Application for a construction certificate

John J Briggs Associates P/L
PO Box 800
Brookvale NSW 2100
Phone (02) 9907 1018
johnjbriggs1@bigpond.com

Information for the applicant

- This form may be used to apply for a construction certificate (a "certificate") to carry out building work or subdivision work.
- To minimise delay in receiving a decision about the application, please fill in all sections and ensure all relevant information and documents are provided.
- Once completed, this application form should be submitted to a certifying authority for determination. Certifying authorities are either private accredited certifiers, the local council, or the consent authority for the development (if the council is not the consent authority). Private accredited certifiers may be either an individual or a company. View a list of private accredited certifiers at http://www.bpb.nsw.gov.au/page/for-consumers/find-a-certifier/
- A construction certificate has no effect if it is issued after the building work or subdivision work to which it relates is physically commenced on the land to which the relevant development consent applies.

SECTION A. Details of the applicant*

**An application for a construction certificate may only be made by a person who has the benefit of the development consent. An application may not be made by person who will carry out the building work or subdivision work unless that person owns the land on which the work is to be carried out.*

Mr ☐ Ms ☑ Mrs ☐ Dr ☐ Other:

First name	Family name
Peta Jean	Crafter

Company (if applicable)	ABN (if applicable)
C/-de Soyres Architects	

Unit/Street no.	Street Name
	PO BOX 657

Suburb or town	State	Postcode
Newport	NSW	2106

Daytime telephone	Fax	Mobile

Email

SECTION B. Location and title details of the land where the building work or subdivision work is to be carried out

Unit/Street no.	Street Name
41	Robertson Rd

Suburb or town	State	Postcode
Scotland Island	NSW	2105

Lot no.	Section
301	

DP / SP no.	Volume/folio
514985	

SECTION C. Description of the building work or subdivision work to be carried out

Briefly describe the development. For example, if a dwelling is proposed, include information such as the type of building (house, townhouse, villa etc), the number of floors, the number of bedrooms, the major building material (brick, brick veneer, timber clad etc).

Proposed demolition of majority of existing dwelling, construct new dwelling, boat shed, waste system & landscaping

Class(s) of building(s) under the Building Code of Australia	1a & 10a

SECTION D. Estimated cost of the development

$ 963,317.00

The contract price, or if there is no contract a genuine and accurate estimate, for all labour and material costs associated with all demolition and construction required for the development, including the cost of construction of any building and the preparation of a building for the purpose for which it is to be used (such as the costs of installing plant, fittings, fixtures and equipment). GST is also to be included.

SECTION E. Development consent

Date of development consent (if already granted)	18.10.12
Development consent reference no.:	168/12
Name of consent authority:	Pittwater Council
Name of applicant for development consent:	Peta Jean Crafter

Provide:

A copy of the development consent, including:

- approved plans endorsed by the consent authority
- conditions of development consent
- other documents referenced by the development consent that are relevant to this application.

SECTION F. Planning agreements

If the development or the land upon which the development is to be carried out is subject to a planning agreement as referred to in section 93F EP&A Act, provide a copy of the planning agreement.

SECTION G. Attachments relating to the proposed development

Applicants must provide the documents listed below that are relevant to the type of development that is proposed. Please place a cross in the appropriate box(s) to indicate the type of development involved. Confirm from the certifying authority how many copies are required prior to lodging this application.

1. Does the application relate ONLY to a FIRE LINK CONVERSION? ☐ Yes ☑ No

If Yes-provide:

A document that describes the design and construction and mode of operation of the new fire alarm communication link.

2. Does the development involve SUBDIVISION WORK? ☐ Yes ☑ No

If Yes-provide:

Appropriate subdivision work plans and specifications, which include copies of:

(a) details of the existing and proposed subdivision pattern (including the number of lots and the location of roads)
(b) details as to which public authorities have been consulted with as to the provision of utility services to the land concerned
(c) detailed engineering plans as to the following matters:
  (i) earthworks
  (ii) roadworks
  (iii) road pavement
  (iv) road furnishings
  (v) stormwater drainage
  (vi) water supply works
  (vii) sewerage works
  (viii) landscaping works
  (ix) erosion control works
(d) copies of any compliance certificates to be relied on.

