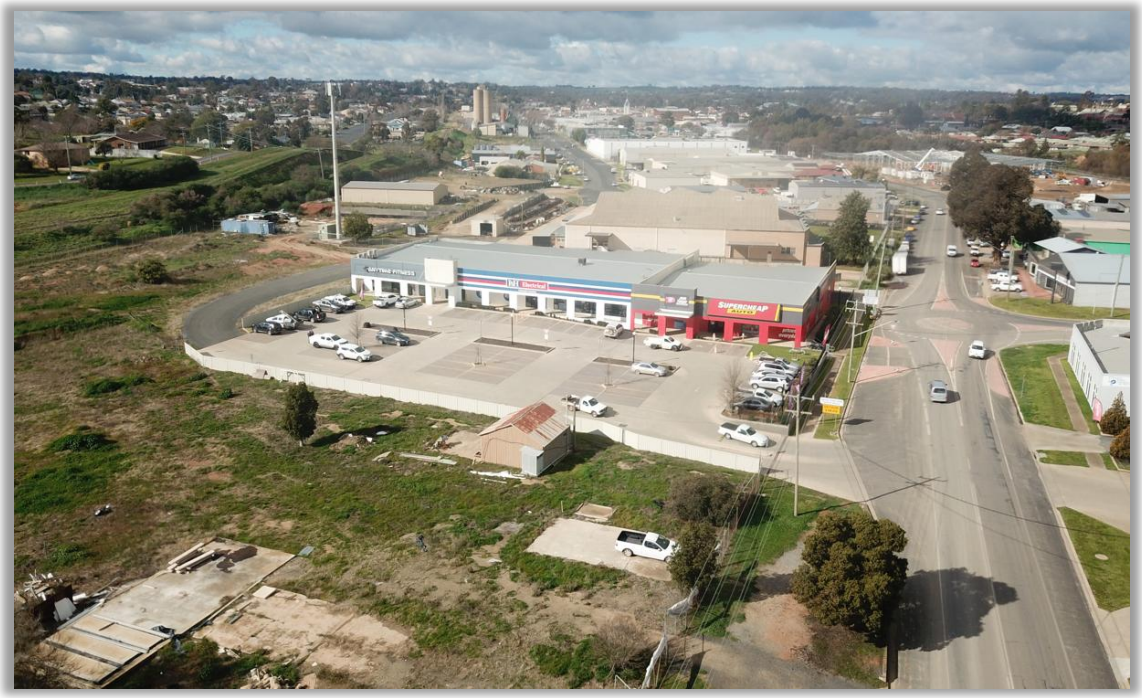
Statement of Environmental Effects & Development Package

In Support of a Development Application

Proposal	Bulky Goods Retail Development – Phase 2 · BCF Store · Bulky Goods Retail premises for lease (potential)
Subject Land Address	Lot 1 DP 1202085
	No 323 Boorowa Street, Young 2594
Owner	DJ & TL MELLROSS
	Darren Mellross – 0418 668 451
SEE Prepared By	DA Busters – Development Assistance Services Ph: 0466 722 869 Email: Craig@DAbusters.com
Plans & Details Prepared By	Warrick Morley – WMD Drafting
LGA	**Hilltops Council** – former Young Shire Council area



Mellross Bulky Goods Retail Complex – Phase 1

SEE completion assisted by:

DA BUSTERS P/L
Craig Filmer Craig@DAbusters.com 0466 722 869
DEVELOPMENT ASSISTANCE SERVICE

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A. The Site and Area

The Site

The subject land legal description is Lot 1 DP 1202085 (site of present buildings and land for proposed development), being known locally as 323 Boorowa Street Young. The land is located approximately 1.306km from the Young Post Office in a west north westerly direction. The access to the land is presently from Boorowa Street which connects to Milvale Rd to the west (classified).

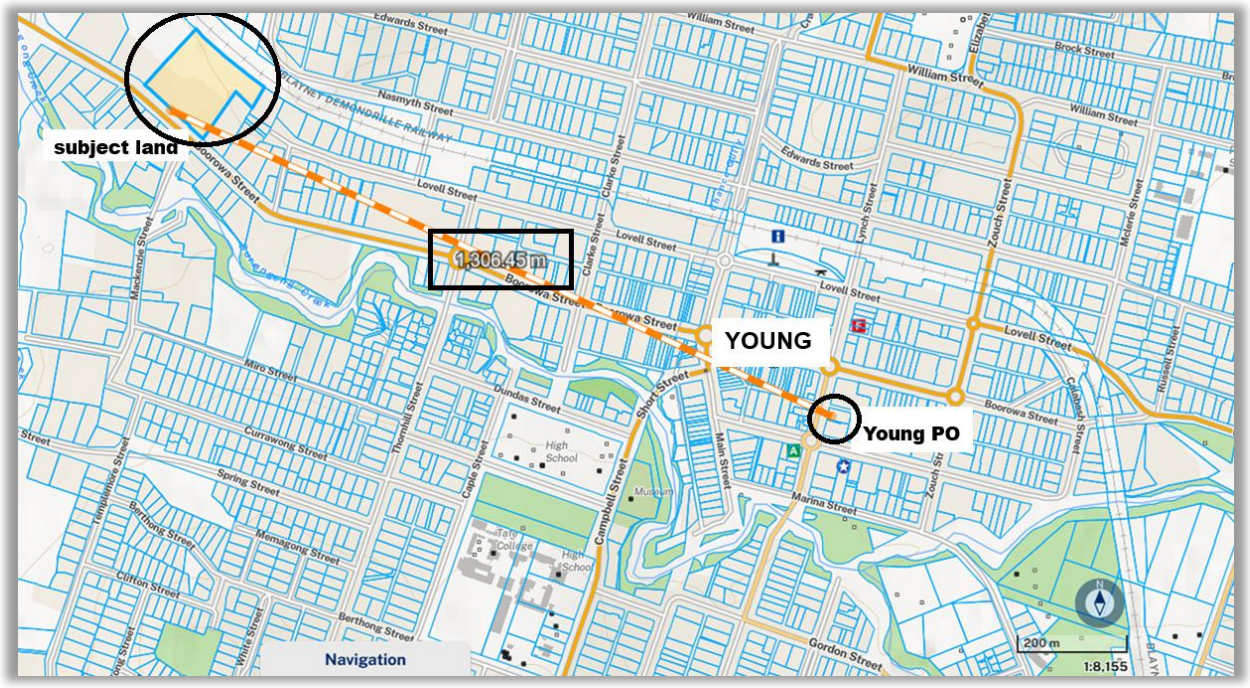


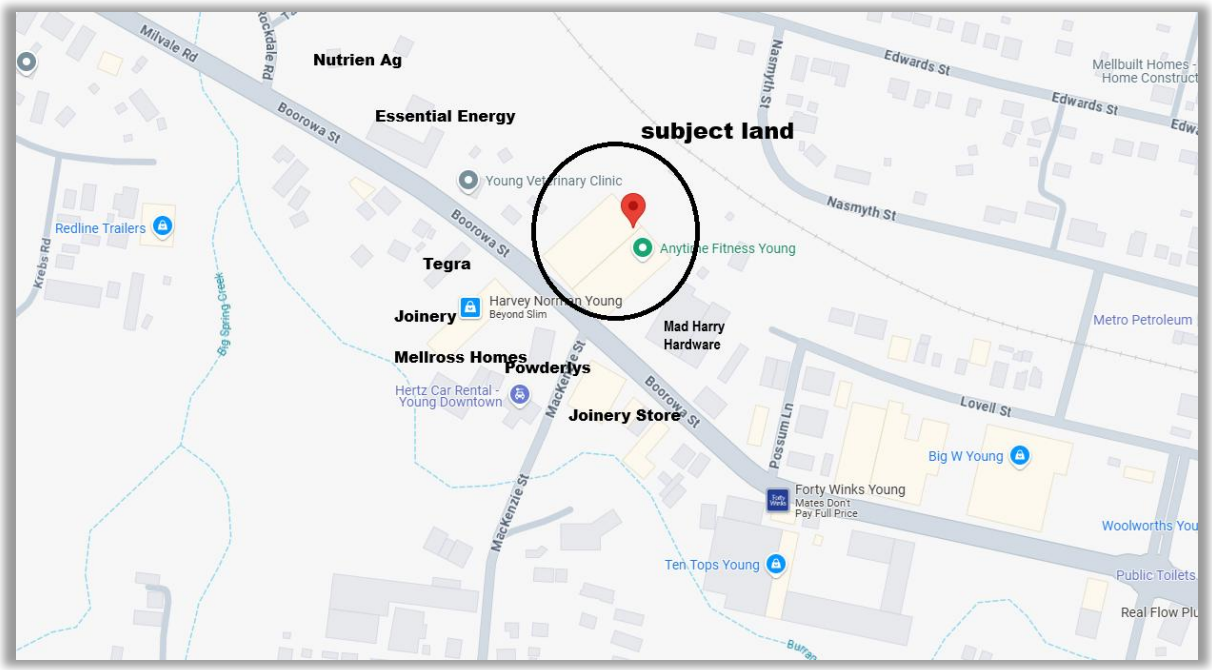
Fig # 1 – Locality Map

Whilst the site is owned by DJ & TL Mellross, the Occupiers of the site are varied businesses presently, and include;

- SuperCheap Auto
- Lawrence & Hansen Electrical Wholesaler
- Leanne Simms Dance Academy
- Anytime Fitness

The existing building with 4 occupancies accounts for some 2,130 square metres of building, associated carparking (61 spaces) and service driveways to rear loading areas. It is presently serviced by a Trucks In servicing driveway at East of Development and a customer in/out and delivery out driveway to the west of Phase 1 as presently exists. The currently built phase 1 part of the development was approved in 2012 (2012/DA-00034 – 1/6/2012) with Construction completed later that year and early into 2013.

The site is bound to the north by the now dormant Blayney to Demondrille Rail line, at approximately 42m from this proposed building and associated infrastructure. To the west of the applicant's land is the local Veterinarian Practise and the Electricity Authority Line Depot. To the East is the inactive Hardware Stores of Mad Harry. Opposite is a Plumbing Wholesale Supplies, a Kitchen Joinery, Harvey Norman Shop, Joinery & Building Office of Mellross Homes.



Locality Analysis

This locality has been long recognised and zoned for Industrial, Service, Bulky Goods Retail, and related uses in both the 1993 Rural LEP (and before this when no EPI was in place) and the 2010 Young LEP. This area has been earmarked to continue in the same vein in the 2022 LEP also, with no major changes proposed between existing and current EPI's.

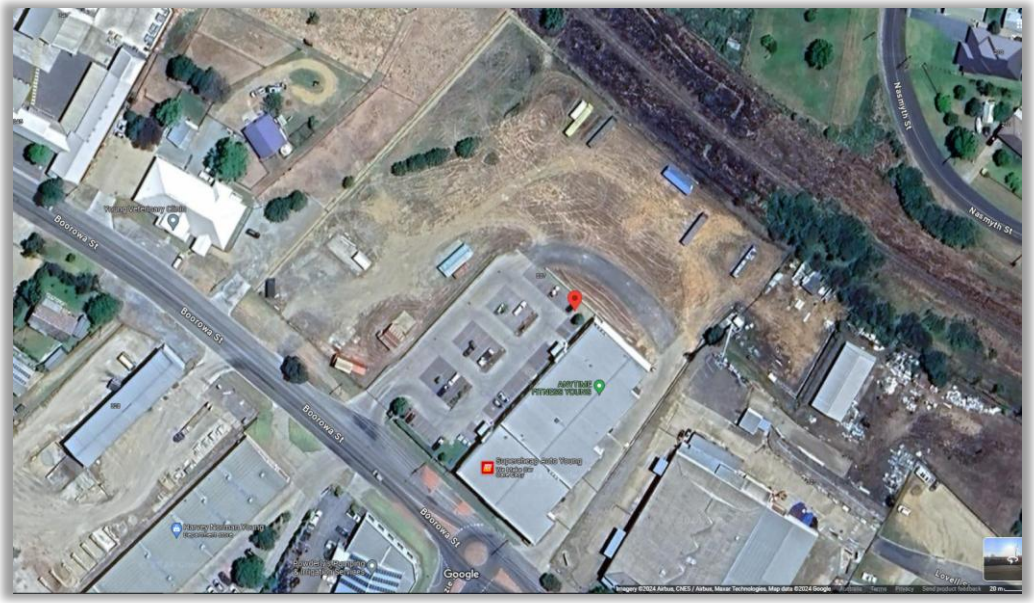
Aerial Image of Subject Land (SIX Maps circa 2012)

Contour Cadastre / Topographic Map (mild slope NE to SW)

Drone Image of site 2022 – DA Busters

Entry on Western Approach – DA Busters

Photo – Western aspect (approach from East) – DA Busters



Aerial Image – Google Circa 2024

Onsite standard of finish – DA Busters

The area of the subject allotment is 1.96 hectares - see the Title extract below. The subject lot of the development has a frontage of 49.59m & 32.41m to Milvale Rd and is an irregular battle-axe shaped allotment.

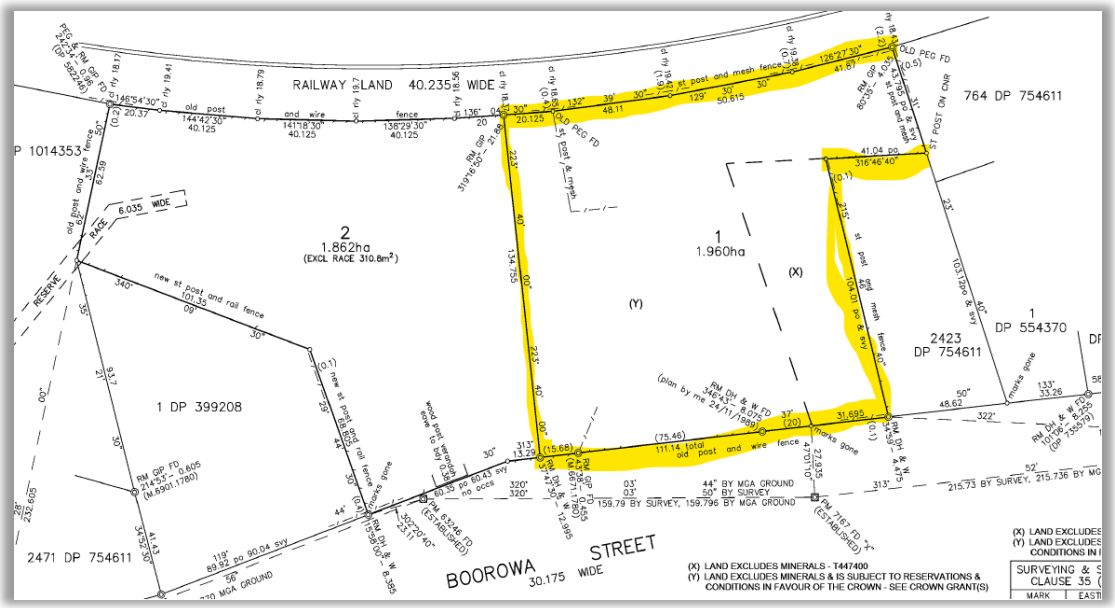


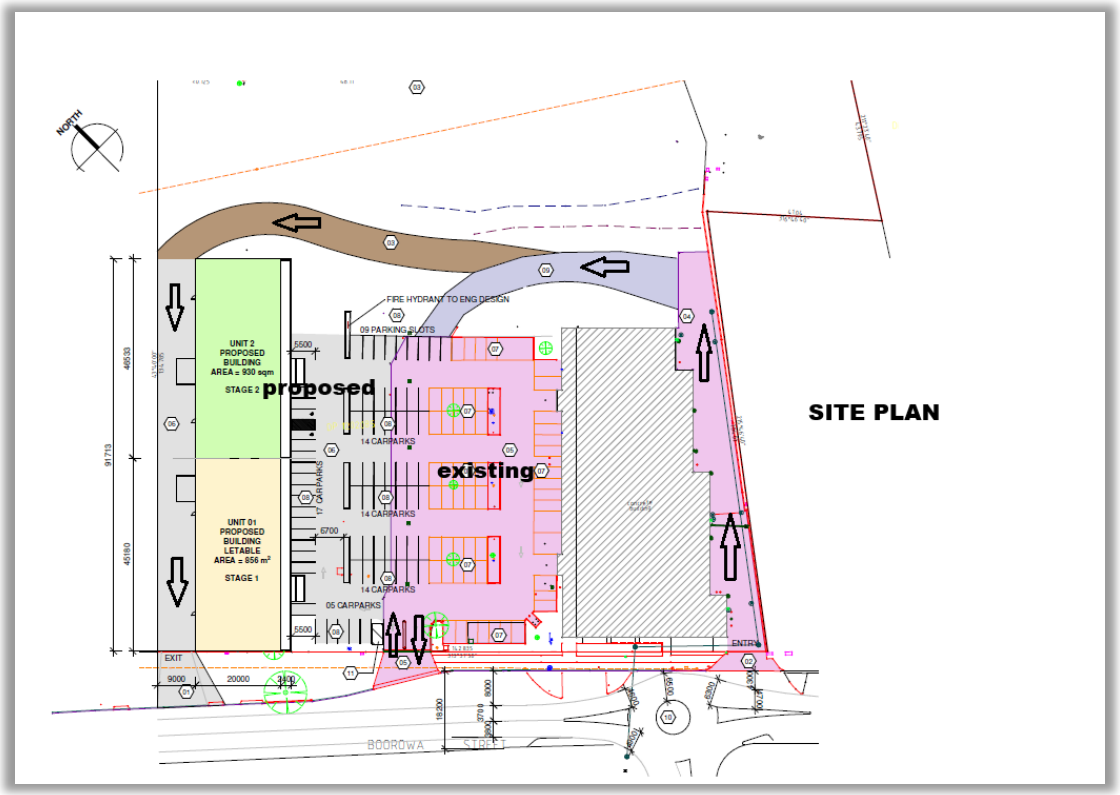
Fig # 3 – Extract of Plan of DP Search (dimensions in metres)

Present Access

There is an existing delivery vehicle access to the eastern edge of the site, of concrete construction designed purposefully for delivery to the Stores in the complex via the rear delivery access as per design. As this is a long-range multi-phase development a semi-permanent temporary linkage presently exists to loop the delivery access to the last aisle in the carpark for exiting the site.

As well, there is a Customer Entry Exit driveway to the concreted carpark, which serves not only customers and staff, but also acts presently as the delivery truck exit of the site, working in a counter clockwise fashion for these vehicles to the last aisle.

The existing accesses are visually documented above and below, and will be retained for site parking, however a new delivery vehicle exit is proposed to the rear of the new building. The temporary (yet sealed) delivery vehicle connection loop is proposed to be extended, as very real potential for more development at the rear of the site, exists, but is not within budget or lessee client availability, to provide presently.



Proposed site function for vehicles – Phase 2

Council did in circa 2020, instal a roundabout at the intersection of Boorowa Street and Mackenzie Street, with no reference to Mr Mellross (owner of this site) and it has potential impacts on the previously approved development and entry for vehicles to the delivery vehicle entry point of the site.

Shortly after the building was opened – 2012/2013

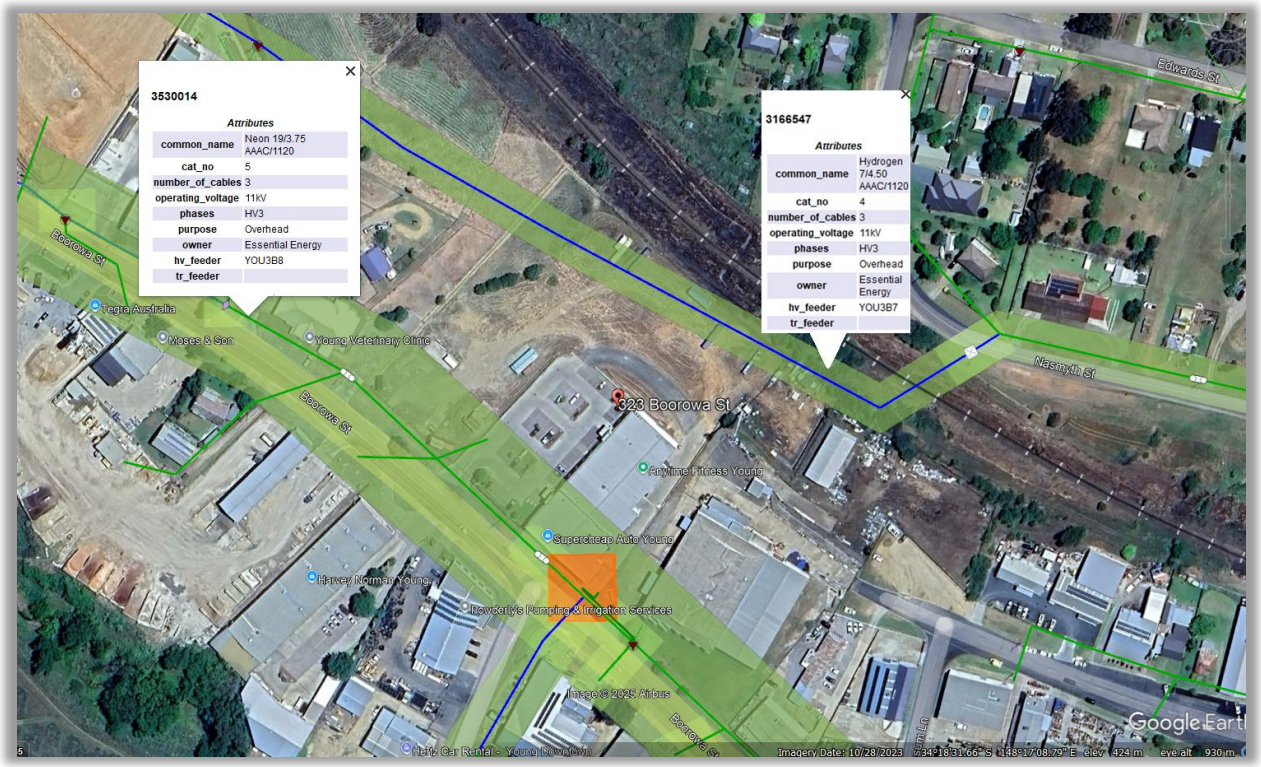
2020 with roundabout installed

Roundabout installed – movements over blisters & islands required

The issue of access was not of the Applicant's making, as he was not aware of intentions, and trusts Council as Road Authority did contemplate the legality of vehicle movements required for access. The Applicant should not be held accountable at cost for a decision of the road authority, at this next development phase.

Electrical Assets

The site is crossed by an electrical line shown highlighted on the below plan at the rear of the site, which has infrastructure within the said easement. The building and site presently have been designed away from these assets, noting the relocation of this is presently the biggest deterrent to phases 3 or more for the development. The line in the front street does not impact on the development.



Power Line Mapping

Additionally, the site has an approved Optus Telecommunications tower in its north eastern corner. This will not cause any conflict to proposed development.

Optus Tower site

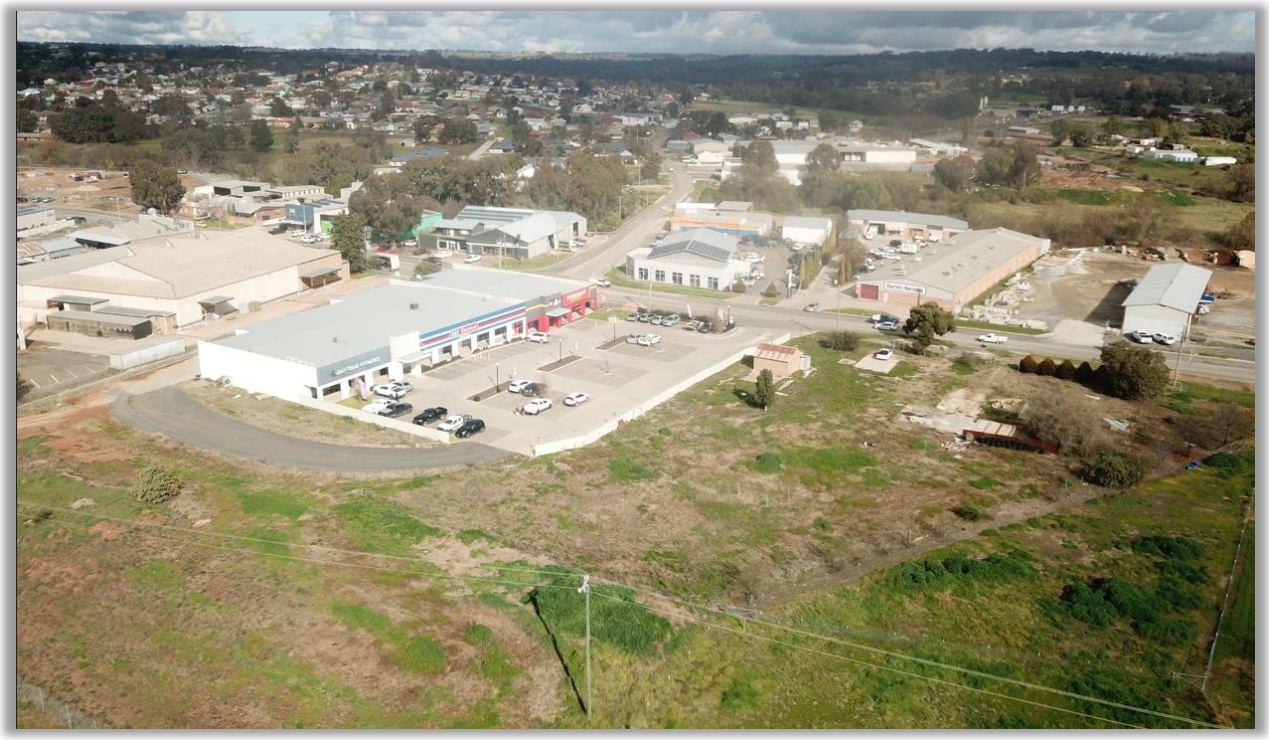
The Site Context

The subject land is within an area zoned (or otherwise earmarked in the original Planning Ordinance & Draft LEP pre-1991) and available for Industrial Lands (including other aligned uses) for at least 40 years. This area has been zoned Industrial since approximately 1991 under the former Young Rural LEP with adjoining lands also zoned Industrial. As a result, the area is well established by a mix of older businesses and with newer ones like the current site. No conflict presently exists between businesses in the locality

The land has a wide mix and range of uses within the 500m or so around it. These include;

- ✓ Tyre Centre
- ✓ Smash Repairs
- ✓ Hardware Store
- ✓ Plumbing Wholesale
- ✓ Govt Electrical Lines Depot
- ✓ Concrete Yard
- ✓ Auto Electrician
- ✓ Kitchen Joineries
- ✓ Harvey Norman
- ✓ Concrete Batching Plant, Depot, and Sand/Soil/Gravel yard
- ✓ Electrical Fitter
- ✓ Bulky Goods retail
- ✓ Mechanical Repairs
- ✓ Powder Coating Service
- ✓ Agricultural Machinery Depot (3 of)
- ✓ Shed Manufacturer, Distribution and Sales Depot (2 of)
- ✓ Rural Residential
- ✓ Residential parts of western Young

The proposal to have the current business expand is consistent amongst this broad range and diverse mix of development. As well, it expands on the original concept for this site when bought from the Soil Conservation Service and neighbouring landholder with this development proposed and started in 2012.



Drone View from NW of site – subject power line visible

B. The Proposed Development

The development proposed by this application can best be summarised as follows;

Phase 2 of Bulky Goods Retail & Allied Businesses Development

To erect a building of 91.713m x 20m, single storey. Clad & parapet construction. Said building will be divided into two (2) large outlets for bulky goods retail.

Occupancy 1 is to be occupied by the BCF (Boating Camping Fishing) Chain of stores, whilst Occupancy 2 will be vacant whilst the tenancy dealings with major businesses are being finalised. A first occupancy DA or CDC will be provided when that tenant is secured.

Delivery driveway and carparking extension will be provided to the site commensurate with policy, the traffic study attached, and the area of tenancy being offered.

Specific BCF Store fit-out, colours and signage are all included direct from the Company, in appendices to this statement. Occupancy 2 will have all baseline fire services ready and installed so any first occupancy DA is purely functional when the time comes.

Design Incorporates

The design of the development has been gradually worked up to comply with

- Building Code of Australia
- The Young DCP 2011 informing the Hilltops LEP 2022 and related Policy
- Council's Engineering Standards for Subdivision & Development

In developing this design, background professional studies in the areas of Survey and Civil (Stormwater) have been drawn on to better inform site possibilities and limitations due to current landform. BCA Consultancy with the A1 Certifier at DA Busters have ensured the Designer has allowed for the required site and construction measures for CC compliance. Other professionals have been engaged for soil clearance, for Traffic analysis and Planning considerations. All of these elements will be discussed at the right legislative and policy point below. As well, all further required specialists (Engineers, Energy efficiency etc) will be sought prior to applying for the Construction Certificate, however straightforward Type C construction principles have been drawn on to ensure the buildings and site, will meet the deemed to satisfy pathway for compliance.

Access & Parking

The site will be serviced by concrete and sealed internal roads and manoeuvring areas for customers, delivery traffic and service vehicles. This is consistent with all of the retail area in Young and policy obligations. 2 coat sealed internal loop road for delivery vehicle connection is demonstrated on plan for this phase. The DCP requires 1 space per 35 sq.m for broad retail. By this calculation there may need to be up to 52 new parking spaces for a generic DCP calculation, supplementing the 61 existing. The client is however, providing an additional 72 which allows for 20 additional spaces to minimum DCP needs, which in the short-term augers for a well-planned phase 2 development yet leaves credit toward phase 3 and beyond.

It should be noted that the attached Traffic study makes a more conservative calculation based around the maximum potential for occupancy 2 (supermarkets at 1:20 sq.m) however as discussed elsewhere in this Statement, a present amending LEP is removing "shops" from the Land Use Table in the LEP, so only bulky goods retail (specialised retail premises) would be permitted and the 1:35 sq.m principal would prevail.

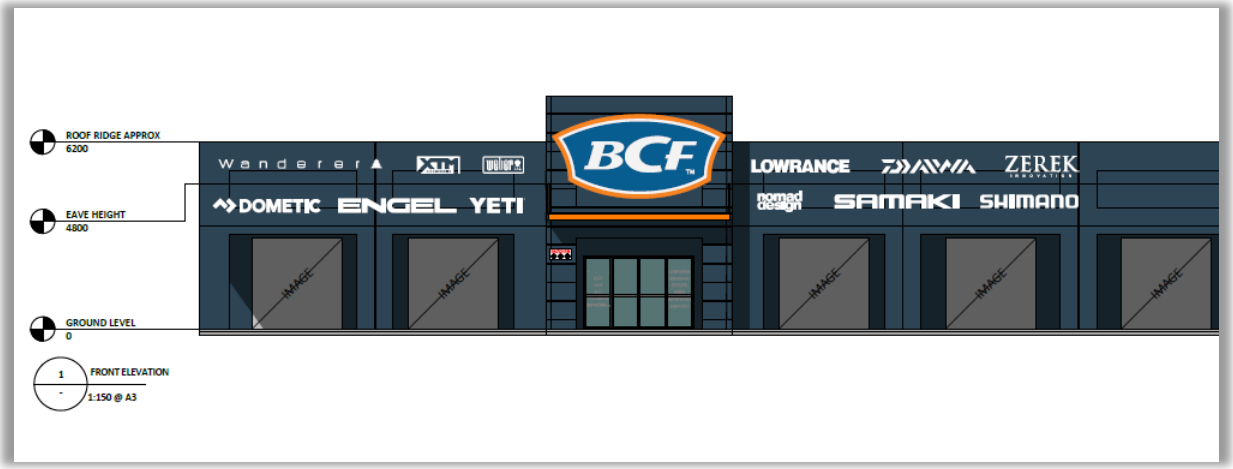
Fencing & waste

The site is and/or will be, perimeter fenced in at least a 2400mm chain-wire fence for basic security purposes yet still offering casual surveillance of the land. All the hard stand areas will be graded, drained, and designed to shed south within the allotment, ultimately being collected, detained in the existing development section, then ultimately disposed of via infrastructure in Boorowa Street. A specific Civil design in this regard is being offered in the appendices.

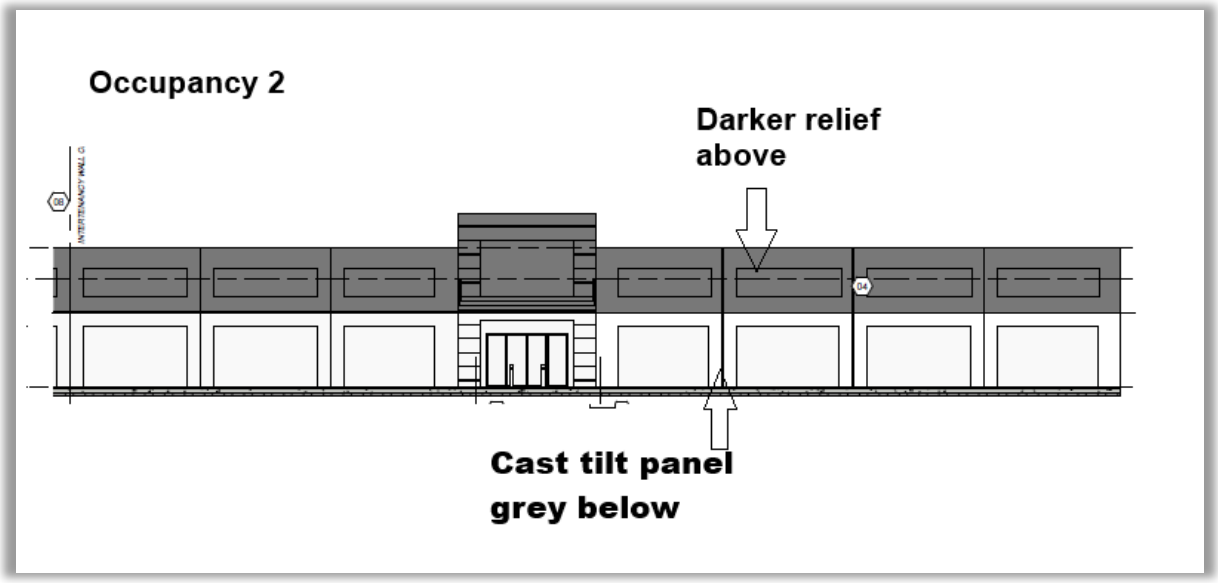
Landscaping / Appearance

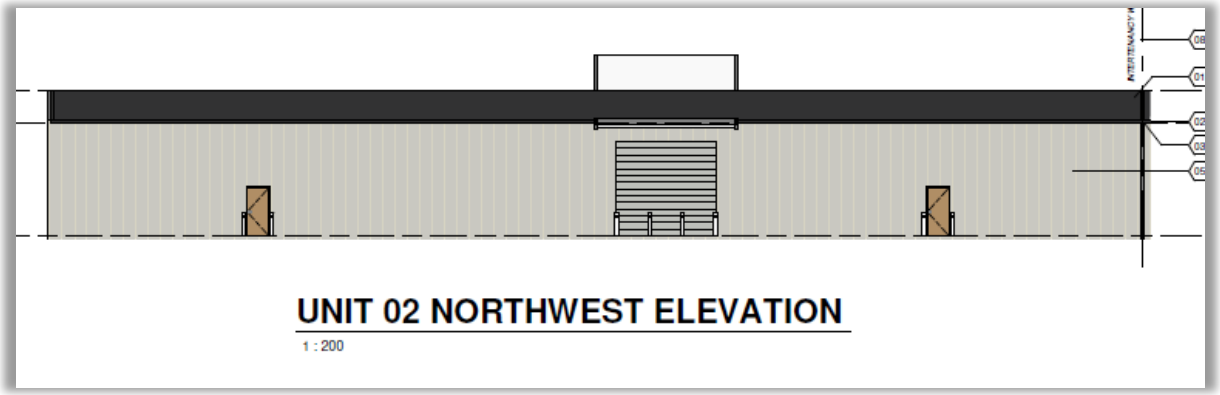
Landscaping across the front and side boundaries (where possible) will comprise a mix of shrubs to a height that will beautify but not disturb vision to Occupant Signage of the Industrial site. These will be further sympathetic to the existing established development.

The construction materials and colour scheme proposed will be consistent across the proposed occupancies with BCF adopting the Dulux Adept colour as the broad external palette. Signage will be as marked up below.



The vacant occupancy will be left at tilt slab colour below the colonnade with a darker hue above, until the tenancy is settled.





The rear of each occupancy will be wheat coloured colorbond with a mid-grey roof. Plans of the layout and position of fixtures and services are included with the appendices to this report.

Referrals

This proposal does not require an Integrated Development application, yet as the building exceeds 500 sq.m, is retail and opens onto a Classified Road, will need referral and consent of Traffic for NSW per the SEPP (Transport & Infrastructure) 2021.

The proposal is off a Classified Road (MR 241) road and is on a controlled straight section of township approach road in an 50km/hr area. The new access will exceed 200m safe intersection sight distance in both directions, is on an area of road already provided with wide verges and is in the process of scheduled maintenance and upgrade. The power setbacks have been discussed and displayed on plan, demonstrating compliance. This should potentially negate even the need for referral under Infrastructure SEPP sec 45.

Site considerations

No demolition of any structure is required. Power, water, and sewer are all adjacent the site in Boorowa Street or already connected and need extension. Water meters and sewer exist, with the only exception being a potential fire hydrant extension onto the site to comply with Part E1.2 of the BCA. This extension will be designed for, and applied to Council satisfaction at Construction Certificate stage due to existing street hydrants not quite having reach to the back of the proposed building from their present location, along with some future proofing for potential later development.

Capacity between or behind the main sheds (4m) for at the least jumbo otto bins, will exist or for the placement of a skip bin for each new occupant (commercially serviced) in order that any waste management concern can be alleviated.

As stated before, the access and service road areas have been designed to allow broad movement within the site for a semi-trailer with straightforward turning movements as presently occurs regularly, and as well a heavy rigid can comfortably service or attend the premises (garbage truck or local supply/delivery), and could enter and leave site in a forward direction comfortably.

A site plan with turning movements for a semi-trailer & heavy rigid vehicle have been included in the appendices. A Semi trailer can access the loop road of the site for site deliveries and product transport.

Built Form

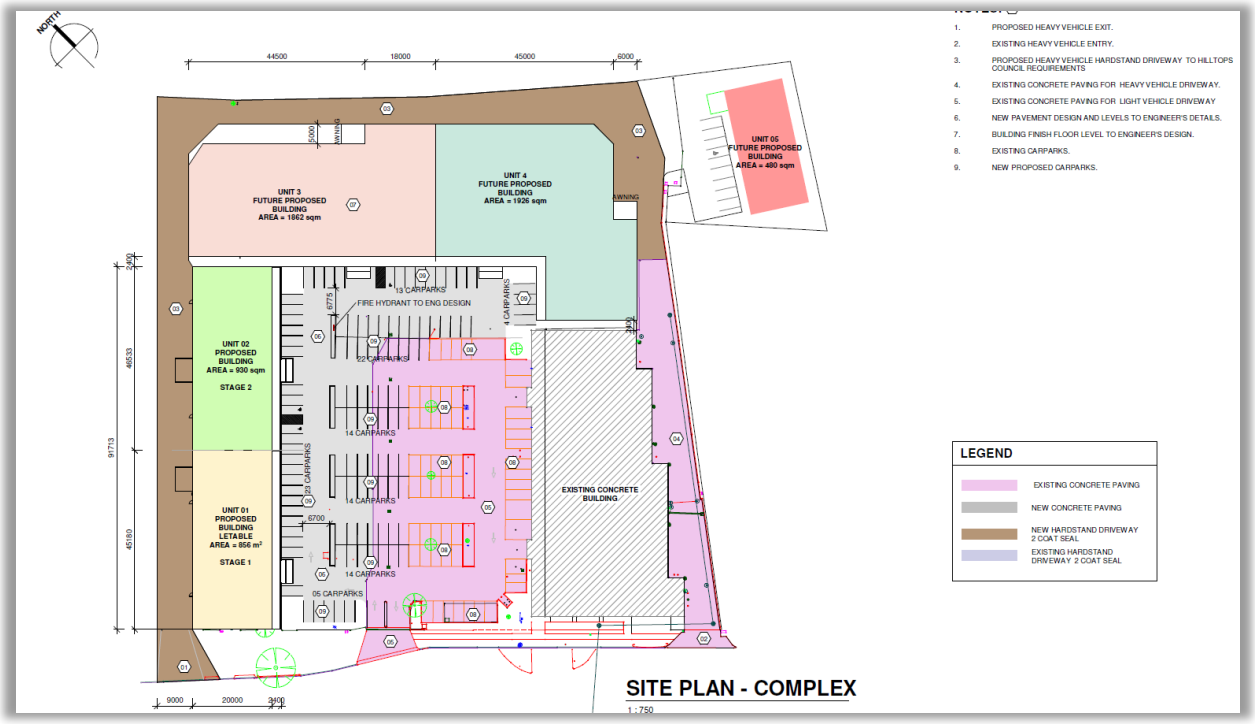
The maximum wall height and roof height of the new building measured from finished ground level will be 6.2m to parapet and ridge respectively – eave height will be 4.8m. This is broadly the same as the existing

established buildings yet will reflect the construction design with lighter weight materials to rear of job rather than wholly tilt slab, which has been retained for facade. The gross floor area (GFA) of the new building will be 1786m^{2,} at 45.1m & 46.53m x 20m each occupancy (BCF = 856 sq.m, Occupancy 2 = 930 sq.m). Each occupancy having less than 10 staff (BCF have 4 – 5 staff per shift on at any time for this sized store) will only require a Unisex Accessible WC which despite this allows for up to 10 females per pan and 15 males per pan anyway (accounts for up to 25 staff) per the BCA. Toilets for Patrons are not required in this style of retail.

Each building will be setback comfortably from boundaries for BCA compliance (>3m) and be fire separated from each other, with the closest other buildings distant. The closest buildings to a side setback are 9m to the western boundary which is the back side of the adjacent development, thereby causing no amenity loss or concern.

As will be discussed below, compliance with Council flood controls is inherent as the carpark is already above the former natural level [pre-2012] by some considerable height compared with the mapped areas.

Sheet A009 has been included with the Plan set to give an indication of future development potential yet should in no way be construed to be part of this application.



Potential for the complex. This DA only the western 2 occupancies

Hours of Operation

BCF is looking to trade or have Staff attending the site and working, between the following hours;

Mon to Wed	7am – 7pm
Late night trade days	7am to 9pm
Saturday/Sunday	8am – 5pm
Public Hols exc Xmas	8am – 5pm

These hours appear not inconsistent with Supercheap Auto's operating hours in the same complex.

Specific Reports attached

The Applicant has sought out specific reports arising from the pre-DA discussions. These include, and are attached;

- Stormwater Design supplement to existing site drainage
- Geotechnical Soil Contamination Clearance Report
- Traffic Study for Traffic Generating Development

These are and will be referred to in detail, in this Statement.

C. Compliance with Planning Controls

Young Local Environmental Plan 2010

The primary environmental planning instrument over this land is Young Local Environmental Plan 2010. A planning portal report has been extracted from NSW Planning and this is attached in the appendices. The land is **zoned E4 – General Industrial**.

The objectives of this zone and this proposals consistency with these is stated.

E4 Land Use Table Objectives Analysis			
1	• To provide a range of industrial, warehouse, logistics and **related** land uses.		Specifically designed for this purpose - CONSISTENT
2	• To ensure the efficient and viable use of land for industrial uses.		Targeted permissible development in a compact and designed way - CONSISTENT
3	• To minimise any adverse effect of industry on other land uses.		Proposal is designed conducive to the site with a presentation or prominence up from the street - CONSISTENT
4	• To encourage employment opportunities.		This is the specific purpose of the application - CONSISTENT
5	• To enable limited non-industrial land uses that provide facilities and services to meet the needs of businesses and workers.		This is the specific purpose of the application - CONSISTENT

Is development permissible within the zone? Yes

The range of permitted and prohibited uses is listed below;

3 Permitted with consent
Building identification signs; Business identification signs; Depots; Freight transport facilities; Garden centres; General industries; Goods repair and reuse premises; Hardware and building supplies; Industrial retail outlets; Industrial training facilities; Kiosks; Landscaping material supplies; Light industries; Local distribution premises; Neighbourhood shops; Oyster aquaculture; Plant nurseries; Roads; Rural supplies; School-based child care; **Shops**; **Specialised retail premises**; Take away food and drink premises; Tank-based aquaculture; Timber yards; Vehicle sales or hire premises; Warehouse or distribution centres; Any other development not specified in item 2 or 4

The development is designed as ***specialised retail premises*** and this was verified for the stated use (BCF) at a pre-DA Meeting with Council's Senior Planners on .3/12/2024. The original development under a past DA & LEP was based on bulky goods retail fitting a permissible description at that time.

specialised retail premises means a building or place the principal purpose of which is the sale, hire or display of goods that are of a size, weight or quantity, that requires—

(a) a large area for handling, display or storage, or
(b) direct vehicular access to the site of the building or place by members of the public for the purpose of loading or unloading such goods into or from their vehicles after purchase or hire,

but does not include a building or place used for the sale of foodstuffs or clothing unless their sale is ancillary to the sale, hire or display of other goods referred to in this definition.

Note - Examples of goods that may be sold at specialised retail premises include automotive parts and accessories, household appliances and fittings, furniture, homewares, office equipment, outdoor and recreation equipment, pet supplies and party supplies.

Specialised retail premises are a type of retail premises—see the definition of that term in this Dictionary.

The Compliance Table below provides a summary of the relevant standards and these are addressed relevant to the broadness of possible usability anticipated.

HILLTOPS LEP 2022

Clause	Complies	Comments
1.2 Aims of plan	Yes	The development is consistent with the following aims of the LEP: (a) to advance the environmental, economic, and social goals of Hilltops, (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.

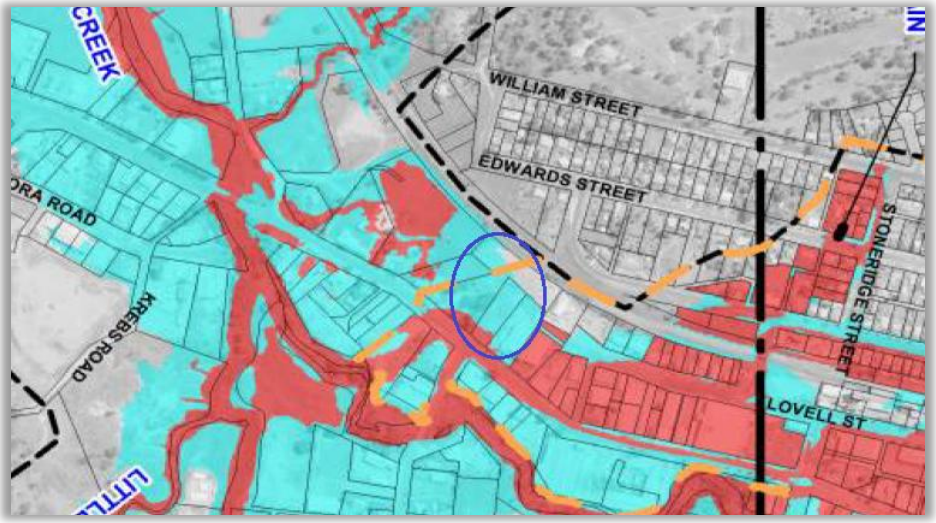
Clause	Complies	Comments
1.4 Definitions	N/A	The proposed development is defined as ***specialised retail premises*** which is defined per the above.
1.9A Suspension of covenants, agreements, and instruments	Yes	The restrictions as to user / dealings that apply to the site are being observed in the design and siting of this proposal.
2.2 Zoning	N/A	The site is zoned E4 General Industrial
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 above. See LUT statement above
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	N/A	N/A
4.1A Dual Occupancy Lot sizes	N/A	n/a
4.6 Exceptions to development standards	N/A	Development permissible so no variation sought
5.4 Other development controls	N/A	Development type not stated
5.10 Heritage Conservation	N/A	The allotment, its buildings, nor adjacent land nor buildings in locality are listed as Heritage nor in a HCA
5.16 Subdivision of, or dwellings on, land in certain rural, residential or environment protection zones	N/A	N/A
6.1 Earthworks	OK	Minor cut/fill. Site shaped at original phase 1 of development Sedimentation and erosion control measures shall be put in place during construction.
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, ***available at front of site on application to Hilltops Shire (connections do exist yet further occupancies will require separate connections)*** (b) the supply of electricity, ***available at front of site on application to Essential Energy (connections do already exist)*** (c) the disposal and management of sewage, ***retic sewer available at front of site on application to Hilltops Shire (connections do exist yet further occupancies will require separate connections)*** (d) stormwater drainage or on-site conservation, ***design attached – to front of site***

Clause	Complies	Comments
		(e) suitable road access ***Sealed road at frontage – entry exists. New custom delivery vehicle exit to be provided.***
6.3 Terrestrial Biodiversity	N/A	Site not mapped this attribute
6.4 Water - Riparian	N/A	Site not mapped this attribute
6.5 Water – Groundwater Vulnerability	N/A	Site not mapped this attribute
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	Site not mapped this attribute

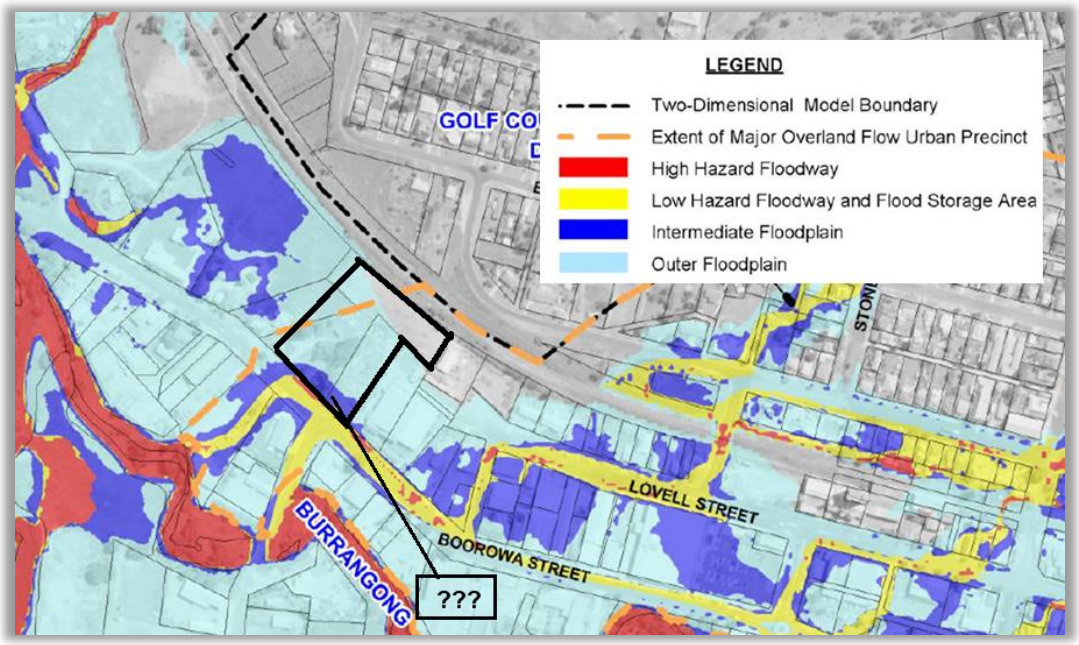
Section 5.21 LEP – Flood Planning – Specific Commentary

The November 2015 Flood Study undertaken for Young Shire Council by Lyall & Associates/Nexus Environmental Planning, and was subsequently adopted.

