

Statement of Environmental Effects	
In Support of a Development Application	
Proposal	- DWELLING – new, on a 15.68ha allotment in an RU1 – 170ha zone - To request a section 4.6 Variation to LEP by seeking relief under sec 5.3 of LEP, to accommodate same over the parcel (15.732ha vs 170ha) with 50m Zone boundary adjoining clause
Subject Land Address	Lot A DP 100012
	Rowans Lane BENDICK MURRELL 2803
Applicant/Owner	Ms Tori Pope & Mr Alex Slavin for Mr Alex Slavin
	0436 468 674 (Tori)
Appn Prepared By	DA Busters – Development Assistance Services Ph: 0466 722 869 Email: Craig@DAbusters.com
LGA	Hilltops Council – former Young Shire Council area



View from NW Corner"

DA assisted by:



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Ph: 0466 722 869 E: Craig@DAbusters.com

7 July 2024

Director Planning
HILLTOPS Regional Council
Locked Bag 5
YOUNG NSW 2594

Att: Manager Planning

Dear Jaime & Andrew,

**Re: Dev Appn – New Rural Dwelling – LEP 4.6 Variation seeking sec 5.3 Relief
Lot A Rowans Lane Bendick Murrell – A & K SLAVIN & POPE**

Please find attached the appropriate application forms for the above, along with all supporting documentation and plans. This document forms the Statement of Environmental Effects demonstrating compliance or giving appropriate justification for performance based assessment under Council's LEP, DCP and Policy Environment.

The land (arguably) currently does not have a building entitlement as researched through appropriate inquiries of Council and the NSW Planning Portal. It is understood that as of today the deemed concurrence arrangements no longer exist and this application has been prepared based on the recent Circular from DoPIE in this regard.

A variation is being claimed under clause 4.2A(3)(a) of the LEP due to it being a holding where compliance with clause 5.3 can be demonstrated. By election and inclusion, Council has defeated the objective of 4.2A(1) for land within 50m of a Village zone where both sets of Zone objectives can be observed. The associated & required Heads of Consideration checklist is completed and appended to the end of this report.

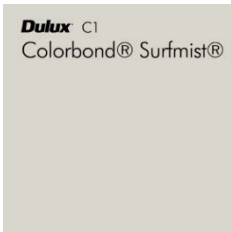
A further 5m variance is also claimed to the front building line setback, were standards under the DCP – RU1 Building Line, to apply. 25m is proposed in lieu of 30m, yet if RU5 standards apply, it would be compliant.

The matter is discussed and presented in depth within this report. This application is commended to you for consideration and approval. Whilst Mr SLAVIN & POPE will be the applicants/primary contacts, should any technical enquiry arise, please forward these to myself, the contact information is in the letterhead above.

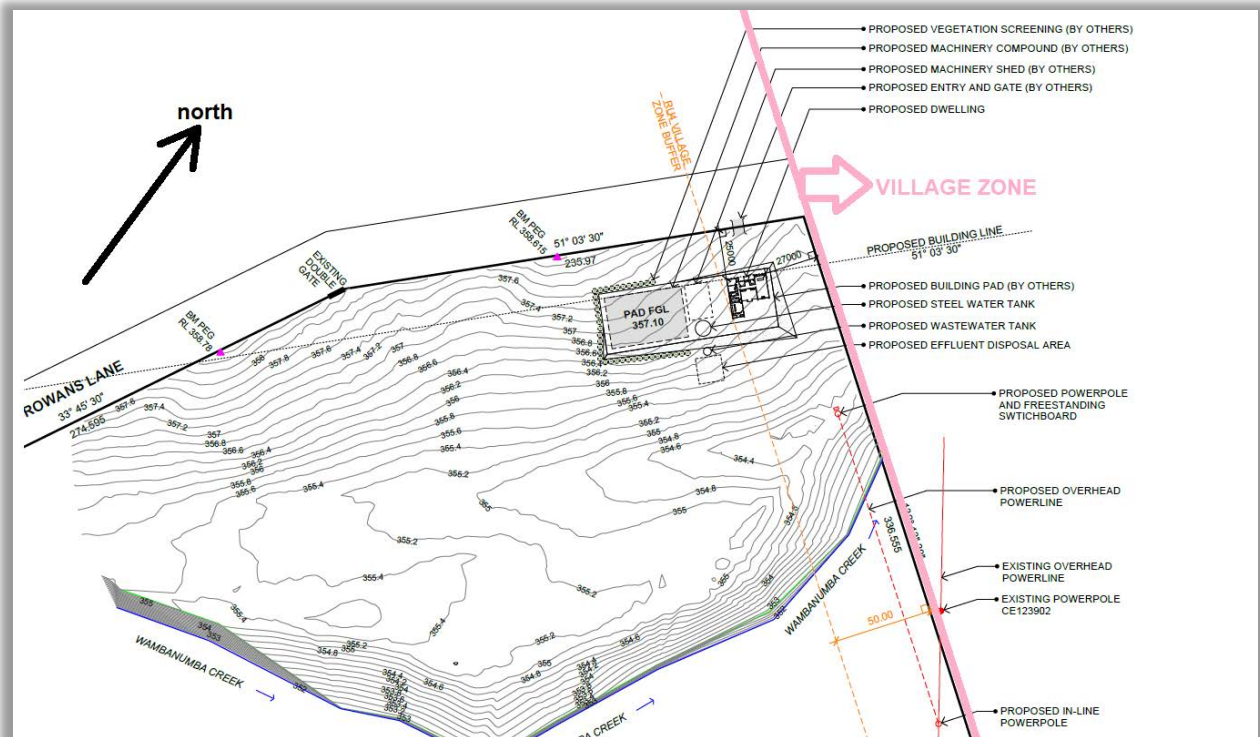
A handwritten signature in black ink, appearing to be 'K Craig Filmer', written over a light grey background.

K Craig Filmer
Development & Environmental Health Specialist

A. DESCRIPTION OF DEVELOPMENT:

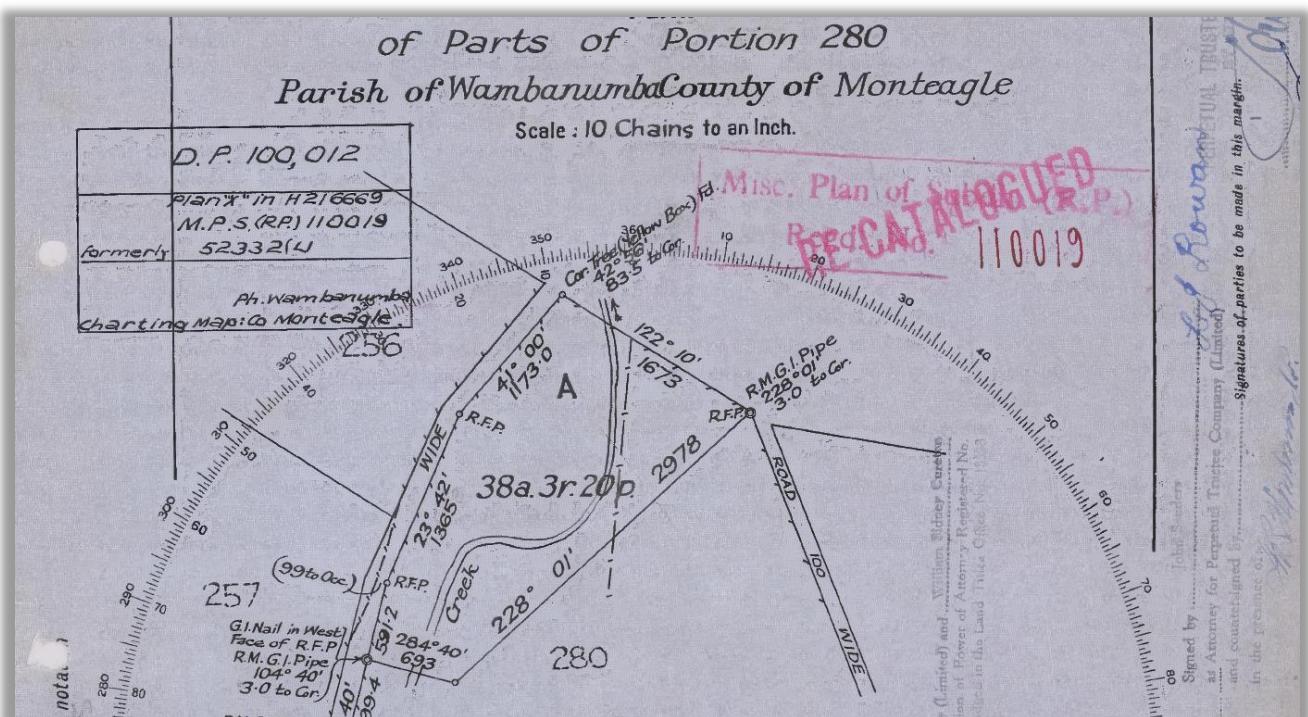
Property address	Lots A DP 100012 Rowans Lane BENDICK MURRELL	
Proposed structures or works	Dwelling – The dwelling will be a 3 bedroom, clad walled, and custom orb colorbond roofed structure, with a comfortable Al Fresco area to the Living Areas engaging the outside areas and having connectivity to the rest of the dwelling. The dwelling will be located in the Northern corner of Lot A within 50m of the adjoining NE lot boundary (and the Village zone). The structure will have a modern take on a homestead based appeal with deck and living to rear rather than surrounding, but be set near the higher part of the land, with the intent by design of enjoying the expansive views to the north-east and and >180 degrees around to NW across their land and beyond whilst maximising the area available for running some livestock/horses or the occasional livestock feed pasture crop to enjoy the rural use of the property. In addition, the Owner is contemplating a Light Home Industry being the housing and basic maintenance for some items of plant for his earthmoving business. Initially however a Dwelling (Village) on Rural Land utilising the cl 5.3 concession is sought. The footprint of the residence will be approximately 279.73 sq.m comprising 48.89 sq.m porch & al fresco. The house will be founded on a slab on higher ground in the locality shown on the plans, leading to minimal cut/fill.	
Nature of use	Rural Dwelling	
Particulars	Shown on plans	Description (written details if not clearly shown on plan)
Building materials (e.g. brick, hardiplank, colorbond, zincalume, etc)	Yes	Dwelling – The dwelling will have walls of light tones with whites, surfmist and contrasting trim. The roof will be colorbond corrugated profile over a roof beam (beam truss) and full trussed mix of construction. The verandah and porches will be consistent roof cladding over timber framed construction, unenclosed.
Colours	Yes	Colours - The dwelling wall, trim & roof colours under consideration by the clients are demonstrated below.
		Surfmist Colorbond or similar Stria White/Off white & contrast trim  
Demolition	No	Nil demolition to occur
Earthworks (location, extent and depth of all cut and fill)	Yes	Extent of earthworks –the plans demonstrate a level area on a saddle in the location chosen for the site. This area is characterised as being

proposed)		relatively level and higher ground which may have some fill as a levelling pad. The land has a gentle grade to the east and south to the creek on adjacent land which is significantly lower level than the site and the house site.
		 View from proposed access to house site and paddock beyond
Tree removal (identify location, size and species of tree/s)	No	No tree removal - a stump exists adjacent dwelling site. <i>Ver 1 of SEE errantly mistook tree on adjacent Crown Common as being on site of this proposal - to left in above image. No tree at site.</i>
Wall and roof height	Yes	Dwelling – When measured from the height of the building pad, the eave height will be 2.55m from floor level, the dominant ridge line will be approximately 4.810m above finished ground level. There will be a soffit of slab at approx. 400mm with relief to Yard Gully on the drainage being 150mm.
Gross floor area (m²)	Yes	The roof footprint will be approximately 280 sq.m. The house will be founded on a slab, on a levelled area, being the gentlest of the slopes on the site, leading to minimal cut/fill.
Open space (m²)	N/A	Not applicable – The holding is over 12.3 ha in size. After a roofed footprint of max 260 sq.m (dwelling) is deducted, a large amount of land exists for rural living, small scale farming, running horses/livestock and enjoying the rural vista.
Landscaping (type and location)	Yes	The applicant will begin plantings to the Rowans Lane & driveway areas, adjacent the proposed dwelling and along fencelines throun the dwelling curtilage, shortly.
Setbacks from each boundary	Yes	NorthWest: 25m to front road bdy (Rowans Lane). SouthEast: 274m to E-W Cemetery Rd beside Lot 245 NorthEast: 27m to side boundary & Village zone See site plan as attached to main drawing set.

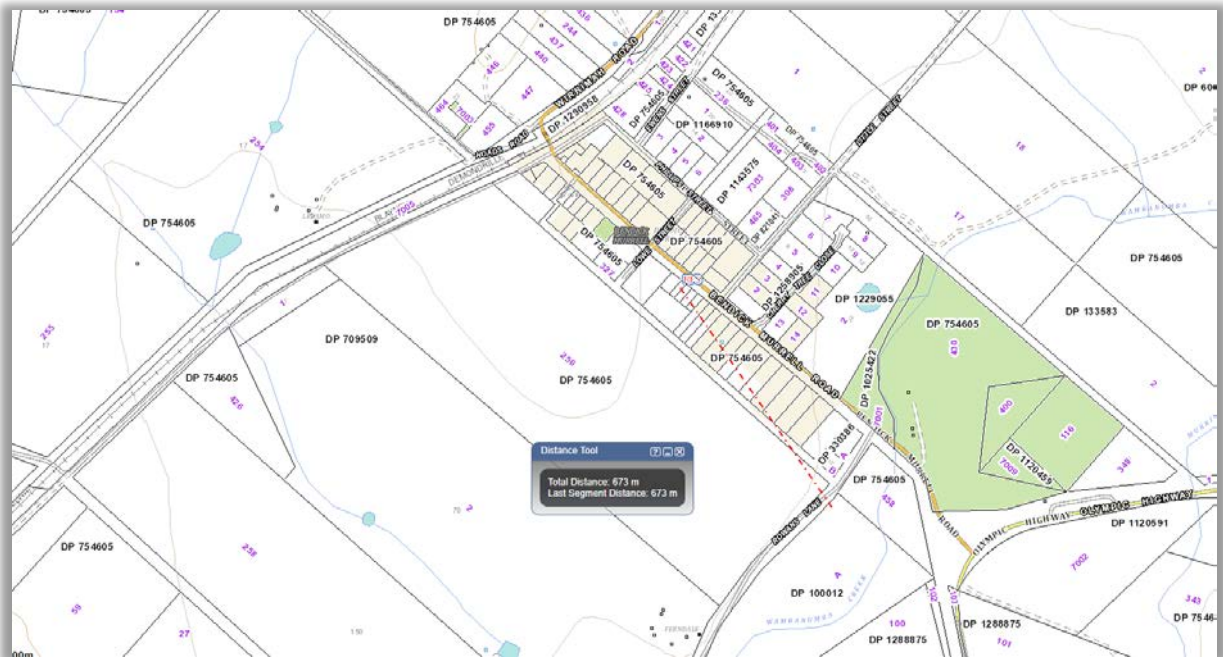
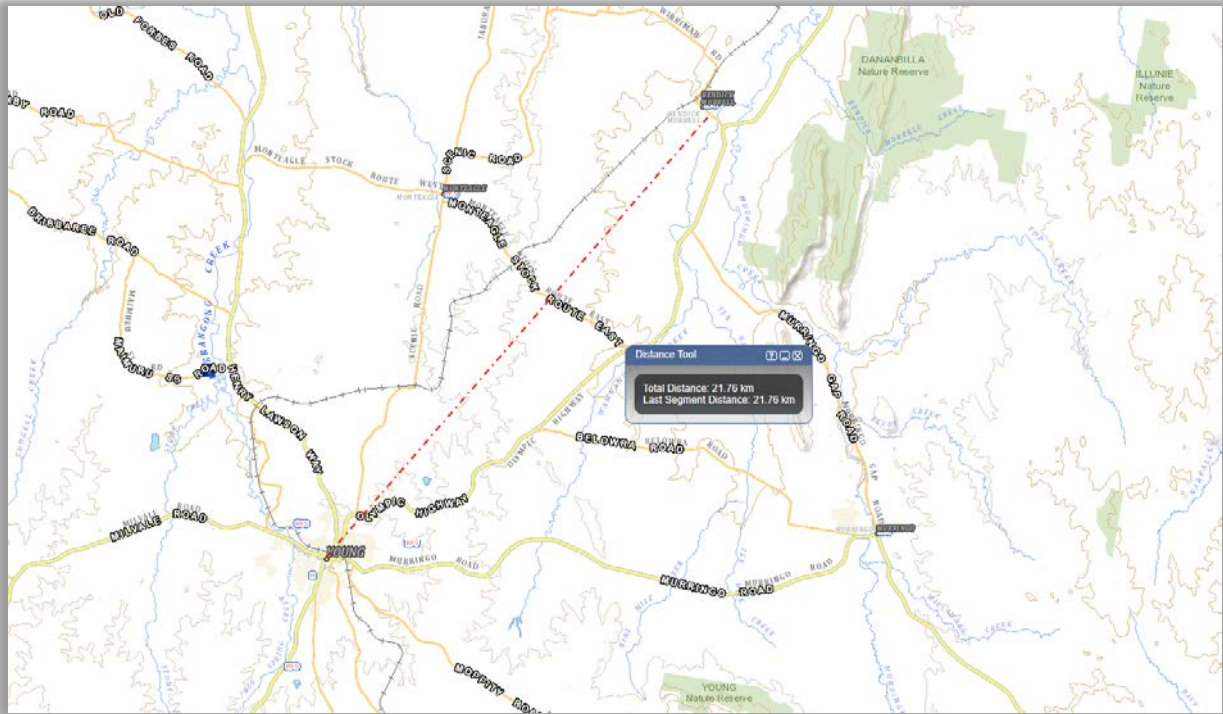




Neighbourhood Aerial (NSW SIX) – site in red



Crown Plan Extract



Locality Maps – Google
From Young & From Central RFS Shed

B. SITE & LOCALITY DESCRIPTION:

The following details have been shown on the site plan,

☒ site dimensions ☒ site area ☒ north point ☒ scale
☒ existing buildings ☒ proposed buildings ☒ easements ☒ BASIX

Issue

Details

Present use of the site

The current use of the land is infrequent farming (hay crop in a better year – occasional grazing). The land (Lot A) was subdivided in 1959 or so from land dating back to creation at or around 1900 and from that time has been in ownership not always consistent with neighbouring lands. It is separated from Village zoned lands by the Reserve Common known as Por 458 which has Creek and Power lines through it.



Owner's Holding – Lot A = 38 ac 3r,20 p = 15.732ha

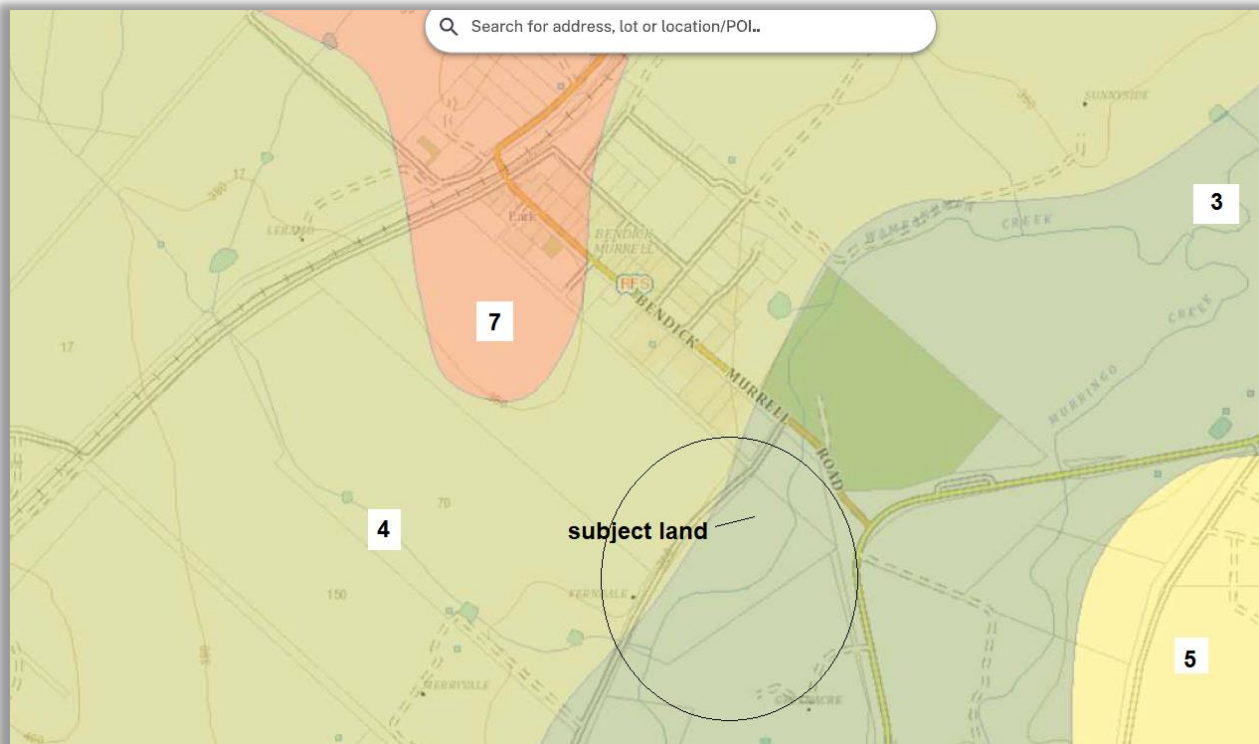
Past use/s of the site

The former use of the land was as it is - farming (occasional grazing and livestock agistment) on this land. No known orcharding occurred in this locality. The land is constrained by its location between Creek, Highway, Common, and Town, as well as by its size for a holding.

Describe any existing dwellings or built structures on the land

No structures exist on this lot presently.

Describe the key physical features of the site (e.g. shape, slope, significant trees or vegetation, dams, waterways, drainage lines, etc)	The site is located approximately 21.75km NE of the Young Post Office and 675m from the centre of Bendick (RFS/Village Hall). The land is 155m south of the Bendick Murrell Rd (main street of Bendick Murrell) and immediately abuts the Village zone at the adjoining Village reserve/common. As described the site has a very gentle grade mostly to the east, yet the creekline at 100m from the dwelling site has well defined banks to a lower level flow . The land has power adjacent, road frontage and is rural fenced and secured. Reticulated water is available (Cowra Scheme) yet with poor pressure and supply issues so a tank per BASIX will be relied upon, however reticulated sewage is not available to this locality. The proposed dwelling is to be located on the slightly higher upper relative level area between the common, the stump the creek and the road. The access is proposed from Rowans Lane at NW. The land is pasture grassed and suitable primarily for grazing (hay crop from residual pasture grasses) in occasional good year but with an insufficient number of hay bales yielded to sell or trade) as soil type, intertwining creek, highway, Village, road, holding size & aspect permitting only occasional cropping, but mostly pasture improvement for grazing. The land based SEED agricultural soils mapping was searched and the broader locality was found to have Type 3 - 7 soils, confirming to a degree but conservatively in the case of this very lot what is visually evident that moderate to severe farming complications exist. The land has broader constraints discussed later and summarised above.
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Ag Class Soils Map



**Aerial Image of Allotment – courtesy SIX 2012
(Constrained by Creek, road, common etc)**

Is the land classified as bushfire prone?	No – This has been reviewed at the RFS web page utilising the search tool.
Locality characteristics Describe the type and nature of adjacent land uses, ▪	Whilst the predominant land use in the area is Village & rural (quite a number of mneary holdings also with residences and this is on edge of Village), there is a surprisingly high number of dwelling houses in close proximity to the subject site, all pursuing Village and semi-rural activities of varying scales (rural feel through to feed cropping, grazing, horses, etc) with > 20 dwellings within 750m to 1km of this larger styled allotment. There is higher density Village zone immediately to the north and northwest, and it is on this peculiarity in the LEP, the circumstances of Bendick Murrell Village and the immediately adjacent land and choices Council has made that form the grounds for this Development Application and request for variance. A settlement pattern aerial image is again reproduced below with features labelled. These are replicated in a an appendix which includes wider analysis of all, part and then statistical breakdowns of these features.



Settlement Pattern – Bendick Murrell
Land parcels immediately around Village with dwelling
Bottom centre of page is subject lot

LEP MATTERS FOR CONSIDERATION

Clause	Complies	Comments
1.2 Aims of plan	Yes	The development is consistent with the following aims of the LEP: (b) to provide for the lifestyles sought by current and future residents of Hilltops, including by providing for the following— (i) the rural lifestyle and liveability of Hilltops communities, (ii) connected, safe and accessible communities, (iii) diverse and affordable housing options, (iv) timely and efficient provision of infrastructure, (v) sustainable building design and energy efficiency, (c) to build and sustain healthy, diverse and empowered communities that actively participate in planning and managing their future, including by providing for the following— (i) social infrastructure that is appropriately planned and located in response to demand and demographic change, (ii) the protection and enhancement of cultural heritage values, (iii) land management practices that support sustainable outcomes, including water efficiency, (iv) the siting and arrangement of land uses for development in response to climate change, (v) the planning of development to manage emissions, (vi) planning decisions that recognise the basic needs and expectations of diverse community members, (e) to recognise and sustain the diverse natural environment and natural resources that support the liveability and economic productivity of Hilltops, including by providing for the following— (i) the avoidance of further development in areas with a high exposure to natural hazards, (ii) the minimisation of alterations to natural systems, including natural flow regimes and floodplain connectivity, through effective management of riparian environments, (iii) the retention and protection of remnant vegetation, (iv) the revegetation of endemic vegetation to sustain natural resource values, reduce the impact of invasive weeds and increase biodiversity, (v) buffers and setbacks to minimise the impact of conflicting land uses and environmental values, including potential impacts on noise, water, biosecurity and air quality, (vi) the management of water on a sustainable and total water cycle basis to provide sufficient quantity and quality of water for consumption, while protecting biodiversity and the health of ecosystems The remainder of the aims are not relevant to this proposal, or are not impacted by the proposal.
1.4 Definitions	N/A	The proposed development is defined as a <i>dwelling house</i> which means, <i>a building containing only one dwelling</i> .
1.9A Suspension of covenants, etc	Yes	No restrictions as to user / covenants apply to the site.
2.2 Zoning	N/A	The site is zoned RU1 – Primary Production

Clause	Complies	Comments
2.3 Zone objectives and land use table	Yes	The development is permitted with consent, in accordance with the land use table, and it is consistent with the objectives of the zone as stated below; - To encourage sustainable primary industry production by maintaining and enhancing the natural resource base. Consistent - Ability to pasture improve and agist stock or horses remains – 15.732ha parcel - To encourage diversity in primary industry enterprises and systems appropriate for the area. Not Inconsistent – ability remains regardless - To minimise the fragmentation and alienation of resource lands. Land is already fragmented, yet has immediately adjacent village attributes – see sec 5.3 below - To minimise conflict between land uses within this zone and land uses within adjoining zones. Consistent – land surrounding is in RU5 & RU1 zone and this proposal will not impact due to topography, soil, slope, rocks, roads, landform - To encourage competitive rural production and associated economic development by maintaining and enhancing— Not inconsistent (a) local and regional transport and communications connectivity, and (b) accessibility to national and global supply chains. - To maintain areas of high conservation value vegetation. Consistent – no impact - To encourage development that is in accordance with sound management and land capability practices, and that takes into account the natural resources of the locality. Consistent – location and siting allows maximum ag use of land as possible if dwelling kept adjacent village - To protect and enhance the water quality of receiving watercourses and groundwater systems and to reduce land degradation. Consistent – no impact and safeguarded by design & research - To encourage the development of non-agricultural land uses that are compatible with the character of the zone and sustain high quality rural amenity. Consistent – intent of this application due to neighbouring residential uses making real zoned use dubious or at least falling into 2 camps
2.7 Demolition	N/A	No demolition proposed.
2.8 Temporary use of land	N/A	The application is not for the temporary use of land.
4.1 Min Subdiv Lot Size	Complies	Per mapping below, minimum lot size in zone is 170ha and a 4.6 variation is being requested to vary this in this case for dwelling.
4.1A Dual Occupancy Lot sizes	Complies	n/a
4.2A Dwellings in RU1, RU4 & C3	Lot sizes	Proposed dwelling on 15.732 ha vs 170ha standard – sec 4.6 justification included in this report PLUS sec 5.3 justification which permits flexibility via Hilltops Council LEP choices.
4.6 Exceptions to development standards	N/A	Development permissible so no variation sought
5.3 Development adjacent zone boundaries.	Applies	Prominent defence of variance is Council defeating objective of 4.2A in this case by allowing up to 50m adjacent Village zone (by choice from standard instrument LEP position) to have that zone standard and objectives apply. Village zone adjacent, last parcel around village able to apply this standard.
5.10 Heritage Conservation	N/A	The allotment, its buildings, nor Adjacent land nor buildings in locality listed as Heritage nor in a HCA

Clause	Complies	Comments
5.16 Subdivision of, or dwellings on, land in certain rural, residential or environment protection zones	N/A	Proposed dwelling on 15.732ha vs 170ha standard yet utilising Council's sec 5.3 choices which in this situation defeat the RU1 position for 50m adjacent Village. – sec 4.6 justification included in this report
6.1 Earthworks	OK	No gross earthworks – minor levelling in and around a saddle between rock outcrops is the proposal.
6.2 Essential Services	Complies	Development consent must not be granted to development unless the consent authority is satisfied the following services that are essential for the development are available or that adequate arrangements have been made to make them available when required— (a) the supply of water, Water per BASIX and retic available. (b) the supply of electricity, available at north of site (c) the disposal and management of sewage, OSM capable see Geotech (d) stormwater drainage or on-site conservation, disposal on site and away from effluent area as overflow after BASIX tank (e) suitable road access exists – Rowans Lane new access proposed adjacent
6.3 Terrestrial Biodiversity	N/A	Mapped as affected this lot yet not at DA site
6.4 Water - Riparian	N/A	Not mapped as affected this lot
6.5 Water – Groundwater Vulnerability	N/A	Is mapped as affected this lot – Geotech report for OSM as only site input
6.6 Salinity	N/A	Not mapped as affected
6.7 Highly Erodible Soils	N/A	Not mapped as affected
6.8 Drinking Water Catchments	N/A	N/A
6.9 Development along Lachlan & Boorowa Rivers & Lake Wyangla	N/A	N/A
6.10 Development on Carinya Estate	N/A	N/A
6.11 DCP for Urban Release Areas	N/A	N/A

DEVELOPMENT CONTROL PLAN / LOCAL APPROVALS POLICY

Young Development Control Plan

An assessment of the DCP applicable matters is detailed below.

Compliance Table for YDCP		
Clause	Control	If non-compliance state and address
2.1 Rural Dwellings		
<i>AR1 Sites are identified and safe access provided</i>	<i>Access complies with DCP provisions</i>	Complies – new more adjacent access is to be used. Good SISD and between road trees
<i>AR2.1 Minimum setback to road boundary</i>	<i>30m – RU1 zone</i>	Applicant seeks to be 25m which is farther from Creek (100m at closest) for more options on effluent disposal. As will be seen in later statements – Village objectives being sought and this setback not uncommon for adjacent development in this locality. Building line variation sought for setback on NW side – justification above and is primarily related to site constraints linked to creek, higher ground & adjacent Village. Offset suggested for consideration.
<i>AR2.2 Minimum setback to side or rear boundary</i>	<i>20m – RU1 zone</i>	Complies – see site plan above at 27m
<i>AR2.3 Minimum setback from ridge line</i>	<i>50m</i>	Complies – ridge line is 10km away
<i>AR2.3 Minimum setback distance from certain land uses</i>	<i>Piggeries: 500m (housing & waste store) 250m (waste utilisation area)</i>	Complies – None nearby
	<i>Feedlots: 500m (yards & waste store) 250m (waste utilisation area)</i>	Complies – none nearby
	<i>Poultry: 500m (sheds & waste store) 250m (waste utilisation area)</i>	Complies – none nearby
	<i>Other intensive livestock: 300m</i>	Complies – none nearby
	<i>Grazing of stock: 50m Cropping: 200m</i>	Complies – minimal use of opposite paddocks yet DCP setbacks observed in essence (25m + 20m road reserve treed) = 45m. well distant from southern and SW land holdings

Compliance Table for YDCP		
Clause	Control	If non-compliance state and address
	<i>Horticulture: 75 metres (from Section 4.5 of DCP)</i>	Complies – no orchards adjacent
	<i>Greenhouse or controlled environment horticulture: 200m</i>	Complies – none nearby
	<i>Rural industries including feed mills and sawmills: 500 m</i>	Complies – none nearby
	<i>Abattoirs: 1000 m</i>	Complies – none nearby
	<i>Potentially hazardous or offensive industries: 1000 m</i>	Complies – none nearby
	<i>Mining, petroleum, production etc: 500 m (or 1000 m where the proposal involves blasting)</i>	Complies – none nearby
	<i>Existing sheep and cattle yard sites: 150 m</i>	Complies – none nearby
	<i>Existing livestock dip sites: 300 m</i>	Complies – none nearby
	<i>Disused mining areas: 300 m</i>	Complies – none nearby
<i>AR2.5 Materials</i>	<i>Materials to be used selectively to minimise glare to roads / nearby dwellings.</i>	Complies – colorbond roof (light colour) and light walls with dark contrast trims and will be landscaped.
<i>AR2.6 Street presentation</i>	<i>Dwellings to have a residential appearance from street or road.</i>	Complies, residential street presence.
<i>AR3 Effluent disposal</i>	<i>To be as per Council Policy No. 31 (Wastewater Management in Unsewered Areas).</i>	There is ample room on-site for an on-site wastewater management system that complies with Council's policy. Geotech Report attached & sec 68 to be lodged. Disposal to be maintained at 100m setback to Creek
<i>AR4.1 BASIX water storage</i>	<i>Onsite water capture and storage complies with BASIX certificate</i>	Roof water will be collected and reticulated back to the dwelling in accordance with the requirements of the BASIX Certificate.

Compliance Table for YDCP		
Clause	Control	If non-compliance state and address
AR4.2 Total water storage	As per Appendix E and have fire-fighting reserve	Complies per DCP – 62,000L tank with 20kL reserved for fire fighting – 4 beds = 100,000L proposed
AR5 Pesticide residues	Testing required if former orchard	N/A no past use
AR6 Vehicle and occupant safety	Comply with 2.1.5 of DCP	No adjoining garage
4.1 Car Parking and Vehicle Access		
APA1.1 Parking requirements	2 spaces per dwelling (stack parking permitted for one space).	Large site – future sheds
4.3 Development Requiring Tree Removal or Lopping - These controls apply to the alterations and additions to a dwelling in all zones other than RU1 and RU3.		
AT1.1, AT1.2, AT2, AT3.1 and AT3.2 – tree removal	Avoid removal, retain and protect	No tree removal proposed
4.5 Spray drift		
ASD1.1 Location of new dwellings to orchards and vineyards	RU4 zone - 75 metres	N/A

D. ASSESSMENT OF THE LIKELY IMPACTS OF THE DEVELOPMENT

Construction – How will construction noise, rubbish removal and sedimentation and erosion controls be managed during construction?

Comments

As the site is well pasture grassed and the impacted area will be at the top of the site and slope, there is a greatly reduced risk of sedimentation and erosion. Notwithstanding this, and due to the minimal depth of cut proposed, sedimentation and erosion measures may need to be put in place to control the exposed area whilst revegetating the land. There is little impact risk to watercourses at current 100m offset siting, sed travel would need to occur to the nearest road or creek through site. Sedimentation and erosion fencing can be employed during building phase.

No construction will occur outside of daylight hours nor on a Sunday or Public Holiday. Setbacks from other dwellings will also assist noise management. All construction rubbish will be contained within a wire fenced area and be removed regularly to the Young Redhill Waste Management Station or Bendick Transfer Stn for smaller loads.

Context and setting – Will the development be ...

- visually prominent in the area? ☐ No – the land is in a level area adjacent village
- out of character with the area? ☐ No – as described earlier, and in depth below, this is within an area of land not far from the Village and assimilates as Village fringe. A high surrounding occupancy rate exists and this is the last parcel on fringe Village to be able to utilise LEP cl 5.3.
- inconsistent with the streetscape? ☐ No – not directly visible from adjacent public roads due to placement adjacent shed
- inconsistent with adjacent land uses? ☐ No – see above comment

Privacy - Will the development result in any ...

- privacy issues between adjoining properties, as a result of the placement of windows, decks,
 - ☐ No as a result of the building's placement, vegetation to curtilage of land (existing neighbours and the proposed development)
- acoustic issues between adjoining properties as a result of the placement of outdoor areas,
 - ☐ No for the same reasons in previous answer

Overshadowing

- Will the development result in the overshadowing of adjoining properties, resulting in an adverse impact?
 - ☐ No there will be no adverse impact on solar access for neighbours.

Views

- Will the development result in the loss of views enjoyed from neighbouring properties or nearby properties?
 - ☐ No views will not be lost as a result of this development

HILLTOPS LEP 2022

Clause 4.6 Variation Response

Claiming an exemption under Clause 4.2A

Utilising primarily a defence under Clause 5.3

Appendix 1 Report (Guidelines on “LEP sec 4.6 Variations” NSW DoPE)	
Claiming a section 4.6 variation	
Proposal	- DWELLING – new, on a 15.68ha allotment in an RU1 – 170ha zone - To request a section 4.6 Variation to LEP by seeking relief under sec 5.3 of LEP, to accommodate same over the parcel (15.732ha vs 170ha) with 50m Zone boundary adjoining clause
Subject Land Address	Lot A DP 100012
	Rowans Lane BENDICK MURRELL 2803
Applicant/Owner	Ms Tori Pope & Mr Alex Slaven for Mr Alex Slavin
	0436 468 674 (Tori)
Appn Prepared By	DA Busters – Development Assistance Services
LGA	Hilltops – Young Shire area



Application Form to vary a development standard

Written application providing grounds for variation to development standards

To be submitted together with the development application (refer to EP&A Regulation 2000 Schedule 1 Forms).

1. What is the name of the environmental planning instrument that applies to the land?

Hilltops Local Environmental Plan 2022

2. What is the zoning of the land?

The land is zoned RU1 – Primary Production

3. What are the objectives of the zone?

The objectives of the zone as set out in the LEP are;

RU1 ZONE - HILLTOPS LEP 2023	
ZONE OBJECTIVE	COMMENTARY
To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.	<i>Consistent - Ability to pasture improve and agist stock / horses remains and/or an occasional hay crop in better years on retained parcel, aided by placement of dwelling per clause 5.3</i>
To encourage diversity in primary industry enterprises and systems appropriate for the area.	<i>Not Inconsistent – ability remains regardless yet constrained due to size of holding, nearby dwellings, density of adjacent zones, location of road and impositions of Creek through land</i>
To minimise the fragmentation and alienation of resource lands.	<i>Land in general area is rural use and location of dwelling per sec 5.3 within 50m of Village zone promotes use of rest of holding in this regard.</i>
To minimise conflict between land uses within this zone and land uses within adjoining zones.	<i>Consistent – use of Clause 5.3 to keep dwelling adjacent Village</i>
To encourage competitive rural production and associated economic development by maintaining and enhancing—	
(a) local and regional transport and communications connectivity, and	<i>Location accessible to Olympic Hwy</i>
(b) accessibility to national and global supply chains.	<i>Olympic Hwy is a classified Road in State's network</i>
To maintain areas of high conservation value vegetation.	<i>Consistent as siting is 100m from Creek</i>
To encourage development that is in accordance with sound management and land capability practices, and that takes into account the natural resources of the locality.	<i>Consistent – location (top rear corner) and siting allows maximum ag use of land (where able), whilst retaining reasonable dwelling curtilage adjacent Village</i>
To protect and enhance the water quality of receiving watercourses and groundwater systems and to reduce land degradation.	<i>Consistent – minimal impact - single dwelling OSM</i>
To encourage the development of non-agricultural land uses that are compatible with the character of the zone and sustain high quality rural amenity.	<i>Consistent – location and siting allows maximum potential small lot ag use of land, whilst retaining reasonable dwelling curtilage</i>

4. What is the development standard being varied? e.g. FSR, height, lot size

Minimum lot size

Clause 4.2A (3)(a) of the LEP reads as follows;

- | | |
|---|--|
| 4.2A Erection of dwelling houses and dual occupancies on land in Zone RU1, RU4 or C3 | |
|---|--|
- (1) The objectives of this clause are as follows—
 - (a) to minimise unplanned rural residential development,
 - (b) to enable the replacement of lawfully erected dwelling houses and dual occupancies in certain rural and conservation zones.
 - (2) This clause applies to land in the following zones—
 - (a) Zone RU1 Primary Production,
 - (b) Zone RU4 Primary Production Small Lots,
 - (c) Zone C3 Environmental Management.
 - (3) Development consent must not be granted for the erection of a dwelling house or dual occupancy on land in a zone to which this clause applies, and on which no dwelling house has been erected, unless the land—

(a) is a lot that is at least the minimum size shown on the <u>Lot Size Map</u> , or
--

 - (b) is a lot—
 - (i) created before the day on which this Plan commenced, and
 - (ii) on which the erection of a dwelling house or dual occupancy was permissible immediately before that day, or
 - (c) Is a lot—
 - (i) resulting from a subdivision for which development consent was granted before the day on which this Plan commenced, and
 - (ii) on which the erection of a dwelling house or dual occupancy would have been permissible if the plan of subdivision had been registered before that day, or
 - (d) would have been a lot referred to in paragraph (a), (b) or (c) had it not been affected by—
 - (i) a minor realignment of boundaries that did not create an additional lot, or
 - (ii) a subdivision creating or widening a public road or public reserve, or
 - (iii) a consolidation with an adjoining public road or public reserve.
 - (4) Development consent may be granted for the erection of a dwelling house on land to which this clause applies if—
 - (a) there is a lawfully erected dwelling house on the land, and
 - (b) the dwelling house to be erected is intended only to replace the existing dwelling house.

In essence, the land is required to be a minimum of 170 ha in order to gain the ability for a dwelling to be erected. The land in question is 15.732 ha by area from the Crown Plans (38 acres 3 roods 20 perches) total, converted to metric).

Despite this an elected conflicting clause (at enactment of LEP) without an associated Development Standard allows blurring of zone lines around Villages – clause 5.3. By electing to include this, it is contended Council has (for affected lands) made a choice which defeats the minimum lot size for that 50m width adjacent a Village zone.

5. Under what clause is the development standard listed in the environmental planning instrument?

Clause 4.2A(3)(a) as reproduced above

6. What are the objectives of the development standard?

- | |
|---|
| (a) to minimise unplanned rural residential development, |
| (b) to enable the replacement of lawfully erected dwelling houses and dual occupancies in certain rural and conservation zones. |

These provisions are addressed more specifically below

7. What is the numeric value of the development standard in the environmental planning instrument?

170 ha

8. What is proposed numeric value of the development standard in your development application?

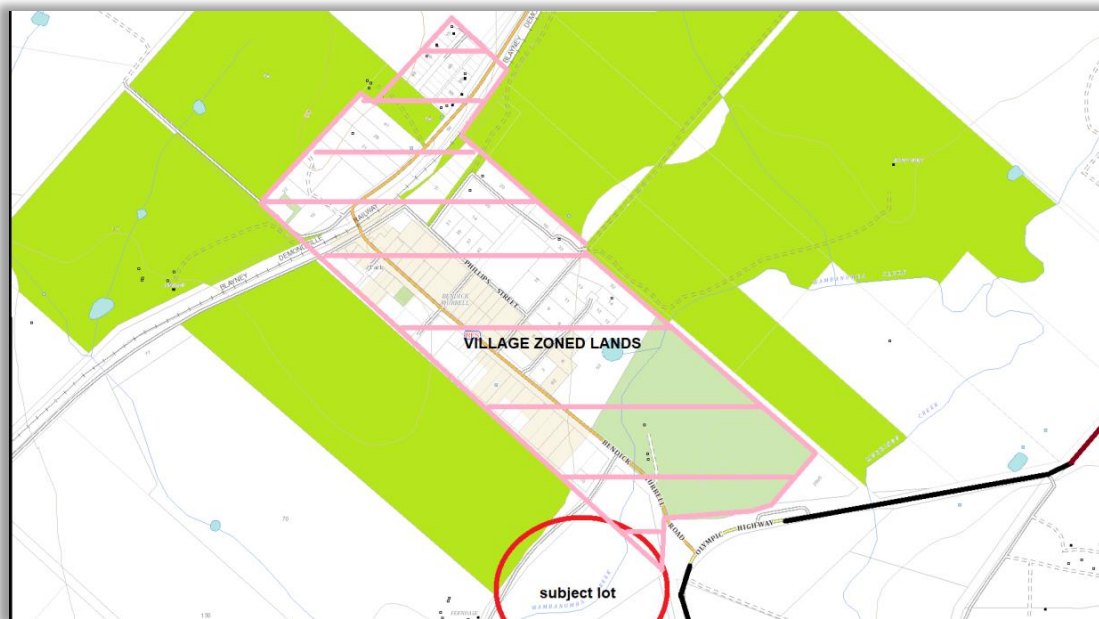
15.732 ha (from metric conversion of 38/3/20 acres)

9. What is the percentage variation (between your proposal and the environmental planning instrument)?

The holding is approximately 9.25% of the required holding size. This represents a 90.75% variation.

10. How is strict compliance with the development standard unreasonable or unnecessary in this particular case?

- ✓ Council has elected at time of enactment of its LEP to include clause 5.3 (an optional LEP clause) from the Standard Instrument Template. It has further elected a larger than average distance clause for zones adjacent RU5 Village zones, being 50 m.
- ✓ Clause 5.3 serves to “provide flexibility” to enable the adjacent zone and its objectives (where compatible) can be applied to land up to 50m from RU5 Village, into RU1 Primary Production, as is this given case.
- ✓ The site in question is 27m from the adjoining RU5 zone, is within the RU1 zone and is within the 50m allowed in Hilltops LEP 2022.
- ✓ The development meets the objectives for a dwelling house, its location, placement and required standards, were it in either zone. See RU1 objective assessment in above report.
- ✓ Clause 5.3A by it being allowed, defeats objective (1) under clause 4.2A by bringing to bear another means of flexibility (as expressed under objectives of clauses 4.6 and 5.3) by Council allowing a fringe overflow of Village development where compatible.
- ✓ The land in question is the last allotment/holding on the fringe of Bendick Murrell to not have a dwelling house on the independently owned parcel. See diagram below;



Last fringe of Bendick parcel to have a dwelling

- ✓ The adjoining parcel is a Village common/reserve so this development will not crowd adjoining development
- ✓ At 27m from the Village zone, the dwelling will have the appearance it is part of the Village not a rural settled allotment
- ✓ Placing dwelling adjacent Village zone allows broadest use of remainder of rural part of allotment

Clause 5.3 evaluation.

