



DEVELOPMENT APPLICATION

PDPLANPMTD-2023/040637

PROPOSAL: Service Station, Takeaway Restaurant & Signage

LOCATION: 259 Kennedy Drive, Cambridge (with access over 263 Kennedy Drive, Cambridge)

RELEVANT PLANNING SCHEME: Tasmanian Planning Scheme - Clarence

ADVERTISING EXPIRY DATE: 21 March 2024

The relevant plans and documents can be inspected at the Council offices, 38 Bligh Street, Rosny Park, during normal office hours until 21 March 2024. In addition to legislative requirements, plans and documents can also be viewed at www.ccc.tas.gov.au during these times.

Any person may make representations about the application to the Chief Executive Officer, by writing to PO Box 96, Rosny Park, 7018 or by electronic mail to clarence@ccc.tas.gov.au. Representations must be received by Council on or before 21 March 2024.

To enable Council to contact you if necessary, would you please also include a day time contact number in any correspondence you may forward.

Any personal information submitted is covered by Council's privacy policy, available at www.ccc.tas.gov.au or at the Council offices.



Clarence... a brighter place

Clarence City Council

APPLICATION FOR DEVELOPMENT / USE OR SUBDIVISION

The personal information on this form is required by Council for the development of land under the Land Use Planning and Approvals Act 1993. We will only use your personal information for this and other related purposes. If this information is not provided, we may not be able to deal with this matter. You may access and/or amend your personal information at any time. How we use this information is explained in our **Privacy Policy**, which is available at www.ccc.tas.gov.au or at Council offices.

Proposal:

Vehicle Fuel Sales (24 hour) and Food Services

Location:

Address..... 259 Kennedy Drive

Suburb/Town Cambridge TAS Postcode 7170

Current Owners/s:

Applicant:

Personal Information Removed

Tax Invoice for application fees to be in the name of: (if different from applicant)

Estimated cost of development

\$ 2.0m

Is the property on the Tasmanian Heritage Register?

Yes

No

(if yes, we recommend you discuss your proposal with Heritage Tasmania prior to lodgement as exemptions may apply which may save you time on your proposal)

If you had pre-application discussions with a Council Officer, please give their name

Current Use of Site: Vacant

Does the proposal involve land administered or owned by the Crown or Council?

Yes

No


Declaration:

- *I have read the Certificate of Title and Schedule of Easements for the land and am satisfied that this application is not prevented by any restrictions, easements or covenants.*
- *I authorise the provision of a copy of any documents relating to this application to any person for the purposes of assessment or public consultation. I agree to arrange for the permission of the copyright owner of any part of this application to be obtained. I have arranged permission for Council's representatives to enter the land to assess this application*
- *I declare that, in accordance with Section 52 of the Land Use Planning and Approvals Act 1993, that I have notified the owner of the intention to make this application. Where the subject property is owned or controlled by Council or the Crown, their signed consent is attached. Where the application is submitted under Section 43A, the owner's consent is attached.*
- *I declare that the information in this declaration is true and correct.*

Acknowledgement:

- *I acknowledge that the documentation submitted in support of my application will become a public record held by Council and may be reproduced by Council in both electronic and hard copy format in order to facilitate the assessment process; for display purposes during public consultation; and to fulfil its statutory obligations. I further acknowledge that following determination of my application, Council will store documentation relating to my application in electronic format only.*

Applicant's Signature:

Signature  Date 28/11/2023

PLEASE REFER TO THE DEVELOPMENT/USE AND SUBDIVISION CHECKLIST ON THE FOLLOWING PAGES TO DETERMINE WHAT DOCUMENTATION MUST BE SUBMITTED WITH YOUR APPLICATION.

Documentation required:

1. **MANDATORY DOCUMENTATION**

This information is required for the application to be valid. An application lodged without these items is unable to proceed.

- Details of the location of the proposed use or development.
- A copy of the current Certificate of Title, Sealed Plan, Plan or Diagram and Schedule of Easements and other restrictions for each parcel of land on which the use or development is proposed.
- Full description of the proposed use or development.
- Description of the proposed operation.
May include where appropriate: staff/student/customer numbers; operating hours; truck movements; and loading/unloading requirements; waste generation and disposal; equipment used; pollution, including noise, fumes, smoke or vibration and mitigation/management measures.
- Declaration the owner has been notified if the applicant is not the owner.
- Crown or Council consent (if publically-owned land).
- Any reports, plans or other information required by the relevant zone or code.
- Fees prescribed by the Council.

Application fees (please phone 03 6217 9550 to determine what fees apply). An invoice will be emailed upon lodgement.

2. **ADDITIONAL DOCUMENTATION**

In addition to the mandatory information required above, Council may, to enable it to consider an application, request further information it considers necessary to ensure that the proposed use or development will comply with any relevant standards and purpose statements in the zone, codes or specific area plan, applicable to the use or development.

- Site analysis plan and site plan**, including where relevant:
 - *Existing and proposed use(s) on site.*
 - *Boundaries and dimensions of the site.*
 - *Topography, including contours showing AHD levels and major site features.*
 - *Natural drainage lines, watercourses and wetlands on or adjacent to the site.*
 - *Soil type.*
 - *Vegetation types and distribution, and trees and vegetation to be removed.*
 - *Location and capacity of any existing services or easements on/to the site.*
 - *Existing pedestrian and vehicle access to the site.*
 - *Location of existing and proposed buildings on the site.*
 - *Location of existing adjoining properties, adjacent buildings and their uses.*
 - *Any natural hazards that may affect use or development on the site.*
 - *Proposed roads, driveways, car parking areas and footpaths within the site.*
 - *Any proposed open space, communal space, or facilities on the site.*
 - *Main utility service connection points and easements.*
 - *Proposed subdivision lot boundaries.*

- Where it is proposed to erect buildings, **detailed plans** with dimensions at a scale of 1:100 or 1:200 showing:
 - *Internal layout of each building on the site.*
 - *Private open space for each dwelling.*
 - *External storage spaces.*
 - *Car parking space location and layout.*
 - *Major elevations of every building to be erected.*
 - *Shadow diagrams of the proposed buildings and adjacent structures demonstrating the extent of shading of adjacent private open spaces and external windows of buildings on adjacent sites.*
 - *Relationship of the elevations to natural ground level, showing any proposed cut or fill.*
 - *Materials and colours to be used on rooves and external walls.*
- Where it is proposed to erect buildings, a plan of the proposed **landscaping** showing:
 - *Planting concepts.*
 - *Paving materials and drainage treatments and lighting for vehicle areas and footpaths.*
 - *Plantings proposed for screening from adjacent sites or public places.*
- Any additional reports, plans or other information required by the relevant zone or code.

This list is not comprehensive for all possible situations. If you require further information about what may be required as part of your application documentation, please contact Council's Planning Officers on (03) 6217 9550 who will be pleased to assist.

SEARCH OF TORRENS TITLE

VOLUME 138536	FOLIO 20
EDITION 7	DATE OF ISSUE 05-Jun-2023

SEARCH DATE : 13-Feb-2024

SEARCH TIME : 02.10 PM

DESCRIPTION OF LAND

City of CLARENCE

Lot 20 on Sealed Plan 138536

Derivation : Part of 1,654 Acres Gtd. to R.Pitcairn & Anr.

Prior CT 137963/1

SCHEDULE 1

N127879 TRANSFER to BUMBLEBEE CAPITAL PTY LTD Registered
05-Jun-2023 at 12.01 PM

SCHEDULE 2

Reservations and conditions in the Crown Grant if any

SP 138536 EASEMENTS in Schedule of Easements

SP 138536 COVENANTS in Schedule of Easements

SP 138536 FENCING COVENANT in Schedule of Easements

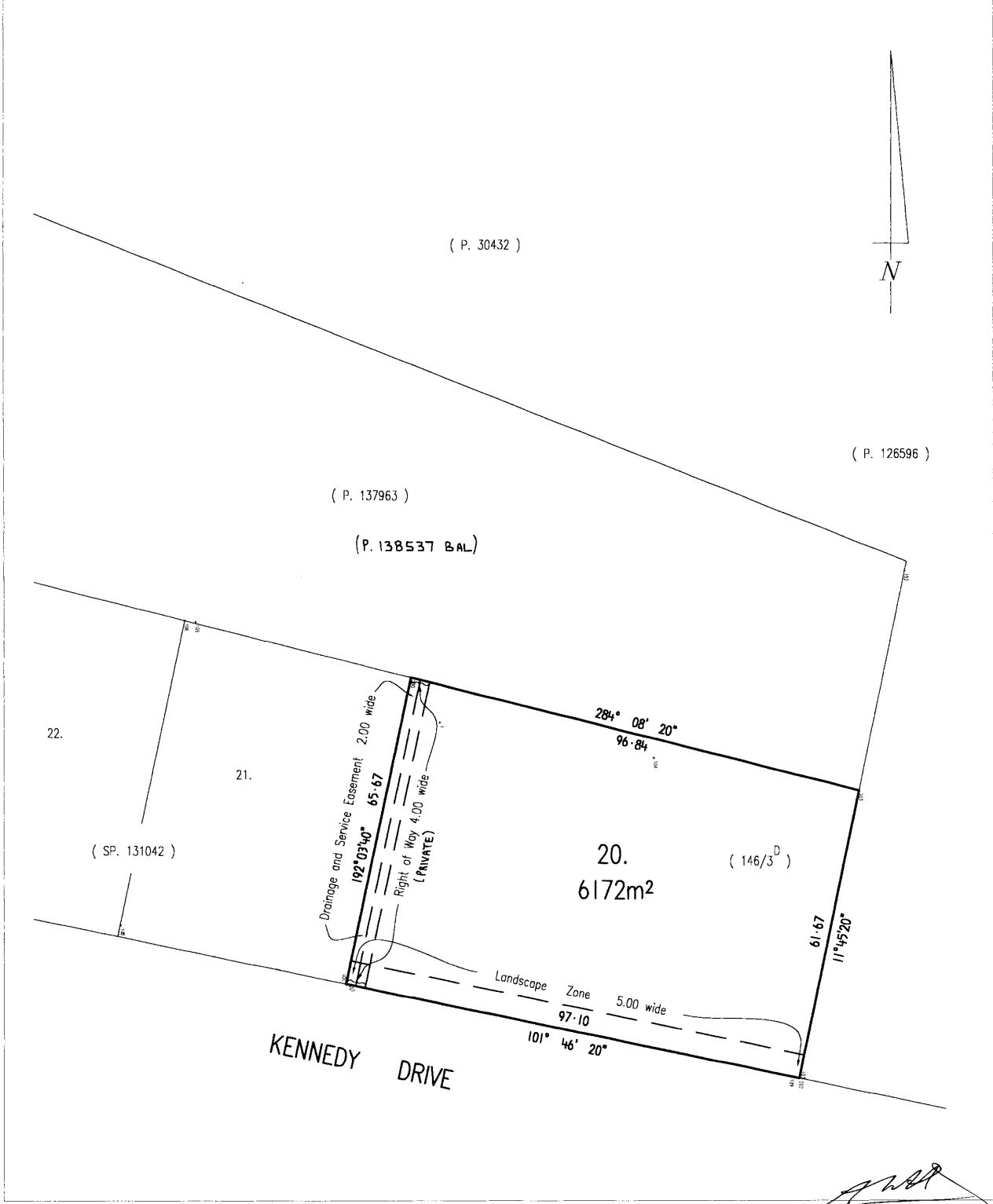
B653478 INSTRUMENT Creating Restrictive Covenants Registered
28-Jun-1993 at 12.01 PM

N128462 MORTGAGE to Australia and New Zealand Banking Group
Limited Registered 05-Jun-2023 at 12.02 PM

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

<p>OWNER Aerotechnology Pty. Ltd.</p> <p>FOLIO REFERENCE 137963-1</p> <p>GRANTEE Part of 1654 acres granted to Robert Pitcairn and Thomas Young</p>	<p>PLAN OF SURVEY</p> <p>BY SURVEYOR J.B.MEDBURY J.B.MEDBURY P/L SURVEYORS OF 224 CAMPBELL STREET, HOBART</p> <p>LOCATION CITY OF CLARENCE</p> <p>SCALE 1: 750 LENGTHS IN METRES</p>	<p>REGISTERED NUMBER SP138536</p> <p>APPROVED EFFECTIVE FROM 20 NOV 2002</p> <p><i>Alice Kawa</i> Recorder of Titles</p>	
<p>MAPSHEET MUNICIPAL CODE No. 107 (5225-25)</p>	<p>LAST UPI No. GHV 75</p>	<p>LAST PLAN No. D.137963</p>	<p>ALL EXISTING SURVEY NUMBERS TO BE CROSS REFERENCED ON THIS PLAN</p>



[Signature]
CORPORATE SECRETARY
CLARENCE CITY COUNCIL

SCHEDULE OF EASEMENTS	Registered Number
NOTE: THE SCHEDULE MUST BE SIGNED BY THE OWNERS & MORTGAGEES OF THE LAND AFFECTED. SIGNATURES MUST BE ATTESTED.	SP 138536

PAGE 1 OF 4 PAGE/S
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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.

~~Lot 20 on the Plan is subject to a landscape easement (appurtenant to the Balance) over the land marked "Landscape Zone 5.00 wide" on the Plan.~~

Lot 20 on the Plan is subject to a right of drainage and service easement for the Council for sewerage reticulation, water supply and electricity supply to the Council's sewerage pump located within the Balance land over the land marked "Drainage and Service Easement 2.00 wide" on the Plan.

Lot 20 on the Plan is subject to a right of carriageway 4.00 wide (appurtenant to the Balance and for the Council) over the land marked "Right of Way 4.00 wide" on the Plan.

Lot 20 on the plan is together with a right of drainage over Lots 21 to 23 and 28 on SP131042, Lots 25 and 26 on SP137962, Lot 27 on SP 135339, Lot 29 on SP134112 and Lot 1 on SP 137290 over the land marked "Landscape Zone and Drainage Easement 5.00 wide" passing through such Lots.

NOISE EASEMENT

Lot 20 shown on the Plan is SUBJECT TO the right (appurtenant to folio of the register volume 112358 folio 1 hereinafter called "the Dominant Land") of transmitting into and across the said Lot such noise and vibration as might arise from the proper use and operation by the occupier from time to time of the Dominant Land of a Schedule Airport under section 3(1) of the Federal Airports Corporation Act 1986 on the Dominant Land.


COVENANTS

The Owner of the Lot shown on the Plan covenants with the Vendor Aerotechnology Pty Ltd and the owner or owners of the Balance to the intent that the burden of this covenant may run with and bind the

Signed by Aerotechnology Pty Ltd: 

Signed by Commonwealth Bank: 

(USE ANNEXURE PAGES FOR CONTINUATION)

SUBDIVIDER: Aerotechnology Pty Ltd FOLIO REF: 137963/1 SOLICITOR & REFERENCE: Toomey Maning & Co (Curtis Browne)	PLAN SEALED BY: Clarence City Council DATE: 30-10-2009 SD 96/0407 REF NO.  Council Delegate
NOTE: The Council Delegate must sign the Certificate for the purposes of	

**CORPORATE SECRETARY
CLARENCE CITY COUNCIL**

<p>ANNEXURE TO SCHEDULE OF EASEMENTS</p> <p>PAGE 2 OF 4 PAGES 4</p>	<p>Registered Number</p> <p>SP 138536</p>
<p>SUBDIVIDER: Aerotechnology Pty Ltd FOLIO REFERENCE: 137963/1</p>	

covenantor's lots and every part thereof and that the benefit of this covenant shall be annexed to and devolve with each and every part of the Balance:

1. Not to conduct any business on the Lot which:
 - 1.1 is not compatible with airport operations; and
 - 1.2 involves a process or processes or generates waste which is conducted in such a way as to attract birds, insects, vermin or wildlife.
2. Not to erect any building on the Lot without a Planning Permit from Council.
3. Not to allow any development on the Lot which is in contravention of Council's approved Development Control Plan for the site known as Cambridge Airport, without the prior written consent of Council.
4. Not to develop any part of the Lot within the area marked on the Plan as "Landscape Zone 5.00 wide" other than by way of driveway and services access and landscaping.
5. Not to erect any building on the Lot the external materials of which are unpainted metal.
6. Not to do anything on the Lot including the erection of any building or structure which contravenes any statute or regulation in force at the time controlling building or other activities on or near an airport or aerodome.

"Balance" means the land comprised in folio of the register volume 137963 folio 1 excepting the Lot shown in the Plan.

"Council" means the Clarence City Council.

FENCING COVENANT

In respect of each Lot on the Plan, the Vendor Aerotechnology Pty Ltd shall not be required to fence.

Signed by Aerotechnology Pty Ltd:

.....

.....

Signed by Commonwealth Bank:

.....

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.

