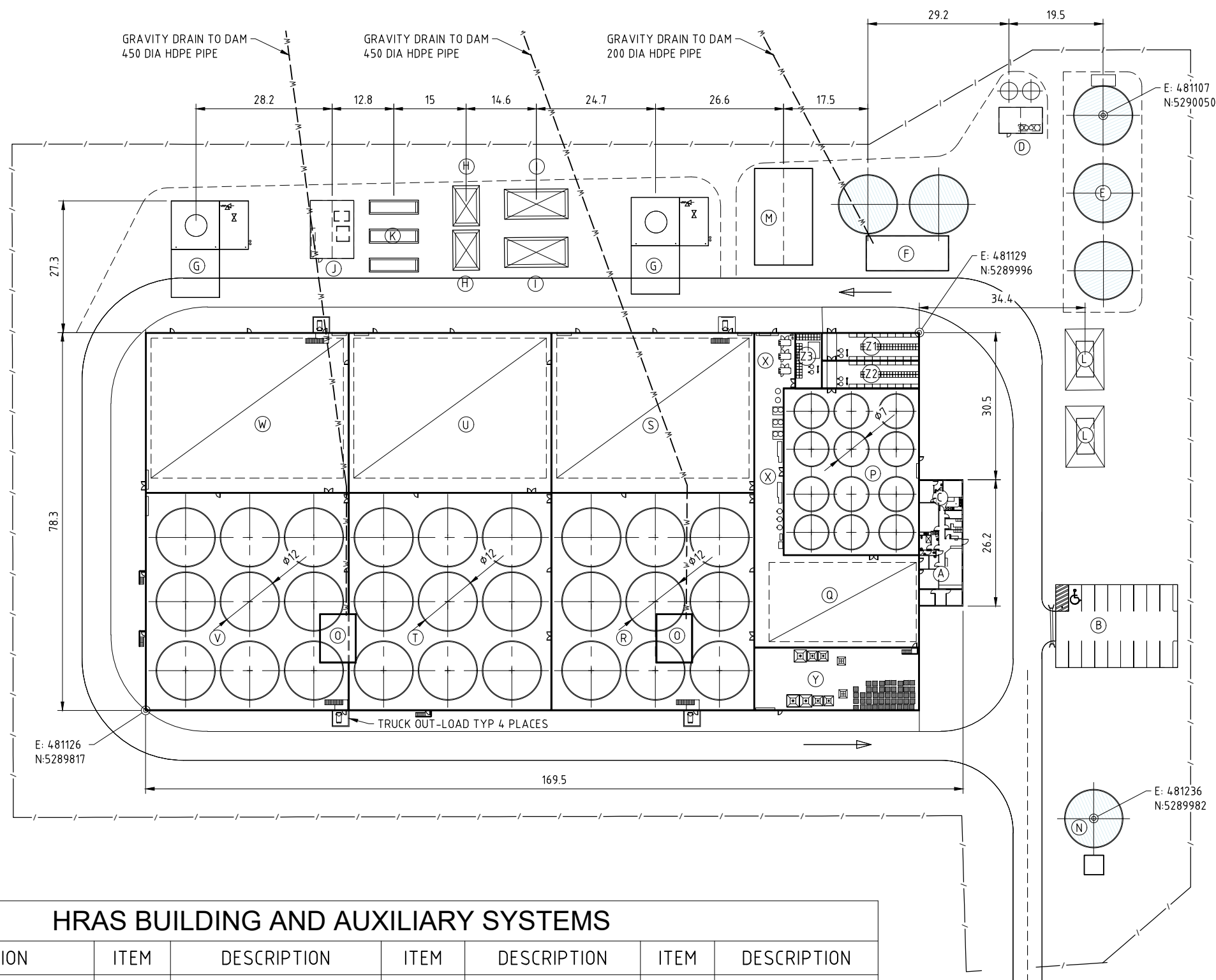
- BITUMEN SURFACE
- DRAINAGE ROCK WITH GEO TEXTILE UNDERLAY
- COMPACTED CRUSHED ROCK

HOLD:

1. PENDING HYDRAULIC DESIGN
2. PENDING CIVIL DESIGN



SITE ENTRY SIGNAGE TYPICAL DETAIL



- NOTES:
1. DIMENSIONS ARE NOMINAL ONLY
 2. FINAL BUILDING FOOTPRINT SUBJECT TO BUILDING DESIGN
 3. ACCESS WAYS PENDING BUILDING DESIGN
 4. FIRE AND EMERGENCY EXIT DESIGN PENDING BUILDING DESIGN
 5. GRADING PIT AND SMOLT LOAD OUT SUBJECT TO TBC

- HOLD:
1. PENDING AUXILIARY EQUIPMENT DESIGN
 2. PENDING WHS REVIEW AND CHEM STORE LOCATION
 3. PENDING TRUCK CLEANING LOCATION
 4. PENDING TRUCK FILLING STATION
 5. PENDING STRUCTURAL DESIGN
 6. PENDING BUILDING DESIGN
 7. PENDING MECHANICAL FILTRATION DESIGN
 8. PENDING BCA ASSESSMENT
 9. PENDING TAS FIRE ASSESSMENT

HRAS BUILDING AND AUXILIARY SYSTEMS

ITEM	DESCRIPTION	ITEM	DESCRIPTION	ITEM	DESCRIPTION	ITEM	DESCRIPTION
A	OFFICE/ADMINISTRATION	H	GENERATOR FUEL	O	GRADING PLATFORM	V	SMOLT 3 TANK ROOM
B	CAR PARK	I	GENERATOR	P	START FEED TANK ROOM	W	SMOLT 3 BIO FILTER
C	SHIFT ACCOMMODATION	J	PUMP SHED/SWITCHROOM	Q	START FEED BIO FILTER	X	PLANT ROOM
D	INTAKE WATER COOK SYSTEM	K	CHILLER SYSTEM	R	SMOLT 1 TANK ROOM	Y	FEED ROOM
E	COOKED INTAKE WATER STORAGE	L	TRANSFORMER	S	SMOLT 1 BIO FILTER	Z1	INCUBATION 1
F	SOLIDS REMOVAL PLANT	M	WORKSHOP	T	SMOLT 2 TANK ROOM	Z2	INCUBATION 2
G	OXYGEN STORE	N	FIRE WATER AND PUMP	U	SMOLT 2 BIO FILTER	Z3	INCUBATION 3

DRAWING STATUS IS PRELIMINARY
MAY BE SUBJECT TO CHANGE

B	COORDINATES ADDED	J.O.C	-
A	PRELIMINARY	J.O.C	-
REV.	DESCRIPTION	APP.	DATE

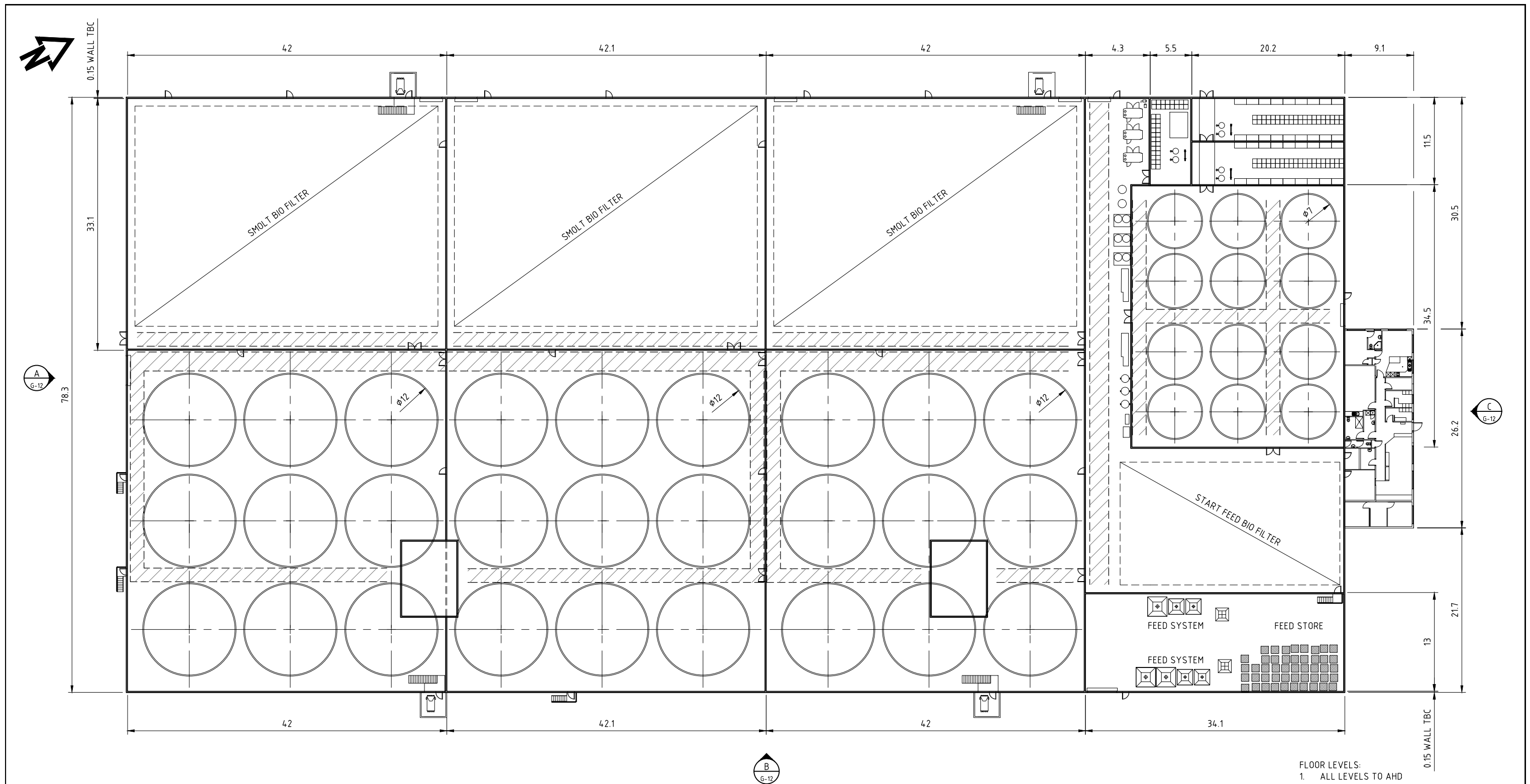


TASSAL GROUP LIMITED.
TASSAL OPERATIONS PTY LTD.
ACN 106 324 127 ABN 38 106 324 127
2 SALAMANCA SQUARE, HOBART, TAS., 7000
PHONE: 1300 66 0491 FACSIMILE: 1300 88 0179
EMAIL: tassal@tassal.com.au WEBSITE: www.tassal.com.au

PROJECT
HAMILTON RAS
LOT 1, 56 WOODMOOR ROAD
OUSE, TASMANIA 7140
AUSTRALIA

TITLE
BUILDING AND COMPOUND
GENERAL ARRANGEMENT
-
-

0 10m 20m 30m 40m	A3
DIMENSIONS IN METRES	
STATUS	PRELIMINARY ONLY
SCALE (A3) 1:1000 UNO	DO NOT SCALE OFF DRAWING
DRAWING No.	HRAS-G-10
REV.	B




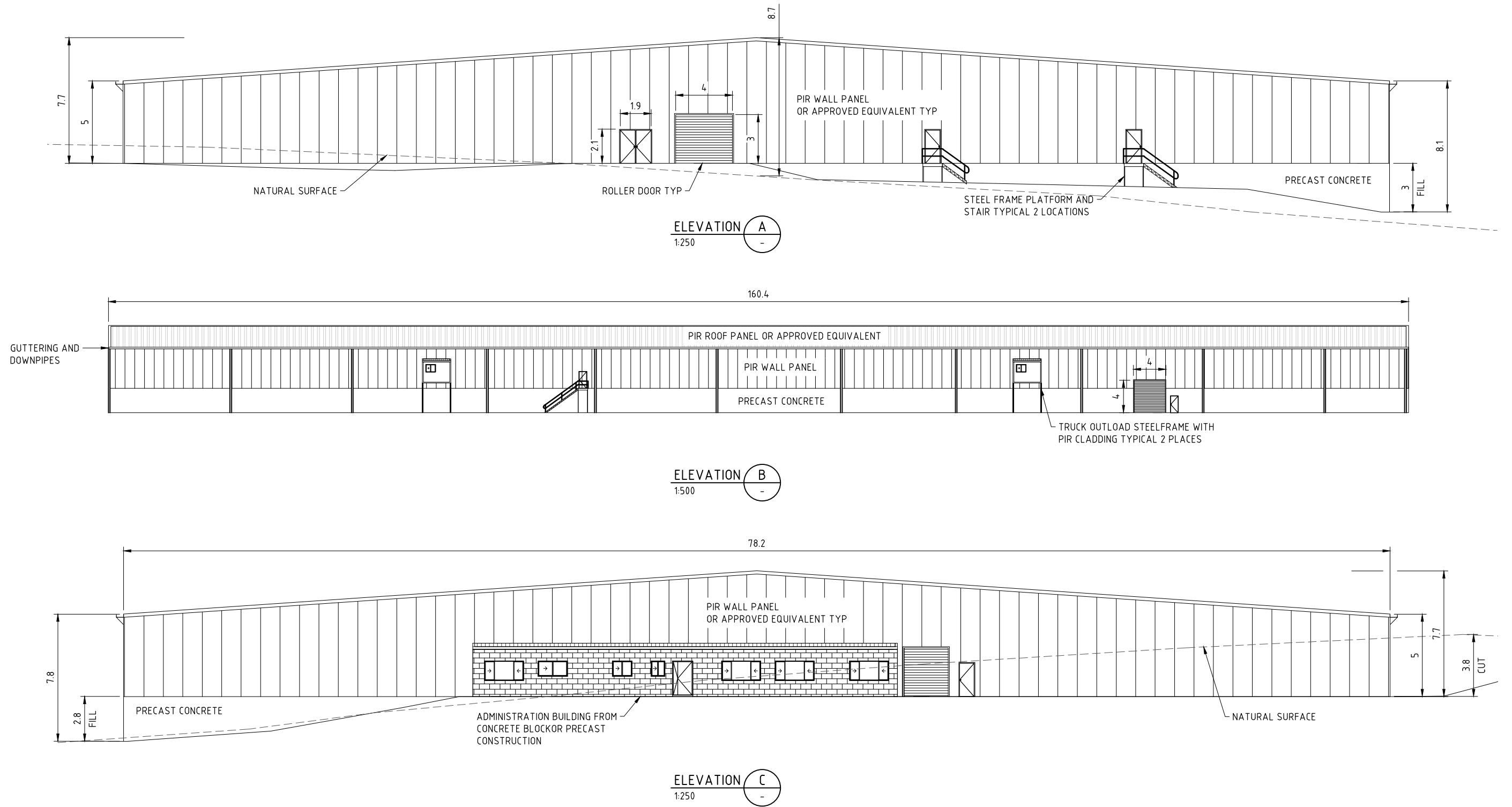
LEGEND

---/---/---	RURAL FENCE	—SW—	STORMWATER PIPE		SERVICE AND VEHICLE TRAVEL PATH
-/-/-	SECURITY FENCE	—SD1—	SWALE DRAIN	M	DOUBLE EXIT DOOR
—	PROPERTY BOUNDARY	[Hatched Box]	NEW INFRASTRUCTURE	D	SINGLE EXIT DOOR
—	EDGE ROADWAY	[Rock Pattern Box]	ROCK DISPERSION	[Roller Door Symbol]	ROLLER DOOR
---	CENTRE ROADWAY	● MH	MANHOLE	[Sliding Panel Door Symbol]	SLIDING PANEL DOOR
105	5m CONTOUR	■ PIT	STORMWATER PIT		
104	1m CONTOUR		STORMWATER CULVERT PIPE		
~	NATURAL WATERCOURSE	---	EDGE HARDSTAND OR EQUIPMENT		

- FLOOR LEVELS:
1. ALL LEVELS TO AHD
 2. ADMIN BUILDING FLOOR RL108.1
 3. HATCHERY FLOOR RL108.0
 4. FEEDROOM FLOOR RL105.2
 5. ALL FLOORS WITH FALL TO FLOOR DRAINS
- HOLD:
1. PENDING STRUCTURAL DESIGN
 2. PENDING BUILDING DESIGN
 3. PENDING MECHANICAL FILTRATION DESIGN
 4. PENDING BCA ASSESSMENT
 5. PENDING TAS FIRE ASSESSMENT

DRAWING STATUS IS PRELIMINARY
MAY BE SUBJECT TO CHANGE

				SIGNATURE		DATE	 		PROJECT HAMILTON RAS LOT 1, 56 WOODMOOR ROAD OUSE, TASMANIA 7140 AUSTRALIA	TITLE BUILDING FLOOR PLAN GENERAL ARRANGEMENT			A3
				DRAWN B.W.		JULY 2019	TASSAL GROUP LIMITED. TASSAL OPERATIONS PTY LTD. ACN 106 324 127 ABN 38 106 324 127				STATUS PRELIMINARY ONLY NOT TO BE USED FOR CONSTRUCTION		
A PRELIMINARY		J.O.C		DESIGNED			2 SALAMANCA SQUARE, HOBART, TAS., 7000 PHONE: 1300 66 0491 FACSIMILE: 1300 88 0179 EMAIL: tassal@tassal.com.au WEBSITE: www.tassal.com.au				SCALE (A3) 1:500 UNO DO NOT SCALE OFF DRAWING		
REV.	DESCRIPTION	APP.	DATE	APPROVED			© TASSAL GROUP LIMITED, ACN 106 324 127, 2008 ALL RIGHTS RESERVED.		DRAWING No. HRAS-G-11		REV. A		



NOTE:

- HATCHERY BUILDING FRAME TO BE COATED STRUCTURAL STEEL WITH FIRE RETARDANT INSULATED PANEL CLADDING
- FLASHING, GUTTERING, WINDOW AND DOOR FRAMES TO BE POWDER COATED STEEL OR ALUMINIUM
- BUILDING TO COMPLY WITH BCA
- PLATFORM AND WALKWAYS TO AS1675
- PIR ROOF COLOUR TO BE 'PALE EUCALYPT'
- PIR WALL COLOUR TO BE 'PAPERBARK'

HOLD:

- PENDING STRUCTURAL DESIGN
- PENDING BUILDING DESIGN
- PENDING MECHANICAL FILTRATION DESIGN
- PENDING BCA ASSESSMENT
- PENDING TAS FIRE ASSESSMENT

DRAWING STATUS IS PRELIMINARY
MAY BE SUBJECT TO CHANGE

REV.	DESCRIPTION	APP.	DATE
B	OVERALL DIMS AMENDED, CUT AND FILL DIMS ADDED	J.O.C	-
A	PRELIMINARY	J.O.C	-

SIGNATURE	DATE
DRAWN B.W	JULY 2019
DESIGNED	
APPROVED	



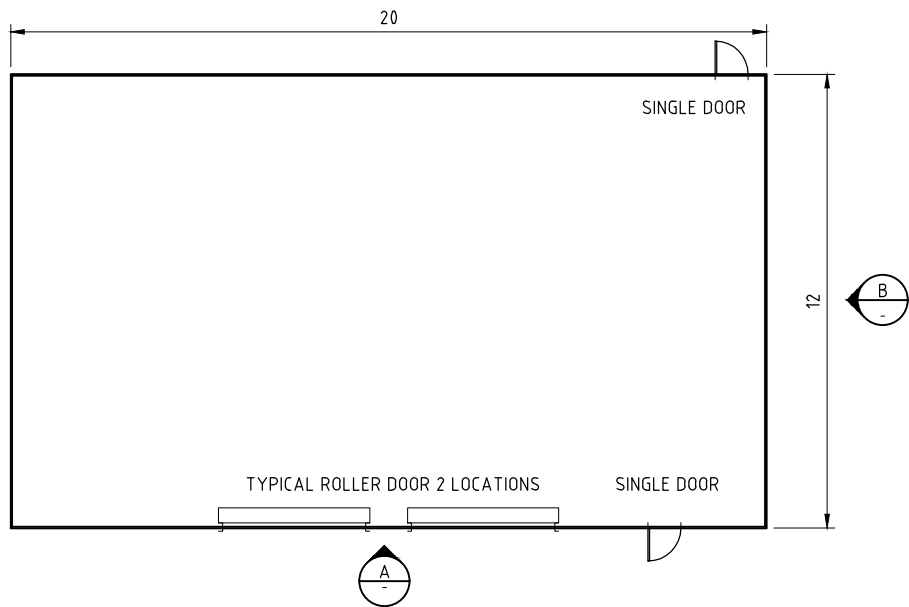
TASSAL GROUP LIMITED.
TASSAL OPERATIONS PTY LTD.
ACN 106 324 127 ABN 38 106 324 127

2 SALAMANCA SQUARE, HOBART, TAS., 7000
PHONE: 1300 66 0491 FACSIMILE: 1300 88 0179
EMAIL: tassal@tassal.com.au WEBSITE: www.tassal.com.au

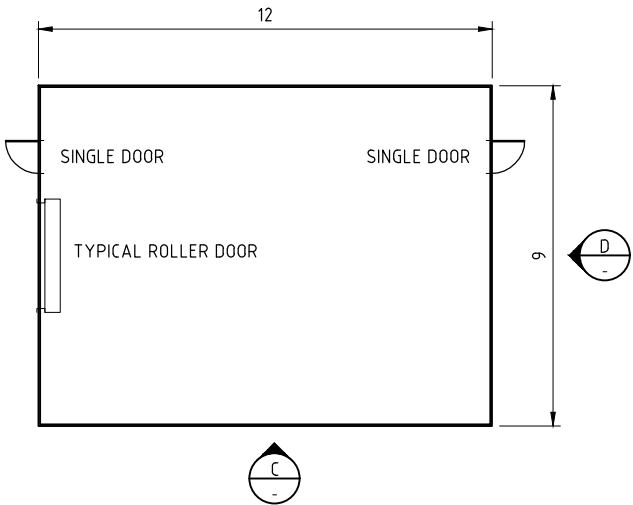
PROJECT
HAMILTON RAS
LOT 1, 56 WOODMOOR ROAD
OUSE, TASMANIA 7140
AUSTRALIA

TITLE
BUILDING ELEVATIONS
GENERAL ARRANGEMENT

0 5m 10m 15m 20m	A3
DIMENSIONS IN METRES	
STATUS PRELIMINARY ONLY	
NOT TO BE USED FOR CONSTRUCTION	
SCALE (A3) 1:500 UNO	DO NOT SCALE OFF DRAWING
DRAWING No. HRAS-G-12	REV. B

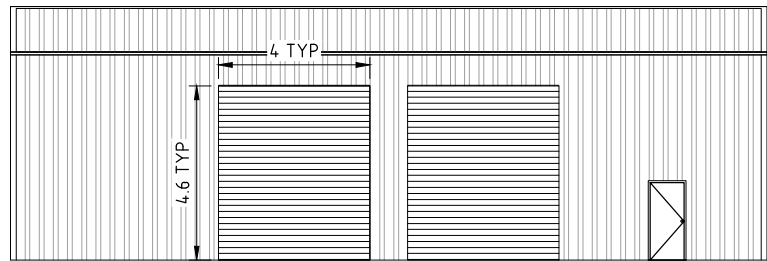


WORKSHOP BUILDING FLOOR PLAN
SCALE 1:200

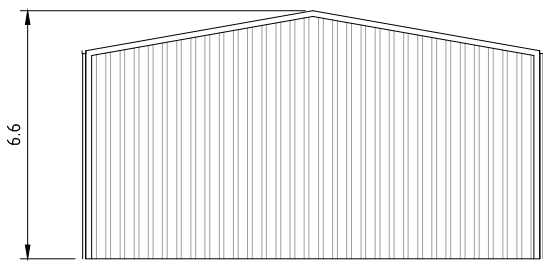


PUMP SHED BUILDING FLOOR PLAN
SCALE 1:200

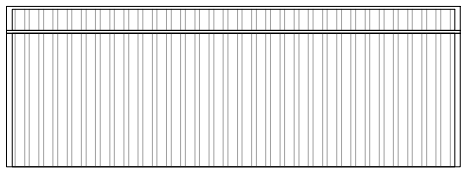
- NOTE:
- 1. ROOF COLOUR TO BE 'PALE EUCALYPT'
 - 2. EXTERNAL WALL COLOUR TO BE 'PAPERBARK'
 - 3. BUILDING FOUNDATIONS AND STRUCTURE, CLADDING AND DRAINAGE TO COMPLY WITH BCA



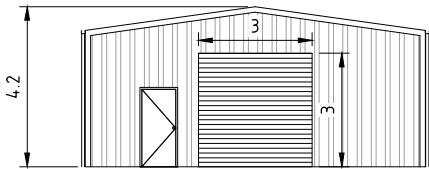
ELEVATION A
1:200



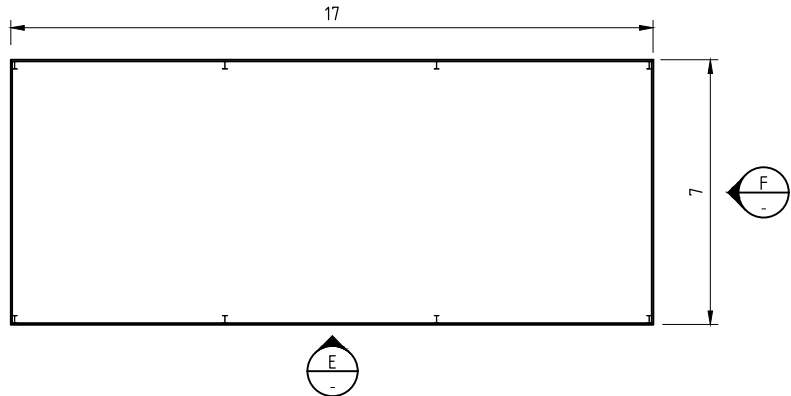
ELEVATION B
1:200



ELEVATION C
1:200



ELEVATION D
1:200



SOLIDS REMOVAL BUILDING FLOOR PLAN
SCALE 1:200



ELEVATION E
1:200



ELEVATION F
1:200

DRAWING STATUS IS PRELIMINARY
MAY BE SUBJECT TO CHANGE

				SIGNATURE		DATE		  © TASSAL GROUP LIMITED, ACN 106 324 127, 2008 ALL RIGHTS RESERVED.	TASSAL GROUP LIMITED. TASSAL OPERATIONS PTY LTD. ACN 106 324 127 ABN 38 106 324 127 2 SALAMANCA SQUARE, HOBART, TAS., 7000. PHONE: 1300 66 0491 FACSIMILE: 1300 88 0179 EMAIL: tassal@tassal.com.au WEBSITE: www.tassal.com.au	PROJECT HAMILTON RAS LOT 1, 56 WOODMOOR ROAD OUSE, TASMANIA 7140 AUSTRALIA	TITLE BUILDING FLOOR PLANS AND ELEVATIONS GENERAL ARRANGEMENT -	 DIMENSIONS IN METRES		A3		
		DRAWN		B.W		JULY 2019						STATUS PRELIMINARY ONLY NOT TO BE USED FOR CONSTRUCTION				
		DESIGNED										SCALE 1:200 UNO			DO NOT SCALE OFF DRAWING	
		APPROVED										DRAWING No			REV.	
A	PRELIMINARY FOR APPROVAL							J.O.C.	-							
REV.	DESCRIPTION							APP.	DATE					A		

Environmental Assessment
Report
**Recirculating
Aquaculture System
Hatchery**
Ouse
Tassal Operations Pty Ltd

November 2019



ENVIRONMENT PROTECTION AUTHORITY

Environmental Assessment Report

Proponent	Tassal Operations Pty Ltd
Proposal	Hamilton Recirculating Aquaculture System (RAS) Hatchery
Location	Ouse
NELMS no.	6371
Permit Application No.	DA 2019/62 (Central Highlands Council)
Electronic Folder No.	EN-EM-EV-DE-258171
Document No.	M542432
Class of Assessment	2B

Assessment Process Milestones

9 April 2019	Notice of Intent lodged
17 May 2019	Guidelines Issued
6 September 2019	Permit Application submitted to Council
13 September 2019	Referral received by the Board
21 September 2019	Start of public consultation period
18 October 2019	End of public consultation period
28 October 2019	Additional information (Supplement) submitted to the Board
1 November 2019	Date draft conditions issued to proponent
10 December 2019	Statutory period for assessment ends

Acronyms

Air EPP	<i>Environment Protection Policy (Air Quality) 2004</i>
Board	Board of the Environment Protection Authority
BoM	Bureau of Meteorology
CEMP	Construction Environmental Management Plan
DA	Development application
DEP	Derwent Estuary Program
DPIPWE	Department of Primary Industries, Parks, Water and Environment
EIA	Environmental impact assessment
EIS	Environmental impact statement
EL	Environmental licence
EMP	Environmental Management Plan
EMPC Act	<i>Environmental Management and Pollution Control Act 1994</i>
EMPCS	Environmental management and pollution control system
EPA	Environment Protection Authority
EPBC Act	<i>Environment Protection and Biodiversity Conservation Act 1999 (Cth)</i>
IEMP	Irrigation and Environmental Management Plan
LUPA Act	<i>Land Use Planning and Approvals Act 1993</i>
ML	Megalitre
OU	Odour units
PLC	Programmable logic controller
RAS	Recirculating aquaculture system
RAM	Restricted animal material
RMPS	Resource management and planning system
SCADA	Supervisory control and data acquisition system
SD	Sustainable development
WM Act	<i>Water Management Act 1999</i>

Report Summary

This report provides an environmental assessment of Tassal Operations Pty Ltd's proposed Recirculating Aquaculture System Salmon Hatchery at Ouse.

The proposal is to develop and operate a recirculating aquaculture system (RAS) salmon hatchery, comprising a series of recirculating concrete tanks, pumps and filters all housed in a steel-structured, temperature controlled building, similar to Tassal's existing Rookwood RAS facilities at Ranelagh in the Huon Valley. The maximum standing biomass would be 750 tonnes with a maximum annual production of 1,400 tonnes of fish. The wastewater flows from the proposed facility are predicted to be 158 ML per year. Wastewater will be treated and stored in a new purpose-built dam on the site and irrigated as part of an agricultural reuse scheme on an adjacent farming property.

This report has been prepared based on information provided in the permit application, Environmental Impact Statement (EIS) and Supplement to the EIS. Government agencies and the public were consulted and relevant submissions, representations and comments were considered as part of the assessment.

On 23 October 2019, the Director requested that the proponent submit additional information to address issues raised during the public exhibition period and to meet other information requirements. The proponent submitted satisfactory additional information on 28 October 2019, in the form of a Supplement to the EIS.

Further details of the assessment process are presented in section 1 of this report. Section 2 describes the statutory objectives and principles underpinning the assessment. Details of the proposal are provided in section 3. Section 4 reviews the need for the proposal and considers the proposal, site and design alternatives. Section 5 summarises the public and agency consultation process and the key issues raised in that process. A detailed evaluation of key issues is provided in section 6, and other issues are outlined in sections 7 and 8. The report conclusions are contained in section 9.

Appendix I Section A evaluates other issues assessed by the Board, while Appendix I Section B outlines other issues that are not assessed by the Board but summarised in this report for context.

Appendix 2 contains details of matters raised by the public and referral agencies during the consultation process.

Appendix 3 contains a table of proponent commitments.

Appendix 4 contains the environmental licence for the proposal.

Contents

1	Approval Process.....	1
2	SD Objectives and EIA Principles	2
3	The Proposal	3
4	Need for the Proposal and Alternatives.....	11
5	Public and Agency Consultation.....	12
6	Evaluation of Key Issues.....	13
6.1	Key Issue 1 Air emissions	13
6.2	Key Issue 2 Noise emissions from construction and operation of the proposed facility ...	19
6.3	Key Issue 3 Potential impacts from effluent treatment and reuse	23
7	Other Issues assessed by the Board	36
8	Other Issues	37
9	Report Conclusions.....	38
10	Report Approval	39
11	Appendices	40

I Approval Process

The Board of the Environment Protection Authority (the Board) received a Notice of Intent in relation to the proposal on 9 April 2019. The Board determined the class of assessment to be 2B.

An application for a permit under the *Land Use Planning and Approvals Act 1993* (LUPA Act) was submitted to Central Highlands Council on 6 September 2019. The application includes the land area covering both the hatchery site and the recycled water scheme as illustrated in Figure 1b of this report (the Land).

The proposal is defined as a 'level 2 activity' under clause 4(h), Schedule 2 of the *Environmental Management and Pollution Control Act 1994* (EMPC Act), being finfish farming, and is therefore also defined as an 'EL activity' under the Act.

Section 25(1) of the EMPC Act required Council to refer the application to the Board of the Environment Protection Authority (the Board) for assessment. The application was received by the Board on 13 September 2019.

The Board required that information to support the proposal be provided in the form of an Environmental Impact Statement (EIS) prepared in accordance with guidelines issued by the Board on 17 May 2019. Two drafts of the EIS were submitted to EPA Tasmania for review against the guidelines before being finalised and accepted on behalf of the Board on 17 September 2019.

The EIS was advertised for public inspection for a 28-day period commencing on 21 September 2019. Advertisements were placed in the Mercury newspaper and on the EPA website. The EIS was also referred to relevant government agencies for comment. 85 representations were received during the advertising period, and a further two representation was received after advertising closed. These additional two representations have been considered but cannot be formally accepted.

On 23 October 2019, the Director requested that the proponent submit additional information to address matters raised during the public consultation period. Satisfactory additional information was submitted by the proponent on 28 October 2019.

2 SD Objectives and EIA Principles

The proposal must be considered by the Board in the context of the objectives of the Resource Management and Planning System of Tasmania (RMPS), and in the context of the objectives of the Environmental Management and Pollution Control System (EMPCS) (both sets of objectives are specified in Schedule 1 the EMPC Act). The functions of the Board are to administer and enforce the provisions of the Act, and in particular to use its best endeavours to further the RMPS and EMPCS objectives.

The Board must assess the proposal in accordance with the Environmental Impact Assessment Principles defined in Section 74 of the EMPC Act.

3 The Proposal

The proposal is to develop and operate a recirculating aquaculture system (RAS) salmon hatchery between Hamilton and Ouse in the Central Highlands which will allow Tassal to expand its onshore production of salmon smolt. The hatchery will be capable of producing smolt in a range of weights up to 600 grams. The maximum standing biomass would be 750 tonnes with a maximum annual production of 1,400 tonnes of fish. The benefits of producing larger smolt include increased benefits to fish health, as well as reducing the time fish need at sea and therefore reducing the environmental impacts of fish production on marine leases.

The hatchery will comprise a water offtake from Meadowbank Lake, four separate RAS units, a start feed unit and three smolt units, each made up of a series of recirculating concrete tanks, bio-filter water treatment systems and associated pumps and pipework. This will all be housed in a steel-structured, temperature controlled building, similar to Tassal's existing Rookwood RAS facilities at Ranelagh in the Huon Valley. External infrastructure will include a sludge dewatering plant, storage tanks and cooling units.

Wastewater flows from the proposed facility are predicted to be up to 158 ML per year. All wastewater produced will be stored in a new purpose-built dam on the site and irrigated as part of an agricultural reuse scheme on an adjacent farming property with no discharge to the Derwent River anticipated.

The main characteristics of the proposal are summarised in Table 1. A detailed description of the proposal is provided in Section 2 of the EIS.

Table 1: Summary of the proposal's main characteristics

Activity	
A finfish hatchery with a maximum standing biomass capacity of 750 tonnes and maximum annual production of 1,400 tonnes. The activity includes the irrigation of reuse water on agricultural land included in the development application.	
Location and planning context	
Location	The site is located on land adjacent to the Lyell Highway between Hamilton and Ouse (Figure 1a). The Land the subject of the development application (DA) is outlined in red in Figure 1b. It incorporates Nos. 56 and 90 Woodmoor Road, Ouse, as well as certificates of title for land within the Lower River Derwent Hydro-Electric Water District and the Irrigation District of the Lawrenny Water Trust, the former being where the water offtake for the hatchery will be located and the latter being for the water race, which transects 90 Woodmoor Road, as shown in Figure 2. 56 and 90 Woodmoor Road are in the process of being amalgamated and then subdivided into Lots 1 and 2, 56 Woodmoor Road under DA 2019/00025 as approved by Central Highlands Council in April 2019 and as shown in Figure 3. The site of the hatchery is Lot 1 as shown in Figure 3 and will be under the ownership of Tassal Operations Pty Ltd. Lot 2 will be owned by Triffet Holdings Pty Ltd who will operate the reuse water irrigation scheme.
Land zoning	Rural Resource (<i>Central Highlands Interim Planning Scheme 2015</i>)
Land tenure	Private freehold.
Existing site	
Land Use	Agricultural use (pastoral grazing).
Topography	The northern side of the site of the proposed hatchery and dam is flat, with elevations of 100-110m above sea level. The site gradually slopes down to 80m above sea level at the southern boundary of the site, which is between Tent Hill and the Sendace Hills at the edge of Meadowbank Lake.

Geology	The larger northern section of the site where the hatchery will be positioned consists of Triassic sandstone and Quaternary and/or Tertiary age unconsolidated sediments (sand, clay, gravel), with the southern end of the site being Jurassic-age dolerite.
Soils	Soils are weakly duplex, comprising grey silty clay over clay subsoil.
Hydrology	Two existing dams on the site drain to Meadowbank Lake located at the southern boundary of the site.
Natural Values	The hatchery site is classified as agricultural land, has largely been cleared of native vegetation and is dominated by exotic plant species, although native species do occur. A comprehensive spring flora assessment of the entire project footprint has not been undertaken.
Local region	
Climate	Rainfall is approximately 526mm per annum, with the wettest month being September (average 67.4mm). Wind direction is predominantly west to north-west with relatively consistent high wind speeds.
Surrounding land zoning, tenure and uses	The site is surrounded by private freehold agricultural land zoned Rural Resource. The nearest existing residence is located to the east, approximately 420m from the site boundary and 750m from the proposed hatchery building. The site of an approved proposed residence is approximately 150m from the site boundary and 480m from the proposed hatchery building. Kimbolton Colliery, regulated by EPA Tasmania, is located 500m to the north east of the site. Meadowbank Lake is a popular recreational site for water skiing and angling.
Species of conservation significance	Three threatened flora species have been recorded within 500 m of the site. The nearby threatened species records are for prickly woodruff (<i>Asperula scoparia</i> subsp. <i>scoparia</i>), woolly new holland daisy (<i>Vittadinia gracilis</i>) and midland wattle (<i>Acacia axillaris</i>). The giant freshwater crayfish (<i>Astacopsis gouldi</i>) which is listed as vulnerable under the <i>Threatened Species Protection Act 1995</i> (TSP Act) and the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act) is potentially present in the local region.
Proposed infrastructure	
Major equipment	<p>Intake pump station at Meadowbank Lake and underground pipeline</p> <p>13,000 m² shed</p> <p>27 x 300 m³ smolt tanks</p> <p>12 x 70 m³ fry tanks</p> <p>Intake water treatment plant and storage tanks</p> <p>4 x recirculation water treatment plants</p> <p>Pumps for recirculating water round the hatchery</p> <p>Hatchery discharge sludge removal plant (located external to shed)</p> <p>Oxygen and ozone generators and bulk oxygen storage</p> <p>Truck wash and disinfection area</p> <p>Water exchange chillers</p> <p>126 ML reuse water dam and associated pump station and pipeline to supply reuse water to the reuse scheme</p> <p>Internal roads and carpark</p> <p>(Refer to Figures 4 and 5 for layout)</p>
Other infrastructure	Small buildings for storage and equipment, workshop, staff residence, electrical transformers and back up electrical generators.
Inputs	
Water	Freshwater supply from Meadowbank Lake to supply hatchery operations. The EIS states that Tassal has an interim licence for an existing pump station on Lot 2 and that a new licence is currently being processed by Hydro Tasmania through a Water Transfer Agreement for a

	<p>new intake pump station capable of supplying 650 ML/yr. Average daily hatchery consumption is estimated at 0.4ML/day. Water will also be used as required to shandy reuse water from the dam to reduce reuse water conductivity to below 1,000 µs/cm.</p> <p>Potable water will either be sourced from TasWater supply, Meadowbank Lake, or roof water collected on site and treated to meet standards for human consumption.</p>
Energy	The hatchery will be connected to mains power via a new 2,500kVA high voltage connection. Back-up generators are to be installed in the event of mains power supply interruption.
Other raw materials	Excavated material from the site is to be used for the dam and berm construction. Clay for lining the dam is to be sourced on site. Concrete will be required for construction of slabs and gravel for internal roads and carpark construction.
Wastes and emissions	
Liquid	<p>Effluent from the sludge dewatering plant and water from the hatchery RAS will be directed to the reuse dam and irrigated on the reuse scheme.</p> <p>Stormwater runoff from both construction and operational phases from rooves and hardstand areas.</p> <p>Potential run-off from areas irrigated as part of the water reuse scheme.</p>
Atmospheric	Dust during construction and from internal traffic. Odour from the hatchery including the sludge removal plant and reuse dam.
Solid	<p>Dewatered sludge from RAS.</p> <p>Fish mortalities.</p> <p>General refuse including food scraps, paper and packaging.</p>
Controlled wastes	<p>Waste engine oil</p> <p>Human waste to be directed to an onsite treatment system.</p>
Noise	Internally from pumps, extraction units, alarms. Externally from chilling equipment and the dewatering plant. Meadowbank Lake water off-take pump. Vehicles on site and going to and from the site.
Greenhouse gases	<p>Greenhouse gases, predominantly CO₂ generated during construction, as well as fuel for vehicles, machinery and generators.</p> <p>During operations diesel and petrol will be used for transport of consumables, products, smolt and waste.</p> <p>Hydroelectricity will be the primary energy input for the hatchery.</p> <p>No ozone depleting substances will be used.</p>
Construction, commissioning and operations	
Proposal timetable	Major construction is to be completed within 18 months. Commissioning is to occur in two stages. Stage 1 (hydraulic, electrical and mechanical) will commence in the later stages of construction. Stage 2 (functional commissioning) will then commence and is anticipated to take 6-8 weeks.
Operating hours (ongoing)	The hatchery is a 24 hrs per day, 7 days per week operation and the site will be permanently manned. Normal staff hours will be 0700 to 1800 hours, with periodic extended hours during smolt transfer. Smolt transfer is likely to occur for around 12 weeks per year.
Other key characteristics	
None.	



Figure 1a: Site Location of proposed hatchery (Figure 1 of the EIS).

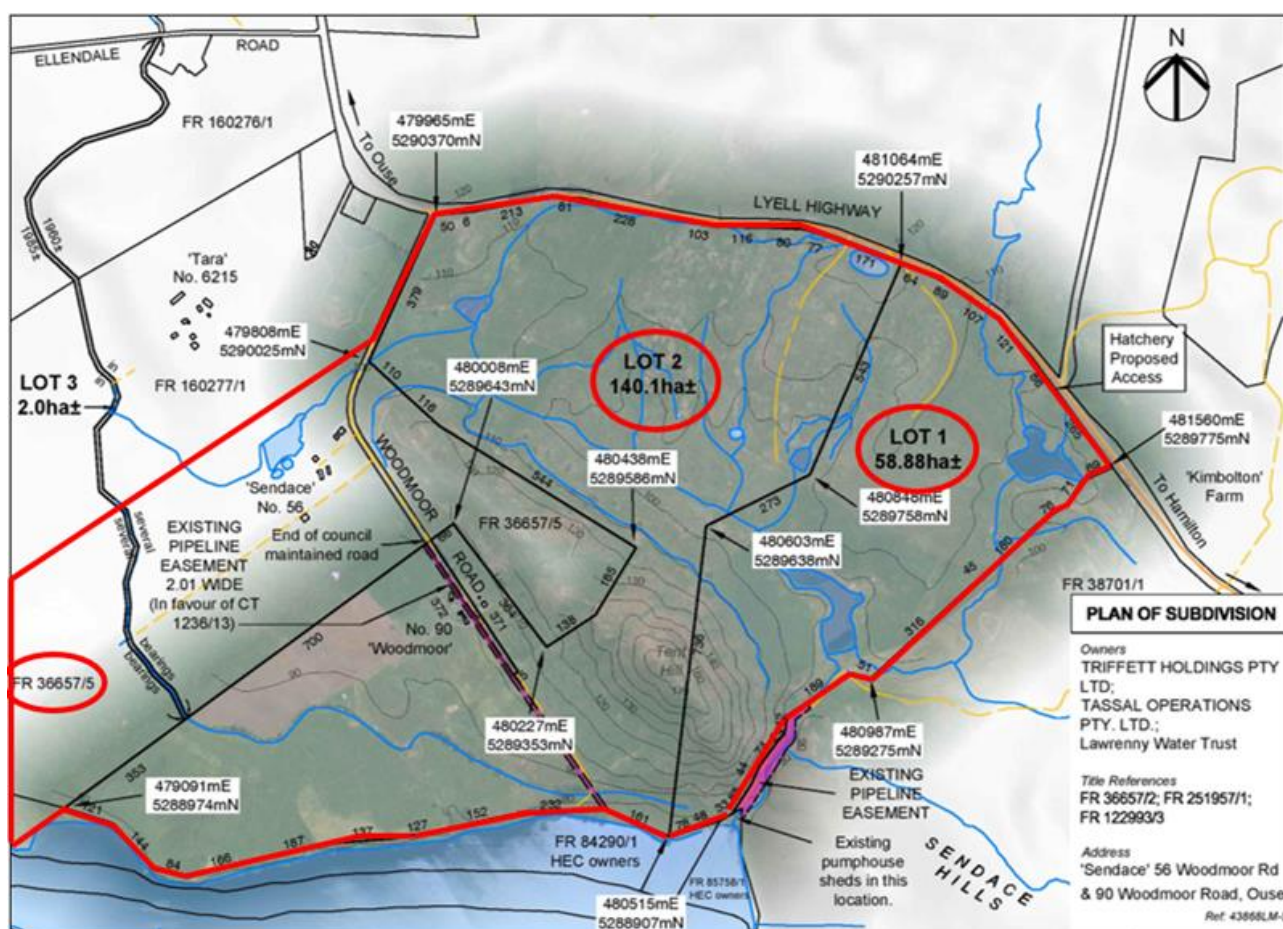


Figure 1b: The Land and area subject to Development Application

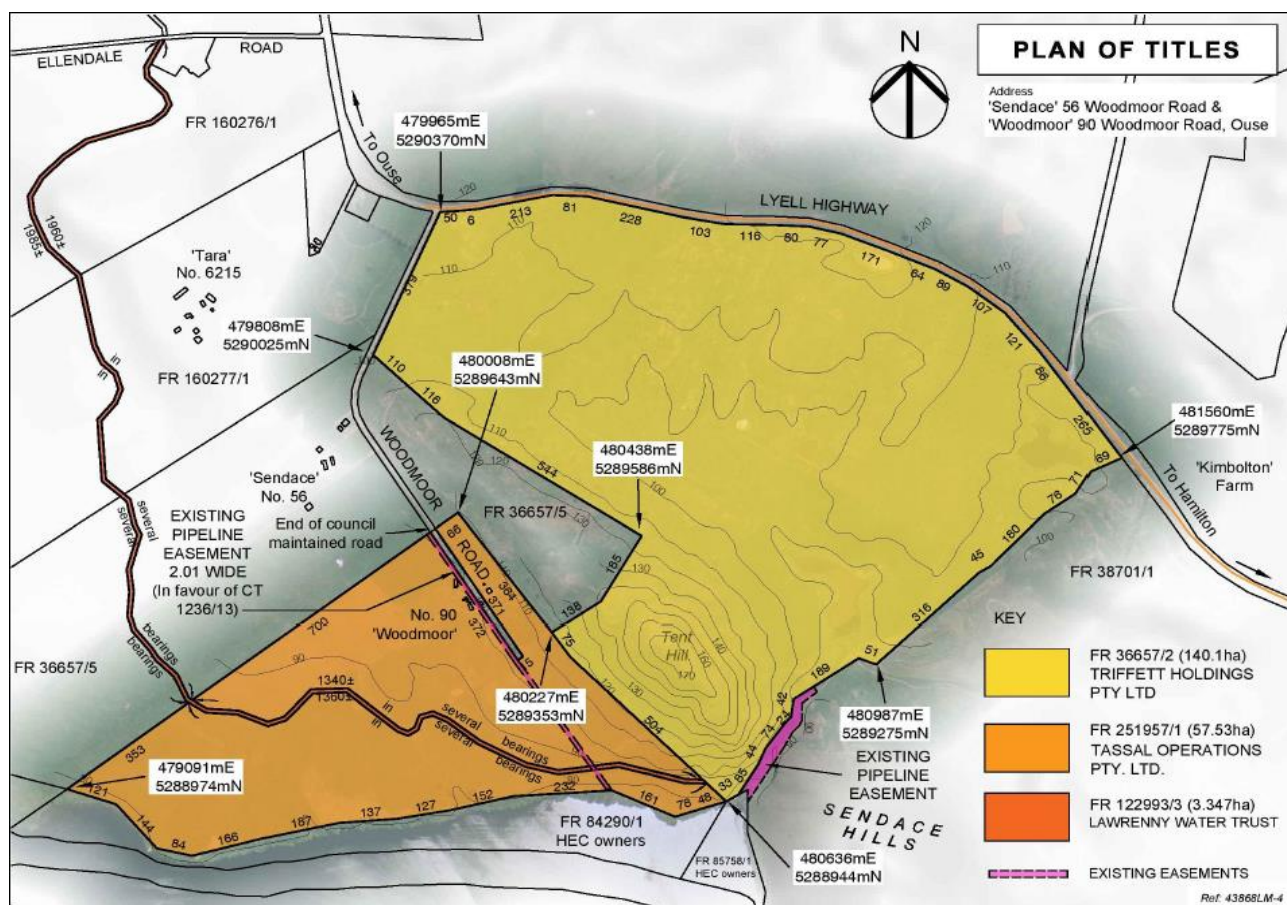


Figure 2: Proposed location (Figure 7 of the EIS)

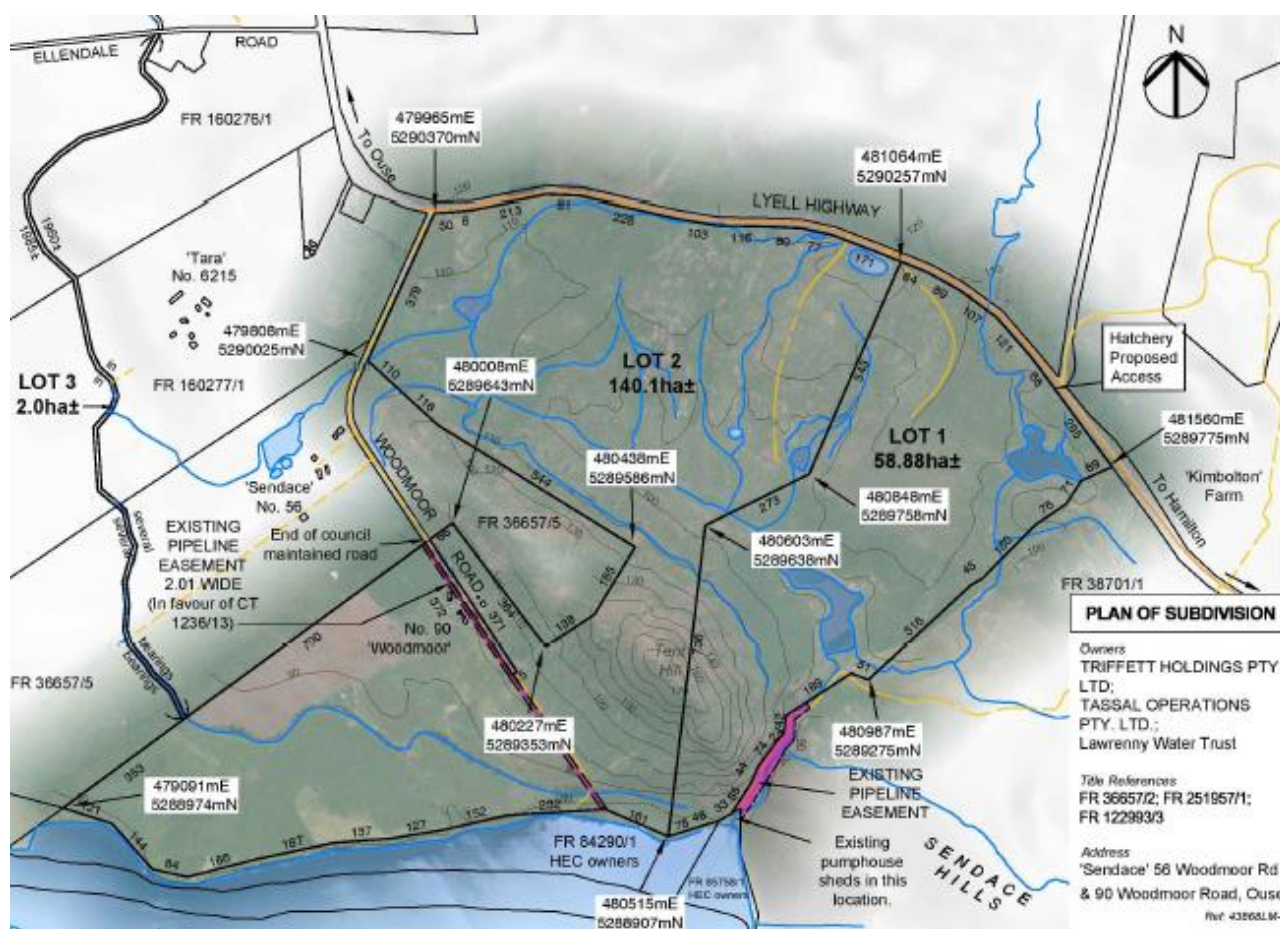


Figure 3: Approved subdivision Lots 1(Hatchery) and 2 (Reuse Irrigation), 56 Woodmoor Road (Figure 8 of the EIS)

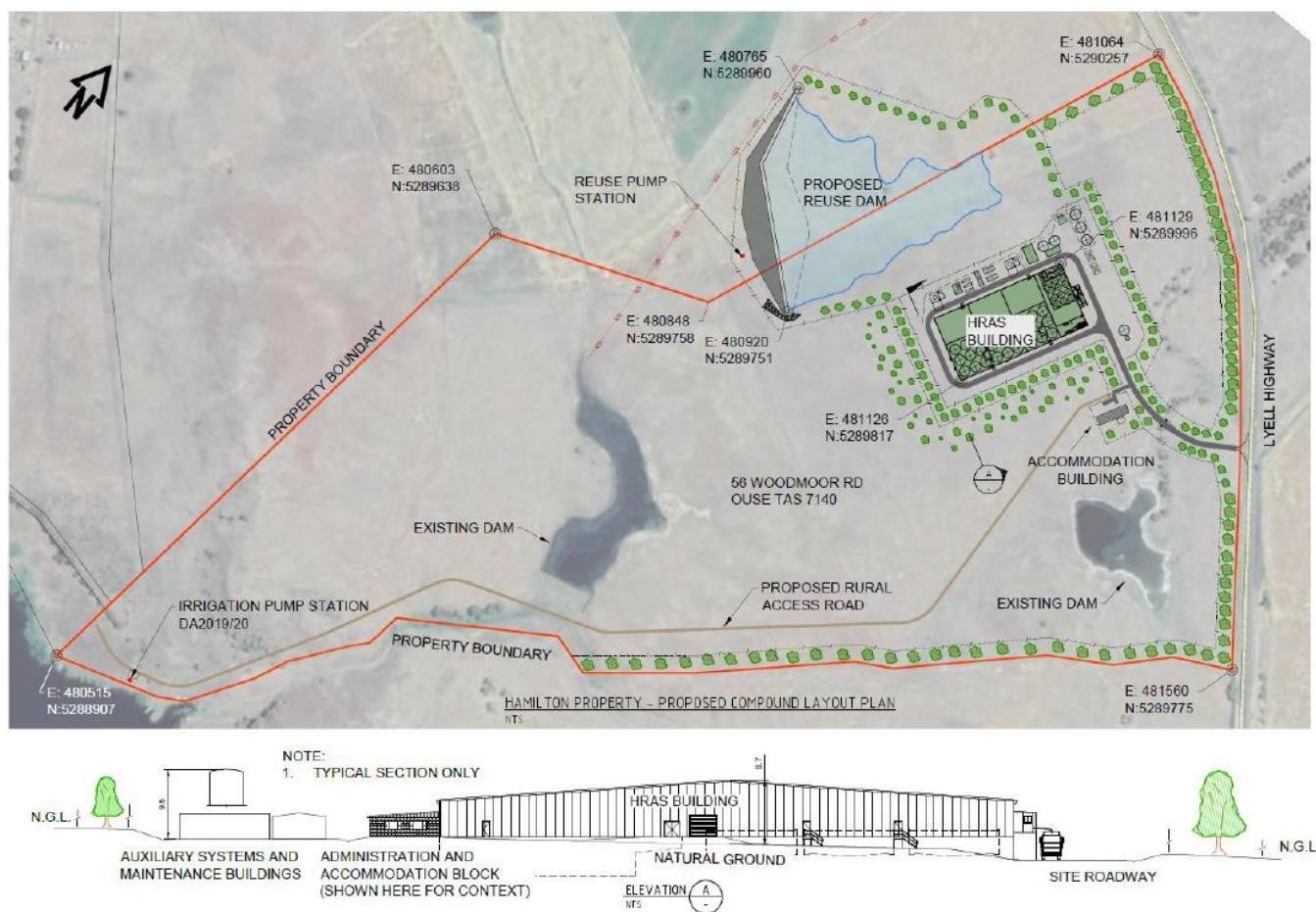


Figure 4: Proposed layout of hatchery (Figure 9 of the EIS).

