NOTICE OF PROPOSED DEVELOPMENT

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

SITE: 10 Miena Drive, 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 **Monday 28th July 2025.**

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 **Monday 28th July 2025.**

APPLICANT: **G Hills & Partners Architects**

APPLICATION NO: **DA 2025 / 00134 1**
DATE: **10 July 2025**

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

Full description of Proposal:	*Use:* Dwelling *Development:* New Dwelling & attached garage *Large or complex proposals should be described in a letter or planning report.*
Design and construction cost of proposal:	$ 380,000

Is all, or some the work already constructed:	No: ☑ Yes: ☐

Location of proposed works:	Street address: Lot 28 - 10 Miena Road Suburb: Sorell Postcode: 7172 Certificate of Title(s) Volume: 182322 Folio: 28

Current Use of Site	Vacant residential

Current Owner/s:	Name(s) M. Welsh

Is the Property on the Tasmanian Heritage Register?	No: ☑ Yes: ☐	*If yes, please provide written advice from Heritage Tasmania*
Is the proposal to be carried out in more than one stage?	No: ☑ Yes: ☐	*If yes, please clearly describe in plans*
Have any potentially contaminating uses been undertaken on the site?	No: ☑ Yes: ☐	*If yes, please complete the Additional Information for Non-Residential Use*
Is any vegetation proposed to be removed?	No: ☑ Yes: ☐	*If yes, please ensure plans clearly show area to be impacted*
Does the proposal involve land administered or owned by either the Crown or Council?	No: ☑ Yes: ☐	*If yes, please complete the Council or Crown land section on page 3*

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/

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: ..... Date: 20/05/2025

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 if 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 _____ Sorell Council Development Application: 5.2025.134.1 - Development Application - 10 Miena Drive, Sorell - P1.pdf Plans Reference:P1 Date Received:20/05/2025

Signature of General Manager, Minister or Delegate:	Signature: ..... Date: .....

P R O P O S E D N E W D W E L L I N G

for: R. J. Welsh & Sons

at: Lot 28, No.10 Miena Road, SORELL

Project No. **22524**

Date: May. 2025

DESIGN DEVELOPMENT DRAWINGS

Drawing Schedule

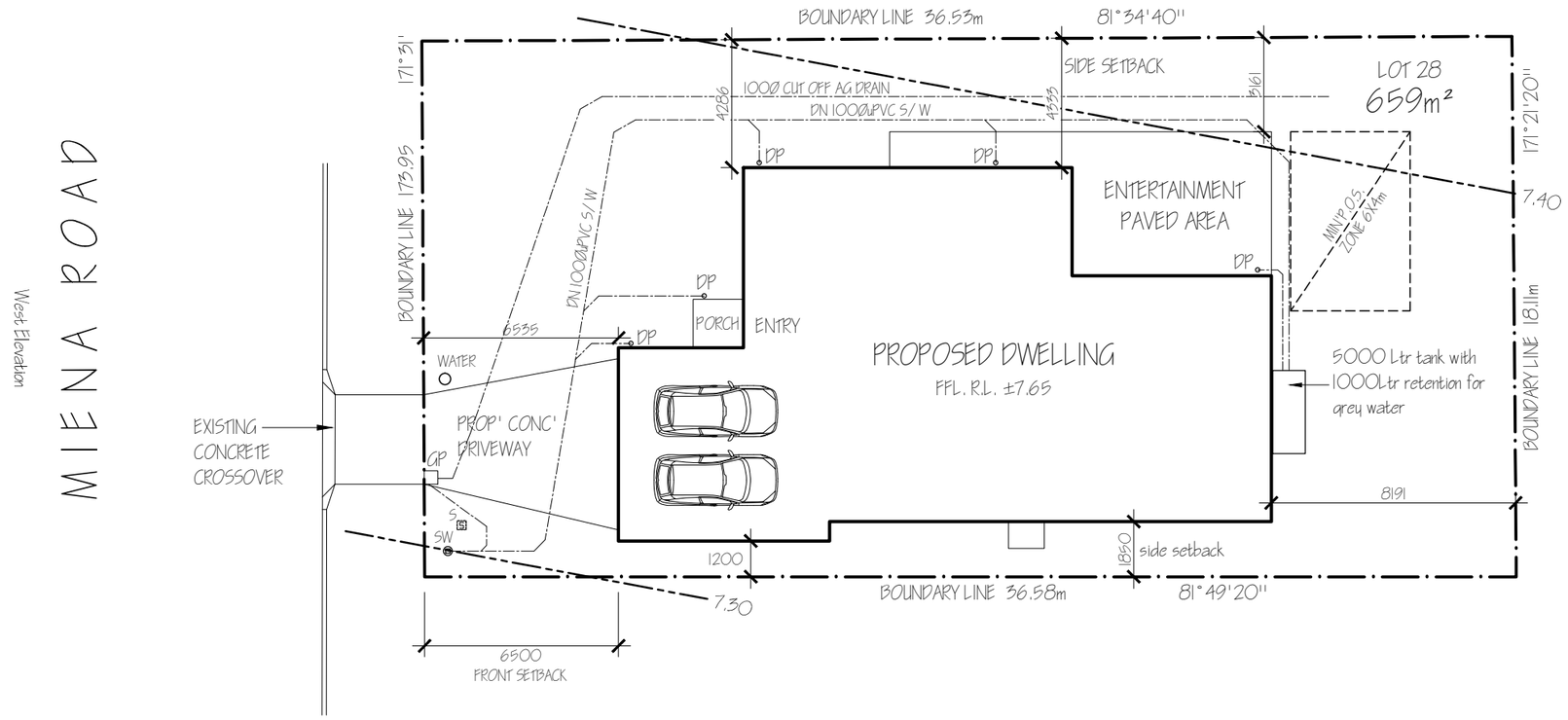
DD01 Proposed Site Plan
DD02 Proposed Floor Plan
DD03 Proposed Elevations 1
DD04 Proposed Elevations 2

Prepared by:

G.Hills&Partners ARCHITECTS

Member Australian Institute of Architects

P.O. Box 910, Kingston, Tas 7051
Ph: (03) 6229 1799 Mob: 0419 883 370
Email: graham.hills@bigpond.com
Tas Building Practitioner No. CC2367B



PROPOSED SITE PLAN

1: 200

0 2 4 6 8

AREAS

Proposed Dwelling (Incl. Garage & Porch)	= 214.60m²
Site Coverage	= 33%

LEGEND

GP	= 450sq TRAFFICABLE GRATED PIT / SILT TRAP
DP	= 100Ø DOWNPIPE

NORTH

NOTES:
* Do not scale the drawings.
* Verify levels / dimensions on site prior to commencement, report any discrepancies / variations to designer.
* Materials / workmanship to comply with AS codes, BCA & relevant regulations.