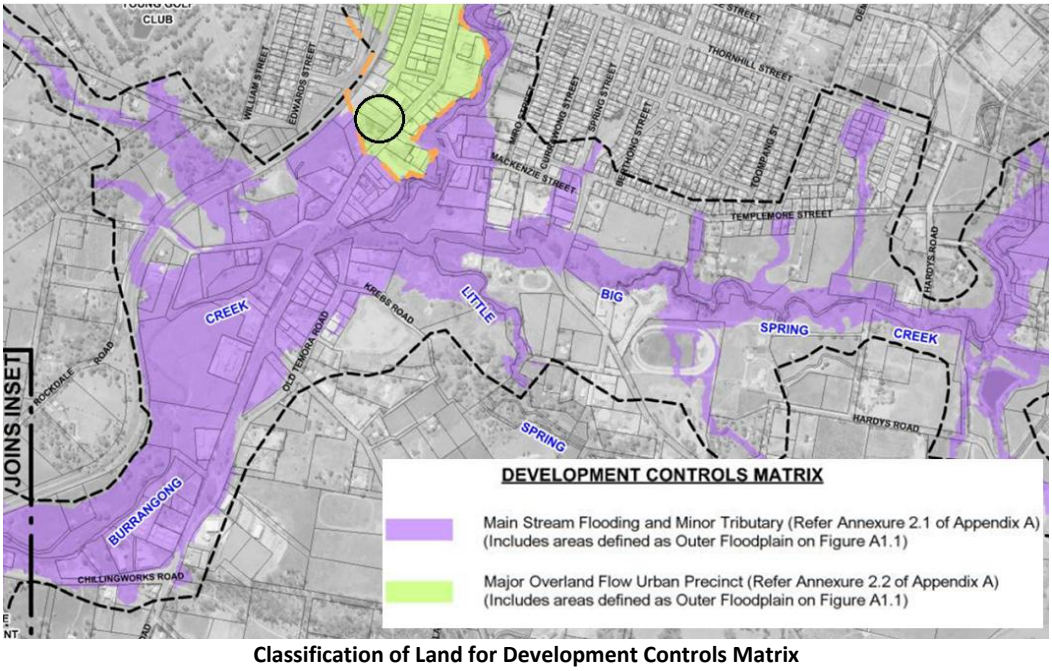
From this map and policy set, it is important to establish if the Flood Planning Level provision of the LEP applies and then subsequent controls as set forth from this point. The critical extracts are reproduced below;



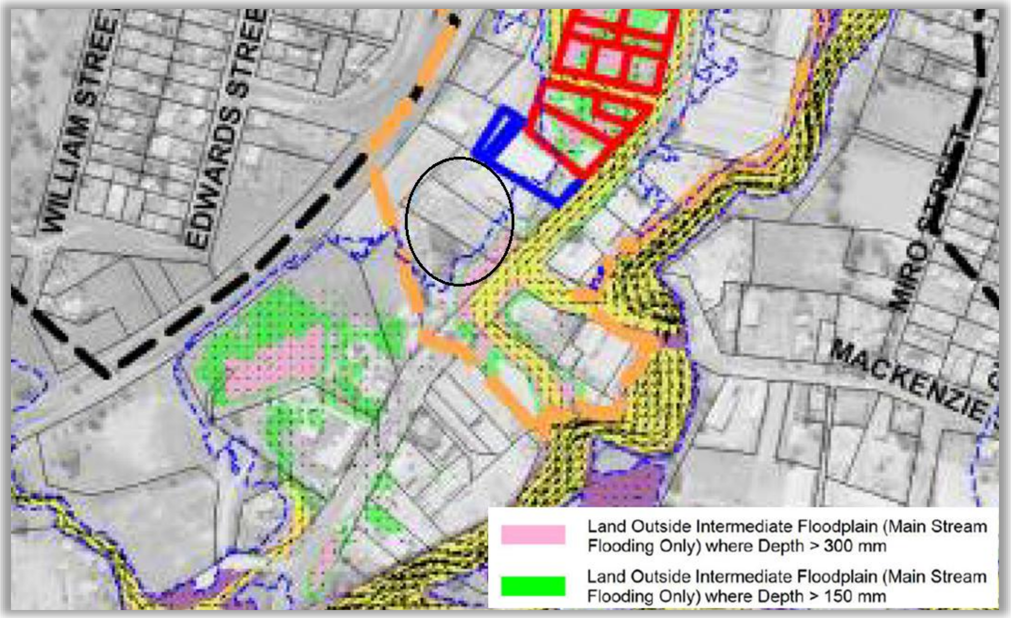
Flood Planning Area – site has mostly white shading with some red – investigation in policy continues



Outer Flood Plain with part marked intermediate ??
Use of pre 2013 (date of phase 1 of development) Contour base data suspected



Classification of Land for Development Controls Matrix



Sub- Classification of Impact Depth
Yet it should be noted affected area is at least 1200mm higher than road adjacent??

The Town of Young
Floodplain Risk Management Study & Plan
Appendix A - Draft Flood Policy

ANNEXURE 2.2
DEVELOPMENT CONTROLS MATRIX – MAJOR OVERLAND FLOW URBAN PRECINCT

	Outer Floodplain								Intermediate Floodplain								Low Hazard Floodway and Flood Storage Areas								High Hazard Floodway							
	Essential Community Facilities	Critical Utilities and Uses	Flood Vulnerable Residential	Residential	Business & Commercial/Industrial	Non-Urban and Outbuildings	Residential Sub-Division	Minor Additions (Residential)	Essential Community Facilities	Critical Utilities and Uses	Flood Vulnerable Residential	Residential	Business & Commercial/Industrial	Non-Urban and Outbuildings	Residential Sub-Division	Minor Additions (Residential)	Essential Community Facilities	Critical Utilities and Uses	Flood Vulnerable Residential	Residential	Business & Commercial/Industrial	Non-Urban and Outbuildings	Residential Sub-Division	Minor Additions (Residential)	Essential Community Facilities	Critical Utilities and Uses	Flood Vulnerable Residential	Residential	Business & Commercial/Industrial	Non-Urban and Outbuildings	Residential Sub-Division	Minor Additions (Residential)
Floor Level	2	2	2	2	2		2	2	2	2	2	2	2		2	2				1	1		1	1								1
Building Components	2	2							2	2	1	1	1		1	1				1	1		1	1								1
Structural Soundness	2	2							2	2	1	1	1		1	1				1	1		1	1								1
Flood Affectation																				1	1		1	1						1		1
Evacuation / Access	1	1	1						1	1	1																					
Management and Design	2,3	2,3	5						2,3	2,3	5		4		1	6				7	4,7		1,7	6						3,7		6,7

Not Relevant
Unsuitable Land Use

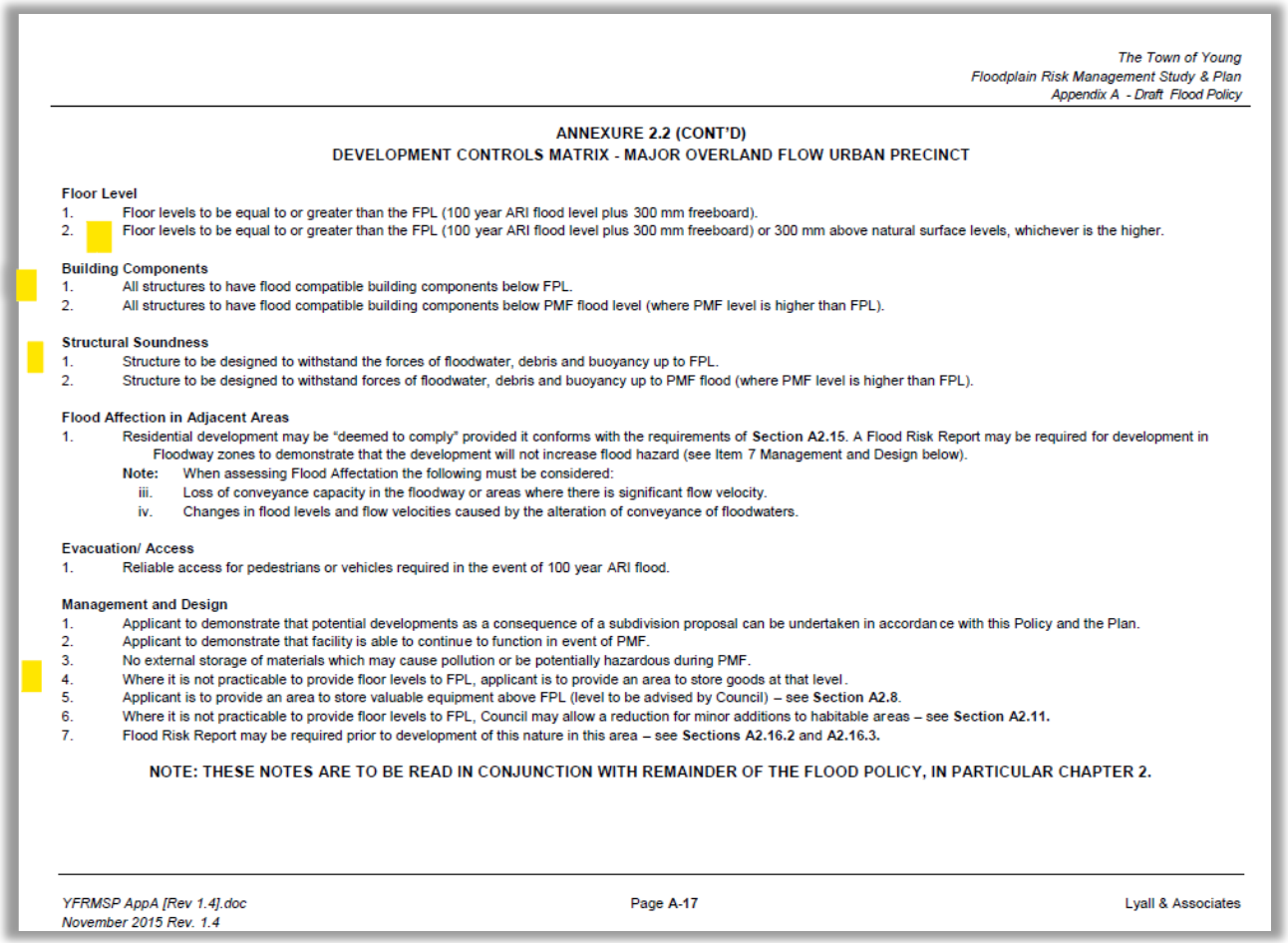
Major Overland Flow applies for inundation of land on the three urban flow paths: Railway Drain, Chance Gully and Golf Course Drain. The Major Overland Flow Urban Precinct identifies the area in which allotments subject to Major Overland Flow lie.

The Intermediate Floodplain is defined by the area between the Floodway and Flood Storage zones and the Flood Planning Area (FPA). The Outer Floodplain is the area between the FPA and the Probable Maximum Flood.

See Notes over page:

YFRMSP AppA [Rev 1.4].doc
November 2015 Rev. 1.4
Page A-16
Lyall & Associates

Development Controls – Identification Matrix



ANNEXURE 2.2 (CONT'D)
DEVELOPMENT CONTROLS MATRIX - MAJOR OVERLAND FLOW URBAN PRECINCT

Floor Level
1. Floor levels to be equal to or greater than the FPL (100 year ARI flood level plus 300 mm freeboard).
2. Floor levels to be equal to or greater than the FPL (100 year ARI flood level plus 300 mm freeboard) or 300 mm above natural surface levels, whichever is the higher.

Building Components
1. All structures to have flood compatible building components below FPL.
2. All structures to have flood compatible building components below PMF flood level (where PMF level is higher than FPL).

Structural Soundness
1. Structure to be designed to withstand the forces of floodwater, debris and buoyancy up to FPL.
2. Structure to be designed to withstand forces of floodwater, debris and buoyancy up to PMF flood (where PMF level is higher than FPL).

Flood Affection in Adjacent Areas
1. Residential development may be "deemed to comply" provided it conforms with the requirements of **Section A2.15**. A Flood Risk Report may be required for development in Floodway zones to demonstrate that the development will not increase flood hazard (see Item 7 Management and Design below).

Note: When assessing Flood Affectation the following must be considered:
iii. Loss of conveyance capacity in the floodway or areas where there is significant flow velocity.
iv. Changes in flood levels and flow velocities caused by the alteration of conveyance of floodwaters.

Evacuation/ Access
1. Reliable access for pedestrians or vehicles required in the event of 100 year ARI flood.

Management and Design
1. Applicant to demonstrate that potential developments as a consequence of a subdivision proposal can be undertaken in accordance with this Policy and the Plan.
2. Applicant to demonstrate that facility is able to continue to function in event of PMF.
3. No external storage of materials which may cause pollution or be potentially hazardous during PMF.
4. Where it is not practicable to provide floor levels to FPL, applicant is to provide an area to store goods at that level.
5. Applicant is to provide an area to store valuable equipment above FPL (level to be advised by Council) – see **Section A2.8**.
6. Where it is not practicable to provide floor levels to FPL, Council may allow a reduction for minor additions to habitable areas – see **Section A2.11.**
7. Flood Risk Report may be required prior to development of this nature in this area – see **Sections A2.16.2** and **A2.16.3.**

NOTE: THESE NOTES ARE TO BE READ IN CONJUNCTION WITH REMAINDER OF THE FLOOD POLICY, IN PARTICULAR CHAPTER 2.

Development Controls Matrix – applicable controls

In summary, the land is identified in a Flood Planning Level area, it does have controls under the matrix – being floor height for new development. The site and road are minor affected by modelled 1:100 ARI flooding or inundation (before or after modelling), however incorporating the precautionary principle applied in the policy, being a nominal area, new floor levels should be 300mm above existing ground levels.

The site rests some 1200mm+ above the adjacent mapped road area and it may appear an older LIDAR/Contour base may have been used from prior to this site being developed 3 years before this Flood Study. The carparking areas and the buildings site at least 1200mm above the adjoining impacted roads and mapped areas.

No work is therefore required.

Verification by a Surveyor that the floor levels are considerably higher than FPL + 300mm can be arranged pre-CC.

OTHER LEGISLATIVE OBLIGATIONS

GENERAL REQUIREMENTS OF THE ENVIRONMENTAL PLANNING AND ASSESSMENT ACT, 1979

1.7 Application of Part 7 of Biodiversity Conservation Act 2016 and Part 7A of Fisheries Management Act 1994

As per these sections of the above Acts, it is not considered that the development is likely to significantly affect threatened species, populations, or ecological communities, because:

Biodiversity Conservation Act 2016

- the development will not significantly affect threatened species or ecological communities, or their habitats, according to the test in section 7.3, as there are no trees and shrubs to be removed, there are no threatened ecological communities on the site, the development will not adversely impact the life cycle or habitat of any of the threatened species that may occur in the region, and the development is not a key threatening process. [7.2(1)(a)],
- the development does not exceed the biodiversity offsets scheme thresholds (is not mapped as high biodiversity value on the Biodiversity Values Map and does not exceed the clearing threshold) [7.2(1)(b)],
- the site has not been declared as an area of outstanding biodiversity value [7.2(1)(c)].
- See also mapping in earlier LEP section marked BOSET/BDAR

Fisheries Management Act 1994

- as per the seven-part test under section 221ZV of the Act, there are no threatened species, populations or ecological communities, occurring on-site, or are known to be in the area, there is no declared critical habitat in the region and the development is not a key threatening process.

4.10 Designated development

This development is not a category of designated development, under Schedule 3 of the *Environmental Planning and Assessment Regulation 2000*.

4.36 Development that is State significant development

The development is not State significant development, as it is not identified in *State Environmental Planning Policy (State and Regional Development) 2011*.

4.46 Integrated development

The building is proposed to be erected and site developed, yet does not conflict with a waterway, an activity or otherwise.

Aboriginal/Indigenous Cultural Heritage

A search under this mapping revealed that no item was identified on the AHIMs database, nor is the property within sensitive land per the Young Aboriginal Cultural Heritage Study as mapped. These searches are in the Appendix to this report.

SECTION 4.15 CONSIDERATIONS UNDER THE ENVIRONMENTAL PLANNING & ASSESSMENT ACT 1979:

State Environmental Planning Policies (SEPPs)

Several SEPPs apply to the land, however, only the following have any relevance to the proposed development:

- 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)

DRAFT LEP's ?

Currently Council has received Gateway, advertised and considered amendments to its LEP for Housekeeping matters, including changes to the LEP in the E4 zone;

Critical changes in Part 1 of proposals table are item 3 & 4 below

Table 1. Hilltops LEP Housekeeping Amendment 2024

Amendment #	Proposed change
Land Use Permissibility amendments:	
1	R1 General Residential: Remove permissibility of 'Shops'
2	R1 General Residential: permit 'Home Industry' and prohibit 'light Industry'.
3	E4 General Industrial: Remove 'School-based Childcare'
4	E4 General Industrial: remove permissibility of 'shops' and 'neighbourhood shops'
5	E3 Productivity Support: remove permissibility of 'animal boarding', 'office premises' and 'neighbourhood shops'
SP2 Land Use Zoning Mapping Alignment Adjustment	
6	Re-alignment of the SP2 Zone covering Saines Road, Young with the Blaney to Demondrille railway corridor.
Addition of Part 5 Miscellaneous Provisions Clause: Clause 5.22	

Of particular interest is the removal of “shops” as a permitted use. The status of the Draft LEP is not as yet “certain or imminent” as apparent on the NSW LEP Tracker, which would lend weight as further permissibility for the proposed development despite the comfort enjoyed from the specialised retail premises definition.

YOUNG DEVELOPMENT CONTROL PLAN EVALUATION

SEE OVER

This DCP was specifically written for applicability to Young LEP 2010 which for the most part is superceded. Its applicability to Hilltops LEP 2022, is questionable yet assessed.

Thereafter however, the Draft Hilltops DCP is assessed also.

Young Development Control Plan 2011 (YDCP)

You should provide an assessment of your proposal against the YDCP 2011 by completing the relevant sections of the Compliance Table below.
The Compliance Table below provides a summary of the relevant controls. Please refer to the YDCP if you require clarification of the control.

Compliance Table for YDCP 2011 – COMMERCIAL & INDUSTRIAL DEVELOPMENT		
Clause	**Control**	**If non-compliance state and address**
Food Premises – Additional Provisions These controls apply to a food premises in any zone.		
	Where a kiosk is proposed in conjunction with an industry the following controls apply: • Food preparation and storage to enable easy cleaning; • Food premises should comply with the Australian Standard for Food Premises (AS 4674); • Provide customer sanitary facilities as per BCA; • Comply with Council's Trade waste Policy.	**No kiosk or food preparation anticipated**
Heritage Conservation Area Provisions These controls apply to a development in any zone affected by a heritage item or conservation zone.		
	Any development of a heritage item should be in accordance with the guidelines from the Heritage Office: Design in Context: Guidelines for infill development in Historic Environment.	**No heritage item on the property and premises not identified in SHR, SHI or LEP**
	Provide a heritage impact statement for development adjacent to a heritage item.	**n/a**
Enterprise Corridor (B6) and Business Park (B7) Zones – Additional Provisions - These controls apply to industrial development in (B6) and (B7) zones.		
	• Site signage (other than on a building) to be consolidated into a single pylon sign contained within the site; • Avoid direct access from the Olympic Highway; • Access and egress to the site to be in a forward direction; • Access, parking and signage to comply with RTA standards (referral to RTA required); • Any façades visible from the Olympic Highway to be constructed of brick, decorative masonry, glass or other quality materials; • Maximum floor space ratio (FSR) of 0.5:1; • Parking to be available which is visible from the street frontage Including in front of the building; • Existing canopy trees to be protected and incorporated into site landscaping;	**Not B6 or B7 zone**

Compliance Table for YDCP 2011 – COMMERCIAL & INDUSTRIAL DEVELOPMENT		
Clause	**Control**	**If non-compliance state and address**
	• Landscaping to be provided over at least 50% of land between the building and the Olympic Highway including canopy trees; • Buildings to be set back at least 15m from the Olympic Highway street frontage and 5m from any side boundary;	
Industrial Development - These controls apply to industrial development in any zone.		
Servicing	• All industrial allotments to be serviced by underground electricity, water, sewer and telecommunications in accordance with the relevant authorities' requirements and relevant Australian Standards; • Development to provide a rainwater tank to amenities; • Separate occupancies to have separate sanitary and stormwater drainage lines; • Developments comply with Council's trade waste policy.	**Anticipated and development has these provided.** **Not provided yet water use is expected to be low.** **Will be designed for** **Only discharge to sewer will be via toilets/kitchenette for staff**
Access and Parking	• Access aisles, manoeuvring areas and parking should be in accordance with Council's Engineering Guidelines for Subdivision and Development; • Access driveways within the road reserve to be constructed of concrete; • Kerb and guttering and footpath to be provided to all road frontages of the development,	**Compliance is demonstrated on plans attached in the appendices and commensurate with the attached Traffic & Parking Study.** **The main access to the development is a concrete finish from road edge to all parking areas.** **New delivery vehicle exit to also be concrete and at crossover.** **Kerb and gutter plus sealed roads at frontage – existing**

Compliance Table for YDCP 2011 – COMMERCIAL & INDUSTRIAL DEVELOPMENT		
Clause	**Control**	**If non-compliance state and address**
	• Customer and visitor parking to be clearly signed and is located at the front of the development, towards the primary street frontage. • Vehicle access and egress is to be in a forward direction. • Appropriate separation is provided between customers / visitors and the operational areas of the site. • A clearly identified point of customer/visitor entry is provided;	**Will be clear parking area central to development** **52 new required – 72 spaces additional being provided. Credit position to be noted & acknowledged in this regard.** **Complies** **Complies** **Complies**
Setbacks	• Minimum front setback of 15 m (from a classified road frontage) and a setback of at least 6 m is provided from any other road; • Minimum setback to rear boundary of at least 5 m (unless the building is constructed to the boundary);	**Minimal setback or 0 front building line proposed consistent with existing. Building is elevated, wide verge and road – does not interfere with amenity or streetscape and is consistent in the area. Variance sought consistent with precedent set by phase 1 of the development** **Compliant** **All other setbacks comply.**
Buffers	Buildings adjoining non-industrial development: • To be set back a minimum of 10 m from the property boundary; • Do not have a wall height exceeding 8m; • Do not produce any additional overshadowing of the adjoining property between the hours of 9am-3pm on the 21st June.	**Set within the zone**
Noise and Vibration	• Building design and machinery to minimise any noise emissions; • If possible, locate machinery within buildings or other acoustic treatment structures;	**During construction there will be earthworks, access construction and building impacts. Construction is very contemporary and short interval build time. Earthworks machinery should not impact on neighbours as a result of distance from neighbouring developments, be it residential or neighbouring industrial.**

Compliance Table for YDCP 2011 – COMMERCIAL & INDUSTRIAL DEVELOPMENT		
Clause	**Control**	**If non-compliance state and address**
	• Openings to the building which are usually open during operations should be directed away from sensitive receivers such as residential housing; • Building design and machinery installation to prevent vibration transmission to adjoining properties or public areas; • The operating noise level of plant and equipment should not exceed 5dBA above the background noise level when measured from the property boundary.	**Longer term there will be no greater impacts than currently experienced (if any) for a retail premises.** **No industrial processes or noise generating development.**
General Design	• The majority of offices and/or customer areas and/or staff facilities to be located to address the primary road frontage and to be located in a part of the building that does not exceed one storey in height.	**The site has buildings facing internally to the parking forecourt. As such, limited or no impact on neighbouring development exists.**
Façade Treatment	• The front façade of the building to be constructed from: - face brick or decorative masonry block; or - timber panelling, pre-coloured metal cladding, and glazing in conjunction with at least 30% of brick or masonry block.	**See the attached BCF Detailing in appendices. Consistent colour scheme as a National chain and not out of character with other established chain retailers nearby – Bunnings, SuperCheap Auto, Lawrence & Hansen, Harvey Norman. Not inconsistent.** **This is considered a desirable outcome per the DCP.**
Landscaping and Fencing	• Landscaping to be selected from schedule of tree species. Refer to Appendix G of this DCP; • Landscaping to be provided to the primary street frontage(s) and to occupy 20% of the front building setback; • Vegetation to be planted should be a mixture of semi-mature species and seedlings/tube stock; • Canopy trees to be provided on properties located on classified roads between the front boundary and the building line; • Fencing to be of a uniform colour and material along all common boundaries; • Solid fencing should be no more than 1.8m above the finished ground level;	**Please see the landscaping and fencing drawing in the appendices.** **This landscaping will extend primarily to the front of site and aisle caps** **Existing retained mature plantings to be matched and consistency achieved. These will be retained.** **Fencing will be 2400mm galvanised chain-wire fencing which is the standard common to the industrial area.**

Compliance Table for YDCP 2011 – COMMERCIAL & INDUSTRIAL DEVELOPMENT		
Clause	**Control**	**If non-compliance state and address**
	• Maximum fence height of 2.4m • Additional fencing, screen walls or screen vegetation to be provided to conceal unsightly areas from neighbour or public view; • Fencing to a street or other public place is of open and durable construction.	
Signage:	• Signage to be located to show business names but without detracting from the appearance of the area or causing issues for adjoining properties, road users, or others in the surrounding area.	**Signage will be as indicated in the appendices with colour palette layout and design nominated.**
Village Development – Zone RU5 These controls apply to light industrial development in the RU5 zone.		
	• Commercial or industrial uses to be constructed with pre-painted metal with unpainted metal type finishes avoided. • All-weather parking areas to be provided; • Where there is no sewer available, the development is to comply with Council's Policy with respect to the On-Site Management of waste disposal. Properties with an area of less than 1ha to provide geotechnical information showing the feasibility of on-site management; • Where no reticulated water supply is available, roof areas and tanks to be provided.	**Not RU5**
Car parking and Vehicle Access – these controls show the required parking rate for any industrial development		
Parking Rates	Warehouse / Distribution Centre – 1 space / 100m^2 of gross leasable area Office Premises - 1 space / 50m^2 of gross leasable area Business Premises – 1 space / 35m^2 of gross leasable area Industries – 1 space / 2 staff employed or 1 space / 100m^2 of gross leasable area	The DCP would require 1 space for every 35 sq.m or part thereof = 51.02 (52) new spaces for the proposal. 61 presently exist in phase 1 of development as built, however it is intended to afford 72 new spaces at this time. This leaves the site in credit without even applying street credits, toward future development when it arises. Parking is provided in line with (and indeed in excess of) the development's needs, on the site plan.

Compliance Table for YDCP 2011 – COMMERCIAL & INDUSTRIAL DEVELOPMENT		
Clause	**Control**	**If non-compliance state and address**
	• Car parking to be provided on the site of the development; • Vehicles enter and leave the site in a forward direction; • All parking spaces to be marked by lines or spaces; • The layout and dimensions of car parking areas are in accordance with Figures 4.1 and 4.2 of this DCP; • All car parking and internal road areas to be paved in bitumen seal coat, asphaltic or bituminous concrete, cement concrete, concrete paving blocks, or brick paving blocks; • Free and uninterrupted access to car parking areas is maintained at all times.	See carparking plan incorporating the above details plus as detailed per this section and comments previously in this SEE. Parking will be on a concrete pavement. The accessible space/s will have pavement markings in concrete displaying it specifically.
General Provisions for Car Parking Areas – these controls apply to industrial premises required to provide a car parking area.		
	• Car parking areas to comply with Australian Standard AS2890; • Pedestrian access to within the car parking area to be separated from vehicular traffic; • Any blind aisles to be: less than 15m in length; a minimum of 6.5 metres wide; clear of all obstructions; and provided with a manoeuvring area at the blind end of the aisle. • Separation of entry and exits points; • Entry to and exit from the site to be in a forward direction; • Holding areas have a maximum grade of 5% for a minimum distance of 6 metres behind the road boundary; • All car parking areas to be sealed, graded and drained; • The maximum acceptable grade for sloping parking (including access aisles) is 10%.; • The minimum clear head room for undercover parking is 2.3 metre for passenger vehicles or 4.6 metres where other vehicles will access the parking area; • For required turning circle dimensions refer to Appendix F of the YDCP; • Where 15 or more spaces provided at least 30% of spaces to be shaded;	Noted – see carparking layout and traffic plan, specifications plan in appendices.

Compliance Table for YDCP 2011 – COMMERCIAL & INDUSTRIAL DEVELOPMENT		
Clause	**Control**	**If non-compliance state and address**
	• For driveway types and the design of access points refer to Tables 4.2, 4.3 and 4.4 in the YDCP.	
Development Requiring Tree Removal or Lopping - These controls apply to commercial development in all zones other than RU1 and RU3.		
	Designated trees should be protected and retained where possible. Designated trees are defined within Section 4.3.1 of the YDCP	No tree removal proposed – development area of site is presently without trees.
	• Where a designated tree is removed it should be replaced by at least 2 trees local to the area of a similar size at maturity; • Work should not occur within the drip line of a retained tree unless an arborist report has been prepared.	Not applicable – see above.

Section 2.5 Commercial, Business and Retail Development		
Commercial and retail development is carried out in such a way as to: a) protect and enhance the economic function of Hilltops Local Government Area. b) protect and enhance the character of Hilltops Local Government Area. c) Protect and respond to the environment.		
Performance Criteria	**Acceptable Solution**	**Comment this Application**
PC1 To ensure that development is consistent with existing or future character and building heights are consistent with the prevailing heights for commercial and retail development within the immediate vicinity.	***AC1.1*** Shop fronts are true to the style of the existing building and the top and bottom floors of existing buildings are consistent in style and colour scheme.	Consistent to existing complex design Façade presentation consistent (colonnade style) and facing the centralised forecourt parking.
	AC1.2 The character of heritage conservation areas is protected and new development is consistent with the bulk and scale of a rural town, containing historic buildings.	n/a not heritage
	AC1.3 Appearance of development is appropriate to neighbouring buildings and the wider area.	consistent to development and nearby
	AC1.4 No existing windows are painted over. Frosting or signage for part of the frontage is considered suitable.	new work
	AC1.5 Development is to avoid fibrous cement, unless painted, and metal cladding of walls, unless as an architectural feature.	painted façade work to be consistent with tilt up from phase 1 on site
	AC1.6 Building front setbacks are consistent with adjoining buildings, or if adjoining buildings have different setbacks, with the average of those setbacks.	consistent with existing
PC2 To ensure that safe and efficient passage is available between street frontages and car parking areas.	***AC2.1*** Pedestrian linkages between shop fronts and public parking areas are retained or provided in convenient locations where possible. These are well lit at all times, and contain no dead ends or other places possible to conceal a person.	centralised carpark to development, footpath linkages
	AC2.2 Primary access to a development is available from a street, not a rear lane.	From street
	AC2.1.2 All frontages of the site are to be provided with kerb and gutter.	Exists

PC3 To ensure that parking is of sufficient quantity, and provided in safe and efficient manner.	***AC3.1*** Parking complies with the provisions of Sections 4.1 and 4.2 of this DCP.	See commentary above
	AC3.2 The re-development of parking areas should not detract from the character of the surrounding area.	Centralised, convenient, and attractive to consumer
	AC3.2 Visitor parking is easily accessible and clearly designated by line-marking and signage.	Complies
	AC3.3 All parking areas and trafficable areas on-site is to be sealed with bitumen, coloured or textured concrete or pavers, to Council specifications.	concrete - greyed texture loop road temporary link in 2 coat seal - extend existing
	AC3.4 Vehicles accessing service areas or onsite parking areas must be able to enter and leave the development in the forward direction. The 85th percentile vehicle must be able to turn on-site in no more than a two-point turn. Templates can be found within Council's Engineering Guidelines, found on Council's website.	Complies
PC4 To provide shop top housing or commercial development in the upper stories of multi-storey development.	***AC4.1*** No part of the building is to exceed 9 m when measured vertically from the natural ground level immediately below that part. This excludes any architectural or service features such as parapets or antennae.	Complies - 6.2m
PC5 To ensure zone E3 Zone has a well landscaped presentation with simple centralized entrance signage.	***AC5.1*** Signage is appropriate to the building and to the surrounding area.	Consistent
PC6 To ensure that new development is provided with appropriate services.	***AC6.1*** Developments are provided with water, sewer, power, telecommunications, and gas in accordance with the relevant authorities requirements.	Compliant
	AC6.2 Developments dispose of waste through a trade waste agreement if necessary.	Compliant - skip space available
PC7 The development is to be connected to Council's reticulated water and sewer systems where available or obligated to be connected under relevant acts.	***AC7.1*** Council's reticulated water service is to be connected separately to each dwelling.	Complies
	AC7.2 Council's reticulated sewer service is to be connected separately to each of the dwellings.	Complies

	AC7.3 Payment of any head-works contributions for water and/or sewer. Refer to Council's Development Servicing Plans that may apply to the development.	By condition where applicable
	AC7.4 Payment of any Section 7.11 or Section 7.12 development contributions applicable to the development.	Is any part of sec 7.11 plan still existing?
	AC7.5 Developments comply with Council's liquid trade waste policy.	No non-compliant discharge - toilet and staff facilities only
PC8 The development is to have appropriate stormwater drainage connected, where possible, into Council's existing stormwater infrastructure.	***AC8.1*** All stormwater from the property shall be disposed of without causing nuisance. This may involve connection to Council's existing drainage system or other suitable arrangements such as easements or on site detention where no direct discharge to waters is available. Post development flow must not exceed pre-development flows.	Design provided
	AMD8.2 All roof and surface water drainage is to be designed to provide for conveyance of these flows per AS3500 per AS3500 and current Australian Rainfall and Runoff Guidelines, including factoring of Climate Change via the Climate Change Rainfall modifier, to the appropriate road, public stormwater drainage system or watercourse where approved to do so.	Design attached
Design Suggestions and Variations		Comments
Council will consider the provision of concessions, possibly including car parking, for development fronting Boorowa Street in Young or Marsden St in Boorowa or Neill Street in Harden or Albury Street in Murrumburrah where developments provide pedestrian access to car parking areas via arcades or passageways having 3m minimum width.		Well designed parking central to the development, lends weight to front building line variance which is consistent with phase 1 of development.

D. Assessment of Likely Impacts of Development

Construction Impacts

During construction of the proposal there is expected to be minimal impacts on neighbouring premises. Care will be taken adjacent the rear common boundary with the Rail Corridor yet no development is proposed within 40 – 50m of same.

As the western of the site will be worked, graded, excavated and finished (not already established), sedimentation and erosion control measures (silt fence & hay bale to scour lines and drainage hold points) will be put in place as each area of the site is worked on. Care will be taken to ensure that no sediment leaves the site or makes its way into drainage lines. A broad scale sedimentation and erosion control plan will be prepared prior to Construction Certificate and conditioning of any determination in this regard, is anticipated.

Work will only occur during 7am to 7pm weekdays and 8am to 6pm on weekends during the construction phase, although it is an industrial area and more productive work may best occur with least impact on weekends. No work will occur on public holidays.

During the erection phase of the buildings & carparking, skip bins will be put in place to prevent construction litter, and these will be serviced by a commercial contractor.

Privacy

There is no anticipated loss of visual or acoustic privacy to any residential neighbouring land use during construction. The nearest residence is close to 90m away and is across a rail corridor. Notwithstanding this the hours of construction, the very contemporary nature of construction (slab and bolt together steel frame, screw on cladding) will mean construction is quick and relatively quiet. The slab preparation and shed erection phase may involve more noise but this will most likely be for 1 – 2 weeks in duration at a time. Long term privacy is assured as this development will continue as it has with no complaint history and a compliant member of the Industrial area

Overshadowing

The proposal will not result in any overshadowing to any residential or neighbouring land use?

Economic and Social Impacts

There are expected to be social and economic impacts within the locality, and these are anticipated to be mostly positive. The development extends Young's Regional Centre appeal by attracting another specialty store to the region. It will enhance the regional centre appeal of Young and its CBD attracting more influx into the Hilltops GDP.

This can only have a positive economic and social impact which aids Council and the business community to grow the Town, Shire and Region.

Environmental Issues

- Water quality, drainage and water supply

  The development has been designed specifically to address these issues. Water connections exist and will be extended on for offices and ablutions. Sewer connections will be required and will specifically allow for flexibility in layout and trade waste potential appliance installation. Stormwater from buildings and from hard stand will be collected and discharged at infrasturcture points in Council's network.

- Erosion and sedimentation

  As per the above statement, erosion and sediment control plans for implementation phase will be provided prior to any CC stage.

- No major impact is foreshadowed having regard to disturbance of amenity type issues, like noise, air quality, odour or visual impacts from the initial build and presentation of the land for continuing this occupation.

- No impacts on native vegetation, threatened species, populations, ecological communities and their habitats are anticipated as this land has been highly disturbed over a long period without any obvious sign of any flora or fauna being impacted.

Access and Traffic

The proposal has been designed to meet Council's Policy statements and DCP in order that there should be no result in any conflict between vehicles, heavy vehicles, pedestrians and cyclists.

Boorowa Street is a well formed local/regional road servicing industry, and the major thoroughfare to Town. The existing access will be supplemented by a delivery vehicle exit point with good SISD. The current and proposed access location to Lot 1 with Boorowa Street has good sight distances, a broad shoulder area and is level and presents safe access to this part of the Industrial area of Young. See the attached Traffic Study verifying this.

E. Summary & Recommendation

Summary

The development is commended to Council as it is expansion of an existing business, displaying strength and support to Young's Industrial area, despite recent Strategic expansion plans in other parts of the Hilltops at Young's expense.

The site is is "shovel ready" and merely needs approvals for the work to commence. Buildings, access, turning areas, parking areas and ready-to-occupy industrial & related permissible development space will be available to augment the Owner's growing development and further anchored by National Chain retailer, BCF.

Council Policy has been reviewed and incorporated in the design. This DA is pivotal that it is providing expansion to the owners growing business. We trust this design and set of policy compliance statements meets Council's needs to adequately assess and determine this application in the affirmative.

The development is commended to Council for its assessment.

APPENDIX 1

TITLE SEARCH &

DEPOSITED PLANS

88B Instrument

NEW SOUTH WALES LAND REGISTRY SERVICES - TITLE SEARCH

FOLIO: 1/1202085

SEARCH DATE	TIME	EDITION NO	DATE
20/5/2025	9:54 AM	10	14/8/2023

LAND

LOT 1 IN DEPOSITED PLAN 1202085
AT YOUNG
LOCAL GOVERNMENT AREA HILLTOPS
PARISH OF YOUNG COUNTY OF MONTEAGLE
TITLE DIAGRAM DP1202085

FIRST SCHEDULE

DJ & TL MELLROSS PTY LIMITED (T AJ673082)

SECOND SCHEDULE (10 NOTIFICATIONS)

1 LAND EXCLUDES MINERALS AND IS SUBJECT TO RESERVATIONS AND CONDITIONS IN FAVOUR OF THE CROWN WITHIN THE PART(S) SHOWN SO INDICATED IN THE TITLE DIAGRAM - SEE CROWN GRANT(S)
2 T447400 LAND EXCLUDES MINERALS WITHIN THE PART(S) SHOWN SO INDICATED IN THE TITLE DIAGRAM
3 AI678511 LEASE TO SUPER CHEAP AUTO PTY LTD OF TENANCY 1, 323-327 BOOROWA STREET, YOUNG. EXPIRES: 3/11/2020. OPTION OF RENEWAL: 5 YEARS AND A FURTHER OPTION OF 5 YEARS.
AT47964 VARIATION OF LEASE AI678511 EXPIRY DATE NOW 3/11/2025. OPTION OF RENEWAL: PRESERVED.
4 AK599587 LEASE TO AUSTRALIA TOWER NETWORK PTY LIMITED (SEE AT217774) OF THE LEASE AREA SHOWN HATCHED IN PLAN ANNEXED WITH AK599587 COMMENCES 1/3/2020. EXPIRES: 28/2/2025.
5 AK599588 LEASE TO AUSTRALIA TOWER NETWORK PTY LIMITED (SEE AT217774) OF THE LEASE AREA SHOWN HATCHED IN PLAN ANNEXED WITH AK599588 COMMENCES 1/3/2025. EXPIRES: 28/2/2030.
6 AK599589 LEASE TO AUSTRALIA TOWER NETWORK PTY LIMITED (SEE AT217774) OF THE LEASE AREA SHOWN HATCHED IN PLAN ANNEXED WITH AK599589 COMMENCES 1/3/2030. EXPIRES: 28/2/2035.
7 AP861733 LEASE TO LIV FITNESS PTY LTD OF TENANCY 3 AND KNOWN AS "ANYTIME FITNESS", 323-327 BOOROWA STREET, YOUNG. EXPIRES: 31/8/2029. OPTION OF RENEWAL: 5 YEARS.
8 AQ180823 LEASE TO LAWRENCE & HANSON GROUP PTY LTD OF THE LOCK-UP SHOP KNOW AS TENANCY 2, 323-327 BOOROWA STREET, YOUNG. EXPIRES: 30/6/2024. OPTION OF RENEWAL:

END OF PAGE 1 - CONTINUED OVER

FOLIO: 1/1202085 PAGE 2

SECOND SCHEDULE (10 NOTIFICATIONS) (CONTINUED)
---

5 YEARS WITH A FURTHER OPTION OF 5 YEARS.

9 AS74395 MORTGAGE TO NATIONAL AUSTRALIA BANK LIMITED

10 AS863180 LEASE TO LEANNE SIMMS OF TENANCY 2A, 323-327 BOOROWA STREET, YOUNG AND KNOWN AS 'LEANNE SIMMS ACADEMY OF DANCE YOUNG'. COMMENCES: 1/03/2023. EXPIRES: 29/2/2028. OPTION OF RENEWAL: 3 YEARS AND ONE FURTHER OPTION OF 3 YEARS.

NOTATIONS

UNREGISTERED DEALINGS: NIL

*** END OF SEARCH ***

* Any entries preceded by an asterisk do not appear on the current edition of the Certificate of Title. Warning: the information appearing under notations has not been formally recorded in the Register. InfoTrack an approved NSW Information Broker hereby certifies that the information contained in this document has been provided electronically by the Registrar General in accordance with Section 96B(2) of the Real Property Act 1900.

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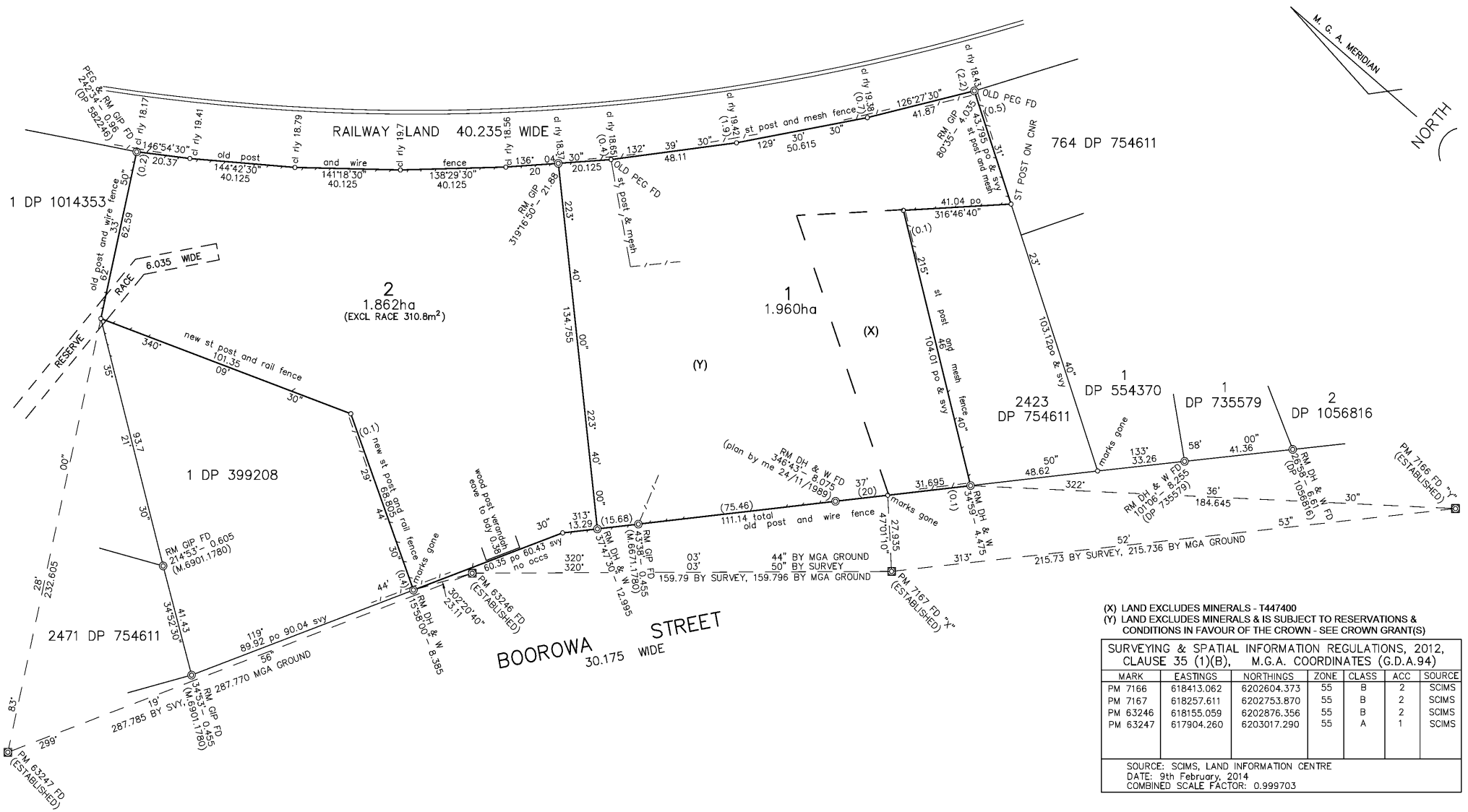
InfoTrack



(X) LAND EXCLUDES MINERALS - T447400
(Y) LAND EXCLUDES MINERALS & IS SUBJECT TO RESERVATIONS & CONDITIONS IN FAVOUR OF THE CROWN - SEE CROWN GRANT(S)

SURVEYING & SPATIAL INFORMATION REGULATIONS, 2012, CLAUSE 35 (1)(B), M.G.A. COORDINATES (G.D.A.94)

MARK	EASTINGS	NORTHINGS	ZONE	CLASS	ACC	SOURCE
PM 7166	618413.062	6202604.373	55	B	2	SCIMS
PM 7167	618257.611	6202753.870	55	B	2	SCIMS
PM 63246	618155.059	6202876.356	55	B	2	SCIMS
PM 63247	617904.260	6203017.290	55	A	1	SCIMS

SOURCE: SCIMS, LAND INFORMATION CENTRE
DATE: 9th February, 2014
COMBINED SCALE FACTOR: 0.999703

Surveyor: William John Chapman
Date of Survey: 9th Feb, 2014
Surveyor' Ref: 16596–B
PPN 1202085

PLAN OF SUBDIVISION OF LOT 2 DP 582246, LOT 1 DP 1179563 AND LOT 1018 DP 754611

LGA: YOUNG
Locality: YOUNG
Subdivision No: 2014/SC-00006
Lengths are in metres. Reduction ratio 1: 1000

Registered 25.9.2015

DP1202085

10 20 30 40 50 60 70 Table of mm 100 110 120 130 140 150

Req:R959037 /Doc:DP 1202085 P /Rev:25-Sep-2015 /NSW LRS /Pgs:ALL /Prt:12-Jan-2023 16:08 /Seq:1 of 3
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Req:R959037 /Doc:DP 1202085 P /Rev:25-Sep-2015 /NSW LRS /Pgs:ALL /Prt:12-Jan-2023 16:08 /Seq:2 of 3
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PLAN FORM 6 (2012) **WARNING: Creasing or folding will lead to rejection**

DEPOSITED PLAN ADMINISTRATION SHEET

Sheet 1 of 2 3 sheet(s)

Office Use Only

Registered: 25.9.2015

Title System: TORRENS

Purpose: SUBDIVISION

Office Use Only

DP1202085 S

PLAN OF SUBDIVISION OF
LOT 2 DP 582246, LOT 1 DP 1179563
AND LOT 1018 DP 754611

LGA: **YOUNG**

Locality: **YOUNG**

Parish: **YOUNG**

County: ~~MONTEAGLE~~ MONTEAGLE

Crown Lands NSW/Western Lands Office Approval

I, ... (Authorised Officer) in approving this plan certify that all necessary approvals in regard to the allocation of the land shown herein have been given.

Signature: .....

Date: .....

File Number: .....

Office: .....

Subdivision Certificate

I, DIRK WYNEN

~~Authorised Person~~/General Manager/~~Accredited Certifier,~~ certify that the provisions of s.109J of the *Environmental Planning and Assessment Act 1979* have been satisfied in relation to the proposed subdivision, new road or reserve set out herein.

Signature: .....

Accreditation number: .....

Consent Authority: YOUNG SHIRE COUNCIL

Date of endorsement: 3rd NOVEMBER 2014

Subdivision Certificate number: 2014/SC-00006

File number: 149.01

*Strike through if inapplicable.

Survey Certificate

I, **William John Chapman**

of **CPC Land Development Consultants, PO BOX 338, YOUNG, 2594**

a surveyor registered under the *Surveying and Spatial Information Act 2002*, certify that:

***(a)** The land shown in the plan was surveyed in accordance with the *Surveying and Spatial Information Regulation 2012*, is accurate and the survey was completed on 9th **February, 2014**

~~*(b) The part of the land shown in the plan (*being/*excluding ^.....) was surveyed in accordance with the *Surveying and Spatial Information Regulation 2012*, is accurate and the survey was completed on,..... the part not surveyed was compiled in accordance with that Regulation.~~

~~*(c) The land shown in this plan was compiled in accordance with the *Surveying and Spatial Information Regulation 2012*.~~

Signature: W.J.Chapman Dated: 9TH **February, 2014**

Surveyor ID: **801**

Datum Line: **X - Y**

Type: **SUBURBAN**

The terrain is **Level-Undulating**

*Strike through if inapplicable.

^Specify the land actually surveyed or specify any land shown in the plan that is not the subject of the survey.

Statements of intention to dedicate public roads, public reserves and drainage reserves.

Plans used in the preparation of survey/compilation.

DP 582246	**DP 1179563**	**DP 1056816**
DP 735579	**DP 554370**	**DP 399208**
DP 1014353	**plan by me 24/11/~~2014~~** 1989	
M.434.1780	**M.5421.1780**	**M.4414.1780**
M.6671.1780	**M.6901.1780**	**M.4349.1780**
M.4419.1780	**M.5386.1780**	

Amendments 17/8/15 W.J.Chapman

If space is insufficient continue on PLAN FORM 6A

Signatures, Seals and Section 88B Statements should appear on PLAN FORM 6A

Surveyor's Reference: **16596-B**

Req:R959037 /Doc:DP 1202085 P /Rev:25-Sep-2015 /NSW LRS /Pgs:ALL /Prt:12-Jan-2023 16:08 /Seq:3 of 3
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PLAN FORM 6A (2012) **WARNING: Creasing or folding will lead to rejection**

DEPOSITED PLAN ADMINISTRATION SHEET

Sheet 2 of 23 sheet(s)

Office Use Only

Registered: 25.9.2015

Office Use Only

DP1202085

PLAN OF SUBDIVISION OF
LOT 2 DP 582246, LOT 1 DP 1179563
AND LOT 1018 DP 754611

This sheet is for the provision of the following information as required:
*(d) A schedule of lots and addresses - See 60(c) *SSI Regulation 2012*
*(e) Statements of intention to create and release affecting interests in accordance with section 88B *Conveyancing Act 1919*
*(f) Signatures and seals- see 195D *Conveyancing Act 1919*
*(g) Any information which cannot fit in the appropriate panel of sheet 1 of the administration sheets.

Subdivision Certificate number: 2014/SC-00006

Date of Endorsement: 3rd NOVEMBER 2014

Executed by DJ & tl Mellross Pty Ltd ACN 003 878 215 in accordance with Section 127 (1) of the Corporations Act 2001 by:

Darren John Mellross
Director

Tracy Lee Mellross
Director/Secretary

Executed by Young Veterinary Clinic Pty Ltd ACN 111 371 058 in accordance with Section 127(1) of the Corporations Act 2001 by:

Anthony Mark Hawker
Director/Secretary

Joanne Hawker
Director

I certify that I am an eligible witness and that the attorney whose signature appears opposite signed this instrument in my presence. [See * below]

Signature of witness:

Name of witness: Vamsi Muppaka

Address of witness: 1 King Street
Concord West NSW

Certified correct for the purposes of the Real Property Act 1900 by the BANK
SIGNED by ROBERT TIDSWELL as attorney for Westpac Banking Corporation under power of attorney registered Book 4299 no. 332

(Signature) Tier Three Attorney

By executing this instrument the attorney states that the attorney has received no notice of the revocation of the power of attorney

*s117RP Act requires that you must have known the signatory for more than 12 months or have sighted identifying documentation

LOT	STREET NUMBER	STREET NAME	STREET TYPE	LOCALITY
1	323	BOOROWA	STREET	YOUNG
2	341	BOOROWA	STREET	YOUNG

If space is insufficient use additional annexure sheet

Surveyor's Reference: **16596-B**

Req:R959038 /Doc:DL T447400 /Rev:22-Jul-1997 /NSW LRS /Pgs:ALL /Prt:12-Jan-2023 16:08 /Seq:1 of 1
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22 FEB 1983 09 34 T447400

Q 1 OF 1 —

NO FEE

MEMORANDUM

BM

THIS MEMORANDUM DESCRIBES THE NATURE OF THE MINERALS WHICH ARE EXPRESSED TO BE EXCLUDED FROM THOSE FOLIOS OF THE REGISTER AS REFER TO THIS MEMORANDUM.

REGISTRAR GENERAL.

DESCRIPTION OF MINERALS

The minerals which are excepted from a resumption of Crown land pursuant to the provisions of the Public Works Act, 1912 on or after 30th October, 1967.

LODGED BY:
REGISTRAR GENERAL'S OFFICE
SYDNEY.
DELIVERY BOX NO: 10 V

Filed in the Office of the REGISTRAR GENERAL
on 28/2/1983.