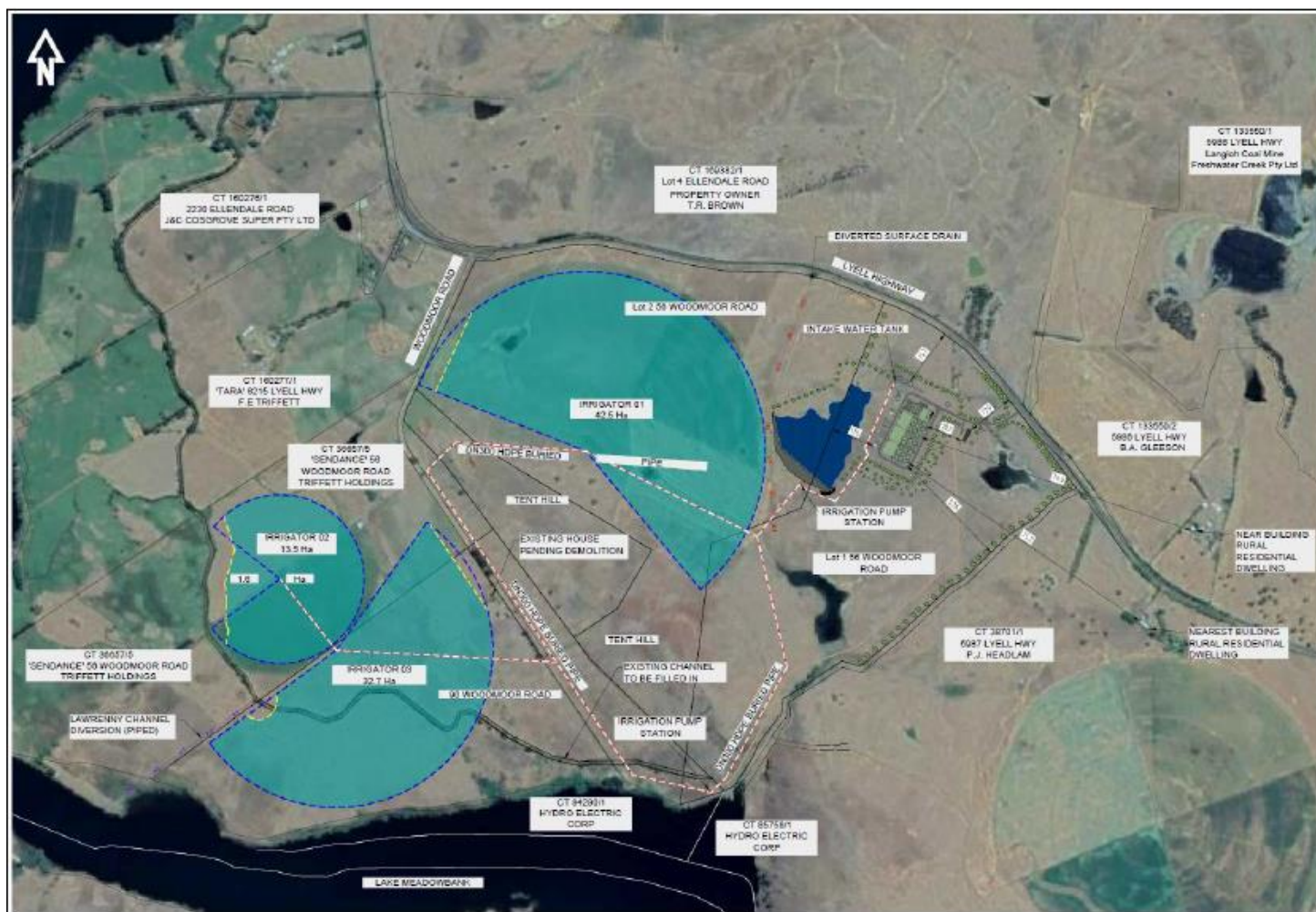


Figure 5: Proposed layout of hatchery and reuse scheme (Figure 11 of EIS)

4 Need for the Proposal and Alternatives

The primary objective of this proposal is to meet increasing demand for salmon products. This project by Tassal Operations Pty Ltd will expand the capacity of their freshwater operations to produce increased numbers of larger smolt to be transferred to marine leases. The proposal will also allow Tassal to increase broodstock security and more precisely time fish harvests and spawning.

The EIS states that the use of a recirculating aquaculture system (RAS) will minimise water consumption and minimise environmental impacts with effluent being irrigated rather than discharged. The alternative would be a conventional flow-through hatchery which uses large flows of water which need to be treated before being discharged back to the waterway.

The EIS states that 14 sites were initially considered against desired criteria such as topography, access to water and power supply, suitable irrigation land, road access and ability to reduce environmental harm. Six sites were assessed as favourable against the site selection criteria and ultimately the site was selected based on it meeting desired characteristics to the greatest extent.

The EIS states that the proposal has the potential to generate employment in the local area, and has wider economic benefits. The total capital cost is approximately \$46 million, with operating costs of around \$9.5 million per year. It is estimated 150 employees will be needed during the feasibility and construction phases of the hatchery, requiring local contractors and consultants, while an estimated 14 employees will be required during its operation.

The EIS does not anticipate any negative impacts on recreational, health or sporting facilities and services within the area, and considers that any impact on the community demographic will be minimal. As the hatchery will be developed on existing agricultural land, it is not anticipated to have an impact on demand for land or housing in the area, or on property values other than to raise values due to increased economic activity.

5 Public and Agency Consultation

A summary of the public representations and government agency/body submissions is contained in Appendix I of this report.

85 public representations were received. The main issues raised in the representations included:

- Water quality impacts
- Noise impacts
- Natural values impacts

The EIS was referred to a number of government agencies/bodies/government business enterprises with an interest in the proposal. Submissions were received from the following:

- Department of State Growth regarding traffic impacts.
- Hydro Tasmania.

The following Divisions/areas of the Department of Primary Industries, Parks, Water and Environment also provided advice on the EIS:

- Regulator, EPA Tasmania
- Water Specialist, EPA Tasmania
- Air Specialist, EPA Tasmania
- Noise Specialist, EPA Tasmania
- Policy and Conservation Advice Branch, Natural and Cultural Heritage Division
- Water Management and Assessment Branch, Water and Marine Resources Division

The Supplement to the EIS prepared by the proponent provides a response to relevant environmental issues raised during public consultation.

6 Evaluation of Key Issues

The key environmental issues relevant to the proposal that were identified for detailed evaluation in this report were:

- Air emissions
- Noise emissions
- Potential impacts from effluent treatment and reuse

Each of these issues is discussed in the following subsections.

General conditions

The following general conditions will be imposed on the activity:

G2 Access to and awareness of conditions and associated documents

G3 Incident response

G4 No changes to an Environmental Licence activity without approval

G5 Change of responsibility

G6 Change of ownership

G7 Complaints register

G8 Annual Environmental Review

G9 Additional annual reporting information for wastewater reuse schemes

6.1 Key Issue 1 Air emissions

6.1.1 Description

Air emissions including particulates and odour, have the potential to cause environmental nuisance and harm, particularly to sensitive uses, including residences, if not appropriately mitigated and managed. Potential sensitive receptors are identified as the residences located to the east of the proposed hatchery site.

The proposed site for the hatchery and irrigation scheme is located on agricultural land currently used for pastoral grazing. The nearest existing residences are to the eastern side of proposed hatchery and are 420 m from the site boundary and 750m from the proposed hatchery building. The site of an approved proposed residence, also to the east and on the same property, is approximately 150m from the site boundary and 480m from the proposed hatchery building. Another existing residence is located approximately 770m from the proposed hatchery building. The location of the existing and proposed residences in relation to the hatchery are shown in Figure 6 below.

To the north east is the Lyell Highway and Kimbolton open cut coal mine. The western boundary abuts the land to be utilised for irrigation of reuse water from the hatchery under an agreement with the landholder (Triffett Holdings Pty Ltd). This land is used for grazing livestock and contains no residences.

Odour

Emissions from the operation of the hatchery, specifically from the hatchery sludge removal plant and reuse water storage dam, are identified as the most significant potential sources of odour. Other odour sources identified in the EIS include storing and transporting fish mortalities and delivery and storage of fish feed.

The sludge removal plant is to be located on the western side of the main hatchery building and will comprise open balancing and storage tanks and a dewatering belt. Hatchery discharge water will be pumped into aerated equalisation tanks, where it will be stored until it can be dewatered using a polymer to aid flocculation and a dewatering belt. The dewatered sludge will be stored in an open tank until collection. It is anticipated that sludge will be collected at least weekly. Effluent from this process (brown water) will be directed to the reuse dam. The reuse dam, also to be located on the western side of the hatchery building, will have a surface area of approximately 33,000m² and will receive both brown water from the sludge removal plant and water removed from the RAS process.

The EIS states fish mortalities will be removed from fish tanks and stored in an onsite freezer. These will be periodically removed and directly transported in a skip to the Tassal Rendering Plant at Triabunna. One to two loads of fish feed will be delivered per week and stored within the hatchery building.

Appendix N of the EIS summarises the methodology, models and inputs used to model the potential impact of emissions from the operation of the hatchery, determines the predicted 99.5th percentile (1 hour average) odour isopleths and assesses predicted potential odour impacts against the Environment Protection Policy (Air Quality) 2004 (Air EPP) odour criteria. Long term meteorological data sourced from the Bureau of Meteorology (BoM) weather station 8 km from the hatchery site at Ouse were used to provide a description of the general climate in the vicinity of the project. Site specific meteorological inputs to the air dispersion model were generated by TAPM and CALMET. The information obtained from this process indicates that winds are predominantly from the north and north-west throughout the day with a relatively high speed and uniformity across the diurnal cycle. The EIS states that relatively low speed NE winds (2 m/s), which are indicators of poor dispersion conditions, are uncommon.

Odour emission rates used in the model were obtained from the sludge dewatering plant and reuse dam emission rates measured at Tassal's Rookwood 2 RAS Hatchery located at Ranelagh. This Rookwood plant utilises very similar processes and infrastructure to that proposed for the Hamilton RAS Hatchery. These emission rates were adjusted, to account for differing design parameters and the greater proposed production rate at Hamilton. The proposed Hamilton RAS Hatchery will be approximately 1.5 times the capacity of Rookwood 2, but less than the combined capacity of Rookwood 1 and Rookwood 2, which are co-located.

Results of odour dispersion modelling presented in the EIS indicate that the predicted 2 odour unit (OU) isopleth (1-hour average, 99.5 percentile), representing the Air EPP odour criterion, does not extend beyond the boundary of the land to be utilised for the hatchery and reuse area (Figure 6). The highest predicted odour level at the boundary of the land to be utilised for the hatchery and reuse area is 0.68 OU. The highest odour level predicted at a sensitive receiver was 0.29 OU at receptor R1a.

The EIS states odour emissions from the site are likely to be dominated by emissions from the reuse water dam with upwards of 95 % of emissions from this source. A nearly three-fold increase in emission rates would be necessary for the air dispersion model to predict an exceedance of the 2 OU Air EPP criterion at the boundary of the land.

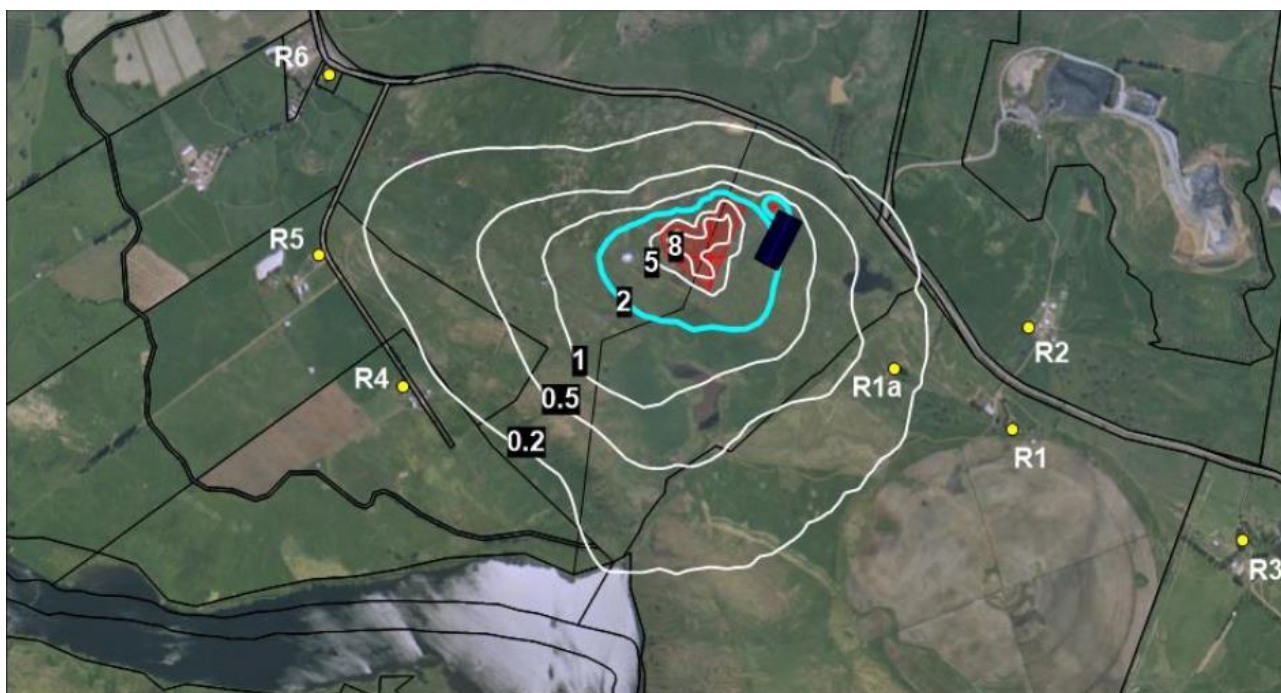


Figure 6: Predicted 99.5th percentile 1-hour average glc odour emission contours (in OU) (Figure 4-13 Appendix N)

The following scenarios with the potential to increase odour emissions from the hatchery were identified in the EIS:

- Seasonal increase in odour emissions as a result of higher temperatures in summer.
- Loss of power to and/or equipment failure at the solids removal plant.
- Anaerobic breakdown in stored sludge.
- Venting of putrid air from transport vessel during sludge collection.
- Blue-green algal blooms on the reuse dam surface.

Dust

Dust generated during the construction of the hatchery, reuse dam and internal roads is also identified as a potential impact. The EIS states dust generation from normal operations of the hatchery is expected to be low due to most operations occurring within the main hatchery shed and the small number of vehicle movements likely on site.

6.1.2 Management measures

Odour

Section 6.1.4 of the EIS describes the following measures to minimise any potential odour impacts:

- All odorous waste material generated by the construction activities will be stored in appropriate containers and removed from site.
- An odour sampling survey will be conducted at the Hamilton RAS Hatchery during the first summer operational period, with survey results used to remodel and reflect seasonal variations in emission rates.

- Backup power generators will be installed and maintained to prevent any down time to the treatment of hatchery discharge water due to power loss.
- Spare hatchery discharge water processing equipment will be retained to allow prompt replacement upon failure and minimise downtime.
- Should emissions from sludge storage increase significantly due to the development of anaerobic processes, the implementation of a mixing system to maintain oxygen levels will be explored.
- All organic wastes processed through the solids removal treatment plant will be stored for no more than 7 days and disposed of via a licenced waste transporter to an approved composting facility. Mitigation of odour emissions from the collection process is to be agreed with the licenced waste transporter.
- A blue-green algae management procedure will be developed and implemented.

Email correspondence from the proponent on 29 October states that a formal agreement will be entered into with the owner of the land proposed for the reuse dam and irrigation (Triffett Holdings).

The correspondence states the agreement will include the following:

- An easement to facilitate the construction of the reuse dam and a restrictive covenant to cover potential limitations as a result of odours emitted from the dam.
- A restrictive covenant to allow the use and management of the reuse dam to remain with the proponent in the event of land sale.
- A water reuse agreement to allow the proponent to maintain control over the use and access of water from the reuse dam (including use of and access to the pump station).

The correspondence further states the agreement will be in place before commissioning operations commence.

Dust

Section 6.1.4 of the EIS states the following measures will be implemented to mitigate dust impacts:

- A CEMP will be implemented during construction to mandate the use of water carts and damping down of material stockpiles as necessary to prevent dust migration past the boundary of the property.
- Use of long-term stockpiles on site will be avoided wherever possible unless they perform the function of visual or noise screening.
- Access to the site from the Lyell Highway will be sealed to the proposed development location minimising dust entrainment from vehicles travelling to and from the site.
- Exhaust emissions will be minimised by ensuring that all equipment is properly maintained; only reputable contractors with well-maintained equipment will be used on-site.

6.1.3 Public and agency comment and responses

Multiple representations highlighted the potential for emission sources to impact air quality, specifically impacts from odour. Odour sources identified in representations included:

- Fish effluent
- Uneaten fish food
- Fish morts

- Recycled water dam
- Freshwater dams contaminated with recycled water
- Pump station
- Hatchery
- Spray irrigation
- Human effluent treatment system

The EPA Air specialist noted that the irrigation of wastewater (effluent reuse) was not included in the air impact modelling included in the EIS.

A number of representations noted that the sampling/measurement of odour utilised in the EIS was completed during winter, and is therefore not representative of other periods during the year.

6.1.4 Evaluation

Results from the air quality assessment indicate odour emissions from the solids removal plant and water reuse dam are unlikely to result in environmental nuisance or environmental harm beyond the land area utilised for the hatchery and associated effluent reuse scheme. The highest predicted odour level at the boundary of the land to be used for the hatchery and reuse area is 0.68 OU, well below the 2 OU Air EPP criterion, while the highest odour level predicted at the approved proposed residence (receptor R1a) was 0.29 OU. Odour management measures necessary to prevent odours causing environmental nuisance at or beyond the land area utilised for the hatchery and associated effluent reuse scheme will be required by condition **A1**.

Although the highest predicted odour levels were well below the Air EPP criterion, it is noted that the irrigation of reuse water was not included in odour modelling and also that seasonal variations were not accounted for in the emissions sampling. The commitment to undertake an odour sampling survey during the first summer operational period and use the obtained survey results to undertake revised modelling with seasonal variation in emission rates is therefore supported and will be required by condition **A2**. This condition will also require the revised odour sampling survey to be conducted during a warm weather period (end of summer, early autumn) and 'high production rate' of the hatchery, as well as including the irrigation areas and all potential odour sources modelled previously.

Although odour from human effluent was raised in representations, the proposed onsite aerated treatment system will treat water to a secondary standard and is unlikely to generate significant odour. The management of sewage on site is discussed in Appendix I Section A Issue 6: Stormwater and Liquid Effluent.

Condition **A3** requires the results of the odour sampling survey to be provided in a report. Should the results of the odour survey vary markedly from the predictions made in Appendix N of the EIS, further Atmospheric Dispersion Modelling may be required (condition **A4**).

The contingencies outlined in the EIS to mitigate potential odour emissions in the event of power failure or failure of components of the sludge removal plant are supported. The mitigation measures identified should an increase in odour be detected from the sludge dewatering plant or in the event of an algal bloom on the reuse dam are also supported. In order to ensure potential odour sources are identified and monitored as part of normal operational procedures, condition **A5** requires the development and approval of an Odour Management Plan. Condition **OPI** requires notification prior to the commencement of normal operations and will allow the due dates for these requirements to be determined.

The development of an agreement with the owner of the land to be used for the reuse dam construction and for irrigation of reuse water is supported and will be required by condition **G13**.

The inclusion of dust management measures in a Construction Environmental Management Plan is supported and will be required by condition **CN1**. Prevention of nuisance dust generated during construction activities will be required by condition **CN3**. Condition **CN3** requires construction not to be undertaken during windy conditions and dust suppression methods to be utilised.

6.1.5 Conclusions

The proponent will be required to comply with the following conditions:

A1 Odour Management

A2 Odour Survey

A3 Odour Survey Report

A4 Atmospheric Dispersion Modelling

A5 Odour Management Plan

OPI Notification prior to the commencement of normal operations

G13 Landowner Agreement with landowners of properties identified in the Wastewater Reuse Environmental Management Plan

CN1 Construction Environmental Management Plan

CN3 Control of dust emissions during construction

6.2 Key Issue 2 Noise emissions from construction and operation of the proposed facility

A description and location of nearby sensitive receptors is provided in section 6.1.1 (Key Issue 1: Air emissions) with sensitive receptors indicated in Figure 6. The EIS states the main source of background noise in the area is from traffic on the Lyell Highway. At times of low traffic movement, night-time background noise levels are considered to be low.

The EIS identifies hatchery traffic as a potential source of noise, specifically periodic movement of smolt tankers to and from the hatchery which typically occurs early morning. Other on-site sources of noise identified in the EIS include the main hatchery building, the filter shed and chiller fans.

6.2.1 Description

Existing noise levels

Pre-existing noise levels, representative of the area, were measured about 1 km west of the proposed hatchery building. Typically night time levels fall to about 20 dB(A) and daytime levels are about 40 dB(A). Night time Leq (Equivalent Continuous Sound Level) noise levels are quite variable although the L90 levels are generally fairly stable, suggesting a number of elevated but short duration noise events consistent with occasional vehicle pass-by events.

A second measurement location was chosen 53m from the highway centreline. The L90 noise levels (noise level exceeded for 90% of the time) were similar to those at the first location, however, the Leq levels were significantly greater, in the order of 55 dB(A) during the day and reducing down to about 44 dB(A) for several hours during the night.

As an adjunct to levels, the noise measurements were used to provide traffic counts on the basis that heavy vehicles produce a peak (Lmax) (maximum sound level, during a measurement period) noise level between 70 and 75 dB(A) and light vehicles produce an Lmax between 60 to 65 dB(A). Traffic count estimates were provided in Table 3.1 of the Noise Impact Assessment report.

Expected limits

EPA Tasmania provided noise limits of 32/37/45 dB(A) for night, evening and daytimes for the activity in feedback on a draft EIS provided by the proponent in September. Aspirational design noise limits, to apply at noise sensitive premises (residences in this situation) were chosen to be 25 dB(A) at night and 38 dB(A) during the day, with an acknowledgement that higher levels would be expected when additional work, such as maintenance, occurs.

The activity will include transport of smolt from the hatchery, likely to occur in the early hours of the morning. The noise implications of this were considered for the residence closest to the highway ("Sendace").

Noise emissions

Noise emissions from the hatchery building were estimated on the basis of measurements at the TASSAL Rookwood 2 facility (a similar but smaller hatchery). The emitted noise was described as not containing any intrusive characteristics with a sound power level of about 101 dB(A)SWL, a similar magnitude to a quiet compressor or generator set.

The other main fixed noise source is a bank of chiller fans, which has an expected sound power level of 102 dB(A)SWL for basic units or 91 dB(A)SWL for low-noise units. The basic chiller fans have weak tonal components at 50 and 100Hz.

The most significant vehicle noise source is expected to be the smolt tankers, with an estimated sound power level of 91 dB(A) at idle and 105 dB(A)SWL at 20 km/h. This level does not include noise from an auxiliary diesel generator, which is present on many smolt trucks, as the proponent

does not intend to use these auxiliary generators. These units have a sound power level of about 104 dB(A)SWL and thus would be a significant noise source.

Predicted noise levels at neighbouring residences

With no additional noise mitigation, the predicted noise level at existing residences (a distance of 750m) was 35 dB(A). This prediction was based on hemispherical spreading, atmospheric absorption and ground absorption. It also assumed that doors associated with areas of elevated noise, such as the biofilter and oxygenation rooms, will be closed and that ventilation louvers will be designed to reduce noise breakout, both important considerations for hatchery noise emissions.

The noise level from loading smolt tankers was predicted to be 26 dB(A) at the residences at 750 metres. This is expected to increase the overall noise by about 1 dB(A). Proposed mitigation options included topographic screening or screening by the hatchery building.

Several specific mitigation measures were also proposed by the proponent. Orientating the quiet side of the hatchery building towards the residences is expected to reduce its resulting noise level to 25 dB(A). The choice of low-noise chiller fans is expected to provide 4 dB(A) reduction in the emitted noise level, and using the hatchery building as an acoustic barrier is expected to reduce the noise level from the chillers to below 20 dB(A). Smolt tankers will wait, and be loaded such that the hatchery building acts as an acoustic barrier, reducing the noise level to below 20 dB(A).

It was considered that, with these additional mitigation measures, the total noise level at 750 metres will meet the night-time design noise level of 25 dB(A).

Noise from smolt tankers

Two trucking scenarios were considered; a situation where tankers run at four per hour from 4am and a worst case variation where tankers operate throughout the night. The predicted increase in the 1 hour Leq for these cases was calculated to be 1 and 3 dB(A) respectively. As a consequence of the existing level of traffic on the highway and the associated noise levels, these variations were considered to be relatively minor.

The increase in daytime traffic noise during smolt loading days has been estimated to be 1 to 2 dB(A) between 7am and 11am at the nearest residence.

Noise levels at R1a (proposed future residence)

Noise levels from the activity were estimated to be 5 dB(A) greater at R1a (a distance of 440 metres) compared to estimated levels at existing residences (a distance of 750 metres). The noise level for the 'normal hatchery operation' (i.e. excluding smolt loading) was 26 dB(A) at 750 metres and this level was predicted to increase by no more than 1 dB(A) with smolt loading. With the 5 dB(A) increase at 440 metres, noise is expected to match the 32 dB(A) night time limit.

The EIS states the application of sound absorptive material inside the hatchery building may reduce the sound emission from the hatchery by 5 dB(A), equating to an additional reduction of 2 dB(A) to the total noise level at R1a.

The noise level at the proposed residence from highway traffic is expected to be 6 dB(A) lower than at 'Sendace' (R1), although this is somewhat dependent on the visibility of the highway from the two residential locations.

Construction noise

Construction will be limited to the hours of 7am to 6pm Monday to Friday, and 8am to 1pm on Saturday. A noise management level of 47 dB(A) has been nominated for the nearest residences.

Pump station noise

The pump station will consist of two 45kW pumps housed in concrete chambers located below the natural ground surface. The pump station will be located near the edge of Meadowbank Lake close to several pre-existing agricultural pump stations.

On the basis of measurements for a pump station with two 55kW pumps located above ground, the noise level from the proposed pump station is expected to be below 28 dB(A) at 250 metres. Mitigation options were considered, including additional enclosure, inclusion of sound absorbing material, noise attenuation of ventilation openings, orientation and the inclusion of an earth berm.

The predicted noise level at the residence at 90 Woodmoor Road was 18 dB(A), based on separation distance alone. Additional attenuation due to topographic screening was considered to result in a level below 10 dB(A).

The predicted noise level for the residences 1.4km south of the proposed pump station was 12 dB(A). The noise level was also predicted for the recreational jetty 50 metres from the pump station at 42 dB(A).

6.2.2 Management Measures

The EIS includes the following commitments in relation to managing noise impacts:

- Restriction on work hours during construction phase – 7am-6pm (Mon-Fri) and 8am-1pm (Sat) or as otherwise approved (commitment 22).
- All onsite equipment (utilised in the construction phase) will comply with recommended noise levels specified in the Interim Construction Noise Guidelines (NSW Department of Environment & Climate Change, 2009) (commitment 23).
- Ensure all roller doors have no gaps at the top (commitment 24).
- Ensure doors to biofilter and oxygenation rooms kept closed at all times (to the extent possible) (commitment 25).
- All noise-emitting equipment will be placed on the western side of the Hatchery building to provide barrier between noise sources and nearest residences (commitment 26).
- Construct/install terrain blocking and earth embankments around the Hatchery to create further natural acoustic barriers (if necessary) (commitment 27).
- Undertake a post-commissioning noise assessment of Hatchery operations (commitment 28).
- Develop and implement a noise management protocol for heavy vehicles used for Hatchery operations during night-time hours (commitment 29).

Section 6.4.3 of the EIS also contains the following additional mitigation measures:

Noise mitigation measures and associated procedures during the construction period will be stipulated in the CEMP. If noise from the main building needs to be further reduced, this can be done after the hatchery is commissioned by installing sound absorbing material inside the hatchery.

6.2.3 Public and agency comment and response

Representations

Multiple representations noted the potential for noise impact on residents and recreational users of the area, with noise being emitted from construction of the facility, pump station (24 hour), hatchery (24 hour) and heavy vehicles, particularly at night.

Several representations noted that the proposed facility location is close to existing houses, and one proposed house, and that the EIS is incorrect regarding line-of-sight to residences. It was considered that it is not reasonable to postpone sound mitigation measures until after the activity is operational.

One representation noted an inconsistent assessment of noise impacts for existing and the approved but yet to be built residence.

One detailed submission casts doubt on the scaling up of hatchery noise output from the smaller hatchery at Ranelagh. The expected noise limit of 32 dB(A) is some 12 dB(A) greater than the recorded background noise level of 20 dB(A), which will lead to noise nuisance. Vehicle movements associated with smolt loading at night will further exacerbate noise impact.

Agency comments

The noise limits for this facility, which will ultimately be included in the EL, are essentially dependent on the pre-existing noise levels in the area and an expectation of the future land uses in the area. The area has low night time noise levels and it is considered that the noise limits should be 32, 37 and 45 dB(A) for night (10pm to 7am), evening (6pm to 10pm) and day (7am to 6pm) times respectively.

Consistent with a recent assessment, these limits would be expected to apply at residences, both in existence or approved but not constructed. The intention here is that the noise from the facility would be such that it would be acceptable when an approved residence was built and occupied.

Without additional noise mitigation, the noise level was predicted to be 35 dB(A) at residences at 750 metres; 32 dB(A) from the hatchery, 32 dB(A) from the chiller fans and 26 dB(A) from the smolt trucks idling during loading.

Although it was considered that mitigation measures were available to reduce this level by about 10 dB(A), such as noise attenuation within the hatchery building, selecting a low-noise option for the chillers and suitable placement to provide acoustic screening from topography, buildings and constructed berms, only some of the mitigation measures were fully quantified. With these mitigation measures the noise level predictions were 27 dB(A) at 750 metres and 32 dB(A) at 440 metres, consistent with the proposed night time limit. It was calculated that an additional 2 dB(A) of attenuation could be achieved by fitting acoustic absorptive material within the hatchery building, so there is some post-construction mitigation in reserve.

Pre-mitigation noise level predictions have been checked against International Standard ISO 9631 Acoustics – Attenuation of sound during propagation outdoors and are considered to be in good agreement.

Given that the attenuation provided by the various mitigation options will be influenced by the selection of components and the final placement of buildings, activities and, possibly, earth berms, a review of the noise predictions should be carried out prior to construction.

Transport of smolt during night time will require careful management. Movement at reduced speed, both on-site and near neighbouring residences will need to be ensured and acceleration as the trucks enter the highway may be a particularly noticeable source of noise. Several other Level 2 activities have utilised night time transportation and it is considered that trucks should be suitably monitored to show compliance with appropriate speed, acceleration and use of exhaust brakes.

Design details and noise predictions for the pump station indicate that the noise emission is low, the pumps are housed underground in a concrete pit, and the pump station is to be located close to several other pump stations. Noise mitigation options were considered but, at this stage, it would appear that additional mitigation would not be necessary.

6.2.4 Evaluation

Noise predictions indicate that compliance with the night time noise limit of 32 dB(A) can be achieved, however, there are some issues that will need to be resolved by appropriate selection of equipment, specifically the chiller fans. The pump station, as designed, is not considered to be a significant source of noise. Condition **N1** is imposed to ensure suitable noise limits. The night-time noise limit of 32 dB(A) is recommended by the EPA Noise technical expert based on night-time noise limits specified in policies from other jurisdictions for comparable quiet rural locations.

The attenuation provided by the various mitigation options will be influenced by the selection of components and the final placement of site components. A suitable review of the noise attenuation provided by all chosen mitigation measures is required before the commencement of construction and is specified by condition **N2**.

Condition **N3** details noise survey requirements and requires a baseline noise survey to be conducted at the proposed location of the Lake Meadowbank offtake pump station. The commitment to undertake post commissioning noise surveys is supported and the requirement for operational noise surveys every 3 months for the first year of full production and every year thereafter is also specified in condition **N3**. Condition **N4** specifies noise survey requirements.

Specific attention will need to be given to the operation of transport vehicles during the night and management of transport noise and the commitment to manage heavy vehicle noise is supported. Condition **N5** requires a management protocol for the operation of heavy vehicles while entering, on or leaving the land, to ensure noise limits are not exceeded.

The commitment to address potential construction noise in the CEMP is supported and will required by Condition **CNI**.

6.2.5 Conclusions

The proponent will be required to comply with the following conditions:

N1 Noise levels

N2 Update noise predictions

N3 Noise surveys

N4 Noise survey requirements

N5 Transport noise management

CNI Construction Environmental Management Plan

6.3 Key Issue 3 Potential impacts from effluent treatment and reuse

6.3.1 Existing environment

The hatchery and recycled water irrigation scheme will be located on land located on the eastern side of Meadowbank Lake. The recycled water irrigation scheme will comprise a 120 ML storage dam and three large central pivot irrigators, the third of which will be located on the edge of Meadowbank Lake. The reuse scheme will be designed to achieve 100% reuse with no discharge to the River Derwent catchment.

Meadowbank Lake is an anthropogenic feature of the hydro scheme on the River Derwent and has a high conservation value. It is a popular recreation area for angling, water-skiing and camping. There are a number of shacks located on the lake. The site of the hatchery is approximately 12 km upstream of Meadowbank Dam and 45 km upstream of TasWater's Bryn Estyn water offtake, the main water supply for Greater Hobart. The Derwent River catchment in this vicinity has extensive

agriculture, dominated by livestock cropping and grazing and large dairy farms upstream at Ouse. There are a large number of water licences allocated for irrigation and stock watering purposes. EPA is advised that there may be water offtakes located approximately 1.3km downstream for drinking water purposes.

6.3.2 Potential impacts

The proposal will generate wastewater from effluent from both the RAS process and sludge dewatering plant.

Effluent produced by the hatchery, stored in the reuse dam and irrigated has the potential to impact on water quality in Meadowbank Lake, either by direct leakage from the reuse dam or reuse pipeline, from run-off from the irrigation area or indirectly through the soils or via leakage to groundwater. The effluent is likely to contain comparatively high levels of salts which pose a risk to soil structure and the sustainability of the reuse scheme and nutrients, which have the potential to contribute to receiving water course eutrophication. Effluent may also be a source of pathogens, therapeutic chemicals and pharmaceutical medicines.

Effluent Flow and Quality

The main EIS document and Appendix B Irrigation and Environmental Management Plan (IEMP) detail the likely effluent volumes and quality. An updated IEMP was provided in response to the EPA's request for supplementary information and it is this version referred to as the IEMP.

According to the EIS, a maximum annual volume of 158 ML of wastewater, comprising both the RAS effluent and effluent from sludge dewatering plant will be produced. This figure is based on a water exchange rate of 90L/kg feed required to maintain suitable conditions for the fish. The proponent advises this figure is conservative and they expect the figure will be significantly lower, at approximately 70 L/kg feed. Sizing of the reuse infrastructure, including the dam and the irrigation area is based on 158 ML wastewater per annum being produced.

Water for the hatchery will be sourced from a dedicated offtake from Meadowbank Lake, which will be filtered, ozone treated and stored in tanks until required. The hatchery will be split into four RAS areas, each with fish growing tanks and a bio-filter water treatment process incorporating screening, biological filtration, ozone treatment, phosphorus removal and disinfection. A denitrification process using methanol will be used once nitrate levels exceed 100mg/L. Solids produced in this water treatment process from the screens, bio-filter and phosphorus removal are directed to the solids removal plant. To refresh the system, a portion of water is withdrawn from the RAS and directed to the reuse dam (referred to in the EIS as 'RAS water') and is replaced with treated intake water. The RAS process will be automated with programmable logic controller (PLC) and supervisory control and data acquisition system (SCADA) which will monitor key process parameters and be alarmed.

The solids removal plant is advised to be the significant source of effluent from the hatchery. The solids waste stream from the RAS process will be directed to the solids removal plant at up to 1% solids. This will be initially stored in aerated and mixed balancing tanks. Dewatering will occur intermittently depending on the volume of material received. Effluent will have polymer added to flocculate the solids. A belt press will then separate the liquid and solid streams and the sludge stored in a holding tank prior to removal for composting. The effluent stream from the belt press will be sent to the reuse dam and is referred to in the EIS as 'brown water'.

According to the EIS the total hatchery discharge will be made up of approximately 25% RAS water and 75% brown water.

Figure 7 gives a summary of the hatchery water management process. Refer to section 2.1.2 of the EIS for a detailed overview of the RAS process.

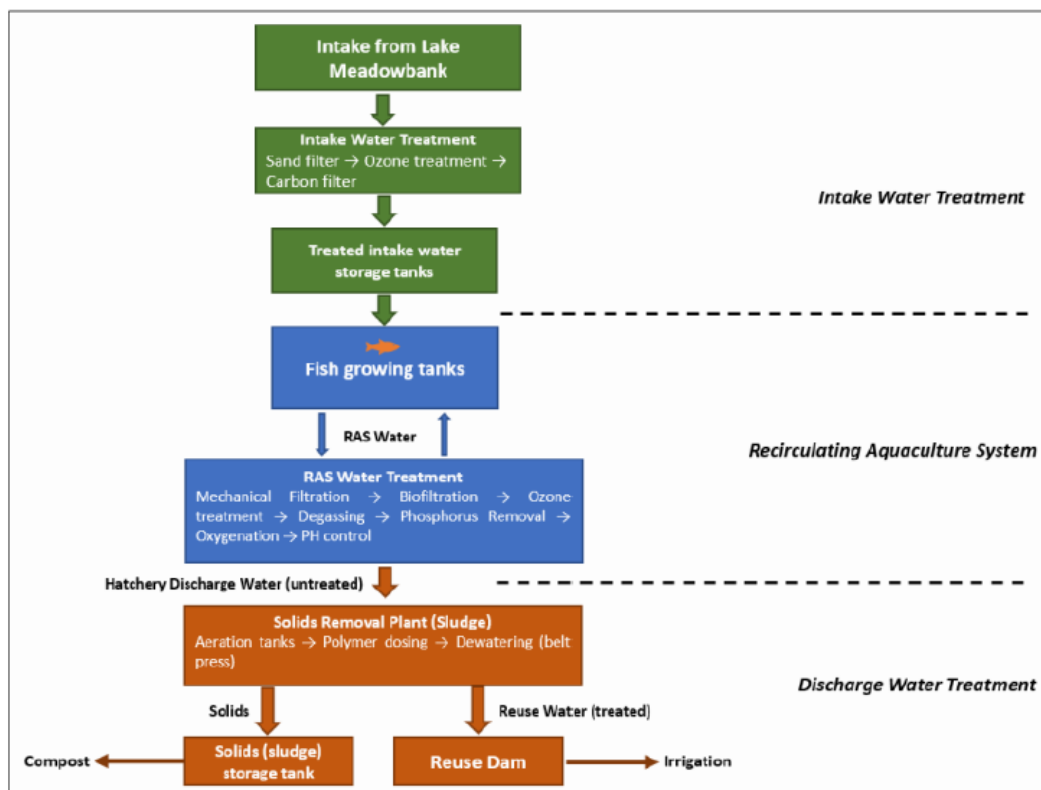


Figure 7: Flowchart of the water management process (Figure 3 of EIS)

Using recent monitoring data from Tassal's combined Rookwood hatcheries (IEMP section 2.3) effluent quality is anticipated to meet Class B recycled water quality requirements as specified in Table 2.1 of the *Environmental Guidelines for the Use of Recycled Water in Tasmania (DPIWE 2002)* (Recycled Water Guidelines) and be suitable for use to irrigate pasture for livestock. Consistent with other effluent reuse schemes in Tasmania using dam storage where algal growth can affect pH, the EIS proposes an upper pH limit of 9 instead of pH 8.

The Recycled Water Guidelines were developed with consideration of the characteristics of treated sewage. Hatchery effluent will, however, potentially have an elevated conductivity, with a Rookwood effluent median of around 1,600-1,800 $\mu\text{S}/\text{cm}$. To address potential risks to soil salinity and sodicity, the EIS states an additional conductivity limit of 1,000 $\mu\text{S}/\text{cm}$ will be maintained by shandying effluent from the dam with additional water sourced from Meadowbank Lake. A conductivity meter will be installed at the dam to monitor conductivity and ensure this limit is met. The anticipated ratio of water required to shandy effluent to meet conductivity is anticipated to ensure that the sodium adsorption ratio (SAR) of the effluent is also maintained below 12 and thus according to the IEMP, acceptable for irrigation.

Rookwood data indicates that levels of the bacterial indicator, thermotolerant coliforms are very low (median 20 cfu/100mL) and well within the Class B recycled water requirements (median < 1,000cfu/100mL). In addition streptococcus has been identified as an additional potential bacteriological indicator and will be monitored and assessed. While hatchery feed contains restricted animal material (RAM) the IEMP indicates that there is no factual evidence that irrigation of salmonid hatchery effluent poses a risk to livestock from pasture irrigation and so no further controls are proposed. The EIS states that therapeutant use in the hatchery will be minimal and generally restricted to the addition of salt when required.

Reuse Scheme

According to the EIS, a reuse scheme will be developed for the reuse of effluent on pasture from the Hamilton RAS on the adjoining property, 56 Woodmoor Road, identified as Lot 2 on Figure 3) and will be managed by the owners of that property, Triffett Holdings Pty Ltd, with significant involvement of agricultural consultants as specialists in agronomy and soil science, giving advice through monitoring audits and reviews. The IEMP describes with the key aspects summarised as follows:

- 120ML capacity reuse dam (126ML including borrow fill embankment fill).
- Pump station and associated pipeline to deliver effluent from the reuse dam and additional shandy water from Meadowbank Lake offtake as required, to the irrigation scheme.
- Irrigation of approximately 90ha pastoral land used for beef cattle and sheep via 3 central pivots (Figure 8) which will be fixed infrastructure programed to manage water for irrigation and protection of identified sensitive areas not to be irrigated.

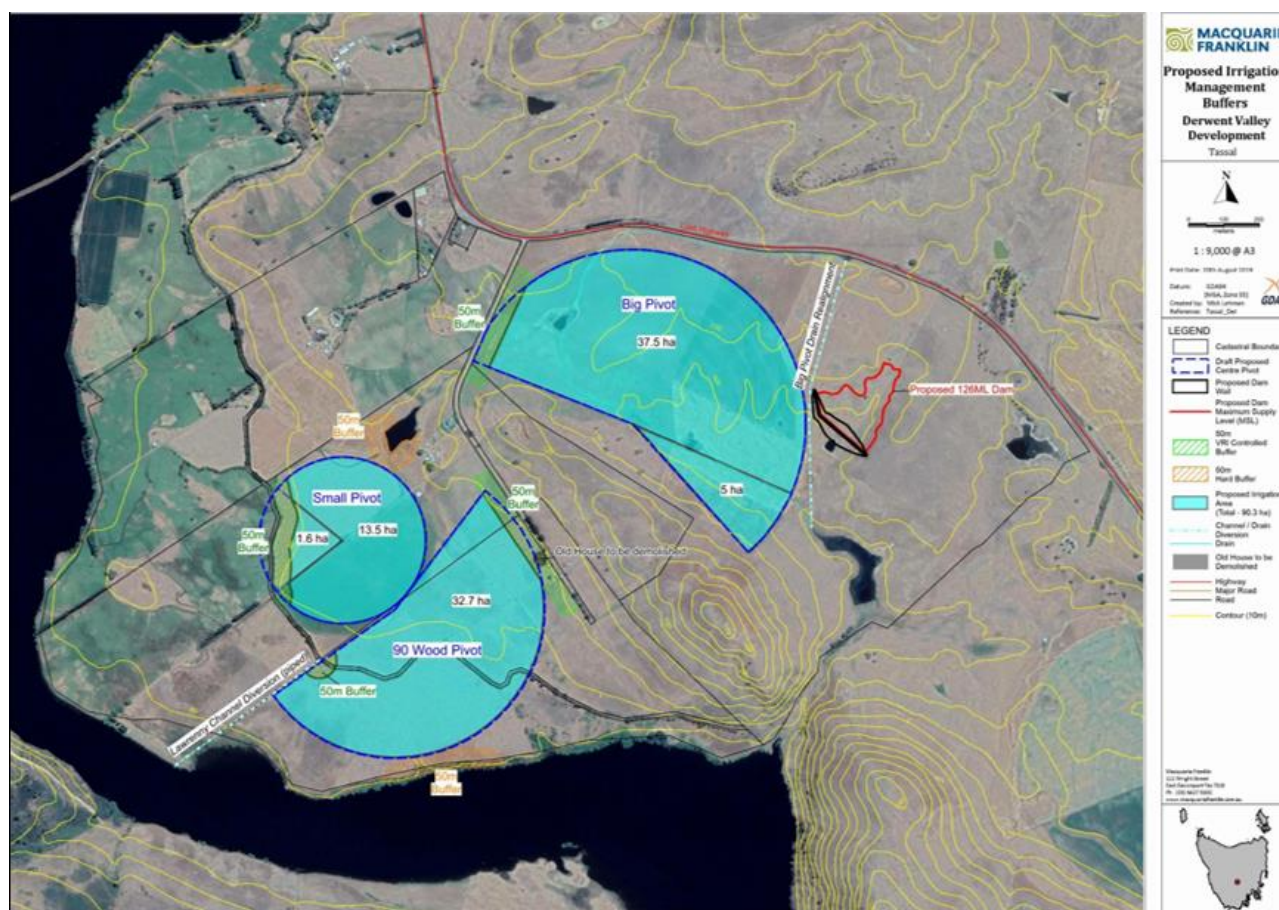


Figure 8: Buffer zones and surface water diversions (Figure 3 of IEMP)

As confirmed during a site visit, pivots on Big Pivot and Small Pivot areas are already established. Big Pivot is located adjacent to the Lyell Highway. Small Pivot and the site for 90 Wood Pivot are located adjacent to Meadowbank Lake. The site for 90 Wood Pivot currently has a watercourse, the Lawrenny Channel, transecting the proposed pivot area, the outer edge of which will be 50 metres from the edge of Meadowbank Lake. The Lawrenny Channel is to be diverted before the

establishment of this pivot area, as will any surface drains currently present on the land irrigated by Big Pivot.

