

NOTICE OF PROPOSED DEVELOPMENT

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

SITE: 1 Pinto Close, Orielton

**PROPOSED DEVELOPMENT:
DWELLING AND OUTBUILDING**

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 **Friday 9th May 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 **Friday 9th May 2025**.

APPLICANT: Integral Design and Drafting Services

APPLICATION NO: DA 2025 / 68 1

DATE: 17 April 2025

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

| | | |
|---|---|----------------------------------|
| Full description of Proposal: | Use: | Single Dwelling |
| | Development: | Single Dwelling with Outbuilding |
| | <i>Large or complex proposals should be described in a letter or planning report.</i> | |
| Design and construction cost of proposal: | | \$ 820,000 |

| | |
|---|---|
| Is all, or some the work already constructed: | No: <input checked="" type="checkbox"/> Yes: <input type="checkbox"/> |
|---|---|

| | | | |
|-----------------------------|---------------------------------|---------------|----------------|
| Location of proposed works: | Street address: | 1 Pinto Close | |
| | Suburb: | Orielton | Postcode: 7172 |
| | Certificate of Title(s) Volume: | 186369/15 | Folio: 15 |

| | |
|---------------------|------------|
| Current Use of Site | Vacant Lot |
|---------------------|------------|

| | |
|------------------|---|
| Current Owner/s: | Name(s) LAURENCE and BETTINA BLUNDELL, JEMMA and MATTHEW WELLER |
|------------------|---|

| | | |
|--|---|--|
| Is the Property on the Tasmanian Heritage Register? | No: <input checked="" type="checkbox"/> Yes: <input type="checkbox"/> | If yes, please provide written advice from Heritage Tasmania |
| Is the proposal to be carried out in more than one stage? | No: <input type="checkbox"/> Yes: <input checked="" type="checkbox"/> | If yes, please clearly describe in plans |
| Have any potentially contaminating uses been undertaken on the site? | No: <input checked="" type="checkbox"/> Yes: <input type="checkbox"/> | If yes, please complete the Additional Information for Non-Residential Use |
| Is any vegetation proposed to be removed? | No: <input checked="" type="checkbox"/> Yes: <input type="checkbox"/> | 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: <input checked="" type="checkbox"/> Yes: <input type="checkbox"/> | If yes, please complete the Council or Crown land section on page 3 |


| | | |
|---|--|--|
| <p>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</p> <p>https://www.sorell.tas.gov.au/services/engineering/</p> | | |
|---|--|--|



Sorell Council

Development Application: 5.2025.68.1 -
Development Application - 1 Pinto Way, Orielton -
P1.pdf
Plans Reference:P1
Date Received:17/03/2025

| Declarations and acknowledgements | |
|--|--|
| <ul style="list-style-type: none"> 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 <i>Land Use Planning and Approvals Act 1993</i>, 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. <p><i>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></p> | |
| <ul style="list-style-type: none"> 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. | |
| <ul style="list-style-type: none"> Where the General Manager's consent is also required under s.14 of the <i>Urban Drainage Act 2013</i>, by making this application I/we also apply for that consent. | |
| Applicant Signature: | Signature: <u>Michael Kinsella</u> Date: <u>17/03/25</u> |

| Crown or General Manager Land Owner Consent | |
|---|------------------------------|
| <p>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 <i>Land Use Planning and Approvals Act 1993</i>).</p> <p>Please note:</p> <ul style="list-style-type: none"> 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. | |
| <p>I _____ being responsible for the administration of land at _____ declare that I have given permission for the making of this application for _____</p> | |
| <div style="display: flex; align-items: center; justify-content: flex-end;">  <div style="text-align: right;"> <p>Sorell Council</p> <p style="font-size: small; color: orange;">Development Application: 5.2025.68.1 - Development Application - 1 Pinto Way, Orielton - P1.pdf Plans Reference:P1 Date Received:17/03/2025</p> </div> </div> | |
| Signature of General Manager, Minister or Delegate: | Signature: _____ Date: _____ |

GEOTECH 25-021

ROCK SOLID GEOTECHNICS PTY LTD

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Orielton

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17/2/2025

Geotechnical Assessment / Classification for Proposed Residential Development

1 Pinto Court, Orielton

CLIENTS: Laurence & Bettina Blundell 0428242364 laurenceb01@bigpond.com

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| APPENDIX 5 | Wastewater Loading Certificate |



Sorell Council

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SUMMARY

A residential development is proposed by Laurence & Bettina Blundell at 1 Pinto Court, Orielton. Tertiary basalt at variable depths and deep Tertiary clays underly the site.

The site is classified as **Class 'H2'** in accordance with AS2870-2011. Foundations on sites with a Class 'H2' classification should be designed by a structural engineer, experienced in the design of residential footings.

Suitable, engineer designed upslope site drainage should be installed prior to the commencement of construction.

The following Wind Load Classifications (AS4055-2012: Wind Loads for Housing) are appropriate.

| | | |
|-----------------------------------|-----------|--------------|
| • Terrain Category Classification | TC2 | Open Terrain |
| • Shielding Classification | NS | No Shielding |
| • Topographic Classification | T1 | |
| • Wind Load Classification | N3 | |

INVESTIGATION

The Tasmanian Geological Survey 1:63360 Geological Atlas 'Buckland' indicates that the site is underlain by Tertiary sediments and Tertiary basalt.

A site investigation was completed on Friday 14 February, 2025. This included the augering of seven test holes to assess the site for foundation conditions and onsite wastewater disposal (4WD mounted SAMPLA25 mechanical auger with 100mm solid flight augers). The locations of the test holes are marked on [Figure 1](#).

It is proposed to construct a new residence at on the currently vacant block ([Plate 1](#)). The site is covered in grass and is devoid of trees. The site slopes shallowly at 1 degree to the southwest. Surface cracks were observed over the site in the dry topsoils.

The profile displayed in [Test Hole #1](#) ([Plate 2](#)) consisted of:

| | |
|--------------|---|
| 0.00 – 0.15m | sandy CLAY: high plasticity, dark brown, to 20% fine to medium grained sand, trace rootlets - TOPSOIL |
| 0.15 – 0.90m | CLAY: high plasticity, dark grey / dark greyish brown, trace fine grained sand, moist, Bearing Capacity 230kPa – TERTIARY SEDIMENTS |
| 0.90 – 1.20m | gravelly SAND: fine to coarse grained, grey / brownish grey, 20\$ angular basalt gravel, dry – TERTIARY SEDIMENTS |
| 1.20m+ | Mechanical auger refusal on presumed basalt bedrock. |

Test Holes #2 & #3 encountered clays to 0.70 and 0.75m depths – auger refusal on presumed basalt bedrock.

Test Hole #4 encountered clays to 1.10m over gravelly sand and auger refusal on presumed basalt bedrock at 1.25m.

Test Hole #5 encountered clays to 1.35 over gravelly sand and auger refusal on presumed basalt bedrock at 1.80m.

Test Hole #6 encountered clays to 1.25 over gravelly sand and auger refusal on presumed basalt bedrock at 1.40m.

Test Hole #7 encountered clays to 2.10 – no bedrock encountered.

Groundwater was not encountered in any of the holes.

The foundation classification must be based on the test holes with the most reactivity over the site – resulting in the Class 'H2' site classification.

Plate 1 – Property - Looking to the southeast.

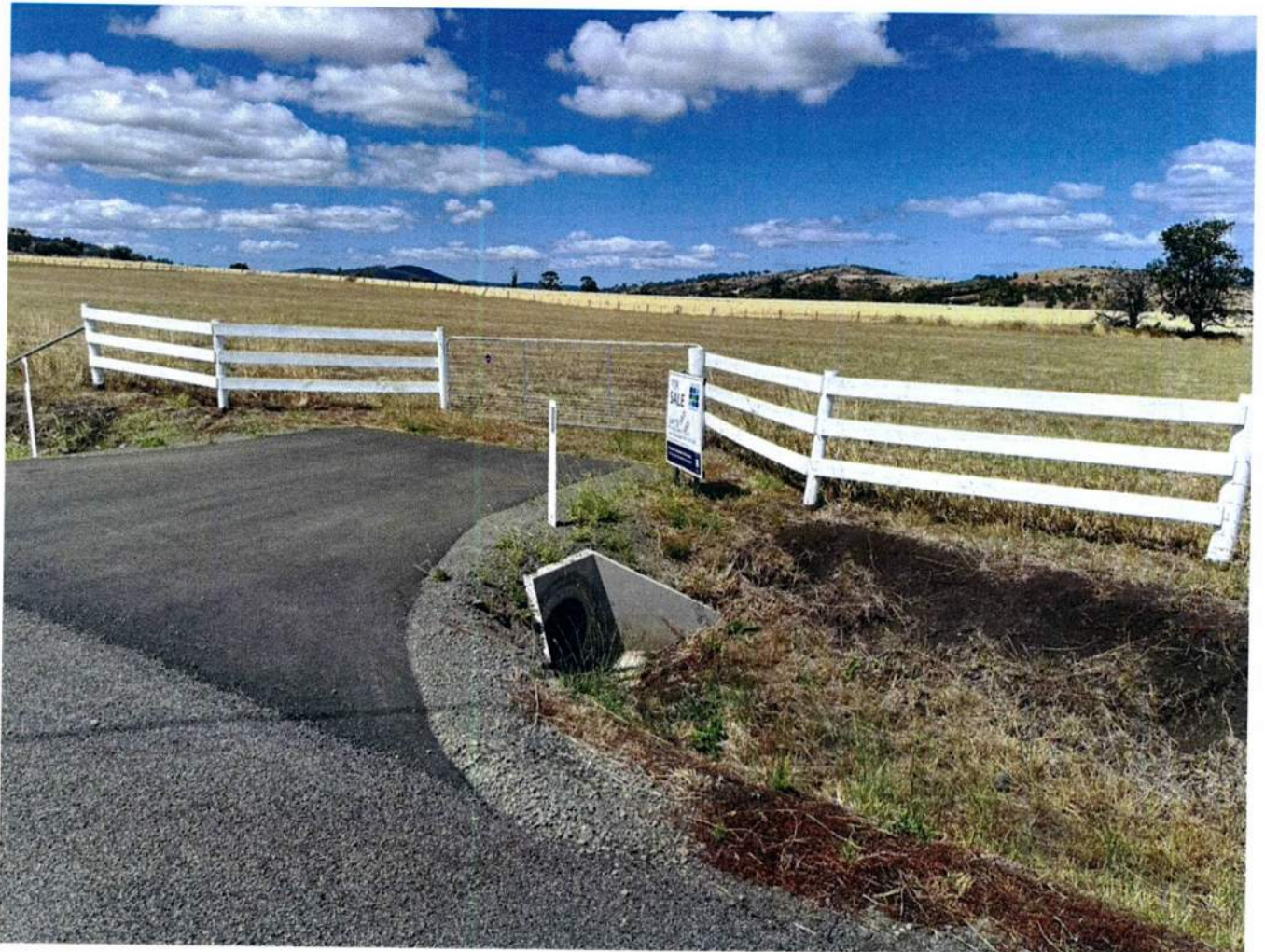


Plate 2 – Looking to the north (Test Hole #1).



CONDITIONS OF INVESTIGATION

This report remains the property of Rock Solid Geotechnics Pty. Ltd. (RSG). It must not be reproduced in part or full, or used for any other purpose without written permission of this company. The investigations have been conducted, & the report prepared, for the sole use of the client or agent mentioned on the cover page. Where the report is to be used for any other purpose RSG accepts no responsibility for such other use. **The Forms 55 and 35 are not transferable to another body without consultation (reissue) from RSG.** The information in this report is current and suitable for use for a period of two years from the date of production of the report, after which time it cannot be used for Building or Development Application.

This report should not be used for submission for Building or Development Application until RSG has been paid in full for its production. RSG accepts no liability for the contents of this report until full payment has been received.

The results & interpretation of conditions presented in this report are current at the time of the investigation only. The investigation has been conducted in accordance with the specific client's requirements &/or with their servants or agent's instructions.

This report contains observations & interpretations based often on limited subsurface evaluation. Where interpretative information or evaluation has been reported, this information has been identified accordingly & is presented based on professional judgement. RSG does not accept responsibility for variations between interpreted conditions & those that may be subsequently revealed by whatever means.

Due to the possibility of variation in subsurface conditions & materials, the characteristics of materials can vary between sample & observation sites. RSG takes no responsibility for changed or unexpected variations in ground conditions that may affect any aspect of the project. The classifications in this report are based on samples taken from specific sites. The information is not transferable to different sites, no matter how close (ie. if the development site is moved from the original assessment site an additional assessment will be required). It is recommended to notify the author should it be revealed that the sub-surface conditions differ from those presented in this report, so additional assessment & advice may be provided.

Investigations are conducted to standards outlined in Australian Standards:

- AS1726-1993: Geotechnical Site Investigations
- AS2870-2011: Residential Slabs and Footings
- AS4055-2012: Wind Loads for Housing
- AS1547-2012: Onsite Domestic Wastewater Management

& as specified in 'Guidelines for Geotechnical Assessment of Subdivisions and Recommended Code of Practise for Site Classification to AS2870 in Tasmania' - Institute of Engineers, Tasmanian Division.

All new developments should subject to strict site maintenance. Attention is drawn to the enclosed information reproduced with the permission from Standards Australia:

- CSIRO Information Sheet No. BTF18 – 'Guide to home-owners on foundation maintenance & footing performance'.

Any assessment that has included an onsite wastewater system design will require a further site visit / inspection once the system has been installed. After the inspection to verify that the system has been installed as per RSG's design a statement will be provided. An additional fee applies for the site visit & issuing the certificate.

RSG is not responsible for the correct installation of wastewater systems. Any wastewater installation is the sole responsibility of the owner/agent and certified plumber. Any variation to the wastewater design must be approved by RSG, and an amended Special Plumbing Permit obtained from the relevant council. The registered plumber must obtain a copy and carefully follow the details in the council issued Special Plumbing Permit. A "Certificate of Completion" will be based on surface visual inspection only, to verify the location of the system. All underground plumbing works are the responsibility of the certified plumber.

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PETER HOFTO

ROCK SOLID GEOTECHNICS PTY LTD

1 PINTO CLOSE ORIELTON
FIGURE 1 TEST HOLES



CERTIFICATE OF QUALIFIED PERSON – ASSESSABLE ITEM

Section 321

To: Laurence & Bettina Blundell

Owner /Agent

laurenceb01@bigpond.com

Address

Suburb/postcode

Form **55**

Qualified person details:

Qualified person: Peter Hofto - Rock Solid Geotechnics P/L

Address: 163 Orielson Road

Phone No: 0417960769

Orielson

7172

Fax No:

Licence No:

Email address:

peter@rocksolidgeotechnics.com.au

Qualifications and
Insurance details:

BSc (Hons) – Geology / Geophysics
PI Insurance – Lloyds Underwriting
PL Insurance – CGU Insurance Lt

(description from Column 3 of the
Director's Determination - Certificates
by Qualified Persons for Assessable
Items)

Speciality area of
expertise:

Geotechnical Assessments

(description from Column 4 of the
Director's Determination - Certificates
by Qualified Persons for Assessable
Items)

Details of work:

Address: 1 Pinto Court, Orielson

Lot No:

Certificate of title No:

The assessable
item related to
this certificate:

Geotechnical Assessment

(description of the assessable item being
certified)

Assessable item includes –

- a material;
- a design
- a form of construction
- a document
- testing of a component, building
system or plumbing system
- an inspection, or assessment,
performed

Certificate details:

Certificate type:

Geotechnical Assessment

(description from Column 1 of
Schedule 1 of the Director's
Determination – Certificates by
Qualified Persons for Assessable
Items n)

This certificate is in relation to the above assessable items, at any stage, as part of – (tick one)

☒ building work, plumbing work or plumbing installation or demolition work

OR

☐ a building, temporary structure or plumbing installation

In issuing this certificate the following matters are relevant –

Documents:

Relevant
calculations:

AS2870

References:


Substance of Certificate: (what it is that is being certified)

Scope and/or Limitations

I certify the matters described in this certificate.

Qualified person:

Signed:



Certificate No:

GEOTECH
25-021

Date:

17/2/2025

Foundation Maintenance and Footing Performance: A Homeowner's Guide



BTF 18
replaces
Information
Sheet 10/91

Buildings can and often do move. This movement can be up, down, lateral or rotational. The fundamental cause of movement in buildings can usually be related to one or more problems in the foundation soil. It is important for the homeowner to identify the soil type in order to ascertain the measures that should be put in place in order to ensure that problems in the foundation soil can be prevented, thus protecting against building movement.

This Building Technology File is designed to identify causes of soil-related building movement, and to suggest methods of prevention of resultant cracking in buildings.