Registrar General

Req:R288387 /Doc:DL AT217774 /Rev:14-Aug-2023 /NSW LRS /Prt:20-May-2025 09:55 /Seq:1 of 3
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Lodger Details

Lodger Code	503123C
Name	SETTLEIT PTY LTD
Address	NORTH TOWER L 14, 135 KING ST SYDNEY 2000
Lodger Box	1W
Email	SARAH.AFIOUNI@INFOTRACK.COM.AU
Reference	KL 111313107/11

Land Registry Document Identification

AT217774

STAMP DUTY:

Transfer of Lease, Mortgage or Charge (01TL)

Jurisdiction NEW SOUTH WALES

Privacy Collection Statement

The information in this form is collected under statutory authority and used for the purpose of maintaining publicly searchable registers and indexes.

Land Title Reference	Part Land Affected?	Land Description
1/1202085	N	

Applicant

AUSTRALIA TOWER NETWORK PTY LIMITED ACN 643875165

Registered company

Document Type

Transfer of Lease, Mortgage or Charge (01TL)

The subscriber requests the Registrar-General to make any necessary recording in the Register to give effect to this instrument, in respect of the land or interest described above.

Attachment

See attached Dealing

Execution

The Certifier has taken reasonable steps to verify the identity of the applicant or his, her or its administrator or attorney.

The Certifier holds a properly completed Client Authorisation for the Conveyancing Transaction including this Registry Instrument or Document.

The Certifier has retained the evidence supporting this Registry Instrument or Document.

The Certifier has taken reasonable steps to ensure that this Registry Instrument or Document is correct and compliant with relevant legislation and any Prescribed Requirement.

Executed on behalf of	AUSTRALIA TOWER NETWORK PTY LIMITED
Signer Name	HELEN THERESE RIGNEY
Signer Organisation	SETTLEIT PTY LTD
Signer Role	PRACTITIONER CERTIFIER
Execution Date	28/06/2023

Req:R288387 /Doc:DL AT217774 /Rev:14-Aug-2023 /NSW LRS /Prt:20-May-2025 09:55 /Seq:2 of 3
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Form: 01TL
Licence: 05-11-645
Licensee: Softdocs

TRANSFER OF LEASE

New South Wales
Real Property Act 1900

Leave this space clear. Affix additional pages to the left-hand corner.

PRIVACY NOTE: Section 31B of the Real Property Act 1900 (RP Act) authorises the Registrar General to collect the information required by this form for the establishment and maintenance of the Real Property Act Register. Section 96B RP Act requires that the Register is made available to any person for search upon payment of a fee, if any.

STAMP DUTY — Insert Duties Assessment No. as issued by Revenue NSW Office.
Duties Assessment No. 10612604-001 #

(A) **LEASE/CHARGE/ MORTGAGE**: AK599587, AK599588 and AK599589

(B) **TORRENS TITLE**: 1/1202085

(C) **LODGED BY**

Document Collection Box	Name, Address or DX, Telephone, and Customer Account Number if any	CODE
	SettleIT Pty Ltd - 503123 Email: Reference: KL 111313107/111313309	TL TM TC

(D) **TRANSFEROR**: OPTUS MOBILE PTY LIMITED ABN 65 054 365 696

(E) The transferor acknowledges receipt of the consideration of $ _____
and transfers to the transferee all the transferor's estate and interest in the above _____

(F) Encumbrances (if applicable):

(G) **TRANSFEREE**: AUSTRALIA TOWER NETWORK PTY LIMITED ABN 59 643 875 165

(H) **TENANCY:**

DATE 1 April 2021

(I) I certify I am an eligible witness and that the transferor signed this dealing in my presence.
[See note* below]

Signature of witness:

Name of witness: Sarah Hamshere
Address of witness: 1 Lyonpark Rd Macquarie Park

Certified correct for the purposes of the Real Property Act 1900 by the transferor's attorney who signed this dealing pursuant to the power of attorney specified.

Signature of attorney:

Attorney's name: Nicholes Paul Kusalic Company Secretary
Signing on behalf of: Optus Mobile Pty Ltd ACN 054 365 696
Power of attorney Book: 4210 No: 62

I certify I am an eligible witness and that the transferee's attorney signed this dealing in my presence.
[See note* below]

Signature of witness:

Name of witness: Sarah Hamshere
Address of witness: 1 Lyonpark Rd Macquarie Park

Certified correct for the purposes of the Real Property Act 1900 by the transferee's attorney who signed this dealing pursuant to the power of attorney specified.

Signature of attorney:

Attorney's name: Nicholes Paul Kusalic
Signing on behalf of: Australia Tower Network Pty Ltd
Power of attorney Book: 4787 No: 262 ACN 643 875 165

(J) *This section is to be completed where a notice of sale is required and the relevant data has been forwarded through eNOS.*
The transferee certifies that the eNOS data relevant to this dealing has been submitted and stored under

eNOS ID No. _____ Full Name: ..... Signature: .....

* *s117 RP Act requires that you must have known the signatory for more than 12 months or have sighted identifying documentation.*

ALL HANDWRITING MUST BE IN BLOCK CAPITALS

2005

should read 10612604-003

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NSW Land Registry Services
Level 30, 175 Liverpool Street Sydney NSW 2000
GPO Box 15, Sydney NSW 2001
P (02) 8776 3575
E eConveyancingNSW@nswlrs.com.au
www.nswlrs.com.au

Lodgment Rules Exception Form

This form must be lodged with every Dealing with Exception and Miscellaneous Dealing (Miscellaneous Document) form, as defined in the Lodgment Rules.

Please accept this scanned paper dealing, as an eligible exception under Rules 5 or 10 of the Lodgment Rules (version 2), that has been lodged as either a:

1. Dealing with Exception form; or
2. Miscellaneous Dealing (Miscellaneous Document) form

Lodgment Rules exception number: * 1.1

**Insert, from the Lodgment Rules exceptions list, the exception number relied on to use the Dealing with Exception form or Miscellaneous Dealing (Miscellaneous Document) form.*

The Lodgment Rules exception list is published on the Office of the Registrar General Lodgment Rules webpage:
https://www.registrargeneral.nsw.gov.au/publications/lodgment-rules

APPENDIX 2

PLANS OF DEVELOPMENT

google.com/maps

UBJECT SITE

google.com/maps maps.six.nsw.gov.au

SITE LOCATION

SCHEDULE OF DRAWINGS

SHEET NAME	SHEET NUMBER	CURRENT REVISION
SITE INFORMATION	A00A	8
GENERAL NOTES	A00B	8
PERSPECTIVES	A00C	8
SITE PLAN	A001	8
ROOF PLAN	A002	8
UNIT 01 FLOOR PLAN	A003	8
UNIT 02 FLOOR PLAN	A004	8
ELEVATIONS - UNIT 01	A005	8
ELEVATIONS - UNIT 02	A006	8
SECTIONS	A007	8
VEHICLE MOVEMENT PLAN	A008	8

SITE DETAILS

SITE AREA:	1.968 ha APPROX.
LEP-ZONING:	E4 - GENERAL INDUSTRIAL
LOCAL GOVERNMENT AREA:	HILLTOPS SHIRE COUNCIL
DEVELOPMENT TYPE:	PROPOSED COMMERCIAL DEVELOPMENT
SOIL CLASSIFICATION:	REFER TO ENG. DETAILS
CLIMATE ZONE:	4 (WWW.ABCB.GOV.AU MAP)

WARRICK MORLEY
DRAFTING SERVICES

A 'Greenwood' Bimbi NSW 2810 M 0423 380 735 E warrick@wmdrafting.com

PROPOSED COMMERCIAL BUILDING

323-337, BOOROWA STREET, YOUNG, NSW

MR. D. MELLROSS

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SCALE 1 : 100

DATE 15/05/2025
DRAWN CM
DESIGNED WM

REVISION	DESCRIPTION	DATE
8	DA SUBMISSION	15/05/2025

DA SUBMISSION

PROJECT No.
W23002

SHEET
A00A

GENERAL NOTES

ABBREVIATION

C	STRUCTURAL COLUMN
CONC	CONCRETE FLOOR FINISH
DP	DOWN PIPE
FW	FLOOR WASTE
GAS	GAS BOTTLE
HWS	HOTWATER SYSTEM
MSB	MAIN SWITCH BOARD
MV	MECHANICAL VENTILATION
TL	SELECTED TILE
TP	STANDPIPE + HOSE TAP
V	SELECTED WALL MOUNTED VANITY
VYL	SELECTED VINYL FLOOR FINISH
WC	SELECTED WATER CLOSET

GENERAL SAFETY NOTE:

- ALL PATHS OF TRAVEL BOTH DURING & AFTER CONSTRUCTION ARE TO REMAIN FREE OF OBSTRUCTIONS.

- ALL ACCESS TO THE SITE DURING CONSTRUCTION IS TO REMAIN LIMITED TO AUTHORISED PERSONNEL WHO ARE TO BE MADE AWARE OF THIS REPORT.

- FUTURE DEMOLISHED TO ADHERE TO THE CODE OF PRACTICE FOR DEMOLITION WORK.

- ADEQUATE VENTILATION IS TO BE ALLOWED FOR BOTH DURING & AFTER CONSTRUCTION TO PREVENT INJURY DUE TO HEAT AND/OR AIR BORN CONTAMINANTS.

- ALL COMPONENTS OF THE CONSTRUCTION ARE COMPLY WITH NCC & ALL RELEVANT AUSTRALIAN STANDARDS & ANY ADDITIONAL FUTURE WORK IS TO BE DESIGNED & CARRIED OUT WITH REFERENCE TO THESE.

- POSITIONING OF NOISY PLANT EQUIPMENT BOTH DURING AND AFTER CONSTRUCTION MUST BE CARRIED OUT TO PREVENT NUISANCE AND/OR INJURY TO NEIGHBORING PROPERTIES.

- THE PROJECT MANAGER, CONSTRUCTION MANAGER, BUILDER & ANYONE IN CHARGE OF THE SITE/BUILDING BOTH DURING & AFTER CONSTRUCTION MUST IMPLEMENT ALL SAFETY REQUIREMENTS IN ACCORDANCE WITH THE NCC & ALL RELEVANT STANDARDS. ANY ACTIONS NOT IN COMPLIANCE BECOME THE RESPONSIBILITY OF THE PERSON/PERSONS WHO CARRIED THEM OUT.

- ALL PRODUCTS SELECTED BY THE OWNER & NOT APPROVED BY THE DESIGNER ARE THE RESPONSIBILITY OF THE OWNER.

A001 SITE PLAN

A. ALL SURFACE WATER TO FALL AWAY FROM BUILDING IN ALL DIRECTIONS IN ACCORDANCE WITH REQUIREMENTS OF AS2870

B. DOWNPIPES TO BE CONNECTED INTO STORMWATER AS SOON AS THE ROOF IS INSTALLED.

C. DOWNPIPES SHOULD BE AT A MAXIMUM OF 12 METER CENTRES AND AS CLOSE TO VALLEYS AS POSSIBLE AND IN ACCORDACE WITH NCC 3.5.3.5

D. EXCAVATED MATERIAL STORED ON SITE SHALL BE PLACED UP-SLOPE OF SEDIMENT FENCE. INSTALL A SEDIMENT FENCE ON THE DOWNSLOPE SIDE OF MATERIAL.

E. CONSTRUCTION VEHICLES TO BE PARKED ON THE STREET, TO PREVENT TRANSFERRING DEBRIS ONTO STREET. UNLESS ALTERNATIVE SEDIMENT TRANSFER REDUCTION METHODS ARE IN PLACE

F. ALL EXISTING UNDERGROUND SERVICES MUST BE LOCATED AND EXPOSED PRIOR TO EARTHWORKS COMMENCING & IT IS THE RESPONSIBILITY OF THOSE PERSONS USING THIS PLAN TO CONFIRM BOTH POSITION & LEVEL OF THESE UTILITIES IN CONJUNCTION WITH THE APPROPRIATE AUTHORITY.

A003&A004 GROUND FLOOR PLAN

A. ALL DIMENSIONS TO BE CONFIRMED ON SITE PRIOR TO CONSTRUCTION. NO DETAIL SURVEY WAS UNDERTAKEN FOR THE PREPARATION OF THIS PLAN. CHECK DIMENSIONS AND LEVELS PRIOR TO ANY DEMOLITION OR CONSTRUCTION.

B. ALL WORK SHALL BE IN ACCORDANCE & COMPLY WITH THE NATIONAL CONSTRUCTION CODE (NCC), COUNCIL BY-LAWS, RELEVANT AUSTRALIAN STANDARDS & CURRENT WORKPLACE STANDARDS CODES OF PRACTICE.

C. DAMP-PROOFING MEMBRANE UNDER SLAB-ON-GRADE IN ACCORDANCE TO ABCB 4.2.8.

D. TERMITE MANAGEMENT SYSTEM TO BE INSTALLED IN ACCORDANCE WITH NCC VOL 1. B1D4 AND MUST COMPLY WITH AS 3660.1

E. DOORS TO SWING TOWARDS DIRECTION OF EGRESS PER NCC VOL 1. PART D3D25. DOOR LATCHES MUST BE OPERATED SINGLE-HANDEDLY IN A DOWNWARD MOTION LOCATED BETWEEN 900mm TO 1100mm IN ACCORDANCE TO NCC VOL 1. PART D3D26.

F. DOORS THAT EGRESS DIRECTLY OUTSIDE SHALL HAVE SIGNAGE TO INDICATE THAT PATH SHALL BE UNOBSTRUCTED AS STATED IN NCC VOL. 1 PART D3D28

G. SARKING TO COMPLY WITH AS4200.1 AND WILL HAVE A FLAMMABILITY INDEX NOT GREATER THAN 5

H. PLIABLE BUILDING MEMBRANE INSTALLED IN AN EXTERNAL WALL MUST COMPLY WITH AS/NZS 4200.1 + BE INSTALLED IN ACCORDANCE WITH AS 4200.2. THE MEMBRANE TO BE POSITIONED ON THE EXTERIOR SIDE OF THE PRIMARY INSULATION LAYER THAT FORMS THE EXTERNAL ENVELOPE OF A BUILDING. EXCEPT FOR SINGLE SKIN MASONRY OR CONCRETE WHERE THE PLIABLE BUILDING MEMBRANE IS NOT INSTALLED IN EXTERNAL WALL THEN THE PRIMARY WATER CONTROL LAYER MUST BE SEPARATED FROM WATER SENSITIVE MATERIALS BY A DRAINED CAVITY.

I. WET AREAS CONSTRUCTION AND WATERPROOFING IN ACCORDANCE WITH NCC VOL. 1 SPECIFICATION 26 & AS 3740 2021

J. MECHANICAL VENTILATION. PER NCC VOL 1. PART NSW F6D6. AND AS 1668.2.

K. OFFICE AREA AND CREW ROOM SHALL BE REVERSE CYCLE AIRCONDITION ON EACH AREA.

L. FORKLIFT OPERATION SAFETY REQUIREMENTS PER AUSTRALIAN SAFEWORK GUIDELINES.

A005 & A006 ELEVATIONS

ROOFS:
1. SELECTED COLORBOND ROOF SHEETING
2. COLORBOND GUTTER & FASCIA
3. FC SHEET TO OUTDOOR WALKWAY

WINDOWS & DOORS:
1. ALUMINIUM FRAMED EXTERNAL SLIDING DOORS
2. ALL PA DOORS TO BE 920 MIN. CLEAR AND MUST HAVE SIGNAGE TO ALERT PERSONS TO NOT OBSTRUCT THE DOOR ACCORDING TO NCC PART D3D28

A003&A004 GROUND FLOOR PLAN

WALLS:
1. 90mm STEEL WALL FRAMES WITH STEEL FRAMED ROOF TRUSSES TO MANUFACTURES DETAILS IN COMPLIANCE WITH AS1170 + AS3623 + PART B NCC
2. CONCRETE TILT PANEL WALLS TO ENGINEER'S DESIGN.
3. VAPOUR PERMEABLE SARKING TO ROOF & EXTERNAL WALLS
4. WHERE REQUIRED, FIRE RATED TENANCY WALL FRL 90/90/90 & Rw + Crt 50 TO EXTEND TO U/S ROOF SHEETING

FLOORS:
1. REINFORCED CONCRETE SLAB ON REFER TO ENG. DETAILS
2. SELECTED TILE FLOOR FINISH TO TOILET.
3. SET DOWN IN SLAB TO WET AREAS WITH TILED FINISH

GENERAL:
1. WALL MOUNTED VANITIES TO TOILET
2. SELECTED ALUMINUM FRAMED DOOR
3. DOOR ASSEMBLIES TO HAVE LUMINANCE CONTRAST OF 30% IN ACCORDANCE WITH NCC PART 13.1
4. EMERGENCY LIGHTING ALONG PATH OF TRAVEL GOING TO AN EXIT IN ACCORDANCE TO E4D2
5. EXIT SIGNS MUST BE CLEARLY VISIBLE TO PERSONS APPROACHING EXIT AND MUST BE INSTALLED ON, ABOVE OR ADJACENT TO DOOR PROVIDING EGRESS DIRECTLY OUTSIDE AND DOORS SERVING AS, OR FORMIONG PART OF, A REQUIRED EXIT PER NCC VOL 1 PART E4D5.

FIRE PROTECTION POLICY

A. ALL FIRE HOSE REELS SUPPLIMENTED ARE TO BE IN ACCORDANCE WITH AS 2441 & NCC VOL 1 PART E1D3 & AS 2441.

B. ALL PORTABLE FIRE EXTINGUISHERS SHALL BE LOCATED IN AREAS WITH FIRE RISK AND ARE TO BE IN ACCORDANCE WITH AS 1841 & 2444, AND WITH NCC VOL. 1 PART E1D14.

C. ALL DOORS WITH DIRECT ACCESS TO THE EXTERIOR OF THE BUILDING SHALL HAVE EXIT SIGNS TO BE IN ACCORDANCE WITH NCC E4D5 AND AS 2293.

D. (S) SMOKE ALARM AND DETECTION SYSTEM WHEN REQUIRED REFER TO NCC S20C4.

DISABLED CARPARK NOTES:

SPACE IDENTIFICATION

EACH DEDICATED SPACE SHALL BE IDENTIFIED BY MEANS OF A WHITE SYMBOL OF ACCESS IN ACCORDANCE WITH AS 1428.1 BETWEEN 800mm AND 1000mm HIGH PLACED ON A BLUE RECTANGLE WITH NO SIDE MORE THAN 1200mm, PLACED AS A PAVEMENT MARKING IN THE CENTRE OF THE SPACE BETWEEN 500mm AND 600mm FROM ITS ENTRY POINT AS ILLUSTRATED

SPACE DELINEATION

PAVEMENT MARKINGS SPECIFIED IN ITEMS (A) AND (B) OF THIS CLAUSE SHALL BE YELLOW AND SHALL HAVE A SLIP RESISTANT SURFACE. RAISED PAVEMENT MARKERS SHALL NOT BE USED FOR SPACE DELINEATION.

PAVEMENT MARKINGS SHALL BE PROVIDED AS FOLLOWS:

1. LINEMARKING
1.1. DEDICATED PARKING SPACES SHALL BE OUTLINED WITH UNBROKEN LINES 80 TO 100mm WIDE ON ALL SIDES EXCEPTING ANY SIDE DELINEATED BY A KERB, BARRIER OR WALL.

2. SHARED AREAS SHALL BE MARKED AS FOLLOWS:
2.1. WALKWAYS WITHIN OR PARTLY WITHIN A SHARED AREA SHALL BE MARKED WITH UNBROKEN LONGITUDINAL LINES ON BOTH SIDES OF THE WALKWAY EXCEPTING ANY SIDE DELINEATED BY A KERB, BARRIER OR WALL.
2.2. OTHER VACANT NON-TRAFFICKED AREAS, WHICH MAY BE INTENTIONALLY OR UNINTENTIONALLY OBSTRUCTED (E.G. BY UNINTENDED PARKING), SHALL BE OUTLINED WITH UNBROKEN LINES 80 TO 100mm WIDE ON ALL SIDES EXCEPTING ANY SIDE DELINEATED BY A KERB, BARRIER OR WALL, AND MARKED WITH DIAGONAL STRIPES 150 TO 200mm WIDE WITH SPACES 200 TO 300mm BETWEEN STRIPES. THE STRIPES SHALL BE AT AN ANGLE OF 45 ±10 DEGREES TO THE SIDE OF THE SPACE.
2.3. NO SHARED AREA MARKINGS SHALL BE PLACED IN TRAFFICKED AREAS.
2.4. ALL LINEMARKING MUST BE NON SLIP

3. BOLLARDS:
3.1. MINIMUM HEIGHT 1300mm
3.2. RECOMMENDED COLOUR BLUE TO CONTRAST AGAINST YELLOW LINE MARKING
3.3. RECOMMEND FLEXIBLE BOLLARDS TO REDUCE MOTOR VEHICLE DAMAGE

DISABILITY NOTES:

EXTERNAL DOORWAY THRESHOLDS SHALL BE INSTALLED ALLOWING DISABLED ACCESS IN ACCORDANCE WITH NCC D2.15 VOL. 1 & AS 1428.1

DISABLED TOILET TO BE BUILT IN ACCORDANCE WITH AS 1428.1

ALL RAMPS TO BE MAXIMUM GRADE 1:14 & MAXIMUM 9.0m LONG UNLESS NOTED OTHER WISE

ALL RAMP & STAIR WIDTHS TO BE MINIMUM 1.0M BETWEEN HANDRAILS

ALL LANDINGS TO BE MINIMUM 1200mm LONG IN STRAIGHT RAMPS OR 1540mm 90-180 DEGREE CHANGES IN DIRECTION

TACTILE GROUND SURFACE INDICATORS (TGSI) SHALL COMPLY WITH AS1428.4.1

TGSI TO BE INSTALLED SO NO LIKELIHOOD OF EDGES LIFTING SHALL HAVE SLIP RESISTANT SURFACE

TGSI SHALL HAVE LUMINANCE CONTRAST IN ACCORDANCE WITH AS1428.4.1

PROPRIETARY TGSI SHALL BE INSTALLED TO MANUFACTURERS DETAILS

TACTILE GROUND SURFACES INDICATORS IN ACCORDANCE WITH THE NCC & AS1428.4 ARE REQUIRED AT THE TOP & BASE OF ALL RAMPS & STAIRS.

DISABLED ACCESS & SIGNAGE TO BE PROVIDED IN ACCORDANCE WITH NCC D3 VOL. 1 & AS 1428.1.

APPROPRIATE EXTERNAL SIGNAGE SHALL BE PROVIDED TO
LOCATE THE DISABLED AMENITY FACILITY IN THE BUILDING
IN ACCORDANCE WITH NCC SPECIFICATION D3.6

DA SUBMISSION

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PROPOSED COMMERCIAL BUILDING

323-337, BOOROWA STREET, YOUNG, NSW

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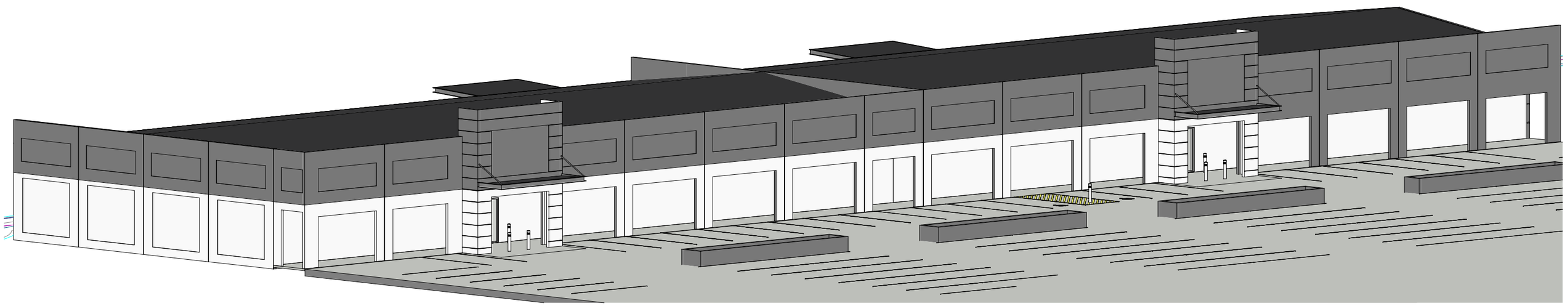
SHEET **A00B**

PERSPECTIVE



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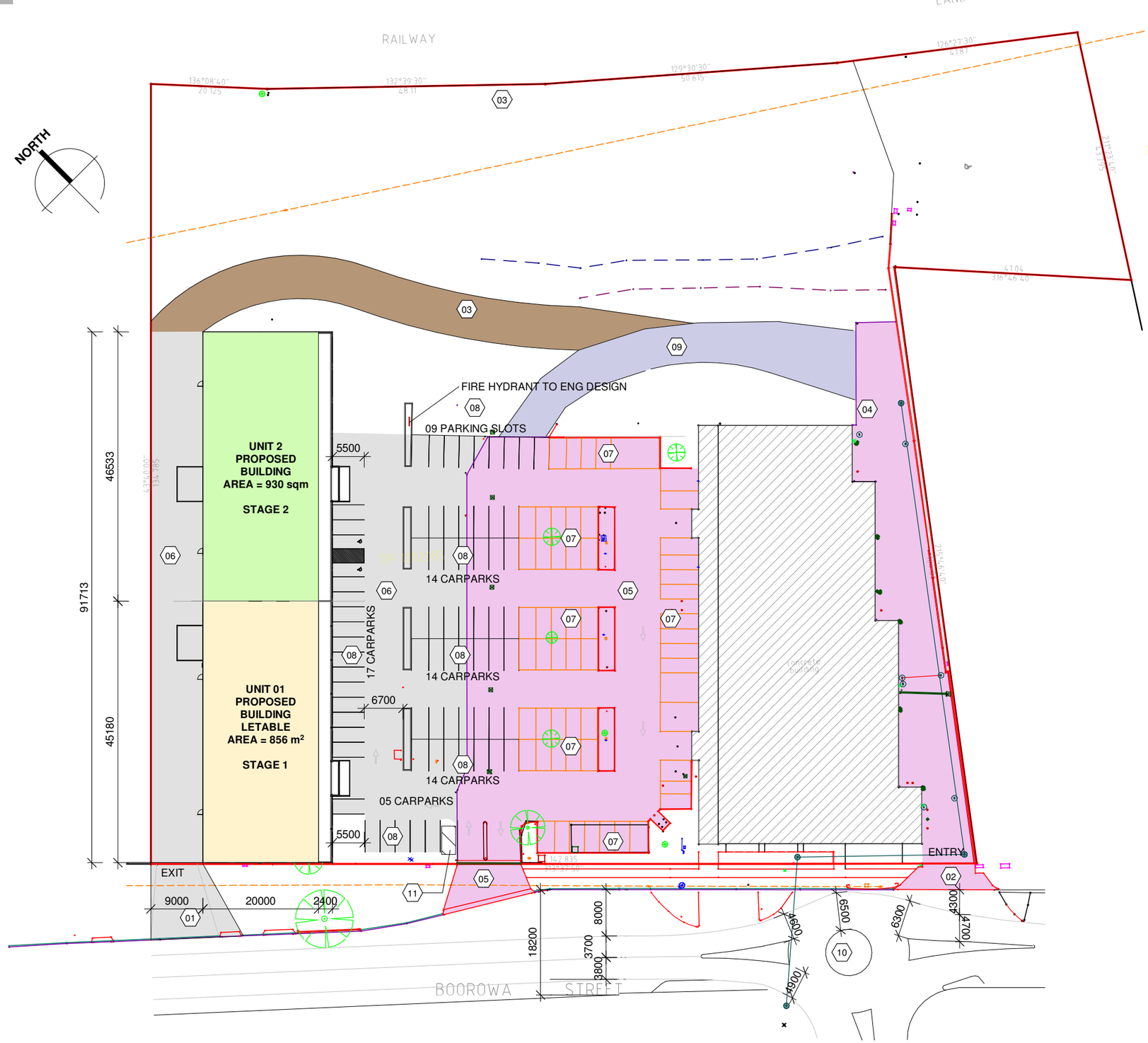
PROJECT No.
W23002

SHEET
A00C



SITE PLAN

1 : 750

NOTES: (XX)

1. PROPOSED HEAVY VEHICLE EXIT.
2. EXISTING HEAVY VEHICLE ENTRY.
3. PROPOSED HEAVY VEHICLE HARDSTAND DRIVEWAY WITH 2 COATS SEAL TO HILLTOPS COUNCIL REQUIREMENTS.
4. EXISTING CONCRETE PAVING FOR HEAVY VEHICLE DRIVEWAY.
5. EXISTING CONCRETE PAVING FOR LIGHT VEHICLE DRIVEWAY
6. NEW PAVEMENT DESIGN AND LEVELS TO ENGINEER'S DETAILS.
7. EXISTING CARPARKS.
8. NEW PROPOSED CARPARKS.
9. EXISTING HARDSTAND DRIVEWAY WITH 2 COATS SEAL.
10. REFER TO COUNCIL FOR EXACT ROAD DETAILS.
11. POWER STATION REFER TO ELECTRICAL ENGINEER FOR KVA AND DETAILS.

LEGEND

- EXISTING CONCRETE PAVING
- NEW CONCRETE PAVING
- NEW HARDSTAND DRIVEWAY 2 COAT SEAL
- EXISTING HARDSTAND DRIVEWAY 2 COAT SEAL

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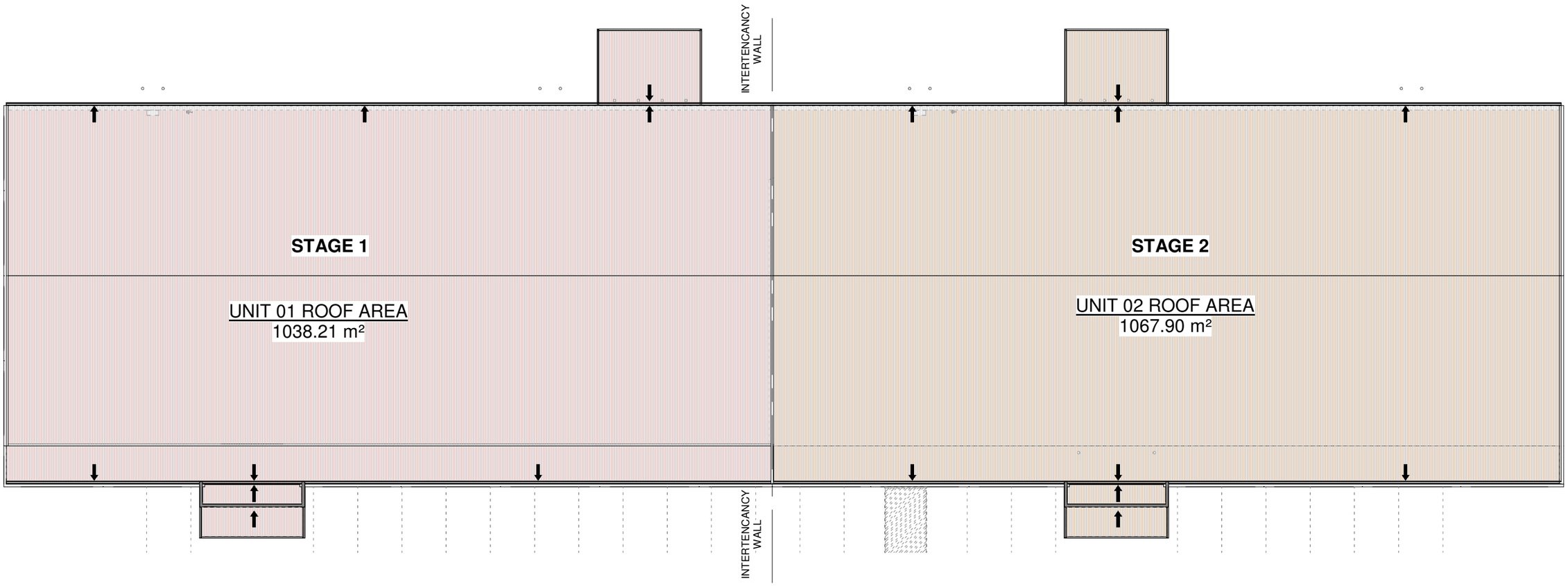
PROJECT No. **W23002**

SHEET **A001**

AREA SHOWN IS IN PLAN VIEW ONLY



ROOF PLAN

1 : 250

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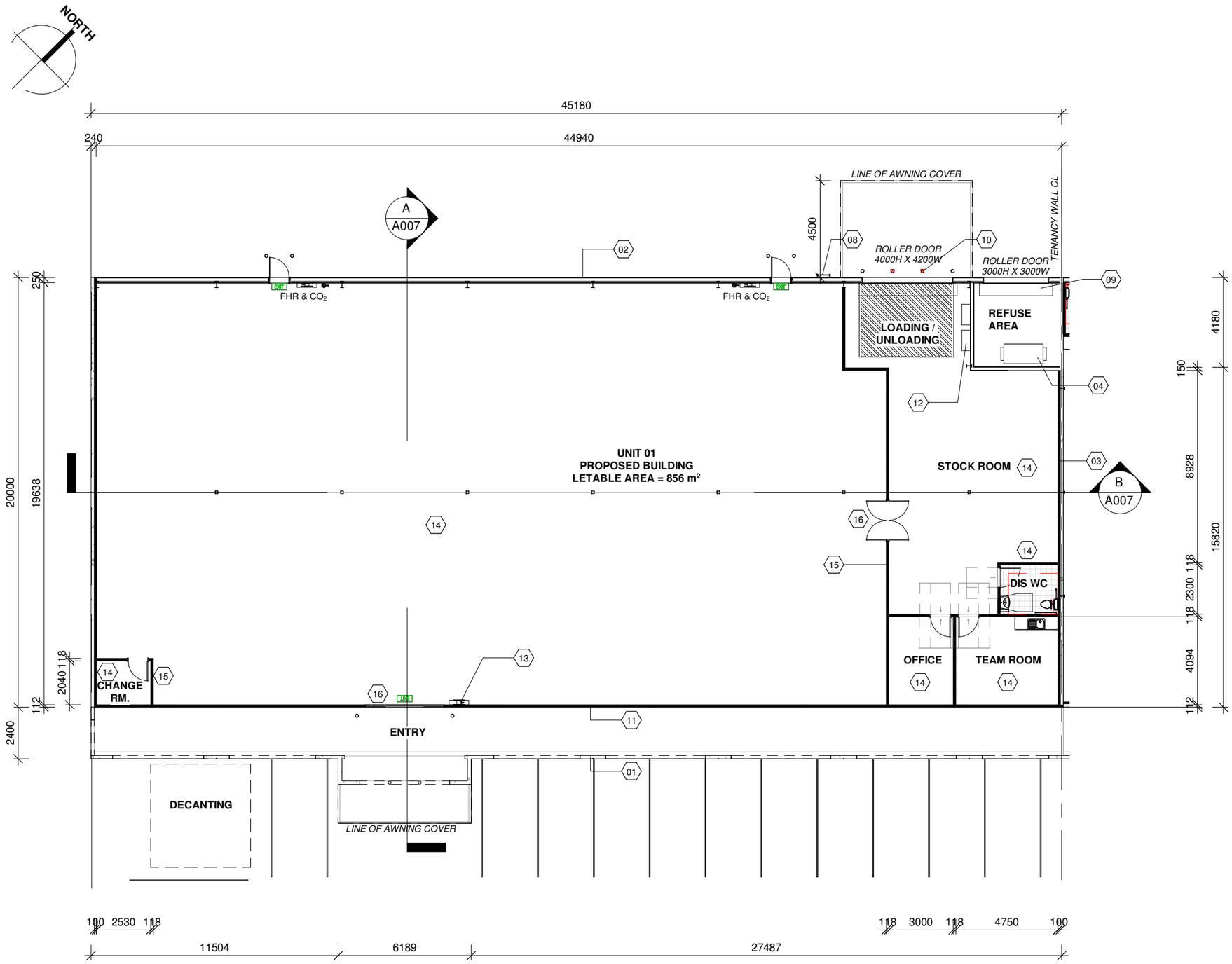
SHEET
A002



NOTES: (XX)

1. CONCRETE TILT PANEL TO ENGINEER'S DESIGN.
2. METAL CLAD WALL MATERIAL AND FINISH TBC.
3. FIRE RATED CONCRETE TILT PANEL TENANCY WALL CONSTRUCTION.
4. WASTE DUMPSTER.
5. FULL HEIGHT WALL TILE TO DISABLED TOILET
6. SKIRTING TILE TO TOILET TO DISABLED TOILET.
7. SET DOWN SLAB IN WET AREAS.
8. ACCESS LADDER TO ROOF.
9. ROLLER DOORS TO REFUSE AREA TO REMAIN OPEN WHENEVER IN USE.
10. REMOVABLE BOLLARDS TO NCC REQUIREMENTS
11. COMPRESSED FIBRO EXTERNAL CLADDING.
12. PROPOSED LOCATION FOR DB & IDF. NOTIFY BCF IF POSITION CAN NOT BE ACHIVED.
13. FHR LOACTION TO TBC. NOTIFY BCF IF NOT ACHIEVABLE.
14. ALL AMENITIES DETAIL AND INTERNAL WORKS TO TENANT SPECIFICATIONS AND LAYOUT.
15. PARTITION WALLS TO TENANT SPECIFICATIONS.
16. DOOR S AND GLAZING TO TENANT SPECIFICATIONS.

UNIT 01 FLOOR PLAN

1 : 200

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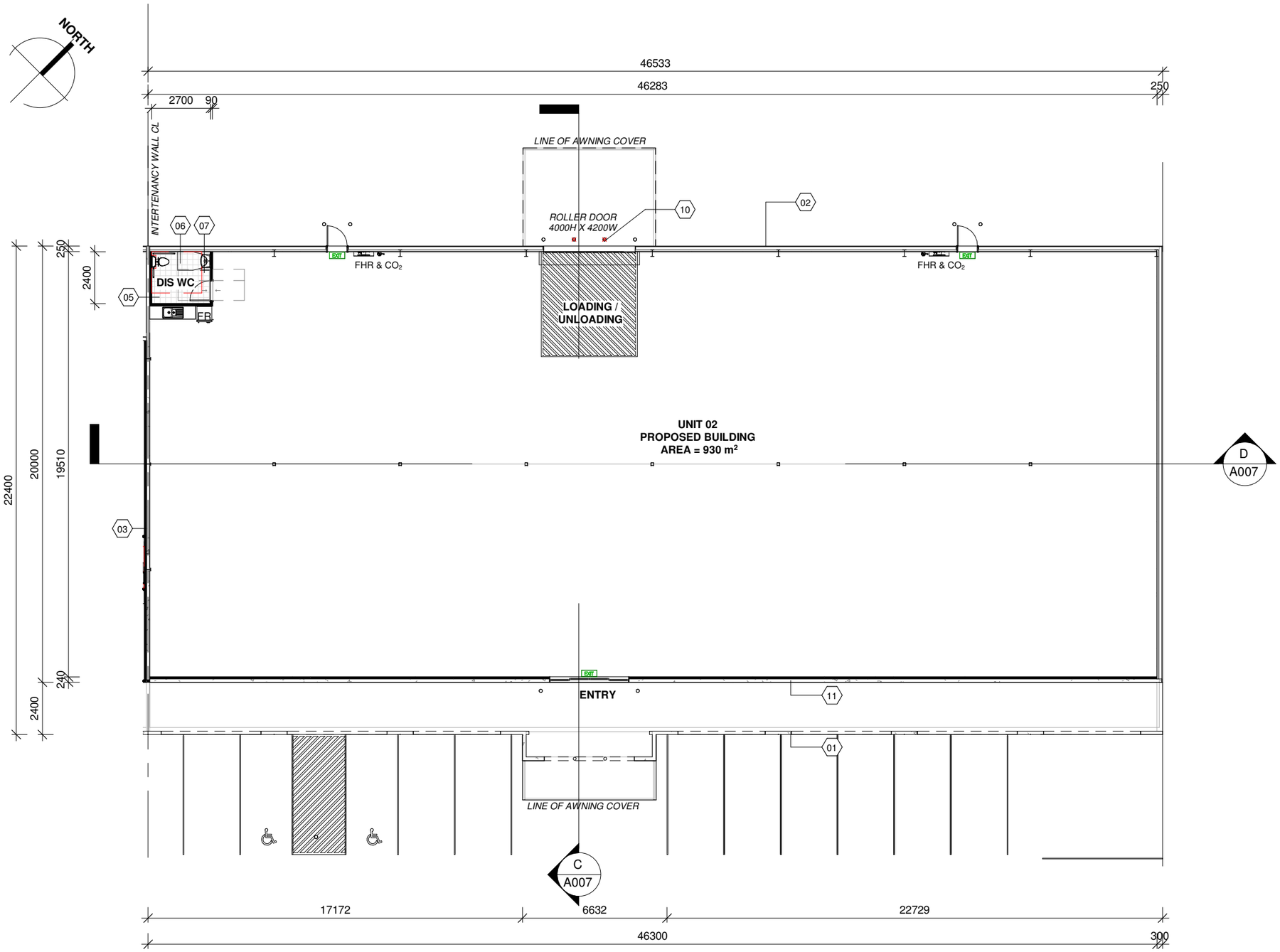
W23002

SHEET
A003



UNIT 02 FLOOR PLAN

1 : 200

NOTES: (XX)

1. CONCRETE TILT PANEL TO ENGINEER'S DESIGN.
2. METAL CLAD WALL MATERIAL AND FINISH TBC.
3. FIRE RATED CONCRETE TILT PANEL TENANCY WALL CONSTRUCTION.
4. WASTE DUMPSTER.
5. FULL HEIGHT WALL TILE TO DISABLED TOILET
6. SKIRTING TILE TO TOILET TO DISABLED TOILET.
7. SET DOWN SLAB IN WET AREAS.
8. ACCESS LADDER TO ROOF.
9. ROLLER DOORS TO REFUSE AREA TO REMAIN OPEN WHENEVER IN USE.
10. REMOVABLE BOLLARDS TO NCC REQUIREMENTS
11. COMPRESSED FIBRO EXTERNAL CLADDING.
12. PROPOSED LOCATION FOR DB & IDF. NOTIFY BCF IF POSITION CAN NOT BE ACHIVED.
13. FHR LOACTION TO TBC. NOTIFY BCF IF NOT ACHIEVABLE.
14. ALL AMENITIES DETAIL AND INTERNAL WORKS TO TENANT SPECIFICATIONS AND LAYOUT.
15. PARTITION WALLS TO TENANT SPECIFICATIONS.
16. DOOR S AND GLAZING TO TENANT SPECIFICATIONS.

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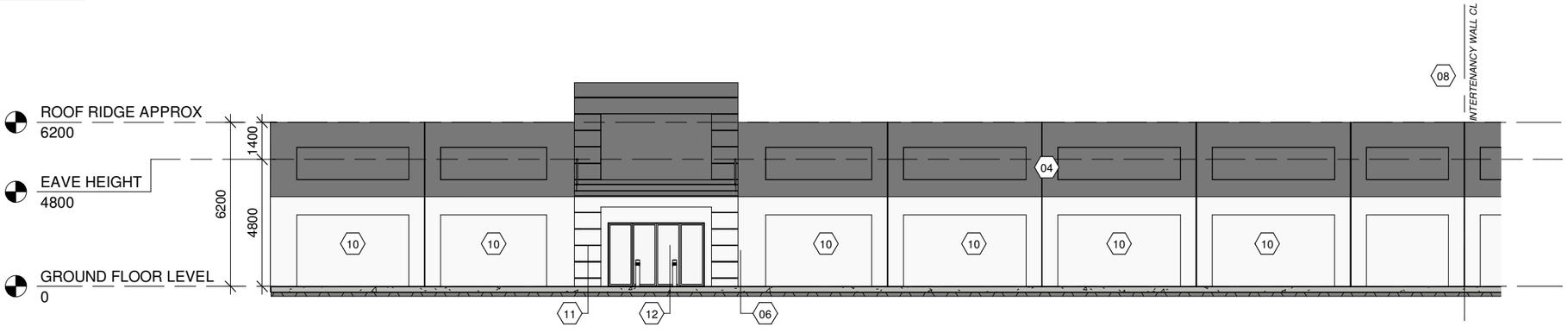
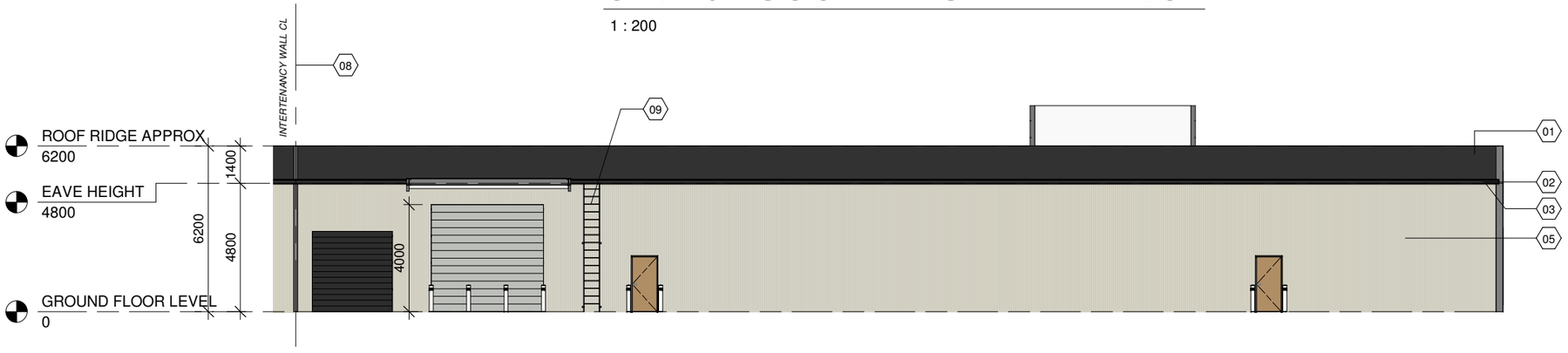
PROJECT No. **W23002**

SHEET **A004**



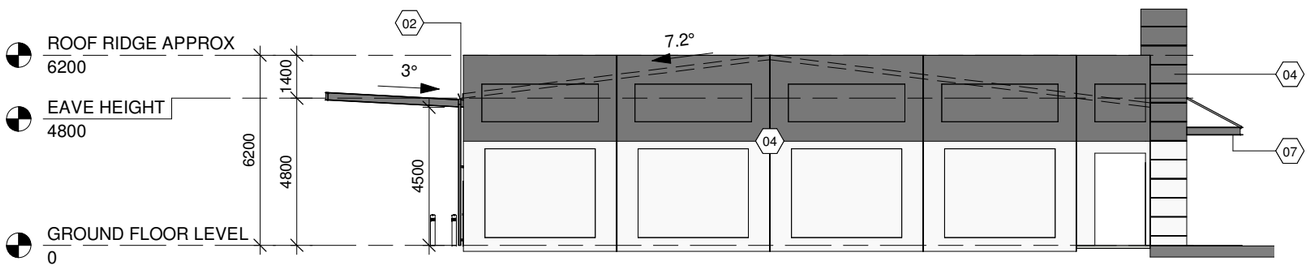
UNIT 01 SOUTHEAST ELEVATION

1 : 200



UNIT 01 NORTHWEST ELEVATION

1 : 200



UNIT 01 SOUTHWEST ELEVATION

1 : 200

NOTES: (XX)

1. NEW "SELECTED" COLORBOND ROOF SHEETING.
2. "SELECTED" COLORBOND GUTTER.
3. "SELECTED" COLORBOND FASCIA.
4. CONCRETE TILT PANEL TO ENGINEER'S DESIGN.
5. METAL CLAD WALL MATERIAL AND FINISH TBC.
6. ALUMINIUM FRAMED SLIDING DOOR WITH VISION PANEL.
7. FC SHEET CEILING TO WALKWAY AND AWNING.
8. INTERTENANCY WALL.
9. ACCESS LADDER TO PLANT DECK.
10. COMPRESSED FIBRO EXTERNAL CLADDING.
11. CONCRETE PANEL FILLET JOINTS SHOWN ARE FOR DIAGRAMATIC PURPOSES ONLY. CHECK AND MATCH CONCRETE FILLET JOINTS IN EXISTING DEVELOPMENT.
12. DOOR AND GLAZING TO TENANT SPECIFICATIONS.

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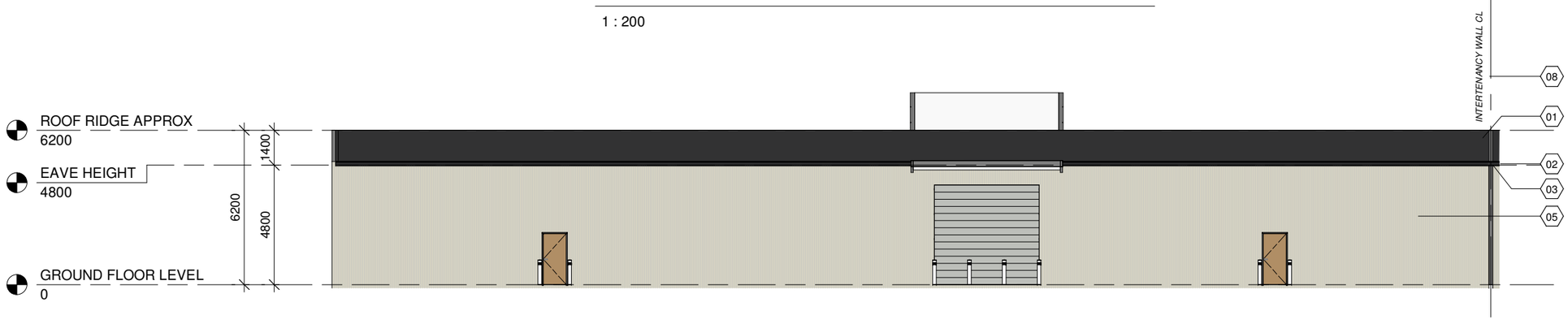
A005

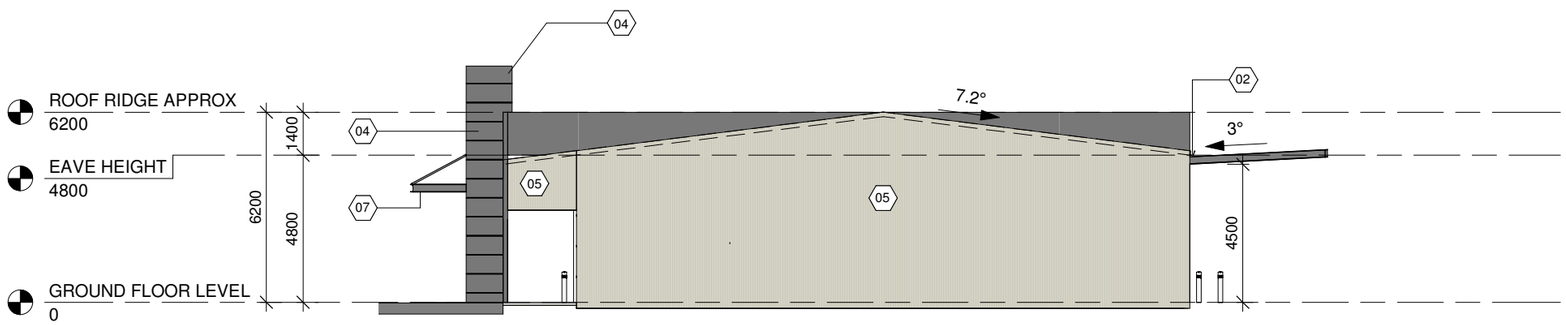
UNIT 02 SOUTHEAST ELEVATION

1 : 200



UNIT 02 NORTHWEST ELEVATION

1 : 200



UNIT 02 NORTHEAST ELEVATION

1 : 200

NOTES: (XX)

1. NEW "SELECTED" COLORBOND ROOF SHEETING.
2. "SELECTED" COLORBOND GUTTER.
3. "SELECTED" COLORBOND FASCIA.
4. CONCRETE TILT PANEL TO ENGINEER'S DESIGN.
5. METAL CLAD WALL MATERIAL AND FINISH TBC.
6. ALUMINIUM FRAMED SLIDING DOOR WITH VISION PANEL.
7. FC SHEET CEILING TO WALKWAY AND AWNING.
8. INTERTENANCY WALL.
9. ACCESS LADDER TO PLANT DECK.
10. COMPRESSED FIBRO EXTERNAL CLADDING.
11. CONCRETE PANEL FILLET JOINTS SHOWN ARE FOR DIAGRAMATIC PURPOSES ONLY. CHECK AND MATCH CONCRETE FILLET JOINTS IN EXISTING DEVELOPMENT.
12. DOOR AND GLAZING TO TENANT SPECIFICATIONS.