An assessment of the suitability of the reuse area soils is provided in section 7 of the IEMP, based on soil pit excavation observations and topsoil and subsoil sample analysis results. The IEMP concludes the soil types are predominantly sandy loam hydrosols with smaller areas of sandy tenosol and clay loam dermosol and that these soils are suited for pastoral irrigation.

It is noted that some areas of the irrigation area are subject to soil salinity and some soil pits in Big Pivot and 90 Wood and have sodic subsoils. Soil sodicity can lead to soil structure decline and compaction, reducing soil drainage and pasture growth. According to the IEMP, both the surface and sub soils in the proposed irrigation areas have a low level of soil fertility in the form of soil nutrients and trace elements, which is currently limiting agricultural production.

Consistent with the Recycled Water Guidelines, the IEMP in Section 6 determines the irrigation demand for the reuse site utilising climatic data and water use estimates for pasture. Water balances have been completed for 10th percentile, median, 90th percentile and the highest rainfall year recorded to demonstrate there is adequate storage capacity in the proposed dam and that land is available to achieve 100% reuse of the projected effluent volumes, plus the water required to shandy the effluent to meet 1,000 µs/cm and additional water, if required, for salt leaching.

Using median effluent data from Rookwood the nutrient balance detailed in section 6.2 of the IEMP determines the likely loads of nitrogen, phosphorus and potassium which will be applied through effluent reuse against the potential annual production of pasture and what can be removed through beef and lamb production in a managed farm program. Section 6.2.2 compares the proposed stocking rates for the reuse area against similar farming businesses in the area to support the figures used in the nutrient balance. Nutrient removal rates have been calculated for both sandy loam soils (Big Pivot paddock) and for sandy soils (Small and 90 Wood pivot paddocks) to ensure phosphorus leaching risks are determined. The balance determines there will be a deficit in phosphorus in both soil conditions. There will also be a deficit in potassium in the effluent applied. There will be a nitrogen surplus of 16kg/ha, much of which the IEMP claims will either be lost through environmental processes such as volatilisation and denitrification, or lead to increased pasture growth, and will not lead to unacceptable levels of nitrogen in the soil. In addition to the irrigation of reuse water, advice through agricultural consultancies will be provided to the land owners for the application of additional required fertiliser to increase the rate of agricultural production.

Soils and groundwater assessments have been completed to ensure understanding of ground conditions and the potential risk of encountering or contaminating groundwater from the establishment of the reuse dam, reuse irrigation and the domestic sewage treatment plant and disposal. These reports indicate that soils are underlain with a high plasticity Tertiary clay and that throughout the reuse area groundwater had not been encountered to a depth of up to 4 metres. A groundwater prospectivity assessment was completed and is included in the EIS as Appendix L. It recommends bores be developed to ascertain whether groundwater is present in the vicinity of the reuse dam. It is concluded that the vertical infiltration of reuse water will be minimal due to the low permeability of the underlying clays.

6.3.3 Management measures

Effluent Flow and Quality

As noted above, the EIS estimates the likely volumes of effluent which will be produced by the hatchery. Effluent infrastructure is designed to cater for a water exchange rate of 90L/kg feed however, based on data from Tassal's Rookwood hatchery, a maximum exchange rate of 70 L/kg feed is expected. The water balance for the 90th percentile rainfall year had the largest dam storage

requirement at 113ML. The proposal is to install a dam with a total capacity of 126ML. The IEMP section 6.1.3 also outlines a series of management measures to prevent overflow from the reuse dam:

- Before any increase to the nominal water exchange rate of 90L/kg feed is made, investigations into identifying additional effluent storage and irrigation areas will be undertaken and an appropriate outcome determined.
- Dam levels will be monitored and a quarterly review will determine the number of day's storage remaining and assess this against when irrigation is likely to occur to ensure water level is maintained below 80% of finished surface level. This will ensure that any rainfall volumes captured in the dam can be stored and provide sufficient time for alternative effluent storage and/or irrigation to be obtained.
- The IEMP commits in section 6.1.3 that in the event 80% of the dam capacity is exceeded an internal contingency plan will be implemented which will include measures to reduce water usage within the hatchery or remove water directly from the hatchery and dispose of it at an approved facility.

The following management measures are detailed in the IEMP to ensure effluent quality is maintained and monitored:

- Source water quality characterisation – a monitoring program of both the RAS water and brown water streams will be undertaken weekly during the first 3 months of production, with a review of the monitoring program to occur after 3 months.
- Installation of conductivity meter and pump station control valve on reuse dam – this PLC controlled system will measure the conductivity of effluent as it leaves the dam and ensure that the correct rate of shandyng will occur to ensure effluent conductivity is below 1,000µs/cm. The system will shut down flows if the limit will be exceeded.

Reuse Scheme

The EIS has a number of overarching commitments to ensure the reuse scheme will be sustainably managed. These include:

- Provision of ongoing agronomic support by Tassal (through agricultural consultancies) for the land managers to manage all aspects of irrigation, land management and production.
- Annual review and adaptation of the irrigation programming.
- Annual auditing of the reuse irrigation scheme to ensure compliance with the IEMP.
- Annual review of the IEMP.

To manage the risks of spray draft and surface water contamination from the reuse scheme, the following measures are detailed in Section 5 of the IEMP and, where relevant, shown in Figure 8:

- The surface water drain in Big Pivot area and the Lawrenny Channel in 90 Wood Pivot area will be realigned to divert these surface waters away from the irrigation areas. The existing water holes in Big Pivot area will be filled in.
- 50 metre buffer zones will be used to protect sensitive areas. In respect to the edge of the 90 Wood pivot area closest to Lake Meadowbank this will be a 'hard buffer' meaning the outer edge of the pivot will be at least 50 metres from the lake's edge. The remaining 50 metre buffers, including those adjacent to publicly accessible Woodmoor Road, shown in Figure 8, will be maintained by using variable irrigation controls on the pivots which will

switch off required irrigation nozzles when the pivot passes over the nominated buffer zone areas.

- Section 10.2 of the IEMP proposes that the proponent will establish vegetation within the 50m hard buffer closest to Meadowbank Lake to provide additional spray drift mitigation.
- Programmed anemometers are to be installed on pivots, which will shut down irrigation if set wind direction and speeds are met which risk spray drift into buffer zone areas.
- Soil moisture probes with remotely accessible data will be installed across the irrigation areas at a depth to allow both surface and subsoil to be monitored and ensure that excess water does not accumulate in the subsoil. These probes will be used to inform irrigation scheduling. Soil probe information will be checked using “spade testing” to assess soil wetness.
- The IEMP in section 11.5 indicates that inspection of the hatchery and irrigation areas will occur before irrigation commences, following a sustained rain event, to determine whether sufficient surface water run-off occurs and if so samples will be collected and an event based monitoring program may be developed.

To manage the risks to soil structure, salt and nutrient accumulation and migration, the following management measures are proposed:

- A quarterly surface and subsoil monitoring program will be undertaken in accordance with Table 19 of the IEMP in the first year of irrigation to obtain baseline soil data. Following this biannual soil monitoring will occur for the following 2 years. Indicative ongoing soil monitoring requirements are detailed in Table 20.
- Salinity risks will be managed primarily by controlling of effluent to ensure irrigation water has a conductivity of less than 1,000 $\mu\text{S}/\text{cm}$. Other management measures include irrigation scheduling to avoid over or under irrigation, an annual freshwater irrigation period if required to flush salts from the soil, ensuring adequate soil drainage and optimising pasture growth.
- A number of management measures are detailed to mitigate risks of soil sodicity including the use of soil moisture probes and deficit irrigation practices to prevent over irrigation and subsoil water logging. Corrective actions, should soil structure decline be observed, include periodic soil aeration to reduce soil compaction and deep ripping if subsoil compaction becomes a concern. Applications of gypsum or calcium thiosulphate could also be utilised.
- Plant Root Simulator probes are to be used to establish nutrient movement through the soil.
- A groundwater monitoring plan will be developed and implemented. The IEMP includes a map depicting the proposed locations of the bores above and below the reuse dam and reuse scheme and within the pivot areas. This program will see bores installed and initially monitored quarterly to capture baseline conditions, following this the frequency will be reviewed.
- An adaptive management approach to the reuse scheme will be used such that should soil monitoring indicate soil nutrient accumulation, leaching or soil structure decline, which is not being managed by the measures detailed, steps will be put in place to improve effluent quality from the hatchery and additional irrigation areas to allow increased dilution of effluent will be investigated.

6.3.4 Public and agency comment and responses

Public representations

Public representations regarding effluent management and risks included:

Risks of impacts to Meadowbank Lake

- Multiple representations expressed concern about the proposed activity, including that the hatchery, recycled water dam and irrigation, have the potential to impact water quality of Meadowbank Lake and soil, from additional nutrient loads, chemicals, salinity or disease from the effluent produced. It was commented that it is essential that effluent from hatchery and the irrigation schemes does not enter the lake.
- The values which representors were concerned would be impacted included human health (drinking water, both local and Hobart water supply downstream), aquatic, ecological health, and agricultural uses on nearby land (soil health and stock water. Baseline lake monitoring should be undertaken before commencement of the activity.
- It was commented spray drift and runoff is exacerbated by the close proximity of the irrigation areas to the shores of the lake and other watercourses which flow through the irrigation properties. Suggestions were made that fencing and a vegetated buffer to prevent livestock access to the lake should be required.
- The proposal may affect availability of water for other users from the lake, including drinking water, and result in conflict between the proposal operator and other users.

Effluent Flow and Quality

- The EIS does not appear to quantify the total amount of effluent that the hatchery will generate.
- It is not clear from the EIS whether the Class B water standard is appropriate for discharge into Lake Meadowbank.
- Additional information is required regarding details of the effluent treatment system and changes in water quality at each step, and anticipated nutrient concentrations in effluent and other contaminants in effluent such as disinfectants and antibiotics and whether effluent is suitable for irrigation.
- Another established RAS system is emitting nutrient levels higher than permitted.
- Further information is required on how blue-green algal risks will be managed.
- It is not clear from the EIS whether adequate monitoring of water quality and mitigation in case of contamination will be put in place.

Reuse Scheme

- The proposal has the potential to contaminate groundwater through water seepage.
- The proposal may result in impacts if the recycled water dam wall fails or dam overflows, including contamination of nearby freshwater dams and that an additional emergency overflow dam/storage system is needed.
- Considerable supplemental work is required to characterise surface and subsurface soil runoff characteristics of the site.
- Recommendations are made in respect to what environmental conditions should be placed on the hatchery and reuse scheme, including independent annual auditing of the irrigation system and publicly available environment reports.

- Concerns were raised in respect to the reuse dam being positioned across title boundaries and the irrigation scheme being operated by a third party and that this makes regulation difficult and is an unacceptable risk.
- Concerns were raised regarding the management of the reuse scheme in respect to climate change and that the EIS does not contain adequate mitigation/management measures for extreme weather scenarios, e.g. flood or drought. It was also suggested the proposal may result in an increased risk of flood or drought in the local area.
- Proposal includes extraction of 400,000L per day from the lake. This is not justified given local rainfall levels and the proposal is not appropriate as freshwater supplies need to be protected in anticipation of climate extremes.
- The proposal does not include adequate contingency for times when Hydro require the lake water level to be lowered, for example for maintenance.

Agency representations

Representations were received from Hydro Tasmania and the Derwent Estuary Program (DEP).

Hydro Tasmania advised that they were satisfied the proposal had taken all reasonable steps to mitigate and manage potential impacts of the development on water quality in Meadowbank Lake.

DEP made the following comments and recommendations:

- Water quality needs to be assessed for suitability for irrigation at this particular site and put into context with available water quality data for Meadowbank Lake and possible adverse effects on water quality. The anticipated effluent nutrient concentrations and other parameter values exceed sewage treatment plant effluent and are significant higher than nitrate concentrations in Meadowbank Lake and a nitrate removal system should be added to the proposal. There is currently no mention of other bacterial counts such as cyanobacterial blooms which may occur in the reuse dam.
- In respect to section 6.2 of the IEMP and nutrient budget calculations for the reuse scheme DEP raised concerns regarding the risks of nutrient migration from the recycled water scheme. DEP commented that no references are given for utilisation rate and soil factor and the given value used for pasture production appears high.
- Soil nutrient adsorption tests needed to check the suitability of the site for irrigation and absorption of nutrients. Soil profiles are underlain by impermeable clays. Excess nutrients would not reach groundwater, but move in surface runoff or in top soil horizon. Further investigation of hydrology is needed, and ongoing monitoring of nutrient concentrations in soil water component.
- Irrigation and application of fertiliser (in the Derwent catchment) has been shown to lead to increased TN and TP loads in the receiving watercourse. There is potential for impact of nutrients on the lake and Derwent catchment. The proposal does not include adequate buffer zones and revegetation for irrigation.
- DEP recommends back-up pivots should be established away from waterways prior to irrigation starting for emergency use.
- DEP is concerned that the proposal to manage soil salinity issues by applying freshwater to leach out soils would result in salts leaching into the lake.

6.3.5 Evaluation

Effluent Flow and Quality

Due to the high conservation values it is important to ensure that discharge does not occur to Meadowbank Lake. It is therefore essential that a high degree of conservatism is adopted in predicting the likely volumes of effluent which will be produced by the hatchery, and ensure that the reuse scheme dam is adequately sized to store all effluent until it can be sustainably irrigated. It is noted that while the reuse scheme dam has the potential to overflow, all natural surface waters will be diverted around the dam so that it will have almost no catchment and could only overflow in the most extreme flood conditions. However, discharge in such circumstances would have no discernible impact on Meadowbank Lake due to the large volumes of floodwater involved.

Condition **EF1** specifies that effluent from the hatchery may only be discharged to the Hamilton RAS Recycled Water Scheme and so 100% effluent reuse must be achieved. The EIS describes what appears to be a careful approach to estimating the likely volumes of effluent which will be produced based on the proponents experience of achievable water exchange rates in operating a similar RAS hatchery and has made an allowance for approximately 20% extra continuous flow resulting in a nominal exchange rate of 90 L/kg feed being used for flow calculations. Management measures included in the EIS were for investigation into suitable contingency measures, in the event the water exchange rate needs to be increased and this must occur before the increase occurs. This commitment is reflected in condition **OP2**, which requires a Contingency Management Plan to be developed for the activity. In addition condition **EF4** requires the proponent to notify the Director, EPA in the event the water exchange rate exceeds the nominal rate of 90L/kg feed and to develop an Effluent Management Plan for the Directors approval detailing how the increased effluent flows will be managed.

The size of the reuse dam and required irrigation areas were determined in the IEMP by using the maximum hatchery water requirement of 158ML and completing water balances to determine the maximum storage required based on 90th percentile rainfall scenarios. This is consistent with the Recycled Water Guidelines. The proposed dam will have a larger capacity (126 ML) than those calculations determined was required (113ML).

It is concluded that the determination of the likely flows of effluent produced by the hatchery and the method used to determine the sizing of the reuse scheme is satisfactory.

A number of representors raised concerns regarding the determination of Consequence Category in respect to Dam Safety of the wastewater dam, and in particular, the assignment of levels of severity in respect to damage and loss relating to health and social and environmental impacts.

As the purpose of the dam is to store wastewater, it is exempt from requiring a permit under the section 139 of *Water Management Act 1999* (WM Act). In these circumstances, section 165F of the WM Act requires the planning authority (Council) to formally refer the dam works application to the Minister responsible for the WM Act and incorporate any terms and conditions into the Planning permit determined by the Ministers delegate (including those related to dam construction and safety).

On that basis, the determination of Consequence Category and the setting of conditions related to Dam Safety are outside of the Board's scope of Assessment.

The IEMP, utilising data from the combined Rookwood RAS hatcheries, demonstrates that effluent will meet the quality requirements of Class B Recycled Water as specified in Table 2.1 of the Recycled Water Guidelines. The effluent will, however, have elevated concentrations of salts and

nitrites compared to sewage, which the Recycled Water Guidelines are based on, and this issue has been raised in several representations. To address concerns in regard to the irrigation of saline effluent the IEMP describes how through the use of a PLC controlled conductivity meter and valve controls, effluent will be shandied to ensure effluent conductivity is below 1,000 $\mu\text{S}/\text{cm}$ before discharge to the reuse scheme. This measure will also ensure that the sodium adsorption ratio (SAR) of the effluent will also be below 12 and mitigate against risks of increasing soil sodicity. In addition to the standard effluent quality limits for Class B recycled water, a maximum conductivity limit of 1,000 $\mu\text{S}/\text{cm}$ has been added to condition **EF2**. The commitment to source water characterisation has been reflected in Appendix 2 Table of Monitoring Requirements imposed through condition **MI**. Commitment 16 in the IEMP to adaptive management in response to concerns being identified with soil nutrient migration is supported and includes consideration of improving effluent quality. The requirement to manage irrigation is discussed in the reuse section below. Condition **OP7** requires the development of an Operational Procedures and Maintenance Manual to detail operational procedures to be documented to ensure ongoing operations of the hatchery are in accordance with environmental conditions, including compliance with effluent quality and flow requirements.

Several representations have raised concerns about chemicals, including disinfectants, antibiotics and therapeutics. Condition **OP5** imposes restrictions on the irrigation of effluent containing therapeutic and cleaning chemicals and requires a record of the use of all such chemicals to be maintained.

Concerns have also been raised regarding how blue-green algal risks will be managed. It is noted that as discharge to Meadowbank Lake is not to occur, the risks to water quality in the lake and so to downstream water users is obviated. The EIS indicates that regular inspection of the reuse dam will occur to monitor for potential development of algae. In addition, EL monitoring requirements include sampling for blue-green algae in the reuse dam and condition **EF3** requires the Director's notification if blue-green algae is measured in the effluent above 11,500 cells/mL. This threshold is selected from the *Guidelines for Managing Blue-Green Algae (Cyanobacteria) Blooms in Sewage Treatment Lagoons* (DPIPWE/EPA, 2011) and is the livestock drinking water trigger which, when exceeded, requires contingency management measures to be taken to protect livestock health such as increasing withholding periods and temporary cessation of reuse irrigation. **OP2** requires the development of contingency measures to be documented in a Contingency Management Plan in the event blue-green algae concentrations have the potential to cause environmental harm.

To ensure compliance with flow and effluent requirements specified in EL conditions, monitoring requirements are imposed by condition **MI** and the Table of Monitoring Requirements, included as Appendix 2. Conditions **M2** and **M3** ensure samples and measurements are collected and analysed in accordance with appropriate procedures and standards to ensure the accuracy of results obtained and that those results are provided in a monthly monitoring report to the Director. Condition **M4** requires monitoring points to be appropriately labelled to ensure samples are consistently collected at the correct location and condition **M5** requires flow meters to be validated every 12 months to ensure the accuracy of flow measurement.

Reuse Scheme

The reuse dam will span 2 land parcels (referred to as Lots 1 and 2 in Figure 3) and the reuse scheme will be operated by Triffett Holdings Pty Ltd. Representations raised concerns about how responsibilities will be managed for both the dam and operation of the reuse scheme. Subsequent information provided by the proponent provides details of both parties' obligations to be reflected in an agreement. Condition **GI2** requires a landowner agreement to be put in place covering the areas proposed to be irrigated as identified in the Wastewater Reuse EMP (the IEMP). The condition requires the agreement to include the arrangements and responsibilities regarding ownership and

management of the dam, the quality and volume of effluent delivered to the scheme and management of the scheme.

Condition **EF1**, clause 2 states that effluent may only be discharged to the reuse scheme if it is managed in accordance with the Wastewater Reuse EMP (the IEMP) and condition **G12** requires the scheme to be operated in compliance with the approved EMP. **EF1** also states effluent must not be discharged to any other dam without Directors approval. Conditions **G8** and **G9** require publicly available annual reporting on the operation of both the hatchery and the reuse scheme, thus addressing those relevant representations, and condition **G10** specifies the frequency and content of review of the Wastewater Reuse EMP.

The IEMP assesses the risks associated with the operation of the reuse scheme and specifies how each of those risks will be managed. Following the receipt of representations raising concerns in regard to the proposed reuse scheme, an updated IEMP was received as a supplement. Review of this revised IEMP demonstrates that the proponent has largely satisfied the pertinent issues raised in representations by committing to further management measures including a thorough monitoring regime detailed in section 11 of the IEMP. Condition **G11** requires the proponent to ensure that the re-use scheme is operated in accordance with the IEMP.

Representations raised concerns with the nutrient budget detailed in section 6.3 of the IEMP, specifically regarding the predicted pasture production figures being too high and thus overestimating the uptake of nutrients, specifically nitrogen, and underestimating the nitrogen surplus. The impact of this would be a potential increase in the risk of migration of nutrients through the soil or by surface runoff to Meadowbank Lake or into groundwater. The updated IEMP provided some further explanation of the assumptions made in the nutrient budget as well as further assessment of nutrient removal in the different soil types found in the irrigation area. The added measure to use plant root simulator probes to monitor vertical movement of nutrients is supported.

Salinity and soil sodicity controls have been outlined and with the addition of baseline soil monitoring, characterisation of the waste streams and the option to improve effluent quality or expand the irrigation area it is deemed the proposal adequately manages this issue.

Concerns regarding surface run-off and spray-drift accessing watercourses have also been adequately addressed with the revised IEMP adding an event based surface water monitoring program to assess prior to irrigation commencing sites on the reuse area where run-off may be an issue (reflected by condition **M7**) and creation of a vegetation buffer in the buffer zone closest to Meadowbank Lake in response to representations. Condition **EF5** includes a requirement to ensure a 50m buffer to Meadowbank Lake from irrigation is maintained.

Concerns were also raised in regard to the potential for groundwater to be contaminated through effluent seepage from the reuse dam or irrigation. The assessment of the risks of potential contamination of groundwater is considered adequate and the assessment concluded that, due to the clay subsoils, migration of effluent into groundwater is unlikely. Water is more likely to accumulate in the subsoils and migrate horizontally if over irrigation were to occur. As management measures include use of a deficit irrigation regime and use of soil moisture probes to allow measurement of water flow into subsoils to be measured in real time, it is concluded that adequate controls will be in place. The inclusion of a groundwater monitoring plan is supported. Condition **M6** requires a groundwater monitoring plan be submitted to the Director for approval before the bores are developed.

The IEMP also details an extensive soil monitoring program which will commence prior to irrigation starting, to give baseline soil data as well as ongoing soil monitoring. This, coupled with the other management measures specified in the IEMP and detailed in section 6.3.1 above, give sufficient confidence that any changes to soil conditions will be detected and reported in the annual review of the irrigation scheme. The IEMP commits to the implementation of appropriate measures in the

event that soil monitoring confirms that there is a decline in soil conditions or in the event that accumulation or migration of nutrients occurs. The IEMP states this would be addressed through an adaptive management approach with options including increasing the irrigation area or adding additional effluent treatment. It is concluded that with the extensive monitoring regime detailed in the IEMP and the commitment to adaptive management any issues which arise with the irrigation scheme will be detected and can be adequately addressed.

It is considered that the RAS technology represents a more efficient use of resources (specifically water) than conventional flow through hatcheries. It is not considered the proposal would significantly impact the potential for flooding or drought in the area.

6.3.6 Conclusions

The proponent will be required to comply with the following conditions:

G8 Annual Environmental Review

G9 Additional annual reporting information for wastewater reuse schemes

G10 Wastewater Reuse EMP Review

G11 Compliance with the Wastewater Reuse EMP

G12 Landowner Agreement with landowners of properties identified in the Wastewater Reuse EMP

EF1 Effluent discharge locations

EF2 Effluent quality limits for the discharge to the Wastewater Reuse Scheme

EF3 Blue-green algae notification

EF4 Notification of increase to hatchery water exchange rate

EF5 Meadowbank Lake buffer zone

M1 Monitoring requirements

M2 Samples and measurements for monitoring purposes

M3 Monitoring reporting and record keeping

M4 Signage of monitoring points

M5 Flow monitoring equipment

M6 Groundwater Monitoring Bore Planning and Construction

M7 Surface Water Monitoring Plan

OP2 Contingency management plan

OP5 Therapeutant and chemical use

OP7 Operational Procedures and Maintenance Manual

7 Other Issues assessed by the Board

In addition to the key issues, the following environmental issues are considered relevant to the proposal and have been evaluated in Appendix I, Section A.

1. Natural Values
2. Solid waste management
3. Dangerous good and environmentally hazardous materials
4. Decommissioning and rehabilitation
5. Biosecurity and disease management
6. Stormwater and liquid effluent
7. Greenhouses and ozone depleting substances
8. Social and economic issues

8 Other Issues

The following issues that have been raised during the assessment process are discussed in Appendix I, Section B. These are issues which are not the Board's responsibility under the EMPC Act, or issues which are more appropriately addressed by another regulatory agency.

1. Aboriginal Heritage
2. European Heritage
3. Traffic
4. Fire Management

9 Report Conclusions

This assessment has been based on the information provided by the proponent, Tassal Operations Pty Ltd, in the permit application, the case for assessment (the EIS) and Additional Information provided (Supplement).

This report incorporates specialist advice provided by EPA Tasmania scientific specialists and regulatory staff, other Divisions of DPIPWE and other government agencies, and has considered issues raised in public submissions.

It is concluded that:

1. the RMPS and EMPCS objectives have been duly and properly pursued in the assessment of the proposal; and
2. the assessment of the proposal has been undertaken in accordance with the Environmental Impact Assessment Principles; and
3. it is appropriate to impose each of the conditions and restrictions outlined in this report and the environmental licence appended to this report as they will each further the objectives of the EMPC Act and allow the proposal to be managed in an environmentally acceptable manner; and
4. it is appropriate to grant an environmental licence for the proposal.

10 Report Approval

Environmental Assessment Report and conclusions, including environmental conditions, adopted:



Warren Jones

CHAIRPERSON, BOARD OF THE ENVIRONMENT PROTECTION AUTHORITY

Meeting date: 14th November 2019

II Appendices

- Appendix 1 Assessment of Other Issues
- Appendix 2 Summary of public and agency submissions
- Appendix 3 Table of proponent commitments
- Appendix 4 Environmental licence

Appendix I – Section A – Assessment of other issues assessed by the Board

Issue I: Natural Values
Description of potential impacts
<p>The natural values of the proposal area may be impacted by the footprint of the buildings, associated infrastructure (including the underground water supply pipeline), and potential for run off of irrigation water or sediments into Meadowbank Lake. The most significant components of the project include the hatchery building (approximately 13,000 square metres in area), and the dam (approximately 11,540 square metres). A pipeline is proposed to supply the hatchery with water from Meadowbrook Lake (refer Figure 5).</p> <p>The EIS includes a natural values assessment undertaken by Enviro-dynamics in April 2019. The field assessment describes the site as modified land only with no vegetation communities of conservation significance. Due to its modified nature, a limited number of native species were recorded on the site and a number of declared weeds were identified.</p> <p>The assessment states that three threatened flora species have been recorded within 500 m of the proposed hatchery site (based on a search of the Natural Values Atlas). The nearby threatened species records are for prickly woodruff (<i>Asperula scoparia</i> subsp. <i>scoparia</i>), woolly new holland daisy (<i>Vittadinia gracilis</i>) and midland wattle (<i>Acacia axillaris</i>).</p> <p>No threatened flora species listed under the <i>Threatened Species Protection Act 1995</i> or the <i>Environment Protection and Biodiversity Conservation Act 1999</i> were identified during the site surveys. The natural values assessment found no significant habitat such as trees with hollows, dens sites or nesting habitat for threatened fauna species being present on the site.</p> <p>The EIS identifies waterways and drainage lines within the site as low conservation management priority and low naturalness while Meadowbank Lake is classified as having very high conservation management priority. Potential aquatic impacts within Meadowbank Lake associated with the irrigation of treated waste water are addressed in section 6.3 (Key Issue 3 Potential impacts from effluent treatment and reuse). Potential impacts from erosion and sedimentation are addressed in Appendix I (Other issues assessed by the Board - Issue 6 Stormwater and liquid effluent).</p> <p>The natural values assessment describes the limitations of the assessment as being restricted to a single survey and the fact that seasonal variation may result in some species being undetected. The assessment also appears not to include the footprint of the proposed water supply pipeline on Tent Hill. These limitations are addressed through conditions below.</p>

Management measures proposed in EIS

The proponent has committed to the following management measures addressing natural values impacts within Section 9 of the EIS:

- Conduct a spring/summer survey near the access to the Hatchery to determine the presence of Prickly woodruff (*Asperula scoparia*) and woolly new-holland-daisy (*Vittadinia gracilis*). If found to be present the area will be marked on maps in CEMP or a 'permit to take' will be submitted to Policy and Conservation Advice Branch (PCAB). **Commitment 50**
- Implement a weed hygiene plan that includes appropriate hygiene protocols, including wash down procedures for weeds, to be maintained on the site during construction. Protocols will be consistent with the Department of Primary Industries, Parks, Water and Environment (2015). *Weed and Disease Planning and Hygiene Guidelines - Preventing the spread of weeds and diseases in Tasmania*. **Commitment 51**
- Maintain a weed-free buffer zone between the Hatchery building and entrance to the property by conducting a monthly inspection within the zone for weeds. If found, trigger immediate action to remove the weeds. **Commitment 52**
- Install bird diverters on any overhead powerlines within Hatchery property boundaries. Install tailored raptor perches on top of powerpoles. **Commitment 53**
- Enforce speed restrictions and signage on the Hatchery access road to reduce any potential roadkill of scavenger species (particularly during night-time hours). **Commitment 54**
- Install perimeter fencing around Hatchery building, access road and reuse storage dam to prevent access of native scavenger species and other neighbouring domestic animals (i.e. cattle). **Commitment 55**

Public and agency comment

Multiple public representations commented on the inappropriate timing and limited geographical extent of the flora and fauna survey. Five representations raised concerns regarding potential impact on native vegetation on the slopes adjacent to the site comprising the land area known as 'Tent Hill'.

Threatened Flora

PCAB noted that the public concerns raised about the possibility of impacts from the pipeline and access track to the side and/or top of Tent Hill which may contain an area of *Eucalyptus tenuiramis* forest and woodland on sediments.

Threatened Fauna

The impacts to aquatic species associated with potential run off of nutrient rich waste water were raised by multiple representations. PCAB noted that the irrigation of land with reuse water will need to be managed to minimise the potential for water quality impacts to Meadowbank Lake. In particular they noted that the giant freshwater crayfish (*Astacopsis gouldi*) which is listed as vulnerable under the *Threatened Species Protection Act 1995* (TSP act) and the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC act) is potentially present in the area.

Weeds and Diseases

PCAB noted the presence of declared weeds on site and recommended the development and implementation of a hygiene management plan for controlling weeds and managing any new infestations of weeds at the development site.

Evaluation

The site is a highly modified landscape comprising agricultural land with small areas of revegetation. However, there is the potential for threatened flora and vegetation to be present and it is noted that the surveys completed for the EIS were not conducted at the optimum period and did not include the Tent Hill/water supply pipeline area. The commitment to conduct a spring/summer survey of roadsides to determine the presence of Prickly woodruff (*Asperula scoparia*) and woolly new-holland-daisy (*Vittadinia gracilis*) (Commitment 50) is supported and will be required by Condition **FFI**. Condition **FFI** will also require the pipeline alignment area to be surveyed and the development of a vegetation management plan for the approval of the Director if threatened flora or vegetation is identified within the development footprint.

The proposed fauna management measures including site speed limits, fencing, and installation of bird diverters are supported, however considering the low potential for impacts, no specific conditions are imposed.

Conditions relating to irrigation management and sediment control are also relevant to management of the potential impact on aquatic species such as the Giant Freshwater Crayfish. Conditions relating to irrigation management are outlined in section 6.3 (Key Issue 3 Potential impacts from effluent treatment and reuse) and Appendix I (Other issues assessed by the Board - Issue 6 Stormwater and liquid effluent). No other conditions relating to aquatic species are imposed.

The commitment to develop and implement a weed management and hygiene plan is supported and will be required by condition **OP5**.

Conclusion
<p>The proponent will be required to comply with the following conditions;</p> <p>FFI Flora and vegetation survey</p> <p>OP6 Weed management</p>

Issue 2: Solid Waste Management
Description of potential impacts
<p>The proposal will produce solid waste in the form of sludge (solids removed following the treatment of hatchery reuse water), fish mortalities and other general solid waste. Waste from the hatchery has the potential to cause odour and biosecurity issues, and contribute to surface and groundwater pollution if inappropriately managed.</p> <p>The quantity of sludge expected to be produced is 2,650 cubic metres per year, which will fluctuate seasonally depending on smolt biomass volumes. The maximum sludge volume produced during peak periods is expected to be 90 cubic metres per week. Large volumes of waste in the form of fish carcasses may be caused by large-scale fish mortalities events, which may occur following either an epidemic disease outbreak, or failure of life support equipment due to accident, error or equipment failure.</p>
Management measures proposed in EIS
<ul style="list-style-type: none"> • Management Measure (MM) – Management Plan C: Develop a Sludge Management Plan, that details management of sludge from the Hatchery solids removal plant including: <ul style="list-style-type: none"> ○ Contractor licencing requirements ○ Final disposal destination ○ Storage and transport requirements ○ Reporting requirements • MM 33: Sludge holding tank will be emptied regularly by an approved licensed waste transport contractor and sent to an approved composting facility. • MM 34: Undertake initial screening of biosolids to confirm contaminant acceptance levels. • MM 35: Disposal management of sludge must be in accordance with an approved sludge management plan. • MM 36: Update Tassal's Freshwater Fish Health Management Plan to include the proposed Hatchery. Management of large-scale fish mortality events and disease biosecurity will be in accordance with this Plan. • MM 37: Ensure the Hatchery solids removal plant is sufficiently incorporated into the Hatchery's preventative maintenance program. • MM 6: All organic wastes processed through the solids removal treatment plant will be stored for no more than 7 days and disposed of via a licenced waste transporter to an approved composting facility. • MM 9: All waste materials generated by the construction activities will be stored in appropriate containers and removed from site, either for disposal at an appropriately authorised facility or transported directly to an authorised recycler/re-user. • MM 15: All fish mortalities will be removed from tanks on a daily basis and stored in sealed bins and frozen before transportation to Tassal's Triabunna Rendering Facility.

- If a large-scale mortality from equipment failure or disease occurs, the waste would be sent to Tassal's rendering facility at Triabunna for rendering to fish meal and oil. This process employs high temperatures for extended periods and produces a microbiologically safe product. If the rendering plant was unavailable, the mortalities would be consigned to either land-fill or composting (Section 6.5.2.2.2 in the EIS)

Public and agency comment

Multiple representations raised concerns about the potential impacts of odour related to inappropriate solid waste management practice. Odour issues are discussed in Key Issue 1 - Odour Management.

Evaluation

The solid waste management measures outlined in the EIS (Section 6.5.2) are supported, and if implemented will reduce the potential for release of pollutants to the environment. Management measures must comply with conditions **WMI** and **WM2**, which require appropriate management, removal and disposal of fish waste and sludge. **WMI** requires that fish waste must be removed from the Land within 48 hours of generation unless frozen or acid stabilised, unless otherwise approved by the Director in writing. Management measure 6 proposes that all organic wastes processed through the solids removal treatment plant will be stored for no more than 7-days, and must be considered in relation to this condition to ensure compliance. Compliance with condition **WM3** is also required to manage waste containing fish, including hatchery sludge waste, which must be treated as a Restricted Animal Material. In the event of a significant fish or ova mortality, condition **OP3** requires the licensee to notify the Director.

Other Information OI2, Waste management hierarchy, provides details about appropriate management of general solid and liquid waste generated at the facility.

Conclusion

The proponent will be required to comply with the following conditions:

WMI Fish Waste Management

WM2 Removal of Fish Waste and Sludge

WM3 Management of Wastes Containing Restricted Animal Material

OP3 Notification of fish or ova mortality

Other information included in the Licence:

OI2 Waste Management Hierarchy

Issue 3: Dangerous goods and environmentally hazardous materials
Description of potential impacts
Inappropriate storage and handling of chemical wastes and other environmentally hazardous materials has the potential to contaminate land and water. Fuel and oils will be used on site during the Hatchery's construction. Section 6.6 (Table 15) of the EIS includes a list of hazardous materials which are expected to be used and/or stored on the site which have the potential to cause significant environmental harm if released to the aquatic environment.
Management measures proposed in EIS
<ul style="list-style-type: none"> • MM – Management Plan A: Develop a Construction Environmental Management Plan in accordance with Section 6.14.2 of the EIS, which will addresses hazardous materials among other issues. • MM 41: Integrate the management of dangerous goods and hazardous materials for the Hatchery including labelling, signage, segregation, storage, handling and inspection requirements into Tassal's existing procedures. • MM 42: Develop a Spill procedure and ensure spill kits and materials are kept and maintained onsite • MM 43: Chemicals will be stored in a bunded chemical storage room or area in accordance with the National Code for the Storage and Handling of Workplace Dangerous Goods (NOHSC 2001). • MM 44: Residual contaminated soil evident after a spill and clean-up will be taken for disposal or treatment at an appropriately licensed facility. • MM 45: Tassal's WHS department to conduct a risk assessment for any new chemical or hazardous substance and provide approval prior to being bought onsite (including consideration of potential environmental impacts as well as possibility of substitution with alternative). • MM 46: Maintain inventory of chemicals stored/used onsite using ChemWatch software. • MM 47: Maintain MSDSs for all chemicals on-site. • MM 48: Conduct regular inspections of storage areas where dangerous goods and hazardous material are kept • MM 49: Ensure appropriate staff training and inductions in the use of reagents during operational activities
Public and agency comment
Multiple representations raised concerns about potential of the proposal to impact on water quality of Meadowbank Lake from additional nutrient load, chemicals, salinity or disease.

Evaluation

The proposed management measures are considered appropriate to minimise the potential for environmental harm, and will be required by conditions in the Environmental Licence.

Condition **CN1** requires a Construction Environmental Plan is submitted 30 days prior to commencement of construction activities, and requires management measures for environmentally hazardous materials during construction.

Management measure 43 is imposed by conditions **H1** and **H2**, which require that all environmentally hazardous materials to be held on the Land must be kept within containment systems such as impervious bunded areas or spill trays, appropriate for the volume of material. Discharge, emission or deposition of any environmentally hazardous materials must be prevented, and condition **H3** requires appropriate spill kits to assist with containment of spills, consistent with proposed management measure 42. The EIS lists expected hazardous materials to be used on site, however details of expected volumes of hazardous materials are not provided. Condition **OP4** requires that a list of all chemical additives which can come into contact with surface waters are submitted to the Director. Condition **OP5** requires that records of therapeutic and other chemicals used must be retained for a minimum of three years, to allow for the proper assessment of potential environmental harm arising from escape of these substances.

In addition, **LO2** is included which provides information on the proponent's responsibilities under relevant legislation relating to hazardous materials including the work *Health and Safety Act 2012* and any subordinate legislation.

Conclusion

The proponent will be required to comply with the following conditions:

CN6 Construction Management Plan

H1 Storage and handling of hazardous materials

H2 Hazardous materials (<250 litres)

H4 Spill Kits

OP3 Identification of chemical additives and residues

OP4 Therapeutant and chemical use

Other information included in the Licence

LO2 Storage and handling of dangerous goods, explosives and dangerous substances

Issue 4: Decommissioning and Rehabilitation
Description of potential impacts
The proposed operation will have the potential to cause ongoing environmental impacts after cessation if not appropriately decommissioned. The EIS states that the facility is being developed for long-term future use, and there are no current decommissioning plans.
Management measures proposed in EIS
<p>In the event that the facility is decommissioned, a Decommissioning and Rehabilitation Plan will be developed and implemented (Section 8 of the EIS). The plan will include:</p> <ul style="list-style-type: none"> • stabilisation of any land surfaces subject to erosion • removal or mitigation of all environmental hazards or land contamination that might pose an on-going risk of causing environmental harm • decommissioning of any equipment that has not been removed
Public and agency comment
No public or agency comments were received with regard to decommissioning and rehabilitation.
Evaluation
The proposed Decommissioning and Rehabilitation Plan in the event that the facility is decommissioned is supported. Condition DC1 requires a Decommissioning and Rehabilitation Plan (DRP) be submitted to the Director within 30 days of being notified of the planned cessation. Condition DC2 is required to ensure the rehabilitation of the site following permanent cessation. Condition DC3 is required to ensure the proponent notifies the Director of the permanent cessation of the activity and condition DC4 requires notification where a temporary suspension of the activity is likely to occur.
Conclusion
<p>The proponent will be required to comply with the following conditions:</p> <p>DC1 DRP requirements</p> <p>DC2 Rehabilitation following cessation</p> <p>DC3 Notification of cessation</p> <p>DC4 Temporary suspension of the activity</p>

Issue 5: Biosecurity and disease management
Description of potential impacts
<p>Wastewater, sludge and other fish waste generated by the activity present a potential biosecurity risk to aquaculture and aquatic life downstream, if released to the environment.</p> <p>Meadowbank Lake is in close proximity to the proposal, is classified as having a ‘high conservation management priority’, and has human health and amenity values, including fishing.</p> <p>Significant mortality events resulting from epidemic disease outbreaks can lead to large volumes of waste with potential environmental impacts to be managed, as discussed in Issue 2: Solid Waste Management. The main pathways for pathogen entry, which may result in disease outbreaks, are movement of animals and vermin into the facility, water taken into the facility, equipment used in the facility, feed provided to the fish and personnel and visitors gaining entry to the facility.</p>
Management measures proposed in EIS
MM 62: Incorporate the Hatchery into Tassal’s Biosecurity Management Plan and ensure requirements of the Plan are included in site and contractor inductions.
Public and agency comment
Multiple representations raised concerns that the proposed activity has the potential to impact the water and soil quality of Meadowbank Lake from additional nutrient loads, chemicals, salinity or disease.
Evaluation
<p>The Board has considered the issue of biosecurity from an environment protection perspective, and the management measures outlined in the EIS (6.5.2) are supported for the purposes of general biosecurity. It is important the proposed Hatchery is managed in accordance with a Biosecurity Management Plan (BMP) to protect the surrounding aquatic ecosystem from invasive species and non-endemic pathogenic organisms. Biosecurity management plans are administered by the Tasmanian Inland Fisheries Service to ensure that inland fish farms are appropriately managed to protect the State’s freshwater environment. Condition OP3 is a standard condition that is imposed on all Environmental Licences to require that EPA Tasmania be made aware of any significant deaths of salmonid stock at the hatchery. EPA Tasmania would involve other relevant authorities in the event of a biosecurity incident</p> <p>An important aspect of biosecurity is the management of solid wastes, which is discussed in Appendix I – Other issues assessed by the Board Issue 2.</p>
Conclusion
<p>The proponent will be required to comply with the following condition:</p> <p>OP3 Notification of fish or ova mortality</p>

Issue 6: Stormwater and liquid effluent
Description of potential impacts
<p>Construction of the Hatchery and associated infrastructure will create exposed surfaces that could be vulnerable to erosion and sediment loss during high rainfall events. This may lead to pollution of the aquatic environment from sediment and other water borne contaminants, such as oil, if not appropriately managed. During operation of the Hatchery, stormwater will be generated from operational infrastructure areas (such as hardstands, roads, car parks and building rooves and drains). Potential contaminants of the stormwater runoff include sediments, fuel, chemicals and oil and greases. This runoff also has the potential to flow to surface water and to the downstream environment without adequate controls.</p> <p>Some domestic wastewater will be generated by amenities at the Hatchery and staff residence, with potential for environmental harm and health impacts if not treated appropriately before release to the environment.</p>
Management measures proposed in EIS
<ul style="list-style-type: none"> • MM – Management Plan A: Develop a Construction Environmental Management Plan in accordance with Section 6.14.2 of the EIS, which will address site management and soil and erosion, among other issues. • MM11: Install sediment controls such as catchment basins, silt fences and hay bales to manage stormwater during construction. • MM12: Installation of appropriate pollutant removal and velocity reduction features on stormwater drains. All drainage will also comply with AS/NZ 3500:2003 and be sized to manage the requisite AEP storm event during construction. • MM13: All new hardstand runoff will be directed to existing dams on the site • MM14: Installation of a swale drain around the upstream perimeter of the Reuse dam to direct runoff water towards existing natural watercourses. • MM 58: Incorporate stormwater management infrastructure into the Hatchery's preventative maintenance schedule. • MM 60: The domestic wastewater systems will be managed in accordance with the Directors Guidelines for On-Site Wastewater Management Systems. Section 2.1.2.6 of the EIS states that domestic wastewater will be treated using an on-site aerated wastewater treatment system (AWTS) to a secondary standard, so that the effluent can be used for irrigation in an approved Land Application Area on site. • Management measures for the storage and handling of fuel, oil and chemicals at the hatchery are discussed in Appendix 1 - Issue 3 Dangerous goods and environmentally hazardous materials
Public and agency comment
<p>Some representations raised concerns about the potential impacts of odour related to inappropriate wastewater management practice. Odour issues are discussed in Key Issue 1 Air Emissions.</p>
Evaluation
<p>Condition CNI requires that the Construction Environmental Management Plan describe appropriate measures to control erosion and sediment loss during construction. Water quality monitoring during construction will also be required in the CEMP. Stormwater that collects on other areas of the land must be directed towards natural drainage lines and away from construction works, to minimise the flow of stormwater into areas of disturbed sediment or contaminated areas (construction zone). Conditions SW1 and SW2 are imposed, and reflect management measures 11 and 12 in the EIS during construction. They will require maintenance</p>

of appropriately located perimeter drains or bunds to limit the volume of surface water to be managed, and other measures to ensure that polluted stormwater is not discharged.

The conditions outlined in Appendix I Issue 3: Dangerous goods and environmentally hazardous materials are relevant to stormwater and liquid effluent management.

Conclusion

The proponent will be required to comply with the following conditions:

CNI Construction Environmental Management Plan

SW1 Perimeter Drains

SW2 Stormwater

Issue 7: Greenhouse gases and ozone depleting substances
Description of potential impacts
<p>Carbon dioxide will be generated from vehicle fuels and generators during construction and operation of the hatchery.</p> <p>Power for operation of the RAS will be sourced from the Tasmanian electricity grid, much of which is hydro-generated.</p> <p>A small amount of oils, greases and refrigerants will also be used.</p>
Management measures proposed in EIS
<p>The EIS states that:</p> <ul style="list-style-type: none"> a) all equipment machinery and vehicles will be well maintained in order to minimise generation of greenhouse gases. b) Tassal reports its energy consumption and greenhouse gas emissions annually to the Commonwealth government, identifying areas for improvement. c) no ozone depleting substances will be used or generated.
Public and agency comment
None received.
Evaluation
<p>On the basis that the majority of power in the Tasmanian power grid is sourced from hydro-generation, the nature of the proposal does not itself result in a high amount of greenhouse gas emissions, the majority relating to transport and construction.</p> <p>There is currently no requirement under Federal or State legislation for industry to demonstrate offsetting of emissions generated.</p>
Conclusion
No specific conditions are required.

Issue 8: Socio-economic issues

Description of potential impacts

The proposal has potential to generate employment in the local area, and wider economic benefits. It also has potential for negative impacts on the local community if it results in environmental or visual impacts, or is felt to result in a negative change to the nature of the locality and community.

The proposal constitutes a new industrial activity in what is currently an agricultural area with recreational uses of the lake, in addition to the lake supplying drinking and irrigation water locally and drinking water further downstream.

Management measures proposed in EIS

The EIS states that:

- a) The total capital cost of the proposal is ~\$46 million, with operating costs of ~\$9.5 million per year.
- b) First preference for employment and project contracts will be given to Australian businesses, with a preference to Tasmanian companies.
- c) Tassal has a strong community engagement fund available for community-minded organisations to apply for financial or in-kind support.
- d) The proposal will provide employment to the local area, providing a broader economic base to the region.
- e) An estimated 150 employees will be needed during the feasibility and construction phases of the hatchery, requiring local contractors and consultants.
- f) An estimated 14 employees will be needed during operation of the hatchery.
- g) Tassal's experience in regional employment is that every direct job created results in a multiplier of a further 5 indirect jobs being created in the community.
- h) Operational employment will result in increased and higher skilled employment in the fish husbandry and industrial services fields.
- i) Where possible, local raw materials will be sourced.
- j) No negative impacts are anticipated on recreational, health or sporting facilities and services within the area.
- k) Any impact on the community demographic is anticipated to be minimal.
- l) The hatchery will be developed on existing agricultural land and is not anticipated to have an impact on demand for land or housing in the area, or on property values other than to raise values due to increased economic activity.
- m) Visual impact will be limited, with screen planting to be installed.
- n) Normal taxes on company profits will be paid. No royalties are proposed.

Public and agency comment

A number of concerns raised by multiple representors could be considered relevant to the issue of socio-economic impact, including that:

- a) The location is not appropriate for this type of industry.
- b) Inadequate consultation with local landowners and sporting clubs has been undertaken.
- c) Potential visual impact on residents and recreational users of the structure, road and lights.
- d) The proposal will result in loss in neighbouring property values.
- e) Potential loss of tourism to the area if lake water quality or amenity is impacted.
- f) The proposal will result in a loss of land from the boundary realignment.
- g) Increased traffic will result in noise and other amenity impacts.
- h) An industry using a public waterway should pay to lease that resource, rather than being subsidised by taxpayers;
- i) No evidence has been given for the statement regarding one job creating an additional five.

Evaluation

The objectives of Tasmania's Resource Management and Planning System encompass the social and economic aspects of resource use and development as well as the environmental aspects. It is therefore appropriate for the Board to consider the social and economic aspects of a proposal in its assessment process. The Board notes the likely economic benefits of the proposal, and also notes concerns raised by some local landowners and other stakeholders.

The Board has no power under the EMPC Act to impose permit conditions specifically in relation to social and economic matters, however it has taken these matters into account as relevant in making its determination and setting conditions on water quality, noise and odour.

Issues such as visual impact, access to recreational areas and whether the proposed industry type is appropriate to the location, are planning matters more appropriately addressed by the planning authority in consideration of the zoning provisions and other standards in its planning scheme.

Conclusion

No specific conditions are to be imposed in relation to this issue.