3. BUILDINGS

3.1 Does the development involve building work (including in relation to a dwelling house or building or structure ancillary to a dwelling house? ☑ *Yes* ☐ *No*

If Yes-provide:

(1) A detailed description of the development, indicating:

(a) for each proposed new building:
  (i) the number of storeys (including underground storeys) in the building
  (ii) the gross floor area of the building (in square metres)
  (iii) the gross site area of the land on which the building is to be erected (in square metres)

(b) for each proposed new residential building:
  (i) the number of existing dwellings on the land on which the new building is to be erected
  (ii) the number of those existing dwellings that are to be demolished in connection with the erection of the new building
  (iii) the number of dwellings to be included in the new building
  (iv) whether the new building is to be attached to any existing building
  (v) whether the new building is to be attached to any other new building
  (vi) whether the land contains a dual occupancy
  (vii) the materials to be used in the construction of the new building by completing the table in **SECTION M**

(2) Appropriate building work plans and specifications, which include copies of:

(a) detailed plans, drawn to a suitable scale and consisting of a block plan and a general plan, that show:
  (i) a plan of each floor section
  (ii) a plan of each elevation of the building
  (iii) the levels of the lowest floor and of any yard or unbuilt on area belonging to that floor and the levels of the adjacent ground
  (iv) the height, design, construction and provision for fire safety and fire resistance (if any)

(b) specifications for the development:
  (i) that describe the construction and materials of which the building is to be built and the method of drainage, sewerage and water supply, and
  (ii) that state whether the materials to be used are new or second-hand and (in the case of second-hand materials) give particulars of the materials to be used

(c) a statement as to how the performance requirements of the *Building Code of Australia* are to be complied with (if an alternative solution, to meet the performance requirements, is to be used)

(d) a description of any accredited building product or system sought to be relied on for the purposes of section 79C(4) of the *Environmental Planning and Assessment Act 1979* (EP&A Act)*

(e) copies of any compliance certificate to be relied on

(f) if the development involves building work to alter, expand or rebuild an existing building, a scaled plan of the existing building

(g) if a BASIX certificate has been obtained for the development, such others matters as the BASIX certificate requires to be included in the plans and specifications.

** S.79C(4) EP&A Act provides that a consent authority must not refuse to grant consent to development on the ground that any building product or system relating to the development does not comply with a requirement of the Building Code of Australia if the building product or system is accredited in respect of that requirement in accordance with the EP&A regulation 2000.*

3.2 Does the development involve building work (other than work in relation to a dwelling-house or a building or structure that is ancillary to a dwelling-house or work that relates only to fire link conversion) ? ☐ Yes ☑ No

If Yes-provide:

(a) A list of any existing fire safety measures provided in relation to the land or any existing building on the land.

(b) A list of the proposed fire safety measures to be provided in relation to the land and any building on the land as a consequence of the building work.

3.3 Does the development involve an alternative solution under the Building Code of Australia ("BCA") in respect of a fire safety requirement? ☐ Yes ☑ No

If Yes-provide:

Either or both of the following from a ***"fire safety engineer"*** (a private accredited certifier holding Category C10 accreditation):

(a) A compliance certificate (as referred to in s.109C(1)(a)(v) EP&A Act) that certifies that the alternative solution complies with the relevant performance requirements of the BCA.

(b) A written report that includes a statement that the alternative solution complies with the relevant requirements of the BCA.