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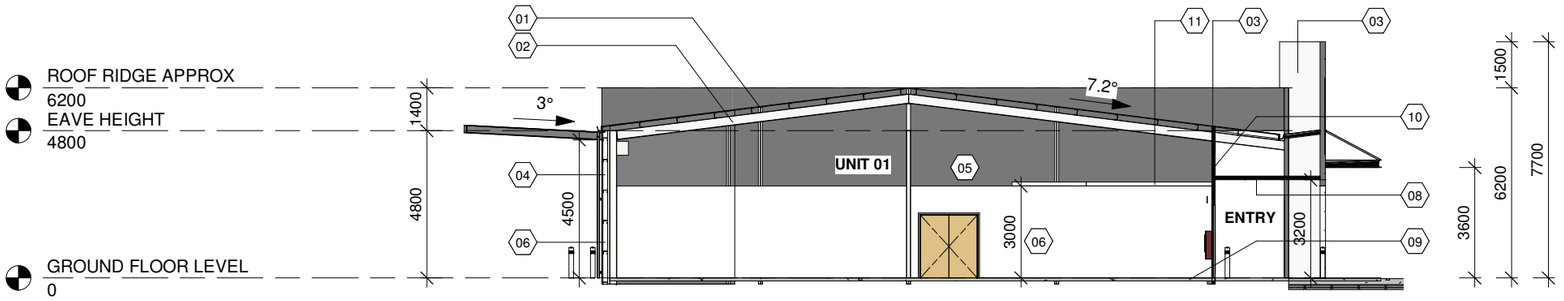
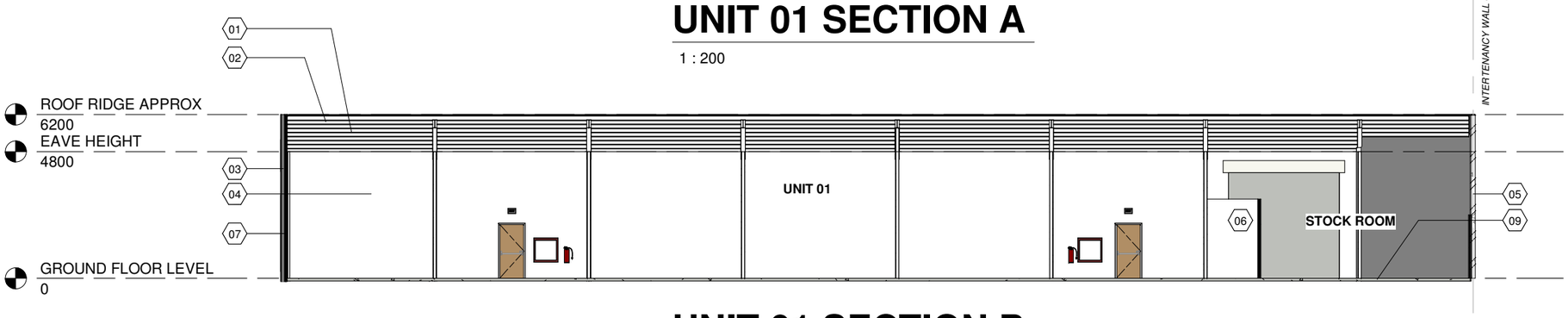


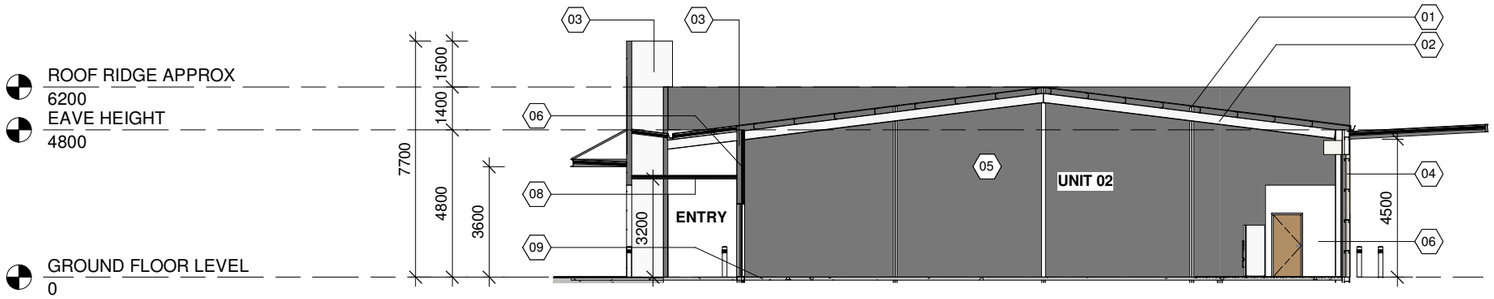
UNIT 01 SECTION A

1 : 200



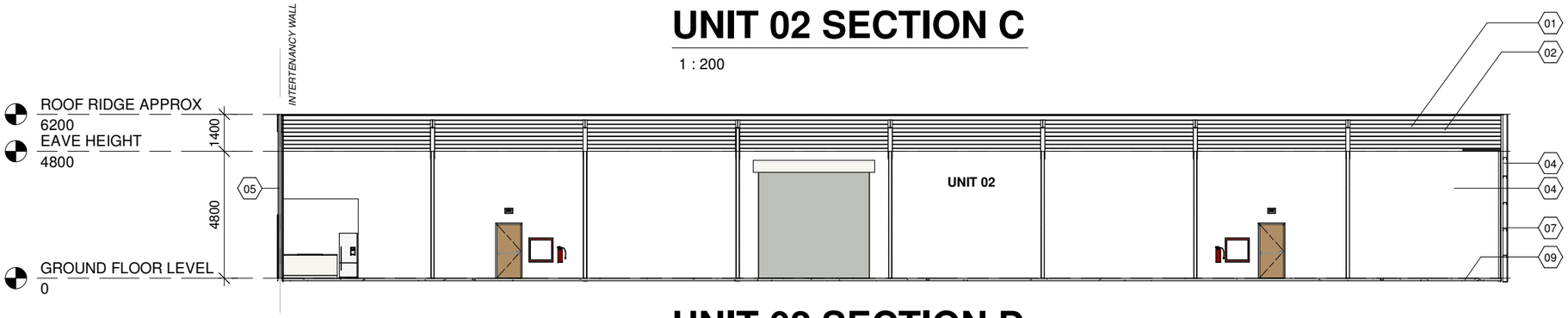
UNIT 01 SECTION B

1 : 200



UNIT 02 SECTION C

1 : 200



UNIT 02 SECTION D

1 : 200

NOTES:

1. INSULATION AS PER SECTION J REQUIREMENTS
2. STEEL ROOF TRUSSES/RAFTERS AS PER ENG DESIGN AND MANUFACTURERS SPEC INSULATION AS PERSECTION J REQUIREMENTS.
3. CONCRETE TILT PANEL TO ENGINEER'S DESIGN.
4. METAL CLAD WALL MATERIAL AND FINISH TBC.
5. HEBEL BLOCK INTERTENANCY WALL CONSTRUCTION.
6. TIMBER FRAMED PLASTERBOARD "SELECTED" PAINT FINISH
7. WALL INSULATION TO SECTION J REQUIREMENTS.
8. FC SHEET CEILING TO OUTDOOR ENTRY/WALKWAY.
9. CONCRETE FLOOR SLAB TO ENGR'S DESIGN
10. 90mm STUD WITH COMPRESSED FIBRO PANEL EXTERNAL CLADDING
11. 1200 X 600MM PLASTERBOARD CEILING GRID

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SHEET
A007

NOTES: (XX)

1. PROPOSED HEAVY VEHICLE EXIT.
2. EXISTING HEAVY VEHICLE ENTRY.
3. PROPOSED NEW HEAVY VEHICLE CONCRETE DRIVEWAY TO HILLTOPS COUNCIL REQUIREMENTS.
4. EXISTING CONCRETE PAVING FOR HEAVY VEHICLE DRIVEWAY.
5. EXISTING HARDSTAND DRIVEWAY WITH 2 COATS SEAL.
6. PROPOSED HEAVY VEHICLE HARDSTAND DRIVEWAY WITH 2 COATS SEAL TO HILLTOPS COUNCIL REQUIREMENTS.
7. REFER TO COUNCIL FOR EXACT ROAD DETAILS.

VEHICLE MOVEMENT PLAN

1 : 750

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W23002

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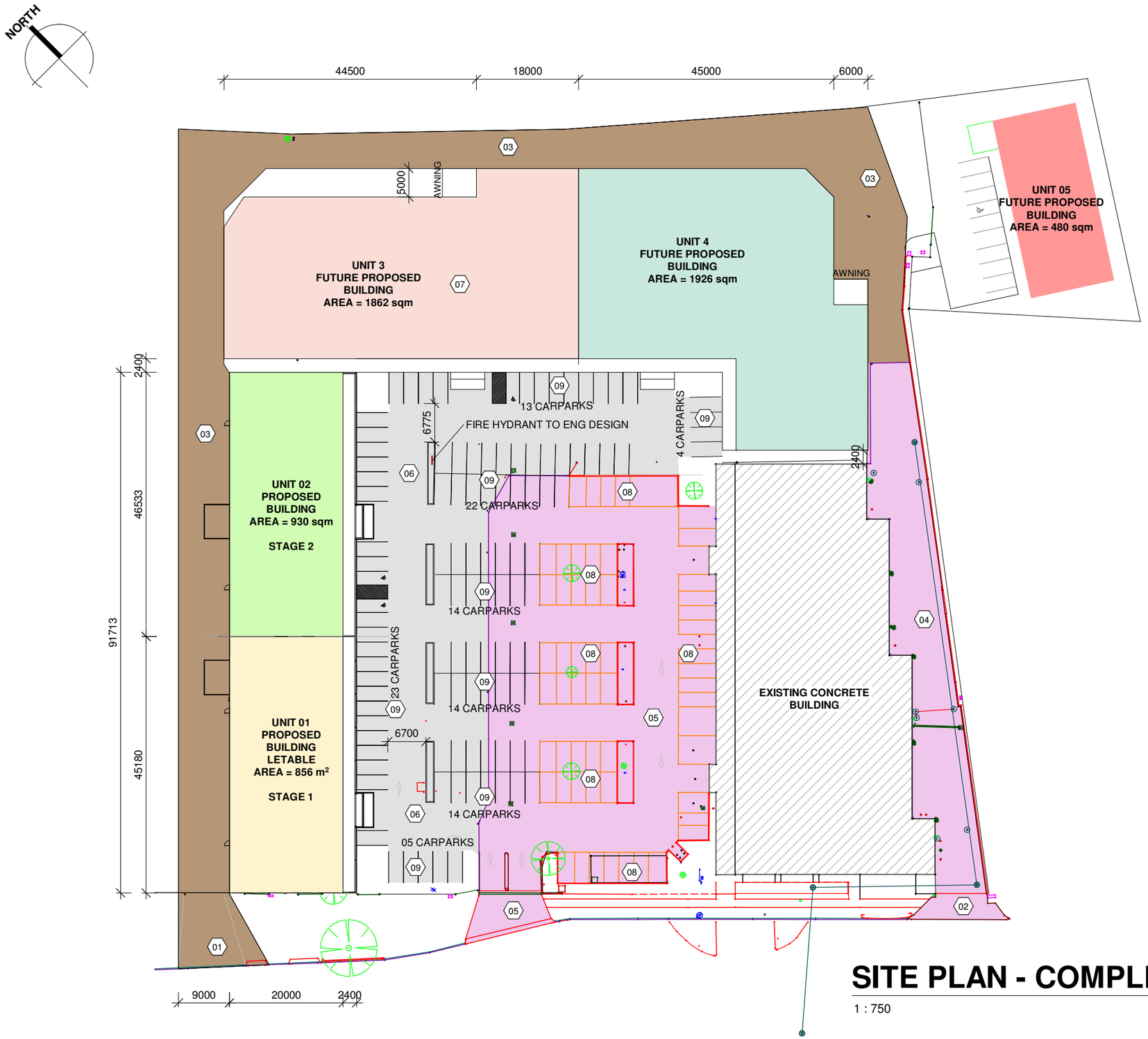
A008



NOTES: (XX)

1. PROPOSED HEAVY VEHICLE EXIT.
2. EXISTING HEAVY VEHICLE ENTRY.
3. PROPOSED HEAVY VEHICLE HARDSTAND DRIVEWAY TO HILLTOPS COUNCIL REQUIREMENTS
4. EXISTING CONCRETE PAVING FOR HEAVY VEHICLE DRIVEWAY.
5. EXISTING CONCRETE PAVING FOR LIGHT VEHICLE DRIVEWAY
6. NEW PAVEMENT DESIGN AND LEVELS TO ENGINEER'S DETAILS.
7. BUILDING FINISH FLOOR LEVEL TO ENGINEER'S DESIGN.
8. EXISTING CARPARKS.
9. NEW PROPOSED CARPARKS.

LEGEND

- EXISTING CONCRETE PAVING
- NEW CONCRETE PAVING
- NEW HARDSTAND DRIVEWAY 2 COAT SEAL
- EXISTING HARDSTAND DRIVEWAY 2 COAT SEAL

SITE PLAN - COMPLEX

1 : 750

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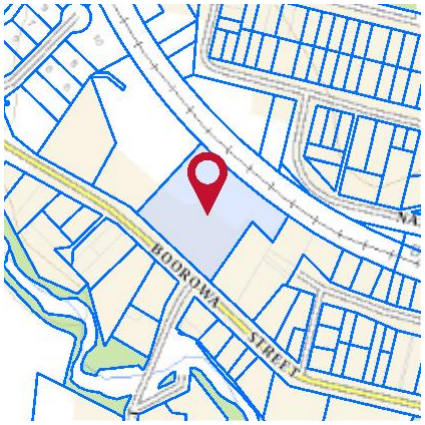
SHEET **A009**

APPENDIX 3

NSW Planning Portal Report

Property Report

323 BOOROWA STREET YOUNG 2594



Property Details

Address:	323 BOOROWA STREET YOUNG 2594
Lot/Section /Plan No:	1/-/DP1202085
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	E4 - General Industrial: (pub. 23-12-2022)
Height Of Building	NA
Floor Space Ratio	NA
Minimum Lot Size	NA
Heritage	NA
Land Reservation Acquisition	NA
Foreshore Building Line	NA

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)

- 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)

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

1.5 m Buffer around Classified Roads	Classified Road Adjacent
Land near Electrical Infrastructure	This property may be located near electrical infrastructure and could be subject to requirements listed under Transport and Infrastructure SEPP 2021 Clause 2.48. Please contact Essential Energy for more information.
Local Aboriginal Land Council	YOUNG
Regional Plan Boundary	South East and Tablelands

Hilltops Council
Locked Bag 5
Young NSW 2594
Telephone: 1300 445 586
Email: mail@hilltops.nsw.gov.au

Important Notice!
This map is not a precise survey document. Accurate locations can only be determined by a survey on the ground.
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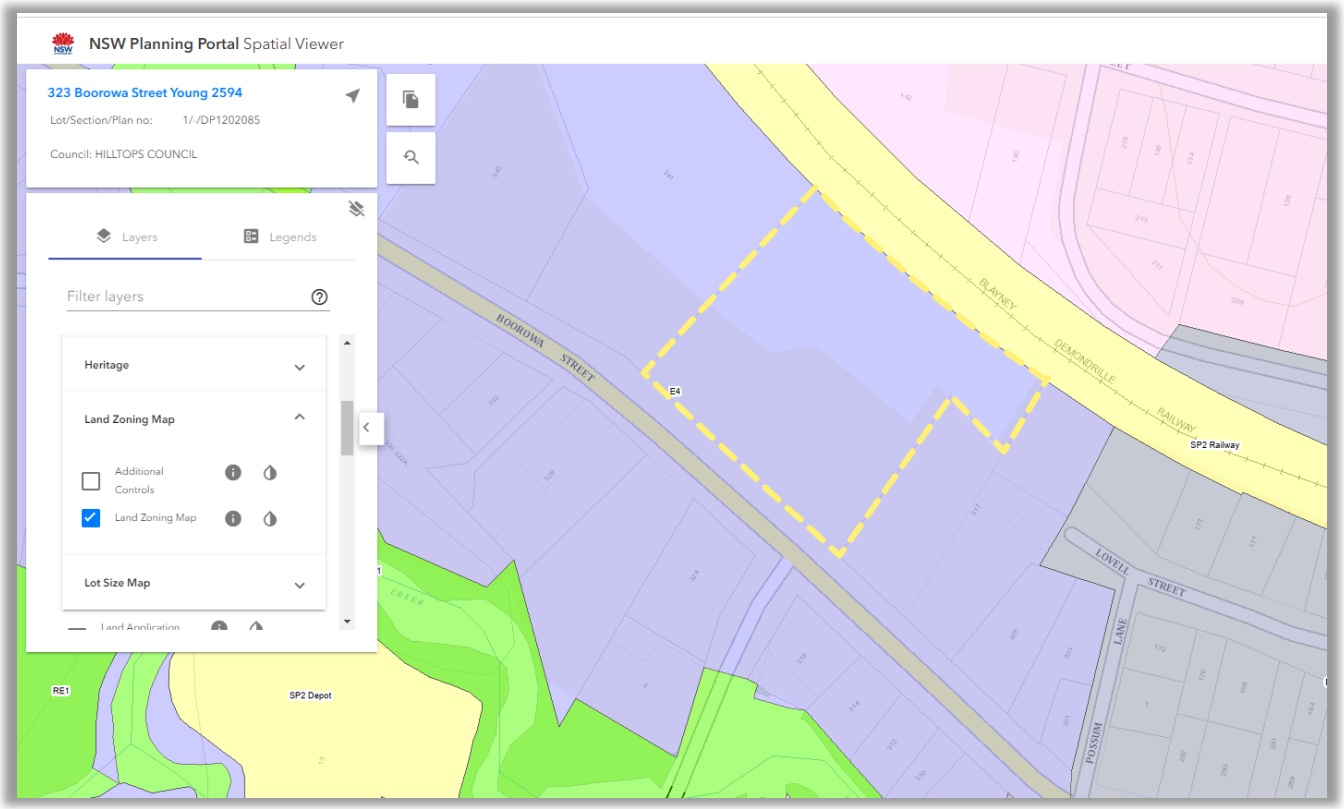
Projection: GDA94 / MGA zone 55

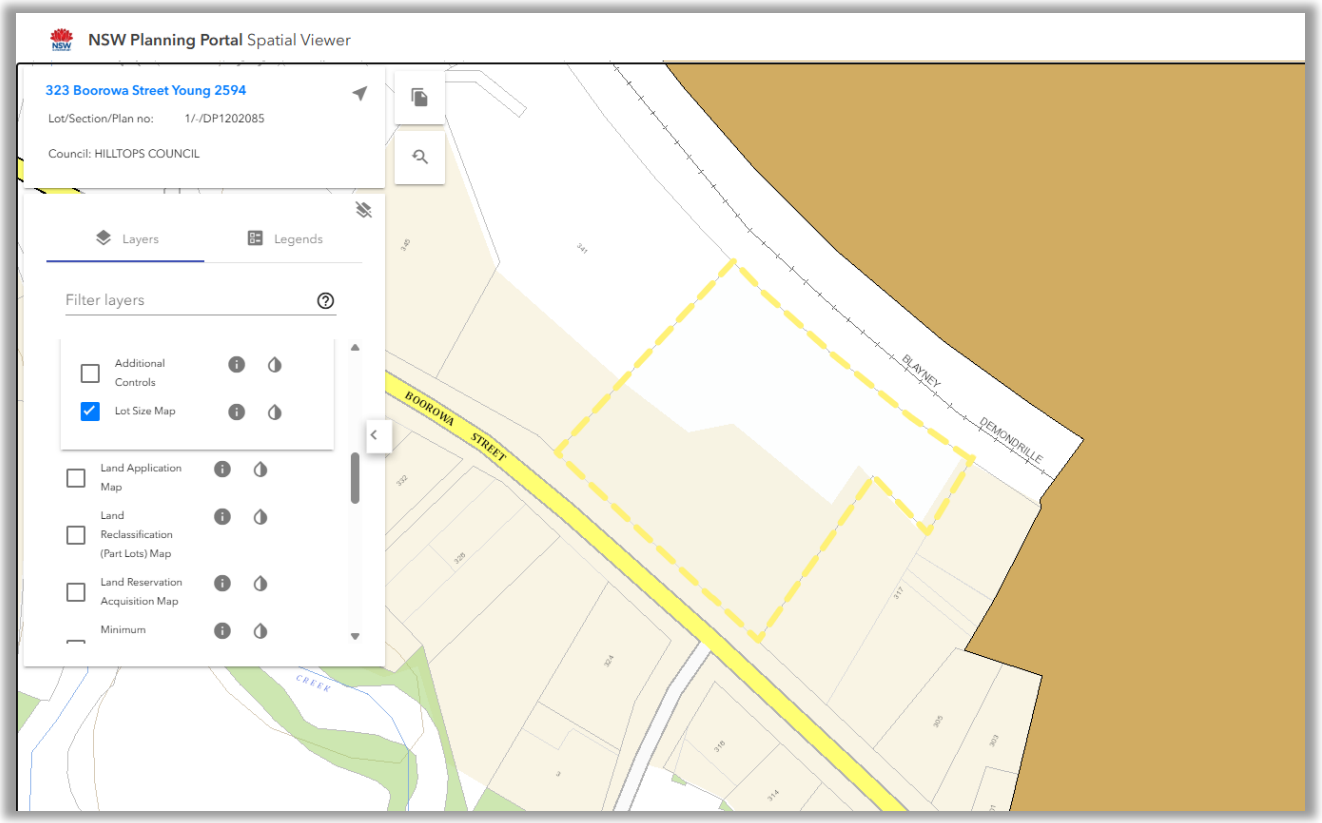
Date: 20/05/2025

Drawn By: anonymous

Map Scale: 1:2000 at A4



Zone Map



Min Lot Size – land of development not residential

DA BUSTERS P/L

Craig Filmer <craig@dabusters.com>

323 Boorowa St YOUNG - Meeting

3 messages

Bill Vanry <bill.vanry@hilltops.nsw.gov.au> Tue, Dec 3, 2024 at 4:28 PM
To: "darren@mellrosshomes.com.au" <darren@mellrosshomes.com.au>, Craig Filmer <craig@dabusters.com>

Good Afternoon Darren and Craig,

Thank you for the meeting this morning to discuss your project over 323 Boorowa St YOUNG.

It is understood you wish to construct a 'Specialised Retail Premises' as defined under the Hilltops LEP to create two (2) tenancies on site (staged), in addition to the existing premises approved under Development Application 2012/DA-00034 as amended.

As per our discussion relating to permissibility and land use definition, Council confirms 'Specialised Retail Premises' is the correct land use definition, and the use is permissible with Council consent under the Hilltops LEP. In terms of the lodgement requirements for the DA, Council would expect the following documents to be submitted for assessment at a minimum:

- Statement of Environmental Effects;
- Full Plan Set – Site / Elevations / sections / signage etc;
- Concept Engineering Servicing Plan;
- Traffic impact statement confirming traffic generation, car parking calculations and swept path diagrams (TfNSW may request further details);
- BCA Report;
- Contamination Report or a Site Validation Certificate (depending on if the rehabilitation works have been completed as per 2012/DA-00034).

It is noted the above list is the minimum requirements for DA lodgement and other issues may arise during detailed DA assessment. This email does not guarantee any form of approval.

Darren - Council have contacted the NSW Department of Planning and Environment for a contact in relation to the Essential Energy matters raised this morning. We are awaiting a response.

Kind Regards,

Hilltops COUNCIL

Bill Vanry
Senior Statutory Land Use Planner

E bill.vanry@hilltops.nsw.gov.au

www.hilltops.nsw.gov.au
Locked bag 5, Young, NSW, 2594
Phone 1300 HILLTOPS (1300 445 586)

NOTICE & DISCLAIMER

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Craig Filmer <craig@dabusters.com> Wed, Dec 4, 2024 at 7:19 AM
To: Darren Mellross <darren@mellrosshomes.com.au>, Warrick Morley <warrick@wmdrafting.com>, Tracey Mellross <tracey@mellrosshomes.com.au>

Darren

After our meeting yesterday with Council I now clarify some matters needed for DA lodgement.

Initially we need to get the plans correct. I have been to the site and am very very curious now Council has put a roundabout in your road, how we make the truck access and departure work on this new plan set ? The splitter island is in the road for west bound trucks blocking entry and the roundabout would interfere with any truck heading eastbound turning in ???? Do we reverse the truck movements to in at Vet and out at roundabout ? Loading dock wall articulation on existing wont work. Do we get Council to get rid of this stupid roundabout ?

When we lock the plan set away is when we get SRD involved - need survey as to where water/sewer/gas is - then need stormwater concept plan.

After that I need someone like Genium Engineering (Simon Cassidy - former Council Engineer) to do Traffic Impact Statement. Do not want to waste $$ on him until we are crystal clear how site can work.

BCA Report, Statement of Env Effects and Portal work can be done by DA Busters once Plans, Servicing and Traffic reports at hand.

Happy to discuss any of above.

Craig Filmer
Development & Enviro Health Specialist
DA BUSTERS Pty Ltd
Phone: 0466 722 869 | Email: Craig@DAbusters.com

[Quoted text hidden]

Craig Filmer <craig@dabusters.com> Wed, Dec 4, 2024 at 7:21 AM
To: Bill Vanry <bill.vanry@hilltops.nsw.gov.au>
Cc: "darren@mellrosshomes.com.au" <darren@mellrosshomes.com.au>

Bill;

Thank you for the prompt email reply.

Darren advises that the site clearance certificate should be on the file as it was required prior to CC on the 2012 DA. Could this please be confirmed after the files are reviewed.

Craig Filmer
Development & Enviro Health Specialist
DA BUSTERS Pty Ltd
Phone: 0466 722 869 | Email: Craig@DAbusters.com

[Quoted text hidden]

APPENDIX 4

BIODIVERSITY OFFSET SEARCH

CULTURAL HERITAGE (AHIMs) SEARCH

AHIMS Web Services (AWS)
Search Result

Your Ref/PO Number : MELLROSS

Client Service ID : 1005829

Kenneth Filmer

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

Attention: Kenneth Filmer

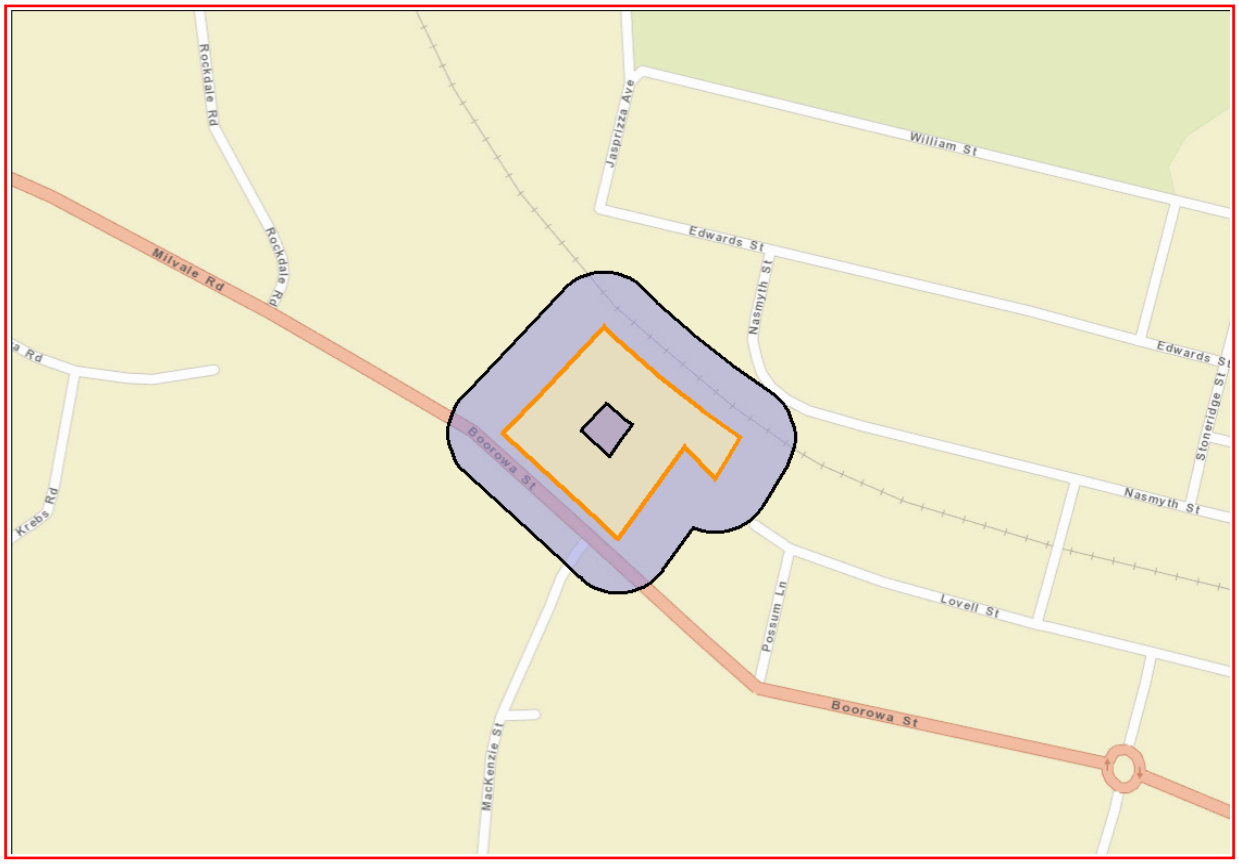
Email: craig@dabusters.com

Date: 20 May 2025

Dear Sir or Madam:

AHIMS Web Service search for the following area at Lot : 1, DP:DP1202085, Section : - with a Buffer of 50 meters, conducted by Kenneth Filmer on 20 May 2025.

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) 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 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.

Level 6, 10 Valentine Ave, Parramatta 2150
Locked Bag 5020 Parramatta NSW 2124
Tel: (02) 9585 6345

ABN 34 945 244 274
Email: ahims@environment.nsw.gov.au
Web: www.heritage.nsw.gov.au

Department of Planning and Environment

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		20/05/2025 9:17 AM
1. Biodiversity Values (BV) Map - Results Summary (Biodiversity Conservation Regulation Section 7.3)		
1.1	**Does the development Footprint intersect with BV mapping?**	no
1.2	Was ALL BV Mapping within the development footprinted added in the last 90 days? (dark purple mapping only, no light purple mapping present)	no
1.3	**Date of expiry of dark purple 90 day mapping**	N/A
1.4	**Is the Biodiversity Values Map threshold exceeded?**	no
2. Area Clearing Threshold - Results Summary (Biodiversity Conservation Regulation Section 7.2)		
2.1	**Size of the development or clearing footprint**	1,708.2 sqm
2.2	**Native Vegetation Area Clearing Estimate (NVACE)** (within development/clearing footprint)	366.7 sqm
2.3	**Method for determining Minimum Lot Size**	Lot size
2.4	**Minimum Lot Size** (10,000sqm = 1ha)	19,604 sqm
2.5	**Area Clearing Threshold** (10,000sqm = 1ha)	5,000 sqm
2.6	**Does the estimate exceed the Area Clearing Threshold?** (NVACE results are an estimate and can be reviewed using the Guidance)	no

REPORT RESULT: Is the Biodiversity Offset Scheme (BOS) Threshold exceeded for the proposed development footprint area? (Your local council will determine if a BDAR is required)	**no**

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: _____ Date: _____

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

20/05/2025 09:17 AM

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.

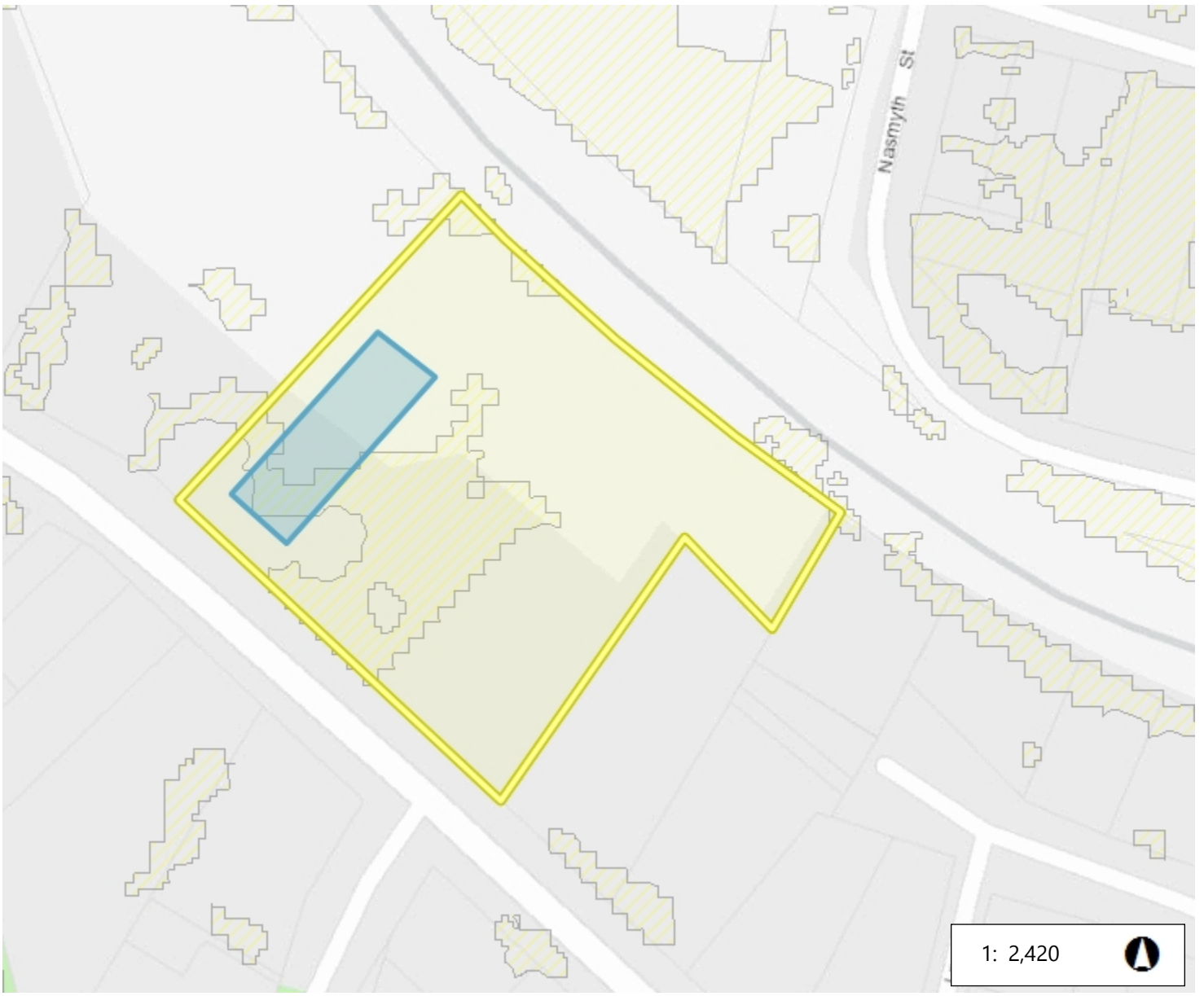
This report may be used as evidence for development applications submitted to councils. You may also use this report when considering native vegetation clearing under the State Environmental Planning Policy (Biodiversity and Conservation) 2021 - Chapter 2 vegetation in non-rural areas.

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 or on 1800 001 490.

Biodiversity Values Map



123.0 0 61.48 123.0 Metres

WGS_1984_Web_Mercator_Auxiliary_Sphere

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.

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

20/05/2025 09:17 AM

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.

APPENDIX 5

TRAFFIC STUDY

ParkTransit

Traffic and Parking Impact Assessment

323 - 337 Boorowa Street Young

For: Mellross Investments

8th May 2025

ParkTransit Australia Pty Ltd
PH: 1300 854 179
ABN: 16 627 168 290
E: parktransit@parktransit.com

Traffic and Parking Impact Assessment
Proposed Commercial Building at
323-337 Boorowa Street, Young
For: Mellross Investments

Version No.	Author	Reviewed by:	Date:
1	A. Mohammad	G Caldwell	29.04.2025
2	A. Mohammad	Client	08.05.2025

© ParkTransit Australia Pty Ltd, 2025, ABN: 16 627 168 290

The information contained in this document is confidential and intended solely for the use of the client for the purpose for which it has been prepared.

Contents

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ATTACHMENTS

ABBREVIATIONS

DA:	Development Application
Council:	Hilltops Council, NSW
Proposal:	Construction of Commercial Building
DCP:	Hilltops Council, NSW Development Control Plan 2011
GFA:	Gross Floor Area
TfNSW Guide:	TfNSW Guide to Traffic Generating Development 2002
AS2890.1:	Australian Standard for Off-Street Parking Facilities AS2890.1-2004
AS2890.6:	Australian Standard for Off-Street Parking for People with Disabilities AS2890.6

1. Introduction

ParkTransit Australia (PT) was engaged by Mellross Investments to assist with the Development Application process for the expansion of the existing commercial/retail facility to include an additional floor area of 1,786 sqm. The subject site is located at 323-337 Boorowa Street, Young, within the Hilltops Council LGA.

The proposal involves the construction of a commercial/retail building accommodating two units. Unit 1 will occupy an area of 856 sqm, while Unit 2 will cover 930 sqm. As part of the proposal, the existing at-grade car park will be extended to accommodate an additional 72 car spaces. The figure below shows the site's location.

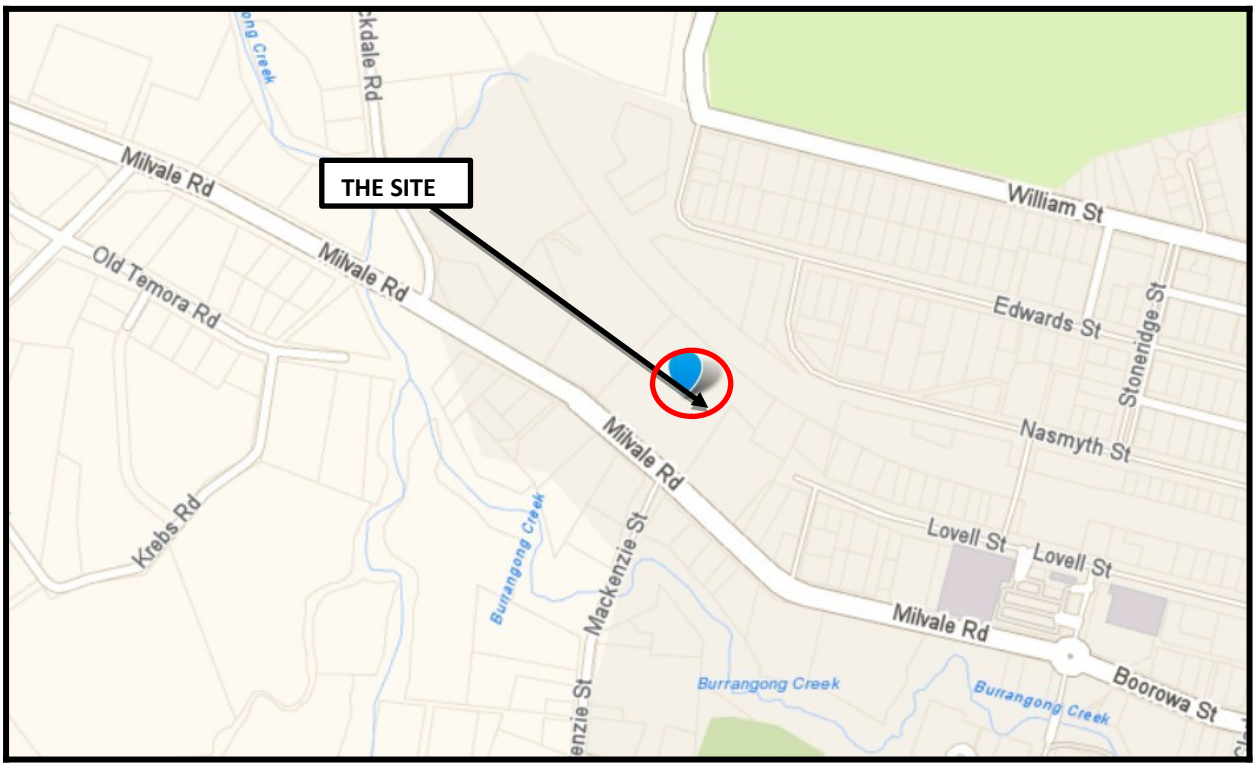

Figure 1: Site Location (source- Whereis Maps)

The purpose of this report is to present the traffic and parking assessment associated with the proposal and to determine the implications of the projected change in traffic activity on the surrounding road network. The report is structured as follows:

Section 2: Site Description

Section 3: Overview of Existing Traffic Conditions

Section 4: Description of the Proposed Development

Section 5: Traffic Impact Assessment

Section 6: Parking Provision

Section 7: Access Arrangements

Section 8: Conclusions and Recommendations

Section 9: Attachments

The following documents were referenced for the preparation of this report:

- Hilltops Council, NSW Development Control Plan (DCP 2025);
- Transport for New South Wales Guide to Traffic Generating Development;
- Australian Standard for Parking Facilities Part 1: Off-Street Car Parking (AS2890.1-2004);
- Australian Standard Parking Facilities Part 2: Off-street commercial vehicle AS2890.2-2018 and
- Australian Standard for Parking Facilities Part 6: Off-Street Parking for People with Disabilities (AS2890.6-2022).

2. Site Description

The subject site is located at 323-337 Boorowa Street, Young, and is part of the Hilltops Council LGA. The site is legally referred to as Lot 1 DP1202085 and occupies an area of 1.96 hectares. The site has a sole frontage along Boorowa Street and is irregular in shape.

The subject site is located on the northern side of Boorowa Street. It is surrounded by commercial/retail developments on the east and west; Boorowa Street to the south; and the railway track to the north.

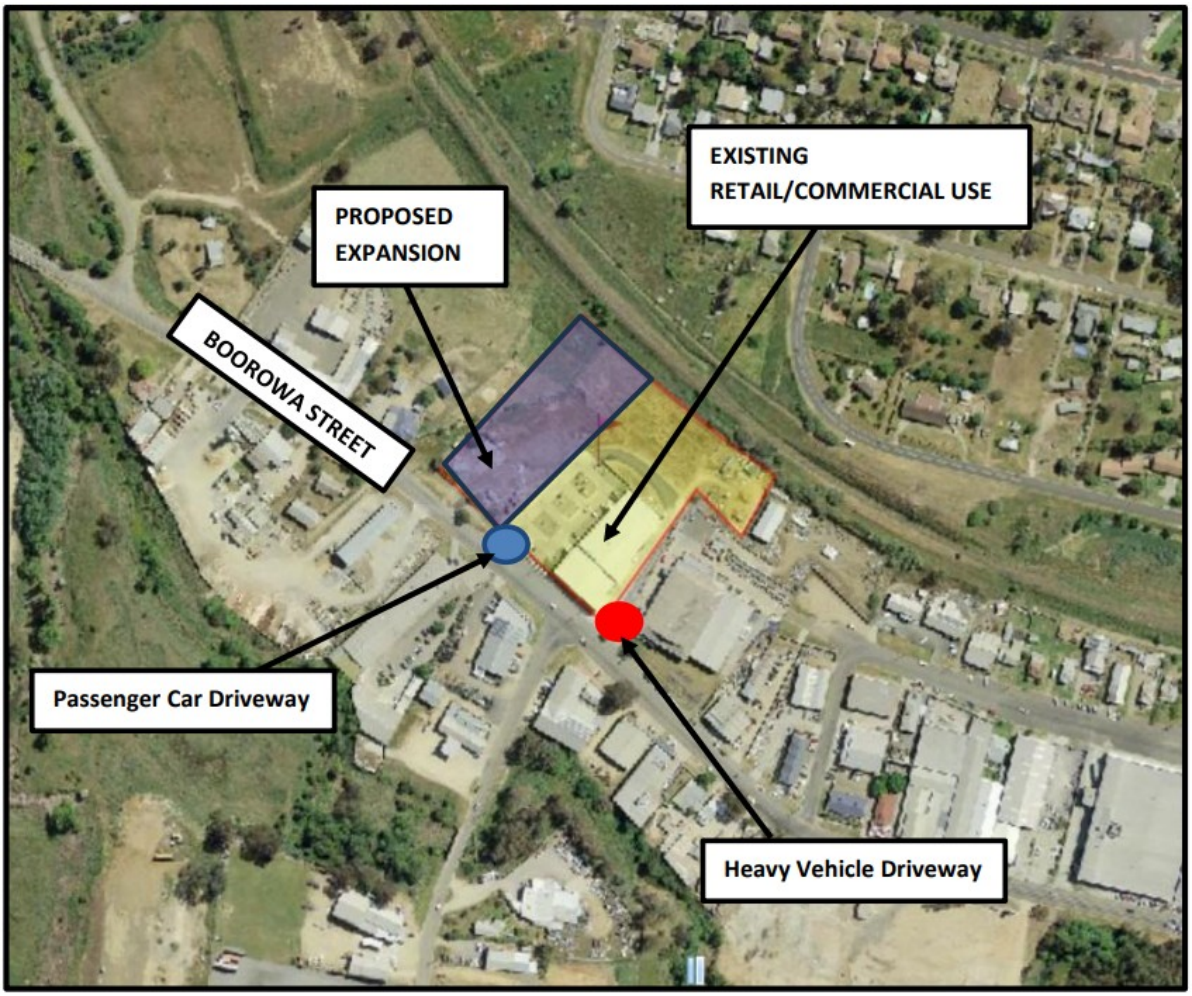

Figure 2: The Site (source- NSW Imagery Website Six Maps)

The site is currently occupied by retail/commercial uses and includes vacant land along the western boundary. The site includes an on-site parking provision of 56 car spaces. The site is accessible via its two driveways located on the Boorowa Street frontage and are shown in the figure above.

The following map shows the hierarchy of the surrounding road network as classified by Transport for New South Wales (TfNSW).

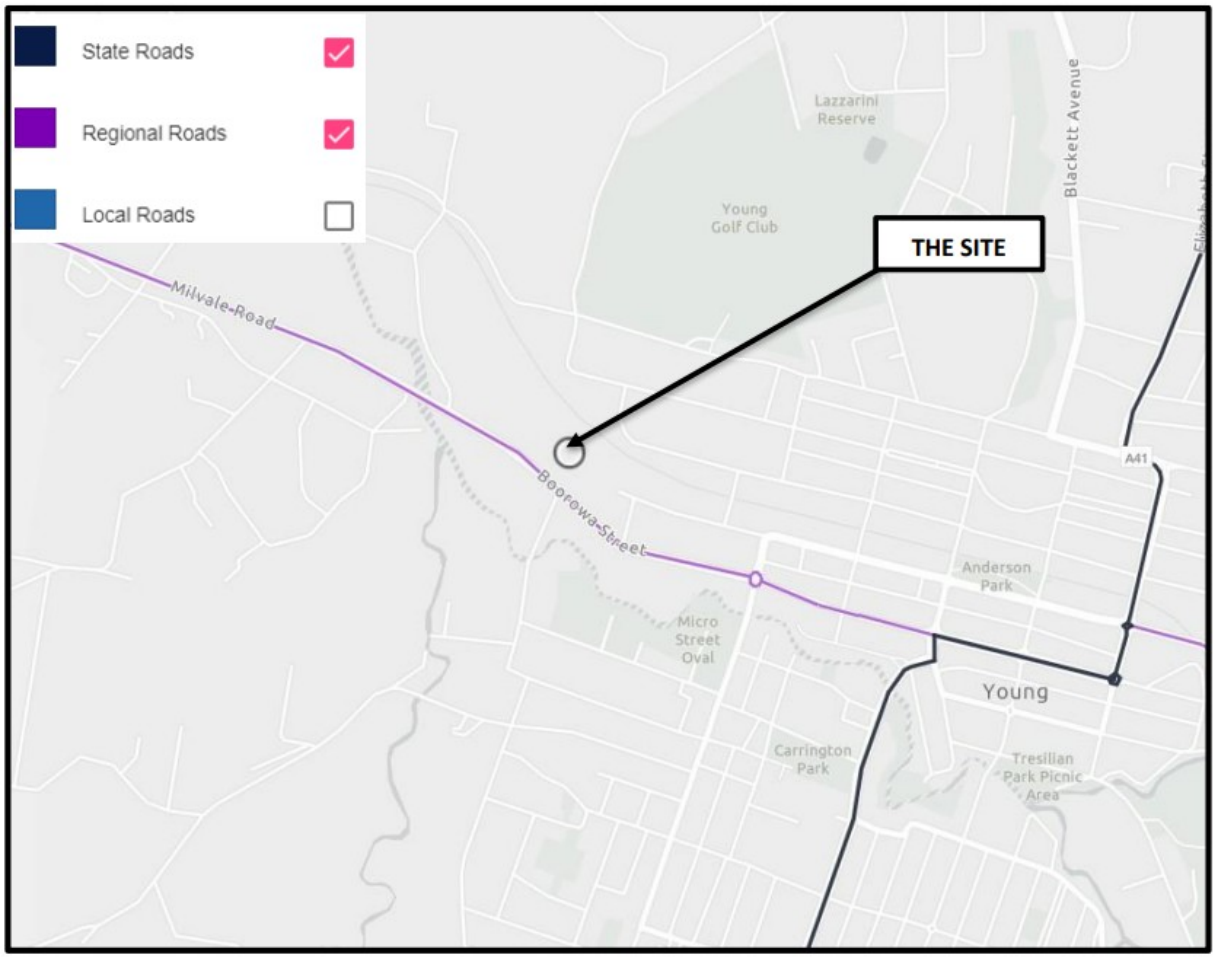

Figure 3: Surrounding Road Network (Source TfNSW Website)

3. Overview of the Existing Traffic Conditions

3.1. Description of Road Environment

Boorowa Street

Boorowa Street is classified as a Regional Road that runs from east to west. It connects Calabash Street on the eastern side with Rockdale Road on the western side.

Generally, the carriageway on Boorowa Street is undivided and comprises one traffic lane in each direction. It has a speed limit of 50 kph, and a paved footpath is present on either side of the carriageway. On-street parking is allowed on Boorowa Street.

The Boorowa Street and Olympic Highway intersection nearest to the subject site is a roundabout intersection. Below is the street view image of Boorowa Street.

Figure 4: Street view of Boorowa Street looking East (Source: Google Maps Street View)

Mackenzie Street

Mackenzie Street is classified as a local road that runs from north to south. It connects Boorowa Street on the northern side with Currawong Street on the southern side.

The carriageway on Mackenzie Street is generally undivided and comprises one traffic lane in each direction. It has a speed limit of 50 kph. The Mackenzie Street and Boorowa Street intersection is a roundabout controlled intersection. Below is the street view image of Mackenzie Street.

Figure 5: Street view of Mackenzie Street looking South (Source: Google Maps Street View)

Olympic Highway

Olympic Highway is classified as a State Road that runs from northeast to southwest. It connects the Hume Highway in the southwest and the Mid-Western Highway in the northeast. Olympic Highway is a 317-kilometre road in the central western and south-eastern Riverina regions of New South Wales, Australia.

Within the suburb of Young, the carriageway on the Olympic Highway is undivided and comprises one traffic lane in each direction. It has a speed limit of 50 kph in Young, and a paved footpath is present on either side of the carriageway.

Below is the street view image of the Olympic Highway within the Young town centre.

Figure 6: Street view of the Olympic Highway looking Southwest (Source Google Maps Street View)

3.2. Public Transport

The site has limited accessibility via public transport. The nearest bus stop is approximately 1.2 kilometres away on the eastern side.