Appendix I – Section B – Other Issues

Issue I: Aboriginal Heritage
Description of potential impacts
The construction of Hamilton Hatchery has the potential to inadvertently destroy or damage Aboriginal cultural heritage that may exist on the site. The Aboriginal Heritage Register indicates there no registered Aboriginal sites located within or in the immediate vicinity of the proposed hatchery footprint.
Management measures proposed in EIS
The EIS (5.2.8) states that guidelines included in the Aboriginal Heritage Tasmania Unanticipated Discovery Plan will be followed if any unanticipated discoveries of Aboriginal Cultural Heritage occur.
Public and agency comment
No comments received.
Conclusion
AHT has advised that it has no objection to the project proceeding. AHT has also advised that, if at any time during works the presence of Aboriginal relics is suspected, works must cease immediately and AHT must be contacted for advice. All Aboriginal heritage is protected under the <i>Aboriginal Relics Act 1975</i> , which specifies the requirements in the event of Aboriginal Heritage be uncovered at the site. Information Schedule LO3 specifies requirements under the <i>Aboriginal Relics Act 1975</i> .

Issue 2: European Heritage
Description of potential impacts
The EIS states that no heritage properties, sites and/or values – as listed on the National Heritage List, Register of the National Estate, Tasmanian Heritage Register or the Tasmanian Historic Places Inventory – exist in the area of the proposed development.
Management measures proposed in EIS
Management proposed or required in the EIS.
Public and agency comment
No comments received.
Conclusion
No relevant Licence conditions.

Issue 3: Traffic
Description of potential impacts
<p>The EIS includes a Traffic Impact Assessment undertaken by Midson Traffic Pty Ltd in August 2019. The TIA describes staff traffic generation in the order of 20 vehicle movements per day (two way movements), with a peak of 7 vehicles per hour and truck movements in the order of 8 trucks per hour (peak). The traffic impact assessment describes and provides a critique against the <i>Derwent Valley Planning Scheme 2015</i> with regard to safety, volumes, car parking and site access.</p> <p>Traffic noise is assessed in Key issue 2 Noise.</p>
Management measures proposed in EIS
<p>The following management measures to mitigate traffic noise impacts are included in the EIS:</p> <p>MM 29: Develop and implement a noise management protocol for heavy vehicles used for Hatchery operations during night-time hours.</p>
Public and agency comment
<p>Multiple public representations raised concerns regarding potential noise impacts associated with an increase in heavy vehicle movements to and from the site, particularly during night time hours. These are addressed in Key issue 2 Noise.</p>
Conclusion
<p>Conditions relating to traffic noise emissions are detailed in Key issue 2 Noise.</p>

Issue 4: Fire Management
Description of potential impacts
The EIS describes the site as being located in a defined Bushfire-Prone Area as it is within 100 metres of contiguous native vegetation (grassland) as defined under the <i>Director's Determination – Requirements for Building in Bushfire Prone Areas</i> (Department of Justice, 2017b). Tassal therefore commissioned Enviro-dynamics to conduct a Bushfire Hazard Assessment. This assessment concluded that the development is able to satisfy the Requirements of the Bushfire-Prone Areas Code (PD5.1) for a BAL 12.5 rating provided it complies with mitigation measures.
Management measures proposed in EIS
<p>MM 63: Ensure all vehicles and machinery are kept in good working order to minimise potential for fires onsite.</p> <p>MM 64: Any fuels required during the construction phase will be limited in quantity and will be stored in appropriately bunded facilities.</p> <p>MM 65: Appropriate firefighting equipment will be kept onsite and site staff will be trained in emergency procedures and use of firefighting equipment.</p> <p>MM 66: Maintain compliance of fire detection and firefighting equipment within the Hatchery.</p> <p>MM67: Maintain bushfire protection measures as outlined in an approved bushfire management plan for the Hatchery.</p>
Public and agency comment
No public or agency comments were received with regard to fire management.
Conclusion
No conditions are imposed.

Appendix 2 - Summary of public representations and agency submissions

Representation No./ Agency	EIS section no.	Comments and issues
Hydro Tasmania	NA	Satisfied that the proposal has taken all reasonable steps to mitigate and manage potential impacts of the development on water quality in Lake Meadowbank - no objection.
Derwent Estuary Program	6.2, 6.4 and 6.5	Soil nutrient adsorption tests needed to check the suitability of the site for irrigation and absorption of nutrients.
		The anticipated nutrient concentrations and other parameter values exceed sewage treatment plant effluent and are significant higher than nitrate concentrations in Lake Meadowbank. A nitrate removal system should be added to proposal.
		Water quality needs to be assessed for suitability for irrigation at this particular site – there is currently no mention of other bacterial counts in the lake.
		No references are given for utilisation rate and soil factor. The given value used for pasture production appears high. How does the Rookwood facility compare to the proposal? Soil moisture content also needs to be monitored.
		Irrigation and application of fertiliser (in Derwent catchment) has been shown to lead to increased TN and TP loads. Proposal does not include adequate buffer zones and revegetation for irrigation.
		Back-up pivots should be established away from waterways.
		Proposal mentions irrigation to leach out salt – would put salt into the lake.
		Soil profiles are underlain by impermeable clays. Excess nutrients would not reach groundwater, but move in surface runoff or in top soil horizon. Further investigation of hydrology is needed, and ongoing monitoring of nutrient concentrations in soil water component. There is potential for impact of nutrients on lake and Derwent catchment.
Multiple representations	6.2, 6.4 and 6.5	<p>The proposed activity, including hatchery, dams and irrigation, has the potential to impact water quality of Meadowbank Lake and soil, from additional nutrient load, chemicals, salinity or disease.</p> <p>This risk is exacerbated by the close proximity of the proposed built structures and irrigation (spray and runoff) to the shores of the Lake. The Lake is classified as having a ‘high conservation management priority’.</p> <p>Values which may be impacted:</p> <ul style="list-style-type: none"> - Human health and amenity (recreation including fishing, drinking water, both local and downstream, e.g. Bryn Estyn water treatment plant) - Aquatic ecological health, e.g. as a result of algal blooms

		- Agricultural uses on nearby land, including soil health and stock water
3, 11, 22, 40, 71		The proposed activity has the potential to result in contamination of nearby freshwater dams from overflow of systems.
3, 5, 11, 22, 40, 66, 71, 73, 77		The EIS does not contain adequate mitigation/management measures for extreme weather scenarios, e.g. flood or drought.
3, 11, 22, 63, 71, 79		The proposal may result in impacts if the recycled water dam wall fails or dam overflows.
3, 11, 17, 22, 34, 40, 62, 72, 77, 79		The proposal may affect water availability for other users of water from the lake, including drinking water, and result in conflict between proposal operator and other users.
3, 11, 22, 40, 72, 77		The proposal does not include adequate contingency for times when Hydro require the Lake water level to be lowered, e.g. maintenance.
10, 32, 38, 39, 47, 55, 56, 57, 70, 80		It is not clear from the EIS whether the Class B water standard is appropriate for discharge into the Lake.
24		The proposal is not appropriate as freshwater supplies need to be protected in anticipation of climate extremes.
28		The proposal may result in an increased risk of flood or drought in the local area.
32, 38, 39, 47, 55, 56, 57, 71		It is not clear from the EIS whether adequate monitoring of water quality and mitigation in case of contamination will be put in place.
40, 45, 71, 75, 77		The proposal includes irrigation to be operated by a third party – this makes regulation difficult and is an unacceptable risk.
45, 61		Additional information is required regarding: <ul style="list-style-type: none"> - Details of effluent treatment system and changes in water quality at each step - Anticipated nutrient concentrations in effluent – whether suitable for irrigation - Other contaminants in effluent including disinfectants and antibiotics - Surface and subsurface soil runoff characteristics of the site - Who is responsible for management of the reuse dam positioned across title boundaries
45		It is essential effluent from hatchery and irrigation schemes does not enter the lake
45		Will there be fencing and a vegetated buffer to prevent livestock access to the lake?
45		Baseline lake monitoring testing should be undertaken prior to commencement of the activity.

45		An independent annual audit of the irrigation system should be required.
45		An additional emergency overflow dam/storage system is needed.
45		The values in the recycled effluent quality table do not add up.
45		Publicly available environment reports should be required as a license condition.
45		Another established RAS system is emitting nutrient levels higher than permitted.
45		Further information is required on how blue-green algal risks will be managed
49		Proposal includes extraction of 400,000L per day from the Lake – this is not justified given local rainfall levels
66, 75, 77, 79		The proposed structures and irrigation pivots are located too close to natural waterways which flow through the property.
69, 79		The proposal has the potential to contaminate groundwater through water seepage.
75		The EIS does not appear to quantify the total amount of effluent that the hatchery will generate.
77		The proposed road/access may result in erosion which will then result in sediment running downhill into Lake
Multiple representations	6.1	<p>The proposal has potential to result in odour impact on residents and recreational users of the area.</p> <p>Possible sources of odour include:</p> <ul style="list-style-type: none"> - Fish effluent - Uneaten fish food - Fish morts - Recycled water dam - Freshwater dams contaminated with recycled water - Pump station - Hatchery - Spray irrigation - Human effluent treatment system
3, 11, 22, 40, 77, 79		Sampling/measurement of odour undertaken for EIS was done in the coldest, stillest time of year, i.e. winter, and therefore is not representative of other times.
Multiple representations	6.4	<p>The proposal has potential result in noise impact on residents and recreational users of the area.</p> <p>Possible sources of noise include:</p> <ul style="list-style-type: none"> - Construction of facility - 24 hour operation of offtake pumpstation - Hatchery (24 hour operation?) - Heavy vehicles, particularly at night

3, 11, 22		The proposed location is close to existing residences and ~400 metres from a new home site (yet to be constructed).
3, 11, 22		The EIS contains mis-statements regarding line-of-sight from residences.
3, 11, 22, 76		It is not reasonable to postpone sound mitigation until after the activity is operational.
79		Inconsistent assessment of noise impacts for existing and approved residences
Multiple representations	6.7	The proposal has the potential to impact flora and fauna, including the hatchery and road.
3, 11, 22, 77		Tassal has already begin construction of the access road – threatened species have been previously recorded in the vicinity.
3, 7, 11, 15, 22, 23, 29, 63, 77		The EIS contains misstatements about vegetation and fauna habitat in Lot 1 – the steep slopes of the hill are covered in native species, but were not surveyed. There was a general lack of survey outside the ‘impact zone’. Spring survey not undertaken for flora.
3, 11, 15, 22, 77		The EIS contains misstatements about presence of raptors – there are frequent local sightings of grey goshawk and two wedge-tailed eagles.
3, 11, 15, 22, 24, 77		Marsupials are known to be present in the area, including platypus in the Lake and protected inlet, where runoff from the hatchery would hit the Lake.
7, 9, 21, 29, 37, 43, 62, 75	NA	The proponent’s activities in other locations have resulted in negative environmental impact.
Multiple representations	4	The proponent has not undertaken any or inadequate consultation with landowners or clubs in the area.
45	6.10	No reference is given in the EIS for the statement that the proposal will result in a 5:1 job multiplier.

Appendix 3 – Table of proponent commitments

Table 1: Summary of management measures for the Hatchery

#	Management Measures	When	EIS Section
MANAGEMENT PLANS			
A	<p>Develop a Construction Environmental Management Plan in accordance with Section 6.14.2, that addresses as a minimum:</p> <ul style="list-style-type: none"> • Site management • Soil and erosion • Water • Hazardous materials • Air quality • Noise • Traffic • Fire • Flora and fauna • Waste disposal • Visual • Incidents and complaints • Audit and reporting 	Prior to construction	2.1.2.5, 2.1.4.3, 2.2, 6.1.4, 6.2.4.1, 6.4.3, 6.6.3, 6.7.1.3.2, 6.7.1.4.1, 6.11.4, 6.12.3 and 6.13.2.
B	<p>Develop a Reuse Water Management Plan, that details management measures for the Hatchery reuse water storage dam including (at minimum):</p> <ul style="list-style-type: none"> • Description of reuse water production, volumes and quality; • Compliance requirements; • Accountabilities; • Irrigation communication procedures; • Irrigation management procedures in accordance with the IEMP; • Monitoring and reporting requirements; • Incident and contingency management procedures; and • Personnel training requirements. 	Prior to operation	6.11.4
C	<p>Develop a Sludge Management Plan, that details management of sludge from the Hatchery solids removal plant including:</p> <ul style="list-style-type: none"> • Contractor licencing requirements; • Final disposal destination; • Storage and transport requirements • Reporting requirements 	Prior to operation	6.2.4.3, 6.5.2.2.1, and 6.11.4.
D	<p>Develop an Emergency Management Plan for the Hatchery which includes procedures for emergency scenarios including (at minimum):</p> <ul style="list-style-type: none"> • Medical emergency • Fire or explosion • Hazardous material spill • Hazardous material exposure 	Prior to operation	6.6.3

	<ul style="list-style-type: none"> Bomb threat Security breach/civil unrest Motor vehicle accident High wind emergency 		
E	<p>Develop a Bushfire Management Plan for the Hatchery which includes (at minimum):</p> <ul style="list-style-type: none"> Hazard reduction and maintenance requirements Firefighting resources Bushfire Emergency Plan 	Prior to operation	6.12.3
ODOUR			
1	Avoid the use of long-term stockpiles onsite (wherever possible) unless they perform function of visual or noise screening.	During construction and operation	6.1.4
2	Ensure access to the site from the Lyell Highway is sealed up to Hatchery to minimise dust entrainment from vehicles.	During construction	6.1.4
3	All equipment is to be properly maintained to minimise exhaust emissions and only reputable contractors with well-maintained equipment will be used onsite.	During construction and operation	6.1.4
4	Odour sampling survey will be conducted during the first summer operational period with survey results used to remodel with seasonal variations in emission rates.	During operation (of first summer period)	6.1.4
5	Retention of spare Hatchery discharge water processing equipment to allow prompt replacement upon failure and minimise downtime.	During commissioning and operation	6.1.4
6	All organic wastes processed through the solids removal treatment plant will be stored for no more than 7-days and disposed of via a licenced waste transporter to an approved composting facility.	During commissioning and operation	6.1.4
7	If odour emissions from the sludge storage increase significantly due to the development of anaerobic processes, Tassal will explore the implementation of a mixing system to maintain oxygen levels.	During operation (if found to be necessary)	6.1.4
8	Backup power generators will be installed and maintained to prevent Hatchery discharge water processing downtime due to power loss.	During operation	6.1.4
9	All waste materials generated by the construction activities will be stored in appropriate containers and removed from site, either for disposal at an appropriately authorised facility or transported directly to an authorised recycler/re-user.	During construction	6.1.4
10	Develop and implement a blue-algae management procedure for the Hatchery reuse dam.	During operation	6.1.4
WATER QUALITY			

11	Install sediment controls such as catchment basins, silt fences and haybales to manage stormwater.	During construction	6.2.4.1
12	Installation of appropriate pollutant removal and velocity reduction features on stormwater drains. All drainage will also comply with AS/NZ 3500:2003 and be sized to manage the requisite AEP storm event.	During and operation	6.2.4.1
13	All new hardstand runoff will be directed to existing dams on the site.	During operation	6.2.4.1
14	Installation of a swale drain around the upstream perimeter of the Reuse dam to direct runoff water towards existing natural watercourses.	During construction and operation	6.2.4.1
15	All fish mortalities will be removed from tanks on a daily basis and stored in sealed bins and frozen before transportation to Tassal's Triabunna Rendering Facility.	During operation	6.2.4.3
16	Installation of level alarms in the Hatchery's solids removal plant treatment tanks to prevent overflow.	Prior to operation	6.2.4.4
17	Water quality monitoring of the reuse water held in the Reuse water dam to be undertaken monthly (with quality required to meet Class B recycled water as described by the <i>Environmental Guidelines for the Use of Recycled Water in Tasmania, 2002</i>).	During operation	6.2.4.6 and 6.5.1.1.3
18	Annual production plans and stocking practices will proactively consider reuse scheme limitations to ensure compliance is maintained.	During operation (if/when necessary)	2.13 and 6.2.4.6
GROUNDWATER			
19	Dam inundation area will be scarified and roller compacted to form a natural clay compacted liner to mitigate against seepage.	During construction	6.3.4
20	Conduct groundwater drilling at the reuse storage dam site to determine groundwater presence	During construction	6.3.4
21	Install groundwater monitoring bores in irrigation areas (and at the reuse storage dam if groundwater found)	During construction	6.3.4
NOISE			
22	Restriction on work hours during construction phase – 7am-6pm (Mon-Fri) and 8am-1pm (Sat) or as otherwise approved.	During construction	6.4.3
23	All onsite equipment (utilised in the construction phase) will comply with recommended noise levels specified in the <i>Interim Construction Noise Guidelines</i> (NSW Department of Environment & Climate Change, 2009).	During construction	6.4.3
24	Ensure all roller doors have no gaps at the top.	During construction	6.4.3

25	Ensure doors to biofilter and oxygenation rooms kept closed at all times (to the extent possible).	During operation	6.4.3
26	All noise-emitting equipment will be placed on the western side of the Hatchery building to provide barrier between noise sources and nearest residences.	During construction	6.4.3
27	Construct/install terrain blocking and earth embankments around the Hatchery to create further natural acoustic barriers (if necessary).	During construction	6.4.3
28	Undertake a post-commissioning noise assessment of Hatchery operations.	Within 6 months of operations commencing	6.4.3
29	Develop and implement a noise management protocol for heavy vehicles used for Hatchery operations during night-time hours.	During operation	6.4.3
WASTE MANAGEMENT			
30	<p>Implement the management measures as outlined in the approved IEMP. Measures including:</p> <ul style="list-style-type: none"> • Reuse water will meet Class B recycled water standards as described by the <i>Environmental Guidelines for the Use of Recycled Water in Tasmania (DPIPWE, 2002)</i>. Reuse water will be shandied with freshwater to maintain conductivity (as a measure of salinity) below 1000 micro Siemen per centimetre. A conductivity meter will be installed on the irrigation to inform freshwater shandying ratios. • Implementing a soil monitoring program to track soil salinity and nutrient trends in irrigated areas. • Installation of groundwater bores in the irrigation areas, and below the reuse water storage dam with implementation of a groundwater monitoring program. • Installation of flow metering equipment, to keep track of both reuse water production and irrigation volumes by irrigation areas. • Installation of gauge boards on the reuse water dam. • Installation of an electrical conductivity meter in the reuse dam which will trigger dilution to ensure the irrigated salinity level is maintained below 1000 $\mu\text{S}/\text{cm}$. • Regularly monitoring dam levels, with quarterly review incorporating: (1) calculations of remaining number of days 	During operation	6.5.1, 6.11.4 and the IEMP

	<p>storage (based on current water exchange rate); (2) review of long-term weather conditions to estimate when irrigation is likely to resume.</p> <ul style="list-style-type: none"> Initiating an internal contingency plan if dam storage level reaches 80% capacity. Plan include (but not be limited to): <ul style="list-style-type: none"> reducing the water exchange rate within the Hatchery (reducing daily flow into the dam); or tankering reuse water off-site to an approved facility. Diverting surface water above the reuse water dam to minimise dam inflow. The reuse water dam will also be fenced (to prevent stock access). Irrigation advice, water quality interpretation and agronomic support to be provided by Tassal (or their representatives) to land/irrigation operators. This will ensure productivity, and utilisation of reuse water nutrients, is maximised. Adherence to nominated irrigation buffer zones to prevent impact on identified sensitive receptors (including Meadowbank Lake) will be adhered to. Anemometers will be installed to prevent spray drift into sensitive areas. These will be programmed to shut down irrigation if set wind direction and/or wind speeds are met. Annual evaluation and application (if required) of freshwater leaching requirement to recycled water irrigation areas. Development and implementation of irrigation procedures and task breakdowns. Annual audit and review of all aspects of the reuse water irrigation system and provision of a written report. 		
31	Engage suitably qualified consultants to undertake all monitoring (with provision of a quarterly up-date), the annual audit and annual review of the IEMP.	During operation	6.5.1 and IEMP
32	<p>Any plan to increase the Hatchery water exchange rate will trigger an investigation into additional contingency measures (for the increase in reuse water) including:</p> <ul style="list-style-type: none"> suitability of utilising existing freshwater dams on the Hatchery site and neighbouring land for emergency storage; and identifying additional irrigation areas. <p>Outcomes of these investigations are to be confirmed prior to any change (increase) in the Hatchery water exchange rate.</p>	During operation	2.1.2.5, 6.5.1.1.3 and 6.11.4

33	Sludge holding tank will be emptied regularly by an approved licensed waste transport contractor and sent to an approved composting facility.	During operation	6.2.4.3 and 6.5.2.2.1
34	Undertake initial screening of biosolids to confirm contaminant acceptance levels.	During operation	6.5.2.2.1
35	Disposal management of sludge must be in accordance with an approved sludge management plan.	During operation	6.2.4.3, 6.5.2
36	Update Tassal's Freshwater Fish Health Management Plan to include the proposed Hatchery. Management of large-scale fish mortality events and disease biosecurity will be in accordance with this Plan.	Prior to operation	6.5.2
37	Ensure the Hatchery solids removal plant is sufficiently incorporated into the Hatcheries preventative maintenance program.	Prior to operation	6.11.4
38	Any additional irrigation areas will be included in an updated IEMP which will be submitted for EPA approval.	During operation	6.11.4
39	If commissioning issues occur and reuse water is not within Grade B recycled water standards, then water is to be pumped from the reuse dam back through the solids removal plant to provide additional treatment.	During commissioning	6.11.4
40	A waste treatment specialist will be commissioned to review the solids removal plant operation to determine if further treatment of discharge water is required.	During commissioning	6.11.4
DANGEROUS GOODS AND HAZARDOUS MATERIALS			
41	Integrate the management of dangerous goods and hazardous materials for the Hatchery including labelling, signage, segregation, storage, handling and inspection requirements into Tassal's existing procedures.	Prior to operation	6.2.4.2
42	Develop a Spill procedure and ensure spill kits and materials are kept and maintained onsite	Prior to construction and during operation	6.2.4.2 and 6.6.3
43	Chemicals will be stored in a bunded chemical storage room or area in accordance with the National Code for the Storage and Handling of Workplace Dangerous Goods (NOHSC 2001).	During operation	6.6.3
44	Residual contaminated soil evident after a spill and clean-up will be taken for disposal or treatment at an appropriately licensed facility.	During operation	6.6.3
45	Tassal WHS department to conduct a risk assessment for any new chemical or hazardous substance and provide approval prior to being bought onsite (including consideration of potential environmental impacts as well as possibility of substitution with alternative).	During operation	6.6.3

46	Maintain inventory of chemicals stored/used onsite using ChemWatch software.	During operation	6.6.3
47	Maintain MSDSs for all chemicals on-site.	During operation	6.6.3
48	Conduct regular inspections of storage areas where dangerous goods and hazardous material are kept	During operation	6.6.3
49	Ensure appropriate staff training and inductions in the use of reagents during operational activities	During operation	6.6.3
FLORA & FAUNA			
50	Commission a spring/summer survey near the access to the Hatchery to determine presence of the species prickly woodruff (<i>Asperula scoparia</i>) and woolly new-holland-daisy (<i>Vittadinia gracilis</i>). If found to be present, area will be marked on maps in CEMP or a 'permit to destroy' will be submitted to Policy and Conservation Advice Branch (PCAB).	Prior to construction of Hatchery access	6.7.1.4.1
51	Implement a weed hygiene plan that includes (but is not limited to): <ul style="list-style-type: none"> - vehicle, machine and equipment hygiene; - wash down protocols; - location and management of wash down areas and facilities; - maintaining log -books, detailing adherence to protocols by contractors; - material hygiene (soils, gravel, plant materials, etc.) ensuring that no materials contaminated with weed propagules (seeds, propagative vegetation material) are imported into the site; - appropriate hygiene protocols, including wash down procedures for weeds, will be maintained on the site during construction. Protocols will be consistent with the <i>Tasmanian Washdown Guidelines for Weed and Disease Control</i>, Edition 1. 	Prior to construction	6.7.1.4.2.1
52	Maintain a weed-free buffer zone between the Hatchery building and entrance to the property by conducting a monthly inspection within the zone for weeds. If found, trigger immediate action to remove the weeds.	During operation	6.7.1.4.2.1
53	Install bird diverters on any overhead powerlines within Hatchery property boundaries. Install tailored raptor perches on top of powerpoles	During construction	6.7.2.4
54	Enforce speed restrictions and signage on the Hatchery access road to reduce any potential roadkill of scavenger species (particularly during night-time hours).	During construction and operation	6.7.2.4
55	Installation of perimeter fencing around Hatchery building, access road and reuse storage dam to prevent access of native scavenger species and other neighbouring domestic animals (i.e. cattle).	During construction and operation	6.7.2.4

GREENHOUSE GASES			
56	Keep all equipment, machinery and vehicles in well maintained in and serviceable order to minimise generation of greenhouse gases.	During construction and operation	6.9.2
57	Incorporate the proposed Hatchery into the Tassal's tool (currently under development) to assist with NGER's reporting and to identify priorities/initiatives for reducing energy consumption and greenhouse gas emissions.	Prior to operation	6.9.2
HAZARD ASSESSMENT			
58	Incorporate stormwater management infrastructure into the Hatcheries preventative maintenance schedule.	Prior to operation	6.11.4
59	Appropriate approvals for the AWTs's are to be obtained.	Prior to operation	6.11.4
60	The domestic wastewater systems will be managed in accordance with the <i>Directors Guidelines for On-Site Wastewater Management Systems</i> .	During operation	6.11.4
61	Ensure any complaints received at the Hatchery and entered into the Tassal Complaints Register and appropriate follow up actions are assigned and implemented.	During construction and operation	6.11.4
62	Incorporate the Hatchery into Tassal's Biosecurity Management Plan and ensure requirements of the Plan are included in site and contractor inductions.	During operation	6.11.4
FIRE MANAGEMENT			
63	Ensure all vehicles and machinery are kept in good working order to minimise potential for fires onsite.	During construction and operation	6.12.3
64	Any fuels required during the construction phase will be limited in quantity and will be stored in appropriately bunded facilities.	During construction	6.12.3
65	Appropriate firefighting equipment will be kept onsite and site staff will be trained in emergency procedures and use of firefighting equipment.	During construction and operation	6.12.3
66	Maintain compliance of fire detection and firefighting equipment within the Hatchery.	During operation	6.12.3
67	Maintain bushfire protection measures as outlined in an approved bushfire management plan for the Hatchery.	During operation	6.12.3

Table 2: Summary of management measures for the recycled water scheme

Commitment		Reference within this IEMP	Forecast Completion date
1	Source water quality characterisation – brown water, RAS water.	Section 11.1	Review requirement 3 months after production begins.
2	Implement baseline soil monitoring program.	Section 11.2	Prior to commencing irrigation.
3	Implement ongoing soil monitoring program.	Section 11.3	Prior to commencing irrigation.
4	Implement event based surface water monitoring program.	Section 11.5	Event based – prior to commencing irrigation.
5	Install groundwater bores in irrigation areas, and below recycled water storage dam, and gather baseline data.	Section 11.4 & Appendix G	Prior to commencing irrigation.
6	Implement groundwater monitoring program.	Section 11.4	Prior to commencing irrigation.
7	Install metering equipment which allows tracking of both recycled water production and irrigation volumes (recycled water and freshwater) by irrigation area. <ul style="list-style-type: none"> including water level measurement equipment within storage. 	Section 10	At irrigation construction.
8	Installation of a conductivity meter to inform irrigation shandyng.	Section 10.1.1	At irrigation system construction.
9	Installation of soil moisture monitoring through the profile of irrigated areas.	Section 10.1.2	Prior to commencing irrigation.
10	Irrigation advice, water quality interpretation and agronomic support to be provided by Tassal (or their representatives) to land/irrigation managers.	Section 9	Prior to commencing irrigation and ongoing.
11	Adherence to nominated buffer zones (Error! Reference source not found.) to prevent impact on identified sensitive receptors.	Section 10.3	Ongoing from commencement of irrigation.

12	Annual evaluation and application (if required) of freshwater leaching requirement to recycled water irrigation areas.	Section 8.3	To be assessed late in the irrigation season (April/May).
13	<p>Development and implementation of irrigation procedures and task breakdowns:</p> <ul style="list-style-type: none"> recycled water irrigation including irrigation scheduling, record keeping; shandyng and leaching fraction; recycled water irrigation monitoring; contingency plan/actions for when the dam storage level reaches 80% capacity; identifying and actioning algal outbreaks (Blue Green Algae Management procedure); 	Sections 6.1.3, 9.3 and 11.	Prior to commencing irrigation.
14	Annual audit of all aspects of the recycled water irrigation system and provision of a written report.	Section 11.6	Annual. At the end of each irrigation period.
15	Engage suitably qualified consultants to undertake all monitoring, quarterly updates, annual audit and annual review of the IEMP. Irrigation programming will be reviewed and adapted annually.	Section 11	Annual.
16	Adopt an adaptive management regime to respond to any indications of soil nutrient accumulation, potential offsite movement of nutrients or soil structural decline, as indicated by ongoing monitoring programs.	Section 11	Ongoing

Appendix 4 – Environmental licence



ENVIRONMENT PROTECTION AUTHORITY

Table Of Contents

Schedule 1: Definitions.....	5
Schedule 2: Conditions.....	7
General.....	7
G1 Quantity Limits.....	7
G2 Access to and awareness of conditions and associated documents.....	7
G3 Incident response.....	7
G4 No changes to an Environmental Licence activity without approval.....	7
G5 Change of responsibility.....	7
G6 Change of ownership.....	7
G7 Complaints register.....	7
G8 Annual Environmental Review.....	8
G9 Additional annual reporting information for wastewater reuse schemes.....	9
G10 Wastewater Reuse EMP review.....	9
G11 Compliance with the Wastewater Reuse EMP.....	10
G12 Landowner Agreement with landowners of properties identified in the Wastewater Reuse EMP	10
Atmospheric.....	10
A1 Odour management.....	10
A2 Odour Survey.....	10
A3 Odour Survey Report.....	10
A4 Atmospheric Dispersion Modelling	11
A5 Odour Management Plan.....	11
Commissioning.....	11
CM1 Notification prior to functional commissioning.....	11
Construction.....	12
CN1 Construction Environmental Management Plan.....	12
CN2 Operating hours - Construction.....	12
CN3 Control of dust emissions during construction.....	12
Decommissioning And Rehabilitation.....	13
DC1 Notification of cessation.....	13
DC2 DRP requirements.....	13
DC3 Rehabilitation following cessation.....	13
DC4 Temporary suspension of activity.....	13
Effluent.....	13
EF1 Effluent discharge locations.....	13
EF2 Effluent quality limits for discharge to the Wastewater Reuse Scheme.....	14
EF3 Blue-green algae notification.....	14
EF4 Approval to increase hatchery water exchange rate.....	14
EF5 Meadowbank Lake buffer zone.....	14
Flora And Fauna.....	15
FF1 Flora and vegetation survey.....	15
Hazardous Substances.....	15
H1 Storage and handling of hazardous materials.....	15
H2 Hazardous materials (< 250 litres).....	16
H3 Spill kits.....	16
Monitoring.....	16
M1 Monitoring requirements.....	16
M2 Samples and measurements for monitoring purposes.....	16
M3 Monitoring reporting and record keeping.....	16
M4 Signage of monitoring points.....	17

M5 Flow monitoring equipment.....	17
M6 Groundwater Monitoring Bore Planning and Construction.....	17
M7 Surface Water Monitoring Plan.....	18
Noise Control.....	18
N1 Noise emission limits.....	18
N2 Update noise predictions.....	19
N3 Noise survey requirements.....	19
N4 Noise survey method and reporting requirements.....	19
N5 Transport noise management.....	20
Operations.....	20
OP1 Notification prior to commencement of normal operations.....	20
OP2 Contingency management.....	20
OP3 Notification of fish or ova mortality.....	21
OP4 Identification of chemical additives and residues.....	21
OP5 Therapeutant and chemical use.....	21
OP6 Weed management	21
OP7 Operational Procedures and Maintenance Manual.....	21
Stormwater Management.....	22
SW1 Perimeter drains or bunds.....	22
SW2 Stormwater.....	22
Waste Management.....	22
WM1 Fish waste management.....	22
WM2 Removal of fish waste and sludge.....	23
WM3 Management of Wastes Containing Restricted Animal Material.....	23
Schedule 3: Information.....	24
Legal Obligations.....	24
LO1 EMPCA.....	24
LO2 Storage and handling of dangerous goods, explosives and dangerous substances.....	24
LO3 Aboriginal relics requirements.....	24
Other Information.....	24
OI1 Notification of incidents under section 32 of EMPCA	24
OI2 Waste management hierarchy.....	24

Attachments

Attachment 1: Plan of Activity (modified: 31/10/2019 14:58).....	3 pages
Attachment 2: Table of Monitoring Requirements (modified: 07/11/2019 12:11).....	2 pages

Schedule 1: Definitions

Aboriginal Relic has the meaning described in section 2(3) of the *Aboriginal Heritage Act 1975*.

Activity means any environmentally relevant activity (as defined in Section 3 of EMPCA) to which this document relates, and includes more than one such activity.

Construction means activities associated with the construction phase of the activity, including but not limited to, activities associated with the clearance of vegetation, site works to create a level site, rock breaking, installation of fences and other infrastructure whether on land or in water.

Control Location (Noise) means a location chosen to represent the general ambient sound without contribution from noise sources at the activity.

Director means the Director, Environment Protection Authority holding office under Section 18 of EMPCA and includes a person authorised in writing by the Director to exercise a power or function on the Director's behalf.

DRP means Decommissioning and Rehabilitation Plan.

Effluent means wastewater discharged to the Wastewater Reuse Scheme.

EIS means the document entitled *Environmental Impact Statement Hamilton Recirculating Aquaculture System Hatchery, Tassal Operations Pty Ltd, September 2019*.

EMPCA means the *Environmental Management and Pollution Control Act 1994*.

Environmental Harm and **Material Environmental Harm** and **Serious Environmental Harm** each have the meanings ascribed to them in Section 5 of EMPCA.

Environmental Nuisance and **Pollutant** each have the meanings ascribed to them in Section 3 of EMPCA.

Environmentally Hazardous Material means any substance or mixture of substances of a nature or held in quantities which present a reasonably foreseeable risk of causing serious or material environmental harm if released to the environment and includes fuels, oils, waste and chemicals but excludes sewage.

Fish produced means the amount of additional fish biomass grown under the environmentally relevant activity and excludes the initial biomass of any fish transferred to the hatchery for the purpose of further on-growing.

Functional commissioning as described in section 2.3.2 of the EIS.

Median means the value at which the median of all results for the relevant parameter from the previous 12 month period is below the stated value.

Minimum Construction Requirements For Water Bores In Australia means the document published under this title by The National Uniform Drillers Licensing Committee, February 2012, or any subsequent updates of this document.

Noise Sensitive Premises means residences (including approved but not constructed residences, whether occupied or not), schools, hospitals, caravan parks and similar land uses involving the presence of individual people for extended periods, except in the course of their employment or for recreation.

Normal operations commences on the completion of functional commissioning and the hatchery is stocked.

Person Responsible is any person who is or was responsible for the environmentally relevant activity to which this document relates and includes the officers, employees, contractors, joint venture partners and agents of that person, and includes a body corporate.

Protected Environmental Value means a value or use for which it has been determined that a given area of the environment should be protected. There can, and often will be, more than one protected environmental value for a given area. A list of potential protected environmental values is provided in clause 7.1 of the *State Policy on Water Quality Management 1997*.

Reporting Period means the financial year.

Restricted Animal Material or RAM has the meaning defined in the *Animal Health Regulations 2016*.

Tasmanian Noise Measurement Procedures Manual means the document titled *Noise Measurement Procedures Manual*, by the Department of Environment, Parks, Heritage and the Arts, dated July 2008, and any amendment to or substitution of this document.

The Land falls within the area delineated at Attachment 1, Figure 1 and includes buildings and other structures permanently fixed to the land, any part of the land covered with water, and any water covering the land.

Waste has the meaning ascribed to it in Section 3 of EMPCA.

Wastewater means spent or used water (whether from industrial or domestic sources) containing a pollutant and includes stormwater which becomes mixed with wastewater.

Wastewater Reuse EMP means the document entitled *Tassal Hamilton Hatchery Recycled Water Irrigation and Environmental Management Plan, Macquarie Franklin, 28 October 2019* and includes any amendment to or substitution of this document approved in writing by the Director.

Wastewater Reuse Scheme means the Hamilton RAS Recycled Water Scheme as described in the Wastewater Reuse EMP

Weed And Disease Guidelines means the document titled *Weed and Disease Planning and Hygiene Guidelines - Preventing the spread of weeds and diseases in Tasmania*, by the Department of Primary Industries, Parks, Water and Environment, dated March 2015, and any amendment to or substitution of this document.

Schedule 2: Conditions

General

G1 Quantity Limits

- 1 The activity must not exceed the following maximum limits:
 - 1.1 750 tonnes standing biomass of fish at any point in time; and
 - 1.2 1,400 tonnes of fish produced annually.

G2 Access to and awareness of conditions and associated documents

A copy of these conditions and any associated documents referred to in these conditions must be held in a location that is known to and accessible to the person responsible for the activity. The person responsible for the activity must ensure that all persons who are responsible for undertaking work on The Land, including contractors and sub-contractors, are familiar with these conditions to the extent relevant to their work.

G3 Incident response

If an incident causing or threatening environmental nuisance, serious environmental harm or material environmental harm from pollution occurs in the course of the activity, then the person responsible for the activity must immediately take all reasonable and practicable action to minimise any adverse environmental effects from the incident.

G4 No changes to an Environmental Licence activity without approval

- 1 The following changes, if they may cause or increase the emission of a pollutant which may cause material or serious environmental harm or environmental nuisance, must only take place in relation to the activity if such changes have been approved in writing by the EPA Board following its assessment of an application for a permit under the *Land Use Planning and Approvals Act 1993*, or an application for a new environmental licence or to vary an environmental licence; or approved in writing by the Director:
 - 1.1 a change to a process used in the course of carrying out the activity; or
 - 1.2 the construction, installation, alteration or removal of any structure or equipment used in the course of carrying out the activity; or
 - 1.3 a change in the quantity or characteristics of materials used in the course of carrying out the activity.

G5 Change of responsibility

If the person responsible for the activity intends to cease to be responsible for the activity, that person must notify the Director in writing of the full particulars of any person succeeding him or her as the person responsible for the activity, before such cessation.

G6 Change of ownership

If the owner of The Land upon which the activity is carried out changes or is to change, then, as soon as reasonably practicable but no later than 30 days after becoming aware of the change or intended change in the ownership of The Land, the person responsible must notify the Director in writing of the change or intended change of ownership.

G7 Complaints register

- 1 A public complaints register must be maintained. The public complaints register must, as a minimum, record the following detail in relation to each complaint received in which it is alleged that environmental harm (including an environmental nuisance) has been caused by the activity:

- 1.1 the date and time at which the complaint was received;
 - 1.2 contact details for the complainant (where provided);
 - 1.3 the subject matter of the complaint;
 - 1.4 any investigations undertaken with regard to the complaint; and
 - 1.5 the manner in which the complaint was resolved, including any mitigation measures implemented.
- 2 Complaint records must be maintained for a period of at least 3 years.

G8 Annual Environmental Review

- 1 Unless otherwise specified in writing by the Director, a publicly available Annual Environmental Review for the activity must be submitted to the Director each year within three months of the end of the reporting period. Without limitation, each Annual Environmental Review must include the following information:
- 1.1 a statement by the General Manager, Chief Executive Officer or equivalent for the activity acknowledging the contents of the Annual Environmental Review;
 - 1.2 subject to the *Personal Information Protection Act 2004*, a list of all complaints received from the public during the reporting period concerning actual or potential environmental harm or environmental nuisance caused by the activity and a description of any actions taken as a result of those complaints;
 - 1.3 details of environment-related procedural or process changes that have been implemented during the reporting period;
 - 1.4 a summary of the amounts (tonnes or litres) of both solid and liquid wastes produced and treatment methods implemented during the reporting period. Initiatives or programs planned to avoid, minimise, re-use, or recycle such wastes over the next reporting period should be detailed;
 - 1.5 details of all non-trivial environmental incidents and/or incidents of non compliance with these conditions that occurred during the reporting period, and any mitigative or preventative actions that have resulted from such incidents;
 - 1.6 a summary of the monitoring data and record keeping required by these conditions. This information should be presented in graphical form where possible, including comparison with the results of at least the preceding reporting period. Special causes and system changes that have impacted on the parameters monitored must be noted. Explanation of significant deviations between actual results and any predictions made in previous reports must be provided;
 - 1.7 identification of breaches of limits specified in these conditions and significant variations from predicted results contained in any relevant DPEMP or EMP, an explanation of why each identified breach of specified limits or variation from predictions occurred and details of the actions taken in response to each identified breach of limits or variance from predictions;
 - 1.8 a list of any issues, not discussed elsewhere in the report, that must be addressed to improve compliance with these conditions, and the actions that are proposed to address any such issues;
 - 1.9 a summary of fulfilment of environmental commitments made for the reporting period. This summary must include indication of results of the actions implemented and explanation of any failures to achieve such commitments; and
 - 1.10 a summary of any community consultation and communication undertaken during the reporting period.

G9 Additional annual reporting information for wastewater reuse schemes

- 1** Annual Environmental Reviews submitted in accordance with these conditions must include the following additional information:
 - 1.1** a list of all supplier-user agreements;
 - 1.2** the volume of treated wastewater discharged to the wastewater reuse scheme during each calendar month of the reporting period;
 - 1.3** a summary of reuse activities including water and nutrient budgets;
 - 1.4** results of monitoring undertaken in accordance with the Wastewater Reuse EMP and an assessment of those results. This information should be presented in graphical form where possible and should include comparison with the results of previous reporting periods;
 - 1.5** discussion of any significant trends observable in the monitoring results over time, including comparison with previous monitoring periods, must be provided;
 - 1.6** verification that the wastewater is only being used in the manner and on crops described in the Wastewater Reuse EMP and how this has been verified; and
 - 1.7** details of any proposed variations to the operation of the reuse scheme from those described in the Wastewater Reuse EMP.
- 2** Where the Director is of the opinion that the Wastewater Reuse EMP needs updating to reflect the current practices and potential environmental impacts associated with the reuse scheme the Director may direct the person responsible to cause a new Wastewater Reuse EMP to be prepared and submitted for approval and the responsible person must comply with the direction or cease the discharge to the wastewater reuse scheme.

G10 Wastewater Reuse EMP review

- 1** A review of the Wastewater Reuse EMP and its operation must be undertaken, and an updated Wastewater Reuse EMP must be provided to the Director within 12 months of the date of the commencement of normal operations, or by a date otherwise specified by the Director.
- 2** The updated Wastewater Reuse EMP must include a statement by the General Manager, Chief Executive Officer or equivalent for the activity acknowledging the contents of the updated Wastewater Reuse EMP. The updated Wastewater Reuse EMP must include, but not necessarily be limited to, the following information:
 - 2.1** details of any variation to the operation of the reuse scheme from those described in the original Wastewater Reuse EMP; and
 - 2.2** a comparison of the environmental performance of the activity predicted in the original Wastewater Reuse EMP with the actual operation and performance of the reuse scheme taking into account monitoring and data analysis undertaken in accordance with the original Wastewater Reuse EMP; and
 - 2.3** a description of the circumstances where environmental performance is below the actual performance predicted in the original Wastewater Reuse EMP; and
 - 2.4** a strategy to improve the environmental performance to the level predicted in the original Wastewater Reuse EMP or propose alternative sustainable practices; and
 - 2.5** a description of the potential environmental impacts arising from the ongoing operation of the activity over the next 5 years, including a strategic consideration of potential changes to the activity during that period and consideration of opportunities to implement continuous improvement.

G11 Compliance with the Wastewater Reuse EMP

- 1 Unless otherwise approved in writing by the Director, the Wastewater Reuse Scheme must be operated in accordance with the Wastewater Reuse EMP.
- 2 The person responsible must
 - 2.1 take all reasonable measures, including periodic audits, to ensure that the irrigation of wastewater is carried out in accordance with the Wastewater Reuse EMP;
 - 2.2 notify the Director if a non-compliance with the Wastewater Reuse EMP is identified; and
 - 2.3 comply with any instruction from the Director to reduce or cease discharge of wastewater to the Wastewater Reuse Scheme.

G12 Landowner Agreement with landowners of properties identified in the Wastewater Reuse EMP

- 1 The person responsible must enter into an agreement with the landowners of properties identified in the Wastewater Reuse EMP to clarify arrangements and responsibilities regarding:
 - 1.1 ownership and management of the wastewater reuse dam;
 - 1.2 odour emanating from the wastewater reuse dam;
 - 1.3 quality and volume of effluent delivered to the wastewater reuse scheme; and
 - 1.4 management of the wastewater reuse scheme including operation, monitoring, reporting and auditing
- 2 The agreement must be maintained and provided to an Authorized Officer upon request.

Atmospheric**A1 Odour management**

The person responsible must institute such odour management measures as are necessary to prevent odours causing environmental nuisance beyond the boundary of The Land.

A2 Odour Survey

- 1 Unless otherwise approved in writing by the Director, a survey of odour emissions from the activity must be undertaken between February and May following the commencement of normal operations.
- 2 Within 30 days of the commencement of normal operations, the proposed odour survey methodology must be submitted to the Director for approval.
- 3 The methodology must include:
 - 3.1 identification of potential odour sources on The Land;
 - 3.2 proposals for measurement of odour emissions from the identified odour sources; and
 - 3.3 a timetable for the completion of the odour survey.
- 4 The survey of odour emissions must be conducted by personnel or laboratories approved by the Director and in accordance with methods approved by the Director.

A3 Odour Survey Report

- 1 Odour survey results must be submitted to the Director within 30 days of the completion of the odour survey, in the form of a written odour survey report.
- 2 Unless otherwise approved in writing by the Director, the report must document:
 - 2.1 the location and operational characteristics of all identified odour sources; and

2.2 measured odour emission rates identified in the odour survey.

A4 Atmospheric Dispersion Modelling

- 1** Within 12 months of the commencement of normal operations, unless otherwise approved in writing by the Director, atmospheric dispersion modelling must be completed and submitted to the Director.
- 2** Within 30 days of the completion of the odour survey report, the proposed atmospheric dispersion modelling methodology must be submitted to the Director for approval.
- 3** The atmospheric dispersion modelling must be conducted by personnel or a consultancy approved by the Director and in accordance with methods approved by the Director. The report must include:
 - 3.1** a map of the activity and surrounds with the following particulars:
 - 3.1.1** The location of odour sources;
 - 3.1.2** The boundary of The Land;
 - 3.1.3** Ground level concentration contours (isopleths) with a key or legend; and
 - 3.1.4** The location of the nearest sensitive receptors;
 - 3.2** details of the limits and criteria specified in the Air Quality EPP that are relevant to the activity;
 - 3.3** modelled odour concentrations predicted at the nearest sensitive receptors;
 - 3.4** identification of any exceedances of the relevant limits and criteria specified in the Air Quality EPP; and
 - 3.5** details of mitigation proposed to address each identified exceedance of the relevant limits or criteria in the Air Quality EPP.

A5 Odour Management Plan

- 1** Unless otherwise approved in writing by the Director, an Odour Management Plan must be submitted to the Director for approval 14 days prior to the commencement of normal operations.
- 2** The Odour Management Plan must include:
 - 2.1** an inventory of all potential odour sources at the Activity;
 - 2.2** details of any proposed actions to be implemented to mitigate anticipated odour issues associated with activities undertaken at the Activity;
 - 2.3** a proposal for a regular odour inspection method and frequency to ensure odour at the Activity is maintained at an acceptable level; and
 - 2.4** a procedure for recording and acting upon any increase in odour emissions.
- 3** Unless otherwise approved in writing, the person responsible must submit a revised Odour Management Plan for the Directors approval within 2 months of the Odour Survey Report being submitted.
- 4** The person responsible must implement the Odour Management Plan approved in writing by the Director.

Commissioning

CM1 Notification prior to functional commissioning

At least 14 days prior to the commencement of functional commissioning of the wastewater treatment plant, the person responsible for the activity must notify the Director of the date on which commissioning is expected to commence.

Construction

CN1 Construction Environmental Management Plan

- 1 At least 30 days prior to the commencement of construction activities, or by a date otherwise specified in writing by the Director, a Construction Environmental Management Plan ('Construction EMP') must be submitted to the Director for approval.
- 2 The Construction EMP must contain a detailed description of the proposed timing and sequence of the major construction activities and of the proposed management measures to be implemented to avoid or minimise the environmental impacts during the construction phase. The Construction EMP must include, but not necessarily be limited to, management measures in relation to the following:
 - 2.1 prevention of impacts upon surface water and waterways;
 - 2.2 erosion and sediment control;
 - 2.3 noise control;
 - 2.4 dust control;
 - 2.5 management of environmentally hazardous materials;
 - 2.6 cultural (Aboriginal and non-aboriginal) heritage considerations;
 - 2.7 flora and fauna management;
 - 2.8 weed, pest and disease management;
 - 2.9 quality control arrangements including supervision by appropriately qualified and experienced persons, detailed construction specifications for key items of environmental management infrastructure, documented site procedures, quality control testing and the keeping of appropriate records; and
 - 2.10 acid sulphate soil management (if identified in pre-construction testing).
- 3 Construction must not commence until the Construction EMP has been approved by the Director.
- 4 Unless otherwise specified in writing by the Director, construction activities must be carried out in accordance with an approved Construction EMP.

CN2 Operating hours - Construction

- 1 Unless otherwise approved in writing by the Director:
 - 1.1 Construction activities must not be undertaken outside 0700 hours to 1800 hours Monday to Friday; and 0800 hours to 1800 hours Saturdays.
 - 1.2 Notwithstanding the above paragraph, the construction activities must not be carried out on Sundays or Public Holidays that are observed State-wide (Easter Tuesday excepted).

CN3 Control of dust emissions during construction

- 1 Construction activities must be managed using such measures as are necessary to prevent dust emissions causing environmental nuisance. Such measures may include but are not limited to:
 - 1.1 using a dust suppression method such as watering dust generating surfaces; and
 - 1.2 ceasing construction activities in windy weather when dust may be blown in the direction of residences.

Decommissioning And Rehabilitation

DC1 Notification of cessation

Within 30 days of becoming aware of any event or decision which is likely to give rise to the permanent cessation of the activity, the person responsible for the activity must notify the Director in writing of that event or decision. The notice must specify the date upon which the activity is expected to cease or has ceased.

DC2 DRP requirements

Unless otherwise approved in writing by the Director, a Decommissioning and Rehabilitation Plan (DRP) for the activity must be submitted for approval to the Director within 30 days of the Director being notified of the planned cessation of the activity or by a date specified in writing by the Director. The DRP must be prepared in accordance with any guidelines provided by the Director.

DC3 Rehabilitation following cessation

- 1** Following permanent cessation of the activity, and unless otherwise approved in writing by the Director, The Land must be rehabilitated including:
 - 1.1** stabilisation of any land surfaces that may be subject to erosion;
 - 1.2** removal or mitigation of all environmental hazards or land contamination, that might pose an on-going risk of causing environmental harm; and
 - 1.3** decommissioning of any equipment that has not been removed.
- 2** Where a Decommissioning and Rehabilitation Plan (DRP) has been approved by the Director, decommissioning and rehabilitation must be carried out in accordance with that plan, as may be amended from time to time with written approval of the Director.

