1 June 2010

Our Reference:

CC10-027



BUILDING CERTIFIERS

ABN 47 078 953 215

- Building Approvals
- Town Planning
- Building/Fire Safety Consultants
- BASIX Energy Rating
- Accredited Certifiers
- Principal Certifying Authority

. . . . . . . .

The General Manager Pittwater Council PO Box 882 MONA VALE NSW 1660

Address of subject land: Development consent: Lot 8 DP 1080203 (No. 1046) Barrenjoey Road, Palm Beach N0587/09 (Pittwater Council) dated 17 March 2010

Dear Sir/Madam,

Please find enclosed a copy of the following information for the above project:

- Construction certificate relating to the above development consent.
- Accompanying plans/specifications and other relevant documents.
- Cheque for \$30.00 (lodgement fee).

Also enclosed is the 'Notice to Commence Building Work and Appointment of Principal Certifying Authority' form.

If you wish to discuss any aspect of this application, please contact me on (02) 4732 6322.

Yours faithfully,

Anthony Krilich

Benchmark Building Certifiers

mul

- 2 JUN 2010 PITTWATER COUNCIL

DENC \$30 PEC: 28/149 2/6/10.

Suite 5, Level 2, 498 High St, Penrith 2750 P.O. Box 1274, Penrith NSW 2751

Tel: 02 4732 6322 Fax: 02 4732 6344 Email: bbc@pnc.com.au

#### Construction Certificate

This certificate verifies that work completed in accordance with specified plans and specifications will comply with the requirements of the Environmental Planning and Assessment Regulation, 2000 referred to in section 81A (5) of the Environmental Planning and Assessment Act, 1979.

Construction certificate number:

Diamantina Designer Homes Pty Ltd Suite 1 53-55 Leabons Lane SEVEN HILLS NSW 2147

CC10-027

The abovementioned being the applicant in respect of the development described as follows:

Beach

Details of the development consent:

N0587/09 (Pittwater Council) dated 17 March 2010

Lot 8 DP 1080203 (No. 1046) Barrenjoey Road, Palm

Classification of building:

Address of subject land:

Class 1a

Decision of the certifying authority:

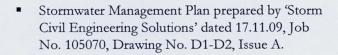
Issued

The certificate is issued-Without any conditions

The issue of this certificate has been endorsed on the following plans and specifications that were lodged with the application-

Plans and specifications:

Architectural plans prepared by Diamantina Designer Homes' Issue C dated 1 June 2010, Sheets 1-2.

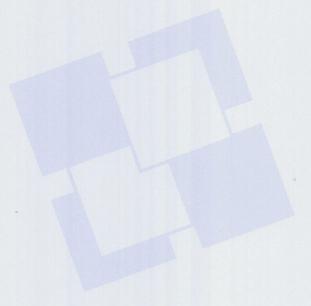


- Structural engineering plans prepared by 'Kneebone, Beretta & Hall' dated 26.03.10, Dwg No. 87219, Sheets 1-2.
- Landscape plan prepared by 'Conzept Landscape Architects' Issue C dated April 2010, Drawing No. LPDA10-122/1C and Issue B dated November 2009 and Drawing No. LPDA10-122/2B, and accompanying certificate dated 22 April 2010.
- BASIX Certificate No. 275286S.
- Accompanying building specification & other information.

benchmark **BUILDING CERTIFIERS** 

ABN 47 078 953 215

- Building Approvals
- Town Planning
- Building/Fire Safety Consultants
- BASIX Energy Rating
- Accredited Certifiers
- Principal Certifying Authority



Suite 5, Level 2, 498 High St, Penrith 2750 P.O. Box 1274, Penrith NSW 2751

Tel: 02 4732 6322 Fax: 02 4732 6344 Email: bbc@pnc.com.au

#### Certification:

Anthony Krilich certifies that if the work is completed in accordance with the documentation accompanying the application for the certificate, the development (with such modifications verified by the certifying authority as may be shown on that documentation) will comply with the requirements Environmental Planning and Assessment Regulation 2000 as referred to in section 81A(5) of the Environmental Planning and Assessment Act, 1979.

Date of this certificate:

1 June 2010

Information attached to this decision:

- General application form.
- Section 81A notice of critical stage inspections.

ruid

Signature:

Accredited certifier:

Anthony Krilich

Accreditation body:

Building Professionals Board

Accreditation number:

BPB0216

Applicant's right of appeal:

Nil



#### General Application Form

0299796511

I/we the undersigned hereby make application to Benchmark Building Certifiers for the following service(s):

Office use only Application No: CC10-027.

Date received: 29/03/10 Tick box to nominate the service sought To lodge a Development Application with the relevant Council. To issue a Construction Certificate. To issue a Complying Development Certificate. I/we appoint the person nominated on this form as our Principal Certifying Authority for 'building work' only (no subdivision work) and would like for them to notify the consent authority of the appointment. To issue an Occupation Certificate (Interim or Final). DETAILS OF THE OWNER All owners of the land neut be included on the application form (or two directors) sole director for a company). In signing this form, I/we advise that I/we are person(s) eligible to appoint a Principal Certifying Ausbority for the relevant development and make application for the relevant above service(c). I/we acknowledge that the applicant for these services is as detailed below PACETO 40PS Owner(s) name: Address: Contact telephone No.s: Signature (of all owners): DETAILS OF THE APPLICANT All correspondence and documentation will be forwarded to the applicant, if different from the owner. HAMPIGARY-TRAMANTINA DESIGNIE HOMES, Applicant(s) name: LEARBONS LANGE, Address: Contact telephone No.s: Signature(s): In completing this General Application Form. the owner(s) and applicant agree to the terms and conditions of this General Application Form and the Service Agreement that forms part of the application (Pages 1 to 4).

0299796511

| LAND TO BE DEVELO  | PED  |
|--|--|
| Address:   | 1046 BALLENSON ROAD PAUM BEACH   |
| Lot & DP No.:  | DI 1090203 15T 8   |
| ESTIMATED COST OF  |  |
| Value of work: (including GST)   | s 427,09.4.20  |
| DEVELOPMENT DESC   | RIPTION  |
| Approval No. & Date:<br>Consent authority:<br>Building work<br>description:<br>BCA classification:                         | DA No: NOSB7/09 -17-3-2010 PHILATER COUNCIL TWO STOREY RESIDENTIAL DURUNG IA + 100   |
|  | PRINCIPAL CONTRACTOR DETAILS "residential building work".  |
| Name: Address & Phone No. Permit No./Licence No.: Home Warranty Insurance details (if applicable for principal contractor) | DIAMAGNITICAL DESCRIPE HONNES FN UTD SALTE 1-53-55 INGREDUS LANE SWENT HILLS BLOGIC P: 9676 477  WYes D No (required to be provided to the PCA before the commencement of works) |
| LONG SERVICE LEVY P  | AYMENT (0.35% of value of work if \$25,000 in value or more.)  |
| Paid:<br>Receipt No.:  | Yes  |
| CERTIFYING AUTHORI   | TY DETAILS   |
| Accredited certifier:<br>Accreditation number:   | Anthony Krilich / Robert Valades BPB0216 / BPB0419   |
| APPOINTED PRINCIPAL  | CERTIFYING AUTHORITY   |
| Accredited certifier: Accreditation number: Address:   | Anthony Krilich / Robert Valudes BPB0216 / BPB0419 Benchmark Building Certifiers   |
| Contact details:   | 5/498 High Street, Penrith NSW 2750 (02) 4732 6322   |

Refer to Pages 3-4 for Service Agreement details which form part of this application. The Particulats of the Proposal on Page 4 must also be completed for all proposed building work.

#### SERVICE AGREEMENT

The following service agreement applies between the owner(s)/applicant for the development and the nominated Principal Certifying Authority (PCA). This service agreement outlines the owner(s)/applicants and the PCA's tasks and responsibilities in undertaking the certifying authority role for the development.

#### Role of the Principal Certifying Authority:

- The nominated PCA for the development shall undertake all works in accordance with the requirements of the Code of Conduct applicable to the accredited certifier / PCA (contained in Schedule 4 of the Building Professionals Board accreditation scheme).
- \* The nominated PCA shall ensure that the development complies with the provisions of the Environmental Planning and Assessment Act, 1979 and Environmental Planning and Assessment Regulation 2000, the applicable development consent, approved Construction Certificate or Complying Development Certificate (as relevant to the development).

#### Responsibilities of the owner(s) and the applicant:

- The owner(s) and/or applicant shall abide by all conditions of the relevant development consent / Complying Development Certificate applying to the development and the requirements of the Environmental Planning and Assessment Act, 1979 and the Environmental Planning and Assessment Regulation 2000.
- "The owner(s) and/or applicant shall abide by all directions made by the PCA (or accredited certifier) and shall comply with all approved documentation, including plans, specifications and other documents, applying for the development.
- The owner(s) and/or applicant shall notify the PCA within a reasonable time frame of any alterations or changes that may affect the proposed development and/or the service agreement.
- The owner(s) and/or applicant shall notify the PCA at least 48 hours before each critical stage inspections, as applicable to the development.

#### Critical stage inspections:

Critical stage inspections, as defined under the Environmental Planning and Assessment Act, 1979 and Environmental Planning and Assessment Regulation 2000 must be undertaken for the development. The owner(s) and/or applicant must notify the PCA when a critical stage inspection is required (48 hours notice). Benchmark Building Certiflers will notify the applicant of all required inspections for the development.

The failure to inspect a critical stage inspection may result in an Occupation Certificate not being able to be issued.

#### Other inspections:

Other inspections for the development may also be required. The owner(s) and/or applicant are to discuss other required inspections with Benchmark Building Certifiers.

#### Fees for service

Fees for service will be as per the quoted fee for the development or as per the tax invoice where a fee is not quoted. The fees for service shall be paid prior to the issue of an approval, or within the time frame indicated on the tax invoice for the development. Alternative payment provisions may also specifically be agreed to between the owner(s) and/or applicant and the PCA.

The fee for service does not include the following matters:

- Works or services not forming part of the application and service agreement.
- Complaint investigation for the development (such as when a complaint is lodged to the PCA about activities undertaken by the builder/developer/owner).

- Assessing and determining applications against the "alternative solution/performance" provisions of the Building Code of Australia (unless otherwise noted at the time of the lodgement of the application).
- \* Serving of a Notice' to carry out works or undertake works/tasks (in accordance with the legal obligations of the PCA), under the requirements of the Environmental Planning and Assessment Regulation 2000.
- \* Other required works will be charged at an hourly rate (nominally \$125.00/hour, or as recommended by the Australian Institute of Building Surveyors (NSW)).
- Payment of other ancillary fees, such as Council fees, service provider fees, contributions, Long Service Levy, or the like (unless otherwise indicated on the application form/service agreement).

#### PARTICULARS OF THE PROPOSAL

Please complete this schedule. The information will be sent to the Australian Bureau of Statistics.

#### All new buildings:

- Number of storeys (including underground floors)
- Gross floor area of new building (m²)
- Gross site atea (m²)

#### Residential buildings only:

- Number of dwellings to be constructed
- Number of pre-existing dwellings on site
- Number of dwellings to be demolished
- Will the new dwelling(s) be attached to other new buildings?
- Will the new building(s) be attached to existing buildings?
- Does the site contain a dual occupancy?

#### 4/15.0Z.22 1075.42



#### 数額/No

#### Materials - residential buildings;

Please circle the appropriate number next to each material that best describes the materials for the new work:

| WALLS                | Roof                                    | FLOOR                  | FRAME            |
|----------------------|---|------------------------|------------------|
| 11 Brick (double)    | (10) Tiles                              | (20) Concrete or slate | (40) Timber      |
| 12) Brick (veneer)   | 20 Concrete or slate                    | 10 Timber              | 60 Steel         |
| 20 Concrete or stone | 30 Fibre cement                         | 80 Other               | 70 Aluminium     |
| 30 Fibre coment      | 60 Steel                                | 90 Not specified       | 80 Other         |
| 40 Timber            | 70 Aluminium                            |                        | 90 Not specified |
| 50 Cuctain glass     | 80 Other                                |                        |                  |
| 60 Steel             | 90 Not specified                        |                        |                  |
| 70 Aluminium         |   |                        |                  |
| 80 Other             | *************************************** |                        |                  |
| 90 Not specified     |   |                        |                  |

End of Application (January 2010)



28 April 2010

DIAMANTINA DESIGNER HOMES PTY LTD SUITE 1 53-55 LEABONS LANE SEVEN HILLS NSW 2147 Building and Construction Industry Long Service Payments Corporation Level 1 19-21 Watt Street Gosford NSW 2250 Locked Bag 3000 Central Coast MC NSW 2252 Tel: 13 14 41 Fax: (02) 9287 5685 Email: info@lspc.nsw.gov.au www.lspc.nsw.gov.au ABN 93 646 090 808

### **Levy Receipt**

Receipt No. 00081556

Received from (Name of person or organisation paying for levy)

the amount of

\$1,494.00

DIAMANTINA DESIGNER HOMES PTY LTD

1

Payment details:

Cheque

058169

\$1,494.00

DIAMANTINA DESIGNER HOMES

being payment for Long Service Levy as detailed below

Levy Payment Form number

0310591

Council/Department/Authority

PITTWATER COUNCIL

C.C. Number

NO587/09

Work address

1046 BARRENJOEY RD PALM BEACH NSW 2108

Estimated value of work

\$427,094.00

Levy payable (No exemption)

\$1,494.00

Total levy paid

\$1,494.00

Signed: (Signature of authorised person)

Date

90782

BASIX

# Version: 6.17 CASUARINA\_2\_0\_12\_1

#### 1046 Barrenjoey Road PALM BEACH 2108 1046 Barrenjoey Road, Palm Beach Deposited Plan 1080203 separate dwelling house Pittwater Council Assessor details and thermal loads 1075 200 294 256 n/a n/a 25 n/a 8 0 4 Area adjusted cooling load (MJ/m².year) Total area of garden and lawn (m2) Unconditioned floor area (m2) Conditioned floor area (m2) Plan type and plan number Local Government Area Project address Certificate number Assessor number Project type No. of bedrooms Site details Roof area (m²) Street address Site area (m²) Project name Climate zone Project type Section no. Lot no.