Clause/objective/development standard		Reply
(1) The objective of this clause is to provide flexibility where the investigation of a site and its surroundings reveals that a use allowed on the other side of a zone boundary would enable a more logical and appropriate development of the site and be compatible with the planning objectives and land uses for the adjoining zone.		
(2) This clause applies to so much of any land that is within the relevant distance of a boundary between any 2 zones. The relevant distance is 50m between Zone RU1 Primary Production and Zone RU5 Village, and 20m in all other cases.		Proposal is compliant - inside 50m
(3) This clause does not apply to—		
	(a) land in Zone RE1 Public Recreation, Zone C1 National Parks and Nature Reserves, Zone C2 Environmental Conservation, Zone C3 Environmental Management or Zone W1 Natural Waterways, or	does not apply
	(b) land within the coastal zone, or	does not apply
	(c) land proposed to be developed for the purpose of sex services or restricted premises.	does not apply
(4) Despite the provisions of this Plan relating to the purposes for which development may be carried out, development consent may be granted to development of land to which this clause applies for any purpose that may be carried out in the adjoining zone, but only if the consent authority is satisfied that—		
	(a) the development is not inconsistent with the objectives for development in both zones, and	Meets objectives of both RU1 & RU5 zones
	(b) the carrying out of the development is desirable due to compatible land use planning, infrastructure capacity and other planning principles relating to the efficient and timely development of land.	Within 27m of Village zone on formed road. The development has little or no impact on any utilities available and is compatible with adjacent development.
(5) This clause does not prescribe a development standard that may be varied under this Plan		Serves to compromise clause 4.2A objective for 50m around Village by allowing this clause for "flexibility"

- The settlement pattern adjacent would see 1 additional dwelling (being a Village type dwelling and associated rural/ag land use still available to the lot) less than 30m from the Village Zone.
- The minimum lot size on the LEP LSZ mapping is not believed to be applicable if invoking this flexible adjustment within 50m of the Village zone. Despite this, compliance with both RU1 & RU5 objectives can be demonstrated.
- The land in this constrained pocket is Ag Class 3 - 7 Lands from the SEED mapping, YET is heavily impacted by physical, amenity and man-made constraints & issues whereby this classification states moderate to severe limitations on farming is the least of the concerns. This proposed use would potentially be the highest pragmatic use (occupied small scale agistment and pasture improvement agriculture) as neighbouring farmers and landholders recently offered this land were not interested.

Zone objectives RU1 & RU5 analysis;

RU1 LAND USE TABLE ASSESSMENT	
• To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.	Consistent - Ability to pasture improve and agist stock or horses remains – 15.732ha parcel

To encourage diversity in primary industry enterprises and systems appropriate for the area.	Not Inconsistent – ability remains regardless
To minimise the fragmentation and alienation of resource lands.	Land is already fragmented, yet has immediately adjacent village attributes – see sec 5.3 evaluation for placement
To minimise conflict between land uses within this zone and land uses within adjoining zones.	Consistent – land surrounding is in RU5 & RU1 zone and this proposal will not impact due to topography, soil, slope, rocks, roads, landform
To encourage competitive rural production and associated economic development by maintaining and enhancing	
(a) local and regional transport and communications connectivity, and	Adjacent a state classified highway so ok
(b) accessibility to national and global supply chains.	
To maintain areas of high conservation value vegetation.	Consistent – no impact - site design and placement sympathetic
To encourage development that is in accordance with sound management and land capability practices, and that takes into account the natural resources of the locality.	Consistent – location and siting allows maximum ag use of land as possible if dwelling kept adjacent village
To protect and enhance the water quality of receiving watercourses and groundwater systems and to reduce land degradation.	Consistent – no impact and safeguarded by design & research
To encourage the development of non-agricultural land uses that are compatible with the character of the zone and sustain high quality rural amenity.	Consistent – intent of this application due to neighbouring residential uses making real zoned use compatible in both zones

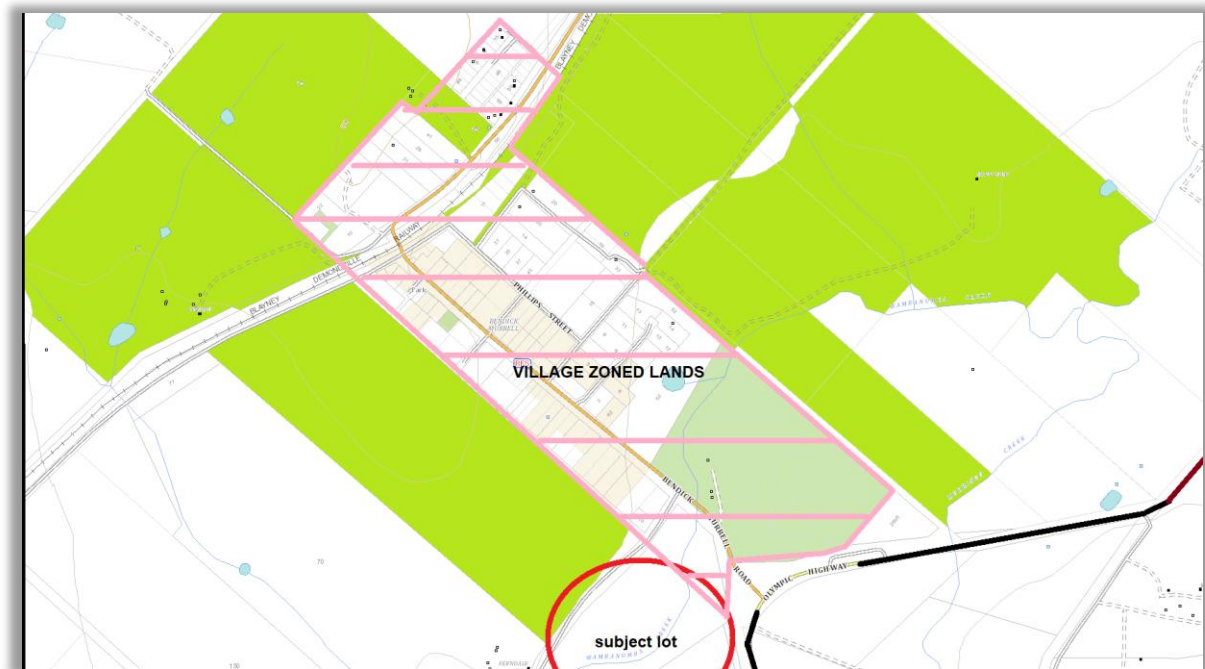
RU5 LAND USE TABLE ASSESSMENT	
To provide for a range of land uses, services and facilities that are associated with a rural village.	Dwelling immediately adjacent Village and able to be connected to Village activities
To ensure that development is sustainable and does not unreasonably increase the demand for public services or public facilities.	Road & Power available adjacent land, last available lot in this circumstance, no impact on Village sustainability except positive input on a declining village
To promote and encourage development that will strengthen the character and economies of Hilltops villages.	Positively reinforces this objective
To enable a range of development, including diverse housing forms and complementary business uses taking into account the distinct character of each village.	Dwelling adjacent village yet remainder of lot open for other and rural based uses.

11. How would strict compliance hinder the attainment of the objects specified in Section 5(a)(i) and (ii) of the Act.

Objective 1 - Minimise unplanned rural residential development

It is proffered that from the advent of the 2022 LEP, Council has weakened its position on this objective in the very band of land around the Village that this application seeks to utilise, by;

- a) Electing to include the optional clause 5.3 from the Standard Instrument Template. This clause is not mandatory and was an elected provision or choice, as made by Council in its Strategic Planning outlook. It sends a clear message that where an allotment adjacent a village does not have a right under 4.2A due to lot size, if it complies with objectives of both zones, a dwelling or land use can be permitted. Note: were the allotment to be the correct land size it would not need to rely on clause 5.3 as the dwelling could be anywhere on that allotment.
- b) By inclusion of clause 5.3 the Council is openly promoting rural residential development, however only in a band 50m from the Village zone and as though it is a part of the Village.
- c) As a consequence and as the clause states “in the interests of flexibility under this LEP” it permits this to occur. By so doing it is promoting planned rural residential development – yet only adjacent a Village.
- d) This is the last parcel of land around Bendick with isolated ownership and that could invoke this clause. As a result, no precedent is being set. This application per se has been invited by Council, counters the 4.2A(1) objective and actively seeks to locate a dwelling within 50m of the Village if compatible.



Last parcel without a dwelling = no precedent

Objective 2 - Enable replacement of lawfully erected dwellings.

No known original dwelling on site

12. Is the development standard a performance based control? Give details.

In its strictest sense no, as 170ha is an allotment size without any agricultural science supporting this actual size to be beneficial to an ideal farm. It is a numeric value being an anti-defragmentation tool set at 50% of the mean holding size in this zone plus >10%.

Its intention is to display that there is no good reason to split up a good holding that has farming value. If the land or holding is already smaller than this value, the merits of the case (and not the numeric) must be investigated. This was explained in depth in the Booth Rural Land Study 2008 commissioned by Young Shire Council and also how it was utilised is fleshed out in the Land Use Study supporting Young LEP 2010. Hilltops 2022 LEP is just a conversion on RU1 and RU4 mapping, for the most part, with a further Rural Study being mooted.

The development standard has been set for rural subdivision and was never a value to prevent dwellings where an alternative discussion or merit assessment could occur. Facetiously, were a 20ha farm full of rocky class 8 land to exist, it may seem reasonable for it to have the highest pragmatic use – say a dwelling, in order to save better farming land adjacent.

The reasoning behind the development standard is explained above, but it is reiterated that whilst it attempts to place controls on broad acre farms, it makes no allowance for smaller or unique properties where amenity and right to farm characteristics of neighbouring lands, are impacted by societal growth (roads, rail, infrastructure [cemetery], existing housing, permitted variance). In the given scenario, it is Council who have sent a strategic message that development akin to Village style, is still ok up to 50m from the Village into the RU1 zone, after evaluation. This is what is being utilised here.

Additional matters to address

As outlined in "Varying Development Standards: A Guide" there are other additional matters that applicants should address when applying to vary a development standard.

13. Would strict compliance with the standard, in your particular case, be unreasonable or unnecessary? Why?

It is considered unnecessary as Council has elected to insert clause 5.3 by strategic decision. In so doing it has permitted growth within a fringe of 50m from the Village zone (where possible). This is the last parcel around Bendick Murrell where this scenario could apply. As such, the clause 4.2A objective is defeated in this case by the inclusion of clause 5.3.

The application of the 170ha would be unreasonable as were the allotment/holding to be 170ha, the 50m rule would be redundant. In essence, with the minimum lot size, siting of a dwelling would not be bound to 50m from the Village, it could be anywhere reasonable on the site.

14. Are there sufficient environmental planning grounds to justify contravening the development standard? Give details.

Yes.

Inclusion of clause 5.3 promotes flexibility in a band up to 50m around the RU5 zone, provided both zone objectives are reasonably satisfied.

This flexibility serves to negate objective (1) of clause 4.2A by express permissibility

It would be perceived as being compliant with the objective being varied by allowing a planned and well thought application for residential development in an area ear-marked by clause 5.3 for same.

In summary and against the actual test of the objectives of clause 4.2A, the following summary is offered;

- (1) The objectives of this clause are as follows—

- (a) to minimise unplanned rural residential development,

It is argued that this development is within the 50m band allowed for by clause 5.3 of the same LEP. This clause (being an optional clause for inclusion) by being included is actually “planning rural residential” or supplementary Village development in this locality.

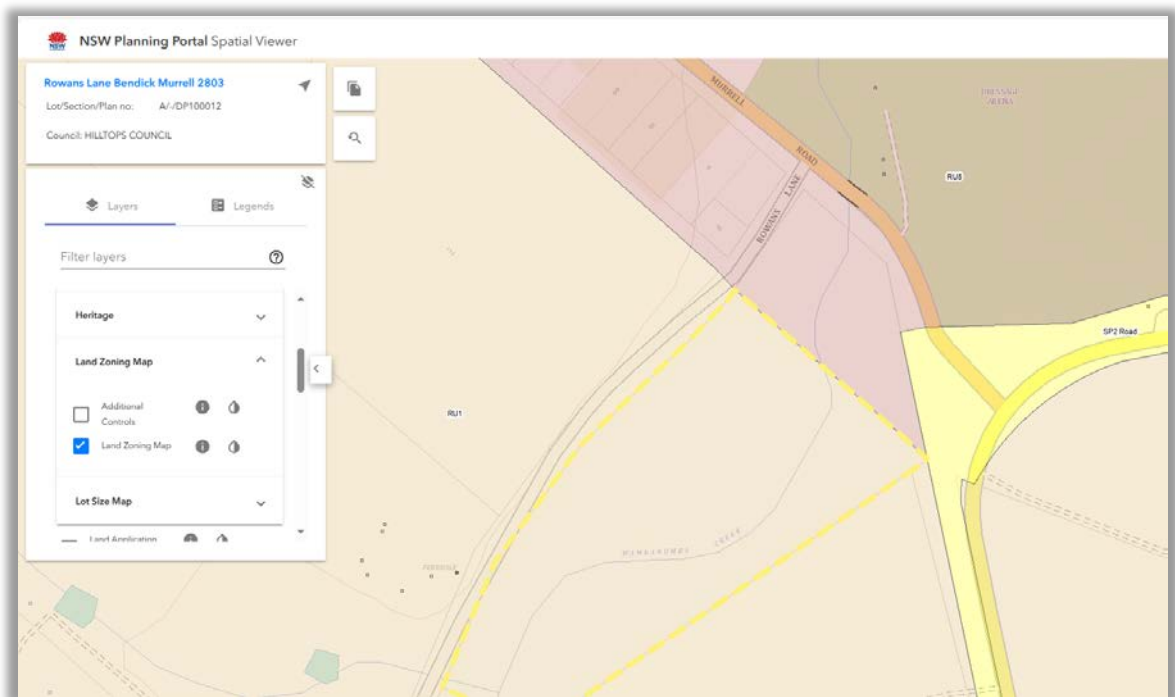
This application serves to utilise clause 5.3 to negate objective (1) of clause 4.2A.

- (b) to enable the replacement of lawfully erected dwelling houses in rural and environmental protection zones.

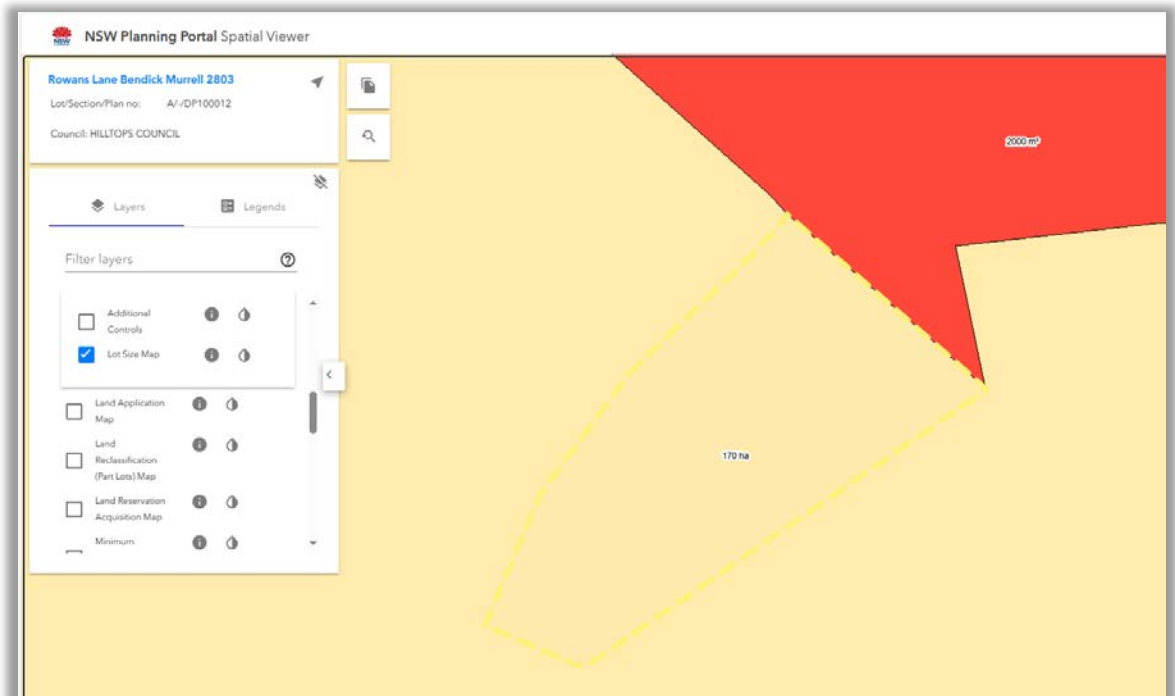
Not applicable – not identified on Parish Crown Plans that a dwelling originally existed.

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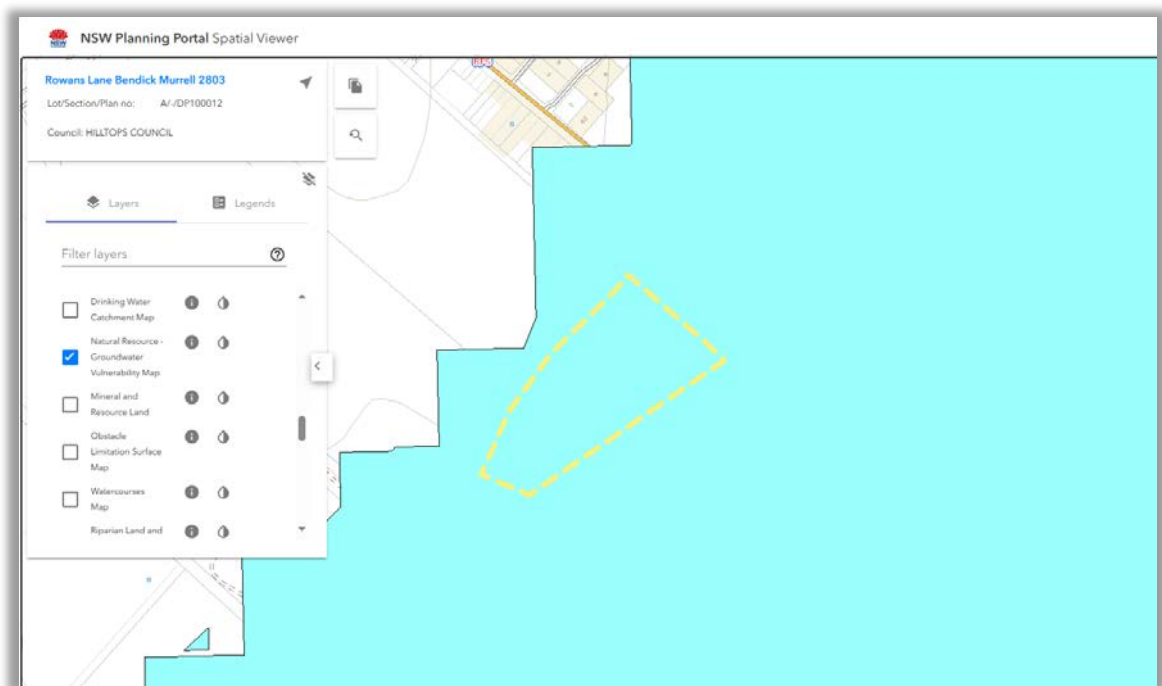
**FIG # 1 - ZONING MAP (RU1)**



**FIG # 2 – Lot Size Mapping (170 ha yet adjacent RU5)**



**FIG # 3 – LEP Groundwater Vulnerability**



**FIG # 4 – LEP Terrestrial Biodiversity**

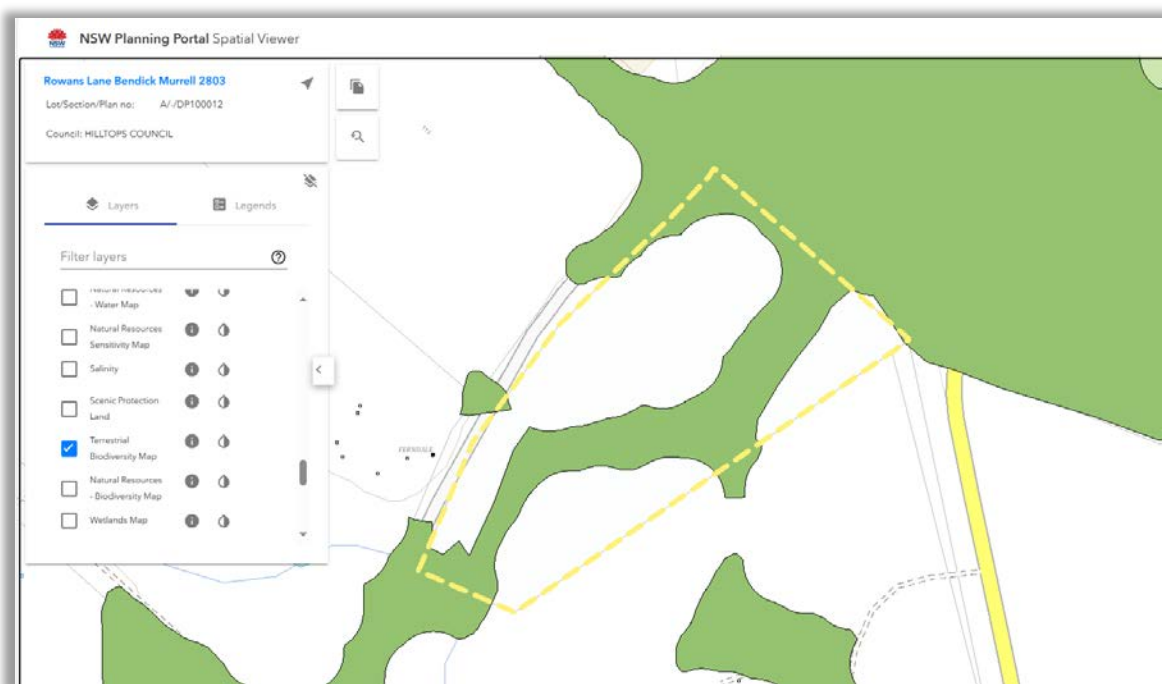


FIG # 5 – AERIAL IMAGE CURRENT NSW SIX(2013)



FIG # 6 – AERIAL IMAGE CURRENT NSW SIX – zoom (2013)

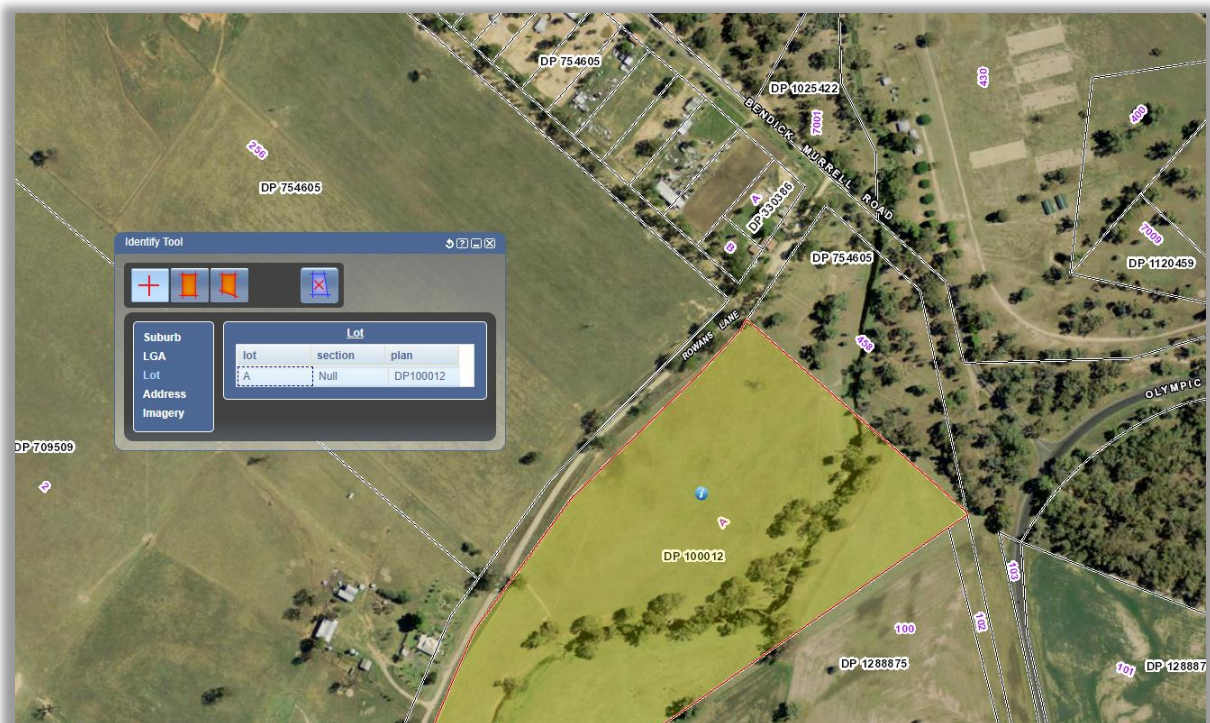


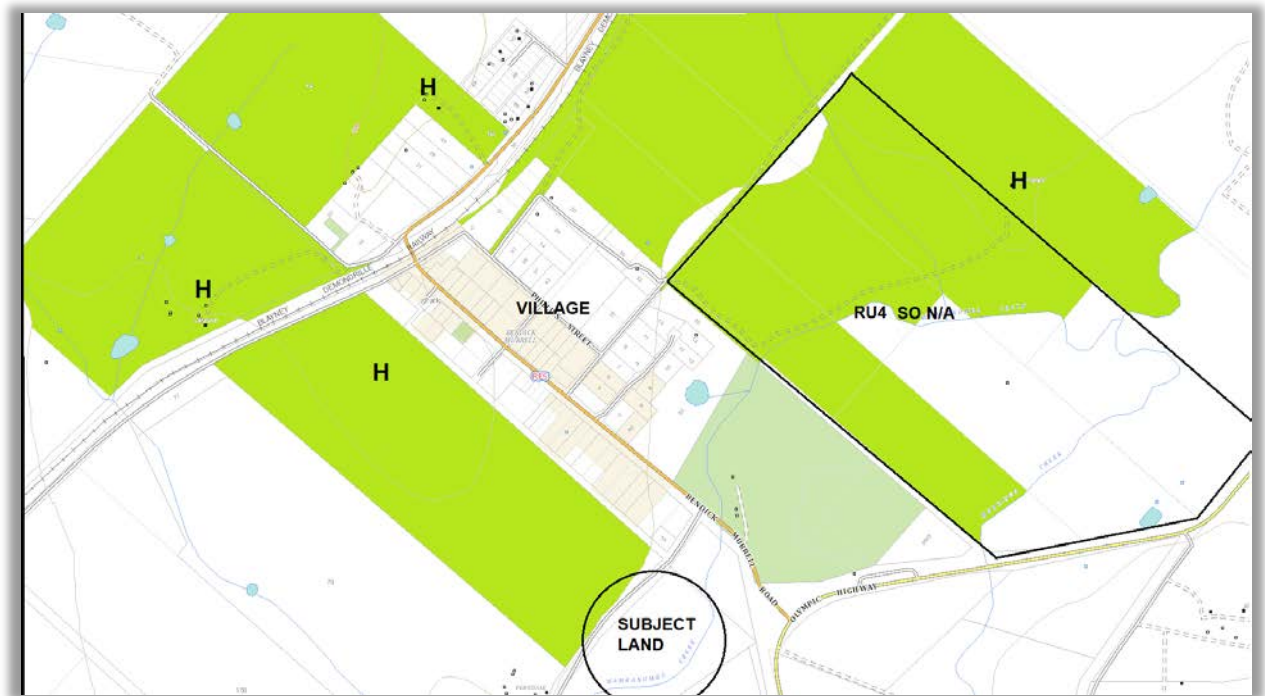
FIG # 7 – AERIAL IMAGE GOOGLE (2023)



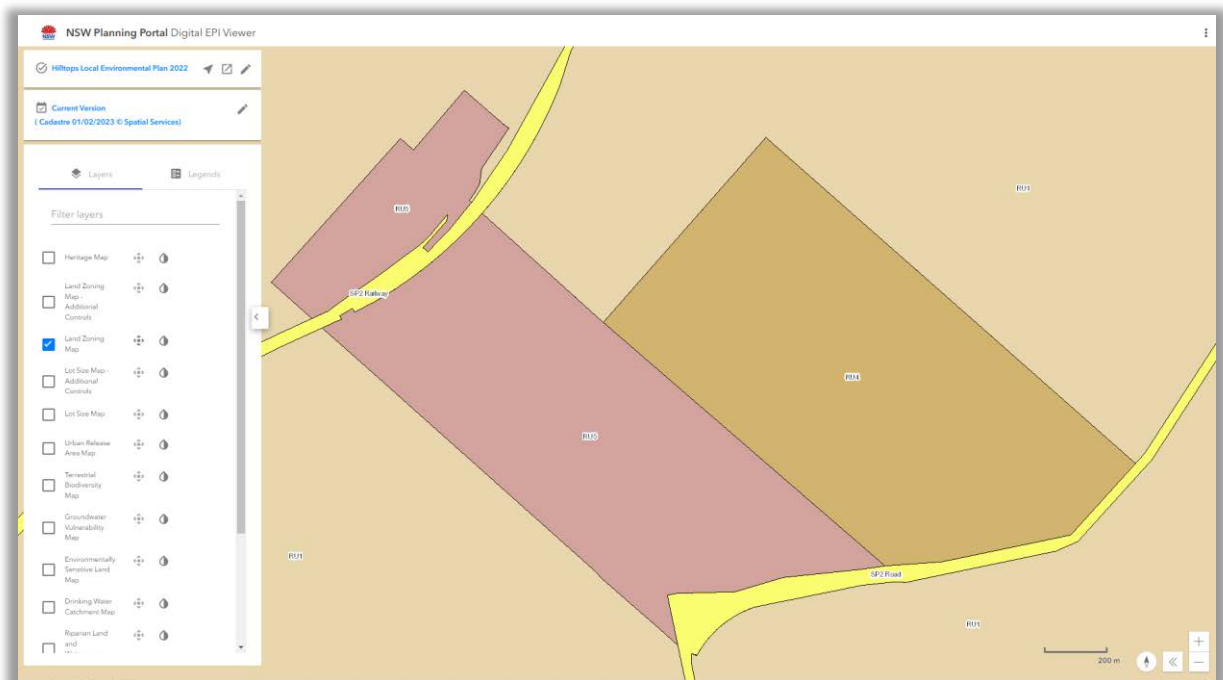
FIG # 8 – TOPO IMAGE SIX NSW



**FIG 9 - OCCUPIED PARCELS SURROUNDING BENDICK MURRELL**



**FIG 10 – ZONINGS AROUND BENDICK MURRELL**



**That compliance with the development standard is unreasonable or unnecessary in the circumstances of the case, as per the Five Part Test (*Wehbe v. Pittwater Council* [2007] NSWLEC 827)**

- (i) *The objectives of the standard are achieved notwithstanding non-compliance with the standard*

The objectives of the standard are replicated as follows, and it is considered that the comments provided with respect to each of these standards, and the information contained in the original Clause 4.6 justification, demonstrates that the development is compatible with the objectives, despite the non-compliance, and is therefore unreasonable or unnecessary in the circumstances of the case.

| Objective                                                                                                                       | Comment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|---------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (a) to minimise unplanned rural residential development,                                                                        | <p>The subject allotment exists, as it has since the portions were created around Bendick Murrell. This proposal does not intend subdivision but to allow an existing parcel of land a building entitlement where one has evaporated through changing planning standards.</p> <p>Council has deliberately elected to introduce clause 5.3 to its LEP from the elective clauses of the Standard Instrument Template. Despite objective (1) of 4.2A this permits a 50m extension to development from the Village zone (including dwellings on a lesser size standard – min 2000 sq.m) provided both zone’s objectives can be met.</p> <p>This has been demonstrated and environmental concern has been allayed with a site specific hydrogeological report for effluent management.</p> <p>This objective has been overcome as Council itself has defeated the clause by permitting the subject development within 50m of the Village zone.</p> |
| (b) to enable the replacement of lawfully erected dwelling houses and dual occupancies in certain rural and conservation zones. | No past or present housing needing replacement on subject land yet wider immediate locality consistency if permitted                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <i>Further commentary to a) above</i>                                                                                           | Both zone objectives met, site fit at given location found to be reasonable by assessment. Clause 5.3 permits this development. Lot size is irrelevant test to clause 5.3 due                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | to if subject land was 170 ha in RU1 zone, it would NOT need clause 5,3 to be proposed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <p>The recommended objectives within the consolidated Hilltops LEP for minimum lot size are:</p> <ul style="list-style-type: none"> <li><i>a) to ensure land use and development are undertaken on appropriately sized parcels of land.</i></li> <li><i>b) to ensure sufficient land area to promote high levels of residential amenity,</i></li> <li><i>c) to ensure new lots have an adequate water supply and can be provided with an effective means of disposal of domestic waste and adequately serviced,</i></li> <li><i>d) to create lots that are compatible with the existing predominant lot pattern or desired future character of the locality and to minimise the likely adverse impact on the amenity of adjoining developments.</i></li> <li><i>e) to prevent fragmentation of primary production agricultural land,</i></li> <li><i>f) to minimise potential for land use conflict, particularly between residential land uses and other rural land uses</i></li> </ul> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | <ul style="list-style-type: none"> <li>a) The land surrounding the development to north in Village has consistent or average lower sized land sizes with dwellings</li> <li>b) Sufficient land area exists as the dwelling proposed is 27m from the Village zoned land and adjacent housing.</li> <li>c) The land can utilise rainwater tanks under BASIX and an OSM system without influence on Groundwater, such that no impact on utilities occurs – as well reticulated water from the Cowra scheme is near the site if required. Power is immediately adjacent the site.</li> <li>d) The proposal is not creating a lot, it is utilising the lot per the LEP and its purpose included clause at 5.3. In so doing, this solitary dwelling appears as though it is wider Village as a result.</li> <li>e) Effective primary production land exists broader to the south and west of the subject allotment over a sub-catchment (creekline) boundary . The subject land is consistent in environmental attributes, scale and character of the lands to the north all of which are sized and established in such a way to be consistent in their use of the related lands. The edge north of the lot will be Village associative, the south of the lot will be rural use.</li> <li>f) The land is effectively sized and development proposed and located to not create a land use conflict. It has a road and a reserve on the 2 sides immediately adjacent the proposed site, with the remainder of the owner’s own allotment as the buffer to neighbouring holdings.</li> </ul> <p>Accordingly, it is considered that the objectives of this standard have been achieved, despite the lot being</p> |

|  |                                                                                                                                       |
|--|---------------------------------------------------------------------------------------------------------------------------------------|
|  | undersized, as the land retains the wider character of the locality/microcatchment, whilst proposing a dwelling adjacent the Village. |
|--|---------------------------------------------------------------------------------------------------------------------------------------|

- (ii) *The underlying objective or purpose of the standard is not relevant to the development and therefore compliance is unnecessary*

The standard is to attempt to prevent subdivision of viable (average) holding sizes (see Booth et al 2008 and YSSLUST Towards 2030) within Young Shire for the 2010 LEP.

Council has elected to bring about clause 5.3 in the 2022 LEP which permits fringe expansion of permissible Village Uses, in up to 50m of the neighbouring RU1 zone. The 170 ha min lot size is not relevant to the subject proposal because were the lot to have 170 hectares, reliance on a 50m fringe rule would not be in play. The owner could in fact propose a dwelling anywhere they reasonably would like on the 170 ha. As such, the lot size is redundant due to the inclusion of clause 5.3 as it would operate independent of this restriction.

- (iii) *The underlying object or purpose would be defeated or thwarted if compliance was required and therefore compliance is unreasonable*

If compliance was required with a 170ha development standard, there would be no reason or need for the 50m Village uses crossover into the RU1 zone allowance. It would in fact be redundant.

- (iv) *The development standard has been virtually abandoned or destroyed by the Council's own actions in granting consents departing from the standard and hence compliance with the standard is unnecessary and unreasonable*

Council has elected to call up and use optional clause 5.3 from the Standard Instrument Template. Further it has enhanced this clause and applied the 50m RU5 into RU1 provision but left all other zone edge crossovers at 20m. By so doing, for the 50m out from RU5 into RU1 zone, the Council has abandoned its 170ha rule per the Mapping supporting clause 5.2A.

If an Owner had 170ha in RU1 zone, it would not need the 50m rule as they could build anywhere on the parcel. By electing the 50m rule, the lot size is abandoned by permitting the edge widening of the RU5 zone.

- (v) *The zoning of the particular land is unreasonable or inappropriate so that a development standard appropriate for that zoning is also unreasonable and unnecessary as it applies to the land and compliance with the standard would be unreasonable or unnecessary. That is, the particular parcel of land should not have been included in the particular zone*

It is the very inclusion of clause 5.3 which undermines the 170ha obligation for the RU1 zone and AD tagged lands. It permits neighbouring zone development in that 50m from the RU5 zone.

- 3(b) That there are sufficient environmental planning grounds to justify contravening the development standard, using the objects of the Environmental Planning and Assessment Act, 1979, as per *Initial Action Pty Ltd v Woollahra Municipal Council* [2018] NSWLEC 118**

The objects of the Act are contained in Section 1.3, and are replicated as follows, and it is considered that the comments provided with respect to each of these objectives, and the information contained in the original Clause 4.6 justification, demonstrates that there are sufficient environmental planning grounds to justify contravening the development standard for this sized allotment.

| <b>Objective</b>                                                                                                                                                                                       | <b>Comment</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>(a) to promote the social and economic welfare of the community and a better environment by the proper management, development and conservation of the State's natural and other resources</i>      | The creation of one additional entitlement in the local area, which is appropriately serviced (or able to be sufficiently BASIX satisfied) and contains a reasonably designed development that meets all relevant planning controls, will not impact on the social and economic welfare of the community and will not impact on the environment or management of natural resources. It will however, have a positive impact on the adjacent Village and in fact serves to build the Village by another household due to the proximity. |
| <i>(b) to facilitate ecologically sustainable development by integrating relevant economic, environmental and social considerations in decision-making about environmental planning and assessment</i> | The permission of a right for a dwelling will have positive economic, social and environmental outcomes. The assimilation and association by close proximity to the Village aids to build the Village.                                                                                                                                                                                                                                                                                                                                 |
| <i>(c) to promote the orderly and economic use and development of land</i>                                                                                                                             | The erection of another dwelling in this immediate Village & surrounds setting, utilises existing infrastructure and services which pass by the land anyway, which in itself is considered to promote the orderly and economic use of the land. .                                                                                                                                                                                                                                                                                      |
| <i>(d) to promote the delivery and maintenance of affordable housing</i>                                                                                                                               | The land having an additional dwelling and habitable permission (where technically it does not at present) aids the delivery of more housing in an area consistently sized for a dwelling, on the fringe of the Village. An additional dwelling without subdivision or extraneous costs would be a positive in the dwelling supply pipeline for wider Village & Hilltops area.                                                                                                                                                         |
| <i>(e) to protect the environment, including the conservation of threatened and other species of native animals and plants, ecological communities and their habitats</i>                              | The land was and still can be used for rural, agistment or small agricultural uses. Occupation by way of a dwelling permission, allows the land to be managed, not allowed to go to weed and be better cared for. Balanced against the sole site input of an OSM system (adequately assessed and site designed), the ultimate nett gain in better management outweighs this input and is a geographically better outcome to the neighbourhood from an environmental viewpoint.                                                         |

|                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                   |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>(f) to promote the sustainable management of built and cultural heritage (including Aboriginal cultural heritage)</i>                                  | The nett increase of dwellings by one (1) at this site, does not actively work either for or against this objective, with the impacts of the intended dwelling on European and Aboriginal heritage having been considered in the original SEE. The site was not found to have known cultural significance at the AHIMs search undertaken.                                         |
| <i>(g) to promote good design and amenity of the built environment</i>                                                                                    | The proposed dwelling is reasonable and modern in nature. It is set within the surrounding land on a slightly level saddle of the slope, without cut/fill. The colours are low key and consistent with other housing (existing and proposed) in the locality. The proposal is immediately adjacent the Village and presents as a Village house when established due to proximity. |
| <i>(h) to promote the proper construction and maintenance of buildings, including the protection of the health and safety of their occupants</i>          | The dwelling will be BCA and legislatively compliant.                                                                                                                                                                                                                                                                                                                             |
| <i>(i) to promote the sharing of the responsibility for environmental planning and assessment between the different levels of government in the State</i> | The provision of a dwelling entitlement and approving a dwelling (within 50m of Village in this instance) is to be deemed concurrence (public interest assured) from State now. Council still has to review and examine how it best deals with the local provisions.                                                                                                              |
| <i>(j) to provide increased opportunity for community participation in environmental planning and assessment</i>                                          | The provision of this permission, does not actively work either for or against this objective.                                                                                                                                                                                                                                                                                    |

It is considered that the objectives of the Dwelling rights clause at the LEP (sec 4.2A) along with its parent legislation (EP&A Act 1.3) are met or considered reasonable in this case and do not make for concerns at local or regional level. The provision of an additional dwelling house in this locality is locally consistent, and in fact compliant by Council's own choice having elected to include clause 5.3 in their LEP.

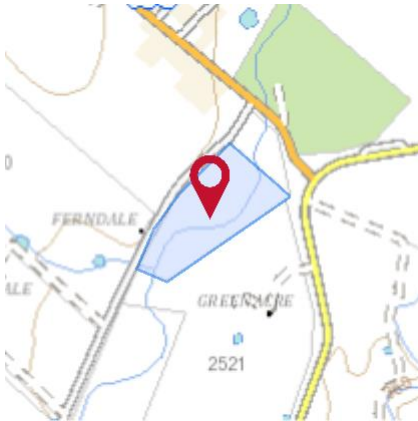
## **APPENDIX # 2**

### **NSW eSpatial Portal Report**



# Property Report

ROWANS LANE BENDICK MURRELL 2803



## Property Details

Address: ROWANS LANE BENDICK MURRELL 2803  
Lot/Section A/-/DP100012  
/Plan No:  
Council: HILLTOPS COUNCIL

## Summary of planning controls

Planning controls held within the Planning Database are summarised below. The property may be affected by additional planning controls not outlined in this report. Please contact your council for more information.

|                              |                                                          |
|------------------------------|----------------------------------------------------------|
| Local Environmental Plans    | Hilltops Local Environmental Plan 2022 (pub. 23-12-2022) |
| Land Zoning                  | RU1 - Primary Production: (pub. 23-12-2022)              |
| Height Of Building           | NA                                                       |
| Floor Space Ratio            | NA                                                       |
| Minimum Lot Size             | 170 ha                                                   |
| Heritage                     | NA                                                       |
| Land Reservation Acquisition | NA                                                       |
| Foreshore Building Line      | NA                                                       |
| Groundwater Vulnerability    | Groundwater Vulnerability                                |
| Terrestrial Biodiversity     | Biodiversity                                             |

## Detailed planning information

### State Environmental Planning Policies which apply to this property

State Environmental Planning Policies can specify planning controls for certain areas and/or types of development. They can also identify the development assessment system that applies and the type of environmental assessment that is required.