DC4 Temporary suspension of activity

- 1** Within 30 days of becoming aware of any event or decision which is likely to give rise to the temporary suspension of the activity, the person responsible for the activity must notify the Director in writing of that event or decision. The notice must specify the date upon which the activity is expected to suspend or has suspended.
- 2** During temporary suspension of the activity:
 - 2.1** The Land must be managed and monitored by the person responsible for the activity to ensure that emissions from The Land do not cause serious environmental harm, material environmental harm or environmental nuisance; and
 - 2.2** If required by the Director a Care and Maintenance Plan for the activity must be submitted, by a date specified in writing by the Director, for approval. The person responsible must implement the approved Care and Maintenance Plan, as may be amended from time to time with written approval of the Director.
- 3** Unless otherwise approved in writing by the Director, if the activity on The Land has substantially ceased for 2 years or more, rehabilitation of The Land must be carried out in accordance with the requirements of these conditions as if the activity has permanently ceased.

Effluent

EF1 Effluent discharge locations

- 1** Unless otherwise approved in writing by the Director effluent from the activity must only be discharged at the following discharge location:

- 1.1** Discharge to the Wastewater Reuse Scheme as defined in the Wastewater Reuse EMP at grid reference GDA coordinates 480839E 5289767N as shown on Attachment 1 at the reuse pump station.
- 2** Effluent must not be discharged to the point referred to in clause 1.1 unless the effluent is managed in accordance with the Wastewater Reuse EMP.
- 3** Unless otherwise approved in writing by the Director, effluent must not be discharged to any other dam located on The Land.

EF2 Effluent quality limits for discharge to the Wastewater Reuse Scheme

- 1** Effluent discharged to the Wastewater Reuse Scheme must comply with the effluent quality limits set out in Table of Reuse Effluent Quality Limits, at the Effluent Quality monitoring location specified in Attachment 2.
- 2** **Table of Reuse Effluent Quality Limits**

Column 1	Column 2	Column 3	Column 4	Column 5
Substance or measure	Unit of measurement	Minimum limit	Median limit	Maximum limit
Biochemical Oxygen Demand	mg/L	-	-	50
Thermotolerant Coliforms	MPN/100mL		1,000	10,000
pH	pH units	6	-	9
Electrical conductivity (after shandying)	µs/cm			1,000

EF3 Blue-green algae notification

Unless otherwise specified by the Director in writing, if blue-green algae are present at concentrations of 11,500 cells/mL or greater in the effluent at the effluent quality monitoring point, the Director must be notified within 24 hours of the monitoring results being received.

EF4 Approval to increase hatchery water exchange rate

- 1** Unless otherwise specified in writing by the Director, at least 30 days prior to increasing the water exchange rate in the hatchery above 90L/kg feed, the person responsible must submit an Effluent Management Plan detailing how the person responsible intends to manage the increased volumes of effluent produced.
- 2** The water exchange rate must not be increased above 90L/kg feed prior to the Director approving the Effluent Management Plan.
- 3** The person responsible must implement the approved Effluent Management Plan when the water exchange rate is increased above 90L/kg feed.

EF5 Meadowbank Lake buffer zone

Irrigation equipment associated with the Wastewater Reuse Scheme must be located at least 50 metres from the shores of Lake Meadowbank and irrigation must be managed to prevent wastewater being applied to the land within 50 metres of Lake Meadowbank.

Flora And Fauna

FF1 Flora and vegetation survey

- 1** Vegetation in the vicinity of any water supply pipeline, internal access tracks and proposed access road as delineated in Attachment 1 Figure 3 must not be disturbed until:
 - 1.1** a flora and vegetation survey has been conducted in the appropriate season, by an appropriately qualified person, to the satisfaction of the Director;
 - 1.2** a report outlining the findings of the survey and appropriate flora and vegetation management measures has been submitted to the Director for approval; and
 - 1.3** the person responsible has implemented the recommendations of the approved survey report to the satisfaction of the Director.

Hazardous Substances

H1 Storage and handling of hazardous materials

- 1** Unless otherwise approved in writing by the Director, all environmentally hazardous materials, including chemicals, fuels, and oils, stored on The Land in volumes exceeding 250 litres must be stored and handled in accordance with the following:
 - 1.1** Any storage facility must be contained within a spill collection bund with a net capacity of whichever is the greater of the following:
 - 1.1.1** at least 110% of the combined volume of any interconnected vessels within that bund; or
 - 1.1.2** at least 110% of the volume of the largest storage vessel; or
 - 1.1.3** at least 25% of the total volume of all vessels stored in that spill collection bund; or
 - 1.1.4** the capacity of the largest tank plus the output of any firewater system over a twenty minute period.
 - 1.2** All activities that involve a significant risk of spillages, including the loading and unloading of bulk materials, must take place in a bunded containment area or on a transport vehicle loading apron.
 - 1.3** Bunded containment areas and transport vehicle loading aprons must:
 - 1.3.1** be made of materials that are impervious to any environmentally hazardous material stored within the bund;
 - 1.3.2** be graded or drained to a sump to allow recovery of liquids;
 - 1.3.3** be chemically resistant to the chemicals stored or transferred;
 - 1.3.4** be designed and managed such that any leakage or spillage is contained within the bunded area (including where such leakage emanates vertically higher than the bund wall);
 - 1.3.5** be designed and managed such that the transfer of materials is adequately controlled by valves, pumps and meters and other equipment wherever practical. The equipment must be adequately protected (for example, with bollards) and contained in an area designed to permit recovery of any released chemicals;
 - 1.3.6** be designed such that chemicals which may react dangerously if they come into contact have measures in place to prevent mixing; and
 - 1.3.7** be managed such that the capacity of the bund is maintained at all times (for example, by regular inspections and removal of obstructions).

H2 Hazardous materials (< 250 litres)

- 1 Unless otherwise approved in writing by the Director, each environmentally hazardous material, including chemicals, fuels and oils, stored on The Land in discrete volumes not exceeding 250 litres, but not including discrete volumes of 25 litres or less, must be stored within bunded containment areas or spill trays which are designed and maintained to contain at least 110% of the volume of the largest container.
- 2 Bunded containment areas and spill trays must be made of materials that are impervious to any environmentally hazardous materials stored within the bund or spill tray.

H3 Spill kits

Spill kits appropriate for the types and volumes of materials handled on The Land must be kept in appropriate locations to assist with the containment of spilt environmentally hazardous materials.

Monitoring**M1 Monitoring requirements**

- 1 Unless otherwise specified in writing by the Director, monitoring must be undertaken in accordance with the Table of Monitoring Requirements at Attachment 2, as follows:
 - 1.1 the items listed in Column 1 must be sampled or tested at the locations listed in Column 2 for the parameters listed in Column 3 at the frequencies listed in Column 5 using the techniques listed in Column 6; and
 - 1.2 resultant monitoring data must be reported to the Director in accordance with the requirements set out in Column 7 and in the units listed in Column 4.

M2 Samples and measurements for monitoring purposes

- 1 Any sample or measurement required under these conditions must be taken and processed in accordance with the following:
 - 1.1 sampling and measuring must be undertaken by a person with training, experience, and knowledge of the appropriate procedure;
 - 1.2 the integrity of samples must be maintained prior to delivery to a testing facility;
 - 1.3 sample analysis must be conducted by a testing facility accredited by the National Association of Testing Authorities (NATA), or a testing facility approved in writing by the Director, for the specified test;
 - 1.4 details of methods employed in taking samples and measurements and results of sample analysis, and measurements must be retained for at least three (3) years after the date of collection; and
 - 1.5 sampling and measurement equipment must be maintained and operated in accordance with manufacturer's specifications and records of maintenance must be retained for at least three (3) years.

M3 Monitoring reporting and record keeping

- 1 Unless otherwise specified in writing by the Director, a Monthly Monitoring Report, in an electronic format approved by the Director, must be submitted to the Director by the 15th day of the following month. As a minimum, the Monthly Monitoring Report must include the following information:
 - 1.1 the laboratories at which sample analyses were carried out
 - 1.2 contact details for a person responsible for managing monitoring programs;
 - 1.3 the estimated or measured average daily flow to the wastewater treatment plant; and

1.4 for each sample or measurement:

- 1.4.1** a sample or measurement identification which allows the location from which the sample or measurement was taken to be clearly identifiable;
- 1.4.2** the date and time at which each sample or measurement was taken;
- 1.4.3** the parameters for which analyses or measurements were carried out and the units in which the results are reported; and
- 1.4.4** the results for all sample analyses and measurements.

- 2** A record of all Monthly Monitoring Reports submitted to the Director must be maintained and copies of all test reports referenced to the relevant Monthly Monitoring Reports kept for a minimum period of three (3) years.

M4 Signage of monitoring points

With the exception of open water sampling, all monitoring points must be clearly marked to indicate the location and name of the monitoring point.

M5 Flow monitoring equipment

- 1** Flow monitoring equipment must be maintained in accurate working order in accordance with the manufacturer's specifications and, unless otherwise approved in writing by the Director, must be validated at least once every 12 months.
- 2** The dates on which flow monitoring equipment has been validated must be recorded and validation records kept for a minimum of 3 years.
- 3** For the purposes of this condition:
 - 3.1** 'validate' means to undertake a set of actions including inspecting the flow monitoring equipment to check that it is installed in compliance with any relevant standards and is maintained to an acceptable state of repair, which provides an acceptable level of confidence that the flow monitoring equipment operates within an acceptable range of error under normal operating conditions.
 - 3.2** 'Flow monitoring equipment' means an instrument, including a flow meter, that measures and may record a flow or level of liquid and includes any ancillary device attached to or incorporated into the instrument.

M6 Groundwater Monitoring Bore Planning and Construction

- 1** A groundwater monitoring bore plan must be submitted by the person responsible to the Director for approval within 3 months of the date on which these conditions take effect, or by a date otherwise specified in writing by the Director.
- 2** The groundwater monitoring bore plan must be prepared by a suitably qualified person.
- 3** The groundwater monitoring bore plan must:
 - 3.1** describe the location and design of groundwater monitoring bores to be constructed or that have already been constructed to detect groundwater contamination caused by the activity;
 - 3.2** include a map of the Land on which the location of existing and proposed bores are marked;
 - 3.3** provide reasons as to why the location and design of proposed bores is appropriate for the purpose of detecting groundwater contamination caused by the activity;
 - 3.4** provide reasons as to why the location and design of existing bores are appropriate for the purpose of detecting groundwater contamination caused by the activity.
- 4** Where the groundwater monitoring bore plan requires the construction of bores, those bores must be constructed within 6 months of the date on which the Director approves the groundwater monitoring bore plan.

- 5 At the time of construction of any bore required by the groundwater monitoring bore plan, the following information must be recorded and compiled into a Bore Installation and Development Record:
 - 5.1 a description of the materials used for construction;
 - 5.2 initial field measurements of the groundwater for conductivity, total dissolved solids, pH and temperature;
 - 5.3 details of slot screens installed, and the depth to which they were installed;
 - 5.4 depth of gravel packing;
 - 5.5 depth of the bentonite cap;
 - 5.6 details of bore development during pumping (removal of drilling contamination);
 - 5.7 results of pump tests;
 - 5.8 aquifer levels; and
 - 5.9 a detailed geological log.
- 6 The Director must be notified of construction of the bores required by the groundwater monitoring bore plan within 1 month of their construction. The Bore Installation and Development Record for each newly constructed bore must be provided with the notification.
- 7 The groundwater bores required by this condition must be established by a suitably qualified person in accordance with the Minimum Construction Requirements for Water Bores in Australia.

M7 Surface Water Monitoring Plan

- 1 Unless otherwise approved in writing by the Director, within 3 months of the date on which these conditions take effect, the person responsible must submit a surface water monitoring plan for approval by the Director.
- 2 The surface water monitoring plan must include:
 - 2.1 details of proposed surface water monitoring locations susceptible to surface water run-off from the Wastewater Reuse Scheme, including the western inlet to the existing surface water dam, located at approximate GDA94 coordinates 480704E 5289549N; and
 - 2.2 an outline the methods, parameters, frequency and duration of the proposed monitoring program.
- 3 The approved monitoring plan must be implemented within 3 months of the plan being approved to collect baseline data prior to commencement of operation of the Wastewater Reuse Scheme.
- 4 The plan must be reviewed and submitted for approval by the Director within 2 months of any works that change surface drainage to or from the irrigation areas specified in the Wastewater Reuse EMP.

Noise Control

N1 Noise emission limits

- 1 Noise emissions from the activity when measured at any noise sensitive premises in other ownership and expressed as the equivalent continuous A-weighted sound pressure level must not exceed:
 - 1.1 45 dB(A) between 0800 hours and 1800 hours (Day time); and
 - 1.2 37 dB(A) between 1800 hours and 2200 hours (Evening time); and
 - 1.3 32 dB(A) between 2200 hours and 0700 hours (Night time).

- 2 Where the combined level of noise from the activity and the normal ambient noise exceeds the noise levels stated above, this condition will not be considered to be breached unless the noise emissions from the activity are audible and exceed the ambient noise levels by at least 5 dB(A).
- 3 The time interval over which noise levels are averaged must be 10 minutes or an alternative time interval specified in writing by the Director.
- 4 Measured noise levels must be adjusted for tonality, impulsiveness, modulation and low frequency in accordance with the Tasmanian Noise Measurement Procedures Manual.
- 5 All methods of measurement must be in accordance with the Tasmanian Noise Measurement Procedures Manual.

N2 Update noise predictions

Before construction of the facility commences, noise predictions are to be carried out, to the satisfaction of the Director, by a suitably qualified practitioner to confirm that the noise limits in condition N1 will be achieved.

N3 Noise survey requirements

- 1 Unless otherwise approved by the Director, a noise survey must be carried out within three (3) months of the date these conditions take effect a baseline noise survey at the proposed location of the Lake Meadowbank offtake.
- 2 Unless otherwise approved by the Director, a noise survey including all hatchery operations must be carried out:
 - 2.1 within three (3) months of commencement of operations; and
 - 2.2 recurrently, with no longer than three (3) months since the previous survey for the first full year of production; and
 - 2.3 recurrently, with no longer than twelve (12) months since the previous survey after the first full year of production; and
 - 2.4 within six (6) months of any change to the activity which is likely to substantially alter the character or increase the volume of noise emitted from The Land; and
 - 2.5 at such other times as may reasonably be required by the Director by notice.

N4 Noise survey method and reporting requirements

- 1 Noise surveys must be undertaken in accordance with a survey method approved in writing by the Director, as may be amended from time to time with written approval of the Director.
- 2 Without limitation, the survey method must address the following:
 - 2.1 measurements must be carried out at day, evening and night times (where applicable) at each location; and
 - 2.2 measurement locations, and the number thereof, must be specified, with one location established as a control location (noise).
- 3 Measurements and data recorded during the survey must include:
 - 3.1 operational status of noise producing equipment and throughput of the activity;
 - 3.2 subjective descriptions of the sound at each location;
 - 3.3 details of meteorological conditions relevant to the propagation of noise;
 - 3.4 the equivalent continuous (L_{eq}) and L_1 , L_{10} , L_{50} , L_{90} and L_{99} A-weighted sound pressure levels measured over a period of 10 minutes or an alternative time interval approved by the Director;
 - 3.5 one-third octave spectra over suitably representative periods of not less than 1 minute; and

- 3.6 narrow-band spectra over suitably representative periods of not less than 1 minute.
- 4 A noise survey report must be forwarded to the Director within 30 days from the date on which the noise survey is completed.
- 5 The noise survey report must include the following:
 - 5.1 the results and interpretation of the measurements required by these conditions;
 - 5.2 a map of the area surrounding the activity with the boundary of The Land, measurement locations, and noise sensitive premises clearly marked on the map;
 - 5.3 any other information that will assist with interpreting the results and whether the activity is in compliance with these conditions and EMPCA; and
 - 5.4 recommendations of appropriate mitigation measures to manage any noise problems identified by the noise survey.

N5 Transport noise management

A management protocol must be developed and implemented to ensure that the operation of heavy vehicles whilst entering, on or leaving The Land do not exceed the noise limits in condition N1.

Operations

OP1 Notification prior to commencement of normal operations

The Director must be notified in writing of the commencement of normal operations at least 14 days before that occurs.

OP2 Contingency management

- 1 A Contingency Management Plan must be prepared and submitted to the Director for approval within six (6) months of the date on which these conditions take effect and maintained with relevant and contemporary information. The plan must detail measures to prevent and mitigate environmental harm if an unplanned event occurs. Unplanned events that must be addressed by the plan include but are not limited to:
 - 1.1 incidents, accidents, power failures and malfunctions with the potential to cause the release of effluent or odour that does not comply with these conditions;
 - 1.2 pipe ruptures leading to discharge of wastewater;
 - 1.3 mass mortalities of fish;
 - 1.4 the water exchange rate exceeding 90L/kg feed or the capacity of the reuse dam exceeding 80% of finished surface level risking the unauthorised discharge of reuse water;
 - 1.5 development of blue green algae (cyanobacteria) concentrations in the reuse dam that have the potential to cause environmental harm;
 - 1.6 soil salt accumulation deleterious to crop growth or soil structure; and
 - 1.7 fire and flooding.
- 2 The Contingency Management Plan must include communication procedures that ensure that water users and land holders that may be adversely impacted, the general public and relevant government agencies are informed of any unplanned event to the extent necessary to allow them to take precautions against adverse impacts upon the environment, human health and livestock health.
- 3 As far as is reasonable and practicable, the Contingency Management Plan must include contact details for all water users and land holders that may be impacted by an unplanned event and must be kept up to date by the person responsible.

- 4 The person responsible must ensure that all personnel are aware of the Contingency Management Plan and their responsibilities in relation to unplanned events and have access at all times to the Contingency Management Plan.
- 5 The approved Plan, including any amendment to or substitution of that Plan, approved in writing by the Director, must be implemented as approved.

OP3 Notification of fish or ova mortality

The licensee(s) must immediately notify the Director of any significant fish or ova mortality event within the fish farm to which this licence relates.

OP4 Identification of chemical additives and residues

- 1 Within 4 weeks of these conditions coming into effect, a list of all chemical additives that may come into contact with surface waters during the course of the activity and all chemical residues potentially arising from those chemical additives, must be identified, documented and submitted to the Director.
- 2 If the person responsible for the activity intends to modify the list of chemical additives and residues, the licensee(s) must notify the Director in writing of the full particulars of any change(s) to the list, as soon as reasonably practicable and before the changes are made to the activity.
- 3 This requirement will be deemed to be satisfied only when the Director indicates in writing that the submitted document sufficiently identifies chemical additives and chemical residues potentially arising from the activity.

OP5 Therapeutant and chemical use

- 1 Unless otherwise specified in writing by the Director, residues of therapeutic chemicals and cleaning chemicals in wastes that are applied to land must not be in concentrations that would cause them to be pollutants or cause them to persist in the environment.
- 2 Records of all therapeutic chemicals (including antibiotics, hormones, anti-fungal and anti-parasite medication) and chemical use in carrying out this activity must be kept for a minimum period of three years. Records must include date of use, reason for use, dosage (as applicable), total volume and method of disposal.

OP6 Weed management

- 1 At least 30 days prior to the commencement of construction, or by a date otherwise specified in writing by the Director, a Weed & Disease Management Plan must be submitted to the Director for approval. This requirement will be deemed to be satisfied only when the Director indicates in writing that the submitted document adequately addresses the requirements of this condition to his or her satisfaction.
- 2 The plan must be consistent with the Weed and Disease Guidelines, or any subsequent revisions of that document.
- 3 The person responsible must implement and act in accordance with the approved plan.
- 4 In the event that the Director, by notice in writing to the person responsible, either approves a minor variation to the approved plan or approves a new plan in substitution for the plan originally approved, the person responsible must implement and act in accordance with the varied plan or the new plan, as the case may be.

OP7 Operational Procedures and Maintenance Manual

- 1 An Operational Procedures and Maintenance Manual ('the Manual') must be developed within 12 months of the commencement of normal operations or by a date specified in writing by the Director. The Manual must provide detailed information relating to the activity and must detail operational procedures as required to ensure compliance with these conditions.

- 2 The Manual must be prepared in accordance with any reasonable guidelines provided by the Director. If no guidelines are provided, the Manual must:
 - 2.1 be written in an easy to understand format, with checklists, diagrams, instructions and photographs as appropriate;
 - 2.2 be available for easy reference by operational staff, including any documents referenced by the Manual; and
 - 2.3 be clear about who is responsible for carrying out tasks, as well as how, when or how often tasks should be performed.
- 3 The Manual must be kept up to date, and reviewed at least annually, and must take into account environment related complaints, incidents and changes to the activity.

Stormwater Management

SW1 Perimeter drains or bunds

- 1 Perimeter cut-off drains, or bunds, must be constructed at strategic locations on The Land to prevent surface run-off from entering the area used or disturbed in carrying out the activity. All reasonable measures must be implemented to ensure that sediment transported along these drains, or bunds, remains on The Land. Such measures may include provision of strategically located sediment fences, appropriately sized and maintained sediment settling ponds, vegetated swales, detention basins and other measures designed and operated in accordance with the principles of Water Sensitive Urban Design.
- 2 Drains, or bunds, must have sufficient capacity to contain run-off that could reasonably be expected to arise during a 1 in 20 year rainfall event. Maintenance activities must be undertaken regularly to ensure that this capacity does not diminish.

SW2 Stormwater

- 1 Polluted stormwater that will be discharged from The Land must be collected and treated prior to discharge to the extent necessary to prevent serious or material environmental harm, or environmental nuisance.
- 2 Notwithstanding the above, all stormwater that is discharged from The Land must not carry pollutants such as sediment, oil and grease in quantities or concentrations that are likely to degrade the visual quality of any receiving waters outside the Land.
- 3 All reasonable measures must be implemented to ensure that solids entrained in stormwater are retained on The Land. Such measures may include appropriately sized and maintained sediment settling ponds or detention basins.
- 4 Stormwater discharged in accordance with this condition must not be directed to sewer without the approval of the operator of the sewerage system.

Waste Management

WM1 Fish waste management

- 1 Unless otherwise specified in writing by the Director, fish waste generated on The Land must be kept in leak proof, lidded containers of strong construction, which must be kept closed when putrescible material is being held in them, to the extent practical and reasonable. Any such container to be kept outdoors must be fitted with a weather proof and animal resistant cover.
- 2 Containers holding fish waste must be moved to a refrigerated area as soon as reasonable and practical, but within 8 hours of generation of the waste at the latest. The contents must be removed from The Land within 48 hours of generation, unless frozen or acid stabilised.

WM2 Removal of fish waste and sludge

- 1** Fish waste, sludge and fish processing by-product must be disposed of only in the following ways:
 - 1.1** removal to a secondary processing facility which has all necessary approvals to conduct these activities; or
 - 1.2** removal to another site for beneficial reuse, provided that this is in accordance with a management plan approved in writing by the Director and provided that the destination site has all necessary approvals for such reuse; or
 - 1.3** removal to a waste depot (landfill) which has all necessary approvals for disposal of such waste.

WM3 Management of Wastes Containing Restricted Animal Material

All wastes containing fish tissues or fish meal, including fish farm sludge waste, must be treated as Restricted Animal Material (RAM). Ruminant stock must be prevented from accessing RAM. Where sludge waste is landspread a minimum withholding period for ruminant stock of 21 days or until the sludge waste is no longer visible must be observed.

Schedule 3: Information

Legal Obligations

LO1 EMPCA

The activity must be conducted in accordance with the requirements of the *Environmental Management and Pollution Control Act 1994* and Regulations thereunder. The conditions of this document must not be construed as an exemption from any of those requirements.

LO2 Storage and handling of dangerous goods, explosives and dangerous substances

- 1 The storage, handling and transport of dangerous goods, explosives and dangerous substances must comply with the requirements of relevant State Acts and any regulations thereunder, including:

- 1.1 *Work Health and Safety Act 2012* and subordinate regulations;

- 1.2 *Explosives Act 2012* and subordinate regulations; and

- 1.3 *Dangerous Goods (Road and Rail Transport) Act 2010* and subordinate regulations.

LO3 Aboriginal relics requirements

- 1 Aboriginal relics, objects, sites, places and human remains regardless of whether they are located on public or private land, are protected under the *Aboriginal Heritage Act 1975*.
- 2 Unanticipated discoveries of Aboriginal heritage must be reported to Aboriginal Heritage Tasmania on **1300 487 045** as soon as possible.

Other Information

OI1 Notification of incidents under section 32 of EMPCA

Where a person is required by section 32 of EMPCA to notify the Director of the release of a pollutant, the Director can be notified by telephoning **1800 005 171** (a 24-hour emergency telephone number).

OI2 Waste management hierarchy

- 1 Wastes should be managed in accordance with the following hierarchy of waste management:
 - 1.1 waste should be minimised, that is, the generation of waste must be reduced to the maximum extent that is reasonable and practicable, having regard to best practice environmental management;
 - 1.2 waste should be re-used or recycled to the maximum extent that is practicable; and
 - 1.3 waste that cannot be re-used or recycled must be disposed of at a waste depot site or treatment facility that has been approved in writing by the relevant planning authority or the Director to receive such waste, or otherwise in a manner approved in writing by the Director.

Figure 1: THE LAND, INCLUDING HATCHERY (LOT 1) AND REUSE SCHEME (LOT 2 & FR 36657/5)

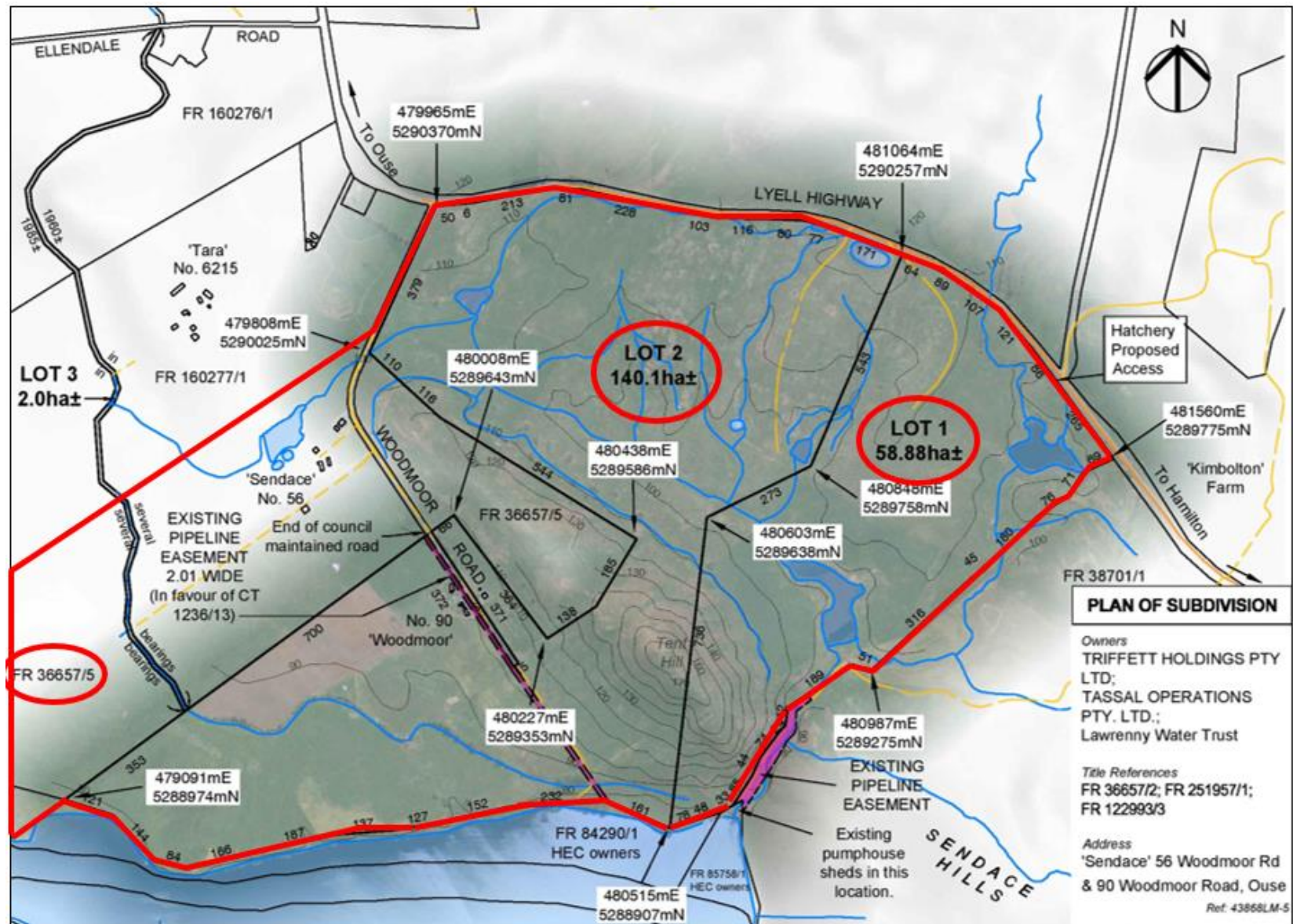
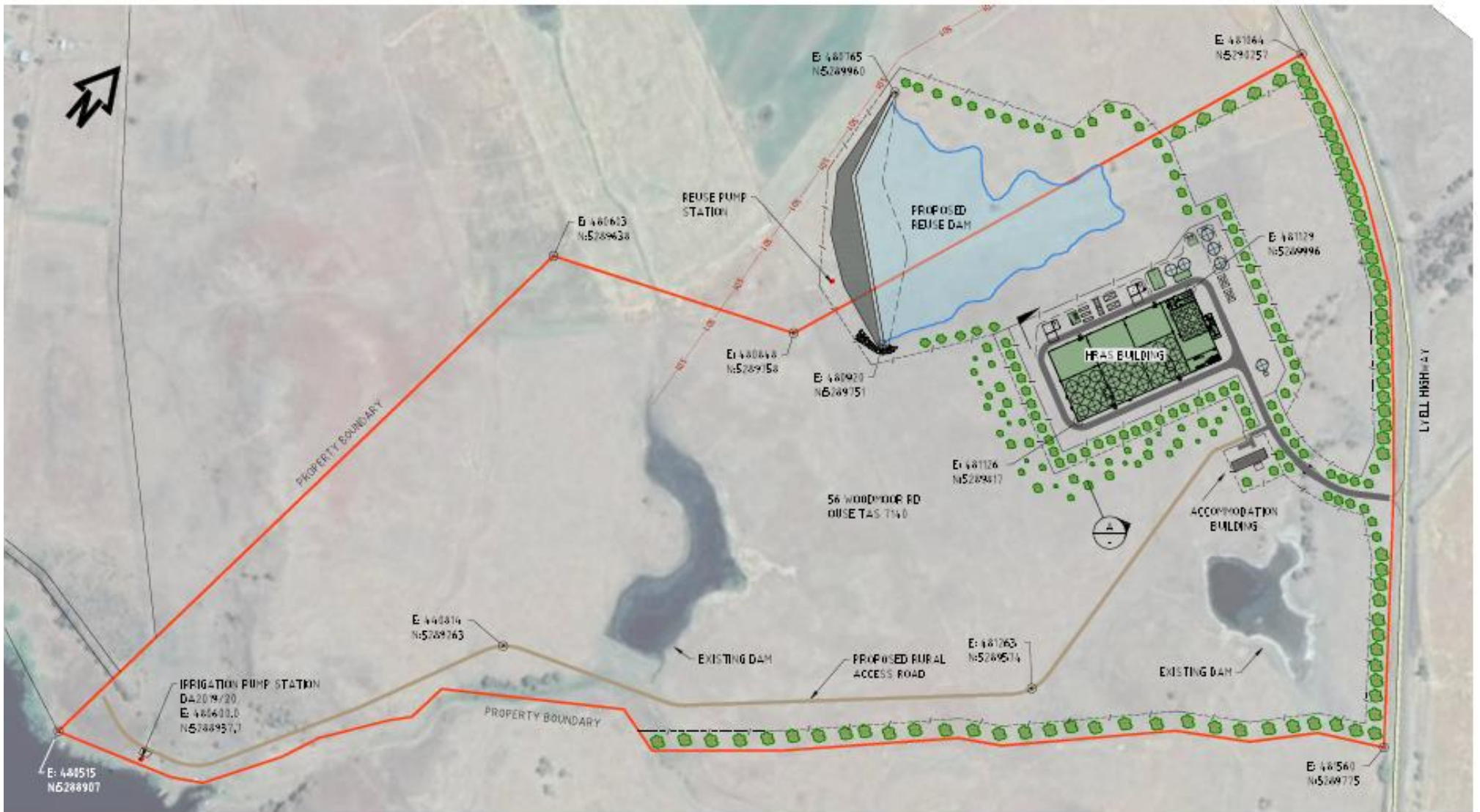


Figure 2: PROPOSED LAYOUT OF HATCHERY AND REUSE DAM



[illegible]

ATTACHMENT 2: TABLE OF MONITORING REQUIREMENTS ENVIRONMENTAL LICENCE 10300/1

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
Item	Locations	Parameter	Unit of Measure	Frequency	Technique	Reporting requirements
Inflow to hatchery	Intake water pump station	Flow	kL/day	Continuous measurement	On-line Flow Meter	1. To be reported in the Monthly Monitoring Report as an average for the reporting period of daily flow. 2. To be reported in the Annual Environmental Review as monthly averages of daily flow.
Hatchery Effluent	Discharge from RAS process Discharge from Hatchery sludge removal plant	Flow	kL/day	Continuous measurement	On-line Flow Meter	1. To be reported in the Monthly Monitoring Report and Annual Environmental Review as monthly flows for each calendar month, based on daily flows for that month.
		pH	-	Weekly for first 3 months of normal operations then monthly. Repeat weekly sampling for 2 months to capture a period of peak biomass each year for the first 3 years of operation.	Field Test	1. Results to be reported in the Monthly Monitoring Report 2. A summary of results to be provided in the Annual Environmental Review.
		Temperature	°C		24 hour flow-weighted composite sample	
		Conductivity	µS/cm			
		Biochemical Oxygen Demand	mg/L			
		Ammonia-Nitrogen	mg/L			
		Nitrate-Nitrogen	mg/L			
		Nitrite-Nitrogen	mg/L			
		Total Nitrogen	mg/L			
		Total Phosphorus	mg/L			
		Dissolved Reactive Phosphorus	mg/L			
		Total and dissolved Calcium	mg/L			
		Total and dissolved Magnesium	mg/L			
		Total and dissolved Potassium	mg/L			
		Total and dissolved Chlorine	mg/L			
		Total and dissolved Sulphur	mg/L			
		Total Alkalinity	mg/L			
		Trace elements (Boron, Iron, Molybdenum)	mg/L			
		Heavy metals (Arsenic, Cadmium, Chromium, Cobalt, Lead, Manganese, Mercury, Nickel, Selenium, Zinc)	mg/L			
		Streptococci	cfu/100mL			
Thermotolerant coliforms	cfu/100mL					
Effluent Quality	Discharge from the Reuse Dam	Flow to Reuse	kL/day	Continuous measurement	On-line Flow Meter	1. To be reported in the Monthly Monitoring Report and Annual Environmental Review as monthly flows for each calendar month, based on daily flows for that month.
		pH	-	Monthly	Field Test	1. Results to be reported in the Monthly Monitoring Report 2. A summary of results to be provided in the Annual Environmental Review.
		Temperature	°C		Grab sample	
		Conductivity	µS/cm			
		Biochemical Oxygen Demand	mg/L			
		Ammonia-Nitrogen	mg/L			
		Nitrate-Nitrogen	mg/L			
		Nitrite-Nitrogen	mg/L			
		Total Nitrogen	mg/L			
		Total Phosphorus	mg/L			
		Thermotolerant coliforms	cfu/100mL			
		Blue-green algae	cells/mL			

Column 1	Column 2	Column 3	Column 4	Column 5	Column 6	Column 7
Item	Locations	Parameter	Unit of Measure	Frequency	Technique	Reporting requirements
Meadowbank Lake water	Freshwater shandy volume	Flow	kL/day	Continuous measurement	On-line Flow Meter	1. To be reported in the Monthly Monitoring Report and Annual Environmental Review as monthly flows for each calendar month, based on daily flows for that month.
Reuse controls	Float switch (or equivalent) on dam	Dam level	m	Monthly		1. To be reported in the Monthly Monitoring Report 2. To be included in annual reporting requirements and information used in any review of the reuse scheme operation.
	Conductivity probe	Conductivity	µS/cm	Continuous		1. To be reported in the Monthly Monitoring Report as a daily average. 2. To be included in annual reporting requirements and information used in any review of the reuse scheme operation.
Reuse Scheme	Soil monitoring in irrigation areas	As described in the approved Wastewater Reuse EMP	As described in the approved Wastewater Reuse EMP	As described in the approved Wastewater Reuse EMP with baseline monitoring to commence 12 months prior to intended commencement of irrigation	As described in the approved Wastewater Reuse EMP	1. To be included in annual reporting requirements and information used in any review of the reuse scheme operation.
	Surface Water as described in the Surface Water Monitoring Plan approved under the requirements of condition M7	As described in the Surface Water Monitoring Plan approved under the requirements of condition M7	As described in the Surface Water Monitoring Plan approved under the requirements of condition M7	As described in the Surface Water Monitoring Plan approved under the requirements of condition M7	As described in the Surface Water Monitoring Plan approved under the requirements of condition M7	1. To be included in annual reporting requirements and information used in any review of the reuse scheme operation.
	For each irrigation zone	Livestock	Average head stocked per month per species	Monthly	Records	1. To be included in annual reporting requirements and information used in any review of the reuse scheme operation.
		Soil amendments	Details of all applications of soil amendments and application rate			
Groundwater	Bore locations – As approved under the groundwater monitoring plan as per condition M6	As described in the approved Wastewater Reuse EMP	As described in the approved Wastewater Reuse EMP	As described in the approved Wastewater Reuse EMP	As described in the approved Wastewater Reuse EMP	1. Records to be reported in the Annual Environmental Review.

For the purposes of the Table of Monitoring Requirements the following definitions apply:

Flow Meter means an instrument that measures and records a flow or level of liquid and includes any ancillary device attached to or incorporated into the instrument

Continuous measurement means automatic ongoing measurement at all times

On-line means measurements or analyses are carried out automatically and the results electronically recorded for remote viewing and analysis

Field test/ on-site test means either *in situ* testing or analysis of samples immediately with appropriate instrumentation

Grab sample means a discrete sample collected in a manner that ensures it is a representative sample

Flow-weighted 24 hour composite sample means a composite sample consisting of grab samples taken and mixed in such a way the sample volume is proportional to the wastewater flow or a sample collected continuously over a 24 hour period at a rate proportional to wastewater flow.

S:\19 PROJECTS 2019\190503_TASSAL HRAS OVERNIGHT ACCOMMODATION\ ARCHICAD\190618_TASSAL HRAS OVERNIGHT ACCOMMODATION.prt1/07/20193:03 PM

TASSAL HRAS ACCOMMODATION

for

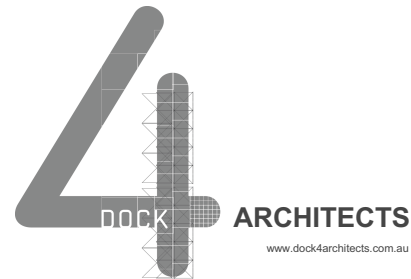
TASSAL GROUP LIMITED

Project Number: 190503

Date: 1/07/2019

Status
DEVELOPMENT APPLICATION

Sheet Index		
Layout ID	Layout Name	Revision
	COVER	A
A.1.01	LOCATION PLAN	A
A.1.02	SITE PLAN	A
A.1.03	FLOOR PLAN	A
A.1.04	ELEVATIONS	A
A.1.05	ELEVATIONS	A
A.1.06	RENDERS	A

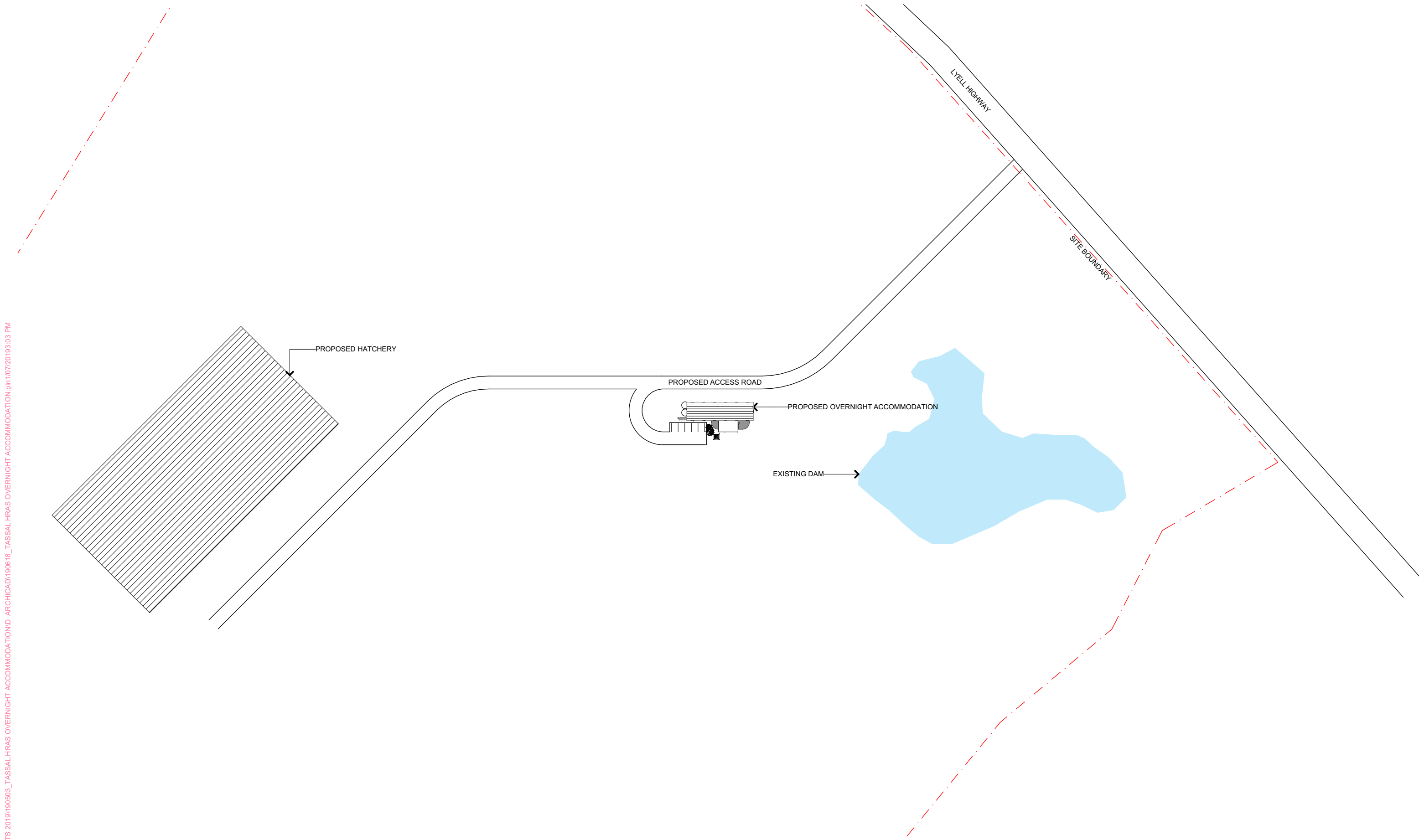


www.dock4architects.com.au

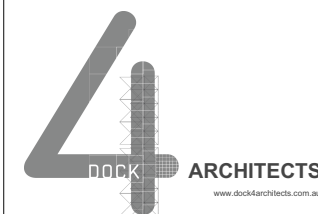

MELBOURNE
673 BOURKE STREET
MELBOURNE, VIC, 3000
PH: (03) 6231 0469
info@dock4.com.au

HOBART
LVL 2, 100 COLLINS STREET
HOBART, TAS, 7000
PH: (03) 6231 0469
info@dock4.com.au

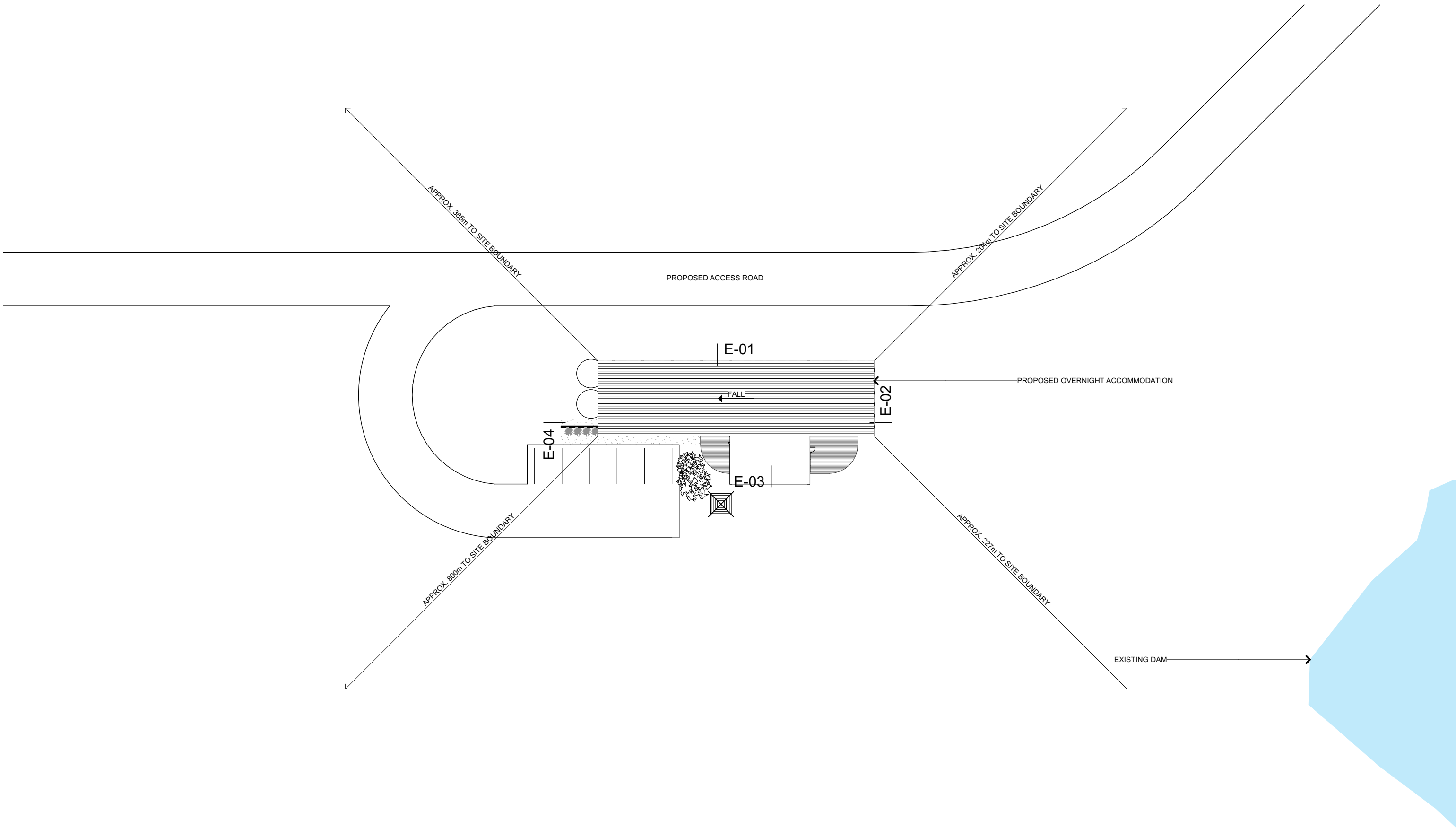
S:\119 PROJECTS 2019\190503_TASSAL HRAS OVERNIGHT ACCOMMODATION.pht 1/07/2019 3:03 PM



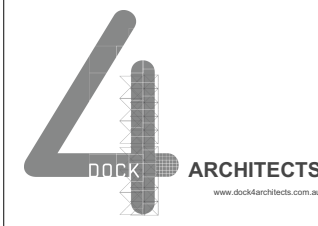
LOCATION PLAN
1:2000

<div><p>DOCK4 ARCHITECTS www.dock4architects.com.au</p></div> <div><p>MELBOURNE 673 BOURKE STREET MELBOURNE, VIC, 3000 PH: (03) 6231 0469 info@dock4.com.au</p><p>HOBART LVL 2, 102 COLLINS STREET HOBART, TAS, 7000 PH: (03) 6231 0469 info@dock4.com.au</p></div>	<p>TASSAL GROUP LIMITED</p> <div><p>tassal PURE TASMANIA</p></div>	<table><thead><tr><th>Date</th><th>Change Name</th><th>ChID</th><th>RevID</th></tr></thead><tbody><tr><td>1/07/2019</td><td></td><td></td><td>A</td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td>206</td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr></tbody></table>	Date	Change Name	ChID	RevID	1/07/2019			A																																			206										<div><div>FOR INFORMATION ONLY</div><div>NOT FOR CONSTRUCTION REVIS REVIS REVIS</div></div>	<p>TASSAL HRAS ACCOMMODATION</p> <p>56 WOODMOOR ROAD OUSE TASMANIA 7140 AUSTRALIA</p> <p>Status DEVELOPMENT APPLICATION Project number 190503</p> <p>Date generated 1/07/2019 Drawn ED Approved GN</p> <p>Accredited Designer: Richard Loney CC 6198Y</p>	<div><div>ARCHITECTURAL LOCATION PLAN</div><div>A.1.01 A</div></div> <div><div>Drawing title</div><div>Drawing number Revision</div></div>
Date	Change Name	ChID	RevID																																																						
1/07/2019			A																																																						
		206																																																							

S:\119 PROJECTS 2019\190503_TASSAL HRAS OVERNIGHT ACCOMMODATION\p1\10720193.03 PM




SITE PLAN
1:500



MELBOURNE
673 BOURKE STREET
MELBOURNE VIC 3000
PH: (03) 6231 0469
info@4dock4.com.au

HOBART
LVL 2, 102 COLLINS STREET
HOBART TAS 7000
PH: (03) 6231 0469
info@4dock4.com.au

TASSAL GROUP LIMITED



Date	Change Name	ChID	RevID
1/07/2019			A
		207	

FOR
INFORMATION
ONLY

NOT FOR CONSTRUCTION
REVISÉ DOCUMENT
REPLACE EARLIER ISSUE

TASSAL HRAS ACCOMMODATION

56 WOODMOOR ROAD OUSE
TASMANIA 7140 AUSTRALIA

Status

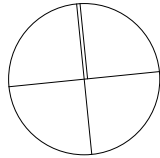
DEVELOPMENT APPLICATION

Date generated
1/07/2019

Project number
190503

Drawn
ED

Approved
GN



Accredited Designer: Richard Loney CC 6198Y

ARCHITECTURAL
SITE PLAN

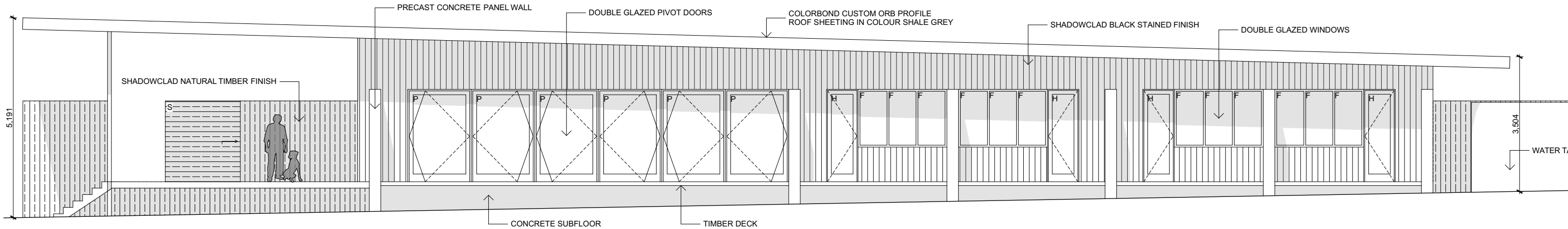
Drawing number
A.1.02

Revision
A



1:100

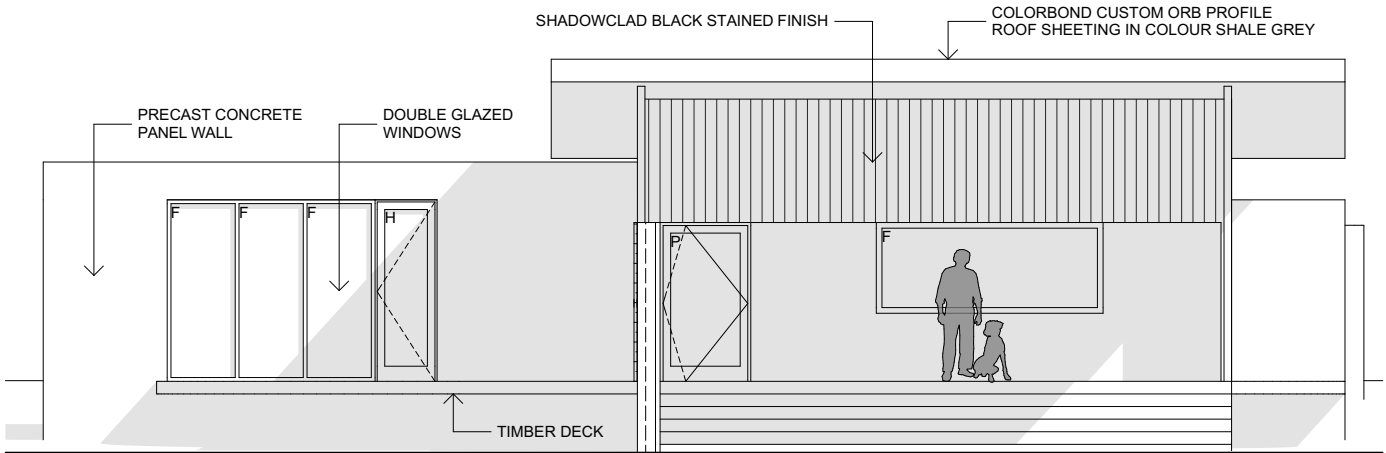
S:\119 PROJECTS 2019\190503_TASSAL HRAS OVERNIGHT ACCOMMODATION\p1\072019\3.03 PM



E-01

Elevation

1:100

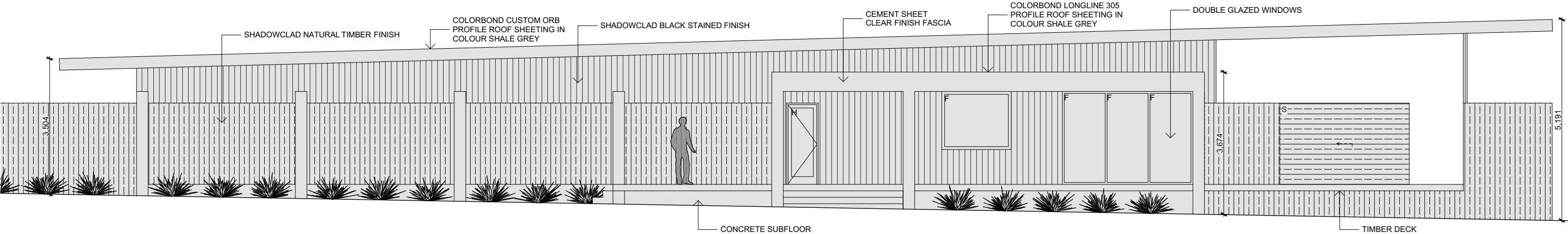


E-02

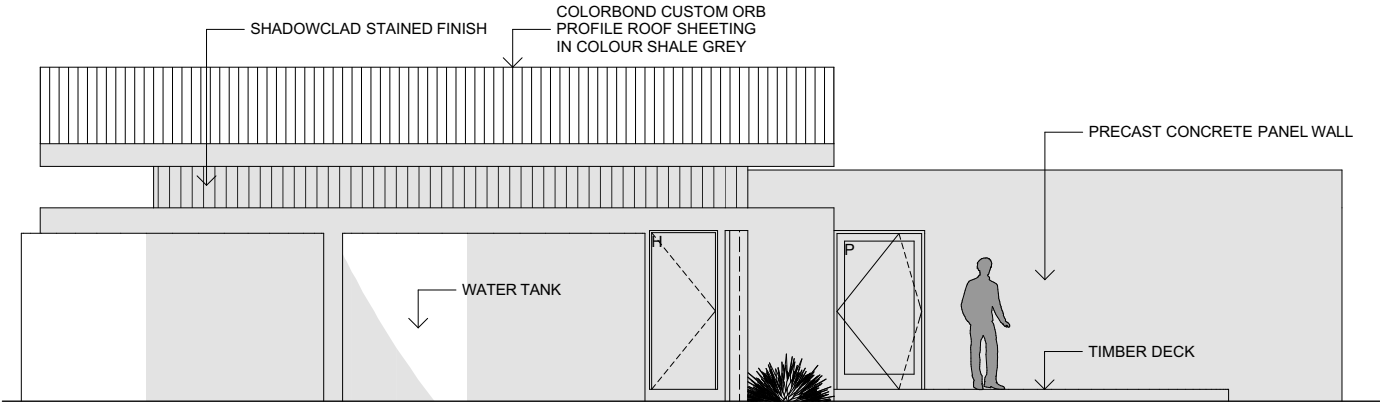
Elevation

1:100

S:\119 PROJECTS 2019\190503_TASSAL HRAS OVERNIGHT ACCOMMODATION\p1\072019\3.03 PM




E-03 Elevation 1:100



E-04 Elevation 1:100

S:\119 PROJECTS 2019\190503_TASSAL HRAS OVERNIGHT ACCOMMODATION\190618_TASSAL HRAS OVERNIGHT ACCOMMODATION.ppt 1/07/2019 3:03 PM





4

ARCHITECTS

www.4architects.com.au

MELBOURNE

673 BOURKE STREET
MELBOURNE VIC 3000
PH: (03) 6231 0469
info@4architects.com.au


HOBART

LVL 2, 102 COLLINS STREET
HOBART TAS 7000
PH: (03) 6231 0469
info@4architects.com.au

TASSAL GROUP LIMITED

tassal

PURE TASMANIA



Date	Change Name	ChID	RevID
1/07/2019			A
		211	

FOR
INFORMATION
ONLY

NOT FOR CONSTRUCTION

REVISD DOCUMENT

REPLACE EARLIER ISSUE

TASSAL HRAS ACCOMMODATION

56 WOODMOOR ROAD OUSE
TASMANIA 7140 AUSTRALIA

Status

DEVELOPMENT APPLICATION

Date generated
1/07/2019

Drawn
ED

Approved
GN

Accredited Designer: Richard Loney CC 6198Y

Project number
190503

Drawing number
A.1.06

Revision
A

ARCHITECTURAL
RENDERS



Tassal Operations Pty Ltd

**Supplementary information for the
Hamilton Recirculating Aquaculture System Hatchery
Environmental Impact Statement**



October 2019

The information contained in this document is provided in the form of a Supplement to Tassal's Hamilton Recirculating Aquaculture System Hatchery EIS. The following table summarises the sections of the EIS where supplementary information or commitments have been amended or added.

