

NOTICE OF PROPOSED DEVELOPMENT

Notice is hereby given that an application has been made for planning approval for the following development:

SITE: 21 Spoonbill Loop, Sorell

PROPOSED DEVELOPMENT:

DWELLING

The relevant plans and documents can be inspected at the Council Offices at 47 Cole Street, Sorell during normal office hours, or the plans may be viewed on Council's website at www.sorell.tas.gov.au until **Tuesday 5th November 2024**.

Any person may make representation in relation to the proposal by letter or electronic mail (sorell.council@sorell.tas.gov.au) addressed to the General Manager. Representations must be received no later than **Tuesday 5th November 2024**.

APPLICANT: Direen Homes Pty Ltd

APPLICATION NO: DA 2024 /243 - 1

DATE: 17 October 2024

Part B: Please note that Part B of this form is publicly exhibited.

Full description of Proposal:	Use: Dwelling
	Development: Proposed single dwelling
	<i>Large or complex proposals should be described in a letter or planning report.</i>
Design and construction cost of proposal:	\$ 450,000

Is all, or some the work already constructed:	No: <input checked="" type="checkbox"/> Yes: <input type="checkbox"/>
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Location of proposed works:	Street address: 21 Spoonbill Loop
	Suburb: Sorell Postcode: 7172
	Certificate of Title(s) Volume: 186811 Folio: 11

Current Use of Site	Vacant Land
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Current Owner/s:	Name(s) Direen Homes Pty Ltd
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Is the Property on the Tasmanian Heritage Register?	No: <input checked="" type="checkbox"/> Yes: <input type="checkbox"/>	<i>If yes, please provide written advice from Heritage Tasmania</i>
Is the proposal to be carried out in more than one stage?	No: <input checked="" type="checkbox"/> Yes: <input type="checkbox"/>	<i>If yes, please clearly describe in plans</i>
Have any potentially contaminating uses been undertaken on the site?	No: <input checked="" type="checkbox"/> Yes: <input type="checkbox"/>	<i>If yes, please complete the Additional Information for Non-Residential Use</i>
Is any vegetation proposed to be removed?	No: <input checked="" type="checkbox"/> Yes: <input type="checkbox"/>	<i>If yes, please ensure plans clearly show area to be impacted</i>
Does the proposal involve land administered or owned by either the Crown or Council?	No: <input checked="" type="checkbox"/> Yes: <input type="checkbox"/>	<i>If yes, please complete the Council or Crown land section on page 3</i>

If a new or upgraded vehicular crossing is required from Council to the front boundary please complete the Vehicular Crossing (and Associated Works) application form
<https://www.sorell.tas.gov.au/services/engineering/>



Sorell Council
 Development Application: Development Application - 21 Spoonbill Loop, Sorell - P1.pdf
 Plans Reference:P1
 Date Received:3/10/2024

Part B continued: Please note that Part B of this form is publicly exhibited

Declarations and acknowledgements

- I/we confirm that the application does not contradict any easement, covenant or restriction specified in the Certificate of Title, Schedule of Easements or Part 5 Agreement for the land.
- I/we consent to Council employees or consultants entering the site and have arranged permission and/or access for Council’s representatives to enter the land at any time during normal business hours.
- I/we authorise the provision of a copy of any documents relating to this application to any person for the purposes of assessment or public consultation and have permission of the copyright owner for such copies.
- I/we declare that, in accordance with s52(1) of the *Land Use Planning and Approvals Act 1993*, that I have notified the owner(s) of the intention to make this application.
- I/we declare that the information in this application is true and correct.

Details of how the Council manages personal information and how you can request access or corrections to it is outlined in Council’s Privacy Policy available on the Council website.

- I/we 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 exhibition, 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.

- Where the General Manager’s consent is also required under s.14 of the *Urban Drainage Act 2013*, by making this application I/we also apply for that consent.

Applicant Signature:	Signature: <u>Simon Dineen</u> Date: <u>02/10/2024</u>
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Crown or General Manager Land Owner Consent

If the land that is the subject of this application is owned or administered by either the Crown or Sorell Council, the consent of the relevant Minister or the Council General Manager whichever is applicable, must be included here. This consent should be completed and signed by either the General Manager, the Minister, or a delegate (as specified in s52 (1D-1G) of the *Land Use Planning and Approvals Act 1993*).

Please note:

- If General Manager consent is required, please first complete the General Manager consent application form available on our website www.sorell.tas.gov.au
- If the application involves Crown land you will also need a letter of consent.
- Any consent is for the purposes of making this application only and is not consent to undertaken work or take any other action with respect to the proposed use or development.

I _____ being responsible for the administration of land at _____

declare that I have given permission for the making of this application for



Signature of General Manager, Minister or Delegate:	Signature: _____ Date: _____
--	------------------------------

Prepared for
JAC Estates Pty Ltd

Spoonbill Loop Subdivision Sorell

FLOOD HAZARD REPORT

FE_24028
09th May 2024

flüssig
ENGINEERS






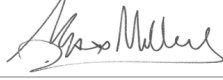

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ABN: 16 639 276 181



Document Information

Title	Client	Document Number	Project Manager
Spoonbill Loop Subdivision, Sorell, Flood Hazard Report	JAC Estate Pty Ltd	FE_24028	Max W. Möller Principal Hydraulic Engineer

Document Initial Revision

REVISION 00	Staff Name	Signature	Date
Prepared by	Max W. Moller Principal Hydraulic Engineer		25/04/2024
Prepared by	Ash Perera Hydraulic Engineer		25/04/2024
Prepared by	Christine Keane Senior Water Resources Analyst		25/04/2024
GIS Mapping	Damon Heather GIS Specialist		26/04/2024
Reviewed by	John Holmes Senior Engineer		29/04/2024
Reviewed by	Max W. Möller Principal Hydraulic Engineer		07/05/2024
Authorised by	Max W. Moller Principal Hydraulic Engineer		08/05/2024

Rev No.	Description	Prepared by	Authorised by	Date
00	Draft for client's review	MM	MM	09.05.2024
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1. Introduction

Flüssig Engineers has been commissioned by JAC Estates Pty Ltd to conduct a detailed Flood Hazard Report tailored to the Spoonbill Loop Subdivision project in Sorell, situated within the jurisdiction of the Sorell Council municipality.