The table below summarises the coach services available in the area:

Table 1 – Bus Route Summary

Route Number	Service Type	Origin	Destination
791	Mon/Wed/Sat	Cootamundra	Dubbo
792	Sun/Tue/Thu	Dubbo	Cootamundra
793	Tue/Thu/Fri/Sat	Cootamundra	Bathurst
794	Mon/Wed/Fri/Sat	Bathurst	Cootamundra

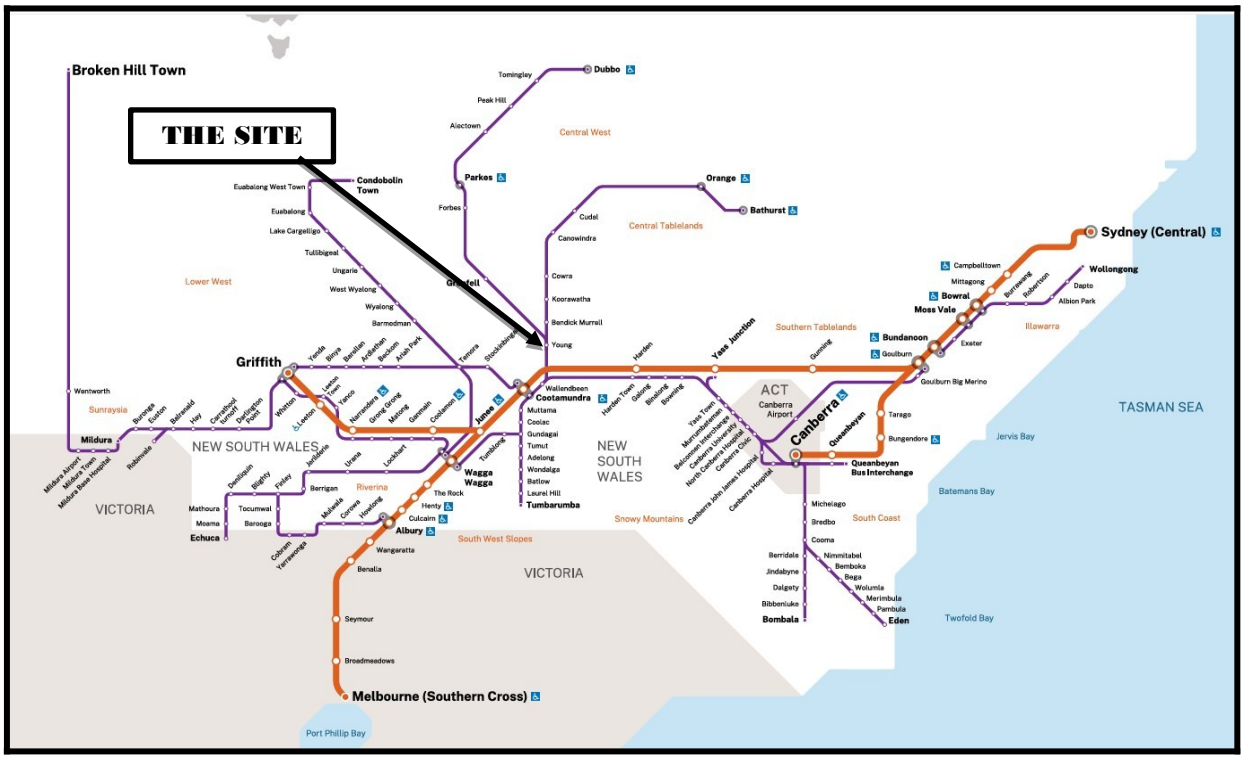

Figure 7: Bus Route Map (Source: NSW Transport Info Website)

3.3. Crash Data

The NSW Centre for Road Safety periodically collects crash and casualty data, which is publicly available. A review of the latest crash data from 2019-2023 indicates no incidents were recorded near the subject site, demonstrating that the local road is operating relatively safely. The Figure below provides the crash location and severity of these crashes recorded in the area.

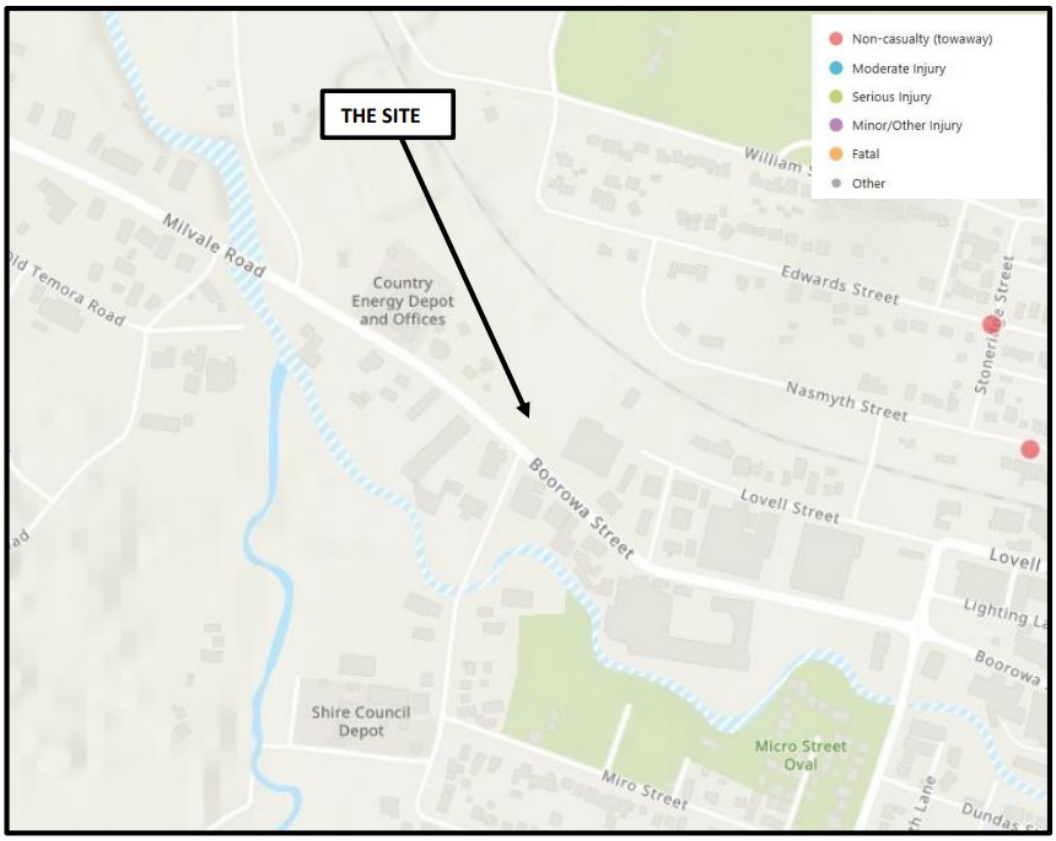

Figure 8: Crash data (Source NSW Centre for Road Safety)

3.4. Existing Traffic Conditions

To determine the existing traffic activity on Boorowa Street. The traffic counts were undertaken on a section of Boorowa Street, 100m north of Mackenzie Street, using automated tube counts across 24 hours over 7 days. The counts were conducted over a week starting 1st May 2024. The count location is presented in Figure 9 below:

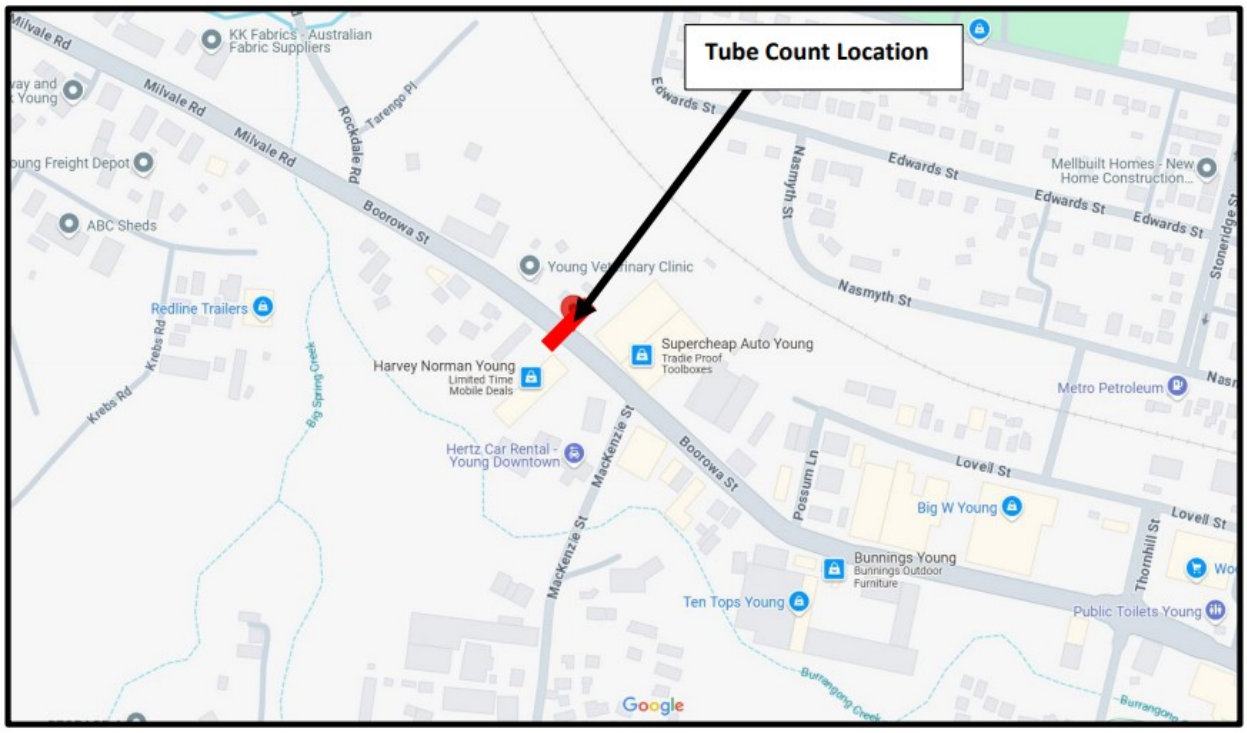

Figure 9: Traffic Count Location (Source Google Maps)

The survey results indicate the following:

- Average Daily Traffic flow was recorded at 4,340 vehicle trips (bi-directional);
- Heavy vehicle proportion represents 16.8% of the AADT;
- 85% travel speed was recorded at 52.6kph.
- Weekday Morning Peak Period was observed from 8:00 am -9:00 am, where 242 vehicle trips (unidirectional) were recorded; and
- Weekday Evening Peak Period was observed from 3:00 pm -4:00 pm, where 234 vehicle trips (unidirectional) were recorded.

The level of Service (LoS) for urban roads is determined with reference to Table 4.4 of the TfNSW Guide to Traffic Generating Development. An extract from Table 4.4 of the TfNSW is presented in the table below:

Table 2 – Summary of the Level of Service (LoS) (Source TfNSW Guide to Traffic Generating Development)

Level of Service	Traffic Flow (Veh/hr)
A	200
B	380
C	600
D	900
E	1400

Boorowa Street is classified as a regional road and accommodates a peak traffic flow of 242 vehicle trips per hour. In accordance with the table above, Boorowa Street operates well below its capacity at LoS B. A summary of daily traffic flow is presented in the figure below.

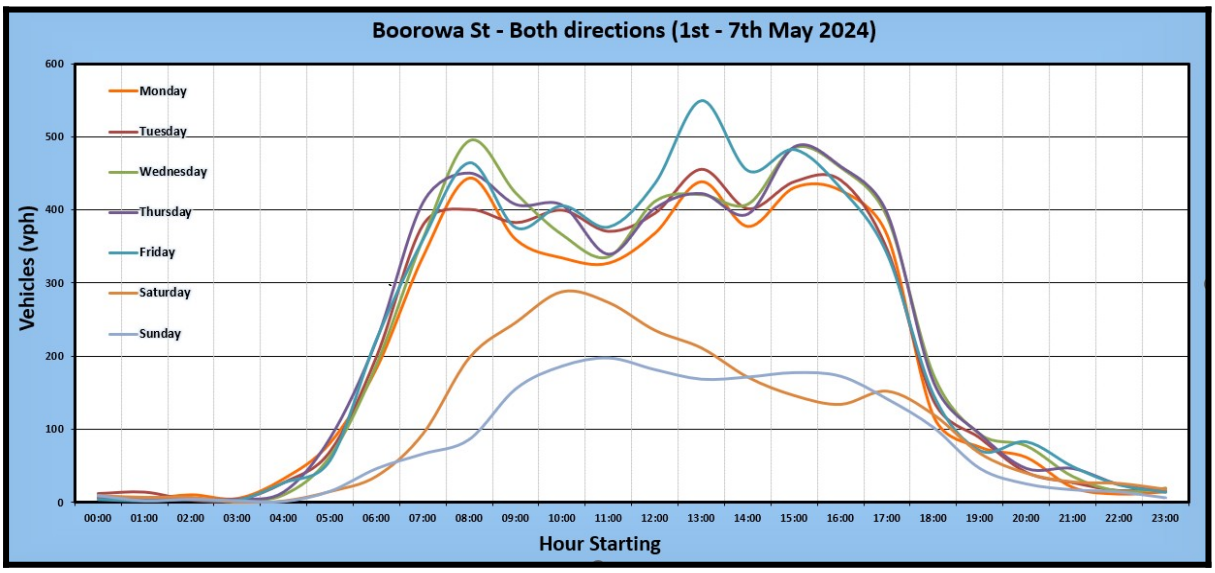

Figure 10: Traffic Flow (veh/hr)

4. Description of the Proposed Development

The development proposal involves expansion of the existing commercial/retail facility to accommodate an additional two(2) Units. Unit 1 will occupy an area of 856 sqm, while Unit 2 will cover 930 sqm.

As part of the proposal, an additional 72 parking spaces, including 2 disabled spaces, will be provided within the existing at-grade level car park.

The existing access to the car park will be retained, ensuring continued convenience for car park users. In addition, a new driveway will be introduced along the western boundary of the site, designed to accommodate the service and delivery vehicles, thus separating the passenger car access from the service/delivery vehicles. This enhancement aims to improve operational efficiency and safety of all users, including the pedestrian accessing the site.

Architectural plans associated with the proposal have been prepared by Warrick Morley Drafting Services, and a snapshot of the plans indicating the car park are shown below:

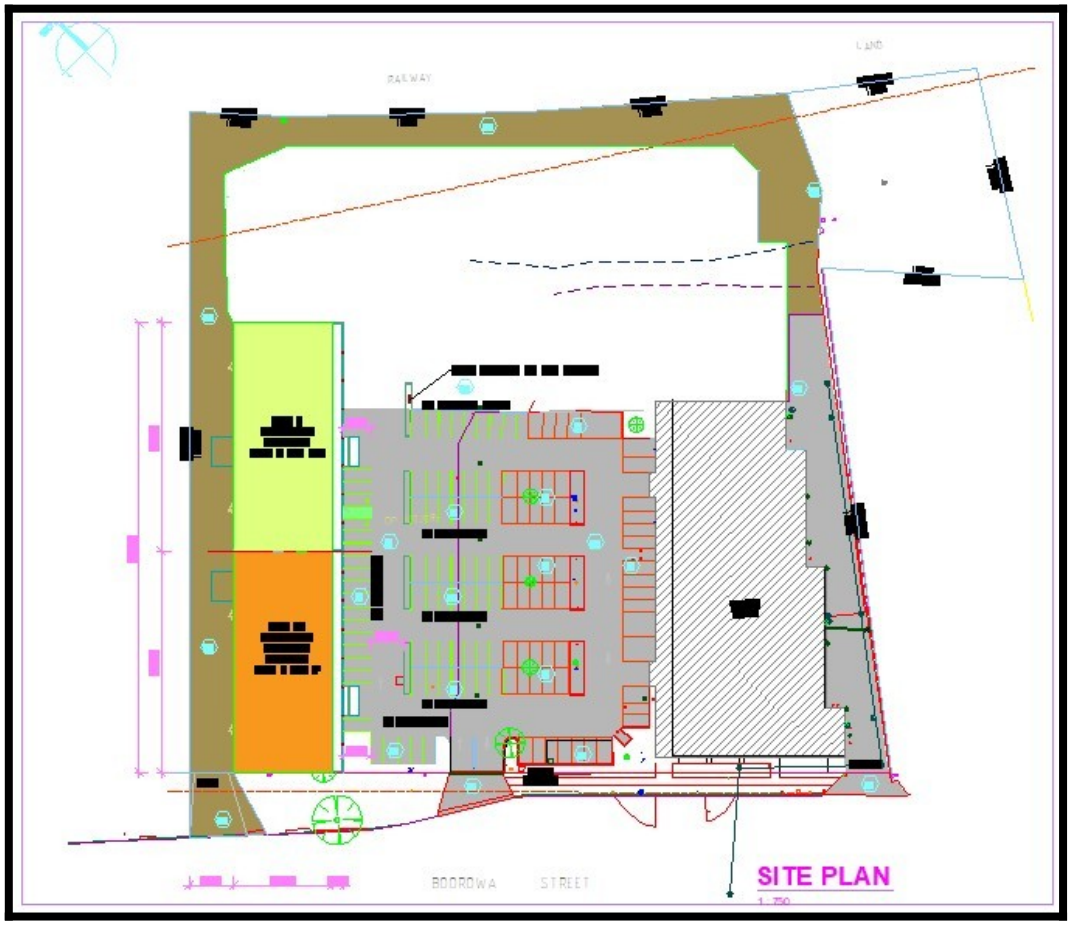

Figure 11: Proposed Site Plan (Source Warrick Morley Drafting Services)

5. Traffic Impact Assessment

The traffic activity associated with the proposal has been calculated with reference to the 'TfNSW Guide to Traffic Generation Developments'. The proposed development will accommodate a total of two units occupying a total area of 1,786 sqm. Based on the information provided to ParkTransit, it is understood that the proposed unit will be used as an outdoor adventure store. The RMS Guide classifies the proposed retail use as "slow trade" and recommends the following traffic generation rates:

> Thursday peak hour vehicle trips = 20 A(S)* per 1000sqm (Gross Leasable Floor Area); and
> Friday peak hour vehicle trips = 11 A(S)* per 1000sqm (Gross Leasable Floor Area).
> **A(S)= Area of Slow Trade*

Applying the above trip generation rates to the proposed development results in approximately 35.72 and 19.64 vehicle trips during Thursday and Friday peak hours, respectively.

5.1. Impact Assessment

As discussed earlier, Boorowa Street is classified as a regional road and accommodates a peak traffic flow of 242 vehicle trips per hour. The proposal has the potential to generate a peak traffic activity of 36 vehicles per hour (bidirectional – 18 in each direction). Therefore, following the completion of the proposal, the peak traffic flow along the section of Boorowa Street will be 260 vehicle trips per hour (unidirectional).

It is evident from the above that the section of Boorowa Street will continue to operate well below its capacity at LoS B. In this regard, the proposal has no detrimental impact on the operation of the surrounding road network.

6. Parking Provision

6.1. Planning Requirements

The development site is located within the Hilltop Council's LGA, formerly known as Young Council. In relation to the on-site parking provision for retail use, Section 2.2 of the Young Development Control Plan 2025 recommends the following parking provision rates.

Table 3 – On-Site Parking Requirements (Source: Young DCP)

Description	Car Park Provision Rates
Shops, (including supermarkets less than 900 square metres gross leasable floor area)	1 space per 35 square metres of gross leasable floor area
Supermarkets (900 square metres gross leasable floor area or greater)	1 space per 20 square metres of gross leasable floor area

6.2. Proposed Parking Provision

The development proposal involves the construction of a commercial/retail building that will accommodate a total of 2 Units. Unit 1 will occupy an area of 856 sqm, while Unit 2 will cover 930 sqm.

Table 4 – On-Site Parking Requirements for the Proposed Development

Description	Car Park Provision Rates	No. of Car Spaces
Unit 1 (occupies an area of 856 sqm)	1 space per 35 square metres of gross leasable floor area	24.45
Unit 2 (occupies an area of 930 sqm)	1 space per 20 square metres of gross leasable floor area	46.5
Total		**70.95(say 71)**

The proposal involves extending the existing car park to include an additional 72 parking spaces, including two(2) disabled spaces. Therefore, the proposed parking provision is considered suitable for servicing the development and is highly unlikely to increase any on-street parking demand.

In this regard, following the completion of the proposed development, the surrounding local street will continue to experience similar parking demand to the existing conditions, suggesting that the proposal has no detrimental impact on the parking availability in the area.

7. Access Arrangements

7.1. Car Parking Arrangement

The proposed car parking arrangement has been assessed according to the requirements listed in AS2890.1 (2004). Table 1.1 of AS2890.1 provides a classification of the off-street parking facilities based on various land uses, which is essential in determining the associated parking space dimensions.

The proposed development will be for retail/commercial use. Therefore, the proposed parking provision has been assessed against the 'Type 3' user class with 90-degree parking spaces (which is associated with short-term city parking). In relation to the Type 3 user class, Figure 2.2 of the AS2890.1 specifies the following parking dimensions:

- Space width – 2.6 metres
- Space length – 5.4 metres
- Aisle width – 5.8 metres

The proposed car park accommodates a total of 72 parking spaces, including two (2) disabled parking spaces. The space dimensions were measured as a minimum of 2.6 metres wide and 5.4 metres long, with an associated aisle width exceeding 5.8 metres, thereby meeting the minimum requirements stipulated by AS2890.1. In this regard, the proposed car parking arrangement has been designed in accordance with the Australian Standard.

In relation to disabled car spaces, the Australian Standard for Off-street Parking for People with Disabilities – AS2890.6 -2022. The standard recommends that disabled bays be accompanied by a shared zone (with the same dimensions as standard space). The dimensions of a standard space are the following:

- Space width – 2.4 metres
- Space length – 5.4 metres

The disabled space dimensions were measured at a minimum of 2.4 metres wide and 5.4 metres long, with an associated shared zone of 2.4 metres wide and 5.4 metres, thereby meeting the minimum requirements stipulated by AS2890.6-2022.

In this regard, the proposed car parking arrangement has been designed in accordance with the Australian Standard.

Additionally, we have undertaken Swept Path Analysis utilising the Auto Track simulation software to assess the car parking spaces. The Swept Path Analysis was undertaken utilising the recommended vehicle type and is presented as **Attachment A**. The swept path assessment concluded that the motorists would enter and exit in the forward direction.

7.2. Driveway Arrangement

The existing access to the car park will be retained, ensuring continued convenience for car park users. In addition, a new driveway will be introduced along the western boundary of the site, designed to accommodate the service and delivery vehicles, thus separating the passenger car access from the service/delivery vehicles.

To assess the service vehicle driveway configuration, we have undertaken a Swept Path Analysis using the AutoTrack simulation software. The analysis, which was undertaken using the recommended vehicle type, is presented in **Attachment A.** The swept path assessment concluded that the driveway configuration is adequate to allow service vehicles to enter and exit in the forward direction.

7.3. Sight Distance

Section 3.2 of AS2890.1 specifies the recommended sight distance associated with the driveway. The sight distance requirement is prescribed in accordance with the posted speed limit along the frontage road. The proposed development will be accessible via the driveway located on the Boorowa Street frontage.

Section 3.2 of the Standard specifies a desirable visibility distance of 69 metres and a minimum distance of 45 metres for streets having a posted speed limit of 50 kph. The proposed driveway is located on a straight section of Boorowa Street, where unobstructed visibility is available. In this regard, the driveway arrangement is considered safe and appropriate to service the proposed development.

7.4. Driveway Location

Figure 3.1 of the Standard shown below specifies the prohibited location for the introduction of a driveway.

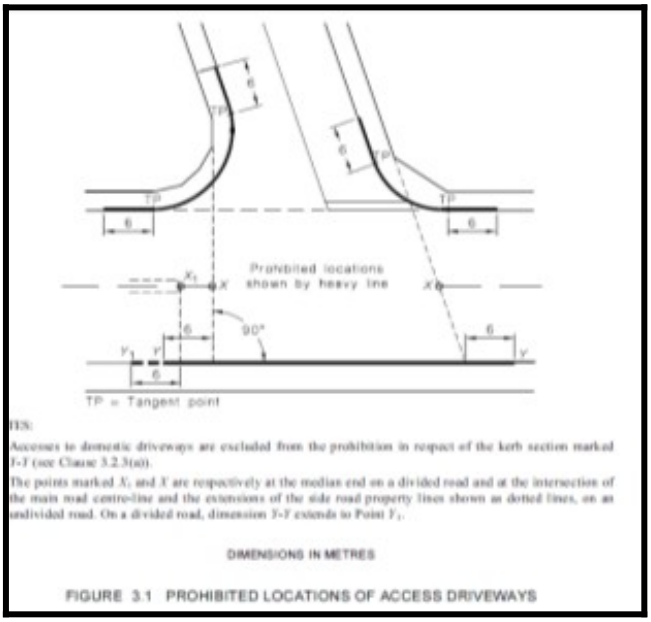

Figure 12: Prohibited Locations of Access Driveway (Source AS2890.1-2004)

A review of the proposed driveway indicates the driveway is located well outside the prohibition zone, and therefore, the proposal is considered compliant with the Standard.

8. Conclusions and Recommendations

- The provision of 72 car parking spaces, including two(2) disabled spaces, for the proposed development is considered sufficient to handle the project parking demand;
- Based on the information provided, the proposal does not generate any increase in safety risk to pedestrians or drivers as a result of the access and parking configuration;
- The proposed development will not negatively impact current traffic conditions, including local intersection capacity; and
- An assessment of the car park layout, including the parking spaces and associated aisle width, indicates the car park layout will be designed in accordance with the relevant applicable Standards (AS2890.1 and AS2890.6).

9. Attachments

Attachment A - Turning Path Assessments:

APPENDIX 6

CONTAMINATION REPORT

54 Wiare Cct
Orange NSW 2800
ABN: 57 021 223 814
P: 0428 619 282
E: info@enviroseer.com.au
http://www.enviroseer.com.au/

Services completed for this site

☐ Lot Classifications ☒ Site Contamination Report ☐ Wastewater Management Report

SITE CONTAMINATION REPORT

PREPARED FOR: MELROSS ENTERPRISES
SITE ADDRESS: LOT 1 DP 1202085 323 BOOROWA STREET YOUNG NSW 2594

Revision: 01/07/2021
Site Test: 28/02/2025
Lab Test: 11/03/2025
Job Number: 25016

DRIVER
Section 4.15 EP&A 1979
SEPP 55

CSM
Source: 1000 m² former machine & chem store
Pathway: ingestion
Receptor: Infants

SAP
Sample density: 9/1000m²
Building Envelopes 1
Composite samples 3
Replicates 0
Area 0.01 ha

CoPc
As Cd Cr Cu Hg Ni Pb Zn OC pesticides, PCBs TRH BTEX PAH

1.0 SUMMARY

An Environmental Assessment was conducted by Envirowest Consulting P/L and a Remediation Action Plan with Validation component cleaned up the fibro shed and the diesel impacted soil about the former Above ground Storage Tanks. These were reported to address most of the former DPI machinery storage and chemical store. Excluded was a <1000 m^2 area of a weatherboard bungalow at the SW of the property. The bungalow was demolished at some point after 2012. The southmost 1500 m2 was assessed to cover the contingency of soil graded E and N from the area excluded by the original study.

Nine soil samples were collected from 150 mm intervals to a depth of 0-0.35 m depending on actual topsoil depth. This was achieved using a mechanical continuous flight auger to break the relatively shallow and compacted overburden. These soil samples were composited in threes. This is typically avoided for hydrocarbons, but acceptable for pesticides and heavy metals. The rational was that discrete sampling of the latter could be implemented if required. Concentrations of all CoPC were at residential levels indicating more than acceptable concentrations of CoPC for a commercial development.

2.0 SITE LOCATION

YOUNG

LOT 1 DP 1202085
323 BOOROWA
STREET YOUNG
NSW 2594

3.0 SAMPLING RATIONALE AND DESIGN

Aerial Photography

29 January 1969

27 November 1970

17 September 1987

20 December 1997

St Albans Orchard
AST

Aerial photography shows that the commercialization of Lot 1 DP 1202085 has occurred over the past 25 years. Prior to the turn of this century, the site was residential. The photography is relatively poor definition and the previous consultants have addressed the infrastructure that emerged with commercial buildings and fuel storage over the past 25 years.

CSM Conceptual Site Model

The Conceptual Site Model is simplified by the previous detailed investigation, remediation validation and extensive reporting conducted by Envirowest Consulting P/L.

distal location of ground water sources. There are three bores within 0.5 km of the BE. SWL is nearest the surface at GW024496 – 2.7 m. Also, the contamination derives from above surface level. The point source is the dispenser.

Pesticide assessment of this property has been conducted and topsoil residues are indicated to be minimal. The potential contaminants deriving from diesel and potentially petrol or oil are: Total Recoverable Hydrocarbons; Monocyclic and Polycyclic Aromatic Hydrocarbons and Lead

There are further issues that significantly simplify the CSM.

1) No aerial evidence of further tank locations (although the pixilation is fair at best)
2) No evidence of Underground Storage Tanks (USTs)
3) No aerial evidence of rural vehicle accumulation.
4) No evidence of greater aggregation of buildings
5) Soil is a clay loam, albeit gravelly, topsoil is sandy favouring lateral movement.

The sole point source is refuelling primarily from the 2000 L Above-ground Storage Tank. Incidence of spillage is unlikely to exceed 0.1L/day

SAP Sampling & Analysis Plan

Sampling and Analysis Planning is confined to the area of the spill and a depth of 1.2 m bgsl/. Borehole placement is judgemental rather than systematic, and minimal for statistically meaning calculations. Six soil samples were taken from three depth intervals and two boreholes 3 m apart across a general 10 m^2 BE area. The rationale was that judgemental sampling of this specific and small areas ought to provide a worst-case scenario if indeed any should exist. No composite samples were prepared, nor replicates. Each sample was discrete so that physical and statistical dilution of thresholds is removed. Samples were dispatched with chain-of custody documentation for CoPc Analysis relevant for diesel fuel.

CoPC Contaminants of Potential Concern

Contaminants of Potential Concern are Lead (Pb), and hydrocarbons: specifically Total Recoverable Hydrocarbons (TRH) which are essentially aliphatic linear and branched alkanes, alkenes and alkynes; Monocyclic Aromatic Hydrocarbons (MAH) the key compounds being Benzene, Toluene, Ethylbenzene and Xylenes; as well as Polycyclic Aromatic Hydrocarbons (PAH) most common being Naphthalene and most environmentally problematic being benzo-a-pyrene (BaP)

This suite is preliminary and can be made more specific, should the preliminary data justify further investigation. Detection of volatile compounds at concentrations above threshold can trigger a more complex investigation.

Geology & Hydrogeology	Geology is basalt. Topsoil is dark reddish brown very fine sandy gravelly clay. There are 3 registered bores within 0.5 km of the site. All are moderate yielding at 0.3-0.9 L/s. with SWL at 3-30 m bgsl..
Site History	Site has been an orchard for 60 years or more. Diesel used has been via the former overhead Above Ground Storage Tank, that was situated 1 m E of the circular former corrugated iron rainwater tank on the NE side of the residence attached to the shed. The tank(s) has only recently been removed. It is conceivable that the second tank was used for petrol and later diesel. Aerial photography is inadequate to clearly ascertain the two tanks. The photo from 1989 appears to show the two tanks longitudinally N-S side-by-side and bounded to the W by a small round tank and to the S by a larger round tank, remnants of both remaining today.

4.0 RESULTS

Sample (mg/k)g	Lead	Moisture
D01-0.3	20	6.8
D01-0.3	20	
D0.1-0.6	14	13
D01-1.2	12	19
D02-0.3	52	12
D02-0.6	15	7.9
D02-1.2	12	22
HSL-A clay	300	

Heavy Metals: Lead (Pb)

Discussion

No statistical analysis is required. The highest concentration is <20% of threshold for residential development. The data indicate there is a 95% probability that the arithmetic average concentration of heavy metal will not exceed respective human health investigation levels for residential development. The Development Application Requirements are therefore met.

Total Recoverable Hydrocarbons (TRH) Volatile Fraction including vTRH & MAH & Naphthalene

Sample (mg/k)g	Depth (m)	TRH C_6-C_9	TRH C_6-C_{10}	vTRH C_6-C_{10} BTEX (F1)	Benzene	Toluene	Ethylbenzene	m+p-xylene	o-Xylene	Naphthalene	Total Xylenes
D01-0.3	0-0.3	<25	<25	<25	<0.2	<0.5	<1	<2	<1	<1	<1
D01-0.3	0-0.3	<25	<25	<25	<0.2	<0.5	<1	<2	<1	<1	<1
D0.1-0.6	0.3-0.6	<25	<25	<25	<0.2	<0.5	<1	<2	<1	<1	<1
D01-1.2	0.6-1.2	<25	<25	<25	<0.2	<0.5	<1	<2	<1	<1	<1
D02-0.3	0-0.3	<25	<25	<25	<0.2	<0.5	<1	<2	<1	<1	<1
D02-0.6	0.3-0.6	<25	<25	<25	<0.2	<0.5	<1	<2	<1	<1	<1
D02-1.2	0.6-1.2	<25	<25	<25	<0.2	<0.5	<1	<2	<1	<1	<1
HSL-A Residential Low density 0-1.0 m clay		230			1.2	1600	420			1.0	280
HSL-C Open Space Clay					3000						

Discussion

No statistical analysis of the concentrations of vTRH and BTEX is warranted. None of the constituent compounds analysed was detected Limits of Reading (LOR) of the analytical methods used to quantify them. The LORs are at or below HSL-A residential thresholds. The complete lack of vTRH and BTEX indicates that the spill was aged and that the volatile compounds have been stripped and biodegraded with time. It may also support the transition of the second tank to diesel and or the removal of one tank significantly before the other.

TRH Semi Volatile and Non-volatile Fraction: 0-0.3 m Topsoil

Sample (mg/k)g	TRH C_{10}-C_{14}	TRH C_{15}-C_{28}	TRH C_{29}-C_{36}	Total TRH (C_{10}-C_{36})	TRH >C_{10}-C_{16}	TRH >C_{10}-C_{16} Naphthalene (F2)	TRH >C_{16}-C_{34}	TRH >C_{34}-C_{40}	Total TRH (>C_{10}-C_{40})
D01-0.3	340	3900	120	4400	1100	1100	3100	100	4200
D02-0.3	140	750	120	1000	270	270	690	100	960
Mean	240	2325	120	2700	685	685	1895	100	2580
Std Dev.	141	2227	0	2404	587	587	1704	0	2291
95% UCL	871	12270	120	13434	3305	3305	9503	100	12809
95% UCL/HSL-V Inhalation					1180%				
95% UCL/HSL-V Contact					100%		211%	2%	
HSL-A Residential Low density 0-1.0 m clay					280				
HSL-A Residential Open Soil Screeening Levels for Direct Contact (mg/kg)					3300		4500	6300	

Discussion

The data indicate there is a 95% probability that the arithmetic average concentration of semi-volatile TRH in the topsoil at the middle of the former spill and even 3 m S of the middle will exceed respective human health investigation levels for residential development. We see also that assuming the spatial distribution is relatively uniform that over 3 m the concentration of svTRH falls more than 3-fold. This means that a residence ought not be withing 3 m of D01. The residence is 6 m from D01 and is the same rate of attrition applies the concentration of svTRH is likely to be around 73 mg/kg which is about 26% of the HSL-A vapour threshold.

TRH Semi Volatile and Non-volatile Fraction: 0.3-0.6 m Subsoil

Sample (mg/k)g	TRH C_{10}-C_{14}	TRH C_{15}-C_{28}	TRH C_{29}-C_{36}	Total TRH (C_{10}-C_{36})	TRH >C_{10}-C_{16}	TRH >C_{10}-C_{16} Naphthalene (F2)	TRH >C_{16}-C_{34}	TRH >C_{34}-C_{40}	Total TRH (>C_{10}-C_{40})
D01-0.6	130	2200	100	2300	570	570	1700	100	2300
D02-0.6	50	100	100	50	50	50	100	100	50
Mean	90	1150	100	1175	310	310	900	100	1175
Std Dev.	57	1485	0	1591	368	368	1131	0	1591
95% UCL	343	7780	100	8278	1952	1952	5951	100	8278
95% UCL/HSL-V Inhalation					697%				
95% UCL/HSL-V Contact					59%		132%	2%	
HSL-A Residential Low density 0-1.0 m clay					280				
HSL-A Residential Open Soil Screeening Levels for Direct Contact (mg/kg)					3300		4500	6300	

Discussion

The data indicate there is a 95% probability that the arithmetic average concentration of semi-volatile TRH in the upper subsoil around 0.45 m bgsl at the middle of the former spill will exceed respective human health investigation levels both inhalation and contact, for residential development. We can see that in the more clayey upper subsoil the lateral

travel is less than in in the topsoil because over the 3 m from D01 to D02 the fall in svTRH is more than 10-fold.

TRH Semi Volatile and Non-volatile Fraction: 0.6-1.2 m Subsoil

Sample (mg/k)g	TRH C_{10}-C_{14}	TRH C_{15}-C_{28}	TRH C_{29}-C_{36}	Total TRH (C_{10}-C_{36})	TRH >C_{10}-C_{16}	TRH >C_{10}-C_{16} - Naphthalene (F2)	TRH >C_{16}-C_{34}	TRH >C_{34}-C_{40}	Total TRH (>C_{10}-C_{40})
D01-1.2	50	200	100	200	50	50	160	100	160
D02-1.2	50	100	100	50	50	50	100	100	50
Mean	50	150	100	125	50	50	130	100	105
Std Dev.	0	71	0	106	0	0	42	0	78
95% UCL	50	466	100	599	50	50	319	100	452
95% UCL/HSL-V Inhalation					18%				
95% UCL/HSL-V Contact					2%		7%	2%	
HSL-A Residential Low density 0-1.0 m clay					280				
HSL-A Residential Open Soil Screeening Levels for Direct Contact (mg/kg)					3300		4500	6300	

Discussion

There is no detection of svTRH above the 280 mg/kg at D01 or D02 below 0.6 m depth.

Polycyclic Hydrocarbons (PAH)

Sample (mg/k)g	Naphthalene	Acenaph-thylene	Acenaph-thene	Fluorene	Phenanthrene	Anthracene	Fluoranthene	Pyrene	Benzo(a) anthracene
D01-0.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1
D01-0.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	0.2	<0.1
D0.1-0.6	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
D01-1.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
D02-0.3	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
D02-0.6	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
D02-1.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
HSL-A clay	1								
SHSCL- HSL-A	1400								

Sample (mg/k)g	Chrysene	Benzo(b,j+k) fluoranthene	Benzo(a)pyrene	Indeno(1,2,3-c,d)pyrene	Dibenzo(a,h) anthracene	Benzo(g,h,i) perylene	Total +ve PAH's	Benzo(a)pyrene TEQ calc (zero)	Benzo(a)pyrene TEQ calc(half)
D01-0.3	<0.1	<0.2	<0.05	<0.1	<0.1	<0.1	0.1	<0.5	<0.5
D01-0.3	<0.1	<0.2	<0.05	<0.1	<0.1	<0.1	0.2	<0.5	<0.5
D0.1-0.6	<0.1	<0.2	<0.05	<0.1	<0.1	<0.1	<0.05	<0.5	<0.5
D01-1.2	<0.1	<0.2	<0.05	<0.1	<0.1	<0.1	<0.05	<0.5	<0.5
D02-0.3	<0.1	<0.2	<0.05	<0.1	<0.1	<0.1	<0.05	<0.5	<0.5
D02-0.6	<0.1	<0.2	<0.05	<0.1	<0.1	<0.1	<0.05	<0.5	<0.5
D02-1.2	<0.1	<0.2	<0.05	<0.1	<0.1	<0.1	<0.05	<0.5	<0.5
Soil Health Screening Levels for Direct Contact (mg/kg) - Residential HSL - A (Low Density)									

Discussion

The data indicate there is a 95% probability that the arithmetic average concentration of PAH in will not exceed respective human health investigation levels for residential development.

Abbreviations

AST Above-ground Storage Tank HIL Health Investigation Level HSL Health Screening Level GL Guideline Threshold CAGL Composite Adjusted Guideline Level 95% UCL 95% Upper Confidence Limit OCP Organochlorine Pesticide OPP Organophosphate Pesticides LOR Limit of Recording

5.0 CONCLUSIONS & RECOMMENDATIONS

CoPC, specifically svTRH concentration was above relevant threshold concentrations in topsoil and upper subsoil discrete soil samples taken in the location of the former 2kL diesel/petrol Above-ground Storage Tank(s) (AST) E of the residence abutting with the main shed on **LOT 201 DP1101736, 501 CANOBOLAS ROAD ORANGE NSW 2800.**

However, the rate of decrease both vertically and horizontally of svTRH concentration was 3.7-11.4-fold between D01 at the middle and D02 3 m further S of D01. The magnitude and spatial distribution of svTRH is problematic for a residential build within 3 m of D01 or the dispensing point of the former tanks.

The current residence is 6 m W of D01 and concentrations of svTRH deriving from the former diesel/petrol ASTs are expected to be below the HSL-A vapour threshold of 280 mg/kg.

There is a concrete plinth of a former rainwater tank between the ASTs and the estimated periphery of the spill.

Should extension to the E of the existing residence be planned. It is recommended that the soil up to 0.5 m be dug out and remediated and Virgin Excavated Material inserted and compacted in 150 mm lifts. The remediated topsoil can be reinstated or used elsewhere on the orchard once the residual concentration of svTRH falls below the HSL-A for low density residential.

6.0 LOCATION SKETCH

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Sample	Elev.(m)	Latitude	Longitude	Depth	Soil Type	Coasre Aggregate	Soil Colour	Texture	Moisture
D01-0.3	1095±10	33°31.703	149°04.639	0.15	Very Fine Sandy Gravelly Clay	1-3 mm 20%	Dark Reddish Brown	Firm	Moist
D01-0.6				0.45	Silty Clay	1-2 mm <20%	Brownish Red	Stiff	Moist
D01-1.2				0.9	Silty Clay	1-2 mm <20%	Dark Brownish Red	Stiff	Moist
D02-0.3	1088±10	33°31.705	149°04.638	0.15	Clayey Silty Sand	1-2 mm <20%	Dark Reddish Brown	Firm	Moist
D02-0.6				0.45	Silty Clay	1-2 mm <20%	Dark Brownish Red	Very Stiff	Moist
D02-1.2				0.9	Silty Clay	1-2 mm <20%	Dark Brownish Red	Stiff	Moist

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geotechnical
environmental

5.1 FIELD LOG

Date: 28/02/2025

Customer Job: 501CO
Job Number: 25016
Site Address: LOT 1 DP 1202085 323 BOOROWA STREET YOUNG NSW 2594

Borehole: D01; D02
Surface RL: 1098-1095
Latitude: -33°31.703-5
Longitude: 148°04.638-9

Water	Depth (m)	DCP (blows)	PP (kPa)	Sample	Classification Code	Material Description	Moisture	Linear Shrinkage (%)	Liquid Limit (%)	Density Consistency	Fill
	0.1 0.2 0.3			D01-0.3		Very Fine Sandy Gravelly Clay Dark Reddish Brown co.ag. 1-3 mm 20%	M			F	
	0.4 0.5 0.6			D01-0.6		Silty Clay, co.ag. 1-2 mm <20% Brownish red	M			St	
	0.7 0.8 0.9			D01-1.2		Silty Clay, co.ag. 1-2 mm 20% Dark Brownish Red	M			St	
	1.0 1.1 1.2										
						End of Borehole @ 1.2 m bgsl D02					
	0.1 0.2 0.3			D02-0.3		Clayey Silty Sand, Dark Reddish Brown	M			F	
	0.4 0.5 0.6			D02-0.6		Silty Clay, Brownish Red	M			VSt	
	0.7 0.8 0.9			D02-1.2		Silty Clay, Dark Brownish Red-Red	M			St	
	1.0 1.1 1.2										
						End of Borehole @ 1.2 m bgsl					

WT – Water Table **UTP** – Unable to pernitrate **DCP** – 9kg Dynamic Cone Penetrometer **PP**- Pocket Penetrometer

AND – Density Index vs Approx. Penetrometer results

DENSITY	Density Index	DCP Blow Count (blows/100mm)
VL - Very Loose	< 15 %	< 1
L - Loose	15 – 35 %	1 – 3
MD – Medium Dense	35 – 65 %	3 – 9
D - Dense	65 – 85 %	9 – 15
VD - Very Dense	> 65 – 85 %	> 15

SILTS & CLAY – Cu vs Approx. Penetrometer results

CONSISTENCY	Undrained Shear Strength (kPa)	DCP Blow Count (blows/100mm)	PP Dial Indicator
VS – Very Soft	0 – 12	< 1	0 - 0.2
S – Soft	12 - 25	1 - 2	0.2 - 0.5
F – Firm	25 – 50	2 – 3	0.5 - 1.0
St – Stiff	50 - 100	3 – 5	1.0 - 2.0
VSt – Very Stiff	100 – 200	5 – 8	3.0 - 4.0
H – Hard	> 200	> 8	> 4.0

MOISTURE

D – Dry
M – Moist
W – Wet
W_P - Plastic Limit
W_L – Liquid Limit

7.0 COC

CHAIN OF CUSTODY - Client

ENVIROLAB GROUP - National phone number 1300 42 43 44

Sydney Lab - Envirolab Services
12 Ashley St, Chatswood, NSW 2067
Ph 02 9910 6200 / sydney@envirolab.com.au

Perth Lab - MPL Laboratories
16-18 Hayden Crt Myaree, WA 6154
Ph 08 9317 2505 / lab@mpl.com.au

Melbourne Lab - Envirolab Services
1A Dalmore Drive Scoresby VIC 3179
Ph 03 9763 2500 / melbourne@envirolab.com.au

Brisbane Office - Envirolab Services
20a, 10-20 Depot St, Banyo, QLD 4014
Ph 07 3266 9532 / brisbane@envirolab.com.au

Adelaide Office - Envirolab Services
7a The Parade, Norwood, SA 5067
Ph 0406 350 706 / adelaide@envirolab.com.au

Client: Enviroseer	Client Project Name / Number / Site etc (ie report title): 501 Canobolas Road ORANGE
Contact Person: James Milson	
Project Mgr: James	PO No.: 25017
Sampler: James	Envirolab Quote No. : see JEREMY FAIRCLOTH 27/2/24
Address: 3004 Cargo Road CARGO 2800	Date results required: standard
	Or choose: standard / same day / 1 day / 2 day / 3 day
	Note: Inform lab in advance if urgent turnaround is required - surcharges apply
Phone: NA Mob: 04 2861 9282	Report format: esdat / equis /
Email: info@enviroseer.com.au	Lab Comments:

Sample information					Tests Required								Comments
Envirolab Sample ID	Client Sample ID or information	Depth (m)	Date sampled	Type of sample	COMBO 2 : TRH BTEX PAH Pb								Provide as much information about the sample as you can
1	D01-0.3	0-0.3	4-Mar-25	soil	x								SILTY CLAYEY GRAVELLY SAND, dark reddish brown, dry, vstiff 1084.6 33°31.305 149°04.963
2	D01-0.6	0.3-0.6	4-Mar-25	soil	x								SANDY GRAVELLY CLAY, brownish red, damp, hard, co.ag. 1-2 mm 30%
3	D01-1.2	0.6-1.2	4-Mar-25	soil	x								SILTY _FINE SANDY GRAVELLY CLAY, dark red, co.ag. 1-2 mm 30%
4	D02-0.3	0-0.3	4-Mar-25	soil	x								CLAYEY GRAVELLY SAND, dark brown, co.ag. 1-2 mm 30% stiff, damp 1087.4 33°31.316 149°04.975
5	D02-0.6	0.3-0.6	4-Mar-25	soil	x								GRAVELLY FINE SANDY CLAY, reddish brown, co.ag. 1-6 mm 50% firm, moist
6	D02-1.2	0.6-1.2	4-Mar-25	soil	x								GRAVELLY SILTY CLAY, strong brown, co.ag. 1-4 mm 30% stiff, moist

ENVIROLAB GROUP — Envirolab Services, 12 Ashley St, Chatswood NSW 2067, Ph: (02) 9910 6200
JOB NO: 37495
Date Received: 7/3/25
Time Received: 0900
Received By: KW
Temp: Cool/Ambient
Cooling: Icepack 6°C
Security: Intact / Broken / None

Relinquished by (Company):	Enviroseer	Received by (Company):	ELS SYD
Print Name:	James Milson	Print Name:	Katy Wayne
Date & Time:	5/03/2025 17:00	Date & Time:	7/3/25 0900
Signature:		Signature:	

Lab use only:
Samples Received: Cool or Ambient (circle one)
Temperature Received at: 6°C (if applicable)
Transported by: Hand delivered / courier

White - Lab copy / Blue - Client copy / Pink - Retain in Book

Page No:

8.0 SAMPLE RECEIPT

Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
customerservice@envirolab.com.au
www.envirolab.com.au

SAMPLE RECEIPT ADVICE

Client Details	
Client	Enviroseer
Attention	James Milson

Sample Login Details	
Your reference	501 Canobolas Road, Orange
Envirolab Reference	374955
Date Sample Received	07/03/2025
Date Instructions Received	07/03/2025
Date Results Expected to be Reported	14/03/2025

Sample Condition	
Samples received in appropriate condition for analysis	Yes
No. of Samples Provided	6 Soil
Turnaround Time Requested	Standard
Temperature on Receipt (°C)	6
Cooling Method	Ice Pack
Sampling Date Provided	YES

Comments
Nil

Please direct any queries to:

Aileen Hie	Jacinta Hurst
Phone: 02 9910 6200	Phone: 02 9910 6200
Fax: 02 9910 6201	Fax: 02 9910 6201
Email: ahie@envirolab.com.au	Email: jhurst@envirolab.com.au

Invoice will be emailed separately. Results will be reported only if payment has been made. Details of analysis on the following page:

Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
customerservice@envirolab.com.au
www.envirolab.com.au

Sample ID	vTRH(C6-C10)/BTEXN in Soil	svTRH (C10-C40) in Soil	PAHs in Soil	Lead in soil
D01-0.3-0-0.3	✓	✓	✓	✓
D0.1-0.6-0.3-0.6	✓	✓	✓	✓
D01-1.2-0.6-1.2	✓	✓	✓	✓
D02-0.3-0-0.3	✓	✓	✓	✓
D02-0.6-0.3-0.6	✓	✓	✓	✓
D02-1.2-0.6-1.2	✓	✓	✓	✓

The '✓' indicates the testing you have requested. **THIS IS NOT A REPORT OF THE RESULTS.**

Additional Info
Sample storage - Waters are routinely disposed of approximately 1 month and soils approximately 2 months from receipt.
Requests for longer term sample storage must be received in writing.
Please contact the laboratory immediately if observed settled sediment present in water samples is to be included in the extraction and/or analysis (exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, Total Recoverable metals and PFAS analysis where solids are included by default.
TAT for Micro is dependent on incubation. This varies from 3 to 6 days.

9.0 CERTIFICATE OF ANALYSIS (KEY DATA)

Envirolab Services Pty Ltd
ABN 37 112 535 645
12 Ashley St Chatswood NSW 2067
ph 02 9910 6200 fax 02 9910 6201
customerservice@envirolab.com.au
www.envirolab.com.au

CERTIFICATE OF ANALYSIS 374955

Client Details	
Client	Enviroseer
Attention	James Milson
Address	PO Box 2519, Orange, NSW, 2800

Sample Details	
Your Reference	501 Canobolas Road, Orange
Number of Samples	6 Soil
Date samples received	07/03/2025
Date completed instructions received	07/03/2025

Analysis Details

Please refer to the following pages for results, methodology summary and quality control data.
Samples were analysed as received from the client. Results relate specifically to the samples as received.
Results are reported on a dry weight basis for solids and on an as received basis for other matrices.
Please refer to the last page of this report for any comments relating to the results.

