HUME CITY COUNCIL

Office Use Only

Application No.: Date Lodged: / /

Application for
Planning Permit

Planning Enquiries
Phone: 03 9205 2200
Web: http://www.hume.vic.gov.au

If you need help to complete this form, read How to complete the Application for Planning Permit form.

⚠ Any material submitted with this application, including plans and personal information, will be made available for public viewing, including electronically, and copies may be made for interested parties for the purpose of enabling consideration and review as part of a planning process under the *Planning and Environment Act 1987*. If you have any concerns, please contact Council's planning department.

⚠ **Questions marked with an asterisk (*) are mandatory and must be completed.**

⚠ **If the space provided on the form is insufficient, attach a separate sheet.**

Clear Form

The Land

(1) Address of the land. Complete the Street Address and one of the Formal Land Descriptions.

Street Address *

Unit No.: | St. No.: 2 | St. Name: Reserve Ave

Suburb/Locality: CAMPBELLFIELD | Postcode:3061

Formal Land Description *
Complete either A or B.

⚠ This information can be found on the certificate of title.

A Lot No.: 64 ◯ Lodged Plan ◯ Title Plan ◉ Plan of Subdivision No.: 013489

OR

B Crown Allotment No.: | Section No.:

Parish/Township Name:

If this application relates to more than one address, please click this button and enter relevant details. Add Address

The Proposal

⚠ You must give full details of your proposal and attach the information required to assess the application. Insufficient or unclear information will delay your application.

(2) **For what use, development or other matter do you require a permit? ***

If you need help about the proposal, read: How to Complete the Application for Planning Permit Form

The proposal seeks to demolish the existing dwelling and propose three (3) new double storey dwellings.

Provide additional information on the proposal, including: plans and elevations; any information required by the planning scheme, requested by Council or outlined in a Council planning permit checklist; and if required, a description of the likely effect of the proposal.

(3) **Estimated cost of development for which the permit is required ***

Cost $ 950,000.00

⚠ You may be required to verify this estimate. Insert `0' if no development is proposed.

If the application is for land within **metropolitan Melbourne** (as defined in section 3 of the *Planning and Environment Act 1987*) and the estimated cost of the development exceeds $1 million (adjusted annually by CPI) the Metropolitan Planning Levy **must** be paid to the State Revenue Office and a current levy certificate **must** be submitted with the application.
Visit www.sro.vic.gov.au for information.

Existing Conditions

(4) **Describe how the land is used and developed now ***

eg. vacant, three dwellings, medical centre with two practitioners, licensed restaurant with 80 seats, grazing.

Single dwelling

Provide a plan of the existing conditions. Photos are also helpful.

Title Information

5 **Encumbrances on title** *

If you need help about the title, read: How to complete the Application for Planning Permit form

Does the proposal breach, in any way, an encumbrance on title such as a restrictrive covenant, section 173 agreement or other obligation such as an easement or building envelope?

- ◯ Yes. (If 'yes' contact Council for advice on how to proceed before continuing with this application.)
- ◉ No
- ◯ Not applicable (no such encumbrance applies).

Provide a full, current copy of the title for each individual parcel of land forming the subject site. (The title includes: the covering 'register search statement', the title diagram and the associated title documents, known as 'instruments', eg. restrictive covenants.)

Applicant and Owner Details

6 Provide details of the applicant and the owner of the land.

Applicant *

The person who wants the permit.

Name:

Title: Ms | First Name: Fran | Surname: Santulan

Organisation (if applicable):

Postal Address: | If it is a P.O. Box, enter the details here:

Unit No.: 101 | St. No.: 1510 | St. Name: Pascoe Vale Rd

Suburb/Locality: Coolaroo | State: VIC | Postcode: 3048

Where the preferred contact person for the application is different from the applicant, provide the details of that person.

Contact person's details *

Same as applicant (if so, go to 'contact information') ☐

Name:

Title: Ms | First Name: Fran | Surname: Santulan

Organisation (if applicable): PD STUDIO

Postal Address: | If it is a P.O. Box, enter the details here:

Unit No.: | St. No.: | St. Name:

Suburb/Locality: | State: VIC | Postcode:

Please provide at least one contact phone number *

Contact information

Business Phone: 03 9972 7667 | Email: admin@pd.net.au

Mobile Phone: | Fax:

Owner *

The person or organisation who owns the land

Where the owner is different from the applicant, provide the details of that person or organisation.

Same as applicant ☐

Name:

Title: | First Name: SELAHATTIN | Surname: YILDIZ

Organisation (if applicable):

Postal Address: | If it is a P.O. Box, enter the details here:

Unit No.: | St. No.: 2 | St. Name: RESERVE RD

Suburb/Locality: CAMPBELLFIELD | State: VIC | Postcode: 3061

Owner's Signature (Optional):

Date: 21.12.21 (day / month / year)

Declaration

7 **This form must be signed by the applicant** *

⚠ Remember it is against the law to provide false or misleading information, which could result in a heavy fine and cancellation of the permit.

I declare that I am the applicant; and that all the information in this application is true and correct; and the owner (if not myself) has been notified of the permit application.

Signature: F.santulan

Date: 21.12.21 (day / month / year)

Need help with the Application?

If you need help to complete this form, read How to complete the Application for Planning Permit form
General information about the planning process is available at www.delwp.vic.gov.au/planning

Contact Council's planning department to discuss the specific requirements for this application and obtain a planning permit checklist. Insufficient or unclear information may delay your application.

8 **Has there been a pre-application meeting with a Council planning officer?**

(●) No ( ) Yes

Checklist

9 **Have you:**

- [ ] Filled in the form completely?
- [ ] Paid or included the application fee?

⚠ Most applications require a fee to be paid. Contact Council to determine the appropriate fee.

- [x] Provided all necessary supporting information and documents?
  - [ ] A full, current copy of title information for each individual parcel of land forming the subject site
  - [ ] A plan of existing conditions.
  - [ ] Plans showing the layout and details of the proposal
  - [ ] Any information required by the planning scheme, requested by council or outlined in a council planning permit checklist.
  - [ ] If required, a description of the likely effect of the proposal (eg traffic, noise, environmental impacts).
  - [ ] If applicable, a current Metropolitan Planning Levy certificate (a levy certificate expires 90 days after the day on which it is issued by the State Revenue Office and then cannot be used). Failure to comply means the application is void.

- [ ] Completed the relevant Council planning permit checklist?
- [ ] Signed the declaration (section 7)?

Lodgement

Lodge the completed and signed form, the fee payment and all documents with:

Hume City Council
PO Box 119 Dallas VIC 3047
Pascoe Vale Road Broadmeadows VIC 3047

Contact information:

Telephone: 61 03 9205 2200
Email: email@hume.vic.gov.au
DX: 94718
Translation: 03 9205 2200 for connection to Hume Link's multilingual telephone information service

Deliver application in person, by fax, or by post:

Print Form

Make sure you deliver any required supporting information and necessary payment when you deliver this form to the above mentioned address. This is usually your local council but can sometimes be the Minister for Planning or another body.

Save Form:

Save Form To Your Computer

You can save this application form to your computer to complete or review later or email it to others to complete relevant sections.

PLAN OF SURVEY

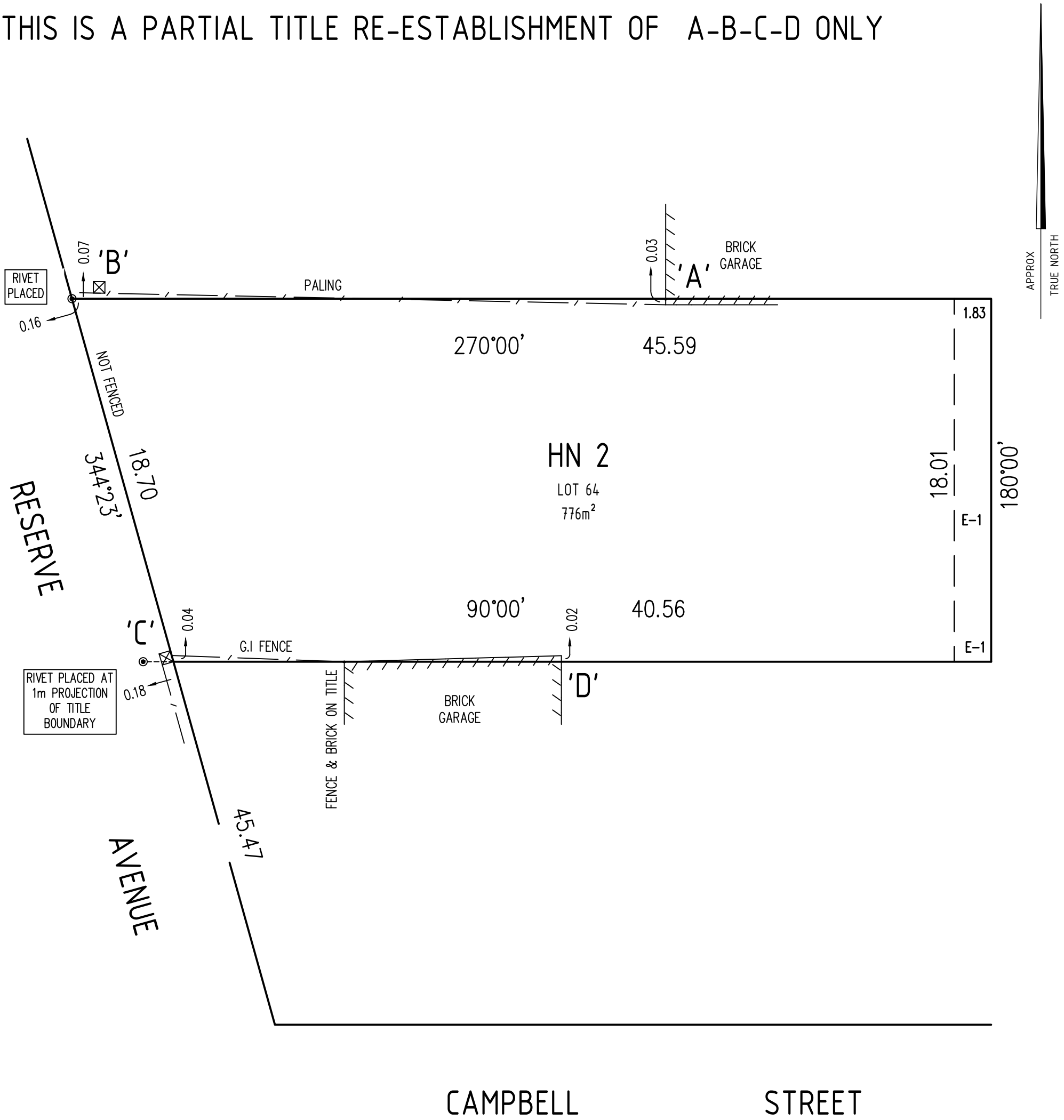
TITLE RE-ESTABLISHMENT

CERTIFICATION BY SURVEYOR

I, Edward James Williamson of 23/20 Enterprise Drive, Bundoora certify that this plan has been prepared from a survey made under my direction and supervision in accordance with the Surveying Act and completed on 10/08/2021, that this plan is accurate and correctly represents the adopted boundaries and that the survey accuracy accords with that required by regulation 7(1) of the Surveying (Cadastral Surveys) Regulations 2015

LICENSED SURVEYOR , SURVEYING ACT 2004
DATE: 10 AUGUST 2021

THIS IS A PARTIAL TITLE RE-ESTABLISHMENT OF A-B-C-D ONLY



SURVEYORS REF.

FIELD SURVEYOR: EJW
DRAFTSPERSON: EJW

LAST PLAN REF:
LOT 64 ON LP13489

PROPERTY ADDRESS:
2 RESERVE AVENUE CAMPBELLFIELD 3061

SCALE

2 0 5 10

LENGTHS ARE IN METRES

RESCOM
Consulting Engineers
Land Surveying Geotechnical Civil Structural
Office: 03 9468 5232
Website: rcce.com.au
Suite 23/ 20 Enterprise Drive, Bundoora, VIC 3083

ORIGINAL

SCALE	SHEET SIZE
1:200	A3

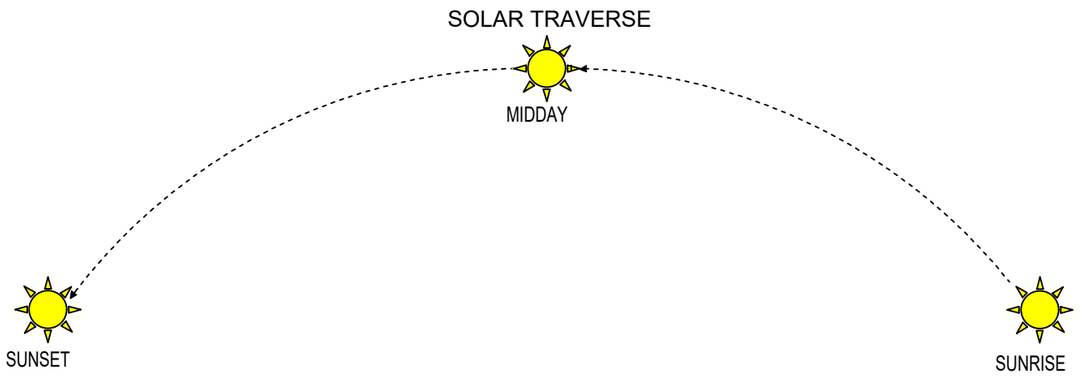
NOTATIONS

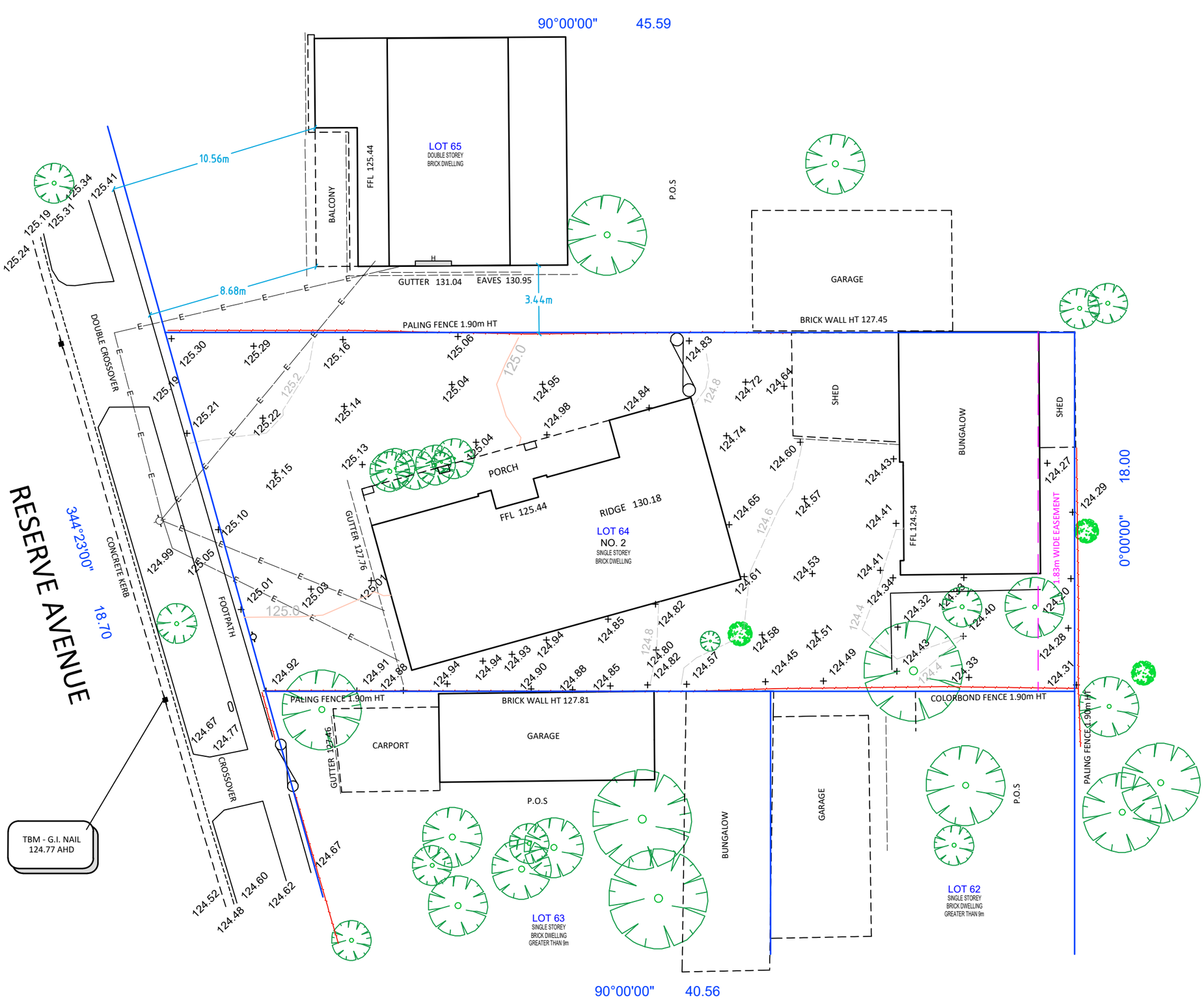
LAND SUBJECT TO EASEMENT:
E-1: EASEMENT FOR DRAINAGE & SEWERAGE VIDE LP13489

THE LAND IN THE SURVEY IS SHOWN ENCLOSED BY CONTINUOUS THICK LINES.

OFFSETS FROM TITLE BOUNDARIES TO OCCUPATION HAVE BEEN EXAGGERATED FOR CLARIFICATION PURPOSES.

LOT 64, 2 RESERVE AVENUE, CAMPBELLFIELD





PLAN OF FEATURE AND LEVEL SURVEY

LOT 64, 2 RESERVE AVENUE, CAMPBELLFIELD		
LP 13489	SCALE AT 1:200	PAPER SIZE: A2
REFERENCE NUMBER: 2213425		VERSION B
FIELD WORK BY: ARMIN E.		DATE : 05/08/2021

RESCOM
Consulting Engineers
Land Surveying · Geotechnical · Civil · Structural
Office: 03 9468 5232
Website: rcce.com.au
Suite 4/ 20 Enterprise Drive, Bundoora, VIC 3083

DISCLAIMER:
BOUNDARIES SHOWN BY THICK BLUE LINES ARE APPROXIMATE ONLY. THIS IS NOT A TITLE RE-ESTABLISHMENT SURVEY.

Location of title and relevant offsets are approximated from occupation. Levels are an Australian height datum contour interval 0.20m.

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HOUSE
RIDGE EDGE
EAVES
RETAINING WALL
FENCE
GARAGE / SHED
LIP OF KERB
INVERT OF KERB
BACK OF KERB
PATH
G/FLOOR WINDOW
1ST FLOOR WINDOW
SEWER PIT
INSPECTION SHAFT
JUNCTION PIT
SIDE ENTRY PIT
STOP VALVE
FIRE HYDRANT
TITLE PEG
NAIL / RIVET
PSM
ELECTRICITY PIT
SPOT LEVEL
SIGN
POLE AND LIGHT
TREE
SHRUB
WATER METER
PROPERTY INLET
TELECOM PIT

PROPOSAL:

MULTI UNIT DEVELOPMENT

AT No.2 RESERVE AVENUE, CAMPBELLFIELD

TP DRAWING LIST	
PAGE	**DRAWING**
TP-01	COVER PAGE
TP-02	NEIGHBOURHOOD CHARACTER PLAN
TP-03	EXISTING SITE AND DEMOLITION PLANS
TP-04	DESIGN RESPONSE
TP-05	GARDEN AREA & SERVICE UTILITY SITE PLAN
TP-06	SDA & WSUD & BESS
TP-07	GROUND/SITE PLAN
TP-08	FIRST/SITE PLAN
TP-09	ELEVATIONS
TP-10	SHADOW DIAGRAMS
TP-11	LANDSCAPING PLAN

TOWN PLANNING DRAWINGS ONLY

NOT TO BE USED FOR CONSTRUCTION PURPOSES

PDSTUDIO.

SUITE 101, 1510 PASCOE VALE RD., COOLAROO | (03) 9972 7667 | PD.NET.AU

SITE ADDRESS

NO.2 RESERVE AVE, CAMPBELLFIELD

PROPOSAL

MULTI UNIT DEVELOPMENT FOR SELCUK YILDIZ

COVER PAGE

DRAWING DETAILS

1/06/2022 1:100, 1:120:17 @ A1 N.N

DRAWING NO.

TP-01

211717

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No. 2 RESERVE AVENUE - SUBJECT SITE

No. 4 RESERVE AVENUE - DOUBLE STOREY DWELLING

No. 3 CAMPBELL STREET - NEW DEVELOPMENT

LEGEND

No.2	PROPERTY NUMBER
SSD	SINGLE STOREY DWELLING
DSD	DOUBLE STOREY DWELLING
BV	BRICK VENEER CONSTRUCTION
⊠	EXISTING CROSSOVER
	PARKLAND
	SUBJECT SITE
	UNIT DEVELOPMENTS

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SITE ADDRESS
NO.2 RESERVE AVE, CAMPBELLFIELD

PROPOSAL
MULTI UNIT DEVELOPMENT FOR SELCUK YILDIZ

NEIGHBOURHOOD CHARACTER PLAN

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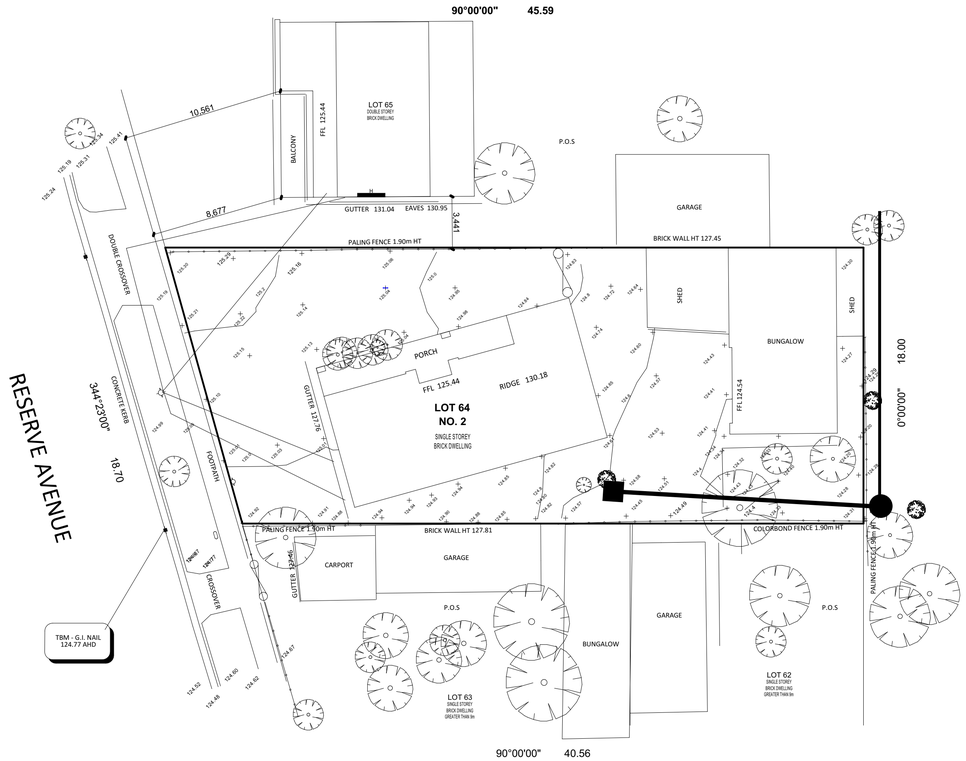
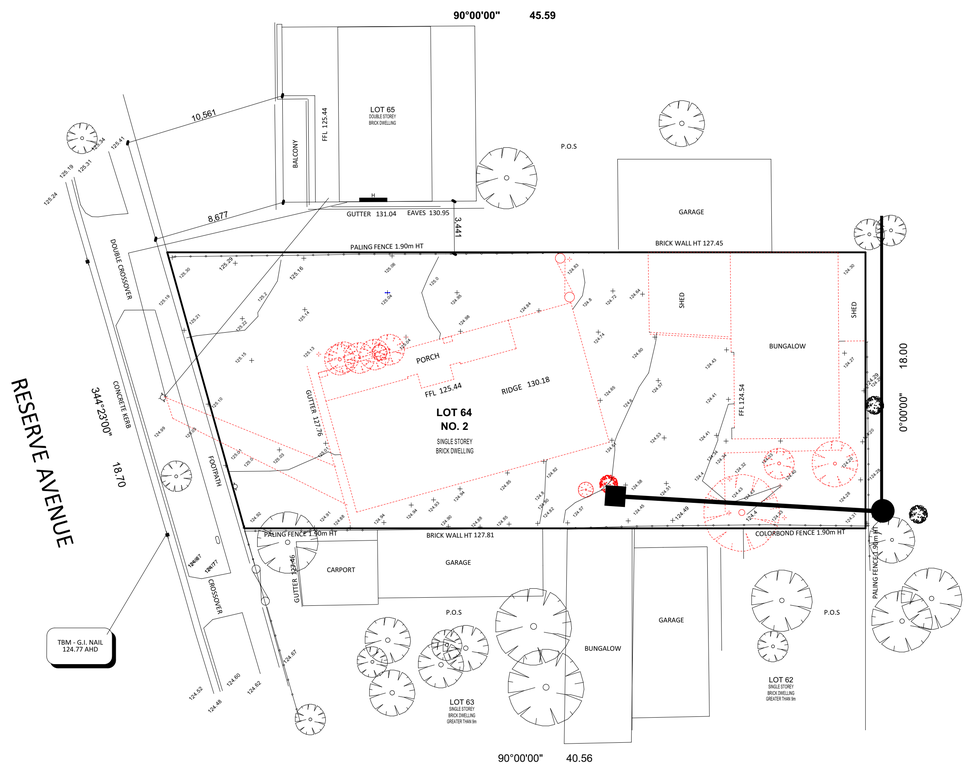