Note: The above requirement only applies to building work in respect of:
(a) a class 9a building that is proposed to have a total floor area of 2000 square metres or more
(b) any building (other than a class 9a building) that is proposed to have:
(i) a fire compartment with a total floor area of more than 2000 square metres or
(ii) a total floor area of more than 6000 square metres
that involves an alternative solution under the BCA in respect of the requirements set out in EP1.4, EP2.1, EP2.2, DP4 and DP5 in Volume 1 of the BCA.

3.4 Does the application relate to a residential flat development for which the development application was required under Clause 50(1A) of the EP&A Regulation to be accompanied by a design verification from a qualified designer? ☐ Yes ☑ No

If Yes-provide:

A statement from a qualified designer which verifies that the plans and specifications achieve or improve the design quality of the development for which development consent was granted, having regard to the design quality principles set out in Part 2 of *State Environmental Planning Policy No. 65: Design Quality of Residential Flat Development* (SEPP 65)

Note: If the development application was also required to be accompanied by a BASIX certificate with respect to any building, the statement need not verify the design quality principles set out in SEPP 65 to the extent to which they aim to

- *reduce consumption of mains-supplied potable water, or reduce emissions of greenhouse gases, in the building or in the use of the land that it is built on, or*
- *improve the thermal performance of the building.*

3.5 Has the Fire Commissioner granted an exemption under clause 188 EP&A Regulation from compliance with any specified Category 3 fire safety provision?

☐ Yes ☑ No

If Yes-provide:

A copy of the exemption together with any conditions imposed.

3.6 Is any long service payment levy payable under s.34 of the Building and Construction Industry Long Service Payments Act 1986? ☐ Yes ☐ No

If Yes-provide:

A copy of a receipt for any long service payment levy that has been made (or, where such a levy is payable by instalments, a receipt for the first instalment of the levy).

Where a council is the certifying authority, the levy may be made to the council when this application is lodged.

3.7 Does the application involve a BASIX affected development, or a BASIX optional development for which a BASIX certificate has been obtained? ☑ Yes ☐ No

If Yes-provide:

The BASIX certificate(s) for the development (being either the BASIX certificate issued when the development consent was granted or some other BASIX certificate(s) that have been issued no earlier than three months before the date of the Application being made), and such other documents as the BASIX certificate(s) for the development requires to accompany the Application.

BASIX (the Building and Sustainability Index) ensures homes are built to be more energy and water efficient. BASIX uses an online program to assess a building's design and compares it against energy and water reduction targets. The design must meet these targets before a BASIX certificate can be printed. Any changes made to a building's design after a BASIX certificate has been issued requires another BASIX assessment and new BASIX certificate. ***"BASIX affected buildings"*** *contain one or more dwellings (but do not include hotels or motels).*

A BASIX certificate ***MUST*** *be obtained for every* ***"BASIX affected development"****, which are any of the following (other than development that is* ***"BASIX excluded development"****):*

- *(a) development that involves the erection (but not the relocation) of a BASIX affected building*
- *(b) development that involves a change of building use by which a building becomes a BASIX affected building*
- *(c) development that involves the alteration, enlargement or extension of a BASIX affected building, where the estimated construction cost of the development is $50,000 or more*
- *(d) development for the purpose of a swimming pool or spa, or combination of swimming pools and spas, that services or service only one dwelling and that has a capacity, or combined capacity, of 40,000 litres or more.*

"BASIX excluded development" *is*

- *(a) development for the purpose of a garage, storeroom, car port, gazebo, verandah or awning*
- *(b) alterations, enlargements or extensions to a building listed on the State Heritage Register under the Heritage Act 1977*
- *(c) alterations, enlargements or extensions that result in a space that cannot be fully enclosed (for example, a veranda that is open or enclosed by screens, mesh or other materials that permit the free and uncontrolled flow of air), other than a space can be fully enclosed but for a vent needed for the safe operation of a gas appliance*
- *(d) alterations, enlargements or extensions that the Director-General has declared, by order published in the Gazette, to be BASIX excluded development.*

