Glamorgan Spring Bay Interim Planning Scheme 2015

Amendment AM 2018/07(b)

Rezone 135 Rheban Road, Orford (CT 149641/1) and Rheban Road, Orford (CT 117058/150, located with frontage to Rheban Road and Jetty Road, Orford) from Rural Resource Zone to General Residential Zone.

General Residential Zone

The Common Seal of the Glamorgan Spring Bay Council is affixed below Pursuant to Councils resolution of the 27th November 2018 in the presence of :

GLAMORGAN • SPRING BAY COUNCIL The Common Seal Of

.....Mayor

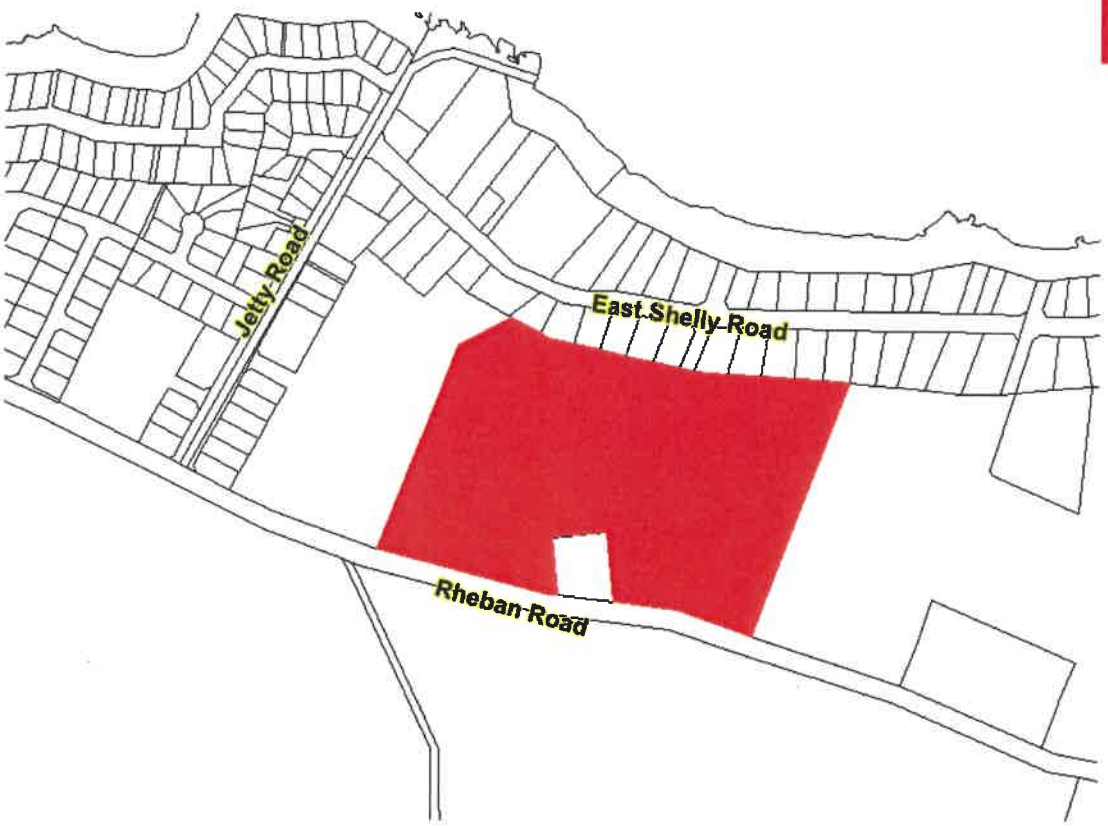
.....General Manager

Glamorgan Spring Bay Interim Planning Scheme 2015

Amendment AM 2018/07(a)

Rezone Lot 2, Rheban Road, Orford (CT 149641/2, located generally between Rheban Road and East Shelly Road and 270m east of Jetty Road) from Rural Resource Zone to General Residential Zone.

General Residential Zone



The Common Seal of the Glamorgan Spring Bay Council is affixed below Pursuant to Councils resolution of the 27th November 2018 in the presence of:

GLAMORGAN • SPRING BAY COUNCIL
The Common Seal Of

.....Mayor

.....General Manager

Draft
Planning Permit
SA 2017 / 04

Issued to:	MJ & HFG Lawrence
Issued on:	27 November 2018
Issued under:	Issued pursuant to Planning Authority resolution 27 June 2018.
Use:	Residential
Development:	Subdivision of 91 lots plus public open space and road lots
Site:	**Lot 2, Rheban Road,** Orford (CT 149641/2, located generally between Rheban Road and East Shelly Road and 270m east of Jetty Road)
Title:	CT 149641/2
Legislation:	Section 43 of the *Land Use Planning and Approvals Act 1993*

CONDITIONS

1. Use and development must be substantially in accordance with the endorsed plans being the plans prepared by Aldanmark Pty Ltd (Ref: 170724 CIV 15E96-10 B Z01-Z05 dated 20/12/2017 and 170724 CIV 15E96-10 C Z06-Z08 dated 24/07/17) and documents unless modified by a condition of this permit.

   Advice: Any changes may either be deemed as substantially in accordance with the permit or may first require a formal amendment to this permit or a new permit to be issued.

2. Use and development must comply with the requirements of TasWater specified by 'Submission to Planning Authority Notice' reference number TWSA 2017/00199-GSB, dated 13 August 2018 and attached to this permit.

3. Lots 77 and 78 must be consolidated.

4. Use and development must be substantially in accordance with the Traffic Impact Assessment prepared by Milan Prodanovic dated July 2017 unless modified by a condition of this permit.

5. The development must be substantially in accordance with the Bushfire Hazard Management plan Assessment Report, by Andrew Goodsell, dated October 2018,

and submitted with the application, or as otherwise required by this permit, whichever standard is greater.

6. The staging plan must be amended to include road access for lots 31 to 39 as part of stage 1.

7. Prior to sealing the final plan of survey for any lots in Stage 2, the public open space lot must be transferred to Council.

8. All land noted as roadway, footway, open space or similar must be transferred to Council. Complete transfer documents that have been assessed for stamp duty, must be submitted with the final plan of survey.

9. The final plan of survey must include easements over all drains, pipelines, wayleaves and services to the satisfaction of Council's Municipal Engineer.

10. Covenants or other restrictions must not conflict with, or seek to override, provisions of the planning scheme.

11. The final plan or survey must show the corners of each road intersection must be splayed or rounded by chords of a circle with a radius of not less than 6m to the satisfaction of Council's General Manager.

Environment Management

12. The developer must implement a soil and water management plan (SWMP) to ensure that soil and sediment does not leave the site during the construction process and must provide a copy of the SWMP to Council's General Manager prior to the commencement of works.

13. No top soil is to be removed from the site.

14. All vehicles and equipment associated with construction of the development and/or operation of the use must be cleaned of soil prior to entering and leaving the site to minimise the introduction and/or spread of weeds and diseases to the satisfaction of Council's General Manager.

15. Prior to the commencement of works a list of procedures describing cleaning and monitoring practices in terms of weed and disease management must be submitted to Council's General Manager. If considered satisfactory, the procedures will be endorsed and will form part of the permit.

16. Prior to the commencement of works a weed eradication plan must be submitted. The plan, and its implementation, must be to the satisfaction of Council's General Manager.

17. Native vegetation must not be removed, lopped, ring-barked or otherwise wilfully destroyed, removed or adversely impacted on other than the minimum necessary for the construction of buildings and works, the connection of services, vehicular access and the implementation of a Bushfire Hazard Management Plan to the satisfaction of Council's General Manager.

18. Suitable barriers must be erected during the construction of the development to ensure native vegetation that must be retained is not damaged during construction works.

Engineering

19. Prior to sealing the final plan the following works must be completed in accordance with engineering design drawings endorsed by Council's Municipal Engineer:

    (a) Lot connections for each lot:
        i. Connection to reticulated stormwater;
        ii. Connection to electricity network;
        iii. Connection to telecommunication network.

    (b) Vehicle access for each lot:
        i. Reinforced concrete vehicle crossover to front boundary;
        ii. Vehicle driveway over access strip for all shared rights of way and internal lots.

    (c) Road construction:
        i. Fully paved, sealed and drained road carriageway with a 8.9m wide carriageway (or 6.9m carriageway with indented parking bays) and 18m road reservation;
        ii. Concrete kerb and channel both sides;
        iii. Concrete footpaths 1.5m wide on at least one side with kerb ramps;
        iv. Concrete footpaths 1.5m wide on both sides of the road fronting lots 1 to 3 and lots 34 and 36
        v. Underground stormwater drainage;
        vi. Underground electrical and telecommunications reticulated infrastructure;

vii. Street lighting;
viii. Street trees;
ix. Street sign and standard to each intersection.

(d) Stormwater network:

i. An underground stormwater drainage system capable of accommodating a storm with an ARI of 20 years, when the land serviced by the system is fully developed.
Where the existing public stormwater infrastructure has insufficient capacity to accommodate the increased stormwater runoff from the development, the developer is to upgrade public stormwater infrastructure or limit any increase such that it can be accommodated within the existing or upgraded public stormwater infrastructure. The details of any measures to limit stormwater or upgrade existing infrastructure are to be included in the Engineering design drawings to be submitted to the Glamorgan Spring Bay Council for approval.
ii. A major stormwater drainage system designed to accommodate a storm with an ARI of 100 years.
iii. A stormwater property connection to each lot capable of servicing the entirety of each lot by gravity.
iv. Stormwater treatment utilising Water Sensitive Urban Design Principles These Principles will be in accordance with the Water Sensitive Urban Design Procedures for Stormwater Management in Southern Tasmania and to the satisfaction of the Council's Municipal Engineer.

(e) Public open space:

i. Land shaped to be fit for purpose;
ii. Landscaping;
iii. Electrical, water, stormwater and sewer lot connections fit for purpose;
iv. Vehicular crossover or suitable access;
v. Concrete or gravel footpaths fit for purpose;

(f) Rehabilitation

vi. Provision of top soil and grass or vegetation on all disturbed surfaces

All work must be to a standard that is to the satisfaction of Council's Municipal Engineer.

Advice*: Some or all works may be bonded subject to satisfaction of relevant Council policies.*

20. Prior to the commencement of construction works, engineering design drawings showing all work required by this planning permit, and any additional work sought, must be submitted to Council's Municipal Engineer. The engineering design drawings must be prepared in accordance with the current:
    a. Tasmanian Subdivision Guidelines
    b. Tasmanian Standard Drawings
    c. Council policy
    d. A comprehensive stormwater management plan including calculations of the stormwater drainage system, including treatment, detention and outfalls must be submitted to in conjuction with the engineering design drawings for approval.

    If considered satisfactory, the plans or documents will be endorsed by Council's Municipal Engineer and will form part of this permit.

Advice:
(a) The Tasmanian Subdivision Guidelines and Tasmanian Standard Drawings are available at www.lgat.tas.gov.au.
(b) Variations from the Tasmanian Subdivision Guidelines and Tasmanian Standard Drawings may be approved at the discretion on Council's Municipal Engineering where a clear justification exists and the alternative solution is to a no lesser quality in terms of infrastructure performance or maintenance costs over the life of the asset.
(c) Engineering design drawings must also include provisions for soil and water management
(d) Engineering design drawings will expire two years after approval and will be endorsed as such by Council's Municipal Engineer.

21. For any internal lot, all electrical, telecommunication, stormwater, water and sewer lot connections must be extended, or conduits for, for the full length of the access strip to the buildable area of lot.

22. Prior to sealing the final plan of survey the developer must submit to Council:
    (a) A "Provisioning of Telecommunications Infrastructure – Confirmation of final payment" or "Certificate of Practical Completion of Developer's Activities" from NBN Co;
    or
    written advice that the existing NBN and copper infrastructure is adequate and future lot owners will not be liable for network extension or upgrade costs,

other than individual property connections at the time each lot is further developed.

(b) A Letter of Release from TasNetworks confirming that all conditions of the Agreement between the Owner and authority have been complied with;

or

written advice that existing infrastructure is adequate and future lot owners will not be liable for network extension or upgrade costs, other than individual property connections at the time each lot is further developed.

23. Works are subject to a 12 month defect liability period commencing from date of practical completion for each stage during which time all maintenance and repair of works during this time as the responsibility of the developer.

24. A bond clearly in excess of 5% of the value of work and no less than $5000.00, must be submitted to Council at the commencement of the defect liability period or prior to sealing the final plan or survey, whichever is earliest. The bond will be returned at the expiration of the defect liability period if all works are maintained and repaired as necessary to the satisfaction of Council's Municipal Engineer.

25. Prior to sealing the final plan of survey, as constructed drawings of all works undertaken must be submitted. The extent and quality of the as constructed drawings must be to the satisfaction of Council's Municipal Engineer.

26. The Subdivider must pay the cost of any alterations and/or reinstatement to existing services, Council infrastructure or private property incurred as a result of the proposed subdivision works. Any work required is to be specified or undertaken by the authority concerned.

27. The developer shall provide a commercial skip for the storage of builders waste on site and arrange for the removal and disposal of the waste to an approved landfill site by private contract.

The following advice is provided for information and assistance only and imposes no direct obligation on the developer.

A. Please read all conditions of this permit and contact the planner for clarification if required.

B. All costs associated with acting on this permit are borne by the person(s) acting on this permit.

C. The following legislation may impose obligations that affect the approved or use development. This legislation is separate to the planning scheme and as such has not been considered by the Planning Authority in granting this permit. You may wish to obtain your own independent advice or discuss with the relevant Government department:
    - Aboriginal Relics Act 1975 (Tasmanian)
    - Threatened Species Protection Act 1995 (Tasmanian)
    - Weed Management Act 1999 (Tasmanian)
    - Disability Discrimination Act 1992 (Commonwealth); see AS 1248 for technical direction

- Environment Protection and Biodiversity Conservation Act 2000 (Commonwealth)
- Environmental Management and Pollution Control (Miscellaneous Noise) Regulations 2014 (Tasmanian)

D. This permit is valid for two years from the date of approval and shall lapse unless it has been substantially commenced to the satisfaction of the Council Senior Planner or otherwise extended by written consent.

E. The permit and conditions on this permit are based on the information submitted in the endorsed plans and documents. The Planning Authority is not responsible or liable for any errors or omissions. I encourage you to engage a land surveyor to accurately set out the location of buildings and works.

F. The Environmental Management & Pollution Control (Distributed Atmospheric Emissions) Regulations 2007 prohibit backyard burning in incinerators or in the open on lots less than 2000m^2 and the burning of plastics, and other non-wood or vegetative material.

G. The granting of this permit takes in no account of any civil covenants applicable to the land. The developer should make their own enquiries as to whether the proposed development is restricted or prohibited by any such covenant and what consequences may apply.

H. Sealing of a final plan of survey is subject to a prescribed Council fee. Please refer to www.gsbc.tas.gov.au for the fee current at the date of lodgement of the final plan or survey.

I. Land Title Office fees must be paid directly to the Recorder of Titles.

J. The final plan of survey will not be sealed until all works required by this permit are complete.

K. The final plan or survey is inclusive of any schedule of easement and Part 5 Agreement.

L. The developer is responsible to ensure that all necessary inspections are undertaken before proceeding past mandatory inspection points as detailed in the Tasmanian Subdivision Guidelines. A minimum of 2 full working days' notice must be provided to ensure Council can inspect at the requested time.

M. The developer may suggest street names. Suggestions should be received three months prior to sealing the final plan of survey and be made in writing to the General Manager.

David Metcalf
GENERAL MANAGER

Submission to Planning Authority Notice

Council Planning Permit No.	SA 2017 / 00004	Council notice date	14/02/2017
TasWater details			
TasWater Reference No.	TWDA 2017/00199-GSB	Date of response	13/08/2018
TasWater Contact	Anthony Cengia	Phone No.	(03) 6237 8243
Response issued to			
Council name	GLAMORGAN/SPRING BAY COUNCIL		
Contact details	admin@freycinet.tas.gov.au		
Development details			
Address	RHEBAN RD, ORFORD	Property ID (PID)	2775205
Description of development	Rezoning from Rural Resource to General Residential & 91 Lot Subdivision		

Schedule of drawings/documents

Prepared by	Drawing/document No.	Revision No.	Date of Issue
Aldanmark Pty	15E96-10 Sheets Z01, Z06, Z07, Z08	C	24/07/2018
Aldanmark Pty	15E96-10 Sheets Z02, Z03, Z04, Z05	B	20/12/2017
Environmental Dynamics	Project ED5190 - ORFORD SEWAGE TREATMENT PLANT ODOUR ASSESSMENT		15 July 2018

Conditions

SUBMISSION TO PLANNING AUTHORITY NOTICE OF DRAFT AMENDMENT TO PLANNING SCHEME *AND* PLANNING APPLICATION REFERRALS

Pursuant to the *Water and Sewerage Industry Act* 2008 (TAS) Section 56P(1) TasWater makes the following submission(s):

TasWater does not object to the draft amendment to planning scheme and has no formal comments for the Tasmanian Planning Commission in relation to this matter and does not require to be notified of nor attend any subsequent hearings.

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

CONNECTIONS, METERING & BACKFLOW

1. A suitably sized water supply with metered connections / sewerage system and connections to each lot of the development must be designed and constructed to TasWater's satisfaction and be in accordance with any other conditions in this permit.
2. Any removal/supply and installation of water meters and/or the removal of redundant and/or installation of new and modified property service connections must be carried out by TasWater at the developer's cost.
3. Prior to commencing construction of the subdivision/use of the development, any water connection utilised for construction/the development must have a backflow prevention device and water meter installed, to the satisfaction of TasWater.

ASSET CREATION & INFRASTRUCTURE WORKS

4. Plans submitted with the application for Engineering Design Approval must, to the satisfaction of TasWater show, all existing, redundant and/or proposed property services and mains.

5. Prior to applying for a Permit to Construct new infrastructure the developer must obtain from TasWater Engineering Design Approval for new TasWater infrastructure. The application for Engineering Design Approval must include engineering design plans prepared by a suitably qualified person showing the hydraulic servicing requirements for water and sewerage to TasWater's satisfaction.

6. Prior to works commencing, a Permit to Construct must be applied for and issued by TasWater. All infrastructure works must be inspected by TasWater and be to TasWater's satisfaction.

7. In addition to any other conditions in this permit, all works must be constructed under the supervision of a suitably qualified person in accordance with TasWater's requirements.

8. The developer must design and construct an additional 13.65m3 of emergency storage to TasWater's satisfaction which is needed at TasWater's East Shelly Sewage Pumping Station (TasWater Location ID ORFSP01). The emergency storage must be designed and constructed to allow future augmentation to add additional emergency storage.

   Advice: In accordance with TasWater's 'Developer Charges Policy' for developments located within Serviced Land where insufficient capacity is available within an existing system, the developer pays the costs of Extension, including connection, to that system and Expansion of the system to the level of capacity required to service the development.

9. Prior to the issue of a Consent to Register a Legal Document all additions, extensions, alterations or upgrades to TasWater's water and sewerage infrastructure required to service the development are to be constructed at the expense of the developer to the satisfaction of TasWater, with live connections performed by TasWater.

10. After testing to TasWater's requirements, of newly created works, the developer must apply to TasWater for connection of these works to existing TasWater infrastructure, at the developer's cost.

11. At practical completion of the water and sewerage works and prior to TasWater issuing a Consent to a Register Legal Document the developer must obtain a Certificate of Practical Completion from TasWater for the works that will be transferred to TasWater. To obtain a Certificate of Practical Completion:

    a. Written confirmation from the supervising suitably qualified person certifying that the works have been constructed in accordance with the TasWater approved plans and specifications and that the appropriate level of workmanship has been achieved;

    b. A request for a joint on-site inspection with TasWater's authorised representative must be made;

    c. Security for the twelve (12) month defects liability period to the value of 10% of the works must be lodged with TasWater. This security must be in the form of a bank guarantee;

    d. As constructed drawings must be prepared by a suitably qualified person to TasWater's satisfaction and forwarded to TasWater.

12. After the Certificate of Practical Completion has been issued, a 12 month defects liability period applies to this infrastructure. During this period all defects must be rectified at the developer's cost and to the satisfaction of TasWater. A further 12 month defects liability period may be applied to defects after rectification. TasWater may, at its discretion, undertake rectification of any defects at the developer's cost. Upon completion, of the defects liability period the developer must request TasWater to issue a "Certificate of Final Acceptance". The newly constructed infrastructure will be

transferred to TasWater upon issue of this certificate and TasWater will release any security held for the defects liability period.

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

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

15. A construction management plan must be submitted with the application for TasWater Engineering Design Approval. The construction management plan must detail how the new TasWater infrastructure will be constructed while maintaining current levels of services provided by TasWater to the community. The construction plan must also include a risk assessment and contingency plans covering major risks to TasWater during any works. The construction plan must be to the satisfaction of TasWater prior to TasWater's Engineering Design Approval being issued.

FINAL PLANS, EASEMENTS & ENDORSEMENTS

16. Prior to the Sealing of the Final Plan of Survey, a Consent to Register a Legal Document must be obtained from TasWater as evidence of compliance with these conditions when application for sealing is made.
Advice: Council will refer the Final Plan of Survey to TasWater requesting Consent to Register a Legal Document be issued directly to them on behalf of the applicant.

17. Pipeline easements, to TasWater's satisfaction, must be created over any existing or proposed TasWater infrastructure and be in accordance with TasWater's standard pipeline easement conditions.

DEVELOPMENT ASSESSMENT FEES

18. The applicant or landowner as the case may be, must pay a development assessment and Consent to Register a Legal Document fee to TasWater, as approved by the Economic Regulator and the fees will be indexed, until the date they are paid to TasWater, as follows:

    a. $1,139.79 for development assessment; and

    b. $149.20 for Consent to Register a Legal Document

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

19. In the event Council approves a staging plan, a Consent to Register a Legal Document fee for each stage, must be paid commensurate with the number of Equivalent Tenements in each stage, as approved by Council.

Advice

General

For information on TasWater development standards, please visit
http://www.taswater.com.au/Development/Development-Standards

For application forms please visit http://www.taswater.com.au/Development/Forms

Declaration

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

Authorised by

Jason Taylor
Development Assessment Manager

TasWater Contact Details			
Phone	13 6992	Email	development@taswater.com.au
Mail	GPO Box 1393 Hobart TAS 7001	Web	www.taswater.com.au

CIVIL DRAWINGS
PROPOSED SUBDIVISION
LOT 2 RHEBAN ROAD,
ORFORD, TASMANIA 7190

SHEET	DRAWING	ISSUE	DATE
Z01	INDEX, NOTES AND OVERALL PLAN	C	24/07/2017
Z02	OVERALL SITE PLAN + CONTOUR ANALYSIS	B	20/12/2016
Z03	OVERALL SITE PLAN + LOT DIMENSIONS	B	20/12/2016
Z04	STAGING PLAN	B	20/12/2016
Z05	OVERALL SITE PLAN + EXISTING SERVICES	B	20/12/2016
Z06	OVERALL PLAN - ROAD NETWORK	C	24/07/2017
Z07	CONCEPT SEWER AND WATER LAYOUT	C	24/07/2017
Z08	CONCEPT STORMWATER LAYOUT	C	24/07/2017

GENERAL NOTES:

1. LIDAR CONTOUR DATA AND TITLE BOUNDARY OBTAINED FROM THELIST.
2. SUBDIVISION MAY BE UNDERTAKEN AS A STAGED DEVELOPMENT.
3. THIS PLAN HAS BEEN PREPARED ONLY FOR THE PURPOSE OF OBTAINING PLANNING SCHEME AMENDMENT FROM THE LOCAL AUTHORITY AND IS SUBJECT TO THAT APPROVAL AND THE INFORMATION SHOWN SHOULD NOT BE USED FOR ANY OTHER PURPOSE.
4. DIMENSIONS AND LOT SIZES ARE ILLUSTRATIVE ONLY AND SHALL BE CONFIRMED DURING DETAIL DESIGN AND FINAL SURVEY
5. WATER SENSITIVE URBAN DESIGN MAY BE INCORPORATED INTO THE DETAILED ENGINEERING DESIGN IN LIEU OF THE STORMWATER NETWORK.
6. STORMWATER RUNOFF GENERATED FROM THE SITE TO BE DIRECTED TO NEW OUTFALLS AT THE EXISTING TRIBUTARIES.
7. EXISTING WATERCOURSE TO REMAIN AS PRIVATE OPEN SPACE. STORMWATER TO BE DIRECTED TOWARDS THIS AREA.
8. CYCLEWAYS AND FOOTWAYS FROM NEWLY CREATED ROADS TO PUBLIC OPEN SPACE AND THROUGH TO EAST SHELLY ROAD TO BE PROVIDED.
9. EXISTING BUILDINGS ON THE SUBJECT TITLE TO BE DEMOLISHED.
10. EXISTING TREE ON LOT 56 TO BE REMOVED.
11. TASWATER DEMANDS ARE ANTICIPATED TO BE ACCOMMODATED IN THEIR EXISTING INFRASTRUCTURE AND ARE AS FOLLOWS:
    - 11.1. WATER = 7.07 L/s DEMAND ; FIRE HYDRANT FLOW 20L/s
    - 11.2. SEWER ET = 91 ; EP = 273
    - 11.3. SEWER Q_{ADWF} = 0.63 L/s
    - 11.2. SEWER Q_{PDWF} = 2.59 L/s

LEGEND

WATERWAY & COASTAL PROTECTION OVERLAY

PEDESTRIAN / CYCLE WAY LINKAGE

BRIDGE FACILITY OVER TRIBUTARY

SITE CALCULATION FOR SUBDIVISION	
TITLE AREA	10.259 ha
PRIVATE OPEN SPACE	1.773 ha
ROADS	1.891 ha
RESIDENTIAL LOTS	6.595 ha
NUMBER OF RESIDENTIAL LOTS	91 LOTS
LOT YIELD	~14/ha

SHELLY BEACH

EAST SHELLY ROAD

PEDESTRIAN FOOTWAY / CYCLING PATH TO BE BETWEEN #22 & #24 EAST SHELLY ROAD ONLY.

CT 161815/1
#1 PINE HILLS COURT
(OTHER OWNER)

CT 117058/150
(OTHER OWNER)

JETTY ROAD

EXISTING TRIBUTARY

ROAD 13,311m²

RIGHT OF WAYS TO BE CREATED OVER LOTS 31-33

EXISTING TREE TO BE REMOVED

POS 17,726m²

DAM AND WATERCOURSE TO REMAIN

LOT 2
CT 149641/2
APPROX 10.26 Ha

#135 RHEBAN ROAD
(OTHER OWNER)

RHEBAN ROAD

GLAMORGAN SPRING BAY COUNCIL
APPROVAL OF PROPOSAL PLAN

SA 2017 / 004

This plan has been approved by Council under Section 57/58 of The Land Use Planning & Approvals Act 1993
Subject to any conditions in the permit dated

27/11/2018

Date:5/12/2018

General Manager

THESE DRAWINGS MUST BE APPROVED BY COUNCIL & TASWATER PRIOR TO CONSTRUCTION

OVERALL PLAN
SCALE 1:1000 (A1)

HALF SCALE PRINT

DIAL BEFORE YOU DIG www.1100.com.au

BEWARE OF UNDERGROUND SERVICES
THE LOCATION OF UNDER GROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT LOCATION SHOULD BE PROVEN ON SITE BY THE RELEVANT AUTHORITIES. NO GUARANTEE IS GIVEN THAT ALL SERVICES ARE SHOWN.

REV.	DESCRIPTION	DATE	REV.	DESCRIPTION	DATE
C	UPDATED FOR COUNCIL/TASWATER	24/07/2017			
B	FOR PLANNING LODGEMENT	20/12/2016			
A	CLIENT REVIEW	16/12/2016			

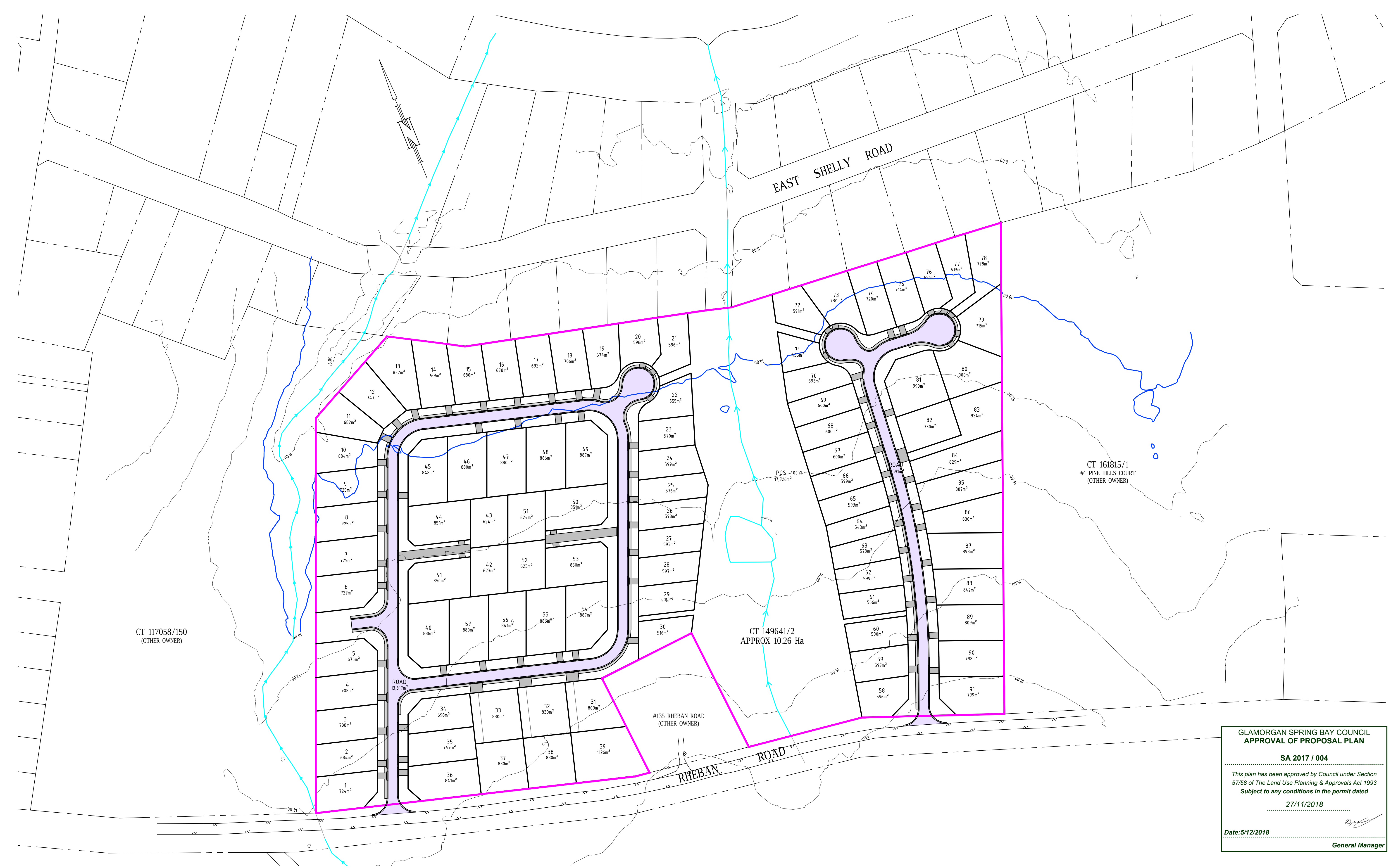
ALDANMARK Pty. Ltd. CONSULTING ENGINEERS
Level 9, 65 Murray Street
Hobart Tas 7000
P: 03 6234 8666
F: 03 6234 8988
E: mail@aldanmark.com.au
W: www.aldanmark.com.au

CLIENT: MICHAEL AND HARRIET LAWRENCE
ADDRESS: LOT 2, RHEBAN ROAD ORFORD, TAS 7109

SHEET: OVERALL SITE PLAN, INDEX & NOTES
PROJECT: ORFORD SUBDIVISION
ISSUE: FOR PLANNING
THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION UNLESS ISSUED "CONSTRUCTION".

DRAWN: MM | APPROVED: ~~
SCALE: 1:1000 | SIZE: A1 | DATE: 20/12/2016
PROJECT No. 15E96-10 | SHEET No. Z01 | REV No. B

DRAWING DETAILS: 15E96-10 GV.dwg - MORGAN MCGUIRE - PLOTTED: 12/Oct/2017, 9:14 AM



GLAMORGAN SPRING BAY COUNCIL
APPROVAL OF PROPOSAL PLAN

SA 2017 / 004

This plan has been approved by Council under Section 57/58 of The Land Use Planning & Approvals Act 1993
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Date:5/12/2018

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OVERALL PLAN
SCALE 1:1000 (A1)

HALF SCALE PRINT

DIAL BEFORE YOU DIG www.1100.com.au

THIS DRAWING MUST ONLY BE DISTRIBUTED IN FULL COLOUR. ALDANMARK CONSULTING ENGINEERS ACCEPTS NO LIABILITY ARISING FROM FAILURE TO COMPLY WITH THIS REQUIREMENT.

BEWARE OF UNDERGROUND SERVICES
THE LOCATION OF UNDER GROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT LOCATION SHOULD BE PROVEN ON SITE BY THE RELEVANT AUTHORITIES. NO GUARANTEE IS GIVEN THAT ALL SERVICES ARE SHOWN.

REV.	DESCRIPTION	DATE	REV.	DESCRIPTION	DATE
B	FOR PLANNING LODGEMENT	20/12/2016			
A	CLIENT REVIEW	16/12/2016			

ALDANMARK Pty. Ltd.
CONSULTING ENGINEERS

Level 9, 65 Murray Street
Hobart Tas 7000
P: 03 6234 8666
F: 03 6234 8988
E: mail@aldanmark.com.au
W: www.aldanmark.com.au

CLIENT: MICHAEL AND HARRIET LAWRENCE

ADDRESS: LOT 2, RHEBAN ROAD
ORFORD, TAS 7109

SHEET: OVERALL SITE PLAN + CONTOUR ANALYSIS

PROJECT: ORFORD SUBDIVISION

ISSUE: FOR PLANNING

THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION UNLESS ISSUED 'CONSTRUCTION'.

DRAWN: MM
APPROVED:
SCALE: 1:200
SIZE: A1
DATE: 20/12/2016
PROJECT No. 15E96-10
SHEET No. Z02
REV No. B

DRAWING DETAILS: 15E96-10 CIV.dwg - MORGAN MCGUIRE - PLOTTED: 12/Oct/2017, 9:14 AM

EAST SHELLY ROAD

#8 #10 #12 #14 #16 #18 #20 #22 #24 #26 #28 #30 #32 #34 #36

CT 117058/150
(OTHER OWNER)

15x10m INSCRIBED RECTANGLE

CT 149641/2
APPROX 10.26 Ha

#135 RHEBAN ROAD
(OTHER OWNER)

ROAD
13,317m²

ROAD
5,291m²

POS
17,726m²

RHEBAN ROAD

CT 161815/1
#1 PINE HILLS COURT
(OTHER OWNER)

GLAMORGAN SPRING BAY COUNCIL
APPROVAL OF PROPOSAL PLAN

SA 2017 / 004

This plan has been approved by Council under Section 57/58 of The Land Use Planning & Approvals Act 1993
Subject to any conditions in the permit dated

27/11/2018

Date:5/12/2018

General Manager

THESE DRAWINGS MUST BE APPROVED BY COUNCIL & TASWATER PRIOR TO CONSTRUCTION

OVERALL PLAN
SCALE 1:1000 (A1)

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REV.	DESCRIPTION	DATE	REV.	DESCRIPTION	DATE
B	FOR PLANNING LODGEMENT	20/12/2016			
A	CLIENT REVIEW	16/12/2016			

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CONSULTING ENGINEERS
Level 9, 65 Murray Street
Hobart Tas 7000
P: 03 6234 8666
F: 03 6234 8988
E: mail@aldanmark.com.au
W: www.aldanmark.com.au

CLIENT: MICHAEL AND HARRIET LAWRENCE

ADDRESS: LOT 2, RHEBAN ROAD
ORFORD, TAS 7109

SHEET: OVERALL SITE PLAN + LOT DIMENSIONS

PROJECT: ORFORD SUBDIVISION

ISSUE: FOR PLANNING — THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION UNLESS ISSUED 'CONSTRUCTION'.

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SCALE: 1:200 / SIZE: A1	DATE: 20/12/2016
PROJECT No. 15E96-10	SHEET No. Z03 / REV No. B

DRAWING DETAILS: 15E96-10 GV.dwg - MORGAN MCGUIRE - PLOTTED: 12/Oct/2017, 9:14 AM

STAGE 1

STAGE 2

STAGE 3

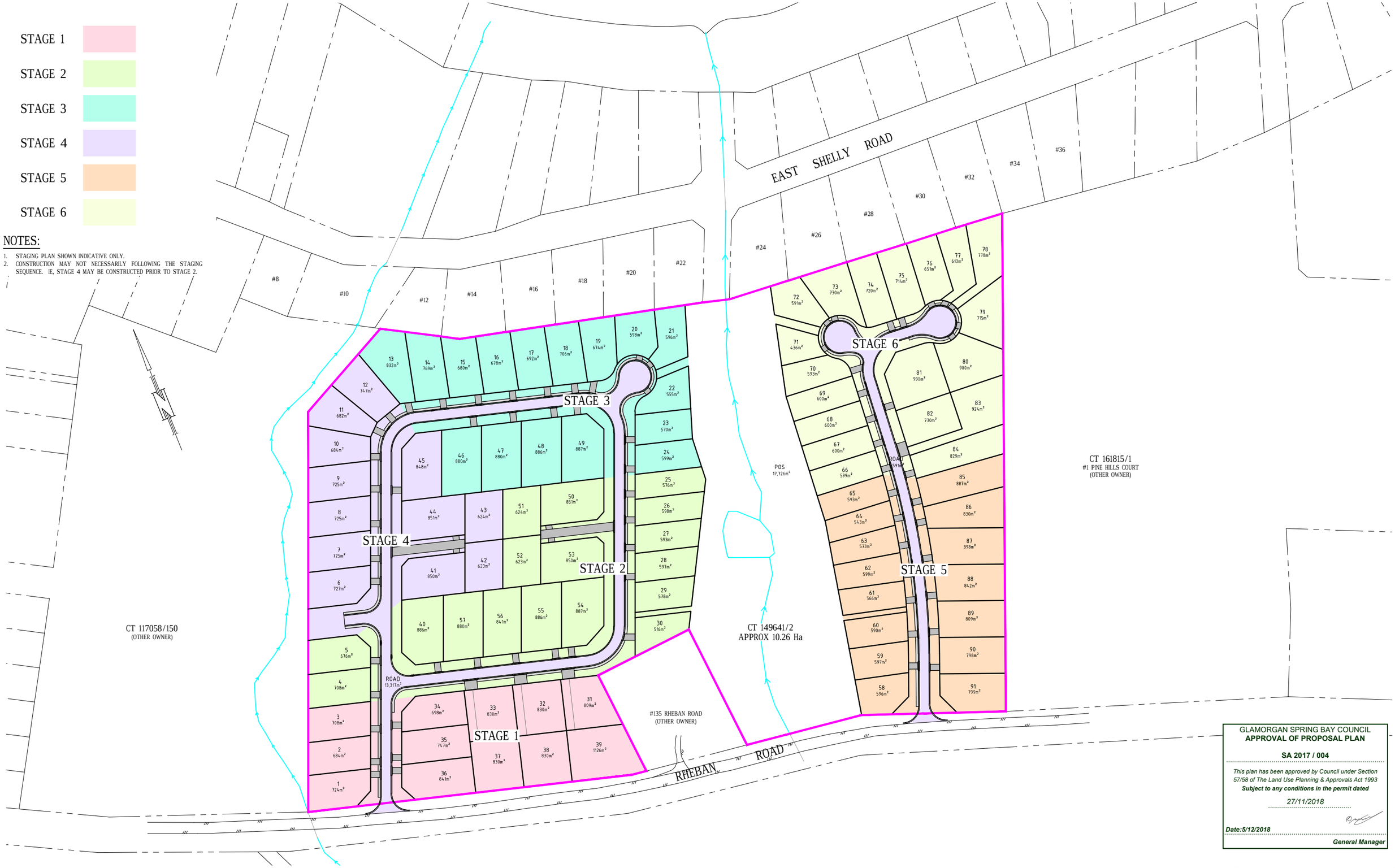
STAGE 4

STAGE 5

STAGE 6

NOTES:

1. STAGING PLAN SHOWN INDICATIVE ONLY.
2. CONSTRUCTION MAY NOT NECESSARILY FOLLOWING THE STAGING SEQUENCE. IE, STAGE 4 MAY BE CONSTRUCTED PRIOR TO STAGE 2.