Soil Types

The types of soils usually present under the topsoil in land zoned for residential buildings can be split into two approximate groups – granular and clay. Quite often, foundation soil is a mixture of both types. The general problems associated with soils having granular content are usually caused by erosion. Clay soils are subject to saturation and swell/shrink problems.

Classifications for a given area can generally be obtained by application to the local authority, but these are sometimes unreliable and if there is doubt, a geotechnical report should be commissioned. As most buildings suffering movement problems are founded on clay soils, there is an emphasis on classification of soils according to the amount of swell and shrinkage they experience with variations of water content. The table below is Table 2.1 from AS 2870, the Residential Slab and Footing Code.

Causes of Movement

Settlement due to construction

There are two types of settlement that occur as a result of construction:

- Immediate settlement occurs when a building is first placed on its foundation soil, as a result of compaction of the soil under the weight of the structure. The cohesive quality of clay soil mitigates against this, but granular (particularly sandy) soil is susceptible.
- Consolidation settlement is a feature of clay soil and may take place because of the expulsion of moisture from the soil or because of the soil's lack of resistance to local compressive or shear stresses. This will usually take place during the first few months after construction, but has been known to take many years in exceptional cases.

These problems are the province of the builder and should be taken into consideration as part of the preparation of the site for construction. Building Technology File 19 (BTF 19) deals with these problems.

Erosion

All soils are prone to erosion, but sandy soil is particularly susceptible to being washed away. Even clay with a sand component of say 10% or more can suffer from erosion.

Saturation

This is particularly a problem in clay soils. Saturation creates a bog-like suspension of the soil that causes it to lose virtually all of its bearing capacity. To a lesser degree, sand is affected by saturation because saturated sand may undergo a reduction in volume – particularly imported sand fill for bedding and blinding layers. However, this usually occurs as immediate settlement and should normally be the province of the builder.

Seasonal swelling and shrinkage of soil

All clays react to the presence of water by slowly absorbing it, making the soil increase in volume (see table below). The degree of increase varies considerably between different clays, as does the degree of decrease during the subsequent drying out caused by fair weather periods. Because of the low absorption and expulsion rate, this phenomenon will not usually be noticeable unless there are prolonged rainy or dry periods, usually of weeks or months, depending on the land and soil characteristics.

The swelling of soil creates an upward force on the footings of the building, and shrinkage creates subsidence that takes away the support needed by the footing to retain equilibrium.

Shear failure

This phenomenon occurs when the foundation soil does not have sufficient strength to support the weight of the footing. There are two major post-construction causes:

- Significant load increase.
- Reduction of lateral support of the soil under the footing due to erosion or excavation.
- In clay soil, shear failure can be caused by saturation of the soil adjacent to or under the footing.

GENERAL DEFINITIONS OF SITE CLASSES

| Class | Foundation |
|--------|---|
| I | Most sand and rock sites with little or no ground movement from moisture changes |
| S | Slightly reactive clay sites with only slight ground movement from moisture changes |
| M | Moderately reactive clay or silt sites, which can experience moderate ground movement from moisture changes |
| H | Highly reactive clay sites, which can experience high ground movement from moisture changes |
| E | Extremely reactive sites, which can experience extreme ground movement from moisture changes |
| A to P | Filled sites |
| P | Sites which include soft soils, such as soft clay or silt or loose sands; landslip; mine subsidence; collapsing soils; soils subject to erosion; reactive sites subject to abnormal moisture conditions or sites which cannot be classified otherwise |

Tree root growth

Trees and shrubs that are allowed to grow in the vicinity of footings can cause foundation soil movement in two ways:

- Roots that grow under footings may increase in cross-sectional size, exerting upward pressure on footings.
- Roots in the vicinity of footings will absorb much of the moisture in the foundation soil, causing shrinkage or subsidence.

Unevenness of Movement

The types of ground movement described above usually occur unevenly throughout the building's foundation soil. Settlement due to construction tends to be uneven because of:

- Differing compaction of foundation soil prior to construction.
- Differing moisture content of foundation soil prior to construction.

Movement due to non-construction causes is usually more uneven still. Erosion can undermine a footing that traverses the flow or can create the conditions for shear failure by eroding soil adjacent to a footing that runs in the same direction as the flow.

Saturation of clay foundation soil may occur where subfloor walls create a dam that makes water pond. It can also occur wherever there is a source of water near footings in clay soil. This leads to a severe reduction in the strength of the soil which may create local shear failure.

Seasonal swelling and shrinkage of clay soil affects the perimeter of the building first, then gradually spreads to the interior. The swelling process will usually begin at the uphill extreme of the building, or on the weather side where the land is flat. Swelling gradually reaches the interior soil as absorption continues. Shrinkage usually begins where the sun's heat is greatest.

Effects of Uneven Soil Movement on Structures

Erosion and saturation

Erosion removes the support from under footings, tending to create subsidence of the part of the structure under which it occurs. Brickwork walls will resist the stress created by this removal of support by bridging the gap or cantilevering until the bricks or the mortar bedding fail. Older masonry has little resistance. Evidence of failure varies according to circumstances and symptoms may include:

- Step cracking in the mortar beds in the body of the wall or above/below openings such as doors or windows.
- Vertical cracking in the bricks (usually but not necessarily in line with the vertical beds or perpend).

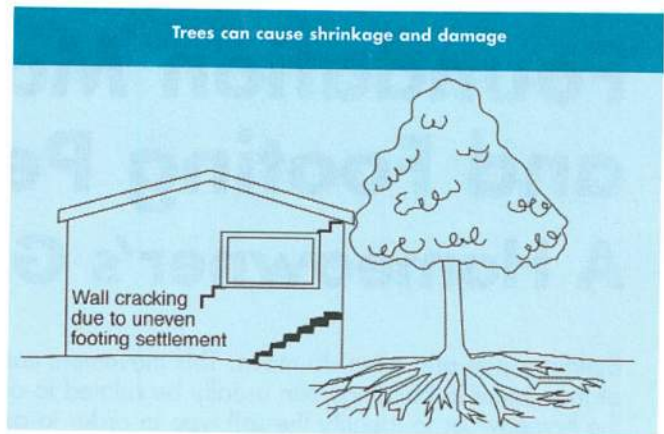
Isolated piers affected by erosion or saturation of foundations will eventually lose contact with the bearers they support and may tilt or fall over. The floors that have lost this support will become bouncy, sometimes rattling ornaments etc.

Seasonal swelling/shrinkage in clay

Swelling foundation soil due to rainy periods first lifts the most exposed extremities of the footing system, then the remainder of the perimeter footings while gradually permeating inside the building footprint to lift internal footings. This swelling first tends to create a dish effect, because the external footings are pushed higher than the internal ones.

The first noticeable symptom may be that the floor appears slightly dished. This is often accompanied by some doors binding on the floor or the door head, together with some cracking of cornice mitres. In buildings with timber flooring supported by bearers and joists, the floor can be bouncy. Externally there may be visible dishing of the hip or ridge lines.

As the moisture absorption process completes its journey to the innermost areas of the building, the internal footings will rise. If the spread of moisture is roughly even, it may be that the symptoms will temporarily disappear, but it is more likely that swelling will be uneven, creating a difference rather than a disappearance in symptoms. In buildings with timber flooring supported by bearers and joists, the isolated piers will rise more easily than the strip footings or piers under walls, creating noticeable doming of flooring.



As the weather pattern changes and the soil begins to dry out, the external footings will be first affected, beginning with the locations where the sun's effect is strongest. This has the effect of lowering the external footings. The doming is accentuated and cracking reduces or disappears where it occurred because of dishing, but other cracks open up. The roof lines may become convex.

Doming and dishing are also affected by weather in other ways. In areas where warm, wet summers and cooler dry winters prevail, water migration tends to be toward the interior and doming will be accentuated, whereas where summers are dry and winters are cold and wet, migration tends to be toward the exterior and the underlying propensity is toward dishing.

Movement caused by tree roots

In general, growing roots will exert an upward pressure on footings, whereas soil subject to drying because of tree or shrub roots will tend to remove support from under footings by inducing shrinkage.

Complications caused by the structure itself

Most forces that the soil causes to be exerted on structures are vertical – i.e. either up or down. However, because these forces are seldom spread evenly around the footings, and because the building resists uneven movement because of its rigidity, forces are exerted from one part of the building to another. The net result of all these forces is usually rotational. This resultant force often complicates the diagnosis because the visible symptoms do not simply reflect the original cause. A common symptom is binding of doors on the vertical member of the frame.

Effects on full masonry structures

Brickwork will resist cracking where it can. It will attempt to span areas that lose support because of subsided foundations or raised points. It is therefore usual to see cracking at weak points, such as openings for windows or doors.

In the event of construction settlement, cracking will usually remain unchanged after the process of settlement has ceased.

With local shear or erosion, cracking will usually continue to develop until the original cause has been remedied, or until the subsidence has completely neutralised the affected portion of footing and the structure has stabilised on other footings that remain effective.

In the case of swell/shrink effects, the brickwork will in some cases return to its original position after completion of a cycle, however it is more likely that the rotational effect will not be exactly reversed, and it is also usual that brickwork will settle in its new position and will resist the forces trying to return it to its original position. This means that in a case where swelling takes place after construction and cracking occurs, the cracking is likely to at least partly remain after the shrink segment of the cycle is complete. Thus, each time the cycle is repeated, the likelihood is that the cracking will become wider until the sections of brickwork become virtually independent.

With repeated cycles, once the cracking is established, if there is no other complication, it is normal for the incidence of cracking to stabilise, as the building has the articulation it needs to cope with the problem. This is by no means always the case, however, and monitoring of cracks in walls and floors should always be treated seriously.

Upheaval caused by growth of tree roots under footings is not a simple vertical shear stress. There is a tendency for the root to also exert lateral forces that attempt to separate sections of brickwork after initial cracking has occurred.

The normal structural arrangement is that the inner leaf of brickwork in the external walls and at least some of the internal walls (depending on the roof type) comprise the load-bearing structure on which any upper floors, ceilings and the roof are supported. In these cases, it is internally visible cracking that should be the main focus of attention, however there are a few examples of dwellings whose external leaf of masonry plays some supporting role, so this should be checked if there is any doubt. In any case, externally visible cracking is important as a guide to stresses on the structure generally, and it should also be remembered that the external walls must be capable of supporting themselves.

Effects on framed structures

Timber or steel framed buildings are less likely to exhibit cracking due to swell/shrink than masonry buildings because of their flexibility. Also, the doming/dishing effects tend to be lower because of the lighter weight of walls. The main risks to framed buildings are encountered because of the isolated pier footings used under walls. Where erosion or saturation cause a footing to fall away, this can double the span which a wall must bridge. This additional stress can create cracking in wall linings, particularly where there is a weak point in the structure caused by a door or window opening. It is, however, unlikely that framed structures will be so stressed as to suffer serious damage without first exhibiting some or all of the above symptoms for a considerable period. The same warning period should apply in the case of upheaval. It should be noted, however, that where framed buildings are supported by strip footings there is only one leaf of brickwork and therefore the externally visible walls are the supporting structure for the building. In this case, the subfloor masonry walls can be expected to behave as full brickwork walls.

Effects on brick veneer structures

Because the load-bearing structure of a brick veneer building is the frame that makes up the interior leaf of the external walls plus perhaps the internal walls, depending on the type of roof, the building can be expected to behave as a framed structure, except that the external masonry will behave in a similar way to the external leaf of a full masonry structure.

Water Service and Drainage

Where a water service pipe, a sewer or stormwater drainage pipe is in the vicinity of a building, a water leak can cause erosion, swelling or saturation of susceptible soil. Even a minuscule leak can be enough to saturate a clay foundation. A leaking tap near a building can have the same effect. In addition, trenches containing pipes can become watercourses even though backfilled, particularly where broken rubble is used as fill. Water that runs along these trenches can be responsible for serious erosion, interstrata seepage into subfloor areas and saturation.

Pipe leakage and trench water flows also encourage tree and shrub roots to the source of water, complicating and exacerbating the problem.

Poor roof plumbing can result in large volumes of rainwater being concentrated in a small area of soil:

- Incorrect falls in roof guttering may result in overflows, as may gutters blocked with leaves etc.

- Corroded guttering or downpipes can spill water to ground.
- Downpipes not positively connected to a proper stormwater collection system will direct a concentration of water to soil that is directly adjacent to footings, sometimes causing large-scale problems such as erosion, saturation and migration of water under the building.

Seriousness of Cracking

In general, most cracking found in masonry walls is a cosmetic nuisance only and can be kept in repair or even ignored. The table below is a reproduction of Table C1 of AS 2870.

AS 2870 also publishes figures relating to cracking in concrete floors, however because wall cracking will usually reach the critical point significantly earlier than cracking in slabs, this table is not reproduced here.

Prevention/Cure

Plumbing

Where building movement is caused by water service, roof plumbing, sewer or stormwater failure, the remedy is to repair the problem. It is prudent, however, to consider also rerouting pipes away from the building where possible, and relocating taps to positions where any leakage will not direct water to the building vicinity. Even where gully traps are present, there is sometimes sufficient spill to create erosion or saturation, particularly in modern installations using smaller diameter PVC fixtures. Indeed, some gully traps are not situated directly under the taps that are installed to charge them, with the result that water from the tap may enter the backfilled trench that houses the sewer piping. If the trench has been poorly backfilled, the water will either pond or flow along the bottom of the trench. As these trenches usually run alongside the footings and can be at a similar depth, it is not hard to see how any water that is thus directed into a trench can easily affect the foundation's ability to support footings or even gain entry to the subfloor area.

Ground drainage

In all soils there is the capacity for water to travel on the surface and below it. Surface water flows can be established by inspection during and after heavy or prolonged rain. If necessary, a grated drain system connected to the stormwater collection system is usually an easy solution.

It is, however, sometimes necessary when attempting to prevent water migration that testing be carried out to establish watertable height and subsoil water flows. This subject is referred to in BTF 19 and may properly be regarded as an area for an expert consultant.

Protection of the building perimeter

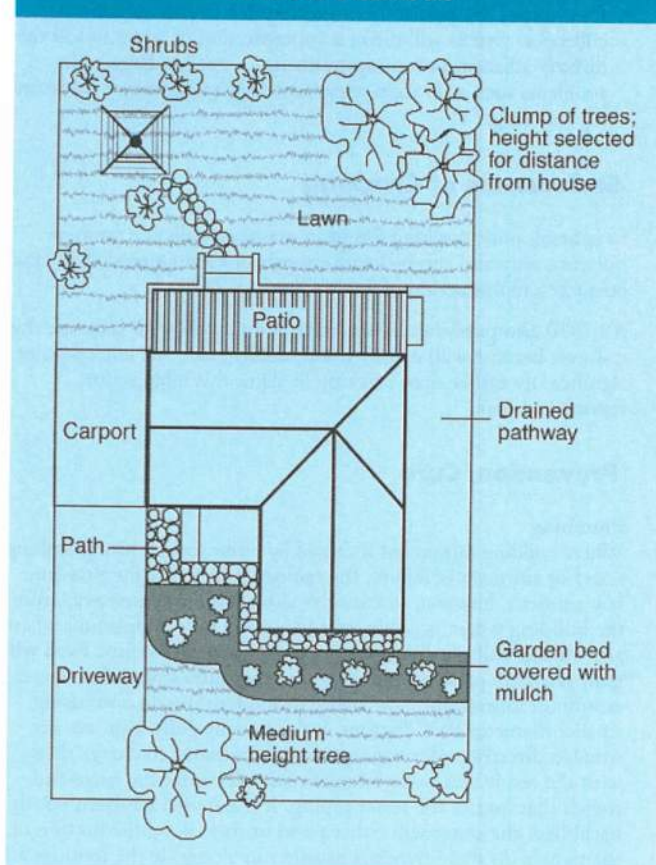
It is essential to remember that the soil that affects footings extends well beyond the actual building line. Watering of garden plants, shrubs and trees causes some of the most serious water problems.

For this reason, particularly where problems exist or are likely to occur, it is recommended that an apron of paving be installed around as much of the building perimeter as necessary. This paving

CLASSIFICATION OF DAMAGE WITH REFERENCE TO WALLS

| Description of typical damage and required repair | Approximate crack width limit (see Note 3) | Damage category |
|---|---|-----------------|
| Hairline cracks | <0.1 mm | 0 |
| Fine cracks which do not need repair | <1 mm | 1 |
| Cracks noticeable but easily filled. Doors and windows stick slightly | <5 mm | 2 |
| Cracks can be repaired and possibly a small amount of wall will need to be replaced. Doors and windows stick. Service pipes can fracture. Weathertightness often impaired | 5–15 mm (or a number of cracks 3 mm or more in one group) | 3 |
| Extensive repair work involving breaking-out and replacing sections of walls, especially over doors and windows. Window and door frames distort. Walls lean or bulge noticeably, some loss of bearing in beams. Service pipes disrupted | 15–25 mm but also depend on number of cracks | 4 |

Gardens for a reactive site



should extend outwards a minimum of 900 mm (more in highly reactive soil) and should have a minimum fall away from the building of 1:60. The finished paving should be no less than 100 mm below brick vent bases.