The primary objective of this report is to meticulously assess the flood dynamics within the existing landscape post-development, particularly under the 1% Annual Exceedance Probability (AEP) compounded with climate change conditions. Additionally, it aims to ascertain the minimum required finished floor level permissible for any potential future dwellings located within lots affected by the flood extent within the potential building envelopes.

1.1 Development

The current subdivision development encompasses a total of 65 residential lots, collectively spanning an area of approximately 45,000 square meters positioned between Nash Street and the Orierton Lagoon in Sorell. Presently, each of the lots remains unoccupied.

1.2 Objectives and Scope

This report is to assess the existing development at Spoonbill Loop Subdivision. The objectives of this study are:

- Conduct an evaluation of the flood attributes of the site considering the combined 1% Annual Exceedance Probability (AEP) along with climate change (CC) scenarios.
- Furnish the findings pertaining to flooding concerning the current state of the subdivision development.
- Offer flood mitigation suggestions tailored for potential future development of individual lots, where deemed suitable. Provide an assessment of the site's flood characteristics under the combined 1% AEP plus climate change (CC) scenario.

1.3 Limitations

This study is limited to the objectives of the engagement by the clients, 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 and has not been checked for accuracy.
- The study is to determine the effects of the existing development on flooding behaviour and should not be used as a full flood study outside the specified area without further assessment.



2. Model Build

2.1 Overview of Catchment

The contributing catchment for Spoonbill Loop Subdivision, Sorell is approximately 35 ha stretching from the Sorell School on Main Road to the east towards the subdivision site with an average slope of 1.5 %.

The land use of the catchment is General Residential and Community Purpose with the specific site being listed as General Residential.

Figure 1 below outlines the approximate contributing catchment for the site at Spoonbill Loop Subdivision, Sorell.



Figure 1. Contributing Catchment, Spoonbill Loop Subdivision, Sorell

2.2 Hydrology

The following Table 1 states the adopted hydrological parameters for the RAFTS catchment, as per best practice guidelines.

Table 1. 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
35	27/1	4.0/0.0	0.045	0.02	-0.285

Design Rainfall Events Figure 2 shows the box and whisker output of the model run. The model shows that the 1% AEP 10 minute storm temporal pattern 9 was the worst-case median storm. Therefore, this storm event was used within the hydraulic model.

Figure 2. 1% AEP Flood Event Model, Box and Whisker Plot

2.2.1 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. However, ARR 2019 recommends that this figure be used in lieu of more local data being available.

The base scenario of the Climate Futures Tasmania (2010) study was revised following the ARR 2019 Australasia Climate Change study (undertaken by the University of Tasmania), resulting in the original increase in rainfall being reduced to 14.6% in cooler climates (Southern Tasmania). Table 2 shows the ARR 8.5 increase of 16.3% that has been adopted by Sorell Council and therefore used within the model.

Table 2. Climate Change Increases

Catchment	CFT increase @ 2100	ARR 8.5 increase @ 2100
South East Tasmania	14.6%	16.3%

2.2.2 Calibration/Validation

This immediate catchment has no stream gauge to calibrate the model against a real-world storm event. Similarly, there is little historical information available, and limited available past flood analysis undertaken to validate against the flows obtained in the model. A Regional Flood Frequency Estimation model (RFFE) has been used to calibrate our rain on grid rainfall estimation. The RFFE values are listed in Table 3 below.

Table 3. Regional Flood Frequency Estimation model (RFFE) v/s Flussig Result.

AEP (%)	Discharge (m ³ /s)	Lower Confidence Limit (5%) (m ³ /s)	Upper Confidence Limit (95%) (m ³ /s)	Flussig Discharge (m ³ /s)
50	0.140	0.0500	0.350	0.251
20	0.250	0.100	0.610	0.374
10	0.340	0.130	0.900	0.404
5	0.450	0.150	1.32	0.488
2	0.610	0.170	2.11	0.657
1	0.760	0.180	2.95	0.780

2.3 Hydraulics

2.3.1 Survey

The 2D surface model was taken from a combination of GreaterHobart-LiDAR2013-DEM-GRID- (Geoscience Australia) and the “As Constructed” 3D mesh TIN, to create a 1m and 0.1m cell size DEM. For the purposes of this report, 0.1m cells are enough to capture accurate flow paths. The DEM with hill shading can be seen below in Figure 3.

Hydraulic structures are included as either 1D or 2D structures throughout the model, where 1D structures exists a 1D/2D link is provided to allow flow to transition to and from the 2D surface.



Figure 3. 1.0m and 0.1m Combined DEM (hill shade) of subdivision

2.3.2 Pipes and pits

Pipes and pits were modelled as 1D underground network within the catchment model included the outfall discharge at the treatment area and ultimate to the Orielton Lagune. Pipe and pit data was supplied by the client for inclusion in the model. Underground pipes were connected via 1D/2D connected pits. Pits adopted an inlet flow limitation based off a double grated pit depth/flow curve.

2.3.3 Key Stormwater Assets

Key infrastructure elements on the site consist of an established levee system, which has been incorporated into the model, utilises a modelled Digital Elevation Model (DEM) with the integration of the concrete trench in Infoworks ICM model. This encompasses both the existing and new underground pipe systems within its framework, ensuring comprehensive representation and analysis within the model's scope building.

2.3.4 Roads

Roads often form the basis for overland flow in high frequency events, however the kerb and channel are not always picked up by DEM surface. To correct for the drainage lines, mesh polygons were used to delineate road corridors with the roads being incorporated a z-line along the gutter to ensure the kerb invert is represent in the mesh.