GLAMORGAN SPRING BAY COUNCIL
APPROVAL OF PROPOSAL PLAN

SA 2017 / 004

This plan has been approved by Council under Section 57/58 of The Land Use Planning & Approvals Act 1993
Subject to any conditions in the permit dated

27/11/2018

Date:5/12/2018

General Manager

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STAGING PLAN

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A	CLIENT REVIEW	16/12/2016			

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Hobart Tas 7000
P: 03 6234 8666
F: 03 6234 8988
E: mail@aldanmark.com.au
W: www.aldanmark.com.au

CLIENT: MICHAEL AND HARRIET LAWRENCE	SHEET: STAGING PLAN	DRAWN: MM	APPROVED: ~~
ADDRESS: LOT 2, RHEBAN ROAD ORFORD, TAS 7109	PROJECT: ORFORD SUBDIVISION	SCALE: 1:200 SIZE: A1	DATE: 20/12/2016
	ISSUE: FOR PLANNING — THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION UNLESS ISSUED 'CONSTRUCTION'.	PROJECT No. 15E96-10	SHEET No. Z04 REV No. B

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EAST SHELLY ROAD

#8 #10 #12 #14 #16 #18 #20 #22 #24 #26 #28 #30 #32 #34 #36

EXISTING DN150 TASWATER WATER MAIN

EXISTING DN150 PVC GRAVITY SEWER AND MANHOLE

EXISTING CULVERT

EXISTING BRIDGE STRUCTURE

ROAD 13,317m²

POS 17,726m²

ROAD 4,291m²

CT 117058/150
(OTHER OWNER)

CT 149641/2
APPROX 10.26 Ha

CT 161815/1
#1 PINE HILLS COURT
(OTHER OWNER)

#135 RHEBAN ROAD
(OTHER OWNER)

RHEBAN ROAD

EXISTING CULVERTS

EXISTING CULVERT

GLAMORGAN SPRING BAY COUNCIL
APPROVAL OF PROPOSAL PLAN

SA 2017 / 004

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EXISTING SERVICES PLAN

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B	FOR PLANNING LODGEMENT	20/12/2016			
A	CLIENT REVIEW	16/12/2016			

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F: 03 6234 8988
E: mail@aldanmark.com.au
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CLIENT:	MICHAEL AND HARRIET LAWRENCE
ADDRESS:	LOT 2, RHEBAN ROAD ORFORD, TAS 7109
SHEET:	OVERALL PLAN - EXISTING SERVICES
PROJECT:	ORFORD SUBDIVISION
ISSUE:	FOR PLANNING

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PROJECT No.	SHEET No.	REV No.
15E96-10	Z05	B

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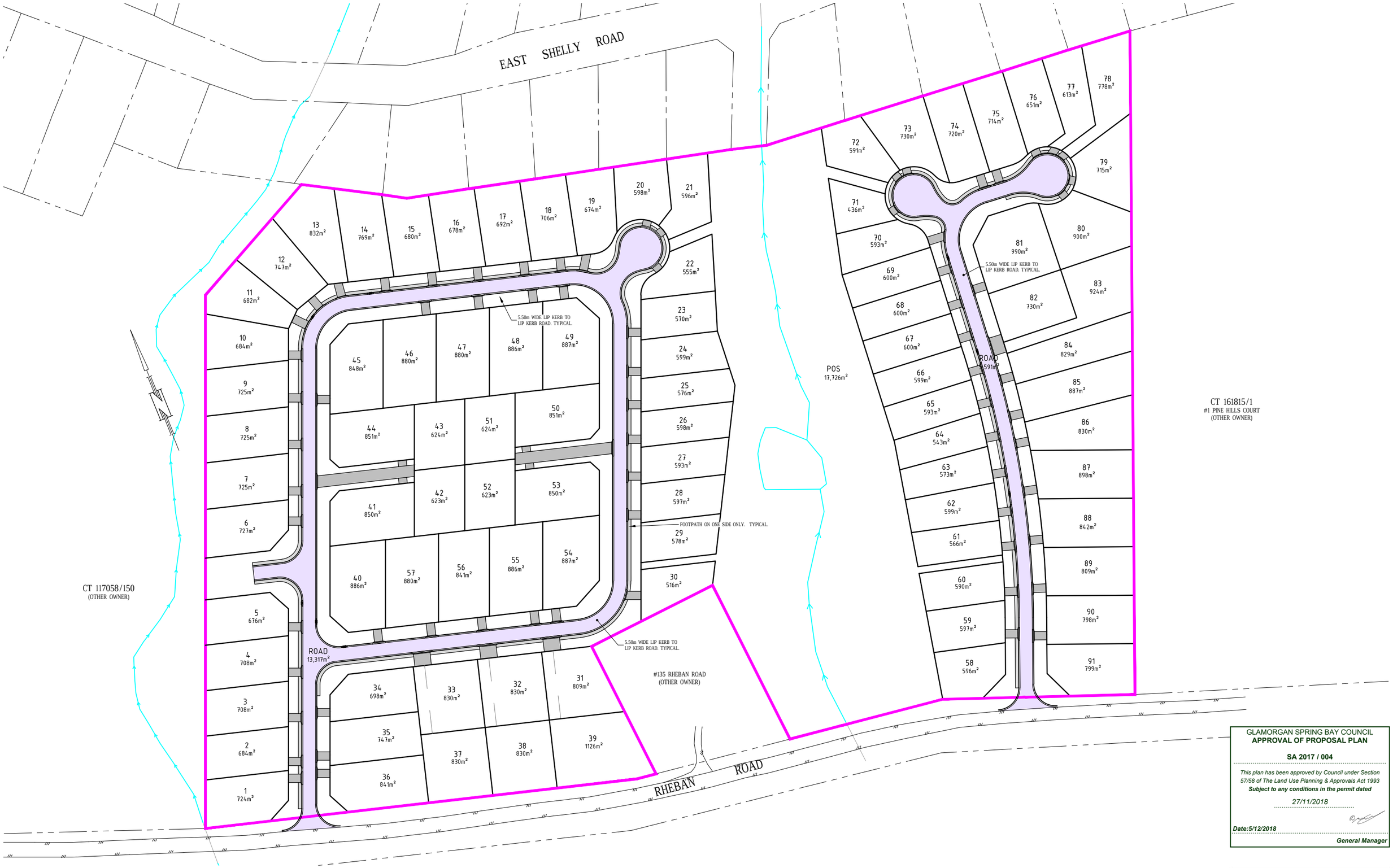

GLAMORGAN SPRING BAY COUNCIL
APPROVAL OF PROPOSAL PLAN

SA 2017 / 004

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Subject to any conditions in the permit dated

27/11/2018

Date:5/12/2018

General Manager

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ROAD LAYOUT PLAN

SCALE 1:750 (A1)

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REV.	DESCRIPTION	DATE	REV.	DESCRIPTION	DATE
C	FOR TRAFFIC ENGINEER ENDORSEMENT	24/07/2017			

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Hobart Tas 7000
P: 03 6234 8666
F: 03 6234 8988
E: mail@aldanmark.com.au
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CLIENT: MICHAEL AND HARRIET LAWRENCE

ADDRESS: LOT 2, RHEBAN ROAD, ORFORD, TAS 7109

SHEET: OVERALL PLAN - ROAD NETWORK

PROJECT: ORFORD SUBDIVISION

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SCALE: 1:200 | SIZE: A1 | DATE: 24/07/2017

PROJECT No. 15E96-10 | SHEET No. Z06 | REV No. C

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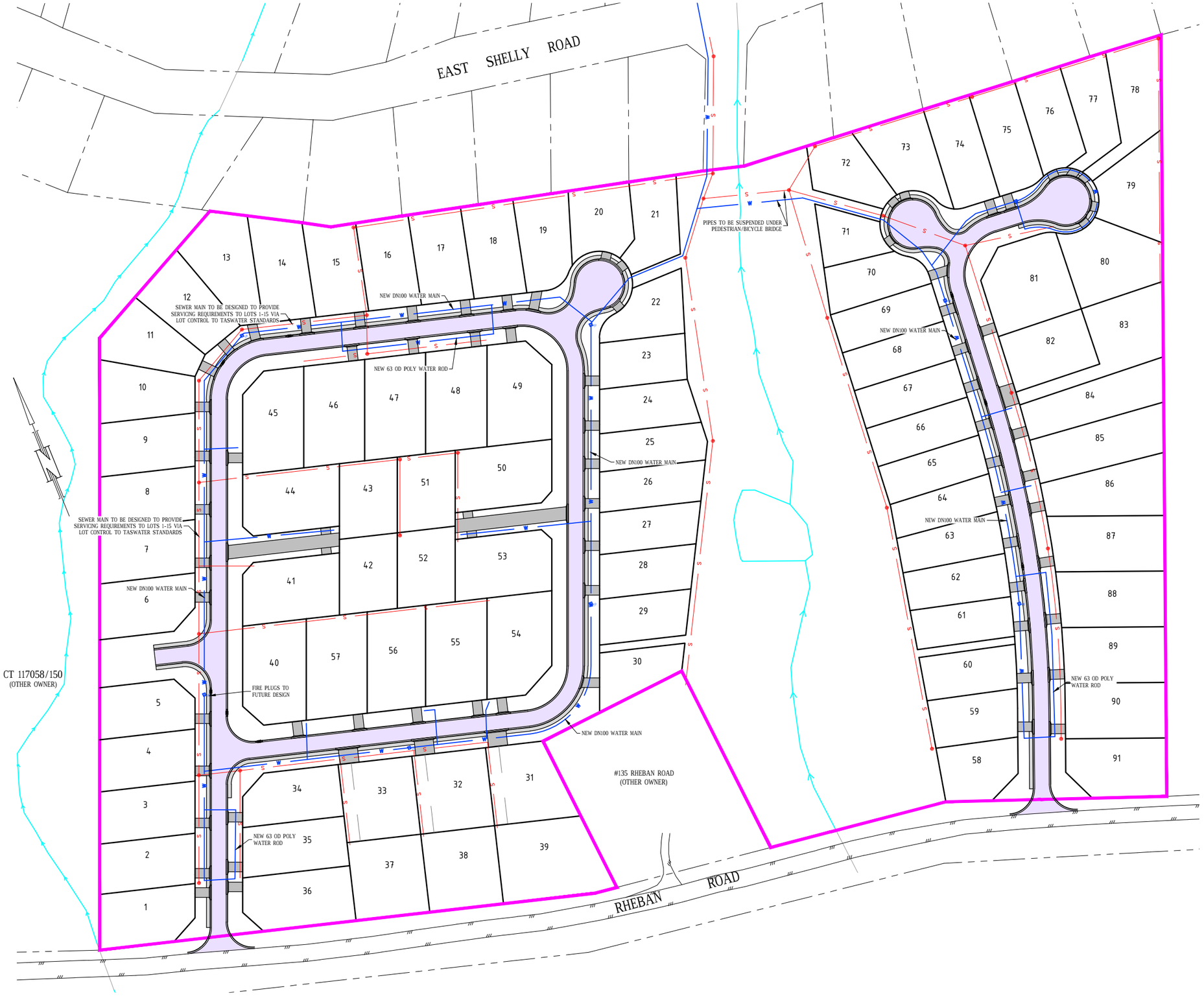

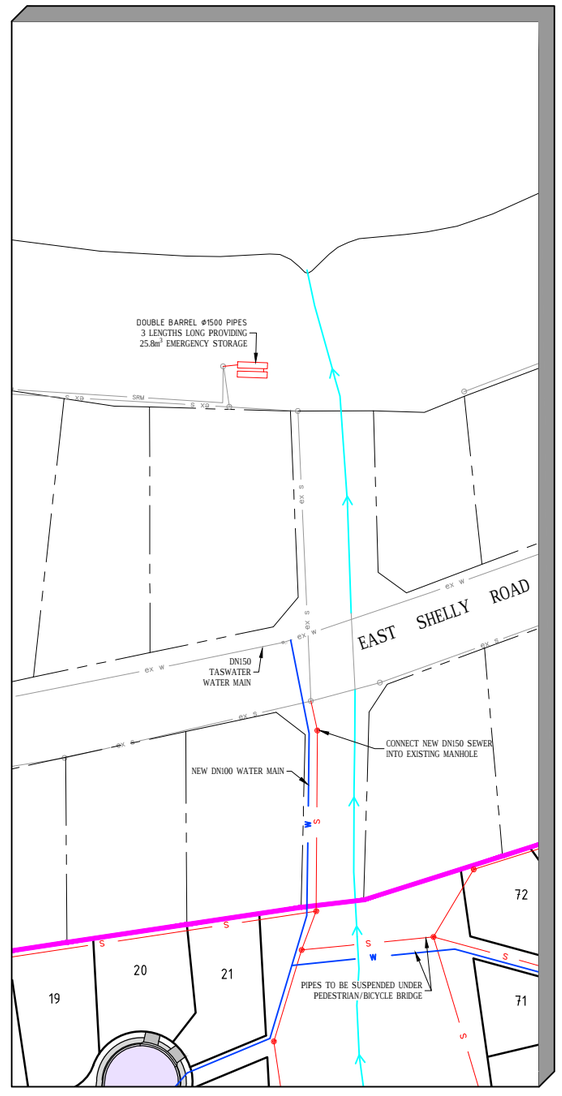

SEWER & WATER LAYOUT PLAN

SCALE 1:750 (A1)

GLAMORGAN SPRING BAY COUNCIL
APPROVAL OF PROPOSAL PLAN

SA 2017 / 004

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27/11/2018

Date:5/12/2018

General Manager

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CONCEPT SEWER AND WATER LAYOUT

SCALE 1:750 (A1)

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C	TASWATER RFI	24/07/2017			

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Hobart Tas 7000
P: 03 6234 8666
F: 03 6234 8988
E: mail@aldanmark.com.au
W: www.aldanmark.com.au

CLIENT: MICHAEL AND HARRIET LAWRENCE

ADDRESS: LOT 2, RHEBAN ROAD ORFORD, TAS 7109

SHEET: CONCEPT SEWER & WATER LAYOUT

PROJECT: ORFORD SUBDIVISION

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EAST SHELLY ROAD

OUTFALLS TO EXISTING WATERCOURSE

OUTFALLS TO EXISTING WATERCOURSE

OUTFALLS TO EXISTING WATERCOURSE

CT 117058/150
(OTHER OWNER)

#135 RHEBAN ROAD
(OTHER OWNER)

RHEBAN ROAD

CT 161815/1
#1 PINE HILLS COURT
(OTHER OWNER)

GLAMORGAN SPRING BAY COUNCIL
APPROVAL OF PROPOSAL PLAN

SA 2017 / 004

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Subject to any conditions in the permit dated

27/11/2018

Date:5/12/2018

General Manager

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CONCEPT STORMWATER PLAN
SCALE 1:750 (A1)

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REV.	DESCRIPTION	DATE	REV.	DESCRIPTION	DATE
C	COUNCIL RFI	24/07/2017			

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F: 03 6234 8988
E: mail@aldanmark.com.au
W: www.aldanmark.com.au

CLIENT: MICHAEL AND HARRIET LAWRENCE

ADDRESS: LOT 2, RHEBAN ROAD
ORFORD, TAS 7109

SHEET: CONCEPT STORMWATER LAYOUT

PROJECT: ORFORD SUBDIVISION

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SCALE: 1:200 | SIZE: A1 | DATE: 24/07/2017
PROJECT No. 15E96-10 | SHEET No. Z08 | REV No. C

DRAWING DETAILS: 15E96-10 CIV.dwg - MORGAN MCGUIRE - PLOTTED: 12/Oct/2017, 9:15 AM

3.5 AM2018/07 – Rezone Lot 2, 135 Rheban Road, Orford

Planning Assessment Report	
Proposal:	**Rezone Lot 2, Rheban Road, Orford (CT 149641/2) from Rural Resource Zone to General Residential Zone and subdivision. Rezone adjoining land to the west and rezone 135 Rheban Road, Orford.**
Requested by:	**M & H Lawrence**
Location:	**Lot 2, Rheban Road, Orford (CT 149641/2)**
Planning Document:	**Glamorgan Spring Bay Interim Planning Scheme 2015 (Interim Scheme)**
Application Date:	**8 February 2017**
Statutory Date:	**N/A**
Attachments:	**TPC process flow chart. Application Documents (see s7.1). AHT and TasWater comments. Related representation on interim planning scheme.**
Author:	**Shane Wells, Development & Compliance Manager**

1. Executive Summary

1.1. The site is one of six lots identified for future urban development in the Triabunna / Orford Structure Plan. The proposal is to rezone one of these lot from the Rural Resource Zone (RRZ) to General Residential Zone (GRZ) and also for approval of 91 residential lots and one public open space lot.

1.2. The site is well suited to residential development; it is serviced, flat, largely cleared and adjoins other residential lots and has limited agricultural potential.

1.3. The proposed amendment is considered to represent fair and orderly planning and it is recommended that the Planning Authority initiate the amendment and permit in a modified form.

1.4. As the site is in the middle of the future urban area, the application ought to be modified by Council to include additional land in the rezoning.

2. Legislative & Policy Content

2.1. The purpose of this report is, firstly, to enable the Planning Authority to determine whether or not to initiate the planning scheme amendment and, secondly, to determine the associated subdivision application.

2.2. The relevant legislation is the *Land Use Planning and Approvals Act 1993* (LUPAA). The provisions of LUPAA establish the test of whether a planning scheme amendment is reasonable or not.

2.3. This report details the reasons for the officer recommendation. The Planning Authority must consider this report but is not bound to adopt the recommendation. Broadly, the Planning Authority can either: (1) adopt the recommendation, or (2) vary the recommendation by adding, modifying or removing recommended reasons and conditions or replacing an approval with a refusal (or vice versa). Any alternative decision requires a full statement of reasons to comply with the *Judicial Review Act* 2000 and the *Local Government (Meeting Procedures) Regulations* 2005.

2.4. This report has been prepared with appropriate regard to the State Policies that apply under the *State Policies and Projects Act 1993*.

2.5. Some of the supporting material indicates that 135 Rheban Road, Orford forms part of the request to Council. However, the written authorisation of the owner of that property has not been provided. Accordingly, the request under s34(1)(a) to Council is limited to Lot 2, Rheban Road.

3. Risk & Implications for Council services and assets

3.1. Approval or refusal of this application will have no direct financial implications for the Planning Authority.

3.2. Implications for Council include general matters related to rate income, asset maintenance and renewal and responding to future building applications.

4. Approval Process

4.1. Attached is a flow chart of the amendment process. The major steps are; (1) initiation, (2) public exhibition, (3) s.39 report on representations, (4) referral to Tasmanian Planning Commission (TPC), and (5) TPC hearings and decisions.

4.2. It should be noted that if initiated, the matter must be determined by the TPC. Further, public exhibition can only occur after initiation. Following public exhibition Council can recommend any modifications to the amendment, which the TPC will consider in making their determination.

4.3. If not initiated, the request is declined. The proponent may ask the TPC to review Council's handling of their request.

5. Site Detail

5.1. Under the *Glamorgan Spring Bay Interim Planning Scheme 2015* (the scheme), the land is within the Rural Resource Zone (RRZ).

5.2. The site is 10.2ha in area and located between Rheban Road and East Shelly Road, Orford some 200m to the east of Jetty Road. It is flat and predominately cleared other than a small area of native vegetation towards East Shelly Road.

5.3. The site has connectivity to East Shelly Road via an undeveloped road reservation.

5.4. There is an existing house in the south-east corner of the site.

5.5. Land to the west (CT 117058/150) is a vacant, flat and predominately cleared 4.3ha lot with frontage to Jetty Road and Rheban Road. To the south the site joins Rheban Road and 135 Rheban Road which is a 4000m^2 lot with existing dwelling. Both lots are within the RRZ.

5.6. To the east the site adjoins 1 Pine Hills Court. This is a 14.57ha lot of which approximately 12.9ha is within the RRZ. 175 Rheban Road is a 1.56ha lot with dwelling that was excised from 1 Pine Hill Court, also within the RRZ. Similarly, 42A East Shelly Road is a 1ha lot with dwelling excised from 1 Pine Hills Court that is within the RRZ.

Figure 1. Site & Surrounds with existing watercourses.

5.7. Together, all of the above RRZ properties form the area of future urban growth identified in the Triabunna / Orford Structure Plan. The total area is 30.36ha. As shown in the following structure plan extract, some but not all of the area, is recommended for normal residential densities:

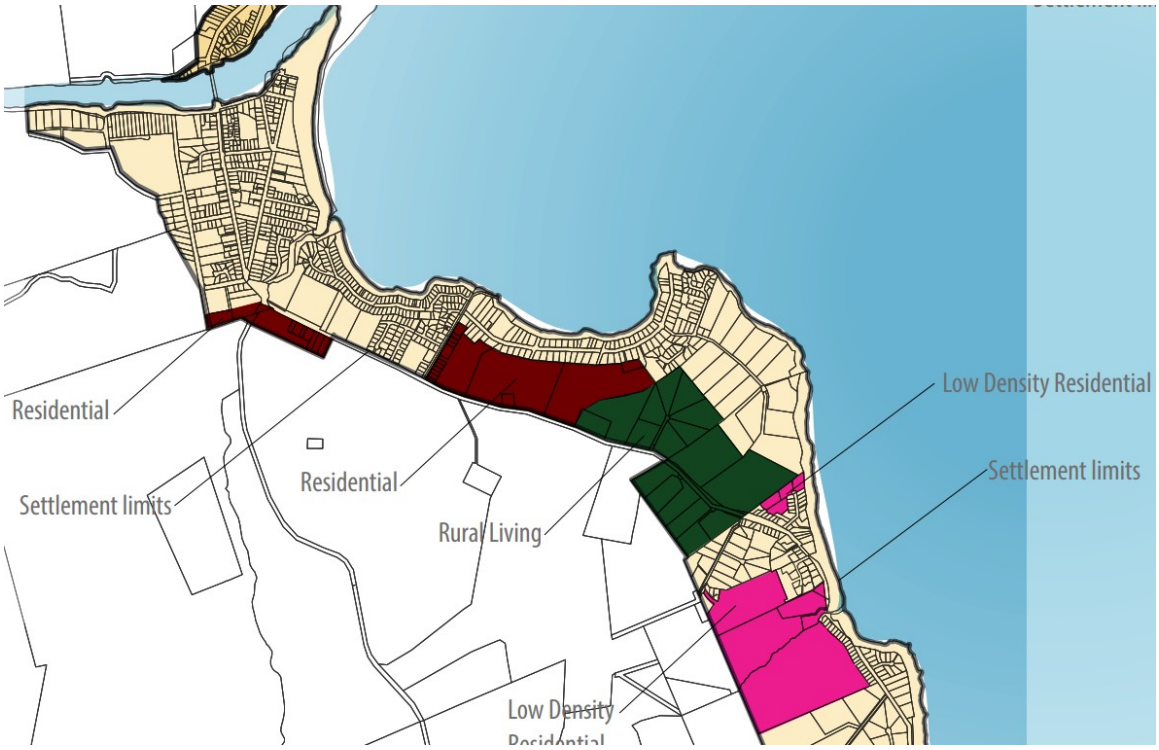


Figure 2. Structure Plan.

5.8. As shown in Figure 1, through the future urban area, three watercourses run through, including one through the subject site.

5.9. The site is subject to overlays for coastal inundation and waterway and coastal protection.

5.10. The coastal inundation overlay is not accurate. What is shown in Figure 3 is all land between high water mark and the 10m elevation contour. More recent coastal hazard mapping is available and this shows that there is no hazard on the site or on the southern side of East Shelly Road. This new mapping will be included in the future Local Provisions Schedule.

5.11. The waterway and coastal protection area is a buffer around the existing watercourse.

5.12. Although the Attenuation Overlay is shown as not applying to north of Rheban Road, the mechanisms in the Code override the mapping and the Attenuation Code is applicable due to proximity to the Orford Wastewater Treatment Plant.

Figure 3. Scheme Overlays. Inundation is Light Blue; Waterway is Blue, Attenuation on southern side of Rheban Road is Red.

Figure 4. Dam and watercourse through the site and existing house on 135 Rheban Road.

6. Proposal

6.1. The proposal seeks to rezone Lot 2, Rheban Road from RRZ to GRZ. This is 10.2ha of land.

6.2. Under s43A of LUPPA a subdivision permit is also sought. The subdivision would create 91 residential lots and one public open space lot. The public open space lot is centred upon the existing watercourse with residential land to either side accessed from separate road networks.

6.3. In the western section of the subdivision, 57 lots are proposed. A new road would be created off Rheban Road which would run as a loop to provide access to all lots. A road reservation to the land to the west is also proposed. All lots would be accessed from the new road and a frontage would be created to the rear of 135 Rheban Road.

6.4. In the eastern part of the subdivision, 34 lots are proposed from a new cul-de-sac road.

6.5. The public open space lot is 1.37ha in size with connectivity to each proposed road, Rheban Road and East Shelly Road. The public open space lot ranges from 45m to 75m in width. It is proposed that the public open space lot would be used for water sensitive urban design which would include the retention of the existing dam.

6.6. Residential lots range from 516m^2 to 924m^2 in size. The net lot yield less public open space and road lots is 13.1 lots per hectare.

7. Supporting Documents

7.1. The request is supported by:

- Planning Report, 20 December 2016
- Copies of title for CT 149641/2
- Subdivision Drawings
- Bushfire Hazard Management Plan, October 2018
- Traffic Impact Assessment, 24 July 2017
- Orford Sewerage Treatment Plan Odour Assessment, 15 July 2018.

7.2. Comments from Aboriginal Heritage Tasmania and TasWater are also included.

8. Assessment of the planning scheme amendment

8.1. Regional land use strategy

8.1.1. Any planning scheme amendment must be, as far as practicable, consistent with regional land use strategies. The Southern Tasmanian Regional Land Use Strategy (the STRLUS) is available at http://stca.tas.gov.au/rpp/wp-content/uploads/2011/05/land_use_strategy_2013_Amended_8thnov_web.pdf).

8.1.2. The STRLUS addresses a host of relevant matters including natural hazards, natural values, coastal values, infrastructure, transport, and activity centres. The most relevant part of the STRLUS are the residential growth policies.

8.1.3. Orford has a low growth strategy to be achieved through infill. Low is defined to mean a zero to 10% increase in the potential number of dwellings over the life of the strategy. The base, commencement number of dwellings

is not defined. Nor are the exact boundaries of Orford defined. For this purposes, the Orford Urban Centre Locality (UCL) used by Australian Bureau of Statistics is preferred and most closely resembles the current General Residential Zone, Low Density Residential Zone and Rural Living Zone areas and excludes Bernacchi Drive / Barton Avenue. This UCL does however include the substantial number of approved lots on the Solis land.

8.1.4. Table 1 provides building and subdivision approval statistics for the Orford UCL, since 2010. They show a consistent demand for dwellings that outstrips land supply. Earlier dwelling approvals are contained in Figure 6 of the Triabunna / Orford Structure Plan and show similar approval numbers from 2000 onwards.

8.1.5. The scale of the subdivision is sufficient to cater for all of the buildings approved from 2010 to 2018 (ytd) and is a large scale subdivision in the context of Orford. However, like any subdivision it takes time to bring an approved subdivision to market and will be released gradually over stages.

8.1.6. Given the continual demand for dwellings in Orford and the limited growth in new lots, additional land for residential development is considered necessary and consistent with the residential policies of the STRLUS.

Table 1. Approvals Orford UCL.

	2010	2011	2012	2013	2014	2015	2016	2017	2018
Dwelling unit building approvals	9	13	7	11	11	17	11	7	6
New Lots Approved	3	5	11	1	20	2	6	0	2
New Lots Sealed	3	3	11	1	4	2	3	0	0

8.1.7. The Coast section of the STRLUS is relevant given the site is within 1km of the coast and subject to the State Coastal Policy 1996. The most relevant parts of The Coast section is C 1.2.

C 1.2 Maximise growth within existing settlement boundaries through local area or structure planning for settlements in coastal areas.

In response the amendment does not expand any existing settlement boundary.

8.1.8. In terms of agricultural land, the amendment does convert potential agricultural land to non-agricultural use. However, the potential of the land is limited by its relatively small size. Moreover, proximity to adjoining residential lots precludes the sorts of intensive agriculture use that are capable of returning sufficient revenue from small holdings. There are very few areas within the site that are not within 100m of an adjoining dwelling.

8.2. Local land use strategy

8.2.1. Local strategy is provided through Triabunna / Orford Structure Plan 2014

update (the Structure Plan). The Structure Plan is available at www.gsbc.tas.gov.au.

8.2.2. The Structure Plan recognises the area as the preferred location for future residential expansion. At section 9.2.2 the Structure Plan recommendation is to zone the future urban area to residential in the long-term. Long-term is considered a reference to timing and need in response to supply and demand as noted by other recommendations at 9.2.2.

8.2.3. Figures of dwelling demand are provided at Table 1. In terms of supply, all recently constructed subdivisions are either fully or near to fully developed. Aside from 3 new lots at the top end of Holkam Court there has been little subdivision construction in Orford for a number of years.

8.2.4. It is now considered an appropriate time to rezone the land and increase the potential supply of residential lots to meet demand.

8.2.5. The rezoning is consistent with all elements of the Structure Plan.

8.3. State Policies

8.3.1. The *State Coastal Policy 1996* applies to the site as it is within 1 km of the high water mark.

8.3.2. As there is no settlement expansion, no new infrastructure demand and no significant natural values or hazards, the amendment complies with State Coastal Policy.

8.3.3. The *State Policy on the Protection of Agricultural Land 2009* does apply given the current zoning of the land. Point 7 of this policy provides:

> *The protection of non-prime agricultural land from conversion to non-agricultural use will be determined through consideration of the local and regional significance of that land for agricultural use.*

8.3.4. The land is not significant for agricultural purposes and has been highly constrained by past residential subdivision. Its conversion to non-agricultural use will have no local or regional impact on agricultural output. The potential for new lots to fetter adjoining agriculture is also minimal given the characteristics of the land south of Rheban Road.

8.3.5. The *State Policy on Water Quality Management 1997* applies, but is more relevant to individual developments.

8.4. RMPS Objectives

8.4.1. The objectives of the Resource Management and Planning System must be furthered by the amendment.

Objectives – Part 1	*Comment*
(a) to promote the sustainable development of natural and physical resources and the maintenance of	The site is part of a modified area with limited natural and physical resources.

ecological processes and genetic diversity;	
(b) *to provide for the fair, orderly and sustainable use and development of air, land and water; and*	The amendment will provide necessary and needed residential supply consistent with local and regional land use planning.
(c) *to encourage public involvement in resource management and planning; and*	The public will be involved in the draft planning scheme amendment through opportunity to make representation and attend public hearings. The public have also had the opportunity to provide input in to the Structure Plan.
(d) to facilitate economic development in accordance with the objectives set out in paragraphs (a), (b) and (c); and	The draft amendment will facilitate economic development in the area.
(e) *to promote the sharing of responsibility for resource management and planning between the different spheres of Government, the community and industry in the State.*	The proposed amendment will require the approval of the Tasmanian Planning Commission following community consultation.
Objectives – Part 2	*Comment*
(a) *to require sound strategic planning and co-ordinated action by State and local government;*	The proposed rezoning is consistent with regional and local level land use strategies.
(b) *to establish a system of planning instruments to be the principal way of setting objectives, policies and controls for the use, development and protection of land.*	This is a procedural objective.
(c) *to ensure that the effects on the environment are considered and provide for explicit consideration of social and economic effects when decisions are made about the use and development of land; and*	No adverse environmental, social or economic effects have been identified.

(d) *to require land use and development planning and policy to be easily integrated with environmental, social, economic, conservation and resource management policies at State, regional and municipal levels; and*	The proposed amendment supports this objective and is consistent with State, regional and local planning policies and strategies.
(e) *to provide for the consolidation of approvals for land use or development and related matters, and to co-ordinate planning approvals with related approvals; and*	This is a procedural objective.
(f) *to secure a pleasant, efficient and safe working, living and recreational environment for all Tasmanians and visitors to Tasmania; and*	The land is well suited for residential development with no identified constraints.
(g) *to conserve those buildings, areas or other places which are of scientific, aesthetic, architectural or historical interest, or otherwise of special cultural value; and*	The site is not known to contain any items or places of scientific, aesthetic, architectural or historic interest. Comments from Aboriginal Heritage Tasmania have been provided. If any Aboriginal heritage sites are discovered during potential future works then the *Aboriginal Relics Act 1975* will apply for reporting and management purposes.
(h) *to protect public infrastructure and other assets and enable the orderly provision and co-ordination of public utilities and other facilities for the benefit of the community;*	All necessary public infrastructure is currently provided to the site or will be constructed as part of future subdivision..
(i) *to provide a planning framework which fully considers land capability.*	The land cannot support agricultural use to any significant extent.

8.5. Land Use Planning and Approvals Act 1993

8.5.1. LUPPA requires the planning authority, for the purposes of planning scheme amendment requests, to consider section 32 as well as any representations received under section 30I on the interim planning scheme and Councils section 30J report on representations received on the interim planning scheme.

8.5.2. Aldanmark made a representation dated 29 September 2015 obo the owners and in support of rezoning for residential. In response, Council noted that whilst the rezoning is supported that it should proceed via a planning scheme amendment in the short to medium term.

8.5.3. Section 32 requires that the planning authority be satisfied that the planning scheme amendment:

***(e)** must, as far as practicable, avoid the potential for land use conflicts with use and development permissible under the planning scheme applying to the adjacent area; and*

***(ea)** must not conflict with the requirements of section 30O; and*

***(f)** must have regard to the impact that the use and development permissible under the amendment will have on the use and development of the region as an entity in environmental, economic and social terms.*

8.5.4. Section 30O requires an amendment to be consistent with the regional land use strategy and all mandatory provisions of the planning scheme.

8.5.5. The extent of compliance with the regional land use strategy is discussed earlier in this report. It is considered that the amendment is consistent with the STRLUS.

8.5.6. The potential for land use conflict is minimal. The zone will be bordered by the golf course to the north and subdivisional road to the east. The exception is one low density residential lot (yet to be created). Under the current zone, many more residential lots border the Local Business Zone. The proposal reduces the potential for conflict.

8.5.7. The amendment affects a small amount of land only and has no regional implications for environmental, economic or social terms.

9. Referrals

9.1. TasWater and Aboriginal Heritage Comments are attached.

9.2. On 20 February 2017, Department of State Growth advised that they had no comments to make on the matter.

9.3. Formal referrals to TasWater & Department of State Growth (DSG) will occur to public exhibition.

10. Relationship of the amendment to other land

10.1. In the form submitted the rezoning could be described as a spot zoning as it would leave land to the west, south and east in RRZ. This is not an ideal outcome and can be avoided by including the land to the west and to the south in the rezoning. The land to the east could be included but the structure plan does recognise that it may be appropriate for both GRZ and Rural Living and further work in that respect is necessary.

10.2. It is recommended that Council initiates an amendment to the land to the west (CT 117058/150) and to 135 Rheban Road to rezone these lots from RRZ to GRZ.

11. Assessment of the subdivision application

11.1. An application must meet every applicable Standard to be approved. Each standard can be met by either an Acceptable Solution or Performance Criteria. Where a Performance Criteria is relied upon an application is discretionary and the application may be approved or refused.

11.2. *The following* provisions *are relevant to the proposed use and development;*

- *General Residential Zone*
- *E5.0 Road and Rail Asset Code*
- *E7.0 Stormwater Management Code*
- *E15.0 Inundation Prone Areas Code*

		Acceptable Solution Requirement	**Proposed**
1	Lot design Clause 10.6.1 A2 (b)	10m x 15m building envelope for each is not subject to any codes	Some lots are subject to the Inundation Prone Areas Code. As noted elsewhere the mapping is in error.
2	Lot design Clause 10.6.1 A2 (e)	*"the long axis of the building area faces north or within 20 degrees west or 30 degrees east of north"*	Not achieved for some north-south aligned lots.
3	Frontage Clause 10.6.1 A3	Maximum frontage for a lot adjoining public open space is 15m	Lots 22, 23, 24, 26, 27, 28, 29, 30, 60, 62, 63 and 70, which adjoin the proposed public open space lot, have a frontage greater than 15m in width.
4	Internal lots Clause 10.6.1 A4	*"No lot is an internal lot."*	Lots 37, 38, 39, 77, 78 and 83 are internal lots.
5	Subdivision is for more than 3 lots Clause 10.6.1 A5	*"Subdivision is for no more than 3 lots."*	91 lots are proposed.
6	Road design Clause 10.6.2 A1	*"The subdivision includes no new road."*	New roads are proposed.
7	Ways and public open space Clause 10.6.3 A1	*"No acceptable solution."*	N/A
8	Services Clause 10.6.4 A4	*"The subdivision includes no new road."*	New roads are proposed.

11.3. **Discretion 1 - Lot Design**

11.3.1. Due to outdated mapping of coastal inundation hazard, a number of lots are wholly contained within the associated overlay and therefore do not comply with Clause 10.6.1 A2 (b).

11.3.2. The relevant Performance Criteria states:

The design of each lot must contain a building area able to satisfy all of the following:

(a) be reasonably capable of accommodating residential use and development;

(b) meets any applicable standards in codes in this planning scheme;
(c) enables future development to achieve maximum solar access, given the slope and aspect of the land;
(d) minimises the need for earth works, retaining walls, and fill and excavation associated with future development;
(e) provides for sufficient useable area on the lot for both of the following;
on-site parking and manoeuvring;
adequate private open space.

11.3.3. All above clauses are relevant although (b) is the major consideration. Although the overlay applies, any future house would meet all Acceptable Solutions in the Inundation Prone Areas Code if built with a floor level at 2.2m or higher. As all land in the site is higher than 2.2m it is impossible to not comply. The Performance Criteria is satisfied.

11.4. **Discretion 2 - Lot Design**

11.4.1. Most lots are aligned with an east-west orientation. Accordingly, any 10m x 15m building envelope within those lots will face east-west rather than north-south.

11.4.2. The relevant Performance Criteria states:

The design of each lot must contain a building area able to satisfy all of the following:

(a) be reasonably capable of accommodating residential use and development;
(b) meets any applicable standards in codes in this planning scheme;
(c) enables future development to achieve maximum solar access, given the slope and aspect of the land;
(d) minimises the need for earth works, retaining walls, and fill and excavation associated with future development;
(e) provides for sufficient useable area on the lot for both of the following;
(i) on-site parking and manoeuvring;
(ii) adequate private open space.

11.4.3. All above clauses are relevant although (c) is the major consideration. The shape of the lot, the watercourse and existing roads dictate a road design that is predominately north-south aligned which in turn determine the alignment of lots. Most lots are east-west aligned and therefore have a long-axis facing north.

11.4.4. In terms of future development, solar access to dwellings is not constrained by topography or vegetation. The north-south aligned lots are generally larger and have greater design flexibility as such. It is considered that the Performance Criteria is satisfied for all lots.

11.5. **Discretion 3 - Frontage**

11.5.1. Lots 22, 23, 24, 26, 27, 28, 29, 30, 60, 62, 63 and 70, which adjoin the proposed public open space lot, have a frontage greater than 15m in width. The relevant Performance Criteria is:

The frontage of each lot must satisfy all of the following:

(a) provides opportunity for practical and safe vehicular and pedestrian access;
(b) provides opportunity for passive surveillance between residential development on the lot and the public road;
(c) is no less than 6m.

11.5.2. Lots adjoining public open space have a maximum frontage in order to achieve higher density around such lots. Lots 22, 30 and 70 exceed the frontage purely due to being located on a corner. Lots 23, 24 and 26-29 exceed the frontage by a

cumulative 9.4m distance. They could be made to comply by squeezing an extra lot along that section of subdivision road but this is less than ideal given only 9.4m to work with. Similarly, for lots 60, 62 and 63 the cumulative distance is 4.1m. Excellent passive surveillance will be maintained and the Performance Criteria is satisfied.

11.6. **Discretion 4 - Internal lots**

11.6.1. Lots 37, 38, 39, 77, 78 and 83 are internal lots. The relevant Performance Criteria is:

An internal lot must satisfy all of the following:

(a) the lot gains access from a road existing prior to the planning scheme coming into effect, unless site constraints make an internal lot configuration the only reasonable option to efficiently utilise land;
(b) it is not reasonably possible to provide a new road to create a standard frontage lot;
(c) the lot constitutes the only reasonable way to subdivide the rear of an existing lot;
(d) the lot will contribute to the more efficient utilisation of residential land and infrastructure;
(e) the amenity of neighbouring land is unlikely to be unreasonably affected by subsequent development and use;
(f) the lot has access to a road via an access strip, which is part of the lot, or a right-of-way, with a width of no less than 3.6m;
(g) passing bays are provided at appropriate distances to service the likely future use of the lot;
(h) the access strip is adjacent to or combined with no more than three other internal lot access strips and it is not appropriate to provide access via a public road;
(i) a sealed driveway is provided on the access strip prior to the sealing of the final plan.
(j) the lot addresses and provides for passive surveillance of public open space and public rights of way if it fronts such public spaces.

11.6.2. Lots 37, 38 and 39 could be designed to access Rheban Road directly and not be internal lots. It is considered that Rheban Road would function more efficiently and with higher safety with lots not having direct access.

11.6.3. Lots 77 and 78 are accessed from a cul-de-sac turning head. These lots could be combined as one larger lot specifically tailored for multiple dwellings and could comfortably yield four dwellings rather than 1 per lot under this configuration. It is recommended that lots 77 & 78 be combined.

11.6.4. Lot 83 can only be practically accessed as an internal lot.

11.6.5. It is considered that, as modified, the Performance Criteria is satisfied.

11.7. **Discretion 5 - Subdivision is for more than 3 lots**

11.7.1. The relevant Performance Criteria is:

Arrangement and provision of lots must satisfy all of the following;

(a) have regard to providing a higher net density of dwellings along;
(i) public transport corridors;
(ii) adjoining or opposite public open space, except where the public open space presents a hazard risk such as bushfire;
(iii) within 200 m of business zones and local shops;
(b) will not compromise the future subdivision of the entirety of the parent lot to the densities envisaged for the zone;
(c) staging, if any, provides for the efficient and ordered provision of new infrastructure;
(d) opportunity is optimised for passive surveillance between future residential development on the lots and public spaces;

(e) is consistent with any applicable Local Area Objectives or Desired Future Character.

11.7.2. In terms of (a), the higher density lots adjoin the public open space. Subclause (b) is not relevant as the land is developed in full. The proposed staging plan is considered logical. Subclause (d) is addressed by other clauses and is considered to be satisfied. Subclause (e) is not applicable. The Performance Criteria is considered to be satisfied.

11.8. **Discretion 6 - Road Design**

11.8.1. Where a new road is proposed the following Performance Criteria is applicable:

The arrangement and construction of roads within a subdivision must satisfy all of the following:

(a) the route and standard of roads accords with any relevant road network plan adopted by the Planning Authority;
(b) the appropriate and reasonable future subdivision of the entirety of any balance lot is not compromised;
(c) the future subdivision of any neighbouring or nearby land with subdivision potential is facilitated through the provision of connector roads and pedestrian paths, where appropriate, to common boundaries;
(d) an acceptable level of access, safety, convenience and legibility is provided through a consistent road function hierarchy;
(e) cul-de-sac and other terminated roads are not created, or their use in road layout design is kept to an absolute minimum;
(f) connectivity with the neighbourhood road network is maximised;
(g) the travel distance between key destinations such as shops and services is minimised;
(h) walking, cycling and the efficient movement of public transport is facilitated;
(i) provision is made for bicycle infrastructure on new arterial and collector roads in accordance with Austroads Guide to Road Design Part 6A;
(j) any adjacent existing grid pattern of streets is extended, where there are no significant topographical constraints.

11.8.2. Subclause (a) and (b) are not relevant. Subclause (c) is satisfied by the road connectivity to the west which is more appropriate and necessary than similar connectivity to the east as the western lot is small and with less options to accommodate road design. Subclause (d) is considered to be met and is supported by the TIA. Cul-de-sea roads are minimised. Subclauses (f) to (j) are satisfied to the fullest extent possible in the location. The Performance Criteria is considered to be met.

11.9. **Discretion 7 - Ways and public open space**

11.9.1. For any subdivision, the following Performance Criteria applies:

The arrangement of ways and public open space within a subdivision must satisfy all of the following:

(a) connections with any adjoining ways are provided through the provision of ways to the common boundary, as appropriate;
(b) connections with any neighbouring land with subdivision potential is provided through the provision of ways to the common boundary, as appropriate;
(c) connections with the neighbourhood road network are provided through the provision of ways to those roads, as appropriate;
(d) convenient access to local shops, community facilities, public open space and public transport routes is provided;
(e) new ways are designed so that adequate passive surveillance will be provided from development on neighbouring land and public roads as

appropriate;

(f) provides for a legible movement network;

(g) the route of new ways has regard to any pedestrian & cycle way or public open space plan adopted by the Planning Authority;

(h) Public Open Space must be provided as land or cash in lieu, in accordance with the relevant Council policy.