This report provides general information only and does not replace a Section 10.7 Certificate (formerly Section 149)



# Property Report

ROWANS LANE BENDICK MURRELL 2803

- State Environmental Planning Policy (Biodiversity and Conservation) 2021: Allowable Clearing Area (pub. 21-10-2022)
- State Environmental Planning Policy (Biodiversity and Conservation) 2021: Land Application (pub. 2-12-2021)
- State Environmental Planning Policy (Exempt and Complying Development Codes) 2008: Land Application (pub. 12-12-2008)
- State Environmental Planning Policy (Housing) 2021: Land Application (pub. 26-11-2021)
- State Environmental Planning Policy (Industry and Employment) 2021: Land Application (pub. 2-12-2021)
- State Environmental Planning Policy (Planning Systems) 2021: Land Application (pub. 2-12-2021)
- State Environmental Planning Policy (Primary Production) 2021: Land Application (pub. 2-12-2021)
- State Environmental Planning Policy (Resilience and Hazards) 2021: Land Application (pub. 2-12-2021)
- State Environmental Planning Policy (Resources and Energy) 2021: Land Application (pub. 2-12-2021)
- State Environmental Planning Policy (Sustainable Buildings) 2022: Land Application (pub. 29-8-2022)
- State Environmental Planning Policy (Transport and Infrastructure) 2021: Land Application (pub. 2-12-2021)
- State Environmental Planning Policy No 65—Design Quality of Residential Apartment Development: Land Application (pub. 26-7-2002)

## Other matters affecting the property

Information held in the Planning Database about other matters affecting the property appears below. The property may also be affected by additional planning controls not outlined in this report. Please speak to your council for more information

|                                     |                                                                                                                                                                                      |
|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Biodiversity Value (BV) Map         | Clearing native vegetation for a development on an area on the BV Map may require a Biodiversity Development Assessment Report. Consult your local council.                          |
| Land near Electrical Infrastructure | This property may be located near electrical infrastructure and could be subject to requirements listed under ISEPP Clause 45. Please contact Essential Energy for more information. |
| Local Aboriginal Land Council       | COWRA                                                                                                                                                                                |
| Regional Plan Boundary              | South East and Tablelands                                                                                                                                                            |

This report provides general information only and does not replace a Section 10.7 Certificate (formerly Section 149)

## **APPENDIX # 3**

**Deposited Plan, Crown Plan**

**&**

**Titles**

**(subject land & neighbouring Common)**



FOLIO: A/100012

-----

| SEARCH DATE | TIME     | EDITION NO | DATE     |
|-------------|----------|------------|----------|
| -----       | ----     | -----      | ----     |
| 14/5/2024   | 11:57 AM | 5          | 6/2/2023 |

LAND

----

LOT A IN DEPOSITED PLAN 100012  
LOCAL GOVERNMENT AREA HILLTOPS  
PARISH OF WAMBANUMBA COUNTY OF MONTEAGLE  
TITLE DIAGRAM DP100012

FIRST SCHEDULE

-----

ALEXANDER JOHN SLAVIN (T AS608603)

SECOND SCHEDULE (3 NOTIFICATIONS)

-----

- 1 LAND EXCLUDES MINERALS AND IS SUBJECT TO RESERVATIONS AND  
CONDITIONS IN FAVOUR OF THE CROWN - SEE CROWN GRANT(S)
- 2 D520708 EASEMENT FOR TRANSMISSION LINE AFFECTING THE PIECE  
OF LAND SHOWN IN DP432616
- 3 AS839066 MORTGAGE TO AUSTRALIA AND NEW ZEALAND BANKING GROUP  
LIMITED

NOTATIONS

-----

UNREGISTERED DEALINGS: NIL

\*\*\* END OF SEARCH \*\*\*

SLAVEN

PRINTED ON 14/5/2024

52332



CONVERSION TABLE ADDED IN  
DEPARTMENT OF LANDS

DP 100012

| LINKS  | METRES   |
|--------|----------|
| 3      | 0.604    |
| 40     | 8.047    |
| 83.5   | 16.798   |
| 99     | 19.916   |
| 100    | 20.117   |
| 150    | 30.175   |
| 159.5  | 32.086   |
| 400    | 80.467   |
| 556.4  | 111.930  |
| 591.2  | 118.931  |
| 653.6  | 131.483  |
| 693    | 139.409  |
| 699.4  | 140.697  |
| 745    | 149.870  |
| 1030   | 207.203  |
| 1173   | 235.970  |
| 1310.8 | 263.691  |
| 1365   | 274.594  |
| 1673   | 336.554  |
| 1928   | 387.852  |
| 2745.4 | 552.287  |
| 2822   | 567.696  |
| 2975   | 598.475  |
| 2978   | 599.078  |
| 3005   | 604.510  |
| 3189   | 641.525  |
| 3283.7 | 660.575  |
| 4329.3 | 870.917  |
| 6253   | 1257.904 |
| 6263   | 1259.915 |

| AC  | RD | P     | HA    |
|-----|----|-------|-------|
| 8   | 3  | 20    | 3.592 |
| 38  | 3  | 20    | 15.73 |
| 38  | 3  | 20.03 | 15.73 |
| 160 | -  | -     | 64.75 |
| 166 | -  | -     | 67.18 |
| 421 | -  | 10    | 170.4 |

5520708

Plan 12-6  
5-0  
17-6  
04MS  
17-145

JUL 14 1946

Crown Instrument not liable to Stamp Duty  
or Payment of Registration or other Fees

CONVEYANCING ACT, 1919-1939.  
REAL PROPERTY ACT, 1900.  
**Notice of Resumption of Land subject to the provisions  
of Real Property Act, 1900.**

F. P. McKessar  
Crown Solicitor

I, ALFRED GEORGE MCKESSAR Crown Solicitor's Office DO HEREBY CERTIFY that the copy Gazette Notification hereunto annexed is a true copy of the Gazette Notification contained in the Government Gazette of the ninth day of February one thousand nine hundred and forty five declaring that the land therein described, being the land mentioned in the Schedule hereunder written, has been resumed. AND I REQUEST that you will deal with and give effect to the in so far as the land mentioned in the Schedule hereunder written is concerned said Notification/as if the same were a Memorandum of Transfer of the land therein described duly executed under the Real Property Act, 1900, and I, the said ALFRED GEORGE MCKESSAR HEREBY CERTIFY that this instrument is correct for the purposes of the Real Property Act, 1900, AND I FURTHER CERTIFY that I was appointed by writing dated the seventh day of March one thousand nine hundred and forty-one under his hand and official seal by THE MINISTER FOR PUBLIC WORKS to sign this Certificate on behalf of the said Minister and that I have received no notice or information of the revocation of such appointment.

SCHEDULE.

| Lot              | Section | Deposited Plan or Name<br>of Estate                                             |           | Part or Whole | Volume | Folio |
|------------------|---------|---------------------------------------------------------------------------------|-----------|---------------|--------|-------|
|                  |         | Parish                                                                          | County    |               |        |       |
| Part Portion 280 |         | Wambanumba                                                                      | Monteagle | Part          | 5532   | 215   |
|                  |         | being the land delineated and edged red in the plan hereunto annexed marked "A" |           |               |        |       |

DATED this seventeenth day of June, in the year of Our Lord one thousand nine hundred and forty-six.

SIGNED by the said ALFRED GEORGE MCKESSAR  
in the presence of [Signature]

B  
[Signature]

THE REGISTRAR GENERAL,  
SYDNEY.

*Gazette 9<sup>th</sup> February 1945 Folio 280*

[Published in Government Gazette No. 15 of 9th  
February, 1945.]

PUBLIC WORKS ACT, 1912.  
SOUTHERN ELECTRICITY SUPPLY OF NEW SOUTH WALES:  
ELECTRICITY SUPPLY TO BENDICK MURRELL.

Acquisition of Easement.

IT IS HEREBY NOTIFIED AND DECLARED by His Excellency the Governor, acting with the advice of the Executive Council, that an easement or right to use the surface and the subsoil or undersurface of the land described in the Schedule hereto which is required for the construction and maintenance of an electricity transmission line is, as to so much of the said land as is Crown land, hereby appropriated and is, as to so much of the said land as is private property, hereby resumed under Division 1 of Part V of the Public Works Act, 1912, for the purposes of Burrinjuck Electrical Construction: Electricity supply to Bendick Murrell, a work authorised by the Hydro-electric Development (Construction) Act, 1919, as amplified and extended by the Burrinjuck Hydro-Electric (Administration) Act, 1920; AND the said easement or right is vested in the Minister for Public Works as Constructing Authority.

Dated the 31st day of January, 1945.

WAKEHURST, Governor.

By His Excellency's Command,

J. J. CAHILL, Minister for Public Works.

SCHEDULE.

All that piece or parcel of land situate in the Shire of Burrangong, parish of Wambanumba, county of Montague, being that part of portion 280 lying within strips of land 30 feet wide on both sides of the centre line of the transmission line as erected which intersects the northernmost north-eastern boundary of the said portion 280, at a point distant 2 chains 80 links north-westerly from its northernmost north-eastern corner, and bears south-easterly through a point on the southernmost north-eastern boundary of that portion distant 2 chains 50 links south-easterly from its aforesaid northernmost north-eastern corner,—and said to be in the possession of James W. Rawns.

Also, all that piece or parcel of land situate as aforesaid, being that part of portion 281 lying within strips of land 30 feet wide on both sides of the centre line of the transmission line as erected which intersects the north-western boundary of the 2 perches of land resumed for substation site by notification in Gazette of 14th October, 1928, at a point distant 8 links north-easterly from its westernmost corner and bears north-westerly through a point on the south-western boundary of the said portion 281 distant 20 chains 87 links south-easterly from its northernmost corner,—and said to be in the possession of Abraham Lynch.

(EL. 48-8,066)

(1641)

This is the copy Gazette Notification referred to in the annexed Certificate.

Witness .....

*J. J. Cahill*

*W. J. Wakehurst*

D520708

No. \_\_\_\_\_

LODGED by  
State Crown Solicitor,  
237 Macquarie Street,  
Sydney.

NOTICE OF RESUMPTION.

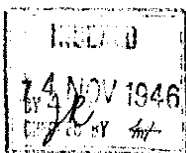
*an Easement through  
part of Portion 280  
Shire of Burragong  
Pt Wambaumba CO Montague.*

*plan*

*Minister for Public Works*

Particulars entered in Register Book,

Vol. 5532. , Fol. 215.



the *8th*  
day of *November* 19*46*  
at *minutes* *12*  
o'clock in the— noon.

*J Wells*



Registrar-General.

*623/34  
5/26/46*

F.W.D.

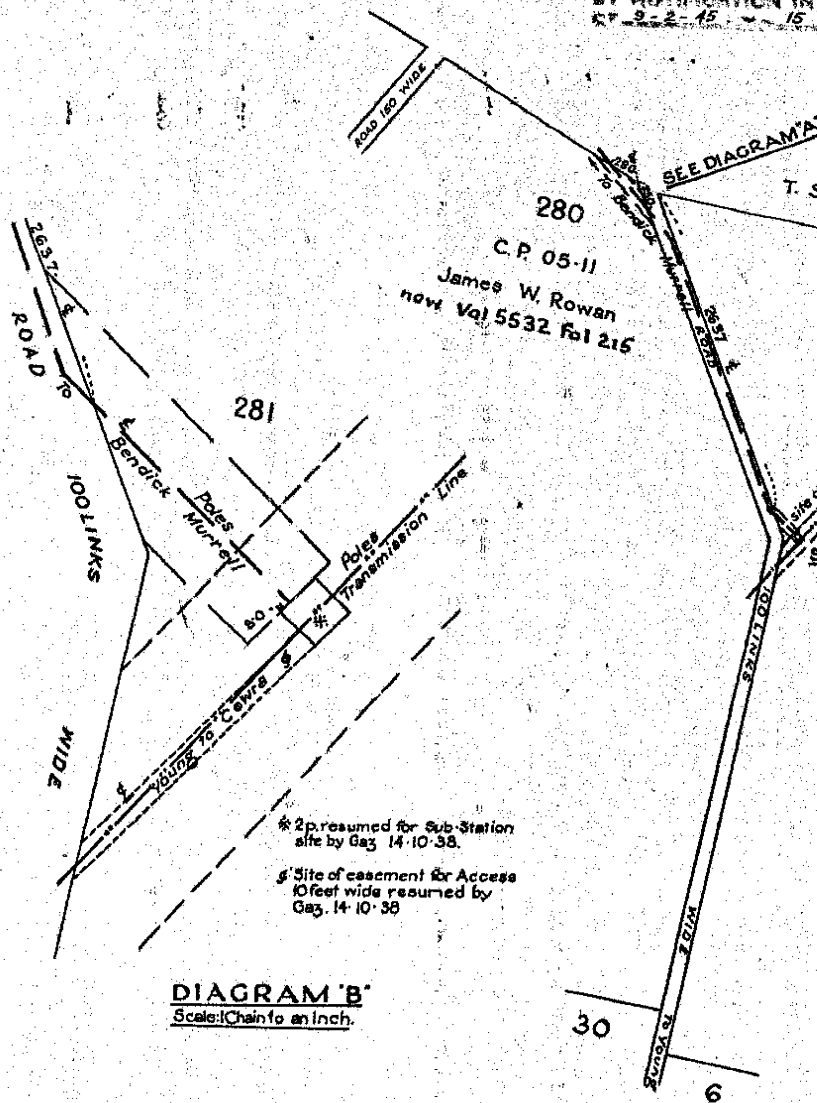
84111 G'S  
SOUTHERN ELECTRICITY SUPPLY  
**BURRINJUCK ELECTRICITY**  
ELECTRICITY SUPPLY  
**PLAN**

Shewing site of easement proposed to be resumed  
Parish of Wambanumba ✓

Scale: 10 Chains to an inch  
P. B. 01501

EASEMENT FOR Transmission  
BY NOTIFICATION IN  
Gaz. 2-2-15

D520708



**DIAGRAM 'B'**  
Scale: 1 Chain to an inch.

Existing line of poles shown thus  
forms centre line of easement 60 feet wide

**SUPPLY OF N.S.W.  
AL CONSTRUCTION**

O BENDICK MURRELL

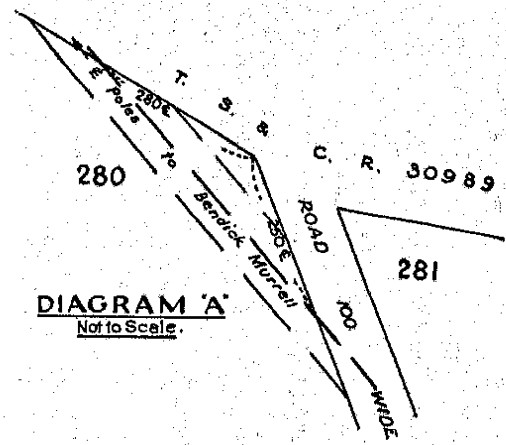
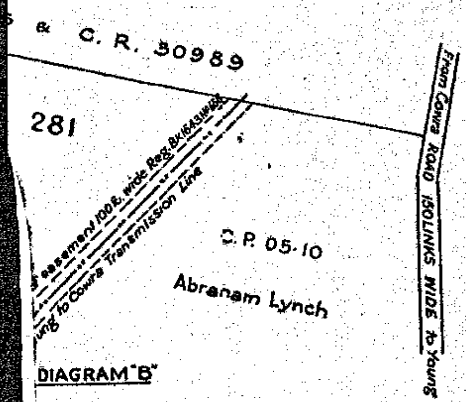
Shire of Burrangong

med for Electricity Transmission Line  
County of Monteagle

n Inch.

I  
"A"

Line: 280  
280



**DIAGRAM 'A'**  
Not to Scale.

This is the plan marked "A" referred to in Certificate  
of Resumption hereunto annexed.  
and witnessed by

*[Signature]*

Witness.

*[Signature]*  
for Chief Electrical Engineer. 24. 11. 44.

6105 RP-1E



FOLIO: 458/754605

-----

| SEARCH DATE | TIME     | EDITION NO | DATE |
|-------------|----------|------------|------|
| -----       | ----     | -----      | ---- |
| 14/5/2024   | 11:59 AM | -          | -    |

LAND

----

LOT 458 IN DEPOSITED PLAN 754605  
AT BENDICK MURRELL  
LOCAL GOVERNMENT AREA HILLTOPS  
PARISH OF WAMBANUMBA COUNTY OF MONTEAGLE  
(FORMERLY KNOWN AS PORTION 458)  
TITLE DIAGRAM CROWN PLAN 6857.1780

FIRST SCHEDULE

-----

THE STATE OF NEW SOUTH WALES (CA138323)

SECOND SCHEDULE (2 NOTIFICATIONS)

-----

- \* 1 THE LAND IS A RESERVE WITHIN THE MEANING OF PART 5 OF THE CROWN LANDS ACT 1989 AND THERE ARE RESTRICTIONS ON TRANSFER AND OTHER DEALINGS IN THE LAND UNDER THAT ACT, WHICH MAY REQUIRE CONSENT OF THE MINISTER.
- \* 2 LIMITED TITLE. LIMITATION PURSUANT TO SECTION 28T(4) OF THE REAL PROPERTY ACT, 1900. THE BOUNDARIES OF THE LAND COMPRISED HEREIN HAVE NOT BEEN INVESTIGATED BY THE REGISTRAR GENERAL.

NOTATIONS

-----

NOTE: EASEMENT FOR TRANSMISSION LINE ADJOINS AS DEFINED IN CP2973.3110 AND REFERRED TO GOV GAZ DATED 9.2.1945 FOL.280. NO EVIDENCE OF CREATION OVER SUBJECT LAND

UNREGISTERED DEALINGS: NIL

\*\*\* END OF SEARCH \*\*\*

SLAVEN

PRINTED ON 14/5/2024



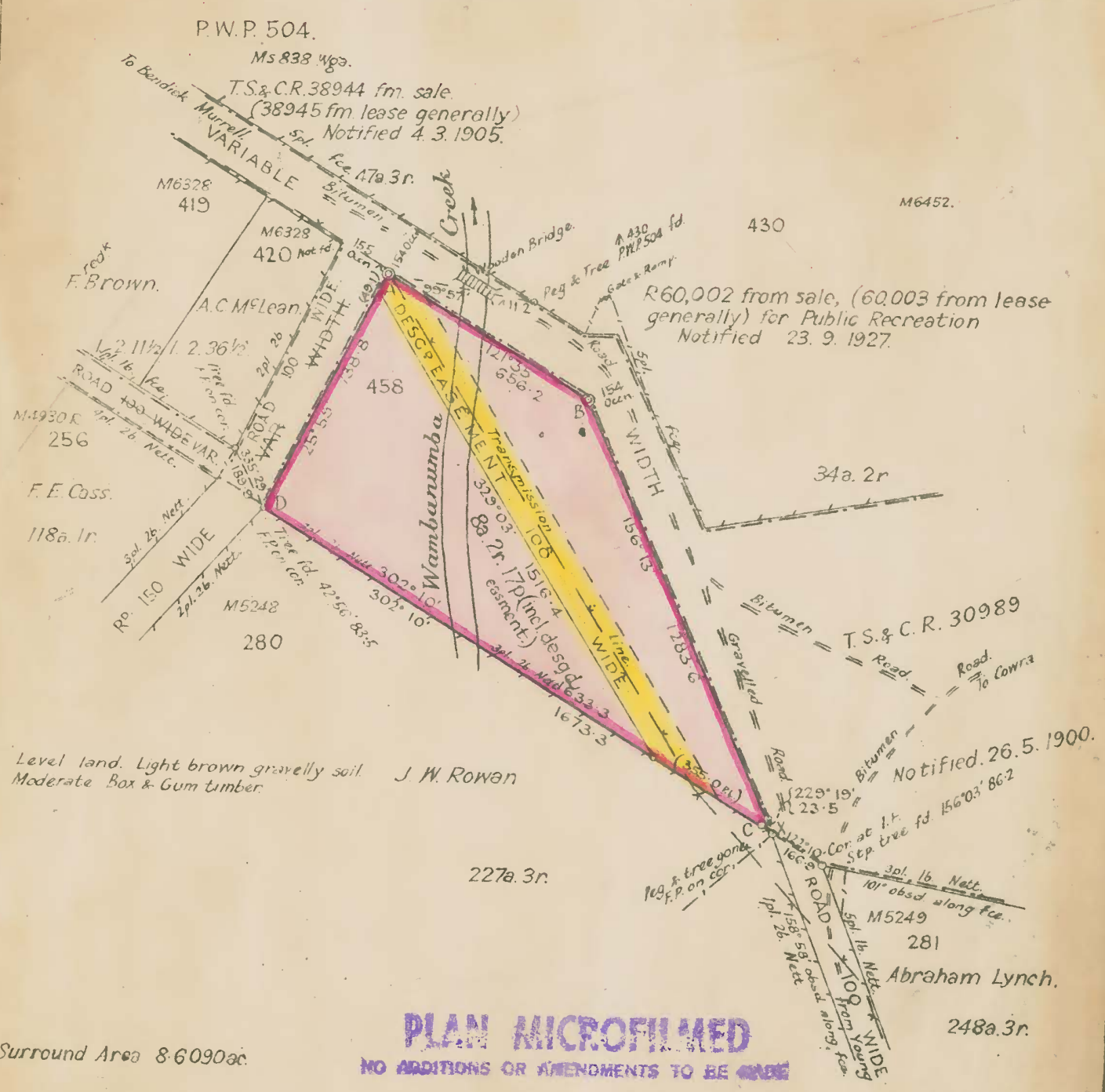
**PLAN OF PORTION 458**  
**PARISH WAMBANUMBA COUNTY MONTEAGLE**  
**LAND DISTRICT YOUNG LAND BOARD DISTRICT COOTAMUNDRA**  
**SHIRE BURRANGONG**

A:293  
PAPERS LB 57405.  
PKS 574440

**NOTATION PLAN**

Applied for under the Section of the Crown Lands Consolidation Act, 1913, by  
Measured for disposal.

~~Within Suburban Holding Area No 2691 Notified 4th October, 1957. Rev'd Gaz 12.7.68~~  
~~S.H. 57.8. November 26th Violet Jean Hood. For'd 10-2-61. Again Available on and after 29.5.61. Gaz 28.4.61.~~  
~~Sp. 1. 6.4.17. Leslie James Rowan, withdrawn.~~



| REFERENCE MARKS |          |           |       |            |
|-----------------|----------|-----------|-------|------------|
| CORNER          | BEARING  | FROM      | LINKS | N° ON TREE |
| A               | 104° 50' | Yell. Box | 51.1  | 458        |
|                 | 121° 35' | G.I. Pipe | 5.0   | 458        |
| B               | 158° 12' | Yell. Box | 61.9  | 458        |
|                 | 301° 35' | G.I. Pipe | 5.0   | 458        |
| C               | 161° 42' | Yell. Box | 77.7  | 458        |
| D               | 42° 56'  | Yell. Box | 83.5  | 458, 280   |

AZIMUTH TAKEN FROM DX.  
FIELD BOOK L.D. 3788 PAGES 28-31

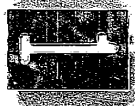
Charted on Head Office maps  
8.4.59  
Examined  
NOTATED under my immediate supervision  
I CERTIFY that this is a  
CORRECT COPY of the  
original plan of survey and  
of all notations therein now  
relevant, I being the officer  
having the custody thereof  
J. W. Rowan  
Officer in Charge,  
Land Board Office.

Peter Wilden  
of Cootamundra.  
A Surveyor registered under the Surveyors Act, 1929 hereby certify  
that the survey represented in this plan is accurate and has been  
made by me in accordance with the Survey Practice Regulations 1933  
and the special requirements of the Department of Lands was  
completed on the 24th September, 1958, and the  
reference marks have been placed as shown hereon

Peter Wilden  
Surveyor registered under the Surveyors Act 1929

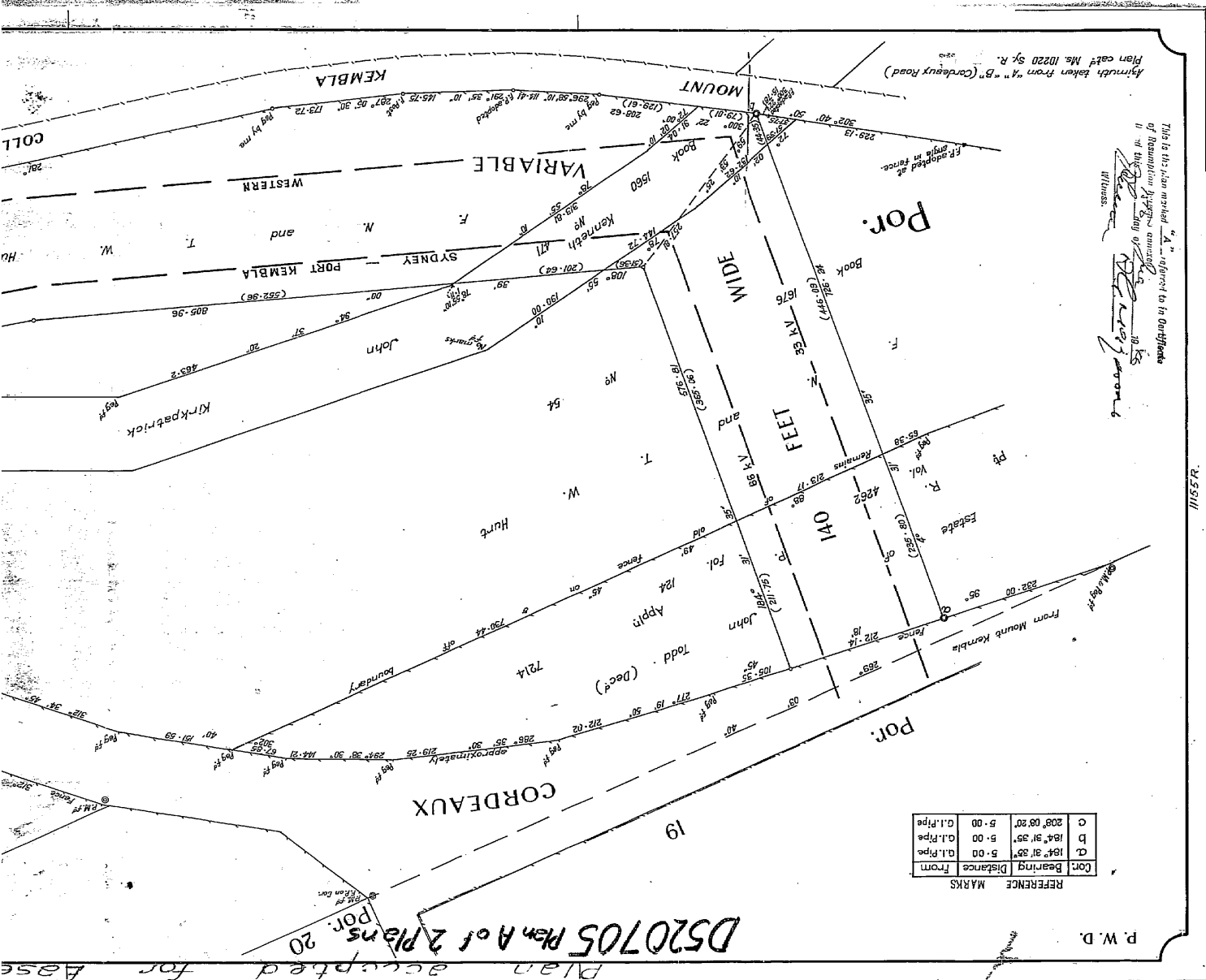
Transmitted to the District Surveyor with my letter of 17th Oct. 1958/54.  
CHECKED & CHARTED  
EXAMINED AND  
PLAN APPROVED  
March 6th 1959

SCALE 4 CHAINS TO AN INCH  
CAT. N°  
M6857 1780



PLAN IN REGISTRAR GENERAL'S OFFICE.

| CONVERSION TABLE ADDED 10/1/80 |        | DEPARTMENT OF LANDS |        |
|--------------------------------|--------|---------------------|--------|
| DP 432616                      | SH 1/2 | FEET INCHES         | METRES |
| 140                            | -      | 42.672              |        |
| LINKS                          |        | METRES              |        |
| 1.11                           | 0.223  |                     |        |
| 1.2                            | 0.271  |                     |        |
| 1.3                            | 0.305  |                     |        |
| 1.4                            | 0.338  |                     |        |
| 1.5                            | 0.372  |                     |        |
| 1.6                            | 0.405  |                     |        |
| 1.7                            | 0.438  |                     |        |
| 1.8                            | 0.472  |                     |        |
| 1.9                            | 0.505  |                     |        |
| 2.0                            | 0.538  |                     |        |
| 2.1                            | 0.572  |                     |        |
| 2.2                            | 0.605  |                     |        |
| 2.3                            | 0.638  |                     |        |
| 2.4                            | 0.672  |                     |        |
| 2.5                            | 0.705  |                     |        |
| 2.6                            | 0.738  |                     |        |
| 2.7                            | 0.772  |                     |        |
| 2.8                            | 0.805  |                     |        |
| 2.9                            | 0.838  |                     |        |
| 3.0                            | 0.872  |                     |        |
| 3.1                            | 0.905  |                     |        |
| 3.2                            | 0.938  |                     |        |
| 3.3                            | 0.972  |                     |        |
| 3.4                            | 1.005  |                     |        |
| 3.5                            | 1.038  |                     |        |
| 3.6                            | 1.072  |                     |        |
| 3.7                            | 1.105  |                     |        |
| 3.8                            | 1.138  |                     |        |
| 3.9                            | 1.172  |                     |        |
| 4.0                            | 1.205  |                     |        |
| 4.1                            | 1.238  |                     |        |
| 4.2                            | 1.272  |                     |        |
| 4.3                            | 1.305  |                     |        |
| 4.4                            | 1.338  |                     |        |
| 4.5                            | 1.372  |                     |        |
| 4.6                            | 1.405  |                     |        |
| 4.7                            | 1.438  |                     |        |
| 4.8                            | 1.472  |                     |        |
| 4.9                            | 1.505  |                     |        |
| 5.0                            | 1.538  |                     |        |
| 5.1                            | 1.572  |                     |        |
| 5.2                            | 1.605  |                     |        |
| 5.3                            | 1.638  |                     |        |
| 5.4                            | 1.672  |                     |        |
| 5.5                            | 1.705  |                     |        |
| 5.6                            | 1.738  |                     |        |
| 5.7                            | 1.772  |                     |        |
| 5.8                            | 1.805  |                     |        |
| 5.9                            | 1.838  |                     |        |
| 6.0                            | 1.872  |                     |        |
| 6.1                            | 1.905  |                     |        |
| 6.2                            | 1.938  |                     |        |
| 6.3                            | 1.972  |                     |        |
| 6.4                            | 2.005  |                     |        |
| 6.5                            | 2.038  |                     |        |
| 6.6                            | 2.072  |                     |        |
| 6.7                            | 2.105  |                     |        |
| 6.8                            | 2.138  |                     |        |
| 6.9                            | 2.172  |                     |        |
| 7.0                            | 2.205  |                     |        |
| 7.1                            | 2.238  |                     |        |
| 7.2                            | 2.272  |                     |        |
| 7.3                            | 2.305  |                     |        |
| 7.4                            | 2.338  |                     |        |
| 7.5                            | 2.372  |                     |        |
| 7.6                            | 2.405  |                     |        |
| 7.7                            | 2.438  |                     |        |
| 7.8                            | 2.472  |                     |        |
| 7.9                            | 2.505  |                     |        |
| 8.0                            | 2.538  |                     |        |
| 8.1                            | 2.572  |                     |        |
| 8.2                            | 2.605  |                     |        |
| 8.3                            | 2.638  |                     |        |
| 8.4                            | 2.672  |                     |        |
| 8.5                            | 2.705  |                     |        |
| 8.6                            | 2.738  |                     |        |
| 8.7                            | 2.772  |                     |        |
| 8.8                            | 2.805  |                     |        |
| 8.9                            | 2.838  |                     |        |
| 9.0                            | 2.872  |                     |        |
| 9.1                            | 2.905  |                     |        |
| 9.2                            | 2.938  |                     |        |
| 9.3                            | 2.972  |                     |        |
| 9.4                            | 3.005  |                     |        |
| 9.5                            | 3.038  |                     |        |
| 9.6                            | 3.072  |                     |        |
| 9.7                            | 3.105  |                     |        |
| 9.8                            | 3.138  |                     |        |
| 9.9                            | 3.172  |                     |        |
| 10.0                           | 3.205  |                     |        |
| 10.1                           | 3.238  |                     |        |
| 10.2                           | 3.272  |                     |        |
| 10.3                           | 3.305  |                     |        |
| 10.4                           | 3.338  |                     |        |
| 10.5                           | 3.372  |                     |        |
| 10.6                           | 3.405  |                     |        |
| 10.7                           | 3.438  |                     |        |
| 10.8                           | 3.472  |                     |        |
| 10.9                           | 3.505  |                     |        |
| 11.0                           | 3.538  |                     |        |
| 11.1                           | 3.572  |                     |        |
| 11.2                           | 3.605  |                     |        |
| 11.3                           | 3.638  |                     |        |
| 11.4                           | 3.672  |                     |        |
| 11.5                           | 3.705  |                     |        |
| 11.6                           | 3.738  |                     |        |
| 11.7                           | 3.772  |                     |        |
| 11.8                           | 3.805  |                     |        |
| 11.9                           | 3.838  |                     |        |
| 12.0                           | 3.872  |                     |        |
| 12.1                           | 3.905  |                     |        |
| 12.2                           | 3.938  |                     |        |
| 12.3                           | 3.972  |                     |        |
| 12.4                           | 4.005  |                     |        |
| 12.5                           | 4.038  |                     |        |
| 12.6                           | 4.072  |                     |        |
| 12.7                           | 4.105  |                     |        |
| 12.8                           | 4.138  |                     |        |
| 12.9                           | 4.172  |                     |        |
| 13.0                           | 4.205  |                     |        |
| 13.1                           | 4.238  |                     |        |
| 13.2                           | 4.272  |                     |        |
| 13.3                           | 4.305  |                     |        |
| 13.4                           | 4.338  |                     |        |
| 13.5                           | 4.372  |                     |        |
| 13.6                           | 4.405  |                     |        |
| 13.7                           | 4.438  |                     |        |
| 13.8                           | 4.472  |                     |        |
| 13.9                           | 4.505  |                     |        |
| 14.0                           | 4.538  |                     |        |
| 14.1                           | 4.572  |                     |        |
| 14.2                           | 4.605  |                     |        |
| 14.3                           | 4.638  |                     |        |
| 14.4                           | 4.672  |                     |        |
| 14.5                           | 4.705  |                     |        |
| 14.6                           | 4.738  |                     |        |
| 14.7                           | 4.772  |                     |        |
| 14.8                           | 4.805  |                     |        |
| 14.9                           | 4.838  |                     |        |
| 15.0                           | 4.872  |                     |        |
| 15.1                           | 4.905  |                     |        |
| 15.2                           | 4.938  |                     |        |
| 15.3                           | 4.972  |                     |        |
| 15.4                           | 5.005  |                     |        |
| 15.5                           | 5.038  |                     |        |
| 15.6                           | 5.072  |                     |        |
| 15.7                           | 5.105  |                     |        |
| 15.8                           | 5.138  |                     |        |
| 15.9                           | 5.172  |                     |        |
| 16.0                           | 5.205  |                     |        |
| 16.1                           | 5.238  |                     |        |
| 16.2                           | 5.272  |                     |        |
| 16.3                           | 5.305  |                     |        |
| 16.4                           | 5.338  |                     |        |
| 16.5                           | 5.372  |                     |        |
| 16.6                           | 5.405  |                     |        |
| 16.7                           | 5.438  |                     |        |
| 16.8                           | 5.472  |                     |        |
| 16.9                           | 5.505  |                     |        |
| 17.0                           | 5.538  |                     |        |
| 17.1                           | 5.572  |                     |        |
| 17.2                           | 5.605  |                     |        |
| 17.3                           | 5.638  |                     |        |
| 17.4                           | 5.672  |                     |        |
| 17.5                           | 5.705  |                     |        |
| 17.6                           | 5.738  |                     |        |
| 17.7                           | 5.772  |                     |        |
| 17.8                           | 5.805  |                     |        |
| 17.9                           | 5.838  |                     |        |
| 18.0                           | 5.872  |                     |        |
| 18.1                           | 5.905  |                     |        |
| 18.2                           | 5.938  |                     |        |
| 18.3                           | 5.972  |                     |        |
| 18.4                           | 6.005  |                     |        |
| 18.5                           | 6.038  |                     |        |
| 18.6                           | 6.072  |                     |        |
| 18.7                           | 6.105  |                     |        |
| 18.8                           | 6.138  |                     |        |
| 18.9                           | 6.172  |                     |        |
| 19.0                           | 6.205  |                     |        |
| 19.1                           | 6.238  |                     |        |
| 19.2                           | 6.272  |                     |        |
| 19.3                           | 6.305  |                     |        |
| 19.4                           | 6.338  |                     |        |
| 19.5                           | 6.372  |                     |        |
| 19.6                           | 6.405  |                     |        |
| 19.7                           | 6.438  |                     |        |
| 19.8                           | 6.472  |                     |        |
| 19.9                           | 6.505  |                     |        |
| 20.0                           | 6.538  |                     |        |
| 20.1                           | 6.572  |                     |        |
| 20.2                           | 6.605  |                     |        |
| 20.3                           | 6.638  |                     |        |
| 20.4                           | 6.672  |                     |        |
| 20.5                           | 6.705  |                     |        |
| 20.6                           | 6.738  |                     |        |
| 20.7                           | 6.772  |                     |        |
| 20.8                           | 6.805  |                     |        |
| 20.9                           | 6.838  |                     |        |
| 21.0                           | 6.872  |                     |        |
| 21.1                           | 6.905  |                     |        |
| 21.2                           | 6.938  |                     |        |
| 21.3                           | 6.972  |                     |        |
| 21.4                           | 7.005  |                     |        |
| 21.5                           | 7.038  |                     |        |
| 21.6                           | 7.072  |                     |        |
| 21.7                           | 7.105  |                     |        |
| 21.8                           | 7.138  |                     |        |
| 21.9                           | 7.172  |                     |        |
| 22.0                           | 7.205  |                     |        |
| 22.1                           | 7.238  |                     |        |
| 22.2                           | 7.272  |                     |        |
| 22.3                           | 7.305  |                     |        |
| 22.4                           | 7.338  |                     |        |
| 22.5                           | 7.372  |                     |        |
| 22.6                           | 7.405  |                     |        |
| 22.7                           | 7.438  |                     |        |
| 22.8                           | 7.472  |                     |        |
| 22.9                           | 7.505  |                     |        |
| 23.0                           | 7.538  |                     |        |
| 23.1                           | 7.572  |                     |        |
| 23.2                           | 7.605  |                     |        |
| 23.3                           | 7.638  |                     |        |
| 23.4                           | 7.672  |                     |        |
| 23.5                           | 7.705  |                     |        |
| 23.6                           | 7.738  |                     |        |
| 23.7                           | 7.772  |                     |        |
| 23.8                           | 7.805  |                     |        |
| 23.9                           | 7.838  |                     |        |
| 24.0                           | 7.872  |                     |        |
| 24.1                           | 7.905  |                     |        |
| 24.2                           | 7.938  |                     |        |
| 24.3                           | 7.972  |                     |        |
| 24.4                           | 8.005  |                     |        |
| 24.5                           | 8.038  |                     |        |
| 24.6                           | 8.072  |                     |        |
| 24.7                           | 8.105  |                     |        |
| 24.8                           | 8.138  |                     |        |
| 24.9                           | 8.172  |                     |        |
| 25.0                           | 8.205  |                     |        |
| 25.1                           | 8.238  |                     |        |
| 25.2                           | 8.272  |                     |        |
| 25.3                           | 8.305  |                     |        |
| 25.4                           | 8.338  |                     |        |
| 25.5                           | 8.372  |                     |        |
| 25.6                           | 8.405  |                     |        |
| 25.7                           | 8.438  |                     |        |
| 25.8                           | 8.472  |                     |        |
| 25.9                           | 8.505  |                     |        |
| 26.0                           | 8.538  |                     |        |
| 26.1                           | 8.572  |                     |        |
| 26.2                           | 8.605  |                     |        |
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| 26.4                           | 8.672  |                     |        |
| 26.5                           | 8.705  |                     |        |
| 26.6                           | 8.738  |                     |        |
| 26.7                           | 8.772  |                     |        |
| 26.8                           | 8.805  |                     |        |
| 26.9                           | 8.838  |                     |        |
| 27.0                           | 8.872  |                     |        |
| 27.1                           | 8.905  |                     |        |
| 27.2                           | 8.938  |                     |        |
| 27.3                           | 8.972  |                     |        |
| 27.4                           | 9.005  |                     |        |
| 27.5                           | 9.038  |                     |        |
| 27.6                           | 9.072  |                     |        |
| 27.7                           | 9.105  |                     |        |
| 27.8                           | 9.138  |                     |        |
| 27.9                           | 9.172  |                     |        |
| 28.0                           | 9.205  |                     |        |
| 28.1                           | 9.238  |                     |        |
| 28.2                           | 9.272  |                     |        |
| 28.3                           | 9.305  |                     |        |
| 28.4                           | 9.338  |                     |        |
| 28.5                           | 9.372  |                     |        |
| 28.6                           | 9.405  |                     |        |
| 28.7                           | 9.438  |                     |        |
| 28.8                           | 9.472  |                     |        |
| 28.9                           | 9.505  |                     |        |
| 29.0                           | 9.538  |                     |        |
| 29.1                           | 9.572  |                     |        |
| 29.2                           | 9.605  |                     |        |
| 29.3                           | 9.638  |                     |        |
| 29.4                           | 9.672  |                     |        |
| 29.5                           | 9.705  |                     |        |
| 29.6                           | 9.738  |                     |        |
| 29.7                           | 9.772  |                     |        |
| 29.8                           | 9.805  |                     |        |
| 29.9                           | 9.838  |                     |        |
| 30.0                           | 9.872  |                     |        |
| 30.1                           | 9.905  |                     |        |
| 30.2                           | 9.938  |                     |        |
| 30.3                           | 9.972  |                     |        |
| 30.4                           | 10.005 |                     |        |
| 30.5                           | 10.038 |                     |        |
| 30.6                           | 10.072 |                     |        |
| 30.7                           | 10.105 |                     |        |
| 30.8                           | 10.138 |                     |        |
| 30.9                           | 10.172 |                     |        |
| 31.0                           | 10.205 |                     |        |
| 31.1                           | 10.238 |                     |        |
| 31.2                           | 10.272 |                     |        |
| 31.3                           | 10.305 |                     |        |
| 31.4                           | 10.338 |                     |        |
| 31.5                           | 10.372 |                     |        |
| 31.6                           | 10.405 |                     |        |
| 31.7                           | 10.438 |                     |        |
| 31.8                           | 10.472 |                     |        |
| 31.9                           | 10.505 |                     |        |
| 32.0                           | 10.538 |                     |        |
| 32.1                           | 10.572 |                     |        |
| 32.2                           | 10.605 |                     |        |
| 32.3                           | 10.638 |                     |        |
| 32.4                           | 10.672 |                     |        |
| 32.5                           | 10.705 |                     |        |
| 32.6                           | 10.738 |                     |        |
| 32.7                           | 10.772 |                     |        |
| 32.8                           | 10.805 |                     |        |
| 32.9                           | 10.838 |                     |        |
| 33.0                           | 10.872 |                     |        |
| 33.1                           | 10.905 |                     |        |
| 33.2                           | 10.938 |                     |        |
| 33.3                           | 10.972 |                     |        |
| 33.4                           | 11.005 |                     |        |
| 33.5                           | 11.038 |                     |        |
| 33.6                           | 11.072 |                     |        |
| 33.7                           | 11.105 |                     |        |
| 33.8                           | 11.138 |                     |        |
| 33.9                           | 11.172 |                     |        |
| 34.0                           | 11.205 |                     |        |
| 34.1                           | 11.238 |                     |        |
| 34.2                           | 11.272 |                     |        |
| 34.3                           | 11.305 |                     |        |
| 34.4                           | 11.338 |                     |        |
| 34.5                           | 11.372 |                     |        |
| 34.6                           | 11.405 |                     |        |
| 34.7                           | 11.438 |                     |        |
| 34.8                           | 11.472 |                     |        |
| 34.9                           | 11.505 |                     |        |
| 35.0                           | 11.538 |                     |        |
| 35.1                           | 11.572 |                     |        |
| 35.2                           | 11.605 |                     |        |
| 35.3                           | 11.638 |                     |        |
| 35.4                           | 11.672 |                     |        |
| 35.5                           | 11.705 |                     |        |
| 35.6                           | 11.738 |                     |        |
| 35.7                           | 11.772 |                     |        |
| 35.8                           | 11.805 |                     |        |
| 35.9                           | 11.838 |                     |        |
| 36.0                           | 11.872 |                     |        |
| 36.1                           | 11.905 |                     |        |
| 36.2                           | 11.938 |                     |        |
| 36.3                           | 11.972 |                     |        |
| 36.4                           | 12.005 |                     |        |
| 36.5                           | 12.038 |                     |        |
| 36.6                           | 12.072 |                     |        |
| 36.7                           | 12.105 |                     |        |
| 36.8                           | 12.138 |                     |        |
| 36.9                           | 12.172 |                     |        |
| 37.0                           | 12.205 |                     |        |
| 37.1                           | 12.238 |                     |        |
| 37.2                           | 12.272 |                     |        |
| 37.3                           | 12.305 |                     |        |
| 37.4                           | 12.338 |                     |        |
| 37.5                           | 12.372 |                     |        |
| 37.6                           | 12.405 |                     |        |
| 37.7                           | 12.438 |                     |        |
| 37.8                           | 12.472 |                     |        |
| 37.9                           | 12.505 |                     |        |
| 38.0                           | 12.538 |                     |        |
| 38.1                           | 12.572 |                     |        |
| 38.2                           | 12.605 |                     |        |
| 38.3                           | 12.638 |                     |        |
| 38.4                           | 12.672 |                     |        |
| 38.5                           | 12.705 |                     |        |
| 38.6                           | 12.738 |                     |        |
| 38.7                           | 12.772 |                     |        |
| 38.8                           | 12.805 |                     |        |
| 38.9                           | 12.838 |                     |        |
| 39.0                           | 12.872 |                     |        |
| 39.1                           | 12.905 |                     |        |
| 39.2                           | 12.938 |                     |        |
| 39.3                           | 12.972 |                     |        |
| 39.4                           | 13.005 |                     |        |
| 39.5                           | 13.038 |                     |        |
| 39.6                           | 13.072 |                     |        |
| 39.7                           | 13.105 |                     |        |
| 39.8                           | 13.138 |                     |        |
| 39.9                           | 13.172 |                     |        |
| 40.0                           | 13.205 |                     |        |
| 40.1                           | 13.238 |                     |        |
| 40.2                           | 13.272 |                     |        |
| 40.3                           | 13.305 |                     |        |
| 40.4                           | 13.338 |                     |        |
| 40.5                           | 13.3   |                     |        |





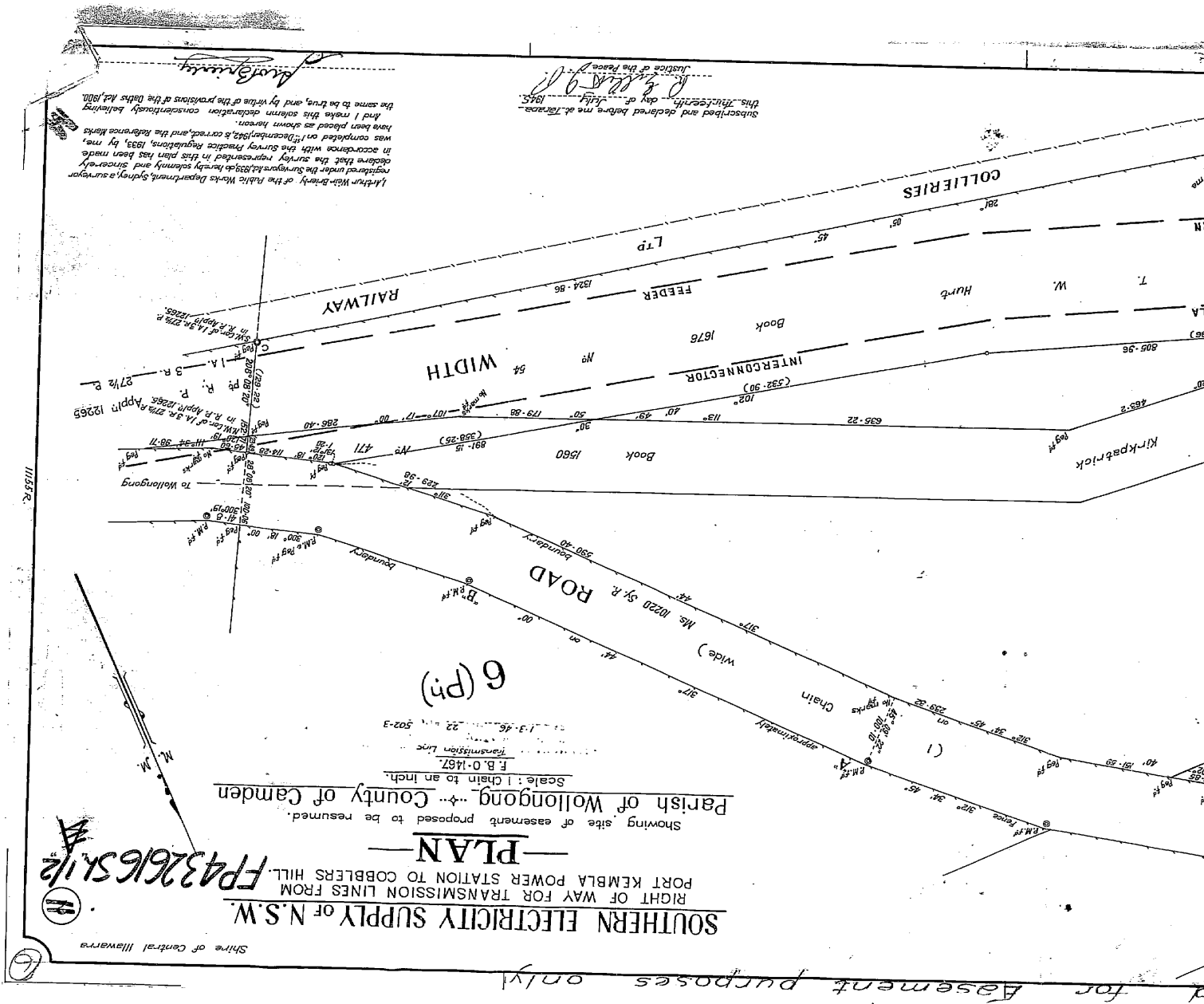
1. Bruce Richard Davies, Registrar General for New South Wales, certify that this register is a photograph made as a permanent record of a document in my custody this 10th day of June, 1980.