29/06/2009 published by the Department of Planning. This document is available at

www.basix.nsw.gov.au

Director-General Date of issue: Tuesday, 27 October 2009

NSW Planning

commitments set out below. Terms used in this certificate, or in the commitments,

have the meaning given by the document entitled "BASIX Definitions" dated

government's requirements for sustainability, if it is built in accordance with the

This certificate confirms that the proposed development will meet the NSW

Certificate number: 275286S

**BASI** Certificate

√ Thermal comfort: pass (Target pass)

√ Water: 40 (Target 40)

Score

Certificate No.: 275286S

Tuesday, 27 October 2009

n/a

Area adjusted heating load (MJ/m².year)

BENCHMARK BUILDING CERTIFIERS Construction Certificate Approval

CC No.: 10 -027

Date: 16/11

Accredited Certifier: Anthony Krilich

att 0216

Accreditation No.:

Other

none

# 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<br>DA plans | Show on CC/CDC<br>plans & specs | Certifier<br>check |
|---|---------------------|---------------------------------|--------------------|
| Fixtures  |                     |                                 |                    |
| The applicant must install showerheads with a minimum rating of 3 star in all showers in the development.   |                     | >                               | >                  |
| The applicant must install a toilet flushing system with a minimum rating of 3 star in each toilet in the development.  |                     | <b>&gt;</b>                     | <b>\</b>           |
| The applicant must install taps with a minimum rating of 3 star in the kitchen in the development.  |                     | >                               |                    |
| The applicant must install basin taps with a minimum rating of 3 star in each bathroom in the development.  |                     | >                               |                    |
| Alternative water   |                     |                                 |                    |
| Rainwater tank  |                     |                                 |                    |
| The applicant must install a rainwater tank of at least 3750 litres on the site. This rainwater tank must meet, and be installed in accordance with, the requirements of all applicable regulatory authorities.                 | >                   | <i>&gt;</i>                     | >                  |
| The applicant must configure the rainwater tank to collect rain runoff from at least 160 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  |                     | >                               | >                  |
| <ul> <li>at least one outdoor tap in the development (Note: NSW Health does not recommend that rainwater be used for human<br/>consumption in areas with potable water supply.)</li> </ul>                                      |                     | >                               | >                  |

Certificate No.: 275286S

| Thermal Comfort Commitments  |  | Show on<br>DA plans    | Show on CC/CDC plans & specs                  | Certifier<br>check |
|--|--|------------------------|---|--------------------|
| Floor, walls and ceiling/roof  |  |                        |   |                    |
| The applicant must construct the floor(s), walls, and ceiling/roof of the below. | of of the dwelling in accordance with the specifications listed in the table | able 🗸                 | <b>&gt;</b>                                   | >                  |
|  |  |                        |   |                    |
| Construction   | Additional insulation required (R-Value)                                     | Other specifications   |   |                    |
| floor - concrete slab on ground  | liu  |                        |   |                    |
| floor - suspended floor above garage, framed                                     | lic  |                        | ***************************************       |                    |
| external wall - brick veneer   | 1.36 (or 1.90 including construction)  |                        |   |                    |
| external wall - framed (weatherboard, fibro, metal clad)                         | 1.50 (or 1.90 including construction)  |                        |   |                    |
| internal wall shared with garage - plasterboard                                  | lic  |                        |   |                    |
| ceiling and roof - flat ceiling / pitched roof                                   | ceiling: 2.5 (up), roof: foil/sarking  | iventilated; dark (sol | unventilated; 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.

www.basix.nsw.gov.au

| Thermal Comfort Commitments  | Show on<br>DA plans | Show on CC/CDC plans & specs           | Certifier<br>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.   | >                   | <b>\</b>                               | >                  |
| 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.   | <b>&gt;</b>         | ************************************** | >                  |
| The following requirements must also be satisfied in relation to each window and glazed door:  | >                   | >                                      | >                  |
| <ul> <li>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.</li> </ul> |                     |  | <b>&gt;</b>        |
| <ul> <li>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.</li> </ul>  | >                   | >                                      | >                  |
| Pergolas with polycarbonate roof or similar translucent material must have a shading coefficient of less than 0.35.  |                     | >                                      |                    |
| <ul> <li>Unless they have adjustable shading, pergolas must have fixed battens parallel to the window or glazed door above which they are<br/>situated, unless the pergola also shades a perpendicular window. The spacing between battens must not be more than 50 mm.</li> </ul>   |                     | · >                                    | · >                |

| Window/glazed door no. Orientation Maximum area (square metres)   | Orientation | Maximum area<br>(square metres) | Туре   | Shading   | Overshadowing    |
|---|-------------|---------------------------------|--|---|------------------|
| GROUP 1 (W1 - Study)  | 8           | 1.62                            | standard aluminium, single clear (or<br>U-value:7.63, SHGC:0.75) | eave/verandah/pergola/balcony<br>1,500-2,000 mm | not overshadowed |
| GROUP 2 (W15 - Ensui te) W  | >           | 1.08                            | standard aluminium, single clear (or U-value:7.63, SHGC:0.75)    | eave/verandah/pergola/balcony<br>451-600 mm     | not overshadowed |
| GROUP 3 (W16 - Maste r)   | 3           | 6.3                             | standard aluminium, single clear (or<br>U-value:7.63, SHGC:0.75) | eave/verandah/pergola/balcony<br>>2,000 mm      | not overshadowed |
| GROUP 4 (W3-Powder;<br>W4-Cinema; W5-Cinema;<br>W6-Family; W7-Fami ly;<br>W8-Family; W9-Fa mily;<br>W10-Rumpus) | Ø           | 5.58                            | standard aluminium, single clear (or<br>U-value:7.63, SHGC:0.75) | none  | not overshadowed |

Certificate No.: 275286S Version: 6.17 CASUARINA\_2\_0\_12\_1

www.basix.nsw.gov.au

Department of Planning

| Energy Commitments  | Show on<br>DA plans | Show on CC/CDC plans & specs   | Certifier<br>check |
|---|---------------------|--|--------------------|
| Hot water   |                     |  |                    |
| The applicant must install the following hot water system in the development, or a system with a higher energy rating: electric heat pump with a performance of 26 to 30 RECs or better.  | >                   | >  | >                  |
| 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 2.5 - 3.0  |                     | And the second s | >                  |
| 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 2.5 - 3.0  |                     |  | <b>\</b>           |
| The cooling system must provide for day/night zoning between living areas and bedrooms.   |                     | <b>&gt;</b>  | >                  |
| 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 3.0 - 3.5  |                     |  | >                  |
| 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 3.0 - 3.5  |                     | >  | >                  |
| The heating system must provide for day/night zoning between living areas and bedrooms.   |                     | <b>\</b>   | >                  |
| 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  |                     |  |                    |
| 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 1 of the bedrooms / study;   |                     | >  | >                  |
| • at least 1 of the living / dining rooms;  |                     | >  | >                  |

Department of Planning www.basix.nsw.gov.au

Tuesday, 27 October 2009

page 6/8

| Energy Commitments  | Show on<br>DA plans                     | Show on CC/CDC plans & specs | Certifier<br>check |
|---|---|------------------------------|--------------------|
| • 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 4 bathroom(s)/toilet(s) in the development for natural lighting.                       | >                                       | >                            | >                  |
| Other   |   |                              |                    |
| 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.  |   | >                            |                    |
| The applicant must install a fixed indoor or sheltered clothes drying line as part of the development.  | *************************************** | >                            |                    |

www.basik.nsw.gov.au

Certificate No.: 275286S Tuesday, 27 October 2009

Certificate No.: 275286S

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

Commitments identified with a  $\sqrt{\ }$  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  $\sqrt{\ }$  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  $\sqrt{\ }$  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



#### **MATERIALS AND FINISHES SELECTION**

Tel. 0414 418 695 P.O.Box 134 – Broadway 2007 NSW

Date 25 / 05 /2010
Client Mr Horst & Mrs Ingrid Schurger
Building Address 1046 Barrenjoey Road Palm Beach

**BRICKS-MANUFACTURER - EXPOSURE GRADE COMMONS** 

RANGE - N/A Walls to be rendered

COLOUR Main - TAUBMANS FORGED IRON

FOR OFFICE USE CHILY

Ref: 00SCH

Are exposure grade bricks/mortar required?

**MORTAR COLOUR - N/A** 

FINISH - FLUSH

NOTE - House is to be rendered mortar colour is not applicable

YES

FOR OFFICE USE ONLY

N/A

FEATURE TO FRONT FAÇADE.

FINISH - SANDSTONE CLADDING.

COLOUR - NEUTRAL TONE, SPLIT FACE

LOCATION - To the front Blade Wall on the Right Hand side of the Garage



**ROOF TILES - BORAL** 

RANGE - FLAT ROOF TILES

PROFILE - LINEA

COLOUR - CHARCOAL GREY

GARAGE DOOR TYPE - B & D GARAGE DOORS

STYLE - SEVILLE (contemporary horizontal slatted look)

COLOUR - COLORBOND SURFMIST

WINDOW FRAMES - VANTAGE

COLOUR - PEARL WHITE GLOSS

Materials and finishes selection -

|                                     | FOR OFFICE USE ONLY                          |
|-------------------------------------|--|
| OND IRONSTONE                       |  |
| OND SURMIST                         |  |
| OND IRONSTONE                       |  |
| TYPE - STENCILED COLOUR - BLUESTONE |  |
|                                     |  |
| TYPE<br>COLOUR                      | N/A  |
|                                     | OND SURMIST  OND IRONSTONE  TYPE - STENCILED |

Owners Signature

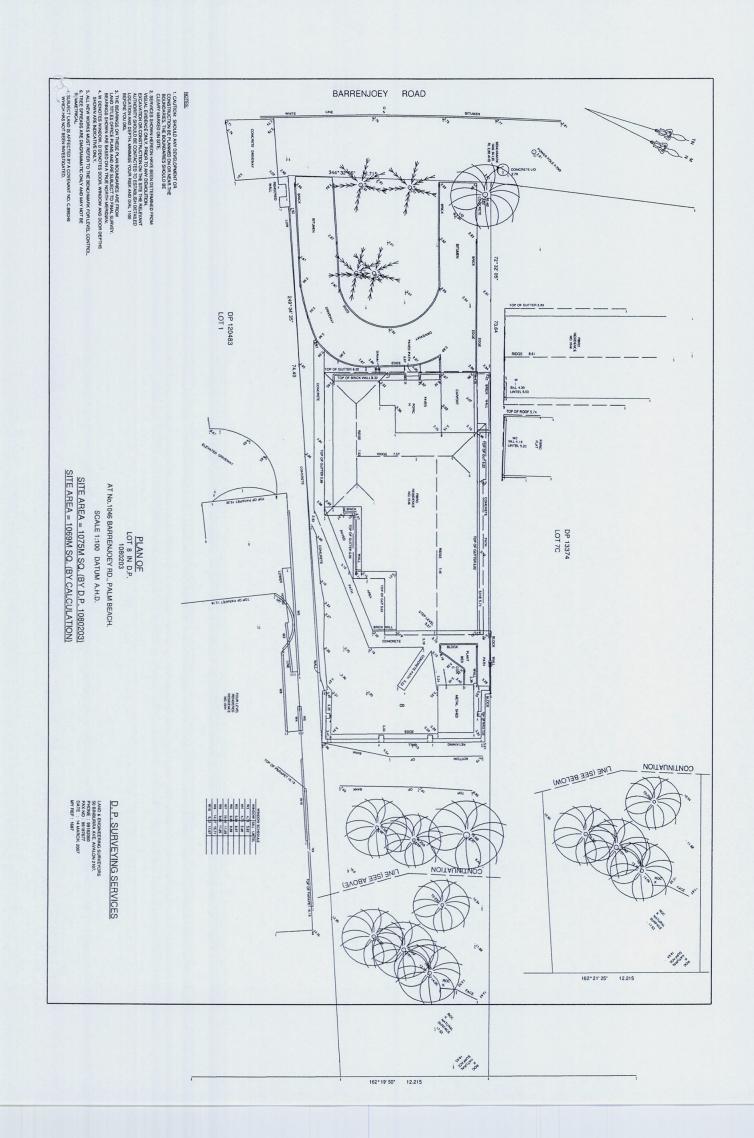
JAMES TREBUE - DESIGNER

Date \_ 25 / 05 / 2010

Materials and finishes selection -

#### GEOTECHNICAL RISK MANAGEMENT POLICY FOR PITTWATER FORM NO. 2 – To be submitted with detailed design for construction certificate

|  | 7  |
|--|--|
| Constant and and and the Control of  |  |
| Development Application for Decision and the Company of the Compan |  |
|  |  |
| Address of site Name Part Control Control Part 15.   | and the state of t |
|  |  |
| Declaration made by Structural or Civil Engineer in relation to the incorporation of the Geotechnical issues into the project design   |  |
| on this the $\frac{MARTENS}{28/D/2010}$ on behalf of $\frac{MARTENS}{(trading or company name)}$ $\frac{8.4550ciATES}{(trading or company name)}$  |  |
| on this the 28/5/20/0  |  |
| certify that I am a Structural or Civil Engineer as defined by the Geotechnical Risk Management Policy for Pittwater   |  |
| am authorised by the above organization/company to issue this document and to certify that the   |  |
| organization/company has a current professional indemnity policy of at least \$2million. It also certify that I have prepared the below listed structural documents in accordance with the recommendations given in the Geotechnical   |  |
| Report for the above development   |  |
| Geotechnical Report Details:   |  |
| Geotechnical Report Details:  Report Title: GEOTECHNICAL & BUSITEMEE ASSESSMENT: UCH BA  Report Date: DECEMBET? 2009  Author: NATHAN ESSTER  | RRON JUSY 18D,   |
| Report Date: DECEMBET? 2009 Author: NATHAN FOSTER  | PAIN APACK   |
| Author: NATHAN FOSTER  | 1.10.10  |
| And a state of the | word.  |
| Structural Documents list:   |  |
|  |  |
| 14 All to the control of the control |  |
|  |  |
| I am also aware that Pittwater Council relies on the processes covered by the Geotechnical Risk Management Policy,   |  |
| including this certification as the basis for ensuring that the geotechnical risk management aspects of the proposed   |  |
| development have been adequately addressed to achieve an "Acceptable Risk Management" level for the life of the structure taken as at least 100 years unless otherwise stated and justified  |  |
|  |  |
| DANIEL MIFREDS (signature)   |  |
| (name) Y (signature)   |  |
| Declaration made by Geotechnical Engineer or Engineering Geologist in relation to Structural Drawings  |  |
| I prepared and/or technically verified the abovementioned Geotechnical Report as per Form 1 dated 28/5/10 and now certify that I have viewed the above listed structural documents prepared for the same development. I am satisfied that the recommendations given in the Geotechnical Report have been appropriate taken into account by the structural engineer in the preparation of these structural documents.   |  |
| I am aware that Pittwater Council relies on the processes covered by the Geotechnical Risk Management Policy,  |  |
| including this certification as the basis for ensuring that the geotechnical risk management aspects of the proposed development have been adequately addressed to achieve an "Acceptable Risk Management" level for the life of the   |  |
| structure taken as at least 100 years unless otherwise stated and justified in the Report and that reasonable and practical measures have been identified to remove oreseptable risk.  |  |
|  |  |
| Signature  |  |
| Name OR DANIEL MARTONS  Chartered Professional Status CREM, NPER, MICAUA   |  |
| CATEN NPER MITTAUX   |  |
| Chartered Professional Status  |  |
| Membership No. 21.8 53.79  |  |
|  |  |