In our Digital Elevation Model (DEM), a "z-line" refers to a line representing a constant elevation or contour line. These lines connect the existing kerb points of equal elevation on the terrain surface, with maximum of 100mm from invert to top of kerb, allowing for visualisation of the terrain's shape and elevation changes.

2.3.5 Roughness (Manning's n)

Roughness values for this model were derived from the ARR 2019 Guidelines. The Manning's values are listed in Table 4.

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

2.3.6 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 300mm above ground.

2.4 Development Runoff

An evaluation of stormwater runoff from the development site has been conducted using the existing subdivision development models. The objective is to ascertain the potential impact of the overland flow path at the Spoonbill Loop Subdivision in Sorell. It is imperative that the existing development does not adversely affect this flow path, in accordance with established guidelines.

3. Model Results

The results obtained from running the 1% AEP (Annual Exceedance Probability) combined with climate change (CC) simulations were applied to the existing subdivision development model scenario. Through an examination of the model runs (refer to Figure 4), it becomes evident that a shallow overland flood path originates from the eastern boundary behind Nash Street, with maximum flood depths reaching 0.15 meters observed at Lot 8 and Lot 9. The variability in maximum flood depths is notable within the lots, ranging from 0.03 meters to 0.15 meters within the confines of the existing subdivision development.

The influence of the current underground stormwater system on the flood extent is significant, notably mitigating much of the overland flood path. However, minor stormwater surcharges are observed in some locations across the lot, particularly around the inlet and outlet of the new concrete trench positioned between Lots 8 and 9.

Notably, the lots affected by the flood extent fall within the lower hazard category. They can feasibly be developed with the implementation of minor mitigation measures, ranging from elevated pad or floor levels to the incorporation of small open drains along lot boundaries.

Figure 4 solely depicts the maximum flood extent across the entire subdivision. The dewatering process for the displayed overland flow areas is anticipated to occur swiftly, facilitated by the absence of significant barriers or impediments hindering the ingress of flow forces into the underground pipe system. Ultimately, these flow forces discharge into the nearby Orielson Lagoon without obstruction.





Figure 4. Pre-Development 1% AEP + CC Depth.

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3.1 Displacement of Overland Flow on Third Party Property

The current subdivision development analysis reveals that there's no escalation in flood depths affecting neighbouring properties of the development lot. Instead, the overland flow persists towards its natural path. However, this specific subdivision is already impacted by this overland flood path and doesn't add to any heightened flood risk. Consequently, it's safe to conclude that the development doesn't measurably impact third-party properties.

3.2 Development Effects on Flooding

The current subdivision development lies within the natural overland flow path. Yet, with the suggested mitigation strategies, the upcoming dwellings within the impacted lots would pose no negative impact on flooding during a 1% AEP storm event, both within the lot and its surroundings. Velocities and depths in the existing subdivision development scenario fall within the lowest hazard category. Consequently, the post-development models indicate no elevation in risk rating for surrounding properties or infrastructure, nor will it provide an opportunity for development that could result in unacceptable flood risk.

3.3 Future New Habitable Buildings

In order to satisfy the performance standards, set by Building Regulations S.54, any new habitable building construction necessitates a habitable floor level exceeding 300 mm above the flood level of greater than 1% AEP (Annual Exceedance Probability) plus Climate Change (CC) considerations. This regulation applies to the new development at Spoonbill Loop Subdivision, Sorell, as detailed in Table 5. (The requirement for floor level elevation above 1% AEP + CC flood level + 300mm does not extend to non-habitable areas). Below is a summary of the lots affected by flooding extent, potentially falling within the future building footprint.

Table 5. Habitable Floor Construction Levels

Spoonbill Loop Subdivision	1% AEP +CC flood depth (m)	1% AEP + CC flood level (mAHD)	Minimum Floor Level required (mAHD)
Lot 8	0.15	4.80	5.10
Lot 9	0.15	4.81	5.11
Lot 25	0.05	4.89	5.19
Lot 26	0.05	4.88	5.18
Lot 36	0.03	4.32	4.62
Lot 40	0.05	4.42	4.72
Lot 41	0.05	4.48	4.78
Lot 48	0.03	4.08	4.38
Lot 49	0.03	4.05	4.35
Lot 50	0.03	4.05	4.35
Lot 51	0.03	4.01	4.31
Lot 52	0.03	3.96	4.26
Lot 61	0.03	3.30	3.60
Lot 62	0.03	3.24	3.54
Lot 63	0.03	3.20	3.50

As indicated previously, the finished floor level must exceed by at least 300 mm to comply with Building Regulations S.54. If a new pad level is proposed for future dwellings, there should be a minimum vertical height disparity between the pad level plus flood depth and the FFL.