A BASIX Certificate ***MAY*** *be obtained for certain developments by an Applicant even though there is no obligation to do so. This is called* ***"BASIX optional development"****.* ***"BASIX optional development"*** *means any of the following development that is not BASIX excluded development:*

- *(a) development that involves the alteration, enlargement or extension of a BASIX affected building, where the estimate of the construction cost of the development is less than $50,000*
- *(b) development for the purpose of a swimming pool or spa, or combination of swimming pools and spas, that services or service only one dwelling and that has a capacity, or combined capacity, of less than 40,000 litres.*

If the proposed development involves the alteration, enlargement or extension of a BASIX affected building that contains more than one dwelling, a separate BASIX certificate is required for each dwelling concerned.

Further information about BASIX and to obtain a BASIX Certificate, go to http://www.basix.nsw.gov.au.

SECTION H. List of documents

Prepare and attach a list of all of the documents provided under SECTION E, F and G.

1108
dwellings

SECTION I. Authority to enter and inspect land

A certifying authority must not issue a construction certificate for development on a site which affects an existing building unless the certifying authority, or an accredited certifier, council or consent authority on behalf of the certifying authority, has carried out an inspection of the site of the development.

If the applicant is the owner of the land, by signing this application authority is given to the certifying authority, or an accredited certifier, council or consent authority, to enter the subject property at any reasonable time for the purpose of carrying out an inspection in connection with the assessment of this Application. The Applicant undertakes to take all necessary steps make access available to the property to enable the inspection to be carried out.

If the applicant is not the owner of the land, the owner(s) must sign the following statement.

As the owner(s) of the above property, I/we consent to the certifying authority, or an accredited certifier, council or consent authority, to enter the subject property at any reasonable time for the purpose of carrying out an inspection in connection with the assessment of this application. I/we undertake to take all necessary steps make access available to the property to enable the inspection to be carried out.

Owners Signature(s)

[signature]

Name(s)

PETA JEAN CRAFTER

Date

22/2/13

SECTION J. Delivery of the application

Applications for construction certificates must be delivered by hand, by post or transmitted electronically to the principal office of the certifying authority. Applications MAY NOT be sent by fax.

SECTION K. Signature of Applicant(s)

Signature of Applicant(s)

[signature]

Name(s)

PETA JEAN CRAFTER

Date

22/2/13

SECTION L. Date of Receipt of Application

27 FEB '13

BY

SECTION M. Development statistics

Place a cross in each appropriate box.

	Walls	Code		Roof	Code		Floor	Code		Frame	Code
	Brick (double)	11		Tiles	10	✓	Concrete/slate	20	✓	Timber	40
	Brick (veneer)	12		Concrete/slate	20	✓	Timber	40		Steel	60
	Concrete/stone	20		Fibre cement	30		Other	80		Aluminium	70
✓	Fibre cement	30	✓	Steel	60		Not specified	90		Other	80
	Timber	40		Aluminium	70					Not specified	90
	Curtain glass	50		Other	80						
	Steel	60		Not specified	90						
	Aluminium cladding	70									
	Timber/ weatherboard	40									
	Other	80									
	Not specified	90									

Gross site area (m^2)	1546.3	Number of dwellings to be demolished	1
Gross floor area of existing building (m^2)	1082.1	Number of dwellings to be constructed	1
Gross floor area of new building work (m^2)	271.5	Will the new building be attached to an existing building	NO
Number of pre-existing dwellings on the site	1	Does the site contain a dual occupancy	NO.
How many storeys will the building have	2		
What are the current uses of the building	RESIDENTIAL		
What will be the new building uses (if changed)	RESIDENTIAL Dwelling + Boatshed		

JOHN J BRIGGS ASSOCIATES

ACCREDITED BUILDING CERTIFIERS
ABN 99 089 896 159

Construction certificate

Certificate no.1688CC1

SECTION A. The Application

1. Details of the applicant

Mr ☐ Ms ☐ Mrs ☐ Dr ☐ Other:

First name	Family name
Peta Jean	Crafter

Unit/Street no.	Street name
	C/-de Soyres Malone Architects, PO BOX 657

Suburb or town	State	Postcode
Newport	NSW	2106

2. Details of the property

Unit/Street no.	Street name
41	Robertson Rd

Suburb or town	Postcode
Scotland Island	2105

Lot no.	Section
301	

DP / SP no.	Volume/folio
514985	

2. Description of the proposed development

Proposed demolition of majority of existing dwelling construct new dwelling, boatshed, waste system & landscaping.

