

ECOMODE Design ABN: 79 845 824 261

131a Gregory Road

Helensburgh NSW 2719

M: 0410 605 614 E: zoltan@ecomode.com.au

11<sup>th</sup> January 2019

# **BASIX Summary for 34 Beatty St, Balgowlah Heights**

#### **BASIX REQUIREMENTS**

#### **WELS Water Rating**

- 3star rated (>7.5 but <= 9 L/min) showerheads to all new showers
- 3star rated toilets
- 3star rated taps

#### **POOLS**

- Pool capacity to be no greater than 35kL
- Timer to pool pump
- Provide pool cover
- No heating to pool system

#### **INSULATION**

- R1.13 insulation to all new brick veneer external walls
- R1.3 insulation to all new clad external walls
- R2.5 insulation to ceiling
- Foil to underside of new roofing

#### **EXTERNAL COLOURS**

• Roof colour must be medium(0.475<SA<0.70)

#### **GLAZED WINDOWS & DOORS**

- Improved aluminium with clear glazing to windows and doors W09, W10, W11, W20, W21, W22, D06, D07, D08, D09, D10;
  - o U=6.44 & SHGC=0.75
- Improved aluminium with low-e glazing to windows and doors W08, D01, D02, D04;
  - o U=4.48 & SHGC=0.46
- Aluminium framed with double glazing (clear/air fill/clear) to window W23;
  - o U=4.21 & SHGC=0.66

#### **HOT WATER SYSTEM**

Solar gas boosted

### **FLUORESCENT OR LED LIGHTING**

• The applicant must ensure a minimum of 40% of new or altered light fixtures are fitted with fluorescent, compact fluorescent, or light-emitting-diode (LED) lamps.

Yours sincerely,

Zoltan Lipovski

**Building Designer & Sustainability Assessor** 

**ECOMODE** design

# **BASIX** Certificate

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

# **Alterations and Additions**

Certificate number: A336749

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 Alterations and Additions Definitions" dated 06/10/2017 published by the Department. This document is available at www.basix.nsw.gov.au

#### Secretary

Date of issue: Friday, 11, January 2019

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



## **Project address** Project name 551B - 34 Beatty St, Balgowlah Heights 34 Beatty Street Balgowlah Heights 2093 Street address Northern Beaches Council Local Government Area Deposited Plan 350345 Plan type and number Lot number 21A Section number 0 **Project type** Dwelling type Separate dwelling house Type of alteration and My renovation work is valued at \$50,000 or more, addition and includes a pool (and/or spa).

Certificate Prepared by (please complete before submitting to Council or PCA)

Name / Company Name: ECOMODE Design

ABN (if applicable): 79845824261

escripti

BASIX Certificate number: A336749 page 2 / 8

| Pool and Spa  | Show on<br>DA Plans | Show on<br>CC/CDC<br>Plans &<br>specs | Certifier<br>Check |
|---|---------------------|---------------------------------------|--------------------|
| Outdoor swimming pool   |                     |                                       |                    |
| The swimming pool must be outdoors.   | <b>✓</b>            | <b>✓</b>                              | <b>✓</b>           |
| The swimming pool must not have a capacity greater than 35 kilolitres.  | <b>✓</b>            | <b>✓</b>                              | <b>✓</b>           |
| The swimming pool must be shaded.   | <b>✓</b>            | <b>✓</b>                              |                    |
| The applicant must install a pool pump timer for the swimming pool.   |                     | <b>✓</b>                              | <b>✓</b>           |
| The applicant must not incorporate any heating system for the swimming pool that is part of this development. |                     | <b>✓</b>                              | <b>✓</b>           |

