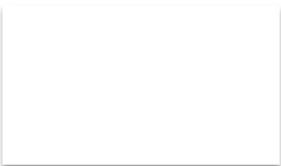
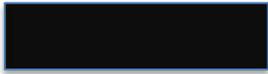


Colour Consultant: Rachael Horwood
 Email: rachael@zachomes.com.au
 Job No.: 214284
 Site Address: Lot 126 Cnr Woodrow Way & Thornton Drive, Thornton.

Date: 16.10.14



	<p>METAL ROOF</p> <p>Colour - Monument</p>		<p>GARAGE DOOR Gliderol Panellift Tuscan Woodgrain</p> <p>Colour - Monument</p>
	<p>BRICKWORK - Main</p> <p>Austral – Metropolis - Marcasite Ironed – off white</p>		<p>BRICKWORK – Feature (where applicable)</p> <p>Austral – Metallix - Bronze Ironed – off white</p>
	<p>CLADDING TYPE 01 (where applicable)</p> <p>Resin Cladding with Acrylic Render Colour – Dulux Lexicon</p>		<p>CLADDING TYPE 02 (where applicable)</p> <p>Blackbutt Timber Stain - Natural</p>
	<p>CLADDING TYPE 03 (where applicable)</p> <p>JH Scyon - Axon 400mm Colour - Monument</p>		<p>CLADDING TYPE 04 (where applicable)</p> <p>JH Scyon - Matrix Colour – Dulux Lexicon</p>
	<p>WINDOW FRAMES</p> <p>Custom Black Matt</p>		<p>ALUMINIUM SCREENS</p> <p>Colour – Dulux Lexicon</p>
	<p>GUTTER, FASCIA, DOWNPIPES</p> <p>Colour - Monument</p>		



STATEMENT OF ENVIRONMENTAL EFFECTS

Project:

Two storey Duplex

Site:

Lot 126, D.P. 1171491

Crn of Woodrow way and Thornton Drive,

Thornton

NSW 2750

APPLICATION DETAILS:

Builder

Zac Homes Pty Ltd

Site location

Lot 126, Cnr Woodrow Way and Thornton Drive, Thornton 2750, NSW

Purpose of proposal

Proposed: New Double Storey Duplex
Zoning: R1 Low Density Residential

This report has been prepared pursuant to

- Penrith City Council's Development Control Plans
- Thornton Design Guidelines
- Section 79C of the Environmental Planning and Assessment Act 1979
- State Environmental Planning Policy (Exempt and Complying Development Codes) General housing Codes
- Along with Penrith City Council's LEP.

Proposed Development

This Statement of Environmental Effects has been prepared as a proposal for a new double storey single dwelling on Lot 126, Cnr Woodrow Way and Thornton Drive, Thornton 2750, NSW, in accordance with Penrith City Council's Development Control Plan and the State Environmental Planning Policy (Exempt and Complying Development Codes) General housing Codes, along with Penrith City Council's LEP.

Careful consideration has been given in determining the design and layout of the proposed dwelling to ensure that the amenity of the surrounding area will not be compromised and that the work provides a high standard of residential development compatible and sympathetic with the existing and likely future built and natural environment.

The Statement of Environmental Effects addresses the relevant statutory planning framework within which the application is to be assessed and determined.
Plans detailing the proposed development accompany this application.

SITE DETAILS:

Site Area

The existing lot is approximately 196.2sqm.

Site Owner

The current owner of the lot to be developed is Zac Homes Pty Ltd.

Site Analysis

- The site is located on the corner of Woodrow way and Thornton Drive.
- The site analysis has not identified any major constraints on the site.
- The site maintains sufficient area for the proposed dwelling and private open space area.
- The site is currently vacant.
- The site's inland location results in the development likely to experience winds from the North-east in the summer and Southerlies during the winter. These prevailing winds will assist in ventilation of the property.
- Minimal privacy issues are raised as a result of the development. Most living areas are located on the ground floor and privacy to the living space on the first floor is achieved by installing a window which faces the street.
- In order to permit the construction of the proposed dwelling it will be necessary to undertake minimal earthworks to the site.
- The new dwelling will connect to the provided stormwater via a 3,000 litre water tank and sewage system.
- The development has been designed so as to achieve a built form that is appropriate having regard to the existing character of the locality.