Supplementary information	EIS section
Water offtake pump station	Section 6.4 – Noise emissions
	Appendix G – HRAS – G-10 and G-13

DRAFT

1 WATER OFFTAKE PUMP STATION

1.1 Pump station location

The pump station already approved under DA 2019/20, will be located on the Lake Meadowbank foreshore (Figure 1) – Eastings: 480600; Northings: 5288937. The pump station and underground pipeline will primarily provide irrigation water to centre pivots and connect to the Hatchery to supply freshwater.

DRAFT

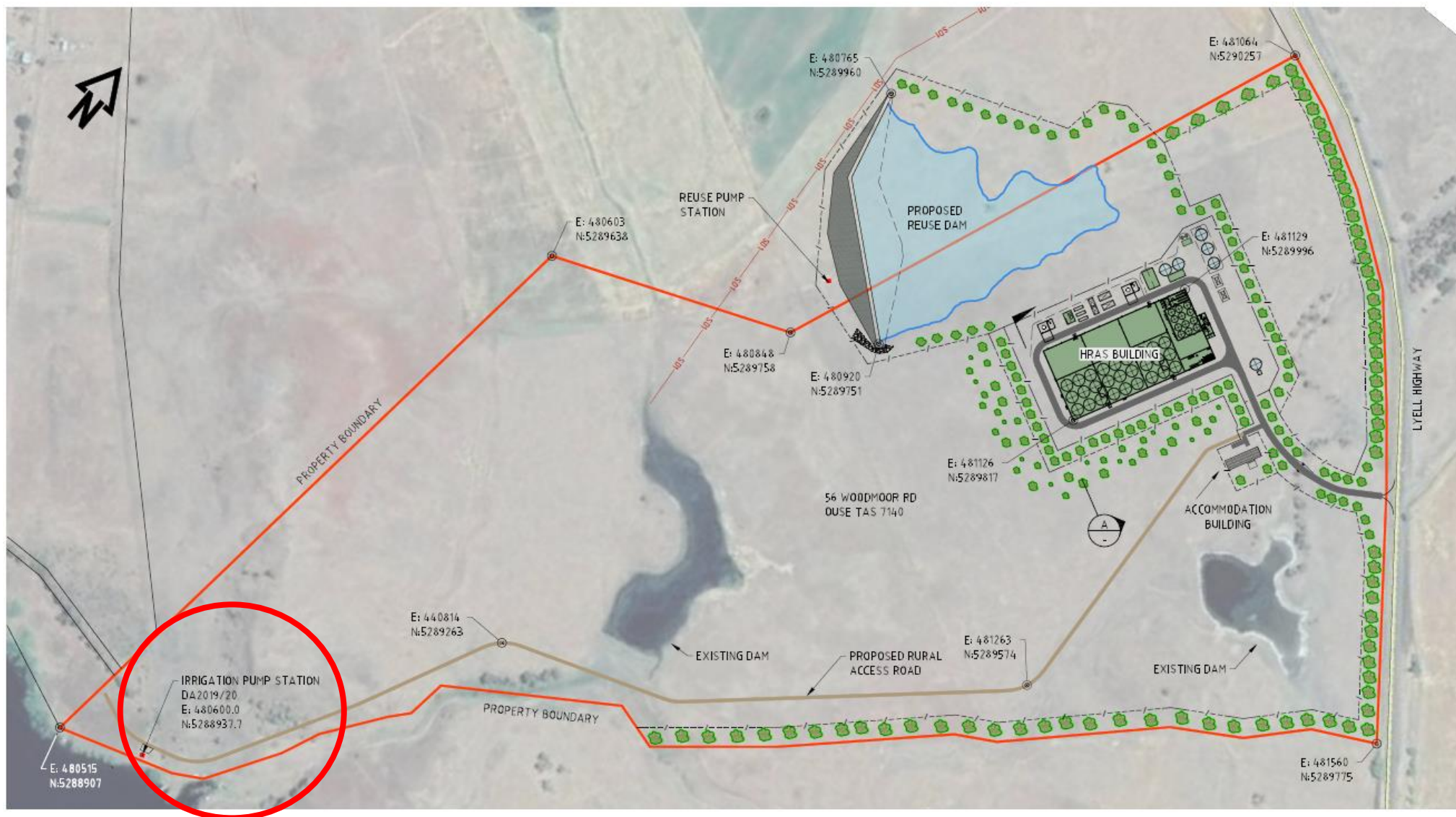


Figure 1 Location of the irrigation pump station at Lake Meadowbank foreshore (circled in red)

1.2 Pump configuration/capacity

The proposed pump station will consist of 2 x 45kw pumps housed in concrete chambers which will be located below the natural ground surface to minimise noise emissions. A 3m (l) x 4m (w) x 2.4 m (h) shed located above ground will contain the necessary electrical control equipment for the pumps, which will be housed in concrete cased wells approximately 2 m below ground (Figure 2). Pipework and fittings will predominantly be installed below ground level and designed to minimise any potential noise emissions during pumping operations.

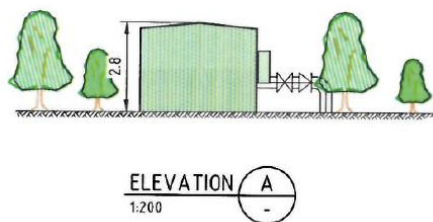
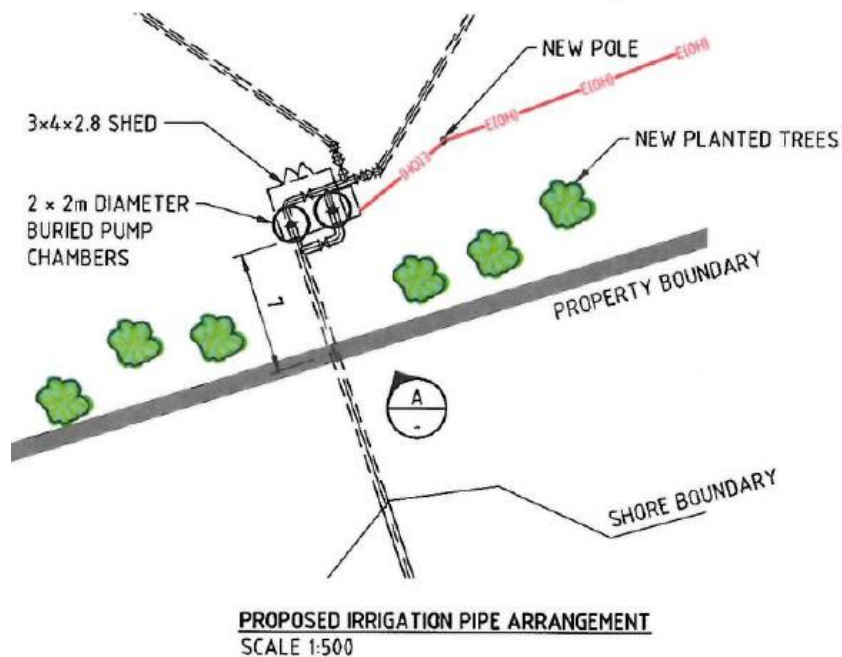


Figure 2 Proposed Pump Station Configuration as approved in DA 2019/20

Tassal understands that a number of representations expressed concerns regarding a pump station of configuration 20 m (l) x 12 m (w) x 4.8 m (h) to be located near the foreshore of Meadowbank Lake. There may have been some confusion with Appendix G to the EIS – Drawing No. HRAS-G-13 that shows a Pump Shed Building Floor Plan. This shed is located adjacent to the western side of the proposed hatchery and houses the chiller pumps and switchroom. It has no relation to the pump station approved under DA 2019/20. The design drawing descriptions have been amended to reflect a more appropriate description of the shed from pump shed to chiller pump shed/switchroom.

1.3 Pump station operations

The pump station will supply freshwater to both irrigation pivots and the hatchery. During peak irrigation periods (i.e. warmer/drier months) the pump station is expected to operate continuously for approximately 6-8 months of the year. This means that the pump station will be in operation during evenings (1800-2200 hours) and at night-time (2200-0700 hours) during this period.

During the remaining months (i.e. autumn/winter period), when irrigation will be undertaken opportunistically, the pump station may only operate 5-8 hours per day, in hourly increments, mostly likely during working hours (i.e. daylight hours). This operational regime may be subject to change, depending on operational demands.

1.4 Existing pump station

An existing pump station (located 70 m from the proposed pump station) currently on land owned by Triffet Holdings Pty Ltd is to be transferred to Tassal on completion of the transfer of Lot 1 to Tassal. Tassal intends to maintain the existing pump station.

1.5 Expected noise emissions

Most of the numerous pump stations scattered across rural Tasmania do not cause noise nuisance and indeed there are three existing pump stations in the vicinity of the proposed pump station.

Tassal proposes to install two x 45 kW pumps that will be submerged in concrete cased wells beneath ground level. Tassal installed a pump station at Narrows Road, Dover comprising 2 x 55 kW situated above ground level on a concrete pad. Noise mitigation measures were applied to this facility to reduce noise emissions to 28 dBA at the nearest residence - 250 metres from the pump station, and below the required 32 dBA night-time noise level limit.

As the proposed pumps will be smaller than those commissioned along Narrows Road and will also be submerged in concrete-cased wells beneath ground level, the proposed pump station approved under DA 2019/20 will discharge noise levels below the levels experienced at the Narrows Rd pump station.

Tassal is considering the option of installing 4-pole machines which would assist in minimising noise emissions even further.

Tassal is committed to incorporating noise mitigation measures into the design and post-commissioning noise monitoring of the proposed pump station, as per recommendations from a noise specialist consultant.

It is therefore conservative to provide worst case noise level predictions based on the 28 dBA at 250m achieved by the Dover pump station.

1.6 Noise mitigation measures

The pump station design will incorporate noise mitigation measures, and may include:

- i. Close source noise control. In other words, an enclosure over the top of the concrete-cased wells containing the pumps.
- ii. Sound absorbing and barrier material on the inside of the pump station - material that is matched to the 1/3rd octave band noise levels of the pump noise.

- iii. Ventilation intakes and outlets designed to prevent noise breakout. This is straightforward and Tassal is experienced in similar designs for other noise bearing activities. Tassal's noise specialist will assess any noise breakout from the pump station and request our specialist supplier (National Acoustic Products) to design acoustic louvres as an appropriate noise mitigation measure.
- iv. Orientation - the pump station will be orientated facing SW where there are no noise sensitive uses in that direction.
- v. If required, external earth berm and/or a 2.4m high solid fence adjacent to the pump station. Again, Tassal has experience of these mitigation measures: the Rookwood II hatchery has an earth berm next to the chiller fans and the Russell Falls hatchery has a 70 long 2.4m high solid fence that has satisfactorily mitigated noise impact on the adjacent visitor accommodation.

1.7 Nearest sensitive receptors

The following locations are considered to represent the nearest sensitive receptors to noise emissions from the proposed pump station to be established as described in DA 2019/20.

- i. The nearest residence is at 90 Woodmore Road about 750m NW of the pump station. Terrain blocking means this residence does not have line of sight to the pump station.
- ii. The nearest residences that do have line of sight to the pump station are located approximately 1.4 km due south of the pump station.
- iii. There is an informal recreational jetty area a short distance east of the pump station, conservatively estimated to be approximately 50m from the pump station. This jetty is located on Hydro land and is accessed via Tassal's property.

For residences, the Tasmanian EPA's most stringent night time noise level limit is 32 dBA. Tassal's intent is to set a design target between 20-25 dBA. This means that noise emanating from the proposed pump station will be inaudible outside the residence. The addition of the noise mitigation measures described above will further reduce noise levels.

For the informal recreational jetty area, a day-time noise level limit of 50 dBA is considered appropriate. Informal discussions held with the EPA in 2014, as part of the last assessment of the leases at Great Taylors Bay, led to agreement that 50 dBA was an appropriate day time noise level limit for the Partridge Island jetty & picnic area. This limit also assumes that recreational areas such as these are not as noise sensitive as residences and reflect the types of activities that do not generally occur during night-time hours. There are existing pumping stations which operate closer to this recreational location than the new pump station will. In addition, these existing pump stations have less noise mitigation measures than will be proposed for the new pump station.

Residence - 90 Woodmore Road

Using the Tassal pumpstation located at Narrows Rd, Dover as a comparative operation to what is proposed as part of DA 2019/20, the adjustment for distance is 10 dB (250m to 750m) including 0.5 dB for sound energy absorption by the atmosphere, so the pump station baseline noise level prediction is $28 - 10 = 18$ dBA at 750m.

The baseline prediction does not consider terrain blocking and 90 Woodmore Road does not have line of sight to the pumps station. In other words, the residence is located in a noise shadow of Tent Hill. Noise levels at 90 Woodmore Road are therefore predicted to be 10 dBA or less, completely inaudible, even on the calmest night.

Residences - south of the pump station

Repeating the above comparison, the adjustment for sound wave spreading with distance is 16 dB (250m to 1,400m), including 1 dB for sound energy absorption by the atmosphere, so the pump station noise level prediction is $28 - 16 = 12$ dBA at 1,400m, again completely inaudible even on the calmest night.

Recreational area - Jetty

The adjustment for sound wave spreading with distance is 14 dB (250m to 50m), so the pump station noise level prediction is $28 + 14 = 42$ dBA at 50m. This is in compliance with the 45 dBA day time noise level limit that the EPA would apply for a more noise sensitive receptor (e.g. a residence) and in good compliance with the 50 dBA day time noise level limit that the EPA has previously agreed is appropriate for an outdoor recreational area.



OFFICE USE ONLY

Application No.: _____

Property ID No.: _____

Date Received: _____

Application for Planning Approval Use and Development

Use this form to apply for planning approval in accordance with section 57 and 58 of the *Land Use Planning and Approvals Act 1993*

Applicant / Owner Details:

Applicant Name	Tassal Operations Pty Ltd		
Postal Address	Level 9, 1 Franklin Wharf	Phone No:	0427010904
	Hobart	7000	Fax No:
Email address	Sean.riley@tassal.com.au		
Owner/s Name (if not Applicant)	See Section 2.2 of Planning Report Tassal Operations Pty Ltd is the owner of 90 Woodmoor Rd		
Postal Address	Level 9, 1 Franklin Wharf	Phone No:	0427010904
	Hobart	7000	Fax No:
Email address:	sean.riley@tassal.com.au		

Description of proposed use and/or development:

Address of new use and development:	56 & 90 Woodmoor Road including CT251957/1, CT 36657/2, CT 36657/5, CT 84290/1 and CT122993/3		
Certificate of Title No:	Volume No	as above	Lot No:
Description of proposed use or development:	Hatchery and farm irrigation - see full description in EIS and Planning Report Level 2B Application under EMPCA		
Current use of land and buildings:	Agricultural		
Proposed Material	What are the proposed external wall colours	Colorbond 'paperbark'	What is the proposed roof colour
	What is the proposed new floor area m ² .	13,000	What is the estimated value of all the new work proposed:
			\$ 46M

ie: New Dwelling /Additions/ Demolition / Shed / Farm Building / Carport / Swimming Pool or detail other etc.

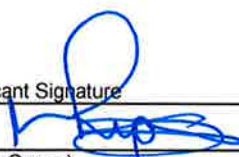
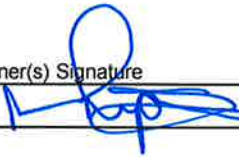
Eg. Are there any existing buildings on this title?
If yes, what is the main building used as?

Is proposed development to be staged:	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Tick ✓
Is the proposed development located on land previously used as a tip site?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Is the place on the Tasmanian Heritage Register?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Have you sought advice from Heritage Tasmania?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Has a Certificate of Exemption been sought for these works?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	

Signed Declaration

I/we hereby apply for a planning approval to carry out the use or development described in this application and in the accompanying plans and documents, accordingly I declare that:

1. The information given is a true and accurate representation of the proposed development. I understand that the information and materials provided with this development application may be made available to the public. I understand that the Council may make such copies of the information and materials as, in its opinion, are necessary to facilitate a thorough consideration of the Development Application. I have obtained the relevant permission of the copyright owner for the communication and reproduction of the plans accompanying the development application, for the purposes of assessment of that application. I indemnify the Central Highlands Council for any claim or action taken against it in respect of breach of copyright in respect of any of the information or material provided.
2. In relation to this application, I/we agree to allow Council employees or consultants to enter the site in order to assess the application.
3. I am the applicant for the planning permit and I have notified the owner/s of the land in writing of the intention to make this application in accordance with Section 52(1) of the *Land Use Planning Approvals Act 1993* (or the land owner has signed this form in the box below in "Land Owner(s) signature");
Applies where the applicant is not the Owner and the land is not Crown land or owned by a council, and is not land administered by the Crown or a council.

Applicant Signature  (if not the Owner)	Applicant Name (Please print) Mark Ryan obo Tassal Operations Pty Ltd	Date 5 September 2019
Land Owner(s) Signature 	Land Owners Name (please print) Mark Ryan obo Tassal Operations Pty Ltd	Date 5 September 2019
Land Owner(s) Signature <div style="border: 1px solid black; height: 20px; width: 100%;"></div>	Land Owners Name (please print) <div style="border: 1px solid black; height: 20px; width: 100%;"></div>	Date <div style="border: 1px solid black; height: 20px; width: 100%;"></div>

Other owners notified 5 September 2019

CT36657/2	56 Woodmoor Road	Triffett Holdings Pty Ltd
CT36657/5	56 Woodmoor Road	Triffett Holdings Pty Ltd
CT84290/1	Part of Meadowbank Lake	Hydro Electric Commission
CT122993/3	Water race	Lawrenny Water Trust

✓



1

<p>Information</p> <p>If you provide an email address in this form then the Central Highlands Council ("the Council") will treat the provision of the email address as consent to the Council, pursuant to Section 6 of the Electronic Transactions Act 2000, to using that email address for the purposes of assessing the Application under the Land Use Planning and Approvals Act 1993 ("the Act").</p> <p>If you provide an email address, the Council will not provide hard copy documentation unless specifically requested.</p> <p>It is your responsibility to provide the Council with the correct email address and to check your email for communications from the Council.</p> <p>If you do not wish for the Council to use your email address as the method of contact and for the giving of information, please tick ✓ the box</p>	<input type="checkbox"/>
<p>Heritage Tasmania</p> <p>If the Property is listed on the Tasmanian Heritage Register then the Application will be referred to Heritage Tasmania unless an Exemption Certificate has been provided with this Application. (Phone 1300 850 332 or email enquires@heritage.tas.gov.au)</p>	
<p>TasWater</p> <p>Depending on the works proposed Council may be required to refer the Application to TasWater for assessment (Phone 136992)</p>	

Service Level Agreement

For the exchange of Location Data and Services

between the

Central Highlands Council

and the

*Department of Primary Industries,
Parks, Water and Environment*

Version 3.0a – November 2019

DRAFT

This page is intended to be blank

TABLE OF CONTENTS

1.	Purpose.....	4
2.	Key Services.....	4
3.	Fees and charges.....	4
4.	Data Use	4
5.	Data Exchange.....	4
6.	Term.....	4
7.	Management and variation of the Agreement	6
8.	Notices	6
9.	Dispute Resolution.....	6
10.	Termination	6
11.	Signing page.....	7

Attachment 1 – Data transfer to Central Highlands Council

Attachment 2 – Data transfer to DPIPWE

Attachment 3 – Contacts

1. Purpose

Both parties acknowledge this Service Level Agreement (Agreement):

- 1.1. Describes the location data and services (Data) for exchange between each party
- 1.2. Details the obligations and responsibilities of each party whilst exchanging and using the Data
- 1.3. Reflects the shared desire to promote the use of location data and services, improve cooperation between state government agencies and reduce duplication, whilst maintaining clarity on roles, resourcing and responsibilities.

2. Key Services

Both parties agree the Key Services of the Agreement are:

- 2.1. DPIPWE shall provide Central Highlands Council with the Data as listed in Attachment 1
- 2.2. Central Highlands Council shall provide DPIPWE with Data as listed in Attachment 2
- 2.3. The parties will liaise in accordance with the contacts listed in Attachment 3.

3. Fees and charges

- 3.1. Neither party will impose a Fee or Charge for the exchange of Key Services detailed in this Agreement.
- 3.2. Neither party shall be responsible for the other party's costs associated with the establishment or ongoing management of this Agreement.
- 3.3. Any LIST function, Data exchange or service provision requiring a Fee or Charge will be negotiated separately to this Agreement. Parties may choose to document that arrangement as an extra Attachment to this Agreement.

4. Data Use

- 4.1. Each party shall use the Data in accordance with the terms detailed in this Agreement, taking note of any specific conditions documented in the Agreement Attachments.
- 4.2. The Data exchanged has been acquired from various sources and is captured at different levels of reliability. Each party will advise the other of the location of the relevant performance criteria for each Dataset within Attachments of the Agreement.
- 4.3. Data supplied by DPIPWE as described in Attachment 1 must not be used in any way which is considered by DPIPWE to compete with or impact on the operations of the Land Information System Tasmania, or TASMAP, without first obtaining written permission from the signatories of this Agreement.
- 4.4. Data may be supplied to DPIPWE for the purpose of integration into statewide datasets. Once that Data is integrated, DPIPWE, without any restriction and in perpetuity, can supply statewide datasets to any third party.
- 4.5. All Data supplied is subject to Crown Copyright provisions as defined by the Copyright Act 1968.

- 4.6. The Data shall be used in a manner consistent with the Personal Information Protection Act 2004.
- 4.7. Each party will make all reasonable attempts to ensure all of its employees, agents and sub-contractors are aware of and comply with the Terms and Conditions of this Agreement.

5. Data Exchange

- 5.1. The method, frequency, format, and any specific conditions of use or distribution (including data security issues) relating to each Data being exchanged, will be documented in Attachment 1 and 2.
- 5.2. Data exchange terms may change at any time by mutual agreement, having regard for the information requirements, and resource implications of each party.
- 5.3. The exchange of the Data does not affect its ownership or Intellectual Property Rights unless otherwise agreed in writing between the parties.
- 5.4. Each party agrees they are the custodian of Data to be exchanged or have documented custodial arrangements in place to do so.
- 5.5. Where one party's Data is to be on-supplied to an external party to this agreement, by whatever means, prior written approval between all parties is required. An ongoing Data supply will be documented in the relevant Attachment to this Agreement. Where reasonable to do so a separate Agreement may be required between the relevant parties prior to exchange of the said data.
- 5.6. Each party will advise the other where reasonably possible via the appropriate contacts listed in Attachment 3 of any:
 - 5.6.1. errors found in exchanged Data
 - 5.6.2. defects in the normal operations of manual or automatic Data transfer systems.
- 5.7. Each party where reasonably practical to do so should advise of an exchange of Data.
- 5.8. Each party is responsible where reasonably possible for ensuring adequate security arrangements are in place for the exchange, storage and use of the Data.

6. Term

- 6.1. The Agreement has a term of five (5) years from the receipt of signatures from both parties.
- 6.2. The Agreement will be reviewed annually. As part of the review each party will inform the other, in a format mutually agreed by each party, of its use of the Data throughout the previous year and where possible planned use or requirements for the next year.
- 6.3. At the conclusion of the Term, the Agreement may be extended for a further five (5) year period, with or without modification, provided both signatories to the Agreement agree in writing. Otherwise this Agreement shall be deemed to have expired. In this case both parties shall negotiate conditions for the ongoing use of Data previously transferred under this Agreement.

7. Management and variation of the Agreement

- 7.1. The Contact officers responsible for liaison and/or escalation of issues are those listed in Attachment 3.
- 7.2. Changes to the Agreement Attachments can be made without requiring the Agreement to be re-signed. The Agreement Attachments are working documents that can be changed at any time with both party's written agreement. They may be issued as a digital version only.
- 7.3. It is anticipated that the body of the Agreement will not alter during the term. However changes to the body of the Agreement may be made, provided the signatories to the Agreement endorse them in writing.
- 7.4. If an event occurs that is beyond the control of either party, that makes it impossible for either party to carry out their responsibilities under this Agreement, the Agreement shall be suspended until such time as services can be restored.

8. Notices

Each party must notify the other party in writing as soon as reasonably possible of a defect of or change to:

- 8.1. the structure or delivery criteria or conditions of use of the Data
- 8.2. network, operating system or database settings, or security arrangements that may impact upon on the exchange of the Data
- 8.3. normal operations of manual or automatic Data transfer systems.

9. Dispute Resolution

- 9.1. If a dispute arises between the parties, they agree to work in a cooperative manner in their resolution. If possible issues should be expediently resolved at the operational level.
- 9.2. If a dispute cannot be resolved at an operational level, it is to be documented and escalated to the relevant contacts listed in Attachment 3.

10. Termination

- 10.1. Either party may terminate this Agreement by giving 12 months' notice to the appropriate contact described in Attachment 3 of this Agreement.
- 10.2. On termination of this Agreement both parties shall negotiate conditions for the ongoing use of Data previously transferred under this Agreement.
- 10.3. Termination or expiration of this Agreement does not override the requirement for the parties to continue providing Data where there is a specific legal requirement to do so.

11. Signing page

Dated: 29th of November 2019

Signed for and on behalf of the)
)
Department of Primary Industries, Parks,)
Water and Environment)
)

by Stuart Fletcher
(a duly authorised person), in the presence
of:

.....
Signature of witness

.....
Name of witness (block letters)

.....
Address of witness

.....
Occupation

Signed for and on behalf of)
)
Central Highlands Council)
)
by Lyn Eyles)
(a duly authorised person), in the presence
of:)

.....
Signature of witness

.....
Name of witness (block letters)

.....
Address of witness

.....
Occupation

In signing this agreement both parties acknowledge it replaces any previous agreements relating to the exchange of location data and services between them. Both parties also acknowledge it is not intended to be a legal document, but a framework for managing the exchange of the Data between the two parties. This agreement does not, nor does it intend to create binding legal relations between the parties.



Land Tasmania Division

Department of Primary Industries, Parks, Water
and Environment

GPO Box 44, Hobart 7001

Ph: 6165 4444

Email: listhelp@dpiuwe.tas.gov.au

Visit: www.dpiuwe.tas.gov.au/lands

Attachment I

*Technical Specifications
for data transferred from DPIPWE*

Version 3.0a – November 2019

ATTACHMENT 1

Technical Specification of data transferred from DPIPWE to Central Highlands Council,
via LISTdata Automated supply

Table Of Contents

Dataset	Format	Supplied	Page
1:15000 Tasmanian Towns Street Atlas Index	ECW	Annually	4
1:25000 Raster Image	ECW	Annually	5
Address Points	MAPINFOB	Monthly	6
Boundary Segments	MAPINFOB	Monthly	8
Building Points	MAPINFOB	6 Monthly	9
Building Polygons	MAPINFOB	6 Monthly	10
Cadastral Parcels	MAPINFOB	Monthly	11
Catchments	MAPINFOB	6 Monthly	12
Community Facilities	MAPINFOB	3 Monthly	13
Contours 10 Metre	MAPINFOB	6 Monthly	14
Contours 5 Metre	MAPINFOB	6 Monthly	15
Crown Leases	MAPINFOB	Monthly	16
Crown Licences	MAPINFOB	Monthly	17
Easements	MAPINFOB	Monthly	18
Feature Metadata Pointers	CSV_COMMA	Monthly	19
Forest Groups	MAPINFOB	6 Monthly	20
Hydrographic Areas	MAPINFOB	6 Monthly	21
Hydrographic Lines	MAPINFOB	6 Monthly	22
Hydrographic Points	MAPINFOB	6 Monthly	23
Land Capability	MAPINFOB	Annually	24
Land Tenure	MAPINFOB	Monthly	25
Local Government Areas	MAPINFOB	3 Monthly	26
Local Government Reserves	MAPINFOB	3 Monthly	27
Locality and Postcode Areas	MAPINFOB	6 Monthly	28
Named Feature Extents	MAPINFOB	Annually	29
Nomenclature Data (Basic Supply)	CSV_COMMA	3 Monthly	30
Orthophoto Mosaic	ECW	Annually	31
Orthophoto Mosaic Index	MAPINFOB	Annually	32
Parish and Town Boundaries	MAPINFOB	Annually	33
Planning Boundaries	MAPINFOB	7 days	34
Planning Overlays	MAPINFOB	7 days	35
Planning Zones	MAPINFOB	7 days	36
Private Reserves	MAPINFOB	3 Monthly	37

ATTACHMENT 1

Technical Specification of data transferred from DPIPWE to Central Highlands Council, via LISTdata Automated supply

Private Timber Reserves	MAPINFOB	3 Monthly	38
Public Land Classification	MAPINFOB	Monthly	39
Ramsar Wetlands	MAPINFOB	6 Monthly	40
Survey Control	CSV_COMMA	Monthly	41
TasVeg 3.0	MAPINFOB	Annually	42
Tasmanian Reserves Estate	MAPINFOB	3 Monthly	43
Transport Nodes	MAPINFOB	Monthly	44
Transport Segments	MAPINFOB	Monthly	45
Vistas Data (LGA View)	CSV_COMMA	Monthly	46

DRAFT

ATTACHMENT 1

Technical Specification of data transferred from DPIPWE to Central Highlands Council, via LISTdata Automated supply

Job ID Number	7372		
Extraction ID Number	36930		
Dataset Name	1:15000 Tasmanian Towns Street Atlas Index		
Description	1:15000 Tasmanian Towns Street Atlas Index		
Metadata Link	data.thelist.tas.gov.au		
Data Coverage	Municipality - Central Highlands		
Data Source	LIST Data Delivery Server		
Datum / Projection	GDA94 / Map Grid of Australia Zone 55		
Data Format	ECW		
Compression	No Compression		
Filename	ttsa_15k_index.ecw		
Receiver	Central Highlands Council		
Transfer Method	HTTP Web Server		
Transfer Type	Full Resupply		
Transfer Frequency	Annually		
Data Distribution	As per Conditions of Use		
Transfer Start Date			
Automated Email Notification	kbradburn@centralhighlands.tas.gov.au, cadastre@insightgis.com.au, listhelp@dpiipwe.tas.gov.au		
Destination Server			
Fields	Field Name	Field Type	Description
	MAP_NAME	CHAR(40)	Map Name
	MAP_NO	CHAR(10)	Map Number
	SCALE	INT32	Scale
	EDITION	INT16	Edition Number
	PROD_YEAR	INT16	Production Year
	PRINT_NAME	CHAR(40)	Printed Name
	REMARKS	CHAR(50)	Remarks
	PROD_CODE	DECIMAL(13,0)	Production Code
	HOR_DATUM	CHAR(5)	Horizontal Datum
	VER_DATUM	CHAR(5)	Vertical Datum
	PROJECTION	CHAR(30)	Projection

ATTACHMENT 1

Technical Specification of data transferred from DPIPWE to Central Highlands Council, via LISTdata Automated supply

Job ID Number	7373		
Extraction ID Number	36931		
Dataset Name	1:25000 Raster Image		
Description	1:25000 Topographic Raster Image Mosaic		
Metadata Link	data.thelist.tas.gov.au		
Data Coverage	Municipality - Central Highlands		
Data Source	LIST Data Delivery Server		
Datum / Projection	GDA94 / Map Grid of Australia Zone 55		
Data Format	ECW		
Compression	No Compression		
Filename	25000_raster_image.ecw		
Receiver	Central Highlands Council		
Transfer Method	HTTP Web Server		
Transfer Type	Full Resupply		
Transfer Frequency	Annually		
Data Distribution	As per Conditions of Use		
Transfer Start Date			
Automated Email Notification	kbradburn@centralhighlands.tas.gov.au, cadastre@insightgis.com.au, listhelp@dpiipwe.tas.gov.au		
Destination Server			
Fields	Field Name	Field Type	Description

ATTACHMENT 1

Technical Specification of data transferred from DPIPWE to Central Highlands Council, via LISTdata Automated supply

Job ID Number	5921		
Extraction ID Number	34433		
Dataset Name	Address Points		
Description	Geo-coded property addresses		
Metadata Link	data.thelist.tas.gov.au		
Data Coverage	Municipality - Central Highlands		
Data Source	LIST Data Delivery Server		
Datum / Projection	GDA94 / Map Grid of Australia Zone 55		
Data Format	MAPINFOB		
Compression	PKZIP		
Filename	Address_Points.zip (geocodes.dat , geocodes.id , geocodes.map , geocodes.tab)		
Receiver	Central Highlands Council		
Transfer Method	HTTP Web Server		
Transfer Type	Full Resupply		
Transfer Frequency	Monthly		
Data Distribution	As per Conditions of Use		
Transfer Start Date			
Automated Email Notification	kbradburn@centralhighlands.tas.gov.au, cadastre@insightgis.com.au, listhelp@dpiuwe.tas.gov.au		
Destination Server			
Fields	<i>Field Name</i>	<i>Field Type</i>	<i>Description</i>
	GEOCODE_ID	INT32	Persistent ID
	GEO_TYPE	CHAR(60)	Geocode Type
	ACCURACY	CHAR(60)	Planimetric Accuracy
	RELIABILIT	CHAR(60)	Reliability of Geocode
	EASTING	DECIMAL(11,3)	MGA Easting
	NORTHING	DECIMAL(11,3)	MGA Northing
	SITE_NAME	CHAR(50)	Site Name
	SITE_DESC	CHAR(100)	Site Description
	NOM_REG_NO	CHAR(7)	Nomenclature Register Number
	FUND_GCODE	INT32	Fundamental Geocode ID
	PID	INT32	Property ID
	RA_ADJUST	INT16	Rural Address Adjustment
	UNIT_CODE	CHAR(7)	Unit Code
	UNIT_TYPE	CHAR(60)	Unit Type
	UNIT_NUMB	CHAR(11)	Unit Number
	PROP_NAME	CHAR(45)	Property Name
	ST_NO_FROM	INT32	Street Number From
	NO1_SUFFIX	CHAR(2)	Street Number From Suffix
	ST_NO_TO	INT32	Street Number To
	NO2_SUFFIX	CHAR(2)	Street Number To Suffix
	STREET	CHAR(45)	Street Name
	ST_TY_CODE	CHAR(4)	Street Type Code
	ST_TYPE	CHAR(60)	Street Type
	ST_SU_CODE	CHAR(4)	Street Suffix Code
	ST_SUFFIX	CHAR(60)	Street Suffix
	LOCALITY	CHAR(46)	Locality
	STATE	CHAR(3)	State
	POSTCODE	INT16	Postcode
	RURAL_ADD	CHAR(1)	Rural Address

ATTACHMENT 1

Technical Specification of data transferred from DPIPWE to Central Highlands Council,
via LISTdata Automated supply

	ALTERED_ON	CHAR(19)	Altered On
	UFI	CHAR(12)	Unique Feature Identifier
	FMP	CHAR(12)	Feature Metadata Pointer
	CREATED_ON	CHAR(19)	Created On Date

DRAFT

ATTACHMENT 1

Technical Specification of data transferred from DPIPWE to Central Highlands Council, via LISTdata Automated supply

Job ID Number	7182		
Extraction ID Number	36706		
Dataset Name	Boundary Segments		
Description	Cadastral line data used to create all cadastral polygon data sets		
Metadata Link	data.thelist.tas.gov.au		
Data Coverage	Municipality - Central Highlands		
Data Source	LIST Data Delivery Server		
Datum / Projection	GDA94 / Map Grid of Australia Zone 55		
Data Format	MAPINFOB		
Compression	PKZIP		
Filename	boundary_segments.zip (bdyseg.dat , bdyseg.id , bdyseg.map , bdyseg.tab)		
Receiver	Central Highlands Council		
Transfer Method	HTTP Web Server		
Transfer Type	Full Resupply		
Transfer Frequency	Monthly		
Data Distribution	As per Conditions of Use		
Transfer Start Date			
Automated Email Notification	kbradburn@centralhighlands.tas.gov.au, cadastre@insightgis.com.au, listhelp@dpiipwe.tas.gov.au		
Destination Server			
Fields	<i>Field Name</i>	<i>Field Type</i>	<i>Description</i>
	BDY_SEG_ID	INT32	Persistent ID
	FEAT_FOL	CHAR(60)	Type of Feature Followed
	FOREIGN_ID	CHAR(30)	Custodian Foreign ID
	COMP_LEN	DECIMAL(9,3)	Computed Length
	UFI	CHAR(12)	Unique Feature Identifier
	FMP	CHAR(12)	Feature Metadata Pointer
	CREATED_ON	CHAR(19)	Created On Date

ATTACHMENT 1

Technical Specification of data transferred from DPIPWE to Central Highlands Council, via LISTdata Automated supply

Job ID Number	5931		
Extraction ID Number	34443		
Dataset Name	Building Points		
Description	Building Points		
Metadata Link	data.thelist.tas.gov.au		
Data Coverage	Municipality - Central Highlands		
Data Source	LIST Data Delivery Server		
Datum / Projection	GDA94 / Map Grid of Australia Zone 55		
Data Format	MAPINFOB		
Compression	PKZIP		
Filename	Buildings.zip (building_points.dat , building_points.id , building_points.map , building_points.tab)		
Receiver	Central Highlands Council		
Transfer Method	HTTP Web Server		
Transfer Type	Full Resupply		
Transfer Frequency	6 Monthly		
Data Distribution	As per Conditions of Use		
Transfer Start Date			
Automated Email Notification	kbradburn@centralhighlands.tas.gov.au, cadastre@insightgis.com.au, listhelp@dpiipwe.tas.gov.au		
Destination Server			
Fields	Field Name	Field Type	Description
	BUILD_ID	INT32	Persistent ID
	BUILD_TY	CHAR(60)	Building Type
	HEIGHT	DECIMAL(4,1)	Height
	UFI	CHAR(38)	Unique Feature Identifier
	CREATED_ON	CHAR(19)	Created On Date

ATTACHMENT 1

Technical Specification of data transferred from DPIPWE to Central Highlands Council, via LISTdata Automated supply

Job ID Number	5931		
Extraction ID Number	34444		
Dataset Name	Building Polygons		
Description	Building Polygons		
Metadata Link	data.thelist.tas.gov.au		
Data Coverage	Municipality - Central Highlands		
Data Source	LIST Data Delivery Server		
Datum / Projection	GDA94 / Map Grid of Australia Zone 55		
Data Format	MAPINFOB		
Compression	PKZIP		
Filename	Buildings.zip (building_polygons.dat , building_polygons.id , building_polygons.map , building_polygons.tab)		
Receiver	Central Highlands Council		
Transfer Method	HTTP Web Server		
Transfer Type	Full Resupply		
Transfer Frequency	6 Monthly		
Data Distribution	As per Conditions of Use		
Transfer Start Date			
Automated Email Notification	kbradburn@centralhighlands.tas.gov.au, cadastre@insightgis.com.au, listhelp@dpiipwe.tas.gov.au		
Destination Server			
Fields	Field Name	Field Type	Description
	BUILD_ID	INT32	Persistent ID
	BUILD_TY	CHAR(60)	Building Type
	HEIGHT	DECIMAL(4,1)	Height
	UFI	CHAR(38)	Unique Feature Identifier
	CREATED_ON	CHAR(19)	Created On Date

ATTACHMENT 1

Technical Specification of data transferred from DPIPWE to Central Highlands Council, via LISTdata Automated supply

Job ID Number	1470		
Extraction ID Number	7481		
Dataset Name	Cadastral Parcels		
Description	Parcels and Properties		
Metadata Link	data.thelist.tas.gov.au		
Data Coverage	Municipality - Central Highlands		
Data Source	LIST Data Delivery Server		
Datum / Projection	GDA94 / Map Grid of Australia Zone 55		
Data Format	MAPINFOB		
Compression	PKZIP		
Filename	parcels.zip (parcels.dat , parcels.id , parcels.map , parcels.tab)		
Receiver	Central Highlands Council		
Transfer Method	HTTP Web Server		
Transfer Type	Full Resupply		
Transfer Frequency	Monthly		
Data Distribution	As per Conditions of Use		
Transfer Start Date			
Automated Email Notification	kbradburn@centralhighlands.tas.gov.au, cadastre@insightgis.com.au, listhelp@dpiuwe.tas.gov.au		
Destination Server			
Fields	<i>Field Name</i>	<i>Field Type</i>	<i>Description</i>
	CID	INT32	Cadastral ID
	VOLUME	CHAR(8)	Volume
	FOLIO	INT16	Folio
	PID	INT32	Valuation Property ID
	POT_PID	INT32	Potential Valuation Property ID
	LPI	CHAR(7)	Land Parcel Identifier (UPI)
	CAD_TYPE1	CHAR(60)	Cadastre Primary Type
	CAD_TYPE2	CHAR(60)	Cadastre Sub Type
	TENURE_TY	CHAR(60)	Tenure Type
	FEAT_NAME	CHAR(60)	Name
	STRATA_LEV	CHAR(60)	Strata Floor Level
	COMP_AREA	DECIMAL(16,3)	Computed Area
	MEAS_AREA	DECIMAL(16,3)	Measured Area
	UFI	CHAR(12)	Unique Feature Identifier
	FMP	CHAR(12)	Feature Metadata Pointer
	CREATED_ON	CHAR(19)	Created On Date

ATTACHMENT 1

Technical Specification of data transferred from DPIPWE to Central Highlands Council, via LISTdata Automated supply

Job ID Number	5928		
Extraction ID Number	34440		
Dataset Name	Catchments		
Description	Water Management Areas (inc Water Catchment Areas)		
Metadata Link	data.thelist.tas.gov.au		
Data Coverage	Municipality - Central Highlands		
Data Source	LIST Data Delivery Server		
Datum / Projection	GDA94 / Map Grid of Australia Zone 55		
Data Format	MAPINFOB		
Compression	PKZIP		
Filename	Catchments.zip (catchments.dat , catchments.id , catchments.map , catchments.tab)		
Receiver	Central Highlands Council		
Transfer Method	HTTP Web Server		
Transfer Type	Full Resupply		
Transfer Frequency	6 Monthly		
Data Distribution	As per Conditions of Use		
Transfer Start Date			
Automated Email Notification	kbradburn@centralhighlands.tas.gov.au, cadastre@insightgis.com.au, listhelp@dpiipwe.tas.gov.au		
Destination Server			
Fields	<i>Field Name</i>	<i>Field Type</i>	<i>Description</i>
	ID	INT32	Catchment ID Number
	PROC_PLAN	CHAR(8)	Proclaimed CPR Plan Number
	REGION_NO	INT32	Catchment Region Number
	INDEX_PLAN	CHAR(7)	Index CPR Plan
	CATCH_NO	INT32	Catchment Number
	CATCH_NAME	CHAR(40)	Catchment Name

ATTACHMENT 1

Technical Specification of data transferred from DPIPWE to Central Highlands Council, via LISTdata Automated supply

Job ID Number	5930		
Extraction ID Number	34442		
Dataset Name	Community Facilities		
Description	Community Facilities		
Metadata Link	data.thelist.tas.gov.au		
Data Coverage	Municipality - Central Highlands		
Data Source	LIST Data Delivery Server		
Datum / Projection	GDA94 / Map Grid of Australia Zone 55		
Data Format	MAPINFOB		
Compression	PKZIP		
Filename	Comm_facilities.zip (community_facilities.dat , community_facilities.id , community_facilities.map , community_facilities.tab)		
Receiver	Central Highlands Council		
Transfer Method	HTTP Web Server		
Transfer Type	Full Resupply		
Transfer Frequency	3 Monthly		
Data Distribution	As per Conditions of Use		
Transfer Start Date			
Automated Email Notification	kbradburn@centralhighlands.tas.gov.au, cadastre@insightgis.com.au, listhelp@dpiuwe.tas.gov.au		
Destination Server			
Fields	<i>Field Name</i>	<i>Field Type</i>	<i>Description</i>
	COMFAC_ID	INT32	Community Facility ID
	PID	INT32	Property ID
	COM_TYPE1	CHAR(60)	Community Facility Primary Type
	COM_TYPE2	CHAR(60)	Community Facility Sub Type
	NAME	CHAR(100)	Name
	UFI	CHAR(38)	Unique Feature Identifier
	CREATED_ON	CHAR(19)	Created On Date