4. Development consent

Date of development consent	18.10.12
Development consent reference no.	168/12
Name of Council	Pittwater Council

5. Date of the application for construction certificate

22.2.13

JOHN J BRIGGS
ASSOCIATES
ACCREDITED BUILDING CERTIFIERS
ABN 99 089 896 159

Construction certificate

Certificate no.1688CC1

6. Date application received by the certifying authority

22.2.13

SECTION B. Certifying authority

Name: John J Briggs

Accreditation no.: BPB 0049

Address: PO BOX 800

Brookvale NSW 2100

SECTION C. Class of building

Class of the proposed building under the Building Code of Australia.
Note: If parts of the building will have different classes, include all classes.

1a & 10a

SECTION D. Conditions

☐ This certificate is subject to the conditions set out in the attached Schedule of Conditions (tick if applicable)

SECTION E. Attachments (Tick as appropriate)

☐ Fire safety schedule ☐ Fire link conversion schedule ☐ Conditions schedule

SECTION F. Date

Date of this certificate: 18.4.13

SECTION G. Certification

I certify that work completed in accordance with the documentation accompanying the application for this certificate (with such modifications, if any, verified by me as may be shown on that documentation) will comply with the requirements of the *Environmental Planning & Assessment Regulation 2000* as referred to in s.81A(5) of the *Environmental Planning & Assessment Act 1979.*

The documents listed below accompanied the application for this certificate.

Note: The certificate is to be endorsed upon all relevant plans and specifications.

Project 1108, drawings all CC-01, 11, 12, 13, 14, 18, 21, 22, 31, 32, 41, 42 & 51 all rev A dated 26.3.13 &
CC019 dated 26.3.13 prepared by de Soyres Malone Architects
See Attached Schedule A

SECTION F. Signature*

* Must only be signed by the certifying authority

JOHN J BRIGGS

ASSOCIATES
ACCREDITED BUILDING CERTIFIERS
ACN 089 896 159

Construction Certificate No.: 1688CC1

Address: 41 Robertson Rd, Scotland Island

Applicant: Peta Jean Crafter

SCHEDULE A

The following is a list of details/plan references that should be read in conjunction with Construction Certificate No. : 1688CC1

- Structural Engineers details drawings 10588 sheets S0.00 & S0.01, S1.00, S1.01, S2.00 & S3.00, all Rev A dated 26.3.13 prepared by Waddington Consulting Pty Ltd (dwelling)
- Structural Engineers details job 10588 sheets S10.00, S10.01, S11.00 & S11.01 all rev A & dated 26.3.13 (boathouse) & E0.00, E1.00 & E1.01 (earthworks) all rev A & dated 26.3.13 prepared by Waddington Consulting P/L.
- Certificates for Structural design & for structural adequacy of existing structure to withstand additional loads proposed ref. 10588-L2 & L3 prepared by Waddington Consulting P/L & dated 7.3.13
- Stormwater management Plan drawing 10588 sheet C1.00 rev A dated 26.3.13 prepared by Waddington Consulting P/L
- Certification of stormwater design for consent compliance, ref 10588-L4 prepared by Waddington Consulting P/L
- Sediment control details, dwg no. CC-51 dated 2.4.13
- Landscape management plan drwg 1205/CC-L01 dated 19.3.13 prepared by Trish Dobson
- Building Specifications – project 1108 dated 27.3.13 prepared by de Soyres Malone Architects P/L
- Waste Management Plan dated 17.3.13 prepared by R. W. Stidwell Constructions P/L
- Forms 2A dated 9.4.13 & 2B dated 26.3.13 – Pittwater geotechnical risk management policy prepared by Crozier geotechnical consultants
- Home Warranty Insurance Fund NSW/Govt QBE
- L.S.L on line payment
- Public Liability – Mecon Insurance
- Aerated Wastewater Treatment System