APPROVED AND/OR ADDITIONS NOTED ON  
PLAN IN REGISTRAR GENERAL'S OFFICE.

CONVERSION TABLE ADDED IN  
DEPARTMENT OF LANDS

| FEET INCHES | SH | 1/2 | METRES  |
|-------------|----|-----|---------|
| 140         | -  |     | 42.672  |
| LINKS       |    |     | METRES  |
| 1.11        |    |     | 0.223   |
| 1.2         |    |     | 0.241   |
| 1.3         |    |     | 1.006   |
| 1.4         |    |     | 3.174   |
| 1.5         |    |     | 4.225   |
| 1.6         |    |     | 7.594   |
| 1.7         |    |     | 8.922   |
| 1.8         |    |     | 9.173   |
| 1.9         |    |     | 10.332  |
| 2.0         |    |     | 10.338  |
| 2.1         |    |     | 13.152  |
| 2.2         |    |     | 67.05   |
| 2.3         |    |     | 15.834  |
| 2.4         |    |     | 18.314  |
| 2.5         |    |     | 19.857  |
| 2.6         |    |     | 20.117  |
| 2.7         |    |     | 20.129  |
| 2.8         |    |     | 20.137  |
| 2.9         |    |     | 21.193  |
| 3.0         |    |     | 22.989  |
| 3.1         |    |     | 23.016  |
| 3.2         |    |     | 25.995  |
| 3.3         |    |     | 26.073  |
| 3.4         |    |     | 26.679  |
| 3.5         |    |     | 29.010  |
| 3.6         |    |     | 29.113  |
| 3.7         |    |     | 30.320  |
| 3.8         |    |     | 30.495  |
| 3.9         |    |     | 30.720  |
| 4.0         |    |     | 34.947  |
| 4.1         |    |     | 36.186  |
| 4.2         |    |     | 38.222  |
| 4.3         |    |     | 40.564  |
| 4.4         |    |     | 41.968  |
| 4.5         |    |     | 42.597  |
| 4.6         |    |     | 42.672  |
| 4.7         |    |     | 42.676  |
| 4.8         |    |     | 44.106  |
| 4.9         |    |     | 46.094  |
| 5.0         |    |     | 46.265  |
| 5.1         |    |     | 47.435  |
| 5.2         |    |     | 48.144  |
| 5.3         |    |     | 51.865  |
| 5.4         |    |     | 57.615  |
| 5.5         |    |     | 63.129  |
| 5.6         |    |     | 72.068  |
| 5.7         |    |     | 73.358  |
| 5.8         |    |     | 89.139  |
| 5.9         |    |     | 93.101  |
| 6.0         |    |     | 107.092 |
| 6.1         |    |     | 111.038 |
| 6.2         |    |     | 116.026 |
| 6.3         |    |     | 117.156 |
| 6.4         |    |     | 121.096 |
| 6.5         |    |     | 146.041 |
| 6.6         |    |     | 149.133 |
| 6.7         |    |     | 266.319 |

AC RD P SO M  
1 3 27 1/2 7778



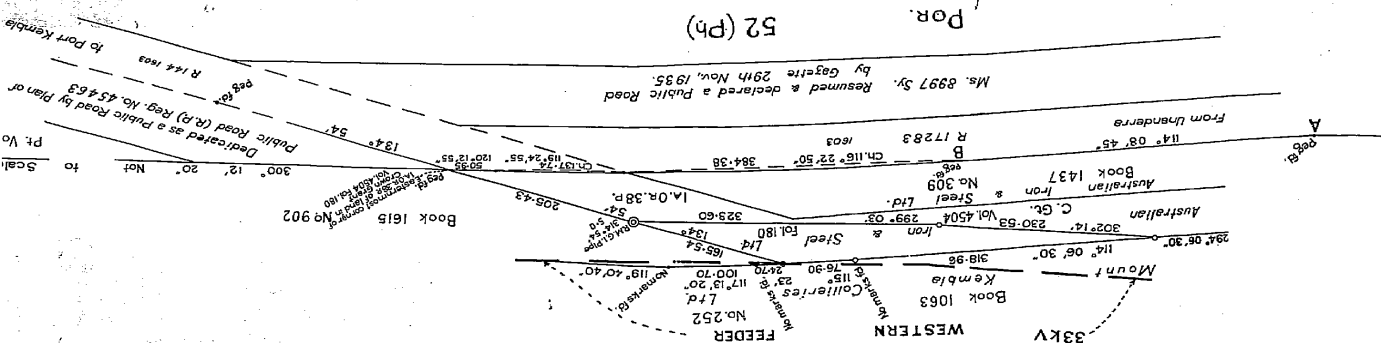


|                                                                                                                                                                                               |                                      |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|
| PLAN IN REGISTRATION OFFICE.                                                                                                                                                                  | AMENDMENTS AND/OR ADDITIONS NOTED ON |
| I, Bruce Richard Davies, Registrar General for New South Wales, certify that this negative is a photograph made as a permanent record of a document in my custody this 10th day of June, 1980 |                                      |

| CONVERSION TABLE ADDED IN<br>DEPARTMENT OF LANDS |         |
|--------------------------------------------------|---------|
| DP 432616 SH 2/2                                 |         |
| LINKS                                            | M FRES  |
| 5                                                | 1.006   |
| 24.7                                             | 4.969   |
| 50.95                                            | 10.250  |
| 76.9                                             | 15.470  |
| 100.7                                            | 20.258  |
| 137.74                                           | 27.709  |
| 165.54                                           | 33.301  |
| 209.43                                           | 41.326  |
| 230.53                                           | 46.375  |
| 318.96                                           | 64.165  |
| 323.6                                            | 65.098  |
| 384.38                                           | 77.325  |
| 2783.4                                           | 559.931 |
| AC RD P                                          | SO M    |
| 1 - 38                                           | 5006    |
| 2 - 17 3/4                                       | 8543    |

Subscribed and declared before me  
this Thirtieth day of  
July.

Azimuth taken from line A'B' (R17283) to B' (R17283) 1003



Shewing site of proposed easement  
Parish of Wollongong - County of Camden  
Scale: Chain to an inch.  
F.B. 01472 & 01473  
S.V. 01472 & 01473  
S.V. 01472 & 01473  
S.V. 01472 & 01473

Southern Electricity Supply of N.S.W. v. The State of New South Wales  
RIGHT OF WAY FOR TRANSMISSION LINES FROM PORT KEMBLA POWER STATION TO COBBLE

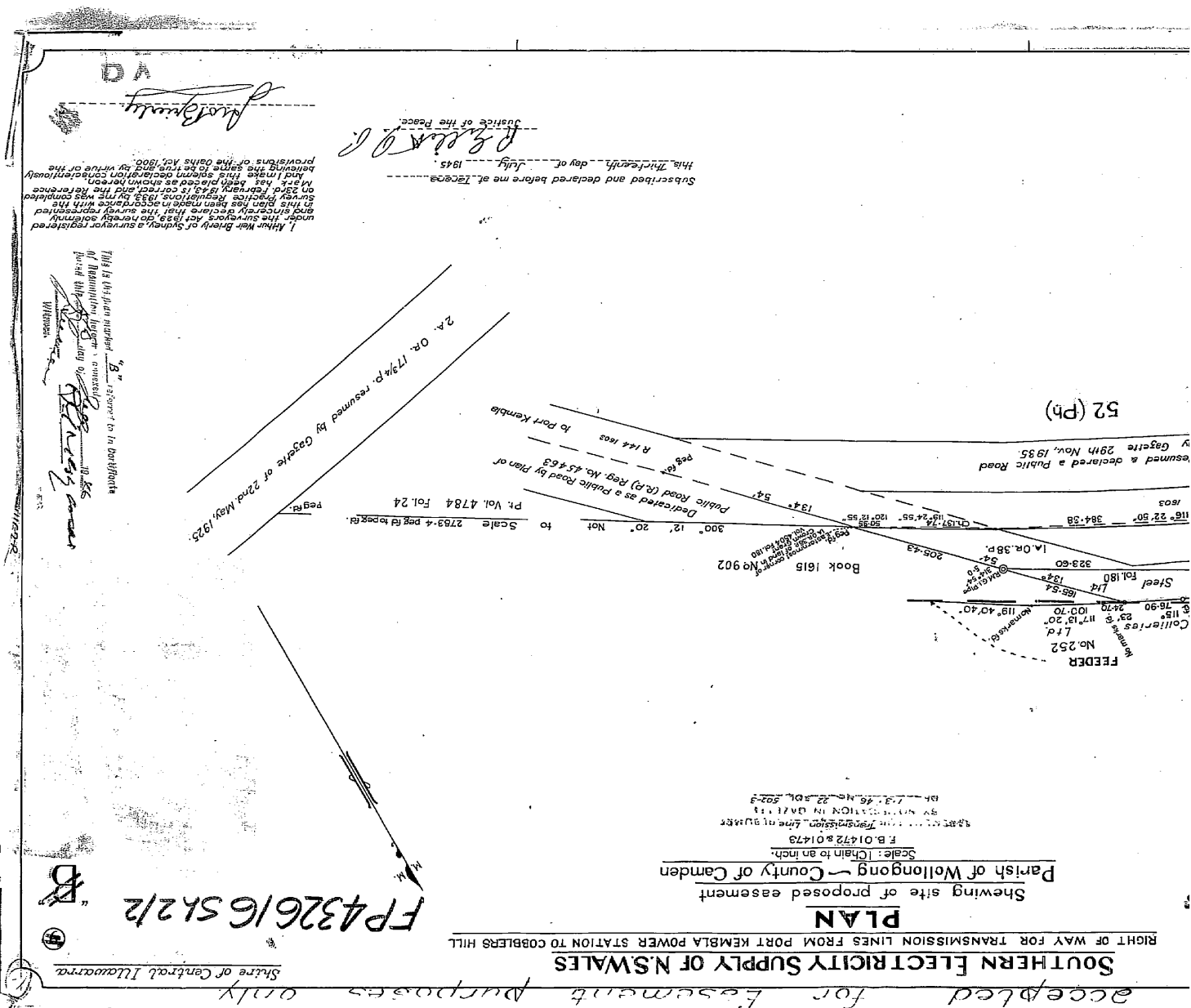
D520705 Plan B of 2 Plans

PWD



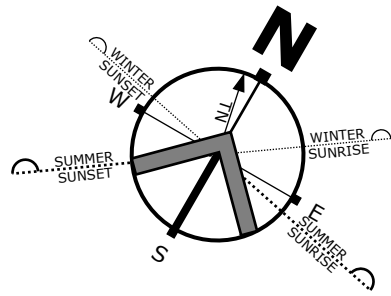
|                                                                                                                                                                                               |                                                 |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|
| AMENDMENTS AND/OR ADDITIONS NOTED ON<br>PLAN IN REGISTRAR GENERAL'S OFFICE.                                                                                                                   | 10<br>9<br>8<br>7<br>6<br>5<br>4<br>3<br>2<br>1 |
| I, Bruce Richard Davies, Registrar General for New South Wales, certify that this negative is a photograph made as a permanent record of a document in my custody this 10th day of June, 1960 | 10<br>9<br>8<br>7<br>6<br>5<br>4<br>3<br>2<br>1 |

| CONVERSION TABLE ADDED IN<br>DEPARTMENT OF LANDS |         |
|--------------------------------------------------|---------|
| DP 432616 SH 2/2                                 |         |
| LINKS                                            | METRES  |
| 5                                                | 1.006   |
| 24.7                                             | 4.969   |
| 50.95                                            | 10.280  |
| 76.9                                             | 15.470  |
| 100.7                                            | 20.298  |
| 131.14                                           | 27.709  |
| 165.34                                           | 33.301  |
| 205.93                                           | 41.326  |
| 235.96                                           | 46.375  |
| 264.98                                           | 64.165  |
| 2783.4                                           | 65.098  |
|                                                  | 77.325  |
|                                                  | 559.931 |
| AC RD P                                          | SO M    |
| 1 - 36                                           | 5008    |
| 2 - 17 3/4                                       | 8543    |



## **APPENDIX # 4**

### **Development Plans**



| AREA SCHEDULE: |   |               |
|----------------|---|---------------|
| LAND           | = | 157,334.49 M2 |
| DWELLING       | = | 279.72 M2     |
| PLOT RATIO     | = | 0.18 %        |

DESIGNS, PLANS, SKETCHES AND DOCUMENTATION HEREIN ALWAYS REMAIN THE INTELLECTUAL PROPERTY OF GC BUILDING PTY LTD.

OWNERSHIP IS NOT INFERED BY THE PRESENCE OF ANOTHER PARTY OR FIRM'S NAME CONTAINED HEREIN THE DESIGN SET.

THIS MAY NOT BE COPIED, ADAPTED OR REPRODUCED WITHOUT PRIOR APPROVAL IN WRITING.

REFER TO SITE CLASSIFICATION & SITE ASSESSMENT FOR EFFLUENT DISPOSAL SYSTEM REPORT SE24-009 DATED 23 FEBRUARY 2024

DETAIL SURVEY AND CONTOURS PREPARED BY SRD LAND CONSULTANTING

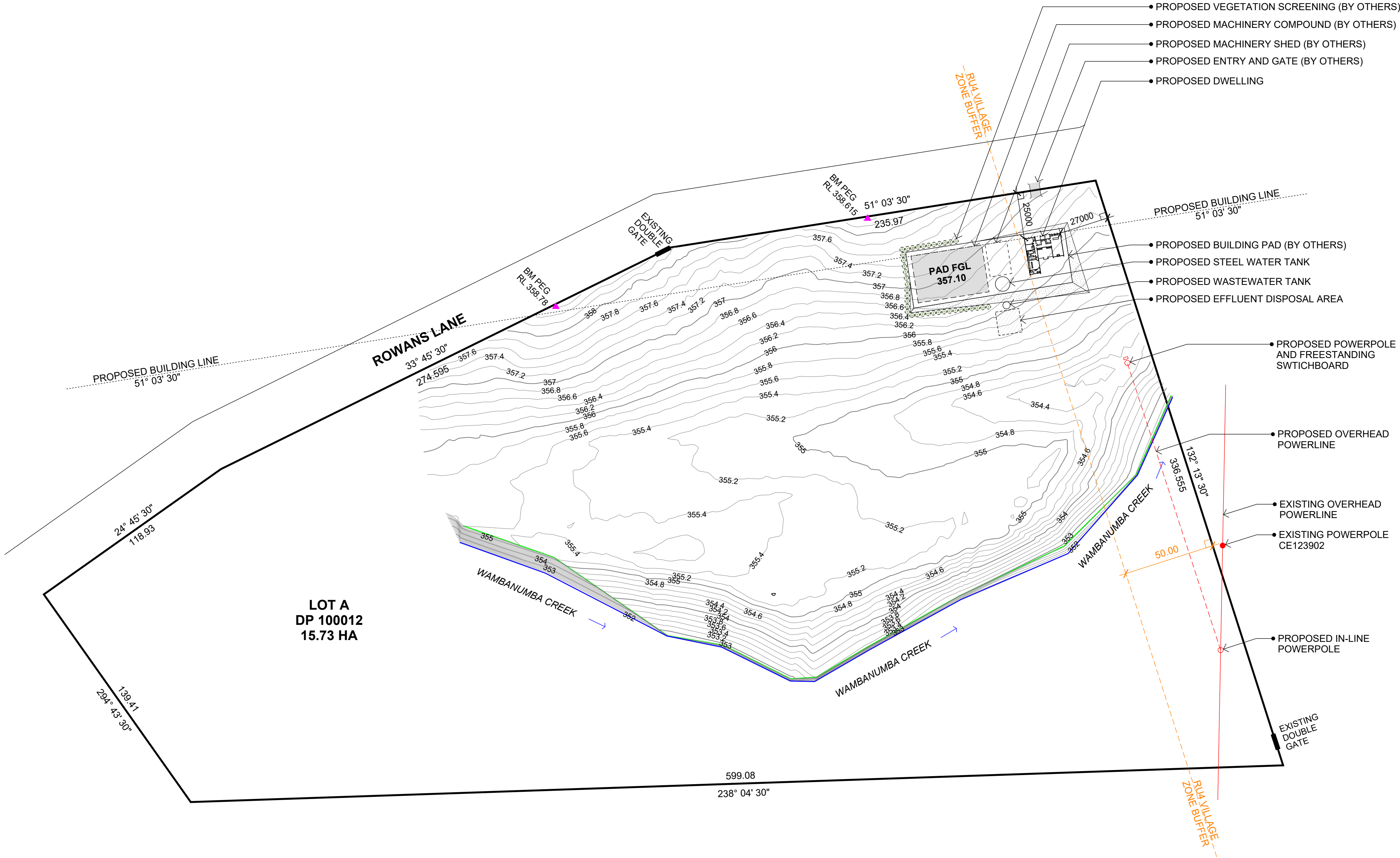
PROJECT NO: 40162  
DATE: 12/02/2024  
PLAN EDITION: A  
PLAN NUMBER: 40162-A-2024-02-12-EK  
SHEET: 1 OF 1

ORIGIN: SCIMS  
SSM 6794 - RL: 353.789  
BM - PEG RL: 358.615  
BM - PEG RL: 358.780  
HEIGHT DATUM: AHD

CONTOUR INT: 0.20m

FIGURED DIMENSIONS SHALL BE USED IN PREFERENCE TO SCALING OF DRAWINGS.

GROUND LINES ARE INDICATIVE ONLY AND MUST BE VERIFIED ON-SITE.



PRELIMINARY

DESCRIPTION  
Site Plan

PROJECT NO.  
1250

DRAWN BY  
CM

SCALE  
1:1500 (A2)

AMDT  
H

DATE  
13/06/24

CLIENT/BUILDING SITE  
Alex Slavin & Tori Pope  
Lot A DP100012  
Rowans Lane  
Bendick Murrell NSW 2594

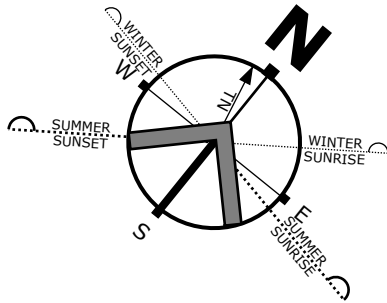
BUILDER  
GC Building Pty Ltd  
Young, NSW 2594  
02 6382 7663  
BLN: 286746C



COPYRIGHT



01



| AREA SCHEDULE: |          |    |
|----------------|----------|----|
| LIVING         | = 230.64 | M2 |
| PORCH          | = 4.86   | M2 |
| ALFRESCO       | = 44.23  | M2 |
| TOTAL          | = 279.72 | M2 |

DESIGNS, PLANS, SKETCHES AND DOCUMENTATION HEREIN ALWAYS REMAIN THE INTELLECTUAL PROPERTY OF GC BUILDING PTY LTD.

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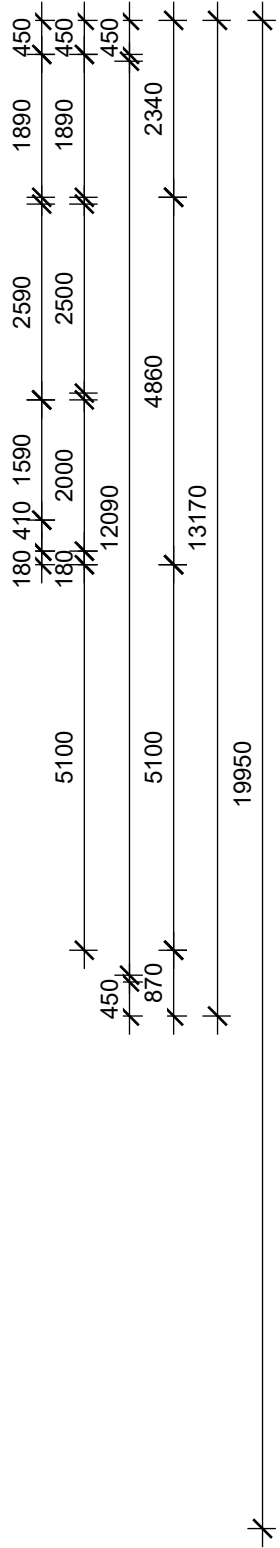
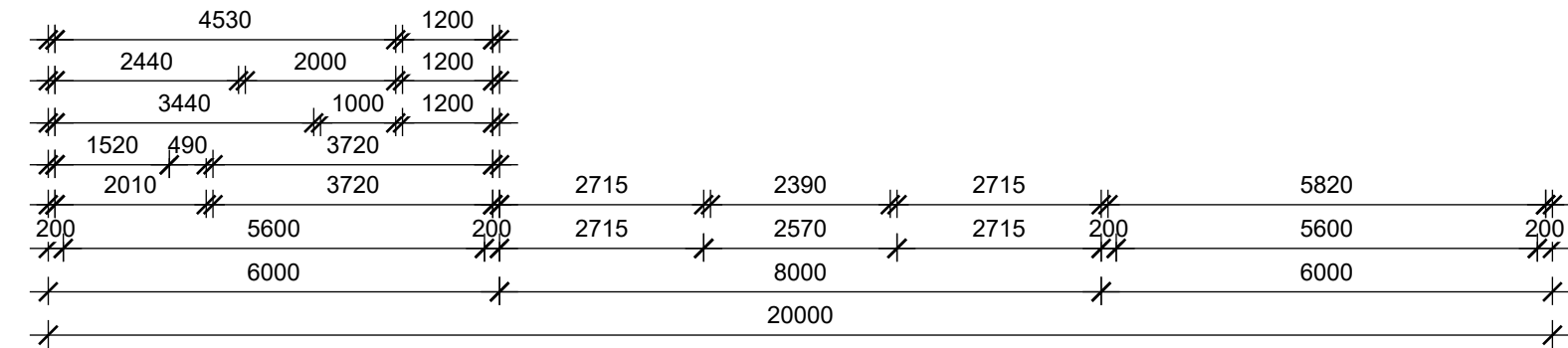
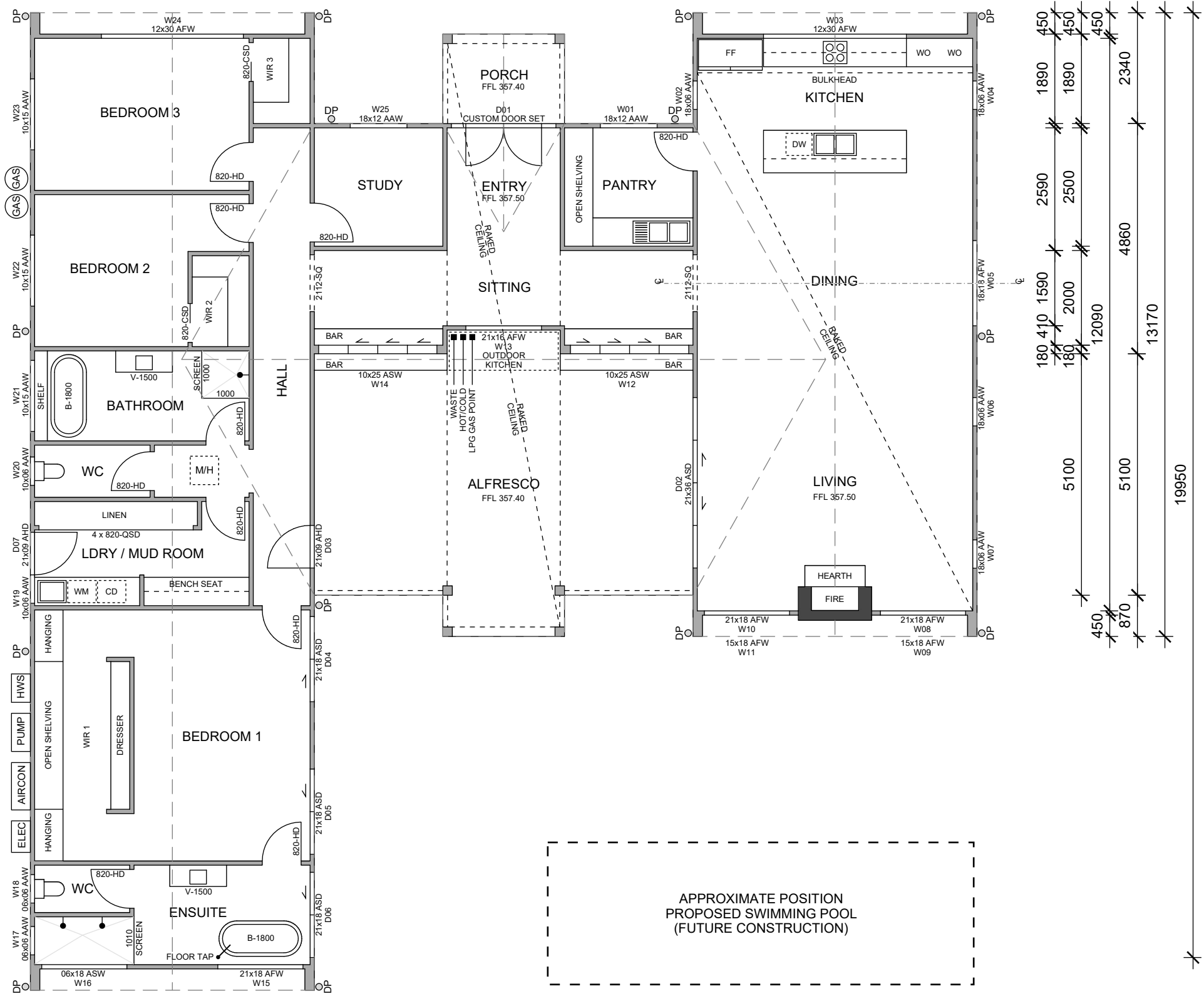
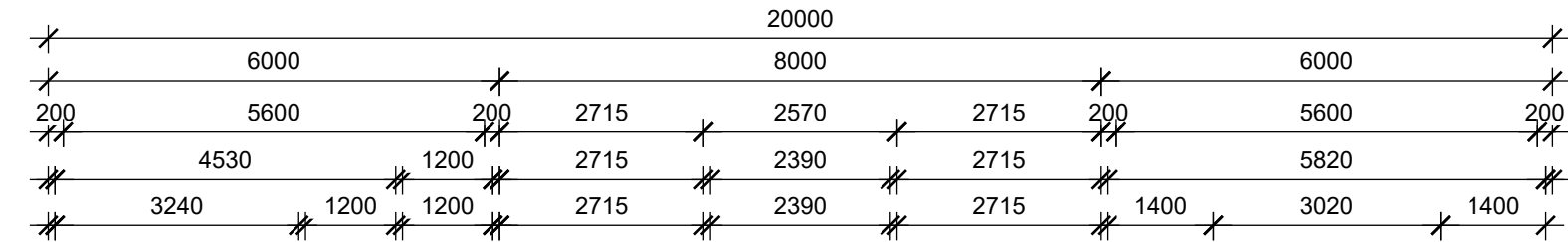
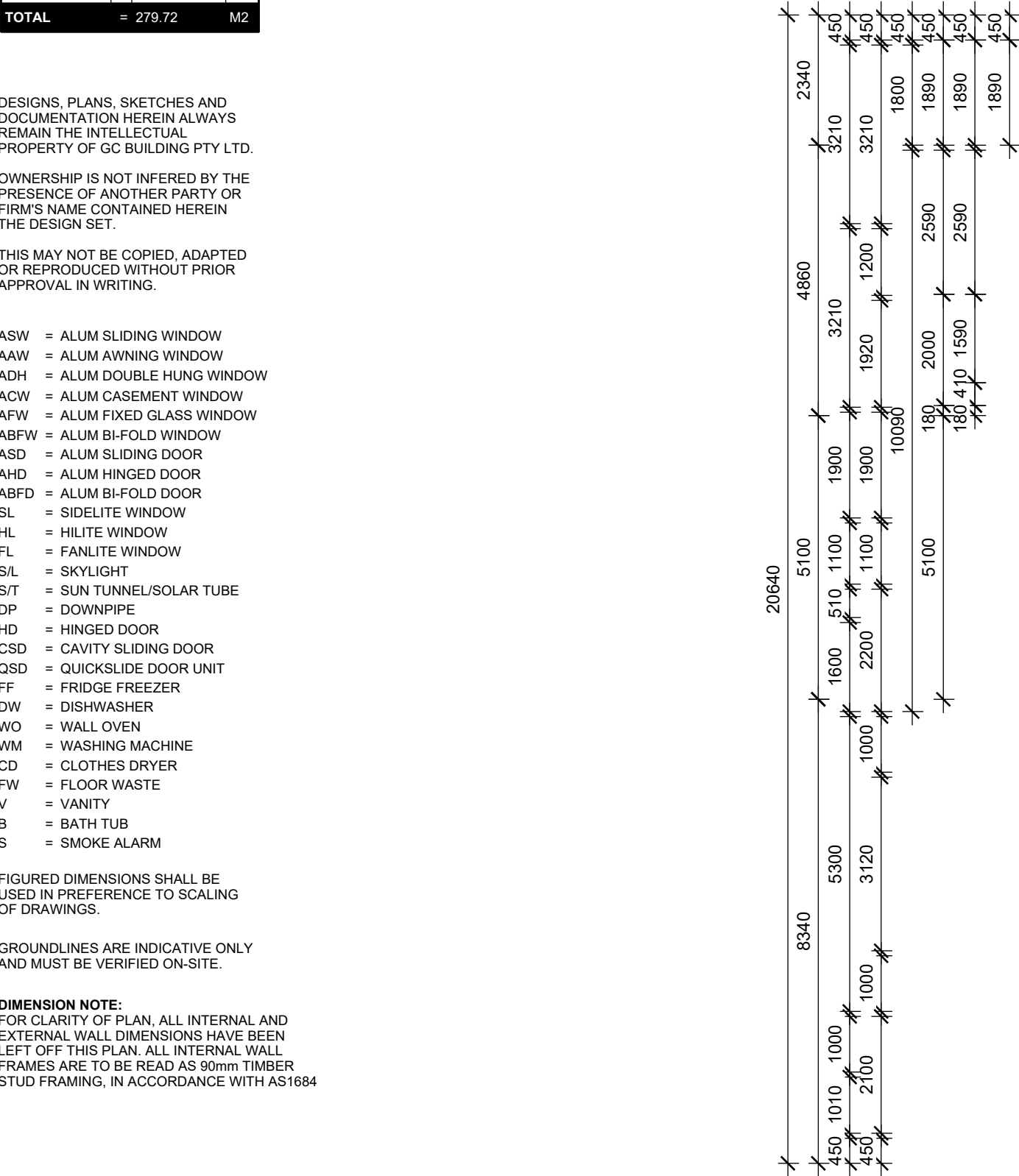
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- ASW = ALUM SLIDING WINDOW  
AAW = ALUM AWNING WINDOW  
ADH = ALUM DOUBLE HUNG WINDOW  
ACW = ALUM CASEMENT WINDOW  
AFW = ALUM FIXED GLASS WINDOW  
ABFW = ALUM BI-FOLD WINDOW  
ASD = ALUM SLIDING DOOR  
AHD = ALUM HINGED DOOR  
ABFD = ALUM BI-FOLD DOOR  
SL = SIDELITE WINDOW  
HL = HILITE WINDOW  
FL = FANLITE WINDOW  
S/L = SKYLIGHT  
S/T = SUN TUNNEL/SOLAR TUBE  
DP = DOWNPIPE  
HD = HINGED DOOR  
CSD = CAVITY SLIDING DOOR  
QSD = QUICKSLIDE DOOR UNIT  
FF = FRIDGE FREEZER  
DW = DISHWASHER  
WO = WALL OVEN  
WM = WASHING MACHINE  
CD = CLOTHES DRYER  
FW = FLOOR WASTE  
V = VANITY  
B = BATH TUB  
S = SMOKE ALARM

FIGURED DIMENSIONS SHALL BE USED IN PREFERENCE TO SCALING OF DRAWINGS.

GROUNDLINES ARE INDICATIVE ONLY AND MUST BE VERIFIED ON-SITE.

**DIMENSION NOTE:**  
FOR CLARITY OF PLAN, ALL INTERNAL AND EXTERNAL WALL DIMENSIONS HAVE BEEN LEFT OFF THIS PLAN. ALL INTERNAL WALL FRAMES ARE TO BE READ AS 90mm TIMBER STUD FRAMING, IN ACCORDANCE WITH AS1684



PRELIMINARY

DESCRIPTION  
Floor Plan

PROJECT NO.  
1250

DRAWN BY  
CM

SCALE  
1:100 (A2)

AMDT  
H

DATE  
13/06/24

CLIENT/BUILDING SITE  
Alex Slavin & Tori Pope  
Lot A DP100012  
Rowans Lane  
Bendick Murrell NSW 2594

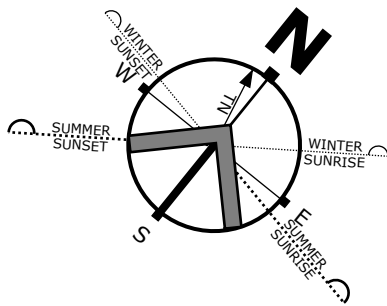
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GC Building Pty Ltd  
Young, NSW 2594  
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BLN: 286746C



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02



| AREA SCHEDULE: |          |    |
|----------------|----------|----|
| LIVING         | = 230.70 | M2 |
| PORCH          | = 4.86   | M2 |
| ALFRESCO       | = 41.93  | M2 |
| TOTAL          | = 277.49 | M2 |

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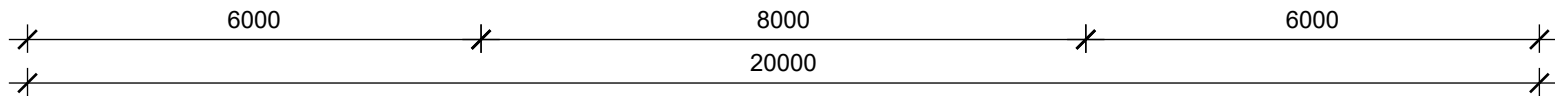
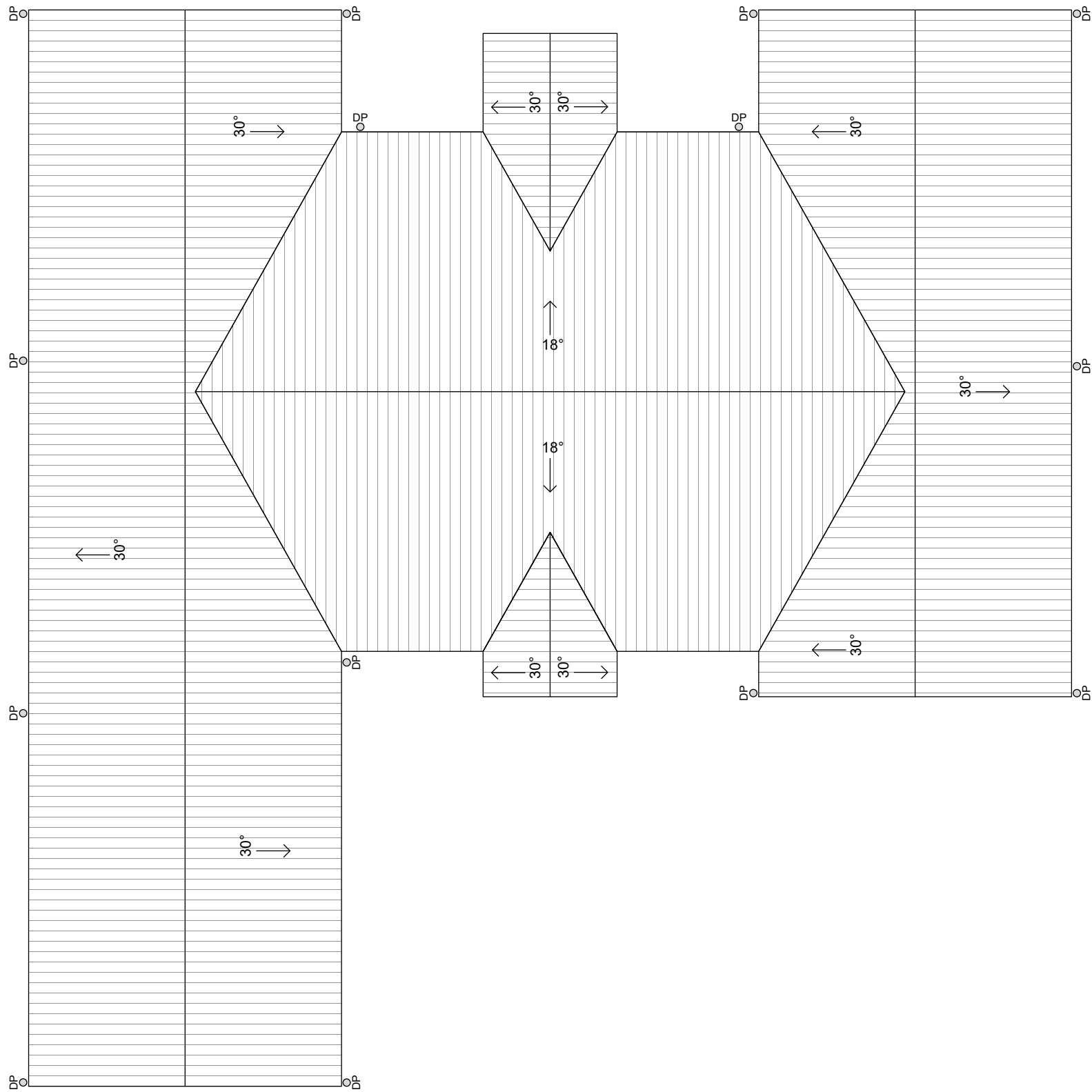
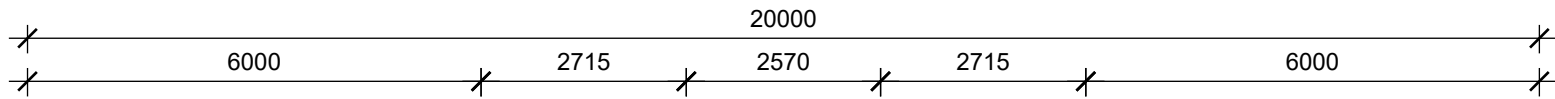
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- FL = FANLITE WINDOW
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FIGURED DIMENSIONS SHALL BE USED IN PREFERENCE TO SCALING OF DRAWINGS.

GROUNDLINES ARE INDICATIVE ONLY AND MUST BE VERIFIED ON-SITE.