ANNEXURE TO SCHEDULE OF EASEMENTS PAGE 3 OF 3 PAGES <i>4</i>	Registered Number SP 138536
SUBDIVIDER: Aerotechnology Pty Ltd FOLIO REFERENCE: 137963/1	

THE COMMON SEAL of **AEROTECHNOLOGY**)
PTY LTD (ACN 009 510 847) as registered)
 proprietor of the land comprised in Certificate of)
 Title Volume 137291 Folio 1 was hereunto affixed)
 in the presence of:)

Common Seal



.....
 Director

.....
 Director/Secretary

SIGNED SEALED & DELIVERED on behalf of)
COMMONWEALTH BANK OF AUSTRALIA)
 by its duly constituted Attorney ... *SCOTT DATHIAN*)
 *JAMES* under Power of Attorney)
 No. *7216177* who hereby certifies that)
 he has received no notice of revocation of the said)
 Power and in the presence of: *SMH*)
 < *SIMONA HILL*)
 Full name (witness signature & full name)

x *8*

x *BANK OFFICER*
 Occupation

x *41/6, 385 BOURKE STREET, MELBOURNE VIC 3000,*
 Address

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.

<p>ANNEXURE TO SCHEDULE OF EASEMENTS</p> <p>PAGE 4 OF 4 PAGE/S</p>	<p>Registered Number</p> <p>SP 138536</p>
<p>SUBDIVIDER.: AEROTECHNOLOGY PTY. LTD.</p> <p>FOLIO REFERENCE: 137963/1</p>	

INTERPRETATION:

Service Easement means the full free right of the Council to lay, use and maintain forever water mains, pipes, drains, mains, channels, gutters, sewers, wires, cables and other conducting media of such size and number as shall from time to time be required on the land shown on the plan marked "Drainage and Service Easement 2.00 wide" and the right for their surveyors and workmen from time to time and at all times hereafter to enter into and upon the said land or any part thereof bringing upon the said Service Easement such material, machinery, and other things as it shall think fit and proper to inspect the condition thereof and to repair, amend and cleanse PROVIDED HOWEVER that any damage occasioned thereby shall be made good.

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SEARCH OF TORRENS TITLE

VOLUME 131042	FOLIO 21
EDITION 7	DATE OF ISSUE 16-Feb-2023

SEARCH DATE : 08-Mar-2023

SEARCH TIME : 11.59 AM

DESCRIPTION OF LAND

City of CLARENCE

Lot 21 on Sealed Plan 131042

Derivation : PART OF 1,654 ACRES GTD.TO R.PITCAIRN & Anr.

Prior CT 106304/1

SCHEDULE 1

N109938 TRANSFER to BENNETTS PETROLEUM SUPPLIES PTY LTD

Registered 16-Feb-2023 at 12.02 PM

SCHEDULE 2

Reservations and conditions in the Crown Grant if any

SP 131042 EASEMENTS in Schedule of Easements

SP 131042 COVENANTS in Schedule of Easements

SP 131042 FENCING COVENANT in Schedule of Easements

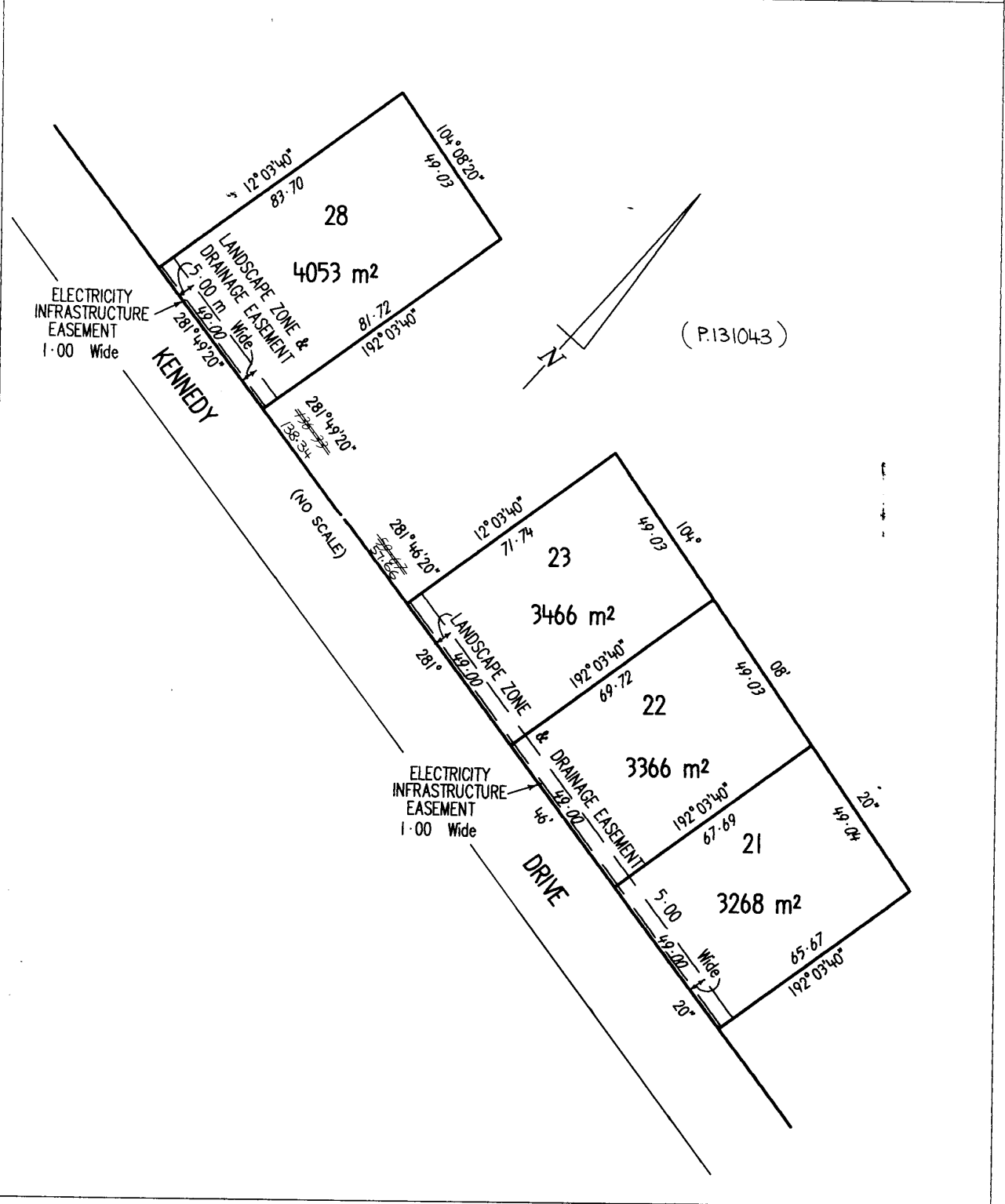
B653478 INSTRUMENT Creating Restrictive Covenants Registered
28-Jun-1993 at 12.01 PM

N109329 MORTGAGE to Australia and New Zealand Banking Group
Limited Registered 16-Feb-2023 at 12.03 PM

UNREGISTERED DEALINGS AND NOTATIONS

No unregistered dealings or other notations

OWNER AEROTECHNOLOGY P/L		PLAN OF SURVEY		REGISTERED NUMBER	
FOLIO REFERENCE FR 106304/1				SP 131042	
GRANTEE Part of 1654 Acres Gtd. to Richard PITCAIRN & Thomas YOUNG		BY SURVEYOR R A CONNOR J.B.MEDBURY P/L SURVEYORS OF 224 CAMPBELL STREET, HOBART			
		LOCATION CITY OF CLARENCE		<i>M. J. ...</i> Recorder of Titles	
		SCALE 1: 1000 LENGTHS IN METRES			
MAPSHEET MUNICIPAL CODE No > 107 (5225-25)	LAST UPI No > 1400129	LAST PLAN No > D.106304	ALL EXISTING SURVEY NUMBERS TO BE CROSS REFERENCED ON THIS PLAN		



SCHEDULE OF EASEMENTS	Registered Number
NOTE: THE SCHEDULE MUST BE SIGNED BY THE OWNERS & MORTGAGEES OF THE LAND AFFECTED. SIGNATURES MUST BE ATTESTED.	SP 131042

PAGE 1 OF 3 PAGE/S

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. or from the balance

The direction of the flow of water through the drainage easements shown on the plan is indicated by arrows.

NOISE EASEMENT

Each Lot on the Plan is SUBJECT TO the right (appurtenant to folio of the register volume 112358 folio 1 hereinafter called "the Dominant Land") of transmitting into and across the said Lot such noise and vibration as might arise from the proper use and operation by Federal Airports Corporation of a Schedule Airport under section 3(1) of the Federal Airports Corporation Act 1986 of the Hobart Airport situate on the Dominant Land.

ELECTRICITY INFRASTRUCTURE EASEMENT

Each Lot on the Plan is SUBJECT TO an Electricity Infrastructure Easement over that part of each Lot shown marked "Electricity Infrastructure Easement 1.00 m wide".


COVENANTS

The Owner of each Lot on the Plan covenants with the owner or owners of every other Lot on the Plan and the Balance to the intent that the burden of this covenant may run with and bind the covenantor's lot and every part thereof and that the benefit of this covenant shall be annexed to and devolve with each and every part of every other Lot on the Plan and the Balance:

- 1. Not to conduct any business on the Lot which:
 - 1.1 is not compatible with airport operations or is a use not directly incidental to such operations;
 - 1.2 involves a process or processes or generates waste which is conducted in such a way as to attract birds, insects, vermin or wildlife;
 - 1.3 in the reasonable opinion of Council uses or would use an excessive amount of water in its operation.

(USE ANNEXURE PAGES FOR CONTINUATION)

SUBDIVIDER: Aerotechnology Pty Ltd FOLIO REF: 106304/1 SOLICITOR & REFERENCE: Toomey Maning & Co (Stephen Wicks)	PLAN SEALED BY: Clarence City Council DATE: 96/0407 REF NO.
NOTE: The Council Delegate must sign the Certificate for the purposes of identification.	


 Council Delegate
CORPORATE SECRETARY
 CLARENCE CITY COUNCIL

<p>ANNEXURE TO SCHEDULE OF EASEMENTS</p> <p>PAGE 2 OF 3 PAGES</p>	<p>Registered Number</p> <p>SP131042</p>
<p>SUBDIVIDER: Aerotechnology Pty Ltd FOLIO REFERENCE: 106304/1</p>	

2. Not to use the Lot for residential purposes.
3. Not to erect any building on the Lot without a Planning Permit from Council.
4. Not to allow any development on the Lot which is in contravention of Council's approved Development Control Plan for the site known as Cambridge Airport, without the prior written consent of Council.
5. Not to develop any part of the Lot within the area marked on the Plan as "Landscape Zone and Drainage Easement 5.00 m Wide" other than by way of driveway and services access and landscaping.
6. Not to erect any building on the Lot the external materials of which are unpainted metal or contrast rather than blend with the rural environment.

"Balance" means the land comprised in folio of the Register volume 106304 folio 1 excepting the Lots shown in the Plan.

"Council" means the Clarence City Council.

"Electricity Infrastructure Easement" means:

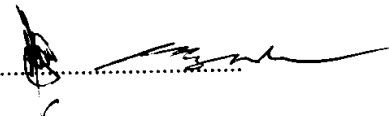
FIRSTLY, all the full and free right and liberty for Aurora Energy Pty Ltd and its successors and its and their servants agents and contractors (hereinafter called "Aurora") at all times hereafter:

- (a) To maintain, lay, erect and install anything used for, or in connection with the generation, transmission or distribution of electricity including powerlines (overhead or underground), substations for converting electricity, substations for transforming or controlling electricity and equipment for metering, monitoring or controlling electricity (hereinafter called "electricity infrastructure") of such materials and type as Aurora may determine above, on or under the land respectively marked "Electricity Infrastructure Easement 1.00 m Wide" on the Plan (hereinafter called the "servient land").
- (b) To enter into and upon the servient land for the purpose of examining, operating, maintaining, repairing, modifying, adding to or replacing electricity infrastructure without doing unnecessary damage to the said servient land and making good all damage occasioned thereby.

Signed by Aerotechnology Pty Ltd:



Signed by Trust Bank



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.

<p>ANNEXURE TO SCHEDULE OF EASEMENTS</p> <p>PAGE 3 OF 3 PAGES</p>	<p>Registered Number</p> <p>SP131042</p>
<p>SUBDIVIDER: Aerotechnology Pty Ltd FOLIO REFERENCE: 106304/1</p>	

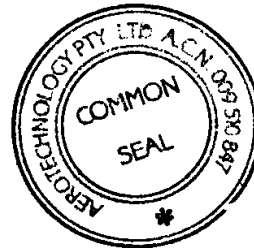
- (c) To erect fencing, signs, barriers or other protective structures upon the servient land if in the opinion of Aurora these are necessary for reasons of safety.
- (d) To cause or permit electrical energy to flow or be transmitted or distributed through the said electricity infrastructure.
- (e) To enter into and upon the servient land for all or any of the above purposes with or without all necessary plant equipment and machinery and the means of transporting the same and if necessary to cross the remainder of the said land in consultation with the registered proprietor/s for the purpose of access and regress to and from the servient land.
- (f) Nothing herein contained shall prevent the registered proprietor/s for themselves and their successors in title from using the servient land PROVIDED THAT such use does not derogate from this grant or, in the opinion of Aurora compromise the safe operation of Aurora electricity infrastructure located on, above or under the servient land.

SECONDLY, the benefit of a covenant for Aurora and its successors with the registered proprietor/s for themselves and their successors in title of the servient land not to erect any buildings or place any structures or objects within the said easement without the prior written consent of Aurora to the intent that the burden of the covenant may run with and bind the servient land and every part thereof and that the benefit thereof may be annexed to the easement hereinbefore described.

FENCING COVENANT

In respect of each Lot on the Plan, the Vendor Aerotechnology Pty Ltd shall not be required to fence.

THE COMMON SEAL of AEROTECHNOLOGY)
PTY LTD (ACN 009 510 847) as registered)
 proprietor of the land comprised in Certificate of)
 Title Volume 106304 Folio 1 was hereunto affixed)
 in the presence of:)



.....

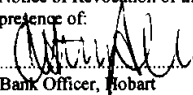

Director

.....


Director/Secretary

SIGNED on behalf of TRUST BANK being the)
 registered proprietor of Mortgage Registered No.)
 B653477 affecting Certificate of Title Volume)
 106304 Folio 1 in the presence of:)

SIGNED BY TRUST BANK by its attorney)
 Peter Maurice Brazendale and Donald Francis Smith)
 under Power No. 67/4762 (and the said)
 Peter Maurice Brazendale and Donald Francis Smith)
 declare that they have received no)
 Notice of Revocation of the said Power) in the)
 presence of:)

.....

 Bank Officer, Hobart

.....


Principal Officer

Principal Officer

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.

Vehicle Fuel Sales (24 hour) and Food Services

259 Kennedy Drive, Cambridge, 7170
with access over 263 Kennedy Drive, Cambridge

DRAWING SCHEDULE

- DA01 Cover Page
- DA02 Site Analysis Plan
- DA03 Site Plan
- DA04 Floor Plan
- DA05 Elevations 01
- DA06 Elevations 02
- DA07 Signage 01
- DA08 Signage 02
- 13343 Detail Survey Plan



All dimensions in millimetres
unless noted otherwise.
PRINT ALL DRAWINGS IN COLOUR

Rev.	Amendment	Date

This drawing is to be read in conjunction with the other contract documents and instructions issued during the course of the contract. Contractors must verify all dimensions and levels on site prior to commencing. Do not scale drawings. Notify any errors, discrepancies or omissions to the Designer. © These drawings and designs are subject to copyright laws.