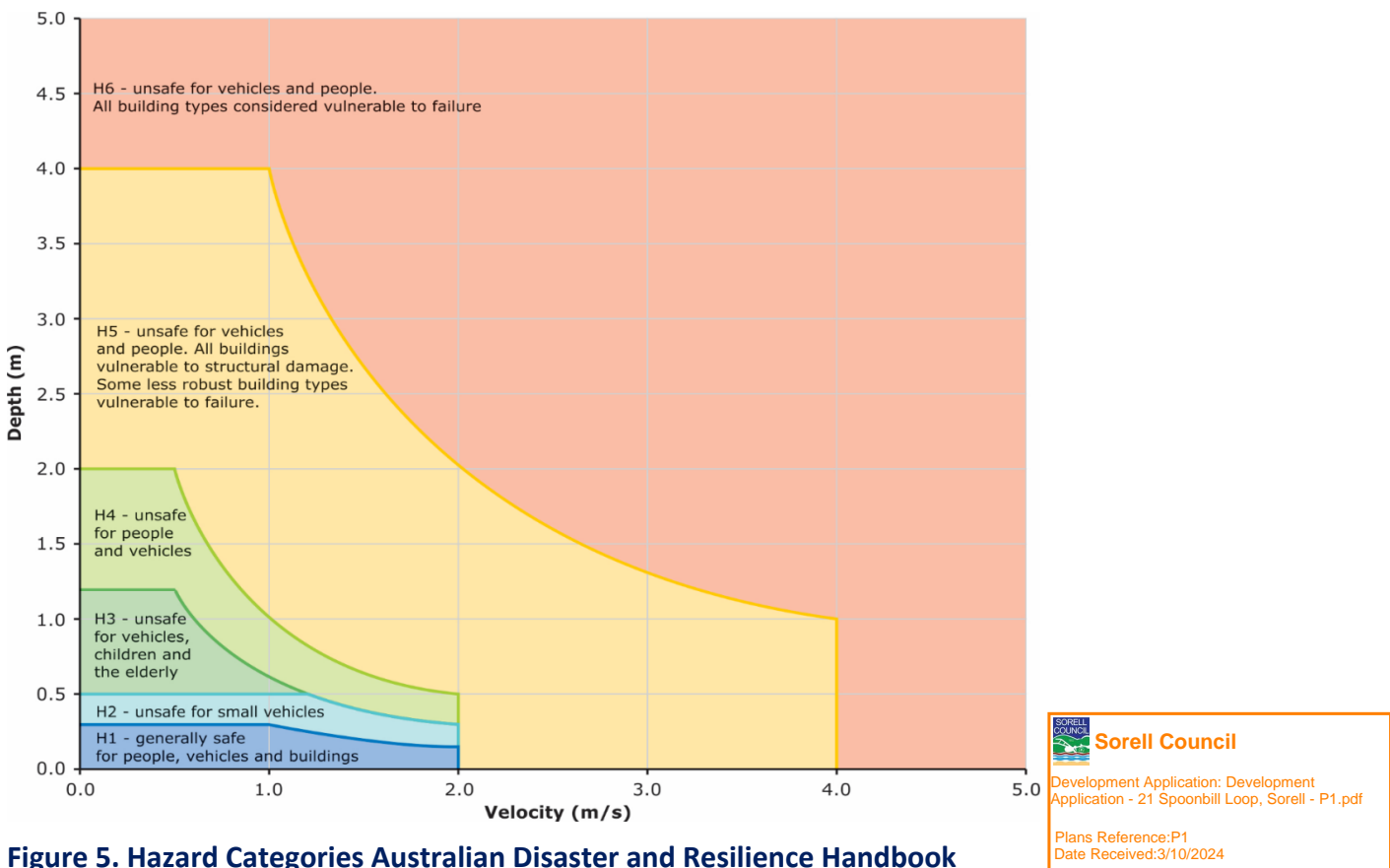
4. Flood Hazard

Under existing conditions the development, the potential locations of the future building in some of the lots are subject to be inundated from 0.03 m to 0.15 m flood depth and 0.13 m/s to 0.42 m/s velocities. This places the hazard rating as adopted by Australian Flood Resilience and Design Handbook as a maximum H1 – *Generally safe for people, vehicles and buildings* as shown in Appendix A – Hazard maps.

The existing subdivision development scenario sees the most significant flood depths at the eastern boundary of Lot 8 and Lot 9, which has no effect on the hazard rating that remains within the lowest hazard band of H1 for the lot.

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 residents and visitors remain inside in the event of a flood unless instructed by emergency services.

A summary of the hazard ratings is shown in Figure 5.



4.1 Tolerable Risk

The lot at Spoonbill Loop Subdivision, Sorell is susceptible to a shallow, slow-moving flood plain flow, with the majority of the immediate surrounding region classified low (H1) hazard rating in the 1% AEP + climate change event.

Even at minor velocity and depths during a storm event, erosion and debris movement nevertheless pose a threat. It is recommended that all structures undertake a hydrostatic/hydrodynamic analysis to ensure suitability. If the recommendations in this report are implemented, the proposed structure, which is intended to be a habitable class 1a structure with a 50-year asset life (BCA2022), can achieve a tolerable risk of flooding over its asset life.

5. Conclusion

The Flood Hazard Report for Spoonbill Loop Subdivision, Sorell development site has reviewed the potential development flood scenario.

The following conclusions were derived in this report:

1. The existing subdivision development peak flows for the 1% AEP at 2100 were undertaken to analyse the impact of flooding in the future individual lot development.
2. Building Regulations S.54 requires a habitable floor level of no less than the levels outlined in Table 5.
3. Flood depths range between 0.03 m to 0.15 m affecting the potential building envelopes of fifteen lots in the existing subdivision.
4. Velocity ranges between of 0.13 m/s to 0.42m/s in the riverine flood scenarios.
5. Hazard classification within the subdivision remains at the majority of H1, including on neighbouring properties.

6. Recommendations

Flüssig Engineers therefore recommends the following engineering design be adopted for the development and future use to ensure future development meets the Inundation Code:

1. Future dwelling affected by the flood extent, to have a minimum floor level as per Table 5 or higher.
2. A minimum of 2% grade to be maintained between all entrances from the dwelling to the natural ground level.
3. Building pads, if any, must be constructed to fall away at a minimum grade of 2% away from the habitable building and have adequate stormwater drainage within the pad extents.
4. Proposed structures, located in the inundation areas, are to be designed and constructed with flood tolerable materials that are deemed flood resistant and they can endure direct exposure to floodwaters.
5. Future proposed structures within the flood extent, not depicted in this report, must adhere to the recommendations outlined herein.

According to the local Council authority's regulations, the current development complies with the acceptable solutions and performance criteria outlined in the Tasmanian Planning Scheme 2021.



7. Limitations

Flüssig Engineers were engaged by **JAC Estates Pty Ltd**, for the purpose of a site-specific Flood Hazard Report for Spoonbill Loop Subdivision, Sorell. This study is deemed suitable for purpose at the time of undertaking the study. If the conditions of the site should change, the report 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 Hazard 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
- 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.