BASIX Certificate number: A336749 page 3 / 8

| Fixtures and systems   | Show on<br>DA Plans | Show on<br>CC/CDC<br>Plans &<br>specs | Certifier<br>Check |
|--|---------------------|---------------------------------------|--------------------|
| Hot water  |                     |                                       |                    |
| The applicant must install the following hot water system in the development: solar (gas-boosted) system that is eligible to create Renewable Energy Certificates under the (Commonwealth) Renewable Energy (Electricity) Regulations 2001 (incorporating Amendment Regulations 2005 (No. 2)). | <b>~</b>            | <b>✓</b>                              | <b>~</b>           |
| Lighting   |                     |                                       |                    |
| The applicant must ensure a minimum of 40% of new or altered light fixtures are fitted with fluorescent, compact fluorescent, or light-emitting-diode (LED) lamps.   |                     | ~                                     | <b>~</b>           |
| Fixtures   |                     | 1                                     |                    |
| The applicant must ensure new or altered showerheads have a flow rate no greater than 9 litres per minute or a 3 star water rating.  |                     |                                       | <b>✓</b>           |
| The applicant must ensure new or altered toilets have a flow rate no greater than 4 litres per average flush or a minimum 3 star water rating.   |                     | ✓                                     | ✓                  |
| The applicant must ensure new or altered taps have a flow rate no greater than 9 litres per minute or minimum 3 star water rating.   |                     | ✓                                     |                    |

BASIX Certificate number: A336749 page 4 / 8

| Construction   |  |   | Show on<br>DA Plans | Show on<br>CC/CDC<br>Plans &<br>specs | Certifier<br>Check |
|--|--|---|---------------------|---------------------------------------|--------------------|
| Insulation requirements  |  |   |                     |                                       |                    |
| The applicant must construct the new or altered the table below, except that a) additional insulat is not required for parts of altered construction v | <b>✓</b>                                 | <b>✓</b>                                | <b>&gt;</b>         |                                       |                    |
| Construction   | Additional insulation required (R-value) | Other specifications                    |                     |                                       |                    |
| concrete slab on ground floor.   | nil                                      |   |                     |                                       |                    |
| external wall: brick veneer  | R1.16 (or R1.70 including construction)  |   |                     |                                       |                    |
| external wall: framed (weatherboard, fibro, metal clad)  | R1.30 (or R1.70 including construction)  |   |                     |                                       |                    |
| flat ceiling, pitched roof   | ceiling: R2.50 (up), roof: foil/sarking  | medium (solar absorptance 0.475 - 0.70) |                     |                                       |                    |

BASIX Certificate number: A336749 page 5 / 8

| Glazing requ   | irements  |                               |                          |                     |  |   | Show on<br>DA Plans | Show on<br>CC/CDC<br>Plans &<br>specs | Certifier<br>Check |
|--|---|-------------------------------|--------------------------|---------------------|--|---|---------------------|---------------------------------------|--------------------|
| Windows and  | glazed do   | ors                           |                          |                     |  |   |                     |                                       |                    |
| The applicant must install the windows, glazed doors and shading devices, in accordance with the specifications listed in the table below. Relevant overshadowing specifications must be satisfied for each window and glazed door.  |   |                               |                          |                     |  |   |                     | <b>✓</b>                              | <b>~</b>           |
| The following re   | The following requirements must also be satisfied in relation to each window and glazed door:  Each window or glazed door with improved frames, or pyrolytic low-e glass, or clear/air gap/clear glazing, or toned/air gap/clear glazing must |                               |                          |                     |  |   |                     | <b>✓</b>                              | <b>✓</b>           |
| Each window or glazed door with improved frames, or pyrolytic low-e glass, or clear/air gap/clear glazing, or toned/air gap/clear glazing must have a U-value and a Solar Heat Gain Coefficient (SHGC) no greater than that listed in the table below. Total system U-values and SHGCs must be calculated in accordance with National Fenestration Rating Council (NFRC) conditions. The description is provided for information only. Alternative systems with complying U-value and SHGC may be substituted. |   |                               |                          |                     |  |   |                     | <b>✓</b>                              | <b>✓</b>           |
|  |   |                               |                          |                     | each eave, pergola, verandah, bal<br>han 2400 mm above the sill. | cony or awning must be no more than 500 mm                              | ✓                   | <b>✓</b>                              | <b>~</b>           |
| Pergolas with p  | olycarbonate  | roof or si                    | milar tran               | slucent mate        | rial must have a shading coefficien                              | t of less than 0.35.  |                     | <b>✓</b>                              | <b>~</b>           |
| External louvres and blinds must fully shade the window or glazed door beside which they are situated when fully drawn or closed.  |   |                               |                          |                     |  |   |                     | ✓                                     | <b>~</b>           |
| Pergolas with fixed battens must have battens parallel to the window or glazed door above which they are situated, unless the pergola also shades a perpendicular window. The spacing between battens must not be more than 50 mm.   |   |                               |                          |                     |  |   |                     | ✓                                     | <b>~</b>           |
| Overshadowing buildings or vegetation must be of the height and distance from the centre and the base of the window and glazed door, as specified in the 'overshadowing' column in the table below.  |   |                               |                          |                     |  |   | <b>✓</b>            | ✓                                     | <b>~</b>           |
| Windows and glazed doors glazing requirements  |   |                               |                          |                     |  |   |                     |                                       |                    |
| Window / door no.  | Orientation   | Area of glass inc. frame (m2) | Oversha<br>Height<br>(m) | dowing Distance (m) | Shading device   | Frame and glass type  |                     |                                       |                    |
| W-08   | E   | 1.2                           | 0                        | 0                   | eave/verandah/pergola/balcony<br>>=600 mm                        | improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46) |                     |                                       |                    |
| W-09   | W   | 1.2                           | 6                        | 12                  | eave/verandah/pergola/balcony<br>>=900 mm                        | improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)           |                     |                                       |                    |
| W-10   | N   | 4.79                          | 3                        | 6.3                 | eave/verandah/pergola/balcony<br>>=900 mm                        | improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)           |                     |                                       |                    |