EXISTING SITE PLAN
1:200

No. 2 RESERVE AVENUE - SUBJECT SITE



DEMOLITION SITE PLAN
1:200

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SITE ADDRESS
NO.2 RESERVE AVE,
CAMPBELLFIELD

PROPOSAL
MULTI UNIT DEVELOPMENT
FOR
SELCUK YILDIZ

EXISTING SITE AND DEMOLITION PLANS

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TP-03

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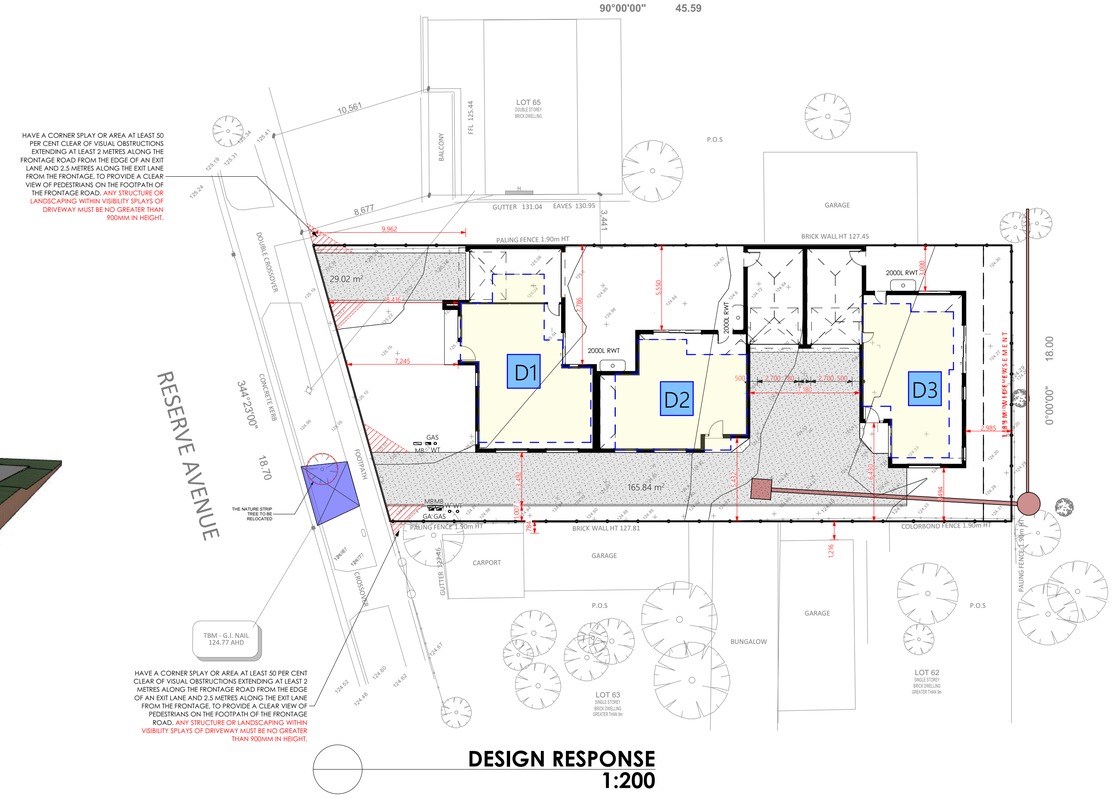
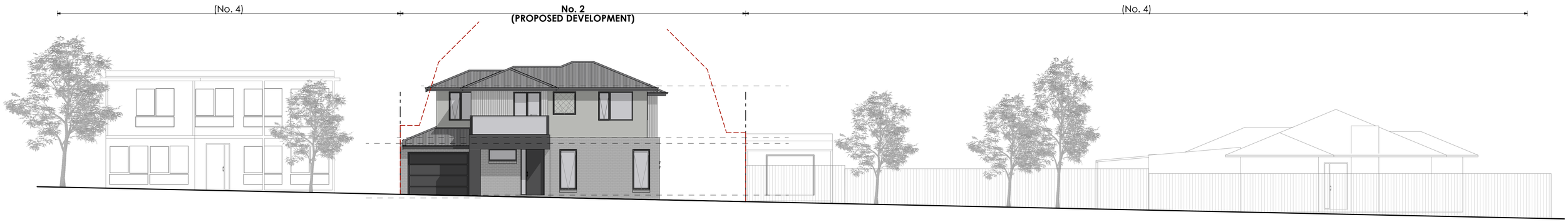


DESIGN RESPONSE
1:200

AREA SUMMARY			
TOTAL SITE AREA: 776m²			
	D1	D2	D2
GROUND FLOOR LIVING	73.50m²	69.92m²	73.60m²
GARAGE	24.24m²	26.45m²	25.84m²
PORCH	4.22m²	2.66m²	3.62m²
SUBTOTAL:	101.96m²	99.03m²	103.06m²
FIRST FLOOR LIVING	67.35m²	54.11m²	50.63m²
SUBTOTAL:	67.35m²	54.11m²	50.63m²
GRAND TOTAL:	169.31m²	153.14m²	153.69m²
SQ	18.2SQ	16.5SQ	16.5SQ
% SITE COVERAGE	304.05m²	39.18%	
% IMPERMEABLE AREA	499.9m²	64.42%	
% PERMEABLE AREA	276.1m²	35.58%	
GARDEN AREA	273.28m²	35.22%	



STREETSCAPE
1:100

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SITE ADDRESS	PROPOSAL
NO.2 RESERVE AVE, CAMPBELLFIELD	MULTI UNIT DEVELOPMENT FOR SELCUK YILDIZ

DESIGN RESPONSE

DRAWING DETAILS
1/06/2022|1:200, 1:0.67, 1:100 @ A1 N.N

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TP-04

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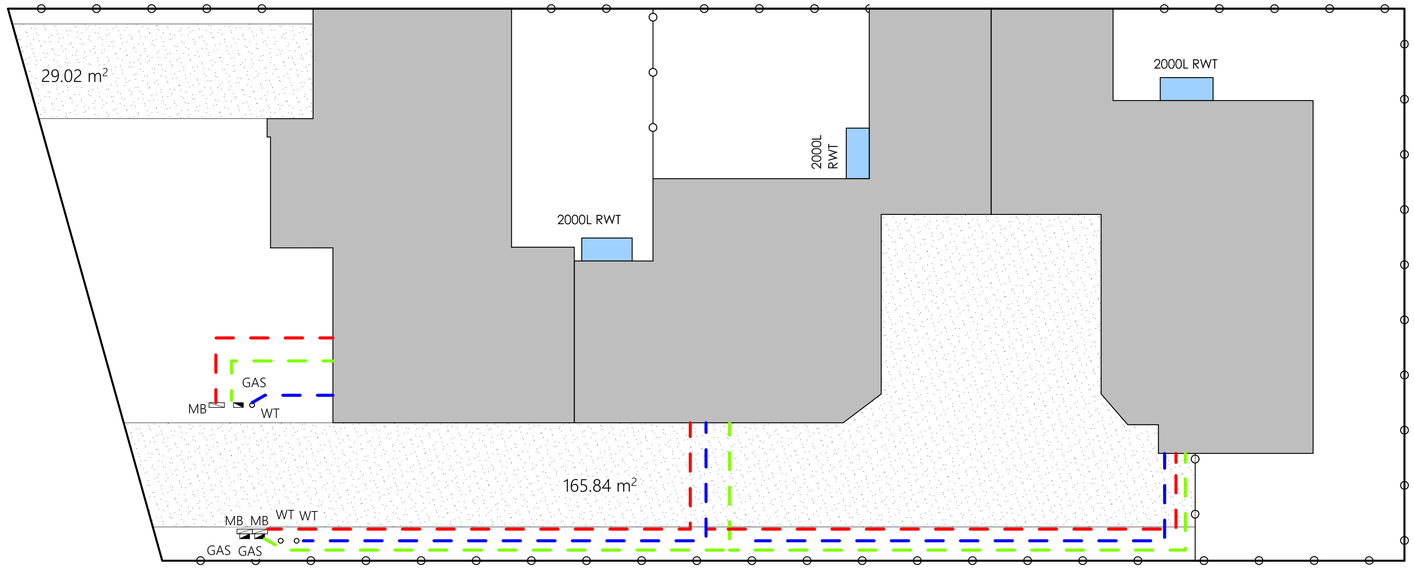

SERVICE UTILITY SITE PLAN
1:100

NOTE: ALL THE SERVICES SUBJECT TO RELEVANT AUTHORITY'S APPROVAL, AND MAY VARY AS PER THEIR REQ.

WATER
ELECTRICITY
NBN
GAS
STORM WATER

AREA SUMMARY			
TOTAL SITE AREA: 776m²			
	D1	D2	D2
GROUND FLOOR LIVING	73.50m²	69.92m²	73.60m²
GARAGE	24.24m²	26.45m²	25.84m²
PORCH	4.22m²	2.66m²	3.62m²
SUBTOTAL:	101.96m²	99.03m²	103.06m²
FIRST FLOOR LIVING	67.35m²	54.11m²	50.63m²
SUBTOTAL:	67.35m²	54.11m²	50.63m²
GRAND TOTAL:	169.31m²	153.14m²	153.69m²
SQ	18.2SQ	16.5SQ	16.5SQ
% SITE COVERAGE	304.05m²	39.18%	
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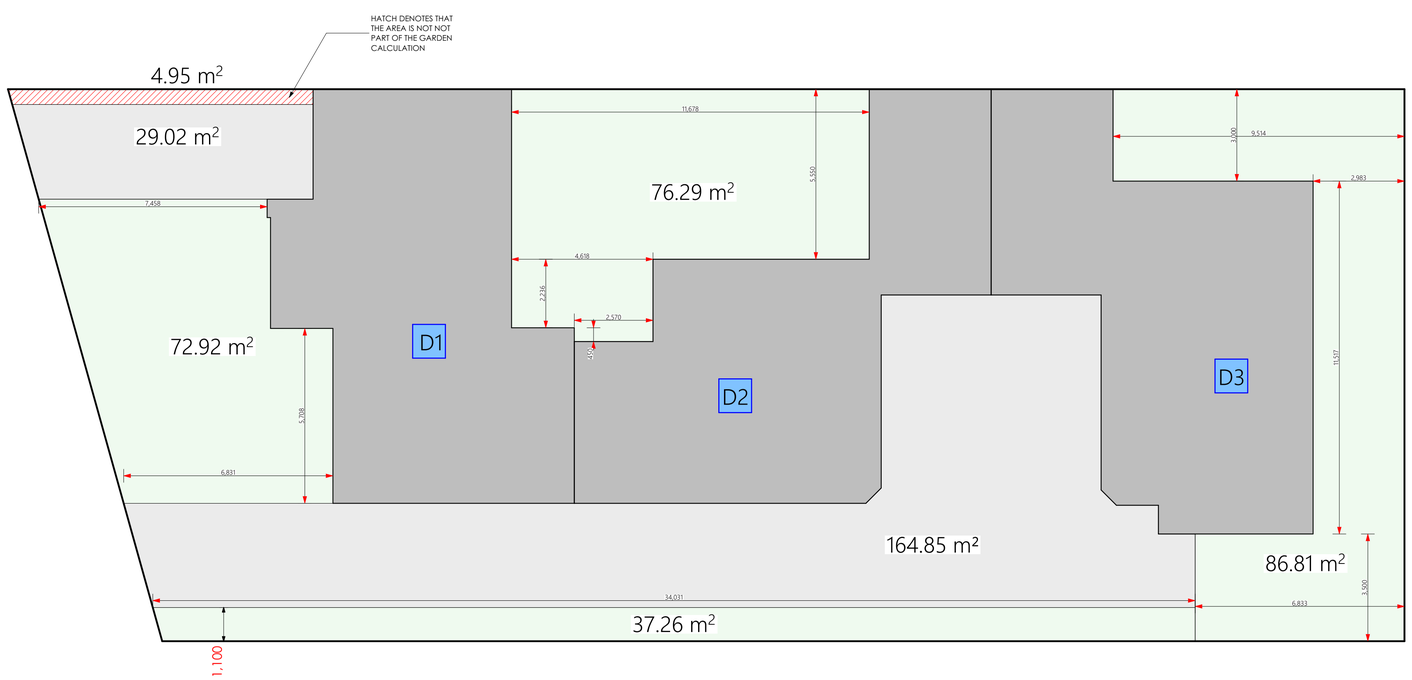

GARDEN AREA
1:100

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SITE ADDRESS
NO.2 RESERVE AVE,
CAMPBELLFIELD

PROPOSAL
MULTI UNIT DEVELOPMENT
FOR
SELCUK YILDIZ

GARDEN AREA & SERVICE UTILITY SITE PLAN

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BESS Report

Built Environment Sustainability Scorecard

This BESS report outlines the sustainable design commitments of the proposed development at 2 Reserve Avenue Campellfield VIC 3061. The BESS report and accompanying documents and evidence are submitted in response to the requirement for a Sustainable Design Assessment or Sustainability Management Plan at Hume City Council.

Note that where a Sustainability Management Plan is required, the BESS report must be accompanied by a report that further demonstrates the development's potential to achieve the relevant environmental performance outcomes and documents the means by which the performance outcomes can be achieved.

Your BESS Score

Best practice Excellence

0% 10% 20% 30% 40% 50% 60% 70% 80% 90% 100%

57%

Project details

Address	2 Reserve Avenue Campellfield VIC 3061
Project no	848BE6EA-R1
BESS Version	BESS-6
Site type	Multi dwelling (dual occupancy, townhouse, villa unit etc)
Account	abenergyassessments@gmail.com
Application no.	
Site area	776 m²
Building floor area	389.11 m²
Date	03 May 2022
Software version	1.7.0-B.384

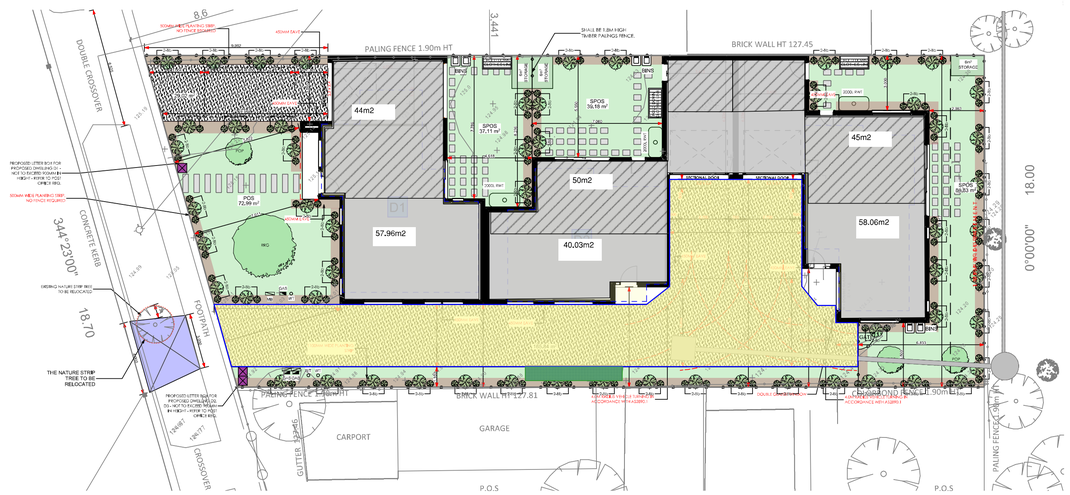
Performance by category ● Your development ● Maximum available

Category	Weight	Score	Pass
Management	5%	0%	·
Water	9%	50%	✓
Energy	28%	50%	✓
Stormwater	14%	100%	✓
IEQ	17%	80%	✓
Transport	9%	100%	·
Waste	6%	0%	·
Urban Ecology	6%	57%	·
Innovation	9%	10%	·

Melbourne Water STORM Rating Report

TransactionID:	1367219
Municipality:	HUME
Rainfall Station:	HUME
Address:	2 Reserve Avenue
	Campellfield
	VIC 3061
Assessor:	Arzu
Development Type:	Residential - Multiunit
Allotment Site (m2):	776.00
STORM Rating %:	102

Description	Impervious Area (m2)	Treatment Type	Treatment Area/Volume (m2 or L)	Occupants / Number Of Bedrooms	Treatment %	Tank Water Supply Reliability (%)
Roof 1	101.96	Rainwater Tank	2,000.00	3	126.80	89.50
Roof 2	99.03	Rainwater Tank	2,000.00	3	131.40	87.70
Roof 3	103.06	Rainwater Tank	2,000.00	2	106.60	97.00



Energy

Overall contribution 14% Minimum required 50%

Dwellings Energy Approach	
What approach do you want to use for Energy?:	Use the built in calculation tools
Project Energy Profile Question	
Are you installing any solar photovoltaic (PV) system(s)?:	No
Are you installing any other renewable energy system(s)?:	No
Gas supplied into building:	Natural Gas
Dwelling Energy Profiles	
Below the floor is: All	Ground or Carpark
Above the ceiling is: All	Outside
Exposed sides: All	4
NatHERS Annual Energy Loads - Heat: All	120 MJ/sqm
NatHERS Annual Energy Loads - Cool: All	30.0 MJ/sqm
NatHERS star rating: All	6.0
Type of Heating System: All	D Reverse cycle space
Heating System Efficiency: All	4 Star
Type of Cooling System: All	Evaporative central
Cooling System Efficiency: All	4 Stars
Type of Hot Water System: All	J Gas Instantaneous 6 star
% Contribution from solar hot water system: All	0 %
Is the hot water system shared by multiple dwellings?: All	No
Clothes Line: All	D Private outdoor clothesline
Clothes Dryer: All	A No clothes dryer

1.2 Thermal Performance Rating - Residential 0%

Score Contribution	This credit contributes 30.0% towards the category score.
Criteria	What is the average NatHERS rating?
Output	Average NATHERS Rating (Weighted)
Detached dwelling	6.0 Stars

2.1 Greenhouse Gas Emissions 100%

Score Contribution	This credit contributes 10.0% towards the category score.
Criteria	What is the % reduction in annual greenhouse gas emissions against the benchmark?
Output	Reference Building with Reference Services (BCA only)
Detached dwelling	21,445 kg CO2
Output	Proposed Building with Proposed Services (Actual Building)
Detached dwelling	7,779 kg CO2
Output	% Reduction in GHG Emissions
Detached dwelling	63 %

2.2 Peak Demand 0%

Score Contribution	This credit contributes 5.0% towards the category score.
Criteria	What is the % reduction in the instantaneous (peak-hour) demand against the benchmark?
Output	Peak Thermal Cooling Load - Baseline
Detached dwelling	60.8 kW
Output	Peak Thermal Cooling Load - Proposed
Detached dwelling	64.4 kW
Output	Peak Thermal Cooling Load - % Reduction
Detached dwelling	-6 %

2.3 Electricity Consumption 100%

Score Contribution	This credit contributes 10.0% towards the category score.
Criteria	What is the % reduction in annual electricity consumption against the benchmark?
Output	Reference
Detached dwelling	18,617 kWh
Output	Proposed
Detached dwelling	7,096 kWh
Output	Improvement
Detached dwelling	61 %

2.4 Gas Consumption 100%

Score Contribution	This credit contributes 10.0% towards the category score.
Criteria	What is the % reduction in annual gas consumption against the benchmark?
Output	Reference
Detached dwelling	47,767 MJ
Output	Proposed
Detached dwelling	10,520 MJ
Output	Improvement
Detached dwelling	77 %

2.5 Wood Consumption N/A ◇ Scoped Out

This credit was scoped out	No wood heating system present

3.2 Hot Water 100%

Score Contribution	This credit contributes 5.0% towards the category score.
Criteria	What is the % reduction in annual energy consumption (gas and electricity) of the hot water system against the benchmark?
Output	Reference
Detached dwelling	13,269 kWh
Output	Proposed
Detached dwelling	3,036 kWh
Output	Improvement
Detached dwelling	77 %

3.3 External Lighting 100%

Score Contribution	This credit contributes 5.0% towards the category score.
Criteria	Is the external lighting controlled by a motion detector?
Question	Criteria Achieved ?
Detached dwelling	Yes

3.4 Clothes Drying 100%

Score Contribution	This credit contributes 5.0% towards the category score.
Criteria	What is the % reduction in annual energy consumption (gas and electricity) from a combination of clothes lines and efficient driers against the benchmark?
Output	Reference
Detached dwelling	1,891 kWh
Output	Proposed
Detached dwelling	131 kWh
Output	Improvement
Detached dwelling	93 %

3.5 Internal Lighting - Residential Single Dwelling 100%

Score Contribution	This credit contributes 5.0% towards the category score.
Criteria	Does the development achieve a maximum illumination power density of 4W/sqm or less?
Question	Criteria Achieved?
Detached dwelling	Yes

4.4 Renewable Energy Systems - Other N/A ⊘ Disabled

This credit is disabled	No other (non-solar PV) renewable energy is in use.

4.5 Solar PV - Houses and Townhouses N/A ⊘ Disabled

This credit is disabled	No solar PV renewable energy is in use.

Stormwater

Overall contribution 14% Minimum required 100%

Which stormwater modelling are you using?:	Melbourne Water STORM tool
1.1 Stormwater Treatment	100%
Score Contribution	This credit contributes 100.0% towards the category score.
Criteria	Has best practice stormwater management been demonstrated?
Question	STORM score achieved
Project	102
Output	Min STORM Score

IEQ

Overall contribution 13% Minimum required 50%

2.2 Cross Flow Ventilation 100%

Score Contribution	This credit contributes 20.0% towards the category score.
Criteria	Are all habitable rooms designed to achieve natural cross flow ventilation?
Question	Criteria Achieved ?
Detached dwelling	Yes

3.1 Thermal comfort - Double Glazing 100%

Score Contribution	This credit contributes 40.0% towards the category score.
Criteria	Is double glazing (or better) used to all habitable areas?
Question	Criteria Achieved ?
Detached dwelling	Yes

3.2 Thermal Comfort - External Shading 0%

Score Contribution	This credit contributes 20.0% towards the category score.
Criteria	Is appropriate external shading provided to east, west and north facing glazing?
Question	Criteria Achieved ?
Detached dwelling	No

3.3 Thermal Comfort - Orientation 100%

Score Contribution	This credit contributes 20.0% towards the category score.
Criteria	Are at least 50% of living areas orientated to the north?
Question	Criteria Achieved ?
Detached dwelling	Yes

Transport

Overall contribution 9%

1.1 Bicycle Parking - Residential 100%

Score Contribution	This credit contributes 50.0% towards the category score.
Criteria	How many secure and undercover bicycle spaces are there per dwelling for residents?
Question	Bicycle Spaces Provided ?
Detached dwelling	3
Output	Min Bicycle Spaces Required
Detached dwelling	3

2.1 Electric Vehicle Infrastructure 100%

Score Contribution	This credit contributes 50.0% towards the category score.
Criteria	Are facilities provided for the charging of electric vehicles?
Question	Criteria Achieved ?
Project	Yes

Waste

Overall contribution 0%

1.1 - Construction Waste - Building Re-Use 0%

Score Contribution	This credit contributes 50.0% towards the category score.
Criteria	If the development is on a site that has been previously developed, has at least 30% of the existing building been re-used?
Question	Criteria Achieved ?
Project	No

2.1 - Operational Waste - Food & Garden Waste 0%

Score Contribution	This credit contributes 50.0% towards the category score.
Criteria	Are facilities provided for on-site management of food and garden waste?
Question	Criteria Achieved ?
Project	No

Urban Ecology

Overall contribution 3%

2.1 Vegetation 100%

Score Contribution	This credit contributes 57.1% towards the category score.
Criteria	How much of the site is covered with vegetation, expressed as a percentage of the total site area?
Question	Percentage Achieved ?
Project	35 %

2.2 Green Roofs 0%

Score Contribution	This credit contributes 14.3% towards the category score.
Criteria	Does the development incorporate a green roof?
Question	Criteria Achieved ?
Project	No

2.3 Green Walls and Facades 0%

Score Contribution	This credit contributes 14.3% towards the category score.
Criteria	Does the development incorporate a green wall or green façade?
Question	Criteria Achieved ?
Project	No

3.1 Food Production - Residential 0%

Score Contribution	This credit contributes 14.3% towards the category score.
Criteria	What area of space per resident is dedicated to food production?
Question	Food Production Area
Detached dwelling	-
Output	Min Food Production Area
Detached dwelling	3 m²

WSUD LEGEND

IMPERVIOUS

- Roof Area connected to Water Tank
- Roof Area connected to storm water
- Concrete Driveway
- RWT 2000L Rainwater Tank

PERVIOUS

- Garden Area
- PERVIOUS DRIVEWAY

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SITE ADDRESS
NO.2 RESERVE AVE, CAMPBELLFIELD

PROPOSAL
MULTI UNIT DEVELOPMENT FOR SELCUK YILDIZ

SDA & WSUD & BESS

DRAWING DETAILS
1/06/2022 @ A1 N.N

DRAWING NO.
TP-06

211717

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AREA SUMMARY			
TOTAL SITE AREA: 776m²			
	D1	D2	D2
GROUND FLOOR LIVING	73.50m²	69.92m²	73.60m²
GARAGE	24.24m²	26.45m²	25.84m²
PORCH	4.22m²	2.66m²	3.62m²
SUBTOTAL:	101.96m²	99.03m²	103.06m²
FIRST FLOOR LIVING	67.35m²	54.11m²	50.63m²
SUBTOTAL:	67.35m²	54.11m²	50.63m²
GRAND TOTAL:	169.31m²	153.14m²	153.69m²
SQ	18.2SQ	16.5SQ	16.5SQ
% SITE COVERAGE	304.05m²	39.18%	
% IMPERMEABLE AREA	499.9m²	64.42%	
% PERMEABLE AREA	276.1m²	35.58%	
GARDEN AREA	273.28m²	35.22%	

BESS NOTE:

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90°00'00" 45.59

LOT 65
DOUBLE STOREY
BRICK DWELLING

10.561

BALCONY

FFL 125.44

P.O.S

GARAGE

BRICK WALL HT 127.45

GUTTER 131.04 EAVES 130.95

3.441

8.677

HAVE A CORNER SPLAY OR AREA AT LEAST 50 PER CENT CLEAR OF VISUAL OBSTRUCTIONS EXTENDING AT LEAST 2 METRES ALONG THE FRONTAGE ROAD FROM THE EDGE OF AN EXIT LANE AND 2.5 METRES ALONG THE EXIT LANE FROM THE FRONTAGE, TO PROVIDE A CLEAR VIEW OF PEDESTRIANS ON THE FOOTPATH OF THE FRONTAGE ROAD. ANY STRUCTURE OR LANDSCAPING WITHIN VISIBILITY SPLAYS OF DRIVEWAY MUST BE NO GREATER THAN 900MM IN HEIGHT.