CASH SALE CUSTOMER

YELLOW - CUSTOMER COPY

Reece Pty Ltd ABN 84 004 097 090

30/03-11:43:46

9999

Supply Branch: BLACKTOWN

Ph: (02) 9621 3200 Fax: (02) 9621 3963

|            |                                   | ACC   | NUNT NUM   | BER        |                                       |                     | ſ               |      |                           | DOCUMENT  | TYPE        |       |
|------------|-----------------------------------|---|------------|------------|---------------------------------------|---------------------|-----------------|------|---------------------------|-----------|-------------|-------|
| ORDER      | """                               |   | 119-1      |            | · · · · · · · · · · · · · · · · · · · | age: i              |                 |      | CASH                      | SALE (TAX |             |       |
|            |                                   | JOB No./NA  |            | DATE       |                                       | LESPERSON           |                 |      | BRANCH                    | 4 2011    | DOCUMEN     | T NUI |
| Refer Be   | 10%                               | FALM BEACH  |            | 30/03/2010 | 02-HAT                                | HEW STEWART         |                 | BLAC | KTOWN                     |           | 465         | 32576 |
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| 2119119    | Milding                           | MBER: 1046 BA<br>  Plan Approva<br>  Prenjoey Rd, | l Applicat | ion        | 1.60                                  | 25., 95             | EA              |      |                           |           | 25.95       | Y     |
|            |                                   | y Customer  |            |            |                                       |                     |                 |      |                           |           |             |       |
|            | Paid By:                          |   |            |            |                                       |                     |                 |      |                           |           |             |       |
|            | GSI lota.                         | l Amount: 0.0                                     | 3          |            |                                       |                     |                 |      |                           |           |             |       |
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|            | PVC & PE I                        | Price Increase                                    | 5-10x 01.  | .04.10     |                                       |                     |                 |      |                           |           |             |       |
|            |                                   |   |            |            |                                       |                     |                 |      |                           |           |             |       |
| LIVERY IN  | STRUCTIO                          | NS, COMMENTS                                      | S, ID.     |            |                                       | N                   | IET TOTA        | L    |                           |           |             |       |
|            |                                   |   |            |            |                                       |                     | CARTAGE         |      | 25, 95                    | 9.60      | 25,95       | ,     |
|            |                                   |   |            |            |                                       | Do                  | OCUMEN<br>TOTAL | т    | 25. 95                    | 0.88      | 25. 95      |       |
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| NDITIONS   | OF SALE S                         | EE REVERSE.                                       |            | R          | ECEIVED E                             | BY (PRINT NA        | ME):            |      |                           |           |             |       |
| TNS.       | COILS                             | LENGTHS   | BAGS       | HWU        | OTHER                                 |                     |                 |      |                           |           |             |       |
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|            |                                   |   |            |            |                                       |                     |                 |      |                           | CHECKED   | BY:         |       |
| E - OFF    | ICE COPY                          |   |            |            | AR REELE                              | CUSTOMER PRI        | CES **          |      |                           |           |             |       |



#### **Application Lodgement Summary**

Sydner

Reference Number 2830227

Date Requested: Tue March 30 2010

Agent

Reece Kings Park, 4 Melissa Place Kings Park

**Applicant** 

Diamantina Designer Homes, 1/53-55 Leabons Lane Seven hills 2147

Property/Asset

1046 Barrenjoey Rd, Palm Beach 2108 (H Schurger Ib Schurger) PNum: 3399508

150 mm PVC Sewer Main - (4336178)

**Product** 

**Building Plan Approval Application** 

Charge

**Product Cost** 

**Total** 

Building Plan Approval Application Fee

\$25.95 \$0.00

GST

\$25.95

#### **Property Special Conditions for Plumbers**

| Boundary Trap Required    | No     |
|---------------------------|--------|
| Watercharged/Tidal area   | No     |
| Partial Drainage area     | No     |
| Aggressive Soil area      | No     |
| Cast Iron Pipe area       | No     |
| Sewer Surcharge area      | No     |
| Minimum Gully Height area | No     |
| Sewer Available           | Yes    |
| Connection Type           | Vacuum |
|                           |        |

You must contact Sydney Water's Plumbing Inspection and Assurance Services on Ph: 1300 889 099 to clarify the property special conditions where the property special conditions are not shown (yes or no), are shown as "unset", "unknown" or "not available" or if the proposed development is being built over more than one existing property.

Please note that boundary traps must be fitted for all commercial and industrial properties and you must ensure that all plumbing/drainage and building works are carried out in accordance with the relevant codes and standards.

A water meter is required to be fitted to the property during construction. You will need to ensure that your licensed plumber carries out this work in accordance to the relevant codes and standards.



**Transaction Summary** 

Sydney WAT≨R

**Date Requested** 

Tue March 30 2010

A.B.N 49 776 225 038

Agent

Reece Kings Park, 4 Melissa Place Kings Park

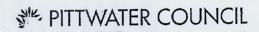
**Applicant** 

Diamantina Designer Homes, 1/53-55 Leabons Lane Seven hills

2147

This document will be a tax invoice when you make payment.

| 03          | 2830227 Building Plan Approval Application Fee | \$25.95 | \$0.00 | \$25.95 |
|-------------|--|---------|--------|---------|
| 03          | 2830227 Building Plan Approval Application Fee | \$25.95 | \$0.00 | \$25.95 |
|             | oey Rd, Palm Beach 2108                        |         |        |         |
| Transaction | Details  | Charge  | GST    | Total   |

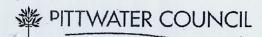


Form No. UI 202

#### Application for Access Driveway Profiles 1 July 2009 – 30 June 2010

| PLEASE PRINT   | •  |
|--|--|
| Applicant: HORET STHURAEL  |  |
| Company Name (if applicable):                                      | EN ROAD PALM BEACH Postcode: 2108                      |
| Postal Address: 1044 BARRENSO                                      |  |
| Phone (W): 5979 6722   | (M): 0414 646809                                       |
| Owner's Name (if different from above):                            | 6 0 0  |
| Property Address: OHB BARRENJOE                                    | POAD PALM BEACH  |
| D.A. No. (if applicable): NOS87 09                                 |  |
| ? Single/Dual Occ.   | ? Single/Dual Occspecial treatment**                   |
| ? Other than Single/Dual Occ.                                      | ? Other than Single/Dual Occspecial treatment**        |
| I hereby apply for Driveway profiles at the above a                | ddress.  |
| Note: Indicate significant trees on Road Verge. If ren             |  |
| Preservation Officer.  |  |
| Applicant's Signature:   | Date: 20-5-10  |
| Insert either X or Y distance from boundary to                     | proposed driveway.                                     |
| / X Boundary Cross   | ing Y  |
| Side Boundary  | Boundary/Property Line                                 |
|  | T  |
|  |  |
| Vehicular Cr   |  |
| (Access Driv   | eway)  |
| Construction not to encroach beyond "x" (boundary line)            |  |
| without written notification 0.6m                                  | 0.6m   |
| to the adjoining owner   | 3m minimum   |
| "X" Gutter Crossi  | ng Wing  |
| Kerb & Gutter Wing   | Availed !  |
| Notes:   | duith anywork  |
| This application does NOT constitute an a                          | pproval to commence or proceed with any work.          |
| 2. A Section 139 Consent Certificate under t                       | ne Roads Act – 1993 is required (See Form UI 203).     |
| 3. **Special treatment includes any of: retain                     | ing structures, stairs or landscape treatment          |
| Field Use Only:  |  |
| a) Type of Profile   | lidth at gutter crossing<br>lidth at boundary crossing |
| b) Length (a) vi<br>Comments:                                      | idili di bodhadi y orosonig                            |
|  |  |
|  |  |
| Office Use Only:   | Form No: UI 202  |
| Office Use Only:<br>CODE: ESTR 1.7.09 - 30.6.10 FEE: \$80.00 incl. | GST and addition                                       |
| CODE: ESTR 1.7.09 - 30.6.10 FEE: \$80.00 incl.                     | GST and addition                                       |

Contact Assets/Restorations Officer Sigi Melderis 9970 1348 or 0407 957 032 for more information



Form No UI 203

# Consent by Road Authority for Work in Road Reserve - DRIVEWAY Section 139 – Roads Act 1993 1 July 2009 - 30 June 2010 PLEASE PRINT

| Applicant: HOPST SCHUEGER   |                     |
|---|---------------------|
| Postal Address: 1048 BARRENTERY ROAD PALM BEACH   | Postcode: 2108      |
| Phone (W): 99796722 (M): 04410414 646   | 803                 |
| Property Address: 1046 BARRENSDEY PORD PAIN BEACH   | +                   |
| Subject to the payment of the appropriate fee, the Applicant is hereby permitted to construct t associated work) as detailed below, in strict accordance with the <b>CONDITIONS</b> overleaf.   | he driveway (and/or |
| I/We the undersigned agree to abide by the said conditions.   |                     |
| Applicant's Signature:  | 0-5-10              |
| FEES (includes GST)   |                     |
| Consent for access driveway construction only (includes 2 site inspections) per allotment for RESIDENTIAL SINGLE/ DUAL OCCUPANCY.   | \$155.00            |
| Consent for access driveway construction only (includes 2 site inspections) per allotment for RESIDENTIAL SINGLE/ DUAL OCCUPANCY which includes any of: major retaining structures, stairs or special landscape treatment.            | \$385.00            |
| Consent for access driveway construction only (includes 2 site inspections) per allotment for OTHER THAN RESIDENTIAL SINGLE/DUAL OCCUPANCY  | \$180,00            |
| Consent for access driveway construction only (includes 2 site inspections) per allotment for OTHER THAN RESIDENTIAL SINGLE/DUAL OCCUPANCY which <i>Includes any of:</i> retaining structures, stairs or special landscape treatment. | \$510.00            |
| Fee per additional site inspection as required  | \$140.00            |
| Office Use Only:  |                     |
| nspected by: Date:  |                     |
| Approved:   |                     |
| lot approved:   |                     |
| Comment:  |                     |
| ODE: ESTR 1.7.09 - 30.6.10 Late Fee: \$650 when work commenced prior to issue of Consent For  | m No: UI 203        |
| EE PAID: \$155-00. RECEIPT NO: 280026 ISSUED BY: JANE 2 DATE  | :20/5/2010          |
| NOTE TO CUSTOMER SERVICE: PHOTOCOPY APPLICATION FORM AND STAPLE WIT   |                     |

#### SECTION 139 - ROADS ACT 1993

#### **CONDITIONS OF CONSENT**

- The Applicant shall, at all times, keep indemnified Council from and against all actions, suits, proceedings, losses, costs, damages, changes, claims and demands in any way arising out of or by reason of anything done or omitted to be done by the Applicant in respect of the work in question.
- 2. The Applicant, at all times for the duration of this Consent, will not interrupt or otherwise disturb the traffic flow on the road without first obtaining the consent of Council.
- 3. The applicant shall make good any damage caused to the property of any person or any property of Council by reason of the carrying out of any work by the Applicant under the Conditions of this Consent.
- 4. Should the Applicant fail to comply with any of these conditions or any requirement of Council as provided then this Consent shall permanently lapse and any part of the work remaining within the road at that time shall be deemed to be an obstruction or encroachment under Section 107 of the Roads Act 1993.
- 5. This Permit/Consent receipt must be held on the job and produced to any officer of Council when called upon.
- 6. All work within the Road Reserve (Including excavation) is to be carried out by Council Authorised Contractors only.
- Construction of the vehicular access is to be strictly in accordance with the profile supplied.
- 8. A formwork inspection and approval by Council is required prior to construction of the driveway. **24 HOURS NOTICE IS REQUIRED.**
- 9. THIS CONSENT AND (PREVIOUSLY ISSUED) APPROVED PROFILE MUST BE RETAINED ON SITE FOR THE INSPECTING COUNCIL OFFICER'S APPROVAL
- Type of Construction:
  - For residential single & dual occupancy 20MPa Concrete, 150mm thick
  - For other 20MPa Concrete, 180mm thick with F72 mesh

#### Pittwater Council

#### OFFICIAL RECEIPT

20/05/2010 Receipt No 280026

To Horst Schurger

1044 Barrenjoey Rd Palm Beach 2108

| Applic | Reference                   | Amount |
|--------|-----------------------------|--------|
| GL Re  | CCGST-CCa                   | \$2.35 |
| GL Re  | ESTR-Eng<br>1 x 1046 Barren |        |

| Total:      | \$237.35 |
|-------------|----------|
| Amounts     | Tendered |
| Cash        | \$0.00   |
| Cheque      | \$0,00   |
| Db/Cr Card  | \$237.35 |
| Money Order | \$0.00   |
| Agency Rec  | \$0.00   |
| Total       | \$237,35 |
| Rounding    | \$0.00   |
| Change      | \$0.00   |
| Nett        | \$237.35 |

Printed 20/05/2010 1:48:31 Cashier JRiche





General Housing
Specifications







ADDRESS OF PROPERTY:

**GENERAL HOUSING SPECIFICATIONS BETWEEN:** 

OWNER:

AND

CONTRACTOR:

CONTRACTOR LICENCE NO:

BENCHMARK BUILDING CERTIFIERS Construction Certificate Approval

Date: Ilyliu

CC No.: 10-027

Accreditation No.: Anthony Krilich

# HIA GENERAL HOUSING SPECIFICATIONS - NSW (INCORPORATING THE HIA GUIDE TO MATERIALS & WORKMANSHIP) REVISED SEPTEMBER 2009

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| Owner 1              | tion referred to in the Contract | No                   | Date: |    |
| Name:                |                                  |                      |       |    |
| Owner's Signature:   |                                  | Date:                |       |    |
| Witness's name:      |                                  | Witness's signature: |       |    |
| Owner 2              |                                  |                      |       |    |
| Name:                |                                  |                      |       |    |
| Owner's Signature:   |                                  | Date:                |       |    |
| Witness's name:      | · .                              | Witness's signature: |       |    |
| Builder              |                                  |                      |       |    |
| Name:                |                                  |                      |       |    |
| Builder's Signature: |                                  | Date:                |       |    |
| Witness's name:      |                                  | Witness's signature: |       |    |
|                      |                                  |                      |       |    |

## HIA GENERAL HOUSING SPECIFICATIONS - NSW (INCORPORATING THE HIA GUIDE TO MATERIALS & WORKMANSHIP) REVISED SEPTEMBER 2009

#### 1. INTRODUCTION

#### 1.1 General

This Specification forms part of the *Contract* documents referred to in the building *Contract* and details the works to be executed and the materials to be used in carrying out those works at the site.

This Specification shall be read as a general specification only. The extent of the works shall be governed by the approved plans and other requirements under the *Contract*.

Any works not fully detailed shall, where appropriate, be sufficiently performed if carried out in accordance with the *Building Code of Australia* (*BCA*), the relevant manufacturer's recommendations or *Engineer's Recommendations*.

#### 1.2 Preliminary Use

This Specification forms part of the Contract and should be read in conjunction with the other contract documents.

#### 1.3 Prevailing Documents

Where there is a difference between the plans and this Specification, this Specification will take precedence. The *Builder* must at all times maintain a legible copy of the plans and this Specification bearing the approval of the relevant *Local Authority*.

Otherwise to the extent of any conflict between documents, the order of precedence set out in the building contract shall apply.

#### 1.4 Size and Dimensions

All sizes and dimensions given in this Specification are in millimetres unless otherwise stated and are nominal only.

#### 1.5 Prime Cost and Provisional Sum Items

Prime cost items and provisional sum items are listed in the Schedule of Works.