Current Lot uses

The current lot is undeveloped and vacant.

Neighbouring Land uses

The subject Lot will be predominantly surrounded by residential dwellings. Such dwellings will include single and double storeys.

Utility Services

The subject lot has access to a range of utility services such as gas, electricity, telephone, mail delivery, local waste collection, national broadband network and water.

ZONING CONTROLS:

Aboriginal Heritage

The site does not include items of Aboriginal heritage.

Coastal Hazards

The development is not subject to Coastal Hazards.

Mine Subsidence

The subject site is not located within a Mine Subsidence District.

Bushfire

The proposed dwelling is not located within an area that is identified as Bush Fire prone land.

Heritage Matters

The proposed dwelling is not located within a Heritage Precinct.

DEVELOPMENT PROPOSAL:

Proposed Development

The architectural designs have been prepared by Zac Homes Pty Ltd.

The proposal provides for the construction of a new attached double storey dwelling which will consist of a single garage, four bedrooms, one dining and two living areas presented in an open plan style. The dwelling's facade will consist of mixed finishes such as face brickwork, light weight cladding and render finish.

The overall design will be aesthetically pleasing and is considered to complement the existing neighbourhood streetscape.

Proposed Development

The amount of disturbance on the land caused by the proposed dwelling has been minimised with the site being cut and filled to form a level building platform.

Appropriate erosion and sediment control measures such as silt fencing will be put in place to limit sediment laid in stormwater discharge and restrict stormwater flows over exposed areas during construction. Due to the level nature of the land it is unlikely that any sediment will leave the site.

Setbacks

Front Primary setback= 3.43m to main living; 2.42m to patio.

Front Secondary setback= 1.2m to main living

Rear Setback= 2.163m.

Side 1 setback= built to boundary

Side 2 setback= 900mm

All setbacks comply with Council's DCP and all related policies. The dwelling does not encroach over any easements or land restriction zones.

Site Coverage

The total site coverage including all hard surfaces= 127.52m²

The site coverage complies with Council's DCP and all related policies.

Landscaped area

The total landscaped area= 68.68m²

The landscape area complies with Council's DCP and all related policies.

Building Height

The proposed building height to the ridge line= 9.115m

The building height complies with Council's DCP and all related policies.

Floor Space Ratio

The proposed F.S.R= 80.94%

The F.S.R complies with Council's DCP and all related policies.

Private open space

The proposed P.O.S= 39.45m²

The P.O.S complies with Council's DCP and all related policies.

Streetscape and building Facade

Selected materials and colours utilised on the proposal will be aesthetically pleasing and is considered to complement the overall streetscape.

The Facade design and colour selection complies with Council's DCP, Developer controls and all related policies.

ACCESS AND TRAFFIC:

Site access

Vehicle access to the proposed dwelling is via a proposed concrete driveway which complies with the Australian standard (AS2890.1) for the driveway gradient located on Woodrow way.

Vehicle Parking

The proposed dwelling provides a single garage which will cover 1 vehicle for the residents and 1 uncovered space to the front of the garage.

Vehicle Parking complies with Council's DCP and all related policies.

Traffic

The proposed dwelling is unlikely to impact local traffic movement in the area.

AIR AND NOISE:

Noise and vibration

The local amenity is generally perceived as being relative to the acoustic impact of land uses within the local area.

The existing amenity within the subject locality is presently diminished by:

- Traffic movement along Woodrow way and Thornton Drive.
- Noise normally associated with residential type activities.
- The proposed dwelling is unlikely to further emit noise above existing background noise.

Air and Odours

The proposed dwelling is unlikely to have an impact on the quality of air in the local area. Air and odours emanating from the proposed dwelling will be consistent with all neighbouring developments and unlikely to affect the adjoining lots.

PRIVACY, VIEWS AND OVERSHADOWING:

Views

The proposed dwelling is unlikely to impede the view of adjoining lots and future developments.

Overshadowing

The proposed dwelling is of double storey construction and will have minor overshadowing to the surrounding neighbours. Solar access for the adjoining properties is shown on the provided shadow diagrams.