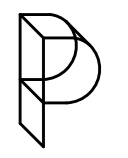
Project:
259 Kennedy Drive
Cambridge, TAS, 7170
Bennett's Petroleum

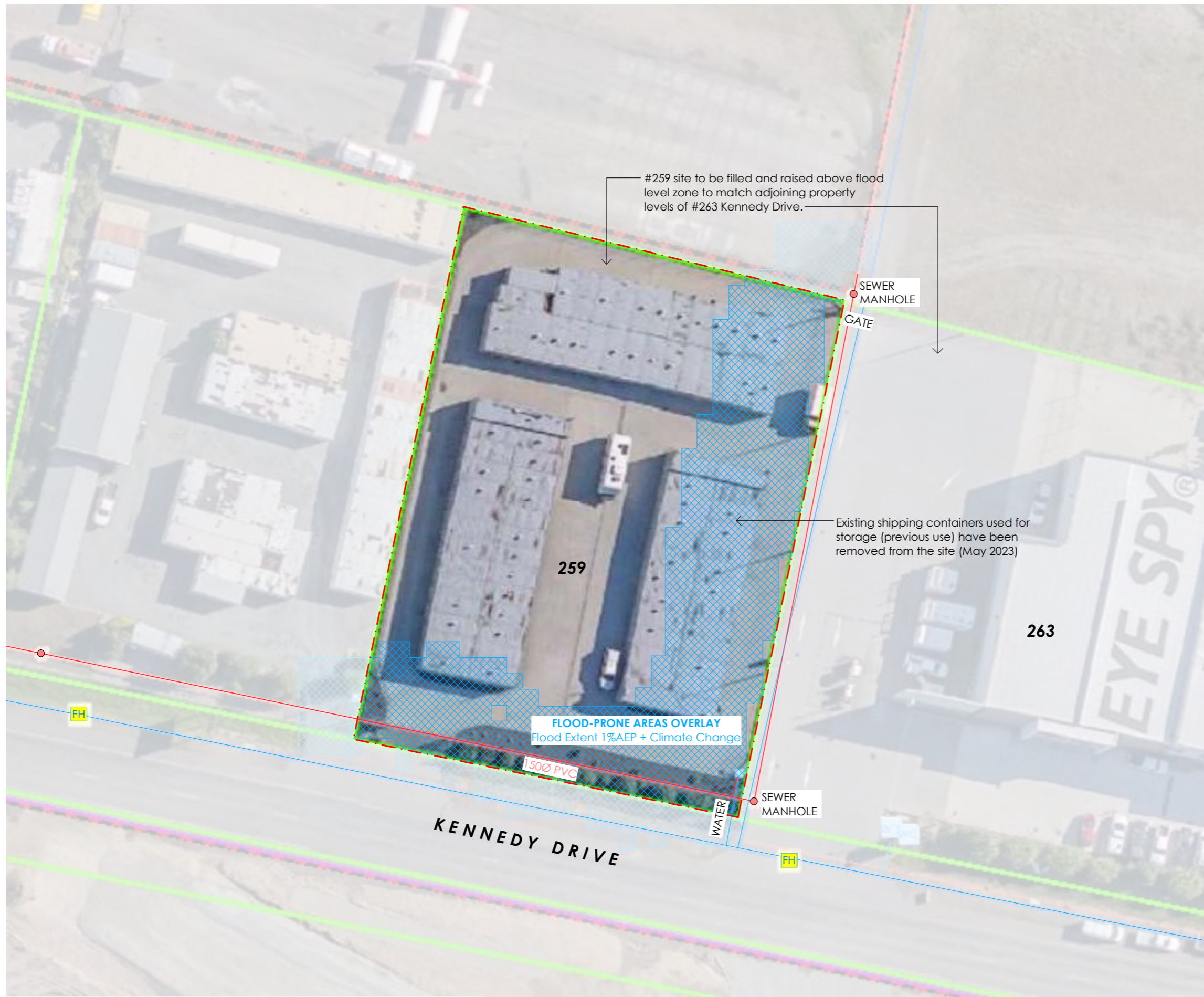
Drawing name:
Cover Page
Issue date:
22/01/2024

Project stage:
Development App.

Drawing no: 23.002-DA01
Scale @ A3:
Sheet 1 of 9
Revision:

POTTER PROJECTS
0457 223 654
admin@potterprojects.com
3A/12 Maxwells Road
Cambridge Tasmania 7170





LEGEND AND NOTES

- TasWater Water
- TasWater Sewer

SITE INFORMATION

Title Reference:	131042/21
Property ID:	1892960
Council:	Clarence City Council
Zone:	Light Industrial
Planning Overlays:	- Airport noise exposure area - Airport Obstacle limitation area - Road or railway attenuation area - Flood-prone areas
Water Supply:	TasWater (20mm connection)
Waste Water:	Sewer - TasWater Stormwater - Clarence City Council
Covenants:	As noted within the Schedule of Easements

DEVELOPMENT STANDARDS

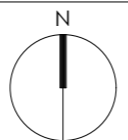
Front Setbacks:
Buildings must have a setback from a frontage of:
(a) not less than 5.5m;
(b) not less than existing buildings on the site; or
(c) not more or less than the maximum and minimum setbacks of the buildings on adjoining properties.

Side & Rear Setback: 0m

Max. Building Height: 10m

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Site Analysis Plan

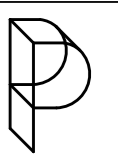
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Project stage:
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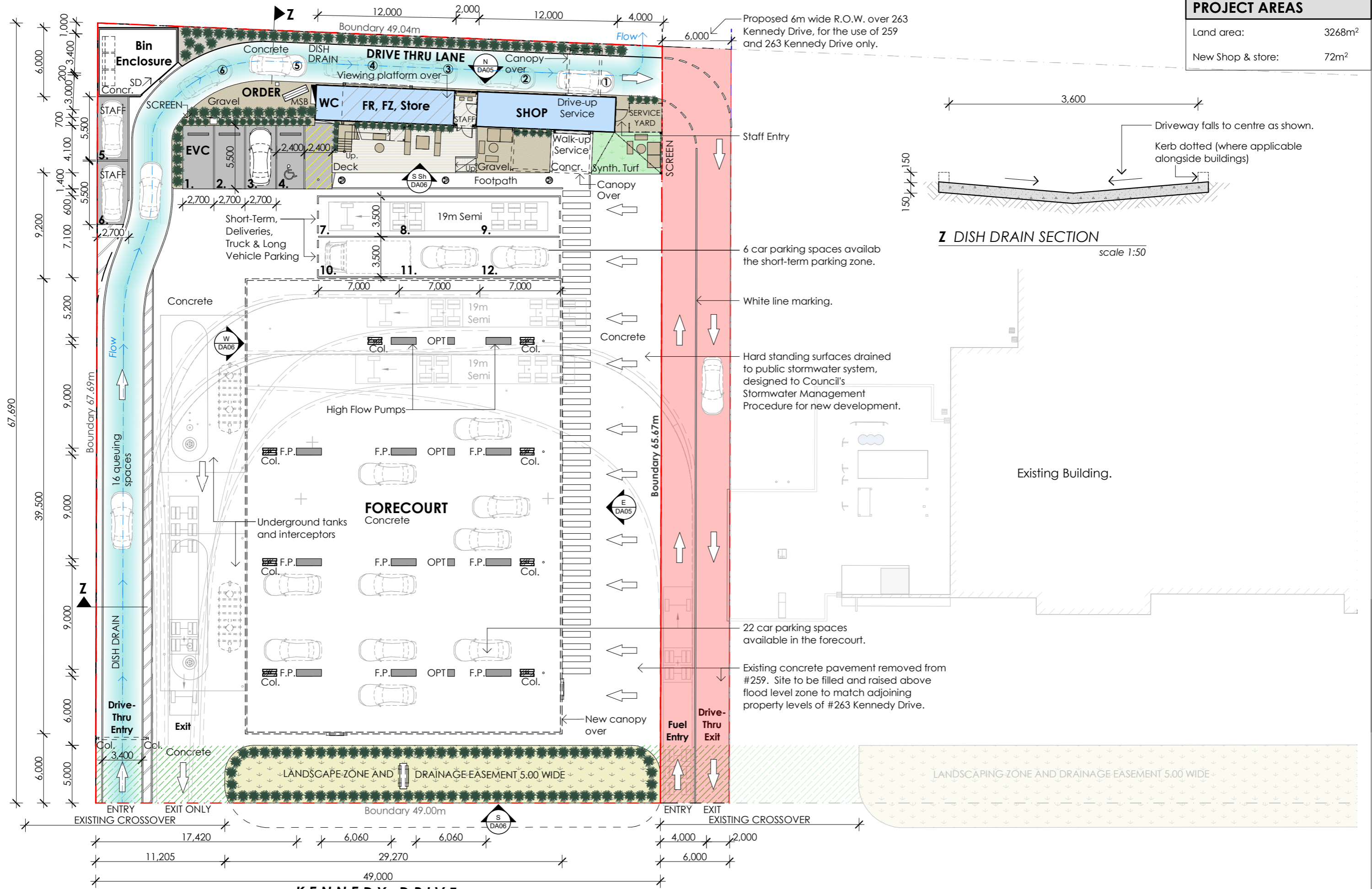
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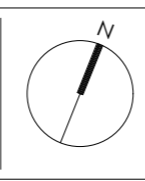


PROJECT AREAS	
Land area:	3268m ²
New Shop & store:	72m ²



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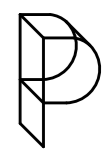
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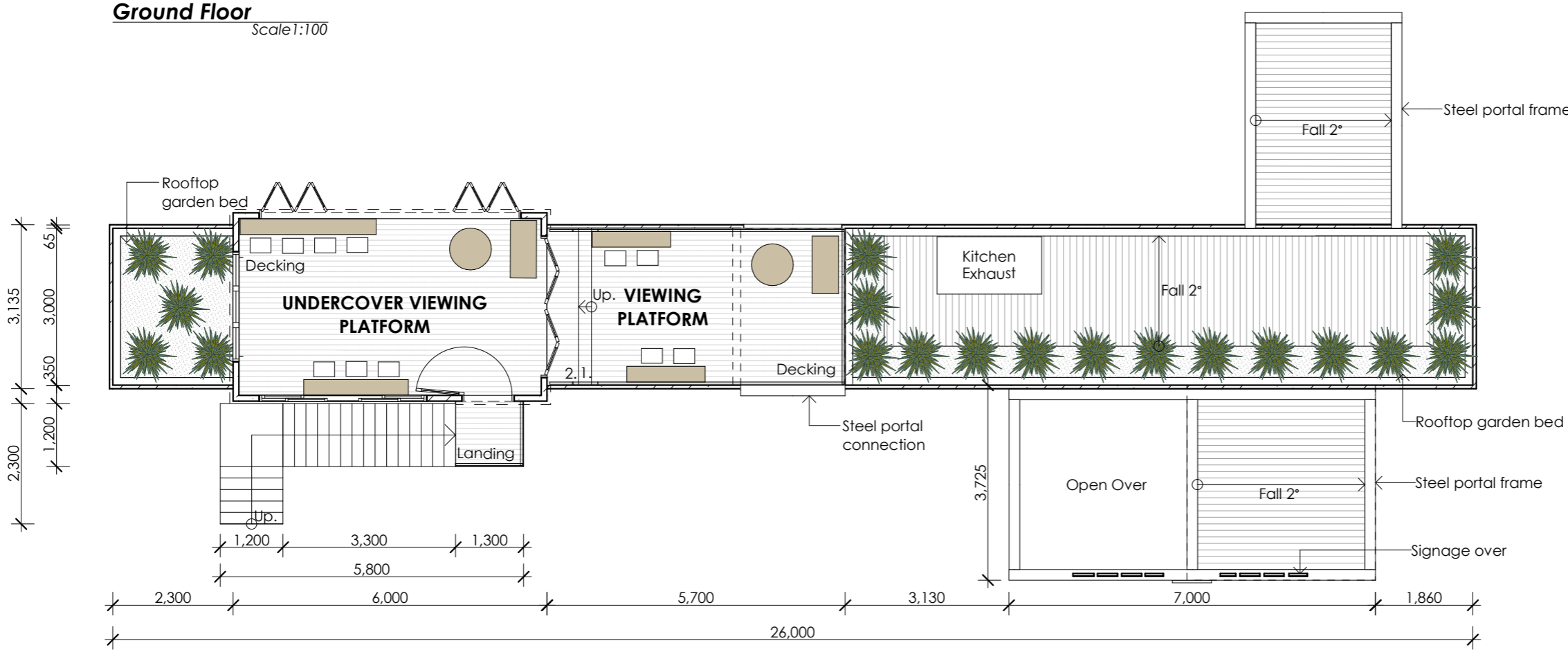
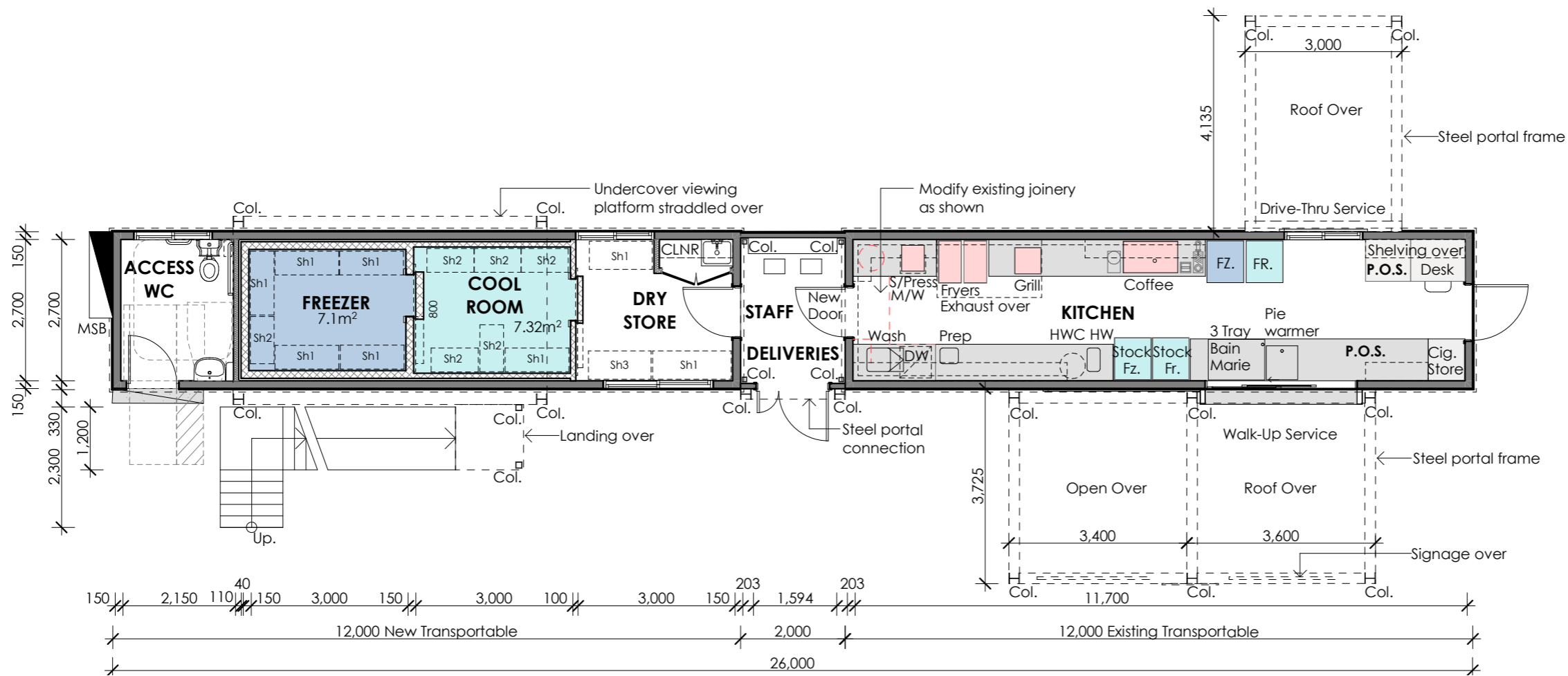
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Project stage:
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Drawing no:
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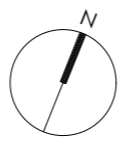
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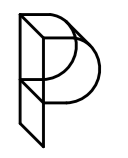
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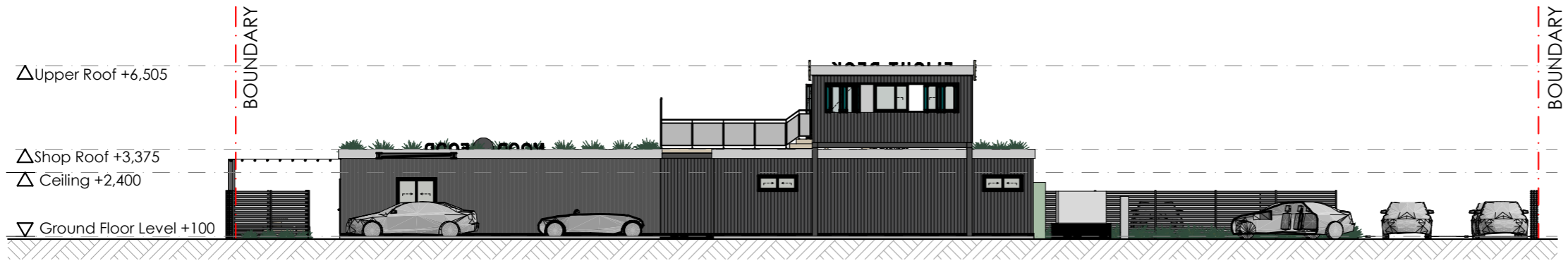
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Project stage:
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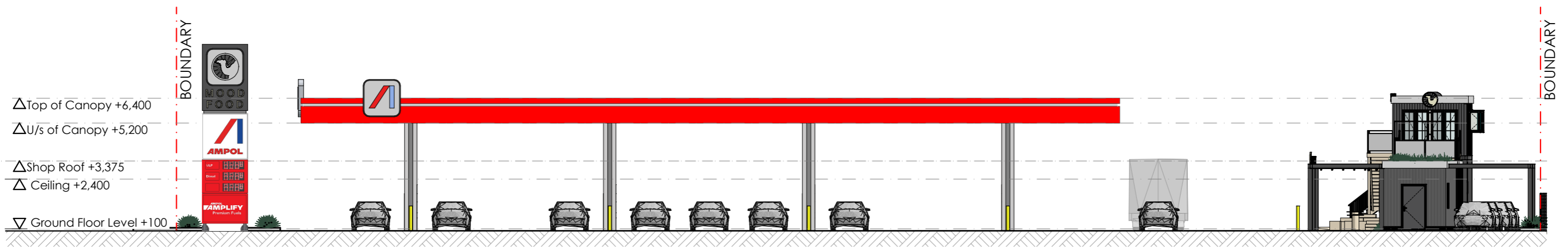
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North Elevation
Scale 1:200