**DIMENSION NOTE:**  
FOR CLARITY OF PLAN, ALL INTERNAL AND EXTERNAL WALL DIMENSIONS HAVE BEEN LEFT OFF THIS PLAN. ALL INTERNAL WALL FRAMES ARE TO BE READ AS 90mm TIMBER STUD FRAMING, IN ACCORDANCE WITH AS1684



PRELIMINARY

DESCRIPTION  
Roof Plan

PROJECT NO.  
1250

DRAWN BY  
CM

SCALE  
1:100 (A2)

AMDT  
H

DATE  
13/06/24

CLIENT/BUILDING SITE  
Alex Slavin & Tori Pope  
Lot A DP100012  
Rowans Lane  
Bendick Murrell NSW 2594

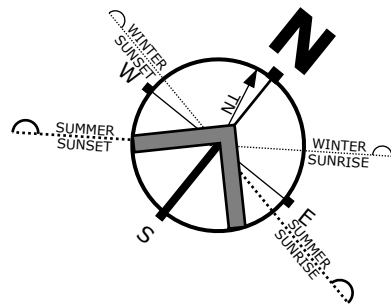
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03



| AREA SCHEDULE: |   |           |
|----------------|---|-----------|
| LIVING         | = | 230.70 M2 |
| PORCH          | = | 4.86 M2   |
| ALFRESCO       | = | 41.93 M2  |
| TOTAL          | = | 277.49 M2 |

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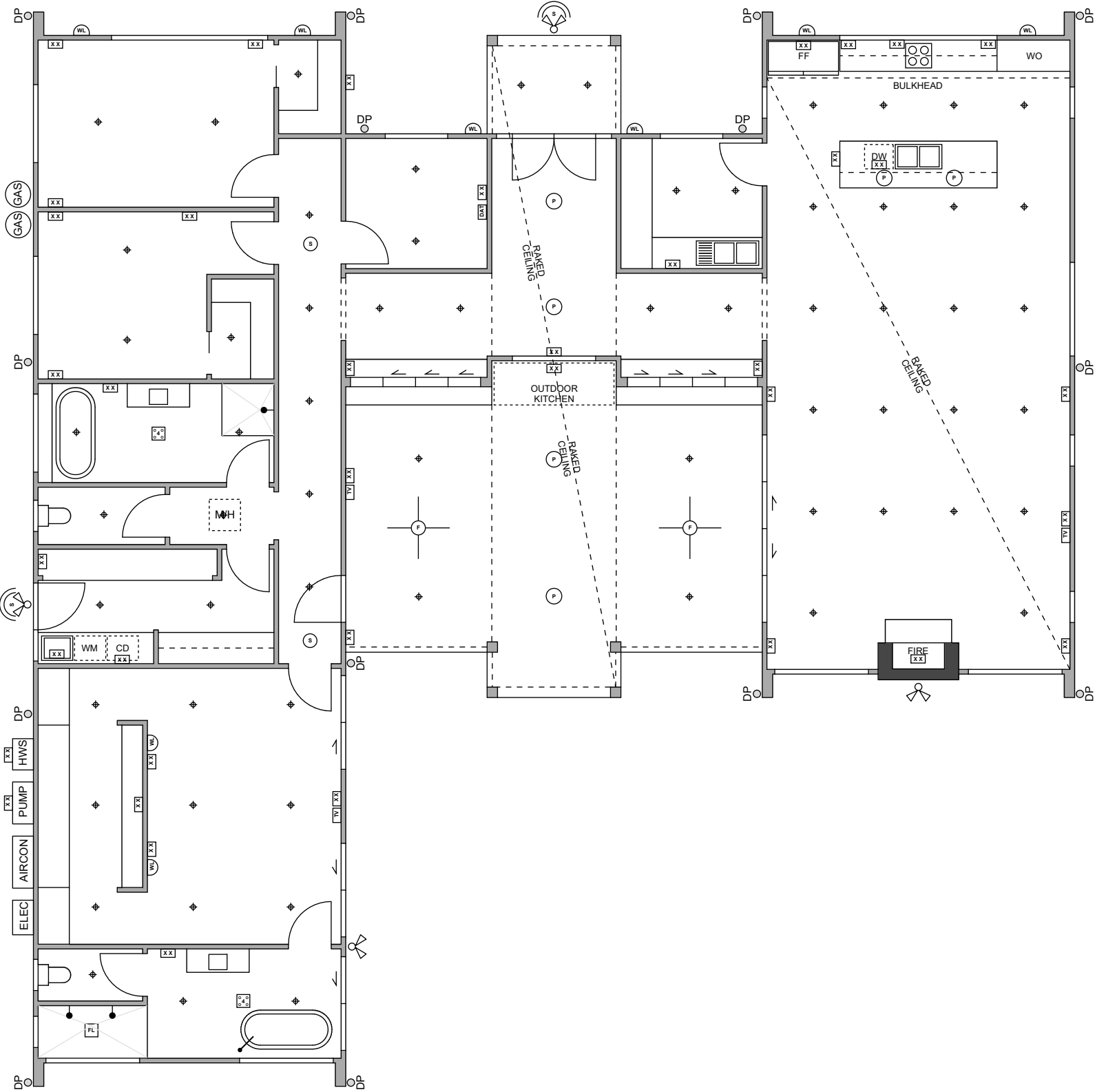
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- FW = FLOOR WASTE
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- S = SMOKE ALARM

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FOR CLARITY OF PLAN, ALL INTERNAL AND EXTERNAL WALL DIMENSIONS HAVE BEEN LEFT OFF THIS PLAN. ALL INTERNAL WALL FRAMES ARE TO BE READ AS 90mm TIMBER STUD FRAMING, IN ACCORDANCE WITH AS1684



| SYMBOL | ITEM                   | SPECIFICATION                          | QTY |
|--------|------------------------|----------------------------------------|-----|
| ◆      | DOWNLIGHT              | CLIPSAL 7W TRI-COLOUR DIMMABLE         | 67  |
| —      | LED BATTEN LIGHT       | PIERLITE 36W ECO LED BATTEN            | -   |
| ○      | PENDANT LIGHT          | CUSTOMER TO SUPPLY                     | 6   |
| ⌋      | WALL LIGHT             | CUSTOMER TO SUPPLY                     | 8   |
| ⋈      | DUAL SPOTLIGHT         | SAL STARGEM TWIN 15W                   | 2   |
| ⋈      | DUAL SENSOR SPOTLIGHT  | SAL STARGEM TWIN 15W W SENSOR          | 2   |
| ⌈      | EXHAUST FAN            | CLIPSAL CEF40 WITH DUCTING KIT         | -   |
| ⌈      | EXHAUST FAN WITH LIGHT | CLIPSAL CEF30L WITH DUCTING KIT        | 1   |
| ⊗      | CEILING FAN            | CLIPSAL CALOUNDRA CEILING FAN          | 2   |
| ⊗      | CEILING FAN WITH LIGHT | CLIPSAL CALOUNDRA CEILING FAN W LIGHT  | -   |
| ⌈      | DOUBLE GPO             | CLIPSAL ICONIC DOUBLE GPO              | 33  |
| ⌈      | WEATHERPROOF GPO       | CLIPSAL ICONIC OUTDOOR GPO             | 5   |
| ⌈      | DATA POINT             | CLIPSAL ICONIC RJ45 (DUAL TERMINATION) | 1   |
| ⌈      | TV POINT               | CLIPSAL ICONIC PAL ANTENNA SOCKET      | 3   |
| ⊙      | SMOKE DETECTOR         | CLIPSAL SURFACE MOUNT PHOTOELECTRIC    | 2   |

PRELIMINARY

DESCRIPTION  
Electrical Plan

PROJECT NO.  
1250

DRAWN BY  
CM

SCALE  
1:100 (A2)

AMDT  
H

DATE  
13/06/24

CLIENT/BUILDING SITE  
Alex Slavin & Tori Pope  
Lot A DP100012  
Rowans Lane  
Bendick Murrell NSW 2594

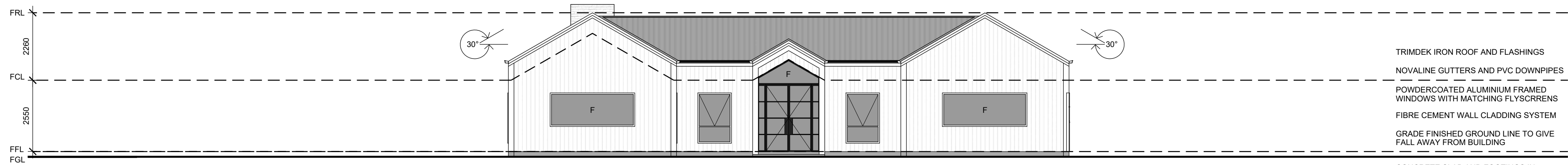
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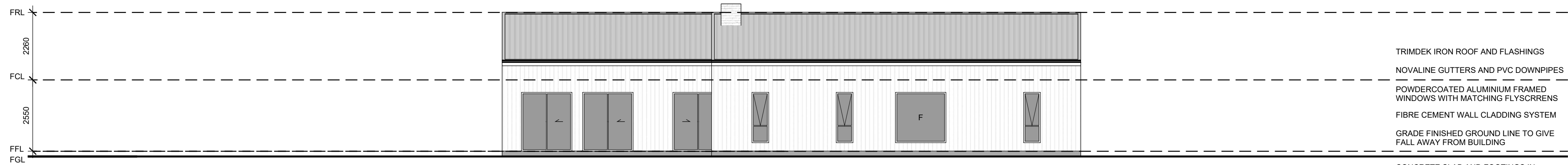
04



NORTH-WEST ELEVATION

TRIMDEK IRON ROOF AND FLASHINGS  
NOVALINE GUTTERS AND PVC DOWNPIPES  
POWDERCOATED ALUMINIUM FRAMED  
WINDOWS WITH MATCHING FLYSCRRENS  
FIBRE CEMENT WALL CLADDING SYSTEM  
GRADE FINISHED GROUND LINE TO GIVE  
FALL AWAY FROM BUILDING

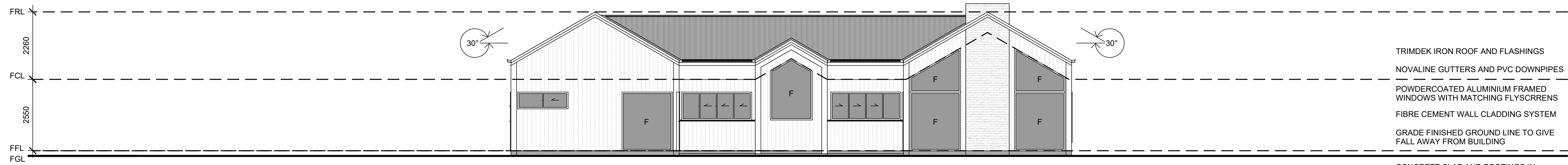
CONCRETE SLAB AND FOOTINGS IN  
ACCORDANCE WITH AS2870 AND/OR  
ENGINEER'S SPECIFICATIONS



NORTH-EAST ELEVATION

TRIMDEK IRON ROOF AND FLASHINGS  
NOVALINE GUTTERS AND PVC DOWNPIPES  
POWDERCOATED ALUMINIUM FRAMED  
WINDOWS WITH MATCHING FLYSCRRENS  
FIBRE CEMENT WALL CLADDING SYSTEM  
GRADE FINISHED GROUND LINE TO GIVE  
FALL AWAY FROM BUILDING

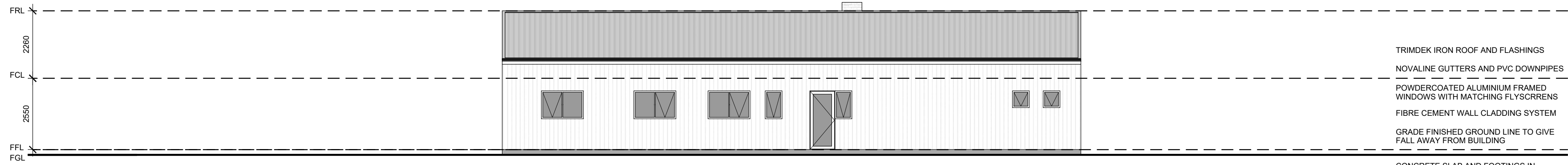
CONCRETE SLAB AND FOOTINGS IN  
ACCORDANCE WITH AS2870 AND/OR  
ENGINEER'S SPECIFICATIONS



SOUTH-EAST ELEVATION

TRIMDEK IRON ROOF AND FLASHINGS  
NOVALINE GUTTERS AND PVC DOWNPIPES  
POWDERCOATED ALUMINIUM FRAMED  
WINDOWS WITH MATCHING FLYSCRRENS  
FIBRE CEMENT WALL CLADDING SYSTEM  
GRADE FINISHED GROUND LINE TO GIVE  
FALL AWAY FROM BUILDING

CONCRETE SLAB AND FOOTINGS IN  
ACCORDANCE WITH AS2870 AND/OR  
ENGINEER'S SPECIFICATIONS



SOUTH-WEST ELEVATION

TRIMDEK IRON ROOF AND FLASHINGS  
NOVALINE GUTTERS AND PVC DOWNPIPES  
POWDERCOATED ALUMINIUM FRAMED  
WINDOWS WITH MATCHING FLYSCRRENS  
FIBRE CEMENT WALL CLADDING SYSTEM  
GRADE FINISHED GROUND LINE TO GIVE  
FALL AWAY FROM BUILDING

CONCRETE SLAB AND FOOTINGS IN  
ACCORDANCE WITH AS2870 AND/OR  
ENGINEER'S SPECIFICATIONS

PRELIMINARY

DESCRIPTION  
Elevations

PROJECT NO.  
1250

DRAWN BY  
CM

SCALE  
1:100 (A2)

AMDT  
H

DATE  
13/06/24

CLIENT/BUILDING SITE  
Alex Slavin & Tori Pope  
Lot A DP100012  
Rowans Lane  
Bendick Murrell NSW 2594

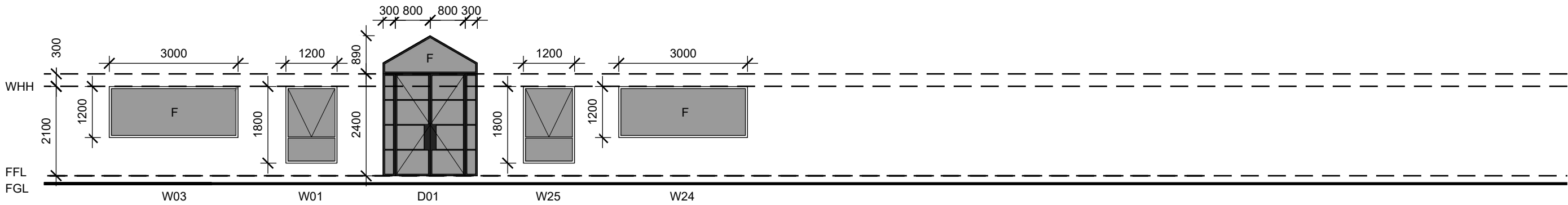
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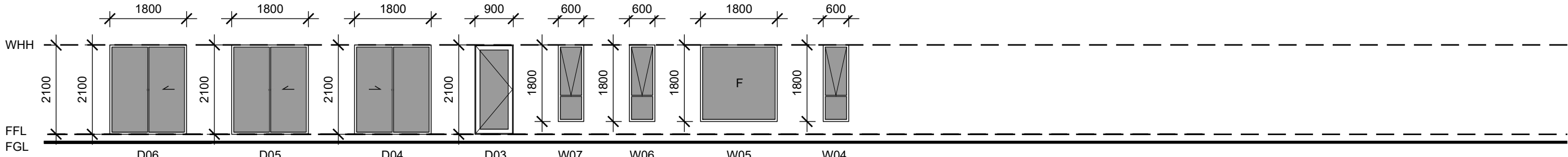
**GC**BUILDING

05

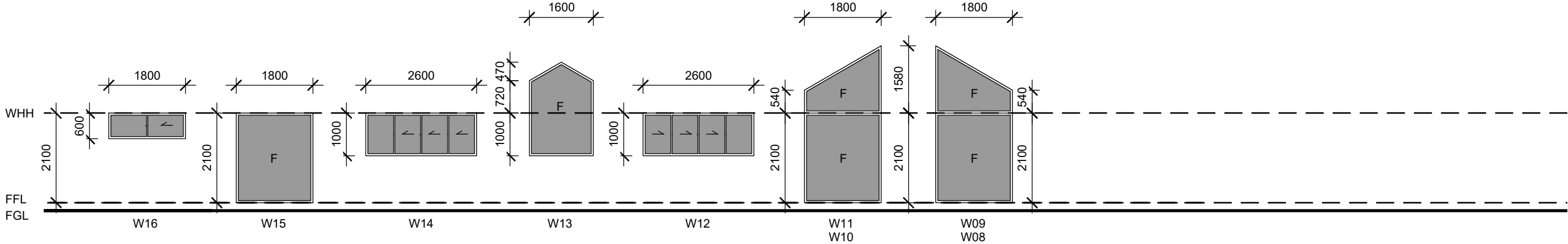
|     | HEIGHT   | WIDTH | HEAD | TYPE                   | FRAME     | GLAZING | GLASS |
|-----|----------|-------|------|------------------------|-----------|---------|-------|
| W01 | 1800     | 1200  | 2100 | AWNING                 | ALUMINIUM | DOUBLE  | CLEAR |
| W02 | 1800     | 600   | 2100 | AWNING                 | ALUMINIUM | DOUBLE  | CLEAR |
| W03 | 1200     | 3000  | 2100 | FIXED                  | ALUMINIUM | DOUBLE  | CLEAR |
| W04 | 1800     | 600   | 2100 | AWNING                 | ALUMINIUM | DOUBLE  | CLEAR |
| W05 | 1800     | 1800  | 2100 | FIXED                  | ALUMINIUM | DOUBLE  | CLEAR |
| W06 | 1800     | 600   | 2100 | AWNING                 | ALUMINIUM | DOUBLE  | CLEAR |
| W07 | 1800     | 600   | 2100 | AWNING                 | ALUMINIUM | DOUBLE  | CLEAR |
| W08 | 2100     | 1800  | 2100 | FIXED                  | ALUMINIUM | DOUBLE  | CLEAR |
| W09 | 1580 COS | 1800  | COS  | FIXED                  | ALUMINIUM | DOUBLE  | CLEAR |
| W10 | 2100     | 1800  | 2100 | FIXED                  | ALUMINIUM | DOUBLE  | CLEAR |
| W11 | 1580 COS | 1800  | COS  | FIXED                  | ALUMINIUM | DOUBLE  | CLEAR |
| W12 | 1000     | 2600  | 2100 | SLIDING                | ALUMINIUM | DOUBLE  | CLEAR |
| W13 | 2190     | 1600  | COS  | FIXED                  | ALUMINIUM | DOUBLE  | CLEAR |
| W14 | 1000     | 2600  | 2100 | SLIDING                | ALUMINIUM | DOUBLE  | CLEAR |
| W15 | 2100     | 1800  | 2100 | FIXED                  | ALUMINIUM | DOUBLE  | CLEAR |
| W16 | 600      | 1800  | 2100 | SLIDING                | ALUMINIUM | DOUBLE  | CLEAR |
| W17 | 600      | 600   | 2100 | AWNING                 | ALUMINIUM | DOUBLE  | CLEAR |
| W18 | 600      | 600   | 2100 | AWNING                 | ALUMINIUM | DOUBLE  | CLEAR |
| W19 | 1000     | 600   | 2100 | AWNING                 | ALUMINIUM | DOUBLE  | CLEAR |
| W20 | 1000     | 600   | 2100 | AWNING                 | ALUMINIUM | DOUBLE  | CLEAR |
| W21 | 1000     | 1500  | 2100 | AWNING                 | ALUMINIUM | DOUBLE  | CLEAR |
| W22 | 1000     | 1500  | 2100 | AWNING                 | ALUMINIUM | DOUBLE  | CLEAR |
| W23 | 1000     | 1500  | 2100 | AWNING                 | ALUMINIUM | DOUBLE  | CLEAR |
| W24 | 1200     | 3000  | 2100 | FIXED                  | ALUMINIUM | DOUBLE  | CLEAR |
| W25 | 1800     | 1200  | 2100 | AWNING                 | ALUMINIUM | DOUBLE  | CLEAR |
| D01 | 3290     | 2200  | -    | CUSTOM HINGED DOOR SET | STEEL     | SINGLE  | CLEAR |
| D02 | 2100     | 3600  | 2100 | SLIDING DOOR           | ALUMINIUM | DOUBLE  | CLEAR |
| D03 | 2100     | 900   | 2100 | HINGED DOOR            | ALUMINIUM | DOUBLE  | CLEAR |
| D04 | 2100     | 1800  | 2100 | SLIDING DOOR           | ALUMINIUM | DOUBLE  | CLEAR |
| D05 | 2100     | 1800  | 2100 | SLIDING DOOR           | ALUMINIUM | DOUBLE  | CLEAR |
| D06 | 2100     | 1800  | 2100 | SLIDING DOOR           | ALUMINIUM | DOUBLE  | CLEAR |
| D07 | 2100     | 900   | 2100 | HINGED DOOR            | ALUMINIUM | DOUBLE  | CLEAR |



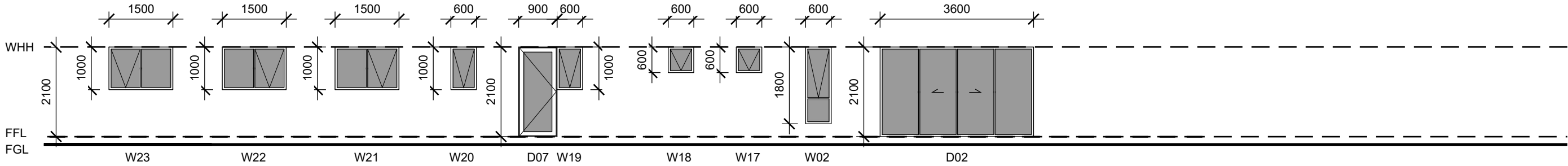
NORTH-WEST



NORTH-EAST



SOUTH-EAST



SOUTH-WEST

PRELIMINARY

DESCRIPTION  
Windows and Doors  
  
PROJECT NO.  
1250

DRAWN BY  
CM  
  
SCALE  
1:100 (A2)

AMDT  
H  
  
DATE  
13/06/24

CLIENT/BUILDING SITE  
Alex Slavin & Tori Pope  
Lot A DP100012  
Rowans Lane  
Bendick Murrell NSW 2594

BUILDER  
GC Building Pty Ltd  
Young, NSW 2594  
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PRELIMINARY

DESCRIPTION  
3D Perspective 1  
PROJECT NO.  
1250

DRAWN BY  
CM  
SCALE  
NTS

AMDT  
H  
DATE  
13/06/24

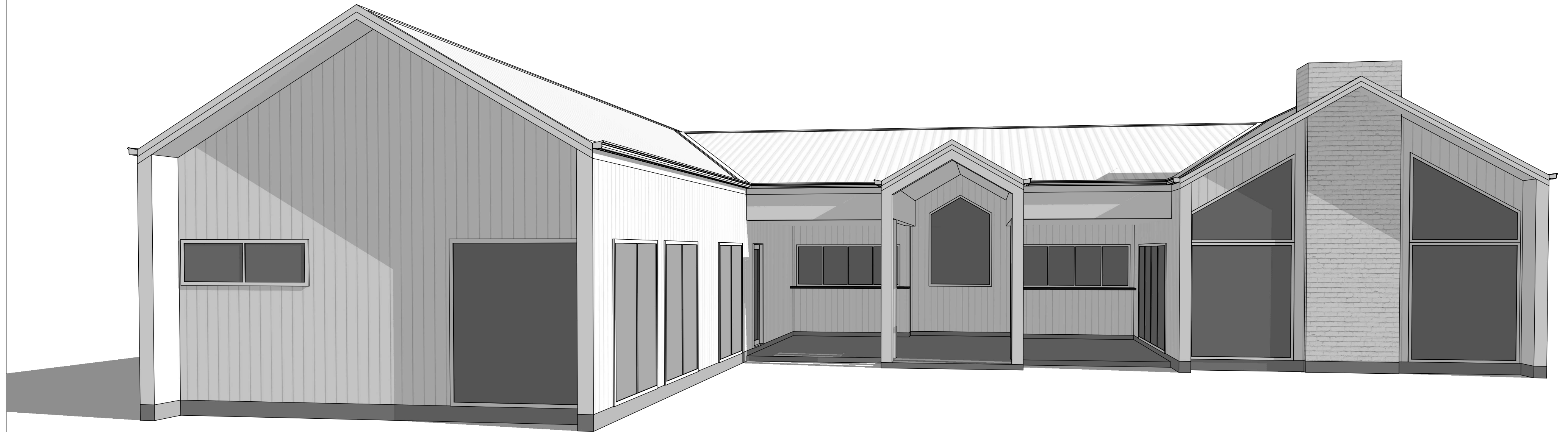
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Lot A DP100012  
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3D Perspective 2  
  
PROJECT NO.  
1250

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SCALE  
NTS

AMDT  
H  
  
DATE  
13/06/24

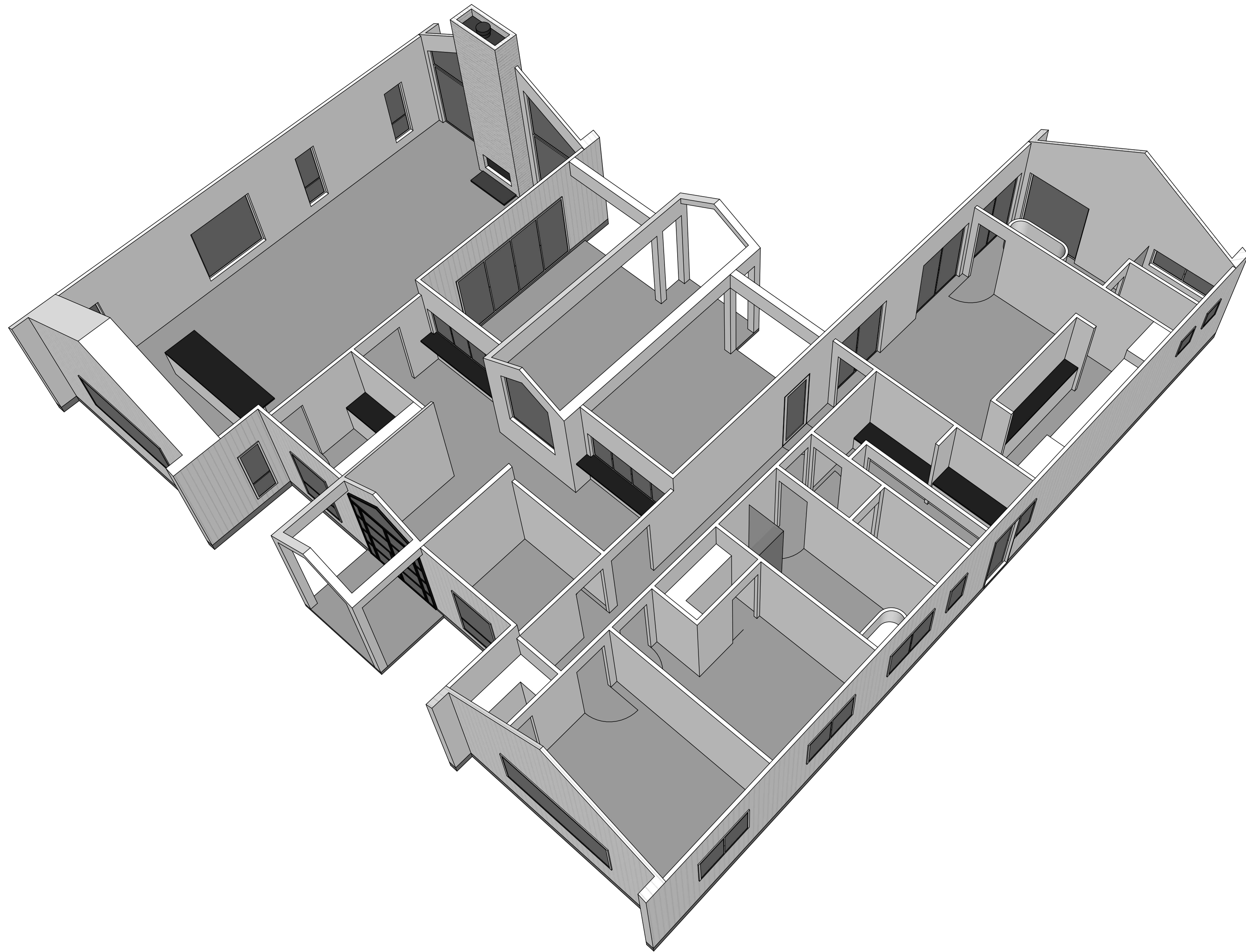
CLIENT/BUILDING SITE  
Alex Slavin & Tori Pope  
Lot A DP100012  
Rowans Lane  
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DESCRIPTION  
3D Plan 1  
PROJECT NO.  
1250

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AMDT  
H  
DATE  
13/06/24

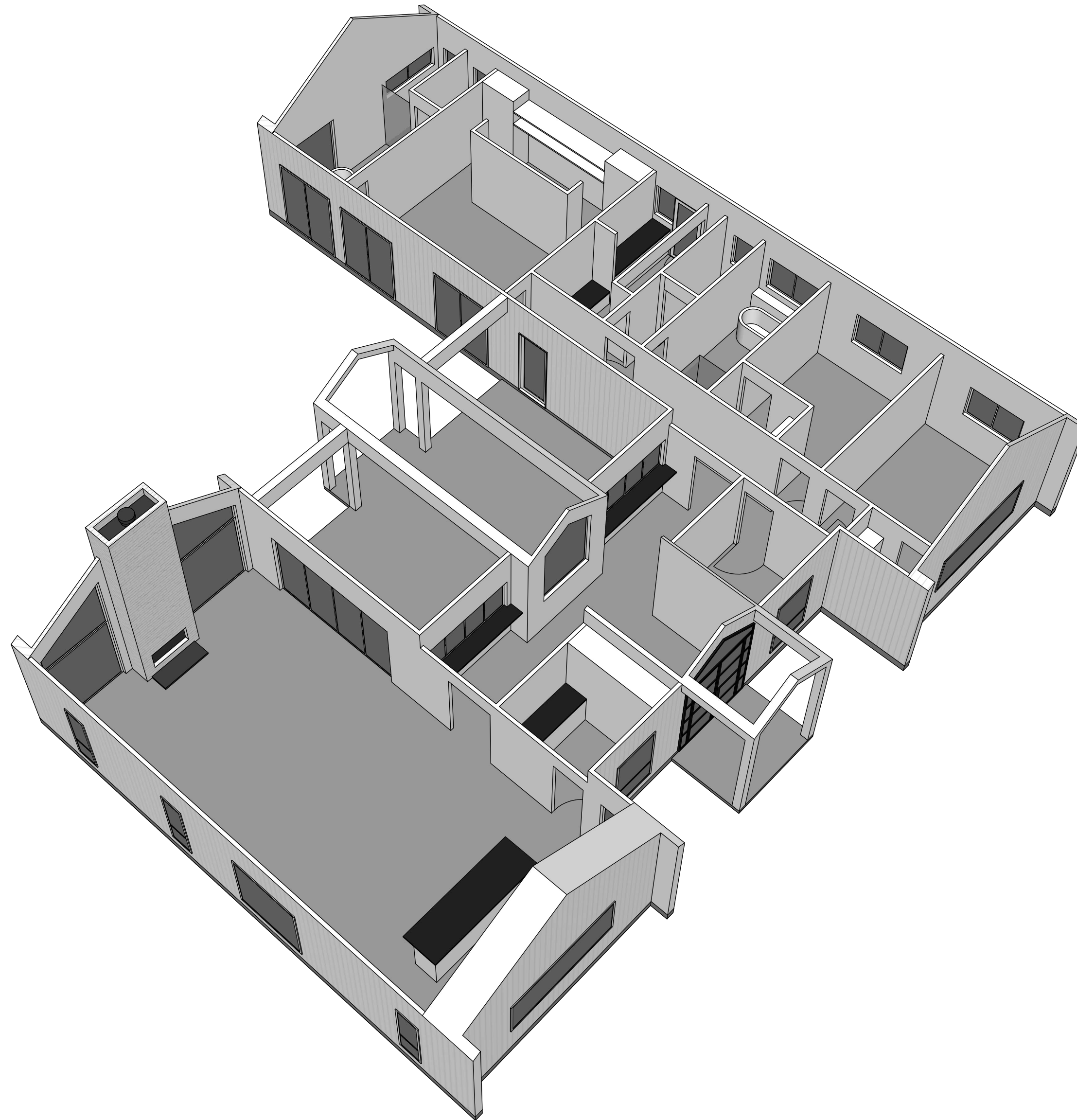
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DESCRIPTION  
3D Plan 2  
PROJECT NO.  
1250

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NTS

AMDT  
H  
DATE  
13/06/24

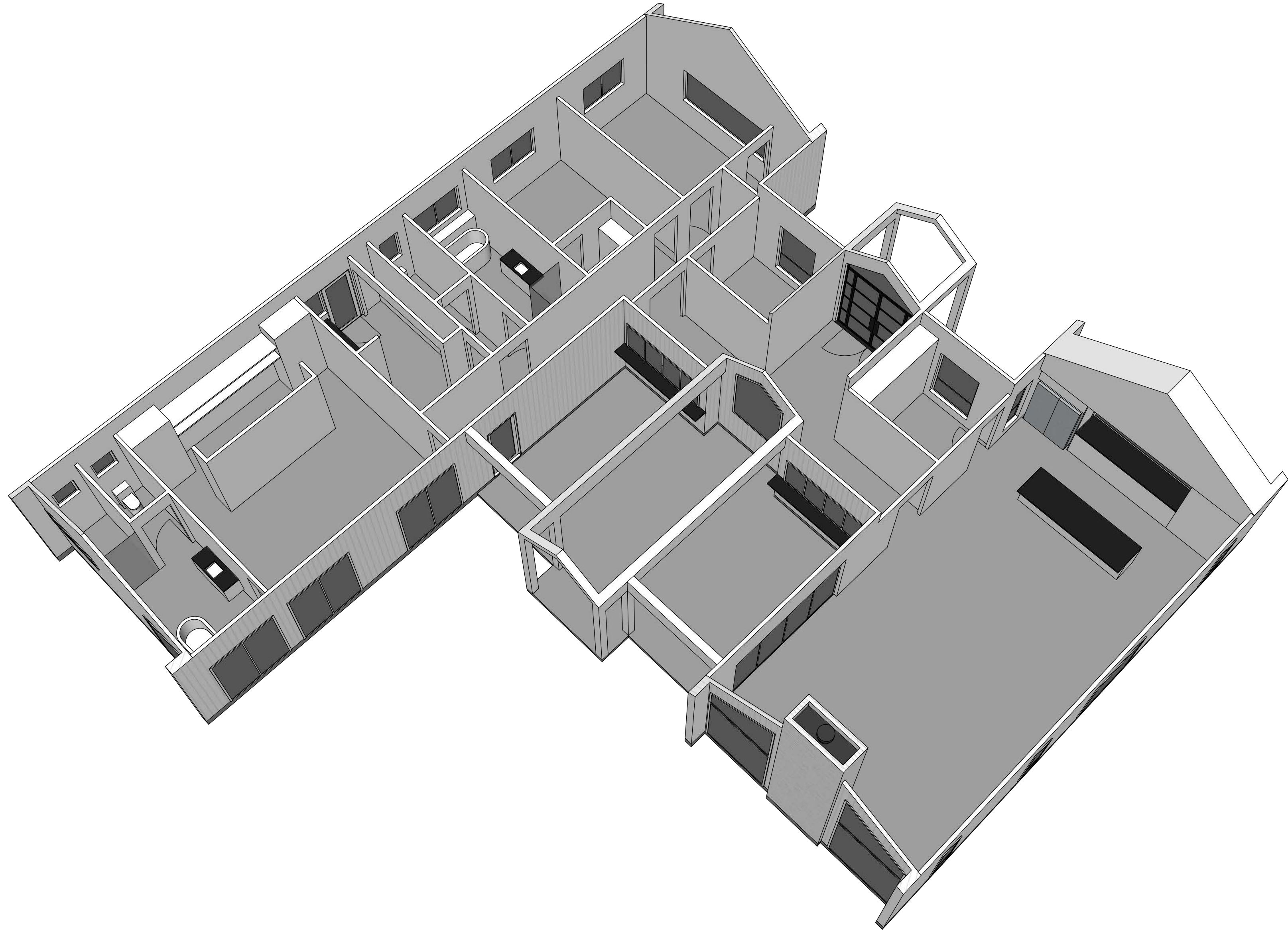
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Lot A DP100012  
Rowans Lane  
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IMAGES FOR ILLUSTRATIVE PURPOSES ONLY

PRELIMINARY

DESCRIPTION  
3D Plan 3  
PROJECT NO.  
1250

DRAWN BY  
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NTS

AMDT  
H  
DATE  
13/06/24

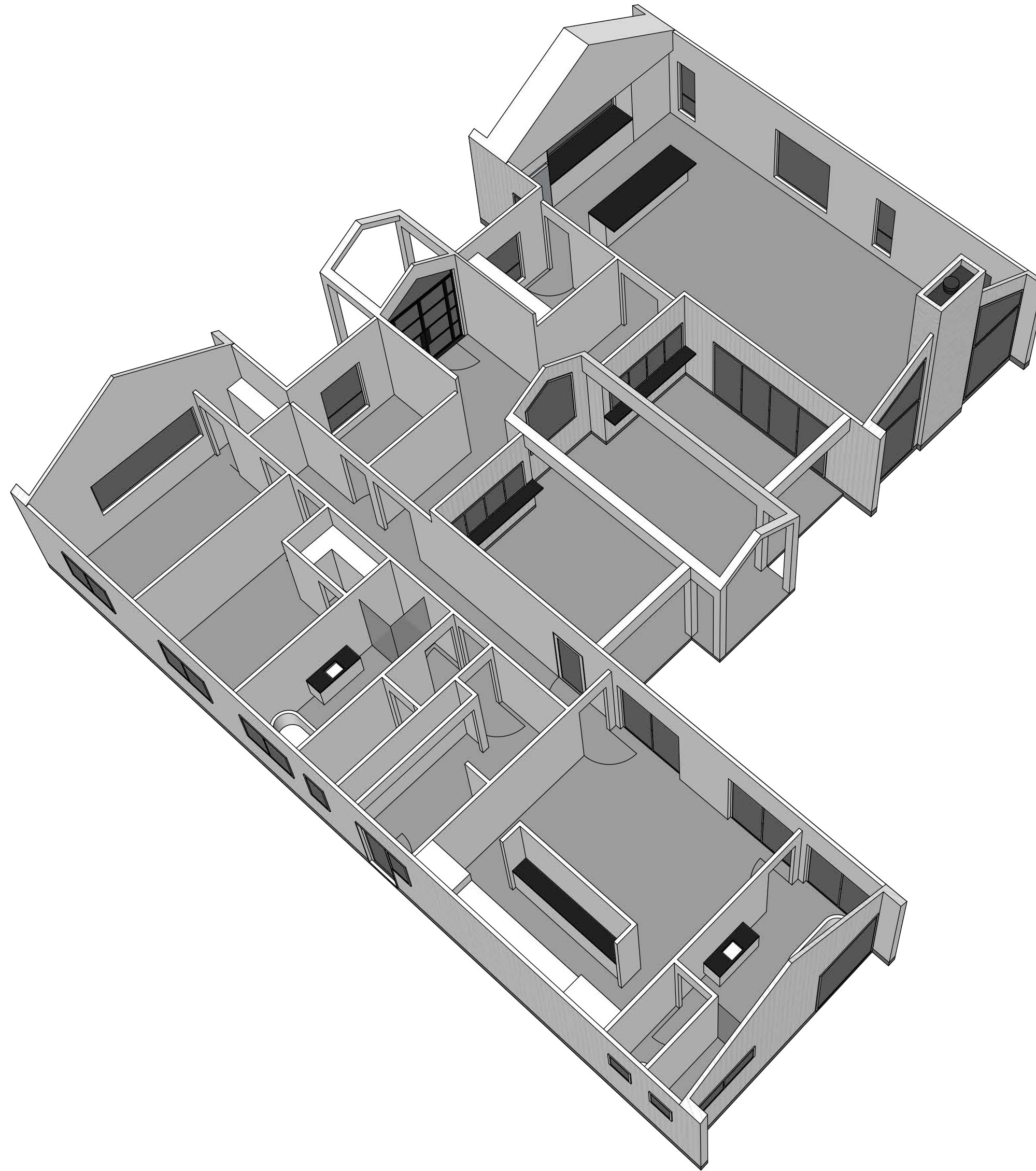
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Lot A DP100012  
Rowans Lane  
Bendick Murrell NSW 2594

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PRELIMINARY

DESCRIPTION  
3D Plan 4  
PROJECT NO.  
1250

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CM  
SCALE  
NTS

AMDT  
H  
DATE  
13/06/24

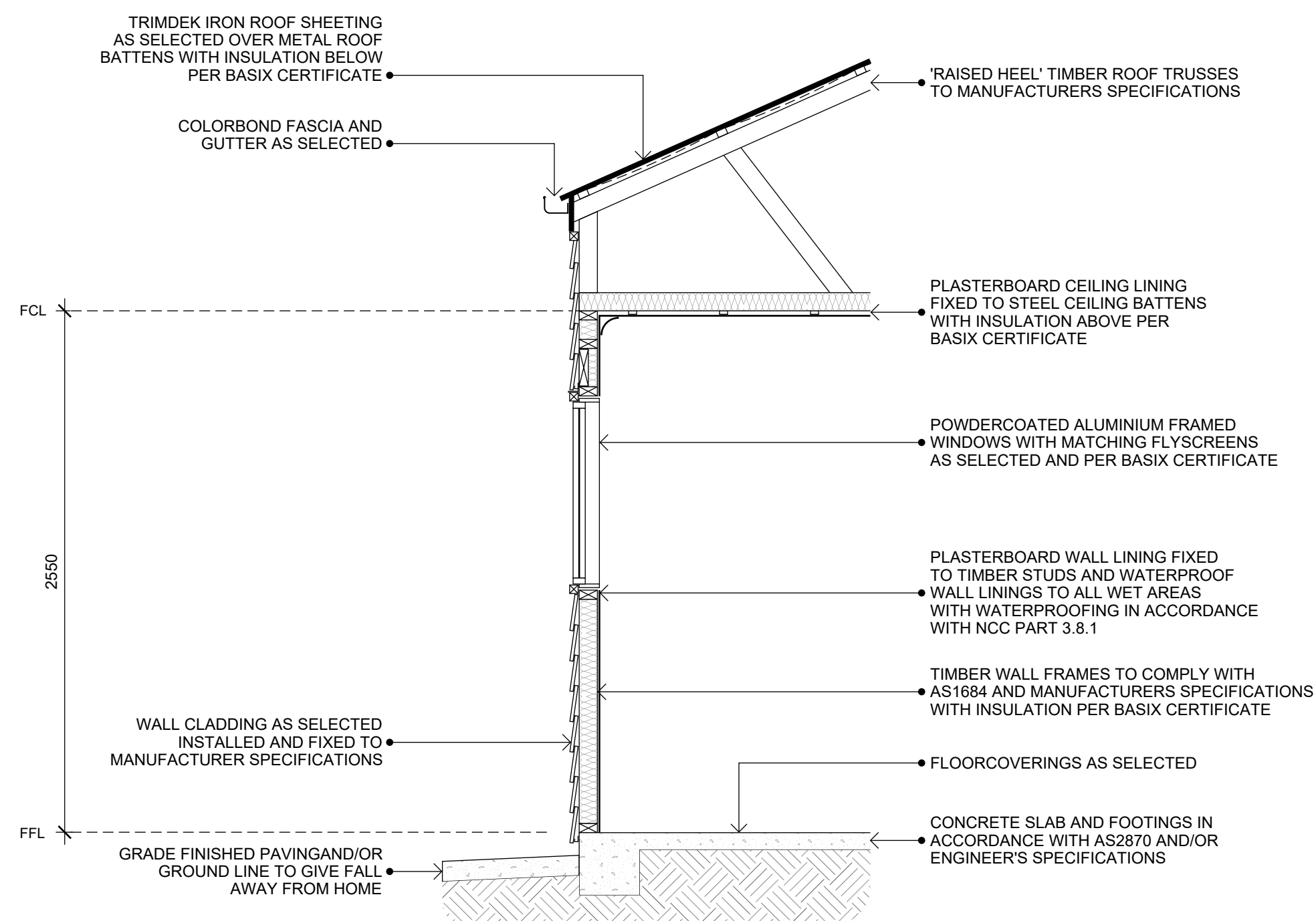
CLIENT/BUILDING SITE  
Alex Slavin & Tori Pope  
Lot A DP100012  
Rowans Lane  
Bendick Murrell NSW 2594

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Young, NSW 2594  
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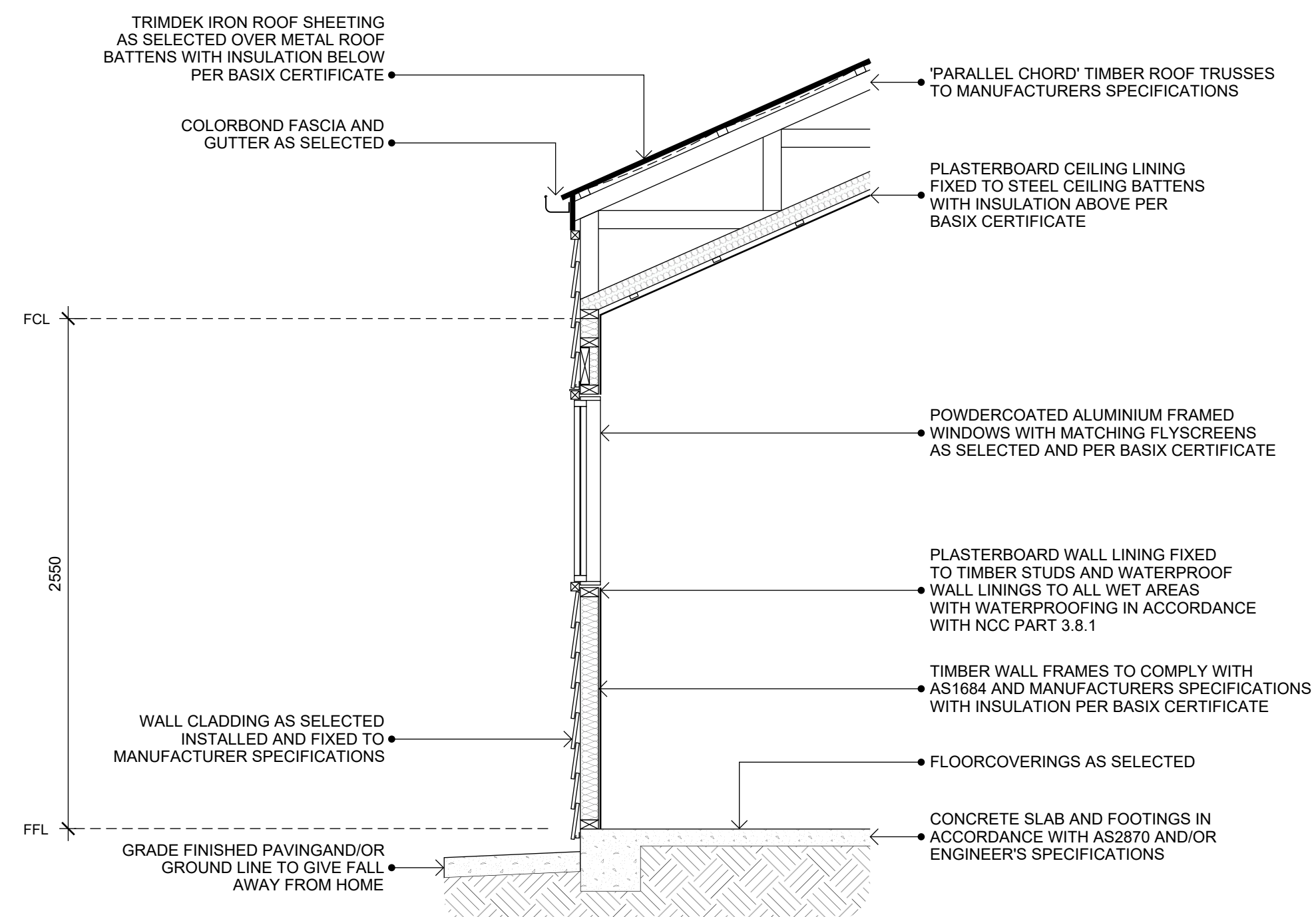
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**GC**BUILDING

12



**TYPICAL SECTION DETAIL**  
RAISED HEEL TRUSS  
CLADDED WALL



**TYPICAL SECTION DETAIL**  
PARALLEL CHORD TRUSS  
CLADDED WALL

PRELIMINARY

DESCRIPTION  
Section  
  
PROJECT NO.  
1250

DRAWN BY  
CM  
  
SCALE  
1:25 (A2)

AMDT  
H  
  
DATE  
13/06/24

CLIENT/BUILDING SITE  
Alex Slavin & Tori Pope  
Lot A DP100012  
Rowans Lane  
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|       |                                        |                              |         |                 |                                                                                                                                                                 |                                      |           |        |            |                                 |                               |         |             |     |
|-------|----------------------------------------|------------------------------|---------|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|-----------|--------|------------|---------------------------------|-------------------------------|---------|-------------|-----|
| WATER | LANDSCAPE                              |                              |         | THERMAL COMFORT | GENERAL FEATURES                                                                                                                                                |                                      |           | ENERGY | HOTWATER   |                                 |                               |         |             |     |
|       | NIDIGENOUS OR LOW WATER USE VEGETATION |                              | 50.00   |                 | M2                                                                                                                                                              | NUMBER OF STOREYS                    |           |        | 1          | STOREYS                         | HOTWATER SYSTEM TYPE          |         | INSTANT GAS | -   |
|       | FIXTURES                               |                              |         |                 | CONDITIONED FLOOR AREA                                                                                                                                          |                                      | <300.00   |        | M2         | HOTWATER SYSTEM RATING          |                               | 6.0     | STARS       |     |
|       | SHOWERHEAD/S                           |                              | 3       |                 | STAR                                                                                                                                                            | OPEN MEZZANINE AREA                  |           |        | 0.00       | M2                              | COOLING                       |         |             |     |
|       | TOILET/S                               |                              | 3       |                 | STAR                                                                                                                                                            | HABITABLE ATTIC ROOM                 |           |        | NO         | -                               | SYSTEM TYPE - LIVING          |         | 1 PHASE     | -   |
|       | KITCHEN TAP/S                          |                              | 3       |                 | STAR                                                                                                                                                            | FLOOR, WALLS AND CEILING/ROOF        |           |        |            | SYSTEM TYPE - BEDROOMS          |                               | 1 PHASE | -           |     |
|       | BATHROOM TAP/S                         |                              | 3       |                 | STAR                                                                                                                                                            | FLOOR INSULATION                     |           |        | -          | R-VALUE                         | SYSTEM ENERGY RATING - LIVING |         | >4.0        | EER |
|       | ALTERNATIVE WATER                      |                              |         |                 | EXTERNAL WALL INSULATION - BRICK VENEER                                                                                                                         |                                      | -         |        | R-VALUE    | SYSTEM ENERGY RATING - BEDROOMS |                               | >4.0    | EER         |     |
|       | RAINWATER TANK/S                       |                              | 110,000 |                 | LITRES                                                                                                                                                          | EXTERNAL WALL INSULATION - FRAMED    |           |        | 2.7        | R-VALUE                         | DAY/NIGHT ZONING              |         | YES         | -   |
|       | ROOF COLLECTION AREA                   |                              | 277.32  |                 | M2                                                                                                                                                              | INTERNAL WALL INSULATION - SPECIFIED |           |        | -          | R-VALUE                         | HEATING                       |         |             |     |
|       | RAINWATER CONNECTED TO:                |                              |         |                 | CEILING INSULATION - FLAT CEILING                                                                                                                               |                                      | 5.0       |        | R-VALUE    | SYSTEM TYPE - LIVING            |                               | 1 PHASE | -           |     |
|       |                                        | TOILET/S (ALL)               | YES     |                 | -                                                                                                                                                               | CEILING INSULATION - RAKED CEILING   |           |        | 5.0        | R-VALUE                         | SYSTEM TYPE - BEDROOMS        |         | 1 PHASE     | -   |
|       |                                        | WASHING MACHINE/S (COLD TAP) | YES     |                 | -                                                                                                                                                               | ROOF INSULATION - FLAT CEILING       |           |        | 55         | MM                              | ENERGY RATING - LIVING        |         | >4.0        | EER |
|       |                                        | OUTDOOR TAP/S (AT LEAST ONE) | YES     |                 | -                                                                                                                                                               | ROOF INSULATION - RAKED CEILING      |           |        | 55         | MM                              | ENERGY RATING - BEDROOMS      |         | >4.0        | EER |
|       |                                        | HOTWATER SYSTEM/S (ALL)      | YES     |                 | -                                                                                                                                                               | ROOF VENTILATORS                     |           |        | NIL        | EACH                            | DAY/NIGHT ZONING              |         | YES         | -   |
|       |                                        | INDOOR COLD TAP/S (ALL)      | YES     |                 | -                                                                                                                                                               | ROOF COLOUR                          |           |        | DARK >0.70 | SA                              | VENTILATION                   |         |             |     |
|       |                                        |                              |         |                 | WINDOWS, GLAZED DOORS AND SKYLIGHTS                                                                                                                             |                                      |           |        | BATHROOM   |                                 | FAN                           | TYPE    |             |     |
|       |                                        |                              |         |                 | WINDOW/S                                                                                                                                                        |                                      | ALUMINIUM |        | FRAME      |                                 |                               | FACADE  | DUCTING     |     |
|       |                                        |                              |         |                 |                                                                                                                                                                 |                                      | CLEAR     |        | GLASS      |                                 |                               | MANUAL  | CONTROL     |     |
|       |                                        |                              |         |                 |                                                                                                                                                                 |                                      | DOUBLE    |        | GLAZED     | KITCHEN                         |                               | FAN     | TYPE        |     |
|       |                                        |                              |         |                 | SKYLIGHT/S                                                                                                                                                      |                                      | -         |        | FRAME      |                                 |                               | FACADE  | DUCTING     |     |
|       |                                        |                              |         |                 |                                                                                                                                                                 |                                      | -         |        | GLASS      |                                 |                               | MANUAL  | CONTROL     |     |
|       |                                        |                              |         |                 |                                                                                                                                                                 |                                      | -         |        | GLAZED     | LAUNDRY                         |                               | NATURAL | TYPE        |     |
|       |                                        |                              |         |                 | ALL WINDOWS, GLAZED DOORS AND SHADING DEVICES TO BE INSTALLED PER THE SPECIFICATIONS LISTED IN THE WINDOW/GLAZED DOOR TABLE APPEARING ON THE BASIX CERTIFICIATE |                                      |           |        |            |                                 | -                             | DUCTING |             |     |
|       |                                        |                              |         |                 | ALL SKYLIGHTS TO BE INSTALLED PER THE SPECIFICATIONS LISTED IN THE SKYLIGHT TABLE APPEARING ON THE BASIX CERTIFICIATE                                           |                                      |           |        |            |                                 | -                             | CONTROL |             |     |
|       |                                        |                              |         |                 | ARTIFICIAL LIGHTING                                                                                                                                             |                                      |           |        |            |                                 |                               |         |             |     |
|       |                                        |                              |         |                 | BEDROOMS                                                                                                                                                        |                                      |           |        | LED        | DEDICATED                       |                               |         |             |     |
|       |                                        |                              |         |                 | LIVING AREAS                                                                                                                                                    |                                      |           |        | LED        | DEDICATED                       |                               |         |             |     |
|       |                                        |                              |         |                 | KITCHEN                                                                                                                                                         |                                      |           |        | LED        | DEDICATED                       |                               |         |             |     |
|       |                                        |                              |         |                 | LAUNDRY                                                                                                                                                         |                                      |           |        | LED        | DEDICATED                       |                               |         |             |     |
|       |                                        |                              |         |                 | HALLWAYS                                                                                                                                                        |                                      |           |        | LED        | DEDICATED                       |                               |         |             |     |
|       |                                        |                              |         |                 | NATURAL LIGHTING                                                                                                                                                |                                      |           |        |            |                                 |                               |         |             |     |
|       |                                        |                              |         |                 | KITCHEN                                                                                                                                                         |                                      |           |        | WINDOW     | -                               |                               |         |             |     |
|       |                                        |                              |         |                 | BATHROOMS                                                                                                                                                       |                                      |           |        | WINDOW     | -                               |                               |         |             |     |
|       |                                        |                              |         |                 | ALTERNATIVE ENERGY                                                                                                                                              |                                      |           |        |            |                                 |                               |         |             |     |
|       |                                        |                              |         |                 | PHOTOVOLTAIC SYSTEM                                                                                                                                             |                                      |           |        | -          | KW (PEAK)                       |                               |         |             |     |
|       |                                        |                              |         |                 | OTHER                                                                                                                                                           |                                      |           |        |            |                                 |                               |         |             |     |
|       |                                        |                              |         |                 | REGRIGERATOR SPACE                                                                                                                                              |                                      |           |        | VENTILATED | -                               |                               |         |             |     |
|       |                                        |                              |         |                 | CLOTHESLINE - OUTDOOR                                                                                                                                           |                                      |           |        | YES        | -                               |                               |         |             |     |
|       |                                        |                              |         |                 | CLOTHESLINE - INDOOR/SHELTERED                                                                                                                                  |                                      |           |        | NO         | -                               |                               |         |             |     |

BUILDING NOTES

**DIMENSIONS:** TO BE CHECKED ON SITE PRIOR TO COMMENCEMENT OF WORKS.

**LEVELS:** SHOWN ARE RELATIVE ONLY, BASED ON PROVIDED CONTOURS AND TO BE CHECKED ON SITE PRIOR TO COMMENCEMENT OF WORKS.