(i) new ways or extensions to existing ways must be designed to minimise opportunities for entrapment or other criminal behaviour including, but not limited to, having regard to the following:

(i) the width of the way;
(ii) the length of the way;
(iii) landscaping within the way;
(iv) lighting;
(v) provision of opportunities for 'loitering';
(vi) the shape of the way (avoiding bends, corners or other opportunities for concealment).

11.9.2. A large public open space area is proposed which provides connectivity through the site consistent with subclause (a), (b) and (d) and the design of which satisfies all other clauses.

11.9.3. The question with the proposed public open space is its size. The area will be suitable for playgrounds and small recreational facilities but in the main it is likely to be used for more passive purposes. This is in part due to the sites location at the edge of Orford but also due to the watercourse running through the middle of the lot. Additionally, Council has no current plans for additional sports grounds and no apparent need.

11.9.4. The cost of maintenance must be weighed against the benefit of public use. Arguably a similar passive use benefit would be obtained from a slightly smaller area. Additional internal lots could be provided near lots 29 and 30 or lots 58 to 61. This would minimise maintenance costs and maximise lot yield whilst also maintaining public benefit.

11.9.5. The above comment is also in the context of potential reshaping works to sections of the watercourse. The subdivision design has assumed the retention of the existing dam for stormwater quality and quantity treatment. However, this dam is not built for such purposes and is located to close to Rheban Road to be of use for the broader subdivision. The dam will likely require removal and the watercourse could be reshaped in part.

11.9.6. The issue of the size of the public open space should be determined post public exhibition of the amendment should it be initiated.

11.9.7. Beyond the issue of size, the public open space provision in the subdivision satisfies the Performance Criteria.

11.10. **Discretion 8 - Services**

11.10.1. Where a new road is proposed the following Performance Criteria is applicable:

The subdivision provides for the installation of fibre ready facilities (pit and pipe that can hold optical fibre line) and the underground provision of electricity supply.

11.10.2. Satisfaction with the Performance Criteria will be achieved by way of permit conditions.

11.11. **Referrals**

11.11.1. *TasWater*

TasWater have provided conditions that must be included in any permit issued.

11.11.2. Council's Technical Officer

The application has been referred to Council's Technical Officer, who has provided the following comments which are reflected in the recommended permit conditions.

The land has frontage to Rheban Rd which is a Council road constructed to a sealed rural standard adjacent the development with a posted 80km/h speed limit. There is no kerb and channel or concrete footpath in the vicinity of the proposed subdivision.

A Traffic Impact Assessment (TIA) prepared by Milan Prodanovic was submitted with the application. The TIA concludes that:

> *The proposed 91 lot subdivision development, when fully developed and occupied will generate some 270 vehicles/day and around 27 vehicles/hour during peak traffic periods, based on the peak hour traffic being the typical 10% of the daily traffic volume.*
>
> *The addition of 27 vehicle/hour along Rheban Road will not create any operational or efficiency problems at the subdivisional junctions or along the road.*
>
> *Conflicting traffic volumes of up to 1,500 vehicles/hour can generally be accommodated at intersections quite efficiently at Levels of Service C. The level of traffic conflict in this case will be less than 5% of this maximum traffic volume.*
>
> *Surveys indicate the 85th percentile speed of passing traffic on Rheban Road is 74km/h. The required sight distance for a speed of 80km/h is 175m.*
>
> *The current sight distances for vehicles turning to and from Rheban Road at the western subdivisional road is limited by trees in the road reservation. Removal of the trees will greatly increase the available sight distances to achieve the required 175m and more.*
>
> *The current sight distances for the vehicle turning to and from Rheban Road at the eastern subdivisional road are more than sufficient at well over 200m.*
>
> *It is expected the subdivisional roads will be sealed with kerb and gutter constructed both sides of the street and a footpath along one side of the road.*
>
> *It is strongly recommended that the streets should be constructed to a width between kerb faces of no more than a maximum of 6.4m. Widths of 8.9m between kerb faces are not appropriate for streets that will carry less than 200 vehicles/day (average of one vehicle every three minutes during the busiest hour of the day).*
>
> *It is recommended the proposed two subdivisional road junctions with Rheban Road be provided with 'give way' sign and 'holding line' controls, the same as at other junctions along Rheban Road.*

Whilst the traffic generation figures used in the report appear low and may underestimated it is nevertheless unlikely that any operational or safety issues will arise from the subdivision.

The narrow road width of 6.4m maximum recommended within the report however is not supported. The Bushfire Report submitted with the application requires a minimum carriageway width of 7m or 5.5m if parking is restricted on one side of the road. The implementation of parking restrictions in a new development is not supported.

The standard drawings adopted by Glamorgan Spring Bay Council, and all other Tasmanian Councils, require a minimum carriageway width of 8.9m for a cul de sac greater than 150m in length or serving more than 15 tenements. As such a condition requiring a minimum road carriageway width of 8.9m or 6.9m with indented parking bays is recommended.

Driveways servicing internal lots are to be constructed to the lot proper with a sealed surface.

The application involves more than 5 lots and more than 600m^2 of new impervious area. As such Water Sensitive Urban Design Principles are required for the treatment and disposal of stormwater.

The open space should provide ample opportunity to include biological treatment solutions such as vegetated swales, bio filtration ponds, etc. The existing dam is potentially too far upstream to provide treatment opportunity for the subdivision and presents a high level of risk to public safety in its current form. A condition requiring a detailed stormwater management report and design is recommended as part of the engineering drawing approval.

11.11.3. Councils NRM Department

Most of the property appears to be classified by Tasveg as either 'Urban areas' or 'Agricultural land' but there are some native trees along the drainage line which according to Terry are mainly black gums and white gums, so they are important habitat trees for threatened birds (swift parrot and forty spotted pardalote) known from the Orford area. There are also some records of two Zone A declared weeds on and near the property – Spanish heath and boneseed.

12. Conclusion

12.1. The planning scheme amendment consistent with regional and local land use strategy and the requirements of LUPAA.

12.2. On this basis it is recommended that Council initiate and certify the draft amendment as requested and initiate a related amendment to the adjoining lots.

RECOMMENDATION:

That, as provided for by the provisions of section 3 of schedule 6, of the Land Use Planning and Approvals Act 1993 (LUPPA):

A. Pursuant to section 34(1)(a) planning scheme amendment AM 2018/07(a) be initiated and certified as being in accordance with sections 30(0) and 32 of LUPAA to rezone Lot 2, Rheban Road, Orford (CT 149641/2, located generally between Rheban Road and East Shelly Road and 270m east of Jetty Road) from Rural Resource Zone to General Residential Zone.

B. Pursuant to section 34(1)(b) planning scheme amendment AM 2018/07(b) be initiated and certified as being in accordance with sections 30(0) and 32 of LUPAA to rezone 135 Rheban Road, Orford (CT 149641/1) and Rheban Road, Orford (CT 117058/150, located with frontage to Rheban Road and Jetty Road, Orford) from Rural Resource Zone to General Residential Zone.

C. Pursuant to section 38 of LUPAA, AM 2018/07(a) and AM 2018/07(b) be simultaneously placed on public exhibition for no less than 28 days.

D. Pursuant to section 39 of LUPAA, if no representations are received during public exhibition, Council directs the General Manager to advise the Tasmanian Planning Commission in writing that no representations have been received.

E. Pursuant to s43A of LUPAA, a permit (SA 2017/04) for subdivision of Lot 2, Rheban Road, Orford (CT 149641/2) into 91 lots plus public open space and road lots be approved subject to the following conditions:

1. Use and development must be substantially in accordance with the endorsed plans being the plans prepared by Aldanmark Pty Ltd (Ref: 170724 CIV 15E96-10 B Z01-Z05 dated 20/12/2017 and 170724 CIV 15E96-10 C Z06-Z08 dated 24/07/17) and documents unless modified by a condition of this permit.

   Advice: Any changes may either be deemed as substantially in accordance with the permit or may first require a formal amendment to this permit or a new permit to be issued.

2. Use and development must comply with the requirements of TasWater specified by 'Submission to Planning Authority Notice' reference number TWSA 2017/00199-GSB, dated 13 August 2018 and attached to this permit.

3. Lots 77 and 78 must be consolidated.

4. Use and development must be substantially in accordance with the Traffic Impact Assessment prepared by Milan Prodanovic dated July 2017 unless modified by a condition of this permit.

5. The development must be substantially in accordance with the Bushfire Hazard Management plan Assessment Report, by Andrew Goodsell, dated October 2018, and submitted with the application, or as otherwise required by this permit, whichever standard is greater.

6. The staging plan must be amended to include road access for lots 31 to 39 as part of stage 1.

7. Prior to sealing the final plan of survey for any lots in Stage 2, the public open space lot must be transferred to Council.

8. All land noted as roadway, footway, open space or similar must be transferred to Council. Complete transfer documents that have been assessed for stamp duty, must be submitted with the final plan of survey.

9. The final plan of survey must include easements over all drains, pipelines, wayleaves and services to the satisfaction of Council's Municipal Engineer.

10. Covenants or other restrictions must not conflict with, or seek to override, provisions of the planning scheme.

11. The final plan or survey must show the corners of each road intersection must be splayed or rounded by chords of a circle with a radius of not less than 6m to the satisfaction of Council's General Manager.

Environment Management

12. The developer must implement a soil and water management plan (SWMP) to ensure that soil and sediment does not leave the site during the construction process and must provide a copy of the SWMP to Council's General Manager prior to the commencement of works.

13. No top soil is to be removed from the site.

14. All vehicles and equipment associated with construction of the development and/or operation of the use must be cleaned of soil prior to entering and leaving the site to minimise the introduction and/or spread of weeds and diseases to the satisfaction of Council's General Manager.

15. Prior to the commencement of works a list of procedures describing cleaning and monitoring practices in terms of weed and disease management must be submitted to Council's General Manager. If considered satisfactory, the procedures will be endorsed and will form part of the permit.

16. Prior to the commencement of works a weed eradication plan must be submitted. The plan, and its implementation, must be to the satisfaction of Council's General Manager.

17. Native vegetation must not be removed, lopped, ring-barked or otherwise wilfully destroyed, removed or adversely impacted on other than the minimum necessary for the construction of buildings and works, the connection of services, vehicular access and the implementation of a Bushfire Hazard Management Plan to the satisfaction of Council's General Manager.

18. Suitable barriers must be erected during the construction of the development to ensure native vegetation that must be retained is not damaged during construction works.

Engineering

19. Prior to sealing the final plan the following works must be completed in accordance with engineering design drawings endorsed by Council's Municipal Engineer:

(a) Lot connections for each lot:
   i. Connection to reticulated stormwater;
   ii. Connection to electricity network;
   iii. Connection to telecommunication network.

(b) Vehicle access for each lot:
   i. Reinforced concrete vehicle crossover to front boundary;
   ii. Vehicle driveway over access strip for all shared rights of way and internal lots.

(c) Road construction:
   i. Fully paved, sealed and drained road carriageway with a 8.9m wide carriageway (or 6.9m carriageway with indented parking bays) and 18m road reservation;
   ii. Concrete kerb and channel both sides;
   iii. Concrete footpaths 1.5m wide on at least one side with kerb ramps;
   iv. Concrete footpaths 1.5m wide on both sides of the road fronting lots 1 to 3 and lots 34 and 36
   v. Underground stormwater drainage;
   vi. Underground electrical and telecommunications reticulated infrastructure;
   vii. Street lighting;
   viii. Street trees;
   ix. Street sign and standard to each intersection.

(d) Stormwater network:
   i. An underground stormwater drainage system capable of accommodating a storm with an ARI of 20 years, when the land serviced by the system is fully developed.
   Where the existing public stormwater infrastructure has insufficient capacity to accommodate the increased stormwater runoff from the development, the developer is to upgrade public stormwater infrastructure or limit any increase such that it can be accommodated within the existing or upgraded public stormwater infrastructure. The details of any measures to limit stormwater or upgrade existing infrastructure are to be included in the Engineering design drawings to be submitted to the Glamorgan Spring Bay Council for approval.
   ii. A major stormwater drainage system designed to accommodate a storm with an ARI of 100 years.
   iii. A stormwater property connection to each lot capable of servicing the entirety of each lot by gravity.
   iv. Stormwater treatment utilising Water Sensitive Urban Design Principles These Principles will be in accordance with the Water Sensitive Urban Design Procedures for Stormwater Management in Southern Tasmania and to the satisfaction of the Council's Municipal Engineer.

(e) Public open space:
   i. Land shaped to be fit for purpose;
   ii. Landscaping;
   iii. Electrical, water, stormwater and sewer lot connections fit for purpose;
   iv. Vehicular crossover or suitable access;

v. Concrete or gravel footpaths fit for purpose;

(f) Rehabilitation

i. Provision of top soil and grass or vegetation on all disturbed surfaces

All work must be to a standard that is to the satisfaction of Council's Municipal Engineer.

Advice: Some or all works may be bonded subject to satisfaction of relevant Council policies.

20. Prior to the commencement of construction works, engineering design drawings showing all work required by this planning permit, and any additional work sought, must be submitted to Council's Municipal Engineer. The engineering design drawings must be prepared in accordance with the current:
    a. Tasmanian Subdivision Guidelines
    b. Tasmanian Standard Drawings
    c. Council policy
    d. A comprehensive stormwater management plan including calculations of the stormwater drainage system, including treatment, detention and outfalls must be submitted to in conjuction with the engineering design drawings for approval.

If considered satisfactory, the plans or documents will be endorsed by Council's Municipal Engineer and will form part of this permit.

Advice:

(a) The Tasmanian Subdivision Guidelines and Tasmanian Standard Drawings are available at www.lgat.tas.gov.au.

(b) Variations from the Tasmanian Subdivision Guidelines and Tasmanian Standard Drawings may be approved at the discretion on Council's Municipal Engineering where a clear justification exists and the alternative solution is to a no lesser quality in terms of infrastructure performance or maintenance costs over the life of the asset.

(c) Engineering design drawings must also include provisions for soil and water management

(d) Engineering design drawings will expire two years after approval and will be endorsed as such by Council's Municipal Engineer.

21. For any internal lot, all electrical, telecommunication, stormwater, water and sewer lot connections must be extended, or conduits for, for the full length of the access strip to the buildable area of lot.

22. Prior to sealing the final plan of survey the developer must submit to Council:

(a) A "Provisioning of Telecommunications Infrastructure – Confirmation of final payment" or "Certificate of Practical Completion of Developer's Activities" from NBN Co;

or

written advice that the existing NBN and copper infrastructure is adequate and future lot owners will not be liable for network extension or upgrade costs, other than individual property connections at the time each lot is further developed.

(b) A Letter of Release from TasNetworks confirming that all conditions of the Agreement between the Owner and authority have been complied with;

or

written advice that existing infrastructure is adequate and future lot owners will not be liable for network extension or upgrade costs, other than individual property connections at the time each lot is further developed.

23. Works are subject to a 12 month defect liability period commencing from date of practical completion for each stage during which time all maintenance and repair of works during this time as the responsibility of the developer.

24. A bond clearly in excess of 5% of the value of work and no less than $5000.00, must be submitted to Council at the commencement of the defect liability period or prior to sealing the final plan or survey, whichever is earliest. The bond will be returned at the expiration of the defect liability period if all works are maintained and repaired as necessary to the satisfaction of Council's Municipal Engineer.

25. Prior to sealing the final plan of survey, as constructed drawings of all works undertaken must be submitted. The extent and quality of the as constructed drawings must be to the satisfaction of Council's Municipal Engineer.

26. The Subdivider must pay the cost of any alterations and/or reinstatement to existing services, Council infrastructure or private property incurred as a result of the proposed subdivision works. Any work required is to be specified or undertaken by the authority concerned.

27. The developer shall provide a commercial skip for the storage of builders waste on site and arrange for the removal and disposal of the waste to an approved landfill site by private contract.

Decision: /18

Moved Deputy Mayor Woods, seconded Clr Arnol, that as provided for by the provisions of section 3 of schedule 6, of the Land Use Planning and Approvals Act 1993 (LUPPA):

A. Pursuant to section 34(1)(a) planning scheme amendment AM 2018/07(a) be initiated and certified as being in accordance with sections 30(0) and 32 of LUPAA to rezone Lot 2, Rheban Road, Orford (CT 149641/2, located generally between Rheban Road and East Shelly Road and 270m east of Jetty Road) from Rural Resource Zone to General Residential Zone.
B. Pursuant to section 34(1)(b) planning scheme amendment AM 2018/07(b) be initiated and certified as being in accordance with sections 30(0) and 32 of LUPAA to rezone 135 Rheban Road, Orford (CT 149641/1) and Rheban Road, Orford (CT 117058/150, located with frontage to Rheban Road and Jetty Road, Orford) from Rural Resource Zone to General Residential Zone.
C.Pursuant to section 38 of LUPAA, AM 2018/07(a) and AM 2018/07(b) be simultaneously placed on public exhibition for no less than 42 days.
D.Pursuant to section 39 of LUPAA, if no representations are received during public exhibition, Council directs the General Manager to advise the Tasmanian Planning Commission in writing that no representations have been received.
E.Pursuant to s43A of LUPAA, a permit (SA 2017/04) for subdivision of Lot 2, Rheban Road, Orford (CT 149641/2) into 91 lots plus public open space and road lots be approved subject to conditions 1 to 27.

The motion was put and carried unanimously
(8 Votes to 0)

For: Mayor Debbie Wisby, Deputy Mayor Jenny Woods, Clr Cheryl Arnol, Clr Keith Breheny, Clr Annie Browning, Clr Rob Churchill, Clr Michael Kent, Clr Michael Symons.

Against: Nil

GLAMORGAN SPRING BAY COUNCIL

Attachment A

Glamorgan Spring Bay Interim Planning Scheme 2015

Amendment AM 2018/07(a)

Rezone Lot 2, Rheban Road, Orford (CT 149641/2, located generally between Rheban Road and East Shelly Road and 270m east of Jetty Road) from Rural Resource Zone to General Residential Zone.

General Residential Zone

The Common Seal of the Glamorgan Spring Bay Council is affixed below Pursuant to Councils resolution of the 27th November 2018 in the presence of :

……Mayor

……..General Manager

Glamorgan Spring Bay Interim Planning Scheme 2015

Amendment AM 2018/07(b)

Rezone 135 Rheban Road, Orford (CT 149641/1) and Rheban Road, Orford (CT 117058/150, located with frontage to Rheban Road and Jetty Road, Orford) from Rural Resource Zone to General Residential Zone.

General Residential Zone

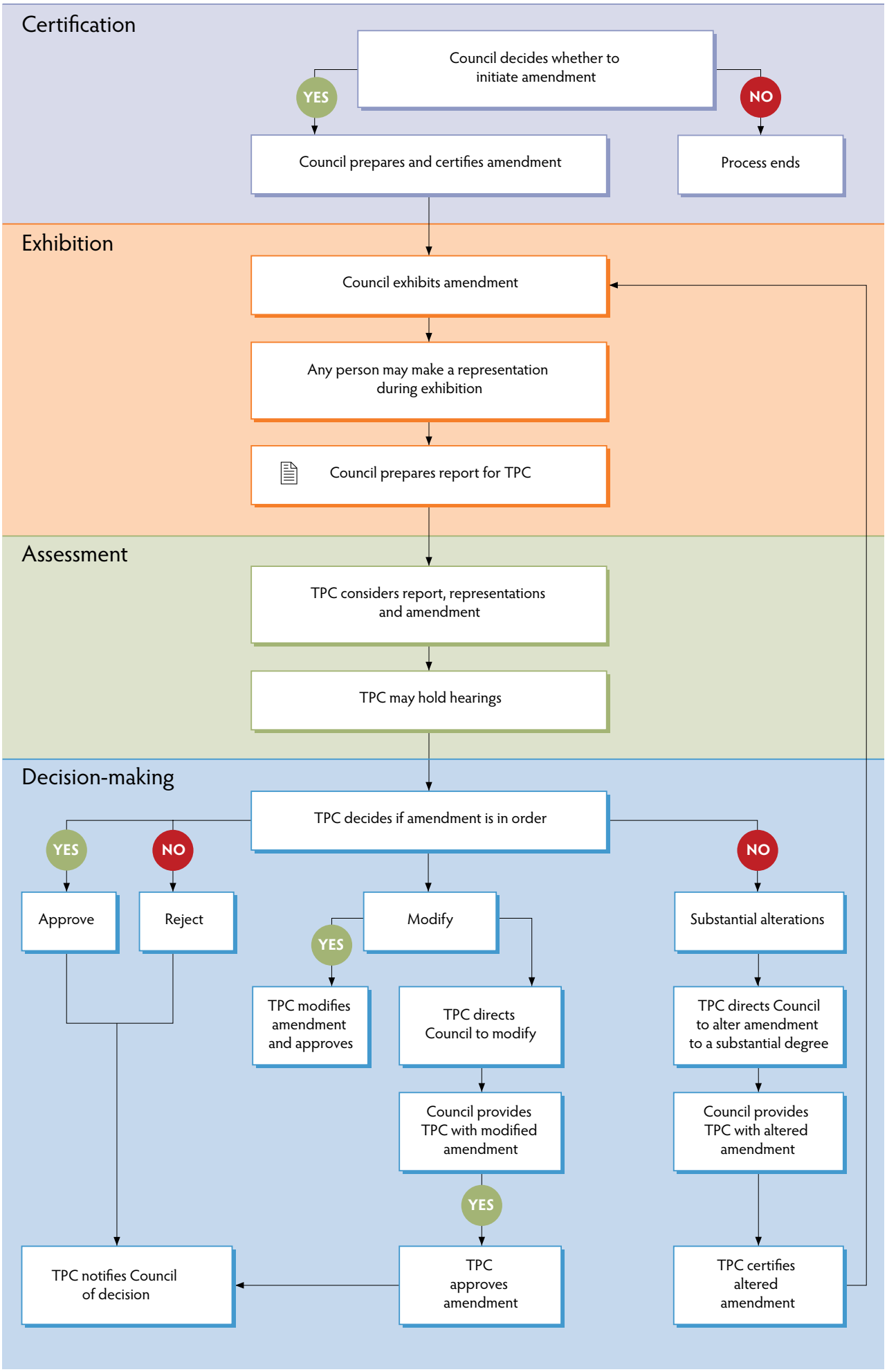
The Common Seal of the Glamorgan Spring Bay Council is affixed below Pursuant to Councils resolution of the 27th November 2018 in the presence of :

.....Mayor

.....General Manager

Approval process for amendment of planning schemes

Part 3, Land Use Planning and Approvals Act 1993



TPC: Tasmanian Planning Commission

TCP P/L
20 December 2016

Proposed Rezoning and Subdivision to rezone CT 149641 folios 1 and 2, Rheban Road Orford from Rural Resource to General Residential - M and H Lawrence and others

Planning Report

Author

This report was prepared by Town & Country Planning Pty Ltd. ABN 27116340991 with all correspondence via Aldanmark (03) 6234 8666).

Disclaimer

The views expressed within this document are solely those of the author and do not necessarily represent the opinions, policies and strategies of State and Local Government entities or other parties.

Contents

1.0 Background:

H and M Lawrence own a parcel of land identified as Lot 2 Rheban Road, Orford. Certificate of title is identified as CT 149641/2 (**Annexure A**) which has a total site area of 10.2 ha. N and S Ransley own 135 Rheban Road, Orford which is identified as CT 149641/1 and has an area of 4000 sq.m. Together these two properties (the subject land) represent the land entity sought to be rezoned from Rural Resource to General Residential under the Glamorgan Spring Bay Interim Planning Scheme 2015.

A pipeline easement is shown on title for CT 149641/2 but otherwise the site is unencumbered. No easements are shown on title CT 149641/1 though a benefitting easement for drainage across CT 149641/2 is shown on the Schedule of Easements.

There is a house on CT 149641/1 located towards the western side of the property. Essentially that property due to size is limited to rural living/low density residential use presently. CT 149641/2 is substantially a greenfield site with a few scattered farm sheds only to the east. The location of the subject land is identified in Figures 1 and 2. Photos provided later in this report confirm conditions.

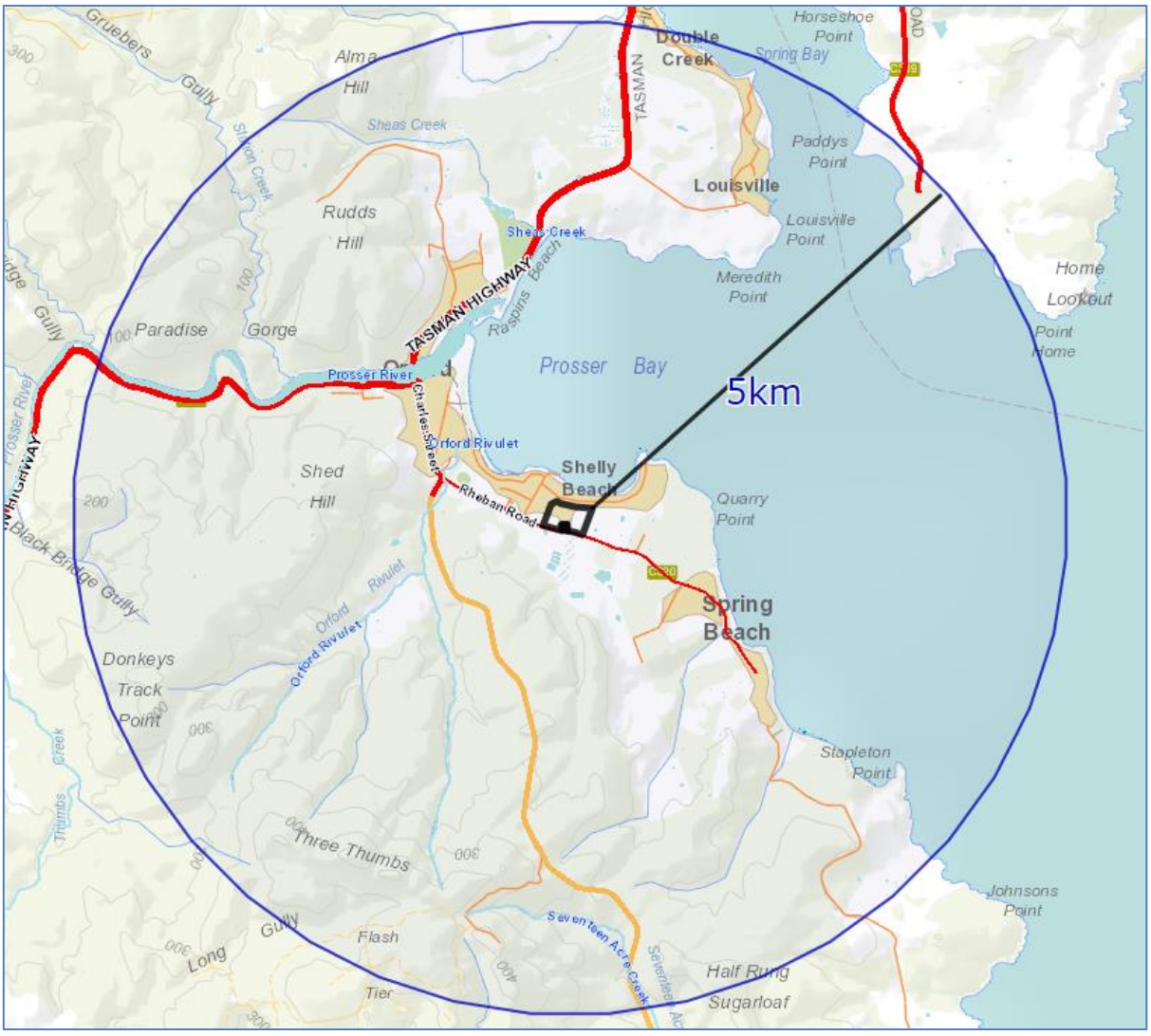


Figure 1 Site Location – broad geographical context (Source: LIST @ State of Tasmania)

Figure 2 Site Location (Source: LIST @ State of Tasmania)

The plans with respect to subdivision for both owners differ. The owner of CT 149641/1 seeks subdivision of the land concurrent with the rezoning. The owner of CT 149641/1 has no direct plans to subdivide at this point but may do so at a later date. It is logical that both parcels of land are included within the rezoning application.

As the development potential of CT 149641/1 is more limited no detailed assessment of subdivision potential has been carried out. However, a full and comprehensive application has been prepared and is assessed for CT 149641/2 as part of this current application.

Note: that whilst there has been discussion with the owner of CT 117058/159 – the land to the immediate west, Mr A.J Miller at this time does not wish to be included in the rezoning application.

2.0 Site Context and Other Relevant Information:

The subject land is accessed off Rheban Road and sits south of East Shelly Road within the south eastern arm of the Orford settlement. An unconstructed road reserve extends to the middle low point of CT 149641/2 off East Shelly Road. Rheban Road is a rural standard sealed road maintained by Council.

As per Figure 3, within 1.7km are the following services and facilities:

- Orford Primary School (identified as 'A')
- An independent supermarket (identified as 'B')
- Police Station (identified as 'C')
- Bowls Rink and Club (identified as 'D')
- Recreation Reserve (identified as 'E')

An existing house sits upon CT 149641/1 and is at least 30 years old. The larger title being CT 149641/2 is essentially vacant. Aerial imagery and some machinery on CT 1498641/1 show that this site was once a horse trotting track. LIST Map shows a 'training track' on the site, though this is no longer evident on ground.

Ostensibly no vegetation is found on either title of note. The only vegetation of significance is found within the localised drainage line being white gum (E viminalis) and black gum (E ovata) towards the lower section of CT 149641/2. The landscape is however more accurately described as open paddock and pasture with the described trees comprising remnant patches only.

Site levels are generally slight with much of the developable land above the 10m AHD contour. Aspect is northerly to north easterly.

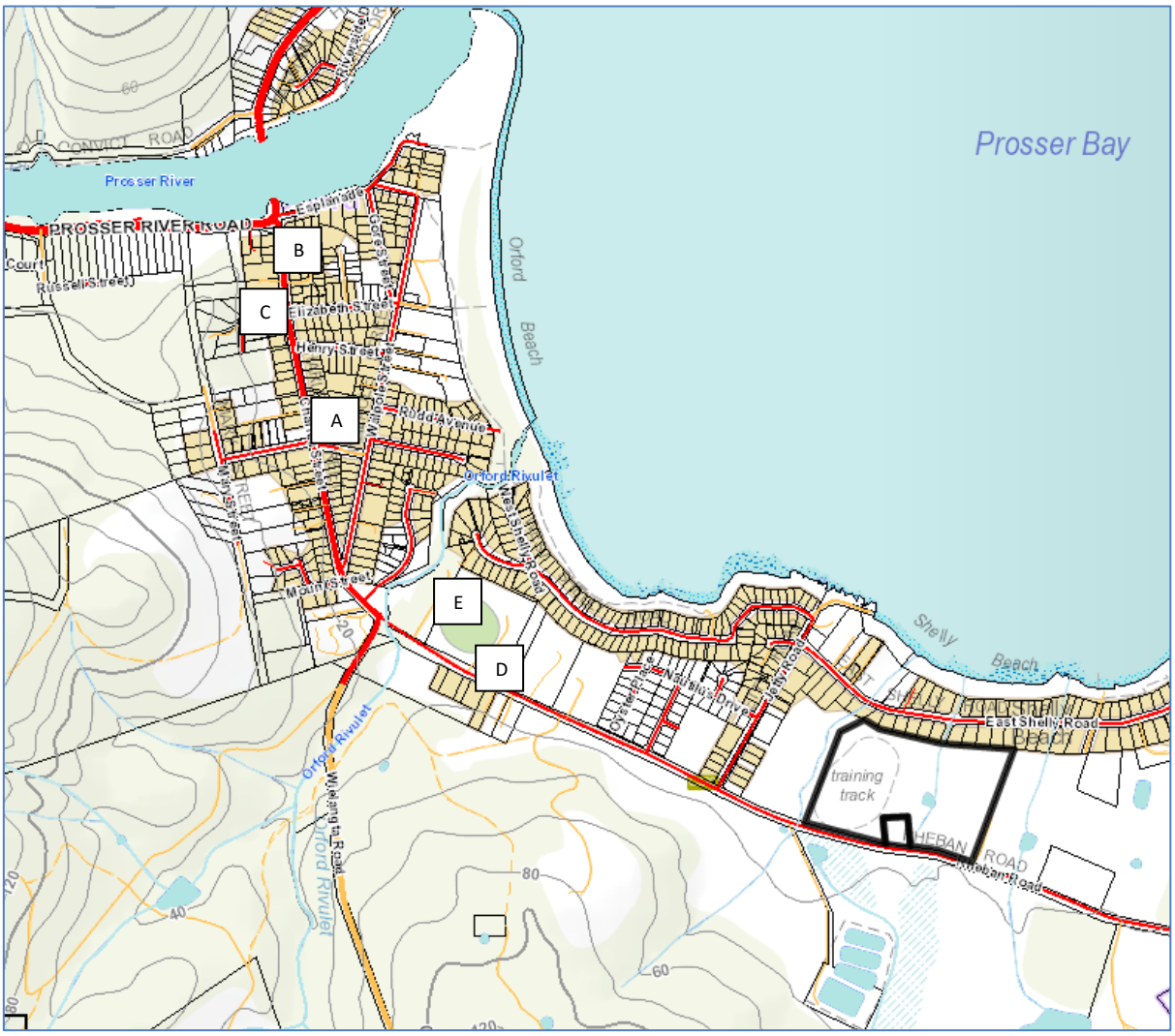


Figure 3 Site Location (Source: LIST @ State of Tasmania)

There is sewer and water reticulated supply in the immediate area (see Figure 4).

Figure 4 Water and sewer mains along with fire hydrants are located directly below the site (Source: LIST @ State of Tasmania)

Within the wider context land use is described in Figure 5.

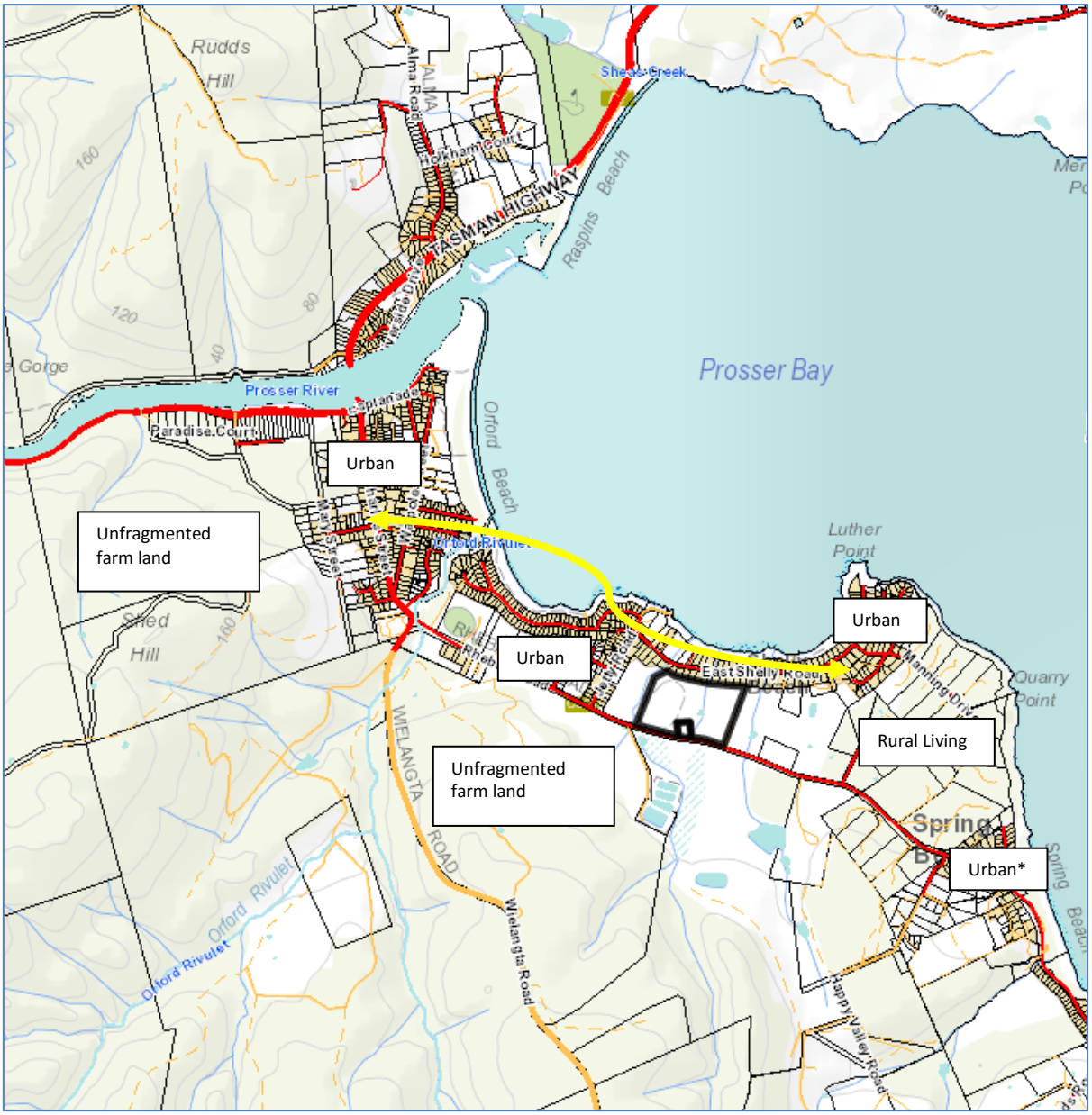


Figure 5 Settlement Context – land use (Source: LIST @ State of Tasmania) Urban* = constrained. Low Density residential use.

A sewerage treatment plant sits a minimum 230m to the south but is generally 300m or greater distance from the majority of the subject land.

Photos indicating site conditions are provided on the following pages.


Photos 1 & 2 Drainage conditions on CT 149641/2 above the dam


Photos 3 & 4 Drainage conditions on CT 149641/2 below the dam


Photos 5 & 6 Open paddocks and unnamed waterway above East Shelly Rd


Photos 7 & 8 Site conditions on CT 149641/2 near western side of property


Photos 9 & 10 Site conditions on CT 149641/2 near eastern side of property

Photo 11 Panorama taken from eastern side of CT 149641/2


Photos 12 & 13 Access conditions – Rheban Road

Photo 14 Existing House – CT 149641/1

Figure 6 Photo Locations (Source: LIST @ State of Tasmania)

Land capability is classified as part class 4 meaning it has suitability for grazing but is not State Significant (Figure 7).

Figure 7 Land Capability (Source: LIST @ State of Tasmania)

3.0 Infrastructure:

Power supply is provided along Rheban Road and also East Shelly Road as is the phone service. Reticulated water and sewer is available in the immediate area (see Figure 4).

Stormwater drainage would be generally towards East Shelly Road via the unnamed water course identified in the photos, corresponding to existing fall.

4.0 Applicable Planning Legislation:

The zoning of the subject land is Rural Resource under the Glamorgan Spring Bay Interim Planning Scheme 2015 (Figure 8). The following overlays apply:

- Waterway and Coastal Protection Area Overlay (along the drainage lines).
- Coastal Inundation Hazard Area (below 10m AHD).

The State Policy on the Protection of Agricultural Land 2009 applies as does the State Coastal Policy 1996 and the State Policy on Water Quality Management. Each of these matters will be assessed later in this report (see 6.3).

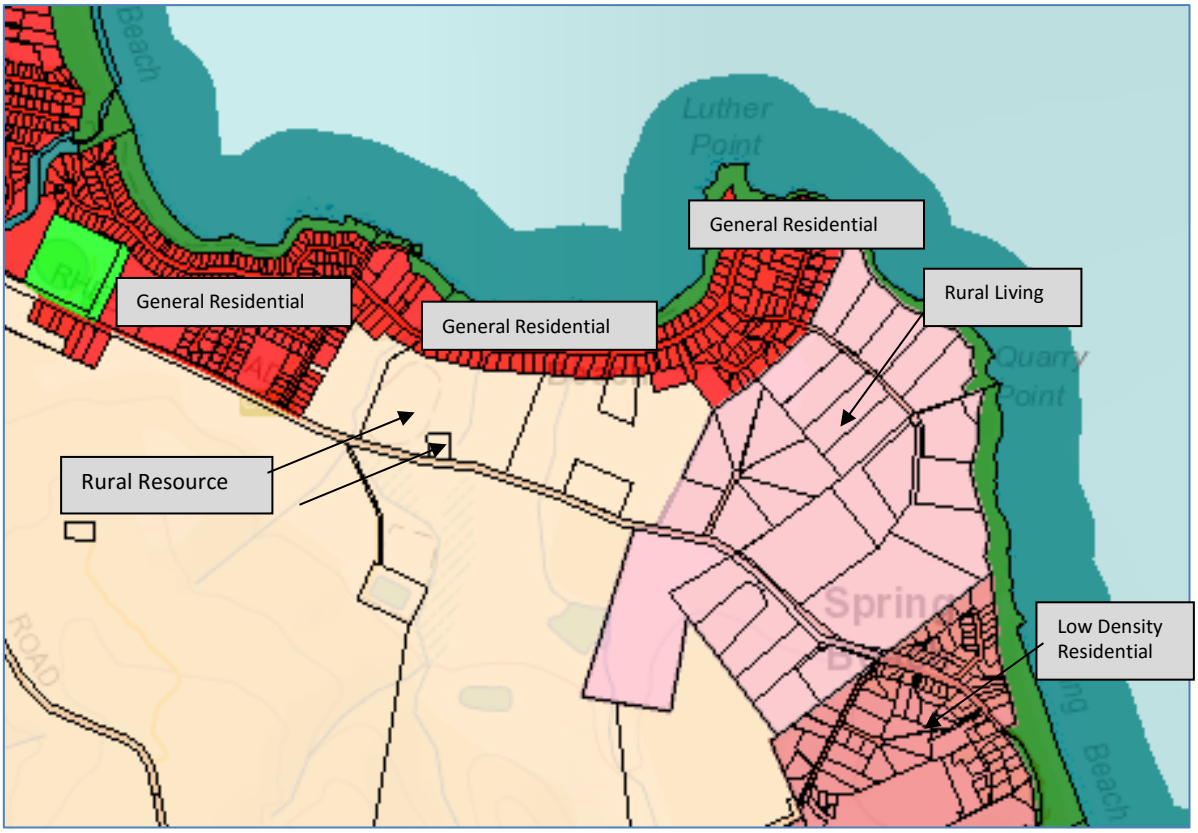


Figure 8 Zoning Arrangements (Source: iPLan @ State of Tasmania)

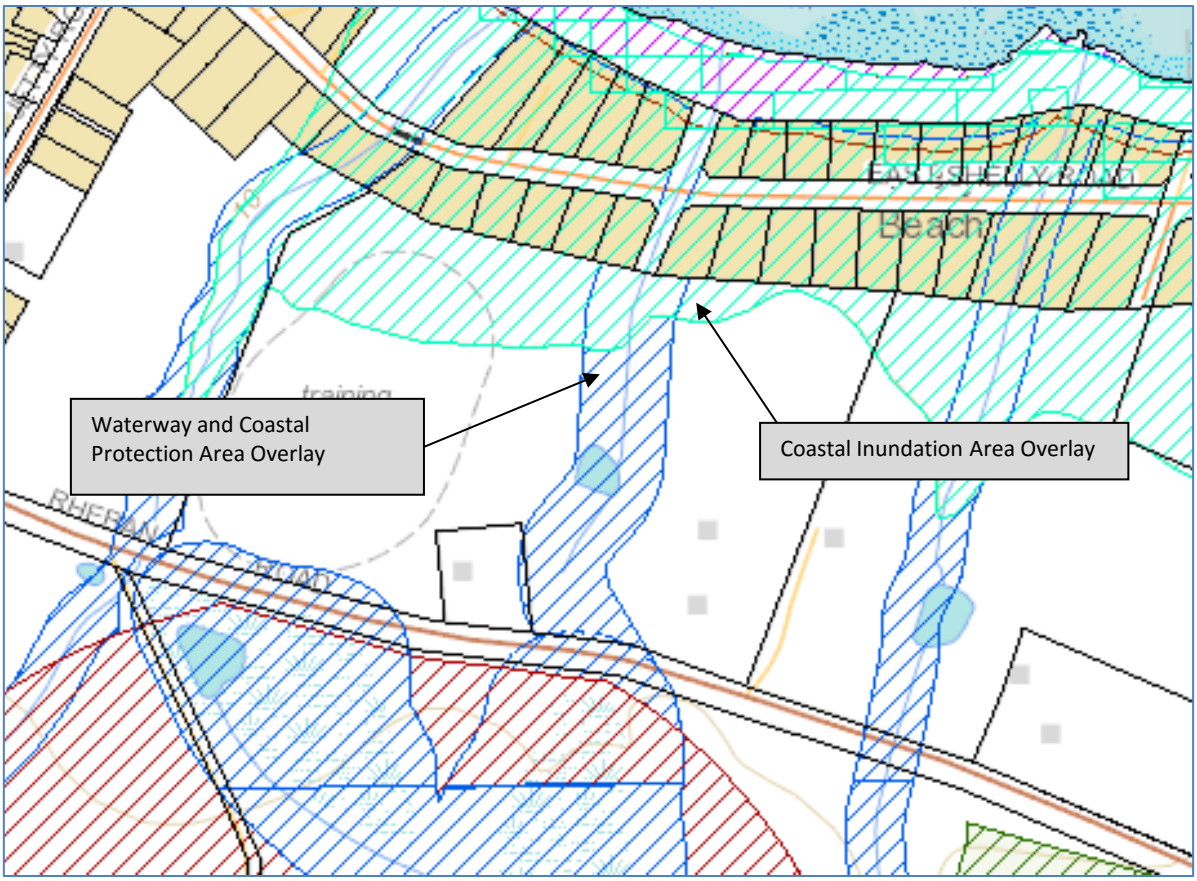


Figure 9 Overlay Arrangements (Source: iPLan @ State of Tasmania)

5.0 Proposal:

There are two parts to the proposal:

(a) To rezone the subject land from Rural Resource to General Residential.
(b) To approve a subdivision of CT 149641/2 as submitted.