#### 1.6 Definitions

In this Specification:

- "BCA" refers to the publication entitled Building Code of Australia Class 1 and Class 10 Buildings, Housing Provisions, Volume 2 published by the Australian Building Codes Board.
- "Engineer's Recommendations" includes any soil classification report, preliminary footing report, construction footing report and any other report, recommendation, site or other instruction, calculations or plans prepared by an engineer in respect of the works.
- Where the words "Local Authority" are mentioned they shall mean the local council, or other governing authority or private certifier with statutory responsibility for the compliance of the work performed.
- Where referred to in this Specification, "Regulations" shall mean the building Regulations and codes (including the BCA, as amended) statutorily enforceable at the time application is made for a construction certificate or other permits, consents or approvals relating to the Contract.
- The "HIA Guide" means the HIA Guide to Materials & Workmanship for Residential Building Work.

Unless the context suggests otherwise, terms used in this Specification shall have the same meaning as in the HIA Plain Language Building Contract between the *Owner* and the *Builder* ("Contract").

| Initials | <br> | . / | <br> |
|----------|------|-----|------|

#### 2. STATUTORY REQUIREMENTS

#### 2.1 The Building Works

The building works shall be constructed in accordance with:

- the Regulations and in particular the Performance Requirements referred to in the BCA, Housing Provisions, Volume 2;
- any conditions imposed by the relevant development consent or complying development certificate; and
- commitments outlined in the relevant BASIX Certificate

in so far as the Builder is required in accordance with the Schedule of Works annexed to this Specification.

#### 2.2 Compliance with Requirements of Authorities

The *Builder* is to comply with the requirements of all legally constituted authorities having jurisdiction over the building works and the provisions of the *Home Building Act 1989*.

#### 2.3 Electricity

Where there is no existing building, the *Builder* is to make arrangements for any electrical power to be used in the construction of the building works and is to pay fees and costs incurred therein. The cost of providing and installing any additional poles, wiring, service risers or underground wiring etc., as may be required by the electricity supply authority, shall be borne by the *Owner*.

#### 2.4 Sanitary Accommodation

Prior to the commencement of the building works, unless toilet facilities exist on the site, the *Builder* shall provide temporary toilet accommodation for the use of subcontractors. Where the *Local Authority* requires the temporary toilet to be connected to sewer mains, the additional cost of this work shall be borne by the *Owner*. On completion the *Builder* shall remove the convenience.

#### 3. OWNER'S OBLIGATIONS

#### 3.1 Engineer's Recommendations

If the *Contract* so indicates, the *Owner* shall, at the *Owner*'s expense, provide the *Builder* with reports and recommendations (including soil classification) as to the foundations or footings requirements for the building works prepared by an engineer.

In these circumstances, if the *Builder* instructs any party to provide such recommendations, the *Builder* does so only as agent for the *Owner*.

#### 3.2 Trades Persons Engaged by Owner

The Owner shall not engage or employ any tradesperson, trade-contractor or any other person to work on the site without the consent of the Builder whose consent may be subject to such terms and conditions as the Builder may stipulate.

#### 3.3 Items Supplied by Owner

For all items referred to in this Specification to be supplied by the *Owner*, it is the responsibility of the *Owner* to arrange payment for delivery of and protection against damage and theft of all these items.

#### 3.4 Water Supply

Where there is no existing building on the site, the *Owner* shall, at the *Owner*'s expense, supply adequate water to the site for construction purposes. Unless otherwise specified, the *Builder* shall pay the standard water meter connection fee to the water supply authority provided this service is pre-laid to the site ready for use. The *Owner* shall be responsible for any fee to be paid in excess of the standard water meter connection fee.

#### 3.5 Sanitation

Unless otherwise specified:

- the Owner shall, at the Owner's expense, supply sewerage connection riser or common effluent drainage connection riser on the site;
- the Builder shall pay the standard sewer connection fee to the sewerage supply authority provided this service is pre-laid to the site and ready for use; and

| <b>NSW HIA</b> | general | housing | spec | Septem | her 2009 | doc |
|----------------|---------|---------|------|--------|----------|-----|

• the Owner shall be responsible for any fee to be paid in excess of the standard sewer connection fee.

#### 4. PLANS, PERMITS AND APPLICATION FEES

#### 4.1 Permits and Fees

Subject to a contrary requirement under the *Contract*, the *Builder* shall lodge all necessary application notices, plans and details with the *Local Authority* for approval prior to commencement of construction.

#### 4.2 Mines Subsidence

In areas affected by mines subsidence, the appropriate authority is to be consulted and any work carried out in accordance with the authority's requirements.

#### 4.3 Setting Out

The Builder shall accurately set out the building works in accordance with the site plan and within the boundaries of the site.

#### 5. EXCAVATIONS

#### 5.1 Excavations

The part of the site to be covered by the proposed building or buildings and an area at least 1000mm wide around that part of the site or to the boundaries of the site, whichever is the lesser, shall be cleared or graded as indicated on the site works plan.

Top soil shall be cut to a depth sufficient to remove all vegetation.

Excavations for all footings shall be in accordance with the Engineer's Recommendations or the BCA requirements.

#### 6. FOUNDATIONS AND FOOTINGS

#### 6.1 Underfloor Fill

Underfloor fill shall be in accordance with the BCA.

#### 6.2 Termite Risk Management

Termite treatment shall be carried out in accordance with the BCA.

#### 6.3 Vapour Barrier

The underfloor vapour barrier shall be 0.2 mm nominal thickness, high impact resistance polyethylene film installed in accordance with the *BCA*.

#### 6.4 Reinforcement

Reinforcement shall conform and be placed in accordance with the Engineer's Recommendations and the BCA.

Support to all reinforcement shall be used to correctly position and avoid any undue displacement of reinforcement during the concrete pour.

#### 6.5 Concrete

Structural concrete shall not be less than Grade N20 except where otherwise approved by the engineer and in accordance with the *BCA*.

Pre-mixed concrete shall be manufactured in accordance with AS 1379 with delivery dockets kept on site and available for inspection by the engineer.

Concrete shall be placed and compacted in accordance with good building practice.

#### 6.6 Curing

All concrete slabs shall be cured in accordance with AS 3600.

#### 6.7 Footings and Slabs on Ground

Concrete slabs and footings shall not be poured until approval to pour concrete is given by the engineer or the *Local Authority*.

NOTE: Bench levels and floor levels on the site works plan shall be regarded as nominal, unless specified otherwise.

| Initials | <br> |  |  |  |  |  | 1 |  |  |  |  |  |  |  | <br> |  |
|----------|------|--|--|--|--|--|---|--|--|--|--|--|--|--|------|--|
|          |      |  |  |  |  |  |   |  |  |  |  |  |  |  |      |  |

#### 6.8 Suspended Slabs

All concrete slabs, other than those supported on solid ground or properly compacted filling, shall be constructed as suspended slabs. These slabs shall be constructed in accordance with the *Engineer's Recommendations*.

#### 6.9 Foundation Walls

On footings as previously specified, brick walls are to be built to the thickness shown on plan to level underside of floor bearers or plates.

#### 6.10 Sub-Floor Ventilation

Where required, adequate cross ventilation will be provided to the space under suspended ground floor. Construction is to meet the requirements of the *BCA*. No section of the under floor area wall to be constructed in such a manner that will hold pockets of still air.

#### 6.11 Sub-Floor Access

If required, access will be provided under suspended floors in position where indicated on plan.

#### 7. RETAINING WALLS

#### 7.1 Retaining Walls

Where the *Builder* is required by the Schedule of Works annexed to this Specification, the *Builder* shall construct retaining walls as shown on the approved plans. Where a retaining wall is not included in the Schedule of Works, the construction of the retaining wall shall be the responsibility of the *Owner*.

#### 8. EFFLUENT DISPOSAL/DRAINAGE

#### 8.1 Effluent Disposal/Drainage

In both sewered and unsewered areas:

- (a) bath, wash basin, kitchen, wash tubs, pedestal pan and floor grate shall be fitted to shower recess in positions shown on plan (refer to Schedule of Works); and
- (b) waste pipes with traps shall be provided to the above fittings and connected to the drainage system.

The whole of the work is to be performed in accordance with the rules and requirements of the sewerage authority concerned.

#### 8.2 Septic System

The *Builder* will provide and install a septic system where applicable to the requirements of the *Local Authority* and in accordance with the manufacturer's recommendations.

#### 8.3 Storm Water Drainage

Stormwater drainage shall be carried out in accordance with the BCA.

The Builder will allow for the supplying and laying of stormwater drains where shown on the site plan

#### 9. TIMBER FRAMING

#### 9.1 Generally

All timber framework sizes, spans, spacing, notching, checking and fixing to all floor, wall and roof structures shall comply with the *BCA* or AS 1684. Alternative structural framing shall be to structural engineer's details and certification.

The work shall be carried out in a proper and tradesperson like manner and shall be in accordance with recognised and accepted building practices.

#### 9.2 Floor Framing

All floors not specified to be concrete are to be framed at the level shown. Span and spacing of bearers is to conform to the requirements of the span tables for the appropriate member size. Deep joists to upper floors, where shown, are to be fitted with solid blocking or herringbone strutting as required. All sizes and stress grades of timber members and tie down methods are to be in accordance with AS 1684.

#### 9.3 Wall Framing

Plates may be trenched to provide uniform thickness where studs occur. Where plates are machine gauged to a uniform thickness, trenching may be omitted. Wall framing is to be erected plumb and straight and securely fastened to floor framing. The *Builder* will provide a clear space of 40mm between outer face of wall frame and inner face of brick veneer walls. The *Builder* will tie brickwork to studs with approved veneer ties. Ties are to slope downwards towards the veneer wall.

Studs in each panel of walling shall be stiffened by means of solid noggings or bridging pieces at not more than 1350 mm centres over the height of the wall. Bottom plates shall be fixed to the floor structure in accordance with AS 1684.

#### 9.4 Heads Over Opening (Lintels)

All sizes, stress grades and bearing areas shall conform to AS 1684. Heads exceeding 175 mm in depth shall be seasoned or a low shrinkage timber species will be used. Plywood web lintels conforming to the requirements of the Plywood Association of Australia may be used. Glue laminated beams conforming to AS 1328 or laminated veneer lumber beams to manufacturer's specification and data sheets may be used.

#### 9.5 Roof Trusses

Where roof truss construction is used, trusses shall be designed in accordance with AS 1720 and fabricated in a properly equipped factory and erected, fixed and braced in accordance with the fabricator's written instructions.

#### 9.6 Bracing

Bracing units shall be determined and installed in accordance with AS 1684 as appropriate for the design wind velocity for the site. Bracing shall be evenly distributed throughout the building.

#### 9.7 Flooring

Floor joists will be covered with strip or sheet flooring as shown on plan with particular regard to ground clearance and installation in wet areas as required by the *BCA*. Thickness of the flooring is to be appropriate for the floor joist spacing.

Strip and sheet flooring shall be installed in accordance with AS 1684.

When listed in Schedule of Works, floors shall be sanded to provide an even surface and shall be left clean throughout.

#### 9.8 Roof Framing

Roofs are to be pitched to the slope shown on plan. The *Builder* will provide tie-down as required for the appropriate design, wind speed and roof covering. The *Builder* will provide all rafters, ridges, hips, valleys, purlins, struts, collar ties and wind bracing as appropriate with all sizes and stress grades in accordance with AS 1684.

Metal fascias shall be installed in accordance with the manufacturer's recommendations and shall meet the requirements of AS 1684.

#### 9.9 Timber Posts

Posts supporting carports, verandas and porches shall be timber suitable for external use, or as otherwise specified, supported on galvanised or treated metal post shoes, unless otherwise specified. Posts shall be bolted to all adjoining beams as required by AS 1684 for the wind speed classification assessed for the site.

#### 9.10 Corrosion Protection

All metal brackets, facing plates and other associated fixings used in structural timber joints and bracing must have appropriate corrosion protection.

#### 9.11 Hot Water Storage Tank Platforms

Where a hot water storage tank is to be installed in the roof space, the tank platform shall be supported directly off the wall plates and must not be supported on ceiling joists. Where installed in the roof space the storage tank shall be fitted with an appropriate spill tray and overflow drain pipe.

Where a hot water storage tank is supported by the roof structure the structure shall be specifically designed to support all imposed loads

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#### 10. STEEL FRAMING

#### 10.1 Generally

Steel floor, wall or roof framing shall be installed in accordance with the manufacturer's recommendations and the BCA.

#### 11. ROOFING

All roof cladding is to comply with the relevant structural performance and weathering requirements of the *BCA* and be installed as per the manufacturer's recommendations.

#### 11.1 Tiled Roofing

The *Builder* will cover the roof of the dwelling with approved tiles as selected. The tiles are to be fixed (as required for the appropriate design and wind speed) to battens of sizes appropriate to the spacing of rafters/trusses in accordance with manufacturer's recommendations. The *Builder* will cover hips and ridges with capping and all necessary accessories including starters and apex caps. Capping and verge tiles are to be well bedded and neatly pointed. Roofing adjacent to valleys should be fixed so as to minimise water penetration as far as practicable. As roof tiles are made of natural products slight variation in colour is acceptable.

#### 11.2 Metal Roofing

The Builder will provide and install a metal roof together with accessories all in accordance with the manufacturer's recommendations.

Except where design prohibits, sheets shall be in single lengths from fascia to ridge. Fixing of sheets shall be strictly in accordance with the manufacturer's recommendations as required for the appropriate design and wind speed. Incompatible materials shall not be used for flashings, fasteners or downpipes.

#### 11.3 Gutters and Downpipes

Gutters and downpipes shall be manufactured and installed in accordance with the BCA. Gutters and downpipes are to be compatible with other materials used.

#### 11.4 Sarking

Sarking under roof coverings must comply with and be fixed in accordance with AS/NZS 4200.1 for materials and AS/NZS 4200.2 for installation.

#### 11.5 Sealants

Appropriate sealants shall be used where necessary and in accordance with manufacturer's recommendations.

#### 11.6 Flashing

Flashings shall comply with, and be installed in accordance with the BCA.

#### 12. MASONRY

#### 12.1 Bricks

All clay bricks and brickwork shall comply with AS 3700 and the BCA. Clay bricks are a natural kiln fired product and as such their individual size may vary.

Tolerances shall only be applied to the total measurements over 20 units, not to the individual units.

#### 12.2 Concrete Blocks

Concrete blocks are to be machine pressed, of even shape, well cured and shall comply with AS 3700. Concrete blockwork shall be constructed in accordance with the *BCA*.

Autoclaved aerated concrete blocks shall be in accordance with the manufacturer's product specification at the time the work is being carried out.

#### 12.3 Damp Proof Courses

All damp proof courses shall comply with the *BCA* and Clause 1.0.10. The damp proof membrane shall be visible in the external face of the masonry member in which it is placed and shall not be bridged by any applied coatings, render or the like.

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#### 12.4 Cavity Ventilation (Weepholes)

Open perpendicular joints (weepholes) must be created in the course immediately above any DPC or flashing at centres not exceeding 1.2m and must be in accordance with the BCA.

#### 12.5 Mortar and Joining

Mortar shall comply with the BCA. Joint tolerances shall be in accordance with AS 3700.

