

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

Single Dwelling

Certificate number: 536956S

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 29/06/2009 published by Planning & Infrastructure. This document is available at www.basix.nsw.gov.au

Director-General

Date of issue: Wednesday, 04 June 2014

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



| Project summary | | | |
|---------------------------|-------------------------|-----------------------------------|--|
| Project name | LOT 2264 | | |
| Street address | TENGALA Drive JO | TENGALA Drive JORDAN SPRINGS 2747 | |
| Local Government Area | Penrith City Council | Penrith City Council | |
| Plan type and plan number | deposited 1168993 | deposited 1168993 | |
| Lot no. | 2264 | | |
| Section no. | - | | |
| Project type | separate dwelling house | | |
| No. of bedrooms | 4 | | |
| Project score | | | |
| Water | ✓ 41 | Target 40 | |
| Thermal Comfort | ✓ Pass | Target Pass | |
| Energy | ✓ 44 | Target 40 | |

Certificate Prepared by

Name / Company Name: GKKL Developments P/L

ABN (if applicable): 15094041648

BASIX Planning & Infrastructure www.basix.nsw.gov.au Version: 6.29 / CASUARINA_2_24_8_1 Certificate No.: 536956S Wednesday, 04 June 2014 page 1/7

Description of project

| Project address | |
|------------------------------------|--|
| Project name | LOT 2264 |
| Street address | N/A TENGALA Drive JORDAN SPRINGS 2747 |
| Local Government Area | Penrith City Council |
| Plan type and plan number | Deposited Plan 1168993 |
| Lot no. | 2264 |
| Section no. | = |
| Project type | |
| Project type | separate dwelling house |
| No. of bedrooms | 4 |
| Site details | |
| Site area (m²) | 540 |
| Roof area (m²) | 285 |
| Conditioned floor area (m2) | 183 |
| Unconditioned floor area (m2) | 12 |
| Total area of garden and lawn (m2) | 258 |

| Assessor details and thermal lo | ads |
|---|--------------------|
| Assessor number | n/a |
| Certificate number | n/a |
| Climate zone | n/a |
| Area adjusted cooling load (MJ/m².year) | n/a |
| Area adjusted heating load (MJ/m².year) | n/a |
| Other | |
| none | n/a |
| Project score | |
| Water | ✓ 41 Target 40 |
| Thermal Comfort | ✓ Pass Target Pass |
| Energy | ✓ 44 Target 40 |

Planning & Infrastructure Version: 6.29 / CASUARINA_2_24_8_1 Wednesday, 04 June 2014 www.basix.nsw.gov.au Certificate No.: 536956S page 2/7

Document Set ID: 5967384 Version: 1, Version Date: 27/06/2014

BASIX

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 10 square metres of the site. | ~ | ~ | |
| Fixtures | | | |
| The applicant must install showerheads with a minimum rating of 3 star (> 6 but <= 7.5 L/min) 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. | | ~ | ~ |
| The applicant must install taps with a minimum rating of 5 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. | | ~ | |
| Alternative water | | | |
| Rainwater tank | | | |
| The applicant must install a rainwater tank of at least 3000 litres on the site. This rainwater tank must meet, and be installed in accordance with, the requirements of all applicable regulatory authorities. | ~ | ~ | V |
| The applicant must configure the rainwater tank to collect rain runoff from at least 285 square metres of the roof area of the development (excluding the area of the roof which drains to any stormwater tank or private dam). | | ~ | ~ |
| The applicant must connect the rainwater tank to: | | | |
| all toilets in the development | | ~ | ~ |
| at least one outdoor tap in the development (Note: NSW Health does not recommend that rainwater be used for human consumption in areas with potable water supply.) | | ~ | - |

BASIX Planning & Infrastructure www.basix.nsw.gov.au Version: 6.29 / CASUARINA_2_24_8_1 Certificate No.: 536956S Wednesday, 04 June 2014 page 3/7

| Thermal Comfort Commitments | Show on DA plans | Show on CC/CDC plans & specs | Certifier check |
|---|------------------|------------------------------|-----------------|
| Criteria | | | |
| The applicant must construct the dwelling in accordance with the following specifications: | | | |
| the dwelling is a single storey dwelling; | ~ | ~ | ~ |
| • the dwelling has a slab on ground floor or, if the floor is suspended, the floor has insulation with an R-value of at least R1.5; | ~ | V | ~ |
| walls are brick veneer, weatherboard or fibre cement; | | ~ | ~ |
| walls have insulation with an R-value of at least R2.0; | | ~ | V |
| all windows and glazed doors have eaves that project at least 600 millimetres (including gutter width); | ~ | V | - |
| eaves are no more than 500 millimetres above window or glazed door heads; | ~ | | - |
| the total window and glazed door area is no more than 42.8 square metres; | ~ | ~ | V |
| ceilings have insulation with an R-value of at least R3.0; | | ~ | V |
| the roof has sarking or two wind-driven ventilators with eave and/or roof vents. | | _ | |

Note Insulation specified in this Certificate must be installed in accordance with Part 3.12.1.1 of the Building Code of Australia.

BASIX Planning & Infrastructure www.basix.nsw.gov.au Version: 6.29 / CASUARINA_2_24_8_1 Certificate No.: 536956S Wednesday, 04 June 2014 page 4/7

| 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 5.5 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: EER < 2.5 | | ~ | ~ |
| 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: EER < 2.5 | | ~ | ~ |
| The cooling system must provide for day/night zoning between living areas and bedrooms. | | ~ | ~ |
| 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: EER < 2.5 | | ~ | ~ |
| 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: EER < 2.5 | | ~ | V |
| 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, not ducted; Operation control: manual switch on/off | | ~ | V |
| Kitchen: individual fan, ducted to façade or roof; Operation control: manual switch on/off | | ~ | ~ |
| Laundry: natural ventilation only, or no laundry; Operation control: n/a | | ~ | ~ |
| 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 5 of the bedrooms / study; | | | |

BASIX Planning & Infrastructure www.basix.nsw.gov.au Version: 6.29 / CASUARINA_2_24_8_1 Certificate No.: 536956S Wednesday, 04 June 2014 page 5/7

| Energy Commitments | Show on DA plans | Show on CC/CDC plans & specs | Certifier check |
|---|------------------|------------------------------|-----------------|
| at least 2 of the living / dining rooms; | | ~ | ¥ |
| • the kitchen; | | | |
| • the laundry; | | ~ | |
| • all hallways; | | ~ | ~ |
| 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 3 bathroom(s)/toilet(s) in the development for natural lighting. | ~ | ~ | ~ |
| Other | | | |
| The applicant must install a gas cooktop & electric oven in the kitchen of the dwelling. | | ~ | |
| The applicant must 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. | | J | |

BASIX Planning & Infrastructure www.basix.nsw.gov.au Version: 6.29 / CASUARINA_2_24_8_1 Certificate No.: 536956S Wednesday, 04 June 2014 page 6/7

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 & Infrastructure www.basix.nsw.gov.au Version: 6.29 / CASUARINA_2_24_8_1 Certificate No.: 536956S Wednesday, 04 June 2014 page 7/7