**DO NOT SCALE:** USE FIGURED DIMENSIONS ONLY. BUILDER TO CONFIRM ALL DIMENSIONS & LEVELS ON SITE PRIOR TO COMMENCING ANY WORK.

**UNDERGROUND SERVICES:** PIPES AND CABLES TO BE LOCATED PRIOR TO EXCAVATION. CALL 'DIAL BEFORE YOU DIG' ON 1100 OR GO TO WWW.1100.COM.AU .

**EXISTING INFRASTRUCTURE:** NO GROUND IS TO BE PENETRATED WITHIN 2.0M OF EXISTING ELECTRICAL TRANSMISSION LINES AND SERVICE POLES AND AS SUCH, THE PROPOSED DWELLING WILL COMPLY WITH THE PROVISIONS OF THE STATE ENVIRONMENTAL PLANNING POLICY (INFRASTRUCTURE) 2007.

**STABILISED ACCESS:** TO BE PROVIDED TO THE BUILDING SITE THROUGHOUT CONSTRUCTION.

**SEDIMENT CONTROL:** SUPPLY, INSTALL AND MAINTAIN GEOTEXTILE FENCE FIXED TO PICKETS AND/OR HAY BALES AT LOWER SIDE OF THE BUILDING SITE.

**CONTROLLED WASTE:** SUPPLY, MAINTAIN AND ROUTINELEY EMPTY A TEMPORARY WASTE RECEPTACLE ON THE BUILDING SITE.

**ENVIRONMENTAL:** DEVELOPMENT TO COMPLY WITH THE NSW ENVIRONMENT PROTECTION AUTHORITY 'ENVIRONMENT PROTECTION GUIDELINES FOR CONSTRUCTION AND LAND DEVELOPMENT' TO PREVENT POLLUTION FROM THE BUILDING SITE.

**SAFETY FENCING:** SUPPLY, INSTALL AND MAINTAIN 180MM HIGH ANTI-CLIMB FENCE FOR THE PERIMETER OF THE BUILDING SITE THROUGHOUT CONSTRUCTION.

**TOILET FACILITIES:** PROVIDE AND MAINTAIN TEMPORARY TOILET FACILITIE/S ON THE BUILDING SITE. AT A RATIO OF 1 TOILET PER 20 PERSONS.

**COMPLIANCE:** ALL BUILDING WORK TO COMPLY WITH THE 'NATIONAL CONSTRUCTION CODE' OF AUSTRALIA, AND ANY REFERENCED AUSTRALIAN STANDARDS AND LOCAL COUNCIL AUTHORITY REQUIREMENTS. ALL AREAS TO BE MADE GOOD BY THE BUILDER WHERE DISTURBED BY THE NEW WORK.

**BASIX/ENERGY EFFICIENCY:** ALL SELECTIONS TO COMPLY WITH ENERGY EFFICIENCY PERFORMANCE REQUIREMENTS AND/OR THE ASSOCIATED BASIX CERTIFICATE.

**CONSTRUCTION MATERIALS:** TO BE STORED WHOLLY WITHIN THE BUILDING SITE.

**EARTHWORKS:** ALL LEVELS AND EXTENT OF CUT AND FILL IS TO BE VERIFIED ON SITE. NO PART OF THE CUT OR FILL SHOULD ENCROACH OUT OF THE BOUNDARY OR EASEMENT. STABILIZATION OF NEW SITE FILL WITH FUTURE SITE LANDSCAPING AND/OR PLANTINGS.

**RETAINING WALLS:** WHERE RETAINING WALLS ARE IMPLEMENTED, THEY MUST BE NO GREATER THAN 900MM ABOVE OR BELOW NA TUR AL GROUND LEVELS OR AS PER ENGINEERS SPECIFICATIONS.

**CONCRETE:** ALL CONCRETE SLAB & FOOTINGS TO COMPLY WITH AS 2870 'RESIDENTIAL SLAB & FOOTINGS' AND/OR ENGINEERS SPECIFICATIONS.

**FINISHED GROUND LEVEL:** FALLS AWAY FROM EXTERNAL WALLS OF DWELLING TO GIVE A SLOPE OF NOT LESS THAN 25MM OVER THE FIRST 1M FROM THE BUILDING FOR REASONABLY IMPERMEABLE SURFACES AND 50MM OVER FIRST 1M FROM THE BUILDING IN OTHER SITUATIONS. REFER TO BCA 3.1.2.3 SURFACE WATER DRAINAGE.

**STORMWATER:** DESIGN AND INSTALLATION TO COMPLY WITH AS/NZS 3500.3 AND/OR AS/NZS 3500.5 - 2000 AND/OR NCC 3.1.2 AND/OR LOCAL GOVERNMENT PLUMBING AND DRAINAGE REGULATIONS.

**SEWER:** DESIGN AND INSTALLATION TO COMPLY WITH AS/NZS 3500.2 - 2003 (PLUMBING AND DRAINAGE - SANITARY PLUMBING AND DRAINAGE) OR AS/NZS 3500.5.

**TERMITE PROTECTION:** PROVIDE PHYSICAL AND/OR CHEMICAL TERMITE BARRIERS IN ACCORDANCE WITH NCC VOL 2, PART 3.1.3 TERMITE RISK MANAGEMENT AND AS 3660.1.

**WALL FRAMING:** IN ACCORDANCE WITH AS1684 AND MANUFACTURERS SPECIFICATIONS

**ROOF TRUSSES:** TO MANUFACTUERS SPECIFICIATIONS AND/OR OR AS PER ENGINEERS SPECIFICATIONS.

**STRUCTURAL STEEL:** TO BE DESIGNED BY A PRACTICING STRUCTURAL ENGINEER.

**OPENINGS:** WINDOW AND DOOR DIMENSIONS MAY DIFFER TO ACTUALY MANUFACTURED SIZES AND ARE APPROXIMATE ONLY - TO BE CHECKED ON SITE PRIOR TO ORDERING AND FABRICATION.

**MASONRY:** TO BE IN ACCORDANCE WITH NCC VOL 2, PART 3.3.5 AND AS 4773

**SUBFLOOR VENTILATION:** TYO BE IN ACCORDANCE WITH NCC, VOL 2 PART 3.4.1

**WINDOWS:** ALL OPERABLE WINDOWS TO BE FITTED WITH SEALS AND TIGHT FITTING FLYSCREENS. WINDOWS/GLAZED DOORS TO BE DESIGNED IN ACCORDANCE WITH AS 4066 WIND LOADS AND AS2047 WINDOWS IN BUILDINGS. OPENABLE PORTIONS OF ALL UPSTAIRS WINDOWS TO BE SCREENED IN ACCORDANCE WITH NCC 3.9.2.5.

**DOORS:** ALL DOORS TO BE FITTED WITH LOCKS AND WEATHER SEALS CONFORMING TO NCC 3.12.3.

**GLAZING:** SELECTION AND INSTALLATION TO AS 2047 AND GLASS TYPE AND THICKNESS TO AS 1288. ALL OTHER COMPONENTS TO COMPLY WITH RELATIVE STANDARDS. IN BUSHFIRE PRONE AREAS, SELECTION AND INSTALLATION TO COMPLY WITH AS 3959. REFER TO BUSHFIRE NOTES FOR BUSHFIRE ATTACK LEVEL (IF APPLICABLE TO PROJECT). WINDOW FRAME AND GLAZING PERFORMANCE LEVELS TO MEET OR EXCEED BASIX CERTIFICATE REQUIREMENTS.

**VENTILATION:** SIZE/AGGREGATE OPENING OF WINDOW/DOOR UNITS HAS BEEN CALCULATED TO BE NOT LESS THAN 5% OF THE ROOM AREA REQUIRING VENTILATION IN ACCORDANCE WITH NCC 3.8.5.

**ELECTRICAL:** DESIGN AND INSTALLATION TO COMPLY WITH AS/NZS 3018 -2001 (ELECTRICAL INSTALLATIONS - DOMESTIC INSTALLATIONS).

**WET AREA WATERPROOFING:** TO BE IN ACCORDANCE WITH BCA VOL 2 PART 3.8.1 'WET AREAS AND EXTERNAL WATERPROOFING' AND MATERIALS SELECTION, SYSTEM DESIGN AS PER AS3740

**WALL AND FLOOR TILING:** PREPERATION AND INSTALLATION TO BE IN ACCORDANCE WITH AS 3958.1

**LIFT-OFF HINGES:** TO BE PROVIDED TO ALL WC COMPARTMENT DOORS WHERE OPENING INWARDS TO SATISFY THE REQUIREMENTS OF NCC 3.8.3.3 OR PROVIDE ALTERNATIVE CONFIGURATION TO SATISFY THE LOCAL AUTHORITIES.

**STAIRS:** IN ACCORDANCEWITH NCC, VOL 2 PART 3.9.1

**BALUSTRADES:** IN ACCORDANCE WITH NCC, VOL 2 PART 3.9.2



**Aitken Rowe**  
TESTING LABORATORIES

## SITE CLASSIFICATION & SITE ASSESSMENT FOR EFFLUENT DISPOSAL SYSTEM REPORT

CLIENT: TORI POPE – YOUNG, NSW

PROJECT DESCRIPTION: PROPOSED RESIDENTIAL DWELLING & EFFLUENT DISPOSAL SYSTEM

LOCATION: No. 70 ROWANS LANE, BENDICK MURRELL, NSW

ACCREDITED CONSTRUCTION MATERIALS  
TESTING LABORATORIES



SE24-009

23 FEBRUARY 2024

AITKEN ROWE TESTING LABORATORIES PTY LTD

At your request, a subsurface exploration was performed at the above location to assess the nature of the underlying soils in order to classify the site in accordance with AS 2870 - 2011 “Residential Slab and Footings”. The following classification is derived from information gained in regard to the history of the site, the description of the natural material and the amount of swell and shrinkage the natural soils experience with variations of water content.

On 9 February 2024, our Geotechnical staff excavated two boreholes (BH1 to 3.0m and BH2 to 2.3m) using a powered drilling rig at the locations shown in the attached sketch. Disturbed samples were taken at various depths to represent various strata. The soil and groundwater conditions in these boreholes were assessed and the boreholes were logged in the field. Visual descriptions of moisture, plasticity and strength were also noted. The soil samples were tested at our NATA accredited laboratory in Wagga Wagga. Dynamic Cone Penetrometer (DCP) testing was performed at the location of BH1 and BH2 to assess the strength of the underlying material. The borehole logs with test results and DCP test reports are attached to this report.

Percolation tests were also carried out at the locations as shown in the attached diagram to assess the percolation rate of the underlying soil materials. An Emerson class test and soil grading were also performed to assess the condition of the underlying materials. The borehole logs with test results, Emerson class, soil grading and percolation test reports are attached to this report.



**Site Photo – BH1 Looking North (9/02/2024)**



## SITE CONDITIONS, CONCLUSIONS AND RECOMMENDATIONS

The site of the proposed construction is on the southern side of the road. The site has a slight downward slope from north-east to south-west at approximately 1V:40H.

The borehole investigation performed for the proposed residence revealed that the site is underlain by natural alluvial material comprising topsoil to 0.1m overlying low plasticity sandy silt to 0.4m in BH1 and 0.3m in BH2, which is then underlain by various medium, medium to high and high plasticity clays extending to the borehole termination depth at 3.0m in BH1 and 2.3m in BH2.

The moisture condition of the underlying material was generally varied from less than plastic limit throughout the upper profile to greater than plastic limit throughout the lower profile at the time of the investigation. The underlying clays are considered “poorly drained” which may result in significant volume changes during the wet and dry climatic cycles. No groundwater or seepage was encountered during the drilling, however it should be noted that variations to the water table level could fluctuate with changes to the season, temperature and rainfall.

The DCP test results in BH1 (DCP1) indicate the underlying natural silt and clay-based material (below topsoil) to be firm to stiff consistency to 0.4m then increasing to stiff and very stiff consistency with depth throughout the tested profile in BH1 at the time of the investigation.

The DCP test results in BH2 (DCP2) indicate the underlying natural silt and clay-based material (below topsoil) to be firm to stiff consistency to 0.3m then increasing to very stiff consistency with depth throughout the tested profile in BH2 at the time of the investigation.

Based on available data, laboratory test results and estimated characteristic surface movements (ys), the site shall be classified as **“H1-D – Highly reactive deep drying”** in accordance with the Australian Standard AS 2870. We recommend that all the footings be designed in accordance with that Standard and shall be founded below **topsoil into natural ground**. Based on the type and condition of the subsoil at the time of the field investigation;

- The footing shall be founded on the **stiff consistency or better natural cream yellow clay at or below the minimum depth of 0.35 to 0.45m** measured from the existing surface (refer to attached borehole logs), for which an allowable bearing capacity of **100kPa may be adopted**, provided proper drainage measures are incorporated in the design, during and after the construction.
- The slab panel, internal beams and load support thickenings may be founded on the underlying **natural sandy silt material**, for which an allowable bearing capacity of **50kPa may be adopted**, provided topsoil, if any, is removed and the exposed natural subgrade is **proof rolled to detect any soft, loose or heaving areas**. If such areas exist, they shall be excavated and replaced and compacted with granular select fill as required.

It should be noted that the minimum footing depths for various footing systems are determined by the type of construction selected for the proposed dwelling and are presented in Section 3 of AS 2870 – 2011. **It is highly recommended to undertake Dynamic Cone Penetrometer testing at the time of construction to ensure the required bearing capacity can be achieved at the base of the footing system.**

If any additional fill placement is required on site during the site preparation, it is highly recommended to remove the existing topsoil, fill, silt-based material, and unsuitable material, if any, and place granular fill comprising mainly sand and well graded gravel, but caution shall be exercised not to select a 'raw' or non-plastic material that may induce erosion. The fill shall be placed in accordance with Clause 6.4.1 & 6.4.2 of AS2870, or otherwise the site classification shall be reviewed.

The structural fill is to be prepared in such a way that it achieves 95% of Standard Maximum Dry Density in every 150mm thick compacted layer. The placed fill shall be certified by a relevant NATA accredited testing laboratory for which a safe allowable bearing pressure of 100kPa may be adopted, provided proper drainage measures are incorporated in the design, during and after the construction.

Care should be taken when selecting material for use as structural fill. Clay-based fill material is reactive to seasonal changes in moisture content which may result in shrink/swell problems and therefore should be avoided where possible. It should be noted that the placement of reactive clay-based fill material can reduce the cracking zone and adversely affect the estimated characteristic surface movements ( $\gamma_s$ ) of the subject site. Similarly, the cracking zone can be reduced when site cuts are undertaken. **If greater than 0.4m of clay-based fill is placed, or greater than 0.5m of cut is undertaken, the site classification shall be reviewed in accordance with Clauses 2.3.2 and 2.5.2 of AS2870.**



## SITE ASSESSMENT FOR EFFLUENT DISPOSAL SYSTEM

It is noted that the site for the proposed treated effluent disposal area is to the south of the proposed dwelling.

The borehole investigation performed for the proposed residence revealed that the site is underlain by natural alluvial material comprising topsoil to 0.1m overlying low plasticity sandy silt to 0.4m in BH1 and 0.3m in BH2, which is then underlain by various medium, medium to high and high plasticity clays extending to the borehole termination depth at 3.0m in BH1 and 2.3m in BH2.

There was no evidence of surface seepage and soaks and the surface soil was found dry at the time of the investigation. No sign of erosion was evident and therefore the site should not pose the problem of uncontrolled run-off and erosion. However, run-on and upslope and down slope seepage, if any, to the land application system should be avoided by using earthworks or a drainage system approved by Council.

A limited site assessment has also been undertaken in Table 1 below. The results show that the site features range from very good to fair and is considered suitable for primary and secondary treated effluent disposal systems **with appropriate management practices undertaken**.

**Table 1: Limited Site Assessment**

| General Characteristics                                  |                                    | Limited Site Assessment Rating |                     |                      |                |                         | Site Result |
|----------------------------------------------------------|------------------------------------|--------------------------------|---------------------|----------------------|----------------|-------------------------|-------------|
|                                                          |                                    | Very Good (1)                  | Good (2)            | Fair (3)             | Poor (4)       | Very Poor (5)           |             |
| Site drainage / runoff                                   |                                    | Very Slow                      | Slow                | Moderate             | Rapid          | Very Rapid              | 2-3         |
| Flood / inundation potential (yearly return exceedances) |                                    | Never                          |                     | <1 in 100            | <1 in 20       | >1 in 20                | 3           |
| Slope (%)                                                |                                    | 0 - 2                          | 2 - 8               | 8 - 12               | 12 - 20        | >20                     | 2           |
| Landslip                                                 |                                    |                                |                     |                      |                | Present or past failure | 1           |
| Seasonal watertable depth (m) (inc perched water tables) |                                    | >5                             | 5 – 2.5             | 2.5 – 2.0            | 2.0 – 1.5      | <1.5                    | 2           |
| Rainfall (mm/yr)                                         |                                    | <450                           | 450 - 650           | 650 - 750            | 750 - 1000     | >1000                   | 2           |
| Pan Evaporation (mm/yr)                                  |                                    | >1500                          | 1250 - 1500         | 1000 - 1250          | -              | <1000                   | 1           |
| Soil Profile characteristics                             | Structure                          | High                           | Moderate            | Weak                 | Massive        | Single Grained          | 1           |
|                                                          | Profile Depth                      | >2m                            | 1.5 – 2m            | -                    | 1.5m – 1.0m    | <1m                     | 1           |
|                                                          | Percolation (mm/hr)                | 50 - 75                        | 20 - 50<br>75 - 150 | 15 - 20<br>150 - 300 | -<br>300 - 500 | <15<br>>500             | 1-2         |
|                                                          | Stoniness (%)                      | <10                            |                     | 10 - 20              | -              | >20                     | 1           |
|                                                          | Emerson Class (dispersion/slaking) | 5&6                            | 4                   | 3                    | 2              | 1                       | 1           |



## FIELD AND LABORATORY RESULTS

The permeability of the underlying clay-based material was assessed by carrying out a series of percolation tests at the site. The tests indicated an average permeability of 0.25m/day on the underlying material. This classifies the underlying soil as “Category 5” as per AS1547:2012 – “On-site domestic-wastewater management”. A soil grading was performed on the underlying material and confirms the soil to be a “Category 5”. An Emerson Class Test was also performed and indicated the material to be “potentially non-dispersive”. The percolation, grading and Emerson class test reports are herewith attached.



## DISPOSAL AREA SIZING

It is assumed the proposal consists of a single storey three-bedroom dwelling connected to tank-water only and will have water reduction fittings in place (to satisfy BASIX certificate) including triple A rated taps and reduced flush toilets. Therefore the calculation rates are based on 120L/bedroom+1/day (allow 4 persons). This assumption is based on Appendix H in AS1547. It should be noted that if the above design flow rates are adopted then the minimum design capacity for the septic tank shall be determined by:

- Providing for around 24 hours settling volume plus 8 hours hydraulic buffering volume for the daily flows as adopted.
- Providing for scum and sludge accumulation over a 5 year period using the following rates;
 

|    |                  |                 |
|----|------------------|-----------------|
| 1) | All waste .....  | 80L/person/year |
| 2) | Greywater .....  | 40L/person/year |
| 3) | Blackwater ..... | 50L/person/year |

The required disposal area is calculated based on the soil data available for different types of land application system. The following assumptions are made in the calculation:

- Daily effluent flow rate per household - 480 litres\*
- Design Loading Rate (DLR) - 5.0 & 8.0 mm/day\*\*
- Design Irrigation Rate (DIR) - 21.0mm/week
- Width of the trench (where applicable) - 600mm
- Depth of trench (where applicable) - 700mm
- Depth of aggregate (where applicable) - 300mm
- Depth of topsoil (where applicable) - 300mm
- The underlying materials are assessed to be “potentially non-dispersive”.
- “Soil Category 5” as per AS1547:2012
- Climatic data for Wagga Wagga provided by the Bureau of Meteorology is adopted.

Note: \* - Assume 120 litres of waste water per bedroom + 1 per day.

\*\* - DLR 5.0 mm/day for primary effluent and 8.0 mm/day for secondary effluent.

### 1. Absorption Trench (Primary Treated Effluent)

Based on the above assumptions, climatic data and water balance analysis undertaken, the following minimum dimensions for the disposal area for the absorption trench disposal system are recommended.

- Minimum Absorption Area (wetted area) - 240m<sup>2</sup>
- Minimum length of the trench - 185m (width 0.6m, depth 0.7m)

### 2. Evapotranspiration – ETA/ETS Bed (Secondary Treated Effluent)

Based on the above assumptions, climatic data and water balance analysis undertaken, the following minimum dimensions for the disposal area for the evapotranspiration disposal system are recommended provided that the Design Loading Rate does not exceed 8.0mm/day. **It should be noted that this system is considered suitable for secondary treated effluent only.**

- Wetted Area - 110m<sup>2</sup>
- Minimum Trench Length - 55m (width 0.6m, depth 0.7m)
- Minimum Bed Length from Water Balance - 42m (width 1.5m, depth 0.55m)
- Minimum Bed Length from AS1547:2012 - 40m (width 1.5m, depth 0.55m)

**Vegetation planting on-site to encourage evapotranspiration is considered when calculating irrigation and absorption trench areas for this method of disposal.**

### 3. Pressurised Irrigation System (Secondary Treated Effluent)

These systems may be used as alternatives to the conventional sub-surface disposal systems outlined in sections above. Consideration through consultation with the local authority will be required prior to choosing this method of disposal because the treatment system will need to conform to effluent quality standards to ensure protection of public health as such:

- Five days biochemical oxygen demand (BOD5) not greater than 20mg/L
- Suspended solids not greater than 30mg/L
- Thermotolerant coliforms not greater than 10 per 100mL.
- Where chlorine is used as a disinfectant, free residual chlorine measured by a field test at the first irrigation outlet, is not less than 0.5mg/L after a 30min contact period.
- Nutrients not more than authorised by the local authority.
- All other requirements are to be met as per AS1547:2012.

Based on the above assumptions, water balance analysis and soil data available, the following minimum irrigation area is recommended provided proper control of the effluent is maintained and the rate of irrigation does not exceed 21.0mm/week. If planting is to occur on-site then the evapotranspiration method and disposal areas as discussed in section 2 can be adopted provided that the rate of irrigation does not exceed 21.0mm/week.

- Area - 160m<sup>2</sup>

The area calculated above assumes there will be no or minimal vegetation planting on-site and evaporation only of the treated effluent is utilised for disposal.



## COMMENTS AND RECOMMENDATIONS

- Land application shall be placed at least 40m away from any channels and 250m away from any domestic groundwater well.
- The irrigation system can only be used for secondary-treated effluent complying with the effluent-quality requirements of Part 5 and Appendix M of AS1547:2012.
- Primary effluent is normally not suitable for irrigation systems but may be permitted by the local authority under special circumstances.
- The proper drainage system should be incorporated with the land application system design as appropriate to ensure surface run-off does not enter into the system.

Should you have any queries, please do not hesitate to contact us.

Yours Faithfully,

**Peter Forbes-Taber**  
**Geotechnical Engineer**

Attachments:

- Addendum
- Site Diagram showing Borehole, DCP and Percolation Test Locations
- Borehole Logs with Explanatory Note
- Dynamic Cone Penetrometer Test Reports
- Percolation, Emerson Class, and Soil Grading Reports
- Water Balance Calculation

# GENERAL COMMENT



## EXAMPLES OF CONVENTIONAL DISPOSAL SYSTEMS

The following figures are taken from Appendix L of AS1547:2012. It should be noted that the below figures are examples of conventional systems only and therefore are **not site-specific**.

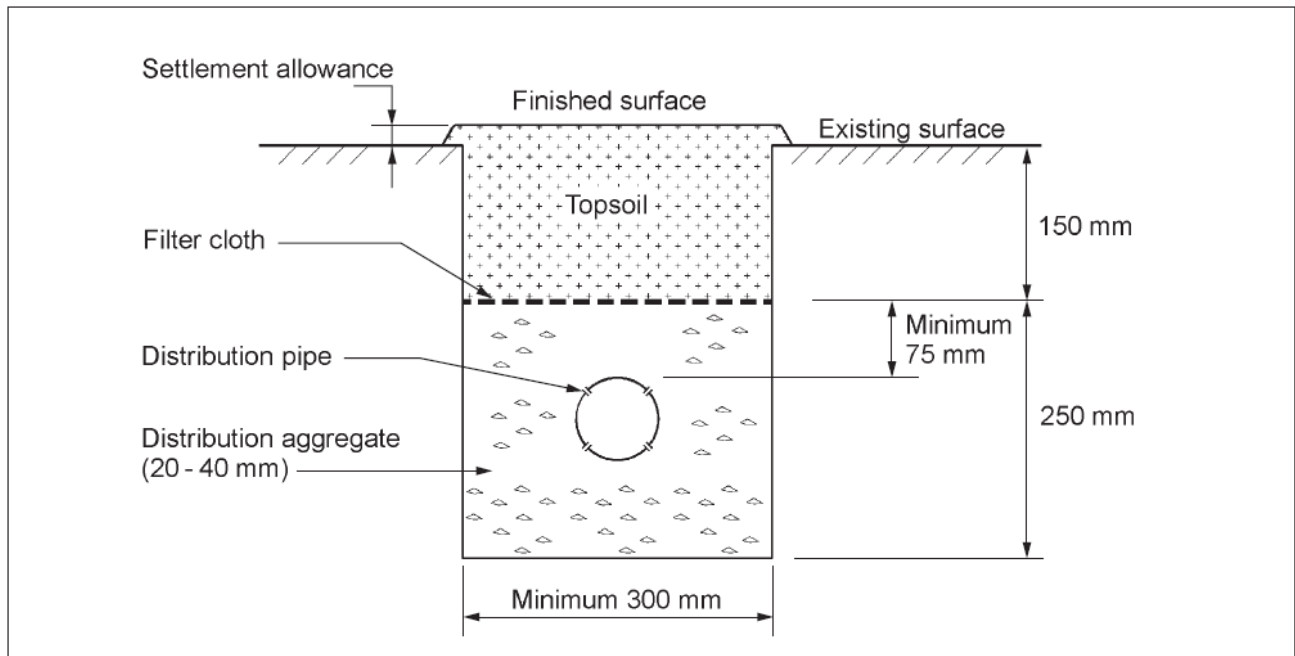


FIGURE L1 CONVENTIONAL PIPED TRENCH

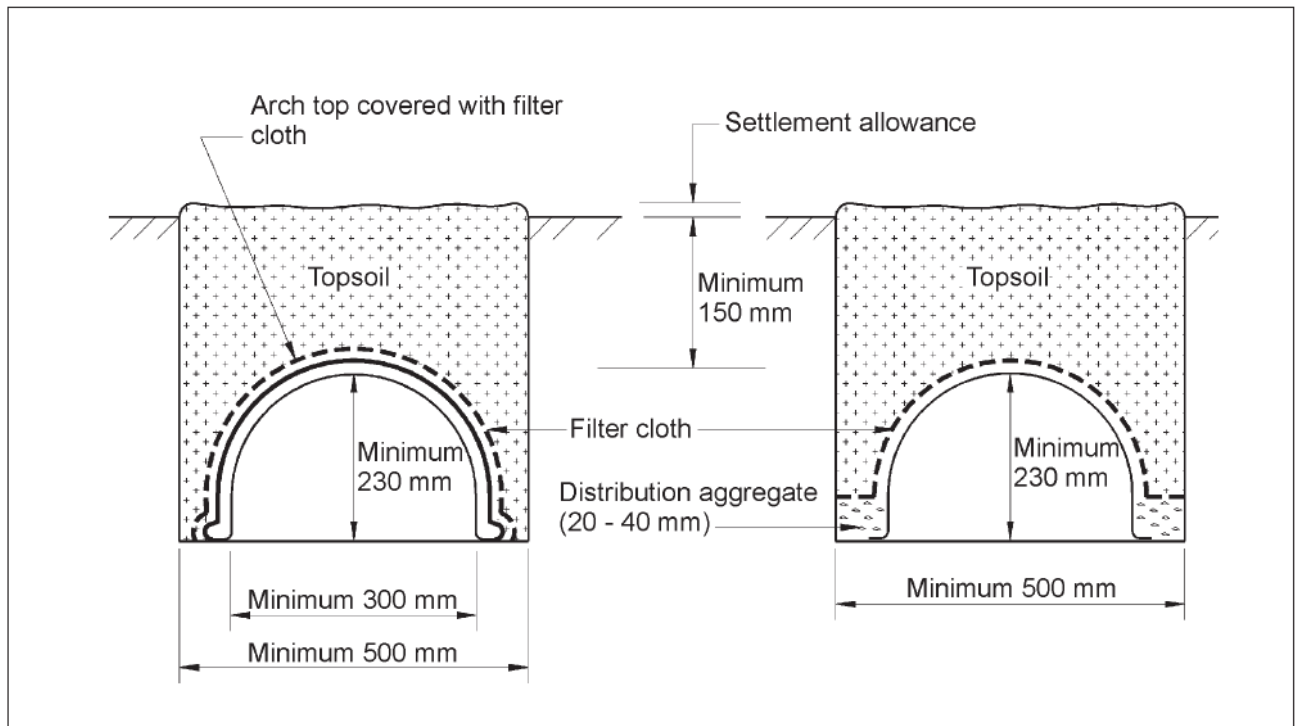
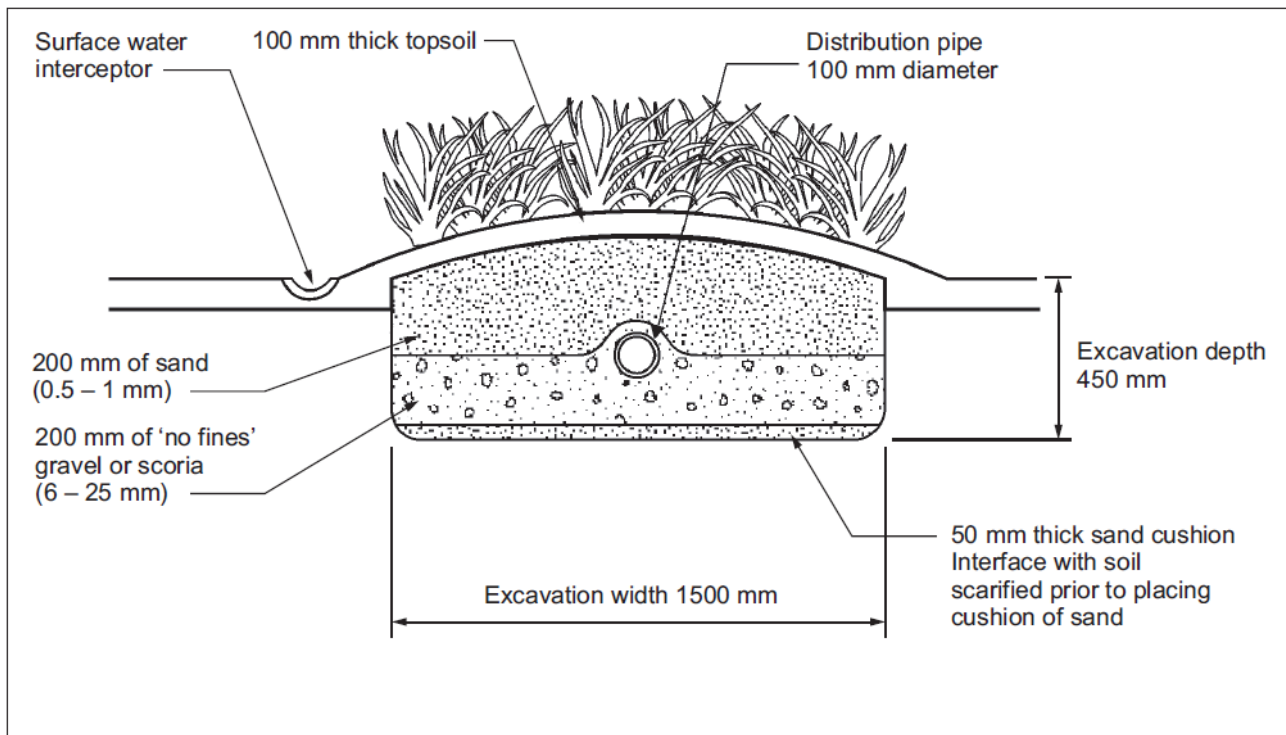
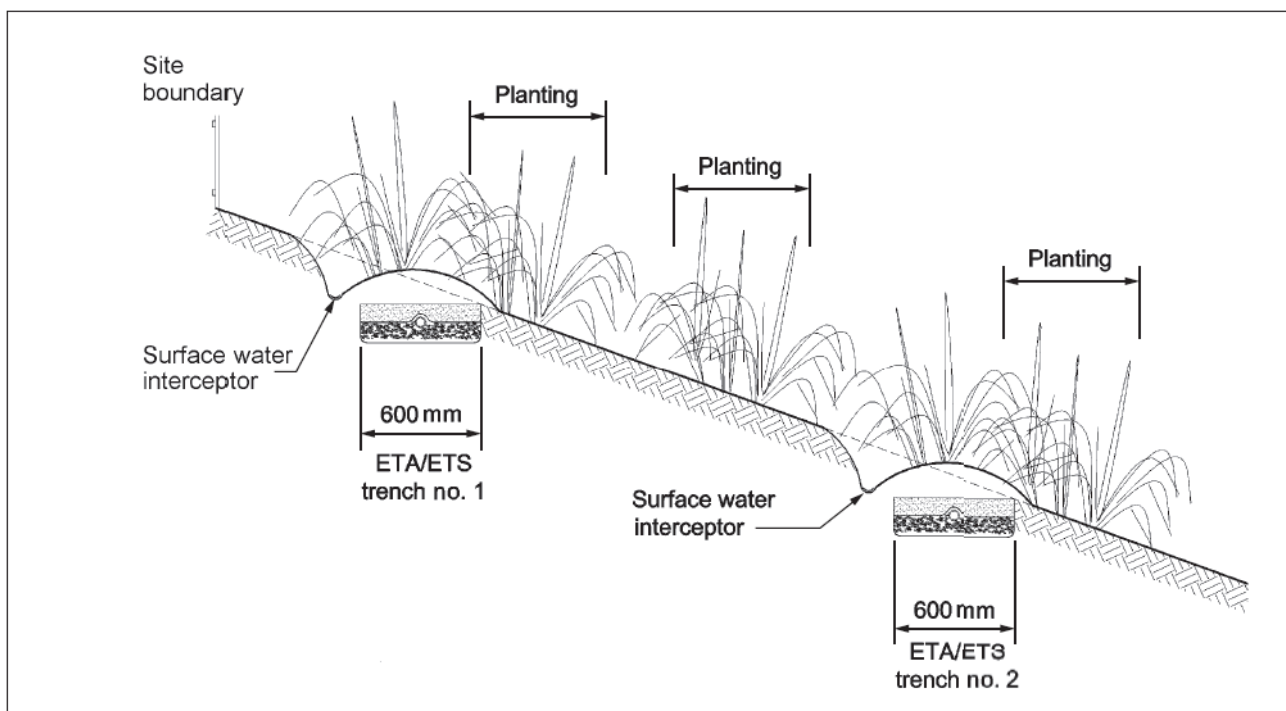


FIGURE L2 SELF-SUPPORTING ARCH TRENCH



**FIGURE L6 ETA/ETS BED DETAILS**



**NOTES:**

- 1 An LPED line can be used to dose load the ETA/ETS trenches.
- 2 Each ETA/ETS trench is constructed to disperse effluent into downslope topsoil so that plantings can provide assistance by evapotranspiration.

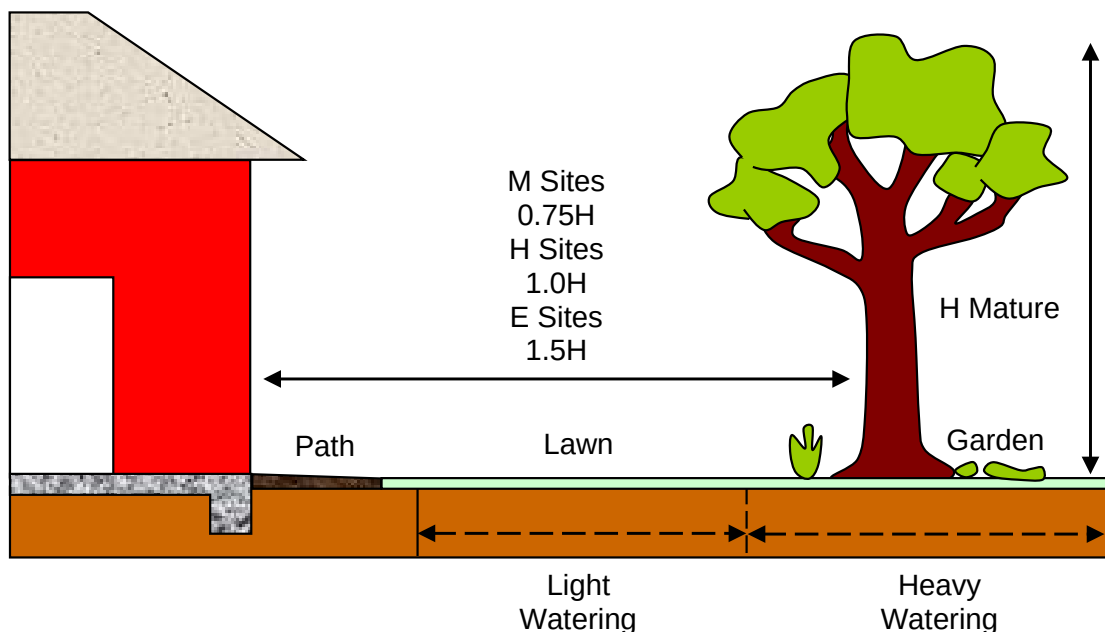
**FIGURE L7 ETA/ETS TRENCHES**

Just as the building of a house changes the moisture conditions of the soil, so does the planting and establishment of a garden. The watering of the gardens increases moisture in the soil which can cause it to swell. Plants also draw moisture out of the soil, especially in long dry spells, causing the soil to shrink.

To avoid excessive moisture fluctuations around the home it is necessary to plan the garden so that only lightly watered areas such as lawns and small garden beds be located in close proximity to the house. Garden beds containing larger shrubs and trees should be kept well away from the building. Heavily watering of gardens near the house should be avoided, although uniform consistent watering of the gardens can be beneficial to prevent damage during long dry periods. Australian native plants generally require less water than exotic varieties. In any case, it is recommended to obtain information about the species to be planted in the garden prior to establishing the area.

If trees exist on site, it is highly recommended to site the proposed residential dwelling away from these trees at a distance equivalent to at least 75% (for Class M sites), 100% (for Class H sites) and 150% (for Class E sites) of the mature height of the tree. If the tree is to be removed, it is highly recommended to remove the entire tree including root system and allow the ground to achieve equilibrium moisture condition prior to construction. To assist with achieving equilibrium moisture content, the material used to backfill the removed tree site should be similar to the surrounding soil. If any trees are to be retained and the dwelling is to be built within the distance equivalent to 75% (for Class M sites), 100% (for Class H sites) and 150% (for Class E sites) of the mature height of the tree, then the footing system shall be designed for “**Class P – Problem site**” classification.

There are no recommendations within the standard for Class A and Class S sites for trees. To ensure that trees do not have a detrimental effect on the underlying materials of the dwelling it is recommended to take care when designing gardens for all soil classifications.