#### 12.6 Masonry Accessories

Masonry accessories shall comply with the *BCA* and accepted building practices. Wall ties are to meet the corrosion resistant rating appropriate for the exposure conditions of the site. The *Builder* will provide appropriate ties to articulated joints in masonry.

#### 12.7 Lintels

Lintels used to support brickwork opening in walls must be suitable for the purpose as required by the *BCA*. The *Builder* will provide one lintel to each wall leaf. The *Builder* will provide corrosion protection in accordance with the *BCA* Part 3.4.4 as appropriate for the site environment and location of the lintels in the structure.

#### 12.8 Cleaning

The Builder will clean all exposed brickwork with an approved cleaning system. Care should be taken not to damage brickwork or joints and other fittings.

#### 13. CLADDING AND LININGS

#### 13.1 External Claddings

Sheet materials or other external cladding shall be fixed in accordance with the manufacturer's recommendations and any applicable special details.

Where required in open verandas, porches and eaves soffits, material indicated on the plans shall be installed.

#### 13.2 Internal Wall and Ceilings Linings

The *Builder* will provide gypsum plasterboards or other selected materials to walls and ceilings. Plasterboard sheets are to have recessed edges and will be a minimum of 10mm thick. Internal angles in walls from floor to ceiling are to be set. Suitable cornice moulds shall be fixed at the junction of all walls and ceilings or the joint set as required. The lining of wet area walls shall be constructed in accordance with the *BCA*. Wet area lining is to be fixed in accordance with the manufacturer's recommendations.

The ceiling access hole shall be of similar material to the adjacent ceiling.

#### 13.3 Waterproofing

All internal wet areas and balconies over internal habitable rooms are to be waterproofed in accordance with the BCA.

#### 14 JOINERY

#### 14.1 General

All joinery work (metal and timber) shall be manufactured and installed according to accepted building practices.

#### 14.2 Door Frames

External door frames shall be a minimum of 32 mm thick solid rebated 12 mm deep to receive doors. Internal jamb linings shall be a minimum of 18 mm thick fit with 12 mm thick door stops. Metal door frames shall be installed where indicated on drawings in accordance with the manufacturer's recommendations.

#### 14.3 Doors and Doorsets

All internal and external timber door and door sets shall be installed in accordance with accepted building practices. Unless listed otherwise in the Schedule of Works, doors and door sets shall be manufactured in accordance with AS 2688 and AS 2689.

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# 14.4 Window and Sliding Doors

Sliding and other timber windows and doors shall be manufactured and installed in accordance with AS2047.

Sliding and other aluminium windows and doors shall be installed in accordance with manufacturer's recommendations and AS2047.

All glazing shall comply with the BCA and any commitments outlined in the relevant BASIX Certificate

# 14.5 Architraves and Skirting

The Builder will provide architraves and skirting as nominated on the plans or listed in the Schedule of Works.

# 14.6 Cupboards/Kitchens/Bathroom

Units shall be installed to manufacturer's recommendations. Bench tops shall be of a water resistant material.

# 14.7 Stairs, Balustrades and other Barriers

The *Builder* will provide stairs or ramps to any change in levels, and balustrades or barriers to at least one side of ramps, landings and balconies as per the *BCA*.

# 15. SERVICES

## 15.1 Plumbing

All plumbing shall comply with the requirements of the relevant supply authority and AS 3500. The work is to be carried out by a licensed plumber.

Fittings, as listed in the Schedule of Works, shall be supplied and installed to manufacturer's recommendations. Fittings, hot water systems and any rainwater harvesting facilities shall be appropriate to satisfy any commitment outlined in the relevant BASIX Certificate

### 15.2 Electrical

The *Builder* will provide all labour and materials necessary for the proper installation of the electricity service by a licensed electrician in accordance with AS/NZS 3000 and the requirements of the relevant supply authority. Unless otherwise specified, the electrical service shall be 240 volt, single phase supply.

### 15.3 Gas

All installation (including LPG) shall be carried out in accordance with the rules and requirements of the relevant supply authority.

## 15.4 Smoke Detectors

The *Builder* will provide and install smoke alarms manufactured in accordance with AS 3786 as specified or as indicated on the plans and in accordance with the *BCA*.

# 15.5 Thermal Insulation

Where thermal insulation is used in the building fabric or services, such as air conditioning ducting or hot water systems, it shall be installed in accordance with manufacturer's recommendations to achieve the R-Values required by the *BCA* or as outlined in the relevant BASIX Certificate.

## 16. TILING

## 16.1 Materials

Cement mortar and other adhesives shall comply with AS 3958.1 or tile manufacturer's recommendations.

# 16.2 Installation

Installation of tiles shall be in accordance with AS 3958.1, manufacturer's recommendations or accepted building practices.

Where practicable, spacing between tiles should be even and regular. The *Builder* will provide expansion joints where necessary. All vertical and horizontal joints between walls and fixtures e.g. bench top, bath, etc. and wall/floor junctions to be filled with flexible mould resistant sealant. All joints in the body of tiled surfaces shall be neatly filled with appropriate grout material as specified by the tile manufacturer or accepted building practice. As tiles are made of natural products a slight variation in colour is acceptable.

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### 16.3 Walls

The *Builder* will cover wall surfaces where indicated on the drawings with selected tiles. Tiles are to be fixed to the wall substrate with adhesives compatible with the substrate material. The *Builder* will provide all required strips, vent tiles and recess fittings.

### 16.4 Floors

The *Builder* will lay selected floor tiles in sand and cement mortar, or adhesive compatible with the substrate material, to areas indicated on the drawings. Where required, the *Builder* will fit approved edge strips or metal angle to exposed edges in doorways or hobless showers in wet areas in accordance with the *BCA*. The *Builder* will provide adequate and even fall to wastes where required.

### 17. PAINTING

# 17.1 General

All paint used shall be of a quality suitable for the purpose intended and the application shall be as per the manufacturer's recommendations. The colours used shall be as listed in the Schedule of Works or other relevant contract document. All surfaces to be painted shall be properly prepared to manufacturer's recommendations.

# 18. WORKMANSHIP STANDARDS AND TOLERANCES

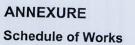
## 18.1 General

These general specifications incorporate the *HIA Guide*. By agreeing to these specifications, the *Owner* agrees that he/she has been provided a copy and has had the opportunity to read the *HIA Guide*.

The HIA Guide is to be used by the Builder and Owner as a point of reference for information on workmanship standards and tolerances, and amongst things, in deciding whether an alleged defect exists and/or whether the materials used and/or workmanship are in accordance with the plans and specifications.

The parties agree to use the HIA Guide in precedence over any other non legislated guide to standards and tolerances.

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Page 10

Initials ...../

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Landscape Architecture Urban Design Horticultural

BENCHMARK BUILDING CERTIFIERS

**Construction Certificate Approval** 

Accredited Certifier: Anthony Krilich

CC No .: 10-027 .

6319 0216

Date: 16hu

Accreditation No.:

22.04.2010

Anthony Krilich

**Benchmark Building Certifiers** 

Suite 5, Level 2, 498 High Street, Penrith 2750

PO Box 1274, Penrith NSW 2751

Tel: 02 4732 6322 Fax: 02 4732 6344

Email: bbc@pnc.com.au

ATT:

Anthony Krilich

Private Certifier

Complying Component Certificate CC Landscape Plan - DA No. N0587 / 09

Lot 8, DP 1080203, 1046 BARRENJOEY ROAD, PALM BEACH

As a qualified Landscape Architect, I certify that the landscape plan, drawing number LPDA 10 - 122 / 1 issue C and associated landscape details (including subsequent issues) have been prepared with reference to Pittwater Councils landscape guidelines, and have been amended to comply with the conditions of the Development Consent outlined in the Notice of Determination, dated 17th March 2010.

The landscape plan was amended to reflect required changes relating to bushfire issues, tree protection, fencing types, planting requirements, Inner Protection Zone requirements and general revisions. In our design capacity, I certify that the requirements of the development consent relating to landscape issues have been addressed and satisfy Council requirements.

If you have any questions, please call at your convenience.

Best regards,

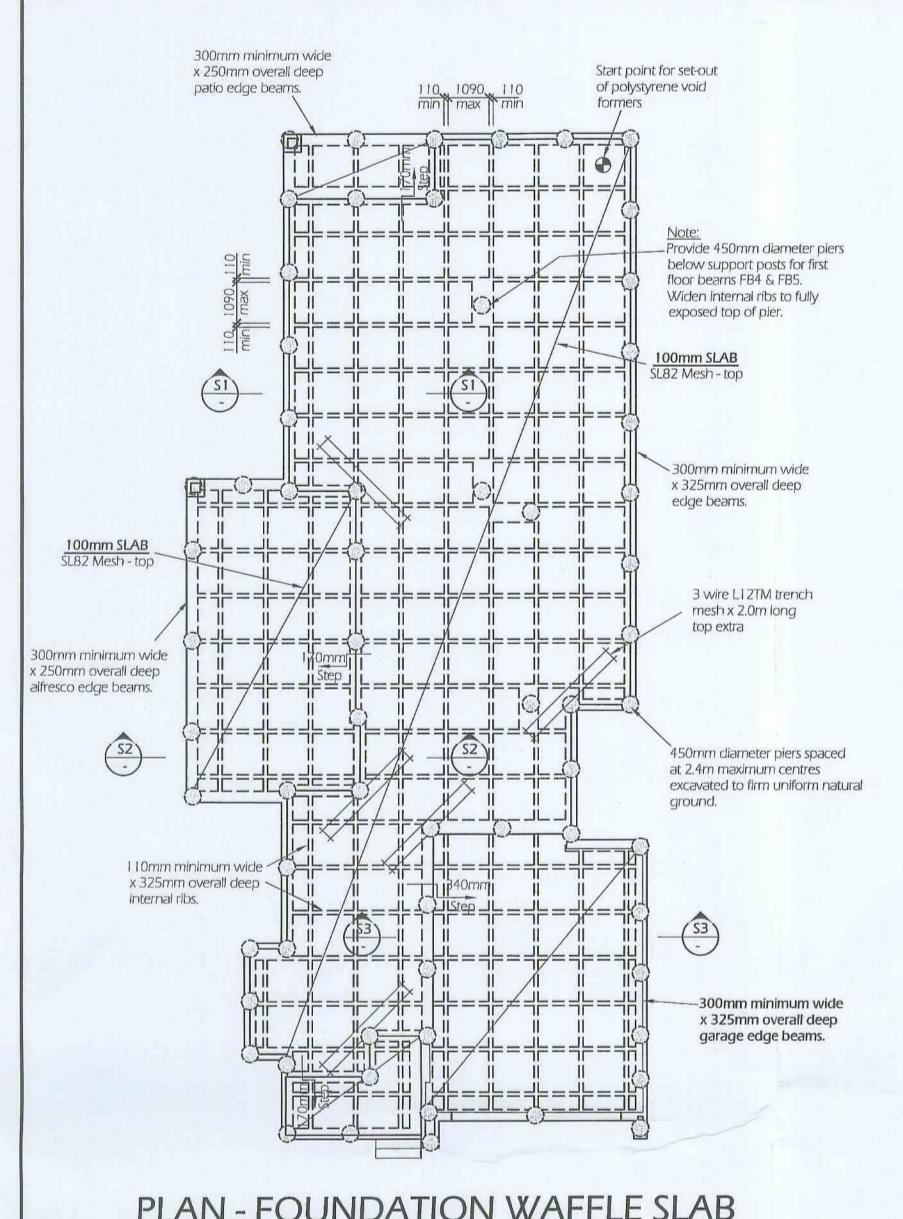
Robert Frew BLA Cert. IV Hort AILA RLA (Director)

abut Frew.

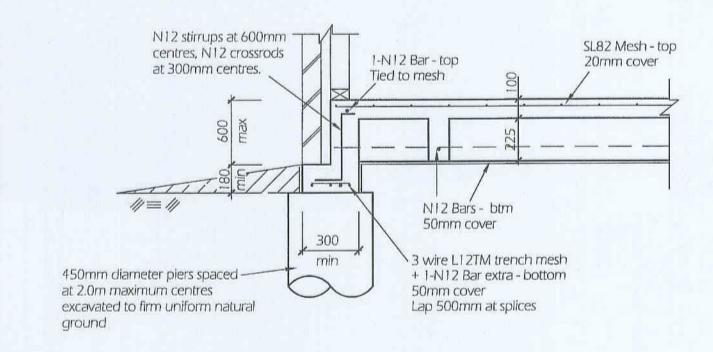
Disclaimer: This certification is based on landscape plans and details prepared by this office to address the conditions of Councils Notice of Determination. It shall be up to the builder and / or landscape contractor to assure these plans are followed as closely as possible during landscape installation to assure Occupancy Certification may be obtained. Any issues or anomalies which may occur on the plans or during construction should be bought to the attention of the landscape architect. Plant quantities to be confirmed on site by the landscape contractor, and any plant substitutes should be reviewed with the landscape architect. All services and drainage shall be located and avoided during landscape construction

Conzept - Landscape Architects, 79 Atchison St., Crows Nest, NSW 2065

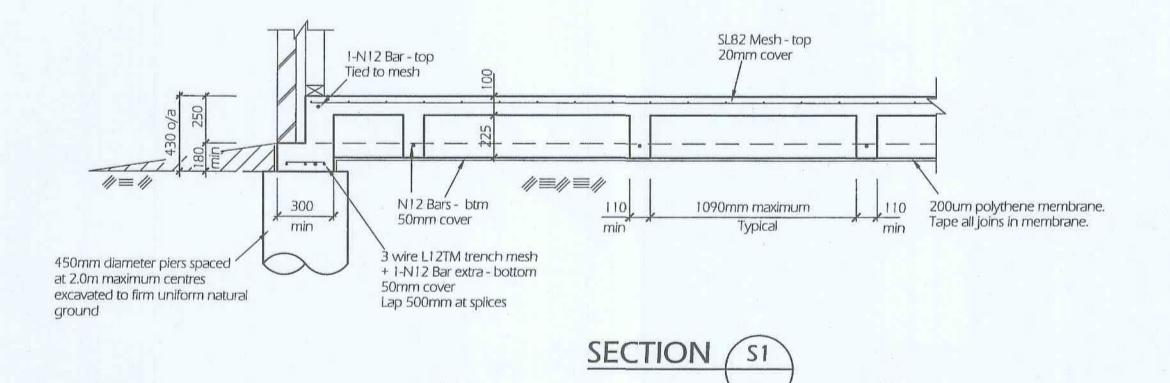
Phone: (02) 9438 1744 | Fax: (02) 9438 1766 | Mobile: 0413 861 351 | enquiries@conzept.net.au | www.conzept.net.au