500MM WIDE PLANTING STRIP NO FENCE REQUIRED

450MM EAVE

PALING FENCE 1.90m HT

SHALL BE 1.8M HIGH TIMBER PALINGS FENCE.

DOUBLE CROSSOVER

NEW DRIVEWAY 29.02 m²

SECTIONAL DOOR

GARAGE 3.5x6.0 FFL:125.11

BINS

FOLD DOWN CLOTHES LINE

6m³ STORAGE

SPOS 39.18 m²

SPOS 37.11 m²

2000L RWT

GARAGE 3.6 x 6.23 FFL:124.86

GARAGE 3.6 x 6.23 FFL:124.61

450MM EAVE

L'DRY

KITCHEN

SPOS 86.83 m²

PROPOSED LETTER BOX FOR PROPOSED DWELLING D1 - NOT TO EXCEED 900MM IN HEIGHT - REFER TO POST OFFICE REQ.

500MM WIDE PLANTING STRIP NO FENCE REQUIRED

POR FFL:125.1

PWD

L'DRY

ENTRY

MEALS

D1 FFL:125.26

POS 72.99 m²

FAMILY

KITCHEN

D2 FFL:125.01

ENTRY

MEALS

PORCH FFL:124.86

SECTIONAL DOOR

IMPERVIOUS DRIVEWAY

D3 FFL:124.76

ENTRY

PORCH FFL:124.60

DOUBLE GLAZED

FAMILY

W DOUBLE GLAZED

BINS

GATE

RESERVE AVENUE

344°23'00"

CONCRETE KERB

EXISTING NATURE STRIP TREE TO BE RELOCATED

18.70

FOOTPATH

PROPOSED 3.0M WIDE CROSSOVER

THE NATURE STRIP TREE TO BE RELOCATED

PROPOSED LETTER BOX FOR PROPOSED DWELLING D2, D3 - NOT TO EXCEED 900MM IN HEIGHT - REFER TO POST OFFICE REQ.

CROSSOVER

IMPERVIOUS DRIVEWAY

1100MM WIDE PLANTING STRIP

IMPERVIOUS DRIVEWAY 165.84 m²

37.27 m²

450MM EAVE

PALING FENCE 1.90m HT

BRICK WALL HT 127.81

COLORBOND FENCE 1.90m HT

DOUBLE GLAZED WINDOW

4.0M RADIUS VEHICLE TURNING IN ACCORDANCE WITH AS2890.1

C1

A1

A B C D

GUTTER 127.46

CARPORT

GARAGE

P.O.S

BUNGALOW

GARAGE

P.O.S

LOT 63
SINGLE STOREY
BRICK DWELLING
GREATER THAN 9m

LOT 62
SINGLE STOREY
BRICK DWELLING
GREATER THAN 9m

TBM - G.I. NAIL
124.77 AHD

HAVE A CORNER SPLAY OR AREA AT LEAST 50 PER CENT CLEAR OF VISUAL OBSTRUCTIONS EXTENDING AT LEAST 2 METRES ALONG THE FRONTAGE ROAD FROM THE EDGE OF AN EXIT LANE AND 2.5 METRES ALONG THE EXIT LANE FROM THE FRONTAGE, TO PROVIDE A CLEAR VIEW OF PEDESTRIANS ON THE FOOTPATH OF THE FRONTAGE ROAD. ANY STRUCTURE OR LANDSCAPING WITHIN VISIBILITY SPLAYS OF DRIVEWAY MUST BE NO GREATER THAN 900MM IN HEIGHT.

90°00'00" 40.56

0°00'00" 18.00

1.80 MAX WALL DESIGN SEGMENT

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SITE ADDRESS	PROPOSAL	GROUND/SITE PLAN
NO.2 RESERVE AVE, CAMPBELLFIELD	MULTI UNIT DEVELOPMENT FOR SELCUK YILDIZ	

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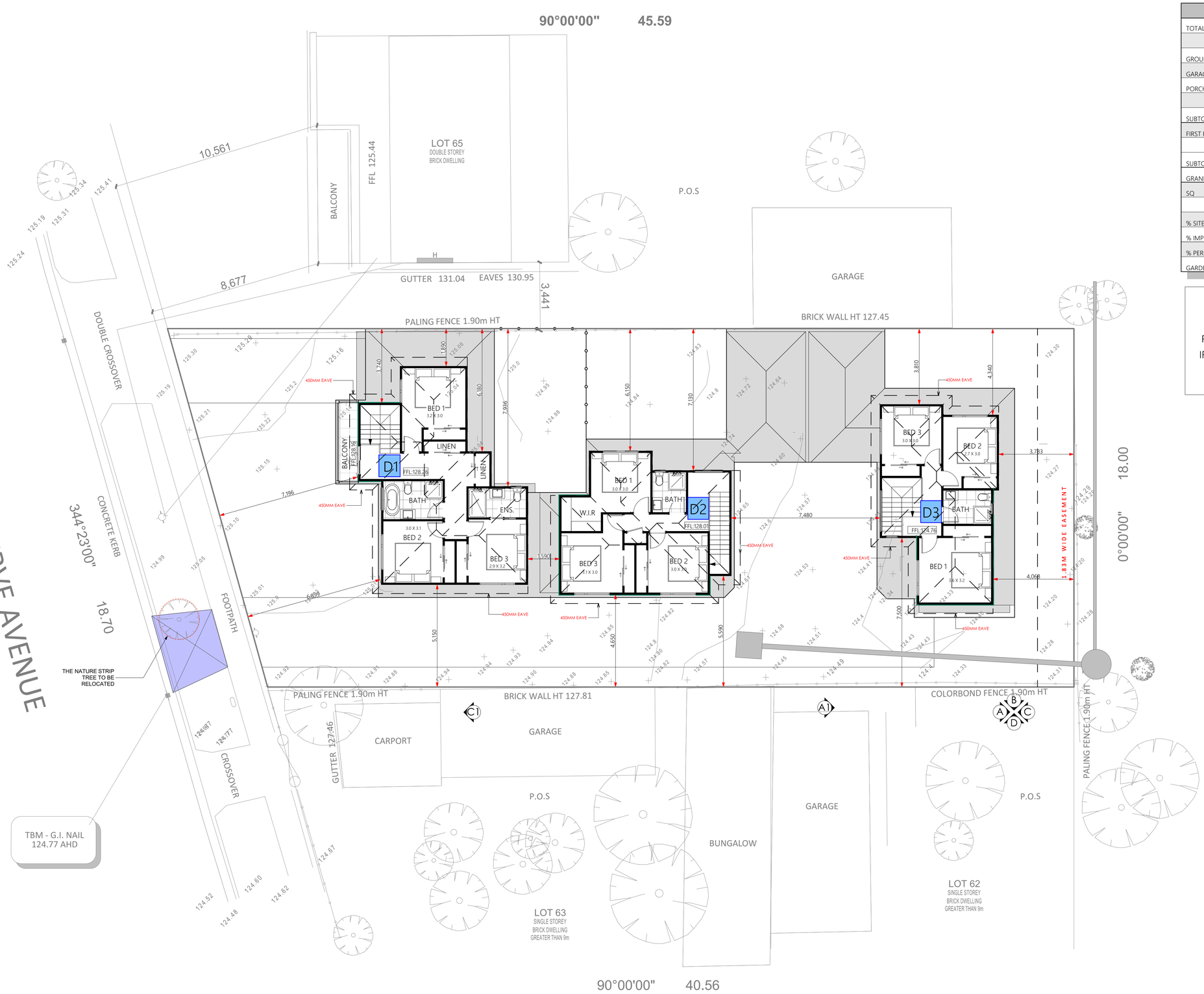

AREA SUMMARY			
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BESS NOTE:

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SITE ADDRESS
NO.2 RESERVE AVE, CAMPBELLFIELD

PROPOSAL
MULTI UNIT DEVELOPMENT FOR SELCUK YILDIZ

FIRST/SITE PLAN

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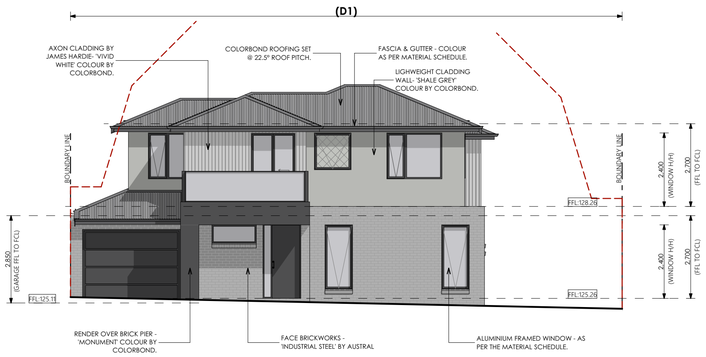
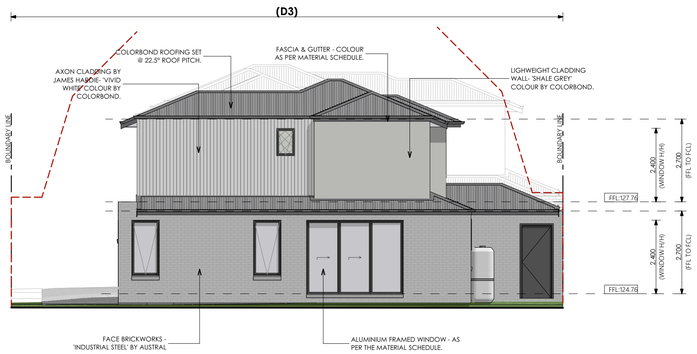


A **WEST ELEVATION**
1:100



C **EAST ELEVATION**
1:100

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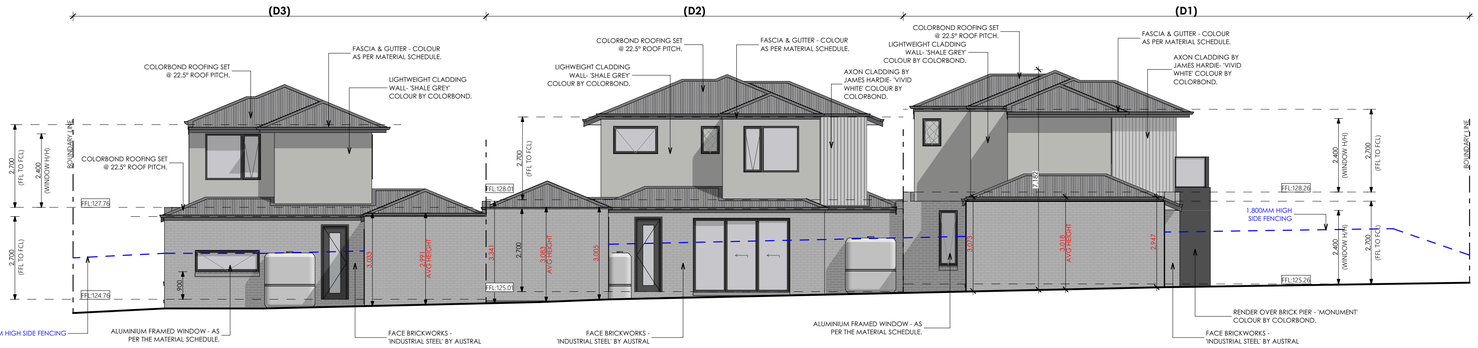
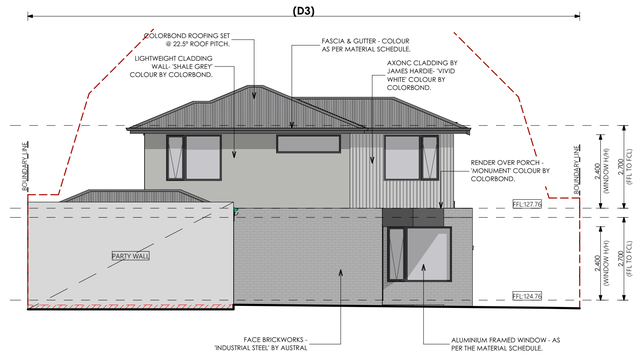
MATERIALS SCHEDULE

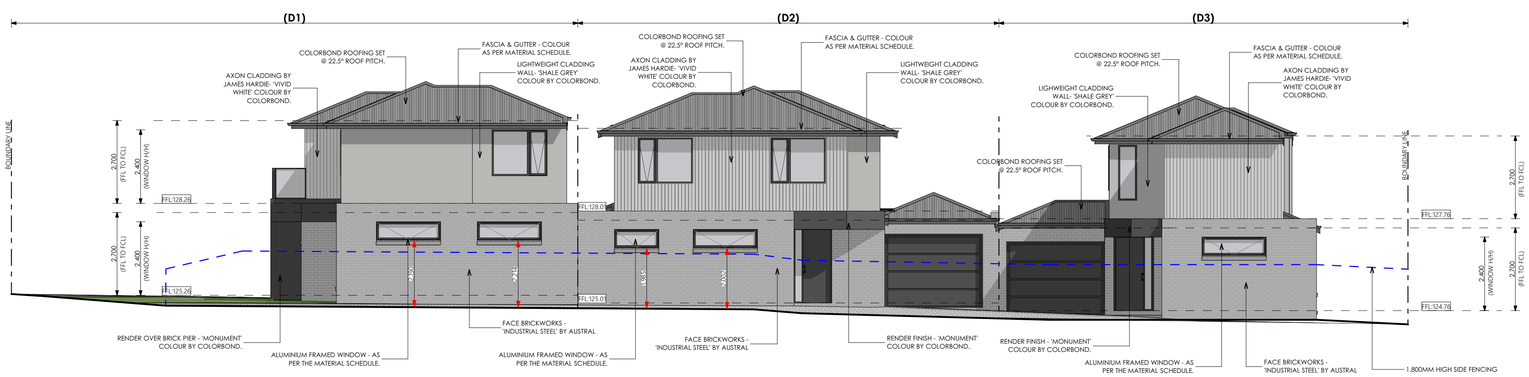
DESCRIPTION	COLOUR SAMPLE
BRICK WORK - 'INDUSTRIAL STEEL' BY AUSTRAL OR SIMILAR	
MAIN RENDER FINISH - 'SHALE GREY' FINISH BY COLORBOND	
AXON CLADDING BY JAMES HARDIE - 'VIVID WHITE' FINISH BY COLORBOND	
ENTRY DOOR - 'TIMBER STAIN' FINISH OR SIMILAR	
GARAGE PANEL LIFT DOOR - 'MONUMENT' FINISH	
ALUMINIUM FRAMED WINDOW & DOORS - 'MONUMENT' FINISH BY COLORBOND OR SIMILAR	
COLORBOND ROOFING - 'MONUMENT' FINISH BY COLORBOND OR SIMILAR	
FASCIA & GUTTER - 'CHARCOAL' FINISH BY COLORBOND OR SIMILAR	



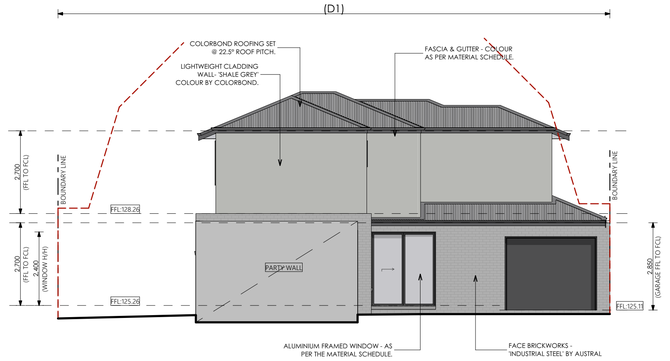
B **NORTH ELEVATION**
1:100



A1 **WEST ELEVATION - D3**
1:100



D **SOUTH ELEVATION**
1:100



C1 **EAST ELEVATION - D1**
1:100

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PROPOSAL
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ELEVATIONS

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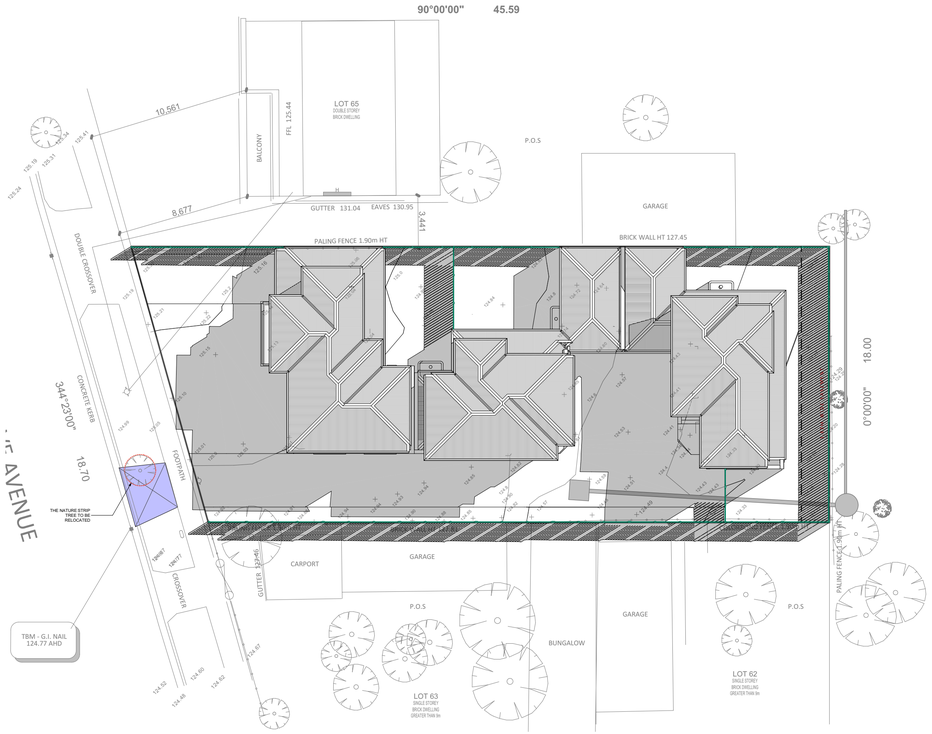
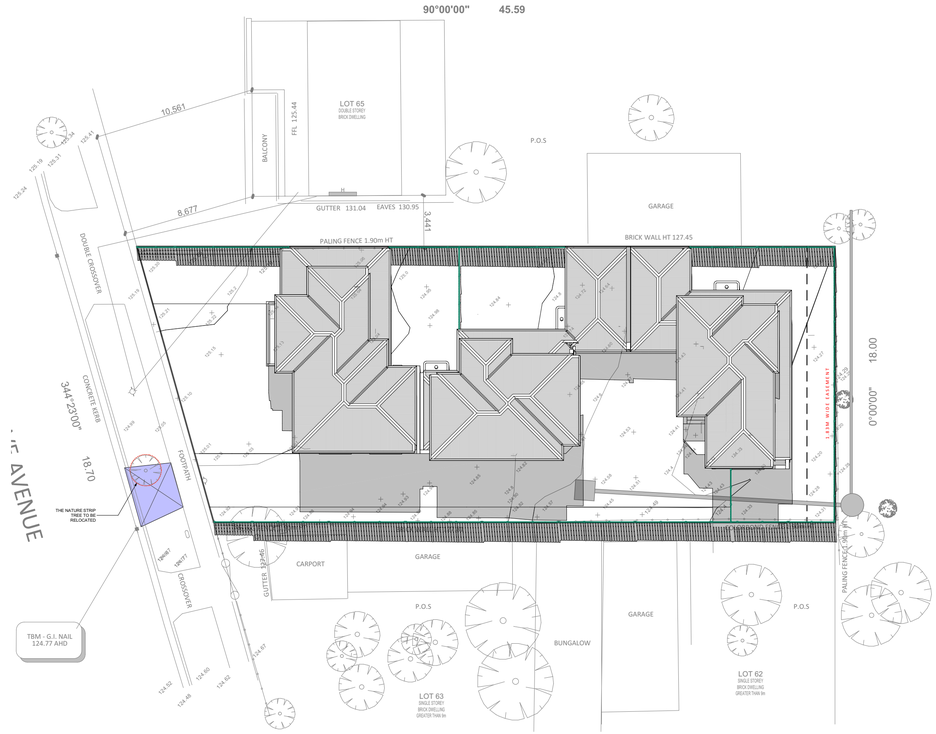


9AM SHADOW DIAGRAM
1:200



12PM SHADOW DIAGRAM
1:200

3PM SHADOW DIAGRAM
1:200

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CAMPBELLFIELD

PROPOSAL
MULTI UNIT DEVELOPMENT
FOR
SELCUK YILDIZ

SHADOW DIAGRAMS

DRAWING DETAILS
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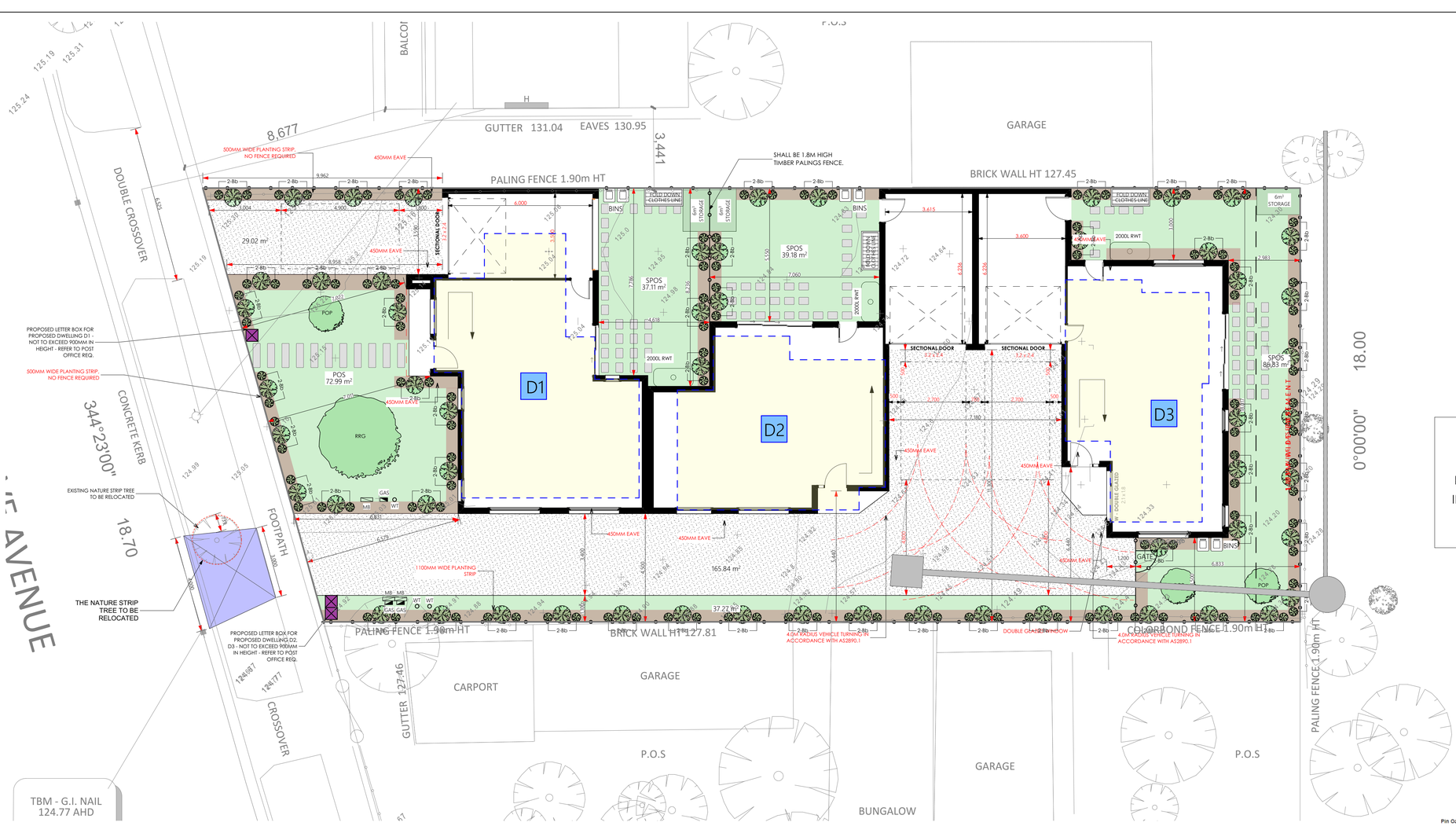

BESS NOTE:

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LANDSCAPING NOTES

THE FOLLOWING LANDSCAPING SPECIFICATIONS ARE TO BE READ IN CONJUNCTION WITH THE RELEVANT LOCAL LAWS AND LOCAL DEVELOPERS GUIDELINES.

SERVICES:

THE CONTRACTOR MUST VERIFY THE LOCATION AND DEPTH OF ALL UNDERGROUND SERVICES SUCH AS DRAINAGE, SEWER, POWER, GAS AND THE LIKE, PRIOR TO COMMENCING ANY DIGGING AND COMPLY WITH LOCAL LAWS ON THE SUBJECT SITE. ALL WORKS AND PRECAUTIONS TO BE CARRIED OUT IN A TRADESMAN LIKE MANNER.

GARDEN BEDS & SUB GRADE:

AS INDICATED ON THE DRAWINGS THE CONTRACTOR SHALL PROVIDE FOR THE ESTABLISHMENT OF GARDEN BEDS.
ALL WORKS ARE TO BE CARRIED OUT IN ACCORDANCE WITH STANDARD HORTICULTURAL PRACTICES.
THE GROUND IS TO BE IN A LOOSE AND FRIABLE CONDITION, BY AN INITIAL CULTIVATION PRIOR TO THE PLACEMENT OF TOPSOIL, BEFORE LAYING MULCH, CULTIVATE SOIL TO A DEPTH OF 250MM.

