

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

Single Dwelling

Certificate number: 1319794S

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

This proposal has been the subject of an Alternative Assessment by the Department. The schedule below contains additional commitments resulting from this assessment, shown at the end of the Certificate.

Secretary

Date of issue: Tuesday, 04 October 2022

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





Project summary				
Project name	22083 - Townsend			
Street address	1 MacDonnell Stree	t Collingullie 2650		
Local Government Area	Wagga Wagga City	Council		
Plan type and plan number	deposited 758265			
Lot no.	1			
Section no.	-			
Project type	separate dwelling house			
No. of bedrooms	2	2		
Project score				
Water	2 0	Target 20		
Thermal Comfort	✓ Pass	Target Pass		
Energy	✓ 48	Target 40		

Certificate Prepared by

Name / Company Name: BCM DESIGN CENTRE PTY. LTD.

ABN (if applicable): 84 912 514 779

BASIX Planning, Industry & Environment www.basix.nsw.gov.au Version: 3.0 / DARWINIA_3_20_0 Certificate No.: 1319794S Tuesday, 04 October 2022 SF 21885556 page 1/8

Description of project

Project address	
Project name	22083 - Townsend
Street address	1 MacDonnell Street Collingullie 2650
Local Government Area	Wagga Wagga City Council
Plan type and plan number	Deposited Plan 758265
Lot no.	1
Section no.	-
Project type	
Project type	separate dwelling house
No. of bedrooms	2
Site details	
Site area (m²)	2023
Roof area (m²)	153
Conditioned floor area (m2)	104.0
Unconditioned floor area (m2)	8.0
Total area of garden and lawn (m2)	150

Assessor details and thermal loads					
Assessor number	BDAV/15/1694				
Certificate number	0008079865				
Climate zone	20				
Area adjusted cooling load (MJ/m².year)	45				
Area adjusted heating load (MJ/m².year)	378				
Ceiling fan in at least one bedroom	No				
Ceiling fan in at least one living room or other conditioned area	No				
Project score					
Water	✓ 20 Target 20				
Thermal Comfort	✓ Pass Target Pass				
Energy	✓ 48 Target 40				

BASIX Planning, Industry & Environment www.basix.nsw.gov.au Version: 3.0 / DARWINIA_3_20_0 Certificate No.: 1319794S Tuesday, 04 October 2022 SF 21885556 page 2/8

Schedule of BASIX commitments

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

Water Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Landscape			
The applicant must plant indigenous or low water use species of vegetation throughout 150 square metres of the site.	V	V	
Fixtures			
The applicant must install showerheads with a minimum rating of 4 star (> 6 but <= 7.5 L/min plus spray force and/or coverage tests) in all showers in the development.		~	~
The applicant must install a toilet flushing system with a minimum rating of 4 star in each toilet in the development.		~	V
The applicant must install taps with a minimum rating of 4 star in the kitchen in the development.		~	
The applicant must install basin taps with a minimum rating of 4 star in each bathroom in the development.		~	

BASIX Planning, Industry & Environment www.basix.nsw.gov.au Version: 3.0 / DARWINIA_3_20_0 Certificate No.: 1319794S Tuesday, 04 October 2022 SF 21885556 page 3/8

Thermal Comfort Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Simulation Method			
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 an occupation certificate for the proposed development.			
The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol.			
The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX certificate, including the Cooling and Heating loads shown on the front page of this certificate.			
The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Assessor Certificate 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. 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.	•	~	~
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.		~	~
The applicant must construct the floors and walls of the dwelling in accordance with the specifications listed in the table below.		~	V

Floor and wall construction	Area
floor - concrete slab on ground	95.0 square metres
floor - suspended floor/enclosed subfloor	16.0 square metres

BASIX Planning, Industry & Environment www.basix.nsw.gov.au Version: 3.0 / DARWINIA_3_20_0 Certificate No.: 1319794S Tuesday, 04 October 2022 SF 21885556 page 4/8