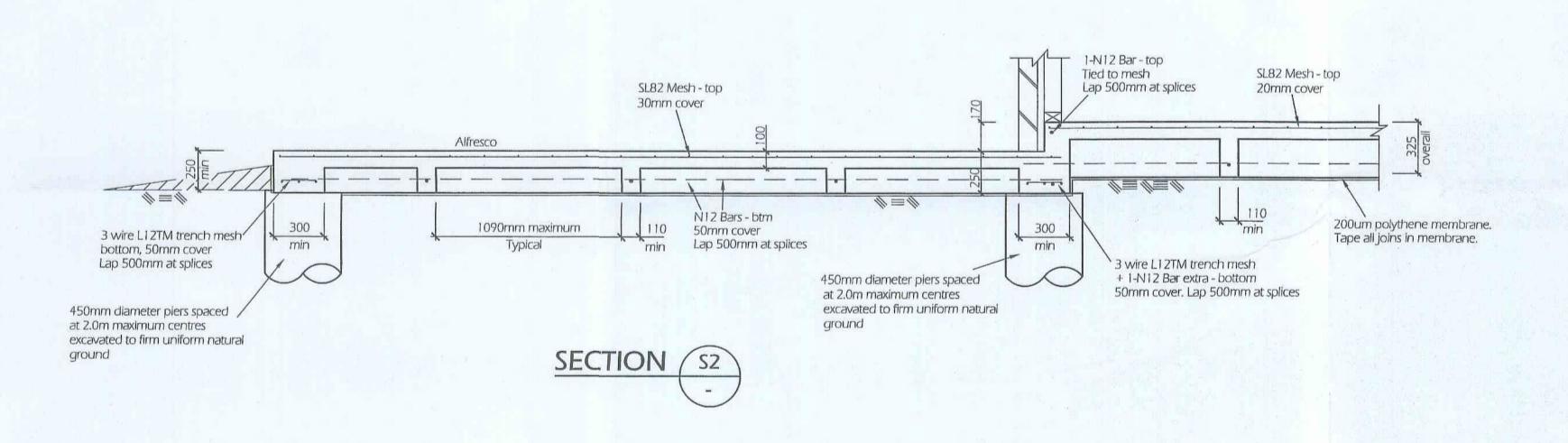


# PLAN - FOUNDATION WAFFLE SLAB Overlap fabric one whole uncut wire panel plus 25mm minimum at splices.



DETAIL - DEEPENED EDGE BEAM RECESS





# NOTES:

- 1. This drawing is to be read in conjunction with the Architectural drawing and specification.
- 2. Workmanship and materials to comply with AS3600 and associated Australian Standards.
- Characteristic concrete compressive strength in accordance with AS3600 to be 25MPa.
- Concrete slump to be 80mm.
- Concrete in slab to be mechanically vibrated during placing.
- 6. Cure concrete by keeping constantly damp for at least 5 days after placing.
- Reinforcement to be supported on bar chairs spaced at every 5th wire in both directions.
- 8. During site excavation provide sufficient drainage around building area to ensure that all rain water run-off is diverted away from area and is not allowed to pond on completion of the slab. Fill around the edge to at least 120mm minimum above the underside of the edge beam and fall away from slab at a slope of 50mm in 1000mm.
- Filling to be thoroughly compacted in shallow layers (150mm thick) by multiple passes of earth moving equipment.
- 10. Termite protection to be in accordance with AS3660.1-1995 and Council's requirements.
- 11. Construction requirements and site maintenance outlined in AS2870-1996 are to be followed. Performance expectations set out in AS2870-1996 Appendix B are acceptable. Refer also to CSIRO Information sheet 10-91 "Guide to house

- a copy of which is available from our office. ALL SLAB EDGE BEAMS ARE TO BE SUPPORTED BY 450mm DIAMETER PIERS SPACED AT 2.0m MAXIMUM CENTRES TO

FIRM UNIFORM NATURAL GROUND WITH AN ALLOWABLE

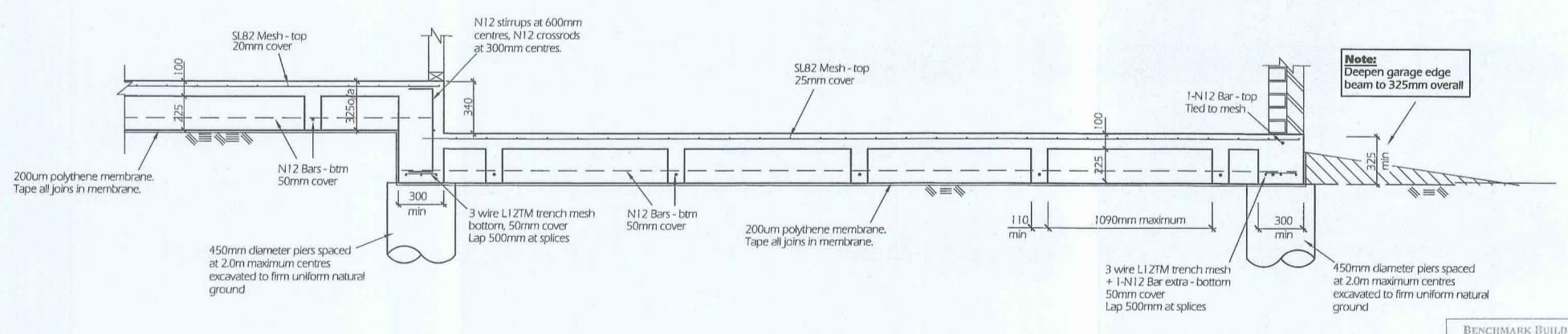
PIER SIZE MAY BE REDUCED TO 400mm WHERE PIERED TO

SAFE BEARING CAPACITY OF AT LEAST 150kPa.

veneer residence on this site.

owners on foundation maintenance and footing performance"

The slab shown on this drawing have been designed for a class "S" site in accordance with the requirements of AS2870 & AS3600 and if constructed in accordance with the details shown will be structurally adequate for the two storey brick



BENCHMARK BUILDING CERTIFIERS Construction Certificate Approval

CC No.: 10-027

Accredited Certifier: Anthony Krilich Accreditation No.: 6310 0216

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|       |      |       |             |   |
| Issue | Date | App'd | DESCRIPTION | - |
|       |      |       | REVISIONS   |   |

KNEEBONE, BERETTA & HALL PTY LTD AGEA CONSULTING STRUCTURAL & CIVIL ENGINEERS A.C.N 002 419 767
A.B.N 36 822 442 203 4 MACQUARIE AVENUE, PENRITH NSW 2750 PHONE: (02) 4731 3833 FACSIMILE: (02) 4721 5442 WEBSITE: www.kneeboneandberetta.com

E-MAIL ADDRESS: kneebone@pnc.com.au

Trevor B. HALL, B.Sc (Eng), F.I.E. Aust., C.P. Eng. Enrico L. BERETTA, B.E. (E.T.H.), F.I.E. Aust., C.P. Eng. Peter R. ANDRESEN, B.E. M.I.E. Aust, C.P. Eng.

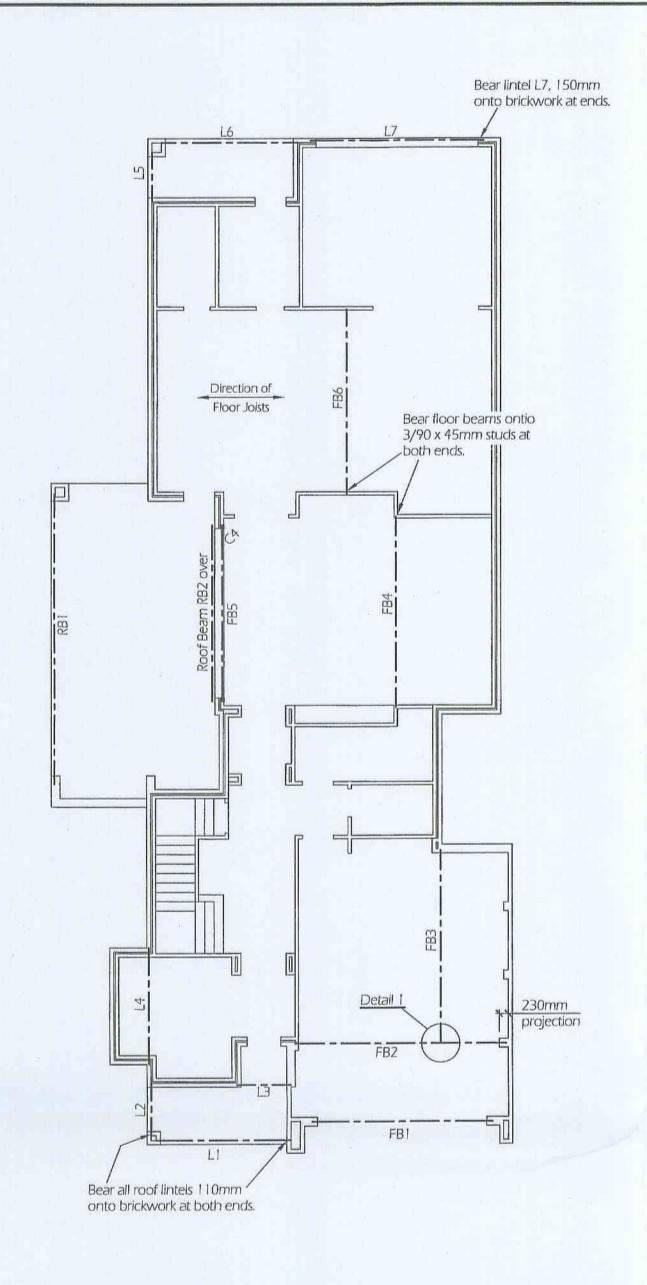
1:100, 1:20 SCALE PROPOSED RESIDENCE AT DATE 26.03.10 1046 BARRENJOEY RD, PALM BEACH D Alwan DRAWN for: Mr & Mrs SCHURGER **DESIGNED** P Andresen **APPROVED** 

FOUNDATION WAFFLE SLAB DETAILS.

ISSUE

DRAWING NUMBER

87219-1



# PLAN - FIRST FLOOR FRAMING

NOTE: ALL EXTERNAL STEELWORK TO BE HOT DIPPED GALVANISED.

# SCHEDULE OF SECTIONS.

COLUMNS.

C1 & C2

to be 75 x 75 x 4.0mm S.H.S

FLOOR BEAMS.

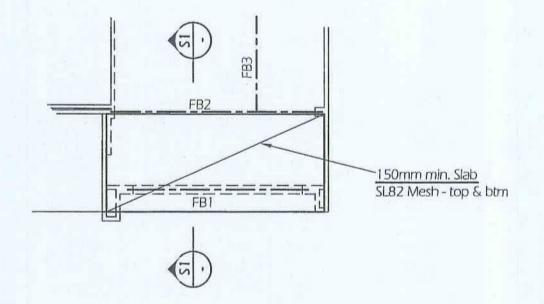
250 PFC + 200 x 10mm plate FB1 full length of beam 310UB 46kg/m FB3 310UB 40kg/m FB4 200UB 30kg/m FB5 250 PFC + 200 x 10mm plate full length of beam to be 250UB 31kg/m FB6

LINTELS

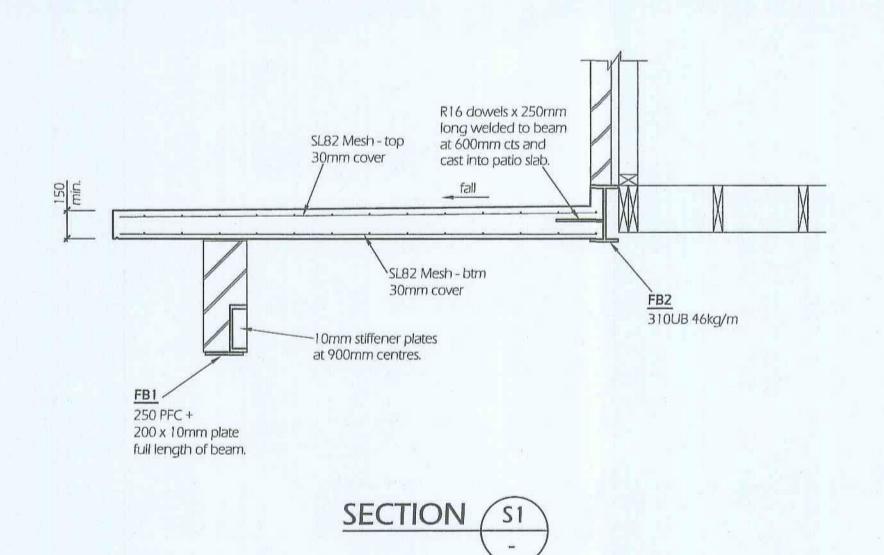
200 x 200 x 9mm Galintel T beam 150 x 100 Galintel L3 & L4 L5 & L6 200 x 200 x 9mm Galintel T beam 200 x 100 x 10mm Fabricated angle

# ROOF BEAMS.

to be 200UB 30kg/m 200 x 100 x 10mm angle + RB2 180 PFC window lintel



# PLAN - BALCONY FLOOR SLAB

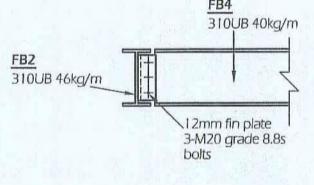


# CONCRETE NOTES:

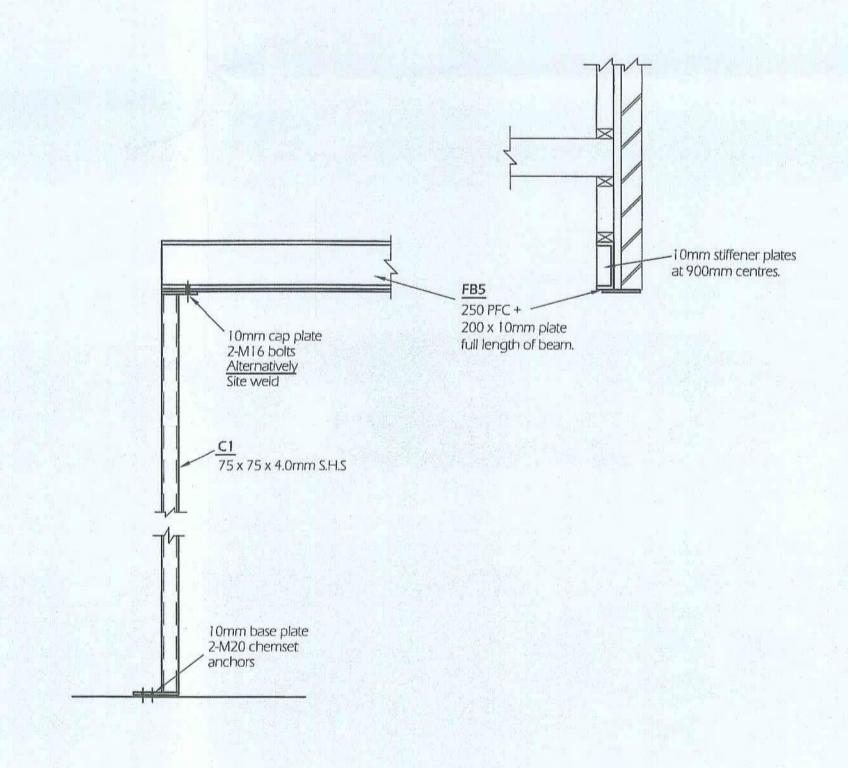
- 1. This drawing is to be read in conjunction with the Architectural drawing and specification.
- 2. Workmanship and materials to comply with AS3600 and associated Australian Standards.
- 3. Characteristic concrete compressive strength in accordance with AS3600 to be 32MPa.
- 4. Concrete slump to be 80mm.
- Concrete in slab to be mechanically vibrated during placing.
- 6. Cure concrete by keeping constantly damp for at least 5 days after placing.
- Reinforcement to be supported on bar chairs spaced at every 5th wire in both directions.