The shadow diagrams comply with Council's DCP and all related policies.

Privacy

The privacy of adjoining lots will be respected and not interrupted by the proposed dwelling. Privacy shall be achieved by maintaining appropriate setbacks from the neighbouring boundaries and fencing.

SOIL AND WATER:

Site contours

The site is subject to minor natural surface flow from the rear boundary to the front boundary.

Stormwater and drainage

The stormwater will be adequately collected using a 3,000 litre rainwater tank which will be used for watering the landscaping during dry weather and service toilets. Excess rainwater will be discharged to the street.

FLORA AND FAUNA:

Existing vegetation

There are no existing trees or vegetation to be removed for construction of the proposed dwelling.

Proposed vegetation

The proposal will comply with Council's DCP and all related policies in regards to landscape requirements and required vegetation plantation.

Basix/Energy

The proposed dwelling will meet with all BASIX requirements and construction will include insulation to external walls and ceiling space along with sarking to the underside of the roof sheeting.

WASTE DISPOSAL:

Utility service and waste

The site is adequately serviced with local council garbage and waste collection. The proposed dwelling will not place any additional demands upon these services.

The proposed dwelling will connect to the provided sewage system.

Building waste is to be contained within the building site in a suitable screened area for the duration of construction. This waste is to be removed by a contractor after completion.

CONCLUSION:

The development complies with the standards and objectives of the State Environmental Planning Policy and other relevant controls that apply to this subject site, the Architectural design, character, scale, materials and details of this project will match the existing neighbourhood area so as to ensure maximum cohesion.

The proposal will enhance the existing streetscape elevation and compliment the general neighbourhood.

The proposed residential development will have minimal adverse environmental effects, and shall prove to become a positive asset to the amenity of the neighbourhood.

Report completed by:

Zac Homes Pty Ltd
Level 1, 232 Coreen Avenue
Penrith, NSW, 2750
Phone: (02) 4724 2500
Email: info@zachomes.com.au

BASIX[®]Certificate

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

Single Dwelling

Certificate number: 579414S

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 18/09/2014 published by Planning & Infrastructure. This document is available at www.basix.nsw.gov.au

Director-General

Date of issue: Tuesday, 28 October 2014

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



Project summary		
Project name	214284-lot 126 thornton	
Street address	woodrow way & thornton Drive Thornton 2752	
Local Government Area	Penrith City Council	
Plan type and plan number	deposited unreg	
Lot no.	126	
Section no.	-	
Project type	separate dwelling house	
No. of bedrooms	4	
Project score		
Water	✓ 42	Target 40
Thermal Comfort	✓ Pass	Target Pass
Energy	✓ 51	Target 40

Certificate Prepared by

Name / Company Name: ZAC HOMES

ABN (if applicable): 47060679576

Description of project

Project address

Project name	214284-lot 126 thornton
Street address	n/a woodrow way & thornton Drive Thornton 2752
Local Government Area	Penrith City Council
Plan type and plan number	Deposited Plan unreg
Lot no.	126
Section no.	-

Project type

Project type	separate dwelling house
No. of bedrooms	4

Site details

Site area (m ²)	196
Roof area (m ²)	95
Conditioned floor area (m2)	124
Unconditioned floor area (m2)	0
Total area of garden and lawn (m2)	68

Assessor details and thermal loads

Assessor number	n/a
Certificate number	n/a
Climate zone	n/a
Area adjusted cooling load (MJ/m ² .year)	n/a
Area adjusted heating load (MJ/m ² .year)	n/a

Other

none	n/a
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Project score

Water	 42	Target 40
Thermal Comfort	 Pass	Target Pass
Energy	 51	Target 40

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
Fixtures			
The applicant must install showerheads with a minimum rating of 3 star (> 7.5 but <= 9 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 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.		✓	
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.	✓	✓	✓
The applicant must configure the rainwater tank to collect rain runoff from at least 95 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: <ul style="list-style-type: none"> • all toilets in the development • the cold water tap that supplies each clothes washer 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.) 		✓ ✓ ✓	✓ ✓ ✓

Thermal Comfort CommitmentsShow on
DA plansShow on CC/CDC
plans & specsCertifier
check**Floor, walls and ceiling/roof**

The applicant must construct the floor(s), walls, and ceiling/roof of the dwelling in accordance with the specifications listed in the table below.