It is prudent to relocate drainage pipes away from this paving, if possible, to avoid complications from future leakage. If this is not practical, earthenware pipes should be replaced by PVC and backfilling should be of the same soil type as the surrounding soil and compacted to the same density.

Except in areas where freezing of water is an issue, it is wise to remove taps in the building area and relocate them well away from the building – preferably not uphill from it (see BTF 19).

It may be desirable to install a grated drain at the outside edge of the paving on the uphill side of the building. If subsoil drainage is needed this can be installed under the surface drain.

Condensation

In buildings with a subfloor void such as where bearers and joists support flooring, insufficient ventilation creates ideal conditions for condensation, particularly where there is little clearance between the floor and the ground. Condensation adds to the moisture already present in the subfloor and significantly slows the process of drying out. Installation of an adequate subfloor ventilation system, either natural or mechanical, is desirable.

Warning: Although this Building Technology File deals with cracking in buildings, it should be said that subfloor moisture can result in the development of other problems, notably:

- Water that is transmitted into masonry, metal or timber building elements causes damage and/or decay to those elements.
- High subfloor humidity and moisture content create an ideal environment for various pests, including termites and spiders.
- Where high moisture levels are transmitted to the flooring and walls, an increase in the dust mite count can ensue within the living areas. Dust mites, as well as dampness in general, can be a health hazard to inhabitants, particularly those who are abnormally susceptible to respiratory ailments.

The garden

The ideal vegetation layout is to have lawn or plants that require only light watering immediately adjacent to the drainage or paving edge, then more demanding plants, shrubs and trees spread out in that order.

Overwatering due to misuse of automatic watering systems is a common cause of saturation and water migration under footings. If it is necessary to use these systems, it is important to remove garden beds to a completely safe distance from buildings.

Existing trees

Where a tree is causing a problem of soil drying or there is the existence or threat of upheaval of footings, if the offending roots are subsidiary and their removal will not significantly damage the tree, they should be severed and a concrete or metal barrier placed vertically in the soil to prevent future root growth in the direction of the building. If it is not possible to remove the relevant roots without damage to the tree, an application to remove the tree should be made to the local authority. A prudent plan is to transplant likely offenders before they become a problem.

Information on trees, plants and shrubs

State departments overseeing agriculture can give information regarding root patterns, volume of water needed and safe distance from buildings of most species. Botanic gardens are also sources of information. For information on plant roots and drains, see Building Technology File 17.

Excavation

Excavation around footings must be properly engineered. Soil supporting footings can only be safely excavated at an angle that allows the soil under the footing to remain stable. This angle is called the angle of repose (or friction) and varies significantly between soil types and conditions. Removal of soil within the angle of repose will cause subsidence.

Remediation

Where erosion has occurred that has washed away soil adjacent to footings, soil of the same classification should be introduced and compacted to the same density. Where footings have been undermined, augmentation or other specialist work may be required. Remediation of footings and foundations is generally the realm of a specialist consultant.

Where isolated footings rise and fall because of swell/shrink effect, the homeowner may be tempted to alleviate floor bounce by filling the gap that has appeared between the bearer and the pier with blocking. The danger here is that when the next swell segment of the cycle occurs, the extra blocking will push the floor up into an accentuated dome and may also cause local shear failure in the soil. If it is necessary to use blocking, it should be by a pair of fine wedges and monitoring should be carried out fortnightly.

This BTF was prepared by John Lewer FAIB, MIAMA, Partner, Construction Diagnosis.

The information in this and other issues in the series was derived from various sources and was believed to be correct when published.

The information is advisory. It is provided in good faith and not claimed to be an exhaustive treatment of the relevant subject.

Further professional advice needs to be obtained before taking any action based on the information provided.

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APPENDIX 3

Onsite Wastewater System Design – 1 Pinto Court, Orielton

Below find an Onsite Wastewater System Design, and the allocation of a Land Application Area (LAA) for a proposed 6-bedroom residence at 1 Pinto Court, Orielton. This assessment should be read in conjunction with a Site & Soil Evaluation Report (GEOTECH 25-021).

It is proposed to construct a new residence at on the currently vacant block (Plate 1). The site is covered in grass and is devoid of trees. The site slopes shallowly at 1 degree to the southwest. Surface cracks were observed over the site in the dry topsoils.

The profile displayed in Test Hole #6 (Plate 3) consisted of:

| | |
|--------------|---|
| 0.00 – 0.15m | sandy CLAY: high plasticity, dark brown, to 20% fine to medium grained sand, trace rootlets - TOPSOIL |
| 0.15 – 1.20m | CLAY: high plasticity, dark grey / dark greyish brown, trace fine grained sand, moist – TERTIARY SEDIMENTS |
| 1.20 – 1.40m | gravelly SAND: fine to coarse grained, grey / brownish grey, 20\$ angular basalt gravel, dry – TERTIARY SEDIMENTS |
| 1.40m+ | Mechanical auger refusal on presumed basalt bedrock. |

Test Hole #7 (Plate 4) encountered clays to 2.10m – no bedrock encountered.

Groundwater was not encountered in any of the holes.

The site is classified as Class 6 (CLAY).

A Design Irrigation Rate of 2mm/day is appropriate.

Plate 3 – Looking to the northeast (Test Hole #6).



Plate 4 – Looking to the northwest (Test Hole #7).



COMPLIANCE WITH THE DIRECTOR'S GUIDELINES - ONSITE WASTEWATER MANAGEMENT SYSTEMS

| Compliance Table Directors Guidelines for OSM | | |
|---|---|---|
| Acceptable Solutions | Performance Criteria | Compliance achieved by |
| 5.1 To ensure sufficient land is available for sustainable onsite wastewater management for buildings. | | |
| A1 A new dwelling must be provided with a LAA that complies with Table 3. | P1 A new dwelling must be provided with a LAA that meets all of the following: a) The LAA is sized in accordance with the requirements of AS/NZS 1547; and b) A risk assessment in accordance with Appendix A of AS/NZS 1547 has been completed that demonstrates that the risk is acceptable. | Complies with A1 130m ² of LAA required per bedroom, or 780m ² for this site. |
| 7. Standards for Wastewater Land Application Areas | | |
| A1 Horizontal separation distance from a building to a LAA must comply with one of the following: a) be no less than 6m; b) be no less than: (i) 3m from an upslope boundary or level building; (ii) If primary treated effluent to be no less than 4m plus 1m for every degree of average gradient from a downslope building; (iii) If secondary treated effluent and subsurface application, no less than 2m plus 0.25m for every degree of average gradient from a downslope building. | P1 The LAA is located so that the risk of wastewater reducing the bearing capacity of a building's foundations is acceptably low. | Complies with A1 LAA > 6m from the residence. |
| A2 Horizontal separation distance from downslope surface water to a LAA must comply with (a) or (b) (a) be no less than 100m; or (b) be no less than the following: (i) if primary treated effluent 15m plus 7m for every degree of average gradient to downslope surface water; or (ii) if secondary treated effluent and subsurface application, 15m plus 2m for every degree of average gradient to downslope surface water. | P2 Horizontal separation distance from downslope surface water to a LAA must comply with all of the following: a) Setbacks must be consistent with AS/NZS 1547 Appendix R; b) A risk assessment in accordance with Appendix A of AS/NZS 1547 has been completed that demonstrates that the risk is acceptable. | Complies with A2 LAA > 100m from downslope surface water. |
| A3 Horizontal separation distance from a property boundary to a LAA must comply with either of the following: (a) be no less than 40m from a property boundary; or (b) be no less than: (i) 1.5m from an upslope or level property boundary; & (ii) If primary treated effluent 2m for every degree of average gradient from a downslope property boundary; or (iii) If secondary treated effluent and subsurface application, 1.5m plus 1m for every degree of average gradient from a downslope property boundary. | P3 Horizontal separation distance from a property boundary to a LAA must comply with all of the following: (a) Setback must be consistent with AS/NZS 1547 Appendix R; and (b) A risk assessment in accordance with Appendix A of AS/NZS 1547 has been completed that demonstrates that the risk is acceptable. | Complies with A3 LAA 1.5m from upslope and side-slope property boundaries. 1° slope to southern boundary. LAA 2.5 from downslope property boundary. |

| | | |
|--|--|---|
| A4 Horizontal separation distance from a downslope bore, well or similar water supply to a LAA must be no less than 50m and not be within the zone of influence of the bore whether up or down gradient. | P4 Horizontal separation distance from a downslope bore, well or similar water supply to a LAA must comply with all of the following: (a) Setback must be consistent with AS/NZS 1547 Appendix R; and (b) A risk assessment completed in accordance with Appendix A of AS/NZS 1547 demonstrates that the risk is acceptable. | Complies with A4 No bores or water supplies within 50m of the site. |
| A5 Vertical separation distance between groundwater & a LAA must be no less than: (a) 1.5m if primary treated effluent; or (b) 0.6m if secondary treated effluent | P5 Vertical separation distance between groundwater and a LAA must comply with the following: (a) Setback must be consistent with AS/NZS 1547 Appendix R; and (b) A risk assessment completed in accordance with Appendix A of AS/NZS 1547 that demonstrates that the risk is acceptable. | Complies with A5 Groundwater encountered. not |
| A6 Vertical separation distance between a limiting layer & a LAA must be no less than: (a) 1.5m if primary treated effluent; or (b) 0.5m if secondary treated effluent. | P6 Vertical setback must be consistent with AS/NZS1547 Appendix R. | Complies with A6 Limiting layer >0.50m. |
| A7 Nil | P7 A wastewater treatment unit must be located a sufficient distance from buildings or neighbouring properties so that emissions (odour, noise or aerosols) from the unit do not create an environmental nuisance to the residents of those properties. | Complies with P7 |

WASTEWATER SYSTEM DESIGN:

It is not possible to install a standard trench based "septic" system on this site due to the low permeability of the subsoils.

It is proposed to secondary treat the effluent in an Aerated Wastewater Treatment System (AWTS), and to apply the effluent into the Land Application Area (LAA) via sub-surface dripline irrigation. The size of the required LAA is conditional on the wastewater load entering the system and the permeability of the site.

| | | |
|------------------------------|------------------------------|----------------------------|
| 6-bedroom residence | 10-person occupancy | |
| Tank water | 120 litres/person/day | |
| Wastewater Load | 10 x 120 litres/person/day | 1200 litres/day |
| Design Irrigation Rate (DIR) | 2mm/day | Secondary treated effluent |
| Irrigation Area | 1200 / 2 = 600m ² | |

Total size of calculated Land Application Area (LAA) is 600m².

LAND APPLICATION AREA

The Land Application Area should be constructed as per the following specifications:

- Establishment and maintenance of a minimum of 600m² of irrigation area in two 300m² zones.
- The areas will be intermittently dosed using an indexing valve.
- The areas will consist of sub-surface irrigation under lawns.
- Landscaping of the irrigation area is to be always maintained in good order. Such maintenance includes the mowing of the grass.
- The irrigation area is not to be used for growing vegetables.
- An approved warning sign is to be clearly positioned to inform occupants that reclaimed effluent is used for irrigation.
- The current topsoil should be scoured / ripped to a minimum depth of 200mm, and any rocks removed.
- The drip lines (**Netafim bio-line 13mm – 3L/h or similar**) must be rated for use with wastewater (pressure compensated), and organized to cover the entire 2 x 300m² LAAs (@ 0.8m spacings).
- Supply line from the AWTS to the LAA and manifold lines to be **32mm Lilac LDPE poly pipes**.
- Vacuum Breaker Valves should be provided at the high points of the LAAs, and placed in Valve boxes to enable inspection.
- Flush Valves should be provided for the LAAs, with piping returning the flush water to the treatment plant. The Flush Valves are to be installed in Valve boxes to allow inspection and servicing.
- An inline strainer (150-200 mesh) is to be installed to prevent solids from entering the irrigation system.
- A cutoff drain will not be required.
- The LAAs should be fenced from stock, as compaction of the area will cause failure of the shallow subsurface driplines.
- The area should not be driven on (apart from non-commercial ride on mowers), as compaction of the subsurface driplines will render the system unserviceable.



Peter Hofto

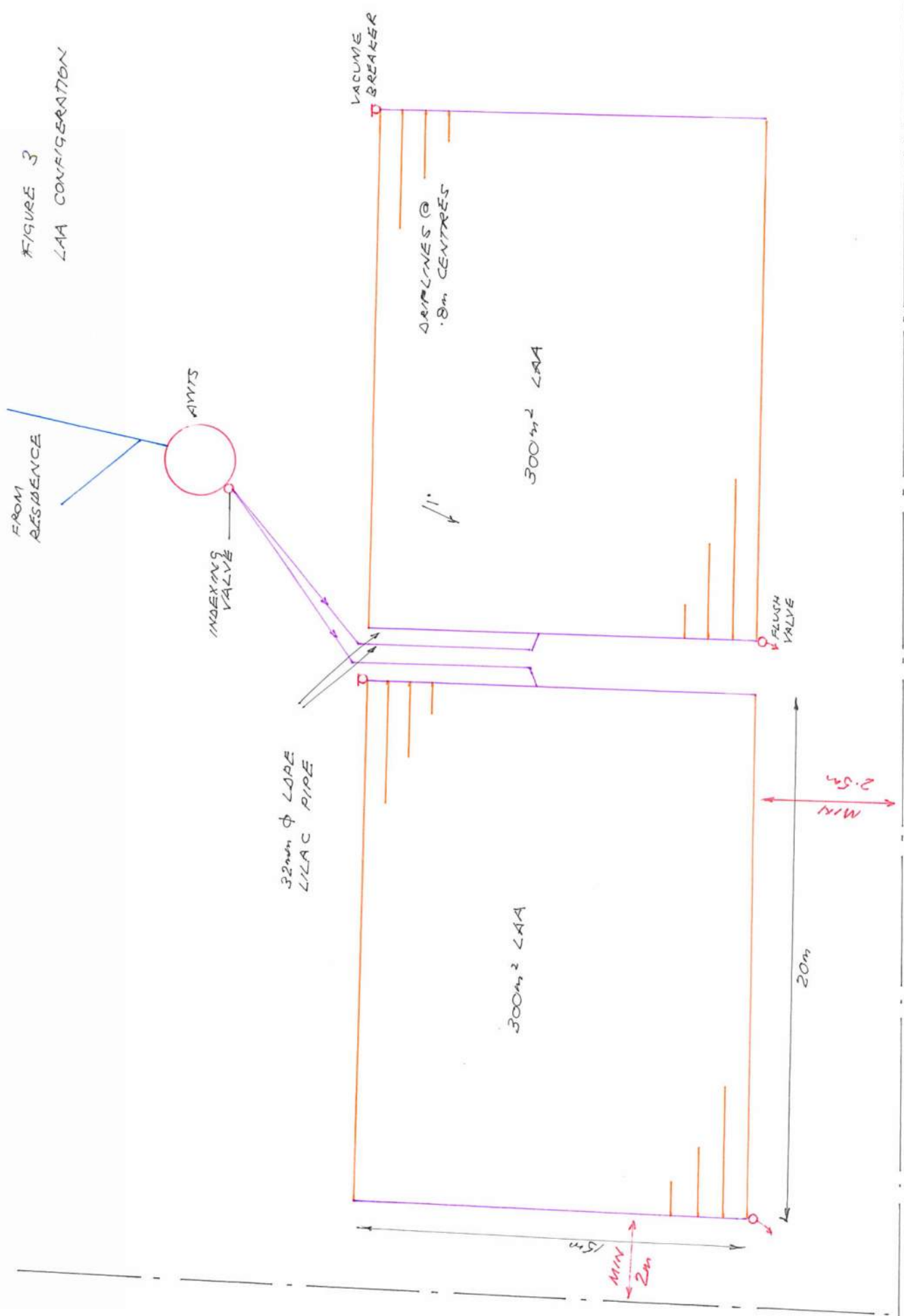
ROCK SOLID GEOTECHNICS P/L

1 PINTO CLOSE ORIELTON

FIGURE 2
ONSITE WASTEWATER

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FIGURE 3
LAA CONFIGURATION



SCALE 1:200

SITE AND SOIL EVALUATION REPORT

Soil Category:

(as stated in AS/NZS 1547-2000)

1,...2,...3,...4,...5,...6

Modified Emerson Test Required

No

If Yes, Emerson Class No.