REVISION NOTES

No.	Revision/Issue	Date

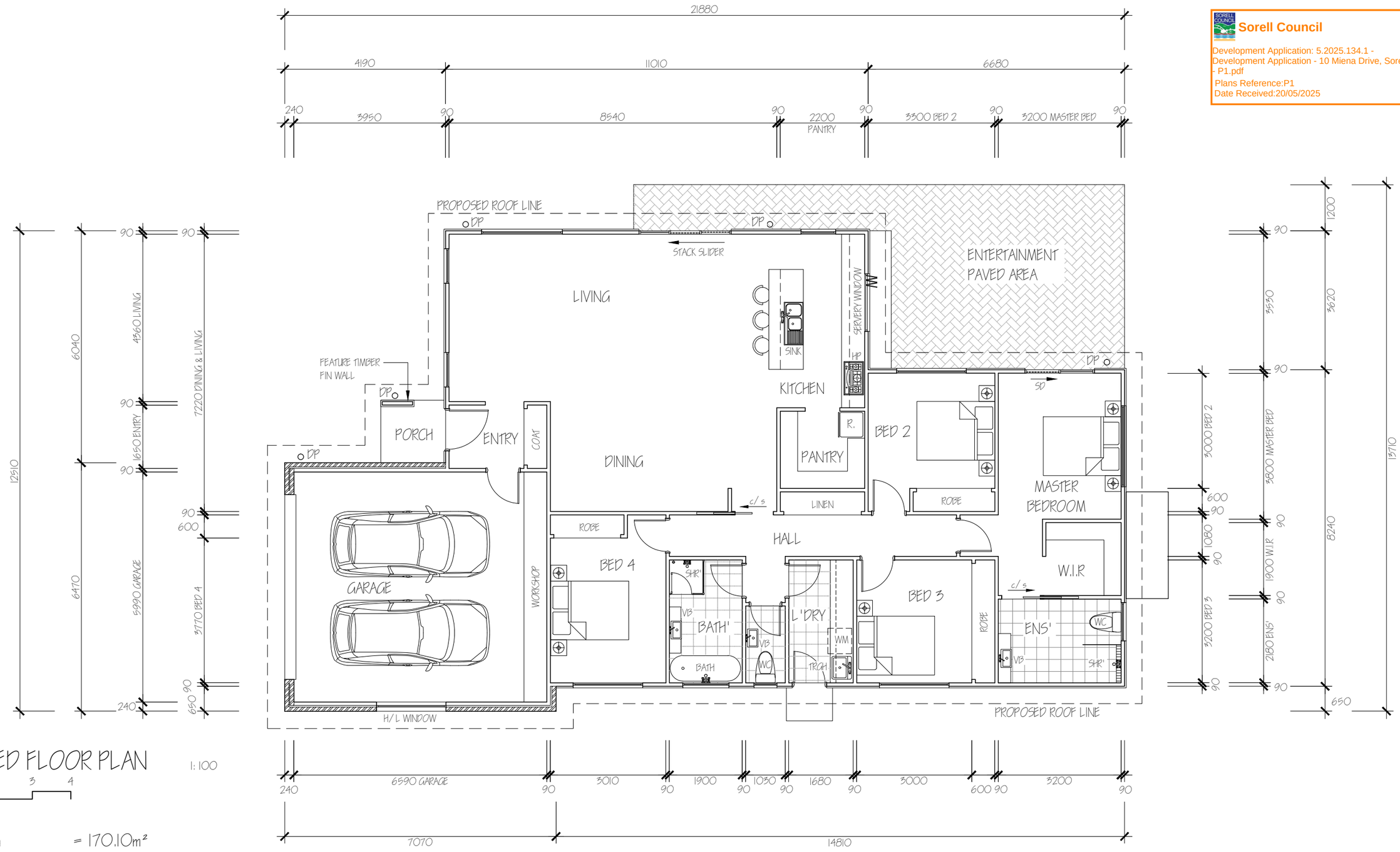
G.Hills&Partners ARCHITECTS
PO Box 910, KINGSTON, TAS 7051
P 03 6229 1799 E graham.hills@bigpond.com
Building Designer Accreditation No. CC2367B

Project Name and Address
PROPOSED NEW DWELLING
Lot 28, No.10 Miena Road, SORELL

Drawing Title
PROPOSED SITE PLAN

Client
R. J. Welsh & Sons

DRAWING TYPE	Design Dev' Drawings
PROJECT No.	22524
Date	20-May-25
SHEET	DD01
CHECKED	G. HILLS
Scale	1:200
Size	A3
DESIGN	G. HILLS
DRAWN	M. Kamankesh



PROPOSED FLOOR PLAN

1: 100

0 1 2 3 4

AREA:

Habitable Area	= 170.10m²
Garage	= 44.50m²
Total	= 214.60m²
Porch	= 2.75m²

NORTH

NOTES:
* Do not scale the drawings.
* Verify levels / dimensions on site prior to commencement, report any discrepancies / variations to designer.
* Materials / workmanship to comply with AS codes, BCA & relevant regulations.

REVISION NOTES

No.	Revision/Issue	Date

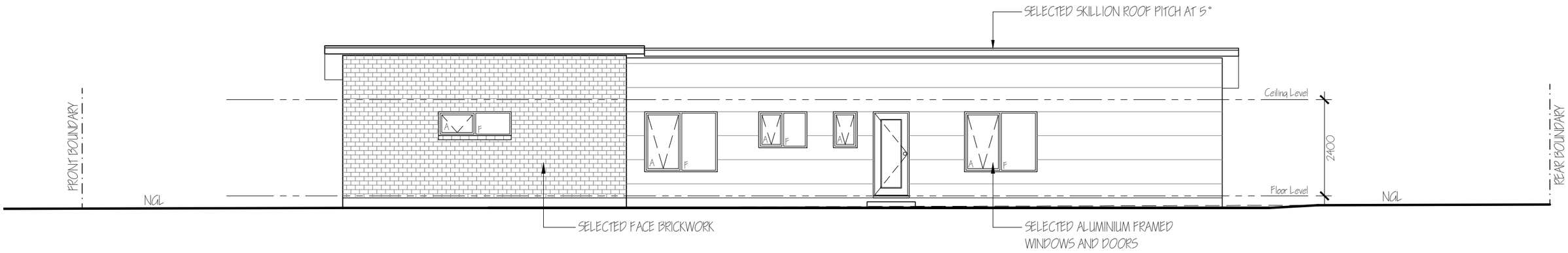
G.Hills&Partners ARCHITECTS
PO Box 910, KINGSTON, TAS 7051
P 03 6229 1799 E graham.hills@bigpond.com
Building Designer Accreditation No. CC2367B

Project Name and Address
PROPOSED NEW DWELLING
Lot 28, No.10 Miena Road, SORELL

Drawing Title
PROPOSED FLOOR PLAN

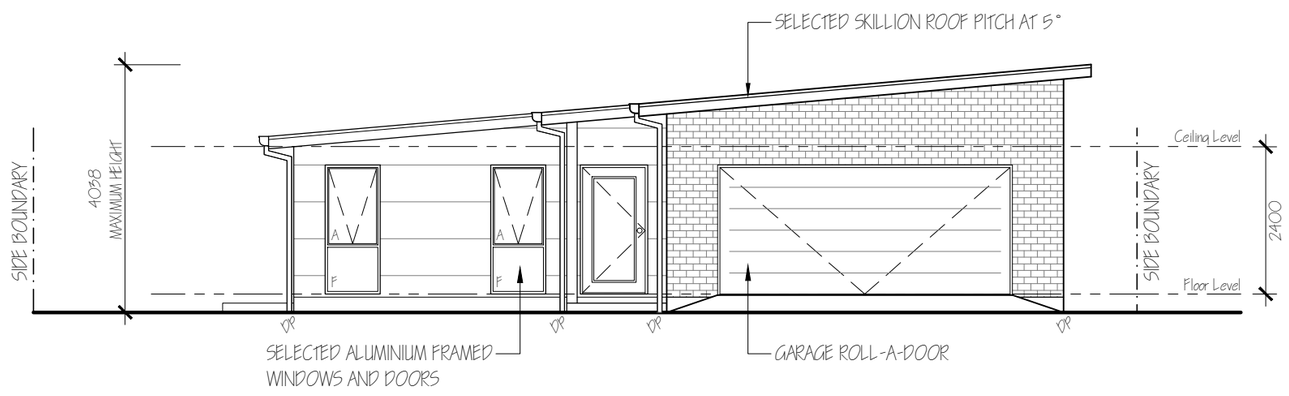
Client
R. J. Welsh & Sons

DRAWING TYPE	Design Dev' Drawings
PROJECT No.	22524
Date	20-May-25
SHEET	DD02
CHECKED	G. HILLS
Scale	1:100
Size	A3
DESIGN	G. HILLS
DRAWN	M. Kamankesh



SOUTH ELEVATION 1: 100

0 1 2 3 4



WEST ELEVATION 1: 100

0 1 2 3 4

NOTES:
* Do not scale the drawings.
* Verify levels / dimensions on site prior to commencement, report any discrepancies / variations to designer.
* Materials / workmanship to comply with AS codes, BCA & relevant regulations.

REVISION NOTES

No.	Revision/Issue	Date

G.Hills&Partners ARCHITECTS
PO Box 910, KINGSTON, TAS 7051
P 03 6229 1799 E graham.hills@bigpond.com
Building Designer Accreditation No. CC2367B

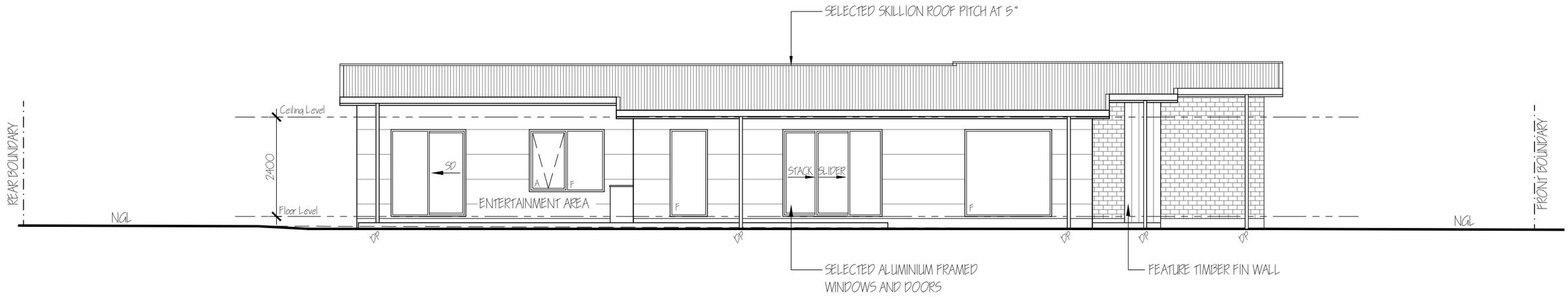
Project Name and Address
PROPOSED NEW DWELLING
Lot 28, No.10 Miena Road, SORELL

Drawing Title
PROPOSED ELEVATIONS 1

Client
R. J. Welsh & Sons

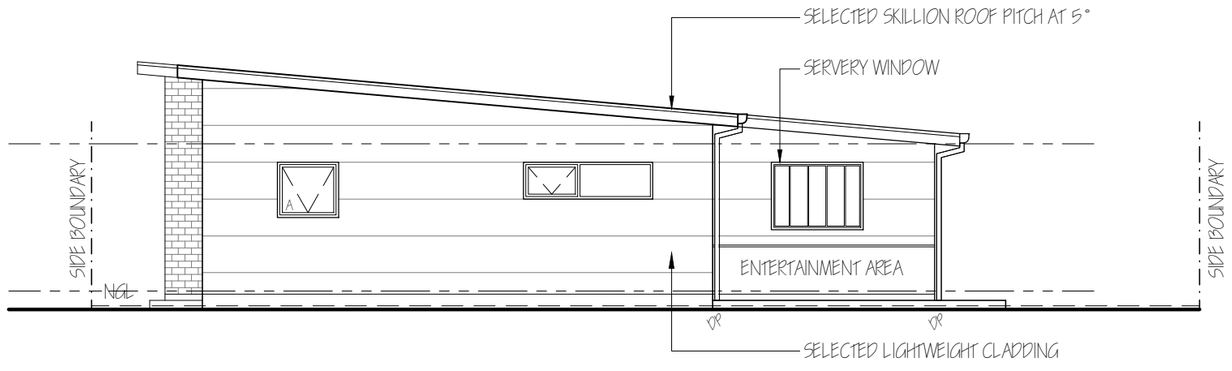
DRAWING TYPE: Design Dev' Drawings
Date: 20-May-25
Scale: 1:100
Size: A3

PROJECT No.: 22524
SHEET: DD03
CHECKED: G. HILLS
DESIGN: G. HILLS
DRAWN: M. Kamankesh



NORTH ELEVATION 1:100

0 1 2 3 4



EAST ELEVATION 1:100

0 1 2 3 4

Sorell Council

Development Application: 5.2025.134.1 - Development Application - 10 Miena Drive, Sorell - P1.pdf
Plans Reference:P1
Date Received:20/05/2025

NOTES:
* Do not scale the drawings.
* Verify levels / dimensions on site prior to commencement, report any discrepancies / variations to designer.
* Materials / workmanship to comply with AS codes, BCA & relevant regulations.

REVISION NOTES

No.	Revision/Issue	Date

G.Hills&Partners ARCHITECTS
PO Box 910, KINGSTON, TAS 7051
P 03 6229 1799 E graham.hills@bigpond.com
Building Designer Accreditation No. CC2367B

Project Name and Address
PROPOSED NEW DWELLING
Lot 28, No.10 Miena Road, SORELL

Drawing Title
PROPOSED ELEVATIONS 2

Client
R. J. Welsh & Sons

DRAWING TYPE: Design Dev' Drawings
Date: 20-May-25
Scale: 1:100
Size: A3

PROJECT No. 22524
SHEET DD04
CHECKED G. HILLS
DESIGN G. HILLS
DRAWN M. Kamankesh

enviro •tech
CONSULTANTS
Geotechnical & Environmental Services

FLOOD PRONE AREAS HAZARD ASSESSMENT

Proposed Dwelling 10 MIENA DRIVE - SORELL

Client: G.Hills & Partners Architects

Certificate of Title: 182322/28

Investigation Date: 11/06/2025

Refer to this Report As

Enviro-Tech Consultants Pty. Ltd. 2025. Flood Prone Areas Assessment Report for a Proposed Dwelling, 10 Miena Drive - Sorell. Unpublished report for Prime Design by Enviro-Tech Consultants Pty. Ltd., 11/06/2025.

Report Distribution:

This report has been prepared by Enviro-Tech Consultants Pty. Ltd. for the use by parties involved in the proposed residential development of the property named above. It is to be used only to assist in managing any existing or potential inundation hazards relating to the Site and its development.

Limitations of this report

The data displayed within this document has been prepared using open-source scientific documents and data. Envirotech have used this local and regional data to estimate present and future hazards at the Site. The data is by its nature approximate and may contain errors introduced by the data provider(s).

The inundation modelling conducted in this assessment assumes specific Site conditions detailed within this assessment report as per design plans. Modifications to the landscape, not indicated in this report, including construction of retaining walls, soil cut or fill, and water flow obstructions including but not limited to vegetation, fencing, and non-fixed items may result in varied inundation levels and varied water flow movement across the property which are not modelled in this assessment are outside of the scope of this investigation.

Executive Summary

Enviro-Tech Consultants Pty. Ltd. (Envirotech) were contracted by G.Hills & Partners Architects to prepare a flood prone areas hazard assessment for a proposed Dwelling located at 10 Miena Drive, Sorell. This report has been written to address planning scheme overlay codes in general accordance with the state-wide planning provisions for Sorell City Council.

The objective of the Site investigation is to:

- Use available geographic information system (GIS) data and use previous local survey (Enviro-Tech 2025) to make interpretations about present Site hydrology, and how the proposed development will be impacted by inundation and where relevant, assessing the development influence on floodwaters entering and existing the land.
- Conduct a risk assessment for the proposed development ensuring relevant performance criteria, building regulations and directors determination are addressed.
- Assess if the proposed development can achieve and maintain a tolerable risk for the intended life of the use or development without requiring any flood protection measures.
- Determine if the building and works will cause or contribute to flood or inundation on the Site, on adjacent land or public infrastructure
- Provide recommendations for managing inundation risk.

The proposed development comprises a single storey dwelling with four bedrooms and a garage.

This assessment involves that part of the dwelling is projected to be impacted by floodwaters. The proposed dwelling FFL were determined based on catchment and site hydrology modelling.

The following are modelled:

- Up to 1.0m thickness of fill has been used to form the Miena Park Estate subdivision (Map 4). The fill has been placed at a location where previous 1% AEP floodwaters have been modelled (and incorporated into the TPS flood prone areas overly).
- The Site survey, conducted in 2025, has been converted into a digital elevation model. In addition, available data from a second survey conducted by Enviro-Tech Consultants in 2025 is used to determine how the fill will impact 1% AEP floodwater movement as well as inundation levels and velocities at the Site.
- With the infilling of the Site, flood waters are now directed southwards along the new subdivision eastern boundary preventing overtopping of the Site.
- The highest inundation level within the open drainage easement is calculated at 6.91 m AHD (Figure 1 – Inferred floodwaters)
- With the building envelope positioned at 7.4 meters AHD and the modelled 1% AEP inundation level at meters AHD, the 0.3-meter freeboard provides an adequate buffer against potential Site flooding

1 Introduction

1.1 *Background*

Enviro-Tech Consultants Pty. Ltd. (Envirotech) were contracted by G.Hills & Partners Architects to prepare a flood prone areas hazard assessment for a proposed Dwelling located at 10 Miena Drive, Sorell. This report has been written to address planning scheme overlay codes in general accordance with the state-wide planning provisions for Sorell City Council.

This inundation modelling report has been overseen by an environmental and engineering geologist with hydrogeology and hydrology training and experience. Areas of competence include catchment and streamflow models for assessing waterway erosion and inundation.

The proposed development has triggered the following overlay codes which are addressed within this report:

- C 12.0 Flood Prone Areas Code

1.2 *Objectives*

The objective of the Site investigation is to:

Use available geographic information system (GIS) data and use previous local survey (Enviro-Tech 2025) to make interpretations about present Site hydrology, and how the proposed development will be impacted by inundation and where relevant, assessing the development influence on floodwaters entering and existing the land.

Conduct a risk assessment for the proposed development ensuring relevant performance criteria, building regulations and directors determination are addressed.

Assess if the proposed development can achieve and maintain a tolerable risk for the intended life of the use or development without requiring any flood protection measures.

Determine if the building and works will cause or contribute to flood or inundation on the Site, on adjacent land or public infrastructure

Provide recommendations for managing inundation risk.

1.3 *Cadastral Title*

The land studied in this report is defined by the title 182322/28

1.4 *Site Setting*

The Site watershed influence and floodwater overlays are presented in Map 1. The Site location plans are presented in Map 5.

2 Assessment

2.1 *Proposed Development*

Table 1 summarises the provided design documents from which this assessment is based (Attachment 2). The proposed development comprises a four bedrooms single storey dwelling and a garage.

The proposed dwelling FFL are to be determined based on the findings of this assessment.

Table 1 Project Design Drawings

Drafted By	Project Number	Date Generated	Drawings
G.Hills & Partners Architects	22524	02/06/2025	WD05

2.2 *Planning*

Planning code overlay mapping is presented in Attachment 1 and planning and building regulations are addressed in Attachment 3.

The Site is located within the Sorell Council mapped 1% Annual Exceedance Probability (AEP) inland flooding hazard area (Map 1). The mapping has triggered Flood Prone Areas Hazard Code, meaning that a more detailed investigation is required to further assess inundation risk associated with the proposed development. The defined floodwater level for the land is to be assessed based on proposed Site works.

2.3 *Building*

According to the Tasmanian Building Regulations 2016, the floor level of each habitable room[1] of the building, being erected, re-erected, or added as part of the work, is to be constructed at least 300 millimetres above the defined flood level for the land.

2.4 *Topography*

The Site ranges in elevation from approximately 7.28 m AHD to 7.45 m AHD and is near level (Map 5).

2.5 *Stormflow Analysis*

Details of the stormflow analysis assessment are presented in Attachment 4. The following are modelled:

- Up to 0.5m thickness of fill has been used to form the Site (Map 4). The fill has been placed at a location where previous 1% AEP floodwaters have been modelled (and incorporated into the TPS flood prone areas overly).
- The Site survey, conducted by PDA in 2022, has been converted into a digital elevation model. In addition, a second survey has been conducted by Enviro-Tech Consultants in 2025 to determine fill depths and how the fill will impact 1% AEP floodwater movement for determining inundation levels and velocities at the Site.
- Modelling indicates that there is a low probability that floodwaters will enter the Site given a 1% flood event.

[1] habitable room - means any room of a habitable building other than a room used, or intended to be used, for a bathroom, laundry, toilet, pantry, walk-in wardrobe, corridor, stair, hallway, lobby, clothes drying room, service or utility room, or other space of a specialised nature occupied neither frequently nor for extended periods.

3 Risk Assessment

Qualitative risk evaluation criteria have been created to determine fundamental risks that may occur due to development in areas that are vulnerable to inundation hazards.

This qualitative risk assessment technique is based on AS/NZS ISO 31000:2009 and relies on descriptive or comparative characterisation of consequence, likelihood, and the level of risk comparative (rather than using absolute numerical measures).

A risk consequence/likelihood matrix has been selected which is consistent with AS/NZS ISO 31000:2009 guidelines.

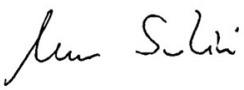
Consequence/likelihood criteria have assisted in determining if any risk management measures are required at the Site to mitigate any potential hazards. Adopted consequence/likelihood criteria are presented in Attachment 5. Performance criteria are presented in Attachment 6.

As habitable rooms are raised 300 mm above the defined flood level for the Site, risks associated with the proposed works are considered low.

4 Site Building and Works

The following are modelled:

- Given the Miena Park Estate development and modified Site elevations, 1% AEP floodwaters will bypass the Site to the east (Figure 1 - Section B and Section C).
- With finished floor levels at or above 7.4 m AHD, the building will be elevated greater than 300 mm above Site 1% AEP inundation levels.



Marco Scalisi BSc Msc | Environmental & Engineering Geologist

Project manager

Enviro-Tech Consultants Pty. Ltd.

5 References

Ball, J. et al., 2019. Australian Rainfall and Runoff (AR&R): A guide to Flood Estimation. [Online] Available at: http://book.arr.org.au.s3-website-ap-southeast-2.amazonaws.com/ [Accessed 12 07 2022].

Ball J, Babister M, Nathan R, Weeks W, Weinmann E, Retallick M, Testoni I, (Editors) Australian Rainfall and Runoff: A Guide to Flood Estimation, © Commonwealth of Australia (Geoscience Australia), 2019.

CBOS 2021a. Director's Determination - Riverine Inundation Hazard Areas. Director of Building Control Consumer, Building and Occupational Services, Department of Justice. 8 April 2021

Chow, VT (1959) Open channel hydraulics, McGraw-Hill, New York

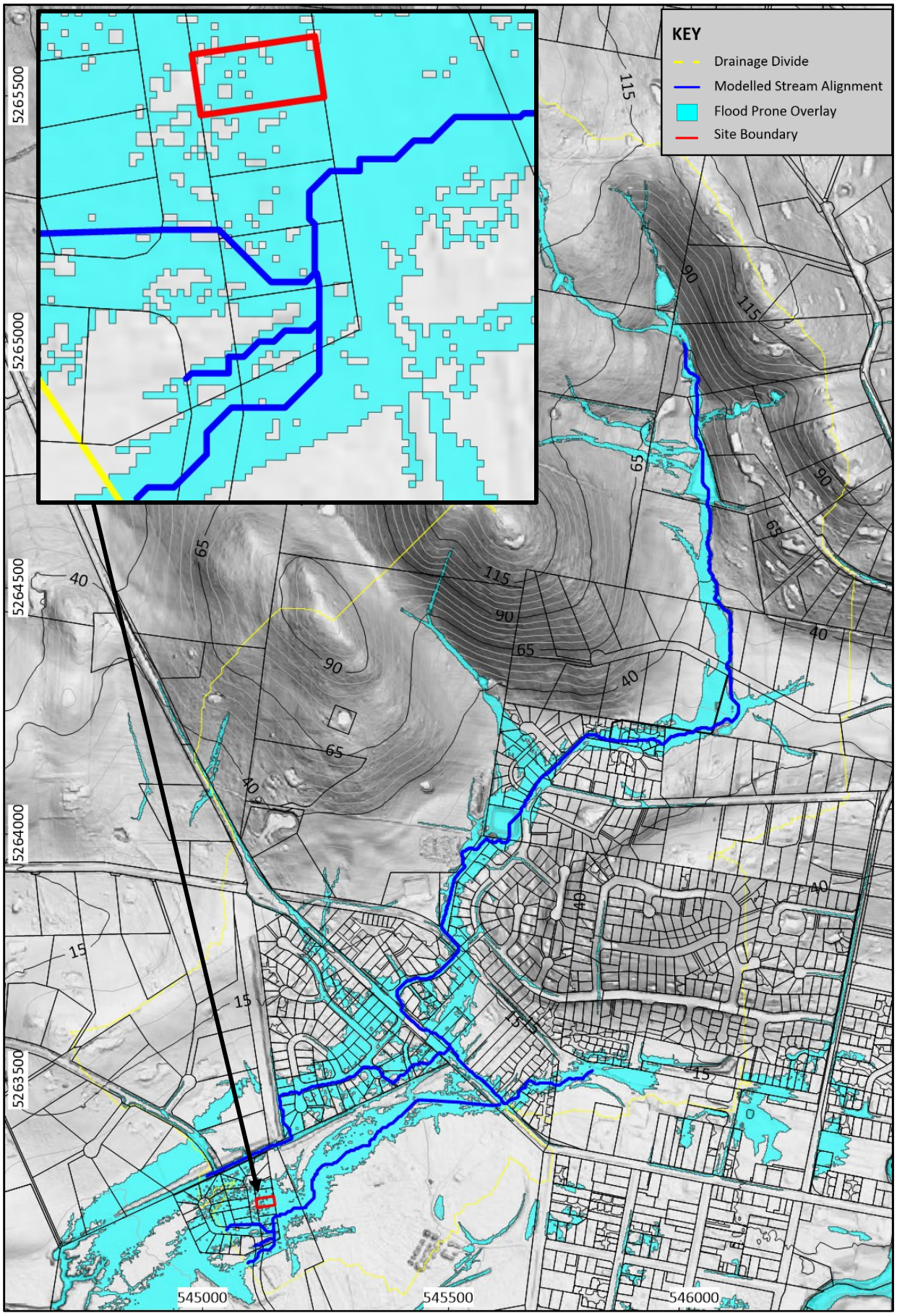
Coombes, P., and Roso, S. (Editors), 2019 Runoff in Urban Areas, Book 9 in Australian Rainfall and Runoff - A Guide to Flood Estimation, Commonwealth of Australia, © Commonwealth of Australia (Geoscience Australia), 2019.

N. Maidment, D.R. 1993. Handbook of hydrology. McGraw-Hill. New York, NY.

Water and Rivers Commission 2000, Stream Channel Analysis Water and Rivers Commission River Restoration Report No. RR 9.

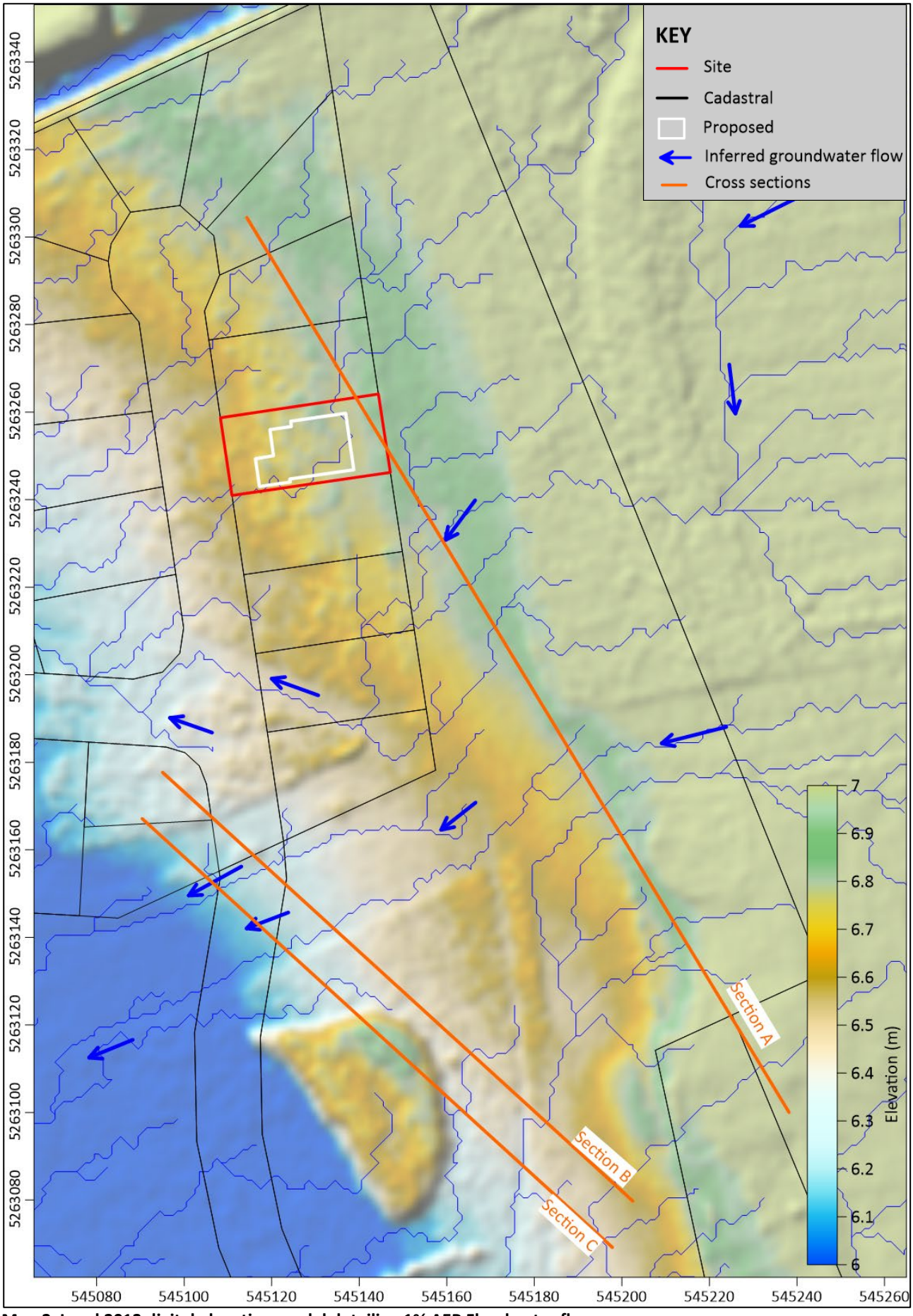
Attachment 1 Mapping

Map 1



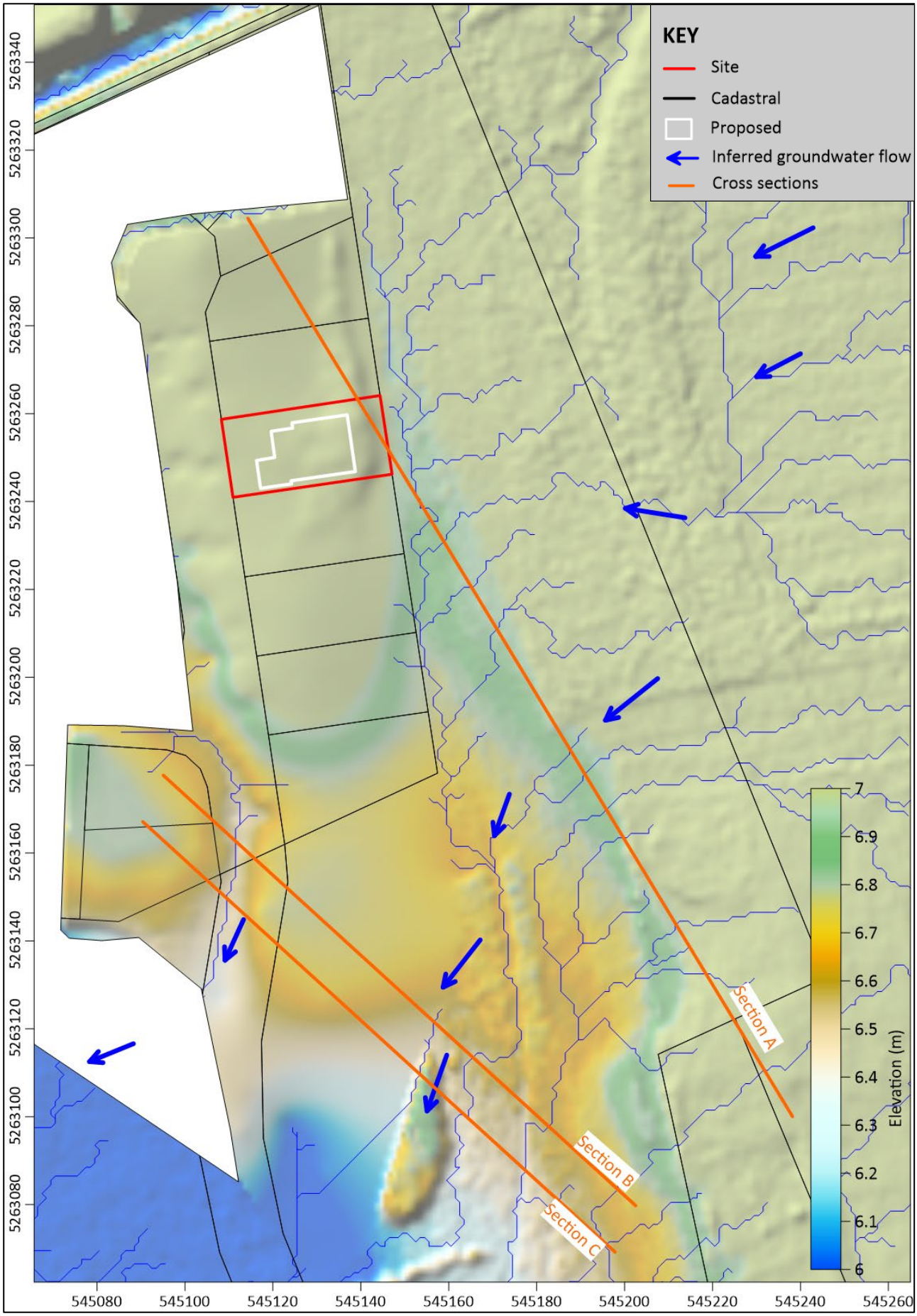
Map 1 Site regional Hillshade setting with Local Surfer Watershed Model

Map 2



Map 2 Local 2013 digital elevation model detailing 1% AEP Floodwater flow

Map 3

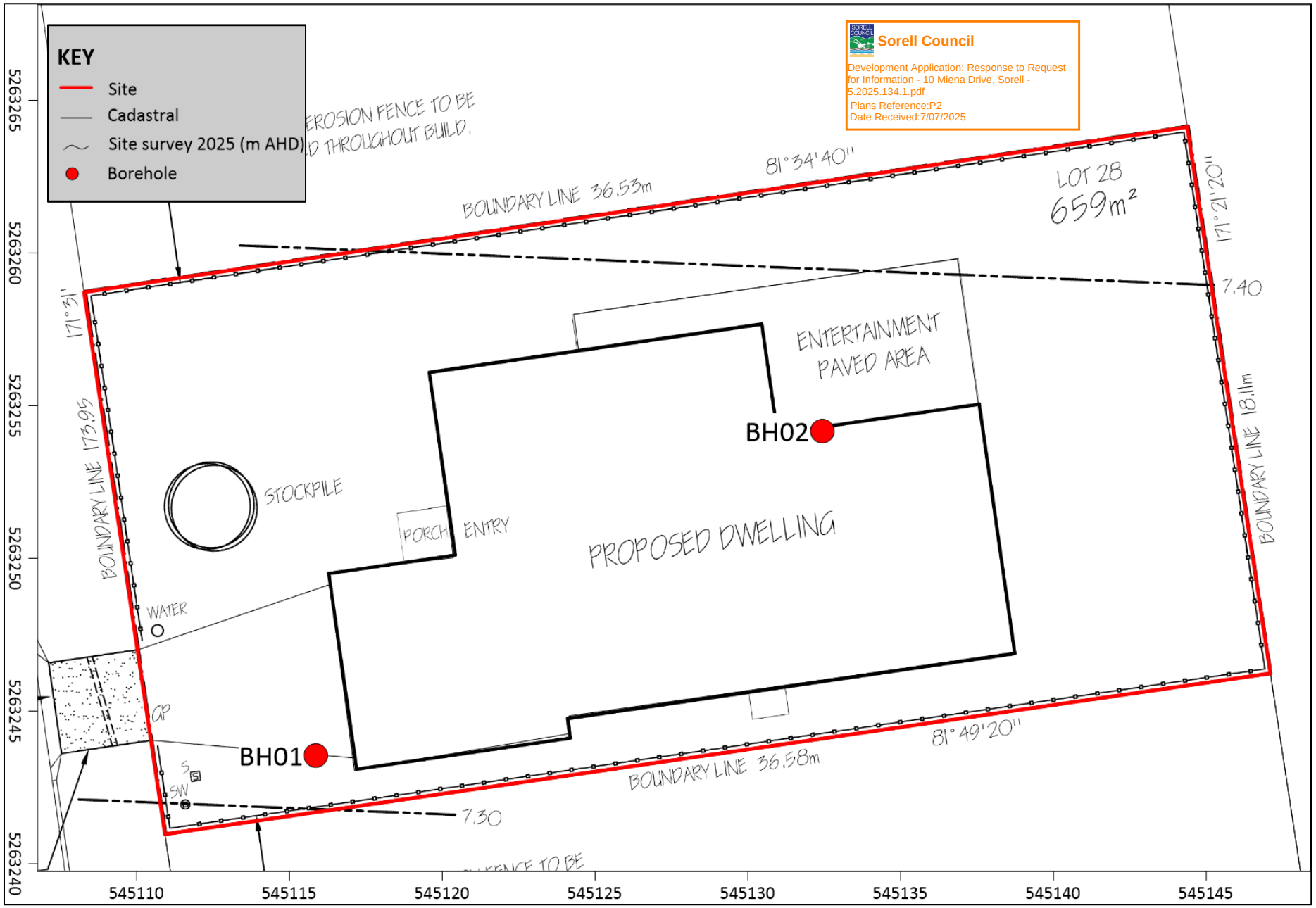


Map 3 Revised digital elevation model based on Envirotech surveying 2025 (spot heights shown) detailing 1% AEP Floodwater flow

Map 4

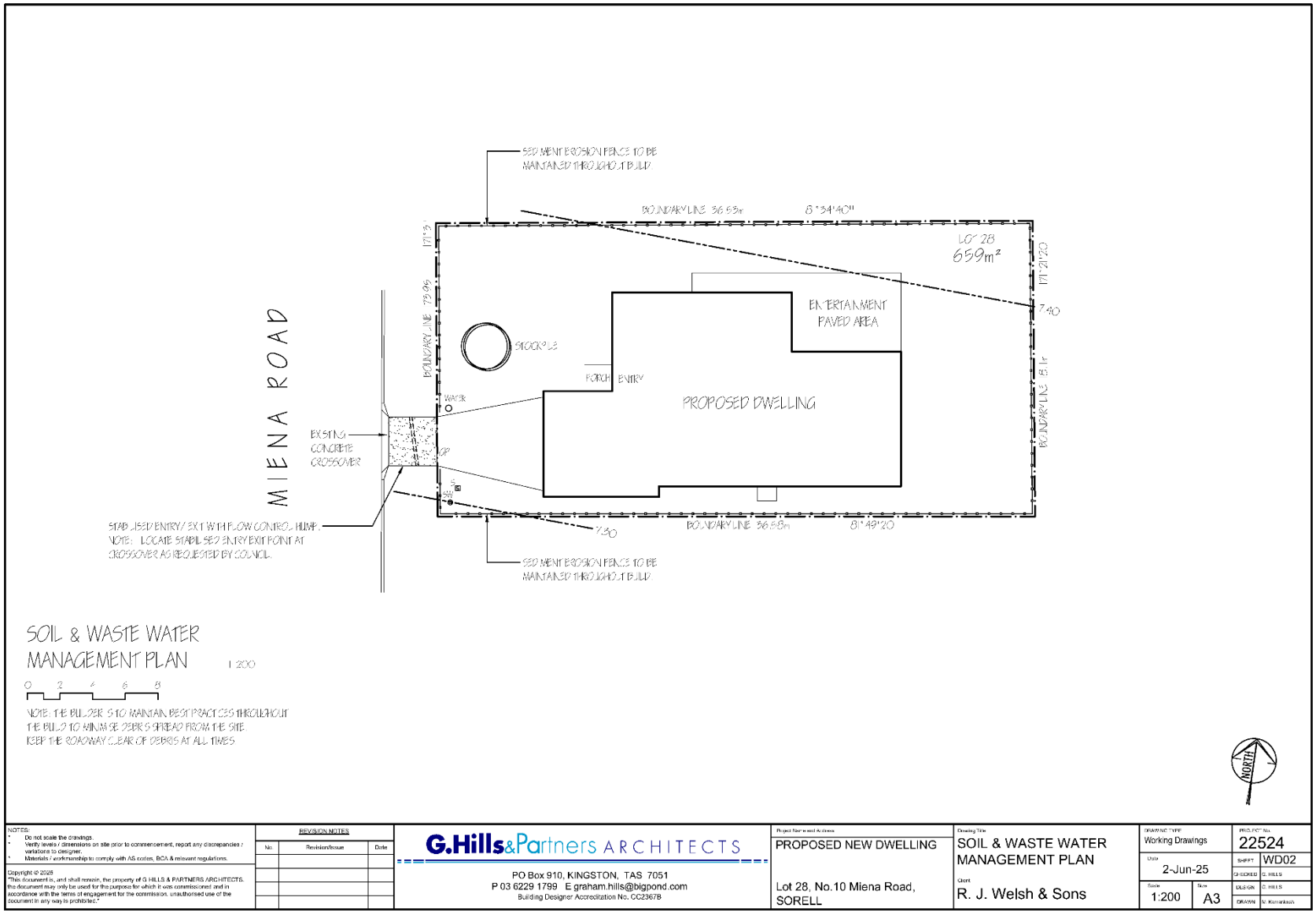
Map 4 Local aerial image (Bing) showing the fill layered as part of the Miena Park Estate development (2021)

Map 5



Map 5 Site plan with soil testing location

Attachment 2 Preliminary Design Concept Plans



Attachment 3 Planning and Building Regulations

C12.0 Flood-Prone Area Hazard Code

Code Overlay – The LIST Mapping

The Site is located within the Sorell Council mapped 1% Annual Exceedance Probability (AEP) inland flooding hazard area (Map 1). The mapping has triggered Flood Prone Areas Hazard Code, meaning that a more detailed investigation is required to further assess risk associated with the proposed development.

C12.6 Development Standards for Buildings and Works

C12.6.1 Buildings and works within a flood-prone hazard area

C12.6.1 Objective

That:

(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.

C12.6.1 A1 Acceptable Solutions

As there are no acceptable solutions to C12.6.1 (A1), the proposed development is to be assessed against performance criteria.

C12.6.1 P1 Performance Criteria

The proposed development needs to be assessed against the following performance criteria:

- C12.6.1 P1.1 and
- C12.6.1 P1.2.

Attachment 4 Site Overland Flow Analysis

Flooding Constraints

The following are inferred:

- A Manning coefficient of 0.045 is estimated (residential setting)
- Assumption there is a conservation of channel flow rates before and after development.

Flood Modelling

Models are used to estimate floodwater flow inundation levels based on a surface roughness of 0.045.

Pre-Subdivision

The modelling has been conducted based on 2013 Greater Hobart LIDAR which was before the subdivision infilling which occurred between 2019 and 2022. Based on the 2013 LIDAR, prior to subdivision, drainage models indicate that floodwaters encroach from the east and continued in an eastward direction past Miena Drive. Most floodwaters flowing from east to west discharge through a 100m wide watercourse.

Peak 1% AEP floodwater flow rates are calculated at 1.37 m3/s with an estimated average flow velocity of 0.2 m/s and inundation levels near the Site boundary at 6.90 m AHD (Figure 1 - Section A Existing floodwaters).

Prost Subdivision Floodwaters

A considerable amount of fill has been laid at the Site during the Miena Park Estate subdivision and development stage (Map 4). The Site survey, conducted in 2025, has been converted into a digital elevation model. In addition to the Site survey, a second survey conducted by Envirotech in 2025 as part of a flood assessment for another property in Miena Park Estate has been used to determine fill depths and how the fill will impact 1% AEP floodwater movement as well as inundation levels and velocities. It has been confirmed from the survey that up to 0.5m of fill has been placed near Meina Drive resulting in floodwaters diverted to the south of the subdivision and to the south of the Site (Map 2).

Proposed Development

Part of the proposed one storey dwelling resides in the Sorell City Council flood prone areas overlay which is based on 1% AEP flood mapping. The presence of fill at the Site has been confirmed during the Site field investigation with 0.5m of fill located near BH01 and 0.3 m near BH02 (Map 5). This has modified the local topography having a direct effect on the 1% AEP floodwater movement near the Site.

Defined Inundation Levels

The following findings are from the 1% AEP stormwater flow modelling Table 2:

- With the infilling of the Site, flood waters are now directed southwards along the new subdivision eastern boundary and into Miena Drive preventing overtopping of the Site (Figure 2).
- The highest inundation level outside the property eastern boundary is calculated at 6.91 m AHD.

Finished Floor Levels

Based on the site survey, with the Site elevations measured at 7.4 meters AHD near the building envelope, there is a minimal risk of inundation in the event of a 1% AEP flood occurrence. With the building envelope positioned at 7.4 meters AHD and the modelled 1% AEP inundation level at 6.9 meters AHD, the 0.3-meter freeboard provides an adequate buffer against potential Site flooding (refer Table 3).

Table 2 Relative finished floor levels

Parameter	Level Relative to the Primary Slab Finished Floor Level (m AHD)
Dwelling	7.40
Channel Surface	6.91

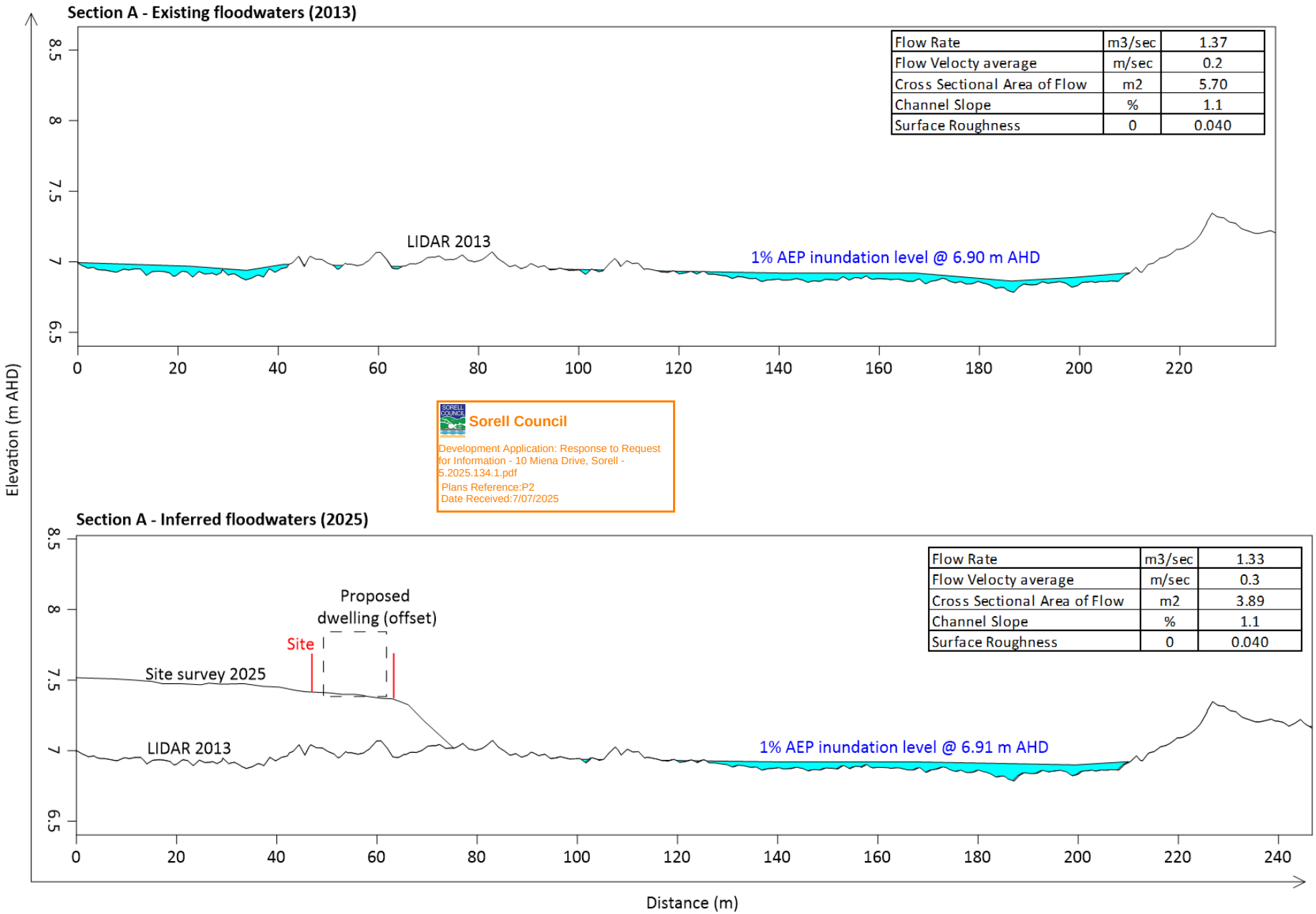
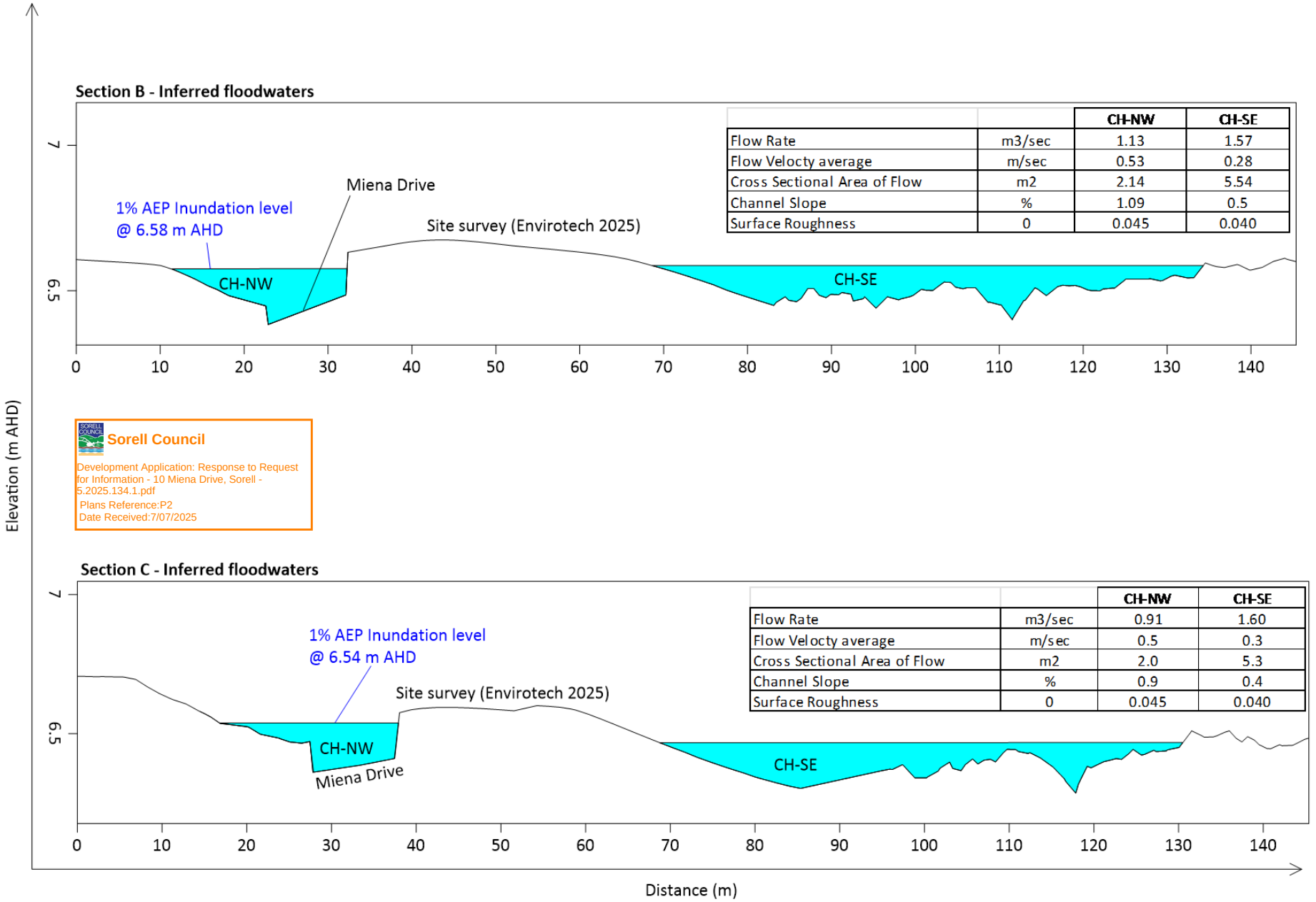