Construction	Additional insulation required (R-Value)	Other specifications
floor - concrete slab on ground	nil	
floor - suspended floor above garage, framed	0.3 (or 1 including construction) (down)	
external wall - brick veneer	1.66 (or 2.20 including construction)	
external wall - framed (weatherboard, fibre cement, metal clad)	1.80 (or 2.20 including construction)	
internal wall shared with garage - plasterboard	nil	
ceiling and roof - flat ceiling / flat roof, framed	ceiling: 3 (up), roof: foil/sarking	framed; dark (solar absorptance > 0.70)

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

Thermal Comfort Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Windows, glazed doors and skylights			
The applicant must install the windows, glazed doors and shading devices described in the table below, in accordance with the specifications listed in the table. Relevant overshadowing specifications must be satisfied for each window and glazed door.	✓	✓	✓
The dwelling may have 1 skylight (<0.7 square metres) and up to 2 windows/glazed doors (<0.7 square metres) which are not listed in the table.	✓	✓	✓
The following requirements must also be satisfied in relation to each window and glazed door:	✓	✓	✓
<ul style="list-style-type: none"> Except where the glass is 'single clear' or 'single toned', each window and glazed door must have a U-value no greater than that listed and a Solar Heat Gain Coefficient (SHGC) +/-10% of that listed. Total system U-values and SHGC must be calculated in accordance with National Fenestration Rating Council (NFRC) conditions. 		✓	✓
<ul style="list-style-type: none"> The leading edge of each eave, pergola, verandah, balcony or awning must be no more than 500 millimetres above the head of the window or glazed door, except that a projection greater than 500 mm and up to 1500 mm above the head must be twice the value in the table. 	✓	✓	✓
<ul style="list-style-type: none"> Pergolas with polycarbonate roof or similar translucent material must have a shading coefficient of less than 0.35. 		✓	✓
<ul style="list-style-type: none"> Unless they have adjustable shading, pergolas must have fixed 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. 		✓	✓

Window/glazed door no.	Orientation	Maximum area (square metres)	Type	Shading	Overshadowing
W1	S	2.52	improved aluminium, single pyrolytic low-e (U-value:4.48, SHGC:0.46)	eave/verandah/pergola/balcony 901-1,200 mm	not overshadowed
W2	S	7.20	improved aluminium, single pyrolytic low-e (U-value:4.48, SHGC:0.46)	none	not overshadowed
W3	S	3.78	standard aluminium, single clear (or U-value:7.63, SHGC:0.75)	eave/verandah/pergola/balcony 901-1,200 mm	not overshadowed
W4	W	1.68	improved aluminium, single clear (U-value:6.44, SHGC:0.75)	none	not overshadowed
W5	W	2.88	improved aluminium, single pyrolytic low-e (U-value:4.48, SHGC:0.46)	none	not overshadowed
W6	W	2.16	improved aluminium, single clear (U-value:6.44, SHGC:0.75)	eave/verandah/pergola/balcony 901-1,200 mm	not overshadowed

Window/glazed door no.	Orientation	Maximum area (square metres)	Type	Shading	Overshadowing
W7	N	1.68	improved aluminium, single clear (U-value:6.44, SHGC:0.75)	none	not overshadowed
W8	S	4.32	improved aluminium, single clear (U-value:6.44, SHGC:0.75)	none	not overshadowed
W9	S	2.88	improved aluminium, single clear (U-value:6.44, SHGC:0.75)	eave/verandah/ pergola/balcony >2,000 mm	not overshadowed