BASIX Certificate number: A336749 page 6 / 8

| Glazing requ      | irements    |                               |                          |                 |   |   | Show on<br>DA Plans | Show on<br>CC/CDC<br>Plans &<br>specs | Certifier<br>Check |
|-------------------|-------------|-------------------------------|--------------------------|-----------------|---|---|---------------------|---------------------------------------|--------------------|
| Window / door no. | Orientation | Area of glass inc. frame (m2) | Oversha<br>Height<br>(m) | Distance<br>(m) | Shading device                            | Frame and glass type  |                     |                                       |                    |
| W-11              | W           | 4.7                           | 5.4                      | 6.8             | eave/verandah/pergola/balcony<br>>=750 mm | improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)           |                     |                                       |                    |
| W-20              | W           | 2.16                          | 0                        | 0               | eave/verandah/pergola/balcony<br>>=750 mm | improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)           |                     |                                       |                    |
| W-21              | W           | 2.6                           | 15                       | 13              | eave/verandah/pergola/balcony<br>>=450 mm | improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)           |                     |                                       |                    |
| W-22              | N           | 19.1                          | 0                        | 0               | external louvre/blind (adjustable)        | improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)           |                     |                                       |                    |
| W-23              | W           | 9.19                          | 12                       | 13              | eave/verandah/pergola/balcony<br>>=450 mm | improved aluminium, clear/air gap/clear, (U-value: 4.12, SHGC: 0.66)    |                     |                                       |                    |
| D01               | N           | 16.21                         | 0                        | 0               | eave/verandah/pergola/balcony<br>>=600 mm | improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46) |                     |                                       |                    |
| D02               | W           | 13.07                         | 8.3                      | 6.8             | none                                      | improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46) |                     |                                       |                    |
| D04               | E           | 2.46                          | 0                        | 0               | eave/verandah/pergola/balcony<br>>=600 mm | improved aluminium, single pyrolytic low-e, (U-value: 4.48, SHGC: 0.46) |                     |                                       |                    |
| D06               | Е           | 3.91                          | 0                        | 0               | eave/verandah/pergola/balcony<br>>=900 mm | improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)           |                     |                                       |                    |
| D07               | W           | 5.7                           | 15                       | 10              | eave/verandah/pergola/balcony<br>>=450 mm | improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)           |                     |                                       |                    |
| D08               | Е           | 7.59                          | 3                        | 7.6             | eave/verandah/pergola/balcony<br>>=750 mm | improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)           |                     |                                       |                    |
| D09               | Е           | 7.46                          | 3                        | 7.6             | eave/verandah/pergola/balcony<br>>=750 mm | improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)           |                     |                                       |                    |
| D10               | E           | 18                            | 0                        | 0               | eave/verandah/pergola/balcony<br>>=900 mm | improved aluminium, single clear, (U-value: 6.44, SHGC: 0.75)           |                     |                                       |                    |

BASIX Certificate number: A336749 page 7 / 8

BASIX Certificate number: A336749 page 8 / 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 & 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 for the development may be issued.