6.0 Assessment:

An individual may lodge a request to rezone land under S37 of the *Land Use Planning and Approvals Act 1993*. In addition, under S40T of the *Land Use Planning and Approvals Act 1993*, provision exists to submit and have assessed by the planning authority (in this case Glamorgan Spring Bay Council) a combined rezoning and permit application.

Therefore, in this section the relevant strategic and statutory matters relate to the following:

(a) Rezoning assessment – strategic assessment.
(b) Subdivision application assessment – statutory assessment.

6.1 Rezoning Assessment

For the purposes of this report the rezoning assessment is provided in three distinct but connected sections, namely (a) the objectives and outcomes sought in the Rural Resource Zone and General Residential Zone; (b) general strategic directions of Council; and (c) zone options.

(a) The objectives sought in the Rural Resource Zone

The objectives of the Rural Resource Zone are set out as follows as per cl. 26.1.1 of the Interim Scheme.

26.1.1.1
To provide for the sustainable use or development of resources for agriculture, aquaculture, forestry, mining and other primary industries, including opportunities for resource processing.

Response: The subject land could be used for low intensity grazing (it is Class 4). But it is surrounded by housing to the north, east and west with a Taswater sewage treatment plant to the south. There is a significant degree of fettering by existing uses, drainage is a limitation and the land is functionally separate from the larger farming titles to the south. Given the infrastructure installed in the immediate area (esp. sewer and water) and the lack of likelihood that this land has any value for aquaculture, mining, forestry or resource processing, the only consideration is the potential loss of land from grazing activity.

There is little evidence that sustainable use of the two properties for agriculture is feasible/probable due to surrounding uses and land fragmentation.

26.1.1.2
To provide for other use or development that does not constrain or conflict with resource development uses.

Response: There is no adjoining or nearby resource development impacted by the potential conversion of the subject land from rural to residential purposes. Given surrounding uses it is unlikely resource development would occur on this land.

26.1.1.3
To provide for non-agricultural use or development, such as recreation, conservation, tourism and retailing, where it supports existing agriculture, aquaculture, forestry, mining and other primary industries.

Response: See response to 26.1.1.1. There is little purpose in holding the land in the Rural Resource Zone for conservation since there are no identified values of note. In turn tourism is of little benefit to consider.

26.1.1.4
To allow for residential and other uses not necessary to support agriculture, aquaculture and other primary industries provided that such uses do not:

(a) fetter existing or potential rural resource use and development on other land;

(b) add to the need to provide services or infrastructure or to upgrade existing infrastructure;

(c) contribute to the incremental loss of productive rural resources.

Response: If the subject land has only limited utility for low impact grazing (at best) there is minimal relevance considering housing to support rural resource uses.

26.1.1.5
To provide for protection of rural land so future resource development opportunities are no lost.

Response: Resource development covers a wide range of potential uses from bee keeping to horse studs to turf growing as well as handling, packing and storage of produce. These uses require certain resources to be available – whether it be food sources (bees), sufficient land (horse studs) or infrastructure (irrigation) for turf production.

None of these or the other myriad scenarios appear feasible or likely on the subject land.

(b) General Strategic Directions of Council and the data available:
Council issued the Triabunna/Orford Structure Plan in April 2014. A Structure Plan sets out the major changes to land use, transport, built form and public spaces within settlements including the identification of greenfield growth areas where appropriate.

Thus, the Structure Plan sets out the issues, challenges and opportunities for Orford for the next few decades and gives specific strategic direction – well beyond the broad directions of the Southern Tasmanian Regional Land Use Strategy 2010-2035 (STRLUS). It also embodies and expands further on the directions contained in Vision East 2030.

What does the Structure Plan tell us?

Demographics (2011 census)

- The median age of residents in Orford was 57 years old versus 42 years old in Triabunna. *Significance – Orford is attractive to retirees and older households.*
- Lone person households in Orford are more common than the SE Tasmania average (30% of households v 25%) – *Significance – likely a consequence of age profile. Any growth in population or even slow growth can fuel more housing demand.*

- By profession, the largest group in Orford are Managers (22.5%) well above the SE Tasmania average (16%) – *Significance – it would appear the lifestyle attraction of Orford influences its level of attraction to householders moving into the area. Anecdotal evidence is that this is largely from SE Tasmania with Hobart around 1 hr. drive distant.*

Land Supply and demand

- Between 1999/2000 and 2013/14 207 residential dwelling approvals were issued for Triabunna/Orford. 77% of these were been in Orford.
- Occupancy rates in Orford were low when measured on census night (August 2011). This reflects the likely high number of holiday homes and the seasonality of use.
- At 2011 there were 706 dwellings in Orford, more than double that of Triabunna (350).

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Figure 10 Snapshot (source: http://www.domain.com.au/suburb-profile/orford-tas-7190)

- In terms of land supply across Triabunna, Orford and Spring Beach the Structure Plan identified capacity for 524 to 744 new dwellings within the existing settlement. However, at a more local level the supply was calculated at 129 dwellings for Orford.
- A demand for something in the order of 17 dwellings per year has been calculated for Orford and Triabunna. Escalation of take-up is evident in Orford in the period 2012/13 with 16 dwellings approved in Orford alone. See data on approvals – Figure 11.
- If such a trend were to continue, this would suggest a 7-8 year housing supply exists in Orford. Ongoing monitoring of demand is logical and appropriate.

Overview, identifying future land supply to enable a 10-15 year supply in all major settlements is generally advisable given the timeframe it takes to zone, obtain permits and release land to market (2-4 years typically). Orford at current rates of demand has likely less than 10 years residential land supply.

That would, in turn suggest more detailed consideration of logical inclusions in the Shelly Beach precinct to meet the 'latent demand', especially for holiday homes. As the Structure Plan sensibly points out, this would comprise land north of Rheban Road and infills the land behind the existing linear settlement on Shelly Beach (see Figure 12).

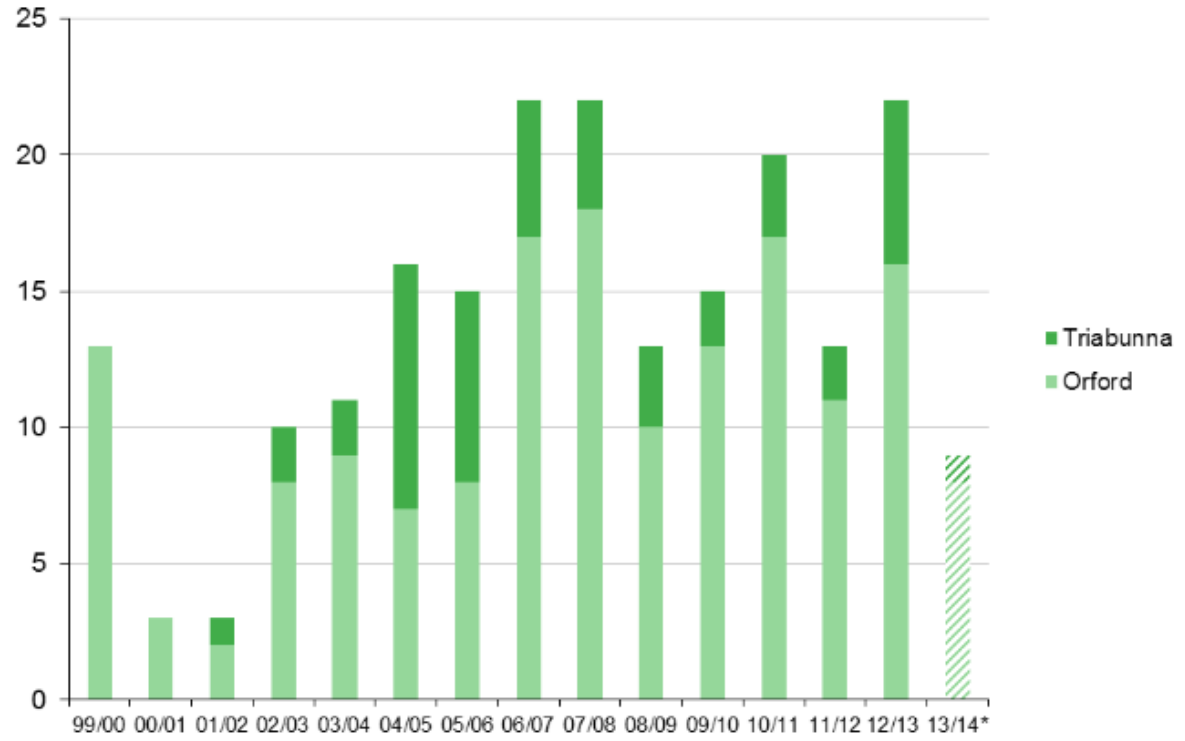


Figure 11 Dwelling Approvals in Orford & Triabunna 1999-2012/13 completed years (source: GSBC, 2014)

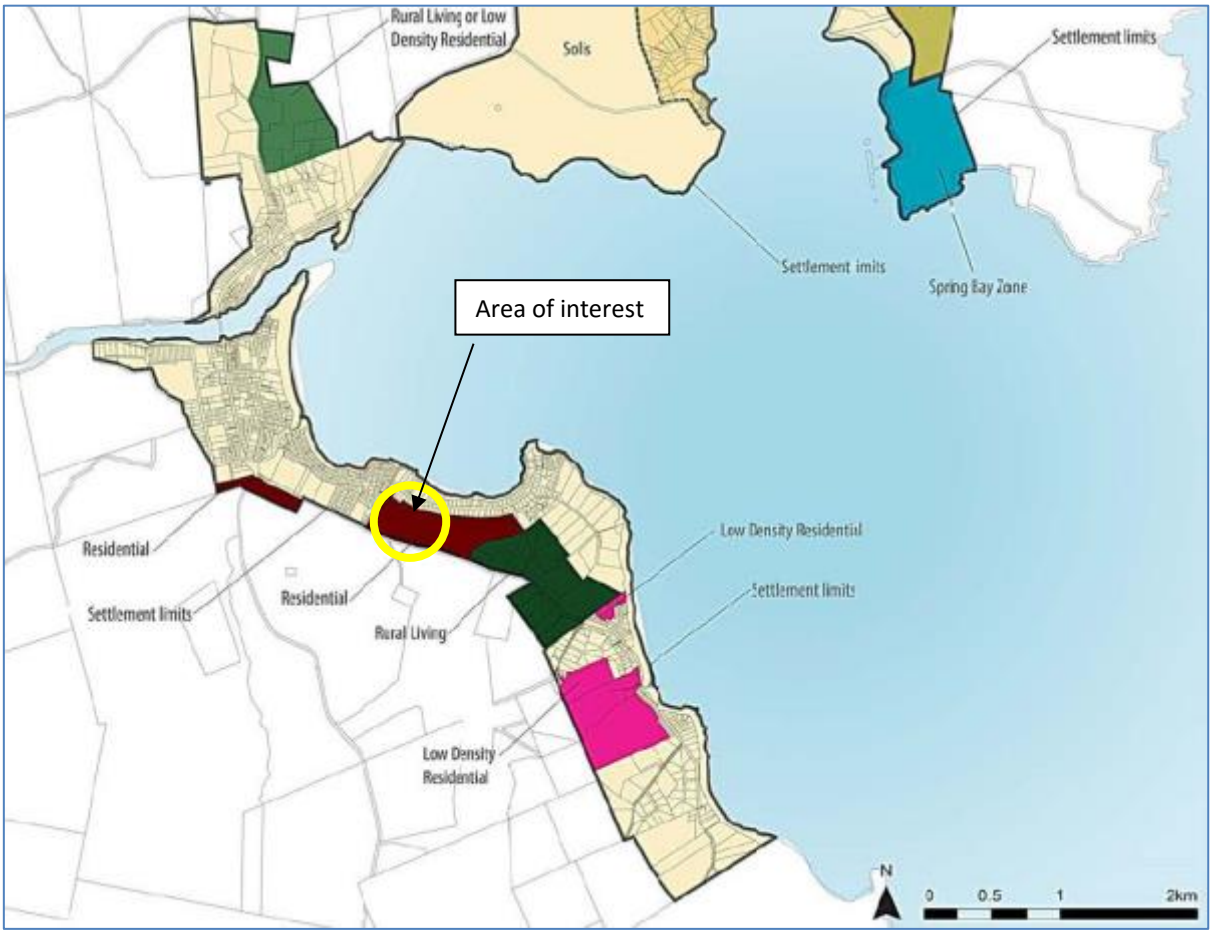


Figure 12 Suggested Zoning Arrangements - Orford (source: GSB Council, 2014)

(c) Alternative Zone Options:
The zone purpose and considerations are as follows:

10.1.1 Zone Purpose Statements
10.1.1.1
To provide for residential use or development that accommodates a range of dwelling types at suburban densities, where full infrastructure services are available or can be provided.

Response: The land is considered suitable for residential use or development. The mandate within the Scheme to achieve smaller lots to achieve a net density of around 15 dwellings/ha will see lots of varying size which will encourage different dwelling types. Full services can be provided to the site.

10.1.1.2
To provide for compatible non-residential uses that primarily serve the local community.

Response: Noted. The proposed open space will serve the wider community as well as that of the future residents within the subdivision.

10.1.1.3
To provide for the efficient utilisation of services.

Response: Full sewer and water reticulation exists in this area.

Whilst the option exists to rezone the land to Low Density Residential this would appear more appropriate in areas with known infrastructure or environmental constraints. Council has applied that zone to Spring Beach which likely reflects a range of constraints and lifestyle considerations. But for greenfield land abutting the main settlement of Orford there seems little merit in the Low Density Residential Zone.

Consistency with STRLUS and Strategic Planning Directions
The sequence of strategic planning frameworks and directions relevant to Orford are summarised as follows:

- **Vision East 2030** – a land use framework for the east coast Councils from Sorell to Break O' Day. Identifies Orford as a village with medium growth potential. Given a village typically has a population, as defined in Vision East, of 200-500 and the ABS population of Orford at 2011 was over 500 it may in fact be closer to the size of a small township (there are 734 dwellings in Orford alone). The logical zoning inclusion as suggested in this submission is not inconsistent with Vision East, noting that holiday housing demand driven by proximity to Greater Hobart is strong and likely to remain so given convenience to the metropolitan population.

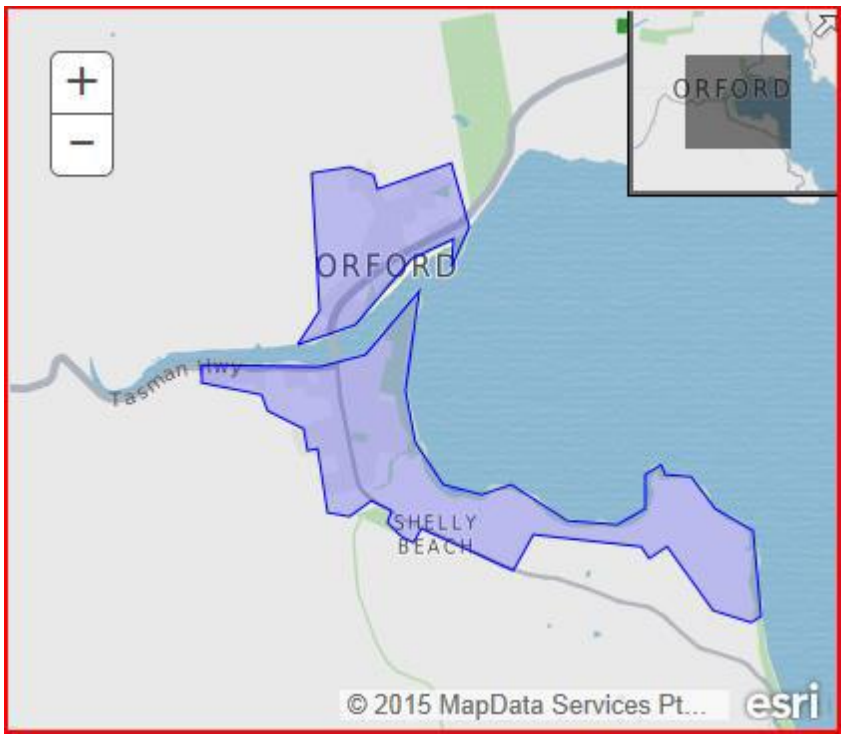


Figure 13 Orford as defined by ABS boundaries in 2011 (source: ABS 2015)

- **Background Report 1** STRLUS: The Project Background for the Southern Tasmania Regional Land Use Framework (April 2010) notes that Vision East will be subsumed into the STRLUS and the controls and strategic direction will remain largely the same as in Vision East.

- **STRLUS** - issued in October 2011. It shows a hierarchy of strategic directions from the objectives in Schedule 1 of the *Land Use Planning and Approvals Act 1993* through to Structure Plans and site development plans at the local level. On page 27 it requires consolidation of residential development and avoiding ribbon development. Orford is classified as a township but with a low growth scenario being applied. Low growth is defined as <10% growth in dwellings. Zoning the subject land for residential purposes is not ribbon development ie it is behind existing coastal housing areas.

  In terms of STRLUS, if the total number of dwellings was 734 in Orford in 2011 (source: ABS Code UCL621015 (UCL)) and noting growth rates it would be best part of 800 dwellings in 2015 and more today. A 10% growth rate would involve 80-85 more dwellings being provided in total. That could be likely accommodated within Orford without further residential rezoning occurring. However, noting that permanent residential housing is only one component of housing demand. Holiday homes plays a significant role in Orford. Both permanent and part-time occupied residences together, constitute overall housing demand.

  It is not unreasonable therefore to cater for both permanent residents and holiday home owners (who may ultimately convert their home to permanent residences) and provide for both in existing established areas and those areas identified by local structure plans.

6.2 Assessment of Rezoning against LUPA ACT 1993

The rezoning has been assessed against the relevant provisions of Schedule 1 of the *Land Use Planning and Approvals Act 1993*.

LUPA Schedule 1 Objectives	Response
Part 1 1.(a) to promote the sustainable development of natural and physical resources and the maintenance of ecological processes and genetic diversity; and	There are no environmental issues attached to this proposed draft amendment or subdivision. The subject land comprises a logical infill within a substantially cleared greenfield scenario.
(b) to provide for the fair, orderly and sustainable use and development of air, land and water; and	Consistent with Council's adopted strategy (Triabunna/Orford SP).
(c) to encourage public involvement in resource management and planning; and	No issues identified.
(d) to facilitate economic development in accordance with the objectives set out in paragraphs (a) (b) and (c); and	This proposal has no adverse impact on these objectives. There zoning and subdivision would promote economic development (housing) in an area where demonstrated demand exists.
(e) to promote the sharing of responsibility for resource management and planning between the different spheres of Government, the community and industry in the State.	No issues identified.
Part 2 (a) to require sound strategic planning and co-ordinated action by State and local government; and	No impact identified. Council tabled the rezoning of the subject land to TPC during the interim scheme hearing process. It was resolved that an amendment to the Interim Scheme was the best process to undertake future planning.
(b) to establish a system of planning instruments to be the principal way of setting objectives, policies and controls for the use, development and protection of land; and	No adverse impact identified.
(c) to ensure that the effects on the environment are considered and provide for explicit consideration of social and economic effects when decisions are made about the use and development of land	No environmental impact identified. The site does not require any land clearing.
(d) to require land use and development planning and policy to be easily integrated with environmental, social, economic, conservation and resource management policies at State, regional and municipal level; and	Noted. The amendment does not affect these considerations.
(e) to provide for the consolidation of approvals for land use or development and related matters, and to co-ordinate planning approvals with related approvals; and	There is no adverse environmental effect from the amendment. The benefit of the combined process of rezoning and subdivision is that the ultimate use and layout of development is considered concurrently with the zoning process, establishing that orderly development of the site is possible.

(f) to promote the health and wellbeing of all Tasmanians and visitors to Tasmania by ensuring a pleasant, efficient and safe environment for working, living and recreation; and	The proposed amendment does not pose any issues with respect to land use and development policy. The draft amendment is consistent with the identified role of the southern section of Orford as the main growth corridor within the settlement.
(g) to conserve those buildings, areas or other places which are of scientific, aesthetic, architectural or historical interest, or otherwise of special cultural value; and	No issues identified. Consultation with AHT has not identified any records of Aboriginal cultural heritage. There are no European culture heritage issues identified.
(h) to protect public infrastructure and other assets and enable the orderly provision and co-ordination of public utilities and other facilities for the benefit of the community; and	No issues identified. The site is ideally suited with regards to aspect, location, slope and access to facilities in Orford.
(i) to provide a planning framework which fully considers land capability.	No issues identified.

Table 1 LUPA Considerations

6.3 Subdivision Application Assessment

The subdivision has been assessed against the relevant provisions of the General Residential Zone and applicable overlays, which are as follows:

- Waterway and Coastal Protection Area Overlay (along the drainage lines).
- Coastal Inundation Hazard Area (below 10m AHD).

The State Policy on the Protection of Agricultural Land 2009 applies as does the State Coastal Policy 1996 and the State Policy on Water Quality Management. Each of these matters will be assessed.

6.3.1 General Residential Zone provisions

Subdivision is regulated under clauses 10.6.1 through to clause 10.6.4.

Each is assessed as follows:

10.6.1 Lot Design: With respect to objectives it is noted that:

(a) The subdivision is designed consistent with the zone purpose. There are no Character Statements defined for the General Residential Zone within the Planning Scheme.
(b) All proposed lots are deemed suitable for development. All are free of hazard risk.
(c) There is a mix of lot sizes which should encourage a range of dwelling types.
(d) The layout, where practicable utilizes east-west roads to enhance residential amenity and solar access. To the east, due to lot configuration this is less practicable but fortunately the entire site has a northerly aspect which ensures all lots will enjoy good amenity.
(e) Average density is 14 dw/ha. The density well exceeds that of the wider area and clearly meets the principles set out in the Scheme on efficient use of land. A cursory examination of density along East Shelly Road shows the proposed layout is considerably more efficient than surrounding subdivisions.

(f) Internal lots are minimized. Only 3 out of 91 lots are internal and given road layout limitations to the east - the cul-de-sac, a limited number of battle axe lots is difficult to avoid. A balance between density, amenity and lot layout has been sought.
(g) The layout responds well to the need for efficient and ordered provision of infrastructure.

Five development standards apply under lot design (cl. 10.6.1). The first relates to lot sizes which must meet the standards set out in Table 10.1 – see Table 2.

Lot Size Requirements	Assessment	Comments
Ordinary Lots (not described below)	All ordinary lots not otherwise specified in Table 10.1 are below 1000 sq.m except lot 39 which is marginally over.	Noting the change of ownership at the common boundary with 135 Rheban Road it is impractical to make the Lot 39 smaller as it would create a subminimal lot.
Corner Lots	Corner lots are to be no less than 550 sq.m in area and no larger than 1000 sq.m. Corner lots are Lots 1, 36 , 4, 40, 41, 44, 50, 53, 54, 58 81 and 91. All meet the standard.	
Internal Lots	Internal lots must be between 550-1000 sq.m. These are Lots 77, 78 and 83. All meet the standard.	
Lots adjoining or opposite public open space	All lots adjoining proposed Lot 2 (open space) meet the maximum lot size of 600 sq.m.	

Table 2 Assessment of compliance with cl. 10.6.1 Table 1

The second standard relates to building areas. All lots meet this standard, whether in terms of slope grade, capacity to contain a rectangle measuring 10m x 15m or setback standards.

The third standard relates to frontage requirements. All lots meet the standards contained in Table 10.2, noting however that internal lots will rely on 6m frontages.

The fourth standard in terms of battle axe lots (a) there are few proposed (3 of 91); (b) these are dictated by the road layout for the eastern side of the subdivision; (c) represents an efficient use of the land; (d) have relatively short access handles. Passive surveillance and the other provisions of P4 are met noting the effort to create regular shaped lots, clear vision of the street and the other principles set out.

Finally, the subdivision is for more than 3 lots and therefore P5 is relied upon. A staging plan is provided, the layout is appropriate in consideration of accessibility to local services and is an efficient subdivision of the land. No character statements direct alternative layout options be developed.

10.6.2 Roads: Standard P1 is relied upon as news roads are being created. The road layout meets the needs for a connected road layout and limits cul –de –sacs as best practicable. Due to the drainage line within the open space area there is no reasonable way to connect the two precincts within the subdivision together. Such links would fragment the proposed open space. Bicycle

network provision within the road layout can be achieved, noting road reservation widths. Road connectivity with adjoining land is provided.

10.6.3 Ways and Public Open Space: Standard P1 is relied upon. The open space proposed is generous and provides for a legible movement network. The critical issue in this area is integrating the subdivision with the existing residential development in the East Shelly Road area. Open space along the unnamed drainage line connecting to East Shelly Road is the optimal method to achieve such an outcome.

10.6.4 Services: All acceptable solutions are met with respect to water supply, reticulated sewer and stormwater drainage. Whilst A4 provides no Acceptable Solution where roads are created, the requirement for fibre ready facilities can be conditioned within a planning permit.

6.3.2 Overlay Controls

The Waterway and Coastal Protection Code impacts the subject land as per Figure 9. Entirely, the drainage line in question is contained within the proposed open space reserve. Under cl. E.11.2 the Code has no bearing on the proposed lots within the subdivision identified for residential purposes. Accordingly, no further assessment of this Code is required. [Note: Figure 9 shows a minor incursion of the Overlay onto lots fronting the southern side of Rheban Road frontage. Noting that stormwater and drainage is directed to the west and east within formed waterways and there is no evidence of overland flow the mapping is considered an anomaly here.]

Below 10m AHD Code E15 Inundation Prone Areas Code applies. Again, Figure 9 shows the extent to which this Code applies, being the bottom quarter of the site in a SW-NE direction across Lots 11-21 and 72-78 primarily. Clause E15.8 concerns subdivision regulation. It in turn relied on Table E15.1. For Orford, modelling produces a range of scenarios but the salient point is that the low hazard area risk sites are at 2.2m AHD. Allowing for all the contingencies including building control and wave runup, the entire site is free of risk. The 10m AHD figure is therefore a mapping simplification embedded within the planning scheme only requiring the issue to be examined further.

To paraphrase – the subdivision is located well above the majority of the existing settlement of Shelly Beach. Consequently, the risk is below 'Low' based on Code 15.

6.3.3 State Planning Policies

As indicated earlier, three State Policies apply. A broad review indicates the following:

- The State Policy on Agricultural Land does indicate that all zoned farming land has some intrinsic value. But as discussed elsewhere, the land is highly fettered and is most productively developed for residential use (demand, level of service infrastructure, adopted Structure Plan). Its loss from agricultural future use is not considered significant in terms of land capability.
- The State Coastal Policy 1996 applies as the site is within 1km of the coast. However, in practical terms it is more distant from the foreshore than the existing settlement and no issues have been identified except for suitable conditions on water quality control through the subdivision design process. Aboriginal heritage and other cultural and environmental management issues can be conditioned as per standard practice.
- The State Policy on Water Quality Management 1997 can be addressed via permit conditions.

6.3.4 Other Matters

Clause 8.1 of the Glamorgan Spring Bay Interim Planning Scheme 2015 sets out all the information to be provided. These are met or can be reasonably conditioned.

7.0 Observations:

The area concerned is the main growth corridor in Orford. It was foreshadowed in the Triabunna/Orford Structure Plan (2014) that the subject land be rezoned for residential use. The subject land abuts the existing General Residential Zone in the Shelly Beach area to the north and is the next logical stage of residential development east of Jetty Road. Already the General Residential Zone sits to the east at French Street. Rheban Road therefore forms a logical southern zone boundary.

The proposed rezoning is situated within relatively close proximity to all community infrastructure in Orford (primary school, supermarket, library, police station, bowls club, sports oval, boat ramp). Full sewer and water reticulation off East Shelly Road is achievable.

There are no slope constraints or environmental constraints identified. No land clearing is required.

There have not been any major land releases in this area since the 55 lots released via the RMPAT decision in Hamilton v GSB Council TASRMPAT 25 (10 Feb 2005) and 14 lots at 11 Elizabeth Street Orford approved via Gentile Properties v GSB Council [20060 TASRMPAT 207 (9 Oct. 2006). Whilst some vacant lots still exist in both subdivision the larger subdivision (off Trochus Drive and Nautilus) is now well advanced in takeup as is the Elizabeth Street subdivision.

There is demonstrated demand for housing in Orford. By best estimates there is < 10 years supply remaining in the area. The proposed subdivision would provide likely 5-6 years supply of housing for Orford, noting it would be likely staged. A staging plan is provided by Aldanmark.

Photo 15 New housing built in East Shelly Road area (last 5 years)

Photo 16 New housing built in East Shelly Road area (last 5 years)

Photo 17 New housing built in East Shelly Road area (last 5 years)

The highest and best use of the subject land is for residential use. The loss of land from the Rural Resource Zone is not significant in area terms. The rezoning raises no strategic issues and does not impact any nearby farming operations. There are no intensive agricultural operations adjoining which raise issue with spray drift or other fettering risks.

The State PAL Policy does not warrant the land being retained in the Rural Resource Zone and the proposal is not inconsistent with the local strategy. It represents orderly planning.

No fettering of nearby agricultural uses has been identified.

The Southern Regional Land Use Strategy needs to be read in conjunction with local strategy.

8.0 Summary:

The land in question is a logical inclusion in the **General Residential Zone** for the following reasons:

- The Triabunna/Orford Structure Plan (2014) supports infill development of this site.
- There is evidence that there is demand for housing, especially holiday homes in Orford which will be difficult to meet if logical infill sites are not provided over the next 10-15 years.
- There is a noted demand for housing in Orford in the Shelly Beach area. That demand well exceeds that for Triabunna.
- The land has TasWater sewer and water infrastructure along East Shelly Road and is a logical infill in that it results in land being used for housing, consistent with that occurring on three sides presently.
- A low to moderate growth scenario in Orford would justify rezoning under STRLUS and Vision East as well as the adopted Structure Plan in the shorter term. Orford is an established township, not a village and any development of this land would have the benefit of enabling Council to reduce development pressure in more sensitive areas nearer the coast in the Orford area.

Town and Country Planning Pty Ltd
20 December 2016

References

Break O'Day, Glamorgan Spring Day, Tasman and Sorell Councils (2009): Vision East 2030, the East Coast Land Use Framework, unpublished.

Glamorgan Spring Bay Interim Planning Scheme 2015, accessed from http://www.gsbc.tas.gov.au/page.aspx, 21 September 2015.

Southern Tasmanian Councils Authority & State of Tasmania (2010): Background Report No.1: The Project Background, Final Report, Southern Tasmanian Regional Land Use Framework.

Southern Tasmanian Councils Authority (2011): Southern Tasmanian Regional Land Use Strategy 2010-2035 unpublished.

Urbis (2014): Triabunna/Orford Structure Plan, Final Report updated April 2014, downloaded from Glamorgan Spring Bay accessed from http://www.gsbc.tas.gov.au/page.aspx, 21 September 2015.

Annexure A Copy of Title

Refer to attached plans.

Annexure B Plan of Subdivision

Refer to Plan of Subdivision (Aldanmark Project 15E96-10)

RESULT OF SEARCH

RECORDER OF TITLES

Issued Pursuant to the Land Titles Act 1980

SEARCH OF TORRENS TITLE

VOLUME	FOLIO
149641	2
EDITION	DATE OF ISSUE
5	18-Oct-2011

SEARCH DATE : 31-Aug-2016
SEARCH TIME : 08.25 PM

DESCRIPTION OF LAND

Parish of ORFORD Land District of PEMBROKE
Lot 2 on Sealed Plan 149641
Derivation : Part of 1050 Acres Gtd. to Frederick Maning
Prior CTs 49324/1 and 49389/1

SCHEDULE 1

C775808 TRANSFER to MICHAEL JOHN LAWRENCE and HARRIETT FLORENCE GUNN LAWRENCE Registered 27-Aug-2007 at 12.01 PM

SCHEDULE 2

Reservations and conditions in the Crown Grant if any
SP149641 COVENANTS in Schedule of Easements
SP149641 FENCING COVENANT in Schedule of Easements
SP149641 SEWERAGE AND/OR DRAINAGE RESTRICTION
C775809 BURDENING EASEMENT: pipeline rights (appurtenant to Lot 1 on SP 149641) over the Pipeline Easement 0.50 Wide shown passing through the said land within described (subject to provisions) Registered 27-Aug-2007 at 12.02 PM
SP 10835 FENCING PROVISION in Schedule of Easements
SP 49324 FENCING COVENANT in Schedule of Easements
SP 49324 COVENANTS in Schedule of Easements
C778361 AGREEMENT pursuant to Section 71 of the Land Use Planning and Approvals Act 1993 Registered 03-May-2007 at noon
D33446 MORTGAGE to Butler McIntyre Investments Ltd Registered 18-Oct-2011 at noon

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

OWNER NEVILLE JOHN RANSLEY
SHIRLEY EMMA RANSLEY

FOLIO REFERENCE: C.T.'s 49324/1 & 49389/1

GRANTEE: PART OF 1050 ACRES GTD. TO FREDERICK MANNING

PLAN OF SURVEY

BY SURVEYOR Anthony Owen Carrick
Brooks Lark & Carrick, Surveyors
175 Collins Street Hobart

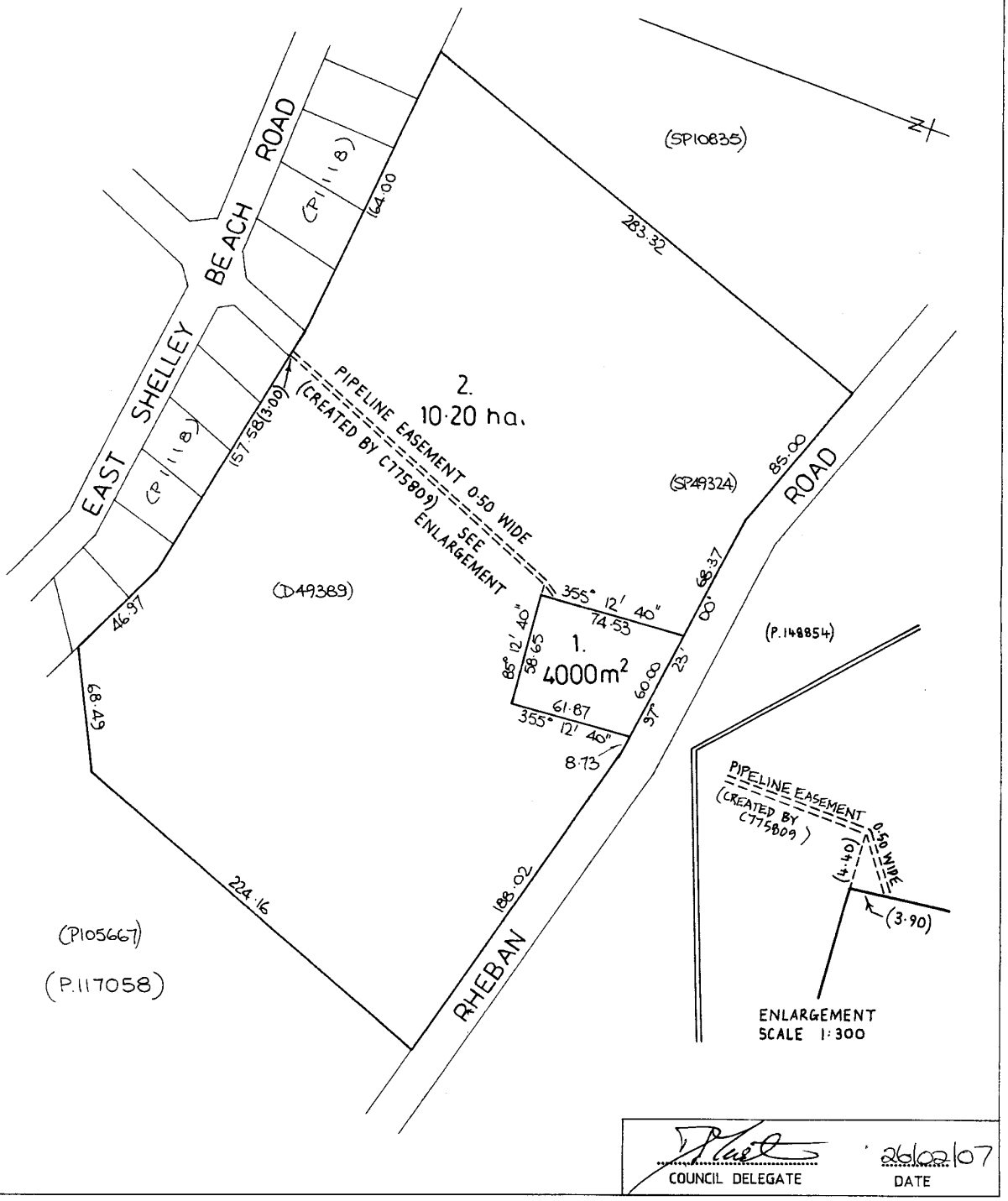
PEMBROKE - ORFORD

SCALE : 1:2000

REGISTERED NUMBER
SP149641

APPROVED
EFFECTIVE FROM - 3 MAY 2007
Alice Kawa
Recorder of Titles

MAPSHEET MUNICIPAL CODE No. 112 (5628-24)	LAST UPI No. ~~3000628~~ FPQ14 FPQ15	LAST PLAN SP49324/D49389	ALL EXISTING SURVEY NUMBERS TO BE CROSS REFERENCED ON THIS PLAN



COUNCIL DELEGATE

26/02/07
DATE

SCHEDULE OF EASEMENTS	Registered Number
NOTE: THE SCHEDULE MUST BE SIGNED BY THE OWNERS & MORTGAGEES OF THE LAND AFFECTED. SIGNATURES MUST BE ATTESTED.	SP149641

EASEMENTS AND PROFITS

Each lot on the plan is together with:-
(1) such rights of drainage over the drainage easements shown on the plan (if any) as may be necessary to drain the stormwater and other surplus water from such lot; and
(2) any easements or profits a prendre described hereunder.
Each lot on the plan is subject to:-
(1) such rights of drainage over the drainage easements shown on the plan (if any) as passing through such lot as may be necessary to drain the stormwater and other surplus water from any other lot on the plan; and
(2) any easements or profits a prendre described hereunder.
The direction of the flow of water through the drainage easements shown on the plan is indicated by arrows.

That part of Lot 2 on the Plan formerly shown as Lot 1 on Sealed Plan 49324 is burdened by the covenants created by and more fully set forth in SP49324.

FENCING ~~CONDITION~~ COVENANT

The owner of each lot on the plan covenants with the Vendor, Neville John Ransley and Shirley Emma Ransley that the Vendor shall not be required to fence.

SIGNED by the said Neville John Ransley and Shirley Emma Ransley the Registered Proprietors of the land comprised in Certificate of Title Volume 49324 Folio 1 and Volume 49389 Folio 1) N J Ransley) S. Ransley.

in the presence of:

Matthew Kent Goodman
Solicitor
100A Collins Street
Hobart Tas

(USE ANNEXURE PAGES FOR CONTINUATION)

SUBDIVIDER: Neville John Ransley & Shirley Emma Ransley FOLIO REF: Volume 49324 Folios 1 & Volume 49389 Folioi 1 SOLICITOR Goodman Solicitors & REFERENCE: Matt Goodman	PLAN SEALED BY: Glamorgan Spring Bay Council DATE: 26/02/07 SU6017 REF NO. Council Delegate

NOTE: The Council Delegate must sign the Certificate for the purposes of identification.

ANNEXURE TO SCHEDULE OF EASEMENTS PAGE 2 OF 2 PAGES	Registered Number SP149641
SUBDIVIDER: Neville John Ransley & Shirley Emma Ransley FOLIO REFERENCE: 49234/1 & 49389/1	

SIGNED by ISLAND STATE CREDIT UNION LTD A.C.N. 087 651 287 by its attorneys STUART COOK and BRYCE ANDREW HARDING under Power No. 12015 (and the said STUART COOK and BRYCE ANDREW HARDING declare that they have received no notice of revocation of the said Power) in the presence of:

JENNY BAILEY
LOANS ADMINISTRATION OFFICER
172 COLLINS STREET, HOBART

NOTE: Every annexed page must be signed by the parties to the dealing or where the party is a corporate body be signed by the persons who have attested the affixing of the seal of that body to the dealing.