Measured or Estimated Soil Permeability (m/d):

0.06-0.12m/d

Design Irrigation Rate (DIR)

2mm/day (Secondary Treated Effluent)

Geology:

Tertiary Sediments

Slope:

1 degree to the southwest

Drainage lines / water courses:

Nil

Vegetation:

Grass pasture

Site History: (land use)

Farmland

Aspect:

Southwest

Pre-dominant wind direction:

Northwest to southwest

Site Stability: Will on-site wastewater disposal affect site stability?

No

Is geological advice required?

No

Drainage/Groundwater:

Not encountered

Depth to seasonal groundwater (m):

Not Encountered

Are surface or sub-surface drains required upslope of the land application area

No

Water Supply:



Rainwater Tanks

Date of Site Evaluation:

14/2/2025

Weather Conditions:

Fine



Sorell Council

Development Application: 5.2025.68.1 -
Development Application - 1 Pinto Way, Orielton -
P1.pdf

Plans Reference: P1
Date Received: 17/03/2025

Laurence & Bettina Blundell
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0417960769
peter@rocksolidgeotechnics.com.au

17/2/2025

Loading Certificate for Onsite Wastewater System – 1 Pinto Court, Orielton

- 1 System Capacity: (medium/long term)
 - 6-bedroom residence, 10 persons total 1200 litres/day
- 2 Design Criteria Summary:
 - Secondary Treated Effluent Aerated Wastewater Treatment System (AWTS)
 - Soil Category Class 6 CLAY
 - Land Application System 2 x 300m² of subsurface irrigation
- 3 Reserve Area:
 - Suitable reserve area if required in the future.
- 4 Variation from design flows etc:
 - The system should successfully assimilate additional peak loadings which may result from occasional social gatherings provided that this does not exceed use by more than 15 persons in a 24-hour period, or more than 2 temporary resident visitors (ie. up to 12 persons total) for a period not exceeding 4 days. Visitors should be advised of the requirement to minimise time spent in showers, not unduly running taps, and other common-sense water conservation measures.
- 5 Consequences of overloading the system:
 - Long term use by more than 10 residents or equivalent may result in overloading of the system, surfacing of effluent, public and environmental health nuisances, pollution of surface water etc.
- 6 Consequences of under-loading the system:
 - Nil.
- 7 Consequences of lack of operation, maintenance and monitoring attention:
 - The AWTS must be maintained by a contracted maintenance provider.

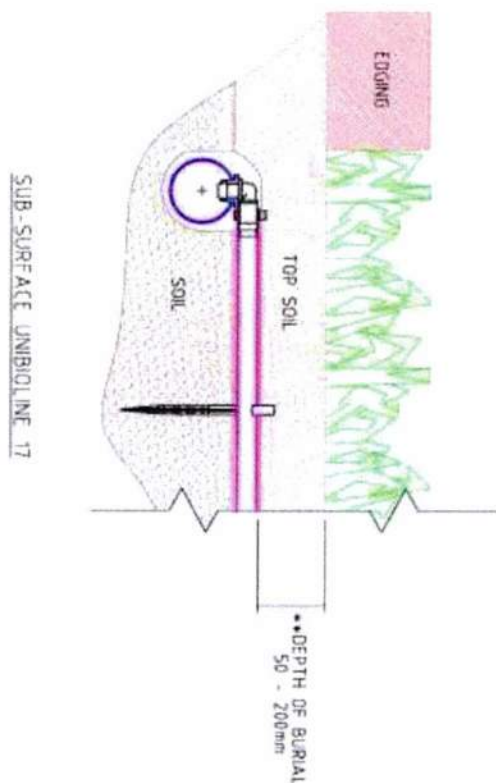
Peter Hofto

Rock Solid Geotechnics Pty Ltd

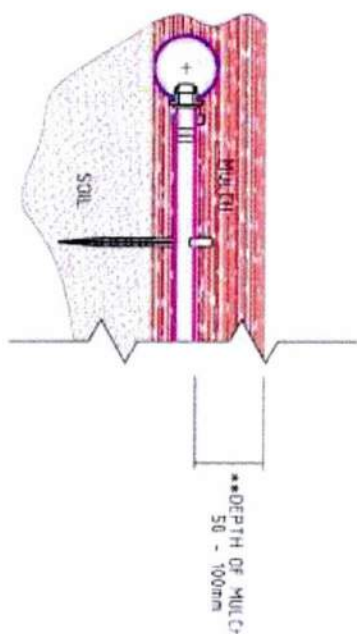
Sub-Surface Turf / On-Surface Gardens

NOTE 1
PVC - HOPE LATERAL CONNECTION SHOWN
REFER TO LLC-001 FOR LOPE
START CONNECTOR
REFER TO LLC-011 FOR PVC-HOPE
START CONNECTOR

NOTE 2
**DEPTH OF BURIAL. THE SUGGESTED DEPTH THAT DRIP TUBE SHOULD BE INSTALLED BELOW THE SURFACE FOR SUBSURFACE IRRIGATION. YOU WILL NOTICE THAT THE DEEPER BURIAL DEPTHS ARE RECOMMENDED FOR HEAVIER SOILS. WHEN SELECTING A BURIAL DEPTH FOR SUBSURFACE IRRIGATION, ALLOWANCES SHOULD BE MADE FOR ANY FORMS OF MECHANICAL AERATION TO THE SOIL. ENSURE A BURIAL DEPTH THAT WILL PREVENT ANY SUCH DAMAGE. FOR GARDEN AREAS IT IS USUALLY SUGGESTED THAT THE DRIP TUBE SHOULD BE INSTALLED ON THE SOIL SURFACE, PEGGED DOWN AND COVERED WITH MULCH.



SUB-SURFACE UNIBIOLINE 17



UNDER-MULCH UNIBIOLINE 17



Sorell Council

Development Application: 5.2025.68.1 -
Reponse to Request For Information - 1 Pinto
Way, Orielton P2.pdf
Plans Reference: P2
Date received: 4/04/2025

GEOTECH 25-038

ROCK SOLID GEOTECHNICS PTY LTD

2/4/2025

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RE: SITE ASSESSMENT – Dispersive Soils – 1 Pinto Court, Orielton

It is proposed to construct a new residence and shed at 1 Pinto Court, Orielton ([Figure 1](#)).

The property is subject to the Dispersive Soils Code (SOR-S1.7.1 Development on dispersive soils – *Statewide Planning Scheme*).

The property is subject to the Dispersive Soils Code. Objective;

- That buildings and works with the potential to disturb dispersive soil are appropriately located or managed:
 - a) To minimise the potential to cause erosion; and
 - b) To reduce risk to property and the environment to an acceptable level.
- Performance Criteria P1 – Buildings and works must be designed, sited and constructed to minimise the risks associated with dispersive soil to property and the environment, having regard to:
 - (a) the dispersive potential of soils in the vicinity of proposed buildings, driveways, services and the development area generally;
 - (b) the potential of the development to affect or be affected by erosion, including gully and tunnel erosion;
 - (c) the dispersive potential of soils in the vicinity of water drainage lines, infiltration areas / trenches, water storages, ponds, dams and disposal areas;
 - (d) the level or risk and potential consequence for the property and the environment from potential erosion, including gully and tunnel erosion;
 - (e) management measures that would reduce risk to an acceptable level.
 - (f) The advice contained in a dispersive soil management plan.

SITE ASSESSMENT

A site visit was completed on Monday 31 March, 2025. This included the augering of two test holes to recover samples for dispersive soils analysis (4WD mounted SAMPLA25 mechanical auger with 100mm solid flight augers). The locations of the holes are marked on [Figure 1](#).

It is proposed to construct a new residence at on the currently vacant block ([Plate 1](#)). The site is covered in grass and is devoid of trees. The site slopes shallowly at 1 degree to the southwest. Surface cracks were observed over the site in the dry topsoils.

There is no evidence of any erosion on or around the site.

[Plate 1](#) – Property – looking to the southeast.



Plate 2 – Test Hole #A - looking to the northwest.



Plate 3 – Test Hole #B - looking to the southwest.



Samples were obtained from the two test holes at various depths to assess the site for dispersive soils.

The Department of Primary Industries and Water publication *Dispersive Soils and their Management: Technical Reference Manual (2009)* specifies sampling and analysis techniques for the determination and classification of dispersive soils.

The samples were taken from the site and tested for dispersiveness in accordance with the Department of Primary Industries and Water publication *Dispersive Soils and their Management: Technical Reference Manual (2009)*.

- The samples were air-dried.
- All samples were placed in jars containing distilled water.
- Samples were left without disturbance for 1 hour.
- Samples were observed and compared with Figure 4 (Field test for aggregate dispersion - *Dispersive Soils and their Management: Technical Reference Manual (2009)*).

From Figure 4, all clay samples were classified as **slightly dispersive**.

DISCUSSION OF RESULTS

The risk of erosion developing due to development on this site is not significant.

The site is underlain by non-dispersive clay topsoils over slightly dispersive clay subsoils.

Although the (slightly) dispersive subsoils that exist over the site can be vulnerable to erosion when exposed, or when water is permitted to concentrate, the proposed development will not leave the clay subsoils exposed. However, erosion could develop if stormwater overflow is not adequately controlled.

The Department of Primary Industries and Water publication *Dispersive Soils and their Management: Technical Reference Manual (2009)* 4.0 ([Appendix 1](#)) – “Approaches for minimising erosion risk in dispersive soils” suggests measures to reduce the risk of erosion:

- Identifying and avoiding disturbance to areas with dispersive subsoils.
- Minimising excavation of dispersive soils.
- Not allowing water to pond on the soil surface, or exposed subsoils.
- Keeping sodic sub-soils buried under topsoil.
- Maintaining vegetation cover (where possible).

Specific to this site the following measures are suggested to reduce the risk of erosion during construction and development works:

- Where possible do not unnecessarily remove or disturb topsoil.
- When construction has been completed ensure that dispersive subsoils are covered with an adequate layer of topsoil, or geotextile fabric, and revegetated where possible.
- Ensure that drains excavated in (or through) dispersive soils are revegetated.
- Ensure that stormwater overflow is adequately controlled in engineer designed trenches.

Performance Criteria P1 – Buildings and works must be designed, sited and constructed to minimise the risks associated with dispersive soil to property and the environment, having regard to:

- (a) the dispersive potential of soils in the vicinity of proposed buildings, driveways, services and the development area generally;
Clay subsoils (at depth) are slightly dispersive over the site.
- (b) the potential of the development to affect or be affected by erosion, including gully and tunnel erosion;
Low potential for this project to initiate gully or tunnel erosion. The dispersive horizons are under a protective, non-dispersive plastic clay horizon. Nearly flat (1°) site so low potential for surface water to move quickly over the site when draining. Despite this, management of the site should be considerate of The Department of Primary Industries and Water publication *Dispersive Soils and their Management: Technical Reference Manual (2009)* 4.0 (Appendix 1) – “Approaches for minimising erosion risk in dispersive soils”
- (c) the dispersive potential of soils in the vicinity of water drainage lines, infiltration areas / trenches, water storages, ponds, dams and disposal areas;
No water drainage lines, water storages, ponds, or dams exist within this site. Typical residential development of the block will require stormwater disposal via trenches. Adequately sized rainwater tanks should reduce the volume of stormwater (SW) runoff. SW trenches to be designed by a suitable qualified engineer. Future onsite wastewater disposal will likely be via shallow subsurface irrigation of secondary treated effluent from Aerated Wastewater Treatment Systems (AWTS) directly into the topsoil above the dispersive clays. This is considered low risk.
- (d) the level or risk and potential consequence for the property and the environment from potential erosion, including gully and tunnel erosion;
Low risk if management practices adhere to the recommendations outlined above in the Department of Primary Industries and Water publication *Dispersive Soils and their Management*.
- (e) management measures that would reduce risk to an acceptable level.
See above.
- (f) The advice contained in a dispersive soil management plan.
See above.

CONCLUSIONS

Slightly dispersive clay subsoils are present at depth over the property at 1 Pinto Court, Orielton.

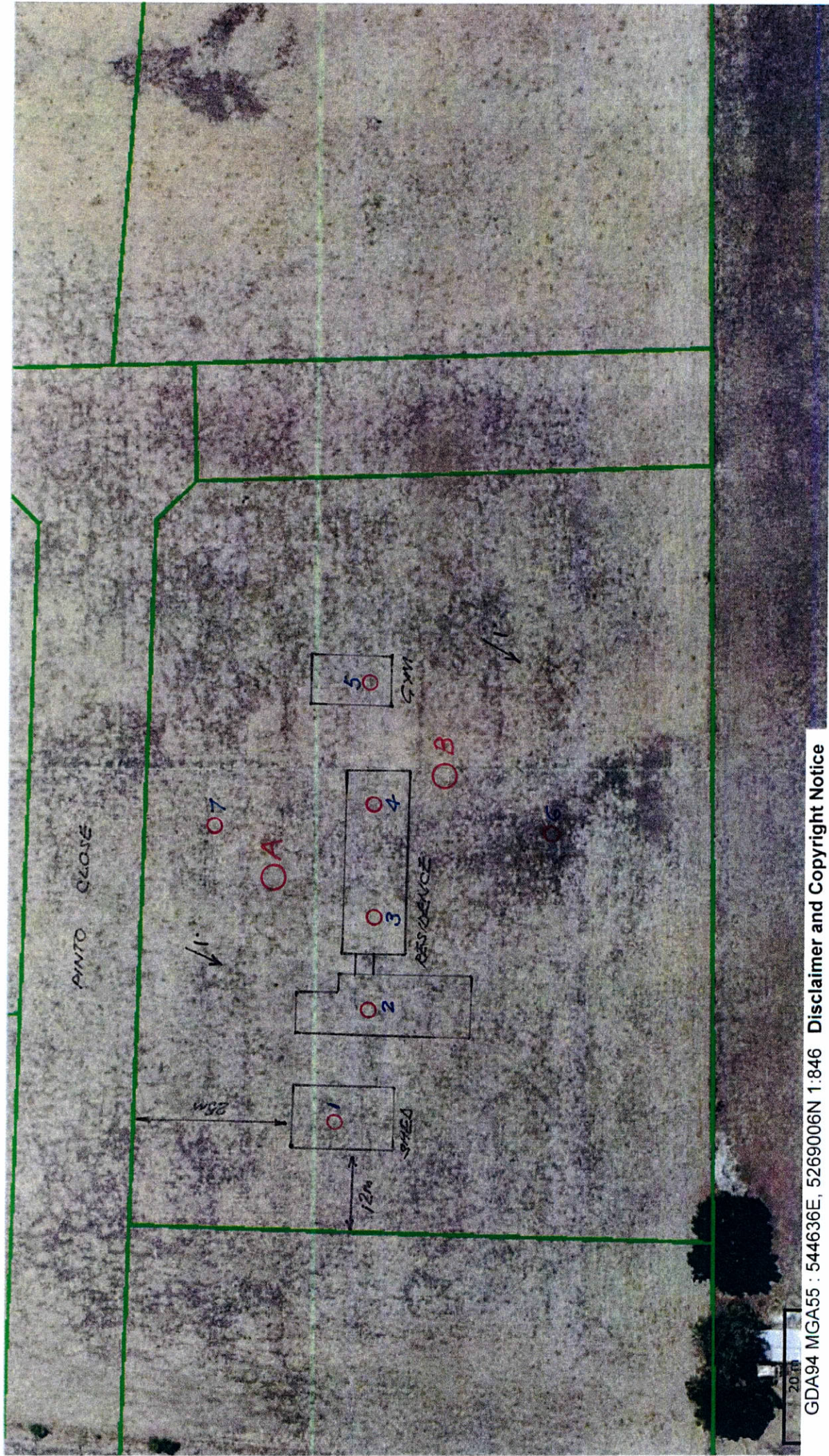
It is unlikely that erosion will occur because of the proposed development.

It is the opinion of the author that sensible development of this site can be achieved and the level of risk to users of the development is minimal and acceptable.