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Hot water			
The applicant must install the following hot water system in the development, or a system with a higher energy rating: gas instantaneous with a performance of 5 stars.	~	~	~
Cooling system			
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 living area: 1-phase airconditioning; Energy rating: 3.5 star (cold zone)		~	-
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 bedroom: 1-phase airconditioning; Energy rating: 3.5 star (cold zone)		~	•
The cooling system must provide for day/night zoning between living areas and bedrooms.		V	V
Heating system			
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 living area: 1-phase airconditioning; Energy rating: 3.5 star (cold zone)		~	-
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 bedroom: 1-phase airconditioning; Energy rating: 3.5 star (cold zone)		~	~
The heating system must provide for day/night zoning between living areas and bedrooms.		~	~
Ventilation			
The applicant must install the following exhaust systems in the development:			
At least 1 Bathroom: individual fan, ducted to façade or roof; Operation control: manual switch on/off		✓	V
Kitchen: individual fan, ducted to façade or roof; Operation control: manual switch on/off		✓	•
Laundry: individual fan, ducted to façade or roof; Operation control: manual switch on/off		V	V
Artificial lighting			
The applicant must ensure that the "primary type of artificial lighting" is fluorescent or light emitting diode (LED) lighting in each of the following rooms, and where the word "dedicated" appears, the fittings for those lights must only be capable of accepting fluorescent or light emitting diode (LED) lamps:			
at least 2 of the bedrooms / study; dedicated			

BASIX Planning, Industry & Environment www.basix.nsw.gov.au Version: 3.0 / DARWINIA_3_20_0 SF 21885556 page 5/8 Certificate No.: 1319794S

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
at least 2 of the living / dining rooms; dedicated			7
• the kitchen; dedicated			
• all bathrooms/toilets;		Ĵ	Ŭ
• the laundry;		j	Ú
all hallways; dedicated		V	
Natural lighting			
The applicant must install a window and/or skylight in the kitchen of the dwelling for natural lighting.		~	-
The applicant must install a window and/or skylight in 2 bathroom(s)/toilet(s) in the development for natural lighting.		~	V
Alternative energy			
The applicant must install a photovoltaic system with the capacity to generate at least 1 peak kilowatts of electricity as part of the development. The applicant must connect this system to the development's electrical system.	~	~	V
Other			
The applicant must install a gas cooktop & electric oven in the kitchen of the dwelling.		~	
The applicant must construct each refrigerator space in the development so that it is "well ventilated", as defined in the BASIX definitions.		~	
The applicant must install a fixed outdoor clothes drying line as part of the development.			

BASIX Planning, Industry & Environment www.basix.nsw.gov.au Version: 3.0 / DARWINIA_3_20_0 Certificate No.: 1319794S Tuesday, 04 October 2022 SF 21885556 page 6/8

Alternative Assessment

	Show on CC/CDC plans & specs	Certifier check
DA plans	pians & specs	cneck

Alternative Assessment

Thermal Comfort commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Change of use, converting a church into a single dwelling house, plus a small addition. The total floor area is 112m2. Heritage restrictions prevent insulating the external walls. This restriction means the applicant has been unable to meet the heating and cooling load standards for the building. The applicant has added 1kW solar PV.			
Reason for approval (include predicted savings / score): The heating load is 377.7 MJ/m2/year compared to the standard for that location (climate zone 20) of 128.0 MJ/m2/year. The cooling load is 45.1 MJ/m2/year compared to the standard for that location (climate zone 20) of 25.1 MJ/m2/year. The applicant provided a signed declaration from the consent authority confirming the heritage restrictions. Within the limits of the heritage restrictions, we are satisfied that the applicant has taken all steps practicable to improve the thermal performance of the dwelling e.g. R8.0 ceiling insulation, double glazed windows (U3.0/4.6), waffle pod slab for existing floor, R4.0 insulation under new suspended timber floor. See NatHERS certificate 0008079865.	~	~	
The development is subject to a heritage restriction, which prevents the insulation of the external walls. It has been granted a concession regarding the thermal comfort heating load requirement.			
The development is to be constructed with the minimum specifications as per NatHERS certificate 0008079865.			

Alternative Assessment

Energy commitments		Show on CC/CDC plans & specs	Certifier check	
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BASIX Planning, Industry & Environment www.basix.nsw.gov.au Version: 3.0 / DARWINIA_3_20_0 Certificate No.: 1319794S Tuesday, 04 October 2022 SF 21885556 page 7/8

Legend

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

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

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

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

BASIX Planning, Industry & Environment www.basix.nsw.gov.au Version: 3.0 / DARWINIA_3_20_0 Certificate No.: 1319794S Tuesday, 04 October 2022 SF 21885556 page 8/8