CIVIL DRAWINGS
PROPOSED SUBDIVISION
LOT 2 RHEBAN ROAD, ORFORD, TASMANIA 7190

SHEET	DRAWING	ISSUE	DATE
Z01	INDEX, NOTES AND OVERALL PLAN	C	24/07/2017
Z02	OVERALL SITE PLAN + CONTOUR ANALYSIS	B	20/12/2016
Z03	OVERALL SITE PLAN + LOT DIMENSIONS	B	20/12/2016
Z04	STAGING PLAN	B	20/12/2016
Z05	OVERALL SITE PLAN + EXISTING SERVICES	B	20/12/2016
Z06	OVERALL PLAN - ROAD NETWORK	C	24/07/2017
Z07	CONCEPT SEWER AND WATER LAYOUT	C	24/07/2017
Z08	CONCEPT STORMWATER LAYOUT	C	24/07/2017

GENERAL NOTES:

1. LIDAR CONTOUR DATA AND TITLE BOUNDARY OBTAINED FROM THELIST.
2. SUBDIVISION MAY BE UNDERTAKEN AS A STAGED DEVELOPMENT.
3. THIS PLAN HAS BEEN PREPARED ONLY FOR THE PURPOSE OF OBTAINING PLANNING SCHEME AMENDMENT FROM THE LOCAL AUTHORITY AND IS SUBJECT TO THAT APPROVAL AND THE INFORMATION SHOWN SHOULD NOT BE USED FOR ANY OTHER PURPOSE.
4. DIMENSIONS AND LOT SIZES ARE ILLUSTRATIVE ONLY AND SHALL BE CONFIRMED DURING DETAIL DESIGN AND FINAL SURVEY
5. WATER SENSITIVE URBAN DESIGN MAY BE INCORPORATED INTO THE DETAILED ENGINEERING DESIGN IN LIEU OF THE STORMWATER NETWORK.
6. STORMWATER RUNOFF GENERATED FROM THE SITE TO BE DIRECTED TO NEW OUTFALLS AT THE EXISTING TRIBUTARIES.
7. EXISTING WATERCOURSE TO REMAIN AS PRIVATE OPEN SPACE. STORMWATER TO BE DIRECTED TOWARDS THIS AREA.
8. CYCLEWAYS AND FOOTWAYS FROM NEWLY CREATED ROADS TO PUBLIC OPEN SPACE AND THROUGH TO EAST SHELLY ROAD TO BE PROVIDED.
9. EXISTING BUILDINGS ON THE SUBJECT TITLE TO BE DEMOLISHED.
10. EXISTING TREE ON LOT 56 TO BE REMOVED.
11. TASWATER DEMANDS ARE ANTICIPATED TO BE ACCOMMODATED IN THEIR EXISTING INFRASTRUCTURE AND ARE AS FOLLOWS:
    - 11.1. WATER = 7.07 L/s DEMAND ; FIRE HYDRANT FLOW 20L/s
    - 11.2. SEWER ET = 91 ; EP = 273
    - 11.3. SEWER Q_{ADWF} = 0.63 L/s
    - 11.2. SEWER Q_{PDWF} = 2.59 L/s

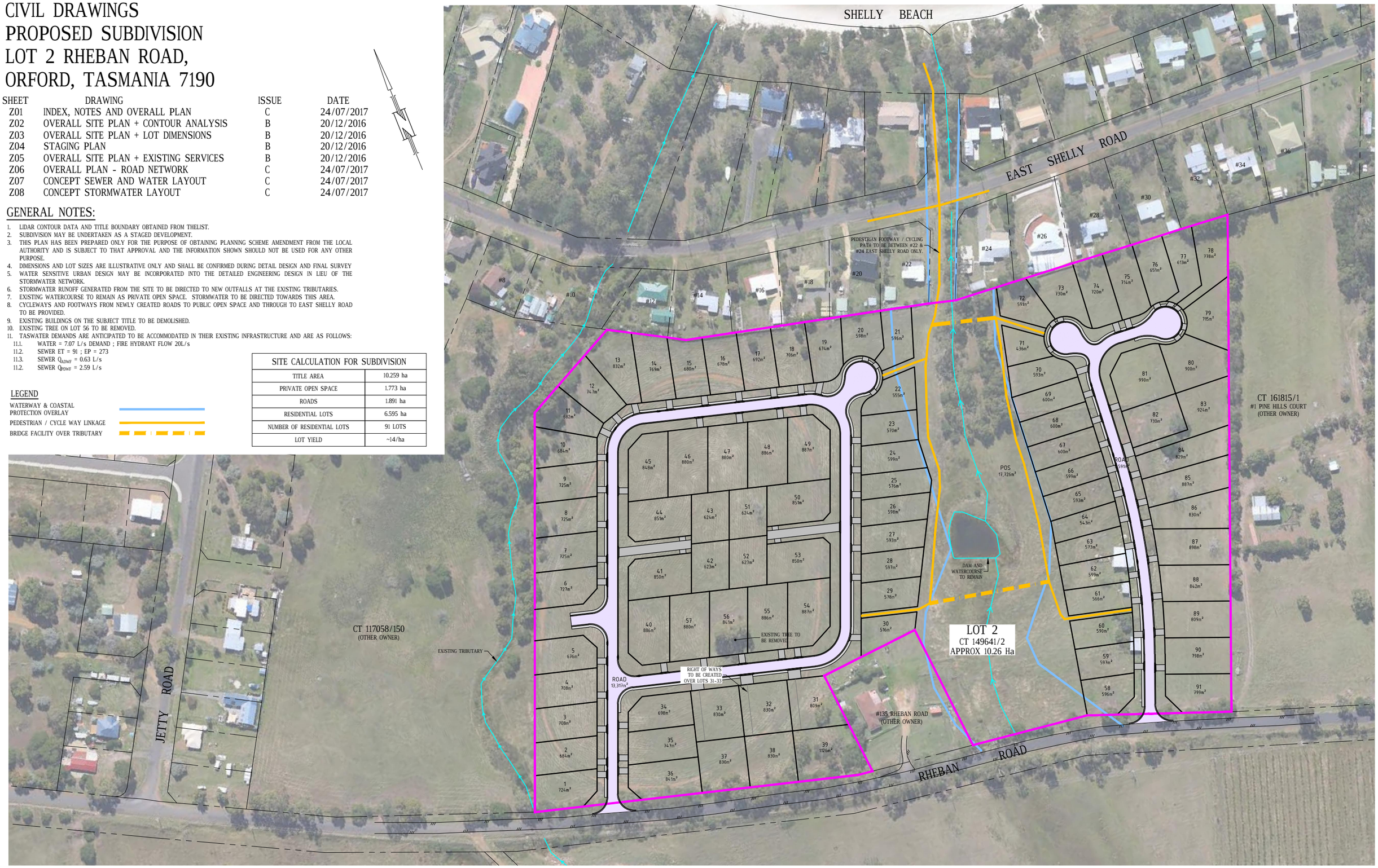
LEGEND

WATERWAY & COASTAL PROTECTION OVERLAY

PEDESTRIAN / CYCLE WAY LINKAGE

BRIDGE FACILITY OVER TRIBUTARY

SITE CALCULATION FOR SUBDIVISION	
TITLE AREA	10.259 ha
PRIVATE OPEN SPACE	1.773 ha
ROADS	1.891 ha
RESIDENTIAL LOTS	6.595 ha
NUMBER OF RESIDENTIAL LOTS	91 LOTS
LOT YIELD	~14/ha



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OVERALL PLAN
SCALE 1:1000 (A1)

HALF SCALE PRINT

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REV.	DESCRIPTION	DATE	REV.	DESCRIPTION	DATE
C	UPDATED FOR COUNCIL/TASWATER	24/07/2017			
B	FOR PLANNING LODGEMENT	20/12/2016			
A	CLIENT REVIEW	16/12/2016			

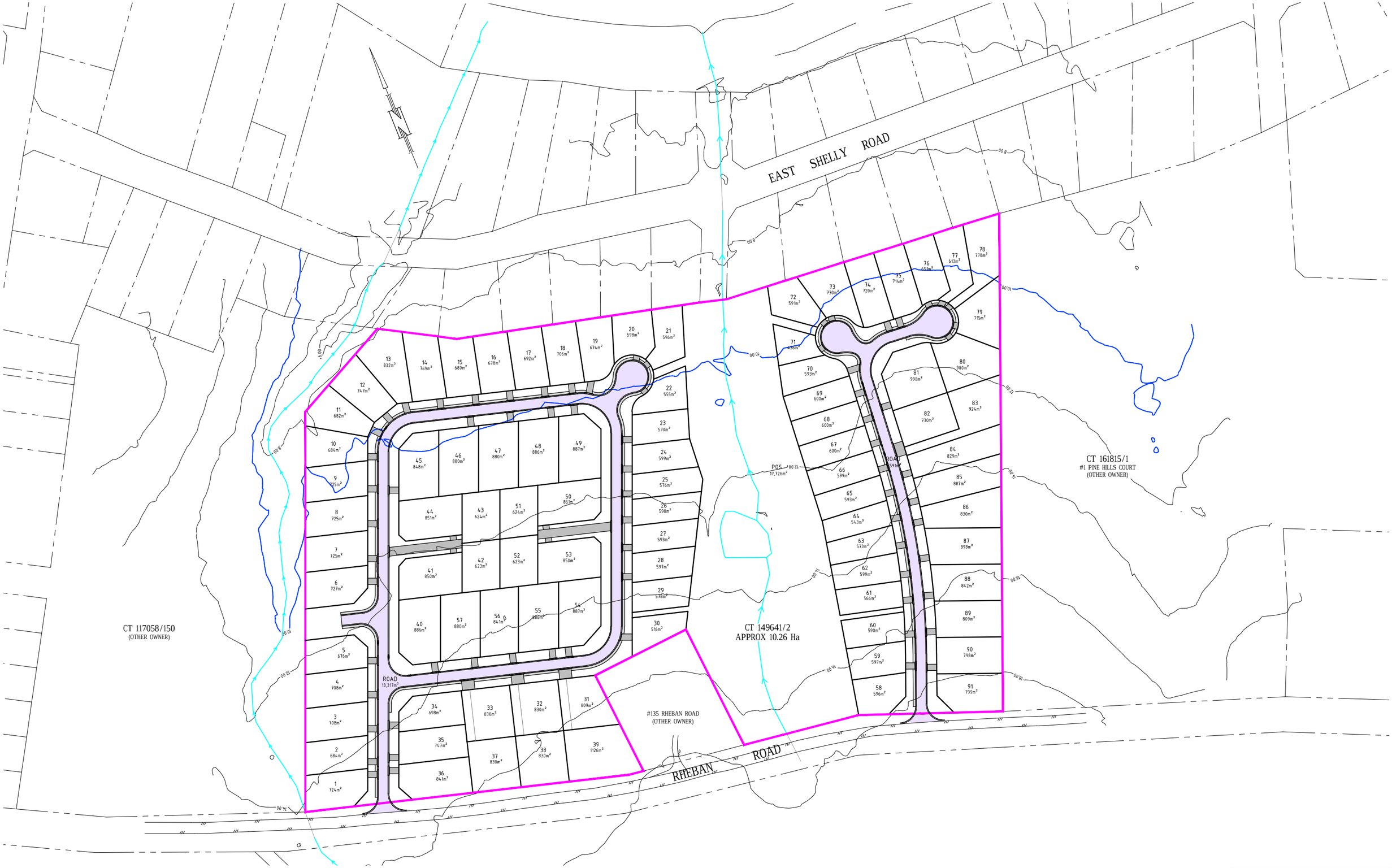
ALDANMARK Pty. Ltd. CONSULTING ENGINEERS
Level 9, 65 Murray Street
Hobart Tas 7000
P: 03 6234 8666
F: 03 6234 8988
E: mail@aldanmark.com.au
W: www.aldanmark.com.au

CLIENT: MICHAEL AND HARRIET LAWRENCE
ADDRESS: LOT 2, RHEBAN ROAD ORFORD, TAS 7109

SHEET: OVERALL SITE PLAN, INDEX & NOTES
PROJECT: ORFORD SUBDIVISION
ISSUE: FOR PLANNING
THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION UNLESS ISSUED 'CONSTRUCTION'.

DRAWN: MM | APPROVED: ~~
SCALE: 1:1000 | SIZE: A1 | DATE: 20/12/2016
PROJECT No. 15E96-10 | SHEET No. Z01 | REV No. B

DRAWING DETAILS: 15E96-10 GV.dwg - MORGAN MCGUIRE - PLOTTED: 12/Oct/2017, 9:14 AM



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OVERALL PLAN

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REV.	DESCRIPTION	DATE	REV.	DESCRIPTION	DATE
B	FOR PLANNING LODGEMENT	20/12/2016			
A	CLIENT REVIEW	16/12/2016			

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F: 03 6234 8988
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CLIENT: MICHAEL AND HARRIET LAWRENCE	SHEET: OVERALL SITE PLAN + CONTOUR ANALYSIS	DRAWN: MM	APPROVED: ~~
ADDRESS: LOT 2, RHEBAN ROAD ORFORD, TAS 7109	PROJECT: ORFORD SUBDIVISION	SCALE: 1:200 SIZE: A1	DATE: 20/12/2016
	ISSUE: FOR PLANNING	PROJECT No. 15E96-10	SHEET No. Z02 REV No. B

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EAST SHELLY ROAD

#8 #10 #12 #14 #16 #18 #20 #22 #24 #26 #28 #30 #32 #34 #36

CT 117058/150
(OTHER OWNER)

CT 149641/2
APPROX 10.26 Ha

CT 161815/1
#1 PINE HILLS COURT
(OTHER OWNER)

#135 RHEBAN ROAD
(OTHER OWNER)

15x10m INSCRIBED RECTANGLE

ROAD
13,317m²

ROAD
5,091m²

POS
17,726m²

RHEBAN ROAD

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OVERALL PLAN
SCALE 1:1000 (A1)

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REV.	DESCRIPTION	DATE	REV.	DESCRIPTION	DATE
B	FOR PLANNING LODGEMENT	20/12/2016			
A	CLIENT REVIEW	16/12/2016			

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Hobart Tas 7000
P: 03 6234 8666
F: 03 6234 8988
E: mail@aldanmark.com.au
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CLIENT: MICHAEL AND HARRIET LAWRENCE

ADDRESS: LOT 2, RHEBAN ROAD
ORFORD, TAS 7109

SHEET: OVERALL SITE PLAN + LOT DIMENSIONS

PROJECT: ORFORD SUBDIVISION

ISSUE: FOR PLANNING
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MM	~~

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1:200	A1	20/12/2016

PROJECT No.	SHEET No.	REV No.
15E96-10	Z03	B

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STAGE 1

STAGE 2

STAGE 3

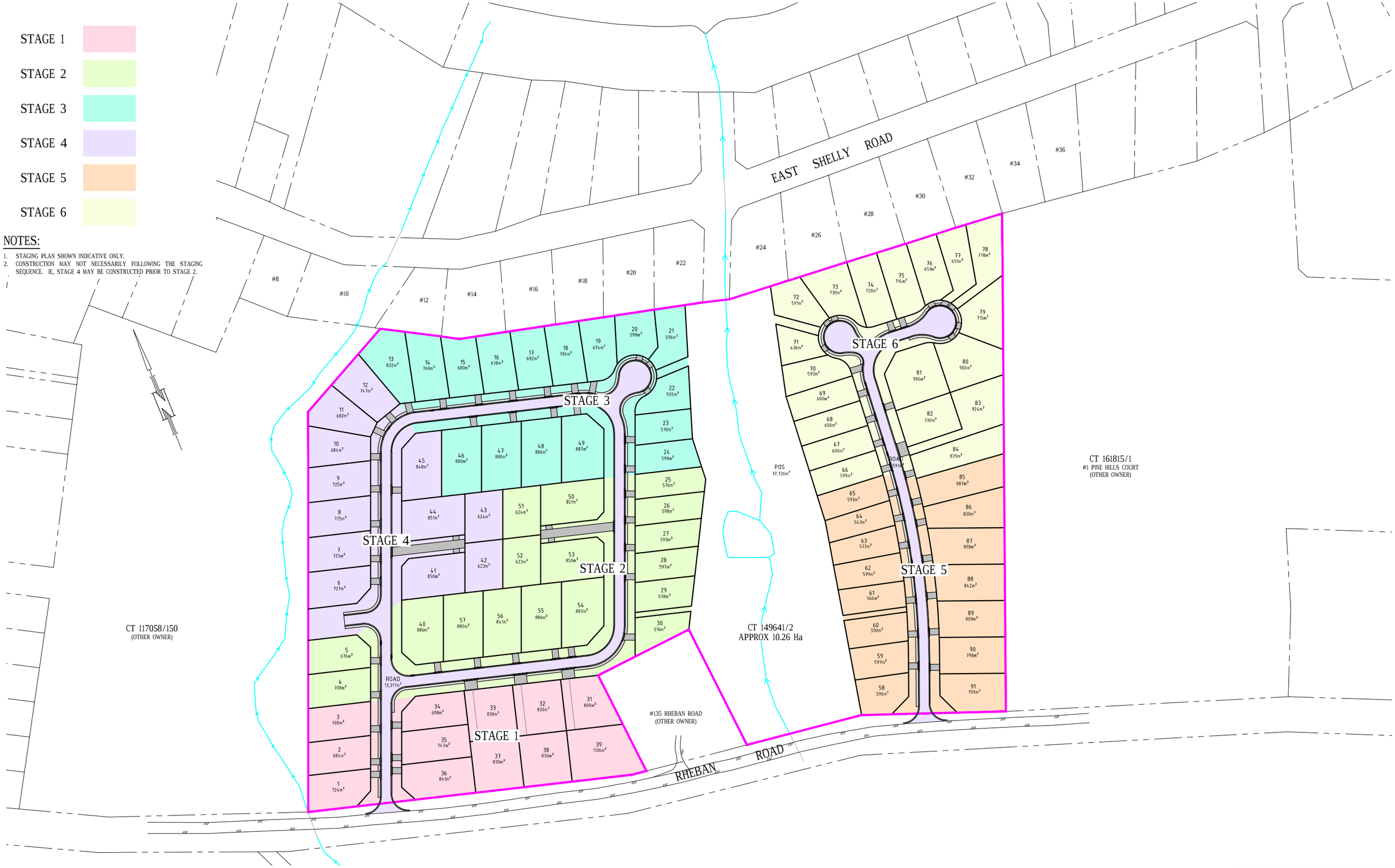
STAGE 4

STAGE 5

STAGE 6

NOTES:

1. STAGING PLAN SHOWN INDICATIVE ONLY.
2. CONSTRUCTION MAY NOT NECESSARILY FOLLOWING THE STAGING SEQUENCE. IE, STAGE 4 MAY BE CONSTRUCTED PRIOR TO STAGE 2.



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STAGING PLAN

SCALE 1:1000 (A1)

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REV.	DESCRIPTION	DATE	REV.	DESCRIPTION	DATE
B	FOR PLANNING LODGEMENT	20/12/2016			
A	CLIENT REVIEW	16/12/2016			

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CLIENT:	MICHAEL AND HARRIET LAWRENCE
ADDRESS:	LOT 2, RHEBAN ROAD ORFORD, TAS 7109
SHEET:	STAGING PLAN
PROJECT:	ORFORD SUBDIVISION
ISSUE:	FOR PLANNING

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DATE: 20/12/2016	
PROJECT No. 15E96-10	SHEET No. Z04
REV No. B	

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EAST SHELLY ROAD

#8 #10 #12 #14 #16 #18 #20 #22 #24 #26 #28 #30 #32 #34 #36

EXISTING DN150 TASWATER WATER MAIN

EXISTING DN150 PVC GRAVITY SEWER AND MANHOLE

EXISTING CULVERT

EXISTING BRIDGE STRUCTURE

ROAD 13,317m²

POS 17,726m²

ROAD 4,291m²

CT 161815/1
#1 PINE HILLS COURT
(OTHER OWNER)

CT 117058/150
(OTHER OWNER)

CT 149641/2
APPROX 10.26 Ha

#135 RHEBAN ROAD
(OTHER OWNER)

RHEBAN ROAD

EXISTING CULVERTS

EXISTING CULVERT

SRM

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EXISTING SERVICES PLAN

SCALE 1:1000 (A1)

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REV.	DESCRIPTION	DATE	REV.	DESCRIPTION	DATE
B	FOR PLANNING LODGEMENT	20/12/2016			
A	CLIENT REVIEW	16/12/2016			

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W: www.aldanmark.com.au

CLIENT: MICHAEL AND HARRIET LAWRENCE

ADDRESS: LOT 2, RHEBAN ROAD
ORFORD, TAS 7109

SHEET: OVERALL PLAN - EXISTING SERVICES

PROJECT: ORFORD SUBDIVISION

ISSUE: FOR PLANNING

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SCALE: 1:200 | SIZE: A1 | DATE: 20/12/2016

PROJECT No. 15E96-10 | SHEET No. Z05 | REV No. B

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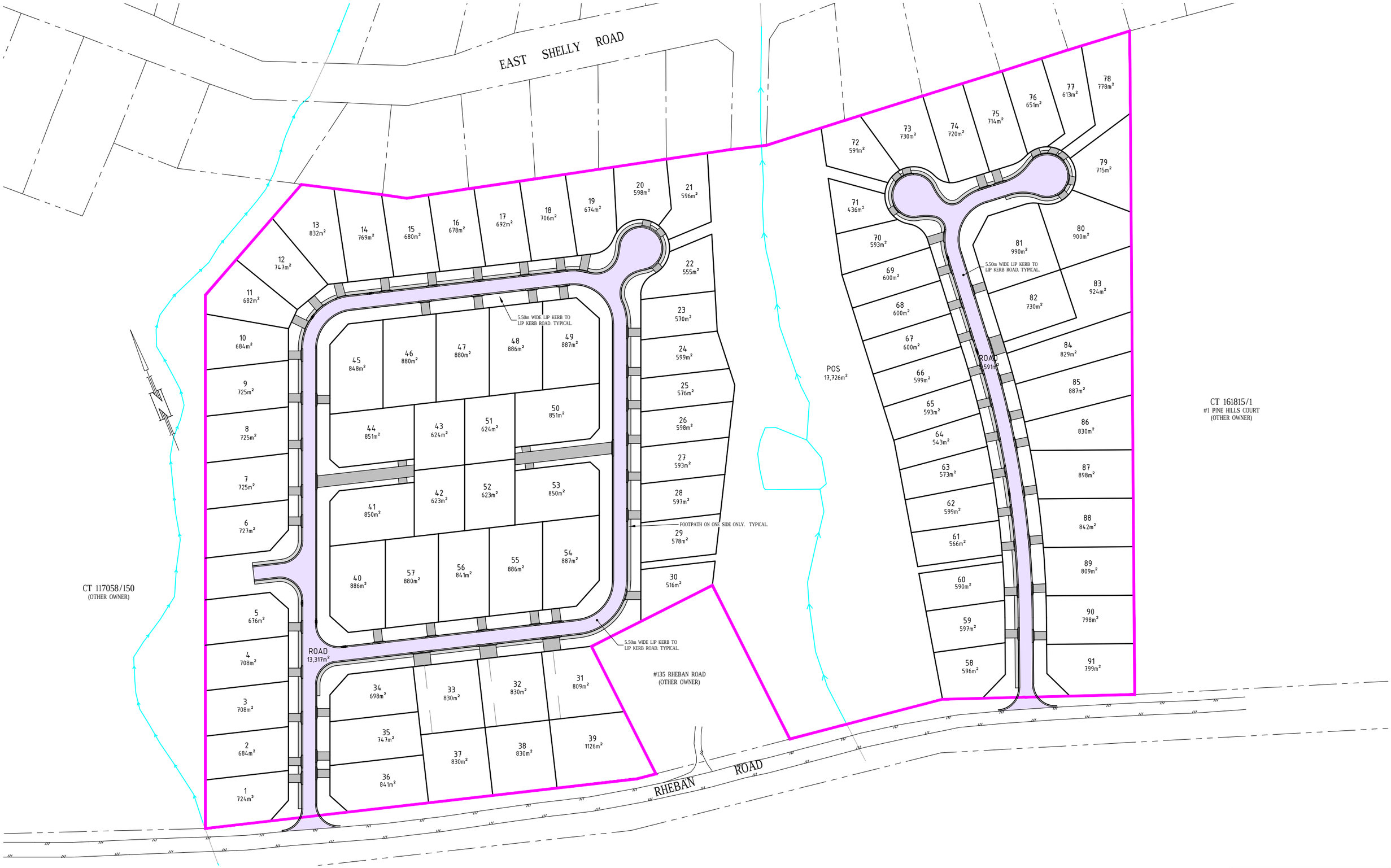

ROAD LAYOUT PLAN

SCALE 1:750 (A1)

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C	FOR TRAFFIC ENGINEER ENDORSEMENT	24/07/2017			

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Hobart Tas 7000
P: 03 6234 8666
F: 03 6234 8988
E: mail@aldanmark.com.au
W: www.aldanmark.com.au

CLIENT: MICHAEL AND HARRIET LAWRENCE

ADDRESS: LOT 2, RHEBAN ROAD ORFORD, TAS 7109

SHEET: OVERALL PLAN - ROAD NETWORK

PROJECT: ORFORD SUBDIVISION

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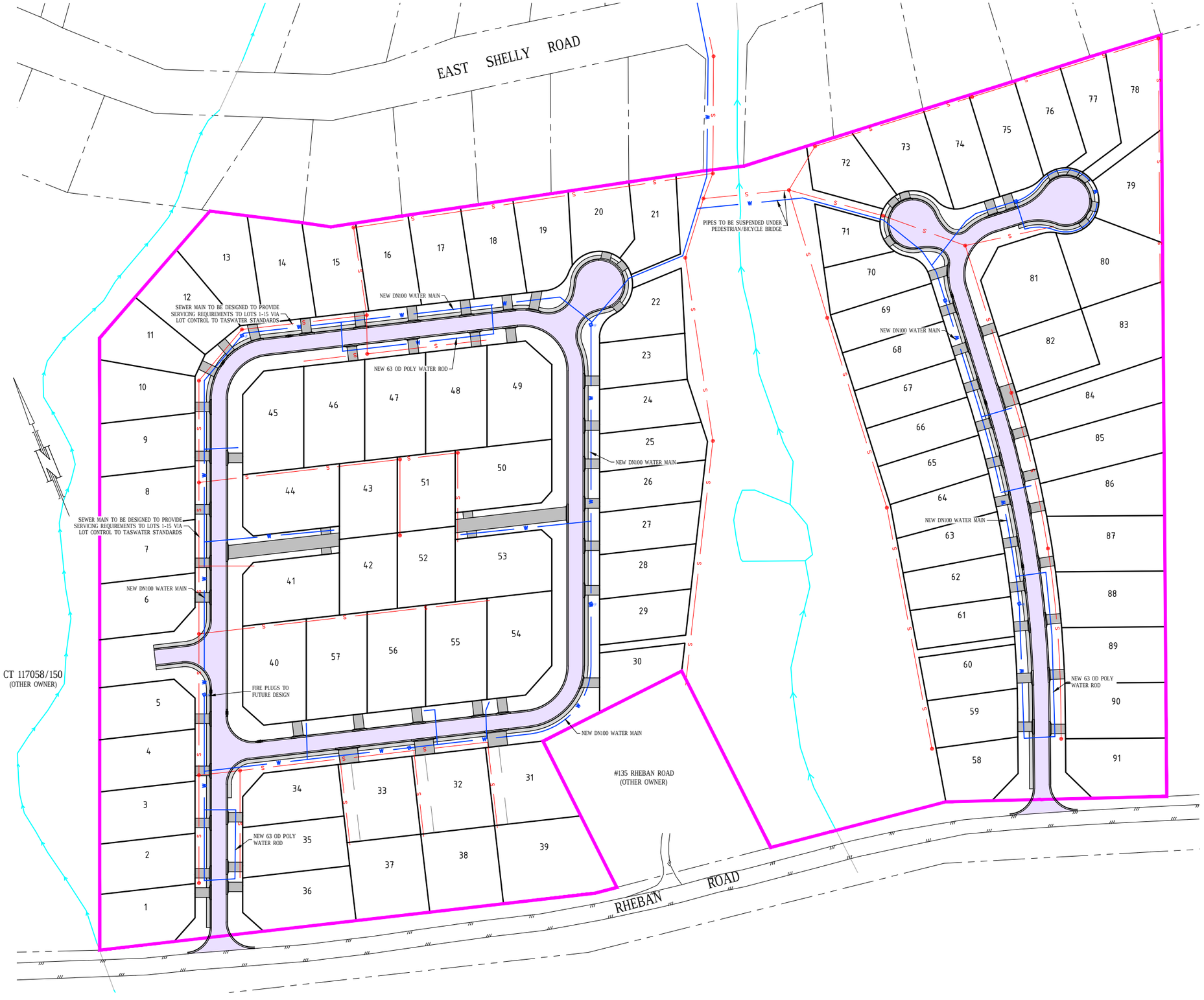

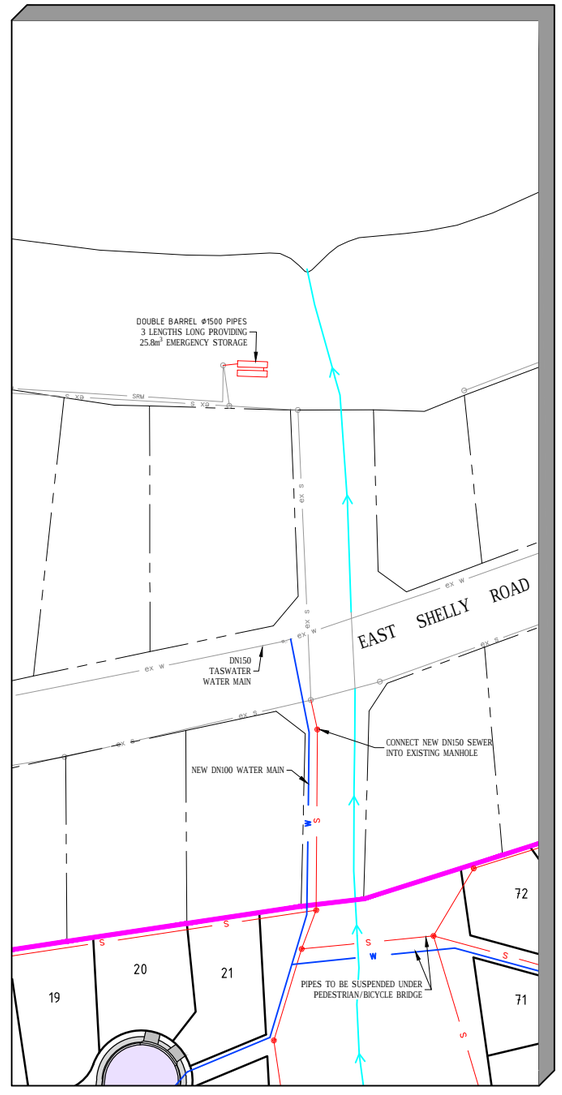

SEWER & WATER LAYOUT PLAN
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Level 9, 65 Murray Street
Hobart Tas 7000
P: 03 6234 8666
F: 03 6234 8988
E: mail@aldanmark.com.au
W: www.aldanmark.com.au

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EAST SHELLY ROAD

OUTFALLS TO EXISTING WATERCOURSE

OUTFALLS TO EXISTING WATERCOURSE

OUTFALLS TO EXISTING WATERCOURSE

CT 161815/1
#1 PINE HILLS COURT
(OTHER OWNER)

CT 117058/150
(OTHER OWNER)

#135 RHEBAN ROAD
(OTHER OWNER)

RHEBAN ROAD

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CONCEPT STORMWATER PLAN

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C	COUNCIL RFI	24/07/2017			

ALDANMARK Pty. Ltd. CONSULTING ENGINEERS
Level 9, 65 Murray Street
Hobart Tas 7000
P: 03 6234 8666
F: 03 6234 8988
E: mail@aldanmark.com.au
W: www.aldanmark.com.au

CLIENT: MICHAEL AND HARRIET LAWRENCE

ADDRESS: LOT 2, RHEBAN ROAD
ORFORD, TAS 7109

SHEET: CONCEPT STORMWATER LAYOUT

PROJECT: ORFORD SUBDIVISION

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MILAN PRODANOVIC B.E. PEng
TRAFFIC ENGINEERING & ROAD SAFETY

TRAFFIC IMPACT ASSESSMENT

PROPOSED

RESIDENTIAL SUBDIVISION DEVELOPMENT

LOT 2 RHEBAN ROAD

ORFORD

JULY 2017

MILAN PRODANOVIC B.E. P Eng
TRAFFIC ENGINEERING & ROAD SAFETY

TRAFFIC IMPACT ASSESSMENT

PROPOSED

RESIDENTIAL SUBDIVISION
DEVELOPMENT

LOT 2 RHEBAN ROAD

ORFORD

JULY 2017

11 KYTHERA PLACE, ACTON PARK TASMANIA 7170
TEL & FAX: (03) 6248 7323 MOBILE: 0402 900 106
EMAIL : milglad@bigpond.net.au ABN: 51 345 664 433

CONTENTS

EXECUTIVE SUMMARY

The proposal for the property at Lot 2 Rheban Road is a subdivision development to create 91 residential lots. There will be two subdivisional roads servicing access to 57 and 34 lots respectively which will junction with Rheban Road.

This assessment has reviewed the existing road and traffic environment along Rheban Road in the area of the development site and no issues of significant concern have been identified.

It has been estimated the current traffic volume along Rheban road past the development site is around 180 vehicles/day and this increases to around 500 vehicles/day during the summer period.

There have been four reported crashes at the Tasman Highway/Charles Street/Esplanade intersection. Three have been loss of control incidents resulting in property damage and one was an angle collision resulting in minor injury.

Along Rheban Road, there has been one minor parking incident near the Wielangta Road junction and one collision at the Walpole Street /Charles Street junction when a vehicle pulled out, both resulting in property damage only.

It has been estimated that the proposed subdivision development, when fully completed and occupied, would generate some 270 vehicles/day and around 27 vehicles/hour during peak traffic periods in the summer period of the year.

The addition of 27 vehicle/hour along Rheban Road will not create any operational or efficiency problems along the road or at the subdivisional road junctions on Rheban Road.

With an estimated peak passing traffic volume of 50 vehicles/hour along Rheban Road during the summer period, an addition of 17 vehicle/hour and 10 vehicles/hour at each subdivisional road junction with Rheban Road will not create any operational or efficiency problems at the junctions or along the road.

Conflicting traffic volumes of up to 1,500 vehicles/hour can generally be accommodated at intersections quite efficiently at Levels of Service C. The level of traffic conflict in this case will be less than 5% of this maximum traffic volume.

Surveys indicate the 85th percentile speed of traffic along this section of Rheban Road is around 74km/h. The required sight distance for an 85th percentile speed of 80km/h based on the Planning Scheme for a public road junction (Clause E5.6.4), is 175m.

The current sight distances for vehicles turning to and from Rheban Road at the western subdivisional road are around 60m to the west and around 35m to

the east, with the trees within the road reserve each side of the proposed subdivisional road limiting the line of sight. Removal of the trees will increase the available sight distances to achieve more than the required 175m.

The current sight distances for the vehicle turning to and from Rheban Road at the eastern subdivisional road are well over 200m.

It is expected the subdivisional roads will be sealed with kerb and gutter constructed both sides of the road and a footpath along one side of the road.

It is strongly recommended that the subdivisional roads should be constructed to a width between kerb faces of no more than a maximum of 6.4m. Widths of 8.9m between kerb faces are appropriate for collector roads, not for local residential streets in this subdivision development that will carry less than 200 vehicles/day.

The subdivisional road layout has been designed to not create any four leg intersections and ensure vehicle priorities at conflict point are clear.

It is recommended that 'give way' signs and 'holding lines, be installed at the proposed two subdivisional road junctions with Rheban Road, the same as exists at other junctions along Rheban Road, for consistency of treatment.

In considering the road network in this area of Orford, there is no reason to have a road connection between the subdivision areas and East Shelly Road. The layout of the western subdivision area provides for a possible future road connection to Jetty Road, which has a minor collector road function, the same as Rheban Road.

If future development of the areas around this subdivision is proposed, the resultant level of traffic activity will not be high enough to support other than additional subdivision roads that junction with Rheban Road.

New subdivisional road junctions along Rheban Road should be spaced sufficiently far apart to not require a reduction in the 80km/h speed limit. The creation of internal subdivisional road connections between subdivisions would assist in this regard.

With the provision of the recommended traffic control measures at the subdivisional road junctions and removal of trees at the western junction, it has been concluded that the proposed subdivision development can be supported on traffic grounds as it will not give rise to any adverse safety or operational traffic issues.

1. INTRODUCTION

A residential subdivision development is proposed for the property at Lot 2 Rheban Road in Orford.

The Glamorgan Spring Bay Council has requested:

- *A Traffic Impact Assessment considering the internal design of the subdivision, how the site relates to land to either side of the subject site, adequacy of the road network, sight distances and whether the proposed junctions onto Rheban Road should serve surrounding land in the future as well as the subject site.*

This Traffic Impact Assessment (TIA) report has been prepared in support of the residential subdivision development and to address this request. It considers the existing road and traffic characteristics along Rheban Road. An assessment has been made of the traffic activity that the subdivision development will generate and the effect that this traffic will have on Rheban Road.

Consideration has also been given to the subdivisional road layout, the location of the new road intersections and available intersection sight distances and the impact of potential future development of surrounding land on the road network management.

The report is based on the Department of State Growth (DSG) Traffic Impact Assessment Guidelines.

The techniques used in the investigation and assessment incorporate best practice road safety and traffic management principles.

2. SITE DESCRIPTION

The subdivision development site lies around 2.3km to the south of the Tasman Highway.

It is located near the southern end of the main built up area of Orford along Rheban Road. There is some residential and shack development in the Spring Beach area which is located some 2km further to the east along Rheban Road from the development site.

There is ribbon residential development along East Shelly Road, which lies immediately to the north of the development site. That development extends for another one kilometre to the southeast of the development site.

The location of the development site has been highlighted on the extract from the street atlas for this area, seen in Figure 2.1.

Figure 2.1: Extract of street atlas showing location of proposed subdivision development

3. DEVELOPMENT PROPOSAL

The property at Lot 2 Rheban Road is currently undeveloped apart for a few sheds located near the south-eastern part of the site.

The proposal is to subdivide the land into 91 residential lots.

The lots will mostly have an area between 600m^2 and 900m^2; one lot will have an area of 1,126m^2.

Two subdivisional roads will be constructed off Rheban Road to access the lots on two parcels of land which will be separated by an area of public open space.

The western subdivisional road will junction with the northern side of Rheban Road some 265m to the east of the Jetty Road junction and form a square shaped loop road within the site. It will service access to 57 lots.

The eastern subdivisional road will junction with the northern side of Rheban Road some 320m to the east of the western subdivisional road. It will have a slightly curved alignment to the north and will service access to 34 lots.

The drawing showing the proposed layout of the residential subdivision roads and lots are included as Attachment A to this report.

4. EXISTING ROAD AND TRAFFIC ENVIRONMENT

4.1 Road Characteristics

In considering the proposed development, the only road of relevance is Rheban Road.

Rheban Road is the eastward continuation of Charles Street which junctions with the Tasman Highway at its western end and becomes Rheban Road to the east of the Wielangta Road junction, around one kilometre from the highway.

Charles Street - Rheban Road would function as the collector road for Orford, linking with Spring Beach and the bushland beyond.

In the area past the subdivision development site, Rheban Road follows an alignment with slight horizontal and vertical curves.

The road is sealed to a width of around 6.3m with around 0.7m to 1.0m wide gravel shoulders each side.

Photographs 4.1 and 4.2 provide views of the Rheban Road character in the area of the subdivisional road junctions.

Photograph 4.1: View to east along Rheban Road towards location of western subdivisional road junction (opposite parked car)

Photograph 4.2: View to east along Rheban Road towards location of eastern subdivisional road junction (opposite parked car)

4.2 Traffic Activity

In order to have some knowledge, or allow determination, of the traffic volume along Rheban Road, traffic volume data was received from DSG for the Tasman Highway in Orford. Some traffic volume surveys were also undertaken along Charles Street – Rheban Road.

The DSG surveys were undertaken in November 2016 and the following traffic volumes were recorded for the uniform traffic segment to the west of the Charles Street intersection on a Friday, which was the busiest day of the week:

Average Friday traffic	- 2,824 vehicles/day;
Morning Friday peak hour traffic (11-12pm)	- 153 vehicles/hour to east; - 96 vehicles/hour to west;
Afternoon Friday peak hour traffic (5-6pm)	- 173 vehicles/hour to east; - 107 vehicles/hour to west;

The traffic volumes recorded in November 2016 for the uniform traffic segment to the north of the Charles Street intersection on a Friday were as follows:

The traffic volumes were recorded at the western road segment were:

Average Friday traffic	- 3,292 vehicles/day;
Morning Friday peak hour traffic (11-12pm)	- 174 vehicles/hour to north; - 141 vehicles/hour to south;
Afternoon Friday peak hour traffic (2-3pm)	- 186 vehicles/hour to north; - 128 vehicles/hour to south;

The hourly distribution of traffic volumes for the average Friday at each site has been presented graphically in Figures 4.1 and 4.2.

The traffic growth has been 2.2% p.a. for the road segment to the west of the Charles Street junction and 1% p.a. for the road segment to the north of the Charles Street junction.

The seasonal traffic variation falls into Group P51 to the north of Charles Street and P59 to the west of Charles Street.