Report Details	
Date results requested by	14/03/2025
Date of Issue	19/03/2025

NATA Accreditation Number 2901. This document shall not be reproduced except in full.
Accredited for compliance with ISO/IEC 17025 - Testing. **Tests not covered by NATA are denoted with ***

Results Approved By
Dragana Tomas, Senior Chemist
Giovanni Agosti, Group Technical Manager
Timothy Toll, Senior Chemist

Authorised By
Nancy Zhang, Laboratory Manager

vTRH(C6-C10)/BTEXN in Soil						
Our Reference		374955-1	374955-2	374955-3	374955-4	374955-5
Your Reference	UNITS	D01-0.3	D0.1-0.6	D01-1.2	D02-0.3	D02-0.6
Depth		0-0.3	0.3-0.6	0.6-1.2	0-0.3	0.3-0.6
Date Sampled		04/03/2025	04/03/2025	04/03/2025	04/03/2025	04/03/202
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	10/03/2025	10/03/2025	10/03/2025	10/03/2025	10/03/202
Date analysed	-	11/03/2025	11/03/2025	11/03/2025	11/03/2025	11/03/202
TRH C_6 - C_9	mg/kg	<25	<25	<25	<25	<25
TRH C_6 - C_{10}	mg/kg	<25	<25	<25	<25	<25
vTRH C_6 - C_{10} less BTEX (F1)	mg/kg	<25	<25	<25	<25	<25
Benzene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Toluene	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Ethylbenzene	mg/kg	<1	<1	<1	<1	<1
m+p-xylene	mg/kg	<2	<2	<2	<2	<2
o-Xylene	mg/kg	<1	<1	<1	<1	<1
Naphthalene	mg/kg	<1	<1	<1	<1	<1
Total +ve Xylenes	mg/kg	<1	<1	<1	<1	<1
Surrogate aaa-Trifluorotoluene	%	88	77	88	97	99

vTRH(C6-C10)/BTEXN in Soil		
Our Reference		374955-6
Your Reference	UNITS	D02-1.2
Depth		0.6-1.2
Date Sampled		04/03/2025
Type of sample		Soil
Date extracted	-	10/03/2025
Date analysed	-	11/03/2025
TRH C_6 - C_9	mg/kg	<25
TRH C_6 - C_{10}	mg/kg	<25
vTRH C_6 - C_{10} less BTEX (F1)	mg/kg	<25
Benzene	mg/kg	<0.2
Toluene	mg/kg	<0.5
Ethylbenzene	mg/kg	<1
m+p-xylene	mg/kg	<2
o-Xylene	mg/kg	<1
Naphthalene	mg/kg	<1
Total +ve Xylenes	mg/kg	<1
Surrogate aaa-Trifluorotoluene	%	87

svTRH (C10-C40) in Soil						
Our Reference		374955-1	374955-2	374955-3	374955-4	374955-5
Your Reference	UNITS	D01-0.3	D0.1-0.6	D01-1.2	D02-0.3	D02-0.6
Depth		0-0.3	0.3-0.6	0.6-1.2	0-0.3	0.3-0.6
Date Sampled		04/03/2025	04/03/2025	04/03/2025	04/03/2025	04/03/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	10/03/2025	10/03/2025	10/03/2025	10/03/2025	10/03/2025
Date analysed	-	11/03/2025	11/03/2025	11/03/2025	11/03/2025	11/03/2025
TRH C_{10} - C_{14}	mg/kg	270	130	<50	140	<50
TRH C_{15} - C_{28}	mg/kg	3,000	2,200	200	750	<100
TRH C_{29} - C_{36}	mg/kg	130	<100	<100	120	<100
Total +ve TRH (C10-C36)	mg/kg	3,400	2,300	200	1,000	<50
TRH >C_{10}-C_{16}	mg/kg	880	570	<50	270	<50
TRH >C_{10}-C_{16} less Naphthalene (F2)	mg/kg	880	570	<50	270	<50
TRH >C_{16}-C_{34}	mg/kg	2,400	1,700	160	690	<100
TRH >C_{34}-C_{40}	mg/kg	<100	<100	<100	<100	<100
Total +ve TRH (>C10-C40)	mg/kg	3,300	2,300	160	960	<50
Surrogate o-Terphenyl	%	#	#	101	#	85

svTRH (C10-C40) in Soil		
Our Reference		374955-6
Your Reference	UNITS	D02-1.2
Depth		0.6-1.2
Date Sampled		04/03/2025
Type of sample		Soil
Date extracted	-	10/03/2025
Date analysed	-	11/03/2025
TRH C_{10} - C_{14}	mg/kg	<50
TRH C_{15} - C_{28}	mg/kg	<100
TRH C_{29} - C_{36}	mg/kg	<100
Total +ve TRH (C10-C36)	mg/kg	<50
TRH >C_{10}-C_{16}	mg/kg	<50
TRH >C_{10}-C_{16} less Naphthalene (F2)	mg/kg	<50
TRH >C_{16}-C_{34}	mg/kg	<100
TRH >C_{34}-C_{40}	mg/kg	<100
Total +ve TRH (>C10-C40)	mg/kg	<50
Surrogate o-Terphenyl	%	83

PAHs in Soil						
Our Reference		374955-1	374955-2	374955-3	374955-4	374955-5
Your Reference	UNITS	D01-0.3	D0.1-0.6	D01-1.2	D02-0.3	D02-0.6
Depth		0-0.3	0.3-0.6	0.6-1.2	0-0.3	0.3-0.6
Date Sampled		04/03/2025	04/03/2025	04/03/2025	04/03/2025	04/03/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date extracted	-	10/03/2025	10/03/2025	10/03/2025	10/03/2025	10/03/2025
Date analysed	-	10/03/2025	10/03/2025	10/03/2025	10/03/2025	10/03/2025
Naphthalene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Acenaphthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluorene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Phenanthrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Fluoranthene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Pyrene	mg/kg	0.1	<0.1	<0.1	<0.1	<0.1
Benzo(a)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Chrysene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2	<0.2	<0.2	<0.2	<0.2
Benzo(a)pyrene	mg/kg	<0.05	<0.05	<0.05	<0.05	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1	<0.1	<0.1	<0.1	<0.1
Total +ve PAH's	mg/kg	0.1	<0.05	<0.05	<0.05	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5	<0.5	<0.5	<0.5	<0.5
Surrogate p-Terphenyl-d14	%	83	76	75	71	76

PAHs in Soil		
Our Reference		374955-6
Your Reference	UNITS	D02-1.2
Depth		0.6-1.2
Date Sampled		04/03/2025
Type of sample		Soil
Date extracted	-	10/03/2025
Date analysed	-	10/03/2025
Naphthalene	mg/kg	<0.1
Acenaphthylene	mg/kg	<0.1
Acenaphthene	mg/kg	<0.1
Fluorene	mg/kg	<0.1
Phenanthrene	mg/kg	<0.1
Anthracene	mg/kg	<0.1
Fluoranthene	mg/kg	<0.1
Pyrene	mg/kg	<0.1
Benzo(a)anthracene	mg/kg	<0.1
Chrysene	mg/kg	<0.1
Benzo(b,j+k)fluoranthene	mg/kg	<0.2
Benzo(a)pyrene	mg/kg	<0.05
Indeno(1,2,3-c,d)pyrene	mg/kg	<0.1
Dibenzo(a,h)anthracene	mg/kg	<0.1
Benzo(g,h,i)perylene	mg/kg	<0.1
Total +ve PAH's	mg/kg	<0.05
Benzo(a)pyrene TEQ calc (zero)	mg/kg	<0.5
Benzo(a)pyrene TEQ calc(half)	mg/kg	<0.5
Benzo(a)pyrene TEQ calc(PQL)	mg/kg	<0.5
Surrogate p-Terphenyl-d14	%	66

Lead in soil						
Our Reference		374955-1	374955-2	374955-3	374955-4	374955-5
Your Reference	UNITS	D01-0.3	D0.1-0.6	D01-1.2	D02-0.3	D02-0.6
Depth		0-0.3	0.3-0.6	0.6-1.2	0-0.3	0.3-0.6
Date Sampled		04/03/2025	04/03/2025	04/03/2025	04/03/2025	04/03/2025
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	10/03/2025	10/03/2025	10/03/2025	10/03/2025	10/03/2025
Date analysed	-	10/03/2025	10/03/2025	10/03/2025	10/03/2025	10/03/2025
Lead	mg/kg	20	14	12	52	15

Lead in soil		
Our Reference		374955-6
Your Reference	UNITS	D02-1.2
Depth		0.6-1.2
Date Sampled		04/03/2025
Type of sample		Soil
Date prepared	-	10/03/2025
Date analysed	-	10/03/2025
Lead	mg/kg	12

Moisture						
Our Reference		374955-1	374955-2	374955-3	374955-4	374955-5
Your Reference	UNITS	D01-0.3	D0.1-0.6	D01-1.2	D02-0.3	D02-0.6
Depth		0-0.3	0.3-0.6	0.6-1.2	0-0.3	0.3-0.6
Date Sampled		04/03/2025	04/03/2025	04/03/2025	04/03/2025	04/03/202
Type of sample		Soil	Soil	Soil	Soil	Soil
Date prepared	-	10/03/2025	10/03/2025	10/03/2025	10/03/2025	10/03/202
Date analysed	-	11/03/2025	11/03/2025	11/03/2025	11/03/2025	11/03/202
Moisture	%	6.8	13	19	12	7.9

Moisture		
Our Reference		374955-6
Your Reference	UNITS	D02-1.2
Depth		0.6-1.2
Date Sampled		04/03/2025
Type of sample		Soil
Date prepared	-	10/03/2025
Date analysed	-	11/03/2025
Moisture	%	22

Method ID	Methodology Summary
Inorg-008	Moisture content determined by heating at 105+/-5 °C for a minimum of 12 hours.
Metals-020	Determination of various metals by ICP-AES. Total Phosphate determined stochiometrically from Phosphorus (assumed to be present as Phosphate). Where salts (oxides, chlorides etc.) are calculated from the element concentration stoichiometrically there is no guarantee that the salt form is completely soluble in the acids used in the preparation.
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis.
Org-020	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-FID. F2 = (>C10-C16)-Naphthalene as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater (HSLs Tables 1A (3, 4)). Note Naphthalene is determined from the VOC analysis. Note, the Total +ve TRH PQL is reflective of the lowest individual PQL and is therefore "Total +ve TRH" is simply a sum of the positive individual TRH fractions (>C10-C40).
Org-022/025	Soil samples are extracted with Dichloromethane/Acetone and waters with Dichloromethane and analysed by GC-MS and/or GC-MS/MS. Benzo(a)pyrene TEQ as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater - 2013. For soil results:- 1. 'EQ PQL'values are assuming all contributing PAHs reported as <PQL are actually at the PQL. This is the most conservative approach and can give false positive TEQs given that PAHs that contribute to the TEQ calculation may not be present. 2. 'EQ zero'values are assuming all contributing PAHs reported as <PQL are zero. This is the least conservative approach and is more susceptible to false negative TEQs when PAHs that contribute to the TEQ calculation are present but below PQL. 3. 'EQ half PQL'values are assuming all contributing PAHs reported as <PQL are half the stipulated PQL. Hence a mid-point between the most and least conservative approaches above. Note, the Total +ve PAHs PQL is reflective of the lowest individual PQL and is therefore "Total +ve PAHs" is simply a sum of the positive individual PAHs.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS.

Method ID	Methodology Summary
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater.
Org-023	Soil samples are extracted with methanol and spiked into water prior to analysing by purge and trap GC-MS. Water samples are analysed directly by purge and trap GC-MS. F1 = (C6-C10)-BTEX as per NEPM B1 Guideline on Investigation Levels for Soil and Groundwater. Note, the Total +ve Xylene PQL is reflective of the lowest individual PQL and is therefore "Total +ve Xylenes" is simply a sum of the positive individual Xylenes.

QUALITY CONTROL: vTRH(C6-C10)/BTEXN in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-9	374955-2
Date extracted	-			10/03/2025	1	10/03/2025	10/03/2025		10/03/2025	10/03/2025
Date analysed	-			11/03/2025	1	11/03/2025	11/03/2025		11/03/2025	11/03/2025
TRH C_6 - C_9	mg/kg	25	Org-023	<25	1	<25	<25	0	104	99
TRH C_6 - C_{10}	mg/kg	25	Org-023	<25	1	<25	<25	0	104	99
Benzene	mg/kg	0.2	Org-023	<0.2	1	<0.2	<0.2	0	104	100
Toluene	mg/kg	0.5	Org-023	<0.5	1	<0.5	<0.5	0	105	98
Ethylbenzene	mg/kg	1	Org-023	<1	1	<1	<1	0	101	96
m+p-xylene	mg/kg	2	Org-023	<2	1	<2	<2	0	106	101
o-Xylene	mg/kg	1	Org-023	<1	1	<1	<1	0	107	101
Naphthalene	mg/kg	1	Org-023	<1	1	<1	<1	0	[NT]	[NT]
Surrogate aaa-Trifluorotoluene	%		Org-023	105	1	88	89	1	102	99

QUALITY CONTROL: svTRH (C10-C40) in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-9	374955-2
Date extracted	-			10/03/2025	1	10/03/2025	10/03/2025		10/03/2025	10/03/2025
Date analysed	-			10/03/2025	1	11/03/2025	11/03/2025		10/03/2025	11/03/2025
TRH C_{10} - C_{14}	mg/kg	50	Org-020	<50	1	270	340	23	105	#
TRH C_{15} - C_{28}	mg/kg	100	Org-020	<100	1	3000	3900	26	96	#
TRH C_{29} - C_{36}	mg/kg	100	Org-020	<100	1	130	120	8	114	86
TRH >C_{10}-C_{16}	mg/kg	50	Org-020	<50	1	880	1100	22	105	#
TRH >C_{16}-C_{34}	mg/kg	100	Org-020	<100	1	2400	3100	25	96	#
TRH >C_{34}-C_{40}	mg/kg	100	Org-020	<100	1	<100	<100	0	114	86
Surrogate o-Terphenyl	%		Org-020	82	1	#	#		86	#

QUALITY CONTROL: PAHs in Soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-9	374955-2
Date extracted	-			10/03/2025	1	10/03/2025	10/03/2025		10/03/2025	10/03/2025
Date analysed	-			10/03/2025	1	10/03/2025	10/03/2025		10/03/2025	10/03/2025
Naphthalene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	70	72
Acenaphthylene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Acenaphthene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	64	70
Fluorene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	70	74
Phenanthrene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	70	76
Anthracene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Fluoranthene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	72	78
Pyrene	mg/kg	0.1	Org-022/025	<0.1	1	0.1	0.2	67	78	78
Benzo(a)anthracene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Chrysene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	94	88
Benzo(b,j+k)fluoranthene	mg/kg	0.2	Org-022/025	<0.2	1	<0.2	<0.2	0	[NT]	[NT]
Benzo(a)pyrene	mg/kg	0.05	Org-022/025	<0.05	1	<0.05	<0.05	0	72	86
Indeno(1,2,3-c,d)pyrene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Dibenzo(a,h)anthracene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Benzo(g,h,i)perylene	mg/kg	0.1	Org-022/025	<0.1	1	<0.1	<0.1	0	[NT]	[NT]
Surrogate p-Terphenyl-d14	%		Org-022/025	81	1	83	78	6	87	86

QUALITY CONTROL: Lead in soil						Duplicate			Spike Recovery %	
Test Description	Units	PQL	Method	Blank	#	Base	Dup.	RPD	LCS-9	374955-2
Date prepared	-			10/03/2025	1	10/03/2025	10/03/2025		10/03/2025	10/03/2025
Date analysed	-			10/03/2025	1	10/03/2025	10/03/2025		10/03/2025	10/03/2025
Lead	mg/kg	1	Metals-020	<1	1	20	20	0	103	94

Result Definitions

NT	Not tested
NA	Test not required
INS	Insufficient sample for this test
PQL	Practical Quantitation Limit
<	Less than
>	Greater than
RPD	Relative Percent Difference
LCS	Laboratory Control Sample
NS	Not specified
NEPM	National Environmental Protection Measure
NR	Not Reported

Quality Control Definitions

Blank	This is the component of the analytical signal which is not derived from the sample but from reagents, glassware etc, can be determined by processing solvents and reagents in exactly the same manner as for samples.
Duplicate	This is the complete duplicate analysis of a sample from the process batch. If possible, the sample selected should be one where the analyte concentration is easily measurable.
Matrix Spike	A portion of the sample is spiked with a known concentration of target analyte. The purpose of the matrix spike is to monitor the performance of the analytical method used and to determine whether matrix interferences exist.
LCS (Laboratory Control Sample)	This comprises either a standard reference material or a control matrix (such as a blank sand or water) fortified with analytes representative of the analyte class. It is simply a check sample.
Surrogate Spike	Surrogates are known additions to each sample, blank, matrix spike and LCS in a batch, of compounds which are similar to the analyte of interest, however are not expected to be found in real samples.

Australian Drinking Water Guidelines recommend that Thermotolerant Coliform, Faecal Enterococci, & E.Coli levels are less than 1cfu/100mL. The recommended maximums are taken from "Australian Drinking Water Guidelines", published by NHMRC & ARMC 2011.

The recommended maximums for analytes in urine are taken from "2018 TLVs and BEIs", as published by ACGIH (where available). Limit provided for Nickel is a precautionary guideline as per Position Paper prepared by AIOH Exposure Standards Committee, 2016.

Guideline limits for Rinse Water Quality reported as per analytical requirements and specifications of AS 4187, Amdt 2 2019, Table 7.2

Laboratory Acceptance Criteria

Duplicate sample and matrix spike recoveries may not be reported on smaller jobs, however, were analysed at a frequency to meet or exceed NEPM requirements. All samples are tested in batches of 20. The duplicate sample RPD and matrix spike recoveries for the batch were within the laboratory acceptance criteria.

Filters, swabs, wipes, tubes and badges will not have duplicate data as the whole sample is generally extracted during sample extraction.

Spikes for Physical and Aggregate Tests are not applicable.

For VOCs in water samples, three vials are required for duplicate or spike analysis.

Duplicates: >10xPQL - RPD acceptance criteria will vary depending on the analytes and the analytical techniques but is typically in the range 20%-50% – see ELN-P05 QA/QC tables for details; <10xPQL - RPD are higher as the results approach PQL and the estimated measurement uncertainty will statistically increase.

Matrix Spikes, LCS and Surrogate recoveries: Generally 70-130% for inorganics/metals (not SPOCAS); 60-140% for organics/SPOCAS (+/-50% surrogates) and 10-140% for labile SVOCs (including labile surrogates), ultra traoe organics and speciated phenols is acceptable.

In circumstances where no duplicate and/or sample spike has been reported at 1 in 10 and/or 1 in 20 samples respectively, the sample volume submitted was insufficient in order to satisfy laboratory QA/QC protocols.

When samples are received where certain analytes are outside of recommended technical holding times (THTs), the analysis has proceeded. Where analytes are on the verge of breaching THTs, every effort will be made to analyse within the THT or as soon as practicable.

Where sampling dates are not provided, Envirolab are not in a position to comment on the validity of the analysis where recommended technical holding times may have been breached.

Where matrix spike recoveries fall below the lower limit of the acceptance criteria (e.g. for non-labile or standard Organics <60%), positive result(s) in the parent sample will subsequently have a higher than typical estimated uncertainty (MU estimates supplied on request) and in these circumstances the sample result is likely biased significantly low.

Measurement Uncertainty estimates are available for most tests upon request.

Analysis of aqueous samples typically involves the extraction/digestion and/or analysis of the liquid phase only (i.e. NOT any settled sediment phase but inclusive of suspended particles if present), unless stipulated on the Envirolab COC and/or by correspondence. Notable exceptions include certain Physical Tests (pH/EC/BOD/COD/Apparent Colour etc.), Solids testing, total recoverable metals and PFAS where solids are included by default.

Samples for Microbiological analysis (not Amoeba forms) received outside of the 2-8°C temperature range do not meet the ideal cooling conditions as stated in AS2031-2012.

Report Comments

TRH Soil C10-C40 NEPM - # Percent recovery for the surrogate/matrix spike is not possible to report as the high concentration of analytes in sample 374955-1,1d,2,2ms,4 have caused interference.

CONDITIONS OF THE RECOMMENDATIONS

- This is a Level 1 classification report generally in accordance with NSW EPA and NEPM guidance on contaminated site investigation and should be sufficient for a qualified person to ascertain the consequence of its findings.

- This site contamination report was completed by an experienced soil technician and does not make any allowance for the lot outside of the building envelope and house yard.

- The advice given in this report assumes that the test results are representative of the overall subsurface conditions. However, it should be noted that actual conditions in some parts of the site may differ from those found in the boreholes. If excavations reveal soil conditions significantly different from those shown in our attached Borehole Log(s), enviroseer should be consulted and excavations stopped immediately.

- Any sketches in this report should be considered as only an approximate pictorial evidence of our work. Therefore, unless otherwise stated, any dimensions or slope information should not be used for any building cost calculations and/or positioning of the building. Dimensions on logs are correct.

REPORT LIMITATIONS

The investigations addressed in this report are the minimum required to satisfy the statistical limits for a designated area. They are not intended nor designed to locate all possible ground conditions on the site. It is not possible to identify all possible ground conditions. Further, while anomalies are usually detected by site visit and historical searches, the potential for undisclosed hotspots of CoPC arising from undisclosed spillage or dumping cannot be entirely removed.

The advice and recommendations contained in this report are based on analyses obtained from the samples tested, and on the assumption that those test results are representative of the overall ground conditions of the entire building envelope and house yard. The actual conditions in some parts of the site might differ from those tested.

The scope and relevance of the advice provided in the report is subject to restrictions and limitations. enviroseer did not perform a complete assessment of all possible conditions, contaminants or circumstances that may exist on the site. If a service is not expressly indicated that means it has not been provided, and the reader should not assume that it has been. If a matter is not specifically addressed then enviroseer has not made a determination in relation to it, and the reader should not assume that it has.

Where data and information has been supplied by the client or a third party, the accuracy of the advice and recommendations in this report is dependent upon the accuracy of that data and information. enviroseer is not responsible for verifying the accuracy of data or information provided to it by third parties. enviroseer is not liable nor responsible for inaccurate advice provided upon reliance of incomplete or inaccurate data supplied by third parties.

Remediation and validation report

327 Boorowa Street, Young NSW

Ref: R12147val
Date: 19 December 2012

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Interested authorities:	Young Shire Council
Report number:	R12147val
Date:	19 December 2012

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Executive summary

Background

A new commercial centre is proposed for 327 Boorowa Street, Young NSW. The site was formally used as a Department of Infrastructure Planning and Natural Resources (DIPNR) machinery storage depot with fuel storage facilities.

A preliminary contamination investigation of the site was undertaken by Envirowest Consulting Pty Ltd in August 2005 (Report R5164c). The investigation identified five localised areas of soil contamination on the site from past activities. The contamination was associated with a vehicle service ramp, fibro shed, diesel AST and two surface stained bare areas. The levels of TPH (C10-C36) in these areas exceeded the adopted thresholds and are unsuitable for commercial land-use. TPH (C10-C36) was identified as the contaminant of concern. Remediation of the contaminated areas was recommended. Additional recommendations from the preliminary contamination report were analysis of the soil beneath the fibro shed for organochlorine chlorine pesticides (OCP) and metals and a site inspection for fibro fragments after the removal of the shed.

A Remediation Action Plan (RAP) was prepared in May 2012 (Report R12147rap) to develop an effective plan to remediate the site for the proposed commercial land-use.

Remediation works at the site were conducted by Mellross Homes in November 2012. Remediation method was removal of the fibro shed and excavation of the contaminated areas and disposal as general solid waste in accordance with the remediation action plan (RAP).

A validation assessment is required to ensure the excavations undertaken in the contamination areas previously identified have been remediated successfully.

Additional analysis of the soil beneath the removed fibro shed for OCP and metals was conducted. A site inspection for the presence of residual fibro potentially containing asbestos was conducted.

The south western section of the site is presently used by Department Primary Industries (DPI) for machinery and chemical storage. The DPI section is fenced off and will not currently be part of the new commercial centre. A preliminary contamination investigation of the DPI area is reported separately.

Objectives of the investigation

Validation of the five excavated areas by soil sampling and analysis

Analysis of soil under the removed fibro shed for OCP and metals

Site inspection for the presence of residual fibro fragments in the area of the removed shed

Summary

Remediation of the TPH (C10-C36) impacted soil was undertaken by Mellross Homes by excavation in five areas of contamination previously identified. The contaminated material was transported off-site as general solid waste. Remediation included removal of the fibro shed.

Validation sampling was undertaken after excavation to confirm successful remediation. Validation was conducted by soil sampling of the excavated areas to confirm the absence of contaminants.

Additional analysis of the soil below the removed fibro shed was conducted for OCP and metals. The soil surface under the former fibro shed was inspected for the presence of residual fibro.

Conclusion

No contamination was identified in the samples collected from the five excavated areas. Levels of TPH (C10-C36) in the validation soil samples collected were below detection limits and less than the adopted land-use threshold.

Levels of OCP and metals in the soil samples collected from below the former fibro shed were at environmental background levels or below detection limits.

No asbestos cement (AC) fragments were observed on the surface in the area surrounding the former fibro shed.

Recommendations

Remediation objectives have been achieved.

The investigation area is suitable for commercial land-use.

CONTENTS

1. Introduction

A contamination investigation undertaken by Envirowest Consulting Pty Ltd (Report number R5164c) in August 2005 identified elevated levels of TPH (C10-C36) in five locations in the yard area at 327 Boorowa Street, Young NSW. The source of the TPH contamination is expected to be from the former AST on-site or fuel pump spills that have migrated into the soil. Sampling indicated the TPH is confined to the 0-500mm layer. The levels of TPH (C10-C36) exceed the EPA (1994) sensitive land-use thresholds. Remediation of the site is required to reduce the level of TPH (C10-C36) to below the appropriate thresholds.

The report recommended additional analysis of the soil beneath the fibro shed for organochlorine chlorine pesticides (OCP) and metals and a site inspection for fibro fragments after the removal of the shed.

A Remediation Action Plan (RAP) was prepared in May 2012 (R12147rap) to develop an effective plan to remediate the site for the proposed commercial land-use.

Remediation works at the site were conducted by Mellross Homes in November 2012. Remediation involved removal of the fibro shed and excavation of the contaminated areas and appropriate disposal as general solid waste in accordance with the remediation action plan (RAP).

A preliminary investigation of the DPI area located in the south western section of the lot is required to determine potential contamination areas. A preliminary contamination investigation of the DPI area is reported separately.

2. Scope of work

Envirowest Consulting Pty Ltd was commissioned by Mellross Homes to undertake validation assessment and additional investigations at 327 Boorowa Street, Young NSW. The assessment included:

- Validation of the remediated areas by soil sampling in the excavated areas
- Additional analysis of soil beneath the fibro shed (removed) for OCP and metals
- A site inspection in the area of the removed fibro shed for the presence of residual fibro potentially containing asbestos was conducted
- Preliminary contamination investigation in the DPI area located in the south western section of the lot.

The investigation will be undertaken according to NSW OEH and NEPC guidelines including *Guidelines for consultants reporting on contaminated sites*, *National Environment Protection (Assessment of Site Contamination) Measure 1999* and *POEO (Petroleum Storage) Regulations 2008.*

3. Site identification

Address	327 Boorowa Street Young NSW

Owner(s)	Mellross Homes
Deposited plans	Lot 2399 DP754611
Australian Map Grid	Zone 55H, E618259m, N6202824m
Locality map	Figure 1
Aerial photograph	Figure 2
Site plan	Figure 3
Photograph(s)	Figure 4

4. Site description

4.1 Zoning

The site is zoned as IN1 – General Industrial under the Young Shire Council Local Environmental Plan 2011.

4.2 Site visit and description

Site inspections were made in 23 November 2012. The site is located at 327 Boorowa Street, Young NSW and is a commercial site which has been used for a depot. The site is located in an industrial estate of Young NSW.

4.3 Land-use

The yard area of the site was vacant at the time of inspection and undergoing site levelling and tree removal. The excavation pits in the remediated areas remained open to enable validation. The south western section of the site was used for a DPI machinery and chemical storage area.

4.4 Council records

A development application was made prior to the construction of a shed in the south east corner currently utilised by the DPI. No other records of development applications are known.

4.5 Information sources

- *Preliminary contamination investigation of 327 Boorowa Street, Young NSW*) was reported in August 2005 (Envirowest Consulting report number R5164c).
- *Remediation Action Plan of 327 Boorowa Street, Young NSW*) was reported in May 2012 (Envirowest Consulting report number R12147rap).
- Information from Mellross Homes
- Site inspection 23 November 2012 by Andrew Ruming of Envirowest Consulting
- Aerial photograph 2010
- NSW Office of Environment and Heritage (OEH) records of public notices under the CLM Act 1997
- Young Shire Council LEP 2011

4.6 Chronological list of site uses

The southern area was occupied by DIPNR and has site has been vacant for 10 years. Between 1950 and 1995 the site was used as a depot for the Soil Conservation Service for the storage and maintenance of machinery including bulldozers.

A gravel circular driveway is located in the DIPNR part of the site providing access to the sheds. Areas south and north of the driveway in the DIPNR area contained grasses and trees and were not used for the parking of machinery.

An area in the centre of the site is used of the storage of building materials including timber, iron and bricks. These materials are associated with a neighbouring land-use. The length of time the building materials have been stored on the site is unknown.

The north-eastern area on the site was used for the grazing of cattle and horses on the inspection date. This is the only known land-use in this area.

No mines, sheep dips, stockyards or contaminating industrial activities are known to have been located on the site.

A small section in the west of the site is fenced and utilised by the DPI for the storage of machinery and chemicals. This area was fenced and a shed constructed on the site in 1988. Two additional smaller sheds were constructed in 2002 and used for the storage farm chemical used for trial work.

4.7 Buildings and infrastructure

One large and two small iron sheds are located on the land leased by the DPI.

One iron shed with a concrete floor is located on the DIPNR area. One fibro shed with slatted timber raised floor and bunding under is located near the centre of the DIPNR area. The fibro shed is suspected of being bonded asbestos. A service ramp for vehicles is located in the DIPNR area.

A former above ground diesel storage tank was located on the site. This has been removed.

4.8 Contaminants of concern

The contaminant of concern for remediation areas is TPH (C10-C36).

Additional analysis of the area under the removed fibro shed was undertaken for OCP and metals. The area was also inspected for the presence of fibro which may potentially contain asbestos.

4.9 Relevant complaint history

Nil

4.10 Contaminated site register

The site is not listed on the NSW OEH register of contaminated sites.

4.11 Neighbouring land-use

North – Railway line and pasture
East – Residential
South – Pasture
West – Pasture

4.12 Integrity assessment

The site history was obtained from a site inspection and history review. The information is consistent with the current site condition and to the best of the assessor's knowledge is accurate.

5. Site condition and environment

5.1 Surface cover

The site was mostly cleared due to earthworks for site development.

5.2 Topography

The site is a gently inclined lower slope with an inclination of 4% and a south westerly aspect.

5.3 Soils and geology

The soil types on the site are red and yellow podzolics. Typical profiles consist of yellowish brown sandy clay loam topsoils with yellow red sandy clay subsoils with quartz gravel.

Fertility is moderate and the soils are moderately erodible requiring banks and gully control structures. No erosion was observed on the site. Soil salinity problems are absent.

The site is underlain by Granite and Granodiotrite.

5.4 Surface water and groundwater

The soil is highly permeable. Surface water flows south west and to Burrangong Creek located approximately 0.5km downslope. No intermittent drainage lines are located on the site.

No bores are located on the site. Groundwater depth in the locality is located around 10 metres.

6. Previous assessments

Envirowest Consulting Pty Ltd (2005) *Preliminary contamination investigation of 327 Boorowa Street, Young NSW* (Report number R5164c)

A preliminary contamination investigation of the site was undertaken by Envirowest Consulting Pty Ltd and reported in August 2005 (Report number R5164c).

Results indicated five areas of soil contamination (Figure 2) requiring remediation activities:

1. Vehicle service ramp: TPH (C10-C36) was greater than the threshold criteria around sampling location 1 at the vehicle service ramp. The level of TPH (C10-C36) in this area was 39,250mg/kg where 1,0000mg/kg is the sensitive land-use threshold. The level of lead in this location was elevated and below the commercial land-use threshold of 1,500mg/kg.
2. Fibro shed: TPH (C10-C36) was greater than the threshold criteria around sampling location 4 at the fibro shed. The level of TPH (C10-C36) in this area was 75,300mg/kg where 1,000mg/kg is the sensitive land-use threshold.
3. Diesel AST: TPH (C10-C36) was greater than the threshold criteria around sampling location 5 around the diesel AST at the fibro shed. The level of TPH (C10-C36) in this area was 12,870mg/kg where 250mg/kg is the sensitive land-use threshold.
4. South east of diesel AST: TPH (C10-C36) was greater than the threshold criteria around sampling location 8 at a bare area south east of the diesel AST. The level of TPH (C10-C36) in this area was 18,920mg/kg where 1,000mg/kg is the sensitive land-use threshold.

5. South of diesel AST: TPH (C10-C36) was greater than the threshold criteria around sampling location 9 at a bare area south of the diesel AST. The level of TPH (C10-C36) in this area was 17,190mg/kg where 1,000mg/kg is the sensitive land-use threshold.

Remediation of the five contaminated areas was recommended. Additional analysis of the soil below the fibro shed was recommended after demolition and removal. Additional investigation of the DPI yard area located in the south western section of the lot was recommended.

Envirowest Consulting Pty Ltd (2012) *Remediation Action Plan, 327 Boorowa Street, Young NSW* (Report number R12147rap)

A Remediation Action Plan of the site was undertaken by Envirowest Consulting Pty Ltd and reported in May 2012 (Report number R12147rap). The objectives of the RAP were:

- Set remediation goals based on land-use threshold
- Propose a cost effective and workable remediation method
- Establish a validation procedure for the site
- Ensure remediation works comply with:

  Guidelines for Consultants Reporting on Contaminated sites (EPA 1997)
  Guidelines for NSW site auditor scheme (EPA 2006)
  The Contaminated Land Management Act (1997)
  Remediation of Contaminated Land State Environmental Planning Policy (SEPP55)

The preferred remediation method was excavation of TPH (C10-C36) contaminated material around and under the vehicle service ramp, fibro shed, diesel AST and bare areas south east and south of the diesel AST will be transported to an approved landfill as general solid waste.

Vertical and lateral extent of the contaminated areas will initially be determined at the time of excavation by visual and olfactory evidence. Vertical and lateral extent of the contaminated areas will be confirmed by laboratory analysis. Excavation of contaminated material shall continue until the analytical results indicate the material remaining is below the adopted criterion.

Validation of the remediated areas will be required by sampling and laboratory analysis.

7. Description of contamination

The investigation carried out in August 2005 (Envirowest Report R5164c) identified soil staining or bare areas in five areas in the yard area on the site from oil and diesel spills. The suspected contaminated areas were under the vehicle service ramp, under the fibro shed, around the diesel AST and two areas near the AST. Elevated levels of TPH (C10-C36) were detected in the soil samples where staining or bare soil was observed. The levels were greater than the sensitive land-use threshold of 1000 mg/kg. The lateral and vertical extent of the five contaminated areas was not determined.

The fibro from the shed on the site is likely to contain bonded asbestos.

8. Remediation method

The method of remediation is excavation and off-site disposal. This has been determined to be the most cost effective and practicable method. Excavation and off-site disposal is considered the preferred option for remediation of the TPH impacted area. A relatively small volume of soil is impacted and transport off-site is the most timely, technically practical and cost effective method of remediation.

9. Remediation works

The preliminary contamination investigation identified five areas of soil contamination (TPH C10-C36) requiring remediation activities:

1 Vehicle service ramp
2 Fibro shed
3 Diesel AST
4 South east of diesel AST
5 South of diesel AST

The preferred method was excavation and transport off-site to Young landfill.

Excavation works were undertaken by Mellross Homes in November 2012. The identified contaminated areas were excavated and extended as determined by evidence of contamination by visual appearance and odour.

The final excavations were:

1 Vehicle service ramp excavation pit 4m by 3m by 0.6m depth (7.2m^3)
2 Fibro shed excavation pit 7m by 3m by 0.8m depth (16.8m^3)
3 Diesel AST excavation pit 7m by 2m by 0.6m depth (8.4m^3)
4 South east of diesel AST excavation pit 8m by 2m by 0.5m depth (8m^3)
5 South of diesel AST excavation pit 8m by 2m by 0.5m depth (11.2m^3)

A total of approximately 52m^3 of soil was stockpiled from the 5 excavation areas. The soil was transported off-site to Young landfill as general solid waste.

Validation of the excavation pits is described in the following sections.

10. Validation assessment

10.1 Data quality objectives (DQO)

The development of data quality objectives is recommended by OEH NSW to provide a systematic framework for site validation. All validation and sampling shall be carried out in accordance with NSW EPA (DEC) guidelines: *Contaminated Sites – Sampling Design Guidelines, Contaminated Sites – Guidelines for Assessing Service Station Sites* and *Contaminated Sites – Guidelines for Consultants Reporting on Contaminated Sites*.

10.1.1 State the problem

A contamination investigation undertaken by Envirowest Consulting Pty Ltd in May 2012 (Report number R12147c) identified elevated levels of TPH (C10-C36) in the soil in the yard area at 327 Boorowa Street, Orange.

The remediation method is to excavate and appropriately dispose the impacted soil off-site. Validation sampling is required to determine the success of the remediation.

10.1.2 Identify the decision

The proposed land-use is commercial and the levels of contaminants following remediation should be less than the assessment criteria listed in Section 9. The decision problem is: *Is the site suitable for commercial land-use?*

10.1.3 Identify the inputs decision

The sampling design for the excavated pits is a systematic pattern on an approximately 6m grid pattern over the walls and base of the excavation. The sampling density is sufficient to detect a potential hot spot with a diameter of 3.5m.

The soil samples will be analysed for the contaminants of concern. The guidelines will be the sensitive land-use thresholds (EPA 1994).

If soil contamination has been identified following remediation, further excavation, sampling and analysis following the guidelines above will be required.

10.1.4 Define the boundaries of the study

The investigation areas are those areas which have been remediated through excavation. The size of this area will be determined by validation sampling and analysis. The size of the remediated area will be increased if further contamination is discovered during the validation investigation.

10.1.5 Develop a decision rule

The guidelines will be the sensitive land-use thresholds (EPA 1994).

10.1.6 Specify acceptable limits on the decision errors

The 95% upper confidence limit of average levels of samples collected is less than the threshold levels.

10.1.7 Optimize the design for obtaining data

Soil sampling will be undertaken as described in Section 7.2.

Data quality indicators are described in Appendix 2.

10.2 Sampling design

The walls and floor of the excavation pit were inspected for visual and olfactory evidence of contamination. The final excavation was validated by visual appearance and soil sampling for laboratory analysis.

The pit was sampled using systematic sampling on an approximate grid of 6m. Nine samples were collected from the walls and base of the excavation pits. The sampling density can detect a potential hot spot with a diameter of 3.5m at a 95% level of confidence.

10.3 Sampling methods

Detailed soil sampling protocols are presented in Appendix 1. Soil samples were collected from the fresh excavation using a spade. The soil was transferred to a solvent rinsed glass jar with a teflon lid quickly to minimise volatile vapour loss. Discrete samples were collected.

Tools were decontaminated between sampling locations to prevent cross contamination by: brushing to remove caked or encrusted material, washing in detergent and tap water, rinsing in deionised water rinsing with clean tap water and allowing to air dry or using a clean towel.

All sample containers were placed immediately into a cooler containing ice. A chain of custody form accompanied the transport of samples.

10.4 Analytes

Table 1 details the schedule of samples and analysis.

The contaminant of concern is total petroleum hydrocarbons (TPH C10-C36).

Additional samples were analysed for OCP and metals from the former fibro shed area.

Table 1. Schedule of samples collected

Laboratory sample id.	Location id (Figure 2)	Sampling date	Description	Analysis undertaken
MH1	1	23/11/12	Vehicle service ramp base	TPH(C10-C36)
MH2	2	23/11/12	Fibro shed base	TPH(C10-C36), metals, OCP
MH3	3	23/11/12	Fibro shed wall	TPH(C10-C36), metals, OCP
MH4	4	23/11/12	Diesel AST base	TPH(C10-C36)
MH5	5	23/11/12	Diesel AST wall	TPH(C10-C36)
MH6	6	23/11/12	South east of diesel AST base	TPH(C10-C36)
MH7	7	23/11/12	South east of diesel AST wall	TPH(C10-C36)
MH8	8	23/11/12	South of diesel AST base	TPH(C10-C36)
MH9	9	23/11/12	South of diesel AST wall	TPH(C10-C36)

11. Quality assurance and quality control

11.1 Sampling design

A systematic sampling pattern is required to validate the site. Samples from the excavated areas were collected on an approximate 6 metre grid pattern. At least 1 sample was collected from each excavation area. The sampling density is in accordance with the NSW EPA (1995) recommendations.

The number of locations tested is thought to provide an adequate assurance that the soils sampled are representative of the area sampled. The sampling program was designed to minimise sampling and measurement errors.

Data quality objectives and data quality indicators are presented in Appendix 2.

11.2 Field procedures

The collection of samples was undertaken in accordance with industry accepted standard protocols (NEPC 1999). The details of the samples collected are presented in Table 1. Discrete samples were collected and analysed.

Sampling equipment was decontaminated between each sampling event. Samples were stored and transported under refrigeration in insulated containers. Appropriate storage duration was observed. A chain of custody form tracked the samples to the laboratory.

A single sampler was used to collect the samples using standard methods. Soil collected from the pit was a fresh sample from the hand shovel. After collection the samples were immediately placed in new glass sampling jars and placed in a cooler.

One intra laboratory sample was collected which is greater than the NEPM (1999) recommended frequency of one per batch or 5%. Intra laboratory duplicate was from the same sampling location and analysed for the same analytes. Details on field sampling procedures are presented in Appendix 1.

11.3 Laboratory

Chemical analyses were conducted in the laboratories of ALS, Smithfield, NSW which is NATA registered for the tests undertaken. The laboratories have quality assurance and quality control programs. The quality control program for analysis of samples in each laboratory batch was greater than the recommended frequency of 5%. The laboratory reports including quality control evaluations are presented in the Appendix 3.

11.4 Data evaluation

The quality control and quality assurance report is presented in Appendix 2. The quality assurance/quality control reports for the data are presented in the laboratory reports.

It is concluded the analytical results are representative and the data is usable for the purposes of the investigation.

12. Assessment criteria

12.1 Remediated area

Land-use of the site is commercial. The NSW DECCW does not provide threshold levels for hydrocarbons under different land-uses. NSW EPA (1994) *Guidelines for Assessing Service Station Sites* provides soil hydrocarbon thresholds for sensitive land-uses. The EPA (1994) hydrocarbon thresholds will be used for comparison of the soil results and are considered appropriate initial threshold for commercial and residential sites.

The adopted investigation levels of the soil for sensitive land-use (EPA 1994) are listed in Table 2.

Table 2. Soil assessment criteria (mg/kg)

Analyte	Sensitive land-use (EPA 1994)
TPH (C10-C36)	1,000

12.2 Additional sampling

Additional sampling for OCP and metals was undertaken in the area of the removed fibro shed. The additional sampling was recommended in the preliminary contamination assessment and remediation action plan due to access restrictions. The assessment criteria for the additional samples is health investigation level (HIL F) which is applicable for commercial land-use (DEC 2006). The adopted assessment criteria for the analytes evaluated is outlined in Table 3.

Table 3. Soil assessment criteria (mg/kg)

Analyte	Commercial land-use (DEC 2006)
Arsenic	500
Cadmium	100
Chromium	600,000
Copper	5,000
Lead	600
Nickel	3,000
Zinc	35,000
OCP	1,000

13. Results and discussion

13.1 Excavated areas

Five areas on the site were excavated. The excavations were undertaken in November 2012. The excavations in each area were extended as determined by evidence of contamination by visual appearance and odour.

The excavated areas had a total approximate volume of 52m^3. The excavation pits sizes are listed in Section 9. No soil staining, odour or evidence of residual contamination was observed during inspection of the final excavated areas.

All soil samples collected from excavated areas contained levels of TPH (C10-C36) below detection limits and less than the sensitive land-use threshold (Table 4).

Table 4. Soil analysis results, bowser area (mg/kg)

Sample id.	Location (Figure 2)	Description	TPH(C10-C36)
MH1	1	Vehicle service ramp base	ND
MH2	2	Fibro shed pit base	ND
MH3	3	Fibro shed pit wall	ND
MH4	4	Diesel AST base	ND
MH5	5	Diesel AST wall	ND
MH6	6	South east of diesel AST base	ND
MH7	7	South east of diesel AST wall	ND
MH8	8	South of diesel AST base	ND
MH9	9	South of diesel AST wall	ND
Sensitive land-use thresholds (EPA 1994)			*1,000*

ND = not detected

13.2 Shed validation

Samples were collected under the removed fibro shed. Access to the area below the fibro shed was restricted during the preliminary investigation undertaken in August 2005. Analysis was undertaken for OCP and metals as these were potential contaminants of concern.

The OCP and metal levels in the soil samples collected from the area of the removed shed were below detection limits or less than the assessment criteria (Table 5).

Table 5. Soil analysis results (mg/kg)

Sample id.	Location	Description	Arsenic	Cadmium	Chromium	Copper	Lead	Nickel	Zinc	OCP
MH2	2	Fibro shed pit base	ND	ND	14	7	7	3	5	ND
MH3	3	Fibro shed pit wall	ND	ND	9	ND	ND	ND	ND	ND
Commercial land-use thresholds (EPA 1994)			*500*	*100*	*600,000*	*5,000*	*600*	*3,000*	*35,000*	*1000*

ND = not detected

13.3 Fibro shed inspection

The fibro shed previously located on the site was likely to contain bonded asbestos. The shed was demolished and removed off-site in November 2012. The fibro was disposed of in accordance with WorkCover and Young Shire Council guidelines.

A site inspection of the soil surface at the removed shed area did not identify any residual fibro fragments on the surface.

14. Site characterisation

14.1 Environmental contamination

No contaminated soil was identified in the excavated areas.

No OCP, elevated levels of metals or asbestos cement were detected in the area of the removed fibro shed.

14.2 Chemical degradation products

Not applicable as no contamination was detected in the remediated areas. Potential contamination areas were identified in the DPI area. Further investigations in the DPI area are recommended after cessation of site occupancy and cleanup.

14.3 Exposed populations

Not applicable as no contamination was detected in the remediated areas.

15. Conclusions and recommendations

15.1 Summary and conclusion

Remediation of the TPH (C10-C36) impacted soil was undertaken by Mellross Homes by excavation in five areas of contamination previously identified. The contaminated material was transported off-site as general solid waste. Remediation included removal of the fibro shed.

Validation sampling was undertaken after excavation to confirm successful remediation. Validation was conducted by soil sampling of the excavated areas to confirm the absence of contaminants.

Additional analysis of the soil below the removed fibro shed was conducted for OCP and metals. The soil surface under the former fibro shed was inspected for the presence of residual fibro.

No contamination was identified in the samples collected from the five excavated areas. Levels of TPH (C10-C36) in the validation soil samples collected were below detection limits and less than the adopted land-use threshold.

Levels of OCP and metals in the soil samples collected from below the former fibro shed were at environmental background levels or below detection limits.

No asbestos cement (AC) fragments were observed on the surface in the area surrounding the former fibro shed.

15.2 Assumptions used in reaching the conclusions
It is assumed the site history is accurate and no significant undetected contamination is located in areas not investigated on the site.

15.3 Extent of uncertainties in the results
Soil sampling in excavated areas was designed to detect contamination with a radius of 4.5m at a 95% level of confidence.

15.4 Suitability of proposed use
The site is suitable for commercial land-use. Further investigations are required in the DPI area after ceasing occupation of the site.

15.5 Limitations and constraints on the use of the site
Nil.

15.6 Recommendation for further work
Remediation objectives have been achieved.

The investigation area is suitable for commercial land-use.

16. Report limitations and intellectual property
This report has been prepared for the use of the client to achieve the objectives given the client requirements and cost constraints. The level of confidence of the conclusion reached is governed by the scope of the investigation and the availability and quality of existing data. Where limitations or uncertainties are known, they are identified in the report. No liability can be accepted for failure to identify conditions or issues which arise in the future and which could not reasonably have been predicted using the scope of the investigation and the information obtained.

The investigation identifies the actual subsurface conditions only at those points where samples are taken, when they are taken. Data derived through sampling and subsequent laboratory testing are interpreted by geologists, engineers or scientists who then render an opinion about overall subsurface conditions, the nature and extent of the contamination, its likely impact on the proposed development and appropriate remediation measures. Actual conditions may differ from those inferred to exist, because no professional, no matter how well qualified, and no sub surface exploration program, no matter how comprehensive, can reveal what is hidden by earth, rock or time. The actual interface between materials may be far more gradual or abrupt than a report indicates. Actual conditions in areas not sampled may differ from predictions. It is thus import to understand the limitations of the investigation and recognise that we are not responsible for these limitations.

This report including data contained and its findings and conclusions remain the intellectual property of Envirowest Consulting Pty Ltd. This report should not be used by persons or for purposes other than stated and not reproduced without permission.

17. References

DEC (2006) *Contaminated Sites: Guidelines for the NSW Site Auditors Scheme* (NSW Environment Protection Authority, Chatswood)

DECC (2009) *Waste Classification Guidelines, Part 1: Classifying Waste* (Department of Environment and Climate Change, Sydney)

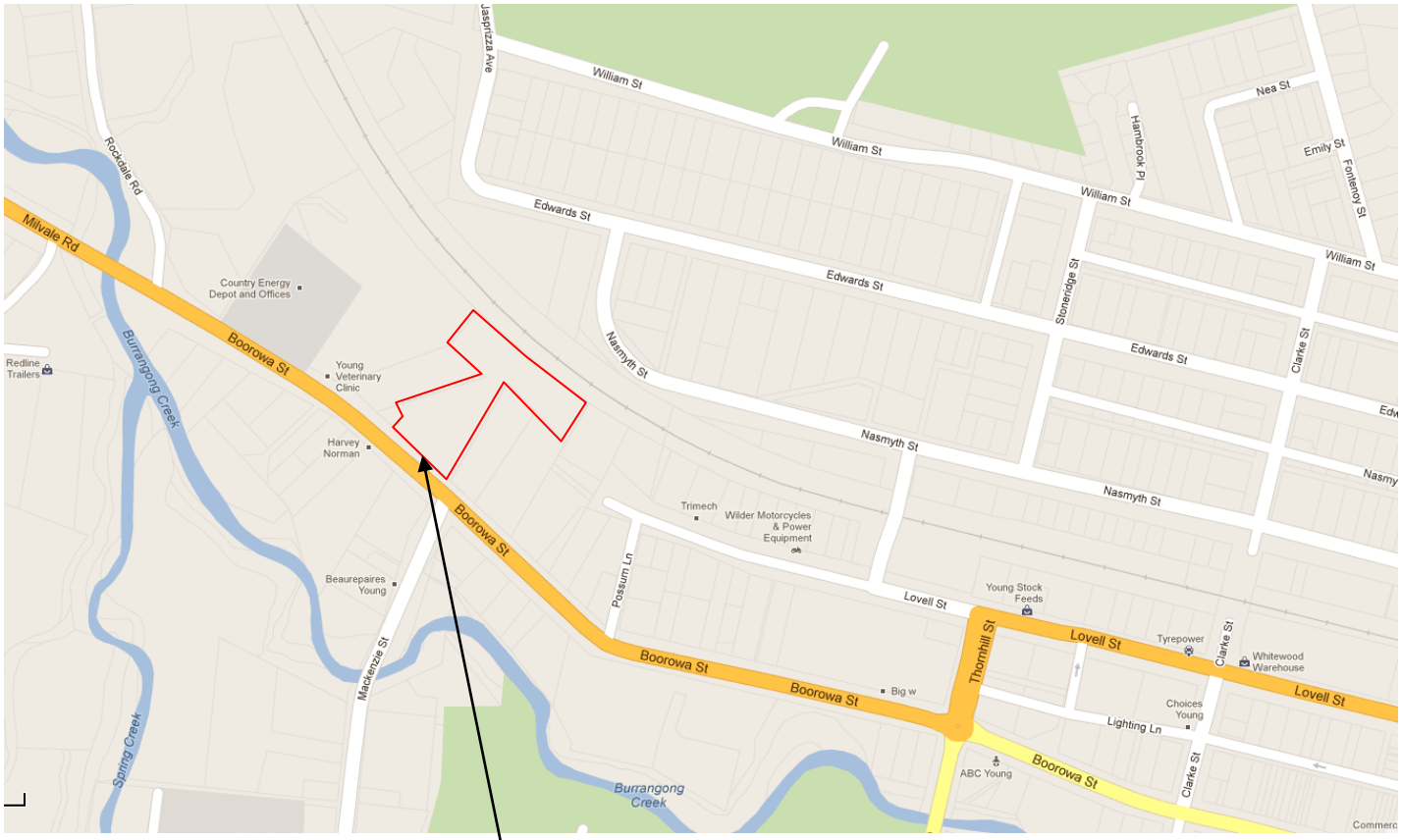
EPA (1995) *Contaminated sites: Sampling Design Guidelines* (NSW Environment Protection Authority, Chatswood)

EPA (1997) *Guidelines for Consultants Reporting on Contaminated Sites* (NSW Environment Protection Authority: Chatswood)

NEPC (1999) *National Environment Protection (Assessment of Site Contamination) Measure 1999* (National Environment Protection Council Service Corporation, Adelaide)

North

Figures



Site assessed

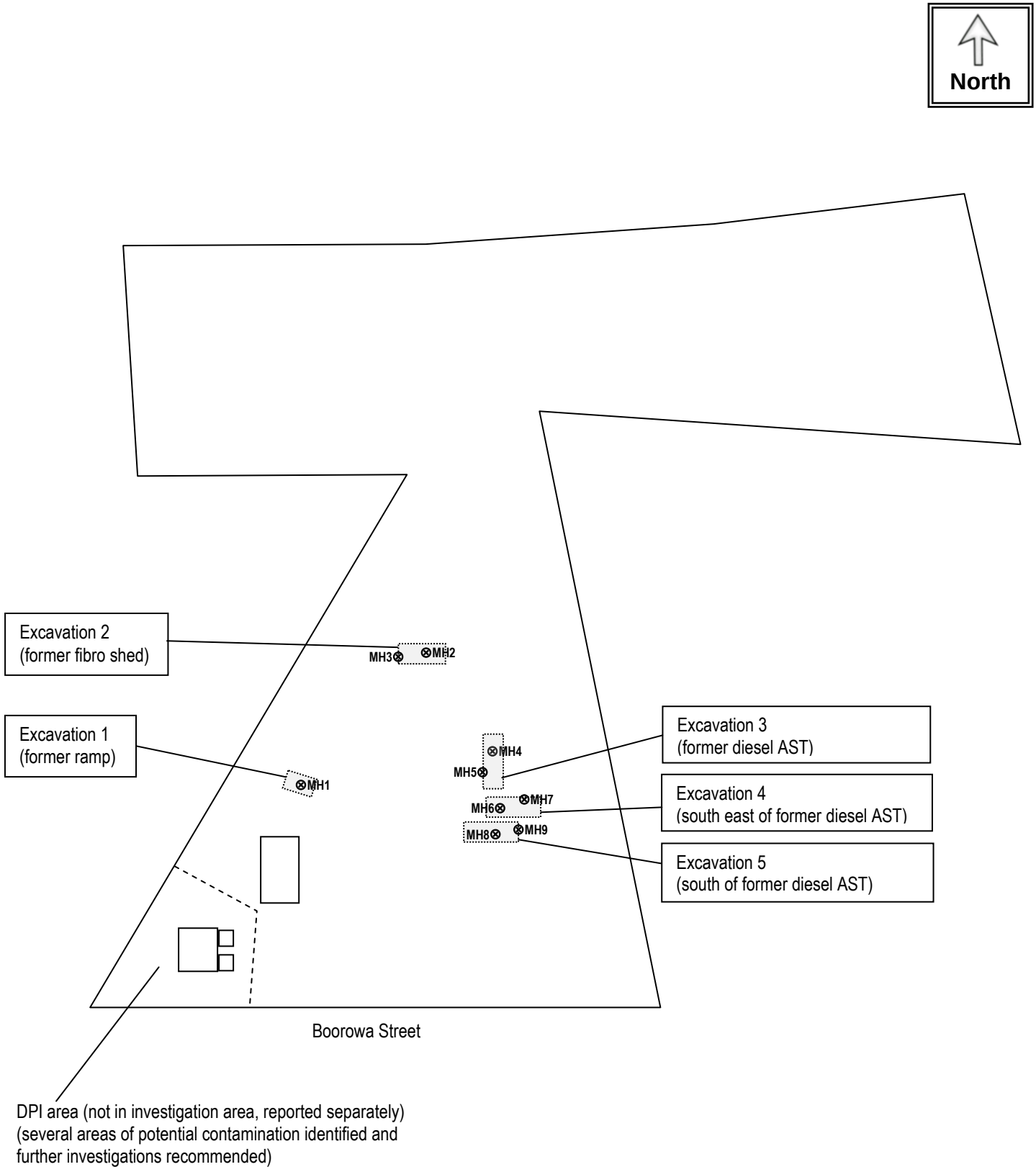
Figure 1: Locality map		
327 Boorowa Street, Orange NSW		
	Envirowest Consulting Pty Ltd	
Job – R12147val	Drawn by: AR from Google Maps	Date: 15/12/2012

North

Site assessed prior to remediation

DPI area (reported separately)

Figure 2. Aerial photograph		
327 Boorowa Street, Orange NSW		
	Envirowest Consulting Pty Ltd	
Job – R12147val	Drawn by: AR from SIX maps	Date: 15/12/2012



Legend

⊗ Sampling location

Slope

Existing building

Fence

Excavated remediated area

Approximate Scale 1: 900

0 9 18 36m

Figure 3. Site plan and sampling locations		
327 Boorowa Street, Orange NSW		
	Envirowest Consulting Pty Ltd	
Job – R12147val	Drawn by: AR	Date: 15/12/2012

Figure 4. Photographs of the site and works

Excavation for the area south east of the former AST

Excavation area of the former fibro shed

Ramp area excavation

Appendix 1. Soil sampling protocols

1. Sampling

The samples will be collected from the auger tip, spade, hand auger or excavator bucket immediately on withdrawal.