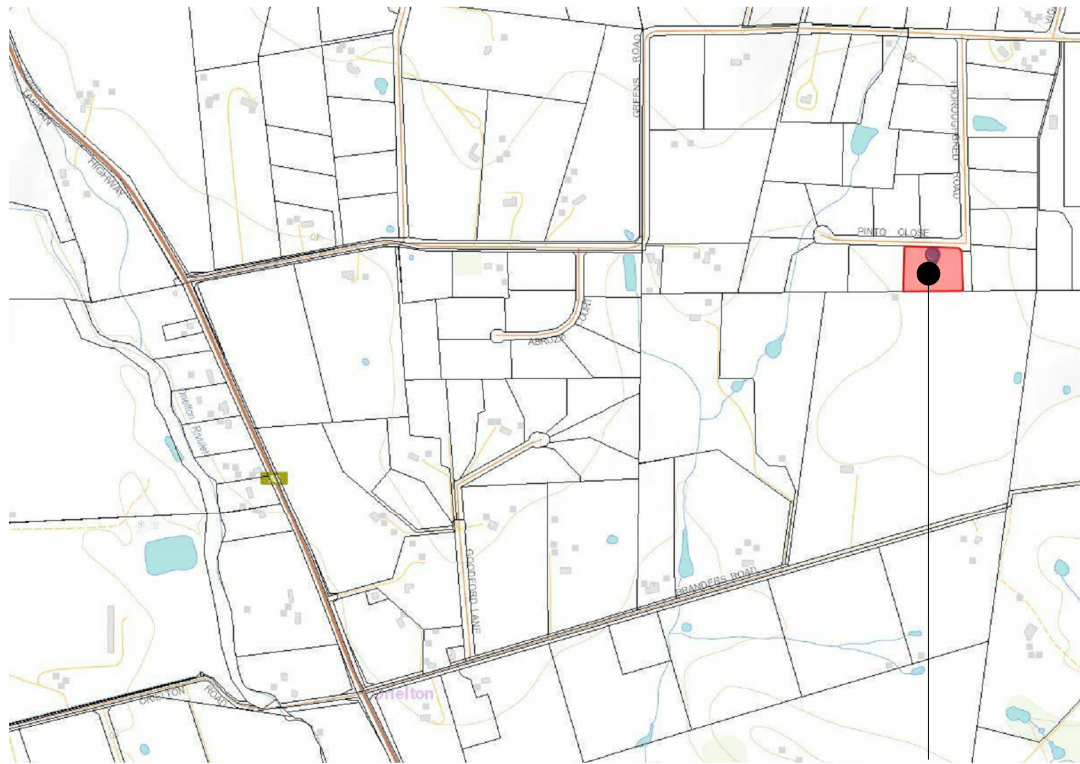
A handwritten signature in black ink, appearing to read 'P. Hofto'.

PETER HOFTO

Rock Solid Geotechnics P/L



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LOCALITY GUIDE

NTS
(SOURCE: THE LIST)

ADDRESS: 1 PINTO CLOSE, ORIELTON, TAS, 7172
PID: 9456533
TITLE REF: 186369/15

DEVELOPMENT APPLICATION

DA 2025-68

PROPOSED NEW HOUSE AND OUTBUILDING

(CLASS 1a SINGLE DWELLING & CLASS 10a OUTBUILDING)

1 PINTO CLOSE, ORIELTON, TAS, 7172

LAURENCE & BETTINA BLUNDELL

GENERAL NOTES

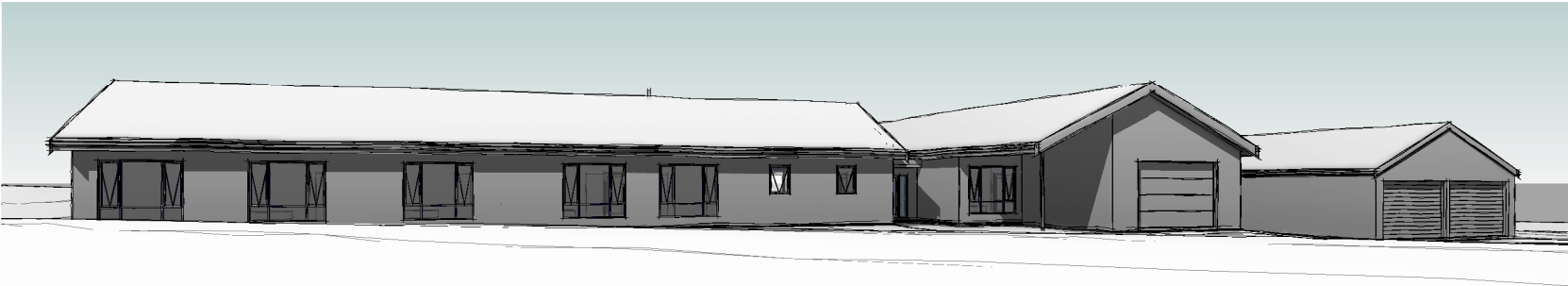
- THESE PLANS HAVE BEEN PREPARED FOR THE PURPOSE OF OBTAINING APPROVAL FROM RELEVANT STATUTORY AUTHORITIES AND ARE SUBJECT TO THAT APPROVAL.
- LEVEL DATUM IS ARBITRARY.
- ALL BOUNDARIES & ADJACENT OFFSETS ARE SUBJECT TO ON-SITE CONFIRMATION BY A LICENSED SURVEYOR.
- DO NOT SCALE. WRITTEN DIMENSIONS HAVE PRECEDENCE.
- ALL WORK TO BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT BUILDING CODE OF AUSTRALIA (NCC), AUSTRALIAN STANDARDS AND ANY BY-LAWS AND REGULATIONS THAT MAY APPLY.
 - ALL SLABS & FOOTING TO COMPLY WITH CURRENT AS2870.
 - ALL TIMBER FRAMING TO COMPLY WITH CURRENT AS1684.
 - ALL GLAZING TO COMPLY WITH CURRENT AS1288.
 - ALL SMOKE ALARMS TO BE INSTALLED IN ACCORDANCE WITH CURRENT NCC 3.7.2
 - ALL STAIRS & BALUSTRADES TO COMPLY WITH CURRENT NCC 3.9
 - ALL EXTERNAL DOORS, WINDOWS & BUILDING PENETRATIONS GENERALLY TO BE SEALED IN ACCORDANCE WITH CURRENT NCC 3.12.3.3
 - ALL WET AREAS TO BE WATERPROOFED IN ACCORDANCE NCC 3.8.1 & CURRENT AS3740.
 - ALL WORK TO COMPLY WITH CURRENT AS3959.
- CONTRACTORS TO CONFIRM ALL AREAS, DIMENSIONS & LEVELS WITH DESIGNER PRIOR TO COMMENCING ANY WORK.
- CONTRACTORS TO CHECK ALL OPENINGS BEFORE ORDERING WINDOWS & DOORS.
- ALL PROPRIETARY ITEMS ARE TO BE INSTALLED TO MANUFACTURERS INSTRUCTION.

THE LOCATION OF UNDERGROUND SERVICES SHOWN IS APPROXIMATE ONLY.
ALL SERVICES MAY NOT BE SHOWN. EXACT LOCATION OF ALL SERVICES SHOULD
BE POSITIVELY ESTABLISHED PRIOR TO COMMENCEMENT OF ANY WORKS.





Sorell Council
Development Application: 5.2025.68.1 -
Reponse to Request For Information - 1 Pinto
Way, Orielton P2.pdf
Plans Reference: P2
Date received: 4/04/2025



| SHEET | REVISION | SHEET NAME |
|--------|----------|---------------------------|
| NUMBER | | |
| A-00 | A | TITLE |
| A-01 | A | SITE PLAN |
| A-02 | A | PROPOSED FLOOR PLAN 1-200 |

THESE DRAWINGS ARE TO BE READ IN CONJUNCTION WITH SPECIFICATION, CERTIFICATE OF LIKELY COMPLIANCE AND ASSOCIATED DOCUMENTATION

DRAWINGS TO BE PRINTED & READ IN FULL COLOUR

| No. | Description | Date |
|-----|------------------|----------|
| | PS V1-2 | 11/03/25 |
| | DA | 17/03/25 |
| A | DA 2025-68 FIR#1 | 31/03/25 |
| | | |
| | | |

MICHAEL KINSELLA
INTEGRAL DESIGN & DRAFTING SERVICES
ACCREDITED BUILDING PRACTITIONER
ACCREDITATION: CC5699V
ACCREDITED BUSHFIRE PRACTITIONER
ACCREDITATION: BFP-133



LAURENCE & BETTINA BLUNDELL
PROPOSED NEW HOUSE
1 PINTO CLOSE, ORIELTON, TAS, 7172

| TITLE | | |
|----------------|------------------|--------------|
| Project number | BLUN-L-01 | A-00 |
| Date | 12/02/25 | |
| Designed by | Michael Kinsella | |
| Drawn by | MK | |
| Scale | | 1 : 100 @ A3 |

SITE INFORMATION

Title Reference Number: 186369/15
Wind Classification: N3 Site Classification to AS 4055-202 by RSG
Soil Classification: H2 Site Classification to AS 2870-201 by RSG
Climate Zone: 7
BAL RATING BAL 12.5
Alpine Area: N/A
Corrosion Environment: Benign >1000m from Calm Marine / C2 Low
Other Hazards: Nil Observed
Energy Efficiency N/A
Geo - Tech Report F55 CoQP RSG GEOTECH 25-021
Structural Form 55 F55 CoQP

PLANNING INFORMATION

Title Reference Number 186369/15
Planning Scheme TPS Sorell Local Provisions Schedule 12/22
Zone 11 Rural Living Zone A
Overlays SOR-S1.0 Dispersive Soils SAP
LPS-13 Bushfire Prone Areas Code
LPS-16 Safeguarding of Airports Code - Airport
Obstacle limitation Area

LOT AREA: 1.00ha
PROPOSED HOUSE GROSS FLOOR AREA: 544.03m²
PROPOSED OUTBUILDING AREA: 135.00m²

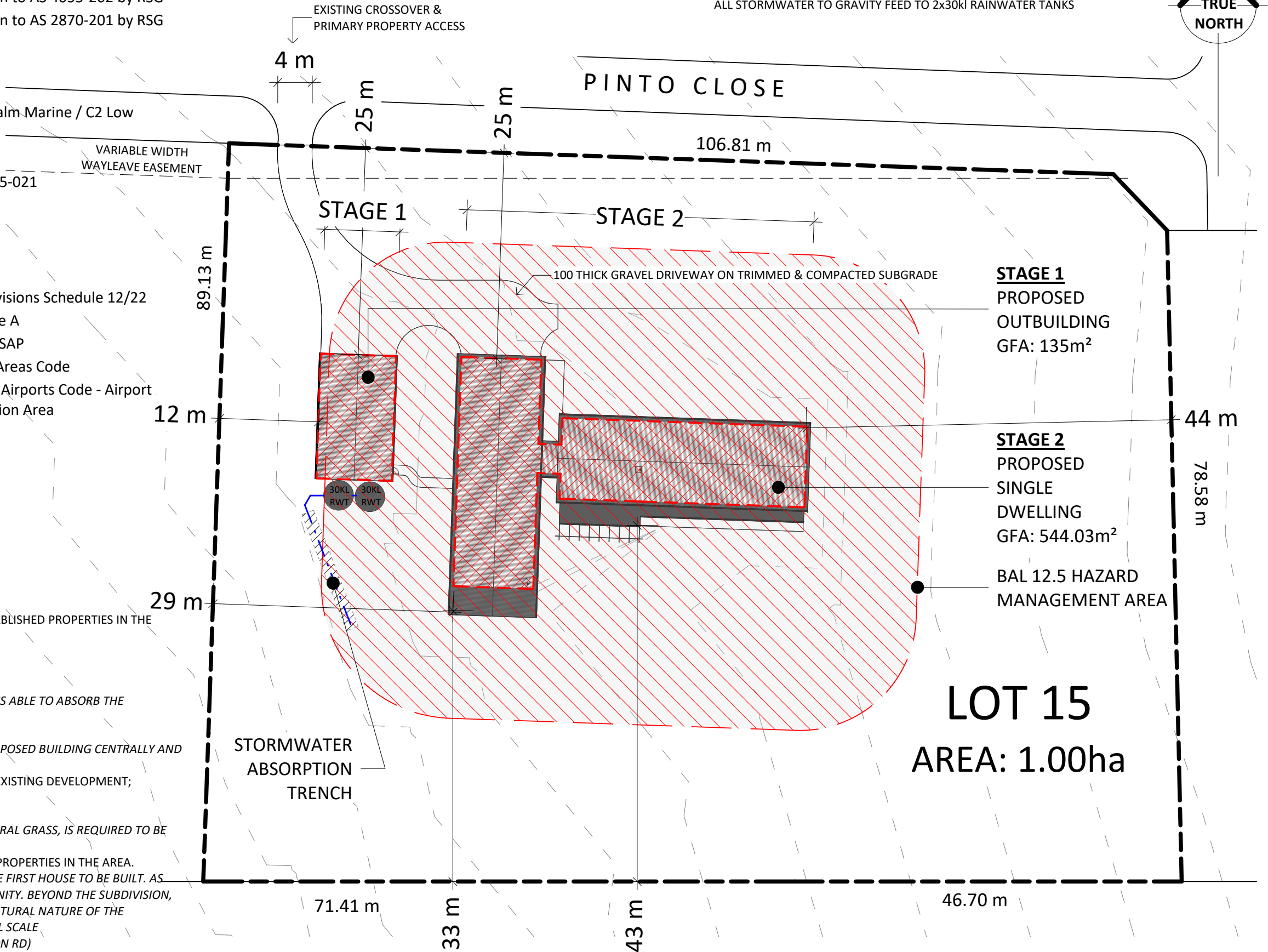
SITE COVERAGE: 789.31m²
PLOT RATIO: 7.89%

11.4.1 SITE COVERAGE

P1
THE SITE COVERAGE MUST BE CONSISTENT WITH THAT EXISTING ON ESTABLISHED PROPERTIES IN THE AREA, HAVING REGARD TO:
(A) THE TOPOGRAPHY OF THE SITE;
SITE IS FLAT AND TYPICAL OF OTHER LOTS IN THE SUBDIVISION
(B) THE CAPACITY OF THE SITE TO ABSORB RUNOFF;
THE 1ha SIZE OF THE LOT ALLOWS FOR ADEQUATE ABSORPTION TRENCHES ABLE TO ABSORB THE OVERFLOW FROM THE 2x30KL RAINWATER TANKS
(C) THE SIZE AND SHAPE OF THE SITE;
BEING RECTANGULAR SHAPE OF 1ha, THE SITE IS ABLE TO CARRY THE PROPOSED BUILDING CENTRALLY AND MAINTAIN REQUIRED SETBACKS
(D) THE EXISTING BUILDINGS AND ANY CONSTRAINTS IMPOSED BY EXISTING DEVELOPMENT;
THE LOT IS CURRENTLY VACANT WITH NO EXISTING BUILDINGS.
(E) THE NEED TO REMOVE VEGETATION; AND
AS A FORMER AGRICULTURAL SITE, NO VEGETATION, OTHER THAN PASTURAL GRASS, IS REQUIRED TO BE REMOVED
(F) THE CHARACTER OF DEVELOPMENT EXISTING ON ESTABLISHED PROPERTIES IN THE AREA.
THE LOT IS PART OF A NEW SUBDIVISION OF 1ha LIFESTYLE LOTS AND IS THE FIRST HOUSE TO BE BUILT. AS SUCH THERE IS NO COMPARABLE DEVELOPMENT IN THE IMMEDIATE VICINITY. BEYOND THE SUBDIVISION, SITE COVERAGE IS TYPICALLY GREATER THAN 400m² DUE TO THE AGRICULTURAL NATURE OF THE PROPERTIES REQUIRING NUMEROUS OUTBUILDING OF AN AGRICULTURAL SCALE
(AS EXAMPLES, REFER 67, 73, 186, 212 GREENS RD, 23, 53, 57, 60 ORIELTON RD)

DRAINAGE

ALL STORMWATER TO GRAVITY FEED TO 2x30kl RAINWATER TANKS



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MICHAEL KINSELLA
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ACCREDITED BUSHFIRE PRACTITIONER
ACCREDITATION: BFP-133

BUILDING DESIGNERS
ASSOCIATION OF AUSTRALIA

LAURENCE & BETTINA BLUNDELL
PROPOSED NEW HOUSE
1 PINTO CLOSE, ORIELTON, TAS, 7172

Sorell Council
Development Application: 5.2025.68.1 -
Response to Request For Information - 1 Pinto
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Plans Reference: P2
Date received: 4/04/2025

SITE PLAN

| | | |
|----------------|------------------|--------------|
| Project number | BLUN-L-01 | A-01 |
| Date | 12/02/25 | |
| Designed by | Michael Kinsella | |
| Drawn by | MK | |
| Scale | | 1 : 500 @ A3 |