## FOUNDATION EXCAVATION

The foundation excavation at times may expose soft or heaving areas at the base of the footing construction particularly if they are excavated after prolonged periods of rainfall. If such areas are encountered within the footing excavation, then such areas shall be excavated and treated before pouring the concrete. It is highly recommended to incorporate proper drainage measures around the perimeter of the building to ensure surface run-off does not ingress into the founding material.



## RECOMMENDED FOUNDATION MATERIAL

Soil layer variations are common; we have therefore provided a description of the “Recommended foundation material” as a guide to the builder as to the correct foundation depths outside our test sites. In all cases the foundation soil chosen should have a similar consistency and strength to that recommended but need not be of the same type. The depth of the recommended foundation material may vary outside the test locations if the site is excavated or filled in any way after the date of our investigation. It is often difficult to distinguish fill from natural ground during investigation. If any significant variation from the borehole logs is noted during footing excavation i.e. 200mm or more, Aitken Rowe Testing Laboratories Pty Ltd should be consulted. Some allowances should be made for the removal of topsoil, organic matter, roots etc, which may be found in small, localised areas in the footing trenches. Also the effect of past and future trees should be considered in the selection of a design value for differential movement.



## UNEXPECTED GROUND CONDITIONS

It is highly recommended to have experienced Geotechnical personnel inspect the site once the topsoil and unsuitable materials, if any, have been stripped to ensure that the exposed subgrade is consistent across the site. It is also recommended to proof roll the exposed subgrade. Isolated areas of “uncontrolled fill”, silt-based material, tree roots, existing services trenches, tile drainage etc, may be identified and may require removal prior to construction. Care should be given to the site history, particularly where orchards/vineyards/trees or existing structures have been removed.



## SITE ESTABLISHMENT

It is important to establish the site as soon as possible around the home as this will assist in stabilising the moisture content in the surrounding soil. The majority of soils expand (increase in volume) when wet, and shrink (decrease in volume) again when they dry out. The change in moisture and volume of soil can cause movement sufficient to damage the home. The more swelling and shrinkage the particular soil types on a site are likely to experience from changing moisture content, the more reactive that site will be. By quickly completing the stormwater drainage and paving around the home the moisture content in the vicinity of the home can be partially stabilised. With careful planting of trees, shrubs and garden beds and well planned watering, the expected soil movement and risk of damage to the home can be minimised.

## SITE DRAINAGE

When initially drawing a plan it is recommended to include the general layout of the site and garden areas. This enables the required levels to be established and ensures that adequate drainage is provided to all areas. This site drainage includes roof stormwater and ground water that may accumulate around the site and result in a change of soil conditions that could cause damage to the building. Retaining walls generally require drainage provisions to be made around and behind the wall. These drains need to be co-ordinated with the total drainage system on the site.

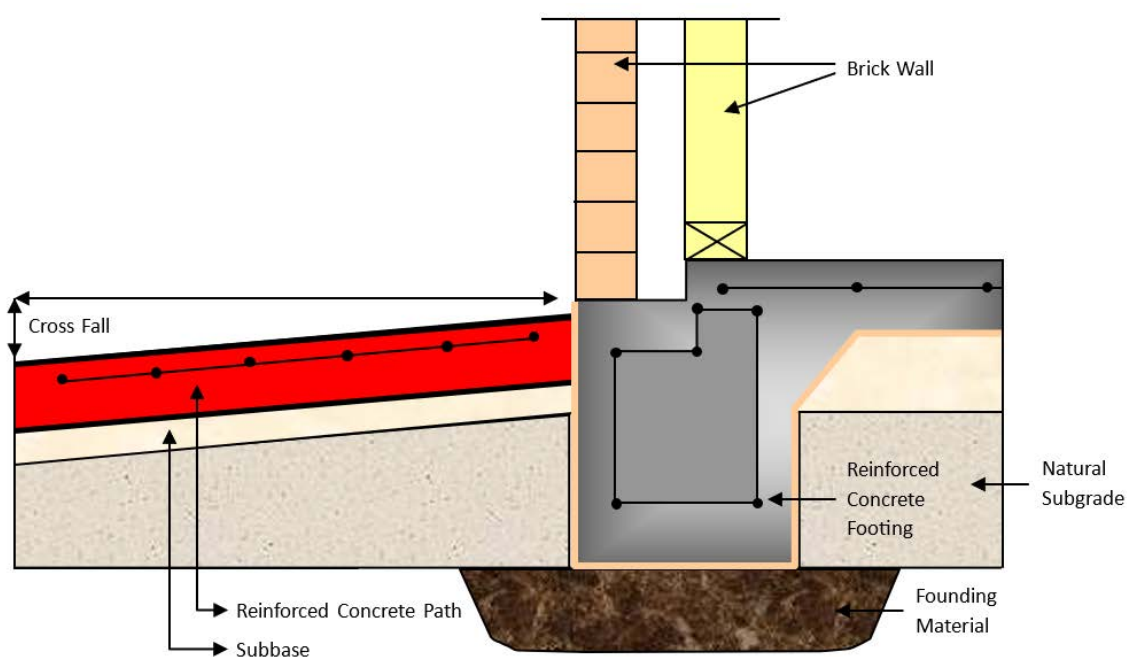
Paved areas also require adequate provision for stormwater runoff and should be graded to collection points that are both accessible for cleaning and connected to the stormwater system. All drains should be designed to prevent surface and subsurface water draining towards the house.

## PAVING

The finished ground level (soil) around the home should be graded away from the house footing with a minimum fall of 50mm over the first metre. Any fill that has been placed during construction should also have the same fall and be well compacted.

Paving provides an excellent “buffer zone” around the house that assists in reducing fluctuations in the moisture conditions adjacent to the footings. If possible this paving should extend outwards from the building line a minimum of 900mm or more for highly reactive soils. It is essential that paving has the right crossfall for the expected reactivity (ground movement) of the site and all surface water is adequately drained. Care needs to be taken if laying pavements in the summer to ensure the crossfalls will not be reduced due to soils swelling in the winter. If it is not possible to construct paving immediately, plastic sheeting with gravel spread on top provides a practical temporary alternative to protect the home until concrete paths can be placed.

For Class A, S, M sites, a minimum 30mm cross fall per metre is advised. For Class H and E sites, a minimum 50mm cross fall per metre is advised.





## DEFINITIONS OF SITE CLASSES

- A** Most sand or 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.
- M-D** Moderately reactive clay or silt sites with deep moisture changes.
- H1** Highly reactive clay sites, which can experience high ground movement from moisture changes.
- H2** Highly reactive clay sites, which can experience high ground movement from moisture changes.
- H1-D** Highly reactive clay sites with deep moisture changes.
- H2-D** Highly reactive clay sites with deep moisture changes.
- E** Extremely reactive sites, which can experience extreme ground movement from moisture changes.
- E-D** Extremely reactive sites with deep moisture changes.
- P** Sites which include “uncontrolled” fill; 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 with large trees adjacent to the footings or sites which cannot be classified otherwise.



## MAINTENANCE

As it is important for the homeowner to maintain the building, it is also important to maintain the site around the home. The primary objective of the site and house footing maintenance is to prevent the soil from becoming too wet or too dry. By keeping the moisture content of the soil under and adjacent to the footing reasonably constant, the potential for the soil to experience significant movement that may damage the building will be limited.

Good site establishment and management is a vital part of the maintenance and protection of the home. Careful planning and detailing of the site around the concrete footing will protect your investment in the home and provide a low maintenance concrete footing for many years.

# ADDENDUM



## LIMITS OF INVESTIGATION

The recommendations made in this report are based on the assumption that the test results are representative of the overall subsurface conditions. However, it should be noted that even under optimum circumstances, actual conditions in some parts of the building site may differ from those said to exist, because no geotechnical engineer, no matter how qualified, and no subsurface exploration program, no matter how comprehensive, can reveal all that is hidden by earth, rock and time. Because the investigation procedure generally includes sampling from either one, two or three boreholes, it may not be possible to conclusively establish the presence or extent the condition of the underlying soil and rock over the whole block until site work commences for the construction.

The client should also be aware that our recommendations refer only to our test site locations and the ground level at the time of testing.

The recommendations in this report are based on the following: -

- a) The information gained from our investigation.
- b) The present "state of the art" in testing and design.
- c) The building type and site treatment conveyed to us by the client.
- d) Historical Information

Should the client or their agent have omitted to supply us with the correct relevant information, or make significant changes to the building type and/or building envelope, our report may not take responsibility for any consequences and we reserve the right to make an additional charge if more testing is necessary.

Not withstanding the recommendations made in this report, we also recommend that whenever footings are close to any excavations or easements, that consideration should be given to deepening the footings.

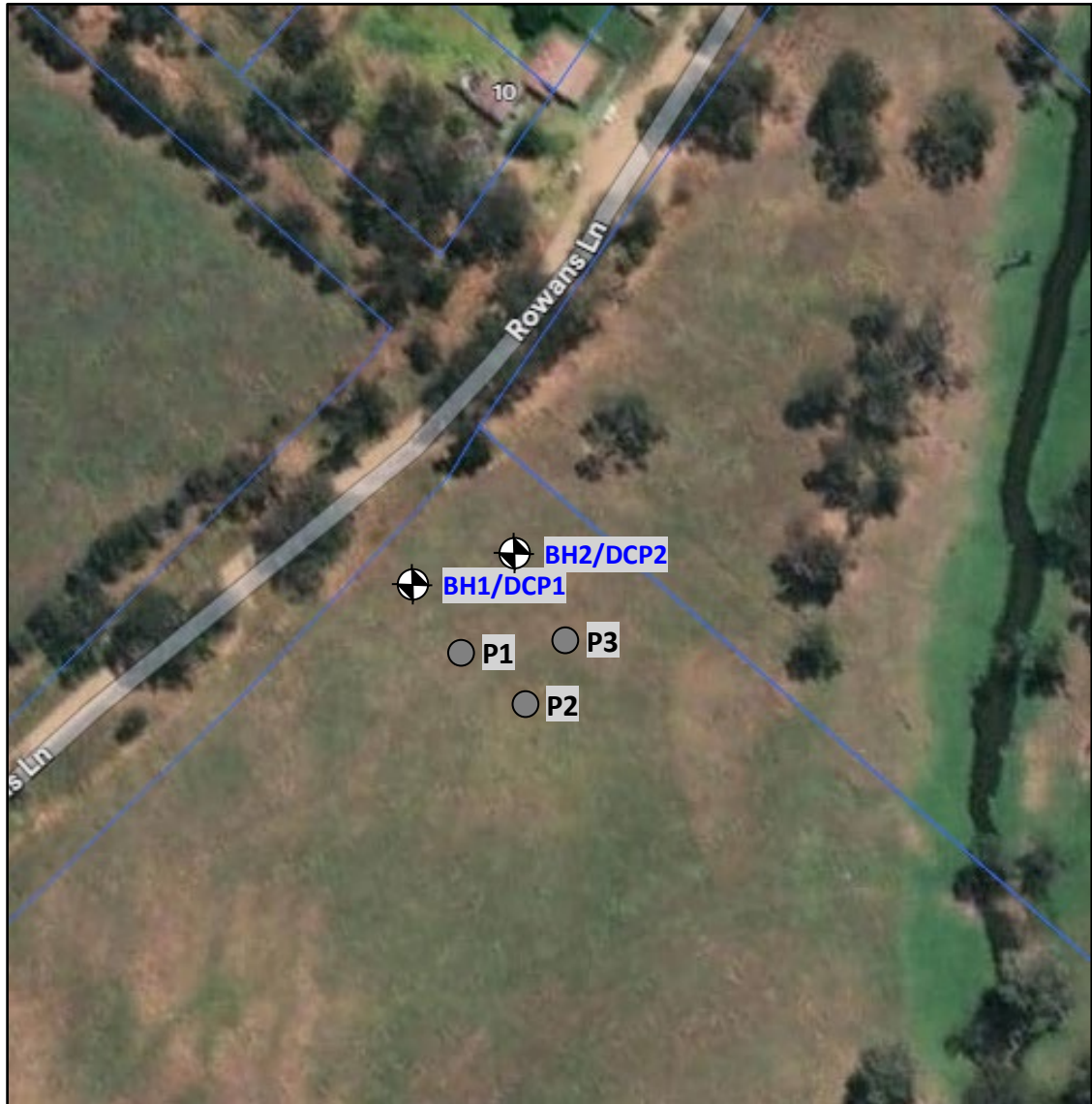
Unless otherwise stated in our commission, any dimensions or slope direction and magnitude should not be used for any building costing calculations and/or positioning. Any sketch supplied should be considered as only an approximate pictorial evidence of our work.



## ADDITIONAL INFORMATION

Refer also to the CSIRO Information Sheet: - BTF18 "Foundation Maintenance and Footing Performance: A Home Owner's Guide, which can be accessed through <https://www.publish.csiro.au/book/7942/>.

# SITE PLAN



NOT DRAWN TO SCALE

| AITKEN ROWE TESTING LABORATORIES PTY LTD                                                                                   |                                                                      |           |                    |                           |        |      | Borehole No.: 1   |                         |            |
|----------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|-----------|--------------------|---------------------------|--------|------|-------------------|-------------------------|------------|
|                                                                                                                            |                                                                      |           |                    |                           |        |      | Sheet No.: 1 of 1 |                         |            |
| Ground Level: Existing                                                                                                     |                                                                      |           |                    |                           |        |      | Date: 9/02/2024   |                         |            |
| Method: Auger Drilling with TC Bit                                                                                         |                                                                      |           |                    |                           |        |      | GPS N: 6218323    |                         |            |
|                                                                                                                            |                                                                      |           |                    |                           |        |      | E: 633921         |                         |            |
| USCS Symbol                                                                                                                | Description                                                          | Depth (m) | Moisture Condition | Consistency/ Rel. Density | Sample |      | Lab. Test         | Remarks & Field Records |            |
|                                                                                                                            |                                                                      |           |                    |                           | Type   | No.  | L.S %<br>-2.36mm  |                         |            |
| ML                                                                                                                         | TOPSOIL: Sandy SILT; low plasticity, fine to coarse sand, dark brown | 0.5       | MC<PL              | F-St.                     |        | 1A   | 2.0               | NATURAL                 |            |
| ML                                                                                                                         | Sandy SILT; low plasticity, fine to coarse sand, pale yellow brown   |           |                    |                           | D      |      |                   |                         |            |
|                                                                                                                            |                                                                      |           |                    |                           |        |      |                   |                         |            |
| CI                                                                                                                         | CLAY; medium plasticity, trace sand, trace gravel, cream yellow      | St.       | D                  | 1B                        | 10.0   |      |                   |                         |            |
|                                                                                                                            |                                                                      | VSt.      |                    |                           |        |      |                   |                         |            |
|                                                                                                                            |                                                                      |           |                    |                           |        |      |                   |                         |            |
| CI-CH                                                                                                                      | CLAY; medium to high plasticity, trace sand, grey yellow             | 1.0       | MC=PL              |                           | D      | 1C   | 12.0              |                         |            |
|                                                                                                                            |                                                                      |           | MC>PL              |                           |        |      |                   |                         |            |
|                                                                                                                            |                                                                      | 1.5       |                    |                           |        |      |                   |                         |            |
| CH                                                                                                                         | CLAY; high plasticity, trace sand, trace gravel, grey yellow         | 2.0       |                    | VSt.                      |        | 1D   | 14.5              |                         | Iss = 3.05 |
|                                                                                                                            |                                                                      |           |                    |                           | D      |      |                   |                         |            |
|                                                                                                                            |                                                                      | 2.5       |                    |                           |        |      |                   |                         |            |
| CH                                                                                                                         | CLAY; high plasticity, with fine to coarse gravel, trace sand, brown | 3.0       |                    | D                         | 1E     | 14.0 |                   |                         |            |
|                                                                                                                            |                                                                      |           |                    |                           |        |      |                   |                         |            |
|                                                                                                                            | End of Borehole (BH1) @ 3.0m                                         | 3.5       |                    |                           |        |      |                   |                         |            |
|                                                                                                                            |                                                                      | 4.0       |                    |                           |        |      |                   |                         |            |
| Registration No.: SE24-009<br><br>Location: No. 70 Rowans Lane, Bendick Murrell, NSW<br><br>Client: Tori Pope - Young, NSW |                                                                      |           |                    |                           |        |      | Logged By: JAG    |                         |            |
|                                                                                                                            |                                                                      |           |                    |                           |        |      | Scale: As shown   |                         |            |
|                                                                                                                            |                                                                      |           |                    |                           |        |      | Dry on completion |                         |            |

| AITKEN ROWE TESTING LABORATORIES PTY LTD           |                                                                      |           |                    |                          |        |     | Borehole No.: 2   |                         |
|----------------------------------------------------|----------------------------------------------------------------------|-----------|--------------------|--------------------------|--------|-----|-------------------|-------------------------|
|                                                    |                                                                      |           |                    |                          |        |     | Sheet No.: 1 of 1 |                         |
| Ground Level: Existing                             |                                                                      |           |                    |                          |        |     | Date: 9/02/2024   |                         |
| Method: Auger Drilling with TC Bit                 |                                                                      |           |                    |                          |        |     | GPS N: 6218326    |                         |
|                                                    |                                                                      |           |                    |                          |        |     | E: 633952         |                         |
| USCS Symbol                                        | Description                                                          | Depth (m) | Moisture Condition | Consistency/Rel. Density | Sample |     | Lab. Test         | Remarks & Field Records |
|                                                    |                                                                      |           |                    |                          | Type   | No. | L.S %<br>-2.36mm  |                         |
| ML                                                 | TOPSOIL: Sandy SILT; low plasticity, fine to coarse sand, dark brown | 0.5       | MC<PL              | F-St.                    |        | 2A  | 2.0               | NATURAL                 |
| ML                                                 | Sandy SILT; low plasticity, fine to coarse sand, pale yellow brown   |           |                    |                          | D      |     |                   |                         |
| CI                                                 | CLAY; medium plasticity, trace sand, trace gravel, cream yellow      |           | VSt.               |                          |        |     |                   |                         |
| CI-CH                                              | CLAY; medium to high plasticity, trace sand, grey yellow             |           |                    | MC=PL                    |        |     |                   |                         |
|                                                    |                                                                      | MC>PL     |                    |                          |        |     |                   |                         |
| CH                                                 | CLAY; high plasticity, trace sand, trace gravel, grey yellow         | 2.0       |                    |                          |        |     |                   |                         |
|                                                    | End of Borehole (BH2) @ 2.3m                                         | 2.5       |                    |                          |        |     |                   |                         |
|                                                    |                                                                      | 3.0       |                    |                          |        |     |                   |                         |
|                                                    |                                                                      | 3.5       |                    |                          |        |     |                   |                         |
|                                                    |                                                                      | 4.0       |                    |                          |        |     |                   |                         |
| Registration No.: SE24-009                         |                                                                      |           |                    |                          |        |     | Logged By: JAG    |                         |
| Location: No. 70 Rowans Lane, Bendick Murrell, NSW |                                                                      |           |                    |                          |        |     | Scale: As shown   |                         |
| Client: Tori Pope - Young, NSW                     |                                                                      |           |                    |                          |        |     | Dry on completion |                         |



# AITKEN ROWE TESTING LABORATORIES PTY LTD

## LOG SYMBOLS

| LOG COLUMN                                   | SYMBOL            | DEFINITION                                                                                                                                                                        |                       |                                |
|----------------------------------------------|-------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|--------------------------------|
| Groundwater Record                           |                   | Standing water level. Time delay following completion of drilling may be shown.                                                                                                   |                       |                                |
|                                              |                   | Groundwater seepage into borehole or excavation noted during drilling or excavation.                                                                                              |                       |                                |
| Samples                                      | D                 | Disturbed bag sample taken between the depths indicated by lines.                                                                                                                 |                       |                                |
|                                              | U                 | Undisturbed 50mm diameter tube sample taken between the depths indicated by lines                                                                                                 |                       |                                |
| Field Tests                                  | 4, 7, 10<br>N=17  | Standard Penetration Test (S.P.T.) performed between depths indicated by lines.<br>Individual figures show blows per 150mm penetration driven by SPT hammer.                      |                       |                                |
|                                              | 5                 | Dynamic Cone Penetration Test performed between depths indicated by lines.<br>Individual figures show blows per 100mm penetration for 60 degree solid cone driven by 9 kg hammer. |                       |                                |
|                                              | 7                 |                                                                                                                                                                                   |                       |                                |
|                                              | 3                 |                                                                                                                                                                                   |                       |                                |
| Moisture Condition<br>(Silt or Clay based)   | MC<PL             | Moisture content estimated to be less than plastic limit.                                                                                                                         |                       |                                |
|                                              | MC=PL             | Moisture content estimated to be approx. equal to plastic limit.                                                                                                                  |                       |                                |
|                                              | MC>PL             | Moisture content estimated to be greater than plastic limit.                                                                                                                      |                       |                                |
| Moisture Condition<br>(Gravel or Sand based) | D                 | DRY – runs freely through fingers.                                                                                                                                                |                       |                                |
|                                              | M                 | MOIST – does not run freely but no free water visible on soil surface.                                                                                                            |                       |                                |
|                                              | W                 | WET – free water visible on soil surface.                                                                                                                                         |                       |                                |
| Consistency<br>(Silt or Clay based)          | VS                | VERY SOFT – unconfined compressive strength less than 25kPa.                                                                                                                      |                       |                                |
|                                              | S                 | SOFT – unconfined compressive strength 25-50 kPa.                                                                                                                                 |                       |                                |
|                                              | F                 | FIRM – unconfined compressive strength 50-100kPa.                                                                                                                                 |                       |                                |
|                                              | St.               | STIFF – unconfined compressive strength 100-200kPa.                                                                                                                               |                       |                                |
|                                              | VSt.              | VERY STIFF – unconfined compressive strength 200-400kPa.                                                                                                                          |                       |                                |
|                                              | H                 | HARD – unconfined compressive strength greater than 400kPa.                                                                                                                       |                       |                                |
| Relative Density<br>(Gravel or Sand based)   |                   | Description                                                                                                                                                                       | Density Index Range % | 'N' Value Range<br>Blows/300mm |
|                                              | VL                | VERY LOOSE                                                                                                                                                                        | <15                   | 0-5                            |
|                                              | L                 | LOOSE                                                                                                                                                                             | 15-35                 | 6-10                           |
|                                              | MD                | MEDIUM DENSE                                                                                                                                                                      | 35-65                 | 11-30                          |
|                                              | D                 | DENSE                                                                                                                                                                             | 65-85                 | 31-60                          |
|                                              | VD                | VERY DENSE                                                                                                                                                                        | >85                   | >60                            |
| Hand Penetrometer Readings                   | 300<br>250<br>280 | Numbers indicate individual test results in kPa on representative undisturbed material.                                                                                           |                       |                                |
| Laboratory Test                              | L.S. %            | Linear Shrinkage (As per TfNSW Method T113)                                                                                                                                       |                       |                                |
|                                              | M.C. %            | Field Moisture Content (As per Australian Standard AS1289.2.1.1 or TfNSW Method T120)                                                                                             |                       |                                |
|                                              | Iss               | Shrink-Swell Index (As per Australian Standard AS1289.7.1.1)                                                                                                                      |                       |                                |
| Piezometer Construction                      | Fill              |                                                                                                                                                                                   | Piezometer            |                                |
|                                              |                   | Bentonite                                                                                                                                                                         |                       | Solid Pipe                     |
|                                              |                   | Washed Fine Graded Gravel                                                                                                                                                         |                       | Slotted Screen                 |
| Remarks                                      | 'V' bit           | Hardened steel 'V' shaped bit.                                                                                                                                                    |                       |                                |
|                                              | 'TC' bit          | Tungsten Carbide wing bit.                                                                                                                                                        |                       |                                |

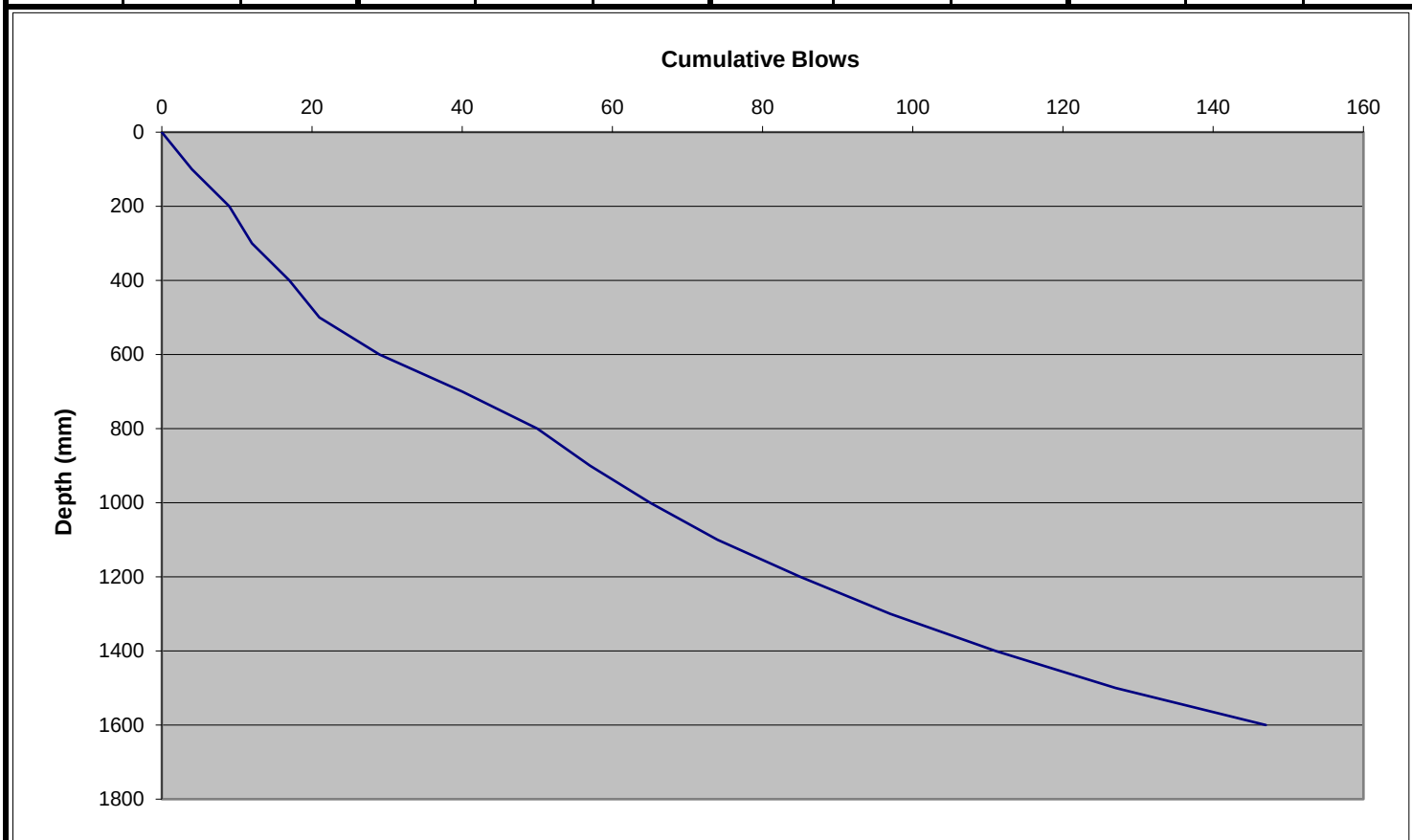
# Aitken Rowe Testing Laboratories Pty Ltd

ARTL Wagga: 4/2 Riedell Street, Wagga Wagga NSW 2650

## DYNAMIC CONE PENETROMETER REPORT

|                                                                                             |                                   |
|---------------------------------------------------------------------------------------------|-----------------------------------|
| CLIENT: TORI POPE - YOUNG, NSW                                                              | PAGE: 1 OF: 2                     |
| PROJECT: SITE CLASSIFICATION & EFFLUENT DISPOSAL ASSESMENT<br>PROPOSED RESIDENTIAL DWELLING | REGISTRATION NO: <b>SE24-009</b>  |
| LOCATION: No. 70 ROWANS LANE, BENDICK MURRELL, NSW DCP: 1 (BH1)                             | DATE OF TEST: 9/02/2024           |
| SOIL DESCRIPTION: REFER TO BOREHOLE LOGS                                                    | DEPTH BELOW ESL (mm): NIL         |
| DEPTH OF GROUND WATER TABLE IF INTERSECTED: N/A                                             | MOISTURE CONDITION: REFER TO LOGS |
|                                                                                             | TEST METHOD: AS 1289.6.3.2        |

| Depth(m)  | Blows | Est. CBR | Depth(m)  | Blows | Est. CBR | Depth(m)  | Blows | Est. CBR | Depth(m)  | Blows | Est. CBR |
|-----------|-------|----------|-----------|-------|----------|-----------|-------|----------|-----------|-------|----------|
| 0.0 - 0.1 | 4     | 7        | 1.5 - 1.6 | 20    | 55       | 3.0 - 3.1 | *     | *        | 4.5 - 4.6 | *     | *        |
| 0.1 - 0.2 | 5     | 9        | 1.6 - 1.7 | END   | *        | 3.1 - 3.2 | *     | *        | 4.6 - 4.7 | *     | *        |
| 0.2 - 0.3 | 3     | 5        | 1.7 - 1.8 | *     | *        | 3.2 - 3.3 | *     | *        | 4.7 - 4.8 | *     | *        |
| 0.3 - 0.4 | 5     | 9        | 1.8 - 1.9 | *     | *        | 3.3 - 3.4 | *     | *        | 4.8 - 4.9 | *     | *        |
| 0.4 - 0.5 | 4     | 7        | 1.9 - 2.0 | *     | *        | 3.4 - 3.5 | *     | *        | 4.9 - 5.0 | *     | *        |
| 0.5 - 0.6 | 8     | 17       | 2.0 - 2.1 | *     | *        | 3.5 - 3.6 | *     | *        | 5.0 - 5.1 | *     | *        |
| 0.6 - 0.7 | 11    | 25       | 2.1 - 2.2 | *     | *        | 3.6 - 3.7 | *     | *        | 5.1 - 5.2 | *     | *        |
| 0.7 - 0.8 | 10    | 23       | 2.2 - 2.3 | *     | *        | 3.7 - 3.8 | *     | *        | 5.2 - 5.3 | *     | *        |
| 0.8 - 0.9 | 7     | 14       | 2.3 - 2.4 | *     | *        | 3.8 - 3.9 | *     | *        | 5.3 - 5.4 | *     | *        |
| 0.9 - 1.0 | 8     | 17       | 2.4 - 2.5 | *     | *        | 3.9 - 4.0 | *     | *        | 5.4 - 5.5 | *     | *        |
| 1.0 - 1.1 | 9     | 20       | 2.5 - 2.6 | *     | *        | 4.0 - 4.1 | *     | *        | 5.5 - 5.6 | *     | *        |
| 1.1 - 1.2 | 11    | 25       | 2.6 - 2.7 | *     | *        | 4.1 - 4.2 | *     | *        | 5.6 - 5.7 | *     | *        |
| 1.2 - 1.3 | 12    | 28       | 2.7 - 2.8 | *     | *        | 4.2 - 4.3 | *     | *        | 5.7 - 5.8 | *     | *        |
| 1.3 - 1.4 | 14    | 35       | 2.8 - 2.9 | *     | *        | 4.3 - 4.4 | *     | *        | 5.8 - 5.9 | *     | *        |
| 1.4 - 1.5 | 16    | 41       | 2.9 - 3.0 | *     | *        | 4.4 - 4.5 | *     | *        | 5.9 - 6.0 | *     | *        |



Accredited for compliance with  
ISO/IEC 17025 - Testing.

ACCREDITATION NUMBER:  
4679

REMARKS:

APPROVED SIGNATORY: Peter Forbes-Taber

DATE: 23/02/2024

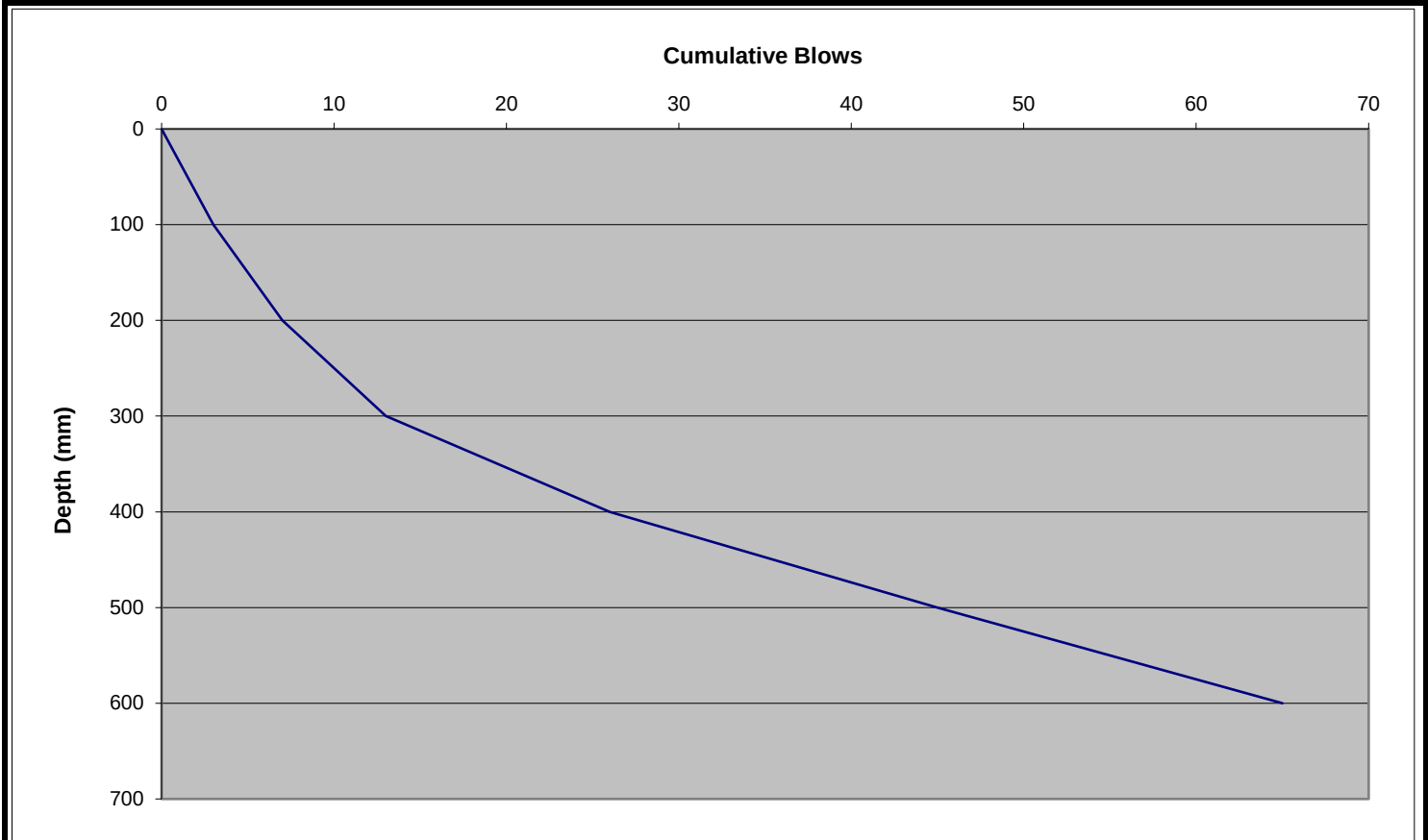
# Aitken Rowe Testing Laboratories Pty Ltd

ARTL Wagga: 4/2 Riedell Street, Wagga Wagga NSW 2650

## DYNAMIC CONE PENETROMETER REPORT

|                                                                                             |                                   |
|---------------------------------------------------------------------------------------------|-----------------------------------|
| CLIENT: TORI POPE - YOUNG, NSW                                                              | PAGE: 2 OF: 2                     |
| PROJECT: SITE CLASSIFICATION & EFFLUENT DISPOSAL ASSESMENT<br>PROPOSED RESIDENTIAL DWELLING | REGISTRATION NO: <b>SE24-009</b>  |
| LOCATION: No. 70 ROWANS LANE, BENDICK MURRELL, NSW DCP: 2 (BH2)                             | DATE OF TEST: 9/02/2024           |
| SOIL DESCRIPTION: REFER TO BOREHOLE LOGS                                                    | DEPTH BELOW ESL (mm): NIL         |
| DEPTH OF GROUND WATER TABLE IF INTERSECTED: N/A                                             | MOISTURE CONDITION: REFER TO LOGS |
|                                                                                             | TEST METHOD: AS 1289.6.3.2        |

| Depth(m)  | Blows | Est. CBR | Depth(m)  | Blows | Est. CBR | Depth(m)  | Blows | Est. CBR | Depth(m)  | Blows | Est. CBR |
|-----------|-------|----------|-----------|-------|----------|-----------|-------|----------|-----------|-------|----------|
| 0.0 - 0.1 | 3     | 5        | 1.5 - 1.6 | *     | *        | 3.0 - 3.1 | *     | *        | 4.5 - 4.6 | *     | *        |
| 0.1 - 0.2 | 4     | 7        | 1.6 - 1.7 | *     | *        | 3.1 - 3.2 | *     | *        | 4.6 - 4.7 | *     | *        |
| 0.2 - 0.3 | 6     | 12       | 1.7 - 1.8 | *     | *        | 3.2 - 3.3 | *     | *        | 4.7 - 4.8 | *     | *        |
| 0.3 - 0.4 | 13    | 32       | 1.8 - 1.9 | *     | *        | 3.3 - 3.4 | *     | *        | 4.8 - 4.9 | *     | *        |
| 0.4 - 0.5 | 19    | 51       | 1.9 - 2.0 | *     | *        | 3.4 - 3.5 | *     | *        | 4.9 - 5.0 | *     | *        |
| 0.5 - 0.6 | 20    | 55       | 2.0 - 2.1 | *     | *        | 3.5 - 3.6 | *     | *        | 5.0 - 5.1 | *     | *        |
| 0.6 - 0.7 | END   | *        | 2.1 - 2.2 | *     | *        | 3.6 - 3.7 | *     | *        | 5.1 - 5.2 | *     | *        |
| 0.7 - 0.8 | *     | *        | 2.2 - 2.3 | *     | *        | 3.7 - 3.8 | *     | *        | 5.2 - 5.3 | *     | *        |
| 0.8 - 0.9 | *     | *        | 2.3 - 2.4 | *     | *        | 3.8 - 3.9 | *     | *        | 5.3 - 5.4 | *     | *        |
| 0.9 - 1.0 | *     | *        | 2.4 - 2.5 | *     | *        | 3.9 - 4.0 | *     | *        | 5.4 - 5.5 | *     | *        |
| 1.0 - 1.1 | *     | *        | 2.5 - 2.6 | *     | *        | 4.0 - 4.1 | *     | *        | 5.5 - 5.6 | *     | *        |
| 1.1 - 1.2 | *     | *        | 2.6 - 2.7 | *     | *        | 4.1 - 4.2 | *     | *        | 5.6 - 5.7 | *     | *        |
| 1.2 - 1.3 | *     | *        | 2.7 - 2.8 | *     | *        | 4.2 - 4.3 | *     | *        | 5.7 - 5.8 | *     | *        |
| 1.3 - 1.4 | *     | *        | 2.8 - 2.9 | *     | *        | 4.3 - 4.4 | *     | *        | 5.8 - 5.9 | *     | *        |
| 1.4 - 1.5 | *     | *        | 2.9 - 3.0 | *     | *        | 4.4 - 4.5 | *     | *        | 5.9 - 6.0 | *     | *        |



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ACCREDITATION NUMBER:  
4679

REMARKS:

APPROVED SIGNATORY: Peter Forbes-Taber

DATE: 23/02/2024

**AITKEN ROWE TESTING LABORATORIES PTY LTD**

ARTL Wagga: 4/2 Riedell Street, Wagga Wagga NSW 2650

PAGE: 1

OF: 1

**TEST REPORT****SOIL PERCOLATION & EMERSON CLASS**

CLIENT: TORI POPE - YOUNG, NSW

JOB DESCRIPTION: SITE CLASSIFICATION &amp; EFFLUENT DISPOSAL ASSESSMENT

PROPERTY LOCATION: No. 70 ROWANS LANE, BENDICK MURRELL, NSW

\*

MATERIAL TYPE: REFER TO BOREHOLE LOGS

DATE OF TEST: 9/02/2024  
& 12/02/2024TEST METHOD: AS1547  
AS1289.3.8.1REGISTRATION No.: **SE24-009****MEASUREMENT OF DROP IN WATER LEVEL**

| Time Elapsed<br>(minutes) | Water Level (mm) |    |    |    |    |    |
|---------------------------|------------------|----|----|----|----|----|
|                           | P1               | P2 | P3 | P4 | P5 | P6 |
| 0                         | 0                | 0  | 0  | *  | *  | *  |
| 10                        | 10               | 15 | 10 | *  | *  | *  |
| 15                        | *                | *  | *  | *  | *  | *  |
| 20                        | 20               | 30 | 25 | *  | *  | *  |
| 30                        | 35               | 45 | 40 | *  | *  | *  |
| 40                        | 50               | 60 | 55 | *  | *  | *  |
| 45                        | *                | *  | *  | *  | *  | *  |
| 50                        | 55               | 70 | 65 | *  | *  | *  |
| 60                        | 60               | 80 | 70 | *  | *  | *  |
| 70                        | *                | *  | *  | *  | *  | *  |

**TIME TAKEN FOR 25mm WATER LEVEL FALL**

| Site | Absorption Rate<br>(mins/25mm) |
|------|--------------------------------|
| P1   | 25.0                           |
| P2   | 18.8                           |
| P3   | 21.4                           |
| P4   | *                              |
| P5   | *                              |
| P6   | *                              |

**Permeability:** 0.25 m/day**D.L.R.:** 5 mm/day**D.I.R.:** 3 mm/day**Emerson Class Number:** 5

APPROVED SIGNATORY:

  
Peter Forbes-Taber

DATE:

23/2/2024

**AITKEN ROWE Testing Laboratories Pty Ltd**

ARTL Wagga: 4/2 Riedell Street, Wagga Wagga NSW 2650

\*

**TEST REPORT: GEOTECHNICAL INVESTIGATION - SOIL ANALYSIS**

CLIENT : TORI POPE - YOUNG, NSW

JOB DESCRIPTION : SITE CLASSIFICATION &amp; EFFLUENT DISPOSAL ASSESSMENT

PROPOSED RESIDENTIAL DWELLING

No. 70 ROWANS LANE, BENDICK MURRELL, NSW

PAGE 1 OF 1

SAMPLED BY: ARTL

DATE SAMPLED: 9/02/2024

DATE SUBMITTED: 9/02/2024

SAMPLING METHOD: AS1289.1.2.1

SAMPLING CLAUSE: 6.5.3

DATES TESTED: 12-13/02/2024

ORDER No.: \*

MATERIAL SOURCE : IN-SITU BOREHOLES

PROPOSED USE : DESIGN

MATERIAL TYPE : REFER TO BOREHOLE LOGS

REGISTRATION No : R28 **SE24-009**

SAMPLE NUMBER :

P1

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SAMPLING LOCATION :

PERC

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DEPTHS BETWEEN WHICH SAMPLES TAKEN (mm) :

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TESTS

TEST ELEMENT

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AS1289.3.6.1

PASS 100.0mm SIEVE %

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PASS 75.0mm SIEVE %

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PASS 53.0mm SIEVE %

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PASS 37.5mm SIEVE %

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PASS 26.5mm SIEVE %

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PASS 19.0mm SIEVE %

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PASS 13.2mm SIEVE %

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PASS 9.50mm SIEVE %

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PASS 6.70mm SIEVE %

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PASS 4.75mm SIEVE %

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PASS 2.36mm SIEVE %

100

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PASS 1.18mm SIEVE %

95

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PASS 600µm SIEVE %

92

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PASS 425µm SIEVE %

91

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PASS 300µm SIEVE %

89

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PASS 150µm SIEVE %

85

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PASS 75µm SIEVE %

77

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AS1289.3.8.1

EMERSON CLASS

5

\*

\*

\*

\*

\*

(AIR DRIED)

TYPE OF WATER

DISTILLED

\*

\*

\*

\*

\*

Accredited for compliance  
with ISO/IEC 17025 - Testing.ACCREDITATION NUMBER:  
4679\*  
\*  
\*

All samples are oven dried and dry sieved during prep. unless otherwise stated

APPROVED SIGNATORY : .....