PO Box 800 Brookvale NSW 2100
Phone: 02 9907 1018
johnjbriggs1@bigpond.com.au

JOHN J BRIGGS

ASSOCIATES

ACCREDITED BUILDING CERTIFIERS
ABN 99 089 896 159

Notice to council of determination of application for a construction certificate

NOTICE TO (insert council's details and address)

Name	Street no./street name
Pittwater Council	PO BOX 882

Suburb or town	State	Postcode
Mona Vale	NSW	1660

SECTION A. NOTICE

As required by clause 142(2) of the EP&A Regulation 2000 (the Regulation), notice is hereby given of the determination of the following application:

Applicants name	Peta Jean Crafter
Development address	41 Robertson Rd
	Scotland Island NSW 2105

Date received	22.2.13	Date determined	???

SECTION B. Attachments (tick appropriate box(s))

☑ Application for construction certificate	☑ Determination of application	☑ Construction Certificate	☑ Plans and specifications relating to the construction certificate
☐ Fire link conversion schedule attached to construction certificate	☐ Fire safety schedule attached to construction certificate	☐ Record of inspection made under clause 143B of the Regulation	☐ Other documents lodged with the application for the certificate or received under clause 140 of the Regulation (list below)

Project 1108, drawings all CC-01, 11, 12, 13, 14, 18, 21, 22, 31, 32, 41, 42 & 51 all rev A dated 26.3.13 &

CC019 dated 26.3.13 prepared by de Soyres Malone Architects

See attached schedule A also.