East Elevation
Scale 1:200

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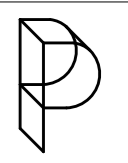
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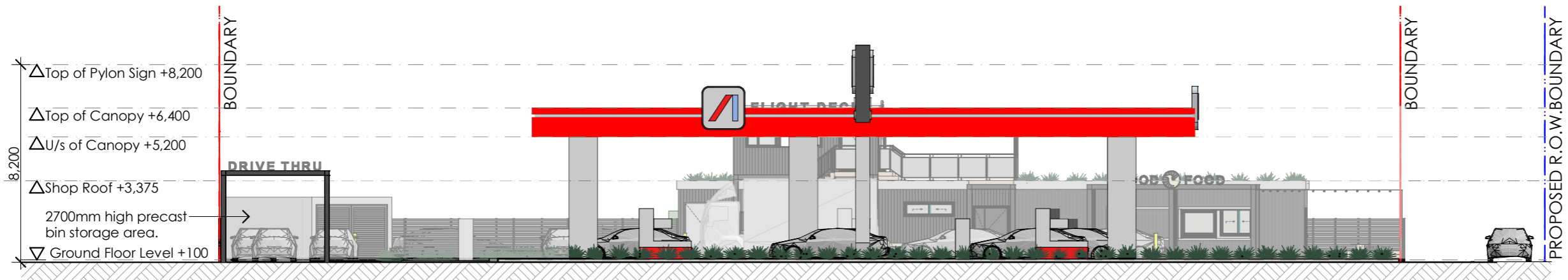
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Issue date:
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Project stage:
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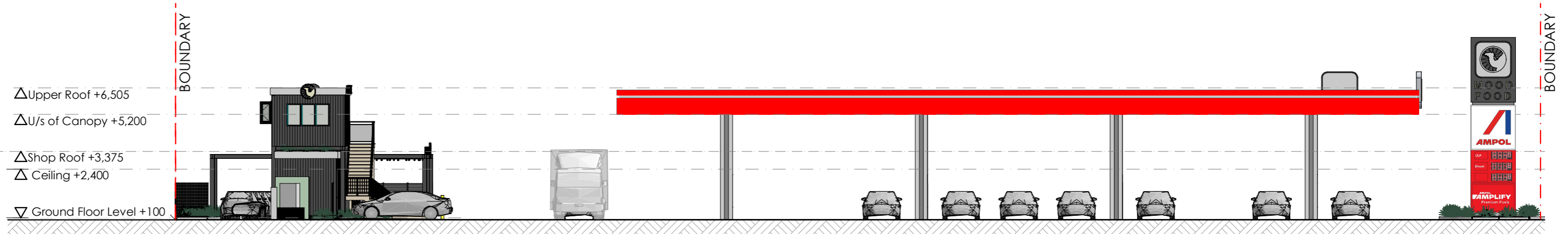
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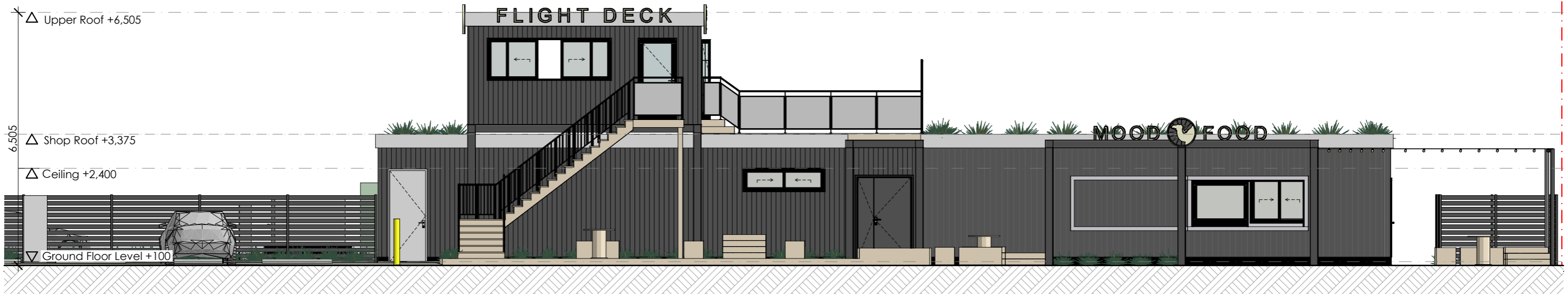




South Elevation
Scale 1:200



West Elevation
Scale 1:200



South Elevation Shop
Scale 1:100

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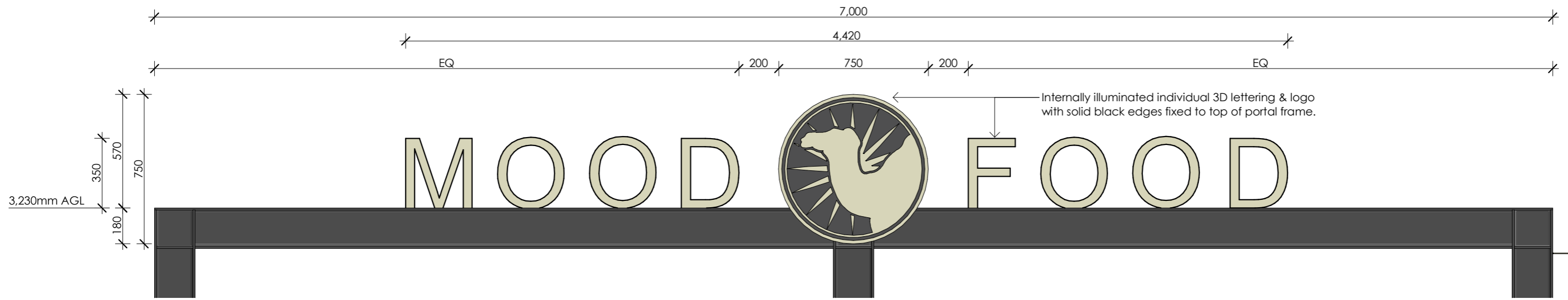
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Project stage:
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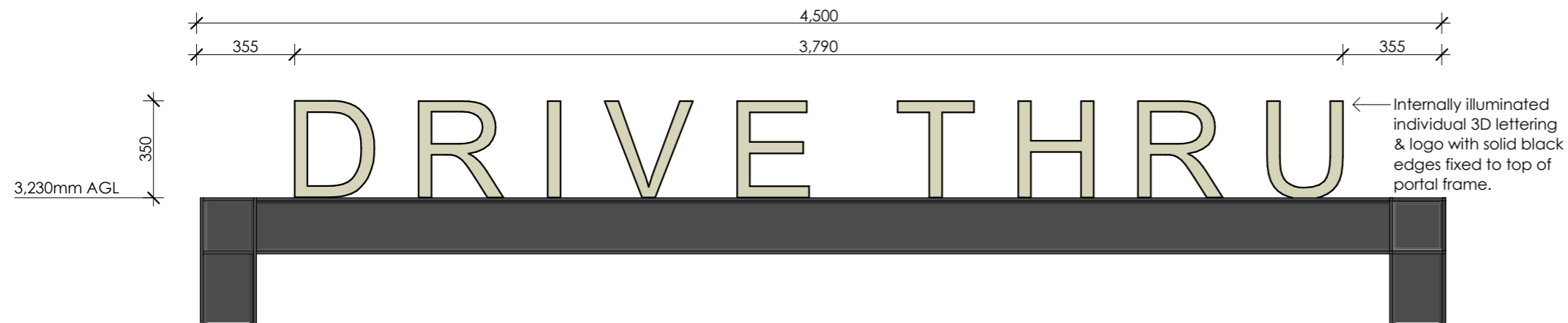
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Mood Food Shop Canopy Signage
Scale 1:20



Drive Thru Portal Sign
Scale 1:20

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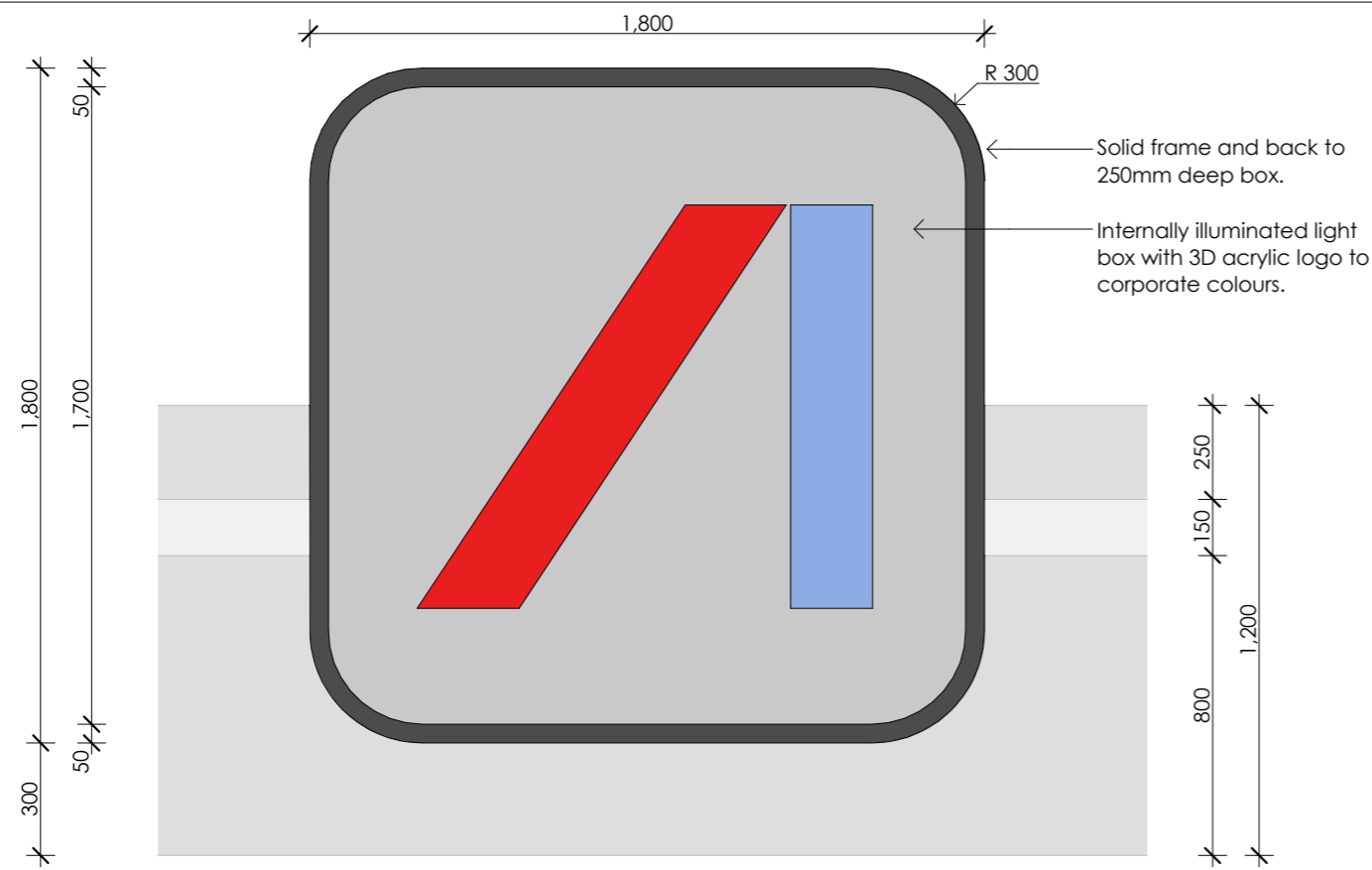
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Issue date:
22/01/2024

Project stage:
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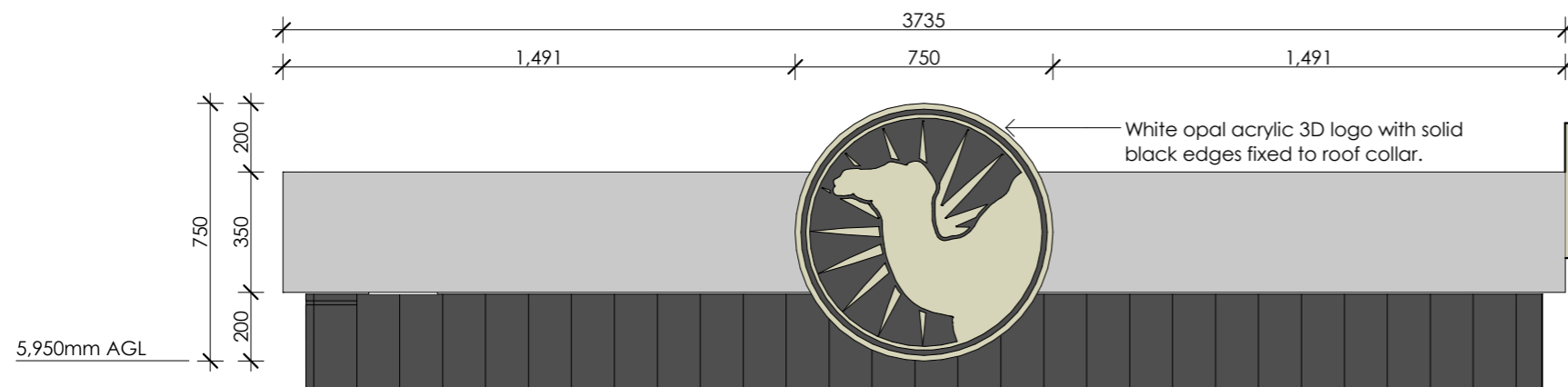
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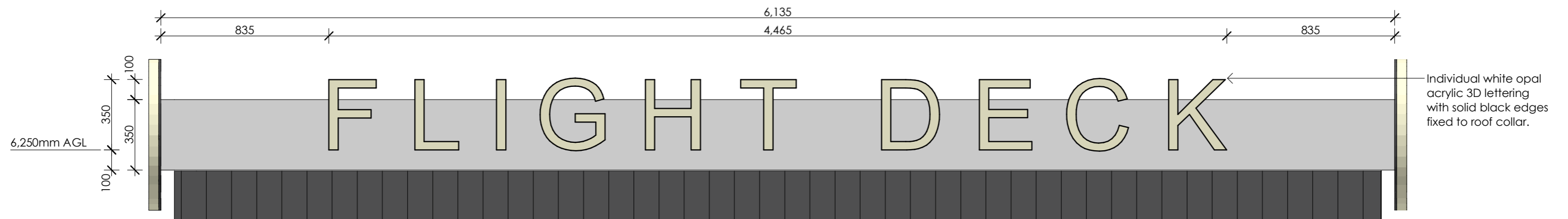