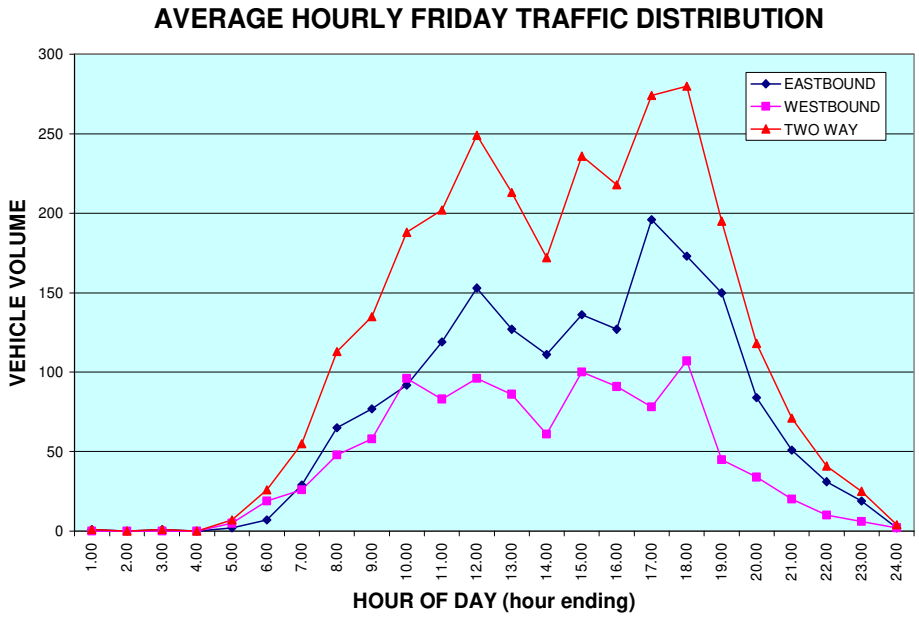


Figure 4.1: Average hourly Friday traffic distribution for Tasman Highway west of Charles Street

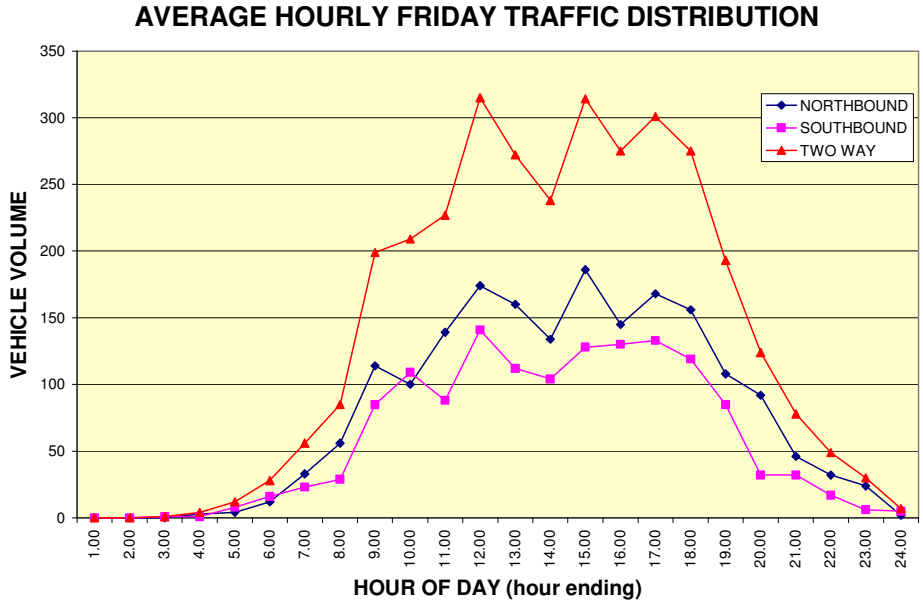


Figure 4.2: Average hourly weekday traffic distribution for Tasman Highway north of Charles Street

Survey of vehicle movements along Rheban Road and Charles Street were undertaken during the site investigations on Tuesday 6 June 2017.

A half hour turning movement survey was undertaken at the Tasman Highway/Charles Street/Esplanade intersection during the 4:10-4:40pm period and the results summarised in Figure 4.3.

During the 3:00pm – 4:00pm period there were 18 vehicle movements (two way) on Rheban Road past the development site.

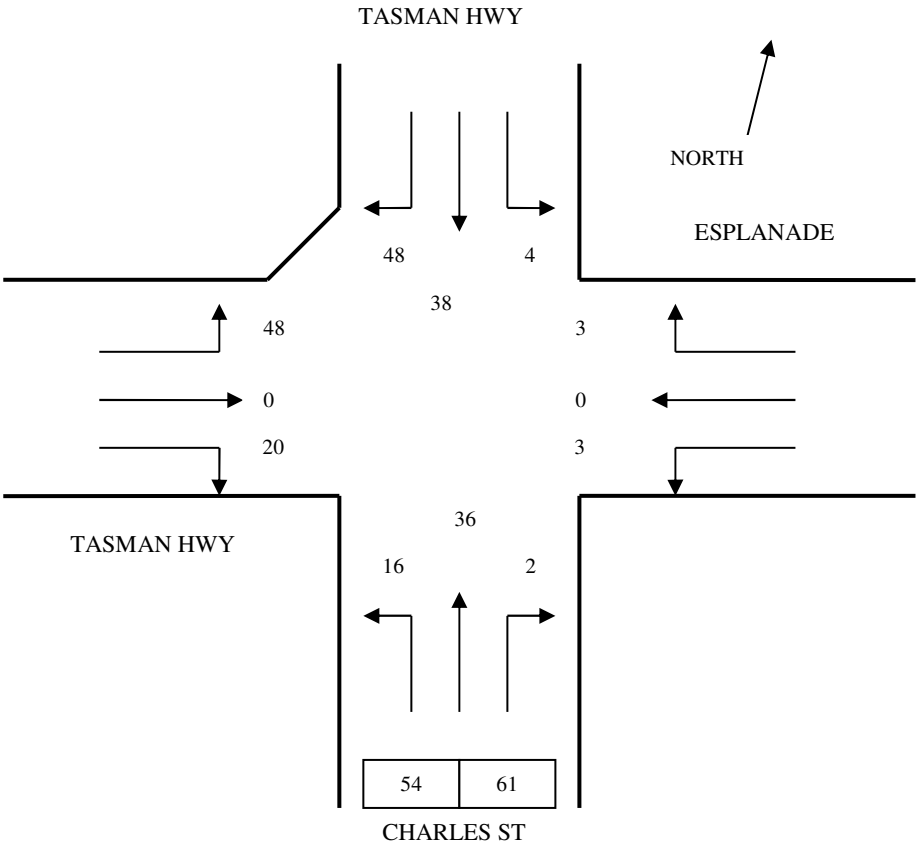


Figure 4.3: Hourly vehicle volumes turning at junction of Tasman Highway/Rheban Road/Esplanade - 4:10pm to 4:40pm

The speed limit along Charles Street to Wielangta Road is 50km/h; it then increases to 60km/h along Rheban Road to around 140m west of the proposed western subdivisional road junction, where it increases to 80km/h past the development site.

4.3 Crash Record

All crashes that result in personal injury are required to be reported to Tasmania Police. Tasmania Police record all crashes that they attend. Any crashes that result in property damage only, which are reported to Tasmania Police, are also recorded even though they may not visit the site.

Details of reported crashes are collated and recorded on a computerised database that is maintained by DSG.

Information was requested from DSG about any reported crashes along the length of Charles Street- Rheban Road in the last five and a half year period from the beginning of 2012.

There have been four reported crashes at the Tasman Highway/Charles Street/Esplanade intersection. Three have been loss of control incidents resulting in property damage and one was an angle collision resulting in minor injury.

Along the road length there has been one minor parking incident near the Wielangta Road junction and one collision at the Walpole Street /Charles Street junction in which a vehicle pulled out; both resulted in property damage only.

The crash record is not of concern.

5. TRAFFIC GENERATION BY THE DEVELOPMENT

As outlined in Section 3 of this report the proposed development is a residential subdivision with 91 lots.

In considering the traffic activity that the dwellings on the subdivisional lots will generate when occupied, guidance is normally sought from the New South Wales, Road Traffic Authority (RTA) document – Guide to Traffic Generating Developments. The RTA guide is a nationally well accepted document that provides advice on trip generation rates and vehicle parking requirements for new developments.

The updated 'Technical Direction' to the Guide dated August 2013 advises that the trip generation for residential dwellings in regional areas of New South Wales is 7.4 vehicles/dwelling/day.

This is consistent with findings by this consultant for dwellings in Tasmania. Surveys in the built-up areas of Tasmania over a number of years have found that typically the traffic generation is 8.0 vehicles/dwelling/day with smaller residential units generating around 4 vehicles/dwelling/day and larger residential units generating around 6 vehicles/dwelling/day.

It is relevant to note that in non-metropolitan areas it has been found that the number of vehicle trips for each dwelling is much lower, in the order of 5 – 6 vehicles/dwelling/day in country towns and even as low as 4 vehicles/dwelling/day in smaller communities and more remote areas. Surveys have also determined the traffic generation rates to be around 6.8 vehicles/dwelling/day in Snug, 6 vehicles/dwelling/day in Huonville, 5 vehicles/dwelling/day in Opossum Bay and around 4.5 vehicles/dwelling/day in Koonya.

The above Tasmanian trip generation data would suggest that the traffic generation in a place such as Orford would be no more than 5.0 trips/dwelling/day during the summer months and much less than this during the colder months of the year. However even in summer months, not all dwellings would have occupants every day or every weekend.

Orford is mostly a holiday and retirement town, therefore the traffic distribution along roads in the town would have peaks during the mid-morning to mid-afternoon periods; there would not be commuter peak hour periods. Also, realistically, the traffic generation could be more around that for a retirement village which is around 2.1 vehicles/dwelling/day.

Allowing for some multiple dwelling developments on a few of the lots and assuming a traffic generation rate of 3.0 vehicles/lot/day during the summer period, the expected traffic generation by the proposed 91 lot subdivision development is up to around 270 vehicles/day when fully developed and all dwellings are occupied.

The peak hour traffic volume would be around 27 vehicles/hour based on this being the typical 10% of the daily traffic volume.

The 57 lot subdivision will generate up to around 170 vehicles/day and 17 vehicles/hour; the 34 lot subdivision will generate up to around 100 vehicles/day and 10 vehicles/hour.

6. TRAFFIC ASSESSMENT AND IMPACT

This section of the report considers the impact that the traffic expected to be generated by the proposed residential subdivision development will have on Rheban Road.

Consideration has also been given to the adequacy of the intersection sight distances at the new junctions on Rheban Road. The proposed subdivisional road layout and traffic circulation within the subdivision is discussed as well as potential connectivity to developments on neighbouring land around the proposed subdivision site, as requested by the Glamorgan Spring Bay Council.

6.1 Operational Impact of Increased Traffic Activity

The proposed development will generate some 270 additional vehicles/day along Rheban Road, as detailed in Section 5 of this report. During peak traffic periods, the additional traffic volume will be around 27 vehicles/hour.

As seen from the survey data in Section 4.2 of this report, the current two-way traffic volume (June 2017) along Rheban Road past the development site during the 3:00pm – 4:00pm period is 18 vehicle movements (two way).

It is expected the daily traffic distribution would be similar to that in Figure 4.2, with a seasonal variation similar to that for the Tasman Highway.

On this basis, the passing traffic volume on Rheban Road during the peak summer period would be around 40-50 vehicles/hour.

There appear to be some 170 existing dwellings to the east of the development site, from a Google Earth view of Orford. Applying a traffic generation rate of 3 vehicles/lot/day, the traffic volume passing the development site during the summer period would be around 510 vehicles/day and around 50 vehicles/hour during the peak hours of the day, the same as estimated above.

Accepting a peak passing traffic volume of 50 vehicles/hour along Rheban Road, the addition of 17 vehicle/hour and 10 vehicles/hour at each subdivisional road junction with Rheban Road will not create any operational or efficiency problems at the junctions or along the road.

Conflicting traffic volumes of up to 1,500 vehicles/hour can generally be accommodated at intersections quite efficiently at Levels of Service C.

The level of traffic conflict in this case will be less than 5% of this maximum traffic volume.

6.2 Adequacy of Sight Distances

A check has been made of the available sight distances at the proposed new subdivisional road junctions onto Rheban Road.

The speed limit along Rheban Road past the development site is 80km/h. A survey was undertaken of a sample of approach vehicle speeds at the location of both subdivision road junctions over a one hour period. The surveys found the 85th percentile speed to be 74km/h.

The required sight distance for an 85th percentile speed of 80km/h based on the Planning Scheme for a public road junction (Clause E5.6.4), is 175m.

Western subdivisional road junction

The current sight distances for the vehicle turning to and from Rheban Road at the western subdivisional road are around 60m to the west and around 35m to the east, with the trees within the road reserve each side of the proposed subdivisional road limiting the line of sight. Removal of the trees, seen in Photographs 6.1 and 6.2, will greatly increase the available sight distances to achieve the required 175m, as can be appreciated from the views in Photographs 6.3 and 6.4.

There will clearly be no issues with sight lines to and from vehicles turning at the subdivisional road junction, as seen in Photographs 6.5 and 6.6.

Eastern subdivisional road junction

The current sight distances for the vehicle turning to and from Rheban Road at the eastern subdivisional road are well over 200m.

Views of available sightlines for vehicles entering and exiting Rheban Road at the eastern proposed subdivisional road junction are seen in Photographs 6.7 to 6.10.

Photograph 6.1: View to west along Rheban Road from proposed western subdivisional road – 3m from road edge

Photograph 6.2: View to east along Rheban Road from proposed western subdivisional road – 3m from road edge

Photograph 6.3: View to west along Rheban Road from proposed western subdivisional road – 1m from road edge

Photograph 6.4: View to east along Rheban Road from proposed western subdivisional road – 1m from road edge

Photograph 6.5: View to west along Rheban Road from vehicle turning right into proposed western subdivisional road

Photograph 6.6: View to east along Rheban Road from rear of vehicle turning right into proposed western subdivisional road

Photograph 6.7: View to west along Rheban Road from proposed eastern subdivisional road

Photograph 6.8: View to east along Rheban Road from proposed eastern subdivisional road

Photograph 6.9: View to west along Rheban Road from vehicle turning right into proposed eastern subdivisional road

Photograph 6.10: View to east along Rheban Road from rear of vehicle turning right into proposed eastern subdivisional road

6.3 Internal Subdivisional Road Design

Road Design Standards

The proposed subdivision development will consist of two separate subdivisional roads that will junction with Rheban Road and service access to 57 and 34 lots respectively.

The daily traffic volume at the start of each subdivisional road is expected to be 170 vehicles/day and 100 vehicles/day for the western and eastern subdivision, respectively.

The subdivisional roads will be sealed with kerb and gutter constructed both sides of the road and a footpath along one side of the road.

When considering the desirable construction standard for new local residential streets and minor collector roads, the width of the street must have design characteristics that encourage driver behaviour which will be appropriate for the street function and to among other things ensure good residential amenity without the need to retrofit traffic management treatments into the future in order to provide for a speed environment less than 50km/h and desirably around 40km/h in local streets.

The current Local Government (IPWEA) geometric street design standards require street widths that are far too wide for the intended local access street function. Widths of 8.9m or greater between kerb faces are appropriate for collector roads rather than local residential streets in this subdivision development that will carry less than 200 vehicles/day (average of one vehicle every three minutes during the busiest hour of the day).

Therefore, it is strongly recommended that such streets should be constructed to a width between kerb faces of no more than a maximum of 6.4m. This width for access streets is more than adequate to accommodate any on-street parking as well as at the same time allowing for the movement of occasional service vehicles/trucks including medium rigid trucks used for garbage collection. There is no need to provide any indented parking bays in such streets and any requirement for this is not supported.

The subdivisional road layout has been designed to not create any four leg intersections and ensure vehicle priorities at conflict point will be clear to drivers.

While the traffic volume along Rheban Road is not high enough to justify junctions having ‘give way’ sign and ‘holding line’ controls, with other junctions along Rheban Road already having such measures, it is recommended the proposed two subdivisional road junctions with Rheban Road be provided with the same controls, for consistency of treatment.

The area of public open space between the two subdivisional areas, which has a watercourse along its length, will include pedestrian and bicycle paths linking both subdivision areas across East Shelly Road to Shelly Beach.

Road Network Considerations

There is no reason to have a road connection between the subdivision areas and East Shelly Road. The traffic control measures at intersections along Jetty Road define this road as a priority route and hence a minor collector road. From a road hierarchy consideration, there is not a need to create another north – south road connection within some 400m when East Shelly Road and Jetty Road provide road connectivity that is more than sufficient for this area.

The layout of the proposed western subdivision area provides for a possible future road connection to Jetty Road through the land on Title CT 117058/150. If this land is subdivided in the future, it allows for other internal subdivisional roads to connect to this east - west road with all traffic access via Jetty Road. A road connection to Rheban Road (based on road hierarchy considerations) would not be necessary in this case; as a result, it would not add to the number of roads or accesses off Rheban Road, ensuring that the current speed limits along the road do not need to be further reduced.

It is not clear what potential exist for future development of land to the east of the proposed subdivision development or across the road, given there is a treatment plant in this area.

If development of these areas is proposed, the resultant level of traffic activity will not be high enough to support other arrangements than the construction of additional subdivision roads that junction with Rheban Road. There would not be sufficient traffic to warrant consideration of four leg intersections with roundabout controls and hence cross intersections on Rheban Road must be avoided.

New subdivisional road junctions along Rheban Road should also be spaced sufficiently far apart to not require a reduction in the 80km./h speed limit. The creation of internal subdivisional road connections between subdivisions would assist in this regard.

7. CONCLUSIONS

The proposed 91 lot subdivision development, when fully developed and occupied will generate some 270 vehicles/day and around 27 vehicles/hour during peak traffic periods, based on the peak hour traffic being the typical 10% of the daily traffic volume.

The addition of 27 vehicle/hour along Rheban Road will not create any operational or efficiency problems at the subdivisional junctions or along the road.

Conflicting traffic volumes of up to 1,500 vehicles/hour can generally be accommodated at intersections quite efficiently at Levels of Service C. The level of traffic conflict in this case will be less than 5% of this maximum traffic volume.

Surveys indicate the 85th percentile speed of passing traffic on Rheban Road is 74km/h. The required sight distance for a speed of 80km/h is 175m.

The current sight distances for vehicles turning to and from Rheban Road at the western subdivisional road is limited by trees in the road reservation. Removal of the trees will greatly increase the available sight distances to achieve the required 175m and more.

The current sight distances for the vehicle turning to and from Rheban Road at the eastern subdivisional road are more than sufficient at well over 200m.

It is expected the subdivisional roads will be sealed with kerb and gutter constructed both sides of the street and a footpath along one side of the road.

It is strongly recommended that the streets should be constructed to a width between kerb faces of no more than a maximum of 6.4m. Widths of 8.9m between kerb faces are not appropriate for streets that will carry less than 200 vehicles/day (average of one vehicle every three minutes during the busiest hour of the day).

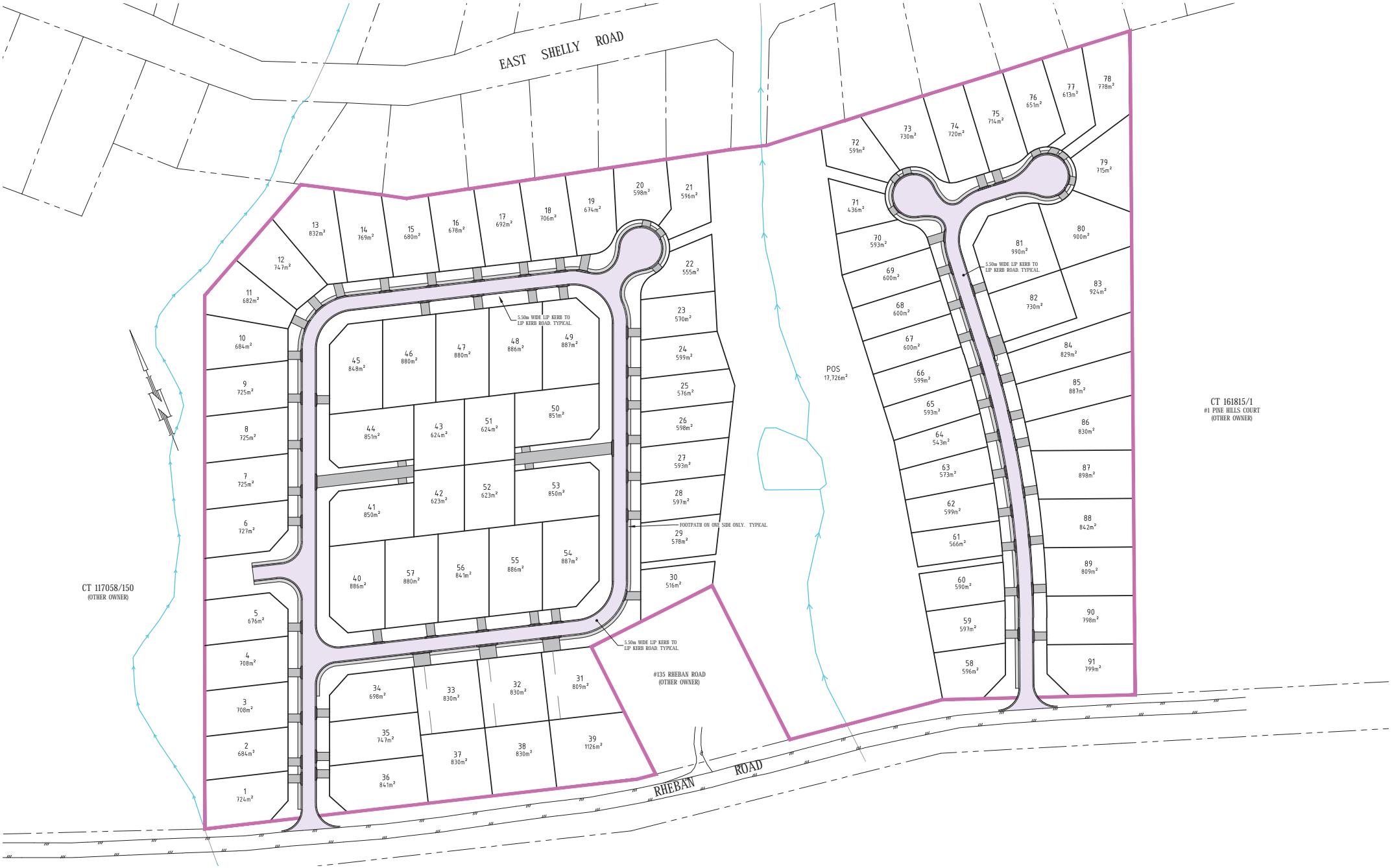
It is recommended the proposed two subdivisional road junctions with Rheban Road be provided with 'give way' sign and 'holding line' controls, the same as at other junctions along Rheban Road.

8. REFERENCES:

- Australian Standard AS 1742.2-2009 – Manual of uniform traffic control devices Part 2: Traffic control devices for general use
- AUSTROADS – Guide to Road Safety Part 6: Road Safety Audit (2009)
- AUSTROADS – Guide to Road Design Part 4A: Unsignalised and Signalised Intersections (2009)
- AUSTROADS – Guide to Traffic Management Part 6: Intersections, Interchanges and Crossings (2009)
- Road Traffic Authority NSW – Guide to Traffic Generating Developments, 2002
- Road and Maritime Services (Transport) - Guide to Traffic Generating Developments; Updated traffic surveys (August 2013)
- Glamorgan Spring Bay Interim Planning Scheme 2015

ATTACHMENT A

Detailed drawing of proposed residential subdivision development layout



THESE DRAWINGS MUST BE APPROVED BY COUNCIL & TASWATER PRIOR TO CONSTRUCTION

ROAD LAYOUT PLAN

SCALE 1:750 (A1)

HALF SCALE PRINT

DIAL BEFORE YOU DIG www.1100.com.au

BEWARE OF UNDERGROUND SERVICES

THE LOCATION OF UNDER GROUND SERVICES ARE APPROXIMATE ONLY AND THEIR EXACT LOCATION SHOULD BE PROVEN ON SITE BY THE RELEVANT AUTHORITIES. NO GUARANTEE IS GIVEN THAT ALL SERVICES ARE SHOWN.

REV.	DESCRIPTION	DATE	REV.	DESCRIPTION	DATE
C	FOR TRAFFIC ENGINEER ENDORSEMENT	24/07/2017			

ALDANMARK Pty. Ltd. CONSULTING ENGINEERS
Level 9, 65 Murray Street
Hobart Tas 7000
P: 03 6234 8666
F: 03 6234 8988
E: mail@aldanmark.com.au
W: www.aldanmark.com.au

CLIENT: MICHAEL AND HARRIET LAWRENCE

ADDRESS: LOT 2, RHEBAN ROAD
ORFORD, TAS 7109

SHEET: OVERALL PLAN - ROAD NETWORK

PROJECT: ORFORD SUBDIVISION

ISSUE: FOR PLANNING

THIS DRAWING SHALL NOT BE USED FOR CONSTRUCTION UNLESS ISSUED 'CONSTRUCTION'.

DRAWN: MM | APPROVED: ~~

SCALE: 1:200 | SIZE: A1 | DATE: 24/07/2017

PROJECT No. 15E96-10 | SHEET No. Z06 | REV No. C

DRAWING DETAILS: 15E96-10 CIV.dwg - MORGAN MCGUIRE - PLOTTED: 24/Jul/2017, 11:37 AM

BUSHFIRE HAZARD MANAGEMENT PLAN ASSESSMENT REPORT

PROPOSED 91 LOT SUBDIVISION UPON CT 149641/2

RHEBAN ROAD, ORFORD

FOR M & H LAWRENCE

(source: LIST @State of Tasmania)

Andrew Goodsell
Accreditation No: BFP 104

October 2018

EXECUTIVE SUMMARY

There is a proposal for a ninety one (91) lot subdivision, including a rezoning upon land situated at Rheban Road, Orford (site identified as CT 149641/2). Whilst the rezoning includes a property identified as 135 Rheban Road (CT 149641/1 - area of 4000 sq.m), this land is not presently proposed to be subdivided. Accordingly this report is concerned solely with bushfire risk in relation to the subdivision of CT 149641/2.

Figure 1. Plan of subdivision (source: Aldanmark)

Having regard to Planning Directive No.5.1 Bushfire Prone Areas Code, there is bushfire prone vegetation upon the subject land (though this will be converted to urban use) as well as on adjoining land within 100m radius of the site. That vegetation comprises a mix of unmanaged grassland (dryland grazing country) and riparian vegetation in the form of woodland. Based on observed ground conditions each lot is to achieve a construction requirement of BAL 19 (or greater) under AS 3959:2009.

Rheban Road in the vicinity of the subdivision has reticulated water supply and hydrants. The subdivision itself will also have reticulated water supply and future hydrants throughout via permit conditions attached to the subdivision.

Hazard management areas (HMAs) to achieve BAL 19 (or greater ie BAL 29) under AS 3959:2009 are shown in **Annexure A** for each of the proposed lots. Access requirements for the subdivision are also specified in the report and as per **Annexure A**. Provided prescriptions contained in this report are met, bushfire risk can be adequately managed and the subdivision should be approved with conditions.

Table of Contents

1.0 Introduction

1.1 Scope

A planning permit (and rezoning) is required for a ninety one (91) lot subdivision on land situated at CT 149641/2 (the subject land) located on Rheban Road, Orford. 135 Rheban Road, identified as CT 149641/1 is also to be rezoned but is not subject to a subdivision application and is therefore not further assessed in this report.

Bushfire hazard risk is a potential constraint for this area given vegetation types, which is a mix of pasture (grassland) and remnant patches of woodland within 100m of the site.

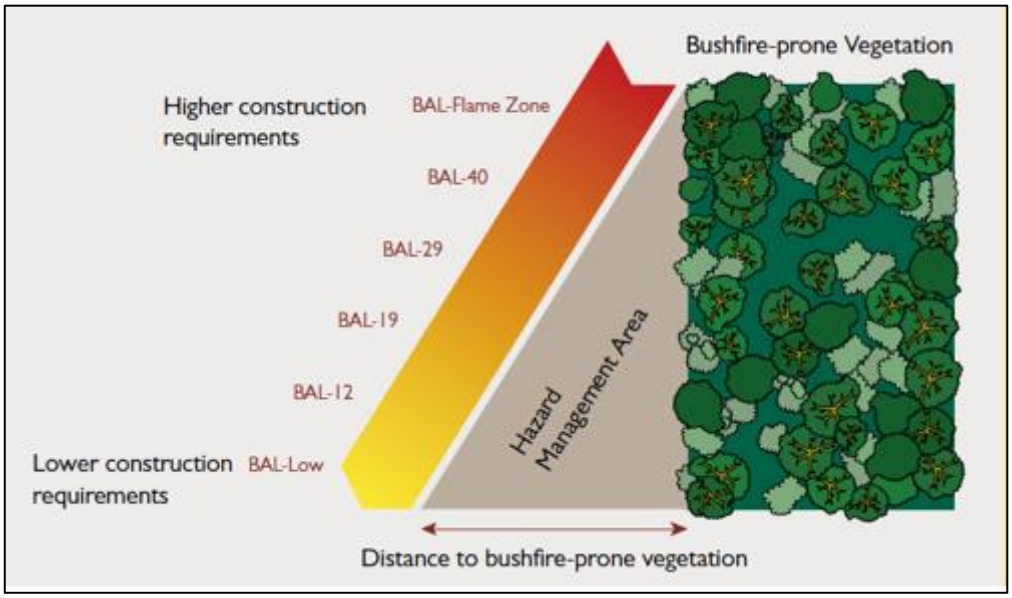


Figure 2. General construction requirements relating to bushfire prone vegetation (source: TFS, 2013)

A bushfire assessment report is required to determine whether the site or surrounding land constitutes bushfire prone vegetation and thus whether a bushfire hazard management plan is required. In the event that a bushfire hazard management plan is not required, an exemption will be issued.

1.2 Purpose

The purpose of the bushfire assessment report is to identify and mitigate bushfire risk consistent with AS3959:2009 and Guidelines for Development in Bushfire Prone Areas (TFS). Planning Directive No.5.1 has also been considered.

1.3 Limitations

This report is for the purposes of identifying and mitigating bushfire hazard risk as part of the subdivision design process and subsequent construction standards for the proposed subdivision.

The prescriptions proposed do not relate to any bushfire hazard risk on nearby or adjoining properties (unless otherwise specified). Nor is the report of itself sufficient to mitigate bushfire hazard risk. It

will be an obligation of the lot owner/s to carry out regular maintenance and any other obligations as set out in this report to effectively manage risk to an acceptable level.

1.4 Author (Qualifications)

The author of this report is Andrew Goodsell, qualified town planner with over 25 years practical experience and someone who has prepared a number of bushfire hazard assessments over the last few years. I hold accreditation to prepare a bushfire hazard assessment under Part 4A of the *Fire Service Act 1979*.

1.5 Site Inspections and available information

I have visited the site recently, examined the propose plan of subdivision and considered other available information on-line.

1.6 Site Details

The site location is identified in Figure 3 and is more fully described under the site description heading of this report (see 2.5).

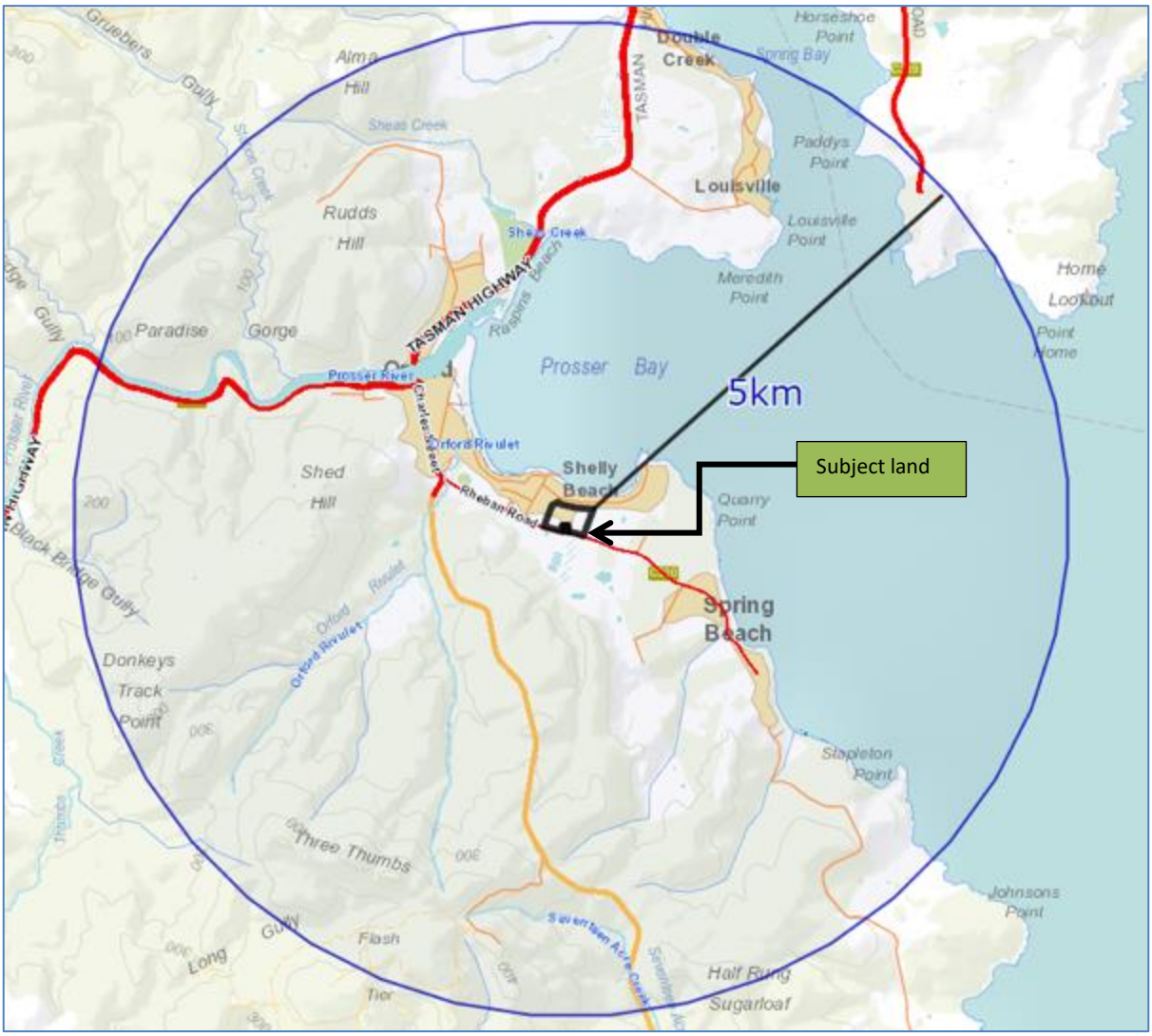


Figure 3. Site Location – broad geographical context (Source: LIST @ State of Tasmania)

2.0 Site Description

2.1 Title

The subject land is identified as CT 149641 folio 2 with an area of some 10.26 ha approximately (title provided separately).

2.2 Locality

Topographically the general area is relatively flat and substantially cleared terrain, with urban development to the north and west. To the south east is the coastal settlement of Spring Beach.

A sewerage treatment plant sits a minimum 230m to the south on Rheban Road. That facility is situated on slight to moderately sloping land, much of which has been cleared to enable low intensity dryland farming. An unnamed waterway runs south to north through the subject land and similar waterways are identified to the near east and west.

2.3 Zoning and Municipality (LGA) and Planning Scheme

The current zoning of the subject land is Rural Resource under the Glamorgan Spring Bay Interim Planning Scheme 2015. The zoning is confirmed in Figure 4.

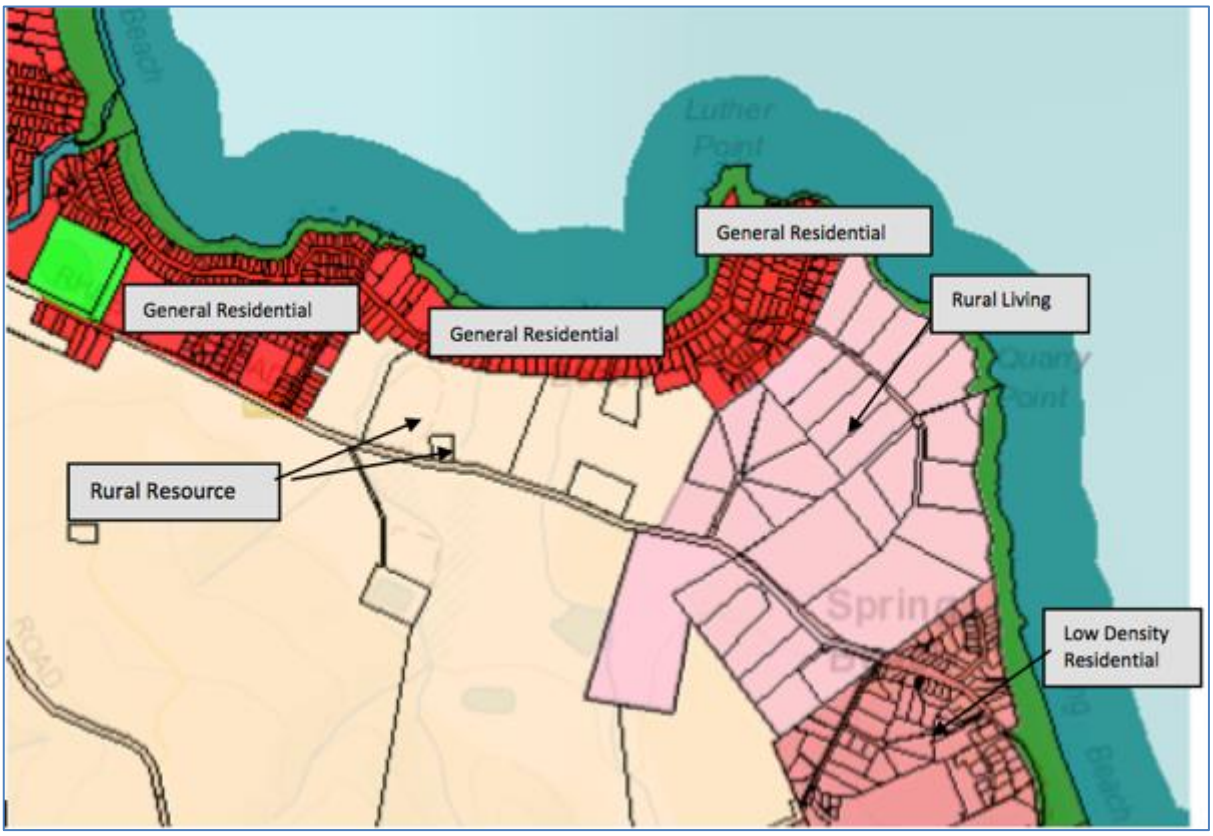


Figure 4. Land Use Zoning (source: IPlan @State of Tasmania)

Overlays have not been assessed as this is not within the scope of the task. But the subject land is not subject to a bushfire prone area overlay.

2.4 Status

A planning permit is required for the proposed subdivision.

2.5 Topographical Context/Site Character

The subject land is accessed off Rheban Road and sits south of East Shelly Road within the south eastern arm of the Orford settlement. Rheban Road is a rural sealed road maintained by Council.

An existing house sits upon CT 149641/1 and is at least 30 years old. The larger title being CT 149641/2 is essentially vacant. Aerial imagery and some machinery on CT 1498641/1 show that this site was once a horse trotting track.

Ostensibly no vegetation of note is found on title. The only vegetation of significance is found within the localised drainage line to the NW of the existing house on CT 149641/1 being white gum (E viminalis) and black gum (E ovata). The landscape is however more accurately described as open paddock and improved pasture. Site levels are generally slight. Aspect is northerly to north easterly.

There is a defined water course identified upon the site, running through proposed Lot 2. There is also another unnamed watercourse on the western boundary of the site and another to the east. The character of the subject land is established in Figure 5.

Figure 5. Land use character (Source: LIST @ State of Tasmania)

TFS indicate no recent fire history upon the site though bushfire events have occurred upslope to the south and south west in the last two fire seasons. These incidents are mapped in Figure 6.

Figure 6. Bushfire History (source: LIST @ State of Tasmania).

2.6 Vegetation communities, access and reticulated water supply

The dominant vegetation community found in this area is farmland or grassland (see Figure 7). Adjoining land subdivided unto residential lots is mapped as urban. Ground observation suggests, with evident fire management applied to the site as well as clearing, that vegetation on site and surrounds is more reasonably classified as either pasture (grassland) or open woodland.

All weather access is provided onto Rheban Road as per Figure 5. There is reticulated water supply available in the area.

Figure 7. Vegetation conditions in area (source: LIST @ State of Tasmania). Green boundary is 100m radius of subject land.

Photo 1 Drainage conditions on CT 149641/2 above dam


Photo 2 & 3 Drainage conditions on CT 149641/2 below dam. Woodland not forest typical in this area.

Photo 4 Open paddocks above East Shelly Rd


Photos 5 & 6 Site conditions on CT 149641/2 near western side of property


Photos 7 & 8 Site conditions on CT 149641/2 near eastern side of property

Photo 9 Panorama taken from eastern side of CT 149641/2

3.0 Proposal (prescriptions)

The prescriptions for the proposed subdivision are set out below as relevant.

3.1 Defendable Space

The extent of defendable space is determined by type of vegetation, aspect, slope and other factors. Conditions are mapped in Figure 8.

Figure 8. Bushfire prone vegetation as viewed on-ground (source: LIST @ State of Tasmania).

It is concluded that there is bushfire prone vegetation on immediately adjoining land as per Figure 8, though in essence grassland unmanaged as the dominant community.

3.2 Water for Fire Fighting Purposes

There is reticulated water supply or fire hydrants nearby, off East Shelly Road or will be conditioned as part of the subdivision proposal to extend to the Rheban Road frontage.

3.3 Access

The plan of subdivision shows two access points onto Rheban Road, the main access being to the west.

3.4 Construction- BAL

Refer to section 4 of report.

3.5 Staging

As per the plan of subdivision, six stages are proposed, beginning south, heading north, thence west to east as per Figure 9.

Figure 9. Staging Plan (source: Aldanmark).

4.0 Bushfire Assessment Analysis

4.1 Vegetation Conditions

The property is a mosaic of unmanaged grassland/paddock and woodland as described within this report. Grassland is overwhelmingly the primary vegetation type in this area. Urbanised conditions exist to the north along the entire frontage [Note this result is valid for the time the inspection was carried out].

4.2 Slope Conditions

The slope conditions for each frontage of the subdivision, this assessment being simplified to four frontages, as per parent lot configuration, are described as below.

Aspect	Veg Type	Distance to Veg* (Presently)	Slope & Condition*
East Shelly Rd frontage (NE) (for Lots 13-21 & 72-78	Urban (managed conditions)	N/A	D/S (<3^0)
Western frontage (for Lots 1-13)	Grassland (G) & Woodland (B)	<10m	At grade
Eastern frontage (for Lots 78-91)	Grassland (G)	<10m	At grade
Southern frontage (for Lots 1, 36-39, 58 & 91)	Grassland	18m (width of Rheban Rd reservation)	U/S (3^0)

Table 1 Slope Assessment
D/S = downslope. U/S = upslope *bushfire prone vegetation off site. Assume all bushfire prone vegetation currently in place upon subject land will be either removed or managed.

4.3 BAL Assessment

The BAL assessment including Hazard Management Areas (HMAs) is as per table 2.

Parameters	East Shelly Rd frontage (NE) for Lots 13-21 & 72-78)	Western frontage (for Lots 1-13)	Eastern frontage (for Lots 78-91)	Southern frontage (for Lots 1, 36-39, 58 & 91)
Defendable Space Proposed	Not specified	Not specified	Not specified	Not specified
BAL Required	No HMA applies. Urban conditions. **BAL PROPOSED = 19**	• Requires 10m HMA to western boundary (Lots 1-3). **BAL PROPOSED = 19** • Requires 10m HMA to western boundary (Lots 4-13). **BAL PROPOSED =29***	• Requires 6m HMA to western boundary (Lots 78-83). **BAL PROPOSED =29**** • Requires 10m HMA to eastern boundary (Lots 84-91) **BAL PROPOSED =19**	• Requires 10m HMA to eastern boundary. **BAL PROPOSED =19**
Water	Water supply to meet Table E4 (retic supply and hydrants)	Water supply to meet Table E4 (retic supply and hydrants)	Water supply to meet Table E4 (retic supply and hydrants)	Water supply to meet Table E4 (retic supply and hydrants)
Access	Access to meet Table E2 standard PD 5.1	Access to meet Table E2 standard PD 5.1	Access to meet Table E2 standard PD 5.1	Access to meet Table E2 standard PD 5.1

Table 2 Bushfire Assessment – Proposed Subdivision

Note: each lot is treated as a hazard management area.
*Hazard Management Area is to be 15m if built to BAL 19. ** Hazard Management Area is to be 10m if built to BAL 19.
Note: Road construction for the road lot as set out in the plan of subdivision is to meet standards as set out in Table E2 of PD 5.1.

No fire trail is deemed necessary given the topography, level of bushfire risk and road layout. An emergency egress point is however appropriate, accessible from both the eastern and western sides of the subdivision onto East Shelly Road (refer to **Annexure A**).

5.0 Building Prescriptions

All lots are to provide building envelopes as per **Annexure A**, be specified that dwellings are to achieve BAL 19 or greater (BAL 29 on specified lots) under AS 3959:2009. On ground works including access standards and water along with hazard management are addressed separately in this report.

6.0 PD 5.1 Bushfire Prone Areas Code

E1.6.1 Hazard Management Areas – **Annexure A** to this BHMP shows HMAS as per AS 3959:2009 meeting Acceptable Solution A1.

E1.6.2 Public and Fire Fighting Access - **Annexure A** to this BHMP shows access arrangements for each lot as per Acceptable Solution A1. No fire trails are required.

E1.6.3 Provision of Water Supply for Fire Fighting Purposes – A1 concerns subdivisions in areas of reticulated supply. Hydrant locations can be conditioned to ensure each lot is within 120m hose reel length of a designated hydrant, whether new or existing.

7.0 Recommendations

Provided all lots are treated as hazard management areas, setbacks of all building envelopes to common boundaries external to the subject land achieve the HMA's specified in **Annexure A**, suitable reticulated supply of water is installed and construction achieves BAL 19 or greater as also set out under **Annexure A** the subdivision can proceed as proposed.

Provision is also required for emergency vehicular egress from the subdivision via the identified walkways onto the open space reserve shown on the plan of subdivision onto East Shelly Road. Where vehicular access may be impracticable (such as from the eastern access road cul-de-sac), pedestrian access must be guaranteed via formed pathway network, suitably signed.

8.0 Conclusion.

The proposed subdivision is endorsed that each lot is to meet BAL 19 or as otherwise specified under AS 3959:2009 for the purposes of dwelling construction subject to meeting conditions as set out in **Annexure A** to this report.

Andrew Goodsell
BFP 104
14 October 2018

9.0 References

AS 3959:2009 Construction of Buildings in Bushfire Prone Areas

Interim Planning Directive No. 5.1 Bushfire Prone Areas Code

Glamorgan Spring Bay Interim Planning Scheme 2015

Tasmania Fire Service (2013). Planning and Building in Bushfire-Prone Areas for Owners and Builders, TFS, Hobart

10.0 Annexures

A Bushfire Hazard Management Plan (provided separately)

Table E1: standards for roads

Element	Requirement
A. Roads	Unless the development standards in the zone require a higher standard, the following apply: (a) two-wheel drive, all-weather construction; (b) load capacity of at least 20t, including for bridges and culverts; (c) min. carriageway width is 7m for a through road, or 5.5m for a dead-end or cul-de-sac road; (d) min. vertical clearance of 4m; (e) min. horizontal clearance of 2m from the edge of the carriageway; (f) cross falls of less than 3 degrees (1:20 or 5%); (g) max. gradient of 15 degrees (1:3.5 or 28%) for sealed roads, and 10 degrees (1:5.5 or 18%) for unsealed roads; (h) curves have a min. inner radius of 10m; (i) dead-end or cul-de-sac roads are not more than 200m in length unless the carriageway is 7m in width; (j) dead-end or cul-de-sac roads have a turning circle with a 12m out radius; and (k) carriageways less than 7m wide have 'No Parking' zones on one side, indicated by a road sign that complies with *Australian Standard AS1743-2001 Road signs-specifications.*

Table E4: reticulated water supply for fire fighting

Element		Requirements
A.	Distance between building area to be protected and water supply.	The following requirements apply: (a) the building area to be protected must be located within 120m of a fire hydrant; and (b) the distance must be measured as a hose lay, between the fire fighting water point and the furthest part of the building area.
B.	Design criteria for fire hydrants.	The following requirements apply: (a) fire hydrant system must be designed and constructed in accordance with *TasWater Supplement to Water Supply Code of Australia WSA03-2011-3.1MRWA 2nd Edition;* and (b) fire hydrants are not installed in parking areas.
C.	Hardstand	A hardstand area for the fire appliances must be: (a) no more than 3m from the hydrant, measured in a hose lay; (b) no closer than 6m from the building area to be protected; (c) a min. width of 3m constructed to the same standard as the carriageway; and (d) connected to he property access by a carriageway equivalent to he standard of the property access.

Photo 2: View of riparian woodland.

Photo 3: View to the west.

Photo 1: View of typical conditions.

Photo 4: View towards Rheban Road above dam.

NOTE:
Walkways A and B to be designed to be capable of providing emergency vehicle exit onto East Shelly Road.

Prescriptions:

1. **Building Construction:** BAL 19 under AS 3959:2009 to be achieved for any dwelling constructed within the subdivision unless otherwise specified (noting some lots are specified to achieve BAL 29).
2. **All Hazard Management Areas (HMA):** Entire subdivision to be treated as building protection zone (hazard management area). Limited vegetation means only regularly managed and mown/slashed to a height no greater than 100mm. Remove debris and fallen trees/shrubs as required and regularly maintain.
3. **Access:** Road to be constructed to standards as set out in Table E1 Element A of PD 5.1 as set out in this BHMP. Individual accesses to lots to meet Table E2 Elements A or B dependent on access length.
4. **Water supply:** Reticulated water supply and hydrants to be installed as per Table E4.

BUSHFIRE HAZARD MANAGEMENT PLAN
Prepared by A Goodsell BFP 104
14 October 2018

SCALE 1 : 2000

KEY:
Hazard Management Area (HMA)

CONSULTANT
Town & Country Planning Consultants
TOWN & COUNTRY PLANNING PTY. LTD.
ABN 27116340991
MOBILE : +61 (04) 28118 292
EMAIL : agoodsell@tcptas.com.au
admin@tcptas.com.au

PROJECT
BUSHFIRE HAZARD MANAGEMENT PLAN – PROPOSED SUBDIVISION
at
LOT 2 RHEBAN ROAD, ORFORD
for
H & H LAWRENCE

SCALE: Shown at A3	DATE: 20/10/18
CHECKED BY: AG	DRAWN BY: MB
DRAWING NUMBER: Sheet 1 of 1	REV. NO. —

CODE E1 – BUSHFIRE-PRONE AREAS CODE

CERTIFICATE[1] UNDER S51(2)(d) *LAND USE PLANNING AND APPROVALS ACT 1993*

1. Land to which certificate applies[2]

Land that <u>is</u> the Use or Development Site that is relied upon for bushfire hazard management or protection.

Name of planning scheme or instrument:	Glamorgan Spring Bay Interim Planning Scheme 2015
Street address:	Rheban Road, Orford
Certificate of Title / PID:	CT 149641/2

Land that <u>is not</u> the Use or Development Site that is relied upon for bushfire hazard management or protection.

Street address:	N/A
Certificate of Title / PID:	

2. Proposed Use or Development

Description of Use or Development:

91 lot subdivision.

Code Clauses[3]:

- ❑ **E1.4 Exempt Development**
- ❑ **E1.5.1 Vulnerable Use**
- ❑ **E1.5.2 Hazardous Use**
- X **E1.6.1 Subdivision**

[1] This document is the approved form of certification for this purpose, and must not be altered from its original form.

[2] If the certificate relates to bushfire management or protection measures that rely on land that is not in the same lot as the site for the use or development described, the details of all of the applicable land must be provided.

[3] Indicate by placing X in the corresponding ❑ for the relevant clauses of E1.0 Bushfire-prone Areas Code.

3. Documents relied upon[4]

Documents, Plans and/or Specifications

Title:	Civil Drawings - Proposed Subdivision Lot 2 Rheban Road Orford		
Author:	Aldanmark		
Date:	20/12/16	**Version:**	B

Bushfire Hazard Report

Title:	BHMP Assessment Report_CT 149641/2, Rheban Road, Orford		
Author:	A Goodsell		
Date:	October 2018	**Version:**	1

Bushfire Hazard Management Plan

Title:	Annexure A_BHMP_CT 149641/2, Rheban Road Orford		
Author:	A Goodsell		
Date:	October 2018	**Version:**	1

Other Documents

Title:			
Author:			
Date:		**Version:**	

[4] List each document that is provided or relied upon to describe the use or development, or to assess and manage risk from bushfire. Each document must be identified by reference to title, author, date and version.

4. Nature of Certificate[5]

❑	E1.4 – Use or development exempt from this code		
	Assessment Criteria	**Compliance Requirement**	**Reference to Applicable Document(s)**
❑	E1.4 (a)	Insufficient increase in risk	

❑	E1.5.1 – Vulnerable Uses		
	Assessment Criteria	**Compliance Requirement**	**Reference to Applicable Document(s)**
❑	E1.5.1 P1	Risk is mitigated	
❑	E1.5.1 A2	BHMP	
❑	E1.5.1 A3	Emergency Plan	

❑	E1.5.2 – Hazardous Uses		
	Assessment Criteria	**Compliance Requirement**	**Reference to Applicable Document(s)**
❑	E1.5.2 P1	Risk is mitigated	
❑	E1.5.2 A2	BHMP	
❑	E1.5.2 A3	Emergency Plan	

x	E1.6 – Development standards for subdivision		
	E1.6.1 Subdivision: Provision of hazard management areas		
	Assessment Criteria	**Compliance Requirement**	**Reference to Applicable Document(s)**
❑	E1.6.1 P1	Hazard Management Areas are sufficient to mitigate risk	
❑	E1.6.1 A1 (a)	Insufficient increase in risk	
X	E1.6.1 A1 (b)	Provides BAL 19 for all lots (or above)	BHMP Assessment Report_CT 149641/2 Rheban Road, Orford

[5] The certificate must indicate by placing X in the corresponding ❑ for each applicable standard and the corresponding compliance test within each standard that is relied upon to demonstrate compliance to Code E1

❑	E1.6.1 A1 (c)	Consent for Part 5 Agreement	

	E1.6.2 Subdivision: Public and fire fighting access		
	Assessment Criteria	**Compliance Requirement**	**Reference to Applicable Document(s)**
❑	E1.6.2 P1	Access is sufficient to mitigate risk	
❑	E1.6.2 A1 (a)	Insufficient increase in risk	
X	E1.6.2 A1 (b)	Access complies with Tables E1, E2 & E3	BHMP Assessment Report_CT 149641/2 Rheban Road, Orford

	E1.6.3 Subdivision: Provision of water supply for fire fighting purposes		
	Assessment Criteria	**Compliance Requirement**	**Reference to Applicable Document(s)**
❑	E1.6.3 A1 (a)	Insufficient increase in risk	
x	E1.6.3 A1 (b)	Reticulated water supply complies with Table E4	BHMP Assessment Report_CT 149641/2 Rheban Road, Orford
❑	E1.6.3 A1 (c)	Water supply consistent with the objective	
❑	E1.6.3 A2 (a)	Insufficient increase in risk	
❑	E1.6.3 A2 (b)	Static water supply complies with Table E5	
❑	E1.6.3 A2 (c)	Static water supply is consistent with the objective	

5. Bushfire Hazard Practitioner[6]

Name:	A Goodsell	**Phone No:**	0428118292
Address:	32 The Parkway	**Fax No:**	-
	Caroline Springs	**Email Address:**	agoodsell@tcptas.com.au
	Vic 3023		
Accreditation No:	BFP – 104	**Scope:**	1, 2, 3A, 3B,3C

6. Certification[7]

I, certify that in accordance with the authority given under Part 4A of the Fire Service Act 1979 –

The use or development described in this certificate is exempt from application of Code E1 – Bushfire-Prone Areas in accordance with Clause E1.4 (a) because there is an insufficient increase in risk to the use or development from bushfire to warrant any specific bushfire protection measure in order to be consistent with the objectives for all the applicable standards identified in Section 4 of this Certificate.	❑

or

There is an insufficient increase in risk from bushfire to warrant the provision of specific measures for bushfire hazard management and/or bushfire protection in order for the use or development described to be consistent with the objective for each of the applicable standards identified in Section 4 of this Certificate.	❑

and/or

The Bushfire Hazard Management Plan/s identified in Section 4 of this certificate is/are in accordance with the Chief Officer's requirements and can deliver an outcome for the use or development described that is consistent with the objective and the relevant compliance test for each of the applicable standards identified in Section 4 of this Certificate.	x

Signed: *certifier*	A Goodsell		
Date:	31/10/18	**Certificate No:**	2018-6

[6] A Bushfire Hazard Practitioner is a person accredited by the Chief Officer of the Tasmania Fire Service under Part IVA of *Fire Service Act 1979.* The list of practitioners and scope of work is found at www.fire.tas.gov.au.

[7] The relevant certification must be indicated by placing X in the corresponding ❑.

M. & H. LAWRENCE and OTHERS

ORFORD SEWAGE TREATMENT PLANT

ODOUR ASSESSMENT

Environmental Dynamics
Project ED5190
First issued on 8 May 2018
Reissued on 15 July 2018

6 Gourlay Street
West Hobart, TAS 7000
(03) 6231 0500

Release notes.

This document replaces the report issued on 8 May 2018.

The document is unchanged except for an addendum section that addresses comments by TasWater.

M. & H. LAWRENCE and OTHERS

ORFORD SEWAGE TREATMENT PLANT

ODOUR ASSESSMENT

Contents

Glossary and Terminology

GLC	Ground level concentration
OU	Odour unit
OER	Odour emission rate (OUV/s)
PST	Primary sedimentation tank
SOER	Specific odour emission rate (OUV/s/m^2)
WWTP / STP	Wastewater / Sewage Treatment Plant

Odour units (OU). One odour unit (1 OU) is defined as the concentration of odour just detectable by 50% of a panel of "expert sniffers". For example, if 1 m^3 of air has an odour concentration of 2 OU, and it is mixed with 1 m^3 of odourless air, the resulting 2 m^3 volume of air will have an odour concentration of 1 OU.

Odour Emission Rates (OERs). An odour emission rate (OER) is measured in OUV/s, sometimes written OU.m^3/s. Odour is treated by dispersion models as simply another airborne contaminant, and its different units are just a matter of convenience.

Basic relationship:	Concentration x flow rate = emission rate.
Odour emission rate	OU x m^3/s = OUV/s
Mass emission rate	g/m^3 x m^3/s = g/s

Averaging period. A measurement, or prediction, of odour concentration must be associated with an averaging period. This is the length of time over which the odour sample is taken, or the prediction is made, and it is called an averaging period because the odour concentration can fluctuate during the period, so the concentration is an average value. Typical averaging periods for odour are 1 hour, 3 minutes, and 1 second.

Lagoon OERs are measured using a flux hood to measure odour emissions per m^2 per second, called a Specific Odour Emission Rate (SOER), and multiplying by the area of the source gives the total OER.

Upset conditions refer to periods of significantly elevated odour emissions, for example due to the WWTP processing certain trade wastes, or equipment breakdown.

1. Introduction

A 91-unit residential subdivision has been proposed for Lot 2, Rheban Road, Orford. The proposed subdivision lies partly within the 350m attenuation distance of the Orford Sewage Treatment Plant (STP) and accordingly TasWater has requested an odour assessment be carried out by a suitably qualified person to determine whether the attenuation distance can be relaxed.

The proponents are M. & H. Lawrence and others. The proponents have engaged Aldanmark Pty Ltd to provide civil design services; and have engaged Environmental Dynamics (Dr Steve Carter) to carry out the required odour assessment.

Qualifications

Dr Carter is a consulting environmental engineer with dual qualifications as a physicist. He has carried out odour impact assessments of sewage treatment plants, a landfill, abattoir, compost facility, a mort (dead fish) processing plant, asphalt plants, poultry farms and other facilities. In 2017, he was engaged by the Macquarie Point Development Corporation to assess the odour impact of the Macquarie Point wastewater treatment plant, a project that involved extensive odour sampling and modelling, working in partnership with TasWater. The work was peer reviewed by TasWater's specialists and consultants, and the EPA. Cross-check modelling was also carried out.

2. The Orford STP and proposed subdivision

Figure 1 shows the location of the Orford STP on the south side of Rheban Road, on the eastern outskirts of Orford. The STP has an inlet works, an aeration lagoon and three secondary lagoons. The inlet works are located adjacent to the SW corner of the aeration lagoon, about 360m south of Rheban Road. TasWater has advised that the STP operates at an average daily inflow of 179 kL/day and has a design capacity of 473 kL/day. The Glamorgan Spring Bay interim planning scheme 2015 specifies an attenuation distance of 350m for an STP with a design capacity between 275 kL/day and 1,375 kL/day.

Figure 1. The Orford Sewage Treatment Plant and proposed subdivision.

Figure 1 also shows the location of the proposed subdivision on the north side of Rheban Road, where there is a single existing residence. The 350m attenuation distance is measured from the north side of the third (northern most) secondary lagoon and extends about halfway into the proposed subdivision.

3. Odour assessment methodology

Schedule 3 of the *Tasmanian Environment Protection Policy (Air Quality) 2004* specifies odour assessment criteria. For an unknown mixture of odiferous pollutants, a 2 OU design ground level concentration (GLC) is specified, over a one-hour averaging period. The maximum GLC predictions are used to assess compliance, unless high quality site-specific meteorology data and odour emission rate data are available, in which case the 99.5 percentile GLC predictions can be used to assess compliance. The standard approach is to make GLC predictions for a year of meteorology, producing 8,760 GLC (1 hour) predictions at each point in the prediction grid, in which case the maximum GLC is the highest GLC prediction at each point, and the 99.5 percentile GLC is the 44th highest GLC prediction at each point.

4. Choice of model

Wind prediction model

Historically, the lack of good site specific meteorological data reduced the credibility of many dispersion modelling exercises. This problem can now be avoided by using computer models to produce the required meteorology. This study uses CSIRO's model The Air Pollution Model (TAPM). It predicts fully 3-D winds from synoptic scale meteorological data gathered by the Bureau of Meteorology from weather stations across the country, supported by data sets of land use, soil and vegetation, sea surface temperature, and terrain. TAPM Version 4.0.5 is used by this study. Calmet is the other model often used in Australia to predict 3-D winds to drive a dispersion modelling exercise.

Dispersion model

Four dispersion models are commonly used in Australia. Ausplume and Aermod are workhorse Gaussian plume models, making "lighthouse" predictions based on a single set of meteorology data each hour. TAPM (dispersion model) and Calpuff are more sophisticated models with algorithms that take advantage of the 3-D meteorology that TAPM (wind prediction model) and Calmet can provide. TAPM V4.0.5 was chosen for the dispersion modelling work. The model has been verified using Australian and international datasets and is described by papers available on the CSIRO's web site www.cmar.csiro.au.

TAPM vs Calmet/Calpuff vs Ausplume

A common fallacy is that Ausplume should be used for odour modelling, presumably because it facilitates the use of the units used for odour emission rates and odour concentrations. However, odour is just another airborne contaminant, and if TAPM or Calpuff are better models for other gaseous contaminants then they are also better for odour modelling.

A recent WWTP odour assessment project compared the wind predictions of Calmet and TAPM and the odour dispersion predictions of Calpuff and TAPM. TasWater and the EPA are aware of this comparison exercise and that there was little difference between the predictions.

5. Wind predictions

Table 1 gives the TAPM meteorology model inputs for the wind predictions. The year 2013 was chosen because it was a typical year and came before the unusual weather conditions that produced record low rainfall across Tasmania.

Default file	*Orford.def* (available on request)	
Meteorology	2013 with two days in December 2012 used for model spin-up, and one day in January 2014 used to ensure clean end of year predictions.	
Terrain, land use.	*Geodata* 9-sec DEM	~250 m resolution
and soil type data	*Tas100mgrid.txt*	~100 m resolution
	Vege.aus 3-min grid	~5 km resolution
	TasSVLU250m.txt	~250 m resolution
	Soil.aus 3-min grid	~ 5km resolution
Wind grid centre	147° 20.5' E, 42° 52.5' S	GDA 94 datum
	{527,905 m E, 5,253,009 m N}	GDA 94 datum
Meteorology grids	25 x 25 horizontal grid points, all five grids 30 km, 10 km, 3 km, 1 km, 300 m resolution	
	25 vertical grid points. At {10, 25, 50, 100,…,6000, 7000, 8000 m}.	

Table 1. TAPM wind prediction model inputs.

Figure 2 shows the digital terrain used for wind prediction modelling over the 4th of the 5 nested prediction grids, a 24 km x 24 km grid with 1 km grid spaces. The high ground south of the STP will tend to suppress the southerly winds at the STP, which is important because the proposed subdivision is located due north of the STP and can only be impacted by odour from the STP when winds are from the south,

Figure 3 shows the annual surface (10m) 2013 wind rose predicted at the WWTP by TAPM. The dominant west to SW wind signature is associated with the flow of weather systems across Tasmania from west to east, together with terrain channeling of winds including nocturnal katabatics. The digital terrain plot in Figure 2 clearly shows that terrain blocking / channeling is expected. The east to NE wind signature is due to the afternoon sea breeze and becomes more prominent in a wind rose showing the 3pm winds.

The wind rose confirms that winds from the south, towards the proposed subdivision, are rare.

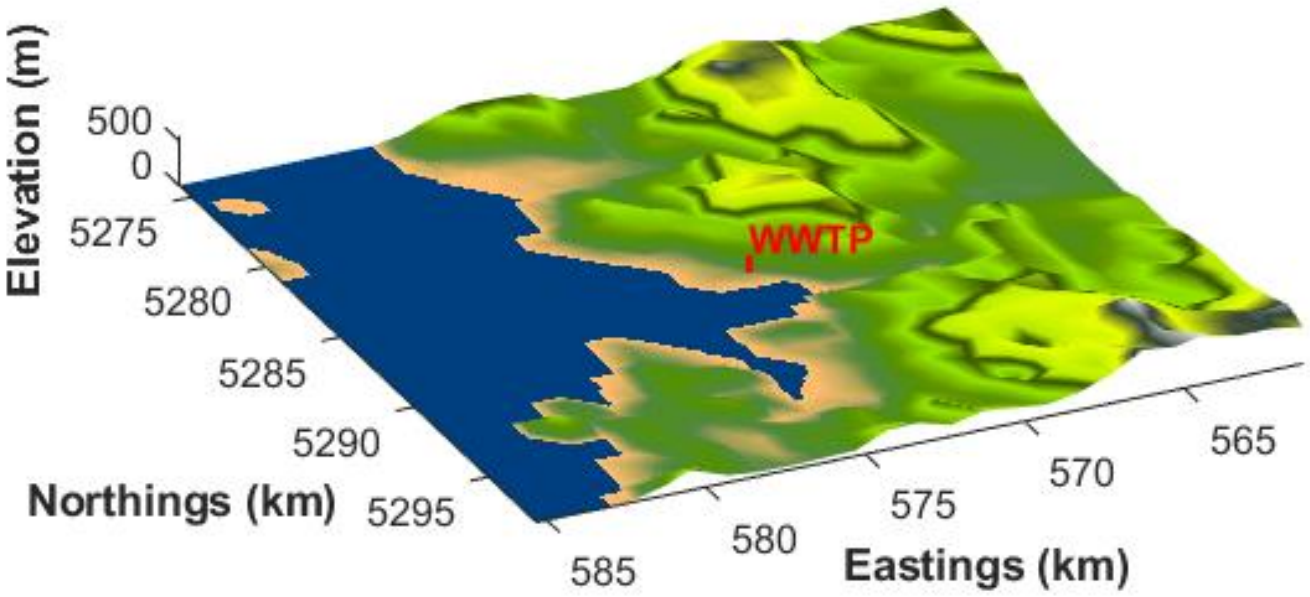


Figure 2. **Digital terrain used by the model. This figure shows the terrain for the 4th of the 5 nested wind prediction grids, which is a 24 km x 24 km grid with 1 km spacing. The data has approximately 100 m resolution. The view is looking SW.**

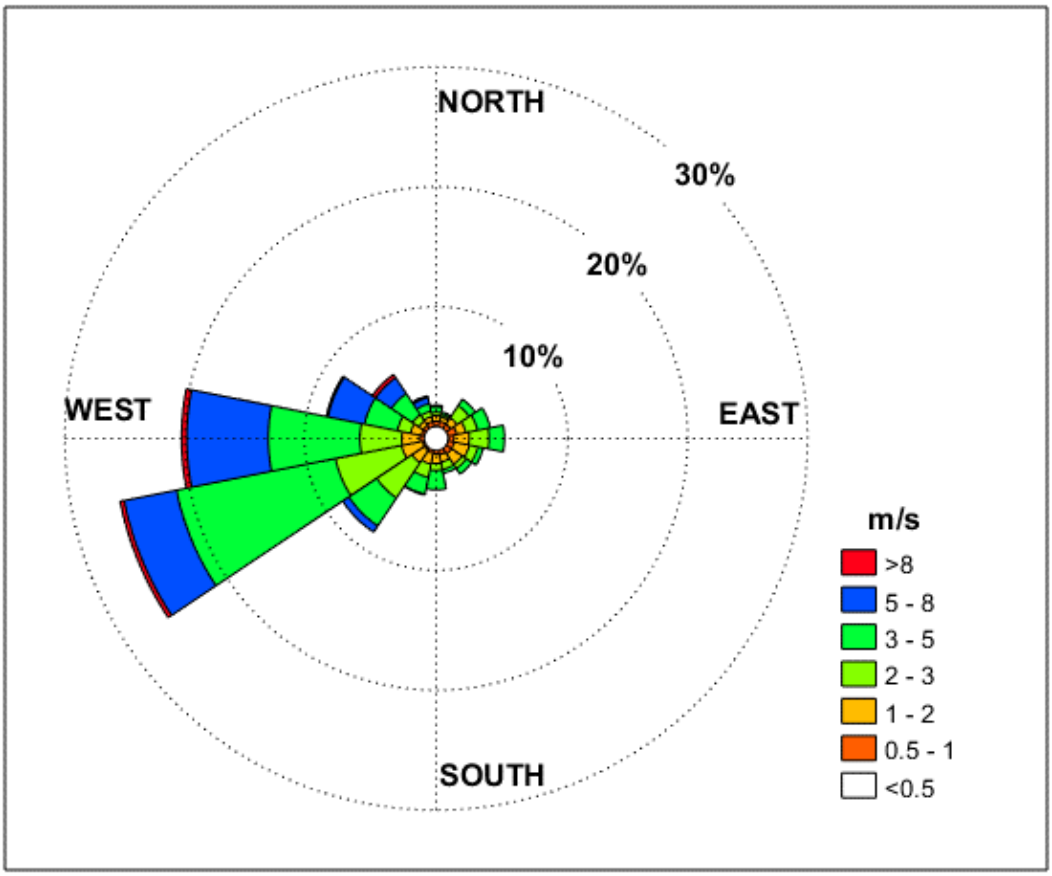


Figure 3. 2013 surface wind roses (m/s) predicted at the STP by TAPM.

Figure 4 shows the distribution of stability classes in 2013 predicted by TAPM. Stability classes A, B and C refer to unstable atmospheric conditions. Class A conditions are associated with hot sunny days, with excellent dispersion due to substantial mixing of the air by vertical eddies. Classes B and C are also associated with good dispersion conditions. Together, these atmospheric conditions occur about 25 percent of the time in the vicinity of the STP.

Stability class D refers to neutral atmospheric conditions, which occur just over 40 percent of the time near the STP. Stability classes E and F refer to stable and very stable conditions respectively, for example due to a temperature inversion under which vertical mixing of the air is suppressed. These conditions are associated with poor emission dispersion and occur about 35 percent of the time near the STP.

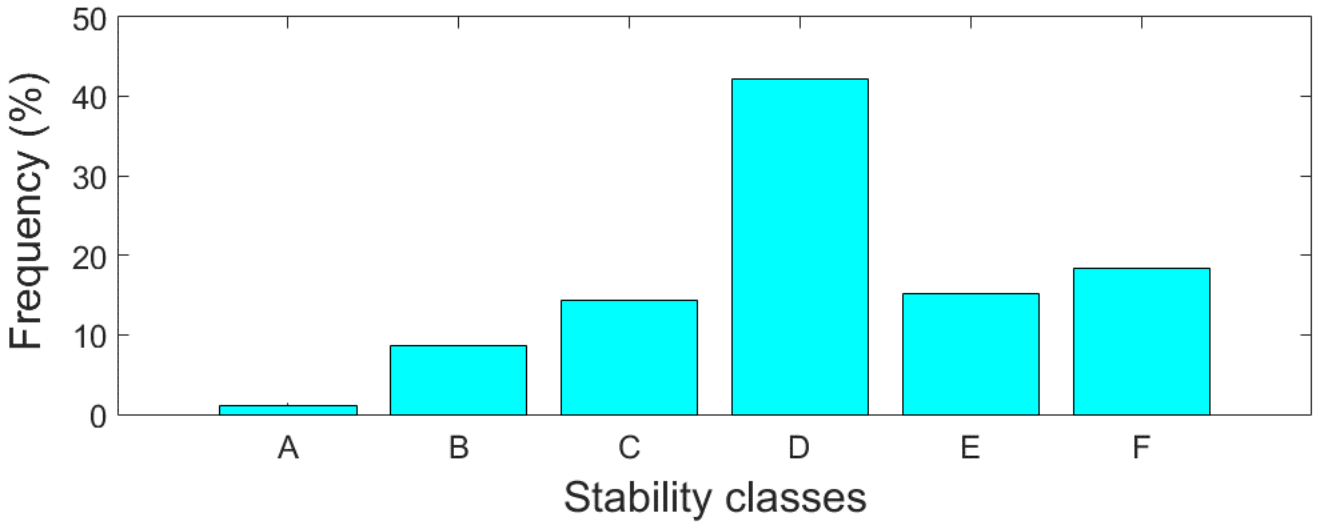


Figure 4. Frequency distribution of 2013 stability classes predicted at the STP by TAPM.

6. Odour emission rates and source representation

Aeration lagoon

The Assured Monitoring Group (AMG) was engaged to carry out odour sampling of the STP's lagoons. The aeration lagoon was the only source of detectable odour, mainly near the small inlet works located at the SW corner of the lagoon. The inflow to the STP was intermittent.

The aeration lagoon was sampled near the inlet works in the SW part of the lagoon; near the outflow to the first of the secondary lagoons in the NW part of the lagoon; and about halfway between these two points. As can be seen in Figure 5, conditions were calm, and the flux hood measurements were high quality.

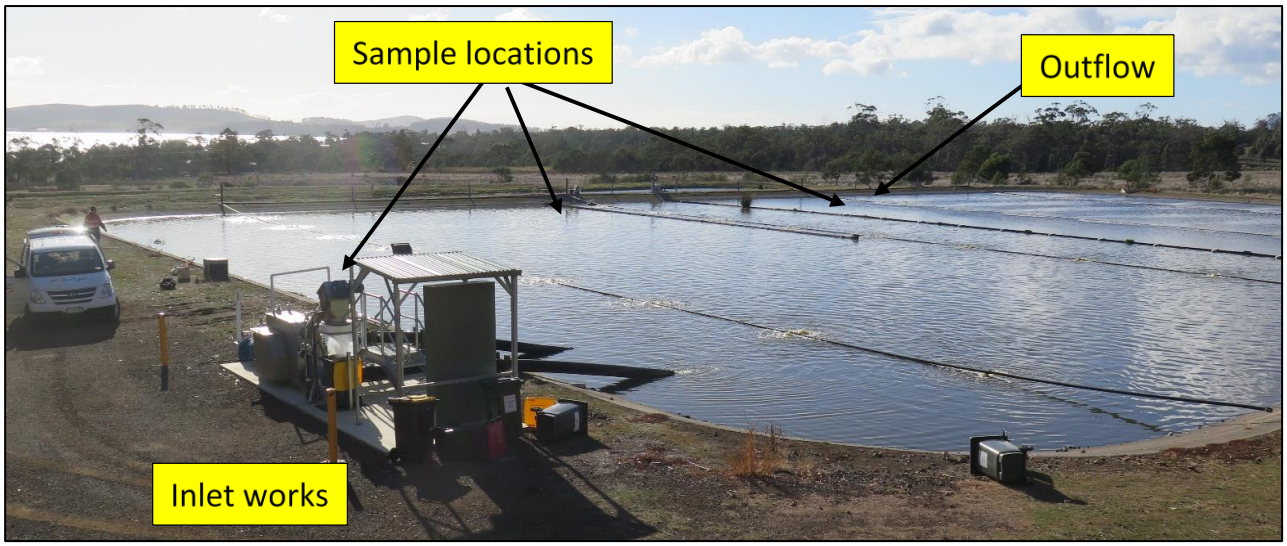


Figure 5. The STP's inlet works and aeration lagoon, showing odour sampling locations.

The measured specific odour emission rates (SOERs) were 0.42 OUV/s per m^2 near the inlet works, 0.20 OUV/s per m^2 near the lagoon outflow, and 0.37 OUV/s per m^2 halfway between these two locations.

These measured SOERs accord with expectations. The Honeywood STP near Brighton is similar to the Orford STP, and a 2012 study estimated SOERs of 0.32 OUV/s per m^2 for its aeration lagoon, using the Sydney Water Corporation's STP odour emission database, in consultation with the database specialist, Rod MacKenzie. To be conservative, this study assumes an SOER of 0.42 OUV/s per m^2 for the aeration lagoon.

Secondary lagoons

No odour was detectable around the three secondary lagoons. The SOERs for the secondary lagoons were not measured because it is conservative to assume all three lagoons have an SOER of 0.20 OUV/s per m^2, in other words the SOER of the aeration lagoon near its outflow. This SOER is conservative. An SOER of 0.12 OUV/s per m^2 was estimated for the secondary lagoons of the Honeywood STP, obtained from the Sydney Water Corporation's WWTP odour emission database, in consultation with the database specialist, Rod MacKenzie. And the SOER of the secondary ponds of the Macquarie Point STP was recently (2017) measured to be 0.16 OUV/s per m^2

Inlet works

The inlet works is only a minor source of odour compared to the total OER of the aeration lagoon. This study conservatively assumes an OER of 100 OUV/s, higher than the 5 OUV/s used by the Honeywood STP study.

Source representation

The inlet works can be modelled either as a small volume source or as a low-level point source with a small discharge. The distance of prediction interest is several hundred meters, so GLCs depend mainly on the OER of the source, not its geometry. This study models the inlet works as a low-level point source.

The lagoons are modelled as area sources, represented by rectangles aligned north-south and east-west. The Orford STP's lagoons are already close to this alignment and this study uses a single rectangular area to represent each lagoon.

Tables 2 and 3 give the source details.

Height (m)	**Diam (mm)**	**Speed (m/s)**	**Temp (°C)**
1	1,000	0.1	15
Easting (m)	**Northing (m)**	**OER (OUV/s)**	
572959	5286104	100	

Table 2. Inlet works representation.

	Easting (m)	**Northing (m)**	**Size**
Aeration lagoon	572967	5286069	96m x 60m
South secondary lagoon	573000	5286137	95m x 29m
Middle secondary lagoon	572014	5286179	94m x 31m
North secondary lagoon	573029	5286221	88m x 30m
	SOER (OUV/s/m^2)	**Area (m^2)**	**OER (OUV/s)**
Aeration lagoon	0.42	5,722	2,403
South secondary lagoon	0.20	2,718	544
Middle secondary lagoon	0.20	2,900	580
North secondary lagoon	0.20	2,623	525

Table 3. Lagoon representation. The eastings and northings are of the SW corner of the lagoon.

7. Odour GLC predictions

Odour GLCs were predicted across a grid with 31 east-west points x 31 north-south points, a grid spacing of 30m and the GDA 94 coordinates of the south-west corner of the grid were {572,690m E, 5,286,159m N}.

As noted, the *Tasmanian Environment Protection Policy (Air Quality) 2004* specifies that the maximum odour GLC predictions should be used to assess compliance with the design GLC of 2 OU (1 hour), unless good site-specific meteorology and odour emission rates are available, in which case the 99.5 percentile GLC predictions can be used to assess compliance. In this case, good input data are indeed available, but both sets of GLC predictions are presented for the sake of completeness.

Figure 6 presents the maximum odour GLC (1 hour) predictions, and Figure 7 presents the 99.5 percentile odour GLC (predictions.

The design GLC of 2 OU (1 hour) is met everywhere on and beyond the boundary of the STP, which is where ambient air quality standards apply. Considering the proposed subdivision, the highest predicted GLCs are naturally along its Rheban Road boundary, with the highest maximum GLCs predicted to be 0.13 OU (1 hour) and the highest 99.5 percentile GLCs predicted to be just under 0.1 OU (1 hour).

Some jurisdictions (e.g. South Australia and Victoria) set odour design GLCs that have a three (3) minute averaging period. Odour concentrations fluctuate over an hour, and a GLC of 1 OU (1 hour) approximately equates to a GLC of 2 OU (3 minutes). Applied to the Orford STP, the highest maximum GLCs for a 3-minute averaging period are therefore predicted to be about 0.26 OU (3 minutes). The importance of this calculation is that the highest predicted odour concentration on the Rheban Road boundary of the proposed subdivision is less than 1 OU over a very short averaging period (3 minutes). Since 1 OU is the threshold of odour detection by humans, the modelling exercise is predicting that odour from the Orford STP will never be detected by residents of the subdivision. Moreover, this conclusion is supported by a factor of safety of nearly four (4) since $1/0.26 \approx 4$.

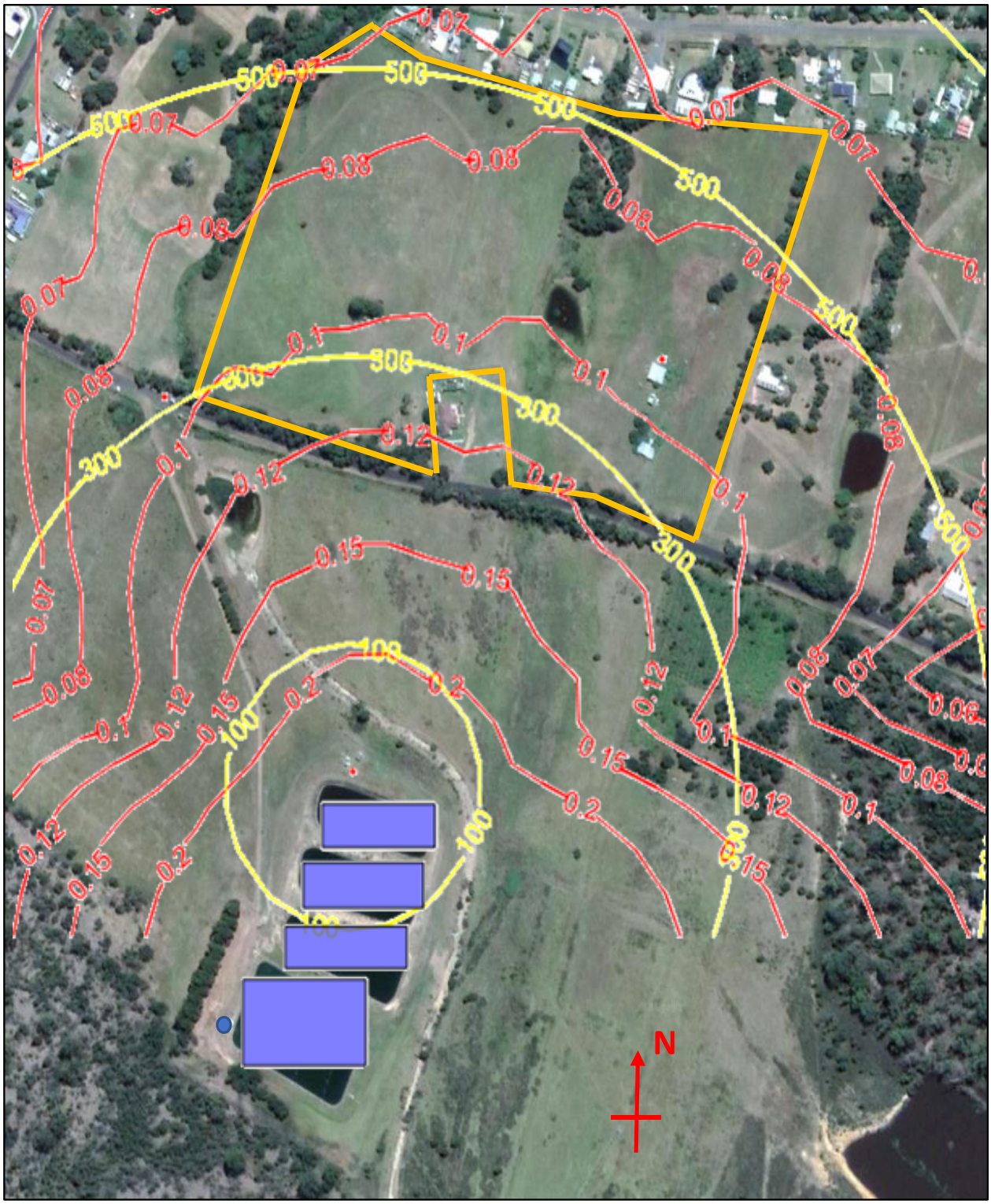


Figure 6. Maximum GLC (1 h) predictions (OU). Contours at {0.07, 0.08, 0.10, 0.12, 0.15, 0.2} OU. The yellow circles show distances (m) from the north side of the northern secondary lagoon.

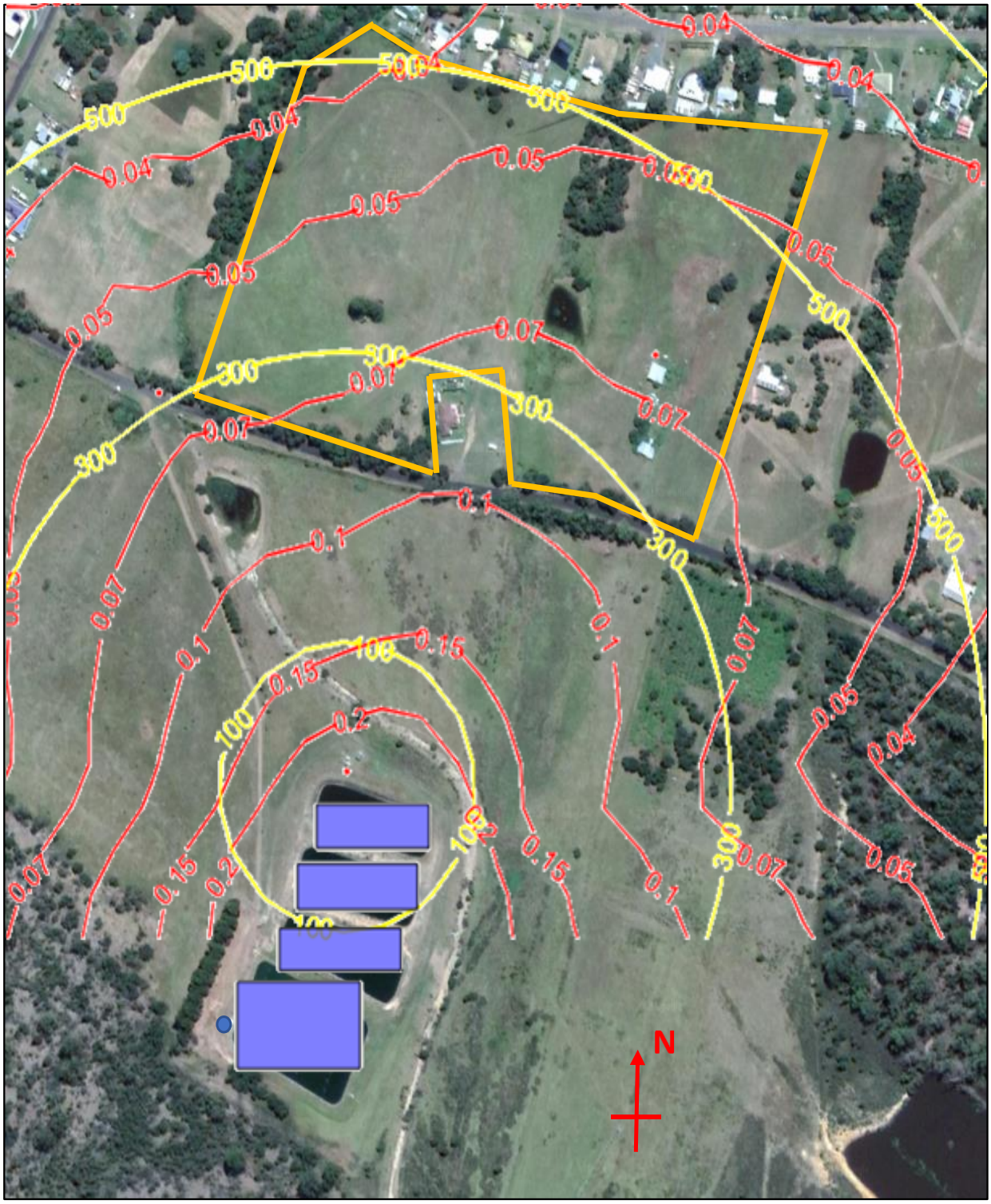


Figure 7. 99.5 percentile GLC (1 h) predictions (OU). Contours at {0.04, 0.05, 0.07, 0.10, 0.15, 0.2} OU. The yellow circles show distances (m) from the north side of the northern secondary lagoon.

8. Conclusions

The Orford STP has a current average daily flow of 179 kL/day and a design capacity of 473 kL/day. The Glamorgan Spring Bay interim planning scheme 2015 specifies an attenuation distance of 350m for an STP with a design capacity between 275 kL/day and 1,375 kL/day. Therefore, although the Orford STP triggers this clause, its design capacity is at the low end of the range and its current average daily low is only 40% of the low end of the range.

The attenuation distance is required to be measured from the nearest boundary of the nearest lagoon. In the direction of the proposed subdivision this point is the north side of the third secondary lagoon. None of the secondary lagoons have detectable odour and the north side of the aeration lagoon is 100m further from the proposed subdivision.

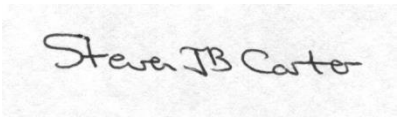
The odour impact assessment presented in this report follows the methodology expected by the *Tasmanian Environment Protection Policy (Air Quality) 2004*. Odour emission rates for the lagoons were obtained by flux hood measurements made under calm conditions, and these odour emission rates are both consistent and conservative when compared to those measured or estimated for similar STPs operated by TasWater.

The wind predictions are supportive of the location of the proposed subdivision. A southerly wind is required for odour from the STP to impact the proposed subdivision and the annual wind rose shows that a southerly wind is rare (due mainly to terrain blocking/channeling).

The maximum odour GLC predictions at the Rheban Road boundary of the proposed subdivision are well below the 2 OU (1 hour) design GLC. They are also well below an odour concentration of 1 OU (3 minutes), which means the model is predicting that odour from the STP will never be detected by residents of the subdivision. A factor of safety of four (4) applies to this statement.

This study has not considered upset conditions because there is little that can go wrong with the Orford STP and the STP does not accept trade waste.

Yours sincerely,



Dr Steve Carter, FIEAust, CPEng
Environmental Engineer

Addendum: Response to comments by TasWater

TasWater comments

Please provide additional reassurance as to the accuracy of the model, the following should be provided and discussed within the report:

- *Local BoM station wind roses and the comparison to the TAPM generated wind roses*
- *Discussion of any odour complaint information / correlation associated with the plant (TasWater can provide on request)*
- *Analysis of the maintenance condition (desludging) using increased SOERs (to values typical of sludge lagoons)*

Responses

1. Model accuracy.

TAPM has been applied on numerous studies of WWTPs operated by TasWater, so it is a model that TasWater is very familiar with. As mentioned in Section 4, TasWater is also familiar with the recent odour assessment of the Macquarie Point WWTP which was subject to extensive peer review and cross-checks. TasWater contact people are Nigel Vivian, David Graham and Mike Brewster. The cross-checks included running the Calmet and Calpuff models. The wind predictions of TAPM and Calmet were very similar, and in agreement with data from the Ellerslie Road weather station. The odour GLC predictions of TAPM and Calpuff were also found to be very similar.

For the Orford WWTP modelling exercise, there isn't a weather station on the innermost wind prediction grid that has hourly wind speed and direction data, so wind predictions can't be compared to weather station observations on this project. But in addition to the Macquarie Point WWTP project I have used TAPM on many projects where comparison with weather station data was possible and also several projects where comparison with field GLC measurements was possible. The EPA was closely involved in one of these projects, for Cement Australia at Railton. Agreement between measured and predicted wind and contaminant ground level concentrations was good, including at a location 2 km from the plant.

Simpler models such as Ausplume and Aermod would also provide reasonably accurate predictions for this situation, given the situation is very straightforward with no buildings or complex terrain. However, TAPM (or Calmet) needed to be used to produce the site-specific winds and once those winds were available it doesn't make sense to switch to a simpler model.

2. Odour complaints.

The Spring Bay Glamorgan Council (Ms Jill D., pers. Comm.) has advised that they have never received a complaint of odour nuisance from the Orford WWTP. This is not surprising. The WWTP has a very small odour footprint.

2. Desludging odour emissions.

The concern about possible elevated odour emissions from desludging is valid and odour impact assessments often do need to consider such upset conditions.

However, desludging of the Orford WWTP is an infrequent and short term operation. The odour emission rate (OER) will depend on the method TasWater uses to desludge the lagoon(s), but desludging is not necessarily associated with unduly high odour emissions. For example, desludging using an excavator with subsequent dewatering can produce elevated odour emissions compared to desludging using a vacuum tanker.

The odour GLC predictions presented in this report were based on conservative and credible OERs and the maximum GLCs at the road were predicted to be about 0.13 OU (1 hour) during normal WWTP operation. The design GLC is 2 OU (1 hour) so the OER from a desludging operation can be about 15 times higher than the OERs used for the modelling exercise before the maximum GLCs are comparable to the design GLC, an SOER of about 6 OU/m^2 per second. That's an extremely high odour emission rate, almost certainly higher than a desludging SOER.

The other factor that means pond desludging should not be an issue for this WWTP is that the wind hardly ever blows towards the location of the proposed sub-division, so it should be easy to schedule desludging for a day when the wind is favourable.

Submission to Planning Authority Notice

Council Planning Permit No.	SA 2017 / 00004	Council notice date	14/02/2017
TasWater details			
TasWater Reference No.	TWDA 2017/00199-GSB	Date of response	13/08/2018
TasWater Contact	Anthony Cengia	Phone No.	(03) 6237 8243
Response issued to			
Council name	GLAMORGAN/SPRING BAY COUNCIL		
Contact details	admin@freycinet.tas.gov.au		
Development details			
Address	RHEBAN RD, ORFORD	Property ID (PID)	2775205
Description of development	Rezoning from Rural Resource to General Residential & 91 Lot Subdivision		

Schedule of drawings/documents

Prepared by	Drawing/document No.	Revision No.	Date of Issue
Aldanmark Pty	15E96-10 Sheets Z01, Z06, Z07, Z08	C	24/07/2018
Aldanmark Pty	15E96-10 Sheets Z02, Z03, Z04, Z05	B	20/12/2017
Environmental Dynamics	Project ED5190 - ORFORD SEWAGE TREATMENT PLANT ODOUR ASSESSMENT		15 July 2018

Conditions

SUBMISSION TO PLANNING AUTHORITY NOTICE OF DRAFT AMENDMENT TO PLANNING SCHEME *AND* PLANNING APPLICATION REFERRALS

Pursuant to the *Water and Sewerage Industry Act* 2008 (TAS) Section 56P(1) TasWater makes the following submission(s):

TasWater does not object to the draft amendment to planning scheme and has no formal comments for the Tasmanian Planning Commission in relation to this matter and does not require to be notified of nor attend any subsequent hearings.

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

CONNECTIONS, METERING & BACKFLOW

1. A suitably sized water supply with metered connections / sewerage system and connections to each lot of the development must be designed and constructed to TasWater's satisfaction and be in accordance with any other conditions in this permit.
2. Any removal/supply and installation of water meters and/or the removal of redundant and/or installation of new and modified property service connections must be carried out by TasWater at the developer's cost.
3. Prior to commencing construction of the subdivision/use of the development, any water connection utilised for construction/the development must have a backflow prevention device and water meter installed, to the satisfaction of TasWater.

ASSET CREATION & INFRASTRUCTURE WORKS

4. Plans submitted with the application for Engineering Design Approval must, to the satisfaction of TasWater show, all existing, redundant and/or proposed property services and mains.

5. Prior to applying for a Permit to Construct new infrastructure the developer must obtain from TasWater Engineering Design Approval for new TasWater infrastructure. The application for Engineering Design Approval must include engineering design plans prepared by a suitably qualified person showing the hydraulic servicing requirements for water and sewerage to TasWater's satisfaction.

6. Prior to works commencing, a Permit to Construct must be applied for and issued by TasWater. All infrastructure works must be inspected by TasWater and be to TasWater's satisfaction.

7. In addition to any other conditions in this permit, all works must be constructed under the supervision of a suitably qualified person in accordance with TasWater's requirements.

8. The developer must design and construct an additional 13.65m3 of emergency storage to TasWater's satisfaction which is needed at TasWater's East Shelly Sewage Pumping Station (TasWater Location ID ORFSP01). The emergency storage must be designed and constructed to allow future augmentation to add additional emergency storage.

   Advice: In accordance with TasWater's 'Developer Charges Policy' for developments located within Serviced Land where insufficient capacity is available within an existing system, the developer pays the costs of Extension, including connection, to that system and Expansion of the system to the level of capacity required to service the development.

9. Prior to the issue of a Consent to Register a Legal Document all additions, extensions, alterations or upgrades to TasWater's water and sewerage infrastructure required to service the development are to be constructed at the expense of the developer to the satisfaction of TasWater, with live connections performed by TasWater.

10. After testing to TasWater's requirements, of newly created works, the developer must apply to TasWater for connection of these works to existing TasWater infrastructure, at the developer's cost.

11. At practical completion of the water and sewerage works and prior to TasWater issuing a Consent to a Register Legal Document the developer must obtain a Certificate of Practical Completion from TasWater for the works that will be transferred to TasWater. To obtain a Certificate of Practical Completion:

    a. Written confirmation from the supervising suitably qualified person certifying that the works have been constructed in accordance with the TasWater approved plans and specifications and that the appropriate level of workmanship has been achieved;

    b. A request for a joint on-site inspection with TasWater's authorised representative must be made;

    c. Security for the twelve (12) month defects liability period to the value of 10% of the works must be lodged with TasWater. This security must be in the form of a bank guarantee;

    d. As constructed drawings must be prepared by a suitably qualified person to TasWater's satisfaction and forwarded to TasWater.

12. After the Certificate of Practical Completion has been issued, a 12 month defects liability period applies to this infrastructure. During this period all defects must be rectified at the developer's cost and to the satisfaction of TasWater. A further 12 month defects liability period may be applied to defects after rectification. TasWater may, at its discretion, undertake rectification of any defects at the developer's cost. Upon completion, of the defects liability period the developer must request TasWater to issue a "Certificate of Final Acceptance". The newly constructed infrastructure will be

transferred to TasWater upon issue of this certificate and TasWater will release any security held for the defects liability period.

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

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

15. A construction management plan must be submitted with the application for TasWater Engineering Design Approval. The construction management plan must detail how the new TasWater infrastructure will be constructed while maintaining current levels of services provided by TasWater to the community. The construction plan must also include a risk assessment and contingency plans covering major risks to TasWater during any works. The construction plan must be to the satisfaction of TasWater prior to TasWater's Engineering Design Approval being issued.

FINAL PLANS, EASEMENTS & ENDORSEMENTS

16. Prior to the Sealing of the Final Plan of Survey, a Consent to Register a Legal Document must be obtained from TasWater as evidence of compliance with these conditions when application for sealing is made.
Advice: Council will refer the Final Plan of Survey to TasWater requesting Consent to Register a Legal Document be issued directly to them on behalf of the applicant.

17. Pipeline easements, to TasWater's satisfaction, must be created over any existing or proposed TasWater infrastructure and be in accordance with TasWater's standard pipeline easement conditions.

DEVELOPMENT ASSESSMENT FEES

18. The applicant or landowner as the case may be, must pay a development assessment and Consent to Register a Legal Document fee to TasWater, as approved by the Economic Regulator and the fees will be indexed, until the date they are paid to TasWater, as follows:

    a. $1,139.79 for development assessment; and

    b. $149.20 for Consent to Register a Legal Document

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

19. In the event Council approves a staging plan, a Consent to Register a Legal Document fee for each stage, must be paid commensurate with the number of Equivalent Tenements in each stage, as approved by Council.

Advice

General

For information on TasWater development standards, please visit
http://www.taswater.com.au/Development/Development-Standards

For application forms please visit http://www.taswater.com.au/Development/Forms

Declaration

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

Authorised by

Jason Taylor
Development Assessment Manager

TasWater Contact Details			
Phone	13 6992	Email	development@taswater.com.au
Mail	GPO Box 1393 Hobart TAS 7001	Web	www.taswater.com.au

Shane Wells

From: Aboriginal (Heritage) <aboriginal@heritage.tas.gov.au>
Sent: Thursday, 23 February 2017 4:37 PM
To: Jane Wing
Subject: Aboriginal Heritage Desktop Assessment - Residential Subdivision - Lot 2 and 135 Rheban Rd, Orford

RE: ABORIGINAL HERITAGE DESKTOP ASSESSMENT

AHTP3023 - Residential Subdivision - Rheban Rd, Orford

Dear Jane,

Aboriginal Heritage Tasmania (AHT) has completed a search of the Aboriginal Heritage Register (AHR) regarding the proposed residential subdivision at Lot 2 and 135 Rheban Road Orford, and can advise that there are no Aboriginal heritage sites recorded within or close to the property.

Accordingly there is no requirement for an Aboriginal heritage investigation and AHT have no objection to the project proceeding.

Please be aware that all Aboriginal heritage is protected under the *Aboriginal Relics Act 1975*. If at any time during works you suspect Aboriginal heritage, cease works immediately and contact AHT for advice. Attached is an Unanticipated Discovery Plan, which you should have on hand during ground disturbing works, to aid you in meeting your requirements under the Act.

If you have any queries please do not hesitate to contact AHT.

Kind Regards,

Claire Keating

B

29/9/2015
Ref: 150929 REPT 15E96-10

ALDANMARK Pty. Ltd.
CONSULTING ENGINEERS

Level 9 . 65 Murray St . Hobart . TAS 7000
GPO Box 1248 . Hobart . TAS 7001
t: (03) 6234 8666 f: (03) 6234 8988
e: mail@aldanmark.com.au

Mr David Metcalf
General Manager
Glamorgan Spring Bay Council
PO Box 6
Triabunna Tasmania 7190

Att: Winny Ennis

Dear Mr Metcalf,

SUBMISSION ON LAND USE ZONING – CT 149641/2 (LOT 2 RHEBAN ROAD, ORFORD, PID 2775205) – GLAMORGAN SPRING BAY INTERIM PLANNING SCHEME 2015

We act on behalf of the owner of CT 149641/2 Michael and Harriett Lawrence and note your invite to comment and make submission as appropriate on proposed land use zonings.

Please find below our submission on the interim planning scheme. Our submission is set out below, pertaining to the appropriate zoning of this land under the interim planning scheme being requested.

LOCATION OF SUBJECT LAND

Our client's land is identified in Figure 1 being situated north of Rheban Road, south of East Shelly Road and east of Jetty Road within the eastern arm of Orford settlement.

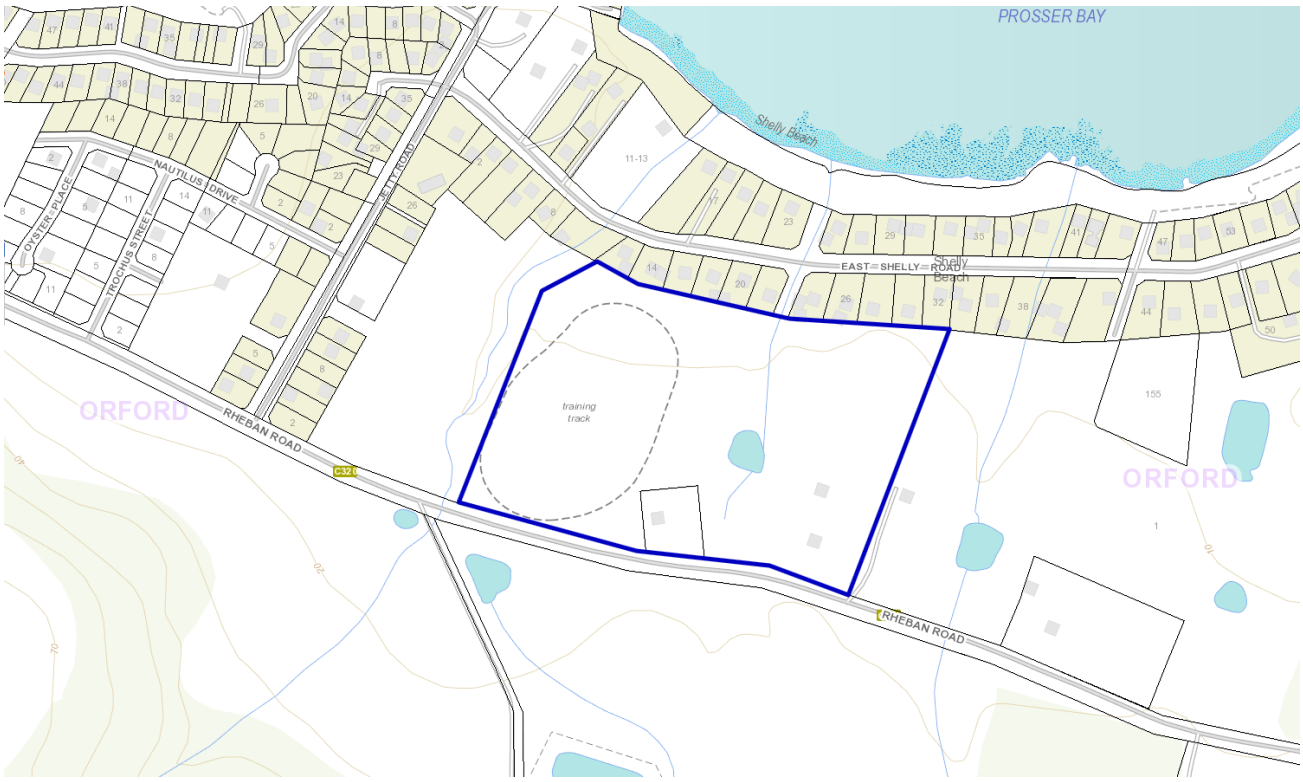


Figure 1 Site Location (source: TheLIST @ State of Tasmania)

PROPOSED ZONING – GLAMORGAN SPRING BAY INTERIM PLANNING SCHEME 2015

The proposed zoning of CT 149641/2 is Rural Resource. Two overlays apply concerning waterways and coastal inundation but both are generally limited in extent and are not considered significant limitations on this site

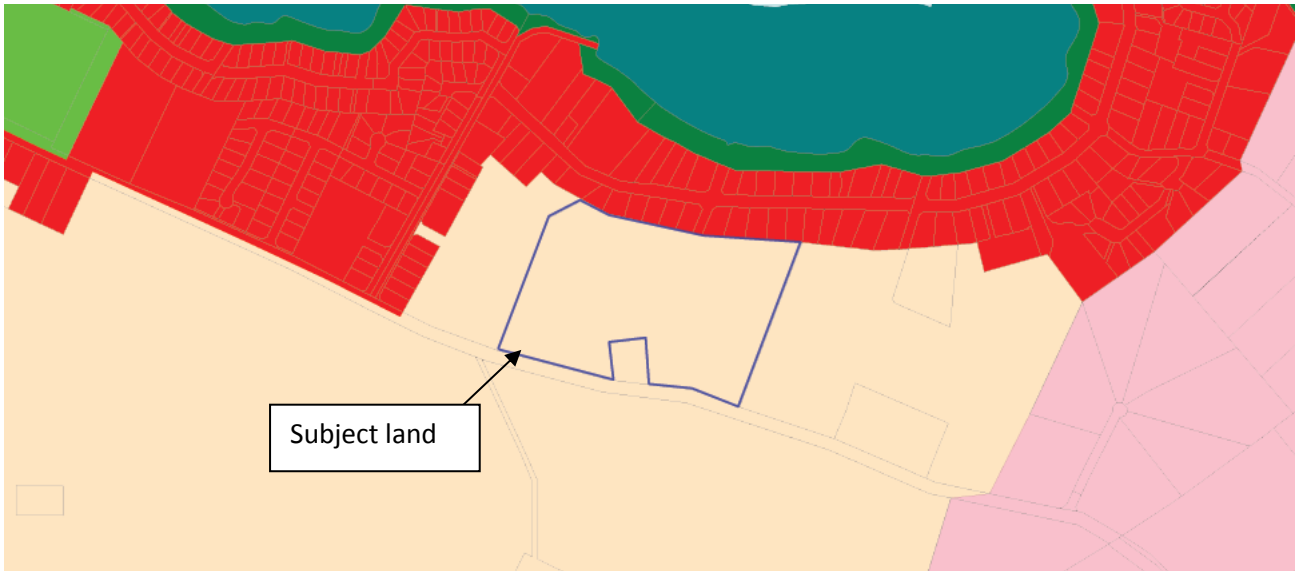


Figure 2 Proposed Zoning - Interim Planning Scheme (source: GSB Council)

Under the Glamorgan Spring Bay Planning Scheme 1984 the land was zoned Rural.

SERVICING ARRANGEMENTS

The land in question is adjoining reticulated sewer and water mains off East Shelly Road as per Figure 3. Drainage can be provided via an unnamed watercourse to the east running south to north to Shelly Beach.

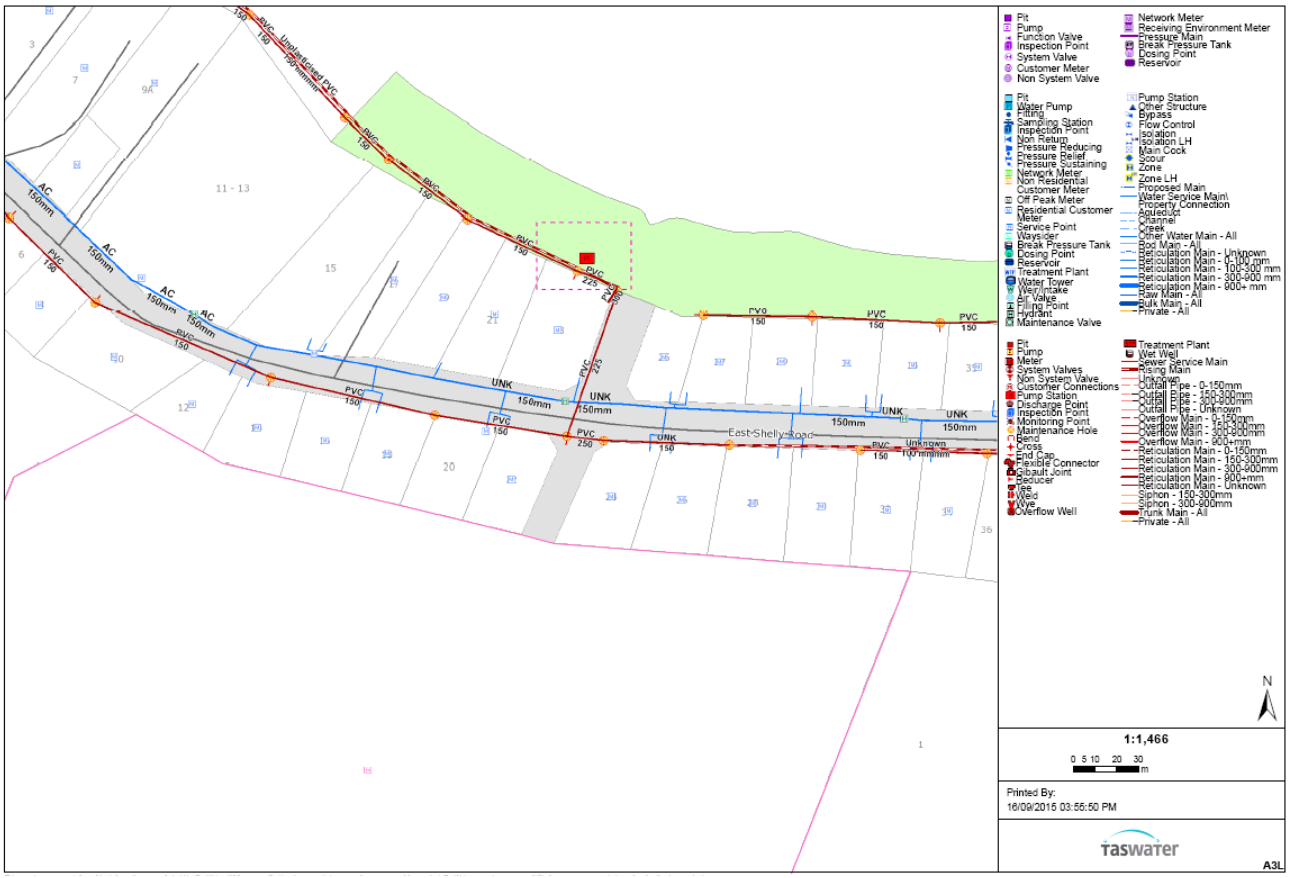


Figure 3 Proposed Zoning - Interim Planning Scheme (source: TASWATER)

USE PATTERNS AND TOPOGRAPHY

The site is used for low impacting grazing and has evidence of use for equestrian activities with a horse training track noted on the LISTmap. There is a slight fall to the north but essentially the land is flat and largely cleared. Essentially, the whole of the site is above 10m AHD, sitting the land above the lower lying land on East Shelly Road to the north.

Approximately 750m to the near west is the Orford Bowls Club and Sports Oval and 1.6km to the west is the Orford Primary School. Dominant use to the east, west and north on Rheban Road is residential activity.

A sewerage treatment plant sits a minimum 230m to the south but is generally 300m or greater distance from the majority of the subject land.

Figure 4 Use Arrangements (source: LIST @ State of Tasmania)

BASIS OF SUBMISSION

1. Consistency with Triabunna/Orford Structure Plan and over-arching strategy direction.
2. Logical inclusion in General Residential Zone – service reticulation.
3. Consistency with Southern Tasmanian Regional Land Use Strategy 2010-2035 (STRLUS).

Consistency with Triabunna/Orford Structure Plan and Overarching Strategy direction

Council issued an updated structure plan for Triabunna and Orford in April 2014. The Structure Plan sets out the issues, challenges and opportunities for Orford for the next few decades and gives specific direction – well beyond the broad directions of the Southern Tasmanian Regional Land Use Strategy 2010-2035 (STRLUS). It also embodies and expands further on the directions contained in Vision East 2030.

In terms of land supply across Triabunna, Orford and Spring Beach there was an identified capacity for 524 to 744 new dwellings within the existing settlement. However at a more local level the supply is calculated at 129 dwellings for Orford. The ratio of unoccupied to occupied dwellings is much higher in Orford than Triabunna reflecting seasonal holiday usage in Orford by many households. A demand for something in the order of 17 dwellings per year has been calculated for Orford and Triabunna of which the majority (75%) were in Orford. Escalation of takeup is evident in Orford in 2012/13 with 16 dwellings approved in Orford alone.

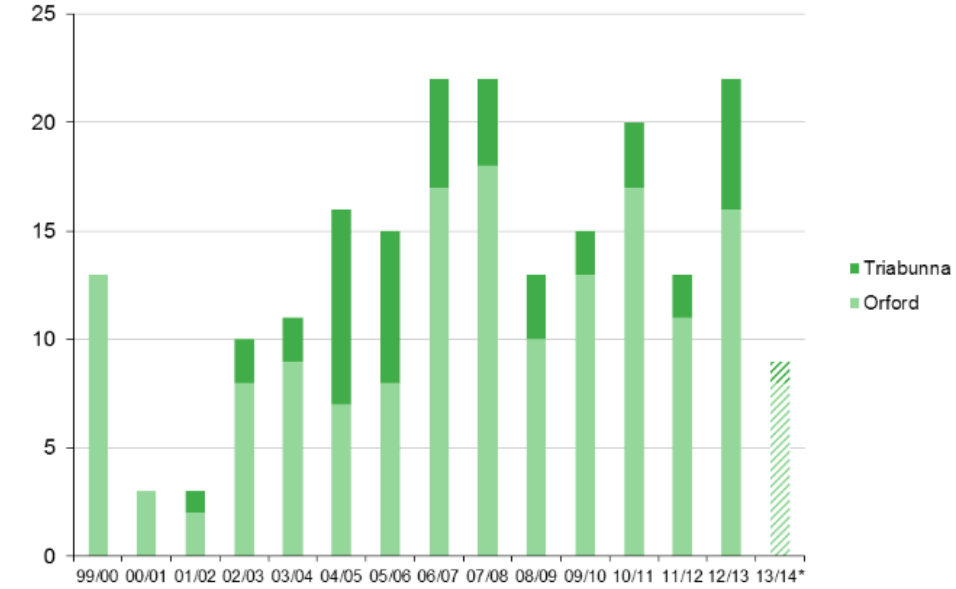


Figure 5 Dwelling Approvals in Orford & Triabunna 1999-2012/13 completed years (source: GSBC, 2014)

If such a trend were to continue this would suggest a 7-8 year housing supply exists in Orford. Ongoing monitoring of demand is logical and appropriate. But equally identifying future land supply to enable a 10-15 year supply is also advisable given the timeframe it takes to zone, obtain permits and release land to market (2-4 years typically).

That would, in turn suggest more detailed consideration of logical inclusions in the Shelly Beach precinct to meet the 'latent demand', especially for holiday homes. As the Structure Plan sensibly points out, this would comprise land north of Rheban Road and infills the land behind the existing linear settlement on Shelly Beach (see Figure 6).

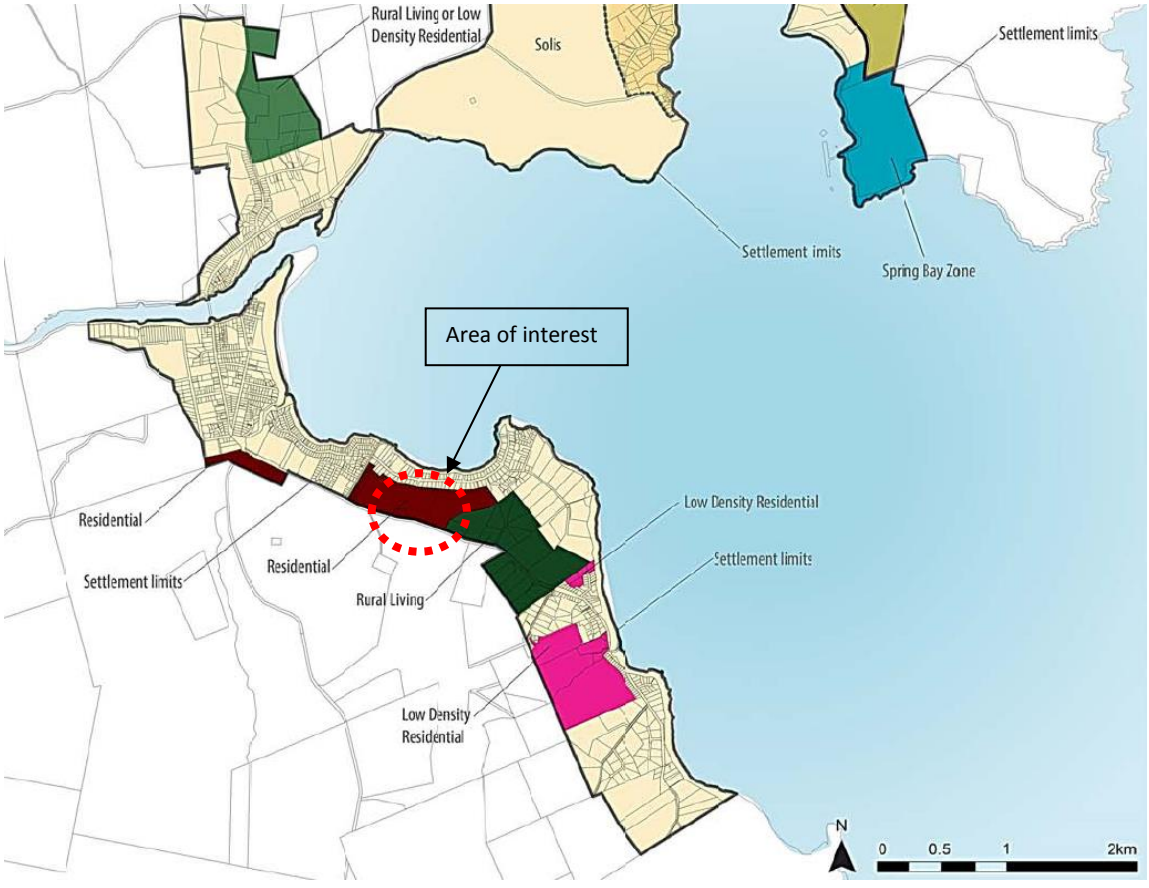


Figure 6 Suggested Zoning Arrangements - Orford (source: GSB Council, 2014)

Logical inclusion in General Residential Zone – service reticulation

Zoning the subject land for residential purposes is entirely consistent with the General Residential Zone objectives as set out below:

10.1.1 Zone Purpose Statements

10.1.1.1 To provide for residential use or development that accommodates a range of dwelling types at suburban densities, where full infrastructure services are available or can be provided.
Comment: Achievable.

10.1.1.2 To provide for compatible non-residential uses that primarily serve the local community.
Comment: Can be regulated under planning scheme.

10.1.1.3 To provide for the efficient utilisation of services. **Comment:** Site has infrastructure fronting development allowing for serviceability. Logical infill site.

We would argue that it is inconsistent given the level of servicing and surrounding land use context that the land should be zoned Rural Resource.

Consistency with STRLUS and Strategic Planning Directions

The sequence of strategic planning frameworks and directions relevant to Orford are summarised as follows:

- **Vision East 2030** – a land use framework for the east coast Councils from Sorell to Break O' Day. Identifies Orford as a village with medium growth potential. Given a village typically has a population, as defined in Vision East, of 200-500 and the ABS population of Orford at 2011 was over 500 it may in fact be closer to the size of a small township (there are 734 dwellings in Orford alone). The logical zoning inclusion as suggested in this submission is not inconsistent with Vision East, noting that holiday housing demand driven by proximity to Greater Hobart is strong and likely to remain so given convenience to the metropolitan population.

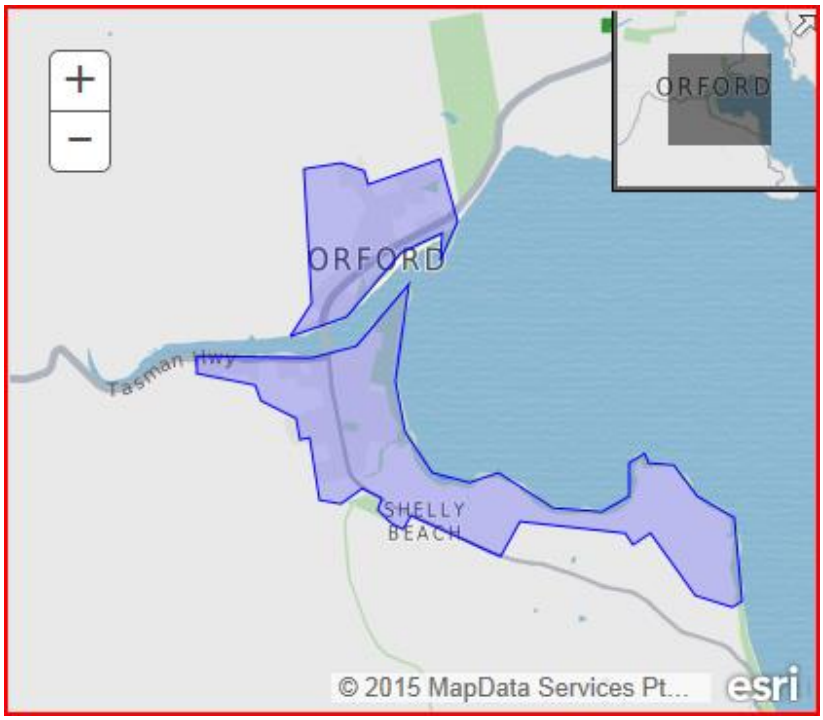


Figure 7 Orford as defined by ABS boundaries in 2011 (source: ABS 2015)

- **Background Report 1** STRLUS: The Project Background for the Southern Tasmania Regional Land Use Framework (April 2010) notes that Vision East will be subsumed into the STRLUS and the controls and strategic direction will remain largely the same as in Vision East.
- **STRLUS** - issued in October 2011. It shows a hierarchy of strategic directions from the objectives in Schedule 1 of the Land Use Planning and Approvals Act 1993 through to Structure Plans and site

development plans at the local level. On page 27 it requires consolidation of residential development and avoiding ribbon development. Orford is classified as a township but with a low growth scenario being applied. Low growth is defined as <10% growth in dwellings. Zoning the subject land for residential purposes is not ribbon development ie it is behind existing coastal housing areas.

In terms of STRLUS if the total number of dwellings was 734 in Orford in 2011 (source: ABS Code UCL621015 (UCL)) and noting growth rates it would be best part of 800 dwellings now in 2015. A 10% growth rate would involve 80 more dwellings being provided in total. That could be likely accommodated within Orford without further residential rezoning occurring. However, noting that permanent residential housing is only one component of housing demand and that holiday homes plays a significant role in Orford 80 dwellings works out at around 20-30 permanent residences for the next 15-20 years or only 1 per year.[1] Given that even in a low growth scenario, a goal of providing very limited opportunities for housing may be appropriate from a permanent residence perspective (low demand) but would be ineffective from a regional perspective where Orford is a well-established holiday home destination. Both, together, constitute overall housing demand.

It is not unreasonable therefore to cater for both permanent residents and holiday home owners (who may ultimately convert their home to permanent residences) and provide for both in existing established areas and those areas identified by local structure plans.

OVERVIEW AND CONCLUSION

We note that our client's land is zoned for rural purposes under the Glamorgan Spring Bay Interim Planning Scheme 2015. In this context it also is similar to the zoning under the previous planning scheme.

It is however likely that the land in question is a logical inclusion in the **General Residential Zone** for the following reasons:

- The Triabunna/Orford Structure Plan (2014) supports infill development of this site.
- There is evidence that there is demand for housing, especially holiday homes in Orford which will be difficult to meet if logical infill sites are not provided over the next 10-15 years.
- There is a noted demand for housing in Orford in the Shelly Beach area.
- The land has TasWater sewer and water infrastructure along East Shelly Road and is a logical infill in that it results in land being used for housing, consistent with that occurring on three sides presently.
- A low to moderate growth scenario in Orford would justify rezoning under STRLUS and Vision East in the shorter term. Orford is a township, not a village and any development of this land would have the benefit of enabling Council to reduce development pressure in more sensitive areas nearer the coast in the Orford area.

We look forward to further consideration of this matter by Council and the Tasmanian Planning Commission. An indication of the relevant issues, if any, attached to the rezoning of this land would be desirable as well as a timeline for when some certainty can be provided that the residential use of the site can proceed.

Yours sincerely,

Morgan McGuire AMIEAust
Senior Civil Engineering Technician
Aldanmark Pty Ltd Consulting Engineers

[1] Based on holiday homes to permanent residences being around 2.5:1 ratio, entirely different to the Triabunna scenario – see Triabunna/Orford Structure Plan (2014).

References

Break O'Day, Glamorgan Spring Day, Tasman and Sorell Councils (2009): Vision East 2030, the East Coast Land Use Framework, unpublished.

Glamorgan Spring Bay Interim Planning Scheme 2015, accessed from http://www.gsbc.tas.gov.au/page.aspx, 21 September 2015.

Southern Tasmanian Councils Authority & State of Tasmania (2010): Background Report No.1: The Project Background, Final Report, Southern Tasmanian Regional Land Use Framework.

Southern Tasmanian Councils Authority (2011): Southern Tasmanian Regional Land Use Strategy 2010-2035 unpublished.

Urbis (2014): Triabunna/Orford Structure Plan, Final Report updated April 2014, downloaded from Glamorgan Spring Bay accessed from http://www.gsbc.tas.gov.au/page.aspx, 21 September 2015.