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: 3-phase airconditioning; Energy rating: EER 3.5 - 4.0		✓	✓
The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 bedroom: 3-phase airconditioning; Energy rating: EER 3.5 - 4.0		✓	✓
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: 3-phase airconditioning; Energy rating: EER 3.5 - 4.0		✓	✓
The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 bedroom: 3-phase airconditioning; Energy rating: EER 3.5 - 4.0		✓	✓
The heating system must provide for day/night zoning between living areas and bedrooms.		✓	✓
Ventilation			
<p>The applicant must install the following exhaust systems in the development:</p> <p>At least 1 Bathroom: individual fan, ducted to façade or roof; Operation control: interlocked to light</p> <p>Kitchen: individual fan, not ducted; Operation control: manual switch on/off</p> <p>Laundry: individual fan, not ducted; Operation control: interlocked to light</p>		<p style="text-align: center;">✓</p> <p style="text-align: center;">✓</p> <p style="text-align: center;">✓</p>	<p style="text-align: center;">✓</p> <p style="text-align: center;">✓</p> <p style="text-align: center;">✓</p>
Artificial lighting			
<p>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:</p> <ul style="list-style-type: none"> at least 4 of the bedrooms / study; 		✓	✓

Energy Commitments	Show on DA plans	Show on CC/CDC plans & specs	Certifier check
<ul style="list-style-type: none"> • at least 3 of the living / dining rooms; • the kitchen; • all bathrooms/toilets; • 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 2 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 install a fixed outdoor clothes drying line as part of the development.			

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.



Waste Management Policy and Contractors Responsibilities

Waste Management Policy

Sydney Bobcat Profiler Pty Ltd has adopted a new policy to help manage on site waste and recycling more effectively and efficiently. It is in the best interest of Zac Homes that all contractors MUST comply in order to avoid additional site cleaning charges and upkeep site tidiness for Workplace Health and Safety obligations.

Compliance with the policy and responsibilities outlined here within will be closely monitored by SBP representatives and by Workcover Officers. Please carefully read and become familiar with the following conditions imposed by the new company policy:

- 1) All sites will comprise of two (2) designated waste areas as nominated by the Site Supervisor:
 - 1st area will be for **“Masonry Waste Only”**
(This includes bricks, tiles and concrete etc.)
NO OTHER WASTE IS TO BE PLACED HERE
 - 2nd area will be a waste compound for all other **“General Waste Only”**
- 2) All reusable pallets and waffle pods are to be stacked in a separate pile out the front for removal by the relevant supplier.
- 3) **ALL OTHER WASTE** is to be put in the general waste compound provided. This includes:
 - Packaging; PVC material; strapping; plastic wrap; steel; bracing; empty paint tins; metal fascia & gutter off cuts and food scraps.
- 4) If compound is full please notify your supervisor immediately so they can arrange for it to be emptied. We would appreciate contractors to report anyone not complying with our company policy.

Contractor Responsibilities

Every contractor is responsible for their own waste and under no circumstances should waste be spread across the site or backyard. All waste is to be brought to the **front** and placed in the waste compound (if applicable) or in a neat pile away from water meters. Back charges will apply for non-conformance by any contractor to these strict conditions.

Plasterers: All plasterboard off-cuts must be placed in one area for removal by relevant supplier. SBP is **not** responsible for any gypsum waste removal from site. Any waste left over and rejected by the relevant supplier pick up will incur additional charges.

Rooftilers: Pallets are to be stacked at the **front** of the house in a separate pile to be taken away by the supplier. All broken roof tiles must be placed in area marked **“Brick, Tile and Concrete”** at the **front** of the house **away from water meters**.

Bricklayers: Brick separators must be placed in the general waste compound. Brick straps, cement bags and plastic wrap are also to be placed in the general waste compound. Broken bricks are to be placed in area marked **“Brick, Tile and Concrete”** at the front of the house **away from water meters**.

Carpenters: All timber off cuts must be placed in the general waste compound.

Painters: All **EMPTY** paint tins must be placed in the general waste compound.

Facia & Gutter Contractors: All metal fascia & gutter off-cuts must be placed in general waste compound.

Slab contractors: All leftover waffle pods must be removed by contractor or supplier. Any excess concrete or wash out is to be spread in driveway.

Electrical contractor: All leftover wiring material and conduit must be placed in general waste compound provided.

Plumbers and Drainers: All waste PVC products must be placed in general waste compound.

All plant and machine operators: Under no circumstances should plant operators place spoil in the waste compound or brick pile. Any waste contamination will incur a back charge.

Any contractor failing to fulfil their responsibly in order to maintain a clean and safe worksite will be back charged \$350.00 by Zac Homes.