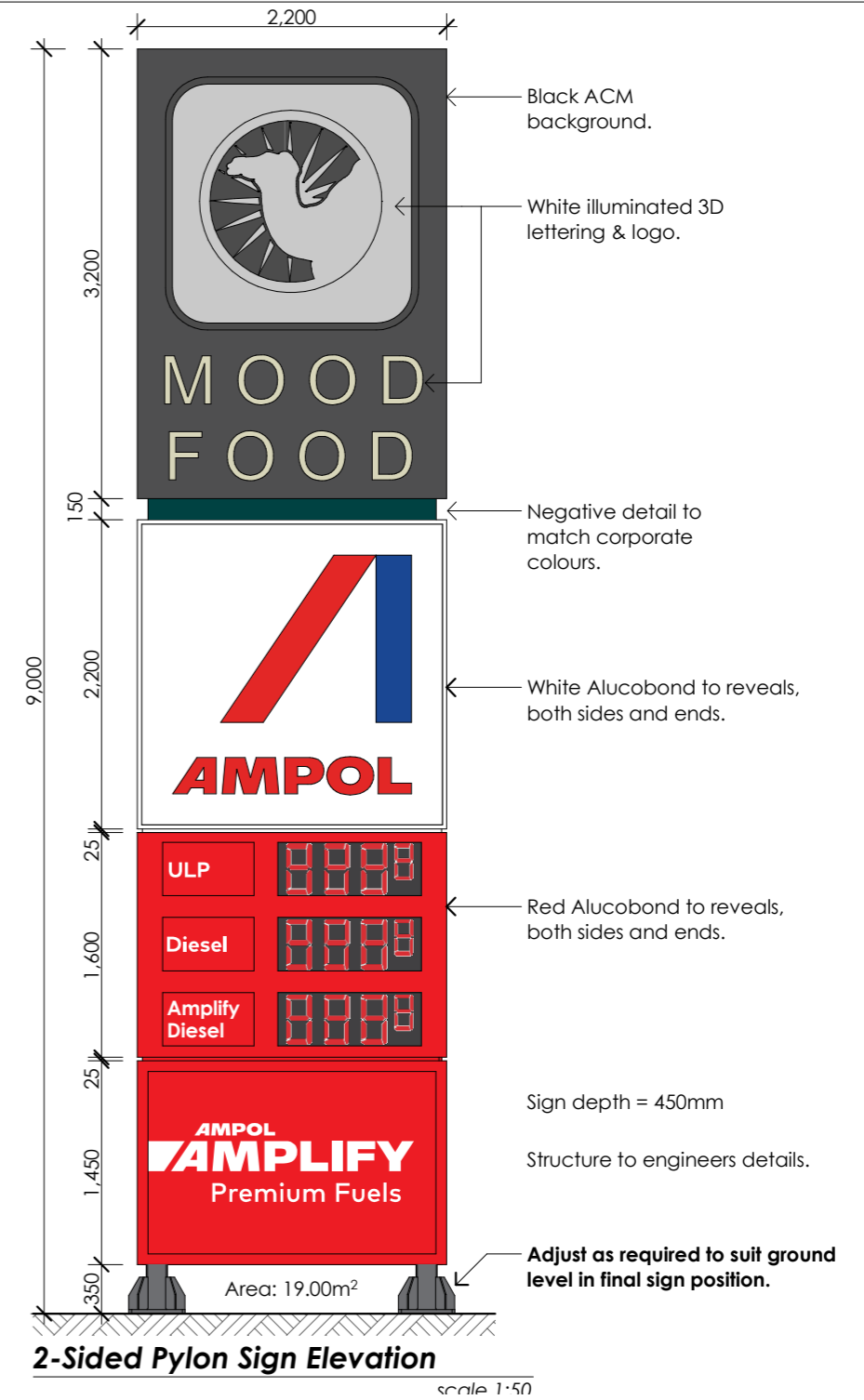
Fuel Canopy Signage (2 off)
Scale 1:20



Viewing Deck Signage Logo
Scale 1:20



Viewing Deck Signage Text
Scale 1:20



2-Sided Pylon Sign Elevation
Scale 1:50

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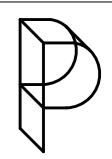
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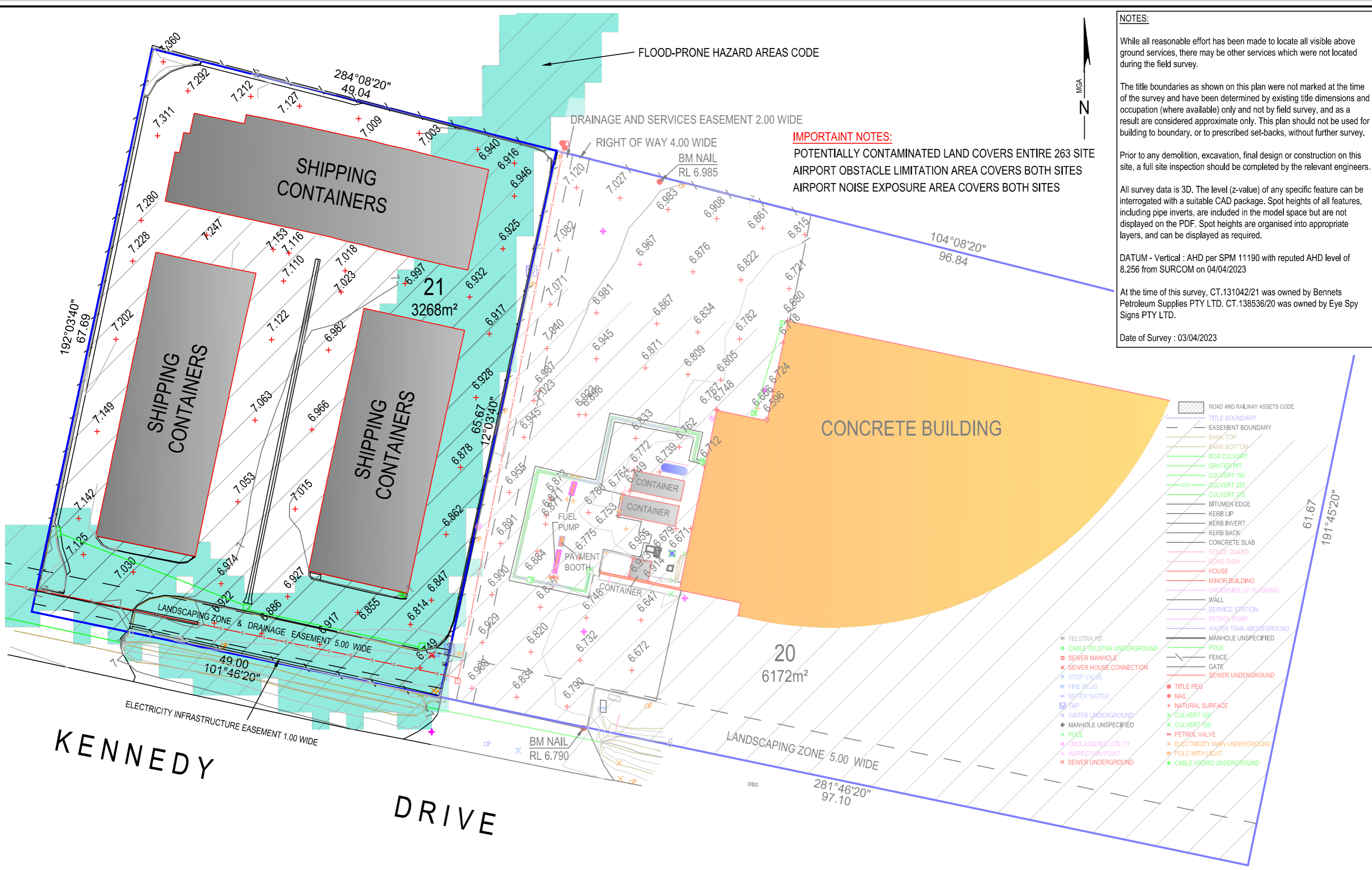
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Signage 02
Issue date:
22/01/2024

Project stage:
Development App.

Drawing no:
23.002- DA08
Scale @ A3:
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Cambridge Tasmania 7170





NOTES:

While all reasonable effort has been made to locate all visible above ground services, there may be other services which were not located during the field survey.

The title boundaries as shown on this plan were not marked at the time of the survey and have been determined by existing title dimensions and occupation (where available) only and not by field survey, and as a result are considered approximate only. This plan should not be used for building to boundary, or to prescribed set-backs, without further survey.

Prior to any demolition, excavation, final design or construction on this site, a full site inspection should be completed by the relevant engineers.

All survey data is 3D. The level (z-value) of any specific feature can be interrogated with a suitable CAD package. Spot heights of all features, including pipe inverts, are included in the model space but are not displayed on the PDF. Spot heights are organised into appropriate layers, and can be displayed as required.

DATUM - Vertical : AHD per SPM 11190 with reputed AHD level of 8.256 from SURCOM on 04/04/2023

At the time of this survey, CT.131042/21 was owned by Bennets Petroleum Supplies PTY LTD. CT.138536/20 was owned by Eye Spy Signs PTY LTD.

Date of Survey : 03/04/2023

IMPORTANT NOTES:

POTENTIALLY CONTAMINATED LAND COVERS ENTIRE 263 SITE

AIRPORT OBSTACLE LIMITATION AREA COVERS BOTH SITES

AIRPORT NOISE EXPOSURE AREA COVERS BOTH SITES

- ROAD AND RAILWAY ASSETS CODE
- TITLE BOUNDARY
- EASEMENT BOUNDARY
- BANK TOP
- BANK BOTTOM
- BOX CULVERT
- GRATED PIT
- CULVERT 150
- CULVERT 225
- CULVERT 375
- BITUMEN EDGE
- KERB LIP
- KERB INVERT
- KERB BACK
- CONCRETE SLAB
- FENCE GUARD
- ROAD SIGN
- HOUSE
- MINOR BUILDING
- UNDERSIDE OF FLASHING
- WALL
- SERVICE STATION
- PETROL PUMP
- WATER TANK ABOVEGROUND
- MANHOLE UNSPECIFIED
- POLE
- FENCE
- GATE
- SEWER UNDERGROUND
- TITLE PEG
- NAIL
- NATURAL SURFACE
- CULVERT 100
- CULVERT 150
- PETROL VALVE
- ELECTRICITY MAIN UNDERGROUND
- POLE WITH LIGHT
- CABLE HYDRO UNDERGROUND
- TELSTRA PIT
- CABLE TELSTRA UNDERGROUND
- SEWER MANHOLE
- SEWER HOUSE CONNECTION
- STOP VALVE
- FIRE PLUG
- METER WATER
- TAP
- WATER UNDERGROUND
- MANHOLE UNSPECIFIED
- POLE
- UNCLASSIFIED UTILITY
- INSPECTION POINT
- SEWER UNDERGROUND

AMENDMENTS		
No.	Revision/Issue	Date



Unit G04 40 Mollie Street,
HOBART TAS 7000
P 03 6118 2030
E admin@lccsurvey.com

Project Name and Address
**259 & 263 KENNEDY DRIVE
CAMBRIDGE
TAS 7170**

Drawing Title
DETAIL PLAN

Client
POTTER PROJECTS
CT.131042/21 & CT.138536/20

SCALE
0 5 10 15
1:400 at A3

Contour Interval
0.200 m

Date
04 / 04 / 23

FILE REF:
13343

Geocivil Ref 1334301
AutoCAD Ref 1334301

SHEET 1 of 1

DRAWN LO
CHKD TC

DATUM Horz: GDA2020
Vert: AHD

Prepared for
Bennett's Petroleum Pty Ltd

259 Kennedy Drive Cambridge

FLOOD HAZARD REPORT

FE_24003_REV00
12 February 2024

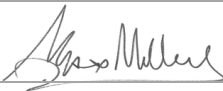



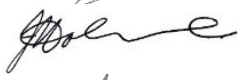
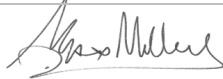

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ENGINEERS

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Document Information

Title	Client	Document Number	Project Manager
259 Kennedy Drive, Cambridge Flood Hazard Report	Bennett's Petroleum Pty Ltd	FE_24003	Max W. Möller <i>BEng, FIEAust, EngExec, CPEng, NER, APEC Engineer, IntPE(Aus.)</i> Managing Director Principal Hydraulic Engineer

Document Initial Revision

REVISION 00	Staff Name	Signature	Date
Prepared by	Max W. Moller <i>Principal Hydraulic Engineer</i>		25/01/2024
Prepared by	Ash Perera <i>Hydraulic Engineer</i>		25/01/2024
Prepared by	Christine Keane <i>Senior Water Resources Analyst</i>		25/01/2024
GIS Mapping	Damon Heather <i>GIS Specialist</i>		07/02/2024
Reviewed by	John Holmes <i>Senior Engineer</i>		09/02/2024
Reviewed by	Max W. Möller <i>Principal Hydraulic Engineer</i>		12/02/2024
Authorised by	Max W. Moller <i>Principal Hydraulic Engineer</i>		12/02/2024

Document Revision History

Rev No.	Description	Reviewed by	Authorised by	Date
02	Change in design	Max W. Moller	Max W. Moller	01/03/2024
01	Change in Description and wording	Max W. Moller	Max W. Moller	13/02/2024

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Acronyms

AEP: Annual Exceedance Probability
 ARR: Australian Rainfall and Runoff
 CC: Climate Change
 TPS: Tasmanian Planning Scheme
 CFT: Climate Futures Tasmania
 RCP: Representative Concentration Pathway

1. Introduction

Flüssig Engineers has been engaged by **Bennett's Petroleum Pty Ltd**, to undertake a site-specific flood hazard report for the development at number 259 Kennedy Drive, Cambridge in the **Clarence City Council** municipality. The purpose of this report is to determine the hydraulic characteristics on the existing and post-development scenarios and the flood hazard for the 1% AEP plus climate change (CC).

1.1 Development

The proposed development includes the construction of fuel sales infrastructure and a food service building at 259 Kennedy Drive, Cambridge. The site is approximately 3268 m² and currently contains mostly impervious ground. It is intended that the ground level be raised to create a flat surface with the neighbouring lot at 263 Kennedy Drive. This development triggers the inundation code as the development falls within Clarence City Council, flood prone area.

1.2 Objectives and Scope

This flood analysis has been written to meet the standards of the Tasmanian Planning Scheme - Clarence (TPS) and Section 54 of the Tasmanian Building Act 2016, with the intent of understanding the development risk with respect to riverine flooding. The objectives of this study are:

- Provide an assessment of the site's flood characteristics under the combined 1% AEP + CC scenario.
- Provide comparison of flooding for pre- and post-development against acceptable and performance criteria.
- Provide flood mitigation recommendations for the development, where appropriate.

1.3 Limitations

This study is limited to the objectives of the engagement by the client, the availability and reliability of data, and including the following:

- The flood model is limited to a 1% AEP + CC worst case temporal design storm.
- All parameters have been derived from best practice manuals and available relevant studies (if applicable) in the area.
- All provided data by the client or government bodies for the purpose of this study is deemed fit for purpose.
- The study is to determine the effects of the new development on flooding behaviour and should not be used as a full flood study into the area without further assessment.

1.4 Relevant Planning Scheme Requirements

Table 1. TPS Planning Scheme Requirements

Planning Scheme Code	Objective	Document Reference
C12.5.1 Uses within a flood prone area	That a habitable building can achieve and maintain a tolerable risk from flood	Refer Section 4
C12.6.1 Building and works within a flood prone area	(a) building and works within a flood-prone hazard area can achieve and maintain a tolerable risk from flood; and	Refer Section 4.1
	(b) buildings and works do not increase the risk from flood to adjacent land and public infrastructure.	Refer Section 3.2

2. Model Build

2.1 Overview of Catchment

The contributing catchment for 259 Kennedy Drive is approximately 353 ha. The land use of the catchment is zoned predominantly Particular Purpose and Light Industrial, with the specific site being Light Industrial.

Figure 1 below outlines the approximate contributing catchment for the 259 Kennedy Drive, Cambridge development site.

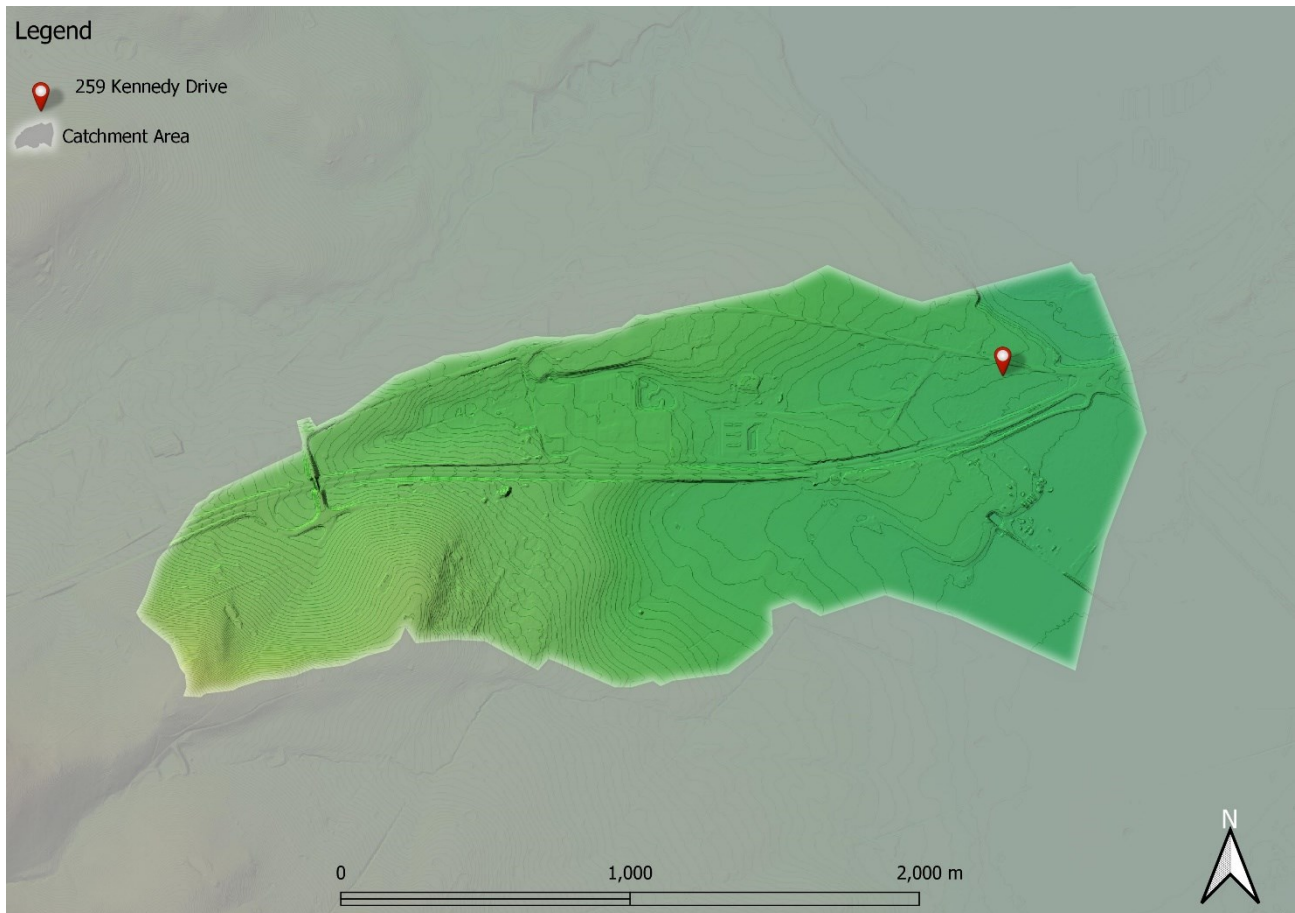


Figure 1. Contributing Catchment, 259 Kennedy Drive, Cambridge

2.2 Hydrology

The following Table 2 states the adopted hydrological parameters for the RAFTS catchment, derived from best practice documents.