STRUCTURAL STEELWORK NOTES:

- 1. This drawing is to be read in conjunction with the architectural drawings, specification and the remainder of the structural drawings.
- 2. Unless otherwise noted welds to be continuous fillets of a size equal to the thickness of the thinner material joined or 6mm whicever is the lesser, bolts to be 16mm diameter and connection plates to be 10mm thick.
- 3. Particular care to be taken with the finished appearance of exposed welds, both those carried out in the factory and those performed on site. These are to be finished to give a tradesmanlike and regular appearance and are to be to the Architect's satisfaction.
- 4. High strength bolts indicated 8.8 to comply with AS1252 and be installed in accordance with the requirements of AS4100 for the joint type indicated (8.8/S - snug tight, 8.8/TB - bearing type, 8.8/TF - friction type).
- 5. Welds to be descaled and steelwork thoroughly cleaned of dirt, grease and rust. Cleaned surfaces above ground to be given at least one coat of primer followed by two coats of approved enamel on exposed surfaces. All paintwork including shop priming damaged during transport and erection to be made good after recleaning steel surfaces.
- 6. The contractor shall provide all cleats and drill all holes for fixing steel to steel and concrete to steel as required by the Architect whether or not detailed on the structural



# DETAIL 2.



# DETAIL - BEAM FB5.

BENCHMARK BUILDING CERTIFIERS Construction Certificate Approval

Date: 16/10 CC No.: 10 - 027

Accredited Certifier: Anthony Krilich Accreditation No.: \$\int 02/6

Issue Date App'd DESCRIPTION REVISIONS

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A.B.N 36 822 442 203 CONSULTING STRUCTURAL & CIVIL ENGINEERS A.C.N 002 419 767
A.B.N 36 822 442 203

4 MACQUARIE AVENUE, PENRITH NSW 2750 PHONE: (02) 4731 3833 FACSIMILE: (02) 4721 5442 WEBSITE: www.kneeboneandberetta.com E-MAIL ADDRESS: kneebone@pnc.com.au

Trevor B. HALL, B.Sc (Eng), F.I.E. Aust., C.P. Eng. Enrico L. BERETTA, B.E. (E.T.H.), F.I.E. Aust., C.P. Eng. Peter R. ANDRESEN, B.E. M.I.E. Aust, C.P. Eng.

DATE D Alwan DRAWN **DESIGNED** P Andresen APPROVED

1:100, 1:20

26.03.10

for: Mr & Mrs SCHURGER

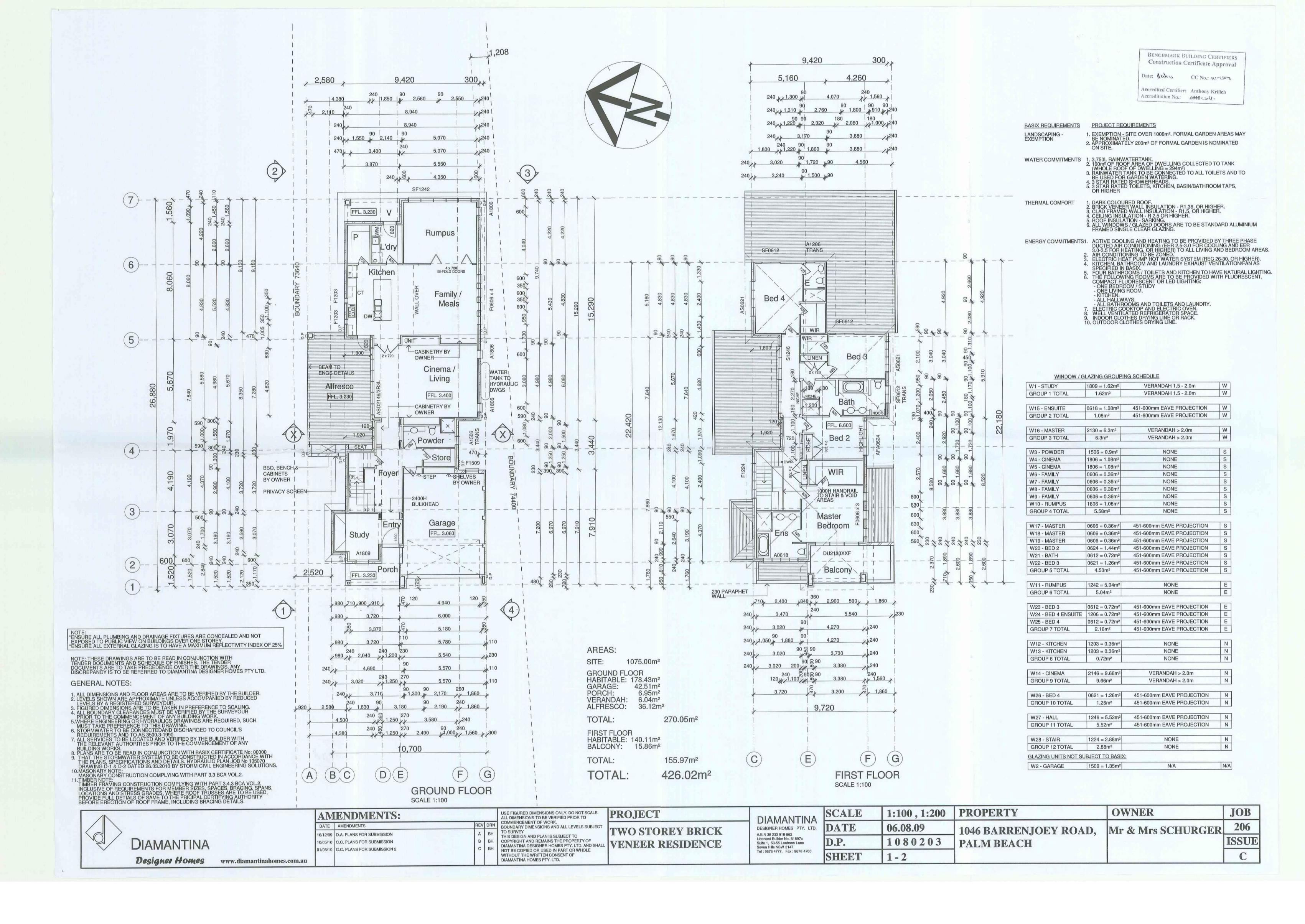
PROPOSED RESIDENCE AT

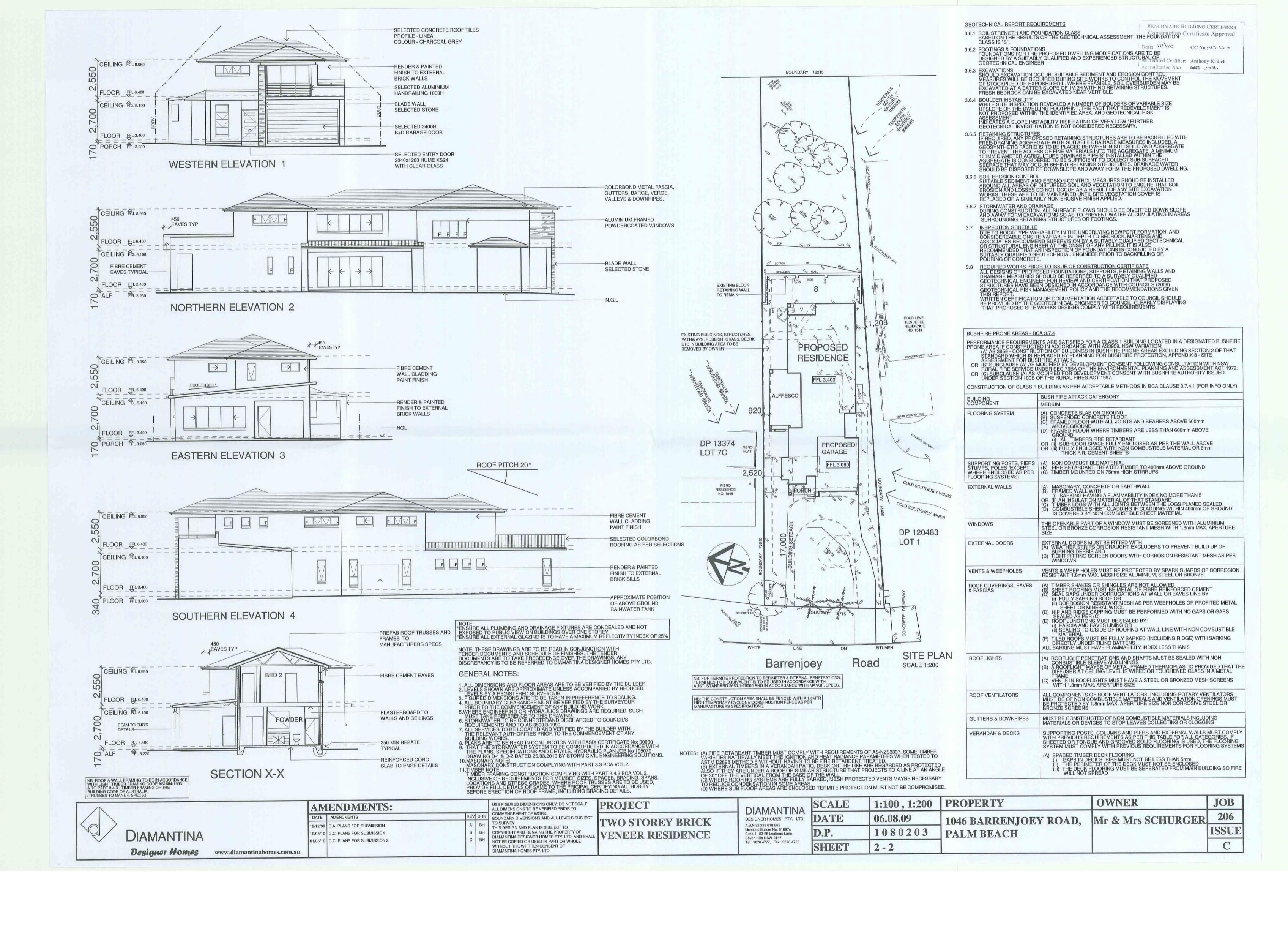
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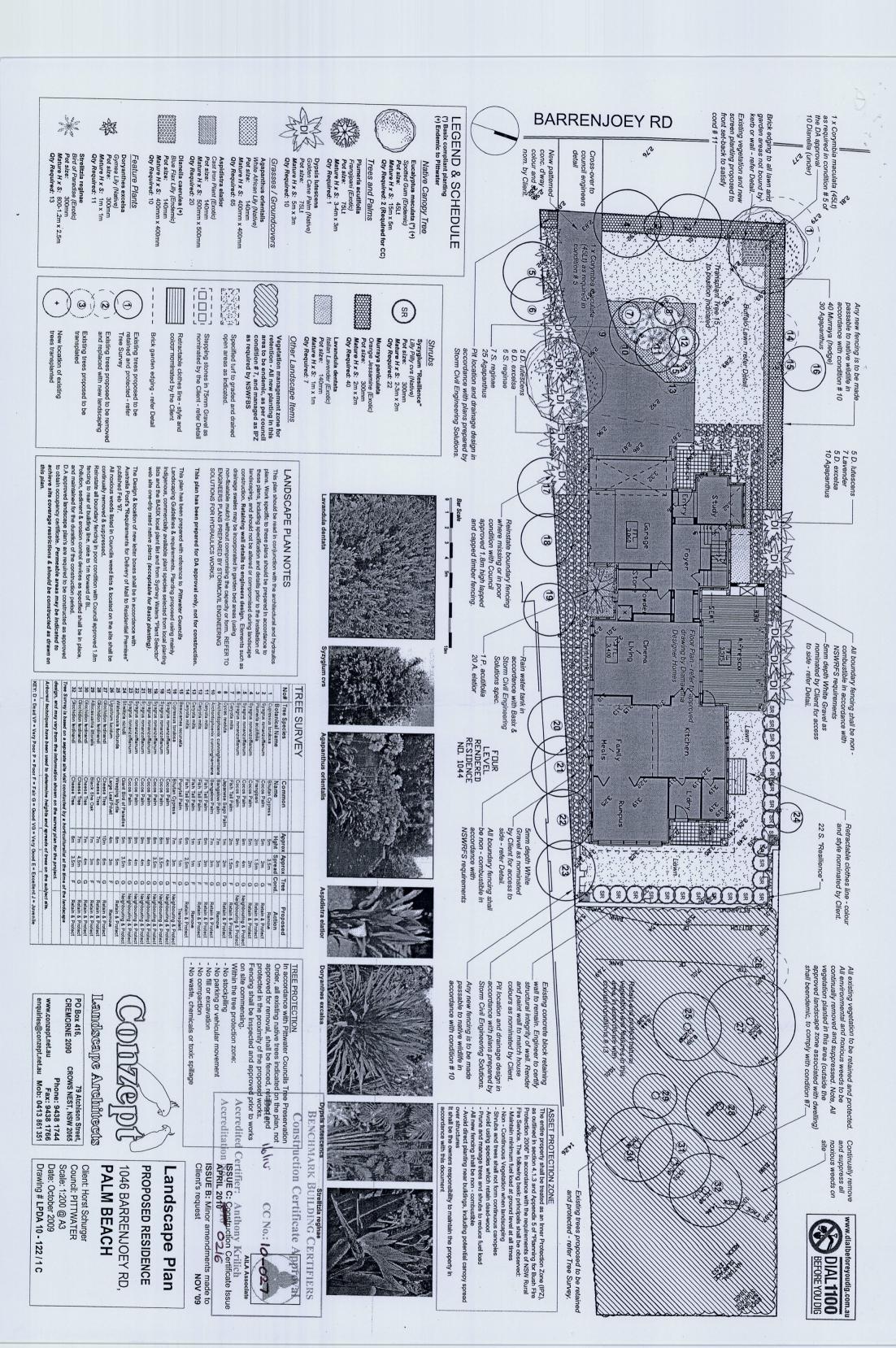
87219-2

FIRST FLOOR FRAMING DETAILS

1046 BARRENJOEY RD, PALM BEACH







# TION

planting species nominated in the design. Note c and native planting will not require significant nay choose to have an approved automated in system installed to garden bed areas prior to its system shall be designed and installed by a d be considered in lieu of irrigation. ce established, and that a longer maintenance ensed irrigation specialist to suit the garden

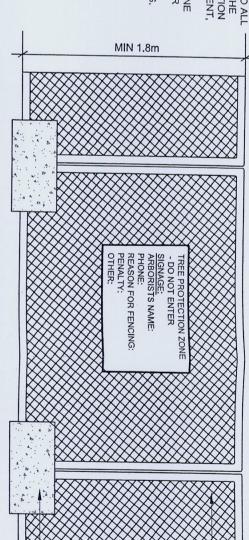
75mm DEPTH OF WHITE GRAVEL AS NOMINATED BY CLIENT

FER TURF DETAIL

MANAMANAMA

shall include a back-flow prevention valve and Irrigation systems shall be installed in accordance to the latest Sydney Water Irrigation regulations and times, and shall consist of the necessary components upon completion, and monitored / maintained at 6 moisture sensor to prevent watering during wet to ensure safe, efficient operation. Such components nonthly periods. periods. The irrigation shall be tested and approved

NOTE: PROVIDE FENCING AS DETAILED TO ALL TREES PROPOSED TO BE RETAINED ON THE SUBJECT SITE WITHIN 5m OF CONSTRUCTION ZONE, VEHICULAR & MACHINERY MOVEMENT, & DRAINAGE OR SERVICES.
FENCING TO BE LOCATED TO THE DRIP LINE OF TREES OR AS INDICATED ON PLANS OR DIRECTED ON-SITE BY ARBORIST. NO STOCKPILING WITHIN FENCE PERIMETERS.