ATTACHMENT 1

Technical Specification of data transferred from DPIPWE to Central Highlands Council, via LISTdata Automated supply

Job ID Number	5929		
Extraction ID Number	34441		
Dataset Name	Contours 10 Metre		
Description	Contours 10 Metre Interval		
Metadata Link	data.thelist.tas.gov.au		
Data Coverage	Municipality - Central Highlands		
Data Source	LIST Data Delivery Server		
Datum / Projection	GDA94 / Map Grid of Australia Zone 55		
Data Format	MAPINFOB		
Compression	PKZIP		
Filename	10m Contours.zip (contours10m.dat , contours10m.id , contours10m.map , contours10m.tab)		
Receiver	Central Highlands Council		
Transfer Method	HTTP Web Server		
Transfer Type	Full Resupply		
Transfer Frequency	6 Monthly		
Data Distribution	As per Conditions of Use		
Transfer Start Date			
Automated Email Notification	kbradburn@centralhighlands.tas.gov.au, cadastre@insightgis.com.au, listhelp@dpiipwe.tas.gov.au		
Destination Server			
Fields	<i>Field Name</i>	<i>Field Type</i>	<i>Description</i>
	CONTOUR_ID	INT32	Persistent ID
	CONTOUR_TY	CHAR(60)	Contour Type
	ELEVATION	INT16	Elevation
	COMP_LEN	DECIMAL(16,3)	Computed Length
	UFI	CHAR(38)	Unique Feature Identifier
	CREATED_ON	CHAR(19)	Created On Date

ATTACHMENT 1

Technical Specification of data transferred from DPIPWE to Central Highlands Council, via LISTdata Automated supply

Job ID Number	7369		
Extraction ID Number	36927		
Dataset Name	Contours 5 Metre		
Description	Contours 5 Metre Interval		
Metadata Link	data.thelist.tas.gov.au		
Data Coverage	Municipality - Central Highlands		
Data Source	LIST Data Delivery Server		
Datum / Projection	GDA94 / Map Grid of Australia Zone 55		
Data Format	MAPINFOB		
Compression	PKZIP		
Filename	5mContours.zip (contours5m.dat , contours5m.id , contours5m.map , contours5m.tab)		
Receiver	Central Highlands Council		
Transfer Method	HTTP Web Server		
Transfer Type	Full Resupply		
Transfer Frequency	6 Monthly		
Data Distribution	As per Conditions of Use		
Transfer Start Date			
Automated Email Notification	kbradburn@centralhighlands.tas.gov.au, cadastre@insightgis.com.au, listhelp@dpiipwe.tas.gov.au		
Destination Server			
Fields	<i>Field Name</i>	<i>Field Type</i>	<i>Description</i>
	CONTOUR_ID	INT32	Persistent ID
	CONTOUR_TY	CHAR(60)	Contour Type
	ELEVATION	INT16	Elevation
	COMP_LEN	DECIMAL(16,3)	Computed Length
	UFI	CHAR(38)	Computed Length
	CREATED_ON	CHAR(19)	Created On Date

ATTACHMENT 1

Technical Specification of data transferred from DPIPWE to Central Highlands Council, via LISTdata Automated supply

Job ID Number	1472		
Extraction ID Number	7483		
Dataset Name	Crown Leases		
Description	Crown Leases (excludes Applications and Private, Forestry and Marine Leases)		
Metadata Link	data.thelist.tas.gov.au		
Data Coverage	Municipality - Central Highlands		
Data Source	LIST Data Delivery Server		
Datum / Projection	GDA94 / Map Grid of Australia Zone 55		
Data Format	MAPINFOB		
Compression	PKZIP		
Filename	leases.zip (leases.dat , leases.id , leases.map , leases.tab)		
Receiver	Central Highlands Council		
Transfer Method	HTTP Web Server		
Transfer Type	Full Resupply		
Transfer Frequency	Monthly		
Data Distribution	As per Conditions of Use		
Transfer Start Date			
Automated Email Notification	kbradburn@centralhighlands.tas.gov.au, cadastre@insightgis.com.au, listhelp@dpiuwe.tas.gov.au		
Destination Server			
Fields	<i>Field Name</i>	<i>Field Type</i>	<i>Description</i>
	CID	INT32	Cadastral ID
	VOLUME	CHAR(8)	Volume
	FOLIO	INT16	Folio
	PID	INT32	Valuation Property ID
	LEASE_TY	CHAR(60)	Lease Type
	STATUS	CHAR(60)	Status
	AGR_ID	CHAR(30)	Agreement ID
	PLAN_REF	CHAR(20)	Plan Reference
	COMP_AREA	DECIMAL(16,3)	Computed Area
	MEAS_AREA	DECIMAL(16,3)	Measured Area
	UFI	CHAR(12)	Unique Feature Identifier
	FMP	CHAR(12)	Feature Metadata Pointer
	CREATED_ON	CHAR(19)	Created On Date

ATTACHMENT 1

Technical Specification of data transferred from DPIPWE to Central Highlands Council, via LISTdata Automated supply

Job ID Number	1473		
Extraction ID Number	7484		
Dataset Name	Crown Licences		
Description	Crown Licences (excludes Applications)		
Metadata Link	data.thelist.tas.gov.au		
Data Coverage	Municipality - Central Highlands		
Data Source	LIST Data Delivery Server		
Datum / Projection	GDA94 / Map Grid of Australia Zone 55		
Data Format	MAPINFOB		
Compression	PKZIP		
Filename	licences.zip (licences.dat , licences.id , licences.map , licences.tab)		
Receiver	Central Highlands Council		
Transfer Method	HTTP Web Server		
Transfer Type	Full Resupply		
Transfer Frequency	Monthly		
Data Distribution	As per Conditions of Use		
Transfer Start Date			
Automated Email Notification	kbradburn@centralhighlands.tas.gov.au, cadastre@insightgis.com.au, listhelp@dpiuwe.tas.gov.au		
Destination Server			
Fields	<i>Field Name</i>	<i>Field Type</i>	<i>Description</i>
	CID	INT32	Cadastral ID
	PID	INT32	Valuation Property ID
	LICENCE_TY	CHAR(60)	Licence Type
	STATUS	CHAR(60)	Status
	AGR_ID	CHAR(30)	Agreement ID
	PLAN_REF	CHAR(20)	Plan Reference
	COMP_AREA	DECIMAL(16,3)	Computed Area
	MEAS_AREA	DECIMAL(16,3)	Measured Area
	UFI	CHAR(12)	Unique Feature Identifier
	FMP	CHAR(12)	Feature Metadata Pointer
	CREATED_ON	CHAR(19)	Created On Date

ATTACHMENT 1

Technical Specification of data transferred from DPIPWE to Central Highlands Council, via LISTdata Automated supply

Job ID Number	1474		
Extraction ID Number	7485		
Dataset Name	Easements		
Description	Cadastral Easements		
Metadata Link	data.thelist.tas.gov.au		
Data Coverage	Municipality - Central Highlands		
Data Source	LIST Data Delivery Server		
Datum / Projection	GDA94 / Map Grid of Australia Zone 55		
Data Format	MAPINFOB		
Compression	PKZIP		
Filename	easements.zip (easements.dat , easements.id , easements.map , easements.tab)		
Receiver	Central Highlands Council		
Transfer Method	HTTP Web Server		
Transfer Type	Full Resupply		
Transfer Frequency	Monthly		
Data Distribution	As per Conditions of Use		
Transfer Start Date			
Automated Email Notification	kbradburn@centralhighlands.tas.gov.au, cadastre@insightgis.com.au, listhelp@dpiuwe.tas.gov.au		
Destination Server			
Fields	<i>Field Name</i>	<i>Field Type</i>	<i>Description</i>
	CID	INT32	Cadastral ID
	VOLUME	CHAR(8)	Volume
	FOLIO	INT16	Folio
	EASEMNT_TY	CHAR(60)	Easement Type
	PLAN_REF	CHAR(20)	Plan Reference
	PLAN_AUTH	CHAR(60)	Plan Authority
	COMP_AREA	DECIMAL(16,3)	Computed Area
	MEAS_AREA	DECIMAL(16,3)	Measured Area
	UFI	CHAR(12)	Unique Feature Identifier
	FMP	CHAR(12)	Feature Metadata Pointer
	CREATED_ON	CHAR(19)	Created On Date

ATTACHMENT 1

Technical Specification of data transferred from DPIPWE to Central Highlands Council, via LISTdata Automated supply

Job ID Number	7183		
Extraction ID Number	36707		
Dataset Name	Feature Metadata Pointers		
Description	Feature Level Metadata Pointers		
Metadata Link	data.thelist.tas.gov.au		
Data Coverage	State-wide		
Data Source	LIST Data Delivery Server		
Datum / Projection	GDA94 / Map Grid of Australia Zone 55		
Data Format	CSV_COMMA		
Compression	PKZIP		
Filename	FMP.zip (feature_metadata.csv)		
Receiver	Central Highlands Council		
Transfer Method	HTTP Web Server		
Transfer Type	Full Resupply		
Transfer Frequency	Monthly		
Data Distribution	As per Conditions of Use		
Transfer Start Date			
Automated Email Notification	kbradburn@centralhighlands.tas.gov.au, cadastre@insightgis.com.au, listhelp@dpiuwe.tas.gov.au		
Destination Server			
Fields	<i>Field Name</i>	<i>Field Type</i>	<i>Description</i>
	FMP	CHAR(12)	Feature Metadata Pointer
	FEAT_REL	DATE	Feature Spatial Reliability Date
	ATT_REL	DATE	Feature Attribute Reliability Date
	PLAN_ACC	DECIMAL(8,3)	Horizontal accuracy
	ELEV_ACC	DECIMAL(8,3)	Vertical Accuracy
	ATTR_ACC	CHAR(50)	Attribute Reliability
	SOURCE	CHAR(60)	Source
	ANZLIC_ID	CHAR(12)	Anzlic Dataset Metadata ID

ATTACHMENT 1

Technical Specification of data transferred from DPIPWE to Central Highlands Council, via LISTdata Automated supply

Job ID Number	5935		
Extraction ID Number	34450		
Dataset Name	Forest Groups		
Description	Estimated extent of forest coverage in Tasmania		
Metadata Link	data.thelist.tas.gov.au		
Data Coverage	Municipality - Central Highlands		
Data Source	LIST Data Delivery Server		
Datum / Projection	GDA94 / Map Grid of Australia Zone 55		
Data Format	MAPINFOB		
Compression	PKZIP		
Filename	Forest Groups.zip (forest.dat , forest.id , forest.map , forest.tab)		
Receiver	Central Highlands Council		
Transfer Method	HTTP Web Server		
Transfer Type	Full Resupply		
Transfer Frequency	6 Monthly		
Data Distribution	As per Conditions of Use		
Transfer Start Date			
Automated Email Notification	kbradburn@centralhighlands.tas.gov.au, cadastre@insightgis.com.au, listhelp@dpiipwe.tas.gov.au		
Destination Server			
Fields	<i>Field Name</i>	<i>Field Type</i>	<i>Description</i>
	ID	CHAR(36)	Persistent ID
	CODE	CHAR(3)	Forest Group Code
	TYPE	CHAR(60)	Forest Group Photo-interpreted types
	AREA	DECIMAL(15,3)	Area in Square Metres

ATTACHMENT 1

Technical Specification of data transferred from DPIPWE to Central Highlands Council, via LISTdata Automated supply

Job ID Number	2221		
Extraction ID Number	7787		
Dataset Name	Hydrographic Areas		
Description	Polygon features within the Hydrographic data model (inc sea, land, water bodies etc)		
Metadata Link	data.thelist.tas.gov.au		
Data Coverage	Municipality - Central Highlands		
Data Source	LIST Data Delivery Server		
Datum / Projection	GDA94 / Map Grid of Australia Zone 55		
Data Format	MAPINFOB		
Compression	PKZIP		
Filename	hydro.zip (hydarea.dat , hydarea.id , hydarea.map , hydarea.tab)		
Receiver	Central Highlands Council		
Transfer Method	HTTP Web Server		
Transfer Type	Full Resupply		
Transfer Frequency	6 Monthly		
Data Distribution	As per Conditions of Use		
Transfer Start Date			
Automated Email Notification	kbradburn@centralhighlands.tas.gov.au, cadastre@insightgis.com.au, listhelp@dpiuwe.tas.gov.au		
Destination Server			
Fields	<i>Field Name</i>	<i>Field Type</i>	<i>Description</i>
	HYDAREA_ID	INT32	Persistent ID
	HYDARTY1	CHAR(60)	Hydro Area Type
	HYDARTY2	CHAR(60)	Hydro Area Sub Type
	NAME	CHAR(60)	Feature Name
	NOM_REG_NO	CHAR(7)	Nomenclature Number
	HYD_CLASS	CHAR(60)	Hydrographic Classification
	PERENNIAL	CHAR(60)	Permanency of Water in Area
	EXISTING	CHAR(60)	Features State of Existence
	WC_BED_TY	CHAR(60)	Type of Material in bed or watercourse
	RELGRND	CHAR(60)	Relation to Ground
	INUSE	CHAR(60)	Whether the instance is in use or not
	ISLANDTYPE	CHAR(60)	Island Type
	ELEVATION	DECIMAL(15,4)	Elevation
	COMP_AREA	DECIMAL(16,3)	Computed Area
	UFI	CHAR(38)	Unique Feature Identifier
	CREATED_ON	CHAR(19)	Created On Date

ATTACHMENT 1

Technical Specification of data transferred from DPIPWE to Central Highlands Council, via LISTdata Automated supply

Job ID Number	2221		
Extraction ID Number	7788		
Dataset Name	Hydrographic Lines		
Description	Line features within the Hydrographic data model (inc rivers, creeks high water marks etc)		
Metadata Link	data.thelist.tas.gov.au		
Data Coverage	Municipality - Central Highlands		
Data Source	LIST Data Delivery Server		
Datum / Projection	GDA94 / Map Grid of Australia Zone 55		
Data Format	MAPINFOB		
Compression	PKZIP		
Filename	hydro.zip (hydline.dat , hydline.id , hydline.map , hydline.tab)		
Receiver	Central Highlands Council		
Transfer Method	HTTP Web Server		
Transfer Type	Full Resupply		
Transfer Frequency	6 Monthly		
Data Distribution	As per Conditions of Use		
Transfer Start Date			
Automated Email Notification	kbradburn@centralhighlands.tas.gov.au, cadastre@insightgis.com.au, listhelp@dpiuwe.tas.gov.au		
Destination Server			
Fields	Field Name	Field Type	Description
	HYDLIN_ID	INT32	Persistent ID
	HYDLNTY1	CHAR(60)	Hydro Line Type
	HYDLNTY2	CHAR(60)	Hydro Line Sub Type
	NAME	CHAR(60)	Feature Name
	NOM_REG_NO	CHAR(7)	Nomenclature Register Number
	MHWM_TYPE	CHAR(60)	Mean High Water Mark Type
	HYD_CLASS	CHAR(60)	Hydrographic Classification
	EXISTING	CHAR(60)	Features State of Existence
	RELGRND	CHAR(60)	Relation to Ground
	INUSE	CHAR(60)	Whether the instance is in use or not
	HYDCNTR_TY	CHAR(60)	Hydrographic Connector Type
	ADJ_FEAT_1	CHAR(60)	Adjacent Feature 1
	ADJ_FEAT_2	CHAR(60)	Adjacent Feature 2
	HEIGHT	DECIMAL(15,4)	Height
	COMP_LEN	DECIMAL(8,1)	Computed Length
	UFI	CHAR(38)	Unique Feature Identifier
	CREATED_ON	CHAR(19)	Created On Date

ATTACHMENT 1

Technical Specification of data transferred from DPIPWE to Central Highlands Council, via LISTdata Automated supply

Job ID Number	2221		
Extraction ID Number	7789		
Dataset Name	Hydrographic Points		
Description	Point features within the Hydrographic data model (inc rocks, waterfalls etc)		
Metadata Link	data.thelist.tas.gov.au		
Data Coverage	Municipality - Central Highlands		
Data Source	LIST Data Delivery Server		
Datum / Projection	GDA94 / Map Grid of Australia Zone 55		
Data Format	MAPINFOB		
Compression	PKZIP		
Filename	hydro.zip (hydpnt.dat , hydpnt.id , hydpnt.map , hydpnt.tab)		
Receiver	Central Highlands Council		
Transfer Method	HTTP Web Server		
Transfer Type	Full Resupply		
Transfer Frequency	6 Monthly		
Data Distribution	As per Conditions of Use		
Transfer Start Date			
Automated Email Notification	kbradburn@centralhighlands.tas.gov.au, cadastre@insightgis.com.au, listhelp@dpiuwe.tas.gov.au		
Destination Server			
Fields	<i>Field Name</i>	<i>Field Type</i>	<i>Description</i>
	HYDPNT_ID	INT32	Persistent ID
	HYDPNTTY	CHAR(60)	Hydrographic Point Type
	NAME	CHAR(60)	Feature Name
	NOM_REG_NO	CHAR(7)	Nomenclature Register Number
	DAM_TYPE	CHAR(60)	Dam type
	EXISTING	CHAR(60)	Features State of Existence
	INUSE	CHAR(60)	Whether the instance is in use or not
	ISLANDTYPE	CHAR(60)	Island Type
	HEIGHT	DECIMAL(15,4)	Height
	UFI	CHAR(38)	Unique Feature Identifier
	CREATED_ON	CHAR(19)	Created On Date

ATTACHMENT 1

Technical Specification of data transferred from DPIPWE to Central Highlands Council, via LISTdata Automated supply

Job ID Number	5933		
Extraction ID Number	34448		
Dataset Name	Land Capability		
Description	Land Capability		
Metadata Link	data.thelist.tas.gov.au		
Data Coverage	Municipality - Central Highlands		
Data Source	LIST Data Delivery Server		
Datum / Projection	GDA94 / Map Grid of Australia Zone 55		
Data Format	MAPINFOB		
Compression	PKZIP		
Filename	Land Capability.zip (land_capability.dat , land_capability.id , land_capability.map , land_capability.tab)		
Receiver	Central Highlands Council		
Transfer Method	HTTP Web Server		
Transfer Type	Full Resupply		
Transfer Frequency	Annually		
Data Distribution	As per Conditions of Use		
Transfer Start Date			
Automated Email Notification	kbradburn@centralhighlands.tas.gov.au, cadastre@insightgis.com.au, listhelp@dpiipwe.tas.gov.au		
Destination Server			
Fields	<i>Field Name</i>	<i>Field Type</i>	<i>Description</i>
	LANDCAP_ID	INT32	Land Capability ID
	CLASS	CHAR(255)	Class
	SOURCE	CHAR(16)	Class
	DESCRIPT	CHAR(255)	Description
	AREA	DECIMAL(31,16)	Area
	PERIMETER	DECIMAL(31,16)	Perimeter

ATTACHMENT 1

Technical Specification of data transferred from DPIPWE to Central Highlands Council, via LISTdata Automated supply

Job ID Number	8595		
Extraction ID Number	39601		
Dataset Name	Land Tenure		
Description	Land Tenure for Tasmania		
Metadata Link	data.thelist.tas.gov.au		
Data Coverage	Municipality - Central Highlands		
Data Source	LIST Data Delivery Server		
Datum / Projection	GDA94 / Map Grid of Australia Zone 55		
Data Format	MAPINFOB		
Compression	PKZIP		
Filename	tenure.zip (land_tenure.dat , land_tenure.id , land_tenure.map , land_tenure.tab)		
Receiver	Central Highlands Council		
Transfer Method	HTTP Web Server		
Transfer Type	Full Resupply		
Transfer Frequency	Monthly		
Data Distribution	As per Conditions of Use		
Transfer Start Date			
Automated Email Notification	kbradburn@centralhighlands.tas.gov.au, cadastre@insightgis.com.au, listhelp@dpiuwe.tas.gov.au		
Destination Server			
Fields	<i>Field Name</i>	<i>Field Type</i>	<i>Description</i>
	TEN_CLASS	CHAR(50)	Land Tenure Classification
	ACT	CHAR(50)	Act (if applicable)
	FEAT_NAME	CHAR(75)	Feature Name (if applicable)
	CREATED_ON	CHAR(19)	Feature Creation Date / Time

ATTACHMENT 1

Technical Specification of data transferred from DPIPWE to Central Highlands Council, via LISTdata Automated supply

Job ID Number	5925		
Extraction ID Number	34437		
Dataset Name	Local Government Areas		
Description	Local Government Area boundaries		
Metadata Link	data.thelist.tas.gov.au		
Data Coverage	Municipality - Central Highlands		
Data Source	LIST Data Delivery Server		
Datum / Projection	GDA94 / Map Grid of Australia Zone 55		
Data Format	MAPINFOB		
Compression	PKZIP		
Filename	LGA bdy.zip (lga.dat , lga.id , lga.map , lga.tab)		
Receiver	Central Highlands Council		
Transfer Method	HTTP Web Server		
Transfer Type	Full Resupply		
Transfer Frequency	3 Monthly		
Data Distribution	As per Conditions of Use		
Transfer Start Date			
Automated Email Notification	kbradburn@centralhighlands.tas.gov.au, cadastre@insightgis.com.au, listhelp@dpiuwe.tas.gov.au		
Destination Server			
Fields	<i>Field Name</i>	<i>Field Type</i>	<i>Description</i>
	LGA_ID	INT32	Persistent ID
	NAME	CHAR(60)	LGA Name
	LGA_CODE	INT16	LGA Number
	PLAN_REF	CHAR(8)	CPR Plan Number
	GAZ_DATE	DATE	Gazette Date
	NOM_REG_NO	CHAR(7)	Nomenclature Register Number
	UFI	CHAR(38)	Unique Feature Identifier
	CREATED_ON	CHAR(19)	Created On Date

ATTACHMENT 1

Technical Specification of data transferred from DPIPWE to Central Highlands Council, via LISTdata Automated supply

Job ID Number	5934		
Extraction ID Number	34449		
Dataset Name	Local Government Reserves		
Description	Local Government Reserves		
Metadata Link	data.thelist.tas.gov.au		
Data Coverage	Municipality - Central Highlands		
Data Source	LIST Data Delivery Server		
Datum / Projection	GDA94 / Map Grid of Australia Zone 55		
Data Format	MAPINFOB		
Compression	PKZIP		
Filename	LGA Reserves.zip (lga_reserves.dat , lga_reserves.id , lga_reserves.map , lga_reserves.tab)		
Receiver	Central Highlands Council		
Transfer Method	HTTP Web Server		
Transfer Type	Full Resupply		
Transfer Frequency	3 Monthly		
Data Distribution	As per Conditions of Use		
Transfer Start Date			
Automated Email Notification	kbradburn@centralhighlands.tas.gov.au, cadastre@insightgis.com.au, listhelp@dpiuwe.tas.gov.au		
Destination Server			
Fields	<i>Field Name</i>	<i>Field Type</i>	<i>Description</i>
	CID	INT32	Persistent ID
	CATEGORY	CHAR(60)	Reserve Category
	FEAT_NAME	CHAR(60)	Reserve Name
	COMP_AREA	DECIMAL(16,3)	Computed Area
	MEAS_AREA	DECIMAL(16,3)	Measured Area
	UFI	CHAR(12)	Unique Feature Identifier
	FMP	CHAR(12)	Feature Metadata Pointer
	CREATED_ON	CHAR(19)	Created On Date

ATTACHMENT 1

Technical Specification of data transferred from DPIPWE to Central Highlands Council, via LISTdata Automated supply

Job ID Number	5923		
Extraction ID Number	34435		
Dataset Name	Locality and Postcode Areas		
Description	Locality and Postcode Areas		
Metadata Link	data.thelist.tas.gov.au		
Data Coverage	Municipality - Central Highlands		
Data Source	LIST Data Delivery Server		
Datum / Projection	GDA94 / Map Grid of Australia Zone 55		
Data Format	MAPINFOB		
Compression	PKZIP		
Filename	Locality.zip (localities.dat , localities.id , localities.map , localities.tab)		
Receiver	Central Highlands Council		
Transfer Method	HTTP Web Server		
Transfer Type	Full Resupply		
Transfer Frequency	6 Monthly		
Data Distribution	As per Conditions of Use		
Transfer Start Date			
Automated Email Notification	kbradburn@centralhighlands.tas.gov.au, cadastre@insightgis.com.au, listhelp@dpiuwe.tas.gov.au		
Destination Server			
Fields	<i>Field Name</i>	<i>Field Type</i>	<i>Description</i>
	LOCAL_ID	INT32	Persistent ID
	NAME	CHAR(60)	Locality Name
	POSTCODE	INT16	Postcode Number
	PLAN_REF	CHAR(8)	CPR Plan Number
	GAZ_DATE	DATE	Gazette Date
	NOM_REG_NO	CHAR(7)	Nomenclature Register Number
	UFI	CHAR(38)	Unique Feature Identifier
	CREATED_ON	CHAR(19)	Created On Date

ATTACHMENT 1

Technical Specification of data transferred from DPIPWE to Central Highlands Council, via LISTdata Automated supply

Job ID Number	7370		
Extraction ID Number	36928		
Dataset Name	Named Feature Extents		
Description	Named Feature Extents		
Metadata Link	data.thelist.tas.gov.au		
Data Coverage	Municipality - Central Highlands		
Data Source	LIST Data Delivery Server		
Datum / Projection	GDA94 / Map Grid of Australia Zone 55		
Data Format	MAPINFOB		
Compression	PKZIP		
Filename	feat_extent.zip (feature_extents.dat , feature_extents.id , feature_extents.map , feature_extents.tab)		
Receiver	Central Highlands Council		
Transfer Method	HTTP Web Server		
Transfer Type	Full Resupply		
Transfer Frequency	Annually		
Data Distribution	As per Conditions of Use		
Transfer Start Date			
Automated Email Notification	kbradburn@centralhighlands.tas.gov.au, cadastre@insightgis.com.au, listhelp@dpiipwe.tas.gov.au		
Destination Server			
Fields	Field Name	Field Type	Description
	FEATEXT_ID	INT32	Persistent ID
	NOM_REG_NO	CHAR(7)	Nomenclature Register Number
	NAME	CHAR(60)	Feature Name
	UFI	CHAR(38)	Unique Feature Identifier
	CREATED_ON	CHAR(19)	Created On Date

ATTACHMENT 1

Technical Specification of data transferred from DPIPWE to Central Highlands Council, via LISTdata Automated supply

Job ID Number	7371		
Extraction ID Number	36929		
Dataset Name	Nomenclature Data (Basic Supply)		
Description	Nomenclature Data (Basic Supply)		
Metadata Link	data.thelist.tas.gov.au		
Data Coverage	State-wide		
Data Source	LIST Data Delivery Server		
Datum / Projection	GDA94 / Map Grid of Australia Zone 55		
Data Format	CSV_COMMA		
Compression	PKZIP		
Filename	nomenclature.zip (nomenclature.csv)		
Receiver	Central Highlands Council		
Transfer Method	HTTP Web Server		
Transfer Type	Full Resupply		
Transfer Frequency	3 Monthly		
Data Distribution	As per Conditions of Use		
Transfer Start Date			
Automated Email Notification	kbradburn@centralhighlands.tas.gov.au, cadastre@insightgis.com.au, listhelp@dpiuwe.tas.gov.au		
Destination Server			
Fields	<i>Field Name</i>	<i>Field Type</i>	<i>Description</i>
	NOM_REG_NO	CHAR(7)	Nomenclature Register Number
	FEAT_NAME	CHAR(60)	Feature Name
	STATUS	CHAR(60)	Nomenclature Status
	CLASS	CHAR(60)	Nomenclature LIST Class
	FEAT_TYPE	CHAR(60)	Nomenclature Feature Type
	LGA_NAME	CHAR(60)	Local Government Name
	EASTING	INT32	GDA94 Easting
	NORTHING	INT32	GDA94 Northing

ATTACHMENT 1

Technical Specification of data transferred from DPIPWE to Central Highlands Council, via LISTdata Automated supply

Job ID Number	7397		
Extraction ID Number	36961		
Dataset Name	Orthophoto Mosaic		
Description	Tasmanian Orthophoto Mosaic with photos at various scales		
Metadata Link	data.thelist.tas.gov.au		
Data Coverage	Municipality - Central Highlands		
Data Source	LIST Data Delivery Server		
Datum / Projection	GDA94 / Map Grid of Australia Zone 55		
Data Format	ECW		
Compression	No Compression		
Filename	ortho_mosaic.ecw		
Receiver	Central Highlands Council		
Transfer Method	HTTP Web Server		
Transfer Type	Full Resupply		
Transfer Frequency	Annually		
Data Distribution	As per Conditions of Use		
Transfer Start Date			
Automated Email Notification	kbradburn@centralhighlands.tas.gov.au, cadastre@insightgis.com.au, listhelp@dpiuwe.tas.gov.au		
Destination Server			
Fields	Field Name	Field Type	Description

ATTACHMENT 1

Technical Specification of data transferred from DPIPWE to Central Highlands Council, via LISTdata Automated supply

Job ID Number	7200		
Extraction ID Number	36724		
Dataset Name	Orthophoto Mosaic Index		
Description	Orthophoto Mosaic Index		
Metadata Link	data.thelist.tas.gov.au		
Data Coverage	State-wide		
Data Source	LIST Data Delivery Server		
Datum / Projection	GDA94 / Map Grid of Australia Zone 55		
Data Format	MAPINFOB		
Compression	PKZIP		
Filename	Index_state_mosaic.zip (ortho_mosaic_index.dat , ortho_mosaic_index.id , ortho_mosaic_index.map , ortho_mosaic_index.tab)		
Receiver	Central Highlands Council		
Transfer Method	HTTP Web Server		
Transfer Type	Full Resupply		
Transfer Frequency	Annually		
Data Distribution	As per Conditions of Use		
Transfer Start Date			
Automated Email Notification	kbradburn@centralhighlands.tas.gov.au, cadastre@insightgis.com.au, listhelp@dpiipwe.tas.gov.au		
Destination Server			
Fields	<i>Field Name</i>	<i>Field Type</i>	<i>Description</i>
	FILM_NEG	CHAR(10)	Film_Negative Number
	PROJECT	CHAR(15)	Project Number
	SCALE	DECIMAL(9,0)	Photo Scale
	FLY_DATE	CHAR(19)	Flight Date
	SEASON	CHAR(10)	Aerial Photo Season
	FILM_NO	CHAR(5)	Film Number
	NEG_NO	CHAR(5)	Negative Number
	FLY_YEAR	CHAR(4)	Flight Date (Year)

ATTACHMENT 1

Technical Specification of data transferred from DPIPWE to Central Highlands Council, via LISTdata Automated supply

Job ID Number	5927		
Extraction ID Number	34439		
Dataset Name	Parish and Town Boundaries		
Description	Parish and Town Boundaries --INTERIM DATA STRUCTURE--		
Metadata Link	data.thelist.tas.gov.au		
Data Coverage	Municipality - Central Highlands		
Data Source	LIST Data Delivery Server		
Datum / Projection	GDA94 / Map Grid of Australia Zone 55		
Data Format	MAPINFOB		
Compression	PKZIP		
Filename	Parish.zip (parish_town.dat , parish_town.id , parish_town.map , parish_town.tab)		
Receiver	Central Highlands Council		
Transfer Method	HTTP Web Server		
Transfer Type	Full Resupply		
Transfer Frequency	Annually		
Data Distribution	As per Conditions of Use		
Transfer Start Date			
Automated Email Notification	kbradburn@centralhighlands.tas.gov.au, cadastre@insightgis.com.au, listhelp@dpiipwe.tas.gov.au		
Destination Server			
Fields	<i>Field Name</i>	<i>Field Type</i>	<i>Description</i>
	PARISH	CHAR(25)	Parish
	TOWN_CITY	CHAR(25)	Town or City

ATTACHMENT 1

Technical Specification of data transferred from DPIPWE to Central Highlands Council, via LISTdata Automated supply

Job ID Number	8241		
Extraction ID Number	38554		
Dataset Name	Planning Boundaries		
Description	Planning Boundaries		
Metadata Link	data.thelist.tas.gov.au		
Data Coverage	Municipality - Central Highlands		
Data Source	LIST Data Delivery Server		
Datum / Projection	GDA94 / Map Grid of Australia Zone 55		
Data Format	MAPINFOB		
Compression	PKZIP		
Filename	Interim_Planning.zip (planning_boundaries.dat , planning_boundaries.id , planning_boundaries.map , planning_boundaries.tab)		
Receiver	Central Highlands Council		
Transfer Method	HTTP Web Server		
Transfer Type	Full Resupply		
Transfer Frequency	7 days		
Data Distribution	As per Conditions of Use		
Transfer Start Date			
Automated Email Notification	kbradburn@centralhighlands.tas.gov.au, cadastre@insightgis.com.au, listhelp@dpiipwe.tas.gov.au		
Destination Server			
Fields	<i>Field Name</i>	<i>Field Type</i>	<i>Description</i>
	OBJECTID	DECIMAL(11,0)	Planning Boundary ID
	DESC_	CHAR(100)	Description
	SCHEMECODE	DECIMAL(5,0)	Planning Scheme ID
	PLANScheme	CHAR(100)	Planning Scheme
	SCHEMEDATE	CHAR(19)	Scheme Date
	COMMENTS	CHAR(250)	Comments
	DISCLAIMER	CHAR(250)	Disclaimer
	LIST_GUID	CHAR(38)	LIST_GUID

ATTACHMENT 1

Technical Specification of data transferred from DPIPWE to Central Highlands Council, via LISTdata Automated supply

Job ID Number	8241		
Extraction ID Number	39094		
Dataset Name	Planning Overlays		
Description	Planning Overlays		
Metadata Link	data.thelist.tas.gov.au		
Data Coverage	Municipality - Central Highlands		
Data Source	LIST Data Delivery Server		
Datum / Projection	GDA94 / Map Grid of Australia Zone 55		
Data Format	MAPINFOB		
Compression	PKZIP		
Filename	Interim_Planning.zip (planning_overlays.dat , planning_overlays.id , planning_overlays.map , planning_overlays.tab)		
Receiver	Central Highlands Council		
Transfer Method	HTTP Web Server		
Transfer Type	Full Resupply		
Transfer Frequency	7 days		
Data Distribution	As per Conditions of Use		
Transfer Start Date			
Automated Email Notification	kbradburn@centralhighlands.tas.gov.au, cadastre@insightgis.com.au, listhelp@dpiipwe.tas.gov.au		
Destination Server			
Fields	<i>Field Name</i>	<i>Field Type</i>	<i>Description</i>
	OBJECTID	DECIMAL(11,0)	Planning Overlay ID
	O_CODE	CHAR(50)	Overlay Code
	O_NAME	CHAR(100)	Overlay Name
	SCHEMECODE	DECIMAL(5,0)	Planning Scheme ID
	PLANScheme	CHAR(100)	Planning Scheme
	DESC_	CHAR(100)	Description
	CLASS	CHAR(100)	Class
	SCHEMEDATE	CHAR(19)	Scheme Date
	COMMENTS	CHAR(250)	Comments
	DISCLAIMER	CHAR(250)	Disclaimer
	LIST_GUID	CHAR(38)	LIST_GUID

ATTACHMENT 1

Technical Specification of data transferred from DPIPWE to Central Highlands Council, via LISTdata Automated supply

Job ID Number	8241		
Extraction ID Number	38556		
Dataset Name	Planning Zones		
Description	Planning Zones		
Metadata Link	data.thelist.tas.gov.au		
Data Coverage	Municipality - Central Highlands		
Data Source	LIST Data Delivery Server		
Datum / Projection	GDA94 / Map Grid of Australia Zone 55		
Data Format	MAPINFOB		
Compression	PKZIP		
Filename	Interim_Planning.zip (planning_zones.dat , planning_zones.id , planning_zones.map , planning_zones.tab)		
Receiver	Central Highlands Council		
Transfer Method	HTTP Web Server		
Transfer Type	Full Resupply		
Transfer Frequency	7 days		
Data Distribution	As per Conditions of Use		
Transfer Start Date			
Automated Email Notification	kbradburn@centralhighlands.tas.gov.au, cadastre@insightgis.com.au, listhelp@dpiipwe.tas.gov.au		
Destination Server			
Fields	<i>Field Name</i>	<i>Field Type</i>	<i>Description</i>
	OBJECTID	DECIMAL(11,0)	Planning Zone ID
	ZONECODE	DECIMAL(5,0)	Zone Code
	ZONE	CHAR(100)	Planning Zone
	SCHEMECODE	DECIMAL(5,0)	Planning Scheme Code
	PLANScheme	CHAR(100)	Planning Scheme
	SCHEMEDATE	CHAR(19)	Effective Date
	COMMENTS	CHAR(250)	Comments
	DISCLAIMER	CHAR(250)	Disclaimer
	LIST_GUID	CHAR(38)	LIST_GUID

ATTACHMENT 1

Technical Specification of data transferred from DPIPWE to Central Highlands Council, via LISTdata Automated supply

Job ID Number	5920		
Extraction ID Number	34432		
Dataset Name	Private Reserves		
Description	Private Nature Reserves, Private Sanctuaries and Conservation Covenants proclaimed and/or registered pursuant to the Nature Conservation Act 2002		
Metadata Link	data.thelist.tas.gov.au		
Data Coverage	Municipality - Central Highlands		
Data Source	LIST Data Delivery Server		
Datum / Projection	GDA94 / Map Grid of Australia Zone 55		
Data Format	MAPINFOB		
Compression	PKZIP		
Filename	Private Reserves.zip (private_reserves.dat , private_reserves.id , private_reserves.map , private_reserves.tab)		
Receiver	Central Highlands Council		
Transfer Method	HTTP Web Server		
Transfer Type	Full Resupply		
Transfer Frequency	3 Monthly		
Data Distribution	As per Conditions of Use		
Transfer Start Date			
Automated Email Notification	kbradburn@centralhighlands.tas.gov.au, cadastre@insightgis.com.au, listhelp@dpiuwe.tas.gov.au		
Destination Server			
Fields	<i>Field Name</i>	<i>Field Type</i>	<i>Description</i>
	CID	INT32	Cadastral ID
	CATEGORY	CHAR(60)	Category
	NAME	CHAR(60)	Name
	RESERVE_ID	CHAR(30)	Reserve ID
	COMP_AREA	DECIMAL(16,3)	Computed Area
	MEAS_AREA	DECIMAL(16,3)	Measured Area
	PLAN_REF	CHAR(8)	Plan
	PLAN_AUTH	CHAR(60)	Plan Authority
	INST_TYPE	CHAR(60)	Instrument Type
	INST_NO	CHAR(40)	Instrument Number
	GOVERN_ACT	CHAR(60)	Governing Act
	GAZ_DATE	CHAR(19)	Gazette Date
	EFFEC_DATE	CHAR(19)	Effective Date
	UFI	CHAR(12)	Unique Feature Identifier
	FMP	CHAR(12)	Feature Metadata Pointer
	CREATED_ON	CHAR(19)	Created On Date

ATTACHMENT 1

Technical Specification of data transferred from DPIPWE to Central Highlands Council, via LISTdata Automated supply

Job ID Number	5932		
Extraction ID Number	34447		
Dataset Name	Private Timber Reserves		
Description	Private Timber Reserves		
Metadata Link	data.thelist.tas.gov.au		
Data Coverage	Municipality - Central Highlands		
Data Source	LIST Data Delivery Server		
Datum / Projection	GDA94 / Map Grid of Australia Zone 55		
Data Format	MAPINFOB		
Compression	PKZIP		
Filename	Private Timber Reserves.zip (ptr.dat , ptr.id , ptr.map , ptr.tab)		
Receiver	Central Highlands Council		
Transfer Method	HTTP Web Server		
Transfer Type	Full Resupply		
Transfer Frequency	3 Monthly		
Data Distribution	As per Conditions of Use		
Transfer Start Date			
Automated Email Notification	kbradburn@centralhighlands.tas.gov.au, cadastre@insightgis.com.au, listhelp@dpiuwe.tas.gov.au		
Destination Server			
Fields	<i>Field Name</i>	<i>Field Type</i>	<i>Description</i>
	PTR_ID	INT32	Private Timber Reserve ID
	PTR_CODE	CHAR(10)	Private Timber Reserve Code

ATTACHMENT 1

Technical Specification of data transferred from DPIPWE to Central Highlands Council, via LISTdata Automated supply

Job ID Number	1471		
Extraction ID Number	7482		
Dataset Name	Public Land Classification		
Description	Reserves proclaimed under the Nature Conservation Act, the Forestry Act and the Crown Lands Act		
Metadata Link	data.thelist.tas.gov.au		
Data Coverage	Municipality - Central Highlands		
Data Source	LIST Data Delivery Server		
Datum / Projection	GDA94 / Map Grid of Australia Zone 55		
Data Format	MAPINFOB		
Compression	PKZIP		
Filename	pluc.zip (plc.dat , plc.id , plc.map , plc.tab)		
Receiver	Central Highlands Council		
Transfer Method	HTTP Web Server		
Transfer Type	Full Resupply		
Transfer Frequency	Monthly		
Data Distribution	As per Conditions of Use		
Transfer Start Date			
Automated Email Notification	kbradburn@centralhighlands.tas.gov.au, cadastre@insightgis.com.au, listhelp@dpiuwe.tas.gov.au		
Destination Server			
Fields	<i>Field Name</i>	<i>Field Type</i>	<i>Description</i>
	CID	INT32	Cadastral ID
	CATEGORY	CHAR(60)	Category
	NAME	CHAR(60)	Name
	COMP_AREA	DECIMAL(16,3)	Computed Area
	MEAS_AREA	DECIMAL(16,3)	Measured Area
	PLAN_REF	CHAR(10)	Plan Reference
	PLAN_AUTH	CHAR(60)	Plan Authority
	INST_TYPE	CHAR(60)	Instrument Type
	INST_NO	CHAR(40)	Instrument Number
	GOVERN_ACT	CHAR(60)	Governing Act
	GAZ_DATE	CHAR(19)	Gazette Date
	EFFEC_DATE	CHAR(19)	Effective Date
	PRIOR_TYPE	CHAR(60)	Prior Type
	PRIOR_MTOID	CHAR(60)	Prior Method
	PRIOR_INST	CHAR(40)	Prior Instrument
	PRIOR_GAZ	CHAR(19)	Prior Gazette
	UFI	CHAR(12)	Unique Feature Identifier
	FMP	CHAR(12)	Feature Metadata Pointer
	CREATED_ON	CHAR(19)	Created On Date

ATTACHMENT 1

Technical Specification of data transferred from DPIPWE to Central Highlands Council, via LISTdata Automated supply

Job ID Number	5919		
Extraction ID Number	34430		
Dataset Name	Ramsar Wetlands		
Description	The 10 existing sites in the State of Tasmania included in the Ramsar List of Wetlands of International Importance		
Metadata Link	data.thelist.tas.gov.au		
Data Coverage	Municipality - Central Highlands		
Data Source	LIST Data Delivery Server		
Datum / Projection	GDA94 / Map Grid of Australia Zone 55		
Data Format	MAPINFOB		
Compression	PKZIP		
Filename	Ramsar.zip (ramsar_wetlands.dat , ramsar_wetlands.id , ramsar_wetlands.map , ramsar_wetlands.tab)		
Receiver	Central Highlands Council		
Transfer Method	HTTP Web Server		
Transfer Type	Full Resupply		
Transfer Frequency	6 Monthly		
Data Distribution	As per Conditions of Use		
Transfer Start Date			
Automated Email Notification	kbradburn@centralhighlands.tas.gov.au, cadastre@insightgis.com.au, listhelp@dpiuwe.tas.gov.au		
Destination Server			
Fields	<i>Field Name</i>	<i>Field Type</i>	<i>Description</i>
	CID	INT32	Cadastral ID
	CATEGORY	CHAR(60)	The primary classification of a cadastral area being the Ramsar Wetland category.
	NAME	CHAR(60)	Name
	REFCODE3	CHAR(30)	The unique reference number
	COMP_AREA	DECIMAL(16,3)	Computed Area
	MEAS_AREA	DECIMAL(16,3)	Measured Area
	PLAN_REF	CHAR(8)	A plan registration reference issued by a Plan Authority
	PLAN_AUTH	CHAR(60)	The description for the authority under which a plan is registered
	UFI	CHAR(12)	Unique Feature Identifier
	FMP	CHAR(12)	Feature Metadata Pointer
	CREATED_ON	CHAR(19)	Created On Date

ATTACHMENT 1

Technical Specification of data transferred from DPIPWE to Central Highlands Council, via LISTdata Automated supply

Job ID Number	7939		
Extraction ID Number	37873		
Dataset Name	Survey Control		
Description	Survey Control		
Metadata Link	data.thelist.tas.gov.au		
Data Coverage	State-wide		
Data Source	LIST Data Delivery Server		
Datum / Projection	GDA94 / Map Grid of Australia Zone 55		
Data Format	CSV_COMMA		
Compression	PKZIP		
Filename	Survey_Control.zip (survey_control.csv)		
Receiver	Central Highlands Council		
Transfer Method	HTTP Web Server		
Transfer Type	Full Resupply		
Transfer Frequency	Monthly		
Data Distribution	As per Conditions of Use		
Transfer Start Date			
Automated Email Notification	kbradburn@centralhighlands.tas.gov.au, cadastre@insightgis.com.au, listhelp@dpiuwe.tas.gov.au		
Destination Server			
Fields	<i>Field Name</i>	<i>Field Type</i>	<i>Description</i>
	PACK_ID	CHAR(24)	Site ID
	SCS_NAME	CHAR(35)	Site Name
	ZONE	INT16	Zone
	EASTING	DECIMAL(12,4)	Easting
	NORTHING	DECIMAL(12,4)	Northing
	HOR_DATUM	CHAR(10)	Horizontal Datum
	HOR_CLASS	CHAR(10)	Horizontal Class
	HOR_ORDER	CHAR(10)	Horizontal Order
	TARGET_STR	CHAR(10)	Target Structure
	HEIGHT	DECIMAL(7,3)	Height
	HGT_DATUM	CHAR(10)	Height Datum
	HGT_CLASS	CHAR(10)	Height Class
	HGT_ORDER	CHAR(10)	Height Order
	MARKSTATUS	CHAR(10)	Mark Status
	DESCRIPT	CHAR(2000)	Description
	ORDER_SYMB	CHAR(20)	Order Symbol

ATTACHMENT 1

Technical Specification of data transferred from DPIPWE to Central Highlands Council, via LISTdata Automated supply

Job ID Number	5924		
Extraction ID Number	34436		
Dataset Name	TasVeg 3.0		
Description	Species-based vegetation layer version 3.0		
Metadata Link	data.thelist.tas.gov.au		
Data Coverage	Municipality - Central Highlands		
Data Source	LIST Data Delivery Server		
Datum / Projection	GDA94 / Map Grid of Australia Zone 55		
Data Format	MAPINFOB		
Compression	PKZIP		
Filename	TASVEG.zip (tasveg.dat , tasveg.id , tasveg.map , tasveg.tab)		
Receiver	Central Highlands Council		
Transfer Method	HTTP Web Server		
Transfer Type	Full Resupply		
Transfer Frequency	Annually		
Data Distribution	As per Conditions of Use		
Transfer Start Date			
Automated Email Notification	kbradburn@centralhighlands.tas.gov.au, cadastre@insightgis.com.au, listhelp@dpiuwe.tas.gov.au		
Destination Server			
Fields	Field Name	Field Type	Description

ATTACHMENT 1

Technical Specification of data transferred from DPIPWE to Central Highlands Council, via LISTdata Automated supply

Job ID Number	5926		
Extraction ID Number	34438		
Dataset Name	Tasmanian Reserves Estate		
Description	Tasmanian Reserves Estate excluding Macquarie Island		
Metadata Link	data.thelist.tas.gov.au		
Data Coverage	Municipality - Central Highlands		
Data Source	LIST Data Delivery Server		
Datum / Projection	GDA94 / Map Grid of Australia Zone 55		
Data Format	MAPINFOB		
Compression	PKZIP		
Filename	Tas Reserves Estate.zip (Tasmanian_Reserve_Estate.dat , Tasmanian_Reserve_Estate.id , Tasmanian_Reserve_Estate.map , Tasmanian_Reserve_Estate.tab)		
Receiver	Central Highlands Council		
Transfer Method	HTTP Web Server		
Transfer Type	Full Resupply		
Transfer Frequency	3 Monthly		
Data Distribution	As per Conditions of Use		
Transfer Start Date			
Automated Email Notification	kbradburn@centralhighlands.tas.gov.au, cadastre@insightgis.com.au, listhelp@dpiuwe.tas.gov.au		
Destination Server			
Fields	<i>Field Name</i>	<i>Field Type</i>	<i>Description</i>
	FOREIGN_ID	INT32	Foreign Identifier
	RES_CLASS	CHAR(100)	The description of the reservation classification
	RES_STATUS	CHAR(60)	The description of an area's CAR Reserve status
	RES_NAME	CHAR(60)	The name of a reserve as proclaimed and recorded in the database of the Nomenclature Board.
	NAME_SHORT	CHAR(60)	Name of the reserve, with the reserve type abbreviated
	MANAGE	CHAR(30)	Identifies the land management
	MINING	CHAR(100)	Identifies if reserve is available under the MRDA
	ACT	CHAR(12)	The Act under which the reserve was defined
	CUSTODIAN	CHAR(60)	Identifies who is the custodian of the source data
	CREATED	DATE	Date that the reserve became effective
	EXPIRY	DATE	Date expired
	IUCN	CHAR(16)	The IUCN category of the reserve
	FOR_ID2	INT32	The Foreign ID of the secondary reserve where there are two current reserve types
	CREATED2	DATE	The date that the secondary reserve became effective where there are two current reserve types
	PROJECT	CHAR(100)	Reason for reservation. eg: RFA, RAPs, TCFA
	AS_AT_DATE	DATE	Date at which the data was current
	ENVIRON	CHAR(12)	Whether the portion of the reserve is Marine or Terrestrial
	TERM	CHAR(20)	Length of the term of conservation covenant or agreement
	REG	CHAR(20)	Indicates conservation covenants or agreements that resulted from a regulatory requirement
	NRS	CHAR(20)	
	MGT_PLAN	CHAR(20)	Management Plan
	AREA_HA	DECIMAL(16,3)	Area Hectares
	AUTHORITY	CHAR(50)	The Authority responsible for administering the land

ATTACHMENT 1

Technical Specification of data transferred from DPIPWE to Central Highlands Council, via LISTdata Automated supply

Job ID Number	1475		
Extraction ID Number	7844		
Dataset Name	Transport Nodes		
Description	Point features within the Transport data model (inc bridges, gates, road junctions etc)		
Metadata Link	data.thelist.tas.gov.au		
Data Coverage	Municipality - Central Highlands		
Data Source	LIST Data Delivery Server		
Datum / Projection	GDA94 / Map Grid of Australia Zone 55		
Data Format	MAPINFOB		
Compression	PKZIP		
Filename	transport.zip (transport_nodes.dat , transport_nodes.id , transport_nodes.map , transport_nodes.tab)		
Receiver	Central Highlands Council		
Transfer Method	HTTP Web Server		
Transfer Type	Full Resupply		
Transfer Frequency	Monthly		
Data Distribution	As per Conditions of Use		
Transfer Start Date			
Automated Email Notification	kbradburn@centralhighlands.tas.gov.au, cadastre@insightgis.com.au, listhelp@dpiipwe.tas.gov.au		
Destination Server			
Fields	<i>Field Name</i>	<i>Field Type</i>	<i>Description</i>
	TRANODE_ID	INT32	Persistent Id
	TNODE_FEAT	CHAR(60)	Node Feature Type
	BARRIER_TY	CHAR(60)	Barrier Type
	BRIDGE_TY	CHAR(60)	Bridge Type
	BRIDGE_NAM	CHAR(60)	Bridge Name
	TUNNEL_TY	CHAR(60)	Tunnel type
	TUNNEL_NAM	CHAR(60)	Tunnel Name
	CARRIER_NA	CHAR(60)	Carrier Name
	STATUS	CHAR(60)	Status
	TRAFF_DIR	CHAR(60)	Traffic Direction
	JUNC_MOVE	CHAR(60)	Junction Move
	AUTHORITY	CHAR(60)	Authority
	FOREIGN_ID	CHAR(30)	Foreign Id
	UFI	CHAR(12)	Unique Feature Identifier
	FMP	CHAR(12)	Feature Metadata Pointer
	CREATED_ON	CHAR(19)	Created On Date

ATTACHMENT 1

Technical Specification of data transferred from DPIPWE to Central Highlands Council, via LISTdata Automated supply

Job ID Number	1475		
Extraction ID Number	7843		
Dataset Name	Transport Segments		
Description	Road, railway and track centre-lines		
Metadata Link	data.thelist.tas.gov.au		
Data Coverage	Municipality - Central Highlands		
Data Source	LIST Data Delivery Server		
Datum / Projection	GDA94 / Map Grid of Australia Zone 55		
Data Format	MAPINFOB		
Compression	PKZIP		
Filename	transport.zip (transport_segments.dat , transport_segments.id , transport_segments.map , transport_segments.tab)		
Receiver	Central Highlands Council		
Transfer Method	HTTP Web Server		
Transfer Type	Full Resupply		
Transfer Frequency	Monthly		
Data Distribution	As per Conditions of Use		
Transfer Start Date			
Automated Email Notification	kbradburn@centralhighlands.tas.gov.au, cadastre@insightgis.com.au, listhelp@dpiipwe.tas.gov.au		
Destination Server			
Fields	Field Name	Field Type	Description
	TRANSEG_ID	INT32	Transport Segment ID
	TRANS_TYPE	CHAR(60)	Transport Type
	TSEG_FEAT	CHAR(60)	Transport Segment Feature
	STATUS	CHAR(60)	Status
	TRAFF_DIR	CHAR(60)	Traffic Direction
	TRAN_CLASS	CHAR(60)	Transport Class
	USER_TYPE	CHAR(60)	User Type
	TOUR_CLASS	CHAR(4)	Tourist Route Number
	SURFACE_TY	CHAR(60)	Surface Type
	PRI_NAME	CHAR(60)	Primary Name
	PRI_NOMREG	CHAR(7)	Primary Nomenclature Number
	SEC_NAME	CHAR(60)	Secondary Name
	SEC_NOMREG	CHAR(7)	Secondary Nomenclature Number
	AUTHORITY	CHAR(60)	Managing Authority
	FOREIGN_ID	CHAR(30)	Foreign ID
	COMP_LEN	DECIMAL(6,1)	Computed Length
	UFI	CHAR(12)	Unique Feature Identifier
	FMP	CHAR(12)	Feature Metadata Pointer
	CREATED_ON	CHAR(19)	Created On Date

ATTACHMENT 1

Technical Specification of data transferred from DPIPWE to Central Highlands Council, via LISTdata Automated supply

Job ID Number	1476		
Extraction ID Number	7487		
Dataset Name	Vistas Data (LGA View)		
Description	Vistas Data (LGA View)		
Metadata Link	data.thelist.tas.gov.au		
Data Coverage	State-wide		
Data Source	LIST Data Delivery Server		
Datum / Projection	GDA94 / Map Grid of Australia Zone 55		
Data Format	CSV_COMMA		
Compression	PKZIP		
Filename	property.zip (property.csv)		
Receiver	Central Highlands Council		
Transfer Method	HTTP Web Server		
Transfer Type	Full Resupply		
Transfer Frequency	Monthly		
Data Distribution	As per Conditions of Use		
Transfer Start Date			
Automated Email Notification	kbradburn@centralhighlands.tas.gov.au, cadastre@insightgis.com.au, listhelp@dpiuwe.tas.gov.au		
Destination Server			
Fields	Field Name	Field Type	Description
	PROPERTY_ID	INT32	Valuation Property ID
	VALUATION_NO	DECIMAL(8,3)	Valuation Number
	PROP_ADDRESS_LINE_1	CHAR(255)	Property Address Line 1
	PROP_ADDRESS_LINE_2	CHAR(255)	Property Address Line 2
	PROP_ADDRESS_LINE_3	CHAR(255)	Property Address Line 3
	BLDG_SUBUNIT_TYPE_CODE	CHAR(2)	Subunit Code
	BLDG_SUBUNIT_NO	CHAR(11)	Subunit Number
	BLDG_PROPERTY_NAME	CHAR(30)	Property Name
	STREET_NO_FROM	INT32	Street Number From
	STREET_NO_FROM_SUFFIX	CHAR(1)	Street Number From Suffix
	STREET_NO_TO	INT32	Street Number To
	STREET_NO_TO_SUFFIX	CHAR(1)	Street Number To Suffix
	RA	CHAR(5)	Other Delivery Number
	STREET	CHAR(25)	Street Name
	STREET_TYPE_CODE	CHAR(4)	Street Type Code
	STREET_SUFFIX	CHAR(2)	Street Suffix
	SUBURB_LOCALITY	CHAR(30)	Suburb or Locality
	POSTCODE	INT16	Postcode
	OWNER_SHORT_NAME	CHAR(30)	Owners Short Name
	OWNER_ADDRESS_LINE_1	CHAR(255)	Owner Address Line 1
	OWNER_ADDRESS_LINE_2	CHAR(255)	Owner Address Line 2
	OWNER_ADDRESS_LINE_3	CHAR(255)	Owner Address Line 3
	IMPROVEMENTS	CHAR(20)	Improvements
	LAND_USE_CODE	CHAR(4)	Land Use Code
	MUNICIPALITY_CODE	CHAR(3)	Municipality Code

Attachment 2

Technical specifications of data transferred from Central Highlands Council

Data set name	Buildings		
Description	Major building structures		
Data Custodian	Client		
Data Coverage	State-wide Bounded by the municipal boundaries of AS per GDA co-ords LL UR		
Metadata Link	where available or similar		
Data Coverage	State-wide Bounded by the municipal boundaries of AS per GDA co-ords LL UR		
Datum / Projection	GDA94 / UTM Zone 55 or AGD66 / UTM Zone 55		
Data Format	ESRI Shapefile or MapInfo or Autocad DXF or Comma Delimited Text File – web services etc.		
Filename	Client_data.zip or Client_EMS_data.zip (for restricted data)		
Transfer Method	FTP		
Transfer Type	Full Resupply or Incremental		
Transfer Frequency	Annually 6 monthly 3 monthly Monthly TBA		
Transfer Start Date	TBA		
Data Distribution	LIST statewide datasets LISTmapPublic LISTmap Restricted Emergency Services Organisations Land Tasmania internal business		
Automated Email Notification	listhelp@dpiwe.tas.gov.au		
Destination Server Details	Server: http://listdata.thelist.tas.gov.au/		
Fields	<i>Field Name</i>	<i>Field Type</i>	<i>Description</i>
	House_No	Character(15)	House Number
	Street	Character(40)	Street name
	Prop_no	Integer	Client Unique Property Number or similar
	Property name	Character(100)	Known name of the property

example only

Attachment 3

Contact Details

Version 3.0a – November 2019

Attachment 3

Contact Details for Central Highlands Council and DPIPWE

Central Highlands Council Contact Details

Issues related to the receipt or delivery of data or the format/quality of the data will be addressed by:

Contact: Kathy Bradburn
Title: Senior Administrative Officer
Phone: (03) 6259 5503
Email: kbradburn@centralhighlands.tas.gov.au

Issues related to the administration of the Agreement or matters that remain unresolved for an unsatisfactory period will be addressed by:

Contact: Kathy Bradburn
Title: Senior Administrative Officer
Phone: (03) 6259 5503
Email: kbradburn@centralhighlands.tas.gov.au

Issues where agreement cannot be reached, concerning the content of this Agreement or the Services described within this Agreement, will be addressed by:

Contact: Lyn Eyles
Title: General Manager
Phone: (03) 6286 3202
Email: leyles@centralhighlands.tas.gov.au

Attachment 3

Contact Details for Central Highlands Council and DPIPWE

DPIPWE Contact Details

Issues related to the receipt or delivery of Data or the format/quality of the Data will be addressed by:

Contact: Craig Smith
Title: Senior Client Services Officer (Agreements)
Location Services Branch, Land Tasmania
Phone: (03) 6165 4646
Email: Craig.Smith@dpipwe.tas.gov.au

Issues related to the administration of the Agreement or matters that remain unresolved for an unsatisfactory period will be addressed by:

Contact: Todd Baker
Title: Manager (Service Delivery)
Location Services Branch, Land Tasmania
Phone: (03) 6165 4644
Email: Todd.Baker@dpipwe.tas.gov.au

Issues where agreement cannot be reached, concerning the content of this Agreement or the Services described within this Agreement, will be addressed by:

Contact: Stuart Fletcher
Title: General Manager, Land Tasmania
Phone: (03) 6165 4117
Email: Stuart.Fletcher@dpipwe.tas.gov.au



LandTasmania

Land Tasmania Data Exchange Methods

User Guide

*This document details Land Tasmania's data
exchange mechanisms available to clients*

July 2018

This page is intended to be blank.

Table of Contents

1.	Introduction	4
1.1.	Operating environment	4
1.2.	Compatible browsers	4
1.3.	Finding location data, products and services	4
2.	Transfer via LIST Clearing House	7
2.1.	Supplying Data to Clients	7
2.2.	Supplying Data to DPIPWE	7
3.	Transfer via Web Services	8
3.1.	LIST spatial web services	8
3.2.	Restricted LIST spatial web services	8
3.3.	Property and Titles Web Services	8
3.4.	Consuming Client web services	8
4.	Transfer via Open Data	9
5.	Transfer via LISTmap 'Clip & Ship'	9
6.	Transfer via other Methods	9
7.	For more information	9

1. Introduction

Land Tasmania manages the provision of services and authoritative information about land and property in Tasmania. This includes services for the collection, maintenance and delivery of a wide range of data relating to land titles, maps, property sales, surveys and valuations.

Most of this information is readily accessible to the public through the LIST, which is a whole-of-government service that enables the discovery and delivery of integrated services and information about land in Tasmania.

In addition to this there is a range of other methods to exchange data with Land Tasmania. This User Guide details what those methods are and how clients can use them.

1.1. Operating environment

Land Tasmania aims to ensure its Data exchange systems operate at a high level of availability.

All reasonable endeavours are taken to ensure Land Tasmania data exchange systems are operational twenty four hours a day and seven days per week, however this is not guaranteed. Support is only available on normal business days during the hours of 9am to 5pm, Monday to Friday.

Should Land Tasmania systems not be available due to system failure, every reasonable endeavor will be made to reinstate the service in a timely manner.

Routine servicing activities that would normally impact on system availability will be conducted outside of normal business hours where reasonably possible to do so.

Notifications for extended outages (planned or otherwise) will be advertised via the LIST Home page and/or by direct contact to clients where reasonably possible.

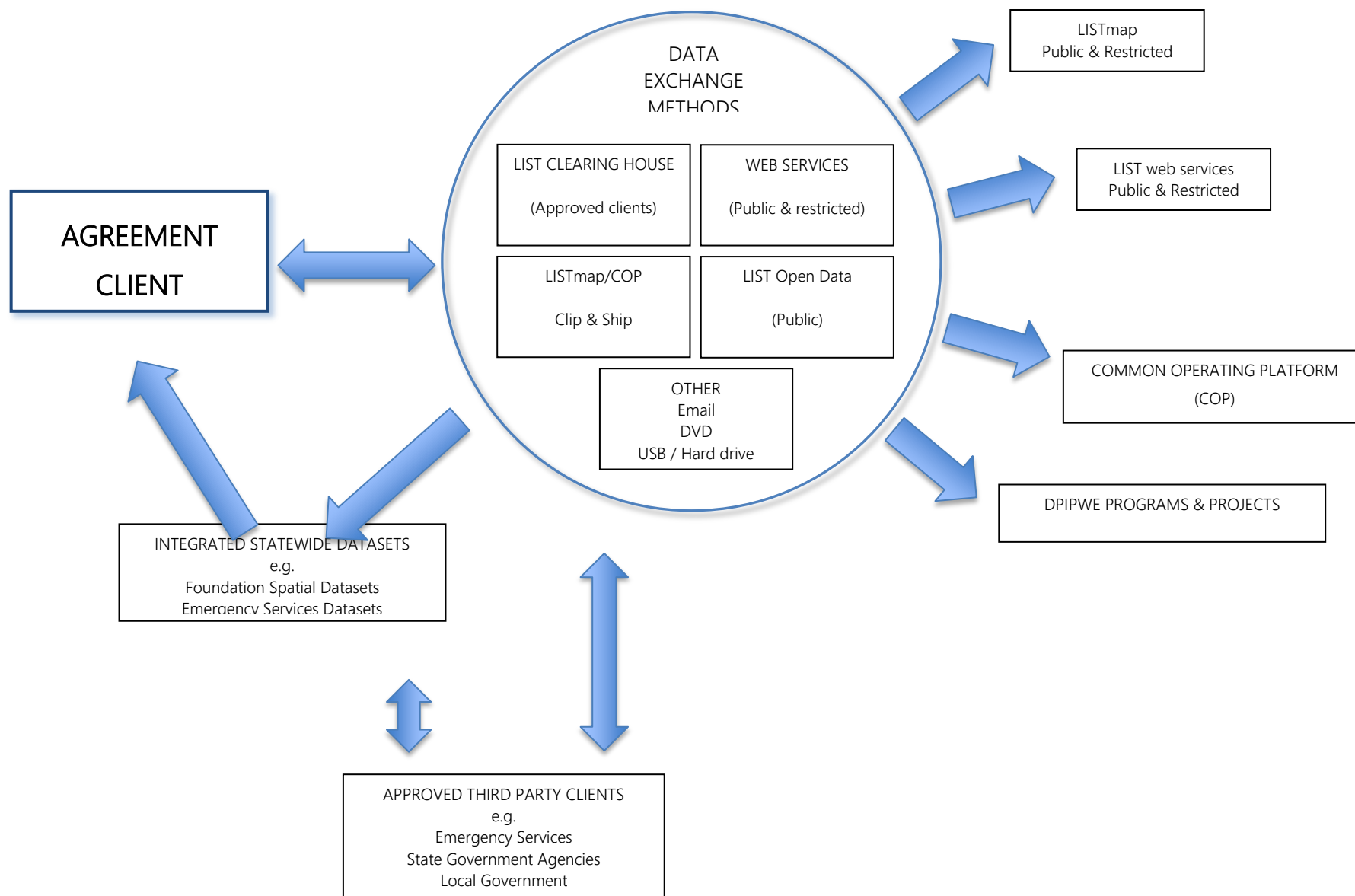
1.2. Compatible browsers

Land Tasmania data exchange systems perform best with the latest versions of modern web browsers. While older and other browsers may be compatible, it is strongly recommended that you upgrade your browser for optimal performance and security. Minimum requirements are:

- Chrome 3.0 and above
- Firefox 3.6 and above
- Internet Explorer 8.0 and above (Windows 7 and up)

1.3. Finding location data, products and services

Whilst this document aims to provide information on the available Land Tasmania data exchange methods, it will not detail all of the available Data products and services available. To find Location data product and services use LISTdata <https://data.thelist.tas.gov.au>. It allows users to discover a wide range of location based information, and provides a central point for discovering all options to access authoritative government data, including Open Data.



2. Transfer via LIST Clearing House

Land Tasmania provides a secured website for the exchange of spatial data. As part of an ongoing data agreement, clients may choose to use the LIST Clearing House for the exchange of Data identified in the Agreement attachments. It should only be used for the purposes of transferring data between one another.

The LIST Clearing House is accessible to approved clients via common web browsers at:

<https://listdata.thelist.tas.gov.au/>

2.1. Supplying Data to Clients

Once an agreement is established approved clients will be provided with a designated folder, username and password with appropriate security measures in place to enable each party to exchange Data. Both parties are responsible for ensuring the security of the assigned login and password.

- DPIPWE will deliver Data to the client folder as per the specifications set out in the Agreement Attachment 1. The client is notified by email that the Data supply has occurred.
- DPIPWE is automatically advised of a data supply error. Every reasonable endeavor will be made to rectify the data supply failure and or place the Data on the site as soon as possible thereafter.
- Data sets are normally transferred as a complete replacement. Complete Dataset supplies will remain in the client folder until replaced by a subsequent update.
- Limited incremental supplies are available. Incremental supplies will only include changes made from the previous update and will include all retired features. DPIPWE will maintain a backup copy of the incremental Data supplies in the client folder for a period of twelve (12) months.

2.2. Supplying Data to DPIPWE

- The client should go to the <https://listdata.thelist.tas.gov.au/> and login with their supplied username and password.
- Data should be compressed into a zip file before copying onto the server.
- Copying directory structures or names including spaces onto the server is not permitted.
- The nominated DPIWPE Agreement contact (in Attachment 3) should be notified via e-mail that the Data has been delivered. This ensures that Data (in particular sensitive Data as per Attachment 2) will be appropriately actioned and managed in a timely manner.

A more detailed fact sheet on how to use the LIST Clearing House is available at

<https://listdata.thelist.tas.gov.au/>

3. Transfer via Web Services

Land Tasmania can supply and receive data by a range of web services. A web service is a software system which supports communication between one computer and another computer over a network.

3.1. LIST spatial web services

LIST web services allows you to receive ongoing current and dynamic feeds of public spatial data and basemap products into your business system via the Land Tasmania ArcGIS REST server. LIST web services also provide Open Geospatial Consortium compliant web services such as WMTS, WMS or WFS. No agreement is required to access and use the LIST public spatial web services or basemaps.

A catalogue of available LIST public spatial services can be found at the following URL:-

<https://services.thelist.tas.gov.au/>

3.2. Restricted LIST spatial web services

The LIST can also provide access to secured web services. Their access may be subject to separate approvals, fees, terms and conditions, over and above a standard Service Level Agreement.

Details of Secured web services accessed by the client will be documented in Attachment 1 of their Service Level Agreement.

3.3. Property and Titles Web Services

The LIST can also provide access to web services for the delivery of Property and Titles data. For more information about secured web services please contact the LIST Helpdesk.

3.4. Consuming Client web services

Land Tasmania can also consume many web services, and integrate them in to LISTmap and/or COP as public or restricted access layers. Details of web services provided by an Agreement client will be documented in Attachment 2 of their Service Level Agreement.

A more detailed User Guide on how to access and use the LIST web services is available from the Help – Spatial Web Services drop down menu on LIST home page at www.thelist.tas.gov.au/

For more information about other web services contact Land Tasmania (as per Attachment 3 of your Service Level Agreement)

4. Transfer via Open Data

Land Tasmania provides access to the majority of its spatial datasets under Open Data principles. Static copies of spatial data is available for download from:

<http://listdata.thelist.tas.gov.au/opendata>.

Each dataset can be downloaded in common GIS formats (ESRI shape, ESRI geodatabase, MapInfo tab). This data is only refreshed every six months and in many cases is supplied zipped to a municipality bundle. The data is supplied using the Creative Commons licensing suite. Accordingly a separate Service Level Agreement is not required if you use the data under these conditions. For many clients this may be a reasonable means of accessing LIST spatial data. A more detailed fact sheet on how to access LIST Open Data is available at

<https://listdata.thelist.tas.gov.au/public/outgoing/sif/opendatahelp.pdf>

5. Transfer via LISTmap 'Clip & Ship'

LISTmap allows you to view and interrogate spatial data as well as extract small extents of spatial data from the LISTmap viewer (data extraction limits apply). Once in LISTmap navigate to the area of interest and add your required layers. By selecting the Tools options and selecting Export Data, you will be able to receive data directly to an email you provide.

A help file on accessing data via LISTmap can be found at Section 3.3 within the following document

<https://listdata.thelist.tas.gov.au/public/outgoing/sif/opendatahelp.pdf>

6. Transfer via other Methods

Subject to agreement by the parties, where required Data may be transferred via other methods including (but not limited to): E-mail; DVD or External Hard Drive device. These types of supplies are not preferred for ongoing repeated supplies. Additional fees may be incurred to deliver data in these forms.

7. For more information

For more information about Land Tasmania Location data, products and services, feel free to contact Land Tasmania staff as identified Attachment 3 of your Service Level Agreement

or

Contact our helpful Client Services team at

Email: listhelp@dpipwe.tas.gov.au

Phone: (03) 6165 4444



the state of volunteering report tasmania 2019

S U M M A R Y

executive summary

Tasmanian's generosity to one another shines through in this research. There are 68.6% (or 297,000) Tasmanians over 15 years of age who volunteer in Tasmania.

Volunteers
contribute
on average,
229
Hours
 **A YEAR**

or
4.4
Hours

EVERY WEEK
to their fellow Tasmanians.

This includes people who volunteer formally with organisations and those that do not have an affiliation with an organisation but contribute informally to their communities. Volunteers contribute on average 229 hours a year or 4.4 hours every week to their fellow Tasmanians.

The value of volunteering to Tasmania in the past 12 months was \$4 billion dollars, this includes the \$3 billion it would cost to replace the labour volunteers contribute to our state as well as \$1 billion in commercial and civic benefits contributed through volunteering.

To demonstrate the scale of the volunteering sector we compared the cost to replace the voluntary work in Tasmania to the total compensation of employees in the government sector and the private sector. The volunteering sector is nearly three times larger than the Tasmanian government sector and 14% larger than the private sector.



“As phenomenal as this contribution is to our State, there are some **warning signs** to government and to volunteer-involving organisations.”

There has been an 11.2% drop in volunteering participation over the past five years from 2014 (79.8%) to 2019 (68.6%).

It is costing volunteers nearly \$1000 a year to volunteer and on average they are only reimbursed 7% of their costs by volunteer-involving organisations.

This means it costs the average volunteer over \$4/hour to volunteer. Care needs to be taken about the financial burden being placed on our volunteers and the potential this has to exclude many who cannot afford the act of volunteering.

There are some indicators within the data that may begin to explain why we have seen a decrease in volunteering in Tasmania over the past five years. When volunteers were asked if volunteering positively or negatively impacted on their work life, 47% indicated that it had a positive impact. They were also asked how large a positive difference volunteering had, the average response was that volunteering positively impacted on people's lives by 16%. In 2014 the average positive impact was 48%. This is a substantial decline in positive impact. Additionally, in 2014 only 5% of people indicated that volunteering had a negative impact on their working lives (through days off, productivity lost etc), in 2019 this figure had risen to 22% of people stating volunteering had a negative impact on their working lives. This is a substantial decline in positive impacts and increase in negative impacts.

Volunteering Tasmania, volunteer-involving organisations and government must take heed of these numbers and what volunteers themselves are telling us. We need to explore why volunteering satisfaction is declining and how it is impacting on participation, otherwise the consequences could be far-reaching for the sector and the impacts felt across our State.

So, although volunteering in Tasmania provides enormous economic and social value to the State there are warning signs in terms of costs to volunteers and the potential negative impacts of volunteering that must be actively explored to ensure the future sustainability of this vital contributor to our state's economic, social and cultural wellbeing.

introduction



**Volunteering is defined as,
“Time willingly given for the
common good and without
financial gain.”**

Volunteering has long been a driver of individual and community well-being. Not only does it contribute significant economic value, but volunteering also gives us enormous social, cultural and recreational benefits.

The 2019 State of Volunteering report explores the:

- Characteristics of volunteers and volunteering
- Characteristics of volunteer-involving organisations
- Economic, social and cultural value of volunteering.

Approach

In 2019 we conducted research that included a statewide survey of 718 Tasmanian residents who were representative of the regionality, age, gender and income levels of the population. We also surveyed 209 Tasmanian volunteer-involving organisations. Finally, a return-on-investment analysis was performed to determine the value of volunteering to Tasmania.

The 2019 data was compared to data from a 2014 research study, where information on volunteering was collected using similar methods. For the first time, we can analyse data across time and begin to see the trends and value of volunteering in Tasmania.

This report gives us a snapshot of the findings and highlights from the 2019 research. Detailed findings, including the survey tools used, are available in the full State of Volunteering in Tasmania report.

**For the full 2019 State of Volunteering Report, go to:
www.volunteeringtas.org.au/sovr2019**



characteristics of volunteering in tasmania

Tasmanians are amazing volunteers.

Nearly 300,000 Tasmanians over 15 years of age – 68.6% of the adult population – volunteered in 2019.

In total, Tasmanians donated at least 68.2 million volunteer hours to the community.

Volunteers donated an average of 229 hours per person. This equates to 19 hours per month, or 4.4 hours per week.

44% of people volunteered formally with organisations,

18% volunteered informally- unaffiliated with any organisation and

38% volunteered both formally and informally.

The range of organisations that people volunteered with in a formal setting were:

29 Million hours a year in not-for-profit organisations (60% of formal volunteering)

13 Million hours a year for Government (26% of formal volunteering)

7 Million hours a year in private, for-profit organisations (14% of formal volunteering)

Informal volunteers (not affiliated with any organisation) contributed 19 Million hours to Tasmania in 2019 (38% of total volunteering).

5.4% of people participated in workplace volunteering in Tasmania

Where people volunteer:

The clear majority (76.7%), of people volunteer in their own communities (within 50km of their home), an increasing number of people are volunteering online (16.3%), the rest volunteer either in other areas of Tasmania or interstate/ international.

The motivations for volunteering: included a desire to contribute to community, to give back/ make a difference, to do an activity that aligns with personal values, for enjoyment and social connection.

Barriers to volunteering: Were limited time and family and work commitments.

Future forecasting: Volunteers indicated they would be 24% more likely to volunteer in the future, and 20% of non-volunteers indicated they were likely to volunteer in the future.

nearly
300,000
tasmanians



of
68.6%
of the adult population
volunteered in 2019

tasmanians
donated
at least
68.2
million
volunteer hours to the community
in the past 12 months.



Volunteers
contribute
on average,

229 hours
per person, per year

19 hours
per month

= of
4.4 hours
per week

People volunteered across the following areas:

not-for-profit
organisations



29

million hours
a year

government



13

million hours
a year

private,
for-profit



7

million hours
a year

informal
(not affiliated)



19

million hours
a year

top 3
motivators



community
contribution

supporting
a cause



values based
contribution

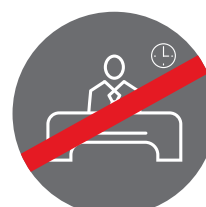


top 3
blockers



limited
time

work
commitments



family
commitments



76.7%

of volunteering
occurred in the
volunteer's own
community

(within 50 kms of home)

volunteer-involving organisations

top methods used to recruit volunteers:



80%
word of
mouth



57%
social media
& website



40%
community &
public events

The following results were reported by volunteer-involving organisations.

These were predominantly not-for-profit organisations and were from across Tasmania.

Who volunteers?

More than 70% of organisations reported that they had volunteers that were seniors and people that were either employed part-time or not employed. Interestingly, 67.5% of organisations reported that people employed fulltime elsewhere were also volunteers. Between 25 and 39 % of organisations engaged young people in volunteer roles.

Volunteering and social inclusion

People from population groups that are at high risk of social isolation and disadvantage were highly engaged in volunteering.

Over half of the organisations surveyed engaged volunteers who were from culturally and linguistically diverse backgrounds, received Centrelink benefits, or lived with a disability. One in five organisations engaged people who identified as Aboriginal or Torres Strait Islander.

Where do people volunteer?

Greater than 60% of the volunteer-involving organisations surveyed were from either community services or sport. The other sectors represented were education, emergency services, environment and conservation, advocacy, museums and heritage, recreation, seniors, arts and culture, tourism, and research.

How do volunteer-involving organisations recruit volunteers?

On average organisations use three different methods to recruit volunteers. The most common was word-of-mouth (80% of organisations) social media and website (57% of organisations) and community or public events (40% of organisations).



>70%

of organisations reported that their volunteers are seniors, unemployed or work part time.



67.5%

of organisations indicated that people working full time also volunteered.



>50%

of organisations engaged volunteers from culturally diverse backgrounds, centrelink recipients and people living with disability.



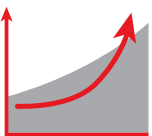
>20%

of organisations engaged people that identified as Aboriginal or Torres Strait Islander.





Fewer than
50% of organisations
reimburse their volunteers

85%
predicted that they would
have **the same or more**
volunteers in three year's time.

The top approaches
are training, awards
and certificates,
building relationships,
events and celebrations.



How do organisations recognise volunteers?

Organisations use a wide variety of approaches to motivate, reward and recognise their volunteers. The top approaches are training, awards and certificates, building relationships, events and celebrations.

Fewer than 50% of organisations reimburse their volunteers.

Future forecasting

Of the organisations surveyed, 85% predicted that they would have the same or more volunteers three years from now; 75% stated that they had the same number or more volunteers now than 12 months ago.

These figures are in contrast to the survey of residents that states volunteering has fallen by more than 10% in the past five years.

the cost of volunteering in tasmania

Direct costs

The purchase or donation of labour, materials, equipment and infrastructure are direct costs. In 2019 the direct cost of volunteering was \$396.8 million. This included \$274.4 million in out-of-pocket expenses to all Tasmanian volunteers (after reimbursements) and a \$122.4 million cost to Tasmanian volunteer-involving organisations (including reimbursements to volunteers).

a) Costs to individuals

Tasmanian volunteers spent \$274.4 million on volunteering in the past 12 months.

Individual volunteers spent on average \$990 per year of their own money on volunteering. In effect, this means they are paying \$4.03 per hour to volunteer.

On average, volunteers were reimbursed \$70.37 per year, 7.1% of their out-of-pocket expenses.

Only 7.6% of volunteers were reimbursed.

tasmanian volunteers spent an estimated **\$274.4M** in out-of-pocket expenses
each volunteer spent an average of **\$990** per year of their own money on volunteering or...
\$4.03 per volunteer hour

b) Costs to volunteer-involving organisations

Volunteer-involving organisations spent \$122.4 million enabling volunteering in the last year across volunteering activities related to salaries, administration and management, reimbursement, education and training, grants and marketing

Volunteers spent over twice as much as volunteer-involving organisations in support of their own volunteering

Opportunity costs

The opportunity costs of volunteering are what other things are lost or not achieved if someone decides to volunteer. These include:

a) Social costs

The cost that results from the person volunteering instead of doing another productive activity. This was calculated at \$756.2 million.

b) Volunteer investment

Volunteer investment models how the money currently spent on volunteering would be spent if there was no volunteering. This was calculated at \$5.8 million.

c) Tax revenue

Tax revenue models how the money currently spent on volunteering would be taxed if there was no volunteering. It was calculated that the Australian Government has foregone \$2.9 million in tax revenue.

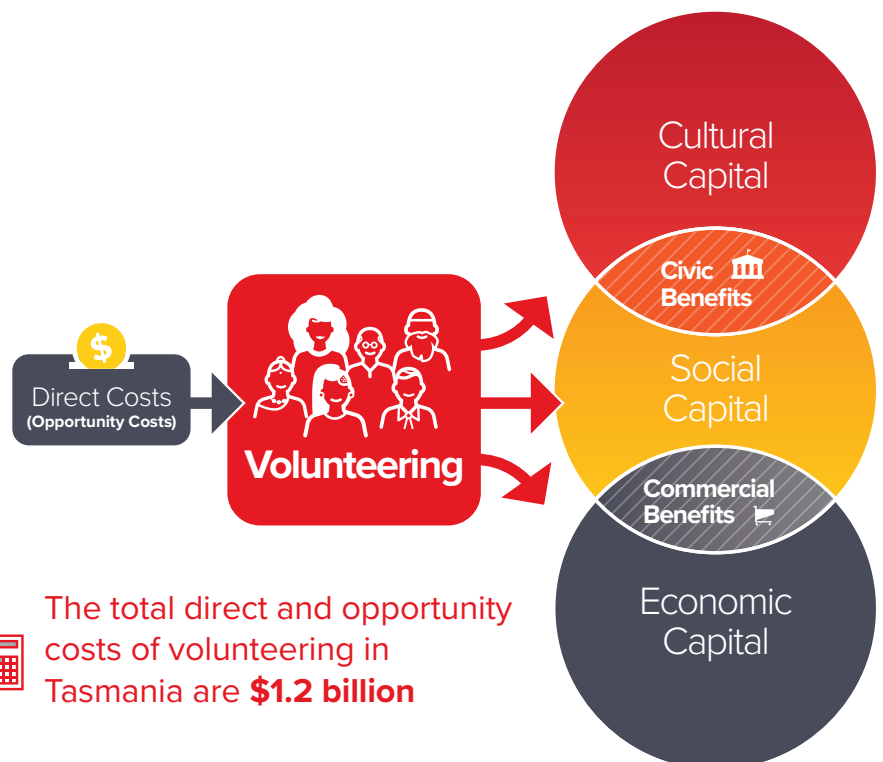
The total direct and opportunity costs of volunteering in Tasmania are \$1.2 billion.



Volunteers outspent (\$274.4 million)

Volunteer involving organisations (\$122.4 million)

by a ratio of 2.25:1



The total direct and opportunity costs of volunteering in Tasmania are **\$1.2 billion**

the benefits of volunteering in tasmania

 For **every dollar** invested by the community, approximately **\$3.50 is returned** as benefits to tasmania



Through the accumulation of economic, social and cultural capital by volunteering, there are two types of benefits that result: commercial and cultural benefit.

Commercial benefits

Producers' surplus

This is the net profit that organisations gain when individuals and organisations spend money on volunteering expenses. It was calculated at \$71.6 million.

Productivity premium

The extent to which people believe their volunteering contributes positively or negatively on their paid work performance is their productivity premium.

In Tasmania 48.6% of volunteers believed their volunteering added an average of 16.3% value to their productivity in their paid employment. Conversely, 22.2% felt their volunteering adversely impacted their 'day-job' by a factor of 5%.

From these figures it is estimated that volunteering in Tasmania improved the productivity of individuals in 2019 (a benefit enjoyed by their employers) by \$706.4 million.

Civic benefits

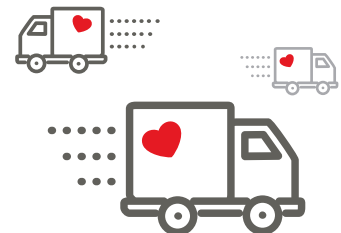
This is a contribution made by a volunteer that would otherwise have to be provided (presumably by the state) to enjoy the same community-wide standard of living. In other words, it typically represents a cost avoided by the government.

Volunteers' labour

This is determined by calculating what it would cost organisations to employ people to perform the same work currently done by volunteers. The cost to the community of replacing volunteers' labour in Tasmania would be \$2.9 billion.

replacing the labour that volunteers' contribute to tasmania would cost

\$2.9 BILLION

In 2019, volunteering in Tasmania enabled an estimated \$4 billion of such benefits across the community.

Therefore, for every dollar invested in volunteering \$3.50 is returned to the community.

Using the replacement cost of labour method and contrasting it with the most recent ABS data on the total compensation of employees by sector, we can see that volunteering is Tasmania's largest sector.

volunteering is tasmania's **largest sector,** (larger than both the private & government sector).

Does volunteering impact your work/life productivity?

 adding +16% value to productivity

Reduces it
22.2%

No effect
29.2%

Improves productivity
48.6%

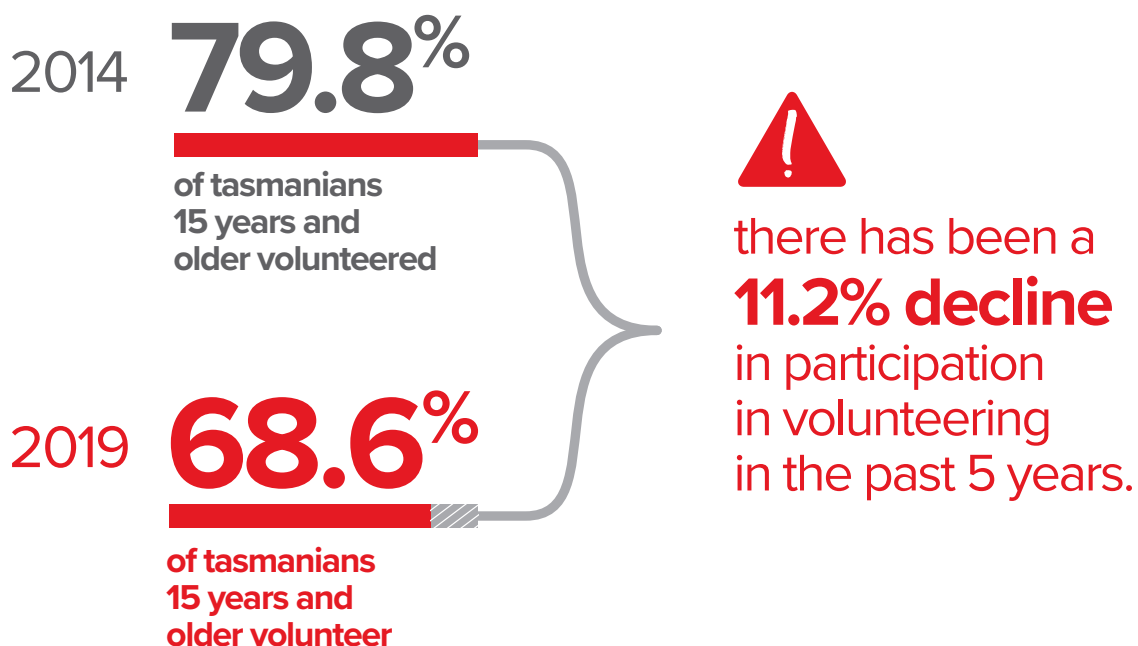
impacting productivity -5%



Volunteering in Tasmania enabled at least **\$4 BILLION** in benefits to the State.

comparison of 2014 & 2019:

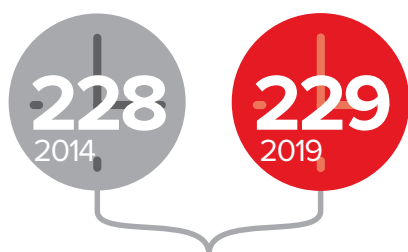
the characteristics of volunteering in tasmania



millions of hours of volunteering
contributed to tasmania

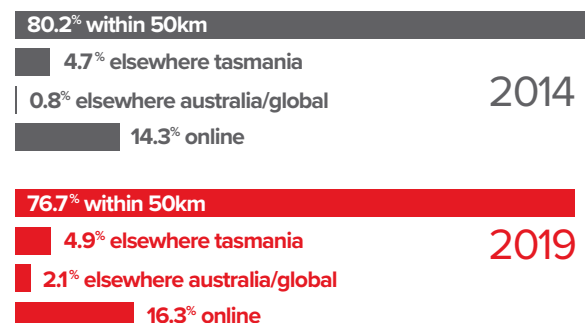


number of hours individual
volunteers contribute each year



The number of hours people
volunteer has **remained stable**
over the past five years

where tasmanians volunteer



People still volunteer predominantly in their
own communities (**within 50 km of their home**),
but there may be a slight movement toward
international and online volunteering

comparison of 2014 & 2019:

volunteer involving organisations

Recruitment Channels

2014

1. Word of mouth
2. Personal approach
2. Community / public events
4. Internet / webpage

Organisations on average used **2.6** recruitment channels

2019

1. Word of mouth / Personal approach
2. Social media /website
3. Community / public events
4. Internal Promotions

Organisations on average used **3** recruitment channels

Volunteer-involving organisations are still relying strongly on **relationship-based approaches to engage volunteers**. But there has been an increase in social media as a recruitment tool over the past five years ago.

Volunteer Recognition

2014



On average organisations used **2.8** different methods to recognise their volunteers

2019

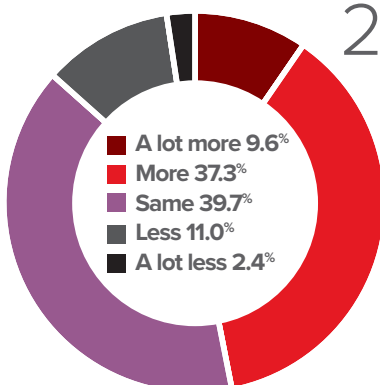


On average organisations used **4.5** different methods to recognise their volunteers

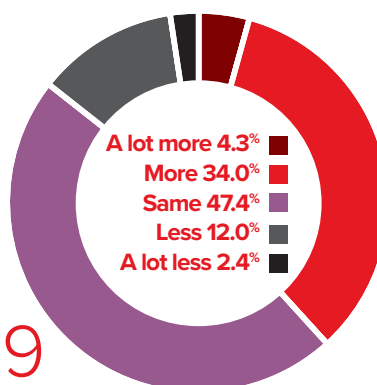
The categories used in the survey between 2014 and 2019 varied slightly, but there appears that the major methods for motivating and recognising volunteers has remained **relatively constant** over the past five years.

Prediction of supply of volunteers in 3 years

2014



2019



Volunteer-involving organisations had a slightly less optimistic outlook on whether they would have more volunteers in three years' time in 2019 compared to 2014. **These predictions align with the observed decrease in volunteering participation in the past five years.**

comparison of 2014 & 2019:

the value of volunteering in tasmania

Amount Volunteers spend per hour on volunteering

2014
\$4.54
per hour

2019
\$4.03
per hour

The amount of money spent per hour by a volunteer has declined slightly over the past five years.



Number of volunteers reimbursed

2014
10.1%

2019
7.6%

There is a **very low rate of volunteer reimbursement**, which appears to be declining. This **may act as a barrier** for some people wishing to volunteer.

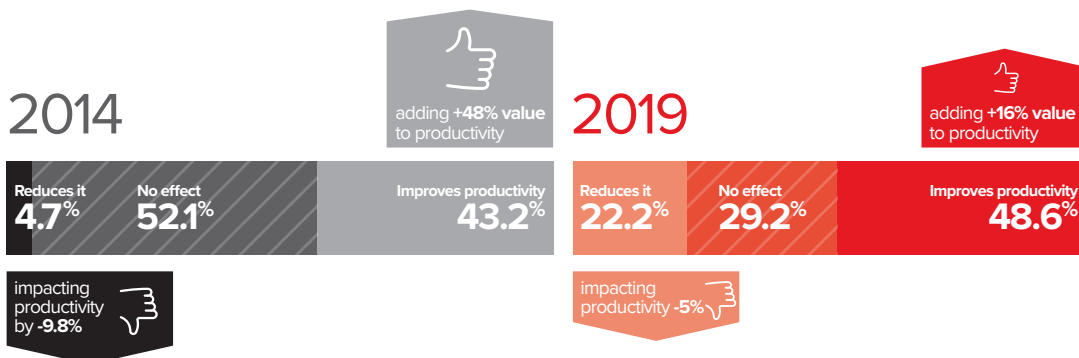
Productivity premium

2014
\$1202.6m

2019
\$706.4m

The productivity premium has **fallen by \$500 million** between 2014 and 2019, **due to falling satisfaction** in volunteering.

Impact of volunteering on work life productivity



Enjoyment in volunteering **has fallen** over the past 5 years.

More people are being **negatively impacted** by volunteering than five years ago.

Total Value of Volunteering

2014
\$4.2b
total value of
volunteering
to tasmania
with a
benefit to cost ratio

3.6:1

2019
\$4.0b
total value of
volunteering
to tasmania
with a
benefit to cost ratio

3.5:1

The total value of volunteering and the benefit to cost ratio of volunteering has remained stable over the past five years.

CENTRAL HIGHLANDS VISITOR CENTRE MANAGEMENT COMMITTEE

Terms of Reference

The Central Highlands Visitor Centre Management Committee is a Special Committee of the Central Highlands Council, established under section 24 of the Local Government Act 1993.

1. Objectives of the Committee

- 1.1 To advise, recommend and assist with the management of the Central Highlands Visitor Centre on behalf of Council.
- 1.2 To ensure that the facilities are managed in the best interests of the community.

2. The Committee Structure and Term

2.1 The Committee shall consist of the following:

- ~~Two Representatives from the Bothwell Tourism Association~~
- ~~Two Representatives from the Bothwell Historical Society Inc.~~
- ~~Two Representatives from the Australasian Golf Museum Inc.~~
- Representatives made up of volunteers from the following groups: Bothwell Tourism Association, Bothwell Historical Society Inc., and Australasian Golf Museum Inc.
- Two Councillors appointed by Council

2.2 The Chairperson of the Committee is a Councillor appointed by Council.

3. Functions of the Committee

- 3.1 To manage the use of the Visitors Centre including displays.
- 3.2 Make recommendations to Council to ensure all repairs and maintenance work are performed as required.
- 3.3 To advise Council of any major works the Committee considers necessary. The recommendation should be provided to Council's General Manager no later than the 31st March of each year so that Council may consider the recommendations during budget discussions for the following financial year.

4. Restrictions on Committee Powers

4.1 The committee does not have the power to:

- impose Council related fees, taxes, rates or charges;

- rebate fees, rates or charges;
- make grants;
- borrow money;
- make a rate;
- make a by-law;
- execute a Deed;
- sign a contract for services;
- institute a legal proceeding;
- call for tenders without prior approval of the Council;
- advertise for and/or appoint employees;
- sell land.

5. Committee Meeting Procedure

5.1 Quorum

A Quorum of the Committee shall be ~~5~~ **3** Committee members, which must include one Councillor.

Where a Quorum has not been present at three consecutive meetings, a Committee member shall notify the General Manager.

5.2 Voting

Voting is by show of hands. If a member abstains, that member is deemed to have voted in the negative.

5.3 The Minutes of each meeting shall be confirmed at the subsequent meeting of that Committee.

5.4 Appointment of Acting Chairperson

If the Chairperson is not available for a meeting, a Councillor nominated as a member of the Committee will undertake the role of the Acting Chairperson.

5.5 Frequency of Meetings

An ordinary meeting of the Committee is to be held at least once every three months.

5.6 Committee Minutes

Following the conclusion of the meeting, the draft Minutes of each Committee Meeting shall be provided to Committee Members and to Council.

5.7 Meetings open to the Public

All meetings of the Committee shall be open to the public.

5.8 Notice of Meetings

- Notice of each Committee meeting shall be given to each Committee member and the General Manager at least five (5) days in advance. Details of the meeting will be advertised on Council's website. The notice of meeting is to be advertised in the local newspaper and be open to the public unless deemed closed by the Chair.
- If an urgent meeting is necessary, the Committee Chair is required to provide the notice of the meeting and the agenda at least two (2) clear days prior to the meeting date. The notice of meeting is to be advertised in the local newspaper and be open to the public unless deemed closed by the Chair.

6. Insurance

Council's insurer provides public liability cover for all Section 24 Committees. Individual user groups are NOT covered by Council's policy and must ensure that they obtain separate public liability insurance to cover their operations. All user groups should also obtain their own contents insurance, as Council's policy does not cover contents owned by user groups.

The Committee shall report any potential public liability claims to Council's General Manager.

6.1 Buildings

Council insures its buildings, fittings and fixtures against fire, flood and damage.

Users leaving their property in Council's buildings are to take out separate insurance cover for those goods and chattels.

6.2 Management Committee Members and Volunteers

When requested, Council's personal accident and public liability insurance may be extended to cover Committee members and/or volunteers attending meetings and other activities such as working bees which have the prior approval of the General Manager.

7. Alteration to Delegation and Terms of Reference

7.1 Council may amend these Terms of Reference at any time.

7.2 The Committee may review the Terms of Reference at any time and submit any amendments to Council for consideration and endorsement.

8. Conflict of Interest

Members of the Committee may from time to time have a conflict of interest when discussing matters. This section provides an outline of what constitutes a conflict of interest and the process to be taken when a conflict of interest arises.

A Committee member who has a direct or indirect interest in any matter decided or under consideration by the committee must disclose the nature of interest to the Committee and this must be recorded in the Minutes.

Being a member of a Council committee is a position of trust that involves obligations to the community and to the Council. It must be clear to everyone that you are not using your position to serve your own interests or the interests of a close associate. For this reason, the Act requires members of Council committees to disclose conflicts of interest and not participate in a decision (discussion or vote) if they have a conflict of interest.

“At any meeting of a special committee ... a member must not participate in any discussion, or vote on any matter, in respect of which the member –

(a) has an interest; or

(b) is aware or ought to be aware that a close associate has an interest.”

Furthermore, the Local Government Act 1993 states that:

“A member has an interest in a matter if the ... member or close associate would, if the matter were decided in a particular manner, receive, have an expectation of receiving or be likely to receive a pecuniary benefit or pecuniary detriment.”

The Act determines that a close associate of a committee member is:

a) a body corporate of which the member is a director or a member of the governing body; or

b) a proprietary company in which the member is a shareholder; or

c) a public company in which the member is directly or indirectly a substantial shareholder; or

d) a beneficiary under a trust or an object of discretionary trust of which the ... member is a trustee; or

e) a business partner of the member; or

f) the employer or an employee of the member; or

g) a person from whom the member has received, or might reasonably be expected to receive a fee, commission or other reward for providing

professional or other services in relation to a matter being dealt with or to be dealt with by the Council committee; or

h) the spouse or partner of the member, member's son or daughter; or

i) the son, daughter, brother, sister, mother or father of the member or of their spouse or partner.

Failure to disclose a conflict of interest may be an offence that can be prosecuted in a court of law. It is your responsibility and duty to identify and disclose your conflicts of interest when required to. It is important to note that, while another person may assist you in deciding or determining whether you have a conflict of interest, they cannot make the decision for you. Irrespective of what assistance or advice you receive from someone else, legally you remain responsible for your own actions.

8.1 Getting Help

In addition to this section assistance with conflict of interest matters or concerns may be sought by contacting:

- The Council's General Manager or other experienced Council Officer authorised by the General Manager to provide such assistance; or
- The Local Government Association of Tasmania (LGAT) - Phone (03) 6233 5966
- The Local Government Division – Phone (03) 6232 7022

8.2 Making Disclosures

Conflicts of interest must be disclosed in Section 24 Special Committees. These committees are delegated a power or duty by the Council.

There are four steps to take when disclosing a conflict of interest:

1. Tell the committee that you have a conflict of interest. This must be done immediately before the matter is discussed.
2. Tell the Chairperson that you are leaving the meeting.
3. Leave the room and any area where you can see or hear the meeting and item being discussed, until the matter has been concluded and you are recalled to the meeting.
4. In accordance with the Local Government Act 1993 Section 48A (4) a member of a special committee ... by notice in writing, is to advise the General Manager of the details of any interest declared under this section within 7 days of that declaration. When the minutes are considered for adoption at the next meeting, ensure that you check that your disclosure has been recorded correctly. The declared interest will also be recorded in

Council's Register of Interests in accordance with the Local Government Act 1993.

9. Confidentiality

Members of the Committee must keep all privileged information in relation to Council and the Special Committee confidential. Members are expected to maintain the same standards of confidentiality as Councillors and employees. This includes information held by the Council and the Special Committee; information shared between members and designated staff members; and information about particular circumstances.

Further assistance on confidentiality matters or concerns may be sought by contacting the Council's General Manager or other experienced Council Officer authorised by the General Manager to provide such assistance.