Table 2. Parameters for RAFTS catchment

Catchment Area (ha)	Initial Loss Perv/imp (mm)	Continuing Loss Perv/imp (mm/hr)	Manning's N pervious	Manning's N impervious	Non-linearity factor
353	28/1	3.7/0.0	0.045	0.02	-0.285

2.2.1 Design Rainfall Events

TPS 2021 requires modelling of flood events of 1% AEP (100yr ARI) for the life of the development. Therefore, the design events assessed in this analysis are limited to the 1% AEP + CC design events. Due to the size and grade of the catchment the peak rainfall time was restricted to between 10min – 6 hrs.

Figure 2 shows the box and whisker output for the 1% model run. The model shows that the 1% AEP 4.5-hour storm temporal pattern 5 was the worst-case median storm. Therefore, this storm event was used within the hydraulic model.

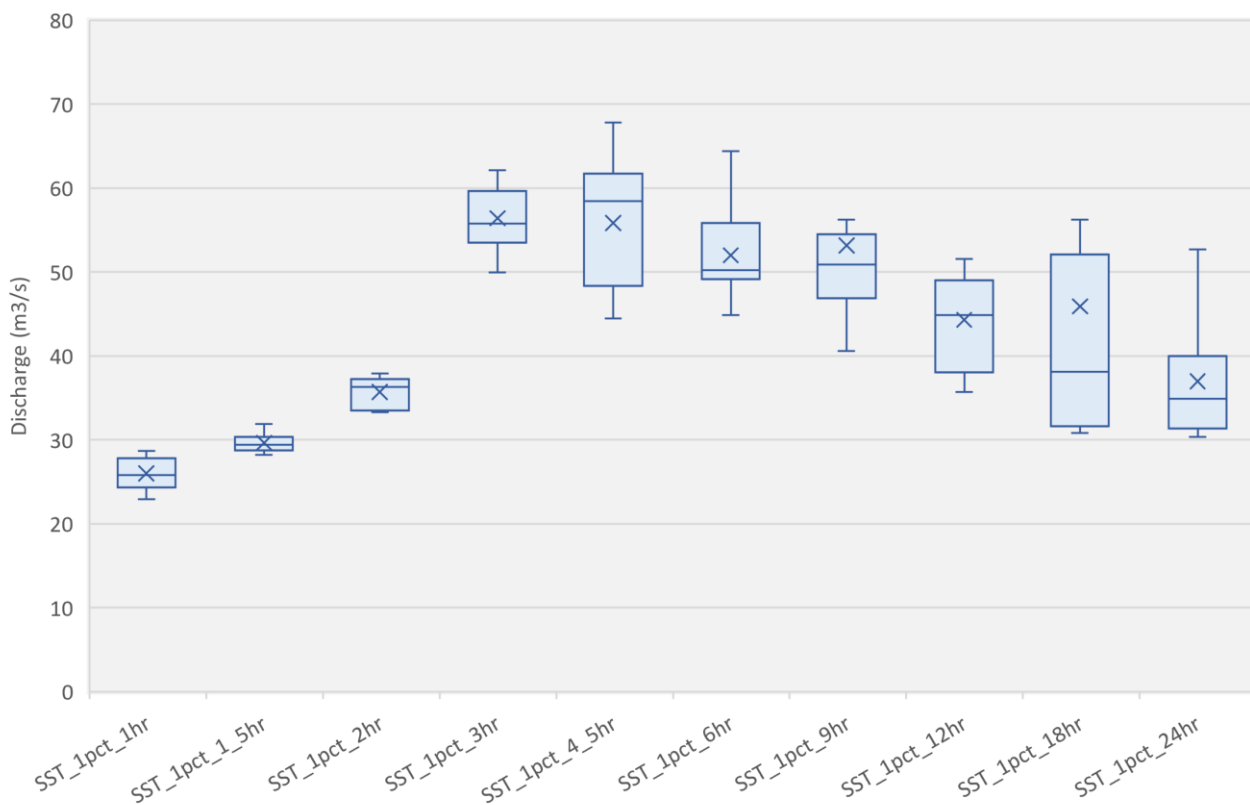


Figure 2. 1% AEP Box and Whisker Plot

2.2.2 Climate Change

As per ARR 2019 Guidelines, for an increase in rainfall due to climate change at 2100, it is recommended the use of RCP 8.5. Table 3 shows the RCP 8.5 increase compared to the revised increase of 14.6% suggested by Climate Futures Tasmania. Therefore, the ARR 8.5 increase of 16.3% was adopted in the model as a conservative estimate.

Table 3. Climate Change Increases

Climate Zone	CFT increase @ 2100	ARR 8.5 increase @ 2100
South-East Tasmania	14.6 %	16.3 %

2.3 Hydraulics

A 1D-2D hydraulic model was created to determine the flood level through the target area.

2.3.1 Extents and topography

The area of concern is situated in the east of the catchment. The catchment originates from Canopus Hill to the west, approximately 195 mAHD higher than the site location and the mainstream with an average gradient of approximately 7 %.

2.3.2 Calibration/Validation

This catchment has no stream gauge to calibrate the model against a real-world storm event. Similarly, there is little historical information available, and no past flood analysis undertaken to validate against the flows obtained in the model.

2.3.3 Survey

The 2D surface model was taken from a combination of LiDAR 2019 to create a 1m and cell size DEM. For the purposes of this report, 1m cells are enough to capture accurate flow paths. The DEM with hill shading can be seen below (Figure 3).



Figure 3. 1m DEM (hill shade) of lot area, 259 Kennedy Drive.

2.3.4 Roughness (Manning's n)

Table 4 shows Manning's values used in the model. Values for this layer were derived from the ARR 2019 Guidelines.

Table 4. Manning's Coefficients (ARR 2019)

Land Use	Roads	Open Channel	Rural	Residential	Parks	Buildings	Piped Infrastructure
Manning's n	0.018	0.035	0.04	0.045	0.05	0.3	0.013

2.3.5 Walls

All significant fences and retaining structures were included as 2D linear wall structures within the 2D model. Fences were modelled 300 mm above the ground level.

2.3.6 Buildings

Buildings were represented as mesh polygons with a high Manning's n value within the model. Buildings with unknown floor levels were set with a minimum 300 mm above ground. This method allows for flow through the building if the flood levels/pressure become great enough. The aim is to mimic flow through passageways such as doors, windows, hallways etc.

The ground information within the lot were extrapolated by using the ground levels of the eastern boundary of the site and matching them with the ground levels of the western boundary data of 263 Kennedy Drive. The survey was provided by "Leary, Cox and Cripps" Survey dated 04.04.2023.

2.4 Development Runoff

Stormwater runoff from the development site has been assessed under pre- and post-development models to determine the potential impact the development at 259 Kennedy Drive has on the immediate local flows. As per planning guidelines it is a requirement that this does not have a negative impact from pre to post development.

Site characteristics for the pre- and post-development model are summarised in Table 5. Although the orientation and areas of buildings change, the impervious surfaces remain the same in both pre and post development scenarios.

Table 5. Site Characteristics

Land Use	Pre-Development		Post-Development	
	Area (m ²)	% Total land	Area (m ²)	% Total land
Pervious	1362	42	182	94
Impervious	3086	58	3086	6

3. Model Results

The result of 1% AEP + CC were run through the pre-development and post-development model scenarios to compare the changes to flooding onsite and to surrounding properties.

3.1 Flood depth and extent.

It can be seen from the pre-development model runs (Figure 4), that some minor flooding occurs within the lot boundaries and surrounding properties. The overland flow path flows through the western lot boundary, through the centre of the lot and exits through to 263 Kennedy Drive and from the northern lot boundary. The storage containers in the pre-development scenario aerial imagery have been removed recently.

The pre-development flood depth at the marked cross-sectional line is 0.45 m, that shows a decrease to 0.42 m in the post-development scenario (Figure 5). This high depth is mainly due to the existing landscape and drainage zone. Excluding the landscaping zone and drainage easement, the maximum depth within the lot in the pre-development scenario is 0.20 m observed within the eastern lot boundary.

In the post-development scenario, the maximum depth within the lot excluding the landscaping zone is 0.24 m which is a 0.04 m increase from the pre-development scenario within the western lot boundary. Figure 5 shows the effect the development has on the overland flow path. The 3.6 m wide drive through lane must be constructed with a 150 mm dish drain through the centre with 100 mm kerbs or bunding. As shown in Figure 5, this channels the flow path through the lane and onto the existing outfall seen in existing conditions.

As the high depths observed in the post development scenario within the eastern boundary is now diverted via the drive through lane along the western boundary, the flood conveyance downstream remains the same as existing conditions. This further illustrates the effectiveness of the dish drain constructed within the drive through lane.

The proposed new shop and store at the northern side of the lot are free from inundation in the post development scenario.



Figure 4. Pre-Development 1%+CC Flood Depths and extents



Figure 5. Post Development 1%+CC Flood Depth and extents

3.2 Displacement of Overland Flow on Third Party Property

Figure 5 shows the post-development flows that, when compared against pre-development, there appears to be no increase in flood depths/extents on surrounding properties around 259 Kennedy Drive. The post-development hazard rating on the neighbouring properties and surrounding infrastructure remains at the same rating seen in the pre-development scenario.

It is therefore deemed that the post development model does not affect flood depths on surrounding properties.

3.3 Development Effects on Stormwater Discharge

Figure 6 below shows the discharge hydrograph at the cross-sectional result line for the lot at 259 Kennedy Drive area only. The graph was captured in the model for both pre- and post-development runs and combined in a graph to demonstrate the change in net-discharge. It demonstrates that there is an increase of 0.04 m/s in net velocity from the pre-development velocity of 0.36 m/s to the post-development velocity of 0.40 m/s. The post development discharge shows a slight increase of 0.01 m³/s from the pre-development discharge of 0.58 m³/s to the post-development discharge of 0.59 m³/s.

The slight changes in velocity and decreases are more likely due to model sensitivity and has no real impact on discharge from the lot following development. It is therefore deemed that the post development model does not increase net discharge.

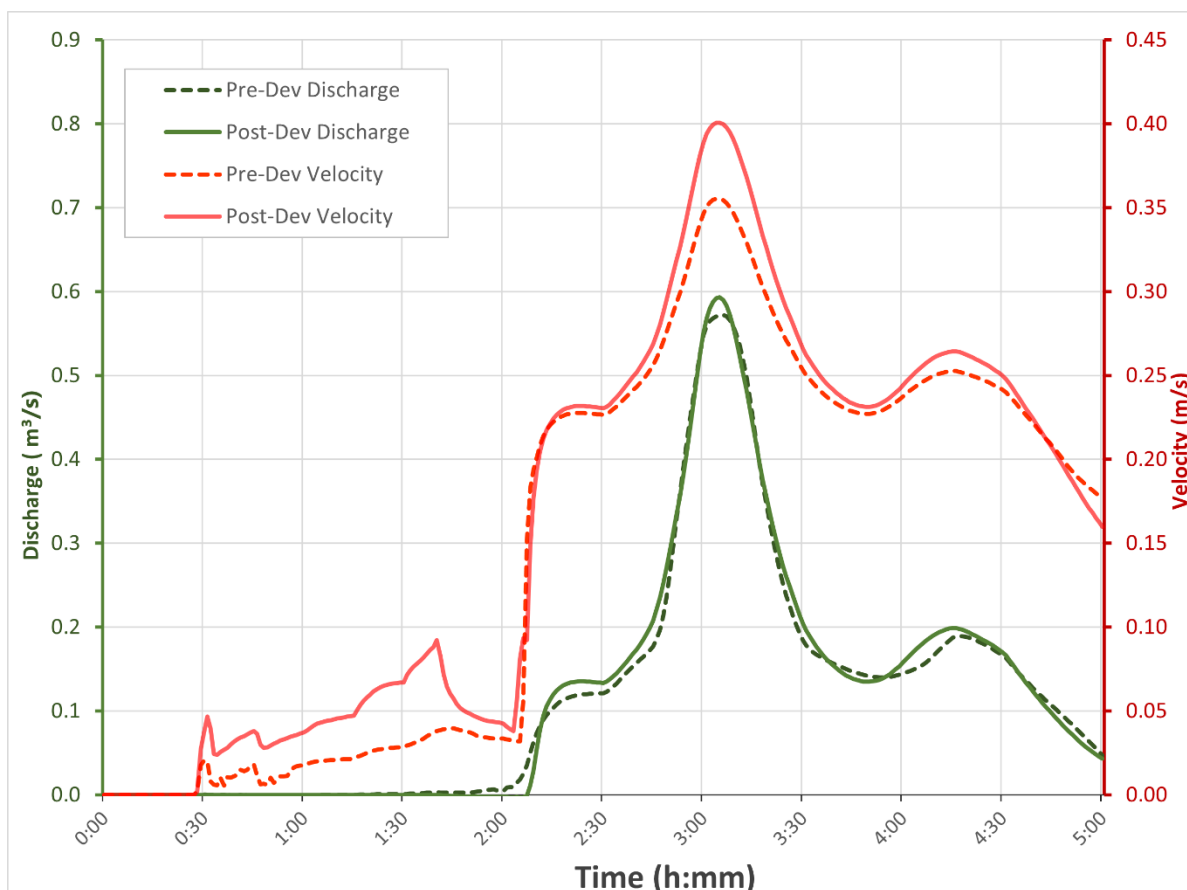


Figure 6. Pre and Post Development Net Discharge 1% AEP +CC, 259 Kennedy Drive

3.4 Model Summary

Table 6. Pre-development and post-development results at the cross-sectional line within the lot

	Pre-development	Post-development	Net Change
Depth (m)	0.45	0.42	-0.03
Velocity (m/s)	0.36	0.40	0.04
Discharge (m ³ /s)	0.58	0.59	0.01

3.5 New Habitable Building

To meet the performance criteria of the Building Regulations 2016 S.54, the construction of a new habitable building is required to have a habitable floor level >300mm above the 1% AEP + CC flood level.

As the flood depth extents does not intercept the proposed habitable building in the post-development scenario, the performance criteria S.54 of the Buildings Regulation 2016 does not apply.

4. Flood Hazard

Appendix A shows the pre and post development velocity and depth at the western lot boundary. In the pre-development scenario, the maximum velocity and depth at the cross-sectional line are 0.36m/s and 0.45 m respectively. This places the hazard rating at **H1 – Generally safe for people, vehicles and buildings** as adopted by Australian Flood Resilience and Design Handbook as shown in Figure 7.

Following the construction of the proposed development, the maximum velocity and depth shows an increase of 0.04 m/s in velocity and a decrease of 0.03 m in depth at the cross-sectional line which does not increase the hazard rating within the development and within the surrounding lots. The pre and post hazard maps are shown in the Appendix A.

Hazard ratings of H2-H3 are observed in the landscaping zone/ drainage easement in both pre-development and post-development scenarios. This area contains a combination of drains and landscaping arrangements. As this area is constant in the post-development scenario, when referring the hazard extents within the lot, this area is excluded to maintain a consistent analysis between the two scenarios.

As this study does not extend to the public access roads we cannot comment on the accessibility to the site, only within the site. Therefore, this report would advise that staff and customers remain inside in the event of a flood unless instructed by emergency services.