Appendices

Appendix A Flood Study Maps

 **Sorell Council**
Development Application: Development
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EXISTING CONDITIONS 1% AEP + CC @2100



Legend

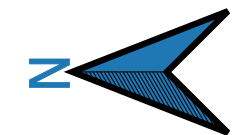
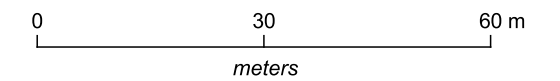
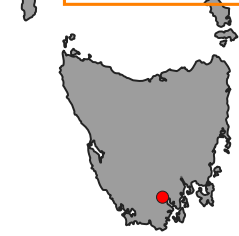
- Spoonbill Loop
- Spoonbill Area
- 1.00m Contours
- Boundary Lines
- Subdivision Layout

Existing Conditions 1% AEP + CC @2100

Depth (m)

- ≤ 0.03
- 0.03 - 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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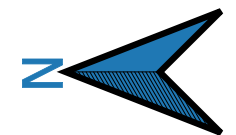
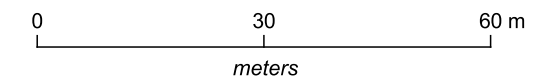
EXISTING CONDITIONS 1% AEP + CC @2100



Legend

- Spoonbill Loop
 - Spoonbill Area
 - Boundary Lines
 - Subdivision Layout
- Existing Conditions
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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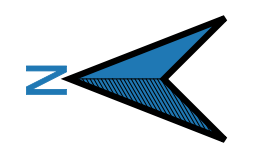
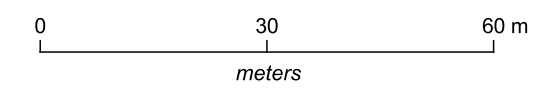
EXISTING CONDITIONS 1% AEP + CC @2100



Legend

- Spoonbill Loop
 - Spoonbill Area
 - Boundary Lines
 - Subdivision Layout
- Existing Conditions
1% AEP + CC @2100
- Hazard
- H1
 - H2
 - H3
 - H4
 - H5
 - H6

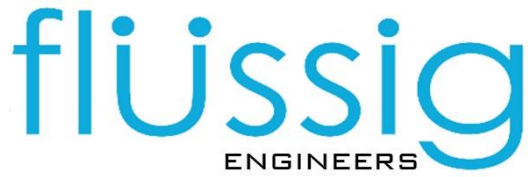
Sorell Council
Development Application: Development
Application - 21 Spoonbill Loop, Sorell - P1.pdf
Plans Reference: P1
Date Received: 3/10/2024



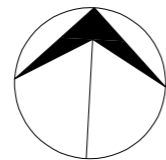
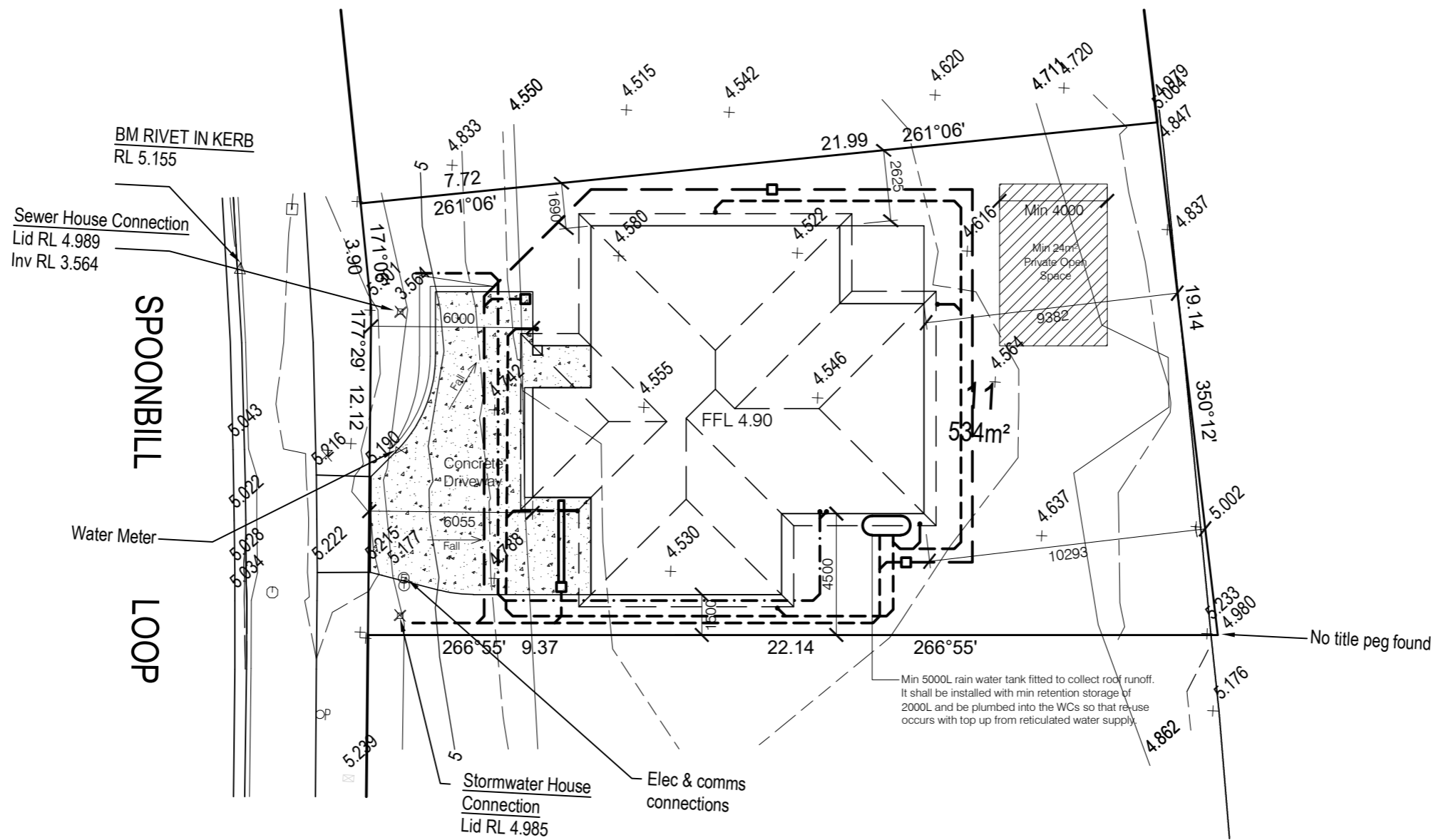
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Site Plan

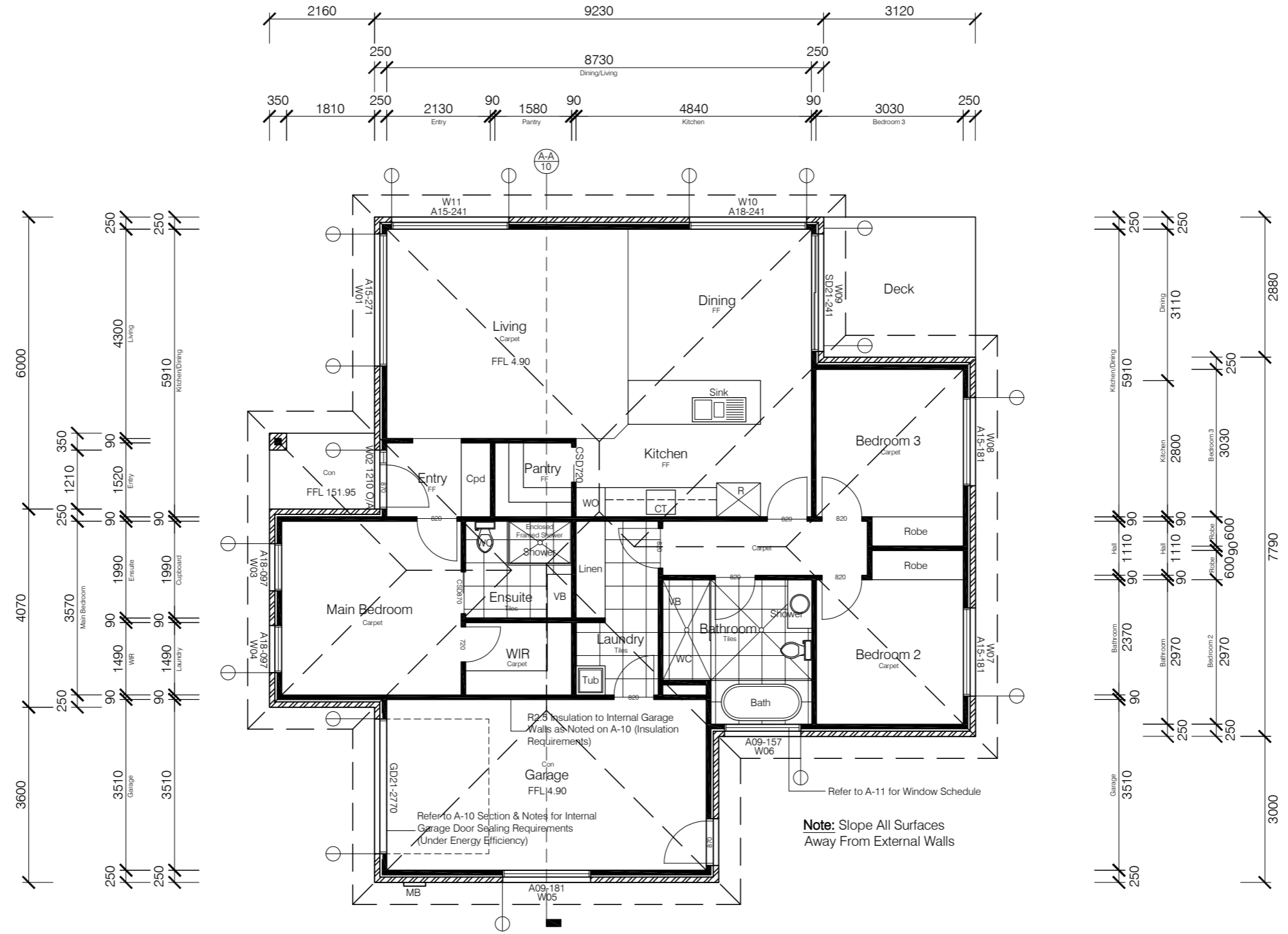
SCALE 1:200

Sorell Council
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Rev	Amendment:	Date:	Accredited Practitioner: Narelle Walker - CC1661W 5 Cessna Way Cambridge TAS 7170 P: 03 62484366 E: narelle@direenhomes.com.au	 DIREEN HOMES PTY LTD 5 Cessna Way, Cambridge, 7170 P: 03 62484366 E: info@direenhomes.com.au	Client Name: Direen Homes Project Address: 21 Spoonbill Loop Sorell TAS 7172	Drawing Title: Site Plan File Name: 24 DHD-13, 21 Spoonbill Loop.dwg	Date: 1-Oct-24 Drawing Scale: 1:200	Sheet Size: A3 Drawing No: A-01

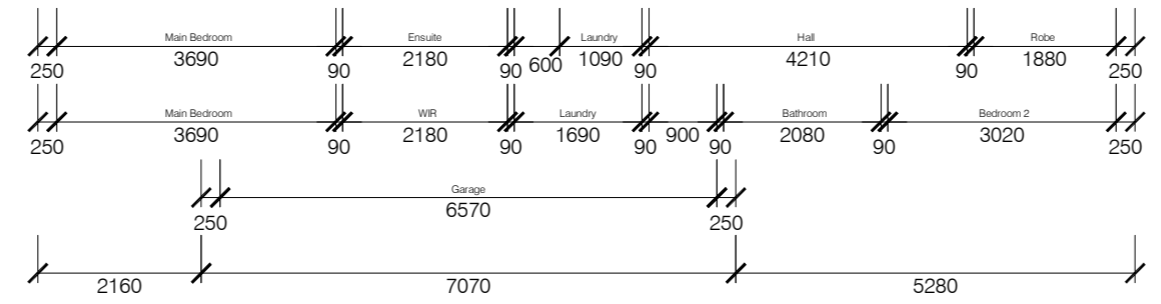
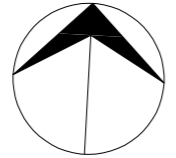
Legend & Notes:

-  Brick Veneer Walls
-  90mm Stud Walls
-  Articulation Joint
- Con Concrete Floor Finish
- FF Floating Floor
- CT Cooktop
- WO Wall Oven
- R Refrigerator
- VB Vanity Basin
- WC Toilet (Water Closet)
- CSD Cavity Sliding Door
- MB Meter Box




Floor Plan

SCALE 1:100
FLOOR AREA: 152.70m²



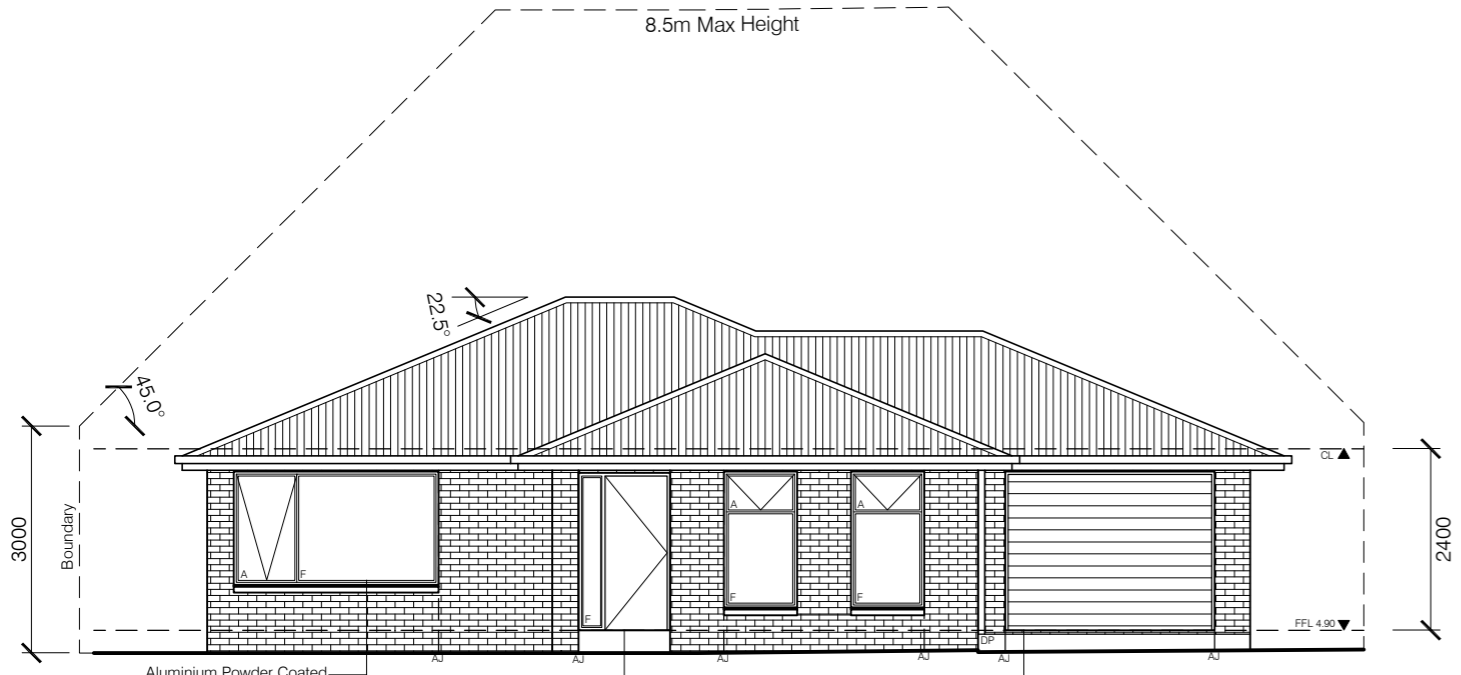
- NOTES:**
- Ground to Slope Away From All External Walls
 - Provide Fall to Bathroom Floor/Shower Outlets in Accordance with Part 10.2 Housing Provisions and AS 3740
 - Provide Waterstop to Edge of Tiles at Door Ways & Shower Screen Perimeters
 - Reinforcement of Bathroom and Sanitary Compartment Walls to be in Accordance with Part 6.1 & 6.2 of Livable Housing Design Standard

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Development Application: Development Application - 21 Spoonbill Loop, Sorell - P1.pdf
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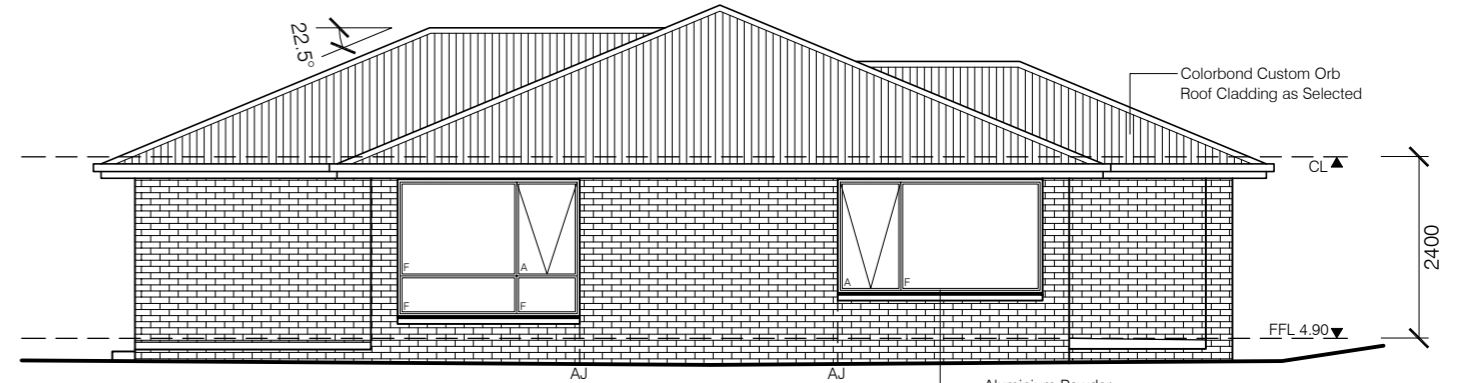
Rev	Amendment:	Date:	Accredited Practitioner: Narelle Walker - CC1661W 5 Cessna Way Cambridge TAS 7170 P: 03 62484366 E: narelle@direenhomes.com.au	 DIREEN HOMES PTY LTD 5 Cessna Way, Cambridge, 7170 P: 03 62484366 E: info@direenhomes.com.au	Client Name: Direen Homes Project Address: 21 Spoonbill Loop Sorell TAS 7172	Drawing Title: Floor Plan File Name: 24 DHD-13, 21 Spoonbill Loop.dwg	Date: 1-Oct-24 Drawing Scale: 1:100	Sheet Size: A3 Drawing No: A-02
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Colour Selection:	
Roof:	Woodland Grey
Gutter:	Woodland Grey
Fascia:	Dover White
Windows:	Dover White
Brick:	Mist Eco Smooth
Garage Door:	Woodland Grey

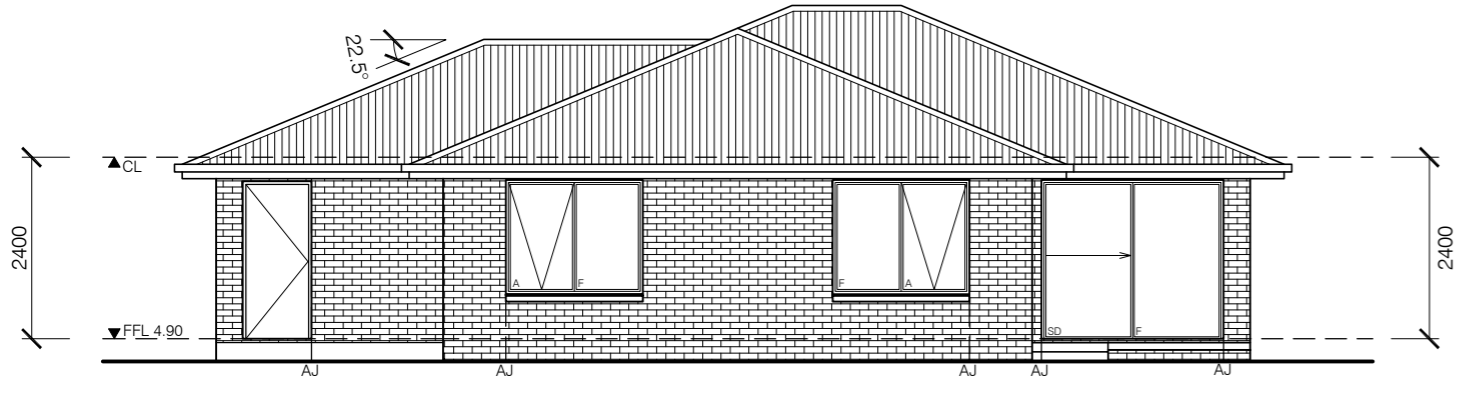
Legend & Notes:	
A	Awning Window
AJ	Articulation Joint
CL	Ceiling Level
F	Fixed Window
FL	Floor Level
SD	Sliding Door



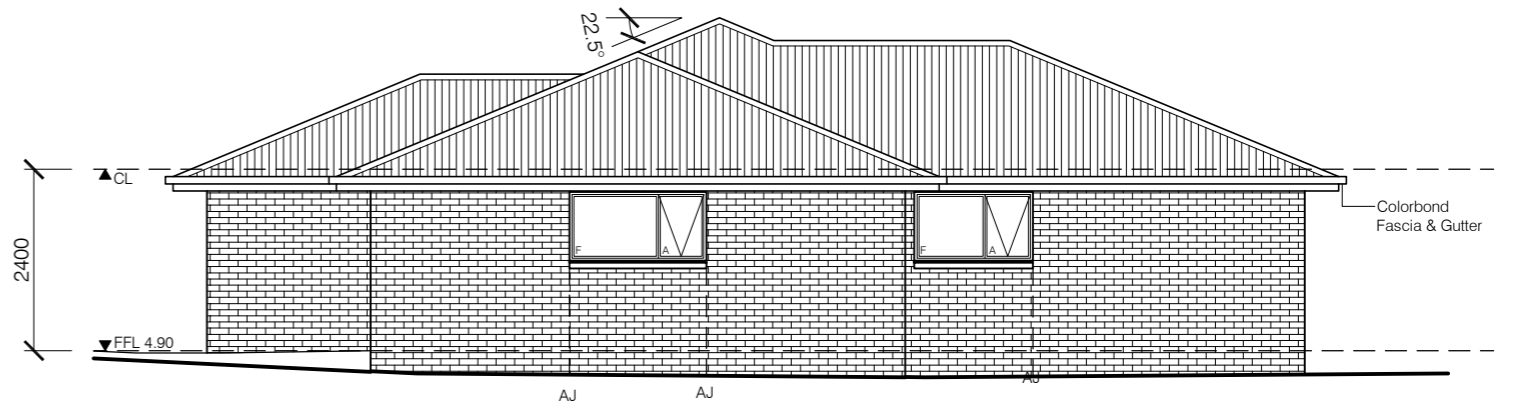
West Elevation
SCALE 1:100



North Elevation
SCALE 1:100



North Elevation
SCALE 1:100



West Elevation
SCALE 1:100

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