Figure 1 AEP Site Stormwater Flow Analysis – Cross Section A 2025 Within the Building Envelope - Drawings Are to Scale and For Conceptual Modelling Purposes Only



		CH-NW	CH-SE
Flow Rate	m3/sec	1.13	1.57
Flow Velocty average	m/sec	0.53	0.28
Cross Sectional Area of Flow	m2	2.14	5.54
Channel Slope	%	1.09	0.5
Surface Roughness	0	0.045	0.040

		CH-NW	CH-SE
Flow Rate	m3/sec	0.91	1.60
Flow Velocty average	m/sec	0.5	0.3
Cross Sectional Area of Flow	m2	2.0	5.3
Channel Slope	%	0.9	0.4
Surface Roughness	0	0.045	0.040

Figure 2 AEP Site Stormwater Flow Analysis – Cross Section B and C Within Miena Drive - Drawings Are to Scale and For Conceptual Modelling Purposes Only

Attachment 5 Qualitative Terminology

almost certain	Is expected to occur in most circumstances; and/or there is a high level of recorded incidents; and/or strong anecdotal evidence; and/or a strong likelihood the event will recur; and/ or great opportunity, reason, or means to occur; may occur once every year or more
Likely	Will probably occur in most circumstances; and/or regular recorded incidents and strong anecdotal evidence; and/or considerable opportunity, reason or means to occur; may occur once every five years
Possible	May occur at some time; and/or few, infrequent or randomly recorded incidents or little anecdotal evidence; and/or very few incidents in associated or comparable organisations, facilities or communities; and/or some opportunity, reason or means to occur; may occur once every 20 years
Unlikely	Is not expected to occur; and/or no recorded incidents or anecdotal evidence; and/or no recent incidents in associated organisations, facilities or communities; and/or little opportunity, reason or means to occur; may occur once every 100 years
Rare	May occur only in exceptional circumstances; may occur once every 500 or more years

Source: Commonwealth of Australia, 2004: Emergency Management Australia – Emergency Risk Management Applications Guide Manual 5

Consequence Rating	***Public Safety***	***Local growth and economy***	***Community and Lifestyle***	***Environment & sustainability***	***Public administration***
Catastrophic	Large numbers of serious injuries or loss of lives	Local decline leading to business failure, loss of employment, local hardship	Local area seen as very unattractive, significant decline, and unable to support community	Major widespread loss of environmental amenity and progressive irrecoverable environmental damage	Public Administration would fail and cease to be effective
Major	Isolated instances of serious injuries or loss of lives	Local stagnation such that businesses unable to thrive and imbalance between employment and local population growth	Severe and widespread decline in services and quality of life within community	Severe loss of environmental amenity and a danger of continuing environmental damage	Public administration would struggle to remain effective and would be perceived as being in danger of failing completely
Moderate	Small number of injuries	Significant general reduction in economic performance relative to current forecasts	General appreciable decline in services	Isolated significant instances of environmental damage that might be reversed with intensive efforts	Public administration would be under significant pressure on numerous fronts
Minor	Serious near misses or minor injuries	Individually significant but isolated areas of reduction in economic performance relative to current forecasts	Isolated but noticeable examples of decline in services	Minor instances of environmental damage that could be reversed	Isolated instances of Public administration being under significant pressure
Insignificant	Appearance of threat by no actual harm	Minor shortfall relative to current forecasts	There would be minor areas in which the region was unable to maintain is current services	No environmental damage	There would be some minor instances of public administration being under more than usual stress but it could be managed

Likelihood (L)	**Consequences (C)**				
	Insignificant	**Minor**	**Moderate**	**Major**	**Catastrophic**
Almost certain	MEDIUM	medium	high	extreme	extreme
Likely	low	medium	high	high	extreme
Possible	low	medium	medium	high	high
Unlikely	low	low	medium	medium	medium
Rare	low	low	low	low	medium

Adapted from DCC 2006, 40.

Attachment 6 Tasmanian Planning Scheme – Flood Prone Hazard Areas – Building and Works

Objective:

That:

(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.

C12.6.1 P1.1 Buildings and works within a flood-prone hazard area – risk assessment

Performance Criteria C12.6.1 P1.1 Buildings and works within a flood-prone hazard area must achieve and maintain a tolerable risk from a flood, having regard to:	Relevance	Management Options	Likelihood	Consequence	Risk	Further Assessment Required
(a) the type, form, scale and intended duration of the development;	The type, form and scale of the development is suitable adjusted to the floodwater hazard to be considered a tolerable risk.		Unlikely	Minor	Low	No
(b) whether any increase in the level of risk from flood requires any specific hazard reduction or protection measures;	No hazard reduction measures are advised other than ensuring the finished floor levels are suitable elevated, with modelling based on adaption and not reduction.	Finished floor levels at 7.4 m AHD or higher	Unlikely	Minor	Low	No
(c) any advice from a State authority, regulated entity or a council; and						
(d) the advice contained in a flood hazard report.						

C12.6.1 P1.2 Buildings and works within a flood-prone hazard area - flood hazard reporting

Performance Criteria C12.6.1 P1.2 A flood hazard report also demonstrates that the building and works:	Relevance	Management Options	Likelihood	Consequence	Risk	Further Assessment Required
(a) do not cause or contribute to flood on the Site, on adjacent land or public infrastructure; and	Given the modelling, the building and works will result in minor and not adverse modifications to storm flow.		Unlikely	Minor	Low	No
(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.	The proposed dwelling 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.		Unlikely	Minor	Low	No