The time between retrieval of the sample and sealing of the sample container was kept to a minimum.

The material was collected using single use disposal gloves or a stainless steel spade which represented material which had not been exposed to the atmosphere prior to sampling.

All sampling jars were filled as close to the top as possible to minimise the available airspace within the jar.

2. Handling, containment and transport

Daily sampling activities will be recorded including sampling locations, numbers, observations, measurements, sampler, date and time and weather condition.

The sampling jars will be new sterile glass jars fitted with plastic lid and airtight Teflon seals, supplied by the laboratories for the purpose of collecting soil samples for analysis. Sample containers will be marked indelibly with the sample ID code to waterproof labels affixed to the body of the container.

All samples will be removed from direct sunlight as soon as possible after sampling and placed in insulated containers. Samples were stored in a refrigerator at 4°C prior to transportation to the laboratory in insulated containers with ice bricks in accordance with AS4482.1.

Handling and transportation to the laboratory will be accompanied with a chain of custody form to demonstrate the specimens are properly received, documents, processed and stored.

Maximum holding time for extraction (AS4482.1) are:

Analyte	Maximum holding time
Metals	6 months
Mercury	28 days
Sulfate	7 days
Oragnic carbon	7 days
OCP, OPP, PCB	14 days
TPH, BTEX, PAH, phenols	14 days

3. Decontamination of sampling equipment

Sampling tools will be decontaminated between sampling locations by

- Removing soil adhering to the sampling equipment by scraping, brushing or wiping
- Washing with a phosphate-free detergent
- Rinsing thoroughly with clean water
- Repeating if necessary
- Dry equipment with disposable towels or air

Appendix 2. Quality control and quality assurance report

1. Data quality indicators (DQI) requirements

1.1 Completeness

A measure of the amount of usable data for a data collection activity. Greater than 95% of the data must be reliable based on the quality objectives. Where greater than two quality objectives have less reliability than the acceptance criterion the data may be considered with uncertainty.

1.1.1 Field

Consideration	Requirement
Locations and depths to be sampled	Described in the sampling plan. The acceptance criterion is 95% data retrieved compared with proposed. Acceptance criterion is 100% in crucial areas.
SOP appropriate and compiled	Described in the sampling plan.
Experienced sampler	Sampler or supervisor
Documentation correct	Sampling log and chain of custody completed

1.1.2 Laboratory

Consideration	Requirement
Samples analysed	Number according to sampling and quality plan
Analytes	Number according to sampling and quality plan
Methods	EPA or other recognised methods with suitable PQL
Sample documentation	Complete including chain of custody and sample description
Sample holding times	Metals 6 months, OCP, PAH, TPH, PCB 14 days

1.2 Comparability

The confidence that data may be considered to be equivalent for each sampling and analytical event. The data must show little or no inconsistencies with results and field observations.

1.2.1 Field

Consideration	Requirement
SOP	Same sampling procedures to be used
Experienced sampler	Sampler or supervisor
Climatic conditions	Described as may influence results
Samples collected	Sample medium, size, preparation, storage, transport

1.2.2 Laboratory

Consideration	Requirement
Analytical methods	Same methods, approved methods
PQL	Same
Same laboratory	Justify if different
Same units	Justify if different

1.3 Representativeness

The confidence (expressed qualitatively) that data are representative of each media present on the site.

1.3.1 Field

Consideration	Requirement
Appropriate media sampled	Sampled according to sampling and quality plan or in accordance with the EPA (1995) sampling guidelines.
All media identified	Sampling media identified in the sampling and quality plan.

1.3.2 Laboratory

Consideration	Requirement
Samples analysed	Blanks

1.4 Precision

A quantitative measure of the variability (or reproduced of the data). Is measured by standard deviation or relative percent difference (RPD). A RPD analysis is calculated and compared to the practical quantitation limit (PQL) or absolute difference AD.

- Levels greater than 10 times the PQL the RPD is 50%
- Levels between 5 and 10 times the PQL the RPD is 75%
- Levels between 2 and 5 times the PQL the RPD is 100%
- Levels less than 2 times the PQL, the AD is less than 2.5 times the PQL

Data not conforming to the acceptance criterion will be examined for determination of suitability for the purpose of site characterisation.

1.4.1 Field

Consideration	Requirement
Field duplicates	Frequency of 5%, results to be within RPD or discussion required indicate the appropriateness of SOP

1.4.2 Laboratory

Consideration	Requirement
Laboratory and inter lab duplicates	Frequency of 5%, results to be within RPD or discussion required. Inter laboratory duplicates will be one sample per batch.
Field duplicates	Frequency of 5%, results to be within RPD or discussion required
Laboratory prepared volatile trip spikes	One per sampling batch, results to be within RPD or discussion required

1.5 Accuracy

A quantitative measure of the closeness of the reported data to the true value.

1.5.1 Field

Consideration	Requirement
SOP	Complied
Inter laboratory duplicates	Frequency of 5%. Analysis criterion 60% RPD for levels greater than 10 times the PQL 85% RPD for levels between 5 to 10 times the PQL 100% RPD at levels between 2 to 5 times the PQL Absolute difference, 3.5 times the PQL where levels are, 2 times PQL
Field blanks	Frequency of 5%, <5 times the PQL, PQL may be adjusted
Rinsate blanks	Frequency of 5%, <5 times the PQL, PQL may be adjusted

1.5.2 Laboratory

Recovery data (surrogates, laboratory control samples and matrix spikes) data subject to the following control limits:

- 60 to 140% acceptable data
- 20-60% discussion required, may be considered acceptable
- 10-20% data should considered as estimates
- 10% data should be rejected

Consideration	Requirement
Method blanks	Frequency of 5%, <5 times the PQL, PQL may be adjusted
Matrix spikes	Frequency of 5%, results to be within +/-40% or discussion required
Matrix duplicates	Sample injected with a known concentration of contaminants with tested. Frequency of 5%, results to be within +/-40% or discussion required
Surrogate spikes	QC monitoring spikes to be added to samples at the extraction process in the laboratory where applicable. Surrogates are closely related to the organic target analyte and not normally found in the natural environment. Frequency of 5%, results to be within +/-40% or discussion required
Laboratory control samples	Externally prepared reference material containing representative analytes under investigation. These will be undertaken at one per batch. It s to be within +/-40% or discussion required
Laboratory prepared spikes	Frequency of 5%, results to be within +/-40% or discussion required

2. Laboratory analysis summary

One analysis batch was undertaken over the sampling program. A total of 10 (including 1 field duplicate) soil samples were submitted for analytical testing. The samples were collected in the field by an environmental scientist from Envirowest Consulting Pty Ltd, placed into laboratory prepared receptacles as recommended in NEPM (1999). The samples preservation and storage was undertaken using standard industry practices (NEPM 1999). A chain of custody form accompanied transport of the samples to the laboratory.

Laboratory analysis schedule

Sample ID	Number of samples	Duplicate	Analyses	Date collected	Substrate	Laboratory report
MH1 to MH9, MHH	10	1	TPH (C10-C36), OCP, metals	23/11/2012	Soil	ES1228084

Analytical methods

Analyte	Laboratory methods
Metals	APHA USEPA SW846-6010
Leachable metals	APHA USEPA SW846-6010
Mercury	APHA 3112
TPH(C6-C9)	USPEA SW 846-8260B
TPH(C10-C36)	USEPA SW 846-8270B
OC/OP Pesticides, PAH, PCB	USEPA SW 846-8270B
BTEX	USEPA SW 846-8260B

3. Field quality assurance and quality control

3.1 Inter laboratory duplicates

One field duplicate sample was collected over the investigation program. The frequency was greater than the recommended frequency of 5%. The following table outlines the sample collected and differences in replicate analyses and acceptance limits for replicate analyses.

Field duplicate frequency

Sample id.	Number of samples	Duplicate	Frequency (%)	Date collected	Substrate	Laboratory report
MH1 to MH9, MHH	10	1	10	23/11/2012	Soil	ES1228084

Relative percent differences between field duplicates

Laboratory report	Duplicate sample comparison	Analyte	Difference in replicate analyses (%)	Acceptance limits (%)
ES1228084	MH8, MHH	TPH (C10-C36)	0	40

4. Laboratory quality assurance and quality control

Sample holding times are recommended in NEPM (1999). The time between collection and extraction for all samples was less than the criteria listed below:

Analyte	Maximum holding time
Metals	6 months
Mercury	28 days
Sulfate	7 days
OCP, OPP, PCB	14 days
TPH, BTEX, PAH	14 days

The laboratory interpretative reports are presented with the individual laboratory reports. Assessment is made of holding time, frequency of control samples and quality control samples. Some minor non-conformities were identified including holding times for the trip spike control and various analyte recoveries were less than or greater than the data quality objective.

5. Data quality indicators (DQI)

5.1 Completeness

A measure of the amount of usable data for a data collection activity (total to be greater than 90%)

5.1.1 Field

Consideration	Accepted	Comment
Locations to be sampled	Yes	In accordance with sampling methodology, described in the report.
SOP appropriate and compiled	Yes	In accordance with sampling methodology
Experienced sampler	Yes	Environmental scientist
Documentation correct	Yes	Chain of custody completed

5.1.2 Laboratory

Consideration	Accepted	Comment
Samples analysed	Yes	In accordance with chain of custody and analysis plan
Analytes	Yes	All analytes in accordance with chain of custody and analysis plan
Methods	Yes	Analysed in NATA accredited laboratory with recognised methods and suitable PQL
Sample documentation	Yes	Completed including chain of custody and sample results and quality results
Sample holding times	Yes	Metals < 6 months Mercury < 28 days OCP, OPP, PAH, TPH, PCB, BTEX < 14 days

5.2 Comparability

The confidence that data may be considered to be equivalent for each sampling and analytical event.

5.2.1 Field

Consideration	Accepted	Comment
SOP	Yes	Same sampling procedures used and each batch sampled on one date
Experienced sampler	Yes	Experienced environmental scientist
Climatic conditions	Yes	Sampling log
Samples collected	Yes	Suitable size and storage

5.2.2 Laboratory

Consideration	Accepted	Comment
Analytical methods	Yes	Same methods all samples
PQL	Yes	Suitable for analytes
Same laboratory	Yes	-
Same units	Yes	-

5.3 Representativeness

The confidence (expressed qualitatively) that data are representative of each media present on the site

5.3.1 Field

Consideration	Accepted	Comment
Appropriate media sampled	Yes	Sampled according to sampling and quality plan
All media identified	Yes	Soil sampling media identified in the sampling and quality plan

5.3.2 Laboratory

Consideration	Accepted	Comment
Samples analysed	Yes	Undertaken in NATA accredited laboratory.

5.4 Precision

A quantitative measure of the variability (or reproduced of the data)

5.4.1 Field

Consideration	Accepted	Comment
SOP	Yes	Complied
Field duplicates	Yes	Greater than 5% frequency

5.4.2 Laboratory

Consideration	Accepted	Comment
Laboratory duplicates	Yes	Frequency of 5%, results to be within +/-40% or discussion required.
Field duplicates (intra and inter laboratory)	Yes	Frequency of 5%, results to be within +/-40%.
Laboratory prepared volatile trip spikes	N/A	No trip spikes analysed

5.5 Accuracy

A quantitative measure of the closeness of the reported data to the true value

5.5.1 Field

Consideration	Accepted	Comment
SOP	Yes	Complied
Field blanks	N/A	Frequency of 5%, <5 times the PQL, PQL may be adjusted
Rinsate blanks	N/A	Frequency of 5%, <5 times the PQL, PQL may be adjusted

5.5.2 Laboratory

Consideration	Accepted	Comment
Method blanks	Yes	Frequency of 5%, <5 times the PQL, PQL may be adjusted
Matrix spikes	Yes	Frequency of 5%, results to be within +/-40%
Matrix duplicates	Yes	Frequency of 5%, results to be within +/-40%.
Surrogate spikes	Yes	Frequency of 5%, results to be within +/-40%
Laboratory control samples	Yes	Frequency of 5%, results to be within +/-40%.
Laboratory prepared spikes	Yes	Frequency of 5%, results to be within +/-40% or discussion required.

Minor outliers were observed. Outliers are not considered significant.

6. Conclusion

All media appropriate to the objectives of this investigation have been adequately analysed and no area of significant uncertainty exist.

It is concluded the data is usable for the purposes of the investigation.

Quality control and assurance is undertaken to ensure the representativeness and integrity of samples, and the accuracy and reliability of analysis results.

Appendix 3. ALS environmental laboratory report ES1228084 and chain of custody form

Environmental Division

CERTIFICATE OF ANALYSIS

Work Order	: **ES1228084**	Page	: 1 of 6
Client	: **ENVIROWEST CONSULTING**	Laboratory	: Environmental Division Sydney
Contact	: MR ANDREW RUMING	Contact	: Client Services
Address	: PO BOX 9158 ORANGE NSW, AUSTRALIA 2800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: andrew@envirowest.net.au	E-mail	: sydney@alsglobal.com
Telephone	: +61 63614954	Telephone	: +61-2-8784 8555
Facsimile	: +61 02 63603960	Facsimile	: +61-2-8784 8500
Project	: 12147-1	QC Level	: NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Order number	: 12147-1		
C-O-C number	: 12147-1	Date Samples Received	: 28-NOV-2012
Sampler	: AR	Issue Date	: 06-DEC-2012
Site	: 12147-1		
		No. of samples received	: 10
Quote number	: SY/400/11	No. of samples analysed	: 10

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. All pages of this report have been checked and approved for release.

This Certificate of Analysis contains the following information:

- General Comments
- Analytical Results
- Surrogate Control Limits

NATA Accredited Laboratory 825

Accredited for compliance with ISO/IEC 17025.

Signatories

This document has been electronically signed by the authorized signatories indicated below. Electronic signing has been carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Celine Conceicao	Senior Spectroscopist	Sydney Inorganics
Pabi Subba	Senior Organic Chemist	Sydney Organics
Wisam Marassa	Inorganics Coordinator	Sydney Inorganics

General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Client sample ID	MH1	MH2	MH3	MH4	MH5
				Client sampling date / time	23-NOV-2012 15:00	23-NOV-2012 15:00	23-NOV-2012 15:00	23-NOV-2012 15:00	23-NOV-2012 15:00
					ES1228084-001	ES1228084-002	ES1228084-003	ES1228084-004	ES1228084-005
EA055: Moisture Content									
Moisture Content (dried @ 103°C)	----	1.0	%		11.2	6.6	6.5	3.9	3.0
EG005T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		----	<5	<5	----	----
Cadmium	7440-43-9	1	mg/kg		----	<1	<1	----	----
Chromium	7440-47-3	2	mg/kg		----	14	9	----	----
Copper	7440-50-8	5	mg/kg		----	7	<5	----	----
Lead	7439-92-1	5	mg/kg		----	7	<5	----	----
Nickel	7440-02-0	2	mg/kg		----	3	<2	----	----
Zinc	7440-66-6	5	mg/kg		----	5	<5	----	----
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg		----	<0.05	<0.05	----	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg		----	<0.05	<0.05	----	----
beta-BHC	319-85-7	0.05	mg/kg		----	<0.05	<0.05	----	----
gamma-BHC	58-89-9	0.05	mg/kg		----	<0.05	<0.05	----	----
delta-BHC	319-86-8	0.05	mg/kg		----	<0.05	<0.05	----	----
Heptachlor	76-44-8	0.05	mg/kg		----	<0.05	<0.05	----	----
Aldrin	309-00-2	0.05	mg/kg		----	<0.05	<0.05	----	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg		----	<0.05	<0.05	----	----
^ Total Chlordane (sum)	----	0.05	mg/kg		----	<0.05	<0.05	----	----
trans-Chlordane	5103-74-2	0.05	mg/kg		----	<0.05	<0.05	----	----
alpha-Endosulfan	959-98-8	0.05	mg/kg		----	<0.05	<0.05	----	----
cis-Chlordane	5103-71-9	0.05	mg/kg		----	<0.05	<0.05	----	----
Dieldrin	60-57-1	0.05	mg/kg		----	<0.05	<0.05	----	----
4.4`-DDE	72-55-9	0.05	mg/kg		----	<0.05	<0.05	----	----
Endrin	72-20-8	0.05	mg/kg		----	<0.05	<0.05	----	----
beta-Endosulfan	33213-65-9	0.05	mg/kg		----	<0.05	<0.05	----	----
^ Endosulfan (sum)	115-29-7	0.05	mg/kg		----	<0.05	<0.05	----	----
4.4`-DDD	72-54-8	0.05	mg/kg		----	<0.05	<0.05	----	----
Endrin aldehyde	7421-93-4	0.05	mg/kg		----	<0.05	<0.05	----	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg		----	<0.05	<0.05	----	----
4.4`-DDT	50-29-3	0.2	mg/kg		----	<0.2	<0.2	----	----
Endrin ketone	53494-70-5	0.05	mg/kg		----	<0.05	<0.05	----	----
Methoxychlor	72-43-5	0.2	mg/kg		----	<0.2	<0.2	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	MH1	MH2	MH3	MH4	MH5
				Client sampling date / time	23-NOV-2012 15:00	23-NOV-2012 15:00	23-NOV-2012 15:00	23-NOV-2012 15:00	23-NOV-2012 15:00
Compound	CAS Number	LOR	Unit		ES1228084-001	ES1228084-002	ES1228084-003	ES1228084-004	ES1228084-005
EP068A: Organochlorine Pesticides (OC) - Continued									
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		----	<0.05	<0.05	----	----
^ **Sum of DDD + DDE + DDT**	----	0.05	mg/kg		----	<0.05	<0.05	----	----
EP080/071: Total Petroleum Hydrocarbons									
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **C10 - C36 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft									
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.1	%		----	**107**	**94.2**	----	----
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.1	%		----	**123**	**102**	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	MH6	MH7	MH8	MH9	MHH
				Client sampling date / time	23-NOV-2012 15:00	23-NOV-2012 15:00	23-NOV-2012 15:00	23-NOV-2012 15:00	23-NOV-2012 15:00
Compound	CAS Number	LOR	Unit		ES1228084-006	ES1228084-007	ES1228084-008	ES1228084-009	ES1228084-010
EA055: Moisture Content									
Moisture Content (dried @ 103°C)	----	1.0	%		6.5	1.4	7.1	7.0	7.4
EP080/071: Total Petroleum Hydrocarbons									
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft									
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50

Surrogate Control Limits

Sub-Matrix: **SOIL**		Recovery Limits (%)	
Compound	*CAS Number*	*Low*	*High*
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	49	145
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	32	142

Environmental Division

QUALITY CONTROL REPORT

Work Order	: **ES1228084**	Page	: 1 of 7
Client	: **ENVIROWEST CONSULTING**	Laboratory	: Environmental Division Sydney
Contact	: MR ANDREW RUMING	Contact	: Client Services
Address	: PO BOX 9158 ORANGE NSW, AUSTRALIA 2800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: andrew@envirowest.net.au	E-mail	: sydney@alsglobal.com
Telephone	: +61 63614954	Telephone	: +61-2-8784 8555
Facsimile	: +61 02 63603960	Facsimile	: +61-2-8784 8500
Project	: 12147-1	QC Level	: NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Site	: 12147-1		
C-O-C number	: 12147-1	Date Samples Received	: 28-NOV-2012
Sampler	: AR	Issue Date	: 06-DEC-2012
Order number	: 12147-1		
		No. of samples received	: 10
Quote number	: SY/400/11	No. of samples analysed	: 10

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. All pages of this report have been checked and approved for release.

This Quality Control Report contains the following information:

- Laboratory Duplicate (DUP) Report; Relative Percentage Difference (RPD) and Acceptance Limits
- Method Blank (MB) and Laboratory Control Spike (LCS) Report; Recovery and Acceptance Limits
- Matrix Spike (MS) Report; Recovery and Acceptance Limits

NATA Accredited Laboratory 825

Accredited for compliance with ISO/IEC 17025.

Signatories

This document has been electronically signed by the authorized signatories indicated below. Electronic signing has been carried out in compliance with procedures specified in 21 CFR Part 11.

Signatories	*Position*	*Accreditation Category*
Celine Conceicao	Senior Spectroscopist	Sydney Inorganics
Pabi Subba	Senior Organic Chemist	Sydney Organics
Wisam Marassa	Inorganics Coordinator	Sydney Inorganics

General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

Key : Anonymous = Refers to samples which are not specifically part of this work order but formed part of the QC process lot
CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
RPD = Relative Percentage Difference
# = Indicates failed QC

Laboratory Duplicate (DUP) Report

The quality control term Laboratory Duplicate refers to a randomly selected intralaboratory split. Laboratory duplicates provide information regarding method precision and sample heterogeneity. The permitted ranges for the Relative Percent Deviation (RPD) of Laboratory Duplicates are specified in ALS Method QWI-EN/38 and are dependent on the magnitude of results in comparison to the level of reporting: Result < 10 times LOR:- No Limit; Result between 10 and 20 times LOR:- 0% - 50%; Result > 20 times LOR:- 0% - 20%.

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EA055: Moisture Content (QC Lot: 2623466)									
ES1228084-001	MH1	EA055-103: Moisture Content (dried @ 103°C)	----	1.0	%	11.2	11.0	2.0	0% - 50%
ES1228087-006	Anonymous	EA055-103: Moisture Content (dried @ 103°C)	----	1.0	%	29.4	30.2	2.5	0% - 20%
EG005T: Total Metals by ICP-AES (QC Lot: 2626628)									
ES1227890-001	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	11	12	0.0	No Limit
		EG005T: Nickel	7440-02-0	2	mg/kg	11	12	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	20	22	7.3	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	10	10	0.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	8	8	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	52	54	2.9	0% - 50%
ES1228115-003	Anonymous	EG005T: Cadmium	7440-43-9	1	mg/kg	<1	<1	0.0	No Limit
		EG005T: Chromium	7440-47-3	2	mg/kg	30	31	0.0	0% - 50%
		EG005T: Nickel	7440-02-0	2	mg/kg	17	18	0.0	No Limit
		EG005T: Arsenic	7440-38-2	5	mg/kg	<5	5	0.0	No Limit
		EG005T: Copper	7440-50-8	5	mg/kg	17	18	0.0	No Limit
		EG005T: Lead	7439-92-1	5	mg/kg	12	12	0.0	No Limit
		EG005T: Zinc	7440-66-6	5	mg/kg	72	74	3.3	0% - 50%
EP068A: Organochlorine Pesticides (OC) (QC Lot: 2627419)									
EP1209945-002	Anonymous	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit

Sub-Matrix: **SOIL**

				Laboratory Duplicate (DUP) Report					
Laboratory sample ID	*Client sample ID*	*Method: Compound*	*CAS Number*	*LOR*	*Unit*	*Original Result*	*Duplicate Result*	*RPD (%)*	*Recovery Limits (%)*
EP068A: Organochlorine Pesticides (OC) (QC Lot: 2627419) - continued									
EP1209945-002	Anonymous	EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
EP1209945-008	Anonymous	EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Dieldrin	60-57-1	0.05	mg/kg	7.88	7.96	1.0	0% - 20%
		EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin	72-20-8	0.05	mg/kg	0.15	0.12	19.2	No Limit
		EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	<0.05	0.0	No Limit
		EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
		EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	<0.2	0.0	No Limit
EP080/071: Total Petroleum Hydrocarbons (QC Lot: 2624806)									
ES1228077-107	Anonymous	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
ES1228084-004	MH4	EP071: C15 - C28 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C29 - C36 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: C10 - C14 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QC Lot: 2624806)									
ES1228077-107	Anonymous	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit
ES1228084-004	MH4	EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	<100	0.0	No Limit
		EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	<50	0.0	No Limit

Method Blank (MB) and Laboratory Control Spike (LCS) Report

The quality control term Method / Laboratory Blank refers to an analyte free matrix to which all reagents are added in the same volumes or proportions as used in standard sample preparation. The purpose of this QC parameter is to monitor potential laboratory contamination. The quality control term Laboratory Control Sample (LCS) refers to a certified reference material, or a known interference free matrix spiked with target analytes. The purpose of this QC parameter is to monitor method precision and accuracy independent of sample matrix. Dynamic Recovery Limits are based on statistical evaluation of processed LCS.

Sub-Matrix: **SOIL**

				Method Blank (MB) Report	Laboratory Control Spike (LCS) Report			
					Spike	Spike Recovery (%)	Recovery Limits (%)	
Method: Compound	CAS Number	LOR	Unit	Result	Concentration	LCS	Low	High
EG005T: Total Metals by ICP-AES (QCLot: 2626628)								
EG005T: Arsenic	7440-38-2	5	mg/kg	<5	21.7 mg/kg	107	84	128
EG005T: Cadmium	7440-43-9	1	mg/kg	<1	4.64 mg/kg	100	79	119
EG005T: Chromium	7440-47-3	2	mg/kg	<2	43.9 mg/kg	101	70	130
EG005T: Copper	7440-50-8	5	mg/kg	<5	32.0 mg/kg	111	83	127
EG005T: Lead	7439-92-1	5	mg/kg	<5	40.0 mg/kg	102	81	117
EG005T: Nickel	7440-02-0	2	mg/kg	<2	55.0 mg/kg	107	79	127
EG005T: Zinc	7440-66-6	5	mg/kg	<5	60.8 mg/kg	104	78	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 2627419)								
EP068: alpha-BHC	319-84-6	0.05	mg/kg	<0.05	0.5 mg/kg	85.4	60.8	116
EP068: Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg	<0.05	0.5 mg/kg	103	59.4	115
EP068: beta-BHC	319-85-7	0.05	mg/kg	<0.05	0.5 mg/kg	92.8	59.8	117
EP068: gamma-BHC	58-89-9	0.05	mg/kg	<0.05	0.5 mg/kg	87.3	59.8	118
EP068: delta-BHC	319-86-8	0.05	mg/kg	<0.05	0.5 mg/kg	78.1	65.8	114
EP068: Heptachlor	76-44-8	0.05	mg/kg	<0.05	0.5 mg/kg	96.7	65.6	115
EP068: Aldrin	309-00-2	0.05	mg/kg	<0.05	0.5 mg/kg	89.0	67	113
EP068: Heptachlor epoxide	1024-57-3	0.05	mg/kg	<0.05	0.5 mg/kg	92.0	65.6	113
EP068: trans-Chlordane	5103-74-2	0.05	mg/kg	<0.05	0.5 mg/kg	91.8	60.7	113
EP068: alpha-Endosulfan	959-98-8	0.05	mg/kg	<0.05	0.5 mg/kg	90.3	65.8	116
EP068: cis-Chlordane	5103-71-9	0.05	mg/kg	<0.05	0.5 mg/kg	89.0	57.3	120
EP068: Dieldrin	60-57-1	0.05	mg/kg	<0.05	0.5 mg/kg	92.1	67.4	116
EP068: 4.4`-DDE	72-55-9	0.05	mg/kg	<0.05	0.5 mg/kg	92.2	67.5	114
EP068: Endrin	72-20-8	0.05	mg/kg	<0.05	0.5 mg/kg	91.9	63	121
EP068: beta-Endosulfan	33213-65-9	0.05	mg/kg	<0.05	0.5 mg/kg	104	66.1	117
EP068: 4.4`-DDD	72-54-8	0.05	mg/kg	<0.05	0.5 mg/kg	104	65.3	116
EP068: Endrin aldehyde	7421-93-4	0.05	mg/kg	<0.05	0.5 mg/kg	68.6	57.3	115
EP068: Endosulfan sulfate	1031-07-8	0.05	mg/kg	<0.05	0.5 mg/kg	82.7	63.6	119
EP068: 4.4`-DDT	50-29-3	0.2	mg/kg	<0.2	0.5 mg/kg	86.3	58.4	127
EP068: Endrin ketone	53494-70-5	0.05	mg/kg	<0.05	0.5 mg/kg	96.6	63.6	117
EP068: Methoxychlor	72-43-5	0.2	mg/kg	<0.2	0.5 mg/kg	93.4	50.4	132
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2624806)								
EP071: C10 - C14 Fraction	----	50	mg/kg	<50	200 mg/kg	100	59	131
EP071: C15 - C28 Fraction	----	100	mg/kg	<100	300 mg/kg	104	74	138
EP071: C29 - C36 Fraction	----	100	mg/kg	<100	200 mg/kg	100	63	131
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QCLot: 2624806)								

Sub-Matrix: **SOIL**

Method: Compound	CAS Number	LOR	Unit	Method Blank (MB) Report: Result	Laboratory Control Spike (LCS) Report: Spike Concentration	Spike Recovery (%): LCS	Recovery Limits (%): Low	Recovery Limits (%): High
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QCLot: 2624806) - continued								
EP071: >C10 - C16 Fraction	----	50	mg/kg	<50	250 mg/kg	102	59	131
EP071: >C16 - C34 Fraction	----	100	mg/kg	<100	350 mg/kg	102	74	138
EP071: >C34 - C40 Fraction	----	100	mg/kg	<100	----	----	----	----
		50	mg/kg	----	150 mg/kg	88.0	63	131

Matrix Spike (MS) Report

The quality control term Matrix Spike (MS) refers to an intralaboratory split sample spiked with a representative set of target analytes. The purpose of this QC parameter is to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **SOIL**

Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Matrix Spike (MS) Report: Spike Concentration	SpikeRecovery(%): MS	Recovery Limits (%): Low	Recovery Limits (%): High
EG005T: Total Metals by ICP-AES (QCLot: 2626628)							
ES1227890-001	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	117	70	130
		EG005T: Cadmium	7440-43-9	50 mg/kg	98.9	70	130
		EG005T: Chromium	7440-47-3	50 mg/kg	105	70	130
		EG005T: Copper	7440-50-8	250 mg/kg	108	70	130
		EG005T: Lead	7439-92-1	250 mg/kg	100	70	130
		EG005T: Nickel	7440-02-0	50 mg/kg	103	70	130
		EG005T: Zinc	7440-66-6	250 mg/kg	106	70	130
EP068A: Organochlorine Pesticides (OC) (QCLot: 2627419)							
EP1209945-002	Anonymous	EP068: gamma-BHC	58-89-9	0.5 mg/kg	97.9	70	130
		EP068: Heptachlor	76-44-8	0.5 mg/kg	100	70	130
		EP068: Aldrin	309-00-2	0.5 mg/kg	88.5	70	130
		EP068: Dieldrin	60-57-1	0.5 mg/kg	96.2	70	130
		EP068: Endrin	72-20-8	2 mg/kg	92.2	70	130
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	80.6	70	130
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2624806)							
ES1228077-107	Anonymous	EP071: C10 - C14 Fraction	----	640 mg/kg	106	73	137
		EP071: C15 - C28 Fraction	----	3140 mg/kg	106	53	131
		EP071: C29 - C36 Fraction	----	2860 mg/kg	105	52	132
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QCLot: 2624806)							
ES1228077-107	Anonymous	EP071: >C10 - C16 Fraction	----	850 mg/kg	134	73	137
		EP071: >C16 - C34 Fraction	----	4800 mg/kg	104	53	131
		EP071: >C34 - C40 Fraction	----	2400 mg/kg	87.5	52	132

Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report

The quality control term Matrix Spike (MS) and Matrix Spike Duplicate (MSD) refers to intralaboratory split samples spiked with a representative set of target analytes. The purpose of these QC parameters are to monitor potential matrix effects on analyte recoveries. Static Recovery Limits as per laboratory Data Quality Objectives (DQOs). Ideal recovery ranges stated may be waived in the event of sample matrix interference.

Sub-Matrix: **SOIL**

				Matrix Spike (MS) and Matrix Spike Duplicate (MSD) Report						
				Spike	Spike Recovery (%)		Recovery Limits (%)		RPDs (%)	
Laboratory sample ID	Client sample ID	Method: Compound	CAS Number	Concentration	MS	MSD	Low	High	Value	Control Limit
EP080/071: Total Petroleum Hydrocarbons (QCLot: 2624806)										
ES1228077-107	Anonymous	EP071: C10 - C14 Fraction	----	640 mg/kg	106	----	73	137	----	----
		EP071: C15 - C28 Fraction	----	3140 mg/kg	106	----	53	131	----	----
		EP071: C29 - C36 Fraction	----	2860 mg/kg	105	----	52	132	----	----
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft (QCLot: 2624806)										
ES1228077-107	Anonymous	EP071: >C10 - C16 Fraction	----	850 mg/kg	134	----	73	137	----	----
		EP071: >C16 - C34 Fraction	----	4800 mg/kg	104	----	53	131	----	----
		EP071: >C34 - C40 Fraction	----	2400 mg/kg	87.5	----	52	132	----	----
EG005T: Total Metals by ICP-AES (QCLot: 2626628)										
ES1227890-001	Anonymous	EG005T: Arsenic	7440-38-2	50 mg/kg	117	----	70	130	----	----
		EG005T: Cadmium	7440-43-9	50 mg/kg	98.9	----	70	130	----	----
		EG005T: Chromium	7440-47-3	50 mg/kg	105	----	70	130	----	----
		EG005T: Copper	7440-50-8	250 mg/kg	108	----	70	130	----	----
		EG005T: Lead	7439-92-1	250 mg/kg	100	----	70	130	----	----
		EG005T: Nickel	7440-02-0	50 mg/kg	103	----	70	130	----	----
		EG005T: Zinc	7440-66-6	250 mg/kg	106	----	70	130	----	----
EP068A: Organochlorine Pesticides (OC) (QCLot: 2627419)										
EP1209945-002	Anonymous	EP068: gamma-BHC	58-89-9	0.5 mg/kg	97.9	----	70	130	----	----
		EP068: Heptachlor	76-44-8	0.5 mg/kg	100	----	70	130	----	----
		EP068: Aldrin	309-00-2	0.5 mg/kg	88.5	----	70	130	----	----
		EP068: Dieldrin	60-57-1	0.5 mg/kg	96.2	----	70	130	----	----
		EP068: Endrin	72-20-8	2 mg/kg	92.2	----	70	130	----	----
		EP068: 4.4`-DDT	50-29-3	2 mg/kg	80.6	----	70	130	----	----

Environmental Division

INTERPRETIVE QUALITY CONTROL REPORT

Work Order	: **ES1228084**	Page	: 1 of 5
Client	: ENVIROWEST CONSULTING	Laboratory	: Environmental Division Sydney
Contact	: MR ANDREW RUMING	Contact	: Client Services
Address	: PO BOX 9158 ORANGE NSW, AUSTRALIA 2800	Address	: 277-289 Woodpark Road Smithfield NSW Australia 2164
E-mail	: andrew@envirowest.net.au	E-mail	: sydney@alsglobal.com
Telephone	: +61 63614954	Telephone	: +61-2-8784 8555
Facsimile	: +61 02 63603960	Facsimile	: +61-2-8784 8500
Project	: 12147-1	QC Level	: NEPM 1999 Schedule B(3) and ALS QCS3 requirement
Site	: 12147-1		
C-O-C number	: 12147-1	Date Samples Received	: 28-NOV-2012
Sampler	: AR	Issue Date	: 06-DEC-2012
Order number	: 12147-1		
		No. of samples received	: 10
Quote number	: SY/400/11	No. of samples analysed	: 10

This report supersedes any previous report(s) with this reference. Results apply to the sample(s) as submitted. All pages of this report have been checked and approved for release.

This Interpretive Quality Control Report contains the following information:

- Analysis Holding Time Compliance
- Quality Control Parameter Frequency Compliance
- Brief Method Summaries
- Summary of Outliers

Analysis Holding Time Compliance

The following report summarises extraction / preparation and analysis times and compares with recommended holding times. Dates reported represent first date of extraction or analysis and precludes subsequent dilutions and reruns. Information is also provided re the sample container (preservative) from which the analysis aliquot was taken. Elapsed period to analysis represents number of days from sampling where no extraction / digestion is involved or period from extraction / digestion where this is present. For composite samples, sampling date is assumed to be that of the oldest sample contributing to the composite. Sample date for laboratory produced leachates is assumed as the completion date of the leaching process. Outliers for holding time are based on USEPA SW 846, APHA, AS and NEPM (1999). A listing of breaches is provided in the Summary of Outliers.

Holding times for leachate methods (excluding elutriates) vary according to the analytes being determined on the resulting solution. For non-volatile analytes, the holding time compliance assessment compares the leach date with the shortest analyte holding time for the equivalent soil method. These soil holding times are: Organics (14 days); Mercury (28 days) & other metals (180 days). A recorded breach therefore does not guarantee a breach for all non-volatile parameters.

Matrix: **SOIL**

Evaluation: × = Holding time breach ; ✓ = Within holding time.

Method / Container / Client Sample ID(s)	Sample Date	Extraction / Preparation			Analysis		
		Date extracted	Due for extraction	Evaluation	Date analysed	Due for analysis	Evaluation
EA055: Moisture Content							
Soil Glass Jar - Unpreserved (EA055-103)							
MH1, MH2, MH3, MH4, MH5, MH6, MH7, MH8, MH9, MHH	**23-NOV-2012**	**----**	----	----	**29-NOV-2012**	07-DEC-2012	✓
EG005T: Total Metals by ICP-AES							
Soil Glass Jar - Unpreserved (EG005T)							
MH2, MH3	**23-NOV-2012**	**03-DEC-2012**	22-MAY-2013	✓	**03-DEC-2012**	22-MAY-2013	✓
EP068A: Organochlorine Pesticides (OC)							
Soil Glass Jar - Unpreserved (EP068)							
MH2, MH3	**23-NOV-2012**	**03-DEC-2012**	07-DEC-2012	✓	**04-DEC-2012**	12-JAN-2013	✓
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft							
Soil Glass Jar - Unpreserved (EP071)							
MH1, MH2, MH3, MH4, MH5, MH6, MH7, MH8, MH9, MHH	**23-NOV-2012**	**30-NOV-2012**	07-DEC-2012	✓	**03-DEC-2012**	09-JAN-2013	✓

General Comments

The analytical procedures used by the Environmental Division have been developed from established internationally recognized procedures such as those published by the USEPA, APHA, AS and NEPM. In house developed procedures are employed in the absence of documented standards or by client request.

Where moisture determination has been performed, results are reported on a dry weight basis.

Where a reported less than (<) result is higher than the LOR, this may be due to primary sample extract/digestate dilution and/or insufficient sample for analysis.

Where the LOR of a reported result differs from standard LOR, this may be due to high moisture content, insufficient sample (reduced weight employed) or matrix interference.

When sampling time information is not provided by the client, sampling dates are shown without a time component. In these instances, the time component has been assumed by the laboratory for processing purposes.

Key : CAS Number = CAS registry number from database maintained by Chemical Abstracts Services. The Chemical Abstracts Service is a division of the American Chemical Society.
LOR = Limit of reporting
^ = This result is computed from individual analyte detections at or above the level of reporting

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)

Compound	CAS Number	LOR	Unit	Client sample ID	MH1	MH2	MH3	MH4	MH5
				Client sampling date / time	23-NOV-2012 15:00	23-NOV-2012 15:00	23-NOV-2012 15:00	23-NOV-2012 15:00	23-NOV-2012 15:00
					ES1228084-001	ES1228084-002	ES1228084-003	ES1228084-004	ES1228084-005
EA055: Moisture Content									
Moisture Content (dried @ 103°C)	----	1.0	%		11.2	6.6	6.5	3.9	3.0
EG005T: Total Metals by ICP-AES									
Arsenic	7440-38-2	5	mg/kg		----	<5	<5	----	----
Cadmium	7440-43-9	1	mg/kg		----	<1	<1	----	----
Chromium	7440-47-3	2	mg/kg		----	14	9	----	----
Copper	7440-50-8	5	mg/kg		----	7	<5	----	----
Lead	7439-92-1	5	mg/kg		----	7	<5	----	----
Nickel	7440-02-0	2	mg/kg		----	3	<2	----	----
Zinc	7440-66-6	5	mg/kg		----	5	<5	----	----
EP068A: Organochlorine Pesticides (OC)									
alpha-BHC	319-84-6	0.05	mg/kg		----	<0.05	<0.05	----	----
Hexachlorobenzene (HCB)	118-74-1	0.05	mg/kg		----	<0.05	<0.05	----	----
beta-BHC	319-85-7	0.05	mg/kg		----	<0.05	<0.05	----	----
gamma-BHC	58-89-9	0.05	mg/kg		----	<0.05	<0.05	----	----
delta-BHC	319-86-8	0.05	mg/kg		----	<0.05	<0.05	----	----
Heptachlor	76-44-8	0.05	mg/kg		----	<0.05	<0.05	----	----
Aldrin	309-00-2	0.05	mg/kg		----	<0.05	<0.05	----	----
Heptachlor epoxide	1024-57-3	0.05	mg/kg		----	<0.05	<0.05	----	----
^ Total Chlordane (sum)	----	0.05	mg/kg		----	<0.05	<0.05	----	----
trans-Chlordane	5103-74-2	0.05	mg/kg		----	<0.05	<0.05	----	----
alpha-Endosulfan	959-98-8	0.05	mg/kg		----	<0.05	<0.05	----	----
cis-Chlordane	5103-71-9	0.05	mg/kg		----	<0.05	<0.05	----	----
Dieldrin	60-57-1	0.05	mg/kg		----	<0.05	<0.05	----	----
4.4`-DDE	72-55-9	0.05	mg/kg		----	<0.05	<0.05	----	----
Endrin	72-20-8	0.05	mg/kg		----	<0.05	<0.05	----	----
beta-Endosulfan	33213-65-9	0.05	mg/kg		----	<0.05	<0.05	----	----
^ Endosulfan (sum)	115-29-7	0.05	mg/kg		----	<0.05	<0.05	----	----
4.4`-DDD	72-54-8	0.05	mg/kg		----	<0.05	<0.05	----	----
Endrin aldehyde	7421-93-4	0.05	mg/kg		----	<0.05	<0.05	----	----
Endosulfan sulfate	1031-07-8	0.05	mg/kg		----	<0.05	<0.05	----	----
4.4`-DDT	50-29-3	0.2	mg/kg		----	<0.2	<0.2	----	----
Endrin ketone	53494-70-5	0.05	mg/kg		----	<0.05	<0.05	----	----
Methoxychlor	72-43-5	0.2	mg/kg		----	<0.2	<0.2	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	MH1	MH2	MH3	MH4	MH5
				Client sampling date / time	23-NOV-2012 15:00	23-NOV-2012 15:00	23-NOV-2012 15:00	23-NOV-2012 15:00	23-NOV-2012 15:00
Compound	CAS Number	LOR	Unit		ES1228084-001	ES1228084-002	ES1228084-003	ES1228084-004	ES1228084-005
EP068A: Organochlorine Pesticides (OC) - Continued									
^ **Sum of Aldrin + Dieldrin**	309-00-2/60-57-1	0.05	mg/kg		----	<0.05	<0.05	----	----
^ **Sum of DDD + DDE + DDT**	----	0.05	mg/kg		----	<0.05	<0.05	----	----
EP080/071: Total Petroleum Hydrocarbons									
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **C10 - C36 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft									
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ **>C10 - C40 Fraction (sum)**	----	50	mg/kg		<50	<50	<50	<50	<50
EP068S: Organochlorine Pesticide Surrogate									
Dibromo-DDE	21655-73-2	0.1	%		----	**107**	**94.2**	----	----
EP068T: Organophosphorus Pesticide Surrogate									
DEF	78-48-8	0.1	%		----	**123**	**102**	----	----

Analytical Results

Sub-Matrix: SOIL (Matrix: SOIL)				Client sample ID	MH6	MH7	MH8	MH9	MHH
				Client sampling date / time	23-NOV-2012 15:00	23-NOV-2012 15:00	23-NOV-2012 15:00	23-NOV-2012 15:00	23-NOV-2012 15:00
Compound	CAS Number	LOR	Unit		ES1228084-006	ES1228084-007	ES1228084-008	ES1228084-009	ES1228084-010
EA055: Moisture Content									
Moisture Content (dried @ 103°C)	----	1.0	%		6.5	1.4	7.1	7.0	7.4
EP080/071: Total Petroleum Hydrocarbons									
C10 - C14 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
C15 - C28 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
C29 - C36 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ C10 - C36 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50
EP080/071: Total Recoverable Hydrocarbons - NEPM 2010 Draft									
>C10 - C16 Fraction	----	50	mg/kg		<50	<50	<50	<50	<50
>C16 - C34 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
>C34 - C40 Fraction	----	100	mg/kg		<100	<100	<100	<100	<100
^ >C10 - C40 Fraction (sum)	----	50	mg/kg		<50	<50	<50	<50	<50

Surrogate Control Limits

Sub-Matrix: **SOIL**		Recovery Limits (%)	
Compound	*CAS Number*	*Low*	*High*
EP068S: Organochlorine Pesticide Surrogate			
Dibromo-DDE	21655-73-2	49	145
EP068T: Organophosphorus Pesticide Surrogate			
DEF	78-48-8	32	142

Environmental Division
Sydney
Work Order
ES1228084

Telephone : +61-2-8784 8555

Chain of Custody Form – Ref 12147-1

Ref: 12147-1
Investigator: Envirowest Consulting
24 William Street
PO Box 8158
ORANGE NSW 2800
Telephone: (02) 6361 4954
Facsimile: (02) 6360 3960
Email: ec@envirowest.net.au
Contact Person: Andrew Ruming

Laboratory: Australian Laboratory Services
277 Woodpark Road
SMITHFIELD NSW 2164

Quotation #: SY-448-12
Courier/CN:

	Sample ID	Container*	Sampling Date/Time	Sample matrix: Water	Soil	Sludge	Sample preservation: Cool	HNO3/ HCl	Unpre-served	Analysis: ALS Method Code S-1 As, Cd, Cr, Cu, Ni, Pb, Zn	EP068A OCP	EP071 TPH (C10-C36)
1	MH1	A	23/11/2012		X		X		X			X
2	MH2	A	23/11/2012		X		X		X	X	X	X
3	MH3	A	23/11/2012		X		X		X	X	X	X
4	MH4	A	23/11/2012		X		X		X			X
5	MH5	A	23/11/2012		X		X		X			X
6	MH6	A	23/11/2012		X		X		X			X
7	MH7	A	23/11/2012		X		X		X			X
8	MH8	A	23/11/2012		X		X		X			X
9	MH9	A	23/11/2012		X		X		X			X
10	MHH	A	23/11/2012		X		X		X			X

Investigator: I attest that the proper field sampling procedures were used during the collection of these samples.

Sampler name: Andrew Ruming
Date : 27/11/2012 Time: 11am

Relinquished by: (print and signature)	Date	Time	Received by: (print and signature)	Date	Time
Andrew Ruming	27/11/12	17:00	Reanne	28-11-12	0800

Please return completed form to Envirowest Consulting, *A = 200mL solvent rinsed glass jar with Teflon lined lid, B = 2x40mL vials solvent rinsed Teflon lined septum caps, C 1x500mL glass bottles , solvent rinsed, Teflon lined cap, D= 200mL plastic bottle with nitric acid.

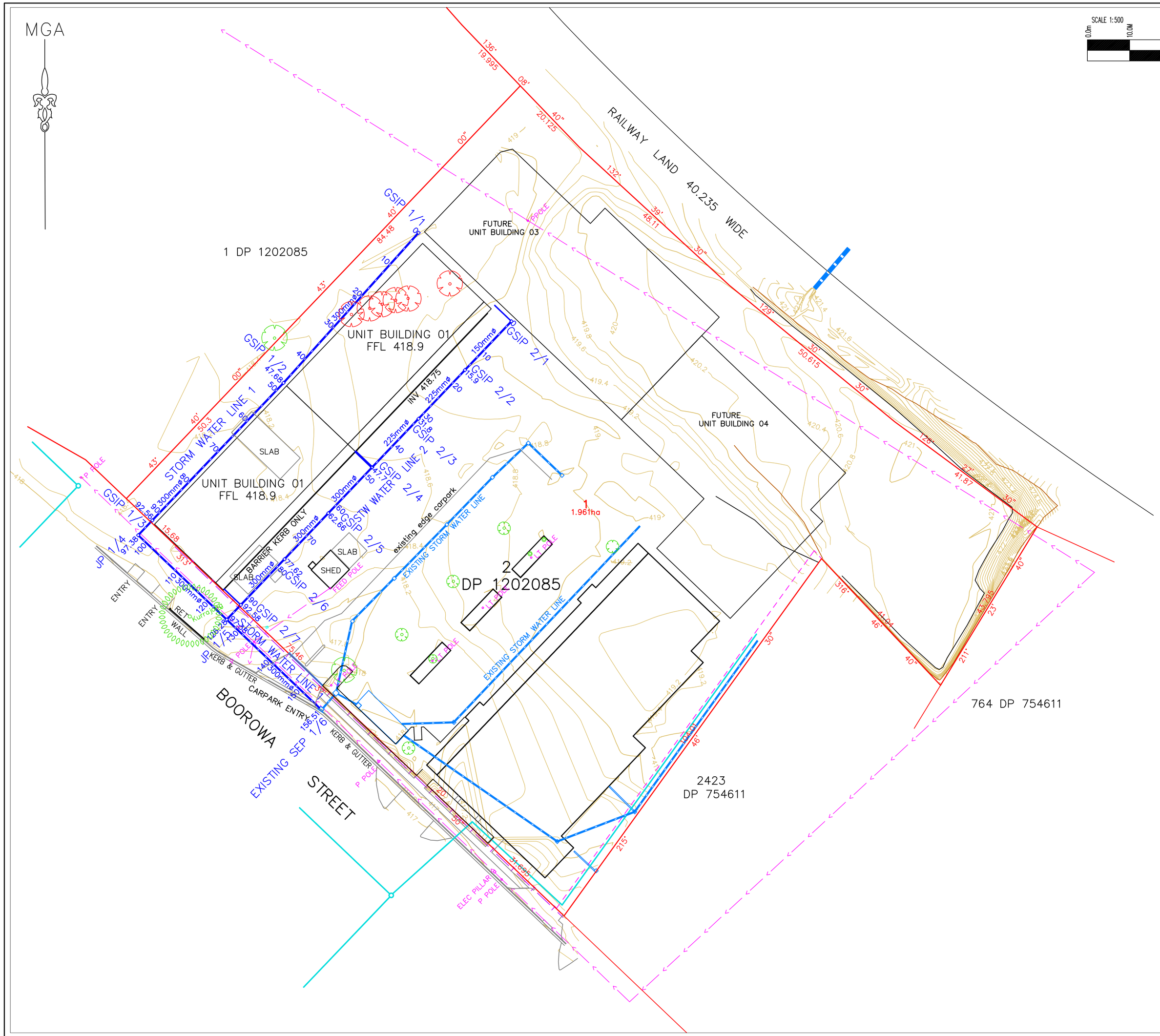
Appendix 4. Sampling log

Client	Mellross Homes
Contact	-
Job number	R12147val
Location	327 Boorowa Street, Orange NSW
Date	23 November 2012
Investigator(s)	Andrew Ruming
Weather conditions	Fine

Sample id	Matrix	Date	Location	Analysis required
MH1	Soil	23/11/12	Vehicle service ramp base	TPH(C10-C36)
MH2	Soil	23/11/12	Fibro shed base	TPH(C10-C36), metals, OCP
MH3	Soil	23/11/12	Fibro shed wall	TPH(C10-C36), metals, OCP
MH4	Soil	23/11/12	Diesel AST base	TPH(C10-C36)
MH5	Soil	23/11/12	Diesel AST wall	TPH(C10-C36)
MH6	Soil	23/11/12	South east of diesel AST base	TPH(C10-C36)
MH7	Soil	23/11/12	South east of diesel AST wall	TPH(C10-C36)
MH8	Soil	23/11/12	South of diesel AST base	TPH(C10-C36)
MH9	Soil	23/11/12	South of diesel AST wall	TPH(C10-C36)
MHH	Soil	23/11/12	Duplicate of MH8	TPH(C10-C36)

APPENDIX 7

CONCEPT STORMWATER DESIGN



SCALE 1:500
0.0m 10.0M 20.0m 30.0M 40.0m 50.0m

THIS PLAN IS NOT CHECKED OR REGISTERED BY THE LAND TITLES OFFICE

ALTERATIONS MAY BE REQUIRED PRIOR TO ITS ACCEPTANCE AND REGISTRATION

ALL DIMENSIONS AND AREAS STATED ON THIS PLAN ARE PRELIMINARY ONLY AND ARE SUBJECT TO CONFIRMATION AND FURTHER SURVEY

THE POSITION AND NATURE OF EASEMENTS TO BE CREATED ARE SUBJECT TO FURTHER SURVEY

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DIAL 1100
DIAL BEFORE YOU DIG

EXISTING U/G POWER LINES
Depth and location to be verified on site by potholing and locator
If depth insufficient, to be relocated

EXISTING TREE (REMOVE)

EXISTING TREE (RETAIN)

– N O T E S –

GENERAL

G1 ALL DEVELOPMENT CONSENT CONDITIONS ARE TO BE FULLY COMPLIED WITH THROUGHOUT THE COMPLETION OF THE PROJECT.