GRADES & LEVELS:

ALL GRADES TO BE SHAPED TO ASSIST DRAINAGE, WHERE BEDS ARE PLACED AGAINST BUILDINGS THEY MUST DRAIN AWAY FROM THE BUILDING

LAWN:

LAWN AREAS ARE TO BE CULTIVATED TO 100MM DEPTH AND SPREAD WITH 75MM SCREENED ORGANIC MIX TOPSOIL.
RAKE WITH A FINE TEETH FINISHING OF APPROXIMATELY 8MM ABOVE ADJACENT PATH SURFACE OR PLINTH BOARD.
SEED LAWNS WITH KIKUYU OR COUCH TYPE LAWN SEED AND APPLY STARTER FERTILIZER.

GYPSUM:

GYPSUM SHALL ASSIST IN THE BREAKUP OF HEAVY CLAY SOIL. SPREAD GYPSUM AT 1.5KGS PER M² OR IN ACCORDANCE WITH THE MANUFACTURES SPECIFICATIONS. MIX IN THE GYPSUM INTO THE SUBGRADE BY DIGGING IN TO A DEPTH OF APPROXIMATELY 50MM.

MULCH:

PROVIDE MULCH TO ALL GARDEN BED AREAS TO AN EVEN DEPTH OF 75MM. THE USE OF ORGANIC MULCH IS RECOMMENDED. TIMBER CHIP BARK AND THE LIKE.

ROOT BARRIER:

AN APPROPRIATE ROOT BARRIER PROTECTION SYSTEM SHOULD BE INSTALLED TO ENSURE THAT NO DAMAGE OCCURS TO ANY FOUNDATIONS, RETAINING WALLS, FOOTPATHS, DRIVEWAYS, UNDERGROUND PIPES AND THE LIKE. THIS SHOULD BE CARRIED OUT BY AN INDUSTRY PROFESSIONAL AND SHOULD BE TO THE REQUIREMENTS OF THE PRODUCT MANUFACTURER.

WATER DRIP SYSTEM:

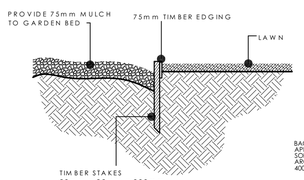
10MM POLYPIPE IS TO BE USED IN GARDEN BED AREAS AND TREES.
A FITTED MANUAL WATER TIMER IS RECOMMENDED TO OPERATE THE DRIP SYSTEM.

PLANTING SCHEDULE

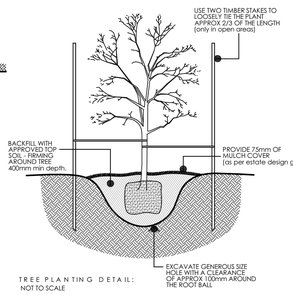
CODE	BOTANICAL NAME	COMMON NAME	HEIGHT/WIDTH (mm)	POT SIZE (mm)	QTY.
CANOPY TREES (MINIMUM PLANTING HEIGHT 2.0m)					
RRG	Allocasuarina littoralis	Black She-Oak	8-15	20LT	1
SMALL/MEDIUM TREES					
POP	Quercus Palustris Pringreen	Pin Oak Pringreen	average 14	N/a	3
MEDIUM/LARGE SHRUBS					
Ap	*Acacia Paradoxa*	Hedge Wattle	3000 x 1000	20LT	57
GROUND COVER AND CLIMBERS					
Bb	*Brachyscome basaltica*	Basalt daisy	400 x 400	150	114
	Pennisetum clandestinum	grass	As Per Architectural	As Per Architectural	
	Concrete Driveway	Coloured driveway	N/a	N/a	N/a

LEGEND

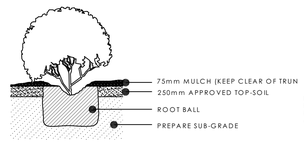
- EXISTING TREES TO BE RETAINED
- PROPOSED NEW TREE, REFER TO PLANTING SCHEDULE
- PROPOSED NEW SHRUBS, REFER TO PLANTING SCHEDULE
- MULCH
- STONE PAVERS
- CONCRETE DRIVEWAY
- TIMBER DECKING



TIMBER EDGE DETAIL:
(NOT TO SCALE)



TREE PLANTING DETAIL:
NOT TO SCALE



SHRUB PLANTING DETAIL:
(NOT TO SCALE)

NOTE:
POT SIZES SPECIFIED MAY NOT ALWAYS BE AVAILABLE FROM LOCAL STOCKIST / SUPPLIERS. IF UNABLE TO PURCHASE SPECIFIED SIZES, SELECT SIZES AS CLOSE AS POSSIBLE. IF POSSIBLE, SELECT LARGER & MORE ADVANCED SPECIES - AVOID SMALLER POT SIZES THAN LISTED.

TREE NOTE:

TREE SPECIES AND PLANTING LOCATIONS MUST BE CAREFULLY SELECTED TO AVOID CANOPY OR ROOT CONFLICTS WITH OVERHEAD WIRES, EASEMENTS AND EXISTING TREES;

PAVING NOTE:

LOCATION AND DETAILS OF PAVING, STEPS, RETAINING WALLS, WATER TANKS, CLOTHESLINES, FENCE DESIGN DETAILS AND OTHER LANDSCAPE WORKS INCLUDING CUT AND FILL;

WATER NOTE:

LOCATION, DETAILS AND CROSS SECTION DRAWINGS OF ALL WATER SENSITIVE URBAN DESIGN FEATURES IN ACCORDANCE WITH THE ENDORSED SUSTAINABLE DESIGN ASSESSMENT AND STORM REPORT, WITH REFERENCE TO CONNECTION DETAILS ON THE ENGINEERING PLANS.

Pin Oak Pringreen
Quercus palustris Pringreen

Narrow columnar, medium sized tree of 8-15m. Suitable for driveways and avenues where space is limited. The lobed foliage is a bright green, turning brown and dark red in autumn

Tree locations and purpose	
Family	Fagaceae
Tree origin	Exotic
Tree shape	
Tree type	
Tree size (at maturity)	Medium tree 8-15m
Minimum ground area (m²)	4
Canopy area (m² at maturity)	7
Average height (at maturity)	14
Average width (at maturity)	3
Spacing	4-8m
Star rating	★★★

Pin Oak Pringreen
Quercus palustris Pringreen

BJ. Stanley, 2012

Tree locations and purpose	
Family	Casuarinaceae
Tree origin	Indigenous to Moreland
Tree shape	Black She-Oak Allocasuarina littoralis
Tree type	
Tree size (at maturity)	Medium tree 8-15m
Minimum ground area (m²)	14
Canopy area (m² at maturity)	28
Average height (at maturity)	10
Average width (at maturity)	6
Spacing	8-12m
Star rating	★★

TOWN PLANNING DRAWINGS ONLY
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PDSTUDIO.
SUITE 101, 1510 PASCOE VALE RD., COOLAROO | (03) 9972 7667 | PD.NET.AU

SITE ADDRESS
NO.2 RESERVE AVE, CAMPBELLFIELD

PROPOSAL
MULTI UNIT DEVELOPMENT FOR SELCUK YILDIZ

LANDSCAPING PLAN

DRAWING DETAILS
1/06/2022 | 1:100 @ A1 | N.N

DRAWING NO.
TP-11

211717

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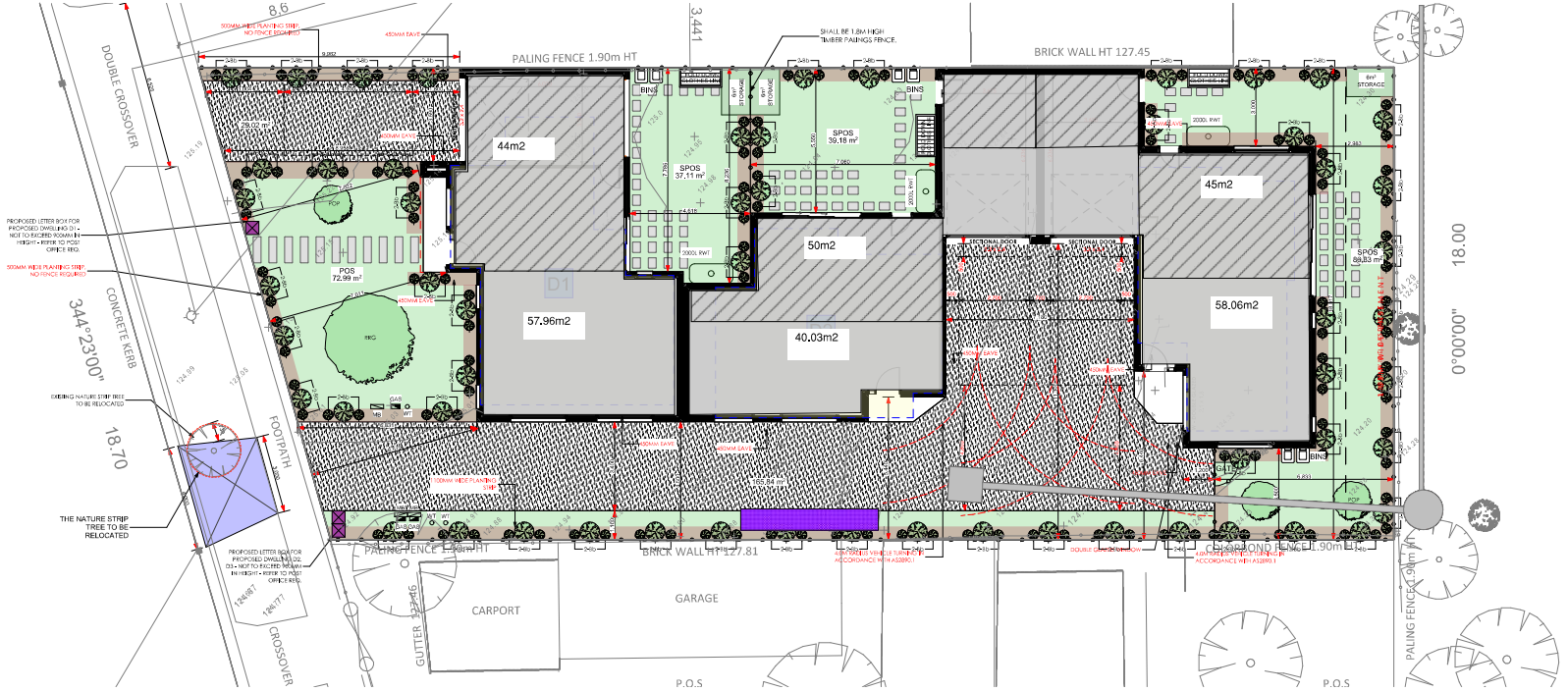
WSUD LEGEND

IMPERVIOUS

- Roof Area connected to Water Tank
- Roof Area connected to storm water
- Concrete Driveway
- 2000L Rainwater Tank (RWT)

PERVIOUS

- Garden Area
- 100mm Rainwater Garden



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PD STUDIO PTY LTD
Suite 101, 1510 Pascoe Vale Rd, Coolaroo VIC 3072
T: (03) 9972 7667 | E: albert@pd.net.au

16/05/2022

Hume City Council
PO Box 119, Dallas 3047

SUBJECT: **RFI RESPONSE FOR: P24240 - 2 RESERVE AVENUE, CAMPBELLFIELD**

Dear Mychelle,

Please see enclosed the following documents as requested in your RFI letter issued on the 18th Jan 2022:

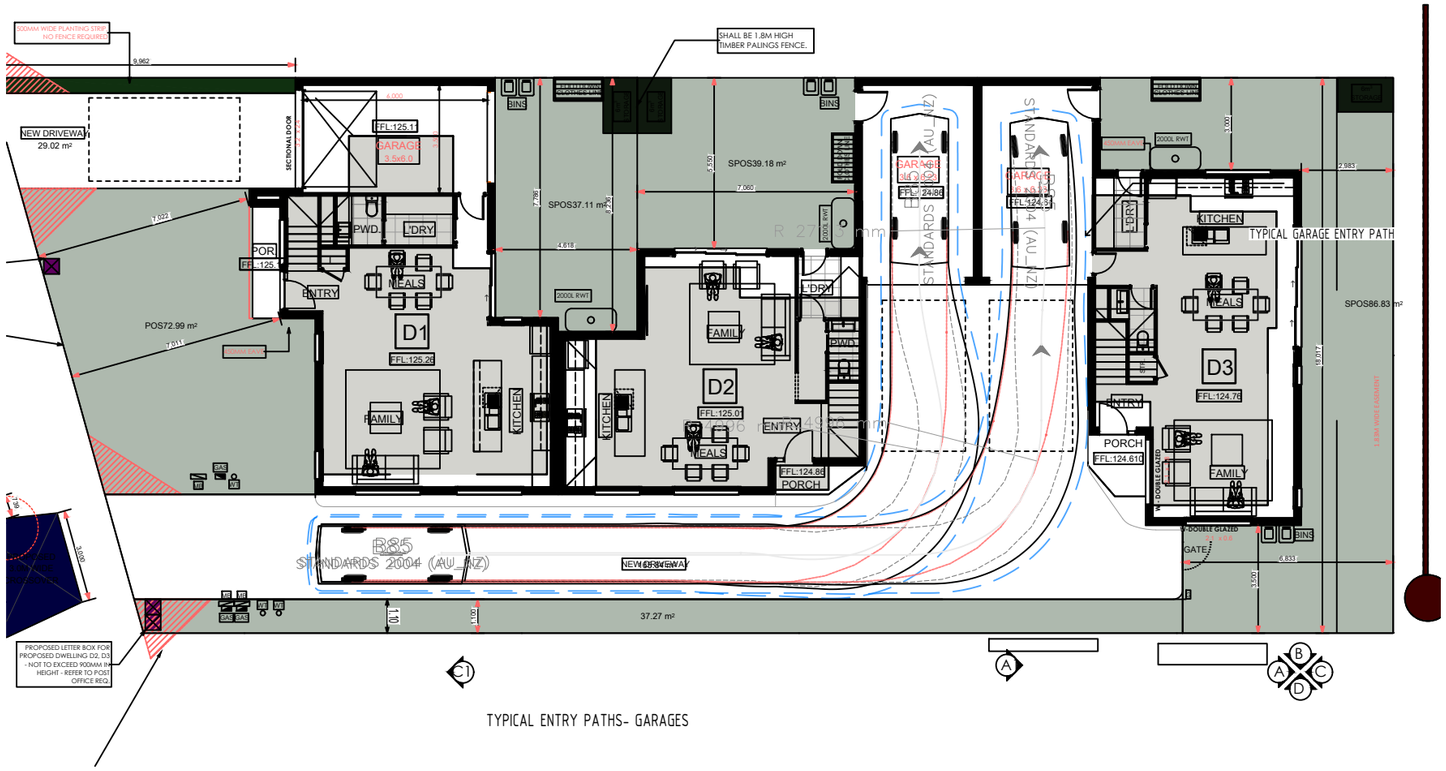
- Amended Architectural drawings
    - Item 1: Has been addressed
    - Item 2: see attached
    - Item 3:refer to traffic engineer's swept paths
    - Item 4: Refer to architectural TP-09
    - Item 5: Refer to architectural TP-05
    - Item 6: refer to updated shadow diagrams
    - Item 7: find enclosed SDA report
    - Item 8storm water connection - TP-06
    - Item 9:see attached revised
    - Item 10. Detailed service utility site plan - TP-05
    - Item 11: awaiting council's Civil Department comments
- Sustainable Design Assessment (SDA) report
- Traffic engineering including swept paths

We kindly request that this application proceed to advertising at the earliest convenience.

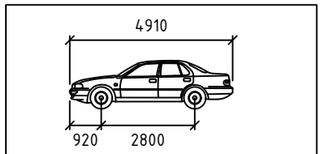
Should you wish to discuss further, please don't hesitate to contact us on (03) 9972 7667.

Kind regards,

Emre Ozdemir | Project Manager



TYPICAL ENTRY PATHS- GARAGES

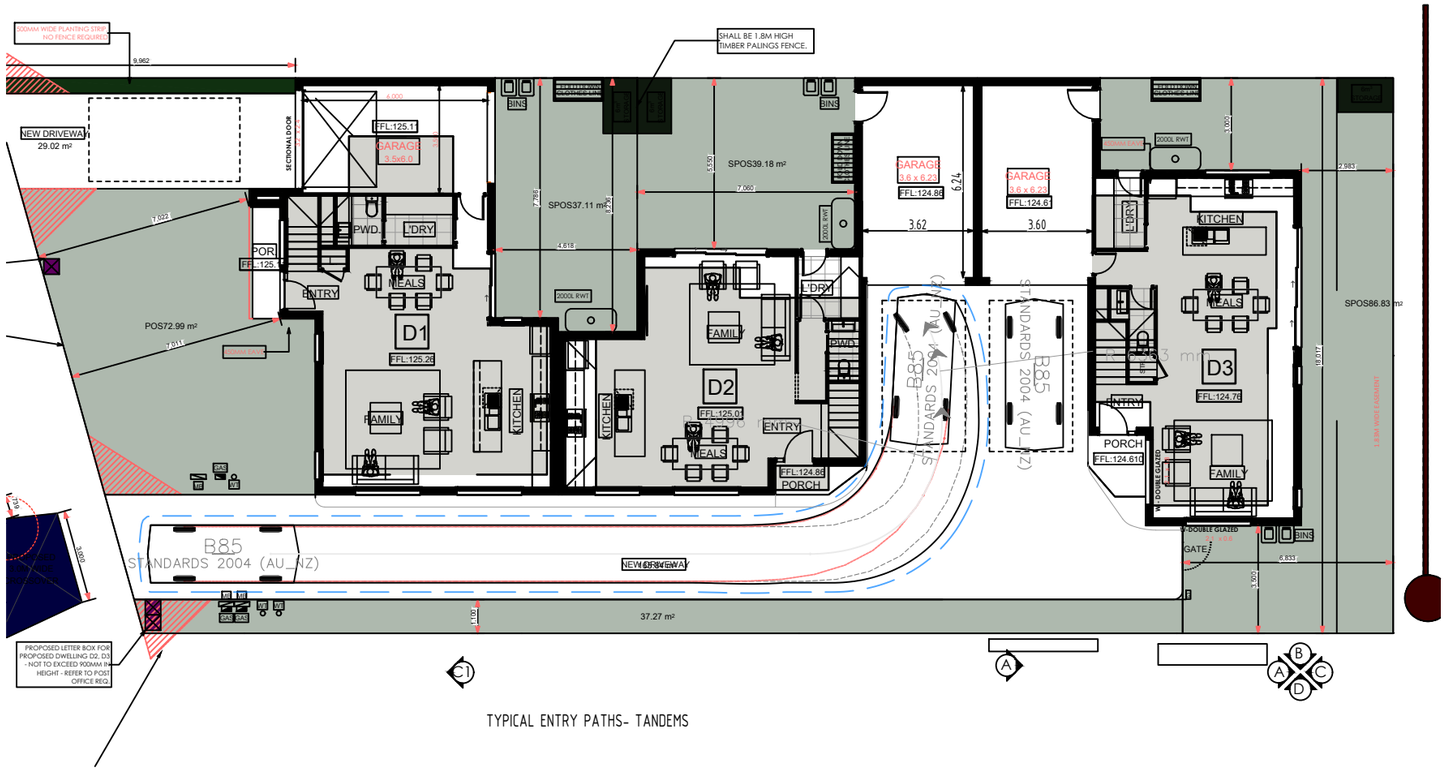


B85

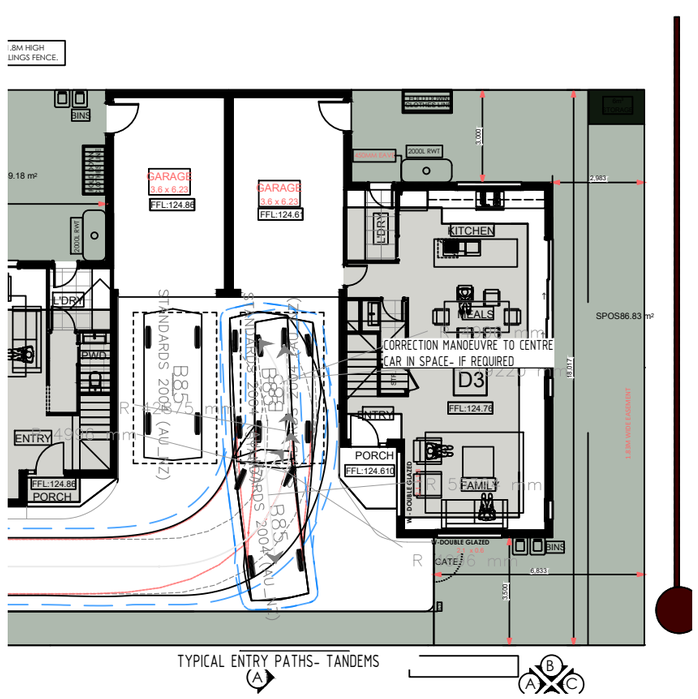
	mm
Width	: 1870
Track	: 1770
Lock to Lock Time	: 6.0
Steering Angle	: 34.1

NOTES:

1. DESIGN CAR, B85 VEHICLE, AS2890.1:2004.
2. 300mm CLEARANCE ENVELOPE SHOWN.
3. DESIGN SPEED 5KM/H FORWARDS; 2.5KM/H REVERSE

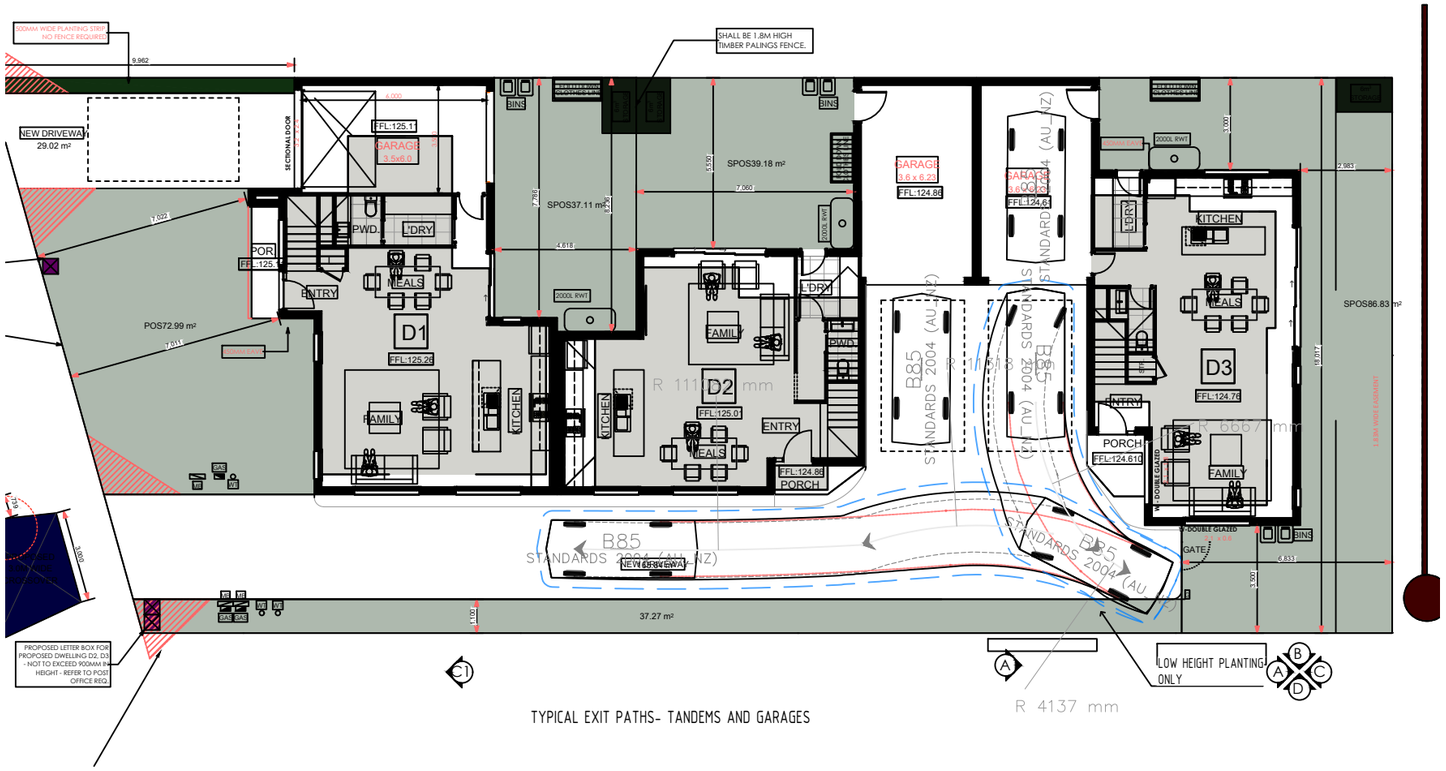


TYPICAL ENTRY PATHS- TANDEMS

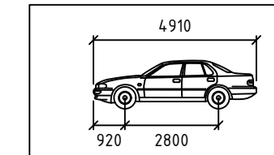


TYPICAL ENTRY PATHS- TANDEMS

2 RESERVE ROAD CAMPBELLFIELD ACCESS REVIEW – ENTRY			CMA
Scales 0 4 8 1: 200(A3) Dimensions shown in metres	Drawn CM Ckd	C Maragos & Associates Pty Ltd Traffic & Transportation ABN 48 145 418 471 222/ 87 Gladstone Street, South Melbourne PO Box 33207, DOMAIN LPO MELBOURNE VIC 3004 Tel: 03 9690 0995	Job No.	Drawing No. SP50 A
			CAD REF:	10/5/2022



TYPICAL EXIT PATHS- TANDEMS AND GARAGES

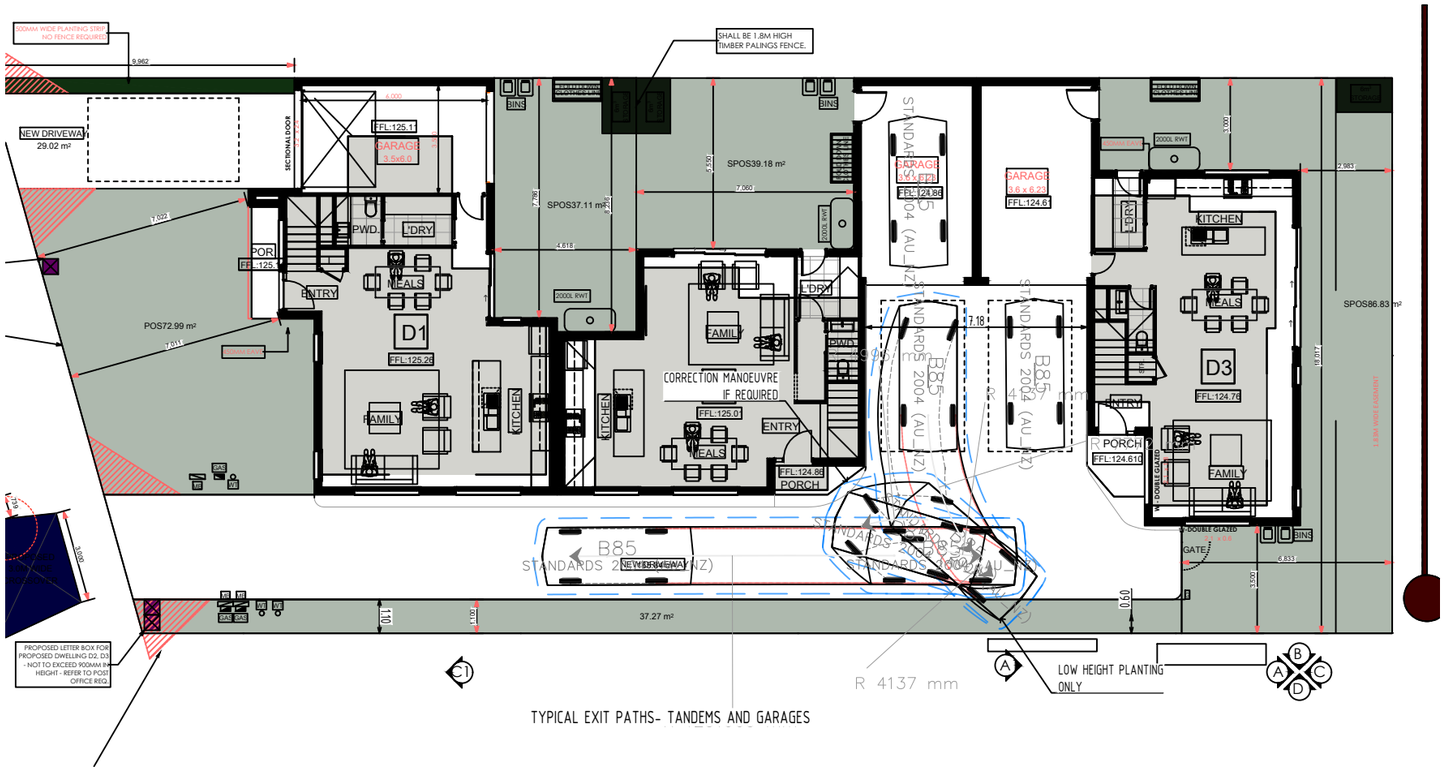


B85

	mm
Width	: 1870
Track	: 1770
Lock to Lock Time	: 6.0
Steering Angle	: 34.1

NOTES:

1. DESIGN CAR, B85 VEHICLE, AS2890.1:2004.
2. 300mm CLEARANCE ENVELOPE SHOWN.
3. DESIGN SPEED 5KM/H FORWARDS; 2.5KM/H REVERSE



TYPICAL EXIT PATHS- TANDEMS AND GARAGES

2 RESERVE ROAD CAMPBELLFIELD ACCESS REVIEW – EXIT				CMA
Scales 0 4 8 1: 200(A3) Dimensions shown in metres	Drawn CM Ckd		C Maragos & Associates Pty Ltd Traffic & Transportation ABN 48 145 418 471 222/ 87 Gladstone Street, South Melbourne PO Box 33207, DOMAIN LPO MELBOURNE VIC 3004 Tel: 03 9690 0995	Job No. 22005 CAD REF: 22005	Drawing No. SP51 A 10/5/2022

PDSTUDIO.

TOWN PLANNING REPORT FOR:

NO. 2 RESERVE AVENUE, CAMPBELLFIELD VIC 3061

PLANNING PERMIT APPLICATION FOR THREE (3) NEW DOUBLE STOREY DWELLINGS ON ONE (1) LOT.

AUTHOR: ALBERT TUZON

2ND DECEMBER 2021

Suite 101, 1510 Pascoe Vale Rd, Coolaroo, VIC 3048 | T: (03) 9972 7667 | albert@pd.net.au

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INTRODUCTION

PD Studio have been engaged to prepare architectural plans and provide supporting documents for the submission of a new planning permit application to Hume City Council.

The subject site is located at No. 2 Reserve Avenue, Campbellfield in an existing residential area comprising of mainly single and double storey dwellings. A full inspection of the site and surroundings was conducted. Please find enclosed the following supporting documents:

1 Current property title certificate and plan of subdivision;
2 Feature and re-establishment survey plans;
3 Completed application form; and,
4 Architectural drawings.

2 SITE ANALYSIS

2.1 The Site

The 776 square metres of site area is currently occupied by an existing single storey brick veneer dwelling fronting Reserve Avenue. The area is in an established residential estate and surrounded adjoining allotments in the locale are existing residences, mainly single and double storey dwellings. These residential dwellings are mainly built of brick veneer with pitched tile concrete roofing which varies between 20-30 degrees. The streetscape follows a general similar pattern throughout.

Figure 1: Arieal View

2.2 Contours and existing vegetation

The land has a maximum slope of 1.0 metres, with the north-western corner being the highest point of the land, and the north-eastern corner being the lowest point.

The existing dwelling is setback approximately 8.0 metres from the title boundary.

There are couple of trees and shrubs located on the rear boundary of the site. None of indigenous significant value.

There are no significant features, no overland views, or any contentious issues which this development would need to address.

Figure 2: Street View

2.3 Abutting Properties

North of the subject site, adjoining property No. 4 Reserve Ave, consists of a single storey weatherboard dwelling on a lot. It is a standard block which appears to be in good condition from the exterior and is well vegetated from its frontage. The dwelling is setback is approximately 10.56 metres from the front title boundary.

South of the subject site, adjoining property No. 4 Campbell St, consists of single storey brick veneer dwelling on a lot. It is a corner block which appears to be in good condition from the exterior and is well vegetated from its frontage. The dwelling is setback is approximately 9.0 metres from Campbell Street and 4.3 metres from Reserve Ave.

2.4 Street Furniture

The subject site consists of one crossing and driveway access from Reserve Ave. A pedestrian concrete footpath and nature strip are in public space to the front of the subject site. There is one street tree planted on the nature strip, which is of medium size as indicated in the enclosed feature survey plan. There is also an electricity pole located to the on the nature strip.

2.5 Fence and Boundaries

The subject site is enclosed by 1.9-metre-high combination of colorond and timber paling fencing. All fences appear to be in ok condition. There is no front fence or wall off Reserve Avenue.

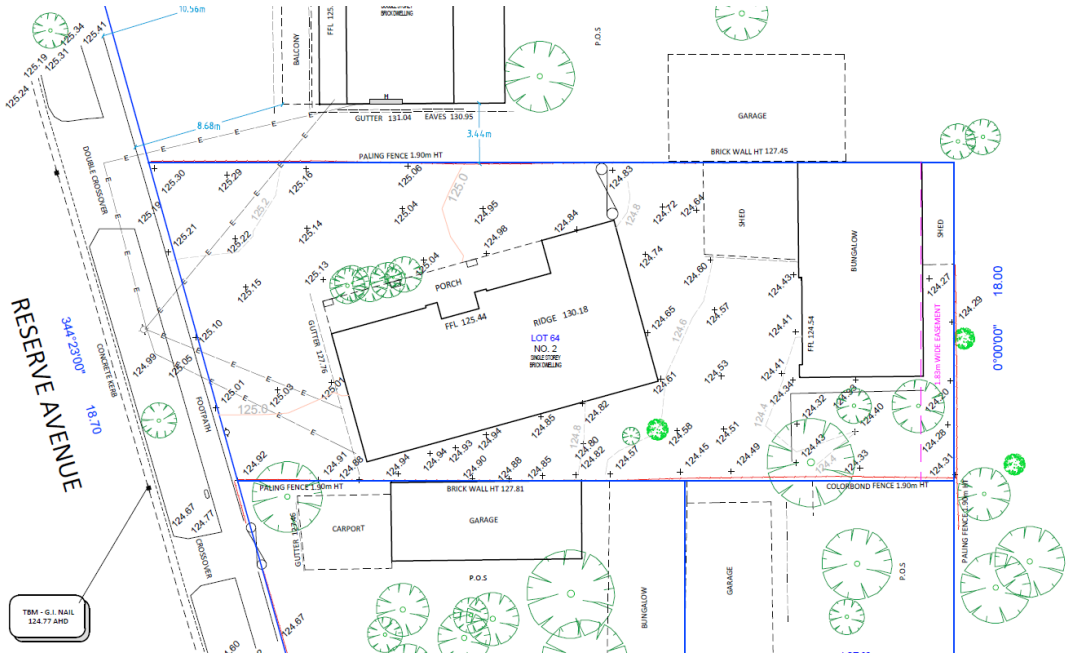

Figure 3: Feature Survey Plan

3 THE PROPOSAL

The proposal seeks to demolish the existing dwelling and propose three (3) new double storey dwellings.

The proposed development will provide floor area sizes that reflect neighbourhood character of the area and will be built to suit the existing form of the surroundings. The proposed development is provided with a three-bedrooms each which can accommodate for small-medium families.

The proposal will utilise building materials typically found in the immediate and surrounding area including selected face brickwork to ground floor levels with a render finish throughout, aluminium framed windows, pitched roof tiles, panel lifts to garage doors and feature front portico entrances. The material and textures for the dwelling have been selected to reflect the dwellings throughout the street. The proposed development has been designed to make a positive contribution to the existing streetscape.

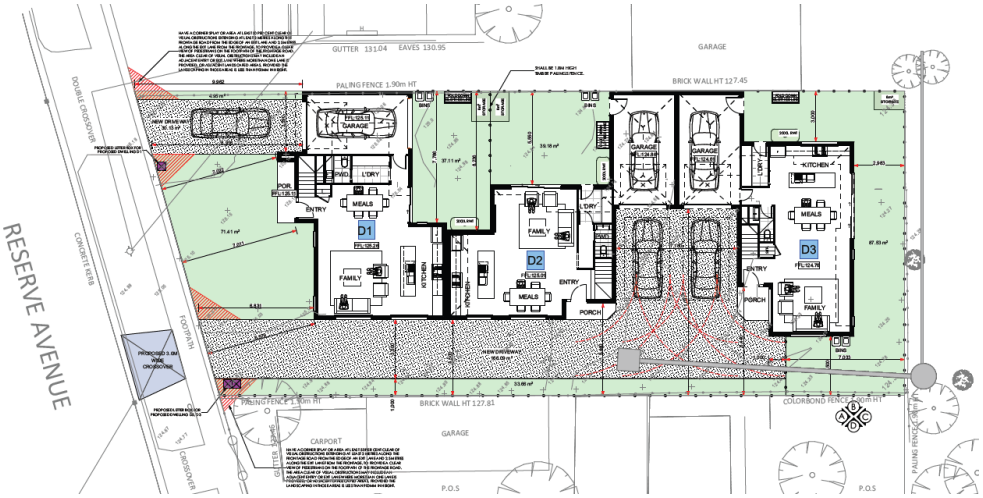

Figure 4: Proposed Ground Floor Plan

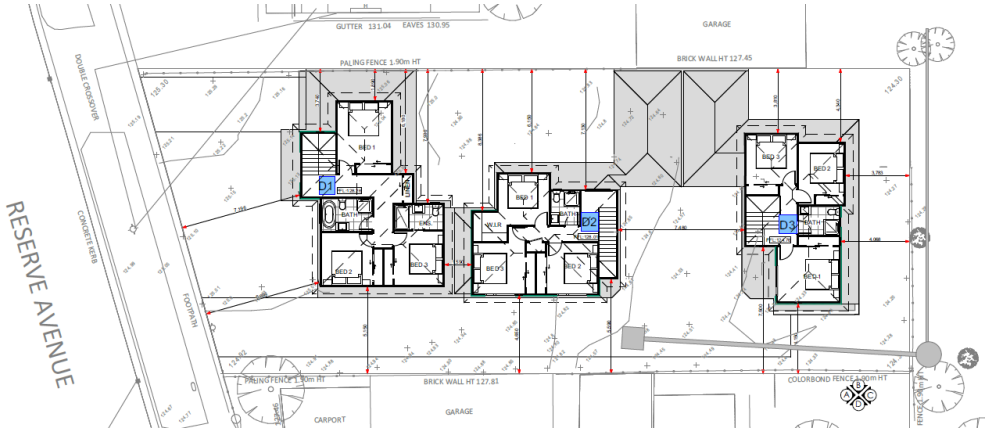

Figure 5: Proposed First Floor Plan

4 ZONING AND PLANNING CONTROLS

4.1 Zoning

Under the Hume City Planning Scheme the subject site is within a General Residential Zone – Schedule 1 (GRZ1). Clause 32.08 of the scheme governs use and development within this zone. Subject to clause 32.08-6 a permit is required to construct two dwellings on a lot.

Schedule 1 highlights the permit requirements for the construction or extension for a dwelling on a lot. In relation to the subject site, the schedule specifies no changes from the normal ResCode Standards.

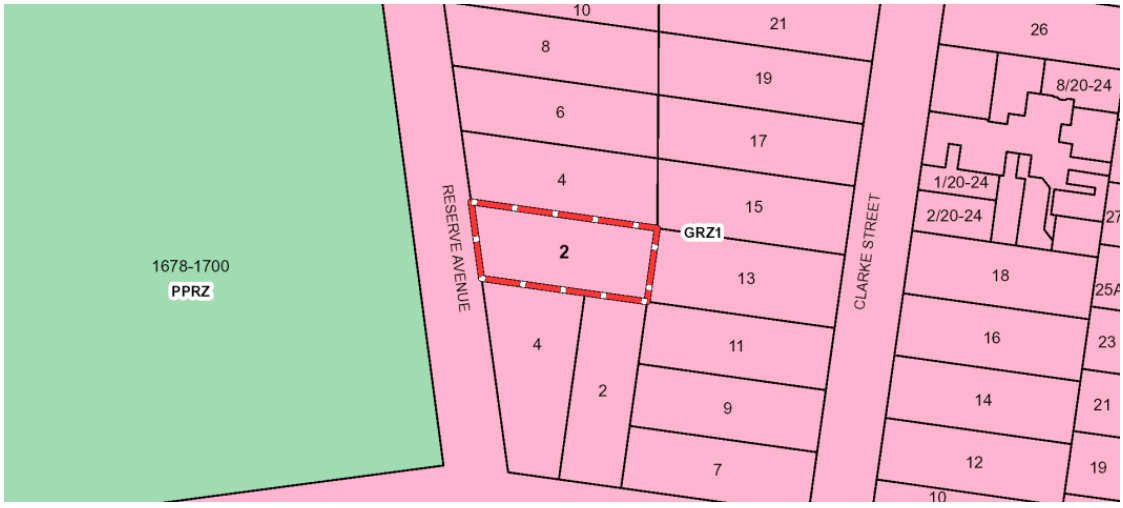

Figure 6: Planning Zones Map

4.2 Overlays

The subject site is affected by no planning overlays.

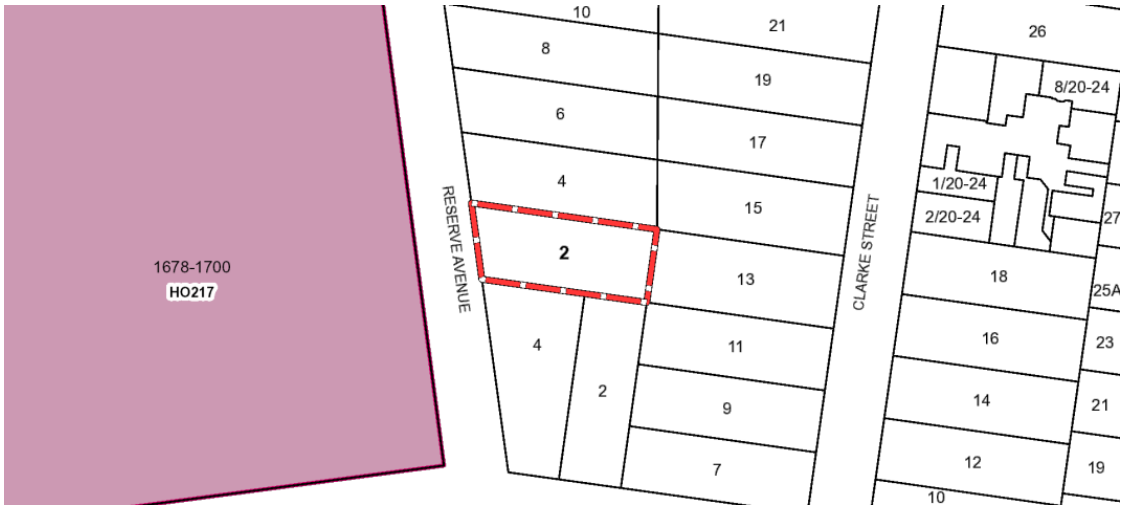

Figure 7: Planning Overlay Map

4.3 Local Planning Policy

The following policies and objectives from clauses 21 and 22 of the City of Hume Planning Scheme have the most relevance to this application.

Clause 21.02 – Urban Structure and Settlement

The clause outlines the council's broader policies for the development of the municipality. It states the following objective(s):

> *"To facilitate large scale change that meets the needs of Hume's growing population and provides choice and equitable access to a range of housing, employment, transport, services and facilities."*

Response:

The proposed development is in line with the City of Hume's Urban Structure and Settlement. Three (3) dwellings on a lot will accommodate to current and future housing needs due to a population increase whilst providing housing diversity.

Clause 21.03Liveable Neighbourhoods and Housing

The clause outlines the council's policies for the development of liveable communities within the municipality. It states the following objective(s):

"To ensure the provision of local infrastructure and services that meets the needs of the local community."

And

"To increase the diversity of housing in Hume."

Response:

The proposed development is in line with the City of Hume's local infrastructure and housing diversity objectives. The three-bedroom dwellings is of a size which can cater to a diverse range of housing and lifestyle requirements.

5 ResCode Clause 55

55.1 Neighbourhood Character and Infrastructure

55.1-1 Design Response (Standard B1)

- *"To ensure that the design respects the existing neighbourhood character or contributes to a preferred neighbourhood character."*
- *"To ensure development responds to the features of the site and the surrounding area."*

The proposed development will be placed on-site, to give a maximum space for all units which are detailed using materials and style similar to the existing streetscape, as well as enhance the immediate area. The medium scale of the proposed development will blend and integrate with the surroundings.

The proposed development meets the objectives of Standard B1.

55.1-2 Residential Policy (Standard B2)

- *"To support medium densities in areas where development can take advantage of public transport and community infrastructure and services."*

The site design, site layout and provision of car parking and open space will ensure that the development provides a good standard of amenity for future residents and good standard for future development in the area. The proposed development supports medium density in an area that can take advantage of public transport and community infrastructure and services.

The proposed development meets the objectives of Standard B2.

55.1-3 Dwelling Diversity (Standard B3)

- *"To encourage a range of dwelling sizes and types in the developments of ten or more dwellings."*

This standard is only applicable to ten (10) or more dwellings.

55.1-4 Infrastructure (Standard B4)

- *"To ensure development is provided with appropriate utility services and infrastructure."*

On site infiltration is maximised through comprehensive landscaping proposed to the front and rear open space. All steps will be taken to direct storm water run-off into garden areas to reduce watering and the demand on drainage infrastructure. Paved areas have also been minimised except for the driveway and pedestrian links onto the site.

The proposed development meets the objectives of Standard B4.

55.1-5 Integration with Street (Standard B5)

- *"To integrate the layout of development with the street."*

The proposed site layout is consistent with standard B5 in that the development will integrate well with and enhance the streetscape and maintain the amenity of adjoining properties. In addition, a strong sense of address and privacy will be provided for future occupants. The proposal will allow for a layout that is functional and capable of efficient maintenance. The position and layout of the proposed dwelling respects the privacy and amenity of adjoining properties.

The proposed development meets the objectives of Standard B5.

55.2 Site Layout and Building Massing

55.2-1 Street Setback (Standard B6)

Walls of buildings should be setback from the streets:

- At least the distance specified in a schedule to the zone, or
- If no distance is specified in a schedule to the zone, the distance specified in table B1 of this clause.

Development context	Minimum setback from front street (metres)	Minimum setback from a side street (metres)
There is an existing building on both the abutting allotments facing the same street, and the site is not on a corner.	The average distance of the setbacks of the front walls of the existing buildings on the abutting allotments facing the front street or 9 metres, whichever is the lesser.	Not applicable
There is an existing building on one abutting allotment facing the same street and no existing building on the other abutting allotment facing the same street, and the site is not on a corner.	The same distance as the setback of the front wall of the existing building on the abutting allotment facing the front street or 9 metres, whichever is the lesser.	Not applicable
There is no existing building on either of the abutting allotments facing the same street, and the site is not on a corner.	6 metres for streets in a Road Zone, Category 1, and 4 metres for other streets.	Not applicable
The site is on a corner.	If there is a building on the abutting allotment facing the front street, the same distance as the setback of the front wall of the existing building on the abutting allotment facing the front street or 9 metres, whichever is the lesser. If there is no building on the abutting allotment facing the front street, 6 metres for streets in a Road Zone, Category 1, and 4 metres for other streets.	Front walls of new development fronting the side street of a corner site should be setback at least the same distance as the setback of the front wall of any existing building on the abutting allotment facing the side street or 3 metres, whichever is the lesser. Side walls of new development on a corner site should be setback the same distance as the setback of the front wall of any existing building on the abutting allotment facing the side street or 2 metres, whichever is the lesser.

Figure 8: Standard B6

As mentioned earlier in this report; adjoining northern property No.4 is setback 10.56 metres from Reserve Ave. Adjoining southern property No.4 fronts Campbell Street and it's carport to the rear is setback approximately 2.5 metres from it's secondary street Reserve Ave.

The average setback between both adjoining properties is 6.53 metres.

The proposal demonstrates dwelling 1 having a front setback of 6.57 metres.

The proposed development meets the objectives of Standard B6.

55.2-2 Building Height (Standard B7)

- "*to ensure that the height of buildings respects the existing or preferred neighbourhood character"*

The maximum building height should not exceed the maximum height specified in the zone, if no maximum height is specified in the zone the maximum building height should not exceed 9 metres.

The proposed development has an overall height of no more than 9 metres, please see elevations for clarification.

The proposed development meets the objectives of Standard B7.

55.2-3 Site Coverage (Standard B8)

The site area covered by buildings should not exceed:

- *"The maximum site coverage specified in a schedule to the zone, or"*
- *"If no maximum site coverage is specified in a schedule to the zone, 60 per cent"*

There is no maximum site coverage specified in the schedule to this zone. Therefore, the maximum site coverage should be 60%.

The proposed dwelling has total site coverage of 39.44%.

The proposed development meets the objectives of Standard B8.

55.2-4 Permeability Objective (Standard B9)

The site area covered by the pervious surfaces should be at least:

- "*The minimum area specified in a schedule to the zone, or"*
- *"If no minimum is specified in a schedule to the zone, 20 percent of the site."*

There is no minimum permeability objective specified in the schedule to this zone. Therefore, the minimum should be 20% of the site.

The proposed development has a total permeable area of 35.28%.

The proposed development meets the objectives of Standard B9.

55.2-5 Energy Efficiency (Standard B10)

Buildings should be:

- *"Oriented to make appropriate use of solar energy"*
- *"Sited and designed to ensure that the energy efficiency of existing dwellings on adjoining lots is not unreasonably reduced."*
- *"Sited and designed to ensure that the performance of existing rooftop solar energy facilities on dwellings on adjoining lots in a General Residential Zone, Neighbourhood Residential Zone or Township Zone are not unreasonably reduced."*

The proposed dwelling is provided with an open plan living which will gain solar access. The layout has been designed so it is not to unreasonably reduce the energy efficiency of adjoining lots, and oriented to gain appropriate use of solar energy. Each proposed private open space receives a large amount of sunlight.

The proposed development meets the objectives of standard B10.

55.2-6 Public Open Space (Standard B11)

If any public or communal open space is provided on site, it should:

- *"Be substantially fronted by dwellings, where appropriate."*
- *"Provide outlook for as many dwellings as practicable."*
- *"Be designed to protect any natural features on the site."*
- *"Be accessible and useable."*

There is no public or communal open space proposed for the development.

55.2-7 Safety Objective (Standard B12)

To ensure the layout of development provides for the safety and security of residents and property by ensuring:

- *"Entrances to dwellings and residential buildings should not be obscured or isolated from the street and internal accessways."*
- *"Planting which creates unsafe spaces along streets and accessways should be avoided."*
- *"Developments should be designed to provide good lighting, visibility and surveillance of car parks and internal accessways."*

- *"Private spaces within developments should be protected from inappropriate use as public thoroughfares."*

The layout of the proposed development had been designed to ensure for the safety and security of residents and the property. The entrances are not obscured or isolated. The entrances provide for shelter and a sense of personal address. The entrances also incorporate features to enable casual surveillance of visitors and the streets. Paved pedestrian links will provide direct access to the dwelling.

The development ensured the dwellings allow observation of adjacent streets and visibility and surveillance of car parks. The dwellings are protected by the installation of side and rear fences so that it is not used as a public thoroughfare.

The proposed development meets the objectives of standard B12.

55.2-8 Landscaping Objective (Standard B13)

The landscape layout and design should:

- *"Protect any predominant landscape features of the neighbourhood."*
- *"Take into account the soil type and drainage patterns of the site."*
- *"Allow for intended vegetation growth and structural protection of buildings."*
- *"In locations of habitat importance, maintain existing habitat and provide for new habitat for plants and animals."*
- *Provide a safe, attractive and functional environment for residents."*

The proposed development respects the landscape character of the area. The site is not situated in an area of habitat importance. The open space provided in the dwelling is of sufficient size and area for the planting of medium-large canopy trees.

The enclosed landscaping plan clearly delineates within the private area of the dwelling. The landscaping proposed for the site takes into account the soil type and drainage patterns of the site. The size, shape and area of the open space proposed for the dwelling allows for vegetation growth, structural protection of building and the planting of trees. The landscape theme proposed for the site provides a safe, attractive and functional environment for residents.

The proposed development meets the objectives of standard B13.

55.2-9 Access Objective (Standard B14)

The width of access ways or car spaces should not exceed:

- *"33 per cent of the street frontage, or"*
- *"if the width of the street frontage is less than 20 metres, 40 per cent of the street frontage."*

The subject site has a 18.70-metre-wide frontage. Therefore, 40% of vehicle access way is permitted.

The existing crossing is being retained, and a second 3-metre-wide crossover is proposed.

Both crossovers when combined are 6 metres in width. The standard allows for 7.48 metres.

The proposed development meets the objectives of standard B14.

55.2-10 Parking Location Objective (Standard B15)

Car parking facilities should:

- *"Be reasonably close and convenient to dwellings and residential buildings."*
- *"Be secure."*
- *"Be well ventilated if enclosed."*

Car parking facilities are convenient to dwellings and secure, allow surveillance from windows and do not obscure the view between the street and the front windows. The internal layout of the dwelling and the location of the proposed garages ensure that the emission of noise from the occupants and their vehicles. The access ways are located directly off the front street and allows easy movements. It is designed to be in keeping with the architectural style of the dwelling.

The proposed development meets the objectives of standard B15.

55.04 Amenity Impacts

55.04-1 Amenity Impacts (Standard B17)

A new building not on or within 200mm of a boundary should be set back from side or rear boundaries:

- *"At least the distance specified in a schedule to the zone, or"*
- *"If no distance is specified in a schedule to the zone, 1 metre, plus 0.3 metres for every metre of height over 3.6 metres up to 6.9 metres, plus 1 metre for every metre of height over 6.9 metres."*

There is none specified in schedule to this zone. Therefore, any developments must comply with the second dot point mentioned above.

To new building not on or within 200mm of a boundary a minimum setback of 1 metre has been provided for building height areas under 3.6 metres.

The proposed development meets the objectives of standard B16.

55.04-2 Walls on Boundaries Objective (Standard B18)

A new wall constructed on or within 200mm of a side or rear boundary of a lot or a carport constructed on or within 1 metre of a side or rear boundary of lot should not abut the boundary:

"For a length of more than the distance specified in a schedule to the zone; or"

"If no distance is specified in a schedule to the zone, for a length of more than:"

– "10 metres plus 25 per cent of the remaining length of the boundary of an adjoining lot, or"

– "Where there are existing or simultaneously constructed walls or carports abutting the boundary on an abutting lot, the length"

All three (3) dwellings garages are proposed to be built on the northern title boundary. All walls on boundary do not exceed an average height of more than 3.2 metres. Please refer to the northern elevation of the enclosed architectural drawings for further details

The proposed development meets the objectives of standard B18.

55.04-3 Daylight to Windows Objective (Standard B19)

"Buildings opposite an existing habitable room window should provide for a light court to the existing window that has a minimum area of 3 square metres and minimum dimension of 1 metre clear to the sky. The calculation of the area may include land on the abutting lot.

Walls or carports more than 3 metres in height opposite an existing habitable room window should be set back from the window at least 50 per cent of the height of the new wall if the wall is within a 55 degree arc from the centre of the existing window. The arc may be swung to within 35 degrees of the plane of the wall containing the existing window.

Where the existing window is above ground floor level, the wall height is measured from the floor level of the room containing the window."

All windows to adjoining buildings will have the required minimum of 3 square metres with one metre clear to the sky.

The proposed development meets the objectives of standard B19.

55.04-4 North-facing window objective (Standard B20)

"If a north-facing habitable room window of an existing dwelling is within 3 metres of a boundary on an abutting lot, a building should be setback from the boundary 1 metre, plus 0.6 metres for every metre of height over 3.6 metres up to 6.9 metres, plus 1 metre for every metre of height over 6.9 metres, for a distance of 3 metres from the edge of each side of the window. A north-facing window is a window with an axis perpendicular to its surface oriented north 20 degrees west to north 30 degrees east."

Diagram B3 North-facing windows

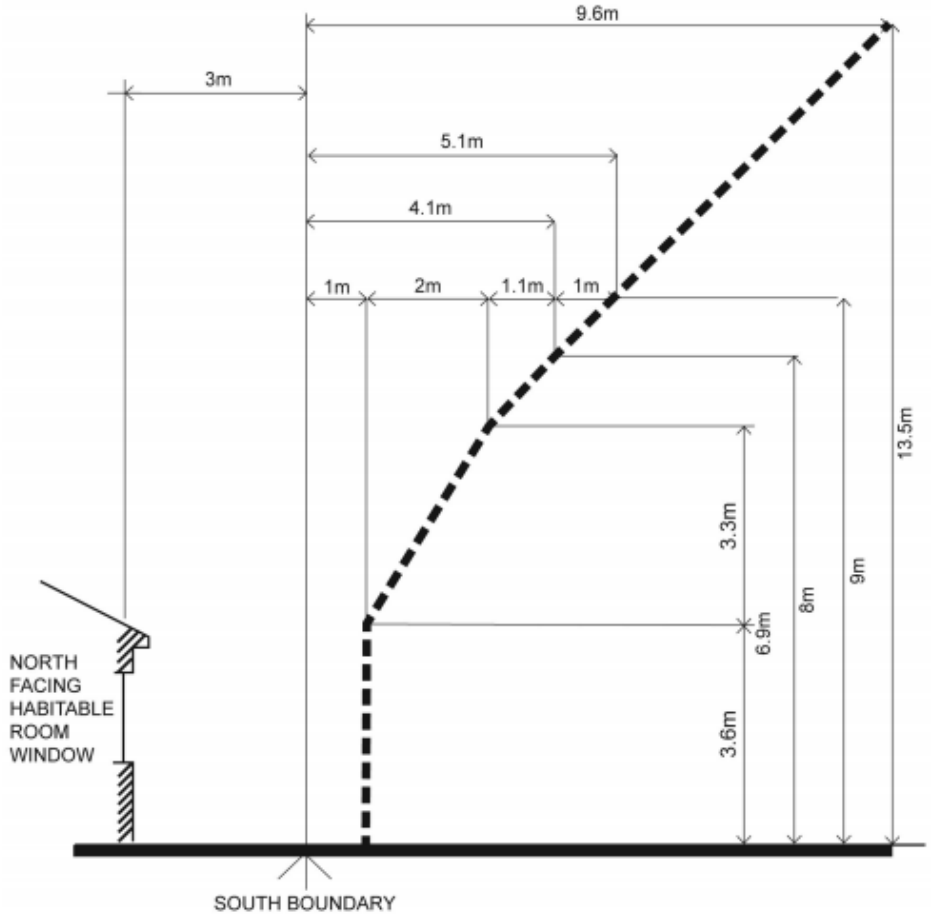

Figure 9: North Facing Window Diagram

All habitable room windows within 3 metres of the boundaries of adjoining buildings will have the required setbacks as per diagram B3.

The proposed development meets the objectives of standard B20.

55.04-5 Overshadowing open space objective (Standard B21)

"Where sunlight to the secluded private open space of an existing dwelling is reduced, at least 75per cent or 40 square metres with minimum dimension of 3 metres, whichever is the lesser area, of the secluded private open space should receive a minimum of five hours of sunlight between 9am and 3 pm on 22 September. If existing sunlight to the secluded private open space of an existing dwelling is less than the requirements of this standard, the amount of sunlight should not be further reduced."

The adjoining properties will not be affected by the 9am-3pm shadows, the existing paling fences will cast as much shadows as the proposed development. Overshadowing to adjoining properties will be minimal. As such, the habitable room windows on adjacent land to the north and south are provided with clear access to sunlight or daylight of at least 1 metre to the sky.

The proposed development meets the objectives of standard B21.

55.04-6 Overlooking objective (Standard B22)

"A habitable room window, balcony, terrace, deck or patio should be located and designed to avoid direct views into the secluded private open space of an existing dwelling within a horizontal distance of 9 metres (measured at ground level) of the window, balcony, terrace, deck or patio. Views should be measured within a 45 degree angle from the plane of the window or perimeter of the balcony, terrace, deck or patio, and from a height of 1.7 metres above floor level. A habitable room window, balcony, terrace, deck or patio with a direct view into a habitable room window of existing dwelling within a horizontal distance of 9 metres (measured at ground level)of the window, balcony, terrace, deck or patio should be either: "

- *"Offset a minimum of 1.5 metres from the edge of one window to the edge of the other"*
- *"Have sill heights of at least 1.7 metres above floor level."*
- *"Have fixed, obscure glazing in any part of the window below 1.7 metre above floor level."*
- *"Have permanently fixed external screens to at least 1.7 metres above floor level and be no more than 25 per cent transparent."*

"Obscure glazing in any part of the window below 1.7 metres above floor level may be openable provided that there are no direct views as specified in this standard.

Screens used to obscure a view should be:

- *Perforated panels or trellis with a maximum of 25 per cent openings or solid translucent panels.*
- *Permanent, fixed and durable.*

- *Designed and coloured to blend in with the development."*

This standard does not apply to a new habitable room window, balcony, terrace, deck or patio which faces a property boundary where there is a visual barrier at least 1.8 metres high and the floor level of the habitable room, balcony, terrace, deck or patio is less than 0.8 metres aboveground level at the boundary.

Properties on either side are not affected by the 9.0 metre / 45 degree arch of any of the windows from this proposed development. Existing dwellings opposite the site present limited privacy overlooking problems, essentially too far away to be protected from overlooking. There are no overlooking concerns from the ground floor level habitable room windows. The boundary fences are in a relatively good condition and height to act as a screening device from any potential ground for level overlooking.

Please see elevation drawings in the enclosed architectural plans for further details.

The proposed development meets the objectives of standard B22.

55.04-7 Internal View objective (Standard B23)

"Windows and balconies should be designed to prevent overlooking of more than 50 per cent of the secluded private open space of a lower-level dwelling or residential building directly below and within the same development."

The proposed development has been designed to limit views into the scheduled private open space and habitable room windows of each of the dwellings on the property. Overlooking within the site has been restricted. There are no habitable room windows with direct outlooks to the principal private open space within the development.

The proposed development meets the objectives of standard B23

55.04-8 Noise Impacts Objectives (Standard B24)

"Noise sources, such as mechanical plant, should not be located near bedrooms of immediately adjacent existing dwellings.

Noise sensitive rooms and secluded private open spaces of new dwellings and residential buildings should take account of noise sources on immediately adjacent properties.

Dwellings and residential buildings close to busy roads, railway lines or industry should be designed to limit noise levels in habitable rooms."

The proposed development has been designed to keep noise sources within the development and to protect residents from external noise. The proposed development will be constructed in brick cladding. This will accommodate for any noise concerns and construction will comply with F(5) of the Building Code of Australia.

There are no mechanical plants proposed adjacent to or located near bedrooms of immediate adjacent existing dwellings. Noise sensitive rooms and secluded private open space of the proposed developments have been designed and suited to take into consideration noise sources on immediately adjacent properties.

The proposed development meets the objectives of standard B24

55.05 Onsite Amenity and Facilities

55.05-1 Accessibility Objective (Standard B25)

"The dwelling entries of the ground floor of dwellings and residential buildings should be accessible or able to be easily made accessible to people with limited mobility."

The proposed development has been designed to take into consideration people with limited mobility. The proposed development has access to the entrance from Reserve Avenue.

The proposed development meets the objectives of standard B25.

55.05-2 Dwelling Entry Objective (Standard B26)

Entries to dwellings and residential buildings should:

- *"Be visible and easily identifiable from streets and other public areas."*
- *"Provide shelter, a sense of personal address and a transitional space around the entry."*

The entry to the proposed dwelling is visible and easily identifiable from the court. The dwelling has its own sense of identity, address and interface with Reserve Ave. The development ensures that the dwellings allow for the observation of the adjacent street. The entrances are not obscured or isolated.

The proposed development meets the objectives of standard B26.

55.05-3 Daylight to New Windows Objective (Standard B27).

A window in a habitable room should be located to face:

- *"An outdoor space clear to the sky or a light court with a minimum area of 3 square metres and minimum dimension of 1 metre clear to the sky, not including land on an abutting lot, or"*
- *"A veranda provided it is open for at least one third of its perimeter, or"*
- *"A carport provided it has two or more open sides and is open for at least one third of its perimeter."*

The proposed development has been designed to provide adequate daylight into new habitable room windows. Habitable room windows of the proposed dwellings have northern orientation wherever possible.

Habitable room windows of the proposed development have been designed to face outdoor open space covering in excess more than 40 square metres.

The proposed development meets the objectives of standard B27.

55.05-4 Private Open Space Objective (Standard B28).

A dwelling or residential building should have private open space of an area and dimensions specified in a schedule to the zone. If no area or dimensions are specified in a schedule to the zone, a dwelling or residential building should have private open space consisting of:

- *"An area of 40 square metres, with one part of the private open space to consist of secluded private open space at the side or rear of the dwelling or residential building with a minimum area of 25 square metres, a minimum dimension of 3 metres and convenient access from living room, or Page 1 of 3"*
- *"A balcony of 8 square metres with a minimum width of 1.6 metres and convenient access from a living room, or"*
- *"A roof-top area of 10 square metres with a minimum width of 2 metres and convenient access from a living room."*

"The balcony requirements in Clause 55.05-4 do not apply to an apartment development."

The dwellings also have dimensions of a minimum of 3 metres which are provided with convenient access from a living room. Please refer to plans for clarification.

The proposed development meets the objectives of standard B28

55.05-5 Solar Access to Open Space Objective (Standard B29).

"The private open space should be located on the north side of the dwelling or residential building, if appropriate.

The southern boundary of secluded private open space should be set back from any wall on the north of the space at least (2 + 0.9h) metres, where 'h' is the height of the wall."

Diagram B5 Solar access to open space

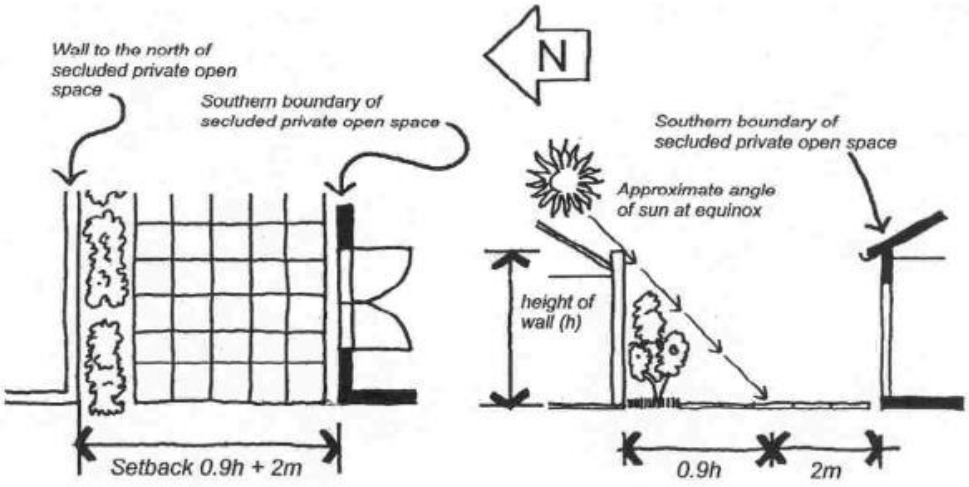

Figure 10: Solar Access To Open Space Diagram

The development is orientated to maximise northern and eastern solar access gain to the indoor and outdoor areas for the and proposed dwellings.

The proposed development meets the objectives of standard B29.

55.05-6 Storage Objective (Standard B30).

"Each dwelling should have convenient access to at least 6 cubic metres of externally accessible, secure storage space."

External storage is provided for the proposed dwellings which is over the 6 cubic metre requirements. Please see enclosed architectural plans for further details.

The proposed development meets the objectives of standard B30.

55.06 Detailed Design

55.06-1 Design Detail Objective (Standard B31).

The design of buildings, including:

1. *"Facade articulation and detailing,"*
2. *"Window and door proportions,"*
3. *"Roof form, and"*
4. *"Verandahs, eaves and parapets,"*

"Should respect the existing or preferred neighbourhood character.

Garages and carports should be visually compatible with the development and the existing or preferred neighbourhood character"

The designed detail of the proposed development respects the neighbourhood character of Reserve Avenue. The ground floor building material introduction of feature entrance portico structure articulated the facade along the frontage. The height and width, massing and detailing, building materials, roof pitch, window and door proportions, minimum use of boundary walls, vehicle accommodation, open space allocation, front setback and rhythm of side spacing is consistent with and in keeping with the neighbourhood character of Reserve Avenue.

The proposed development meets the objectives of standard B31.

55.06-2 Front Fences Objective (Standard B32).

"The design of front fences should complement the design of the dwelling or residential building and any front fences on adjoining properties.

A front fence within 3 metres of a street should not exceed:

The maximum height specified in a schedule to the zone, or

If no maximum height is specified in a schedule to the zone, the maximum height specified in Table B3.

No front fencing is proposed as a part of this application.

The proposed development meets the objectives of standard B32.

55.06-3 Common Property Objective (Standard B33).

"Developments should clearly delineate public, communal and private areas. Common property, where provided, should be functional and capable of efficient management."

Car parking, access areas and site facilities are practical, attractive and easily maintained.

The proposed development meets the objectives of standard B33.

55.06-4 Site Services Objective (Standard B34).

"The design and layout of dwellings and residential buildings should provide sufficient space (including easements where required) and facilities for services to be installed and maintained efficiently and economically.

Bin and recycling enclosures, mailboxes and other site facilities should be adequate in size, durable, waterproof and blend in with the development.

Bin and recycling enclosures should be located for convenient access by residents.

Mailboxes should be provided and located for convenient access as required by Australia Post"

Site services can be installed and easily maintained. Site facilities have been designed to be accessible, adequate and attractive. Bins will be kept in the rear yard of the proposed dwellings and will be located to the front of the property on bin collection days only.

The open space of the proposed dwelling is accessible from the inside of the dwelling. Open spaces are at an adequate size to accommodate an open air cloths-drying facility, not visible from the street. All site facilities will be physically convenient and visually unobtrusive. Ample area is available for secure storage in the private open space area for the proposed dwelling. A proposed prefabricated mailbox will be installed along the frontage of the site. The mailboxes will be in accordance with Australia Post requirements.

The proposed development meets the objectives of standard B34.

6 Conclusion

It is our submission that this proposal has been designed in compliance with provisions of the ResCode (Clause 55) and that this analysis indicates compliance with the objectives and performance criteria for each individual design element.

Based on our analysis which does not raise any major areas of concern in regard to the guide, and based on our inspection of the site, we can see no reason to why council should not support this proposal and issue a Town Planning Permit for this development to proceed.

Should you have any questions, please don't hesitate to contact me on (03) 9972 7667 or email me at albert@pd.net.au

Sincerely,

Albert Tuzon | Project Manager

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REGISTER SEARCH STATEMENT (Title Search) Transfer of Land Act 1958

VOLUME 08554 FOLIO 708

Security no : 124094565232H
Produced 21/12/2021 04:54 PM

LAND DESCRIPTION

Lot 64 on Plan of Subdivision 013489.
PARENT TITLE Volume 05713 Folio 431
Created by instrument C060562 16/10/1964

REGISTERED PROPRIETOR

Estate Fee Simple
Sole Proprietor
SELAHATTIN YILDIZ of 2 RESERVE RD CAMPBELLFIELD
N459185Y 17/05/1988

ENCUMBRANCES, CAVEATS AND NOTICES

MORTGAGE AH738735C 21/01/2011
COMMONWEALTH BANK OF AUSTRALIA

Any encumbrances created by Section 98 Transfer of Land Act 1958 or Section 24 Subdivision Act 1988 and any other encumbrances shown or entered on the plan or imaged folio set out under DIAGRAM LOCATION below.

DIAGRAM LOCATION

SEE LP013489 FOR FURTHER DETAILS AND BOUNDARIES

ACTIVITY IN THE LAST 125 DAYS

NIL

----------END OF REGISTER SEARCH STATEMENT----------

Additional information: (not part of the Register Search Statement)

Street Address: 2 RESERVE AVENUE CAMPBELLFIELD VIC 3061

ADMINISTRATIVE NOTICES

NIL

eCT Control 15940N COMMONWEALTH BANK OF AUSTRALIA
Effective from 23/10/2016

DOCUMENT END

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PLAN OF SUBDIVISION OF PART OF CROWN PORTION 12 PARISH OF WILL WILL ROOK COUNTY OF BOURKE

VOL. 5713 FOL. 431

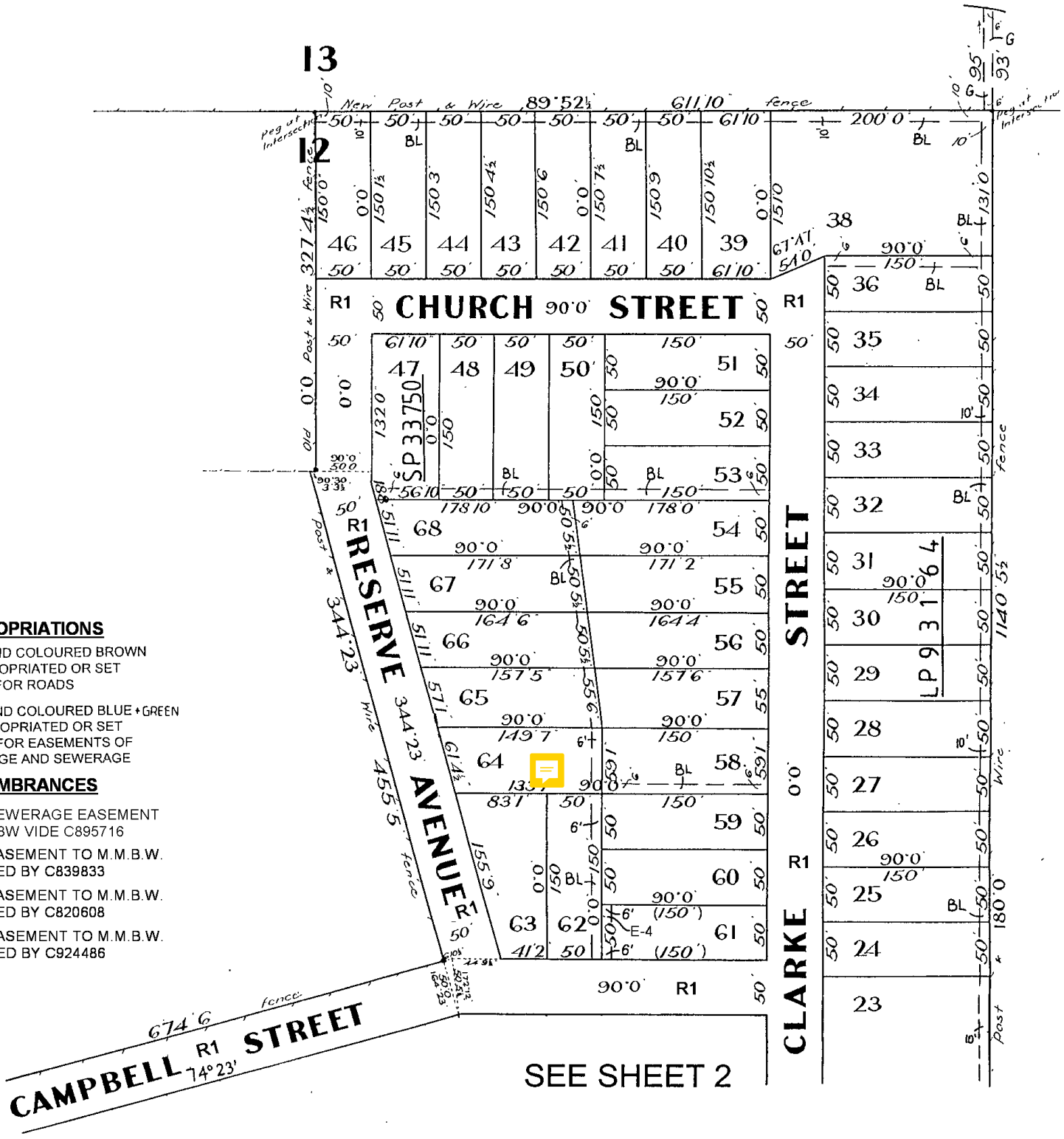
Measurements are in Feet & Inches
Conversion Factor
FEET X 0.3048 = METRES

LP 13489
EDITION 3
PLAN MAY BE LODGED 24-3-1931

2 SHEETS
SHEET 1

COLOUR CODE

BL=BLUE	G=GREEN
R1 & BR=BROWN	P=PURPLE
Y=YELLOW	R=RED
H=HATCH	CH=CROSS HATCH



APPROPRIATIONS

THE LAND COLOURED BROWN IS APPROPRIATED OR SET APART FOR ROADS

THE LAND COLOURED BLUE + GREEN IS APPROPRIATED OR SET APART FOR EASEMENTS OF DRAINAGE AND SEWERAGE

ENCUMBRANCES

E-1 = SEWERAGE EASEMENT TO MMBW VIDE C895716

E-2 = EASEMENT TO M.M.B.W. CREATED BY C839833

E-3 = EASEMENT TO M.M.B.W. CREATED BY C820608

E-4 = EASEMENT TO M.M.B.W. CREATED BY C924486

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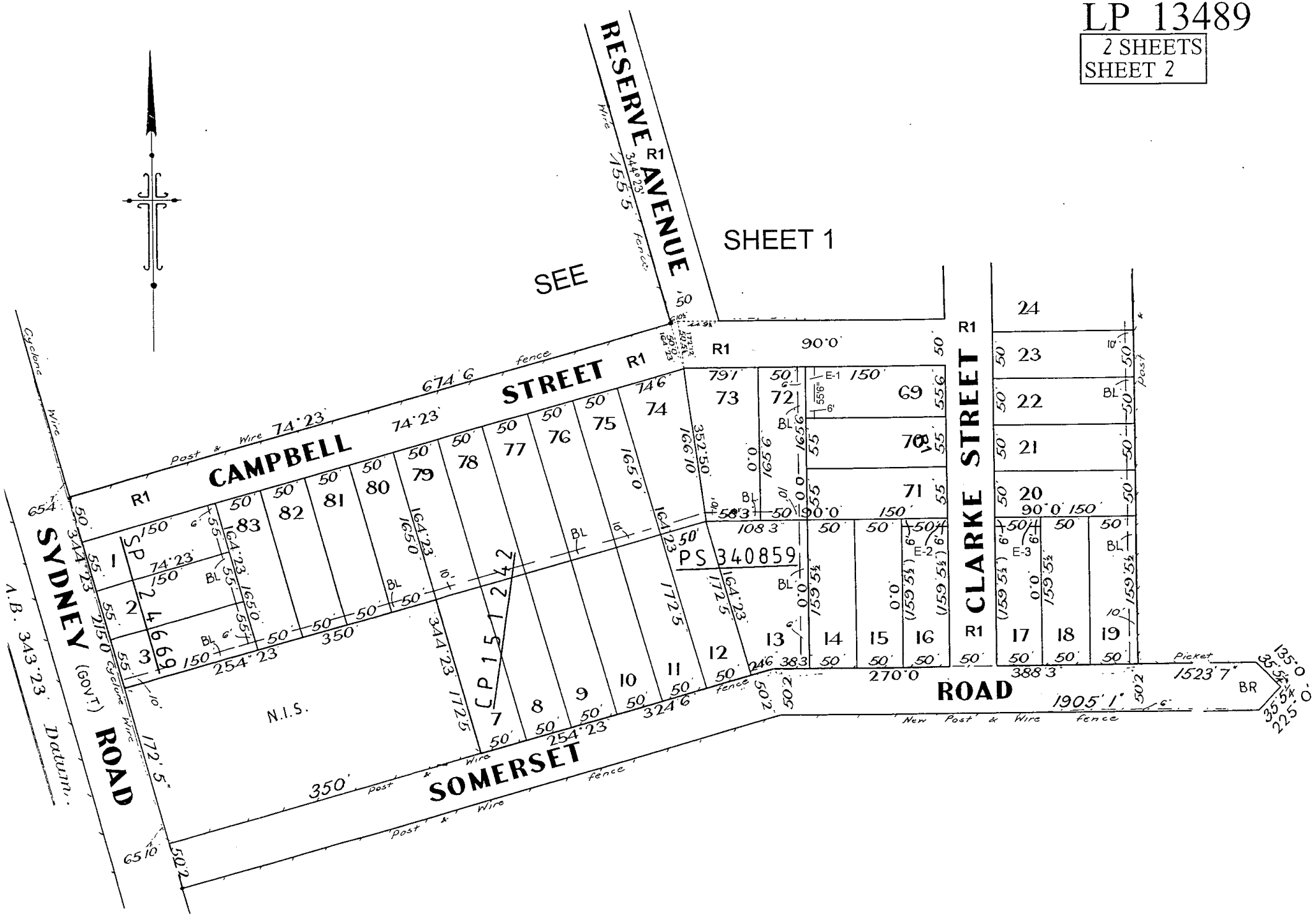
LP 13489

2 SHEETS
SHEET 2



MODIFICATION TABLE

RECORD OF ALL ADDITIONS OR CHANGES TO THE PLAN

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PLAN NUMBER

LP13489

AFFECTED LAND/PARCEL	LAND/PARCEL IDENTIFIER CREATED	MODIFICATION	DEALING NUMBER	DATE	TIME	EDITION NUMBER	ASSISTANT REGISTRAR OF TITLES
LOT 69	E-1	CREATION OF EASEMENT	C895716	17/9/02		2	C.G.
LOT 16	E-2	CREATION OF EASEMENT	C839833			3	AD
LOT 17	E-3	CREATION OF EASEMENT	C820608			3	AD
LOT 61	E-4	CREATION OF EASEMENT	C924486			3	AD

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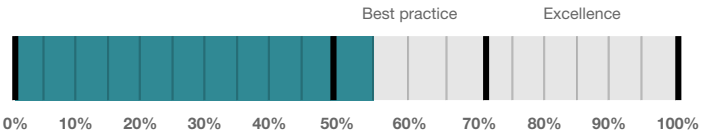
BESS Report

Built Environment Sustainability Scorecard

This BESS report outlines the sustainable design commitments of the proposed development at 2 Reserve Avenue Campellfield VIC 3061. The BESS report and accompanying documents and evidence are submitted in response to the requirement for a Sustainable Design Assessment or Sustainability Management Plan at Hume City Council.

Note that where a Sustainability Management Plan is required, the BESS report must be accompanied by a report that further demonstrates the development's potential to achieve the relevant environmental performance outcomes and documents the means by which the performance outcomes can be achieved.

Your BESS Score

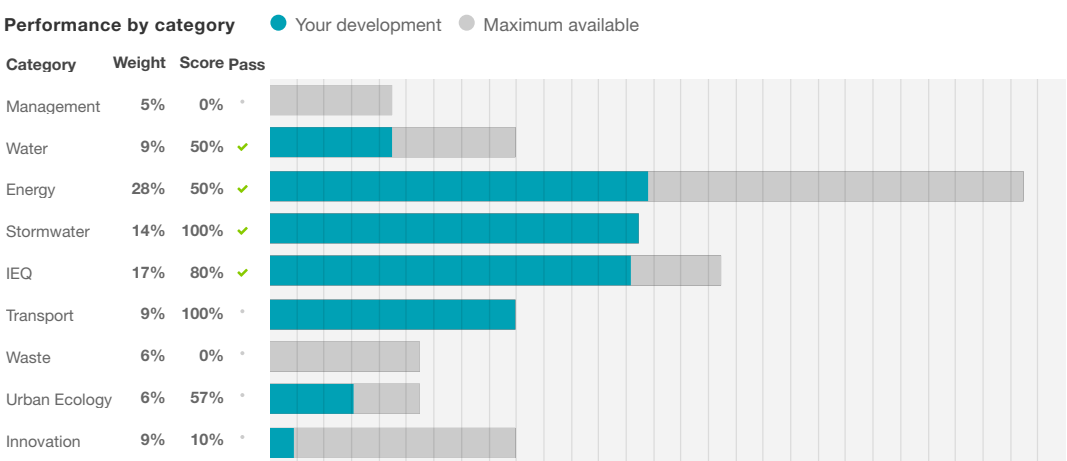


57%

Project details

Address	2 Reserve Avenue Campellfield VIC 3061
Project no	848BE6EA-R1
BESS Version	BESS-6
Site type	Multi dwelling (dual occupancy, townhouse, villa unit etc)
Account	abenergyassessments@gmail.com
Application no.	
Site area	776 m²
Building floor area	389.11 m²
Date	03 May 2022
Software version	1.7.0-B.384

Performance by category



Dwellings & Non Res Spaces

Dwellings

Name	Quantity	Area	% of total area
Detached dwelling			
TH1	1	141 m^2	36%
TH3	1	124 m^2	31%
TH2	1	124 m^2	31%
Total	**3**	**389 m^2**	**100%**

Supporting information

Floorplans & elevation notes

Credit	Requirement	Response	Status
Energy 3.3	External lighting sensors annotated		-
Energy 3.4	Clothes line annotated (if proposed)		-
Stormwater 1.1	Location of any stormwater management systems used in STORM or MUSIC modelling (e.g. Rainwater tanks, raingarden, buffer strips)		-
IEQ 2.2	Dwellings meeting the requirements for having 'natural cross flow ventilation'		-
IEQ 3.1	Glazing specification to be annotated		-
IEQ 3.3	North-facing living areas		-
Transport 1.1	All nominated residential bicycle parking spaces		-
Transport 2.1	Location of electric vehicle charging infrastructure		-
Urban Ecology 2.1	Vegetated areas		-

Supporting evidence

Credit	Requirement	Response	Status
Energy 3.5	Provide a written description of the average lighting power density to be installed in the development and specify the lighting type(s) to be used.		-
Stormwater 1.1	STORM report or MUSIC model		-
IEQ 2.2	A list of dwellings with natural cross flow ventilation		-
IEQ 3.1	Reference to floor plans or energy modelling showing the glazing specification (U-value and Solar Heat Gain Coefficient, SHGC)		-
IEQ 3.3	Reference to the floor plans showing living areas orientated to the north.		-

Credit summary

Management Overall contribution 4.5%

	0%
1.1 Pre-Application Meeting	0%
2.1 Thermal Performance Modelling - Single Dwelling	0%

Water Overall contribution 9.0%

	Minimum required 50%	50%	Pass
1.1 Potable water use reduction		60%	
3.1 Water Efficient Landscaping		0%	

Energy Overall contribution 27.5%

	Minimum required 50%	50%	Pass
1.2 Thermal Performance Rating - Residential		0%	
2.1 Greenhouse Gas Emissions		100%	
2.2 Peak Demand		0%	
2.3 Electricity Consumption		100%	
2.4 Gas Consumption		100%	
2.5 Wood Consumption		N/A	Scoped Out
		No wood heating system present	
3.2 Hot Water		100%	
3.3 External Lighting		100%	
3.4 Clothes Drying		100%	
3.5 Internal Lighting - Residential Single Dwelling		100%	
4.4 Renewable Energy Systems - Other		N/A	Disabled
		No other (non-solar PV) renewable energy is in use.	
4.5 Solar PV - Houses and Townhouses		N/A	Disabled
		No solar PV renewable energy is in use.	

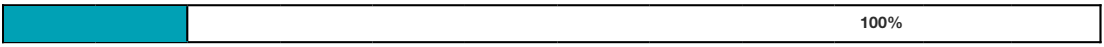
Stormwater Overall contribution 13.5%

	Minimum required 100%	100%	Pass
1.1 Stormwater Treatment		100%	

IEQ Overall contribution 16.5%

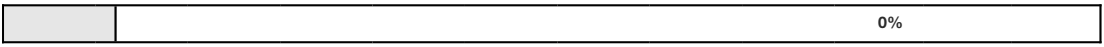
	Minimum required 50%	80%	Pass
2.2 Cross Flow Ventilation		100%	
3.1 Thermal comfort - Double Glazing		100%	
3.2 Thermal Comfort - External Shading		0%	
3.3 Thermal Comfort - Orientation		100%	

Transport Overall contribution 9.0%



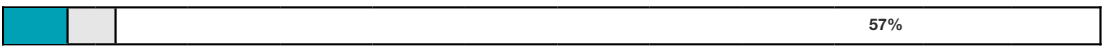
1.1 Bicycle Parking - Residential	100%
2.1 Electric Vehicle Infrastructure	100%

Waste Overall contribution 5.5%



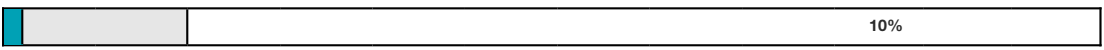
1.1 - Construction Waste - Building Re-Use	0%
2.1 - Operational Waste - Food & Garden Waste	0%

Urban Ecology Overall contribution 5.5%



2.1 Vegetation	100%
2.2 Green Roofs	0%
2.3 Green Walls and Facades	0%
3.1 Food Production - Residential	0%

Innovation Overall contribution 9.0%



1.1 Innovation	10%

Credit breakdown

Management Overall contribution 0%

1.1 Pre-Application Meeting		0%
Score Contribution	This credit contributes 60.0% towards the category score.	
Criteria	Has an ESD professional been engaged to provide sustainability advice from schematic design to construction? AND Has the ESD professional been involved in a pre-application meeting with Council?	
Question	Criteria Achieved ?	
Project	No	

2.1 Thermal Performance Modelling - Single Dwelling		0%
Score Contribution	This credit contributes 40.0% towards the category score.	
Criteria	Has a preliminary NatHERS rating been undertaken?	
Question	Criteria Achieved ?	
Detached dwelling	No	

Water Overall contribution 4% Minimum required 50%

Water Approach	
What approach do you want to use for Water?:	Use the built in calculation tools
Project Water Profile Question	
Do you have a reticulated third pipe or an on-site water recycling system?:	Yes
Are you installing a swimming pool?:	No
Are you installing a rainwater tank?:	Yes
Reticulated third pipe or an on-site water recycling system	
Recycled Profile Name:	Third pipe
Irrigation area connected to reticulated third pipe or an on-site water recycling system only (i.e. not also connected to rainwater system):	15.0 m²
Water Efficient Garden?:	No
Other external water demand connected to reticulated third pipe or an on-site water recycling system only (i.e. not also connected to rainwater system):	-
Water fixtures, fittings and connections	
Showerhead: All	4 Star WELS (>= 4.5 but <= 6.0)
Bath: All	Scope out
Kitchen Taps: All	>= 5 Star WELS rating
Bathroom Taps: All	>= 5 Star WELS rating
Dishwashers: All	>= 4 Star WELS rating
WC: All	>= 4 Star WELS rating
Urinals: All	Scope out
Washing Machine Water Efficiency: All	Default or unrated
Which non-potable water source is the dwelling/space connected to?:	
TH1	RWT1
TH2	RWT2
TH3	RWT3
Non-potable water source connected to Toilets: All	Yes
Non-potable water source connected to Laundry (washing machine): All	Yes
Non-potable water source connected to Hot Water System: All	No
Rainwater Tanks	
What is the total roof area connected to the rainwater tank?:	
RWT1	44.0 m²
RWT2	50.0 m²
RWT3	45.0 m²

Tank Size:	
RWT1	2,000 Litres
RWT2	2,000 Litres
RWT3	2,000 Litres
Will this tank be connected to the reticulated third pipe or onsite water recycling system?:	
RWT1	Yes
RWT2	Yes
RWT3	Yes
Irrigation area connected to tank:	
RWT1	15.0 m²
RWT2	15.0 m²
RWT3	15.0 m²
Is connected irrigation area a water efficient garden?:	
RWT1	No
RWT2	No
RWT3	No
Other external water demand connected to tank?:	
RWT1	0.0 Litres/Day
RWT2	0.0 Litres/Day
RWT3	0.0 Litres/Day

1.1 Potable water use reduction		60%
Score Contribution	This credit contributes 83.3% towards the category score.	
Criteria	What is the reduction in total potable water use due to efficient fixtures, appliances, rainwater use and recycled water use? To achieve points in this credit there must be >25% potable water reduction.	
Output	Reference	
Project	528 kL	
Output	Proposed (excluding rainwater and recycled water use)	
Project	312 kL	
Output	Proposed (including rainwater and recycled water use)	
Project	250 kL	
Output	% Reduction in Potable Water Consumption	
Project	52 %	
Output	% of connected demand met by rainwater	
Project	53 %	
Output	How often does the tank overflow?	
Project	Often	
Output	Opportunity for additional rainwater connection	
Project	75 kL	

3.1 Water Efficient Landscaping		0%
Score Contribution	This credit contributes 16.7% towards the category score.	
Criteria	Will water efficient landscaping be installed?	
Question	Criteria Achieved ?	
Project	No	

Energy Overall contribution 14% Minimum required 50%

Dwellings Energy Approach	
What approach do you want to use for Energy?:	Use the built in calculation tools

Project Energy Profile Question	
Are you installing any solar photovoltaic (PV) system(s)?:	No
Are you installing any other renewable energy system(s)?:	No
Gas supplied into building:	Natural Gas

Dwelling Energy Profiles	
Below the floor is: All	Ground or Carpark
Above the ceiling is: All	Outside
Exposed sides: All	4
NatHERS Annual Energy Loads - Heat: All	120 MJ/sqm
NatHERS Annual Energy Loads - Cool: All	30.0 MJ/sqm
NatHERS star rating: All	6.0
Type of Heating System: All	D Reverse cycle space
Heating System Efficiency: All	4 Star
Type of Cooling System: All	Evaporative central
Cooling System Efficiency: All	4 Stars
Type of Hot Water System: All	J Gas Instantaneous 6 star
% Contribution from solar hot water system: All	0 %
Is the hot water system shared by multiple dwellings?: All	No
Clothes Line: All	D Private outdoor clothesline
Clothes Dryer: All	A No clothes dryer

1.2 Thermal Performance Rating - Residential 0%

Score Contribution	This credit contributes 30.0% towards the category score.
Criteria	What is the average NatHERS rating?
Output	Average NATHERS Rating (Weighted)
Detached dwelling	6.0 Stars

2.1 Greenhouse Gas Emissions 100%

Score Contribution	This credit contributes 10.0% towards the category score.
Criteria	What is the % reduction in annual greenhouse gas emissions against the benchmark?
Output	Reference Building with Reference Services (BCA only)
Detached dwelling	21,445 kg CO2
Output	Proposed Building with Proposed Services (Actual Building)
Detached dwelling	7,779 kg CO2
Output	% Reduction in GHG Emissions
Detached dwelling	63 %

2.2 Peak Demand		0%
Score Contribution	This credit contributes 5.0% towards the category score.	
Criteria	What is the % reduction in the instantaneous (peak-hour) demand against the benchmark?	
Output	Peak Thermal Cooling Load - Baseline	
Detached dwelling	60.8 kW	
Output	Peak Thermal Cooling Load - Proposed	
Detached dwelling	64.4 kW	
Output	Peak Thermal Cooling Load - % Reduction	
Detached dwelling	-6 %	

2.3 Electricity Consumption		100%
Score Contribution	This credit contributes 10.0% towards the category score.	
Criteria	What is the % reduction in annual electricity consumption against the benchmark?	
Output	Reference	
Detached dwelling	18,617 kWh	
Output	Proposed	
Detached dwelling	7,096 kWh	
Output	Improvement	
Detached dwelling	61 %	

2.4 Gas Consumption		100%
Score Contribution	This credit contributes 10.0% towards the category score.	
Criteria	What is the % reduction in annual gas consumption against the benchmark?	
Output	Reference	
Detached dwelling	47,767 MJ	
Output	Proposed	
Detached dwelling	10,520 MJ	
Output	Improvement	
Detached dwelling	77 %	

2.5 Wood Consumption		N/A	Scoped Out
This credit was scoped out	No wood heating system present		

3.2 Hot Water		100%
Score Contribution	This credit contributes 5.0% towards the category score.	
Criteria	What is the % reduction in annual energy consumption (gas and electricity) of the hot water system against the benchmark?	
Output	Reference	
Detached dwelling	13,269 kWh	
Output	Proposed	
Detached dwelling	3,036 kWh	
Output	Improvement	
Detached dwelling	77 %	

3.3 External Lighting		100%	
Score Contribution	This credit contributes 5.0% towards the category score.		
Criteria	Is the external lighting controlled by a motion detector?		
Question	Criteria Achieved ?		
Detached dwelling	Yes		
3.4 Clothes Drying		100%	
Score Contribution	This credit contributes 5.0% towards the category score.		
Criteria	What is the % reduction in annual energy consumption (gas and electricity) from a combination of clothes lines and efficient driers against the benchmark?		
Output	Reference		
Detached dwelling	1,891 kWh		
Output	Proposed		
Detached dwelling	131 kWh		
Output	Improvement		
Detached dwelling	93 %		
3.5 Internal Lighting - Residential Single Dwelling		100%	
Score Contribution	This credit contributes 5.0% towards the category score.		
Criteria	Does the development achieve a maximum illumination power density of 4W/sqm or less?		
Question	Criteria Achieved?		
Detached dwelling	Yes		
4.4 Renewable Energy Systems - Other		N/A	⊘ Disabled
This credit is disabled	No other (non-solar PV) renewable energy is in use.		
4.5 Solar PV - Houses and Townhouses		N/A	⊘ Disabled
This credit is disabled	No solar PV renewable energy is in use.		

Stormwater

Overall contribution 14% Minimum required 100%

Which stormwater modelling are you using?:	Melbourne Water STORM tool	
1.1 Stormwater Treatment	100%	
Score Contribution	This credit contributes 100.0% towards the category score.	
Criteria	Has best practice stormwater management been demonstrated?	
Question	STORM score achieved	
Project	102	
Output	Min STORM Score	
Project	100	

IEQ Overall contribution 13% Minimum required 50%

2.2 Cross Flow Ventilation	100%
Score Contribution	This credit contributes 20.0% towards the category score.
Criteria	Are all habitable rooms designed to achieve natural cross flow ventilation?
Question	Criteria Achieved ?
Detached dwelling	Yes

3.1 Thermal comfort - Double Glazing	100%
Score Contribution	This credit contributes 40.0% towards the category score.
Criteria	Is double glazing (or better) used to all habitable areas?
Question	Criteria Achieved ?
Detached dwelling	Yes

3.2 Thermal Comfort - External Shading	0%
Score Contribution	This credit contributes 20.0% towards the category score.
Criteria	Is appropriate external shading provided to east, west and north facing glazing?
Question	Criteria Achieved ?
Detached dwelling	No

3.3 Thermal Comfort - Orientation	100%
Score Contribution	This credit contributes 20.0% towards the category score.
Criteria	Are at least 50% of living areas orientated to the north?
Question	Criteria Achieved ?
Detached dwelling	Yes

Transport Overall contribution 9%

1.1 Bicycle Parking - Residential	100%
Score Contribution	This credit contributes 50.0% towards the category score.
Criteria	How many secure and undercover bicycle spaces are there per dwelling for residents?
Question	Bicycle Spaces Provided ?
Detached dwelling	3
Output	Min Bicycle Spaces Required
Detached dwelling	3

2.1 Electric Vehicle Infrastructure	100%
Score Contribution	This credit contributes 50.0% towards the category score.
Criteria	Are facilities provided for the charging of electric vehicles?
Question	Criteria Achieved ?
Project	Yes

Waste Overall contribution 0%

1.1 - Construction Waste - Building Re-Use	0%
Score Contribution	This credit contributes 50.0% towards the category score.
Criteria	If the development is on a site that has been previously developed, has at least 30% of the existing building been re-used?
Question	Criteria Achieved ?
Project	No

2.1 - Operational Waste - Food & Garden Waste	0%
Score Contribution	This credit contributes 50.0% towards the category score.
Criteria	Are facilities provided for on-site management of food and garden waste?
Question	Criteria Achieved ?
Project	No

Urban Ecology Overall contribution 3%

2.1 Vegetation	100%
Score Contribution	This credit contributes 57.1% towards the category score.
Criteria	How much of the site is covered with vegetation, expressed as a percentage of the total site area?
Question	Percentage Achieved ?
Project	35 %

2.2 Green Roofs	0%
Score Contribution	This credit contributes 14.3% towards the category score.
Criteria	Does the development incorporate a green roof?
Question	Criteria Achieved ?
Project	No

2.3 Green Walls and Facades	0%
Score Contribution	This credit contributes 14.3% towards the category score.
Criteria	Does the development incorporate a green wall or green façade?
Question	Criteria Achieved ?
Project	No

3.1 Food Production - Residential	0%
Score Contribution	This credit contributes 14.3% towards the category score.
Criteria	What area of space per resident is dedicated to food production?
Question	Food Production Area
Detached dwelling	-
Output	Min Food Production Area
Detached dwelling	3 m^2

Innovation Overall contribution 1%

Innovation		
Description: Electric car	Power point in garage for future development of car charging facilities	
Points Targeted: Electric car	1	

1.1 Innovation		10%
Score Contribution	This credit contributes 100.0% towards the category score.	
Criteria	What percentage of the Innovation points have been claimed (10 points maximum)?	

Disclaimer

The Built Environment Sustainability Scorecard (BESS) has been provided for the purpose of information and communication. While we make every effort to ensure that material is accurate and up to date (except where denoted as 'archival'), this material does in no way constitute the provision of professional or specific advice. You should seek appropriate, independent, professional advice before acting on any of the areas covered by BESS.

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Environmentally Sustainable Design (ESD)

Proposed Unit Development for:

2 Reserve Avenue,
Campbellfield VIC
3061

For
PD Studio

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About this Document

This document outlines how the key Environmentally Sustainable requirements within the Hume City Council will be addressed. An SDA is a simple sustainability assessment of a proposed design at the planning stage. The assessment will support the planning application by showing how the 10 Key Sustainable Building Categories will be addressed:

1. Energy Performance
2. Water Efficiency
3. Stormwater Management
4. Indoor Environment Quality
5. Transport
6. Waste Management
7. Urban Ecology
8. Building Materials
9. Construction and Building Management
10. Innovation

How to use this document

This document is not designed to set a minimum standard or to provide a definitive list of environmentally sustainable design (ESD) initiatives to be included in a development. ESD should be integrated into the design of a new building from the earliest stage. The best ESD response will depend on many site-specific factors.

Project Information

Municipality	Hume City Council	Total Site Area	776 sq/m
Project Name	3x Double Storey Dwelling	Residential GFA	389.11 m2
Project Address	2 Reserve Avenue, Campbellfield VIC 3061	No. of Res.Dwellings	3
		Zoning	General Residential Zone (GRZ)
Applicant	PD Studio		

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Above & Beyond Energy Solutions

Built Environment Sustainable Scoreboard (BESS)

The development has been assessed using the BESS assessment tool (www.bess.net.au).
A summary of the results is shown in the table below. For the full BESS Report refer to Appendix.

BESS score: 57%

% of Total	Category	Score	Pass
5	Management	*0*	PASS
9	Water	*50*	PASS
28	Energy	*50*	PASS
14	Stormwater	*100*	PASS
17	IEQ	*80*	PASS
9	Transport	*100*	-
6	Waste	*0*	-
6	Urban Ecology	*57*	-
9	Innovation	*10*	-

1.0 Energy Performance

Objectives:

- To improve the efficient use of energy, by ensuring development demonstrates design potential for ESD initiatives at the planning stage.
- To reduce total operating greenhouse gas emissions.
- To reduce energy peak demand through particular design measures (eg. appropriate building orientation, shading to glazed surfaces, optimise glazing to exposed surfaces, space allocation for solar panels and external heating and cooling systems).

Considerations:

- Energy rating of building fabric in excess of minimum BCA requirements

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Preliminary NatHERS assessment has been undertaken for all proposed dwellings. Attached to the Appendix of this report are preliminary certificates for each modelled dwelling.

- Heating and Cooling system types and associated energy-efficiency rating/benchmark

Proposed heating system: D reverse cycle space (5 stars)
Proposed Cooling system: Evaporative Central (4 stars)

- Hot water system type and associated energy-efficiency rating/benchmark

Hot water system: Gas Instantaneous (6 star)

- Location of fixed clothes drying lines/ racks

A private outdoor clothesline will be provided to each dwelling refer to attached working drawings.

- Lighting strategy

LED downlight will be installed in all habitable areas to reduce energy consumption. Illumination power density calculations can be found on the Working drawings.

2.0 Water Resources

Objectives:

- To improve water efficiency.
- To reduce total operating potable water use.
- To encourage the collection and reuse of stormwater.
- To encourage the appropriate use of alternative water sources (eg. greywater).

Considerations:

- Water-efficiency rating of fixtures within one star of the best available
  Description of fixtures for both dwellings:

Shower head	4 Star WELS (>=7.5 but=<9.0)
Kitchen Taps	>=5 Star WELS
Bathroom Taps	>=5 Star WELS
WC	>=4 Star WELS

- Size, capacity, and location of rainwater tanks

Using rainwater can reduce water bills, provide an alternative supply during water restrictions. Depending on tank size and climate, mains water use can be reduced by up to 100%. This in turn can help:

- reduce the need for new dams or desalination plants
- protect remaining environmental flows in rivers
- reduce infrastructure operating costs.

Rainwater harvesting also decreases stormwater runoff, thereby helping to reduce local flooding and scouring of creeks.

Size of rainwater tanks are three 2000L tanks, refer to Working Drawings for location.

- Provisions for a more water efficient landscaping

Rainwater will be transferred from the roof and collected in the rainwater tank for toilet flushing.

3.0 Stormwater Management

Objectives:

- To reduce the impact of stormwater run-off.
- To improve the water quality of stormwater run-off.
- To achieve best practice stormwater quality outcomes.
- To incorporate the use of water sensitive urban design, including stormwater re-use.

Considerations:

- Rainwater tank capacity for whole development. All sanitary flushing to operate using rainwater tanks.

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Melbourne Water **STORM Rating Report**

TransactionID:	1367219
Municipality:	HUME
Rainfall Station:	HUME
Address:	2 Reserve Avenue
	Campellfield
	VIC 3061
Assessor:	Arzu
Development Type:	Residential - Multiunit
Allotment Site (m2):	776.00
STORM Rating %:	102

Description	Impervious Area (m2)	Treatment Type	Treatment Area/Volume (m2 or L)	Occupants / Number Of Bedrooms	Treatment %	Tank Water Supply Reliability (%)
Roof 1	101.96	Rainwater Tank	2,000.00	3	126.80	89.50
Roof 2	99.03	Rainwater Tank	2,000.00	3	131.40	87.70
Roof 3	103.06	Rainwater Tank	2,000.00	2	106.60	97.00
Impervious Driveway	164.85	Raingarden 100mm	0.50	0	64.80	0.00

4.0 Indoor Environment Quality

Objectives:

- To achieve a healthy indoor environment quality for the wellbeing of building occupants, including the provision of fresh air intake, cross ventilation, and natural daylight.
- To achieve thermal comfort levels with minimised need for mechanical heating, ventilation and cooling.
- To reduce indoor air pollutants by encouraging use of materials with low toxic chemicals.
- To reduce reliance on mechanical heating, ventilation, cooling and lighting systems.
- To minimise noise levels and noise transfer within and between buildings and associated external areas.

Considerations:

- Access to daylight

All living areas receive a good amount of daylight, exceeding the minimum amount of daylight required under the Planning scheme.

- Access to natural ventilation

The majority of habitable rooms receive cross ventilation, helping to moderate internal temperatures.

- Thermal Comfort
    - R4.0 insulation is nominated for ceilings and R2.5 for the walls
    - The roof will be a medium grey colour (anti glare foil will help reduce solar heat gain)

- Indoor air quality
    - Low VOC, water based and non-toxic paints to be specified- please refer to attached table
    - Timber used at the site will be either reused, post-consumer recycled or certified under the forest certification scheme where applicable.

5.0 Transport

Objectives:

- To ensure that the built environment is designed to promote the use of walking, cycling and public transport, in that order.
- To minimise car dependency.
- To promote the use of low emissions vehicle technologies and supporting infrastructure.

Considerations:

- Bicycle rack
    - A bicycle rack will be provided to each dwelling, encouraging sustainable transport habits.

6.0 Waste Management

Objectives:

- To promote waste avoidance, reuse and recycling during the design, construction and operation stages of development.
- To ensure durability and long term reusability of building materials.
- To ensure sufficient space is allocated for future change in waste management needs, including (where possible) composting and green waste facilities.

Considerations:

- Materials selections Recommendations
    - Avoidance of materials that contain toxic substances.
    - Durable materials
    - Low embodied materials
    - Material selection are as follows:
        - Concrete slab
        - Timber wall framing
        - Walls- Brickveener + Cladding
        - Roof structure and cladding-Colorbond

7.0 Urban Ecology

Objectives:

- To protect and enhance biodiversity within the municipality.
- To provide environmentally sustainable landscapes and natural habitats, and minimise the urban heat island effect.
- To encourage the retention of significant trees.
- To encourage the planting of indigenous vegetation.
- To encourage the provision of space for productive gardens, particularly in larger residential developments.

Considerations:

To Encourage plant growth a tap is provided in Private open spaces.

8.0 Building Materials

Objectives:

- To reduce the embodied energy and CO2 impact of materials.

- To maximise the responsible sourcing materials.
- To maximise the use of recycled material.
- To maximise the reuse of materials.
- To reduce the use of material that contains high levels of VOC (or other toxic elements).

Considerations:

- All timber used in the development should be Forest Stewardship Council (FSC) or Program for the Endorsement of Forest Certification (PEFC) certified or recycled / reused.
- Materials must be carefully stored to reduce waste and facilitate recycling. A dedicated storage space to be allowed on site for the separation of waste and recyclables

9.0 Construction and Building Management

Objectives:

- Best practice for building management means that sustainability is integrated from concept design through the construction process. Good decisions made early will always deliver the maximum benefit for the lowest cost.
- Best practice building management also means giving future occupants the information they need to be able to run their buildings in the most efficient way.

Considerations:

- Not applicable

10.0 Innovation and ESD Excellence

Objectives:

- To encourage innovative technology, design and processes in all development, so as to positively influence the sustainability of buildings.

Considerations:

- a power point located in the garage for each dwelling to accommodate infrastructure in future to charge electric vehicles.

Conclusion

Above & Beyond Energy Solutions

This ESD report is a detailed sustainability assessment of the proposed design which demonstrates compliance with the key requirements of *Planning Clause 22.01 Environmentally Sustainable Development.*

In conclusion, the proposed development meets the Built Environment Sustainability Scoreboard (BESS) and National construction code requirements.

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Appendices

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Melbourne Water STORM Rating Report

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Roof 3	103.06	Rainwater Tank	2,000.00	2	106.60	97.00
Impervious Driveway	164.85	Raingarden 100mm	0.50	0	64.80	0.00

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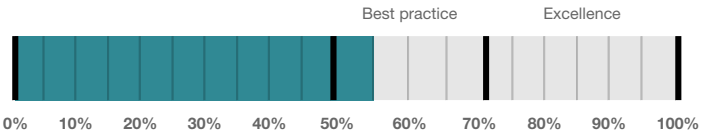
BESS Report

Built Environment Sustainability Scorecard

This BESS report outlines the sustainable design commitments of the proposed development at 2 Reserve Avenue Campellfield VIC 3061. The BESS report and accompanying documents and evidence are submitted in response to the requirement for a Sustainable Design Assessment or Sustainability Management Plan at Hume City Council.

Note that where a Sustainability Management Plan is required, the BESS report must be accompanied by a report that further demonstrates the development's potential to achieve the relevant environmental performance outcomes and documents the means by which the performance outcomes can be achieved.

Your BESS Score

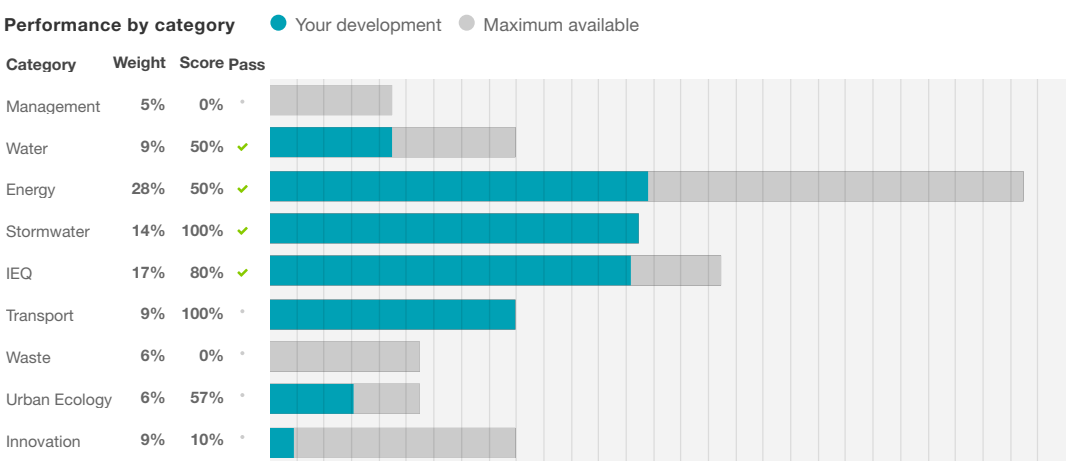


57%

Project details

Address	2 Reserve Avenue Campellfield VIC 3061
Project no	848BE6EA-R1
BESS Version	BESS-6
Site type	Multi dwelling (dual occupancy, townhouse, villa unit etc)
Account	abenergyassessments@gmail.com
Application no.	
Site area	776 m²
Building floor area	389.11 m²
Date	03 May 2022
Software version	1.7.0-B.384

Performance by category



Dwellings & Non Res Spaces

Dwellings

Name	Quantity	Area	% of total area
Detached dwelling			
TH1	1	141 m^2	36%
TH3	1	124 m^2	31%
TH2	1	124 m^2	31%
Total	**3**	**389 m^2**	**100%**

Supporting information

Floorplans & elevation notes

Credit	Requirement	Response	Status
Energy 3.3	External lighting sensors annotated		-
Energy 3.4	Clothes line annotated (if proposed)		-
Stormwater 1.1	Location of any stormwater management systems used in STORM or MUSIC modelling (e.g. Rainwater tanks, raingarden, buffer strips)		-
IEQ 2.2	Dwellings meeting the requirements for having 'natural cross flow ventilation'		-
IEQ 3.1	Glazing specification to be annotated		-
IEQ 3.3	North-facing living areas		-
Transport 1.1	All nominated residential bicycle parking spaces		-
Transport 2.1	Location of electric vehicle charging infrastructure		-
Urban Ecology 2.1	Vegetated areas		-

Supporting evidence

Credit	Requirement	Response	Status
Energy 3.5	Provide a written description of the average lighting power density to be installed in the development and specify the lighting type(s) to be used.		-
Stormwater 1.1	STORM report or MUSIC model		-
IEQ 2.2	A list of dwellings with natural cross flow ventilation		-
IEQ 3.1	Reference to floor plans or energy modelling showing the glazing specification (U-value and Solar Heat Gain Coefficient, SHGC)		-
IEQ 3.3	Reference to the floor plans showing living areas orientated to the north.		-

Credit summary

Management Overall contribution 4.5%

	0%
1.1 Pre-Application Meeting	0%
2.1 Thermal Performance Modelling - Single Dwelling	0%

Water Overall contribution 9.0%

	Minimum required 50%	50%	Pass
1.1 Potable water use reduction		60%	
3.1 Water Efficient Landscaping		0%	

Energy Overall contribution 27.5%

	Minimum required 50%	50%	Pass
1.2 Thermal Performance Rating - Residential		0%	
2.1 Greenhouse Gas Emissions		100%	
2.2 Peak Demand		0%	
2.3 Electricity Consumption		100%	
2.4 Gas Consumption		100%	
2.5 Wood Consumption		N/A	Scoped Out
		No wood heating system present	
3.2 Hot Water		100%	
3.3 External Lighting		100%	
3.4 Clothes Drying		100%	
3.5 Internal Lighting - Residential Single Dwelling		100%	
4.4 Renewable Energy Systems - Other		N/A	Disabled
		No other (non-solar PV) renewable energy is in use.	
4.5 Solar PV - Houses and Townhouses		N/A	Disabled
		No solar PV renewable energy is in use.	

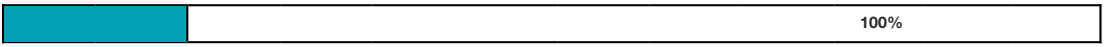
Stormwater Overall contribution 13.5%

	Minimum required 100%	100%	Pass
1.1 Stormwater Treatment		100%	

IEQ Overall contribution 16.5%

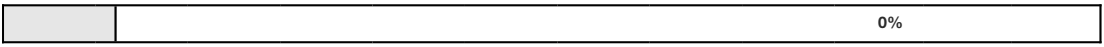
	Minimum required 50%	80%	Pass
2.2 Cross Flow Ventilation		100%	
3.1 Thermal comfort - Double Glazing		100%	
3.2 Thermal Comfort - External Shading		0%	
3.3 Thermal Comfort - Orientation		100%	

Transport Overall contribution 9.0%



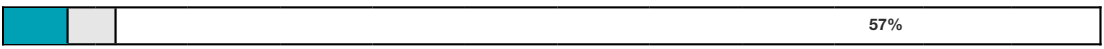
1.1 Bicycle Parking - Residential	100%
2.1 Electric Vehicle Infrastructure	100%

Waste Overall contribution 5.5%



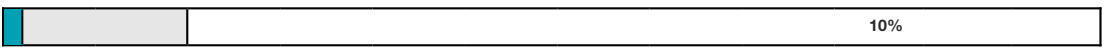
1.1 - Construction Waste - Building Re-Use	0%
2.1 - Operational Waste - Food & Garden Waste	0%

Urban Ecology Overall contribution 5.5%



2.1 Vegetation	100%
2.2 Green Roofs	0%
2.3 Green Walls and Facades	0%
3.1 Food Production - Residential	0%

Innovation Overall contribution 9.0%



1.1 Innovation	10%

Credit breakdown

Management Overall contribution 0%

1.1 Pre-Application Meeting		0%
Score Contribution	This credit contributes 60.0% towards the category score.	
Criteria	Has an ESD professional been engaged to provide sustainability advice from schematic design to construction? AND Has the ESD professional been involved in a pre-application meeting with Council?	
Question	Criteria Achieved ?	
Project	No	

2.1 Thermal Performance Modelling - Single Dwelling		0%
Score Contribution	This credit contributes 40.0% towards the category score.	
Criteria	Has a preliminary NatHERS rating been undertaken?	
Question	Criteria Achieved ?	
Detached dwelling	No	

Water Overall contribution 4% Minimum required 50%

Water Approach	
What approach do you want to use for Water?:	Use the built in calculation tools
Project Water Profile Question	
Do you have a reticulated third pipe or an on-site water recycling system?:	Yes
Are you installing a swimming pool?:	No
Are you installing a rainwater tank?:	Yes
Reticulated third pipe or an on-site water recycling system	
Recycled Profile Name:	Third pipe
Irrigation area connected to reticulated third pipe or an on-site water recycling system only (i.e. not also connected to rainwater system):	15.0 m²
Water Efficient Garden?:	No
Other external water demand connected to reticulated third pipe or an on-site water recycling system only (i.e. not also connected to rainwater system):	-
Water fixtures, fittings and connections	
Showerhead: All	4 Star WELS (>= 4.5 but <= 6.0)
Bath: All	Scope out
Kitchen Taps: All	>= 5 Star WELS rating
Bathroom Taps: All	>= 5 Star WELS rating
Dishwashers: All	>= 4 Star WELS rating
WC: All	>= 4 Star WELS rating
Urinals: All	Scope out
Washing Machine Water Efficiency: All	Default or unrated
Which non-potable water source is the dwelling/space connected to?:	
TH1	RWT1
TH2	RWT2
TH3	RWT3
Non-potable water source connected to Toilets: All	Yes
Non-potable water source connected to Laundry (washing machine): All	Yes
Non-potable water source connected to Hot Water System: All	No
Rainwater Tanks	
What is the total roof area connected to the rainwater tank?:	
RWT1	44.0 m²
RWT2	50.0 m²
RWT3	45.0 m²

Tank Size:	
RWT1	2,000 Litres
RWT2	2,000 Litres
RWT3	2,000 Litres
Will this tank be connected to the reticulated third pipe or onsite water recycling system?:	
RWT1	Yes
RWT2	Yes
RWT3	Yes
Irrigation area connected to tank:	
RWT1	15.0 m²
RWT2	15.0 m²
RWT3	15.0 m²
Is connected irrigation area a water efficient garden?:	
RWT1	No
RWT2	No
RWT3	No
Other external water demand connected to tank?:	
RWT1	0.0 Litres/Day
RWT2	0.0 Litres/Day
RWT3	0.0 Litres/Day

1.1 Potable water use reduction		60%
Score Contribution	This credit contributes 83.3% towards the category score.	
Criteria	What is the reduction in total potable water use due to efficient fixtures, appliances, rainwater use and recycled water use? To achieve points in this credit there must be >25% potable water reduction.	
Output	Reference	
Project	528 kL	
Output	Proposed (excluding rainwater and recycled water use)	
Project	312 kL	
Output	Proposed (including rainwater and recycled water use)	
Project	250 kL	
Output	% Reduction in Potable Water Consumption	
Project	52 %	
Output	% of connected demand met by rainwater	
Project	53 %	
Output	How often does the tank overflow?	
Project	Often	
Output	Opportunity for additional rainwater connection	
Project	75 kL	

3.1 Water Efficient Landscaping		0%
Score Contribution	This credit contributes 16.7% towards the category score.	
Criteria	Will water efficient landscaping be installed?	
Question	Criteria Achieved ?	
Project	No	

Energy Overall contribution 14% Minimum required 50%

Dwellings Energy Approach	
What approach do you want to use for Energy?:	Use the built in calculation tools

Project Energy Profile Question	
Are you installing any solar photovoltaic (PV) system(s)?:	No
Are you installing any other renewable energy system(s)?:	No
Gas supplied into building:	Natural Gas

Dwelling Energy Profiles	
Below the floor is: All	Ground or Carpark
Above the ceiling is: All	Outside
Exposed sides: All	4
NatHERS Annual Energy Loads - Heat: All	120 MJ/sqm
NatHERS Annual Energy Loads - Cool: All	30.0 MJ/sqm
NatHERS star rating: All	6.0
Type of Heating System: All	D Reverse cycle space
Heating System Efficiency: All	4 Star
Type of Cooling System: All	Evaporative central
Cooling System Efficiency: All	4 Stars
Type of Hot Water System: All	J Gas Instantaneous 6 star
% Contribution from solar hot water system: All	0 %
Is the hot water system shared by multiple dwellings?: All	No
Clothes Line: All	D Private outdoor clothesline
Clothes Dryer: All	A No clothes dryer

1.2 Thermal Performance Rating - Residential 0%

Score Contribution	This credit contributes 30.0% towards the category score.
Criteria	What is the average NatHERS rating?
Output	Average NATHERS Rating (Weighted)
Detached dwelling	6.0 Stars

2.1 Greenhouse Gas Emissions 100%

Score Contribution	This credit contributes 10.0% towards the category score.
Criteria	What is the % reduction in annual greenhouse gas emissions against the benchmark?
Output	Reference Building with Reference Services (BCA only)
Detached dwelling	21,445 kg CO2
Output	Proposed Building with Proposed Services (Actual Building)
Detached dwelling	7,779 kg CO2
Output	% Reduction in GHG Emissions
Detached dwelling	63 %

2.2 Peak Demand		0%
Score Contribution	This credit contributes 5.0% towards the category score.	
Criteria	What is the % reduction in the instantaneous (peak-hour) demand against the benchmark?	
Output	Peak Thermal Cooling Load - Baseline	
Detached dwelling	60.8 kW	
Output	Peak Thermal Cooling Load - Proposed	
Detached dwelling	64.4 kW	
Output	Peak Thermal Cooling Load - % Reduction	
Detached dwelling	-6 %	

2.3 Electricity Consumption		100%
Score Contribution	This credit contributes 10.0% towards the category score.	
Criteria	What is the % reduction in annual electricity consumption against the benchmark?	
Output	Reference	
Detached dwelling	18,617 kWh	
Output	Proposed	
Detached dwelling	7,096 kWh	
Output	Improvement	
Detached dwelling	61 %	

2.4 Gas Consumption		100%
Score Contribution	This credit contributes 10.0% towards the category score.	
Criteria	What is the % reduction in annual gas consumption against the benchmark?	
Output	Reference	
Detached dwelling	47,767 MJ	
Output	Proposed	
Detached dwelling	10,520 MJ	
Output	Improvement	
Detached dwelling	77 %	

2.5 Wood Consumption		N/A	Scoped Out
This credit was scoped out	No wood heating system present		

3.2 Hot Water		100%
Score Contribution	This credit contributes 5.0% towards the category score.	
Criteria	What is the % reduction in annual energy consumption (gas and electricity) of the hot water system against the benchmark?	
Output	Reference	
Detached dwelling	13,269 kWh	
Output	Proposed	
Detached dwelling	3,036 kWh	
Output	Improvement	
Detached dwelling	77 %	

3.3 External Lighting		100%	
Score Contribution	This credit contributes 5.0% towards the category score.		
Criteria	Is the external lighting controlled by a motion detector?		
Question	Criteria Achieved ?		
Detached dwelling	Yes		
3.4 Clothes Drying		100%	
Score Contribution	This credit contributes 5.0% towards the category score.		
Criteria	What is the % reduction in annual energy consumption (gas and electricity) from a combination of clothes lines and efficient driers against the benchmark?		
Output	Reference		
Detached dwelling	1,891 kWh		
Output	Proposed		
Detached dwelling	131 kWh		
Output	Improvement		
Detached dwelling	93 %		
3.5 Internal Lighting - Residential Single Dwelling		100%	
Score Contribution	This credit contributes 5.0% towards the category score.		
Criteria	Does the development achieve a maximum illumination power density of 4W/sqm or less?		
Question	Criteria Achieved?		
Detached dwelling	Yes		
4.4 Renewable Energy Systems - Other		N/A	⊘ Disabled
This credit is disabled	No other (non-solar PV) renewable energy is in use.		
4.5 Solar PV - Houses and Townhouses		N/A	⊘ Disabled
This credit is disabled	No solar PV renewable energy is in use.		

Stormwater

Overall contribution 14% Minimum required 100%

Which stormwater modelling are you using?:	Melbourne Water STORM tool	
1.1 Stormwater Treatment	100%	
Score Contribution	This credit contributes 100.0% towards the category score.	
Criteria	Has best practice stormwater management been demonstrated?	
Question	STORM score achieved	
Project	102	
Output	Min STORM Score	
Project	100	

IEQ Overall contribution 13% Minimum required 50%

2.2 Cross Flow Ventilation	100%
Score Contribution	This credit contributes 20.0% towards the category score.
Criteria	Are all habitable rooms designed to achieve natural cross flow ventilation?
Question	Criteria Achieved ?
Detached dwelling	Yes

3.1 Thermal comfort - Double Glazing	100%
Score Contribution	This credit contributes 40.0% towards the category score.
Criteria	Is double glazing (or better) used to all habitable areas?
Question	Criteria Achieved ?
Detached dwelling	Yes

3.2 Thermal Comfort - External Shading	0%
Score Contribution	This credit contributes 20.0% towards the category score.
Criteria	Is appropriate external shading provided to east, west and north facing glazing?
Question	Criteria Achieved ?
Detached dwelling	No

3.3 Thermal Comfort - Orientation	100%
Score Contribution	This credit contributes 20.0% towards the category score.
Criteria	Are at least 50% of living areas orientated to the north?
Question	Criteria Achieved ?
Detached dwelling	Yes

Transport Overall contribution 9%

1.1 Bicycle Parking - Residential	100%
Score Contribution	This credit contributes 50.0% towards the category score.
Criteria	How many secure and undercover bicycle spaces are there per dwelling for residents?
Question	Bicycle Spaces Provided ?
Detached dwelling	3
Output	Min Bicycle Spaces Required
Detached dwelling	3

2.1 Electric Vehicle Infrastructure	100%
Score Contribution	This credit contributes 50.0% towards the category score.
Criteria	Are facilities provided for the charging of electric vehicles?
Question	Criteria Achieved ?
Project	Yes

Waste Overall contribution 0%

1.1 - Construction Waste - Building Re-Use	0%
Score Contribution	This credit contributes 50.0% towards the category score.
Criteria	If the development is on a site that has been previously developed, has at least 30% of the existing building been re-used?
Question	Criteria Achieved ?
Project	No

2.1 - Operational Waste - Food & Garden Waste	0%
Score Contribution	This credit contributes 50.0% towards the category score.
Criteria	Are facilities provided for on-site management of food and garden waste?
Question	Criteria Achieved ?
Project	No

Urban Ecology Overall contribution 3%

2.1 Vegetation	100%
Score Contribution	This credit contributes 57.1% towards the category score.
Criteria	How much of the site is covered with vegetation, expressed as a percentage of the total site area?
Question	Percentage Achieved ?
Project	35 %

2.2 Green Roofs	0%
Score Contribution	This credit contributes 14.3% towards the category score.
Criteria	Does the development incorporate a green roof?
Question	Criteria Achieved ?
Project	No

2.3 Green Walls and Facades	0%
Score Contribution	This credit contributes 14.3% towards the category score.
Criteria	Does the development incorporate a green wall or green façade?
Question	Criteria Achieved ?
Project	No

3.1 Food Production - Residential	0%
Score Contribution	This credit contributes 14.3% towards the category score.
Criteria	What area of space per resident is dedicated to food production?
Question	Food Production Area
Detached dwelling	-
Output	Min Food Production Area
Detached dwelling	3 m^2

Innovation Overall contribution 1%

Innovation		
Description: Electric car	Power point in garage for future development of car charging facilities	
Points Targeted: Electric car	1	

1.1 Innovation		10%
Score Contribution	This credit contributes 100.0% towards the category score.	
Criteria	What percentage of the Innovation points have been claimed (10 points maximum)?	

Disclaimer

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