FIXTURES LEGEND

- B ... BASIN
- Bth ... BATH
- CWM... CLOTHES WASHING MACHINE
- CT ... COOK TOP
- CWM.. CLOTHES WASHING MACHINE
- DRY... CLOTHES DRYER
- DP ... DOWN PIPE
- DW ... DISHWASHER
- Fr ... REFRIGERATOR
- HTR ... HEATED TOWEL RAIL
- HWC ... HOT WATER CYLINDER
- ORG... OVERFLOW RELIEF GULLY
- P ... PANTRY
- RH ... RANGE OR CANOPY HOOD
- RWT... RAINWATER TANK
- SCH ... SLOW COMBUSTION HEATER
- Shr ... SHOWER
- S ... SINK, DOMESTIC
- Tr ... TROUGH, LAUNDRY
- WC ... WATER CLOSET PAN
- WO ... WALL OVEN

FLOOR FINISHES LEGEND

- Cp1 ... SELECTED CARPET TYPE 1
- Cbr ... CONCRETE - BRUSHED
- Cbn ... CONCRETE - BURNISHED
- Cpd ... CONCRETE - POLISHED
- Csf ... CONCRETE - STEEL FLOAT FINISH
- GVL ... SELECTED GRAVEL
- Pv1 ... SELECTED PAVING TYPE 1
- T&G ... SELECTED TONGUE & GROOVE OVERLAY FLOORING
- T1 ... SELECTED TILE TYPE 1
- Vyl ... SELECTED VINYL

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BUILDING DESIGNERS ASSOCIATION OF AUSTRALIA

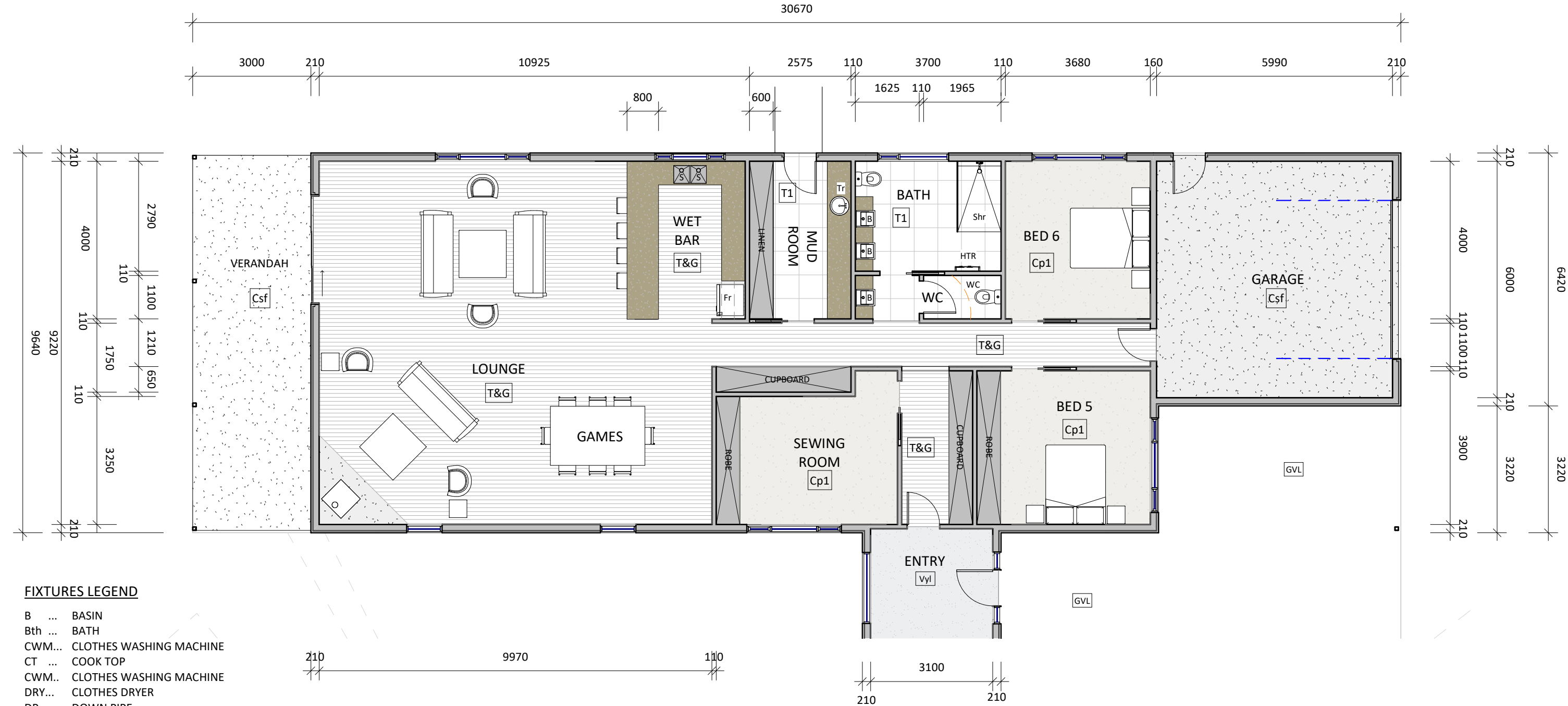
ACCREDITED BUILDING DESIGNER

MICHAEL KINSELLA
INTEGRAL DESIGN & DRAFTING SERVICES
ACCREDITED BUILDING PRACTITIONER
ACCREDITATION: CC5699V
ACCREDITED BUSHFIRE PRACTITIONER
ACCREDITATION: BFP-133

LAURENCE & BETTINA BLUNDELL
PROPOSED NEW HOUSE
1 PINTO CLOSE, ORIELTON, TAS, 7172

PROPOSED EAST WING FLOOR PLAN

| | | |
|----------------|------------------|--------------|
| Project number | BLUN-L-01 | A-03 |
| Date | 12/02/25 | |
| Designed by | Michael Kinsella | |
| Drawn by | MK | |
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DRAWINGS TO BE PRINTED & READ IN FULL COLOUR

LAURENCE & BETTINA BLUNDELL
PROPOSED NEW HOUSE
1 PINTO CLOSE, ORIELTON, TAS, 7172

PROPOSED WEST WING FLOOR PLAN

| | | |
|----------------|------------------|--------------|
| Project number | BLUN-L-01 | A-04 |
| Date | 12/02/25 | |
| Designed by | Michael Kinsella | |
| Drawn by | MK | |
| Scale | | 1 : 100 @ A3 |

| No. | Description | Date |
|-----|-------------|----------|
| | PS V1-2 | 11/03/25 |
| | DA | 17/03/25 |
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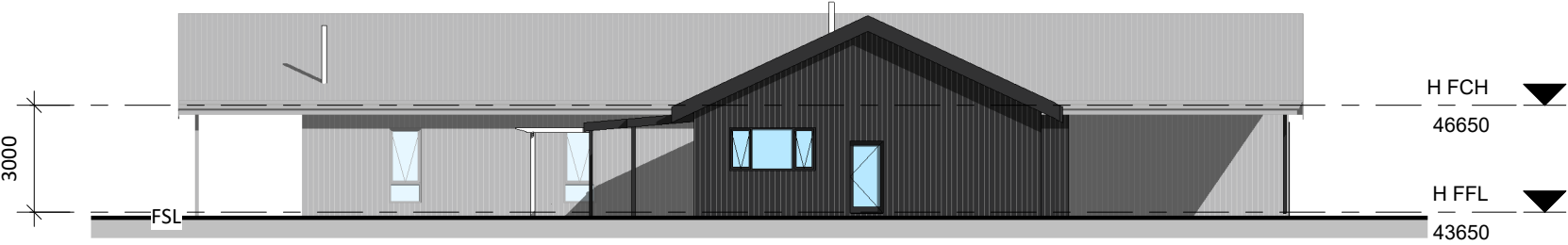
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ACCREDITED BUILDING PRACTITIONER
ACCREDITATION: CC5699V
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ACCREDITATION: BFP-133

bda
BUILDING DESIGNERS
ASSOCIATION OF AUSTRALIA

ACCREDITED
CHARTERED
BUILDING DESIGNER

-EAST ELEVATION-

1 : 200



-SOUTH ELEVATION-

1 : 200



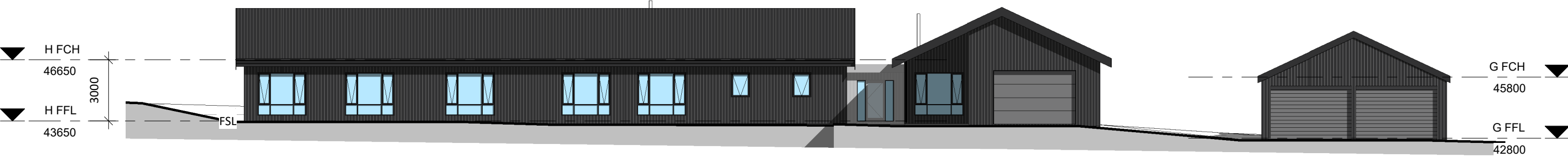
-WEST ELEVATION-

1 : 200



-NORTH ELEVATION-

1 : 200



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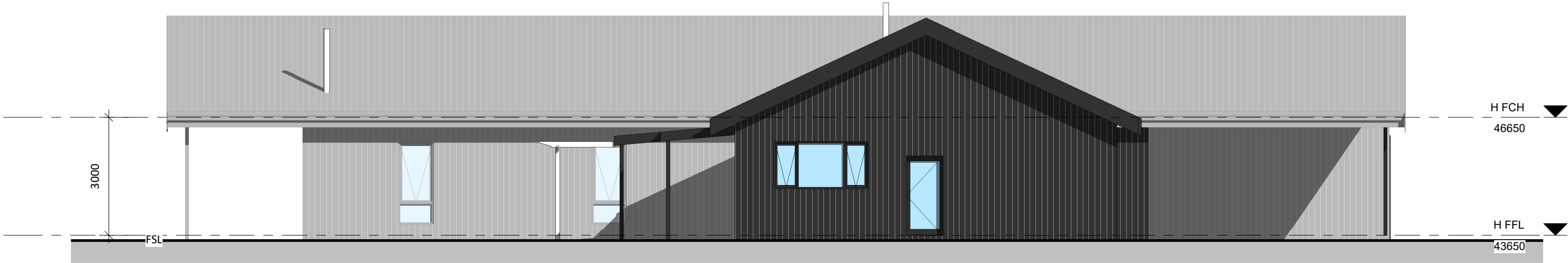
MICHAEL KINSELLA
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ACCREDITED BUILDING PRACTITIONER
ACCREDITATION: CC5699V
ACCREDITED BUSHFIRE PRACTITIONER
ACCREDITATION: BFP-133



LAURENCE & BETTINA BLUNDELL
PROPOSED NEW HOUSE
1 PINTO CLOSE, ORIELTON, TAS, 7172

PROPOSED OVERALL ELEVATIONS 1-200

| | | |
|----------------|------------------|--------------|
| Project number | BLUN-L-01 | A-05 |
| Date | 12/02/25 | |
| Designed by | Michael Kinsella | |
| Drawn by | MK | |
| Scale | | 1 : 200 @ A3 |



EAST ELEVATION

1 : 100

MATERIALS SCHEDULE

EXTERNAL CLADDING

COLORBOND LONGLINE 305 OR EQV
INSTALL TO MANUFACTURERS INSTRUCTION
COLOUR: COLORBOND MONUMENT MATT

WINDOW FRAMES

DOUBLE GLAZED W/ uPVC FRAMES
COLOUR: TO MATCH CLADDING

EXPOSED COLUMNS

MS SHS
COLOUR: TO MATCH CLADDING

ROOFING

COLORBOND LONGLINE 305 OR EQV
INSTALL TO MANUFACTURERS INSTRUCTION
COLORBOND SURFMIST

ROOF FLASHINGS

COLOURBOND FLAT SHEET
COLOUR TO MATCH ROOF SHEETING

GUTTERS

INTERNAL COLORBOND HALF ROUND
COLOUR TO MATCH ROOFING

FASCIA

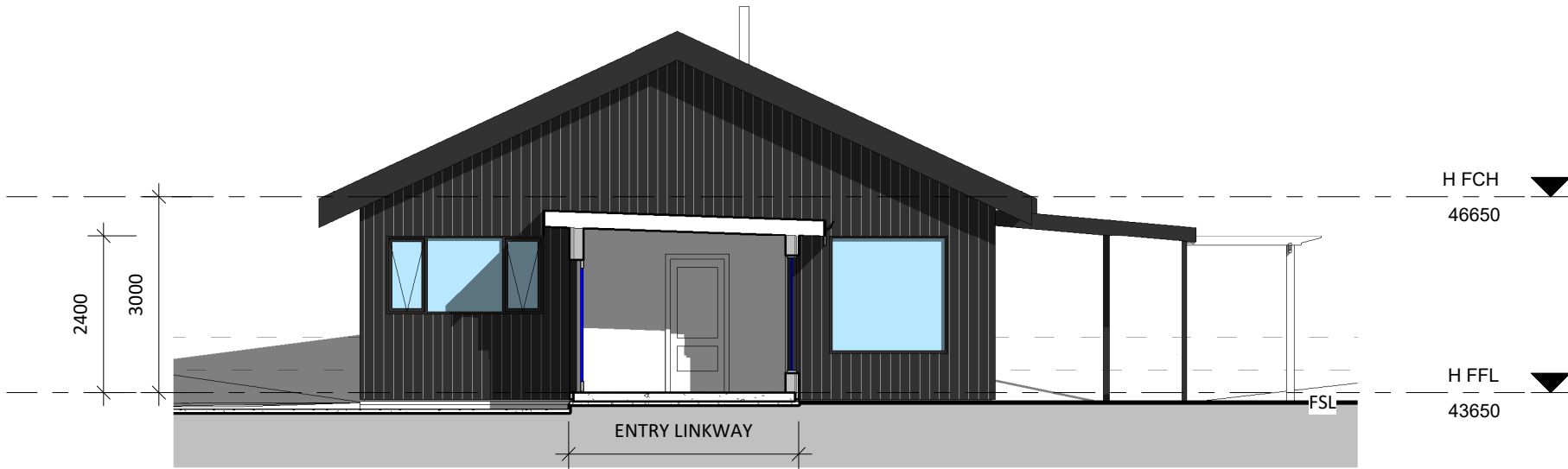
COLORBOND
COLOUR TO MATCH ROOFING

DOWNPIPES

DN90 uPVC.
PAINT TO MATCH WALLS

SOFFITS

6 FCS
PRIME & PAINT SELECTED GREY



EAST WING WEST ELEVATION

1 : 100

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P1.pdf
Plans Reference:P1
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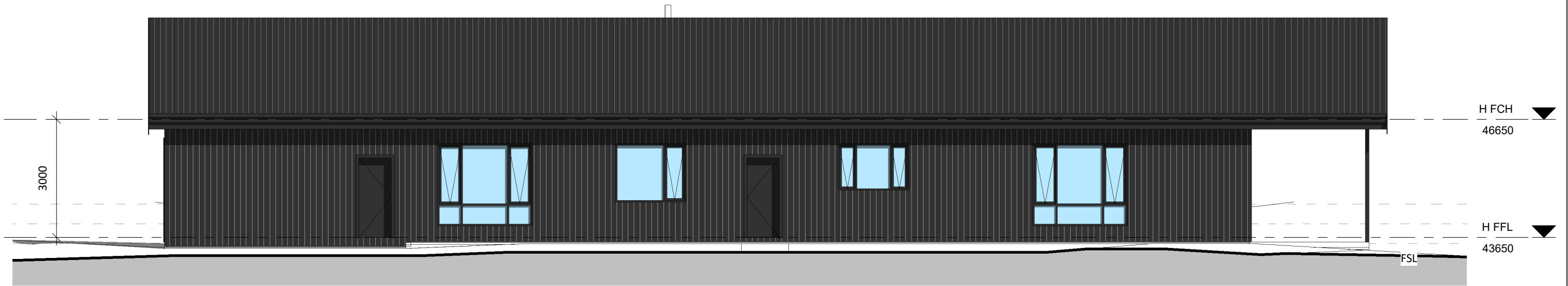
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ACCREDITATION: BFP-133



LAURENCE & BETTINA BLUNDELL
PROPOSED NEW HOUSE
1 PINTO CLOSE, ORIELTON, TAS, 7172

PROPOSED ELEVATIONS 1

| | | | |
|----------------|------------------|-------|--------------|
| Project number | BLUN-L-01 | A-06 | |
| Date | 12/02/25 | | |
| Designed by | Michael Kinsella | | |
| Drawn by | MK | Scale | 1 : 100 @ A3 |



WEST ELEVATION

1 : 100



WEST WING EAST ELEVTAION

1 : 100

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| | DA | 17/03/25 |
| | | |
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MICHAEL KINSELLA
INTEGRAL DESIGN & DRAFTING SERVICES
ACCREDITED BUILDING PRACTITIONER
ACCREDITATION: CC5699V
ACCREDITED BUSHFIRE PRACTITIONER
ACCREDITATION: BFP-133