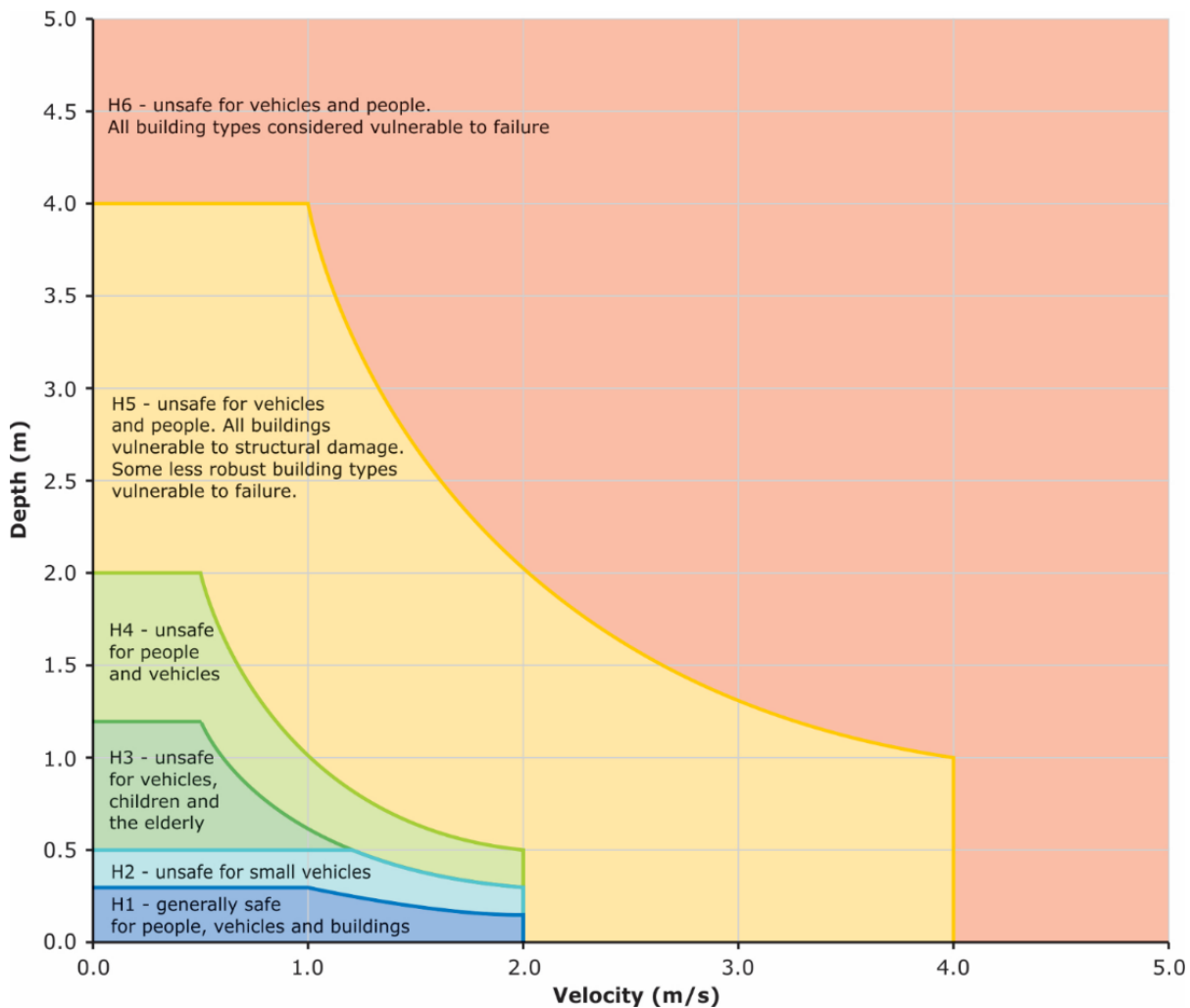


Figure 7. Hazard Categories Australian Disaster and Resilience Handbook

4.1 Tolerable Risk

Flood analysis into the lot at 259 Kennedy Drive, Cambridge shows the proposed habitable building is located just outside a shallow overland flow path that intersects the lot in the vicinity of the proposed fuel pumps with majority of the surrounding area rated low (H1) hazard rating in the 1% AEP plus climate change event. This means the site is considered generally safe for all ages, and structures.

Velocities and depths, although relatively small, still present some risks from erosion and debris movement. Assuming appropriate structural considerations are applied, it is deemed that the structures proposed, intended to be a habitable class 5 commercial building with an asset life of 50 years (BCA2022), can achieve a tolerable risk to flooding over its asset life, assuming the recommendations of this report are adhered to.

Table 7. TPS C12.5.1 Uses within a flood prone area

C12.5.1 Uses within a flood prone area			
Objectives: That a habitable building can achieve and maintain a tolerable risk from flood			
Performance Criteria			
P1.1		P1.1	
A change of use that, converts a non-habitable building to a habitable building, or a use involving a new habitable room within an existing building, within a flood-prone hazard area must have a tolerable risk, having regard to:		Response from flood report	
(a)	the location of the building;	(a)	Proposed new shop, store, and concrete forecourt
(b)	the advice in a flood hazard report;	(b)	Assuming recommendations of this report are implemented along with the recommended finished floor levels, no additional flood protection measures required for the life expectancy of a habitable building.
(c)	any advice from a state authority, regulated entity or a council;	(c)	N/A
P1.2		P1.2	
A flood hazard report also demonstrates that:		Response from flood report	
(a)	any increase in the level of risk from flood does not require any specific hazard reduction or protection measures;	(a)	No increase in level of risk from pre-development scenario.
(b)	the use can achieve and maintain a tolerable risk from a 1% annual exceedance probability flood event for the intended life of the use without requiring any flood protection measures	(b)	Maximum hazard rating at the proposed development is at H1 excluding the hazard ratings within the drainage easement areas.

Table 8. TPS C12.6.1 Building and works within a flood prone area.

C12.6.1 Building and works within a flood prone area			
Objective: (a) building and works within a flood-prone hazard area can achieve and maintain a tolerable risk from flood; and (b) buildings and works do not increase the risk from flood to adjacent land and public infrastructure.			
Performance Criteria			
P1.1		P1.1	
Buildings and works within a flood-prone hazard area must achieve and maintain a tolerable risk from a flood, having regard to:		Response from flood report	
(a)	the type, form, scale and intended duration of the development;	(a)	Proposed new shop, store and concrete forecourt
(b)	whether any increase in the level of risk from flood requires any specific hazard reduction or protection measures;	(b)	No requirement to provide hazard reduction protection measures.
(c)	any advice from a state authority, regulated entity or a council; and	(c)	N/A
(d)	the advice contained in a flood hazard report.	(d)	Flood report and recommendations provided within.
Performance Criteria			
P1.2		P1.2	
A flood hazard report also demonstrates that the building and works:		Response from Flood Report	
(a)	do not cause or contribute to flood on the site, on adjacent land or public infrastructure; and	(a)	There is no increase in the level of risk within the lot, adjacent land and to surrounding infrastructure.
(b)	can achieve and maintain a tolerable risk from a 1% annual exceedance probability flood event for the intended life of the use without requiring any flood protection measures.	(b)	Can achieve tolerable risk without mitigation measures provided the minimum floor level recommendations are followed.

5. Conclusion

The Flood Hazard Report for 259 Kennedy Drive, Cambridge has reviewed the potential pre- vs post-development flood scenarios.

The following conclusions and observations were derived in this report:

1. A comparison of the post-development peak flows for the 1% AEP at 2100 were undertaken against the Tasmanian Planning C, C12.5.1 & C12.6.1.
2. In the post-development scenario, the proposed building is not subject to inundation and therefore Building Regulation 54 does not apply.
3. Peak flood depths at the cross sectional line shows a decrease of 0.03 m from pre- to post-development, riverine flood scenarios.
4. Peak discharge sees a slight increase of 0.01 m³/s from pre- to post-development, riverine flood scenarios.
5. There is an increase in velocity of 0.04 m/s from pre- to post-development along the cross-sectional results line.
6. The pre-development model shows the hazard from flooding in the area is H1 remains unchanged in the post-development scenario.
7. The newly adjusted ground levels within the lot, which are aligned with 263 Kennedy Drive, has an impact on flood outcomes within the development.

6. Recommendations

Flussig Engineers therefore recommend the following engineering design be adopted for proposed development to ensure the works meets the Inundation Code and the Building Regulations:

1. The proposed 3.6 m drive through lane designed by others must be constructed with a 150 mm minimum deep dish drain with 100 mm high kerbs or bunding on the sides. Refer Appendix 'B' for detail.
2. The new structures within the development to be designed to resist flood forces including debris for the given flood conditions.
3. No additional solid structures to be constructed around the property without further flood assessment.
4. Future use of lot areas to be limited to areas deemed safe under the ARR Disaster manual categories.
5. All future proposed structures within the flood extent not shown within this report will require a separate report addressing their impacts.

Under the requirements of Flood Hazard Report, the proposed development will meet current acceptable solutions and performance criteria under the Tasmanian Planning Scheme 2021.

7. Limitations

Flüssig Engineers were engaged by **Bennett's Petroleum Pty Ltd**, for the purpose of a site-specific Flood Hazard Report for 259 Kennedy Drive, Cambridge as per C12.5.1 and C12.6.1 of the Tasmanian Planning Scheme - Clarence 2021. This study is deemed suitable for purpose at the time of undertaking the study. If the conditions of the development should change, the plan will need to be reviewed against all changes.

This report is to be used in full and may not be used in part to support any other objective other than what has been outlined within, unless specific written approval to do otherwise is granted by Flüssig Engineers.

Flüssig Engineers accepts no responsibility for the accuracy of third-party documents supplied for the purpose of this flood report.

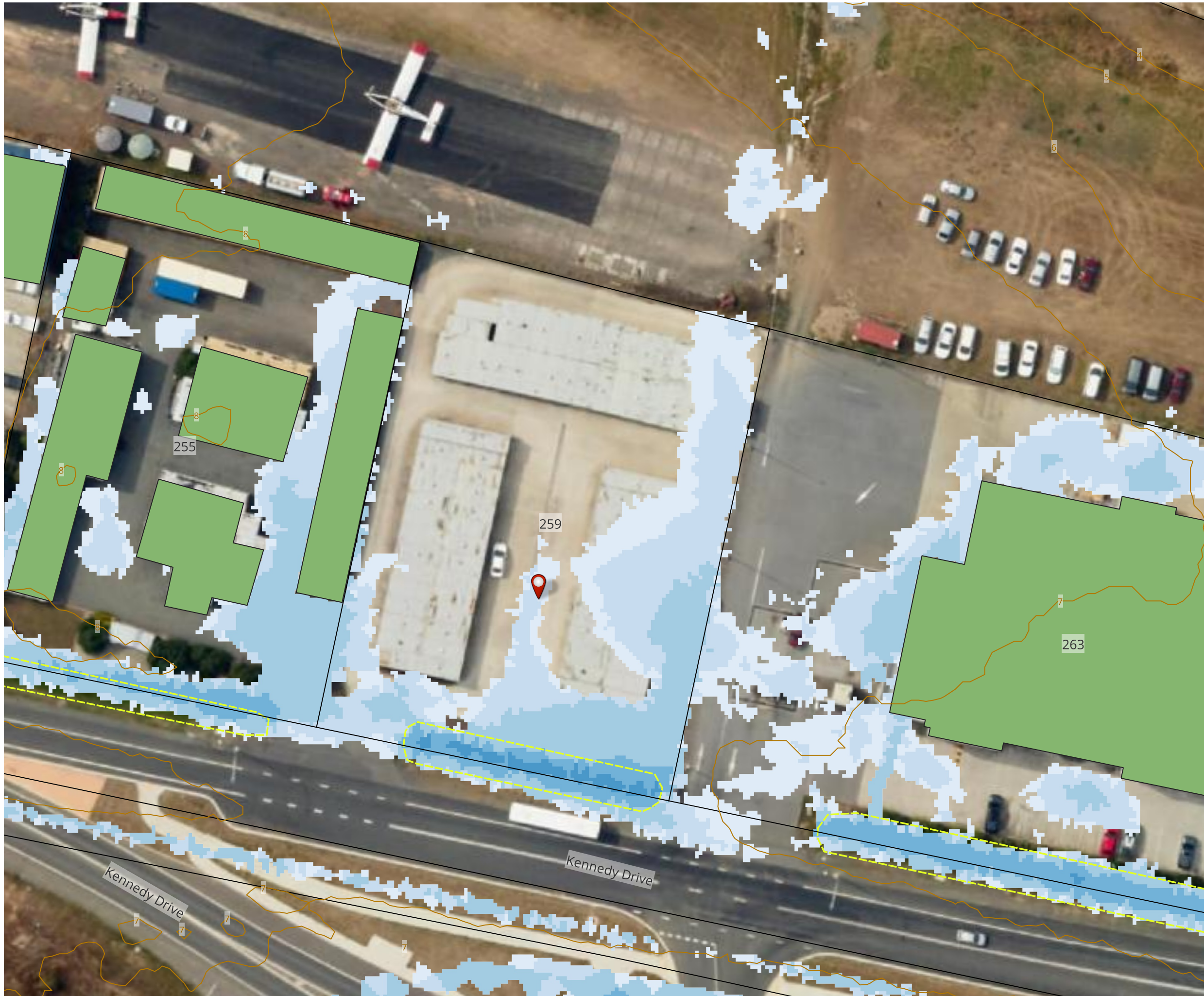
8. References

- Australian Disaster Resilience Guideline 7-3: Technical flood risk management guideline: Flood hazard, 2014, Australian Institute for Disaster Resilience CC BY-NC
- Austroads 2013, Guide to Road Design Part 5: Drainage-General and Hydrology Considerations
- Ball J, Babister M, Nathan R, Weeks W, Weinmann E, Retallick M, Testoni I, (Editors), 2019, Australian Rainfall and Runoff: A Guide to Flood Estimation, Commonwealth of Australia
- Grose, M. R., Barnes-Keoghan, I., Corney, S. P., White, C. J., Holz, G. K., Bennett, J., & Bindoff, N. L. (2010). Climate Futures for Tasmania: General Climate Impacts Technical Report.
- T.A. Remenyi, N. Earl, P.T. Love, D.A. Rollins, R.M.B. Harris, 2020, Climate Change Information for Decision Making –Climate Futures Programme, Discipline of Geography & Spatial Sciences, University of Tasmania.

9. Appendices

Appendix A Flood Maps

PRE 1% AEP + CC @2100



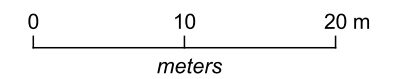
Legend

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- 1.00m Contours
- Boundary Lines
- Building Areas
- Existing drainage easements

Pre 1% AEP + CC @2100

Depth(m)

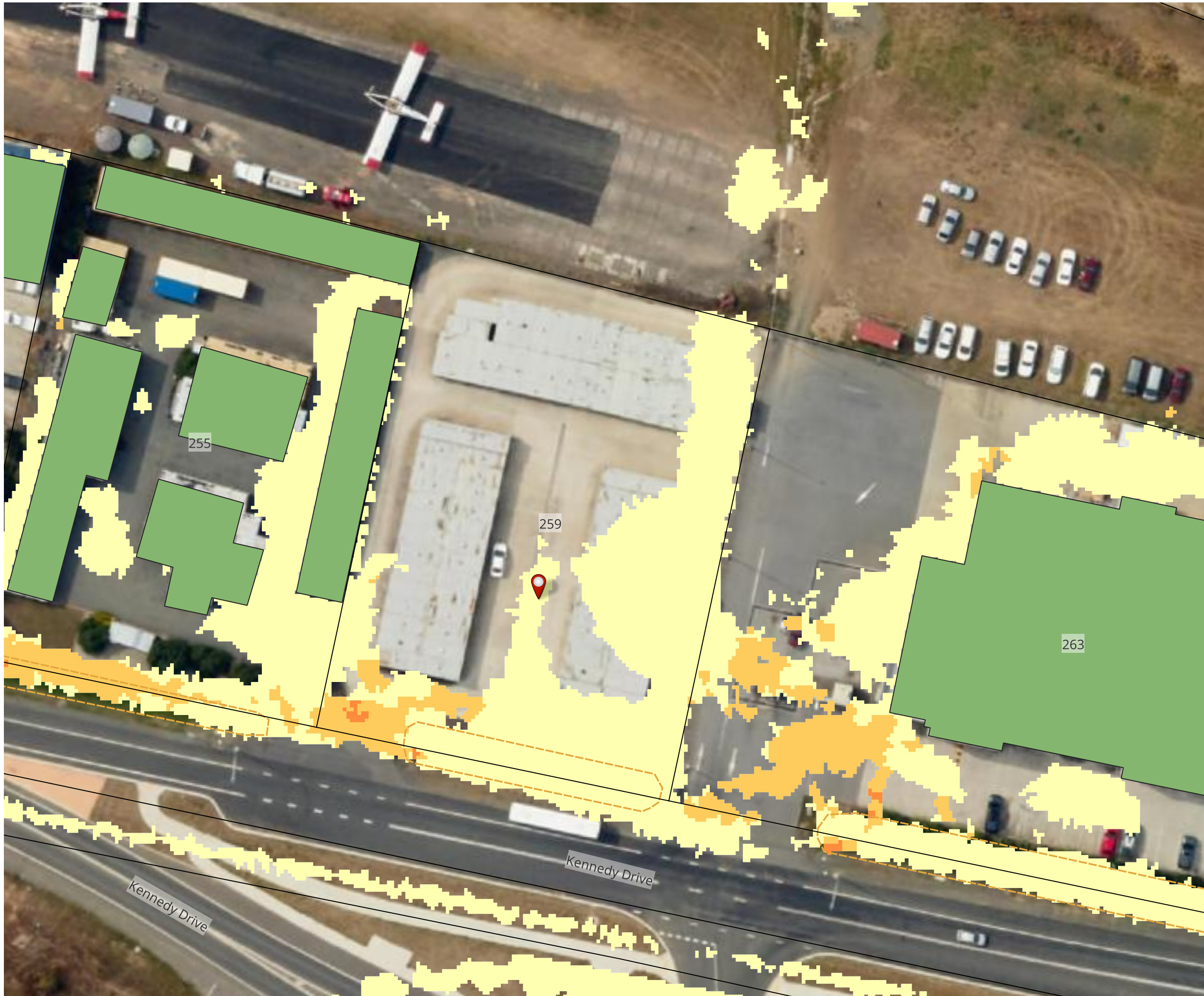
- <= 0.02
- 0.02 - 0.05
- 0.05 - 0.10
- 0.10 - 0.30
- 0.30 - 0.60
- 0.60 - 0.80
- 0.80 - 1.00
- 1.00 - 1.50
- > 1.50



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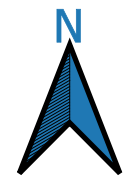
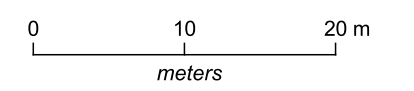
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PRE 1% AEP + CC @2100



Legend

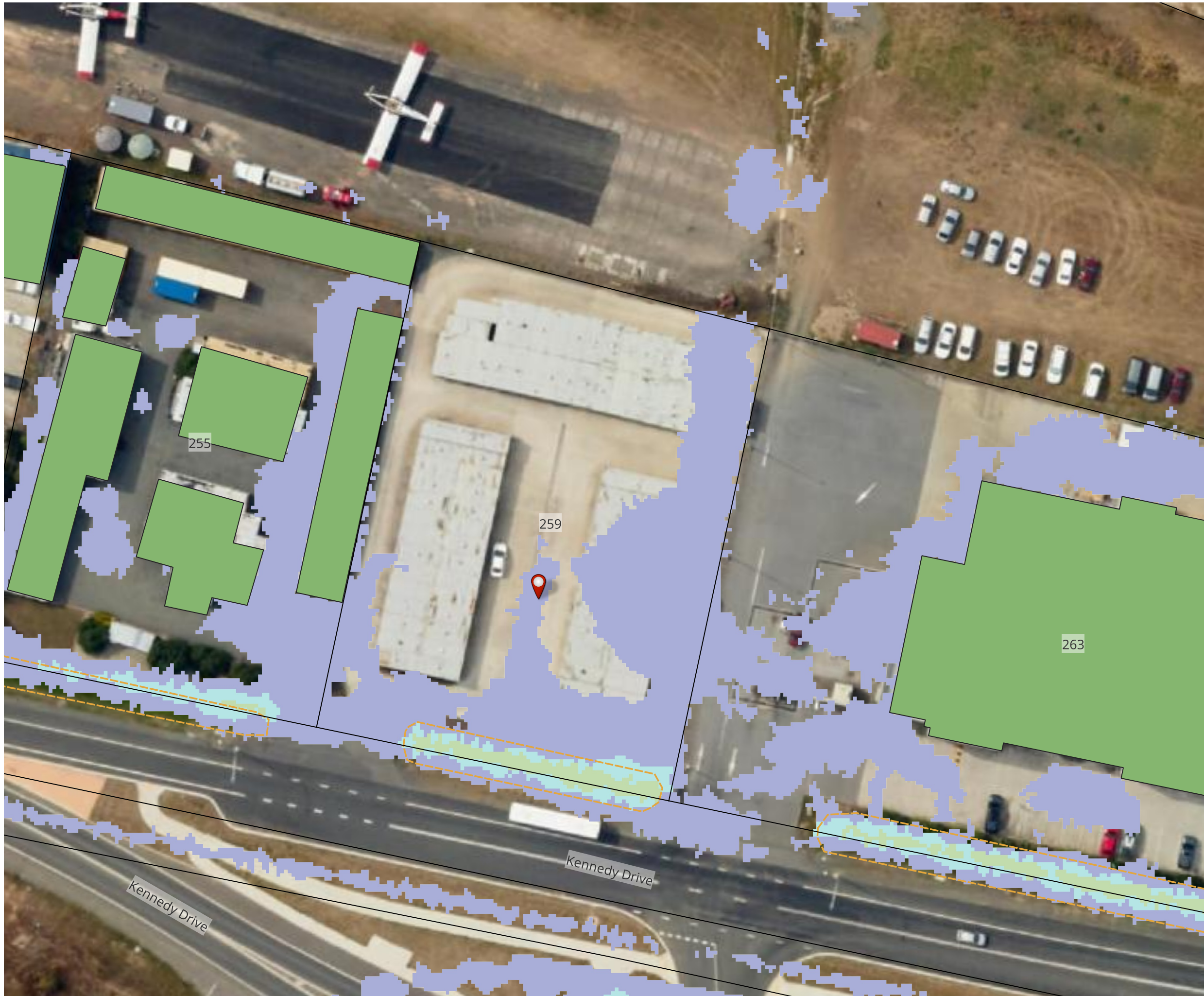
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 - Boundary Lines
 - Building Areas
 - Existing drainage easements
- Pre 1% AEP + CC @2100
- Velocity (m/s)
- <= 0.50
 - 0.50 - 1.00
 - 1.00 - 1.50
 - 1.50 - 2.00
 - > 2.00



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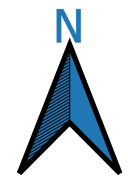
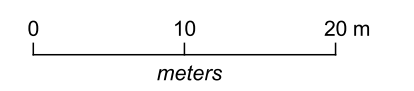
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PRE 1% AEP + CC @2100



Legend

- 259 Kennedy Drive
 - Boundary Lines
 - Building Areas
 - Existing drainage easements
- Pre 1% AEP + CC @2100
- Hazard
- H1
 - H2
 - H3
 - H4
 - H5
 - H6



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POST 1% AEP + CC @2100



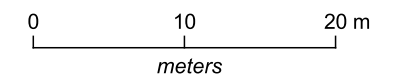
Legend

- 259 Kennedy Drive
- 1.00m Contours
- Boundary Lines
- Building Areas
- Existing drainage easements
- Columns and fuel bowsers
- Drive through lane with dish drain
- Proposed buildings

Post 1% AEP + CC @2100

Depth(m)

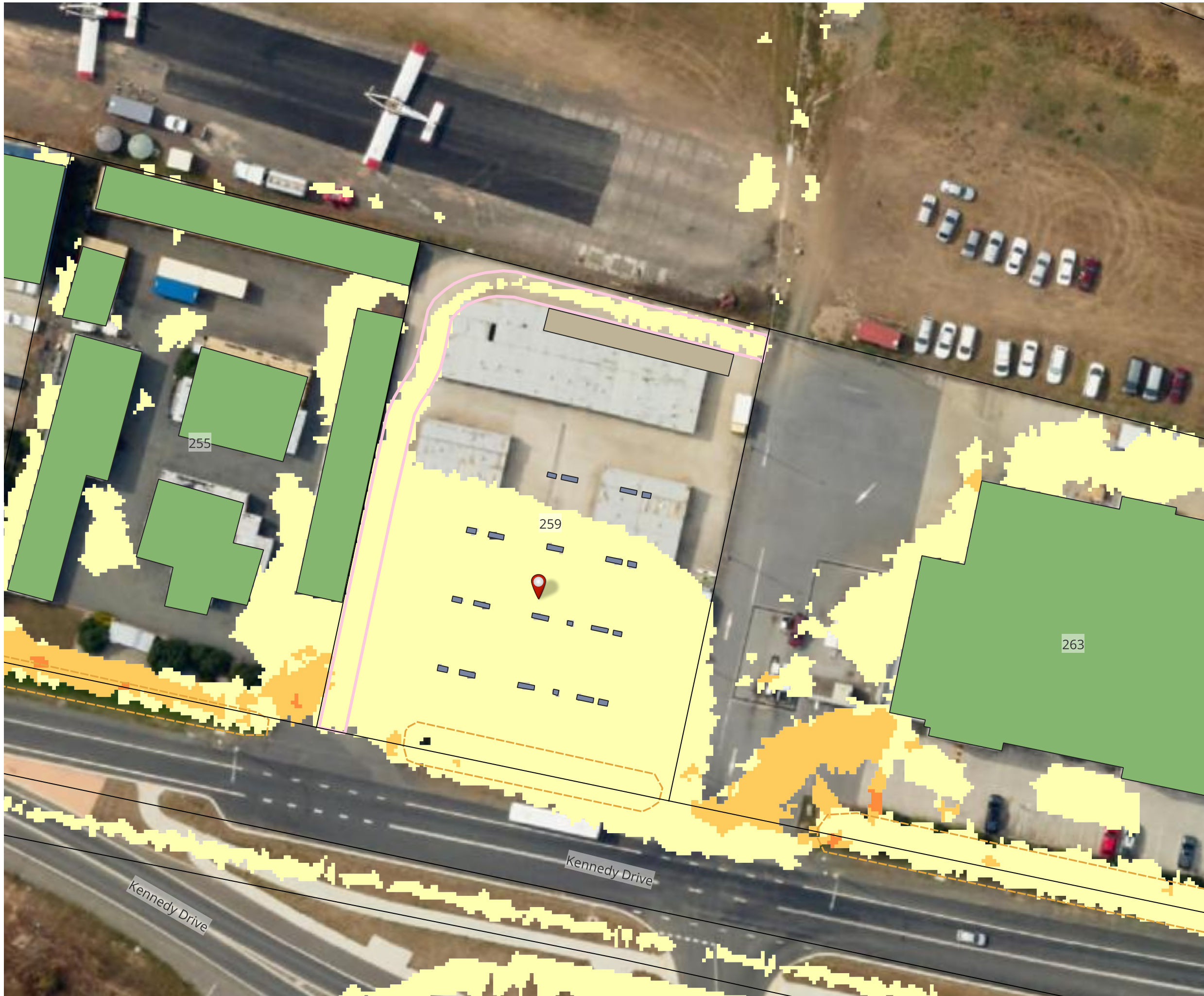
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- 0.80 - 1.00
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- > 1.50



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POST 1% AEP + CC @2100



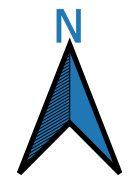
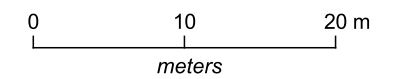
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- 259 Kennedy Drive
- Boundary Lines
- Building Areas
- Existing drainage easements
- Columns and fuel bowsers
- Drive through lane with dish drain
- Proposed buildings

Post 1% AEP + CC @2100

Velocity(m/s)

- <= 0.50
- 0.50 - 1.00
- 1.00 - 1.50
- 1.50 - 2.00
- > 2.00



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POST 1% AEP + CC @2100



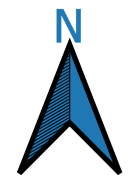
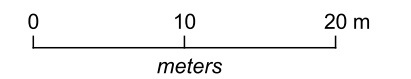
Legend

- 259 Kennedy Drive
- Boundary Lines
- Building Areas
- Existing drainage easements
- Columns and fuel bowsers
- Drive through lane with dish drain
- Proposed buildings

Post 1% AEP + CC @2100

Hazard

- H1
- H2
- H3
- H4
- H5
- H6

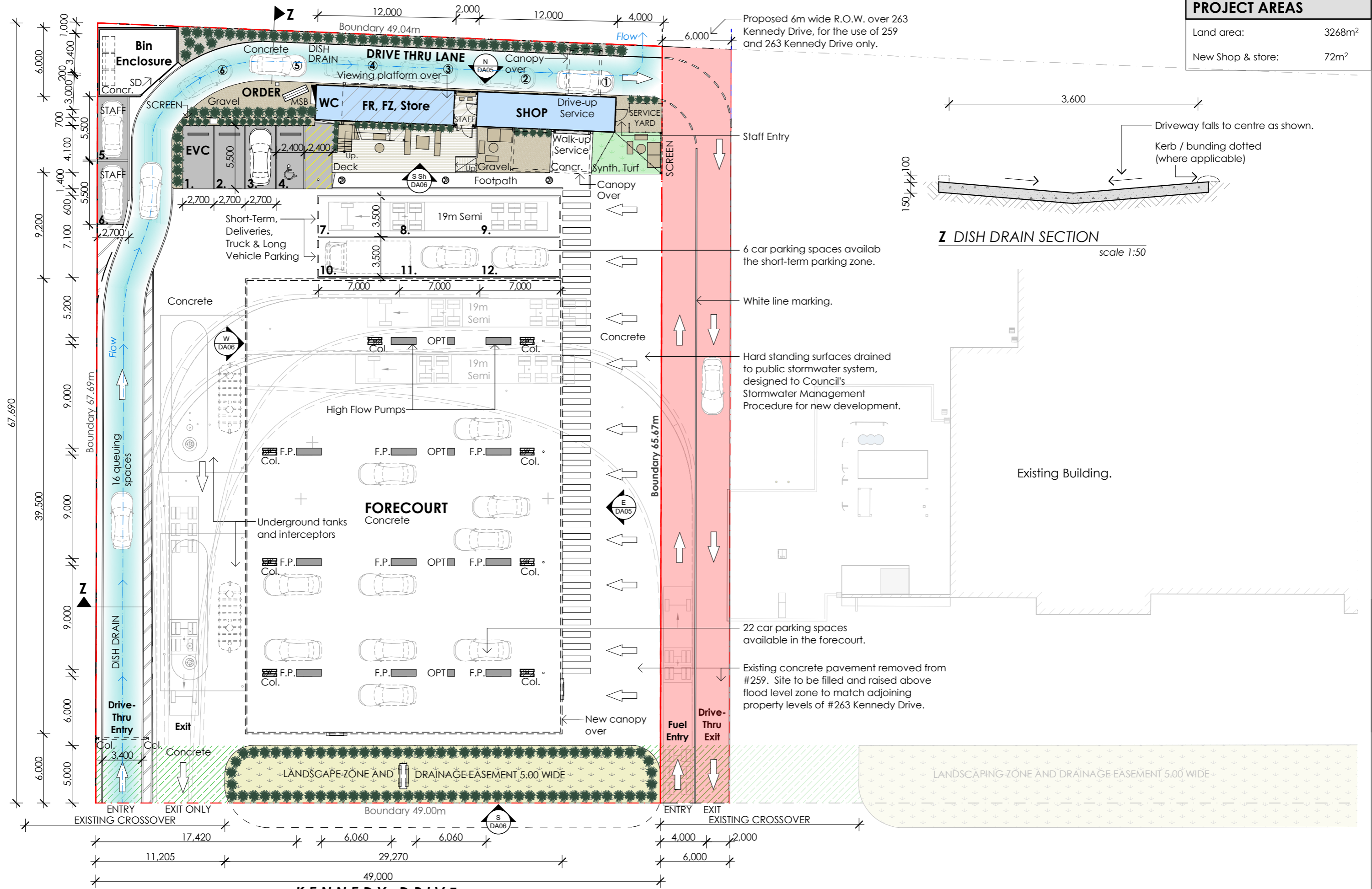


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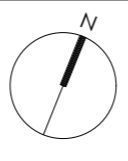
Appendix B Site plan including dish drain cross section

PROJECT AREAS	
Land area:	3268m ²
New Shop & store:	72m ²



Rev.	Amendment	Date

This drawing is to be read in conjunction with the other contract documents and instructions issued during the course of the contract. Contractors must verify all dimensions and levels on site prior to commencing. Do not scale drawings. Notify any errors, discrepancies or omissions to the Designer. © These drawings and designs are subject to copyright laws.



Project:
259 Kennedy Drive
Cambridge, TAS, 7170
Bennett's Petroleum

Drawing name:
Site Plan
Issue date:
28/02/2024

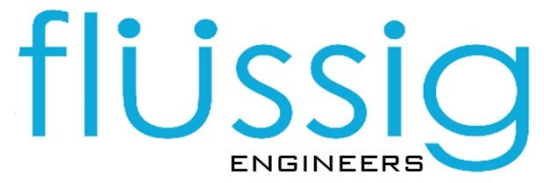
Project stage:
Development App.

Drawing no:
23.002-DA03
Scale @ A3:
1:300, 1:50
Revision:

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