Peter Forbes-Taber

DATE: 23/02/2024

**SIZE OF AREA FOR EACH MONTH (INCLUDING STORAGE OF EFFLUENT)**

| Month | Days per month | Pan Evaporation (mm) | Crop Factor<br>S = 0.8 W = 0.6 | Evapotranspiration (mm) | Rainfall (mm) | Retained Rainfall | LTAR per day (mm) | LTAR per month (mm) | Disposal Rate per month (mm) | Effluent Applied per Month (L) | Size of Area (m <sup>2</sup> ) |
|-------|----------------|----------------------|--------------------------------|-------------------------|---------------|-------------------|-------------------|---------------------|------------------------------|--------------------------------|--------------------------------|
|       | N              | E <sub>o</sub>       | C <sub>f</sub>                 | ET                      | R             | R <sub>r</sub>    | P                 | Pm                  | ET-Rr+Bm                     | QxN                            |                                |
| Jan.  | 31             | 257.3                | 0.8                            | 205.8                   | 43.0          | 32.3              | 3.5               | 108.5               | 282.1                        | 14880                          | 53                             |
| Feb.  | 28             | 207.2                | 0.8                            | 165.8                   | 37.1          | 27.8              | 3.5               | 98                  | 235.9                        | 13440                          | 57                             |
| Mar.  | 31             | 173.6                | 0.8                            | 138.9                   | 41.5          | 31.1              | 3.5               | 108.5               | 216.3                        | 14880                          | 69                             |
| Apr.  | 30             | 105.0                | 0.6                            | 63.0                    | 45.6          | 34.2              | 3.5               | 105                 | 133.8                        | 14400                          | 108                            |
| May.  | 31             | 58.9                 | 0.6                            | 35.3                    | 56.1          | 42.1              | 3.5               | 108.5               | 101.8                        | 14880                          | 146                            |
| Jun.  | 30             | 36.0                 | 0.6                            | 21.6                    | 47.7          | 35.8              | 3.5               | 105                 | 90.8                         | 14400                          | 159                            |
| Jul.  | 31             | 40.3                 | 0.6                            | 24.2                    | 56.2          | 42.2              | 3.5               | 108.5               | 90.5                         | 14880                          | 164                            |
| Aug.  | 31             | 52.7                 | 0.6                            | 31.6                    | 54.3          | 40.7              | 3.5               | 108.5               | 99.4                         | 14880                          | 150                            |
| Sep.  | 30             | 75.0                 | 0.6                            | 45.0                    | 55.0          | 41.3              | 3.5               | 105                 | 108.8                        | 14400                          | 132                            |
| Oct.  | 31             | 117.8                | 0.8                            | 94.2                    | 62.2          | 46.7              | 3.5               | 108.5               | 156.1                        | 14880                          | 95                             |
| Nov.  | 30             | 177.0                | 0.8                            | 141.6                   | 44.0          | 33.0              | 3.5               | 105                 | 213.6                        | 14400                          | 67                             |
| Dec.  | 31             | 241.8                | 0.8                            | 193.4                   | 42.0          | 31.5              | 3.5               | 108.5               | 270.4                        | 14880                          | 55                             |
| Sum   |                | 1542.6               |                                | 1160.5                  | 584.7         |                   |                   |                     |                              | Average Area                   | 105                            |

| Month | Days per month | First Trial Area (m <sup>2</sup> ) | Effluent Applied per Month (L) | Disposal Rate per month (mm) | Application Rate (mm) | Gain/Loss (mm) | Evaporation Deficit (mm) | Starting depth of Effluent (mm) | Increase in depth of stored effluent (mm) | Computed depth of Effluent (mm) |
|-------|----------------|------------------------------------|--------------------------------|------------------------------|-----------------------|----------------|--------------------------|---------------------------------|-------------------------------------------|---------------------------------|
| Dec.  |                |                                    |                                |                              |                       |                |                          |                                 |                                           | 0.0                             |
| Jan.  | 31             | 110                                | 14880                          | 282.1                        | 135.3                 | -146.8         | -173.6                   | 0.0                             | -367.0                                    | -367.0                          |
| Feb.  | 28             | 110                                | 13440                          | 235.9                        | 122.2                 | -113.8         | -137.9                   | -367.0                          | -284.4                                    | -651.4                          |
| Mar.  | 31             | 110                                | 14880                          | 216.3                        | 135.3                 | -81.0          | -107.8                   | -651.4                          | -202.5                                    | -853.9                          |
| Apr.  | 30             | 110                                | 14400                          | 133.8                        | 130.9                 | -2.9           | -28.8                    | -853.9                          | -7.2                                      | -861.1                          |
| May.  | 31             | 110                                | 14880                          | 101.8                        | 135.3                 | 33.5           | 6.7                      | -861.1                          | 83.8                                      | -777.3                          |
| Jun.  | 30             | 110                                | 14400                          | 90.8                         | 130.9                 | 40.1           | 14.2                     | -777.3                          | 100.2                                     | -677.1                          |
| Jul.  | 31             | 110                                | 14880                          | 90.5                         | 135.3                 | 44.7           | 18.0                     | -677.1                          | 111.9                                     | -565.3                          |
| Aug.  | 31             | 110                                | 14880                          | 99.4                         | 135.3                 | 35.9           | 9.1                      | -565.3                          | 89.7                                      | -475.6                          |
| Sep.  | 30             | 110                                | 14400                          | 108.8                        | 130.9                 | 22.2           | -3.8                     | -475.6                          | 55.4                                      | -420.2                          |
| Oct.  | 31             | 110                                | 14880                          | 156.1                        | 135.3                 | -20.8          | -47.6                    | -420.2                          | -52.0                                     | -472.2                          |
| Nov.  | 30             | 110                                | 14400                          | 213.6                        | 130.9                 | -82.7          | -108.6                   | -472.2                          | -206.7                                    | -679.0                          |
| Dec.  | 31             | 110                                | 14880                          | 270.4                        | 135.3                 | -135.2         | -161.9                   | -679.0                          | -337.9                                    | -1016.9                         |



## PRIMARY TREATMENT

SE24-009 No. 70 Rowans Lane, Bendick Murrell, NSW

### CALCULATION OF ABSORPTION TRENCH

$A_w = Q_d / LTAR$   
 $Q_d = 480$  litres  
 $A_w = 240m^2$   
 $L = A_w / (b + d_w)$   
 Trench width = 600mm  
 Trench depth = 700mm  
  
**Length, L = 185m**

LTAR (P) = 2 mm/day  
 LTAR = Long Term Acceptance Rate (mm/day)  
 $Q_d$  = daily effluent flow (L/day)  
 $A_w$  = wetted area  
 b = trench width  
 L = trench length (m)  
 $d_w$  = allowance for depth of wetted walls (m)  
 $d_w = 2 * 0.5d$

|                       | DATA        |                       |
|-----------------------|-------------|-----------------------|
| Flow Rate ( $Q_d$ )   | <b>480</b>  | L/day                 |
| LTAR (P)              | <b>2</b>    | L/m <sup>2</sup> /day |
| LTAR (S)              | <b>3.5</b>  | L/m <sup>2</sup> /day |
| Run off Coefficient   | <b>0.75</b> | Retained              |
| Soil Porosity         | <b>0.4</b>  | Estimate              |
| Estimated Wetted Area | <b>110</b>  | m <sup>2</sup>        |
| DLR (P)               | <b>5</b>    |                       |
| DLR (S)               | <b>8</b>    |                       |
| DIR                   | <b>3</b>    |                       |



## SECONDARY TREATMENT

### CALCULATION OF EVAPOTRANSPIRATION AREA - ETA TRENCH / ETS BED

**ETA TRENCH**  
 Water Balance Area = 110m<sup>2</sup>  
 Be = width + 2depth  
 Length, L = Ae/Be  
 Trench width = 600mm  
 Trench depth = 700mm

**ETA Length, L = 55m**

**ETS BED**  
 Water Balance Area = 110m<sup>2</sup>  
 Be = width + 2depth  
 Length, L = Ae/Be  
 Bed width = 1500mm  
 Bed depth = 550mm

**ETS Length, L = 42m**

**ETS BED**  
 (AS1547:2012 Calculation)  
 DLR (Secondary) = 8 mm/day  
 Length, L =  $Q_d / (DLR (S) \times \text{width})$   
 Bed width = 1500mm  
 Bed depth = 550mm

**ETS Length, L = 40m**

### CALCULATION OF IRRIGATION AREA - AS1547:2012

Area  $A_i = Q_w / DIR$   
 $Q_w = 3360$  litres  
 DIR = 21 mm/week  
 $Q_w$  = weekly effluent flow  
 DIR = Design Irrigation Rate

**Irrigation  $A_i = 160m^2$**

## **APPENDIX # 5**

### **BASIX**

# BASIX<sup>®</sup>Certificate

Building Sustainability Index [www.basix.nsw.gov.au](http://www.basix.nsw.gov.au)

## Single Dwelling

Certificate number: 1754755S

This certificate confirms that the proposed development will meet the NSW government's requirements for sustainability, if it is built in accordance with the commitments set out below. Terms used in this certificate, or in the commitments, have the meaning given by the document entitled "BASIX Definitions" dated 10/09/2020 published by the Department. This document is available at [www.basix.nsw.gov.au](http://www.basix.nsw.gov.au)

Secretary

Date of issue: Monday, 08 July 2024

To be valid, this certificate must be submitted with a development application or lodged with a complying development certificate application within 3 months of the date of issue.



### Project summary

|                           |                                      |
|---------------------------|--------------------------------------|
| Project name              | 1250                                 |
| Street address            | n/a ROWANS Lane BENDICK MURRELL 2803 |
| Local Government Area     | Hilltops Council                     |
| Plan type and plan number | Deposited Plan DP100012              |
| Lot no.                   | A                                    |
| Section no.               | -                                    |
| Project type              | dwelling house (detached)            |
| No. of bedrooms           | 3                                    |

### Project score

|                     |        |             |
|---------------------|--------|-------------|
| Water               | ✓ 96   | Target 40   |
| Thermal Performance | ✓ Pass | Target Pass |
| Energy              | ✓ 64   | Target 61   |
| Materials           | ✓ -61  | Target n/a  |

### Certificate Prepared by

Name / Company Name: GC BUILDING PTY LTD

ABN (if applicable): 41604065107

# Description of project

| Project address                         |                                      |
|-----------------------------------------|--------------------------------------|
| Project name                            | 1250                                 |
| Street address                          | n/a ROWANS Lane BENDICK MURRELL 2803 |
| Local Government Area                   | Hilltops Council                     |
| Plan type and plan number               | Deposited Plan DP100012              |
| Lot no.                                 | A                                    |
| Section no.                             | -                                    |
| Project type                            |                                      |
| Project type                            | dwelling house (detached)            |
| No. of bedrooms                         | 3                                    |
| Site details                            |                                      |
| Site area (m²)                          | 157334                               |
| Roof area (m²)                          | 280                                  |
| Conditioned floor area (m²)             | 206.75                               |
| Unconditioned floor area (m²)           | 23.89                                |
| Total area of garden and lawn (m²)      | 200                                  |
| Roof area of the existing dwelling (m²) | 0                                    |

| Assessor details and thermal loads       |                                                                                       |      |             |
|------------------------------------------|---------------------------------------------------------------------------------------|------|-------------|
| Assessor number                          | n/a                                                                                   |      |             |
| Certificate number                       | n/a                                                                                   |      |             |
| Climate zone                             | n/a                                                                                   |      |             |
| Area adjusted cooling load (MJ/ m².year) | n/a                                                                                   |      |             |
| Area adjusted heating load (MJ/ m².year) | n/a                                                                                   |      |             |
| Project score                            |                                                                                       |      |             |
| Water                                    |    | 96   | Target 40   |
| Thermal Performance                      |    | Pass | Target Pass |
| Energy                                   |    | 64   | Target 61   |
| Materials                                |  | -61  | Target n/a  |

## Schedule of BASIX commitments

The commitments set out below regulate how the proposed development is to be carried out. It is a condition of any development consent granted, or complying development certificate issued, for the proposed development, that BASIX commitments be complied with.

| Water Commitments                                                                                                                                                                                                                  | Show on DA plans | Show on CC/CDC plans & specs | Certifier check |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------------------|-----------------|
| <b>Landscape</b>                                                                                                                                                                                                                   |                  |                              |                 |
| The applicant must plant indigenous or low water use species of vegetation throughout 50 square metres of the site.                                                                                                                | ✓                | ✓                            |                 |
| <b>Fixtures</b>                                                                                                                                                                                                                    |                  |                              |                 |
| The applicant must install showerheads with a minimum rating of 3 star (> 7.5 but <= 9 L/min) in all showers in the development.                                                                                                   |                  | ✓                            | ✓               |
| The applicant must install a toilet flushing system with a minimum rating of 3 star in each toilet in the development.                                                                                                             |                  | ✓                            | ✓               |
| The applicant must install taps with a minimum rating of 3 star in the kitchen in the development.                                                                                                                                 |                  | ✓                            |                 |
| The applicant must install basin taps with a minimum rating of 3 star in each bathroom in the development.                                                                                                                         |                  | ✓                            |                 |
| <b>Alternative water</b>                                                                                                                                                                                                           |                  |                              |                 |
| <b>Rainwater tank</b>                                                                                                                                                                                                              |                  |                              |                 |
| The applicant must install a rainwater tank of at least 100000 litres on the site. This rainwater tank must meet, and be installed in accordance with, the requirements of all applicable regulatory authorities.                  | ✓                | ✓                            | ✓               |
| The applicant must configure the rainwater tank to collect rain runoff from at least 279.72 square metres of the roof area of the development (excluding the area of the roof which drains to any stormwater tank or private dam). |                  | ✓                            | ✓               |
| The applicant must connect the rainwater tank to:                                                                                                                                                                                  |                  |                              |                 |
| • all toilets in the development                                                                                                                                                                                                   |                  | ✓                            | ✓               |
| • the cold water tap that supplies each clothes washer in the development                                                                                                                                                          |                  | ✓                            | ✓               |

## Water Commitments

Show on  
DA plans

Show on CC/CDC  
plans & specs

Certifier  
check

- at least one outdoor tap in the development (Note: NSW Health does not recommend that rainwater be used for human consumption in areas with potable water supply.)
- all hot water systems in the development
- all indoor cold water taps (not including taps that supply clothes washers) in the development



| Thermal Performance and Materials commitments                                                                                                                        | Show on DA plans | Show on CC/CDC plans & specs | Certifier check |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------------------|-----------------|
| <b>Do-it-yourself Method</b>                                                                                                                                         |                  |                              |                 |
| General features                                                                                                                                                     |                  |                              |                 |
| The dwelling must be a Class 1 dwelling according to the National Construction Code, and must not have more than 2 storeys.                                          | ✓                | ✓                            | ✓               |
| The conditioned floor area of the dwelling must not exceed 300 square metres.                                                                                        | ✓                | ✓                            | ✓               |
| The dwelling must not contain open mezzanine area exceeding 25 square metres.                                                                                        | ✓                | ✓                            | ✓               |
| The dwelling must not contain third level habitable attic room.                                                                                                      | ✓                | ✓                            | ✓               |
| Floor, walls and ceiling/roof                                                                                                                                        |                  |                              |                 |
| The applicant must construct the floor(s), walls, and ceiling/roof of the dwelling in accordance with the specifications listed in the table below.                  | ✓                | ✓                            | ✓               |
| The applicant must adopt one of the options listed in the tables below to address thermal bridging in metal framed floor(s), walls and ceiling/roof of the dwelling. | ✓                | ✓                            | ✓               |
| The applicant must show through receipts that the materials purchased for construction are consistent with the specifications listed in the tables below.            |                  |                              | ✓               |

| Construction                                                                               | Area - m <sup>2</sup> | Additional insulation required                                 | Options to address thermal bridging | Other specifications                          |
|--------------------------------------------------------------------------------------------|-----------------------|----------------------------------------------------------------|-------------------------------------|-----------------------------------------------|
| floor - concrete slab on ground, waffle pod slab.                                          | 230.64                | nil;not specified                                              | nil                                 |                                               |
| external wall: framed (fibre cement sheet or boards); frame: timber - H2 treated softwood. | all external walls    | 3.00 (or 3.50 including construction);fibreglass batts or roll | nil                                 | wall colour: Light (solar absorptance < 0.48) |
| internal wall: plasterboard; frame: timber - H2 treated softwood.                          | 149.66                | none                                                           | nil                                 |                                               |

| Construction                                                                                                    | Area - m <sup>2</sup> | Additional insulation required                                                                              | Options to address thermal bridging | Other specifications                                                                                              |
|-----------------------------------------------------------------------------------------------------------------|-----------------------|-------------------------------------------------------------------------------------------------------------|-------------------------------------|-------------------------------------------------------------------------------------------------------------------|
| ceiling and roof - flat ceiling / pitched roof, framed - metal roof, timber - H2 treated softwood.              | 194.28                | ceiling: 5.5 (up), roof: foil backed blanket ;ceiling: fibreglass batts or roll; roof: foil backed blanket. | nil                                 | roof space ventilation: unventilated; roof colour: light (solar absorptance < 0.38); ceiling area fully insulated |
| ceiling and roof - raked ceiling / pitched or skillion roof, framed - metal roof, timber - H2 treated softwood. | 85.45                 | ceiling: 5.5 (up), roof: foil backed blanket ;ceiling: fibreglass batts or roll; roof: foil backed blanket. | nil                                 | roof colour: light (solar absorptance < 0.38); ceiling area fully insulated                                       |

|      |                                                                                                                                                                                                                                  |
|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Note | <ul style="list-style-type: none"> <li>Insulation specified in this Certificate must be installed in accordance with the ABCB Housing Provisions (Part 13.2.2) of the National Construction Code.</li> </ul>                     |
| Note | <ul style="list-style-type: none"> <li>If the additional ceiling insulation listed in the table above is greater than R3.0, refer to the ABCB Housing Provisions (Part 13.2.3 (6)) of the National Construction Code.</li> </ul> |
| Note | <ul style="list-style-type: none"> <li>In some climate zones, insulation should be installed with due consideration of condensation and associated interaction with adjoining building materials.</li> </ul>                     |
| Note | <ul style="list-style-type: none"> <li>Roof space ventilation needs to meet the condensation management provisions in the ABCB Housing Provisions of the National Construction Code.</li> </ul>                                  |
| Note | <ul style="list-style-type: none"> <li>Thermal breaks must be installed in metal framed walls and applicable roofs in accordance with the ABCB Housing Provisions of the National Construction Code.</li> </ul>                  |

| Thermal Performance and Materials commitments                                                                                                                                                                                                                                                                                                   | Show on DA plans | Show on CC/CDC plans & specs | Certifier check |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------------------|-----------------|
| Glazed windows, doors and skylights                                                                                                                                                                                                                                                                                                             |                  |                              |                 |
| The applicant must install the windows, glazed doors and shading devices described in the table below, in accordance with the specifications listed in the table. Relevant overshadowing specifications must be satisfied for each glazed window and door.                                                                                      | ✓                | ✓                            | ✓               |
| The dwelling may have 1 skylight (<0.7 square metres) which is not listed in the table.                                                                                                                                                                                                                                                         | ✓                | ✓                            | ✓               |
| The following requirements must also be satisfied in relation to each window and glazed door:                                                                                                                                                                                                                                                   | ✓                | ✓                            | ✓               |
| • The applicant must install windows and glazed doors in accordance with the height and width, frame and glazing types listed in the table.                                                                                                                                                                                                     | ✓                | ✓                            | ✓               |
| • Each window and glazed door must have a U- value no greater than that listed and a Solar Heat Gain Coefficient (SHGC) within the range listed. Total system U values and SHGC must be calculated in accordance with National Fenestration Rating Council (NFRC) conditions.                                                                   |                  | ✓                            | ✓               |
| The applicant must install the skylights described in the table below, in accordance with the specifications listed in the table. Total skylight area must not exceed 3 square metres (the 3 square metre limit does not include the optional additional skylight of less than 0.7 square metres that does not have to be listed in the table). | ✓                | ✓                            | ✓               |

| Glazed window/door no. | Orientation | Maximum height (mm) | Maximum width (mm) | Frame and glass specification                         | Shading device (Dimension within 10%) | Overshadowing    |
|------------------------|-------------|---------------------|--------------------|-------------------------------------------------------|---------------------------------------|------------------|
| facing                 |             |                     |                    |                                                       |                                       |                  |
| D06                    | NE          | 2100.00             | 1800.00            | aluminium, double glazed (U-value: <=3.5, SHGC: >0.6) | none                                  | not overshadowed |
| D05                    | NE          | 2100.00             | 1800.00            | aluminium, double glazed (U-value: <=3.5, SHGC: >0.6) | none                                  | not overshadowed |
| D04                    | NE          | 2100.00             | 1800.00            | aluminium, double glazed (U-value: <=3.5, SHGC: >0.6) | none                                  | not overshadowed |

| Glazed window/door no. | Orientation | Maximum height (mm) | Maximum width (mm) | Frame and glass specification                                   | Shading device (Dimension within 10%)                    | Overshadowing    |
|------------------------|-------------|---------------------|--------------------|-----------------------------------------------------------------|----------------------------------------------------------|------------------|
| D03                    | NE          | 2100.00             | 900.00             | aluminium, double glazed (U-value: $\leq 4.5$ , SHGC: $>0.6$ )  | eave 8000 mm, 450 mm above head of window or glazed door | not overshadowed |
| W07                    | NE          | 1800.00             | 600.00             | aluminium, double glazed (U-value: $\leq 4.5$ , SHGC: $>0.49$ ) | none                                                     | not overshadowed |
| W06                    | NE          | 1800.00             | 600.00             | aluminium, double glazed (U-value: $\leq 4.5$ , SHGC: $>0.49$ ) | none                                                     | not overshadowed |
| W05                    | NE          | 1800.00             | 1800.00            | aluminium, double glazed (U-value: $\leq 3.5$ , SHGC: $>0.6$ )  | none                                                     | not overshadowed |
| W04                    | NE          | 1800.00             | 600.00             | aluminium, double glazed (U-value: $\leq 4.5$ , SHGC: $>0.49$ ) | none                                                     | not overshadowed |
| W16                    | SE          | 600.00              | 1800.00            | aluminium, double glazed (U-value: $\leq 4$ , SHGC: $>0.6$ )    | eave 600 mm, 1500 mm above head of window or glazed door | not overshadowed |
| W15                    | SE          | 2100.00             | 1800.00            | aluminium, double glazed (U-value: $\leq 3.5$ , SHGC: $>0.6$ )  | eave 600 mm, 1500 mm above head of window or glazed door | not overshadowed |
| W14                    | SE          | 1000.00             | 2600.00            | aluminium, double glazed (U-value: $\leq 4$ , SHGC: $>0.6$ )    | eave 5100 mm, 450 mm above head of window or glazed door | not overshadowed |
| W13                    | SE          | 2190.00             | 1600.00            | aluminium, double glazed (U-value: $\leq 4$ , SHGC: $>0.6$ )    | eave 6560 mm, 450 mm above head of window or glazed door | not overshadowed |
| W12                    | SE          | 1000.00             | 2600.00            | aluminium, double glazed (U-value: $\leq 4$ , SHGC: $>0.6$ )    | eave 5100 mm, 450 mm above head of window or glazed door | not overshadowed |
| W11                    | SE          | 1580.00             | 1800.00            | aluminium, double glazed (U-value: $\leq 3.5$ , SHGC: $>0.6$ )  | eave 600 mm, 550 mm above head of window or glazed door  | not overshadowed |

| Glazed window/door no. | Orientation | Maximum height (mm) | Maximum width (mm) | Frame and glass specification                                    | Shading device (Dimension within 10%)                    | Overshadowing    |
|------------------------|-------------|---------------------|--------------------|------------------------------------------------------------------|----------------------------------------------------------|------------------|
| W10                    | SE          | 2100.00             | 1800.00            | aluminium, double glazed (U-value: $\leq 3.5$ , SHGC: $> 0.6$ )  | eave 600 mm, 1500 mm above head of window or glazed door | not overshadowed |
| W09                    | SE          | 1580.00             | 1800.00            | aluminium, double glazed (U-value: $\leq 3.5$ , SHGC: $> 0.6$ )  | eave 600 mm, 550 mm above head of window or glazed door  | not overshadowed |
| W08                    | SE          | 2100.00             | 1800.00            | aluminium, double glazed (U-value: $\leq 3.5$ , SHGC: $> 0.6$ )  | eave 600 mm, 1500 mm above head of window or glazed door | not overshadowed |
| W23                    | SW          | 1000.00             | 1500.00            | aluminium, double glazed (U-value: $\leq 4.5$ , SHGC: $> 0.49$ ) | none                                                     | not overshadowed |
| W22                    | SW          | 1000.00             | 1500.00            | aluminium, double glazed (U-value: $\leq 4.5$ , SHGC: $> 0.49$ ) | none                                                     | not overshadowed |
| W21                    | SW          | 1000.00             | 1500.00            | aluminium, double glazed (U-value: $\leq 4.5$ , SHGC: $> 0.49$ ) | none                                                     | not overshadowed |
| W20                    | SW          | 1000.00             | 600.00             | aluminium, double glazed (U-value: $\leq 4.5$ , SHGC: $> 0.49$ ) | none                                                     | not overshadowed |
| D07                    | SW          | 2100.00             | 900.00             | aluminium, double glazed (U-value: $\leq 4.5$ , SHGC: $> 0.6$ )  | none                                                     | not overshadowed |
| W19                    | SW          | 1000.00             | 600.00             | aluminium, double glazed (U-value: $\leq 4.5$ , SHGC: $> 0.49$ ) | none                                                     | not overshadowed |
| W18                    | SW          | 600.00              | 600.00             | aluminium, double glazed (U-value: $\leq 4.5$ , SHGC: $> 0.49$ ) | none                                                     | not overshadowed |
| W17                    | SW          | 600.00              | 600.00             | aluminium, double glazed (U-value: $\leq 4.5$ , SHGC: $> 0.49$ ) | none                                                     | not overshadowed |

| Glazed window/door no. | Orientation | Maximum height (mm) | Maximum width (mm) | Frame and glass specification                                    | Shading device (Dimension within 10%)                    | Overshadowing    |
|------------------------|-------------|---------------------|--------------------|------------------------------------------------------------------|----------------------------------------------------------|------------------|
| W02                    | SW          | 1800.00             | 600.00             | aluminium, double glazed (U-value: $\leq 4.5$ , SHGC: $> 0.49$ ) | none                                                     | not overshadowed |
| D02                    | SW          | 2100.00             | 3600.00            | aluminium, double glazed (U-value: $\leq 3.5$ , SHGC: $> 0.6$ )  | eave 8000 mm, 450 mm above head of window or glazed door | not overshadowed |
| W03                    | NW          | 1200.00             | 3000.00            | aluminium, double glazed (U-value: $\leq 3.5$ , SHGC: $> 0.6$ )  | eave 600 mm, 2600 mm above head of window or glazed door | not overshadowed |
| W01                    | NW          | 1800.00             | 1200.00            | aluminium, double glazed (U-value: $\leq 4.5$ , SHGC: $> 0.49$ ) | none                                                     | not overshadowed |
| D01                    | NW          | 3290.00             | 2200.00            | steel, double glazed (U-value: $\leq 4$ , SHGC: $> 0.49$ )       | eave 1890 mm, 500 mm above head of window or glazed door | not overshadowed |
| W25                    | NW          | 1800.00             | 1200.00            | aluminium, double glazed (U-value: $\leq 4.5$ , SHGC: $> 0.49$ ) | none                                                     | not overshadowed |
| W24                    | NW          | 1200.00             | 3000.00            | aluminium, double glazed (U-value: $\leq 3.5$ , SHGC: $> 0.6$ )  | eave 600 mm, 2600 mm above head of window or glazed door | not overshadowed |

| Energy Commitments                                                                                                                                                                                                                                                                                                                                                       | Show on DA plans | Show on CC/CDC plans & specs | Certifier check |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|------------------------------|-----------------|
| <b>Hot water</b>                                                                                                                                                                                                                                                                                                                                                         |                  |                              |                 |
| The applicant must install the following hot water system in the development, or a system with a higher energy rating: gas instantaneous with a performance of 7 stars.                                                                                                                                                                                                  | ✓                | ✓                            | ✓               |
| <b>Cooling system</b>                                                                                                                                                                                                                                                                                                                                                    |                  |                              |                 |
| The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 living area: 1-phase airconditioning - ducted; Energy rating: EER > 4.0                                                                                                                                                                                  |                  | ✓                            | ✓               |
| The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 bedroom: 1-phase airconditioning - ducted; Energy rating: EER > 4.0                                                                                                                                                                                      |                  | ✓                            | ✓               |
| <b>Heating system</b>                                                                                                                                                                                                                                                                                                                                                    |                  |                              |                 |
| The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 living area: wood heater; Energy rating: n/a                                                                                                                                                                                                             |                  | ✓                            | ✓               |
| The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 bedroom: 1-phase airconditioning - ducted; Energy rating: EER > 4.0                                                                                                                                                                                      |                  | ✓                            | ✓               |
| The wood heater must have a compliance plate confirming that it complies with the relevant Australian standards, and must be installed in accordance with the requirements of all applicable regulatory authorities.                                                                                                                                                     |                  |                              | ✓               |
| <b>Ventilation</b>                                                                                                                                                                                                                                                                                                                                                       |                  |                              |                 |
| The applicant must install the following exhaust systems in the development:<br>At least 1 Bathroom: individual fan, ducted to façade or roof; Operation control: manual switch on/off<br><br>Kitchen: individual fan, ducted to façade or roof; Operation control: manual switch on/off<br><br>Laundry: natural ventilation only, or no laundry; Operation control: n/a |                  | ✓<br>✓<br>✓                  | ✓<br>✓<br>✓     |
| <b>Artificial lighting</b>                                                                                                                                                                                                                                                                                                                                               |                  |                              |                 |
| The applicant must ensure that a minimum of 80% of light fixtures are fitted with fluorescent, compact fluorescent, or light-emitting-diode (LED) lamps.                                                                                                                                                                                                                 |                  | ✓                            | ✓               |
| <b>Natural lighting</b>                                                                                                                                                                                                                                                                                                                                                  |                  |                              |                 |

| Energy Commitments                                                                                                      | Show on DA plans | Show on CC/CDC plans & specs | Certifier check |
|-------------------------------------------------------------------------------------------------------------------------|------------------|------------------------------|-----------------|
| The applicant must install a window and/or skylight in the kitchen of the dwelling for natural lighting.                | ✓                | ✓                            | ✓               |
| The applicant must install a window and/or skylight in 4 bathroom(s)/toilet(s) in the development for natural lighting. | ✓                | ✓                            | ✓               |
| Other                                                                                                                   |                  |                              |                 |
| The applicant must install a gas cooktop & electric oven in the kitchen of the dwelling.                                |                  | ✓                            |                 |
| The applicant must install a fixed outdoor clothes drying line as part of the development.                              |                  | ✓                            |                 |

## Legend

In these commitments, "applicant" means the person carrying out the development.

Commitments identified with a  in the "Show on DA plans" column must be shown on the plans accompanying the development application for the proposed development (if a development application is to be lodged for the proposed development).

Commitments identified with a  in the "Show on CC/CDC plans and specs" column must be shown in the plans and specifications accompanying the application for a construction certificate / complying development certificate for the proposed development.

Commitments identified with a  in the "Certifier check" column must be certified by a certifying authority as having been fulfilled, before a final occupation certificate (either interim or final) for the development may be issued.

## **APPENDIX # 6**

### **AHIMS SEARCH**

### **BMAT SEARCH**

Kenneth Filmer

Date: 09 July 2024

18 Pineview Cct 91 Boorowa Street Young  
Young New South Wales 2594

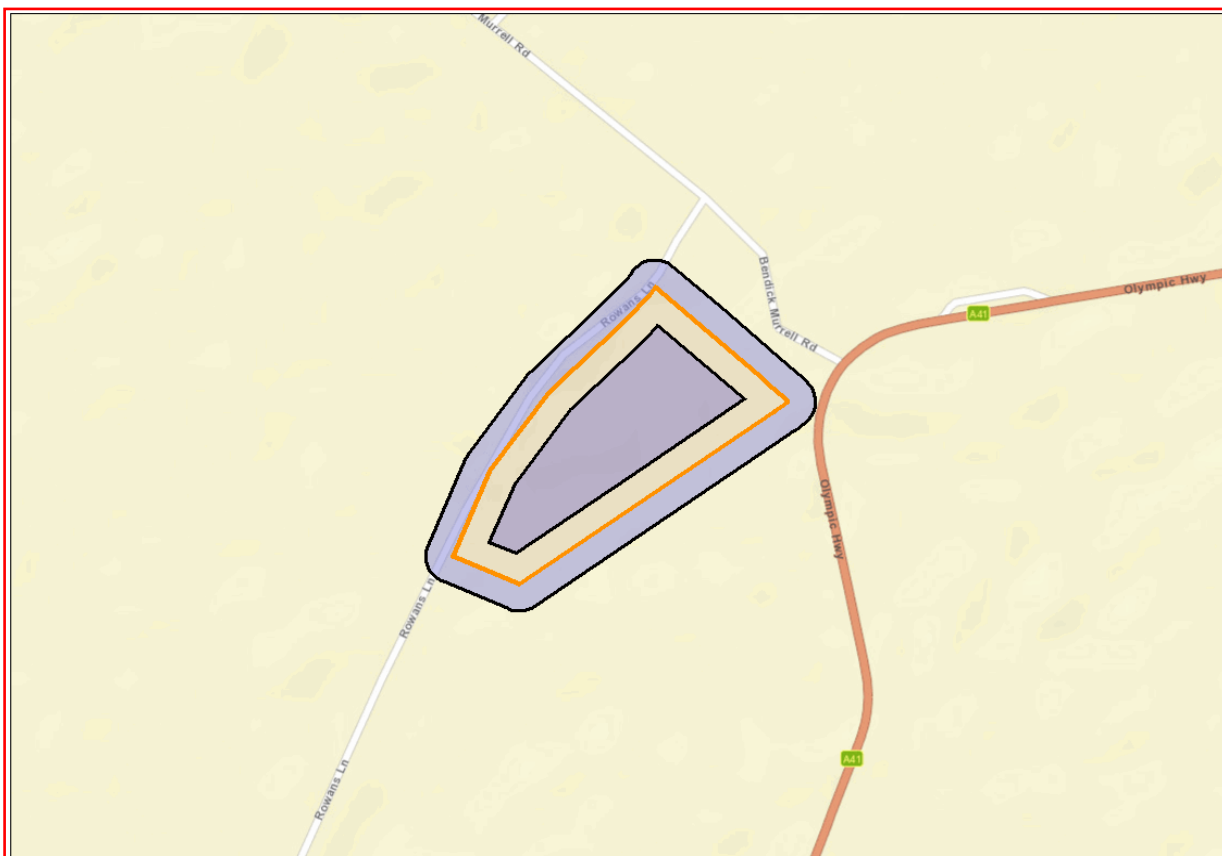
Attention: Kenneth Filmer

Email: craig@dabusters.com

Dear Sir or Madam:

**AHIMS Web Service search for the following area at Lot : A, DP:DP100012, Section : - with a Buffer of 50 meters, conducted by Kenneth Filmer on 09 July 2024.**

The context area of your search is shown in the map below. Please note that the map does not accurately display the exact boundaries of the search as defined in the paragraph above. The map is to be used for general reference purposes only.



A search of Heritage NSW AHIMS Web Services (Aboriginal Heritage Information Management System) has shown that:

|   |                                                                       |
|---|-----------------------------------------------------------------------|
| 0 | Aboriginal sites are recorded in or near the above location.          |
| 0 | Aboriginal places have been declared in or near the above location. * |

**If your search shows Aboriginal sites or places what should you do?**

- You must do an extensive search if AHIMS has shown that there are Aboriginal sites or places recorded in the search area.
- If you are checking AHIMS as a part of your due diligence, refer to the next steps of the Due Diligence Code of practice.
- You can get further information about Aboriginal places by looking at the gazettal notice that declared it. Aboriginal places gazetted after 2001 are available on the [NSW Government Gazette \(https://www.legislation.nsw.gov.au/gazette\)](https://www.legislation.nsw.gov.au/gazette) website. Gazettal notices published prior to 2001 can be obtained from Heritage NSW upon request

**Important information about your AHIMS search**

- The information derived from the AHIMS search is only to be used for the purpose for which it was requested. It is not to be made available to the public.
- AHIMS records information about Aboriginal sites that have been provided to Heritage NSW and Aboriginal places that have been declared by the Minister;
- Information recorded on AHIMS may vary in its accuracy and may not be up to date. Location details are recorded as grid references and it is important to note that there may be errors or omissions in these recordings,
- Some parts of New South Wales have not been investigated in detail and there may be fewer records of Aboriginal sites in those areas. These areas may contain Aboriginal sites which are not recorded on AHIMS.
- Aboriginal objects are protected under the National Parks and Wildlife Act 1974 even if they are not recorded as a site on AHIMS.
- This search can form part of your due diligence and remains valid for 12 months.

## Biodiversity Values Map and Threshold Report

This report is generated using the Biodiversity Values Map and Threshold (BMAT) tool. The BMAT tool is used by proponents to supply evidence to your local council to determine whether or not a Biodiversity Development Assessment Report (BDAR) is required under [the Biodiversity Conservation Regulation 2017 \(Cl. 7.2 & 7.3\)](#).

The report provides results for the proposed development footprint area identified by the user and displayed within the blue boundary on the map.

There are two pathways for determining whether a BDAR is required for the proposed development:

1. Is there Biodiversity Values Mapping?
2. Is the 'clearing of native vegetation area threshold' exceeded?

| Biodiversity Values Map and Threshold Report                                                                                                                                               |                                                                                                                                                         |                    |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| Date of Report Generation                                                                                                                                                                  |                                                                                                                                                         | 04/07/2024 3:01 PM |
| 1. Biodiversity Values (BV) Map - Results Summary (Biodiversity Conservation Regulation Section 7.3)                                                                                       |                                                                                                                                                         |                    |
| 1.1                                                                                                                                                                                        | <b>Does the development Footprint intersect with BV mapping?</b>                                                                                        | no                 |
| 1.2                                                                                                                                                                                        | Was <u>ALL</u> BV Mapping within the development footprint added in the last 90 days? (dark purple mapping only, no light purple mapping present)       | no                 |
| 1.3                                                                                                                                                                                        | <b>Date of expiry of dark purple 90 day mapping</b>                                                                                                     | N/A                |
| 1.4                                                                                                                                                                                        | <b>Is the Biodiversity Values Map threshold exceeded?</b>                                                                                               | no                 |
| 2. Area Clearing Threshold - Results Summary (Biodiversity Conservation Regulation Section 7.2)                                                                                            |                                                                                                                                                         |                    |
| 2.1                                                                                                                                                                                        | <b>Size of the development or clearing footprint</b>                                                                                                    | 4,093.8 sqm        |
| 2.2                                                                                                                                                                                        | <b>Native Vegetation Area Clearing Estimate (NVACE)</b><br>(within development/clearing footprint)                                                      | 0.0 sqm            |
| 2.3                                                                                                                                                                                        | <b>Method for determining Minimum Lot Size</b>                                                                                                          | LEP                |
| 2.4                                                                                                                                                                                        | <b>Minimum Lot Size</b> (10,000sqm = 1ha)                                                                                                               | 1,700,000 sqm      |
| 2.5                                                                                                                                                                                        | <b>Area Clearing Threshold</b> (10,000sqm = 1ha)                                                                                                        | 10,000 sqm         |
| 2.6                                                                                                                                                                                        | <b>Does the estimate exceed the Area Clearing Threshold?</b><br>(NVACE results are an estimate and can be reviewed using the <a href="#">Guidance</a> ) | no                 |
| <b>REPORT RESULT: Is the Biodiversity Offset Scheme (BOS) Threshold exceeded for the proposed development footprint area?</b><br>(Your local council will determine if a BDAR is required) |                                                                                                                                                         | <b>no</b>          |

## What do I do with this report?

- If the result above indicates the BOS Threshold has been exceeded, your local council may require a Biodiversity Development Assessment Report with your development application. Seek further advice from Council. An accredited assessor can apply the Biodiversity Assessment Method and prepare a BDAR for you. For a list of accredited assessors go to: <https://customer.lmbc.nsw.gov.au/assessment/AccreditedAssessor>.
- If the result above indicates the BOS Threshold has not been exceeded, you may not require a Biodiversity Development Assessment Report. This BMAT report can be provided to Council to support your development application. Council can advise how the area clearing threshold results should be considered. Council will review these results and make a determination if a BDAR is required. Council may ask you to review the area clearing threshold results. You may also be required to assess whether the development is “likely to significantly affect threatened species” as determined under the test in Section 7.3 of the *Biodiversity Conservation Act 2016*.
- If a BDAR is not required by Council, you may still require a permit to clear vegetation from your local council.
- If all Biodiversity Values mapping within your development footprint was less than 90 days old, i.e. areas are displayed as dark purple on the BV map, a BDAR may not be required if your Development Application is submitted within that 90 day period. Any BV mapping less than 90 days old on this report will expire on the date provided in Line item 1.3 above.

For more detailed advice about actions required, refer to the Interpreting the evaluation report section of the [Biodiversity Values Map Threshold Tool User Guide](#) .

## Review Options:

- If you believe the Biodiversity Values mapping is incorrect please refer to our [BV Map Review webpage](#) for further information.
- If you or Council disagree with the area clearing threshold estimate results from the NVACE in Line Item 2.6 above (i.e. area of Native Vegetation within the Development footprint proposed to be cleared), review the results using the [Guide for reviewing area clearing threshold results from the BMAT Tool](#).

## Acknowledgement

I, as the applicant for this development, submit that I have correctly depicted the area that will be impacted or likely to be impacted as a result of the proposed development.

Signature: \_\_\_\_\_

(Typing your name in the signature field will be considered as your signature for the purposes of this form)

Date: \_\_\_\_\_

04/07/2024 03:01 PM

## Biodiversity Values Map and Threshold Tool

The Biodiversity Values (BV) Map and Threshold Tool identifies land with high biodiversity value, particularly sensitive to impacts from development and clearing.

The BV map forms part of the Biodiversity Offsets Scheme threshold, which is one of the factors for determining whether the Scheme applies to a clearing or development proposal. You have used the Threshold Tool in the map viewer to generate this BV Threshold Report for your nominated area. This report calculates results for your proposed development footprint and indicates whether Council may require you to engage an accredited assessor to prepare a Biodiversity Development Assessment Report (BDAR) for your development.

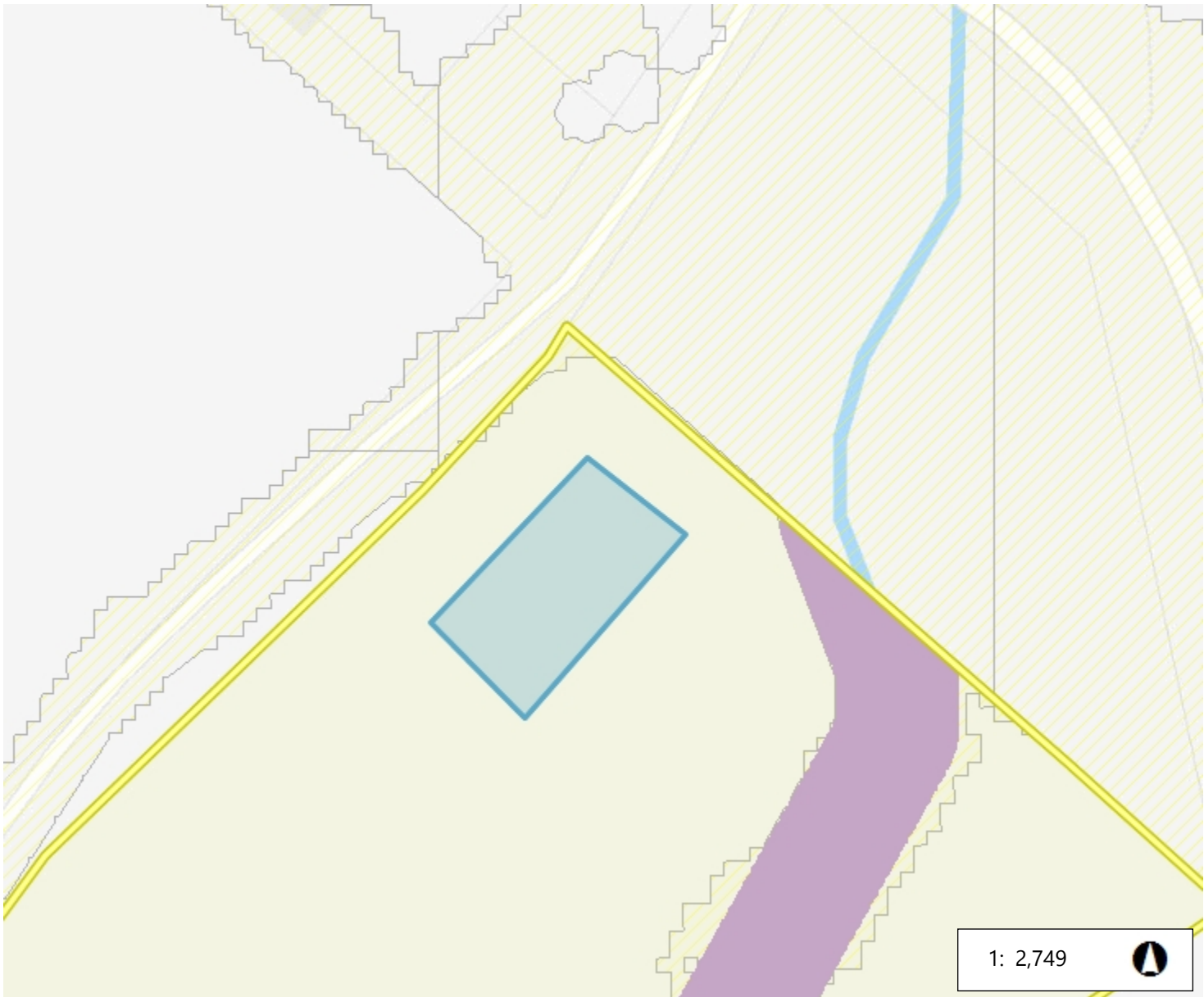
This report may be used as evidence for development applications submitted to councils. You may also use this report when considering native vegetation clearing under the State Environmental Planning Policy (Biodiversity and Conservation) 2021 - Chapter 2 vegetation in non-rural areas.

What's new? For more information about the latest updates to the Biodiversity Values Map and Threshold Tool go to the updates section on the [Biodiversity Values Map webpage](#).

Map Review: Landholders can request a review of the BV Map where they consider there is an error in the mapping on their property. For more information about the map review process and an application form for a review go to the [Biodiversity Values Map Review webpage](#).

If you need help using this map tool see our [Biodiversity Values Map and Threshold Tool User Guide](#) or contact the Map Review Team at [map.review@environment.nsw.gov.au](mailto:map.review@environment.nsw.gov.au) or on 1800 001 490.

# Biodiversity Values Map



139.6 0 69.82 139.6 Metres

WGS\_1984\_Web\_Mercator\_Auxiliary\_Sphere

Legend

-  Biodiversity Values that have been mapped for more than 90 days
-  Biodiversity Values added within last 90 days
-  Native Vegetation Area Clearing Estimate (NVACE)
-  Development area selected by proponent

04/07/2024 03:01 PM

This map is a user generated static output from an Internet mapping site and is for reference only. Data layers that appear on this map may or may not be accurate, current, or otherwise reliable.

Imagery © Airbus DS/Spot Image 2016

© NSW Department of Customer Service, Basemaps 2019

© NSW Department of Planning and Environment

The results provided in this tool are generated using the best available mapping and knowledge of species habitat requirements.

This map is valid as at the date the report was generated. Checking the [Biodiversity Values Map viewer](#) for mapping updates is recommended.