G2 ALL WORK TO BE IN ACCORDANCE WITH DEVELOPMENT CONTROL PLAN F UPPER LACHLAN COUNCIL

G3 INSPECTIONS BY COUNCIL'S DEVELOPMENT CONTROL ENGINEERS ARE TO BE UNDERTAKEN AT CRITICAL STAGES WHEN DIRECTED AND WHERE REQUIRED BY DCP GENERALLY A MINIMUM OF 48 HOURS NOTICE IS REQUIRED FOR INSPECTIONS, HOWEVER THIS MAY VARY FOR CERTAIN INSPECTIONS .

G4 NO WORK TO BE CARRIED OUT ON COUNCIL PROPERTY OR PRIVATE PROPERTY WITHOUT THE WRITTEN PERMISSION OF THE OWNER. A COPY OF THE WRITTEN PERMISSION IS TO BE SENT TO COUNCIL FOR ITS RECORDS.

G5 ALL RUBBISH, BUILDINGS, SHEDS, UNDERGROWTH AND FENCES ARE TO BE REMOVED FROM THE SITE AND ROAD RESERVES TO THE SATISFACTION OF COUNCILS DEVELOPMENT CONTROL ENGINEER.

G6 ALL TREES TO BE REMOVED SHALL BE CLEARLY MARKED ON SITE AND INSPECTED BY COUNCIL STAFF PRIOR TO REMOVAL AS REQUIRED BY THE CONSENT CONDITIONS.

G7 WHERE EXCAVATION IS REQUIRED ADJACENT TO TREES, ALL ROOTS SHALL BE CLEAN CUT AND TREATED BY A QUALIFIED ARBORIST. CERTIFICATION BY THE ARBORIST THAT WORKS HAVE BEEN DONE IN ACCORDANCE WITH BEST PRACTICE WILL BE REQUIRED TO BE SUBMITTED TO COUNCIL PRIOR TO THE ISSUE OF THE CONSTRUCTION CERTIFICATE.

G8 MAKE SMOOTH CONNECTION TO ALL EXISTING ENGINEERING WORK.

G9 ALL EXISTING SERVICES TO BE LOCATED AND LEVELED BY THE CONTRACTOR PRIOR TO THE COMMENCEMENT OF WORK.

G10 ALL SERVICES AFFECTED BY NEW WORK TO BE ADJUSTED TO SUIT IN THE FIELD TO THE SATISFACTION OF THE RELEVANT SERVICE AUTHORITY.

G11 THE CONTRACTOR SHALL PROVIDE TRAFFIC CONTROL WHICH COMPLIES WITH TFNSW, TCWSM AND AS1742.3-2002. A COPY OF THE PLAN SHOWING LAYOUT OF PROPOSED TRAFFIC CONTROL FOR THE COMMENCEMENT OF WORK AND CERTIFIED BY A SUITABLY QUALIFIED PERSON IS TO BE SUBMITTED TO COUNCIL PRIOR TO COMMENCEMENT OF ANY WORK. FURTHER PLANS ARE TO BE SUBMITTED IF WORK SITE ALTERS.

G12 ANY ROAD RESTORATION REQUIRED SHALL BE IN 150mm LAYERS OF DGS40 FROM THE BOTTOM OF TRENCH ON TOP OF SAND OVERLAY OVER ANT PIPES, IN ACCORDANCE WITH WSAA AND PAVEMENT DESIGN .

G13 THE CONTRACTOR SHALL MAINTAIN AND/OR RESTORE ANY DAMAGE WHICH MAY HAVE BEEN CAUSED BY THE CONSTRUCTION OF THE SUBDIVISION TO THE ROAD PAVEMENT, ROADSIDE DRAINAGE OR UNDERGROUND FACILITIES IN COUNCIL ROADS WHICH GIVE ACCESS TO THE SUBDIVISION.

G14 ALL DISTURBED AREAS TO BE REINSTATED AS NEARLY AS POSSIBLE TO THE PRE-CONSTRUCTION CONDITION.

EXISTING DETAIL

1. THE POSITION OF IMPROVEMENTS TO BOUNDARIES ARE DIAGRAMATIC ONLY
2. POSITION OF RIDGE LINES ARE DIAGRAMMATIC ONLY (NOT TO SCALE)
3. NO INVESTIGATION OF UNDERGROUND SERVICES HAS BEEN MADE. RELEVENT AUTHORITIES ARE TO BE NOTIFIED PRIOR TO ANY DEVELOPMENT DEPTH AND LOCATION TO BE VERIFIED ON SITE BY POTHOLING AND LOCATOR. IF DEPTH INSUFFICIENT, TO BE RELOCATED
4. ALL DIMENSIONS ARE BY TITLE ONLY & SUBJECT TO FINAL SURVEY
5. CONTOURS ARE INDICATIVE OF GROUND FORM ONLY. ONLY SPOT LEVELS SHOULD BE USED FOR CALCULATIONS OF QUANTITIES WITH CAUTION
6. NO INVESTIGATIONS HAVE BEEN MADE OF BUILDING RESTRICTIONS WHICH MAY APPLY TO THIS LAND
7. CONTOUR INTERVAL 0.2m MINOR 1.0m MAJOR
8. THE SPREAD AND HEIGHT OF TREES SHOWN ARE INDICATIVE ONLY AND CANNOT BE SHOWN ACCURATELY WITHOUT ADDITIONAL DETAILED SURVEY.

STORMWATER

S1 KERB INLET PITS TO CONFORM TO SD
S2 JUNCTION PITS TO CONFORM TO SD
S3 INTERALLOTMENT DRAINAGE PITS TO CONFORM TO SD
S4 PIPES TO BE RUBBER RING JOINTED ON TYPE 'H' BEDDING WHICH COMPLIES WITH A.S.3725 AND DEVELOPMENT CONTROL PLAN
S5 LINTELS TO BE LOCATED CENTRALLY ON SAG PITS UNLESS OTHERWISE SHOWN.
S6 PROVIDE STEP IRONS ON ALL DRAINAGE PITS DEEPER THAN 1.2m.
S7 BACKFILL TO ALL PIPES IN ROAD RESERVE TO COMPLY WITH DEVELOPMENT CONTROL PLAN
S8 ALL INTERALLOTMENT DRAINAGE LINES THAT WILL NOT BENEFIT COUNCIL ARE TO BE INSPECTED AND CERTIFIED BY AN ENGINEER OR SURVEYOR
ALL PIPE JOINS IN PITS, HEADWALLS AND OTHER DRAINAGE STRUCTURES ARE TO BE MORTARED TO PREVENT INFILTRATION.

ISSUE	AMENDMENT	DATE
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.	. .	.
.	. .	.
.	.	.
A	PRELIMINARY DRAINAGE DESIGN	19th Mar, 2025

I HEREBY CERTIFY THAT ENGINEERING WORKS SHOWN ON THIS PLAN ARE WORK-AS-EXECUTED AND HAVE BEEN CONSTRUCTED GENERALLY IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS APPROVED BY THE DIRECTOR. IN ACCORDANCE WITH THE GENERAL REQUIREMENTS

NAME: ....
SIGNATURE: ....
CAPACITY: ....
DATE: ....

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DATE	CHECKED
19th Mar, 2025	AG

DRAWN	APPROVED
WJC	

DESIGNED	SCALE	SHEET
WJC	1:500	A1

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LAND CONSULTING
GOULBURN: 4823 5100 | YOUNG: 6382 1501
THE LAND CONSULTANT SPECIALISTS
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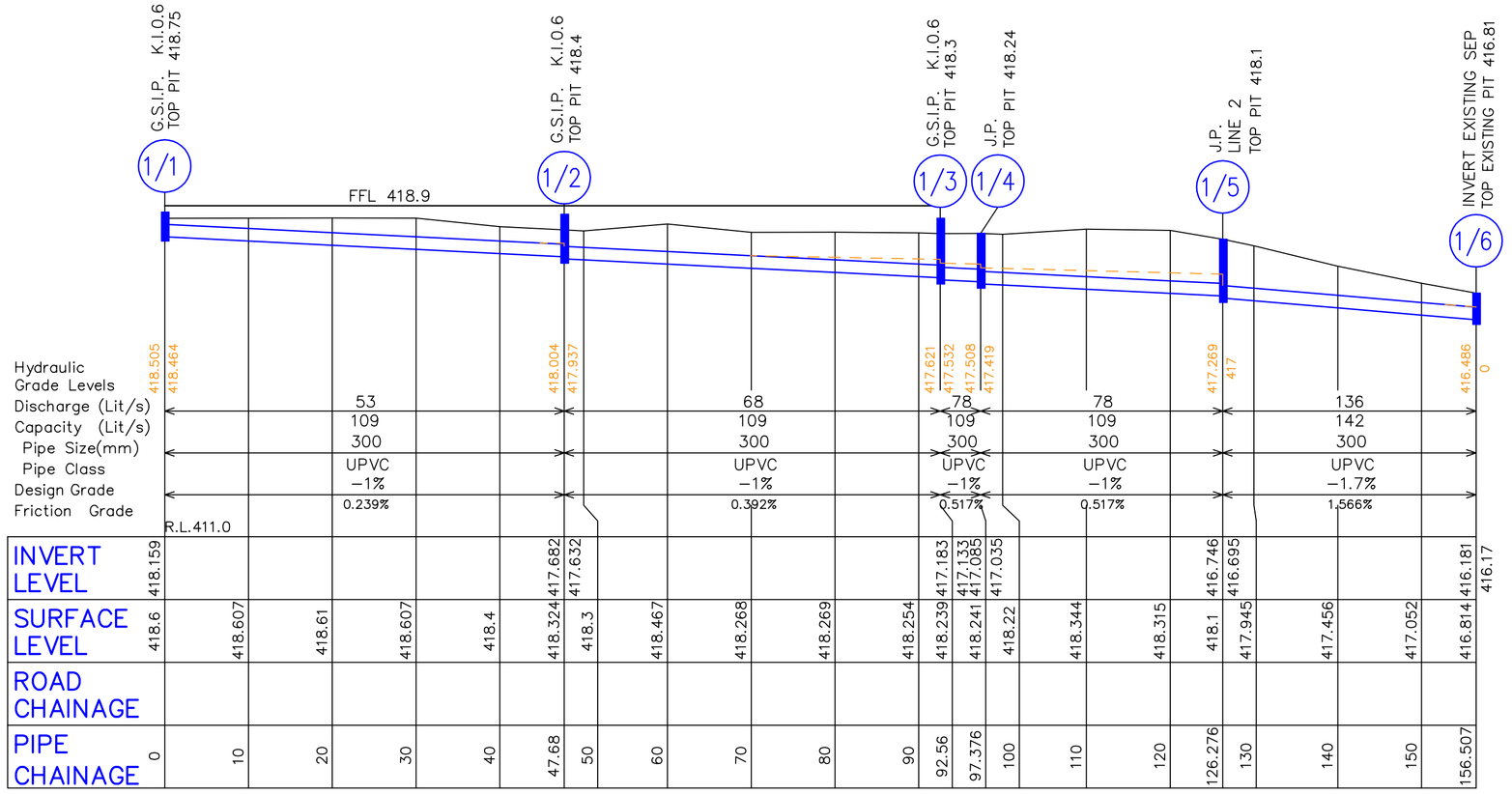
SHEET SUBJECT
PLAN VIEW, CONTOURS AND DETAIL
STORM WATER

PROJECT
PROPOSED COMMERCIAL UNIT DEVELOPMENT
323-337 BOOROWA STREET, YOUNG
LOT 2 DP 1202085

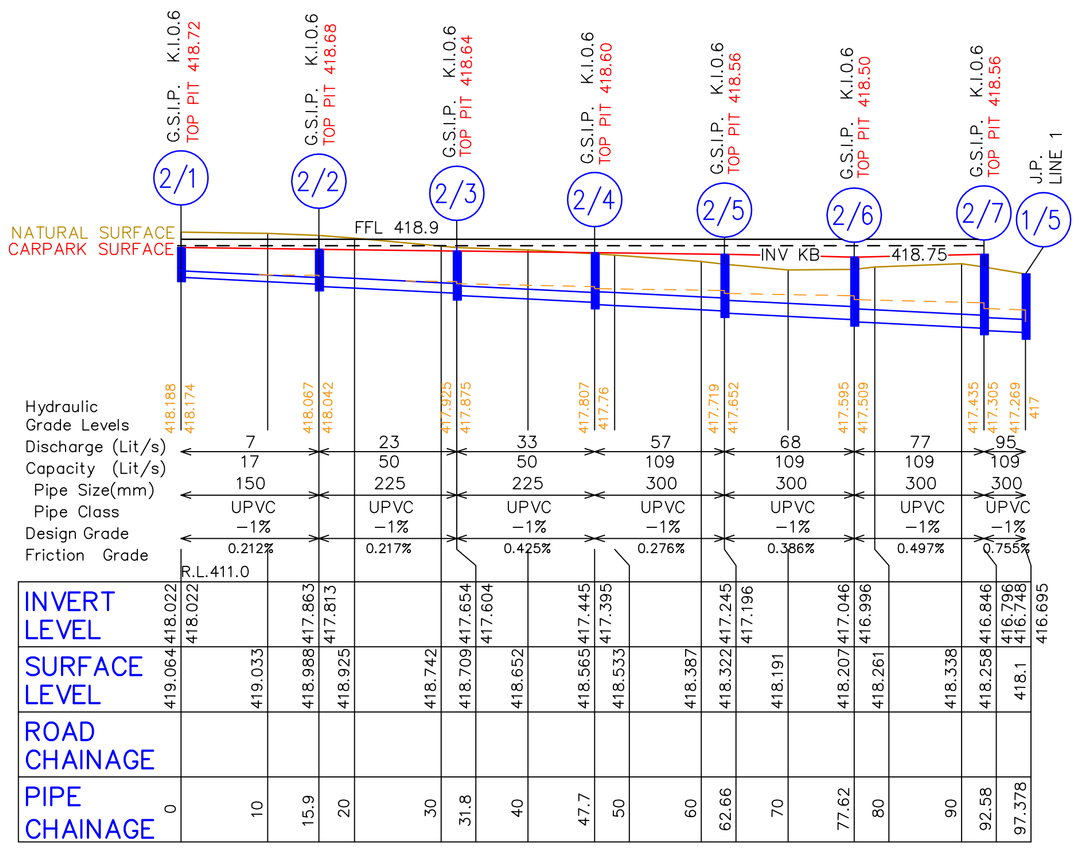
CLIENT
Mr. D. MELLROSS

ISSUE	PROJECT NO.	SHEET NO.	SHEET
A	16596-B	1 of 2	A1



STORM WATER LINE No.1

H=1:500 V=1:100



STORM WATER LINE No.2

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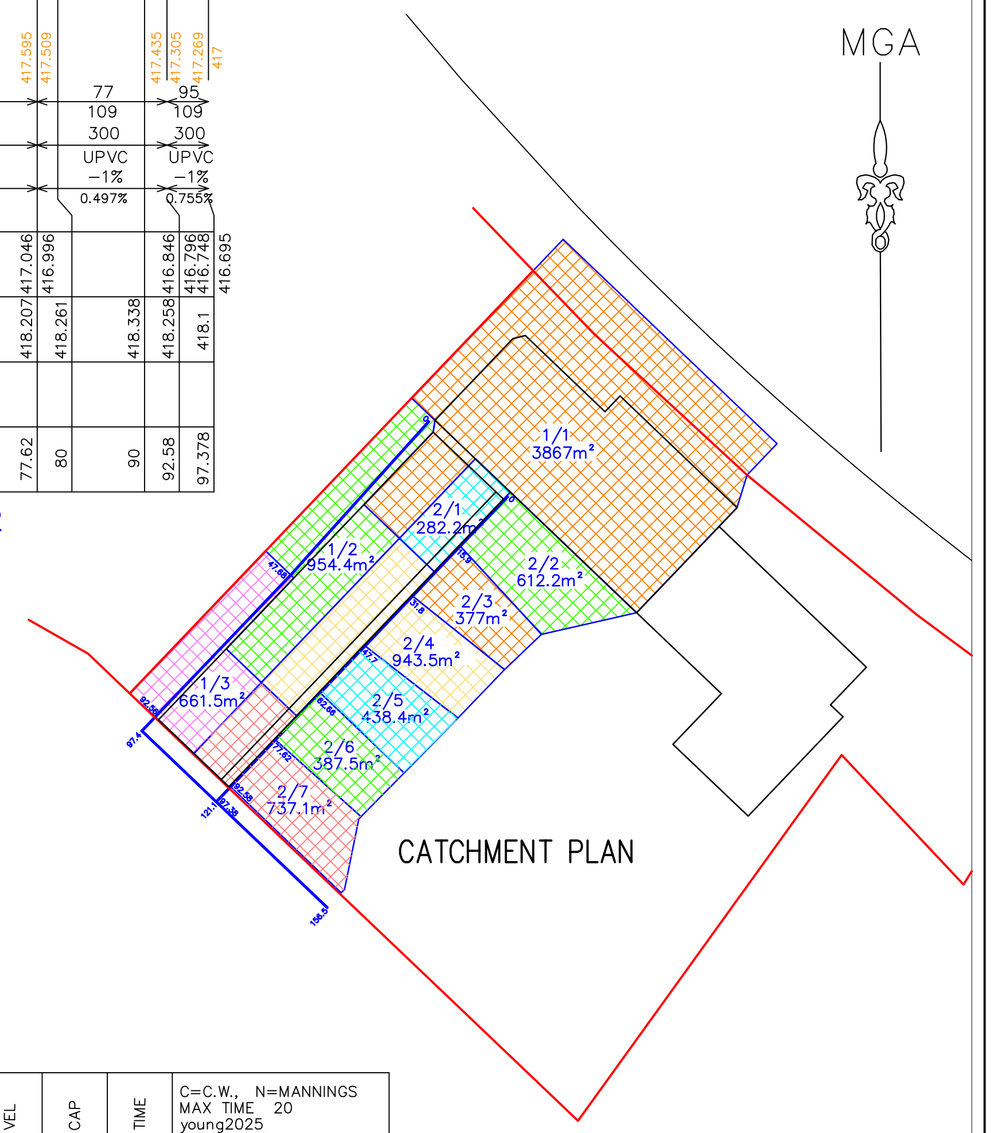
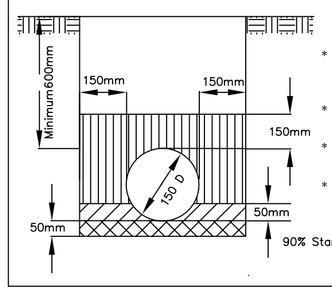


PROFILE OF INSTALLATION OF SEWER AND PVC STORM WATER



INSTALLATION NOTES

* This drawing relates to the class of pipe and minimum compacted cover required for a vibratory smooth drum roller (7t). The use of heavier compactors or heavier live loading will require a review of the class of pipe and/or minimum compacted cover. Refer to AS3725-1989.
* When using a pedestrian vibrating plate the minimum compacted fill is 125mm for all pipe classes and trench types.
* Widening of the trench beyond that shown on the drawing will increase the load carried by the pipe and will require a review of pipe class and trench filling method.
* To obtain sufficent compaction you may have to use shallower fills and initially use a light roller.

Bedding Haunch Selected Fill

HYDROLOGICAL DESIGN SHEET

PIT	LAND USE	FLOW LENGTH	SLOPE	"n"	TIME	TIME	INTENSITY	CODE	COEFF	AREA	C.A	SUM AREA	Q	BY PASS	TOTAL FLOW	GUTTER SLOPE	FLOW WIDTH	PIT TYPE	LINTEL	INFLOW	BY FLOW	BY PIT	MIN TIME 5 MAX TIME 20 young2025 REMARKS
		m	%		min	min	mm/h			ha	ha	ha	L/s	L/s	L/s	%	m		m	L/s	L/s		
2/1	2 3	11 11	7.2 1	0.010 0.010	1.603 2.380	5	107 10Yr	9 8	0.950 0.901	0.026 0.002	0.025 0.002	0.027	8		8	1	1.58	GSIP	0.6	8		2/2	
2/2	3	43	1	0.010	3.749	5	107 10Yr	8	0.901	0.061	0.055	0.055	16		16	1	2.429	GSIP	0.6	16		2/3	
2/3	3	31	1	0.010	3.361	5	107 10Yr	8	0.901	0.038	0.034	0.034	10		10	1	1.873	GSIP	0.6	10		2/4	
2/4	2 3	11 33	7.2 1	0.010 0.010	1.603 3.432	5	107 10Yr	9 8	0.950 0.901	0.051 0.043	0.048 0.039	0.087	26		26	1	3.027	GSIP	0.6	26		2/5	
2/5	3	32	1	0.010	3.397	5	107 10Yr	8	0.901	0.044	0.040	0.04	12		12	1	2.037	GSIP	0.6	12		2/6	
2/6	3	31	1	0.010	3.361	5	107 10Yr	8	0.901	0.039	0.035	0.035	10		10	1	1.902	GSIP	0.6	10		2/7	
2/7	2 3	11 31	7.2 1	0.010 0.010	1.603 3.361	5	107 10Yr	9 8	0.950 0.901	0.025 0.049	0.024 0.044	0.068	20		20	1	2.699	GSIP	0.6	20		1/6	
1/1	1 2 2 3	70 72 11 90	1.9 7.2 7.2 1	0.060 0.010 0.010 0.010	23.271 2.999 1.603 4.795	20	61 10Yr	2 9 9 8	0.307 0.950 0.950 0.897	0.070 0.202 0.026 0.089	0.021 0.192 0.025 0.080	0.318	54		54	1	4.164	GSIP	0.6	54		1/2	
1/2	2 3	11 48	7.2 1	0.010 0.010	1.603 3.889	5.5	103 10Yr	9 8	0.950 0.901	0.051 0.045	0.048 0.041	0.089	26		26	1	3.015	GSIP	0.6	26		1/3	
1/3	2 3	11 45	7.2 1	0.010 0.010	1.603 3.806	5.4	104 10Yr	9 8	0.950 0.901	0.025 0.041	0.024 0.037	0.061	18		18	1	2.517	GSIP	0.6	18		1/6	
1/4	4					5	107 10Yr										9999	JP		ADP		1/6	
1/5	4					5	107 10Yr										9999	JP		ADP		1/6	

HYDRAULIC DESIGN SHEET

PIT	TIME	INTENSITY	AREAS	FLOW	LENGTH	DIAMETER	GRADE	H.G.L.GRADE	VEL Q/A	K	HEAD LOSS	VEL CAP	PIPE VEL	PIPE CAP	PIPE TIME	C=C.W., N=MANNINGS MAX TIME 20 young2025 BY PASS=Q AREA=SUM.CA REMARKS
	min	mm/hr	ha	L/s	m	mm	%	%	m/s		m	m/s	m/s	L/s	min	
LINE 2 2/1–2/2	5	107 10Yr	0.027	8	15.9 N0.012	152	1	0.212	0.434	1.5	0.014	0.942	0.92	17	0.29	
2/2–2/3	5.3	104 10Yr	0.081	24	15.9 N0.012	229	1	0.217	0.576	1.5	0.025	1.238	1.21	51	0.22	
2/3–2/4	5.5	103 10Yr	0.116	33	15.9 N0.012	229	1	0.425	0.807	1.5	0.05	1.238	1.31	51	0.2	
2/4–2/5	5.7	102 10Yr	0.203	58	14.96 N0.012	305	1	0.276	0.787	1.5	0.047	1.498	1.51	109	0.17	
2/5–2/6	5.9	100 10Yr	0.243	68	14.96 N0.012	305	1	0.386	0.931	1.5	0.066	1.498	1.57	109	0.16	
2/6–2/7	6	99 10Yr	0.278	77	14.96 N0.012	305	1	0.497	1.056	1.5	0.085	1.498	1.62	109	0.15	
2/7–1/5	6.2	99 10Yr	0.346	95	4.798 N0.012	305	1	0.755	1.302	1.5	0.13	1.498	1.68	109	0.05	
LINE 1 1/1–1/2	20	60 10Yr	0.318	54	47.68 N0.012	305	1	0.239	0.733	1.5	0.041	1.498	1.49	109	0.53	
1/2–1/3	20	60 10Yr	0.407	69	44.88 N0.012	305	1	0.392	0.938	1.5	0.067	1.498	1.58	109	0.47	
1/3–1/4	20	60 10Yr	0.468	79	4.816 N0.012	305	1	0.517	1.078	1.5	0.089	1.498	1.63	109	0.05	
1/4–1/5	20	60 10Yr	0.468	79	28.9 N0.012	305	1	0.517	1.078	1.5	0.089	1.498	1.63	109	0.3	
1/5–1/6	20	60 10Yr	0.813	137	30.231 N0.012	305	1.7	1.566	1.875	1.5	0.269	1.954	2.22	143	0.23	

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DIAL 1100
DIAL BEFORE YOU DIG

SCALE 1:500
0.0m 10.0m 20.0m 30.0m 40.0m 50.0m

ISSUE	AMENDMENT	DATE
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.	. .	.
.	. .	.
.	.	.
A	PRELIMINARY DRAINAGE DESIGN	19th Mar, 2025

I HEREBY CERTIFY THAT ENGINEERING WORKS SHOWN ON THIS PLAN ARE WORK-AS-EXECUTED AND HAVE BEEN CONSTRUCTED GENERALLY IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS APPROVED BY THE DIRECTOR. IN ACCORDANCE WITH THE GENERAL REQUIREMENTS

NAME: .....
SIGNATURE: .....
CAPACITY: .....
DATE: .....

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DATE	CHECKED
19th Mar, 2025	AG
DRAWN	APPROVED
WJC	
DESIGNED	SCALE
WJC	1:500

SHEET A1

SRD LAND CONSULTING
GOULBURN: 4823 5100 | YOUNG: 6382 1501
THE LAND CONSULTANT SPECIALISTS
WWW.SRDLAND.COM.AU

SHEET SUBJECT
STORM WATER LONG SECTIONS
HYDRAULICS AND HYDROLOGY

CLIENT
Mr. D. MELLROSS

PROJECT
PROPOSED COMMERCIAL UNIT DEVELOPMENT
323-337 BOOROWA STREET, YOUNG
LOT 2 DP 1202085

ISSUE	PROJECT NO.	SHEET NO.	SHEET
A	16596-B	2 of 2	A1

APPENDIX 8

BCF STORE

TENANCY LAYOUT, COLOURS & SCHEDULES

BFC (Occupancy 1)

BCF YOUNG BASE PLAN SET

323-337, BOOROWA STREET, YOUNG, NSW

D1 V2

LEGEND

BUILD

	BASE BUILD WALL
COL	BASE BUILD COLUMN
	BASE BUILD DOOR
DP	
	ENTRY AND AUTOMATIC DOORS
	SHOP GLAZING
FHR	EX. FIRE HOSE REEL
	FIRE EXIT
	NEW BOLLARDS
	NEW REMOVABLE BOLLARD HOLDER
	NEW WALL CONSTRUCTION
	NEW DOOR CONSTRUCTION
	KITCHEN & CABINETRY (KC-01)
	- TRIBUTE RECTANGLE 600 RIGHT HAND SHELF WB 1TH OF (VB-01) - WITH AQUA CARE BASIN MIXER
	CARE 100 V2 CONNECTOR SUITE WITH BACKREST
	CARE SUPPORT GRAB RAIL 140 DEGREE ANGLED 870X700
	CARE SUPPORT GRAB RAIL 450MM STRAIGHT

ANNOTATION & DRAFTING

	REVISION CLOUD
	ELEVATIONS CALLOUT
-	STRUCTURAL GRID LINE
BY - # WT##	WALL TAG
BY - # DT##	DOOR TAG
PT-**-#	PAINT TAG
**-##	ITEM TAG
- ATL-***	ROOM CALLOUT

FITOUT

	POINT OF SALE COUNTER

	RETAIL FIXTURES AND FURNITURE

LIGHTING

	LED SPOT LIGHT & RAIL SYSTEM
	1200MM LED LIGHTING BATTENS
	LED HIGH BAY
	LED PANEL LIGHT
	LIGHTING CONTROLLER/ MBS
MS	MOTION SENSOR

ELECTRICAL

DDF DB	DISTRIBUTION BOARD & INTERMEDIATE DISTRIBUTION FRAME
	10 AMP DOUBLE GPO GENERAL CIRCUIT SUPPLIED AND INSTALLED BY ELECTRICAL CONTRACTOR
D	DEDICATED PERMANENT POWER DROPPER "D" = DROPPER WITH 12M TAIL (BCF ELECTRICIAN TO FIT OFF)
L	"L" = DROPPER CONNECTED TO LIGHT CIRCUIT 12M TAIL (BCF ELECTRICIAN TO FIT OFF)
X	"X" = DROPPER DEDICATED SEPARATE CIRCUIT (LABELLED) 12M TAIL (BCF ELECTRICIAN TO FIT OFF)

DOOR SCHEDULE

ALL NOMINATED DOORS SUBJECT TO REVIEW UPON CONSULTANTS SPECIFICATION (ANY ADDITIONAL FIXING SERVICES ADDED IS TO BE OUT OUTLINE IN SCOPE OF WORKS WITH FINAL REVIEW IN CONJUNCTION WITH ANY ENGINEERS DRAWINGS)

DOOR TYPE	DOOR #	DESCRIPTION & TYPE	LEAF HEIGHT	LEAF WIDTH	FRAME THICKNESS	FRAME MATERIAL & COLOUR	LEAF MATERIAL & COLOUR	COMMENTS	CONSIGNMENT
DT01	-	AUTOMATIC DOUBLE DOOR GLASS ALUMINUM INCASED, EXISTING	3000MM	1000MM 1000MM	MULLION	MULLION	GLAZING WITH MULLION	PUSH BUTTON EMERGENCY SWITCH LWSP3540- LSSC STRIKE UNIT, LIAL515004 OUTSIDE SPRING KEY SWITCH (LOCK IT WELL), LIAL545021 INSIDE FOUR POSITION SWITCH (LOCK IT WELL), EXTERNAL SECURITY COVER PLATE FITTED OVER LOCKING MECHANISM WEATHER STRIPS	-
DT02	-	SINGLE SOLID CORE, HINGED DOOR	2040MM	920MM	35MM	STANDARD PT-WH-3 (INTERIOR) PT-WH-3 (EXTERIOR)	STANDARD PT-BL-2 (INTERIOR) PT-BL-2 (EXTERIOR)	CODELOCKS CL425 SS PVD MANUAL DIGITAL LOCK WITH INTERNAL LEVER WITH MORTICE LOCK. DOOR TO BE FITTED WITH "PEEPHOLE" VIEWER @ 1500MM ABOVE FFL AND DOOR STOPPER	-
DT03	-	SINGLE SOLID CORE, HINGED DOOR	2040MM	920MM	35MM	STANDARD PT-WH-3 (INTERIOR) PT-WH-3 (EXTERIOR)	STANDARD PT-BL-2 (INTERIOR) PT-BL-2 (EXTERIOR)	CODELOCKS CL410 SS WITH INTERNAL LEVER WITH LATCH. DOOR TO HAVE 'PEEPHOLE' VIEWER AND DOOR STOPPER.	-
DT04	-	SINGLE SOLID CORE, HINGED DOOR	2040MM	920MM	35MM	STANDARD PT-WH-3 (INTERIOR) PT-WH-3 (EXTERIOR)	STANDARD PT-BL-2 (INTERIOR) PT-BL-2 (EXTERIOR)	SOLID CORE DOORS WITH EXTERNAL FULL FACE METAL SHEETED WITH FULL HEIGHT METAL STRIKER PLATE, LOCKWOOD PANIC BAR EXIT LOCK HARDWARE(900E0SIL). PEEPHOLE VIEWER @ 1500MM	-
DT05	-	FLEX SHEILD DOUBLE DOOR, HINGED DOOR	2200MM	900MM 900MM	35MM	STANDARD	PVC	SEE FLEX SHEILD DETAIL FOR FURTHER INFORMATION.	-
DT06	-	METAL ROLLER DOOR	5000MM	4000MM	-	-	GALVANISED ROLLER DOOR	HEAVEY DUTY ROLLER DOOR MOTOR GALVANISED ROLLER DOOR WITH REINFORCED BASE WINDLOCK TRACKS AND CLIPS. 2 XTRATEC BRAND FLOOR ANCHOR LOCKS AND KINK BOLTS (XTRA1A) KEYED ISOLATOR SWITCH	-
DT07	-	SINGLE SOLID CORE, HINGED DOOR	2040MM	920MM	35MM	STANDARD PT-WH-3 (INTERIOR) PT-WH-3 (EXTERIOR)	STANDARD PT-BL-2 (INTERIOR) PT-BL-2 (EXTERIOR)	PRIVACY SET LOCK, DOOR STOPPER AND REQUIRED SIGNAGE	-
DT08	-	DOUBLE SOLID CORE, HINGED DOOR	2040MM	920MM	35MM	STANDARD PT-WH-3 (INTERIOR) PT-WH-3 (EXTERIOR)	STANDARD PT-BL-2 (INTERIOR) PT-BL-2 (EXTERIOR)	SOLID CORE DOORS WITH EXTERNAL FULL FACE METAL SHEETED WITH FULL HEIGHT METAL STRIKER PLATE, LOCKWOOD PANIC BAR EXIT LOCK HARDWARE(900E0SIL). PEEPHOLE VIEWER @ 1500MM TO ACTIVE LEAF	-

WALL SCHEDULE

ALL NOMINATED WALLS ARE SUBJECT TO REVIEW OR CHANGE UPON AVAILABILITY OF MATERIAL:
CHANGES ARE TO COMPLY WITH ANY RELEVANT STANDARDS.

WALL TYPE #	WALL NUMBER	WALL STRUCTURE	WALL COVERING*2	WALL FINISHES*2	WALL HEIGHT	CONSIGNMENT
WT01	-	PARTITION WALL SYSTEM	PLASTERBOARD BOTH SIDES	PAINT COAT	3600MM	-
WT02	-	PARTITION WALL SYSTEM	PLASTERBOARD BOTH SIDES	PAINT COAT	4200MM	-
WT03	-	PARTITION WALL SYSTEM	AQUACHECK PB TO WET AREAS PLASTERBOARD TO NON WET AREAS	PAINT COAT	3600MM	-

FOOTNOTE*: MINIMUM FRL FOR WALL CONSTRUCTION FROM TABLE 3 IN SECTION C1.1 OF THE NCC

DRAWING LIST

PAGE NUMBER	DRAWING NAME	SCALE	REVISION	SHEET REFERENCE
1	DRAWING LIST & LEGEND	-	A	ATL-001
2	BASE PLAN	1:150	A	ATL-002
3	RETAIL PLAN	1:150	A	ATL-003
4	OFFICE CALLOUT	1:150	A	ATL-004
5	TEAM ROOM CALLOUT	1:150	A	ATL-005
6	LICENCED AREA PLAN	1:300	A	ATL-006
7	GAS DECENTING DETAIL	1:50	A	ATL-007
8	SIGNAGE MOCK UP	1:50	A	ATL-008

ITEM SCHEDULE

ALL ITEMS & ASSOCIATED WORKS BY LESSOR

ITEM TAG CODE	DESCRIPTION	QTY	BRAND	COMMENT
KC-01	KITCHEN CABINETRY	1	-	SEE KITCHEN CALLOUT FOR SCHEDULE
SK-01	SINK	1	ESTILO	
HD-01	HAND DRYER	1	BRADLEY	
SD-01	SOAP DISPENSER	1	BRADLEY	
VB-01	VANITY BASIN	1	CAROMA	
FW-01	FLOOR WASTE GULLY	1	TBC	
RH-01	TOILET ROLL HOLDER	1	CAROMA	
TL-01	TOILET	1	CAROMA	
GR-01	GRAB RAIL	1	CAROMA	
GR-02	GRAB RAIL	1	CAROMA	

PAINT SCHEDULE

PAINTING WORKS BY LESSEE

PAINT TAG	DESCRIPTION	SHEEN TYPE	PANTONE # / COLOUR #	BRAND
PT-WH-1	TAUBMANS COTTON TOUCH	LOW SHEEN	T9-6	TAUBMANS
PT-WH-2	TAUBMANS COTTON TOUCH	GLOSS	T9-6	TAUBMANS
PT-OR-1	BCF ORANGE	LOW SHEEN	PMS 151C	*
PT-OR-2	BCF ORANGE	GLOSS	PMS 151C	*
PT-BL-1	BCF NEXT GEN BLUE	LOW SHEEN	PMS 647C	*
PT-BL-2	BCF NEXT GEN BLUE	GLOSS	PMS 647C	*
PT-BL-3	DULUX ADEPT	LOW SHEEN	S36B9	DULUX
PT-BL-4	DULUX ADEPT	GLOSS	S36B9	DULUX
PT-CC-1	CLEAR COAT	GLOSS	-	*
PT-WH-3	WHITE ONE WHITE	GLOSS	-	DULUX

*1 - SCOPE OF WORK CLAUSE 13.2 DULUX ADEPT TO 4200MM DATUM LINE
* - RESENE, DULUX OR WATTYL CAN BE USED

BCF

SRG LEASURE PTY LTD
6 COULTHARDS AVENUE
STRATHPINE QLD 4500

PROJECT: YOUNG

ADDRESS:
323-337, BOOROWA STREET,
YOUNG, NSW

TITLE: DRAWING LIST & LEGEND

DATE: 14/01/2025

BY: BRENDAN H.

SCALE: -

SIZE: A3

DRAWING #: ATL-001

SHEET NUMBER: 01

REVISION: A

TENANCY INFORMATION:

ROOF HEIGHT:4.8M+

ROOF TYPE: OPEN CEILING

GROSS FLOOR AREA - RETAIL
857M²

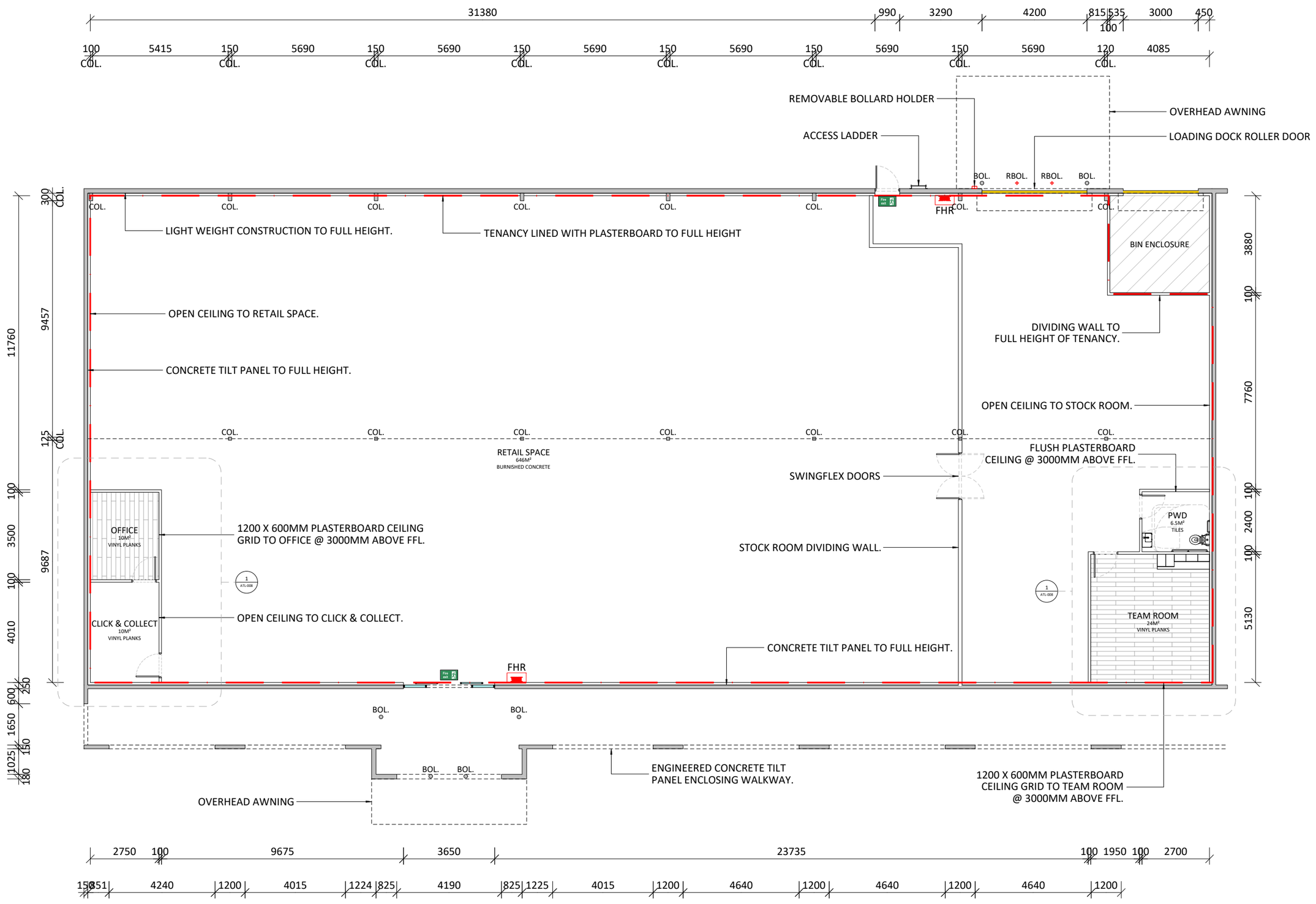
DOCUMENT NUMBER:
BCF0102025

VERSION: D1 V2

REVISION NOTES

PRELIMINARY

CONCEPT PLAN NOT FOR CONSTRUCTION



SRG LEASURE PTY LTD

6 COULTHARDS AVENUE
STRATHPINE QLD 4500

PROJECT: YOUNG

ADDRESS:
323-337, BOOROWA STREET,
YOUNG, NSW

TITLE: BASE PLAN

DATE: 14/01/2025

BY: BRENDAN H.

SCALE: 1:150

SIZE: A3

DRAWING #: ATL-002

SHEET NUMBER: 02

REVISION: A

TENANCY INFORMATION:

ROOF HEIGHT:4.8M+

ROOF TYPE: OPEN CEILING

GROSS FLOOR AREA - RETAIL
857M²

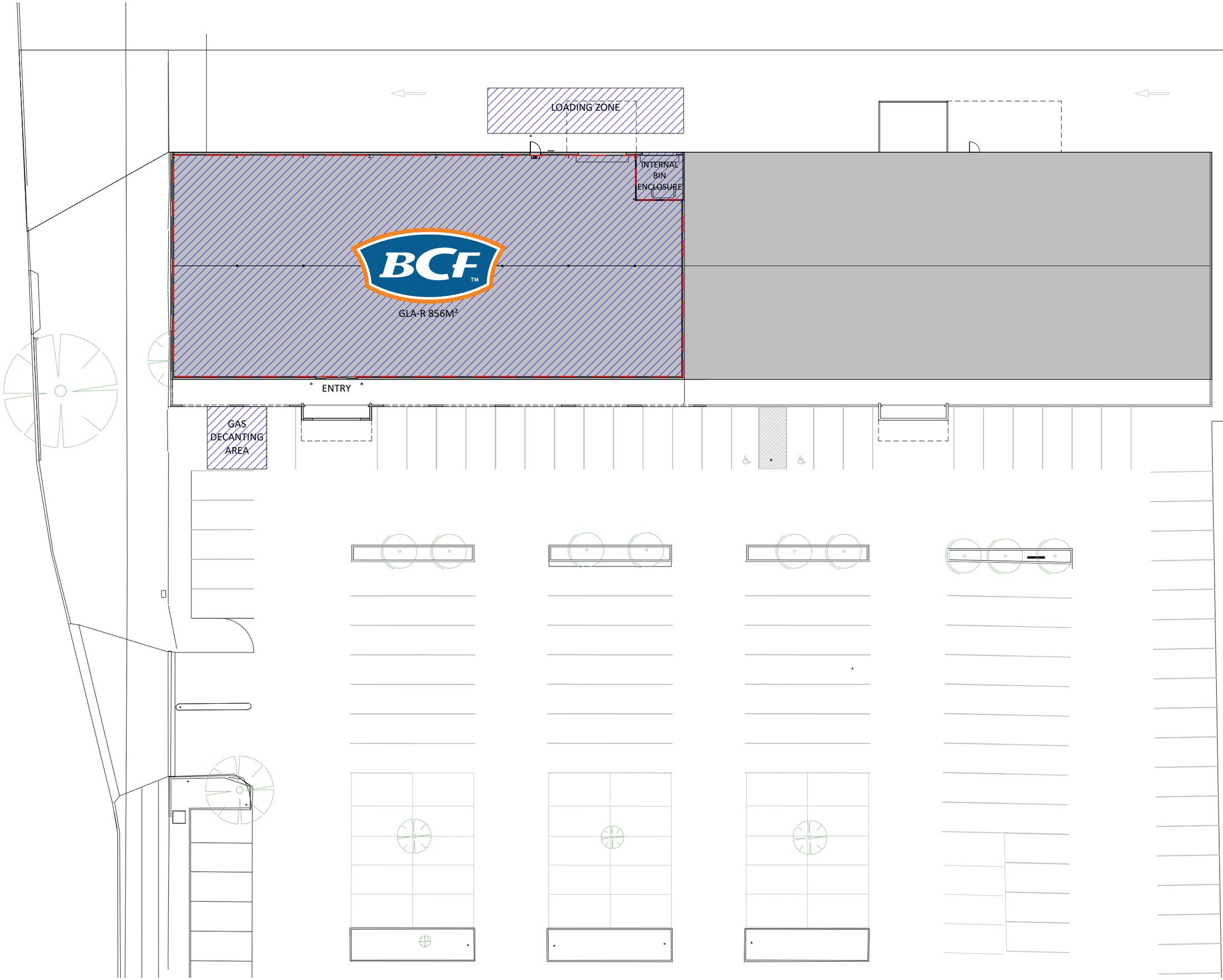
DOCUMENT NUMBER:
BCF0102025

VERSION: D1 V2

REVISION NOTES

PRELIMINARY

CONCEPT PLAN NOT
FOR CONSTRUCTION



SRG LEASURE PTY LTD

6 COULTHARDS AVENUE
STRATHPINE QLD 4500

PROJECT: YOUNG

ADDRESS:
323-337, BOOROWA STREET,
YOUNG, NSW

TITLE: LICENCED AREA PLAN

DATE: 14/01/2025

BY: BRENDAN H.

SCALE: 1:300

SIZE: A3

DRAWING #: ATL-006

SHEET NUMBER: 06

REVISION: A

TENANCY INFORMATION:

ROOF HEIGHT:4.8M+

ROOF TYPE: OPEN CEILING

GROSS FLOOR AREA - RETAIL
857M²

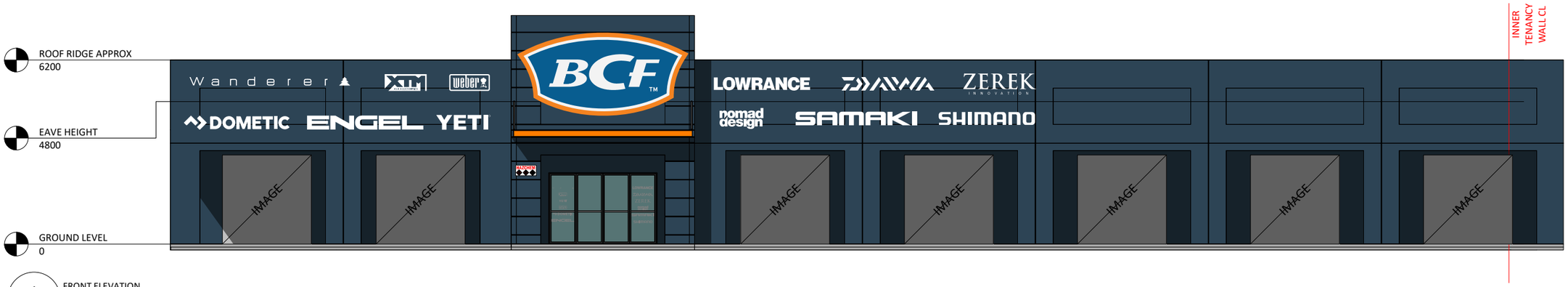
DOCUMENT NUMBER:
BCF0102025

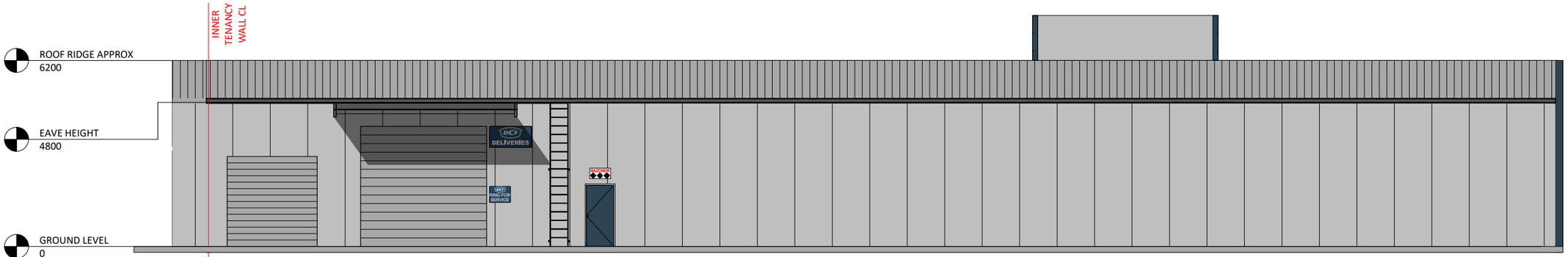
VERSION: D1 V2

REVISION NOTES

PRELIMINARY

CONCEPT PLAN NOT
FOR CONSTRUCTION





SRG LEASURE PTY LTD

6 COULTHARDS AVENUE
STRATHPINE QLD 4500

PROJECT: YOUNG

ADDRESS:
323-337, BOOROWA STREET,
YOUNG, NSW

TITLE: SIGNAGE MOCK UP

DATE: 14/01/2025

BY: BRENDAN H.

SCALE: 1:150

SIZE: A3

DRAWING #: ATL-008

SHEET NUMBER: 08

REVISION: A

TENANCY INFORMATION:

ROOF HEIGHT:4.8M+

ROOF TYPE: OPEN CEILING

GROSS FLOOR AREA - RETAIL
857M²

DOCUMENT NUMBER:
BCF0102025

VERSION: D1 V2

REVISION NOTES	

PRELIMINARY

CONCEPT PLAN NOT
FOR CONSTRUCTION