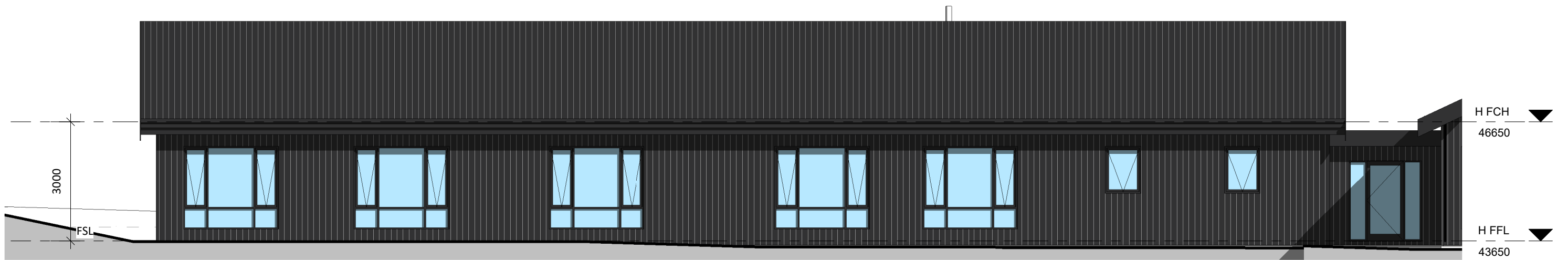
LAURENCE & BETTINA BLUNDELL

PROPOSED NEW HOUSE

1 PINTO CLOSE, ORIELTON, TAS, 7172

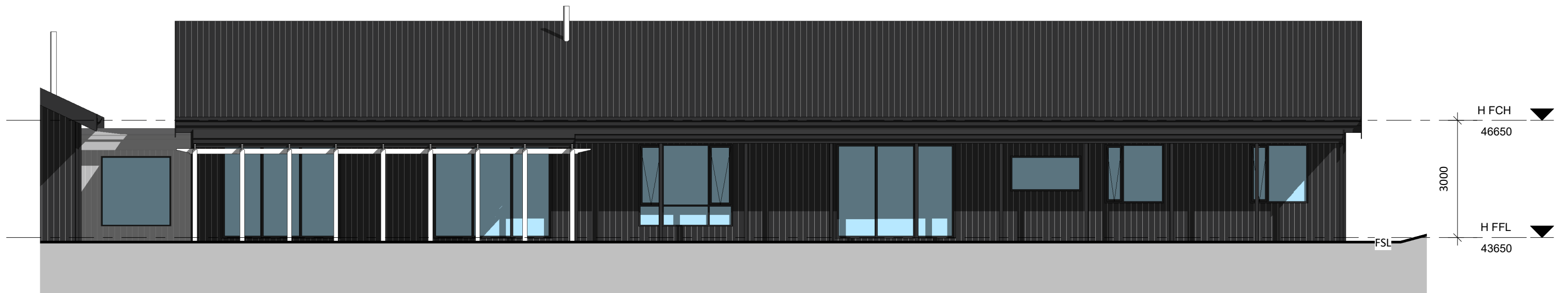
| PROPOSED ELEVATIONS 2 | | |
|-----------------------|------------------|--------------|
| Project number | BLUN-L-01 | A-07 |
| Date | 12/02/25 | |
| Designed by | Michael Kinsella | |
| Drawn by | MK | Scale |
| | | 1 : 100 @ A3 |

INTEGRAL DES



EAST WING NORTH ELEVATION

1 : 100



EAST WING SOUTH ELEVATION

1 : 100



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| | DA | 17/03/25 |
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MICHAEL KINSELLA
INTEGRAL DESIGN & DRAFTING SERVICES
ACCREDITED BUILDING PRACTITIONER
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ACCREDITATION: BFP-133



LAURENCE & BETTINA BLUNDELL
PROPOSED NEW HOUSE
1 PINTO CLOSE, ORIELTON, TAS, 7172

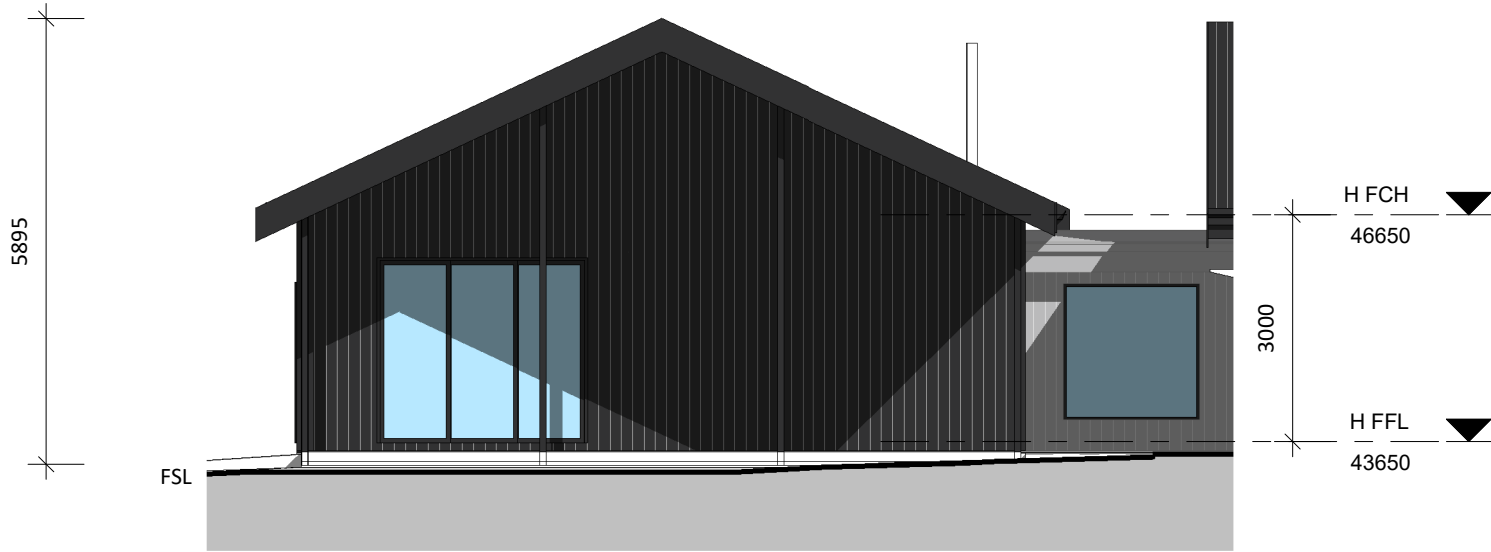
PROPOSED ELEVATIONS 3

| | | |
|----------------|------------------|--------------------|
| Project number | BLUN-L-01 | A-08 |
| Date | 12/02/25 | |
| Designed by | Michael Kinsella | |
| Drawn by | MK | Scale 1 : 100 @ A3 |



WEST WING NORTH ELEVATION

1 : 100



WEST WING SOUTH ELEVATION

1 : 100

MATERIALS SCHEDULE

EXTERNAL CLADDING

COLORBOND LONGLINE 305 OR EQV
INSTALL TO MANUFACTURERS INSTRUCTION
COLOUR: COLORBOND MONUMENT MATT

WINDOW FRAMES

DOUBLE GLAZED W/ uPVC FRAMES
COLOUR: TO MATCH CLADDING

EXPOSED COLUMNS

MS SHS
COLOUR: TO MATCH CLADDING

ROOFING

COLORBOND LONGLINE 305 OR EQV
INSTALL TO MANUFACTURERS INSTRUCTION
COLORBOND SURFMIST

ROOF FLASHINGS

COLOURBOND FLAT SHEET
COLOUR TO MATCH ROOF SHEETING

GUTTERS

INTERNAL COLORBOND HALF ROUND
COLOUR TO MATCH ROOFING

FASCIA

COLORBOND
COLOUR TO MATCH ROOFING

DOWNPIPES

DN90 uPVC.
PAINT TO MATCH WALLS

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LAURENCE & BETTINA BLUNDELL
PROPOSED NEW HOUSE
1 PINTO CLOSE, ORIELTON, TAS, 7172

PROPOSED ELEVATIONS 4

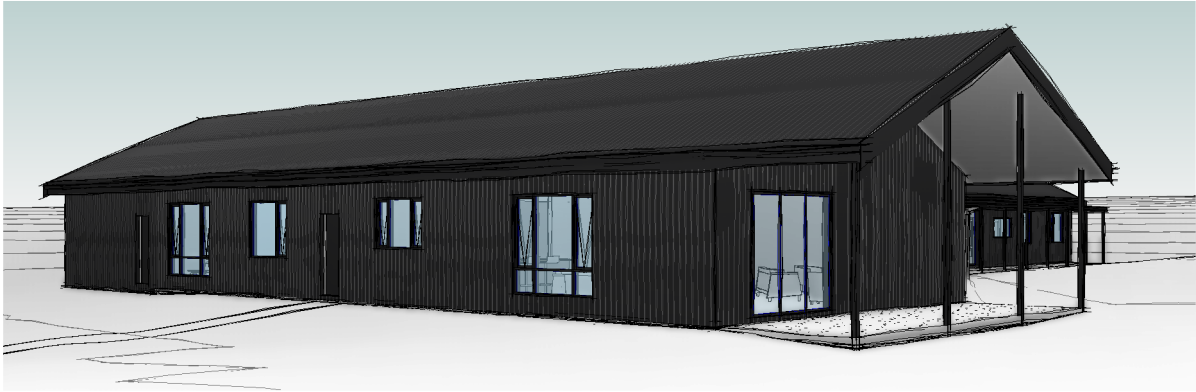
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| Project number | BLUN-L-01 | A-09 |
| Date | 12/02/25 | |
| Designed by | Michael Kinsella | |
| Drawn by | MK | |
| Scale | | 1 : 100 @ A3 |



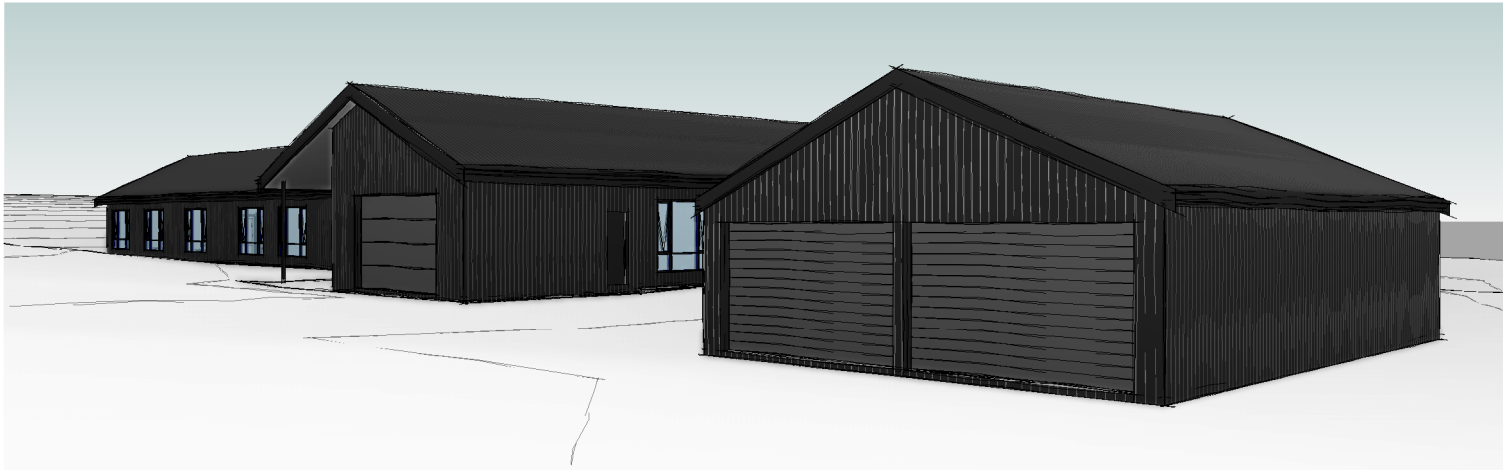
EXT02 - NE



EXT02 - SE



EXT03 - SW





EXT04 - NW



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| <table><tr><th>No.</th><th>Description</th><th>Date</th></tr><tr><td></td><td>PS V1-2</td><td>11/03/25</td></tr><tr><td></td><td>DA</td><td>17/03/25</td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td></tr></table> <div><div>MICHAEL KINSELLA INTEGRAL DESIGN & DRAFTING SERVICES ACCREDITED BUILDING PRACTITIONER ACCREDITATION: CC5699V ACCREDITED BUSHFIRE PRACTITIONER ACCREDITATION: BFP-133</div></div> | No. | Description | Date | | PS V1-2 | 11/03/25 | | DA | 17/03/25 | | | | | | | | | | <div>LAURENCE & BETTINA BLUNDELL PROPOSED NEW HOUSE 1 PINTO CLOSE, ORIELTON, TAS, 7172</div> | <div>SKETCHES 1</div> <table><tr><td>Project number</td><td>BLUN-L-01</td><td rowspan="3">SK-01</td></tr><tr><td>Date</td><td>12/02/25</td></tr><tr><td>Designed by</td><td>Michael Kinsella</td></tr><tr><td>Drawn by</td><td>MK</td><td>Scale</td><td>@ A3</td></tr></table> | Project number | BLUN-L-01 | SK-01 | Date | 12/02/25 | Designed by | Michael Kinsella | Drawn by | MK | Scale | @ A3 |
|---|------------------|--------------|------|--|---------|----------|--|----|----------|--|--|--|--|--|--|--|--|--|---|--|----------------|-----------|--------------|------|----------|-------------|------------------|----------|----|-------|------|
| No. | Description | Date | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | PS V1-2 | 11/03/25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | DA | 17/03/25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| Project number | BLUN-L-01 | SK-01 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Date | 12/02/25 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Designed by | Michael Kinsella | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Drawn by | MK | Scale | @ A3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

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Sorell Council

Development Application: 5.2025.68.1 -
Development Application - 1 Pinto Way, Orielton -
P1.pdf

Plans Reference:P1

Date Received:17/03/2025

Site Specific Windspeed Report

Wind Code AS/NZS 1170.2:2021



Wind

| | | | |
|----------------------|------------|--|------------|
| Wind Region: | A | Terrain Category (TC): | 2.0 |
| Latitude: | -42.730696 | Critical Direction: | WEST |
| Longitude: | 147.545174 | Md: | 1.00 |
| Elevation: | 44 | Mz, cat: | 0.91 |
| Importance Level: | 2 | Ms: | 1.00 |
| Average Height: | 4.05 | Mt: | 1.00 |
| ULTIMATE VR: | 45 m/s | WIND SPEED (V_{sit}, β): | 40.95 m/s |
| ULTIMATE ARI: | vr500 | WIND PRESSURE (q_{sit}, β): | 1.0061 kPa |

Snow

| | | | |
|--------------|-----|----------------------|-----|
| Snow Region: | N/A | Snow Classification: | N/A |
|--------------|-----|----------------------|-----|







Ice

| | | |
|-------------|--------|----|
| Ice Region: | No VR: | 34 |
|-------------|--------|----|

Seismic

| | |
|---------------------------|---|
| Seismic Risk Coefficient: | 0 |
|---------------------------|---|



| Legend | |
|---|---------|
|  | T.C.1 |
|  | T.C.1.5 |
|  | T.C.2 |
|  | T.C.2.5 |
|  | T.C.3 |
|  | T.C.4 |

Customer Name: Laurence Blundell

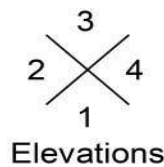
Site Address: 1 Pinto Cl, Orielton, TAS, 7172

| | |
|--------------------|-----------|
| Project Reference: | KS.116116 |
|--------------------|-----------|

Calculations provided by Revolutio Hazard API v4

[illegible]

Note: * Indicates signature on original issue of drawings or last revision of drawing (These drawings are valid only when endorsed by a separate design certificate that is valid for the date of issue and construction.)

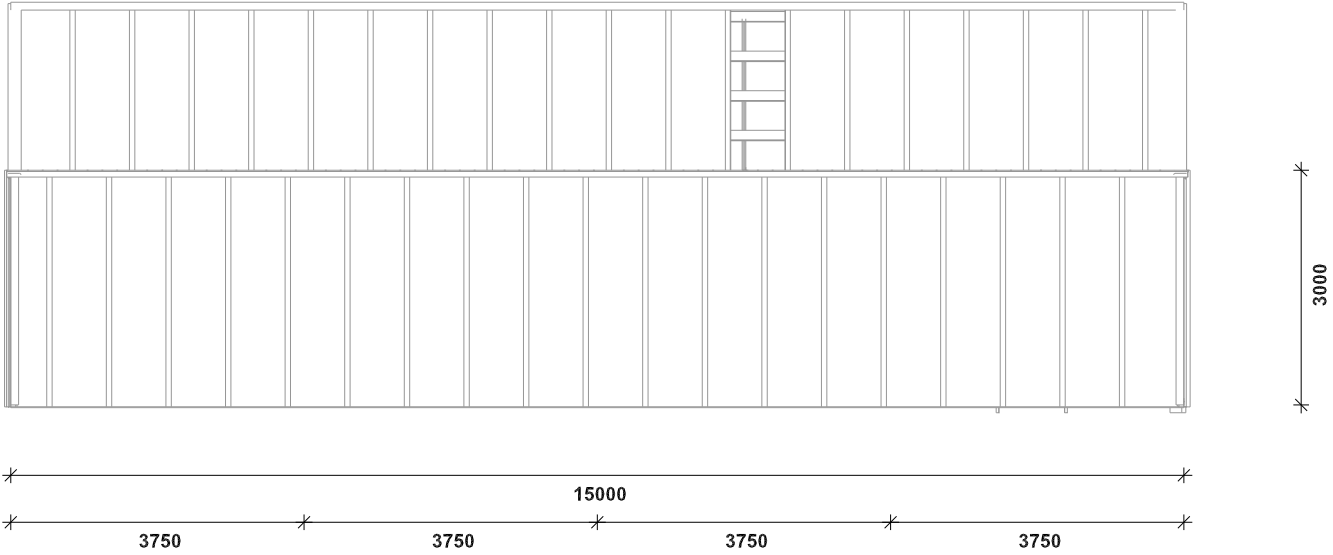
[illegible]

Note: * Indicates signature on original issue of drawings or last revision of drawing (These drawings are valid only when endorsed by a separate design certificate that is valid for the date of issue and construction.)

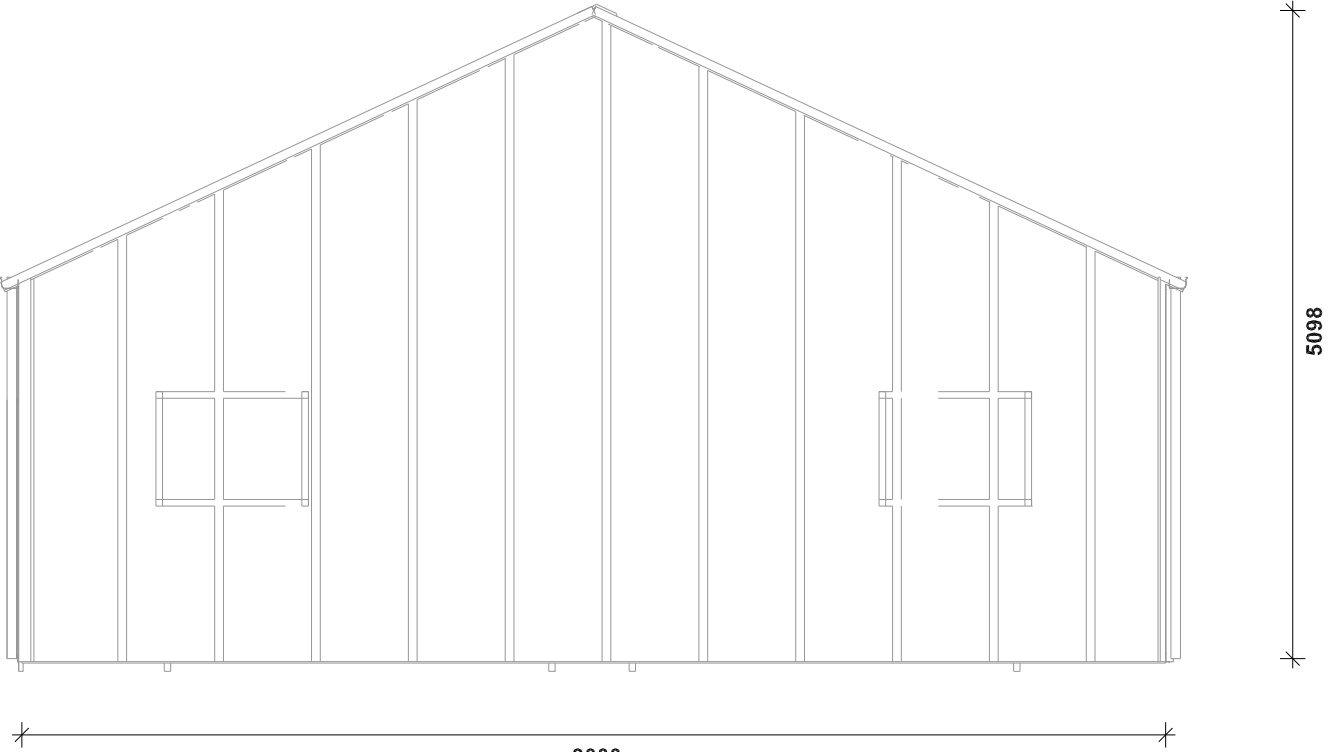


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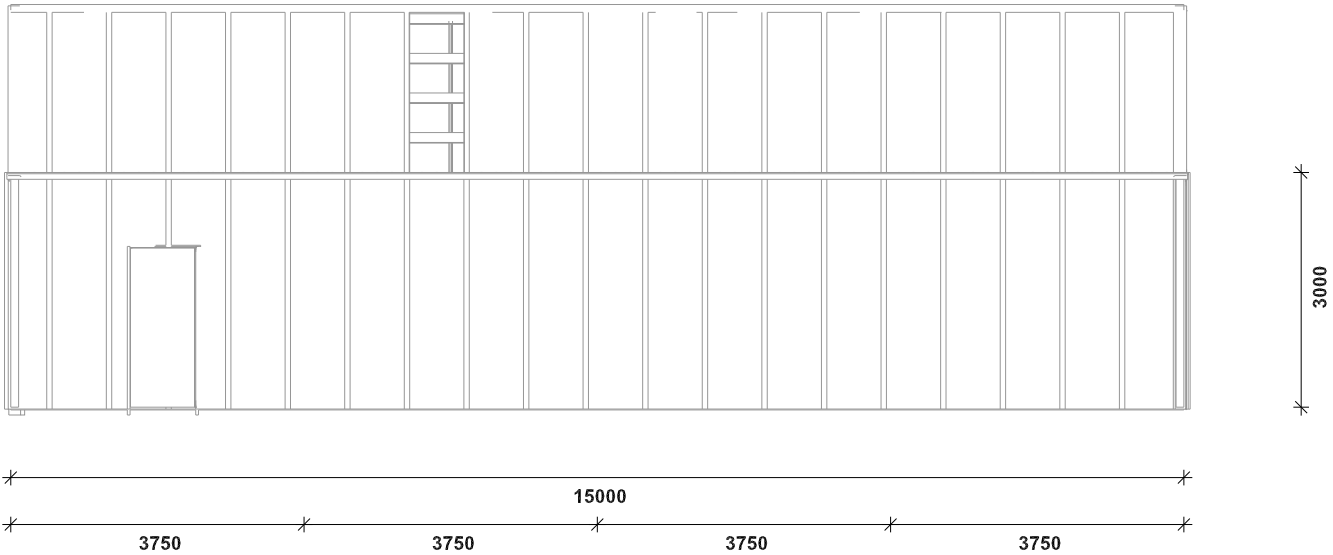
Development Application: 5.2025.68.1 -
Development Application - 1 Pinto Way, Orielton -
P1.pdf
Plans Reference:P1
Date Received:17/03/2025



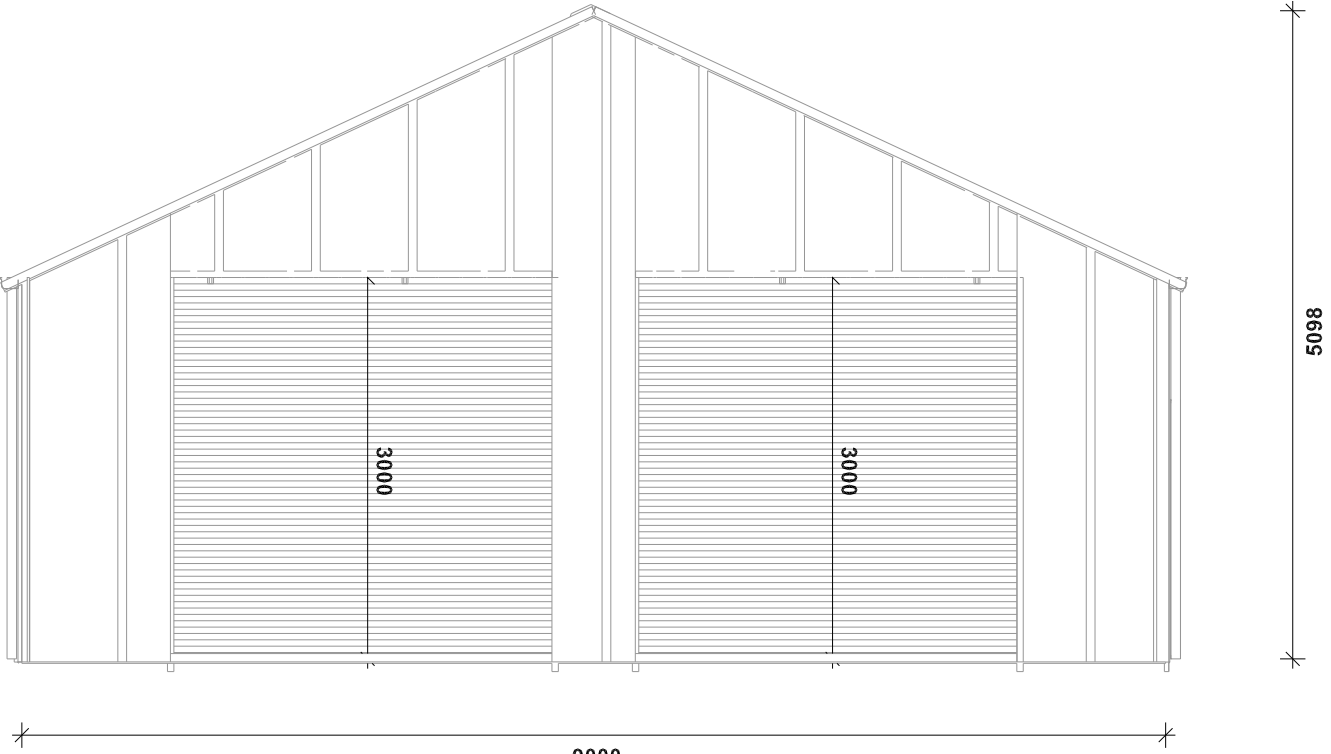
ELEVATION 1



ELEVATION 2



ELEVATION 3



ELEVATION 4

| | | | | | | | | |
|------|----------------|--|-------|-------|-----|------------|--|--|
| | | <div><div>Wirtu L. Bayissa</div><div>Registered Professional Engineer</div><div>B.Sc.(Civil), M.Tech (Building/Structures), PhD (Structures)</div><div>MIEAust, CPEng, CMEngNZ, NER, APEC, IntPE(Aust),</div><div></div><div>Signed: 24/01/2025</div><div>RPEQ (16592), PE (Vic) (PE0002085), RC (NSW) (BDC3146),</div><div>BSP (TAS) (702601568); BP (NT) (332299ES)</div></div> | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| Rev. | Remark/Comment | | Date: | Appr. | W.B | 24/01/2025 | 74 Platinum Street, Crestmead QLD 4132. PO Box 1581, Browns Plains, Brisbane, QLD, Australia. | T:07 3827 8000 F:07 3803 2320 W:steelshedsaustralia.com.au |

Client: Laurence Blundell

Project: 1 Pinto Cl, Orielton, 7172

Title: ELEVATIONS

| | |
|------------------|----------------------------|
| Job No. | SSA9106 |
| Drawing No. | SSA-DW-06 |
| Date: 24/01/2025 | Approved: Wirtu L. Bayissa |
| Scale: N.T.S | Sheet : SSA9106-04 |

Note: * Indicates signature on original issue of drawings or last revision of drawing(These drawings are valid only when endorsed by a separate design certificate that is valid for the date of issue and construction.)

| Building Dimensions | | | | | | | | |
|---------------------|------|--------|--------|-------|----------------|-------------------|-------------|------------|
| Categories | Span | Length | Height | Pitch | Number of bays | Design Open/Close | Wind Region | Wind Speed |
| Main Building | 9000 | 15000 | 3000 | 25 | 4 | Open | A | 40.95 |

| Bay Length | | | | |
|------------|-------|-------|-------|-------|
| | Bay 1 | Bay 2 | Bay 3 | Bay 4 |
| Bay Length | 3750 | 3750 | 3750 | 3750 |

| Cladding Elements & Colours | | |
|-----------------------------|----------|-------------------------------------|
| Category | Colour | Product |
| Roof Cladding | Monolith | Spanclad 0.42 |
| Wall Cladding | Monolith | Spanclad 0.42 |
| Trim | Monolith | Type 06 01 Flashing |
| Roller Door | Monolith | See roller door specification table |
| Downpipes | PVC | PVC Pipe 6m 90mm - Metroll |

| Portal Elements | | | | | |
|-------------------------|-----------|-----------|-----------|-----------|-----------|
| | Portal 1 | Portal 2 | Portal 3 | Portal 4 | Portal 5 |
| Purlin | Z10012 | Z10012 | Z10012 | Z10012 | Z10012 |
| Eave purlin | C10012 | C10012 | C10012 | C10012 | C10012 |
| Purlin design spacing | 1198 | 1198 | 1198 | 1198 | 1198 |
| End girt | Z10015 | | | | Z10015 |
| Side girt | Z10012 | Z10012 | Z10012 | Z10012 | Z10012 |
| Girt design spacing | 1325 | 1325 | 1325 | 1325 | 1325 |
| Upright | C15019 | | | | C15019 |
| Upright base hold down | M12 100mm | | | | M12 100mm |
| Upright base connection | Cleat | | | | Cleat |
| Leg | C20015 | C20019 | C20019 | C20019 | C15012 |
| Rafter | C20015 | C20019 | C20019 | C20019 | C15012 |
| Leg base hold down | M12 100mm | M12 100mm | M12 100mm | M12 100mm | M12 100mm |
| Leg base connection | Cleat | Cleat | Cleat | Cleat | Cleat |

| Bracing Specifications | |
|------------------------|--------------------|
| End Wall Bracing | 4X 50 x 1.0 Straps |
| Side Wall Bracing | 2X 50 x 1.0 Straps |
| Roof Bracing End | 30 x 1.0 Straps |
| Roof Bracing Mid | 30 x 1.0 Straps |

| Roller Doors Specifications | | |
|-----------------------------|-------------|-------------|
| Opening | 3000 x 3000 | 3000 x 3000 |
| Wall | 4 | 4 |
| Jambs | C20015 | C20015 |
| Common Jamb | N/A | N/A |
| Head Beam | C15012 | C15012 |

NOTE: Dimensions are in mm.

NOTE: Allowable tolerance limit for girts and purlins spacing variations without adversely affecting performance characteristics of these is up to 100mm



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KEYS

- B.E Refers to bottom edge of section
CTR Refers to centres
F.F.L Refers to finished floor level
R.O Refers to rough opening
T.E Refers to top edge of section
U.N.O Refers to unless noted otherwise

Opening symbol

Height from F.F.L.

R.O. Width

| | | | | | | | | | | | |
|------|----------------|--|--|------------|-----|-------|-------|---|---------------------------|------------------|----------------------------|
| | | <div>Wirtu L. Bayissa Registered Professional Engineer B.Sc.(Civil), M.Tech (Building/Structures), PhD (Structures) MIEAust, CPEng, CMEngNZ, NER, APEC, IntPE(Aust),  Signed 24/01/2025 RPEQ (16592), PE (Vic) (PE0002085), RC (NSW) (BDC3146), BSP (TAS) (702601568); BP (NT) (332299ES)</div> | | | | | | <div><div>STEEL SHEDS AUSTRALIA</div><div>74 Platinum Street, Crestmead QLD 4132. PO Box 1581, Browns Plains, Brisbane, QLD, Australia. T:07 3827 8000 F:07 3803 2320 W:steelshedsaustralia.com.au</div></div> | Client: Laurence Blundell | Job No. | SSA9106 |
| | | | | | | | | | | Drawing No. | SSA-DW-07 |
| | | | | | | | | | | Date: 24/01/2025 | Approved: Wirtu L. Bayissa |
| | | | | | | | | | | Scale: N.T.S | Sheet : SSA9106-05 |
| Rev. | Remark/Comment | | | 24/01/2025 | W.B | Date: | Appr. | | | | |

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