GALV CHAIN-WIRE MESH

— IN 50mm GALV STEEL PIPE
FRAMEWORK. MAINTAIN
FENCING THROUGHOUT
CONSTRUCTION PERIOD.

REE PROTECTION F **ENCING DETAIL** 

approx 1:10

HEAVY MASONRY
- FOOTINGS TO SECURE
FENCE PANELS OR FIX
POSTS INTO GROUND
WHERE APPLICABLE.

RAVEL EARTH UNDER DETAIL

# PATH & BRICK EDGE

COCRETE WITH TRENCH MESH .....

THICKEN CONCRETE TO-PERIMETRE OF PATIO

MIN 100mm COMPACTED ROAD BASE ON LEVEL CONSOLIDATED COMPACTED EARTH

MIN 100mm

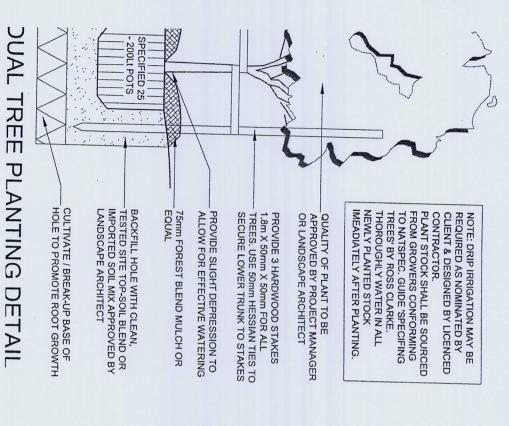
CC No.: 10 -027

Anthony Krilich

75mm Pedestriar 100mm Vehicular

MIN 75mm PATTERNED OR COLOURED CONCRETE AREA, COLOUR & PATTERN NOMINATED BY CLIENT. ENSURE 1.5 % SLOPE TO DRAINAGE PITS

REFER TURF DETAIL



LAY TURF ON MINIMUM 75mm-80 : 20 TOP DRESS SOIL MIX SAND : PULVERIZED MANURE

'Sir WALTER" BUFFALO

SOIL CONDITIONER:
ADD 100mm OF ORGANIC MATTER
EQUAL TO "BOTANY HUMUS MIX" AS
SUPPLIED BY ANL. CULTIVATE INTO
THE TOP 300mm OF GARDEN BED

gravel and decomposed granite areas, cleaning / weeding paving etc) Maintaining all hard and semi permeable areas including toping / raking

Making good areas of soil subsistence or erosion & repair problem

SELECTED BRICK EDGING NOM. BY CLIENT TO MATCH HOUSE BRICK, ON MORTAR BASE TO SUIT—

TYPICAL PATTERNED

CONC. DETAIL

nts

Date: 16hu

Accredited Certifier:

BENCHMARK BUILDING CERTIFIERS Construction Certificate Approval

# LANDSCAPE MAINTENANCE SCHEDULE

Consolidation & landscape maintenance shall mean the care and Certifying Authority approving the correct installation of landscape construction works and Practical Completion, the maintenance period shall After a landscape compliance certificate has been issued to the Principal

The landscape maintenance period shall be a minimum of 3 months (12 weeks) or as required by Council, or requested by client, from the certificate date, and shall include, but not be limited to the following maintenance works: aintenance works;

as well as the rectification of defects which have resulted from regular use. the optimum growing conditions and are in excellent appearance at all times, horticultural practices, ensuring that all plants and planting areas experience maintenance of the contracted landscape works using acceptable

the reasonable discretion of client / landscape architect) Replacement of dead, damaged, stolen, unhealthy or diseased plants (at

Clearing litter and other debris from landscaped & lawn areas

Monitoring for pests and disease & treat as required

Fertilizing with approved fertilizer at rates applicable to plant species

Adjusting stakes and ties / removing as tree mature

Mowing lawn areas, watering, edging and weeding as required (Mowing a period of 18 days during summer & 21 during winter)

Topping up mulch areas and keeping beds free or weeds - Mowing lawn areas, watering, edging and weeding as required (Mowing at Watering all garden areas as required by hand to ensure plant

ISSUE B: Fencing Detail removed and Gravel path Detail added NOV '09

PROPOSED RESIDENCE PALM BEACH **Details Plan** 1046 BARRENJOEY ROAD

Landscape Airchitects PO Box 416, CREMORNE 2090 79 Atchison Street, CROWS NEST, NSW 2065

DDED/DITVINI WITH BBIOK EDGE TYPICAL **CULTIVATE TO 100mm** 

100mm AG line in blue-metal trench-

**TURFING & GARDEN AREA** 

NOTE: TURF AREAS TO FINISH FLUSH WITH SURROUNDS. ROLL AND WATER IMMEDIATELY AFTER LAYING.

SOIL MIX BLEND MIN. 300m

SPECIFIED PLANTING & POT SIZE

MIN 100mm

MIN 75mm OF LEAF LITTER MULCH

Council: PITTWATER

# PROPOSED SINGLE DWELLING DEVE No 1046 BARRENJOEY ROAD, PALM STORMWATER MANAGEMENT P

# GENERAL NOTES

- FINAL LOCATION OF NEW DOWNPIPES TO BE
- 2. THESE DRAWINGS TO BE READ IN CONJUNCTION WITH ARCHITECTS AND OTHER CONSULTANTS DRAWINGS. BEFORE PROCEEDING WITH WORK. ANY DISCREPANCIES TO BE REFERRED TO THE ENGINEER

RE-USE SYSTEM CONTROL BOX MOUNTED TO DWELLING WALL. PROVIDE SYDNEY WATER APPROVED MAINS WATER DIVERTOR.

100mm DIA UPVC
ROOFWATER INLET(S).
FOR CHARGED PIPES ENSURE
AT LEAST 1.0m HEAD BETWEEN
ROOF GUTTER LEVEL AND

ROOF AREA DIRECTED TO EACH RAINWATER TANK TO COMPLY WITH BASIX CERTIFICATE

ROOF GUTTER - RL 6.10 nom

TANK INLET LEVEL. PIPES TO BE FULLY SEALED SOLVENT WELDED FROM ROOF GUTTER TO TOP OF TANK.

CHARGED INLET(S)

ABOVEGROUND RAINWATER TANK (\$).

3750 litres min. REFER TO PLAN.

NOTE: ENSURE TOP OF TANK IS AT LITERAST 1.0m BELOW LOWEST ROOF GUTTER TO PROVIDE SUFFICIENT CONTROLLIC HEAD TO DRIVE CHARGED SYSTEM OUTLET PIPE

AND DIA OUTLET PIPE

AND TANK - RL 5.05 npm.

AND DIA OUTLET PIPE

DEVELOPMENT CONSENT

BASKET

100 DIA OUTLET PIPE

4. ALL DIMENSIONS AND LEVELS TO BE VERIFIED BY BUILDER ON-SITE PRIOR TO COMMENCEMENT OF WORKS.

RAINWATER RE-USE AS
SPECIFIED IN BASIX
CERTIFICATE (BY OTHERS)
OUTDOOR TAPS AND/OR
TOILETS AND/OR

WASHING MACHINE

- SURFACE LEVELS SHOWN IN THESE DRAWINGS ARE BASED ON LEVELS OBTAINED FROM DRAWINGS BY OTHERS.
- 7. ALL STORMWATER DRAINAGE PIPES ARE TO BE 100mm DIAMETER uPVC AT MINIMUM 1% GRADE UNLESS NOTED OTHERWISE.
  8. IT IS THE CONTRACTORS RESPONSIBILITY TO LOCATE AND LEVEL OTHERWISE. THE DESIGN OF ROOF AND SUBSOIL DRAINAGE SYSTEMS IS THE RESPONSIBILITY OF OTHERS. AFFECT/BE AFFECTED BY THIS DESIGN PRIOR TO COMMENCEMENT ALL EXISTING SERVICES OR OTHER STRUCTURES WHICH MAY
- ALL PITS WITHIN DRIVEWAYS TO BE 150mm THICK CONCRETE OR EQUAL.
   THIS PLAN IS THE PROPERTY OF STORMCIVIL ENGINEERING SOLUTIONS AND MAY NOT BE USED OR REPRODUCED WITHOUT WRITTEN PERMISSION FROM STORMCIVIL ENGINEERING SOLUTIONS.
- THESE DRAWINGS ARE NOT TO BE SCALED FOR DIMENSIONS NOR TO BE USED FOR SETOUT PURPOSES.

  5. ALL SURVEY INFORMATION AND PROPOSED BUILDING AND FINISHED 3. ALL MATERIALS AND WORKMANSHIP TO BE IN ACCORDANCE WITH ASINZS 3500.3:2003 STORMWATER DRAINAGE, BCA AND LOCAL COUNCIL POLICY/CONSENT/REQUIREMENTS. DETERMINED BY BUILDER/ARCHITECT AT TIME OF CONSTRUCTION.
- 6. THESE DRAWINGS DEPICT THE DESIGN OF SURFACE STORMWATER RUNOFF DRAINAGE SYSTEMS ONLY AND DO NOT DEPICT ROOF DRAINAGE OR SUBSOIL DRAINAGE SYSTEMS UNLESS NOTED

# TYPICAL DETAIL - RAINWATER RE-USE TANK

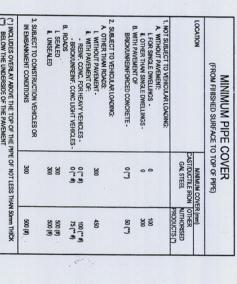
PITTWATER COUNCIL -

FGL - RL 3.00 non

TO FINISHED GROUND LEVEL TO FINISHED GROUND LEVEL OF THE PROPERTY OF THE PROPE

INSPECTION OPENING CAP TO FINISHED GROUND LEVEL ON ALL CHARGED INLETS —

MANUFACTURERS SPECS. PROPRIETARY FIRST FLUSH SYSTEM INSTALLED TO



| LOCATION  | MINIMUM COVER (mm)                             | ER (mm)                       |
|---|--|-------------------------------|
|   | CAST/DUCTILE IRON OTHER GAL STEEL AUTHOR PRODU | OTHER AUTHORISED PRODUCTS (*) |
| 1. NOT SUBJECT TO VEHICULAR LOADING:                            |  |                               |
| L FOR SINGLE DWELLINGS -  | 0  | 100                           |
| IL OTHER THAN SINGLE DWELLINGS -                                | 0  | 300                           |
| BRICK/UNREINFORCED CONCRETE -                                   | CO   | 50 (*)                        |
| 2. SUBJECT TO VEHICULAR LOADING: A OTHER THAN ROADS:            |  |                               |
| L WITHOUT PAVEMENT OF   | 300  | 450                           |
| - REINF, CONC. FOR HEAVY VEHICLES -                             | 0("#)  | 100 (** #)                    |
| - BRICK/UNREINF, CONCLIGHT VEHICLES - B. ROADS                  | 0(**)  | 75 (** #)                     |
| L SEALED  | 300  | 500 (#)                       |
| I. UNSEALED   | 300  | 500 (#)                       |
| 3. SUBJECT TO CONSTRUCTION VEHICLES OR IN EMBANKMENT CONDITIONS | 3  | SON (A)                       |

IL 75.12 GRT 75.54 450×450

INVERT LEVEL = 75.12 GRATE LEVEL = RL 75.54

+112.20 SP3

FINISHED SURFACE LEVEL

GRATED TRENCH DRAIN

PROPOSED STANDARD DOWNPIPE SPREADER

▦

GRATED INLET PIT 450 SQUARE INTERNAL

EGEND

o DP1

DOWNPIPE: 90 DIA ROUND OR 100 x 50 RECTANGULAR

BD2

STORMWATER DRAINAGE

00

SCREW-CAPPED INSPECTION OPENING 50mm SQUARE WITH 90mm DIA OUTLET

GRATED ROUND OUTLET 100mm DIA

ARCHITE DIAM

**EXISTING TREE** 

| BASIX CERTIFICATE (BY OTHERS): 3750 litres FROM 160m2 ROOF AREA.  |
|---|
| RAINWATER TANK REQUIREMENT  |
| DISCHARGE TO STREET - REFER TO PLAN.  |
| STORMWATER DISPOSAL   |
| DETENTION REQUIREMENT NEW DWELLING, INCREASE HARD SURFACE < 50 m2 (ACTUAL REDUCTION BY 107m2). THEREFORE DETENTION NOT REQUIRED (PER SECTION B5.8 - CONTROLS).                                  |
| PRE-DEVELOPMENT (EXISTING) IMPERVIOUS AREA = 450.3 m2 (AS MEASURED BY CAD FROM SURVEY) POST-DEVELOPMENT (PROPOSED) IMPERVIOUS AREA = 343.3 m2 (AS MEASURED BY CAD FROM ARCHITECTURAL SITE PLAN) |
| SITE AREA = 1075 m2   |
| RELEVANT DESIGN CODE : P21 DCP PART 5B WATER MANAGEMENT (AMEND 2009)  |
| STORMWATER CALCULATIONS   |

| 0              | I GA   PITTWATER COUNCIL           |
|----------------|------------------------------------|
| Engineering So | MR & MRS SCHURGER                  |
|                | CLIENT                             |
| Storm Civil    | DIAMANTINA HOMES                   |
|                | ARCHITECT/BUILDER ARCH. REF: 09-03 |

SS

DATE 17.11.2009

LGA

DA ISSUE **AMENDMENT** 

olutions

69 Berecry Road, Mangrove Mountain 2 ph/fax (02) 43741360 mobile: 0424023047 Civil & Environmental. Stormwater Management Consulting Engineers 2250

> DWG TITLE PROJECT TITLE LEGEND, NOTES, DETAILS

PROPOSED SINGLE DWELLING DEVELOPMENT No 1046 BARRENJOEY ROAD, PALM BEACH

JOB No 105070 Storm DWG No  $\Box$ No IN SET

**NOTE: THESE PLANS MUST BE READ** CONJUNCTION WITH THE CONDITIONS OF ... Date: 1610 CC No.: 10-027 **DEVELOPMENT CONSENT** 

Accredited Certifier: Anthony Krilich 0216 Accreditation No.:

