

BASIX[®]Certificate

Building Sustainability Index www.basix.nsw.gov.au

Multi Dwelling

Certificate number: 1378175M_02

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

Secretary

Date of issue: Monday, 19 June 2023

To be valid, this certificate must be lodged within 3 months of the date of issue.



Planning,
Industry &
Environment

Project summary

Project name	19333_02
Street address	75-77 Sheppard Street Casino 2470
Local Government Area	Richmond Valley Council
Plan type and plan number	deposited 1155484
Lot no.	761
Section no.	-
No. of residential flat buildings	0
No. of units in residential flat buildings	0
No. of multi-dwelling houses	6
No. of single dwelling houses	0

Project score

Water	✓ 40	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 48	Target 45

Certificate Prepared by



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Revision of Certificates not lodged within 3 months of the date of issue will incur further BASIX issuing fees.

Description of project

Project address

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Project type

No. of residential flat buildings	0
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No. of multi-dwelling houses	6
No. of single dwelling houses	0

Site details

Site area (m ²)	1355
Roof area (m ²)	536
Non-residential floor area (m ²)	-
Residential car spaces	7
Non-residential car spaces	-




Common area landscape

Common area lawn (m ²)	0.0
Common area garden (m ²)	434.0
Area of indigenous or low water use species (m ²)	-

Assessor details

Assessor number	DMN/13/1491
Certificate number	0008644670
Climate zone	9
Ceiling fan in at least one bedroom	Yes
Ceiling fan in at least one living room or other conditioned area	Yes

Project score

Water	 40	Target 40
Thermal Comfort	 Pass	Target Pass
Energy	 48	Target 45

Description of project

The tables below describe the dwellings and common areas within the project

Multi-dwelling houses

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
1	2	72.0	7.0	5.0	-
6	2	72.0	0.0	8.0	-

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
2	2	72.0	7.0	7.0	-

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
3	3	89.0	12.0	29.0	-

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
4	3	89.0	12.0	14.0	-

Dwelling no.	No. of bedrooms	Conditioned floor area (m ²)	Unconditioned floor area (m ²)	Area of garden & lawn (m ²)	Indigenous species (min area m ²)
5	2	74.0	0.0	35.0	-

No common areas specified.

Schedule of BASIX commitments

1. Commitments for multi-dwelling houses

(a) Dwellings

- (i) Water
- (ii) Energy
- (iii) Thermal Comfort

2. Commitments for single dwelling houses

3. Commitments for common areas and central systems/facilities for the development (non-building specific)

- (i) Water
- (ii) Energy

Schedule of BASIX commitments

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

1. Commitments for multi-dwelling houses

(a) Dwellings

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must plant indigenous or low water use species of vegetation throughout the area of land specified for the dwelling in the "Indigenous species" column of the table below, as private landscaping for that dwelling. (This area of indigenous vegetation is to be contained within the "Area of garden and lawn" for the dwelling specified in the "Description of Project" table).	✓	✓	
(c) If a rating is specified in the table below for a fixture or appliance to be installed in the dwelling, the applicant must ensure that each such fixture and appliance meets the rating specified for it.		✓	✓
(d) The applicant must install an on demand hot water recirculation system which regulates all hot water use throughout the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below.		✓	✓
(e) The applicant must install:			
(aa) a hot water diversion system to all showers, kitchen sinks and all basins in the dwelling, where indicated for a dwelling in the "HW recirculation or diversion" column of the table below; and		✓	✓
(bb) a separate diversion tank (or tanks) connected to the hot water diversion systems of at least 100 litres. The applicant must connect the hot water diversion tank to all toilets in the dwelling.		✓	✓
(e) The applicant must not install a private swimming pool or spa for the dwelling, with a volume exceeding that specified for it in the table below.	✓	✓	
(f) If specified in the table, that pool or spa (or both) must have a pool cover or shading (or both).		✓	
(g) The pool or spa must be located as specified in the table.	✓	✓	
(h) The applicant must install, for the dwelling, each alternative water supply system, with the specified size, listed for that dwelling in the table below. Each system must be configured to collect run-off from the areas specified (excluding any area which supplies any other alternative water supply system), and to divert overflow as specified. Each system must be connected as specified.	✓	✓	✓

	Fixtures					Appliances		Individual pool				Individual spa		
Dwelling no.	All shower-heads	All toilet flushing systems	All kitchen taps	All bathroom taps	HW recirculation or diversion	All clothes washers	All dish-washers	Volume (max volume)	Pool cover	Pool location	Pool shaded	Volume (max volume)	Spa cover	Spa shaded
All dwellings	4 star (> 4.5 but <= 6 L/min)	4 star	5 star	5 star	-	-	-	-	-	-	-	-	-	-

	Alternative water source							
Dwelling no.	Alternative water supply systems	Size	Configuration	Landscape connection	Toilet connection (s)	Laundry connection	Pool top-up	Spa top-up
All dwellings	individual water tank (no. 1)	Tank size (min) 4000.0 litres	To collect run-off from at least: 70.0 square metres of roof area;	yes	no	-	no	no
None	-	-	-	-	-	-	-	-

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must comply with the commitments listed below in carrying out the development of a dwelling listed in a table below.			
(b) The applicant must install each hot water system specified for the dwelling in the table below, so that the dwelling's hot water is supplied by that system. If the table specifies a central hot water system for the dwelling, then the applicant must connect that central system to the dwelling, so that the dwelling's hot water is supplied by that central system.	✓	✓	✓
(c) The applicant must install, in each bathroom, kitchen and laundry of the dwelling, the ventilation system specified for that room in the table below. Each such ventilation system must have the operation control specified for it in the table.		✓	✓
(d) The applicant must install the cooling and heating system/s specified for the dwelling under the "Living areas" and "Bedroom areas" headings of the "Cooling" and "Heating" columns in the table below, in/for at least 1 living/bedroom area of the dwelling. If no cooling or heating system is specified in the table for "Living areas" or "Bedroom areas", then no systems may be installed in any such areas. If the term "zoned" is specified beside an air conditioning system, then the system must provide for day/night zoning between living areas and bedrooms.		✓	✓

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(e) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Artificial lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that the "primary type of artificial lighting" for each such room in the dwelling is fluorescent lighting or light emitting diode (LED) lighting. If the term "dedicated" is specified for a particular room or area, then the light fittings in that room or area must only be capable of being used for fluorescent lighting or light emitting diode (LED) lighting.		✓	✓
(f) This commitment applies to each room or area of the dwelling which is referred to in a heading to the "Natural lighting" column of the table below (but only to the extent specified for that room or area). The applicant must ensure that each such room or area is fitted with a window and/or skylight.	✓	✓	✓
(g) This commitment applies if the applicant installs a water heating system for the dwelling's pool or spa. The applicant must: (aa) install the system specified for the pool in the "Individual Pool" column of the table below (or alternatively must not install any system for the pool). If specified, the applicant must install a timer, to control the pool's pump; and (bb) install the system specified for the spa in the "Individual Spa" column of the table below (or alternatively must not install any system for the spa). If specified, the applicant must install a timer to control the spa's pump.		✓ ✓	
(h) The applicant must install in the dwelling: (aa) the kitchen cook-top and oven specified for that dwelling in the "Appliances & other efficiency measures" column of the table below; (bb) each appliance for which a rating is specified for that dwelling in the "Appliances & other efficiency measures" column of the table, and ensure that the appliance has that minimum rating; and (cc) any clothes drying line specified for the dwelling in the "Appliances & other efficiency measures" column of the table.		✓ ✓ ✓	✓
(i) If specified in the table, the applicant must carry out the development so that each refrigerator space in the dwelling is "well ventilated".		✓	
(j) The applicant must install the photovoltaic system specified for the dwelling under the "Photovoltaic system" heading of the "Alternative energy" column of the table below, and connect the system to that dwelling's electrical system.	✓	✓	✓

	Hot water	Bathroom ventilation system		Kitchen ventilation system		Laundry ventilation system	
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control
3, 4	electric heat pump - air sourced 31 to 35 STCs	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off	natural ventilation only, or no laundry	-

	Hot water	Bathroom ventilation system		Kitchen ventilation system		Laundry ventilation system	
Dwelling no.	Hot water system	Each bathroom	Operation control	Each kitchen	Operation control	Each laundry	Operation control
All other dwellings	electric heat pump - air sourced 31 to 35 STCs	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off	individual fan, ducted to façade or roof	manual switch on/off

	Cooling		Heating		Artificial lighting						Natural lighting	
Dwelling no.	living areas	bedroom areas	living areas	bedroom areas	No. of bedrooms &/or study	No. of living &/or dining rooms	Each kitchen	All bathrooms/toilets	Each laundry	All hallways	No. of bathrooms &/or toilets	Main kitchen
5, 6	-	-	-	-	2 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	1	yes
All other dwellings	-	-	-	-	2 (dedicated)	1 (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	yes (dedicated)	2	yes

	Individual pool		Individual spa		Appliances & other efficiency measures							
Dwelling no.	Pool heating system	Timer	Spa heating system	Timer	Kitchen cooktop/oven	Refrigerator	Well ventilated fridge space	Dishwasher	Clothes washer	Clothes dryer	Indoor or sheltered clothes drying line	Private outdoor or unsheltered clothes drying line
All dwellings	-	-	-	-	electric cooktop & electric oven	-	yes	-	-	-	-	yes

	Alternative energy
Dwelling no.	Photovoltaic system (min rated electrical output in peak kW)
All dwellings	-

(iii) Thermal Comfort	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) The applicant must attach the certificate referred to under "Assessor details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or, if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for a final occupation certificate for the proposed development.			
(b) The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
(c) The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX Certificate, including the details shown in the "Thermal Loads" table below.			
(d) The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Thermal Comfort Protocol requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor, to certify that this is the case.	✓		
(e) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.		✓	
(f) The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications.		✓	✓
(g) Where there is an in-slab heating or cooling system, the applicant must: (aa) Install insulation with an R-value of not less than 1.0 around the vertical edges of the perimeter of the slab; or (bb) On a suspended floor, install insulation with an R-value of not less than 1.0 underneath the slab and around the vertical edges of the perimeter of the slab.	✓	✓	✓
(h) The applicant must construct the floors and walls of the development in accordance with the specifications listed in the table below.	✓	✓	✓
(i) The applicant must show on the plans accompanying the development application for the proposed development, the locations of ceiling fans set out in the Assessor Certificate.	✓		
(j) The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), the locations of ceiling fans set out in the Assessor Certificate.		✓	

Dwelling no.	Thermal loads	
	Area adjusted heating load (in mJ/m ² /yr)	Area adjusted cooling load (in mJ/m ² /yr)
1	9.5	26.7
2	10.4	20.9

	Thermal loads	
Dwelling no.	Area adjusted heating load (in mJ/m ² /yr)	Area adjusted cooling load (in mJ/m ² /yr)
3	9.0	27.8
4	17.7	24.3
5	8.1	30.4
All other dwellings	9.1	22.9

	Construction of floors and walls				
Dwelling no.	Concrete slab on ground(m ²)	Suspended floor with open subfloor (m ²)	Suspended floor with enclosed subfloor (m ²)	Suspended floor above garage (m ²)	Primarily rammed earth or mudbrick walls
5	74	-	-	-	No
6	72	-	-	-	No
1, 2	45	-	-	-	No
All other dwellings	60	-	-	-	No

3. Commitments for common areas and central systems/facilities for the development (non-building specific)

(b) Common areas and central systems/facilities

(i) Water	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a showerhead, toilet, tap or clothes washer into a common area, then that item must meet the specifications listed for it in the table.		✓	✓
(b) The applicant must install (or ensure that the development is serviced by) the alternative water supply system(s) specified in the "Central systems" column of the table below. In each case, the system must be sized, be configured, and be connected, as specified in the table.	✓	✓	✓
(c) A swimming pool or spa listed in the table must not have a volume (in kLs) greater than that specified for the pool or spa in the table.	✓	✓	
(d) A pool or spa listed in the table must have a cover or shading if specified for the pool or spa in the table.		✓	
(e) The applicant must install each fire sprinkler system listed in the table so that the system is configured as specified in the table.		✓	✓
(f) The applicant must ensure that the central cooling system for a cooling tower is configured as specified in the table.		✓	✓

Common area	Showerheads rating	Toilets rating	Taps rating	Clothes washers rating
All common areas	no common facility	no common facility	no common facility	no common laundry facility

(ii) Energy	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
(a) If, in carrying out the development, the applicant installs a ventilation system to service a common area specified in the table below, then that ventilation system must be of the type specified for that common area, and must meet the efficiency measure specified.		✓	✓
(b) In carrying out the development, the applicant must install, as the "primary type of artificial lighting" for each common area specified in the table below, the lighting specified for that common area. This lighting must meet the efficiency measure specified. The applicant must also install a centralised lighting control system or Building Management System (BMS) for the common area, where specified.		✓	✓
(c) The applicant must install the systems and fixtures specified in the "Central energy systems" column of the table below. In each case, the system or fixture must be of the type, and meet the specifications, listed for it in the table.	✓	✓	✓

Notes

1. In these commitments, "applicant" means the person carrying out the development.
2. The applicant must identify each dwelling, building and common area listed in this certificate, on the plans accompanying any development application, and on the plans and specifications accompanying the application for a construction certificate / complying development certificate, for the proposed development, using the same identifying letter or reference as is given to that dwelling, building or common area in this certificate.
3. This note applies if the proposed development involves the erection of a building for both residential and non-residential purposes (or the change of use of a building for both residential and non-residential purposes). Commitments in this certificate which are specified to apply to a "common area" of a building or the development, apply only to that part of the building or development to be used for residential purposes.
4. If this certificate lists a central system as a commitment for a dwelling or building, and that system will also service any other dwelling or building within the development, then that system need only be installed once (even if it is separately listed as a commitment for that other dwelling or building).
5. If a star or other rating is specified in a commitment, this is a minimum rating.
6. All alternative water systems to be installed under these commitments (if any), must be installed in accordance with the requirements of all applicable regulatory authorities. NOTE: NSW Health does not recommend that stormwater, recycled water or private dam water be used to irrigate edible plants which are consumed raw, or that rainwater be used for human consumption in areas with potable water supply.

Legend

1. Commitments identified with a "✓" in the "Show on DA plans" column must be shown on the plans accompanying the development application for the proposed development (if a development application is to be lodged for the proposed development).
2. Commitments identified with a "✓" in the "Show on CC/CDC plans and specs" column must be shown in the plans and specifications accompanying the application for a construction certificate / complying development certificate for the proposed development.
3. Commitments identified with a "✓" in the "Certifier check" column must be certified by a certifying authority as having been fulfilled. (Note: a certifying authority must not issue an occupation certificate (either interim or final) for a building listed in this certificate, or for any part of such a building, unless it is satisfied that each of the commitments whose fulfilment it is required to monitor in relation to the building or part, has been fulfilled).

Assessor Certificate

Multiple Dwellings

Assessed and issued in accordance with the BASIX Thermal Comfort Protocol for the Simulation Method



Date:	19 June 2023		BSA File ref:	19333
Assessor				
Name:	Gavin Chambers	Company:	Building Sustainability Assessments	Assessor #: DMN/13/1491
Address:	7 William Street, HAMILTON NSW 2303			
Phone:	(02) 4962 3439		Email:	enquiries@buildingsustainability.net.au
Declaration of interest in the project design:		None		
Project				
Address:	75 - 77 Sheppard Street			
	CASINO NSW 2470		Climate Zone:	9
Assessment				
Software:	BERS Pro 4.4	Ceiling fans used in the modelling:	Living areas: Yes, Bedrooms: Yes	
Documentation				

All details, upon which this assessment has been based, are included in the project documentation that has been stamped and signed by the Assessor issuing this certificate, as identified below:

Drawings used for this assessment:

(Title, Ref.#, Revision, Issue date, etc)

Barry Rush & Associates Project No. BGZEG DA 19/06/23

Thermal Performance Specification (copy on page 2)

Attached to the drawings and is on page: Sheet A05



0008644670 **19 Jun 2023**

Assessor Gavin Chambers

Accreditation No. DMN/13/1491

Address
75 - 77 Sheppard Street ,
Casino , NSW , 2470



hstar.com.au

Scan QR code to see NatHERS Certificate

[illegible]



May 2023		BSA Reference: 19333	
Building Sustainability Assessments		Ph: (02) 4962 3439	
enquiries@buildingsustainability.net.au		www. buildingsustainability.net.au	
Important Note			
The following specification was used to achieve the thermal performance values indicated on the Assessor Certificate. If the proposed construction varies to those detailed below than the Assessor and NatHERS certificates will no longer be valid. Assessments assume that the BCA provisions for building sealing & ventilation are complied with at construction.			
In NSW both BASIX & the BCA variations must be complied with, in particular the following:			
- Thermal construction in accordance with Vol 1 Section J1.2 or Vol 2 Part 3.12.1.1			
- Thermal breaks for Class 1 dwellings in accordance with Part 3.12.1.2(c) & 3.12.1.4(d)			
- Floor insulation for Class 1 dwellings as per Part 3.12.1.5(a)(ii), (iii) & (e) or (c), (d) & (e)			
- Building sealing in accordance with Section J3 or Part 3.12.3.1 to 3.12.3.6.			
Thermal Performance Specifications (does not apply to garage)			
External Wall Construction		Added Insulation	
Brick Veneer & Lightweight		R2.0	
Internal Wall Construction		Added Insulation	
Plasterboard on studs		R2.0 to walls adjacent to roof space	
Cavity Brick (party walls)		None	
Ceiling Construction		Added Insulation	
Plasterboard		R3.5 to ceilings adjacent to roof space	
Roof Construction		Colour (Solar Absorptance)	Added Insulation
Metal		Basalt (SA 0.69)	Foil + R1.0 blanket
Floor Construction		Covering	Added Insulation
Concrete	As drawn (if not noted default values used)		None
Timber	As drawn (if not noted default values used)		None
Windows	Glass and frame type	U value	SHGC Range Area sq m
ALM-001-01 A	Aluminium Type A Single clear	6.70	0.51 - 0.63 As drawn
ALM-002-01 A	Aluminium Type B Single clear	6.70	0.63 - 0.77 As drawn
Type A windows are awning windows, bifolds, casements, tilt 'n 'turn' windows, entry doors, french doors			
Type B windows are double hung windows, sliding windows & doors, fixed windows, stacker doors, louvres			
Skylights	Glass and frame type	U	SHGC Area sq m Detail
Single glazed in aluminium frames		As drawn	
U and SHGC values are according to AFRC. Alternate products may be used if the U value is lower & the SHGC is within the range specified			
Shade elements		(eaves, verandahs, awnings etc)	
All shade elements modelled as drawn			
Ceiling Penetrations		(downlights, exhaust fans, flues etc)	
Modelled as drawn and/or to comply with the ventilation and sealing requirements of the BCA			
Ducting is modelled at 150mm. No insulation losses from downlighting have been modelled.			
Additional Notes			
1200mm diam. ceiling fans to all bedrooms + 1 to living rooms			

DA PLANS

GENERAL HOUSING DEVELOPMENT

75-77 SHEPPARD STREET,CASINO

LOTS 761 & 762 in DP 1155484



LOCATION DIAGRAM



PERSPECTIVE

DRAWING SCHEDULE

ARCHITECTURAL	REFERENCE No
COVER PAGE	A01 -
SITE ANALYSIS PLAN	A02 -
SITE PLAN	A03 -
GROUND FLOOR PLAN	A04 -
FIRST FLOOR PLAN	A05 -
ROOF PLAN	A06 -
ELEVATIONS	A07 -
SECTIONS	A08 -
FINISHES SCHEDULE	A09 -
BLOCK ANALYSIS PLAN	A10 -
SHADOW DIAGRAMS MID WINTER	A11 -
VIEWS FROM SUN DIAGRAM	A12 -
STREET PERSPECTIVE	A13 -
AREAS OF EXCAVATION & FILL	A14 -

CIVIL		
COVER SHEET, LEGEND & DRAWING SCHEDULE	SW000	P2
EROSION & SEDIMENT CONTROL PLAN	SW001	P2
GROUND FLOOR PLAN	SW101	P2
FIRST FLOOR PLAN	SW102	P2
ROOF PLAN	SW103	P2
DETAIL SHEET 1	SW201	P2
DETAIL SHEET 2	SW202	P2

LANDSCAPE		
LANDSCAPE PLAN	LA 1 OF 2	C
LANDSCAPE DETAILS & SPECIFICATION	LA 2 OF 2	C

SURVEY		
DETAIL SURVEY	S SHT 1 OF 1	-
BY: RPS AUSTRALIA EAST PTY LTD		

SURVEY REFERENCE 151687
DATE 01/05/2022

DEVELOPMENT DATA

Job Reference	BGZEG
Locality / Suburb	Casino
Street Address	75-77 Sheppard Sreet
Lot & DP	Lots 2761 and 762 in DP 1155484
Site Area	1354.9 m ² by title
Existing Lots	2
Proposed GFA	505.6 m ²
No. of Dwellings	4 x 2 Bed + 2 x 3 Bed = 6 Dwellings

	Control	Requirement	Proposed
HEIGHT	Richmond Valley Council LEP Housing SEPP LRHDG Rear 40% of Site	8.5m 9.0m 4.5m	6.3m to ceiling 7.8m to top of roof rear 40% of site < 4.5m
FSR	Richmond Valley Coast DCP Housing SEPP	0.5:1 (631.5m ²) 0.5:1	0.37:1 (505.6m ²) 0.37:1 (505.6m ²)
LOT SIZE & WIDTH	Richmond Valley Coast DCP	Site 1000 m ² Width 20m	Site 1354.9m ² Width 34m
SETBACKS	Richmond Valley Coast DCP multi - dwelling LRHDG LRHDG	Front Setback 6.0m Side Setback = H - 3m Rear Setback = 6m	6.0-8.5m to Building 3.0-5.2m to Building East (front) - 5.2m to building 3.2m to awning East (rear) - 3m West - 5m 4m to Building 2m to awning
PARKING	Housing SEPP	1 x (no. 2 Beds) = 4 1.5 x (no. 3 Beds) = 3	7 car spaces
BICYCLE PARKING	LRHDG	1 space per Dwelling = 6	Bicycles to be stored in unit POS
POS Private open space	LAHC Dwelling Requirements Richmond Valley Coast DCP multi - dwelling	1 bed Dwelling = 8m ² 2 bed Dwelling = 10m ² 3 bed Dwelling = 12m ² 1+2 bed Dwelling = 16m ² 3 bed Dwelling = 25m ²	All POS > 25m ² All POS > 25m ²
SOLAR ACCESS	Housing SEPP	70% for 3hrs in Mid-Winter = 4.2	5 = 83%

Site Area = 1354.9 m ² by title						SOLAR ACCESS	
DWELLINGS	Number	Type*	Beds	Area* (m ²)	POS*	LIVING	POS
	1	T/H	2	80	26	6 hr	6 hr
	2	T/H	2	80	27	6 hr	6 hr
	3	T/H	3	99	47	6 hr	6 hr
	4	T/H	3	99	30	2 hr	3 hr
	5	VILLA	2	74.5	60	4 hr	3 hr
	6	VILLA	2	73	31	3 hr	2 hr



LOCKED BAG 5022
PARRAMATTA NSW 2124
PHONE No 1800 738 718
<https://www.dple.nsw.gov.au/land-and-housing-corporation>



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REV	DATE	NOTATION/AMENDMENT
C		
B		
A		

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ARCHITECT BARRY RUSH & ASSOCIATES PTY LTD PH (02) 9555 9028	STRUCTURAL CONSULTANT
PROJECT MANAGER LAND & HOUSING CORPORATION PH (02) 8753 9000	CIVIL CONSULTANT ERBAS AND ASSOCIATES PTY LTD PH (02) 9437 1022
LANDSCAPE CONSULTANT GREENLAND DESIGN PTY LTD PH (0403) 164 198	HYDRAULIC & ELECTRICAL CONSULTANT ERBAS AND ASSOCIATES PTY LTD PH (02) 9437 1022

BUSINESS PARTNER:

PROJECT:
HOUSING DEVELOPMENT
75-77 SHEPPARD STREET
CASINO, NSW
LOTS 761 & 762 in DP 1155484

TITLE:
COVER PAGE

FILE:
DA01 - 09 Sheppard St Casino.dwg

DATE:
03/05/23
SCALE:
NTS
TYPE:
A

PROJ:
-
DRAWN:
MB
SHEET:
A01

STATUS: DA
PROJECT No:
BGZEG
CHECKED:
BR
REV:
-

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SCALE FOR PRINTING
PURPOSE ONLY

SHEPPARD STREET

LEGEND

- B BROOM CUPBOARD
BSN BASIN
BCH BENCH
BOE BRICK ON EDGE
BR BROOM CUPBOARD
CL CLOTHES LINE
CMR COLORBOND METAL ROOFING
CPB CUPBOARD
CWM COLD WATER METERS
DP DOWNPIPE
F REFRIGERATOR LOCATION
F1 FENCE 1000mm HIGH METAL PICKET
F2 FENCE 1800mm HIGH LAPPED & CAPPED
F3 SLATED METAL FENCE 1500 HIGH UNLESS NOTED OTHERWISE
FB1 FACE BRICK WORK TYPE 1
FB2 FACE BRICK WORK TYPE 2
FCL FINISHED CEILING LEVEL
FFL FINISHED FLOOR LEVEL
FG FIXED GLASS
G GATE
HR HANDRAIL
HWU HOT WATER UNIT
LB LETTERBOXES - RECESSED INTO WALL
L LINEN CUPBOARD
LV LOUVER WINDOW
P PANTRY
PCC PREFORMED COLORBOND CAPPING
PWT1 PREFINISHED FC COMPOSITE PANEL
PWT2 PREFINISHED MANUFACTURED TIMBER PANEL
POS PRIVATE OPEN SPACE
PP POWER POLE
PS PRIVACY SCREEN 1500mm HIGH METAL SLATS
RL RELATIVE LEVEL
R WARDROBE
RWT RAINWATER TANK
SWP STORMWATER PIT
T LAUNDRY TUB
TOW TOP OF WALL
V VANITY
WC TOILET SUITE
WFP RWT FILTRATION AND PUMP
WM WASHING MACHINE
WO WALL OVEN

BUS STOP & SIGN TO BE
RELOCATED TO BETWEEN HOUSES
71 & 73. SIZE, CONSTRUCTION AND
FINAL LOCATION TO BE ADVISED BY
COUNCIL

EXISTING BUS
STOP & SIGN TO
BE RELOCATED

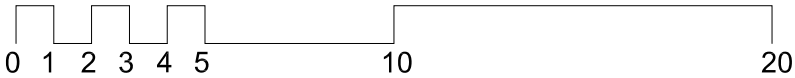
ENTRY &
LETTERBOXES

SINGLE STOREY
BRICK RESIDENCE
TILE ROOF
No. 73

SITE AREA
1354.0 m²

SITE PLAN

SCALE



1:100 @ A1
1:200 @ A3

- 1 STOREY 2 BED VILLA
2 STOREY 2 BED TOWNHOUSE
2 STOREY 3 BED TOWNHOUSE
COMMON OPEN SPACE
PRIVATE OPEN SPACE



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SITE PLAN

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PLOTTED:
3/05/2023 10:09 AM

STATUS: DA

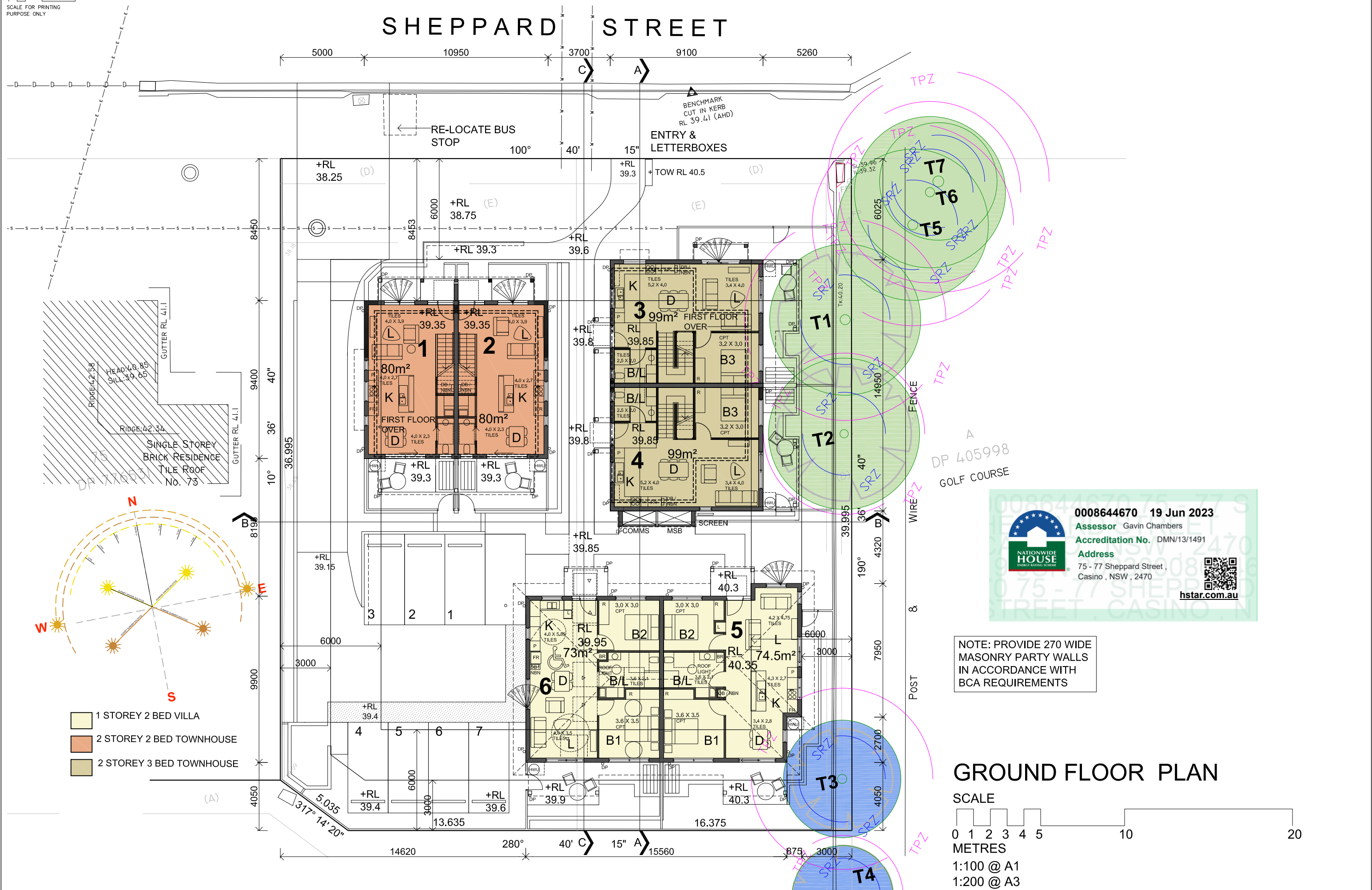
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1:200 @ A3

DRAWN: MB

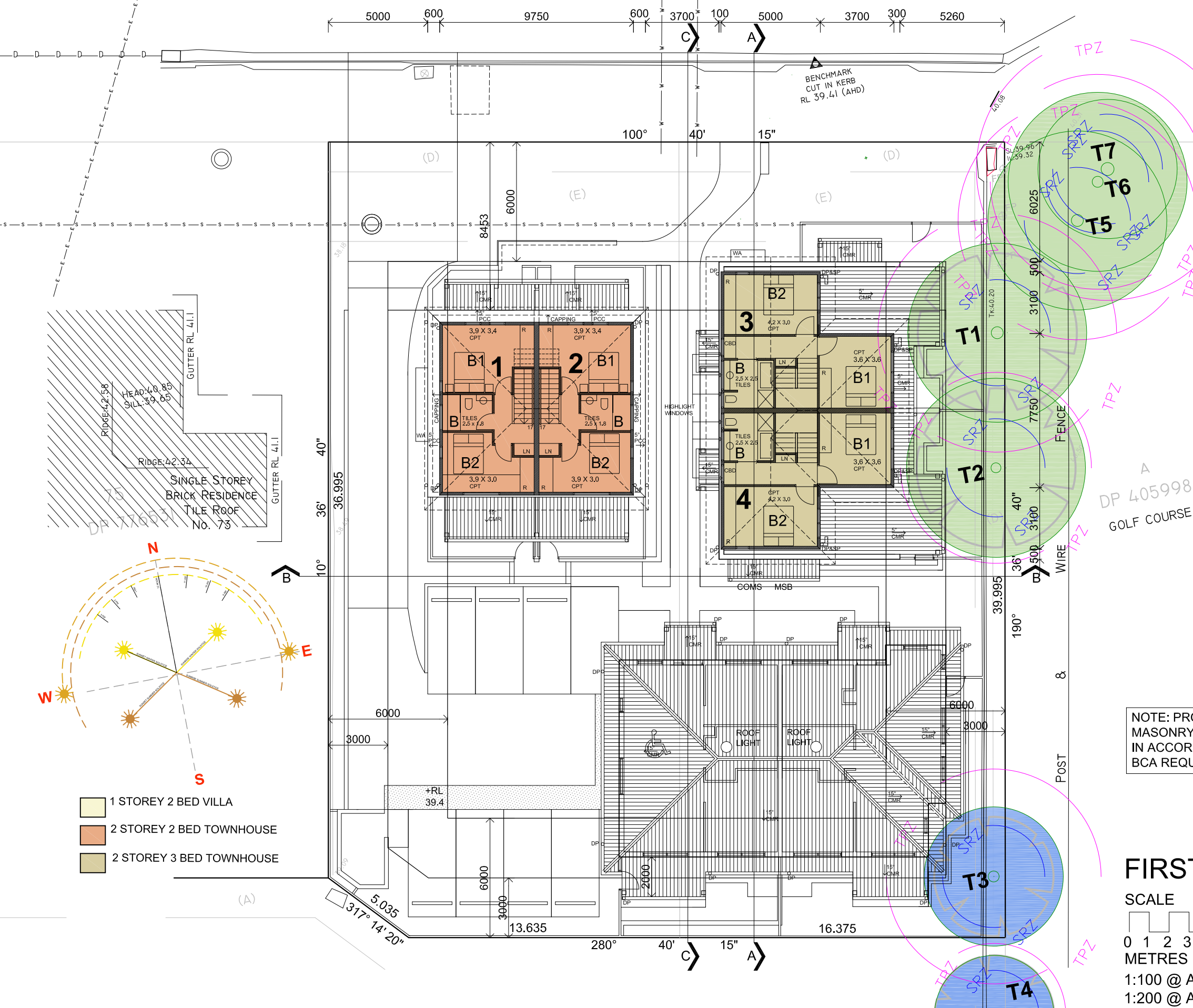
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PROJECT No: BGZEG
NOMINATED ARCHITECT: BR
TYPE: A
SHEET: A03
REV: -



0 5 10 20 40MM
SCALE FOR PRINTING
PURPOSE ONLY

SHEPPARD STREET



May 2023			BSA Reference: 19333		
Building Sustainability Assessments			Ph: (02) 4962 3439		
enquiries@buildingsustainability.net.au			www. buildingsustainability.net.au		
Important Note					
The following specification was used to achieve the thermal performance values indicated on the Assessor Certificate. If the proposed construction varies to those detailed below than the Assessor and NatHERS certificates will no longer be valid. Assessments assume that the BCA provisions for building sealing & ventilation are complied with at construction.					
In NSW both BASIX & the BCA variations must be complied with, in particular the following:					
- Thermal construction in accordance with Vol 1 Section J1.2 or Vol 2 Part 3.12.1.1					
- Thermal breaks for Class 1 dwellings in accordance with Part 3.12.1.2(c) & 3.12.1.4(d)					
- Floor insulation for Class 1 dwellings as per Part 3.12.1.5(a)(ii), (iii) & (e) or (c), (d) & (e)					
- Building sealing in accordance with Section J3 or Part 3.12.3.1 to 3.12.3.6.					
Thermal Performance Specifications (does not apply to garage)					
External Wall Construction			Added Insulation		
Brick Veneer & Lightweight			R2.0		
Internal Wall Construction			Added Insulation		
Plasterboard on studs			R2.0 to walls adjacent to roof space		
Cavity Brick (party walls)			None		
Ceiling Construction			Added Insulation		
Plasterboard			R3.5 to ceilings adjacent to roof space		
Roof Construction			Added Insulation		
Colour (Solar Absorptance)			Foil + R1.0 blanket		
Metal			Basalt (SA 0.69)		
Floor Construction			Added Insulation		
Covering					
Concrete			As drawn (if not noted default values used)		
Timber			As drawn (if not noted default values used)		
None			None		
Windows			Glass and frame type		
ALM-001-01 A			Aluminium Type A Single clear		
6.70			0.51 - 0.63		
As drawn			As drawn		
ALM-002-01 A			Aluminium Type B Single clear		
6.70			0.63 - 0.77		
As drawn			As drawn		
Type A windows are awning windows, bifolds, casements, tilt 'n' turn windows, entry doors, french doors					
Type B windows are double hung windows, sliding windows & doors, fixed windows, stacker doors, louvres					
Skylights			Glass and frame type		
Single glazed in aluminium frames			U SHGC Area sq m		
As drawn			Detail		
U and SHGC values are according to AFRC. Alternate products may be used if the U value is lower & the SHGC is within the range specified					
Shade elements			(eaves, verandahs, awnings etc)		
All shade elements modelled as drawn					
Ceiling Penetrations			(downlights, exhaust fans, flues etc)		
Modelled as drawn and/or to comply with the ventilation and sealing requirements of the BCA					
Ducting is modelled at 150mm. No insulation losses from downlighting have been modelled.					
Additional Notes					
1200mm diam. ceiling fans to all bedrooms + 1 to living rooms					



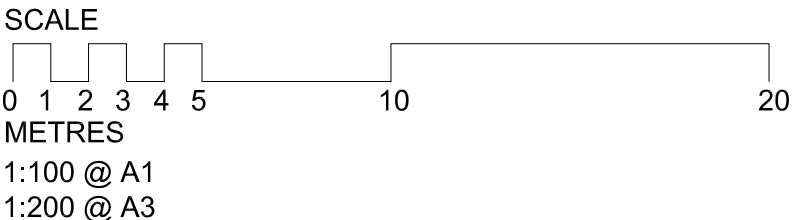
0008644670 19 Jun 2023
Assessor Gavin Chambers
Accreditation No. DMN/13/1491
Address
75 - 77 Sheppard Street ,
Casino , NSW , 2470

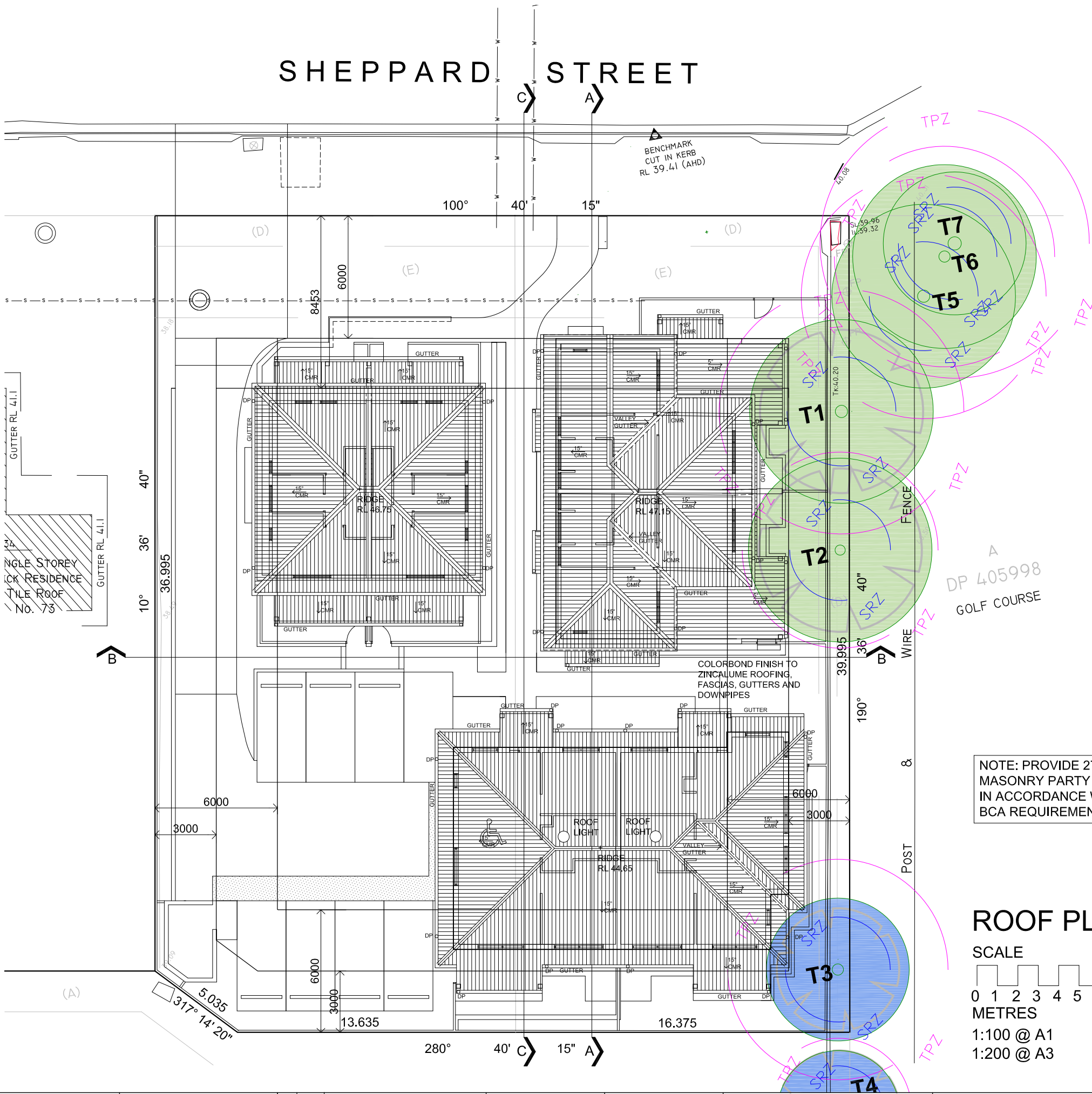


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NOTE: PROVIDE 270 WIDE
MASONRY PARTY WALLS
IN ACCORDANCE WITH
BCA REQUIREMENTS

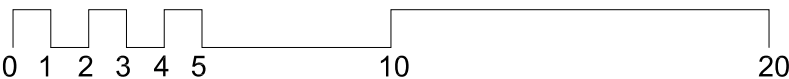
FIRST FLOOR PLAN





ROOF PLAN

SCALE

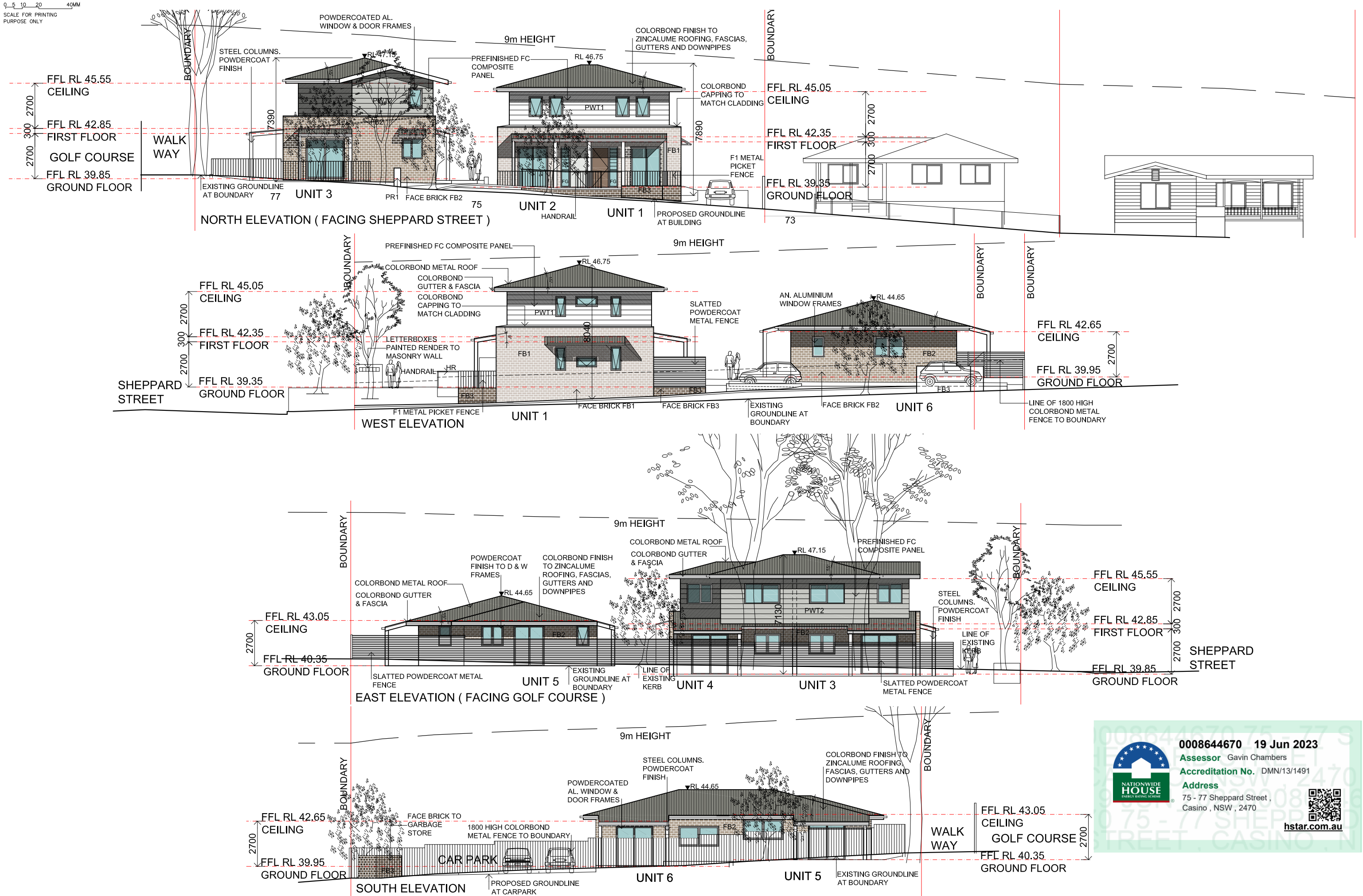


METRES

1:100 @ A1

1:200 @ A3

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NATIONWIDE HOUSE
ENERGY RATING SCHEME

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ELEVATIONS

FILE:
DA01 - 09 Sheppard St Casino.dwg

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STAGE: MB

TYPE: A

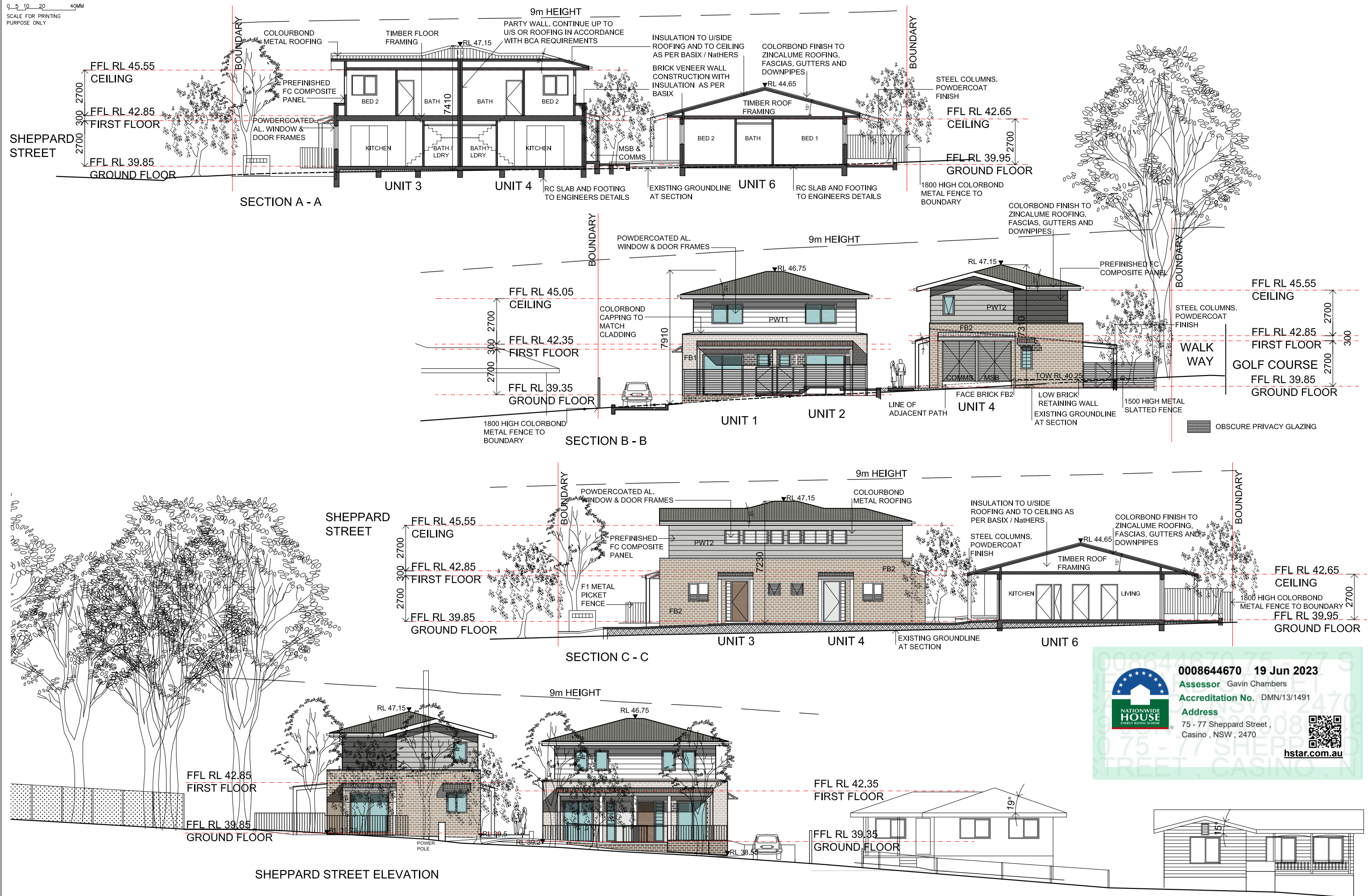
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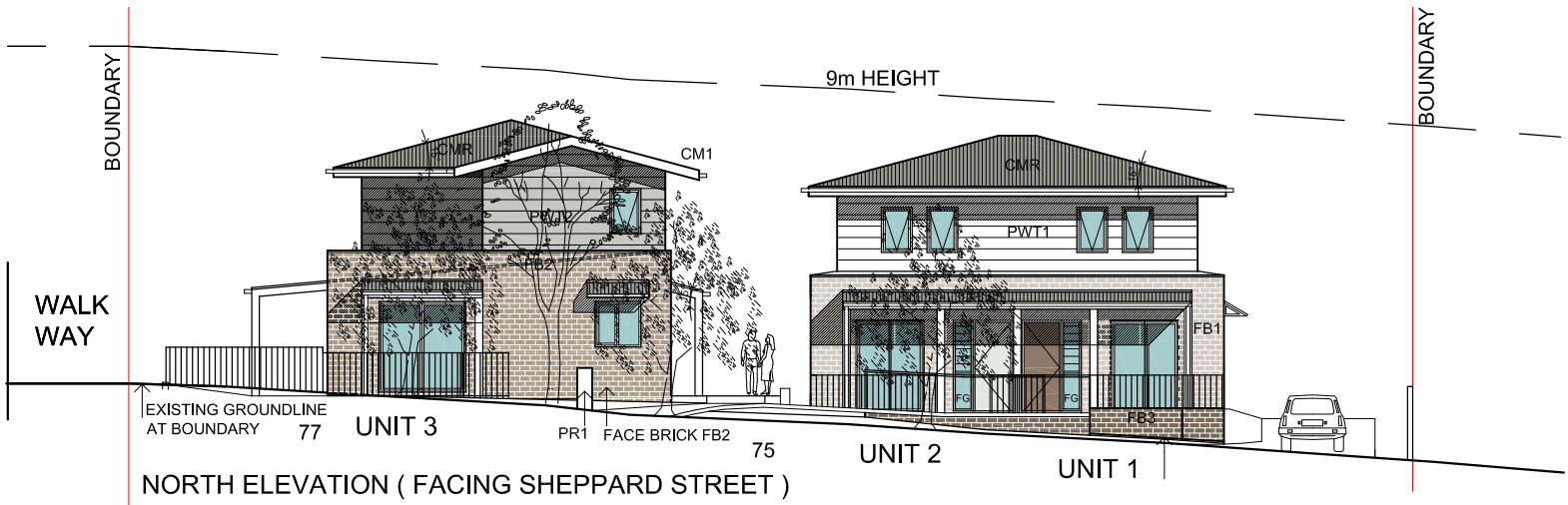
BGZEG

CHECKED: BR

DESIGNED: BR

REV: -





FINISHES SCHEDULE

CODE	LOCATION		DESCRIPTION	COLOUR
CMR	ROOFING/		CORRUGATED COLORBOND METAL ROOFING	BASALT
CM1	FASCIA, GUTTER, AWNING, COLUMNS & BEAMS		METAL COLORBOND & GALV STEEL	WINDSPRAY
FB1	WALLS UNITS 1 & 2		FACE BRICK light warm	PGH BRICK VELOUR "CRUSHED GREY"
FB2	WALLS UNITS 3, 4, 5 & 6		FACE BRICK light off white	PGH BRICK VELOUR "MINERAL"
FB3	SITE WALLS & BIN STORAGE		FACE BRICK medium warm	PGH BRICK OPALINE "TOURMALINE"
PR1	LETTERBOX WALL		PAINTED RENDER	DULUX LEXICON HALF
FC1	EAVES LINING & SOFFIT		PAINTED FIBER CEMENT SHEETING	DULUX LEXICON HALF

CODE	LOCATION		DESCRIPTION	COLOUR
PWT1	FIRST FLOOR WALLS UNITS 1&2		RECONSTITUTED HARDWOOD PLANKS -PRE SEALED. PAINT FINISH	WATTYL "WINTER SKY"
PWT2	FIRST FLOOR WALLS UNITS 3&4		RECONSTITUTED HARDWOOD PLANKS -PRE SEALED. PAINT FINISH	WATTYL "SEQUOIA DUSK"
W & D	WINDOWS & GLASS DOORS FRAMING		POWEDERCOATED ALUMNIUM	WHITE
PS	PRIVACY SCREEN		ALUMINIUM HORIZONTAL SLATTED BARS	SURFMIST
F1	METAL FENCES TO FRONT POS		POWDERCOATED METAL	DULUX WINDSPRAY
F2	FENCE		1800 HIGH COLORBOND METAL FENCE	DULUX WINDSPRAY
F3	SLATTED METAL FENCES TO REAR POS		1500 HIGH (UNLESS NOTED OTHERWISE) SLATTED POWDERCOATED METAL FENCE	DULUX WINDSPRAY
D1	FRONT DOOR UNITS 1, 3, 5		PAINT FINISH TO ENTRY DOOR	DULUX "TERRAIN"
D2	FRONT DOOR UNITS 2, 4, 6		PAINT FINISH TO ENTRY DOOR	DULUX "LEXICON HALF"



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EXTERNAL COLOUR SCHEDULE

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TYPE:	A	SHEET:	A09
REV:	-		