SECTION C Certifying Authority

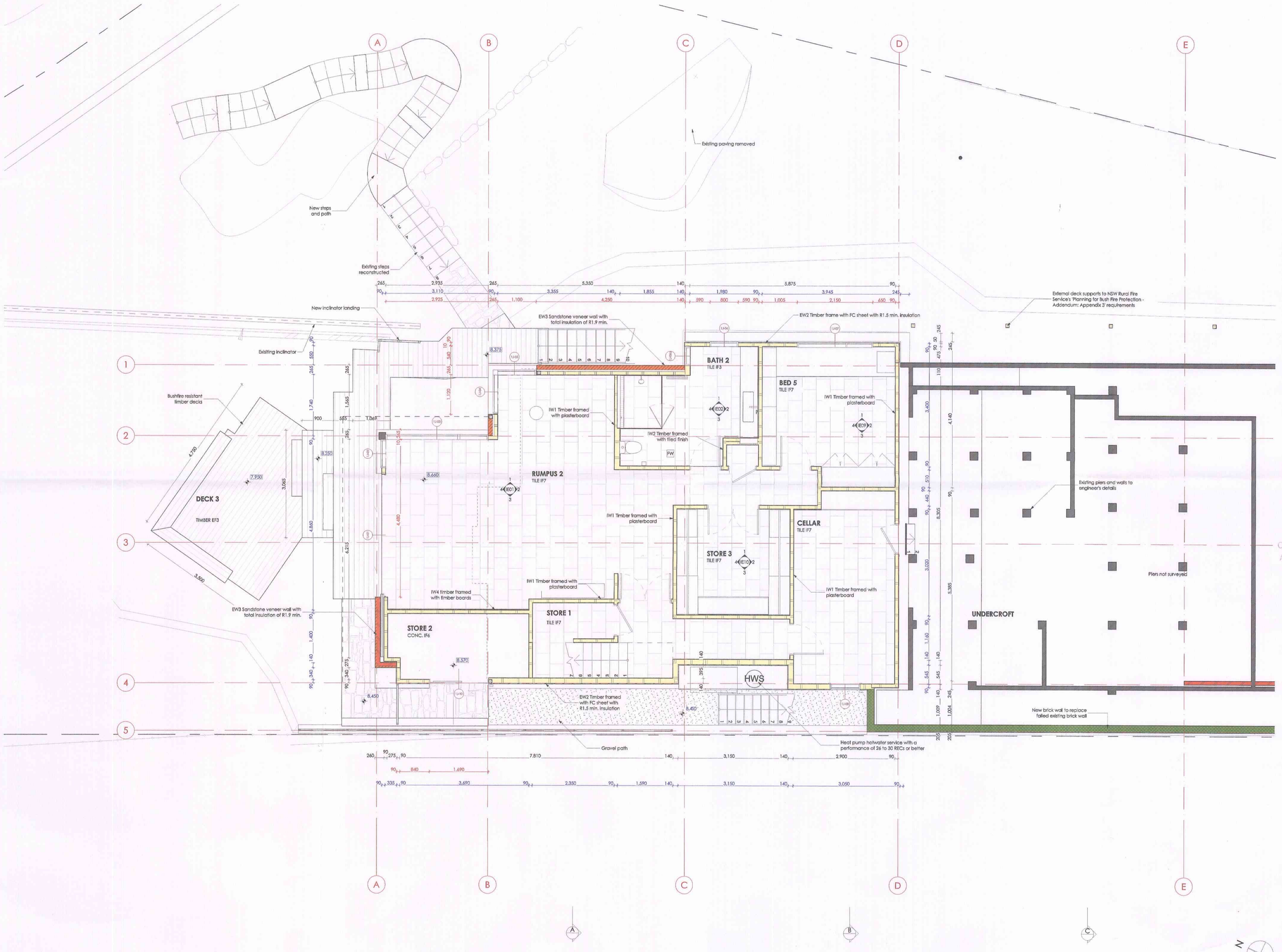
Name	John J Briggs	Signature	
Accreditation No.	BPB0049	Date	18.4.13

Rct. 339634 DB 19/4/2013.

FOR CONSTRUCTION CERTIFICATE
Not for Construction

NOTES :

1. ALL CONSTRUCTION TO A.S.3959.2009 BAL 12.5



1 BASEMENT
1:50

This Plan / Detail is to be read in conjuction with CONSTRUCTION CERTIFICATE APPROVAL NO. 1688cc1

JJ BRIGGS ASSOCIATES
PO BOX 600 BROOKVALE 2100

REV.	DATE	REVISION	BY
A	26/03/13	Issued for CC	MH

de Soyres Malone Architects Pty Ltd
Nominated Architect: James de Soyres #6769
PO BOX 657 NEWPORT BEACH NSW 2106
5 ROWELL MARINA
QUEENS PARADE WEST NEWPORT
contact@dsmarchitects.com
TELEPHONE: (02) 9979 1823

CLIENT
The Crafter family

LOCATION
41 Robertson Road,
Scotland Island, NSW 2105.
Lot 301 in D.P. 514985

DRAWING TITLE
Basement Floor Plan

DATE OF ISSUE 26/03/2013

Scale in metres: 1:00 of A1 original size
0 0.5 1 1.5 2 2.5
Scale in metres: 1:100 of A1 original size
0 1 2 3 4 5

PROJECT No	DRAWING No	REVISION
1108	CC-11	A

FOR CONSTRUCTION CERTIFICATE
Not for Construction

NOTES :

1. ALL CONSTRUCTION TO A.S.3959.2009 BAL 12.5

BASIX COMMITMENTS

Landscape
- Plant indigenous or low water use species of vegetation throughout 603 square metres of the site.

Fixtures
- Install showerheads with a minimum rating of 3 star (> 6 but <= 7.5 L/min) in all showers in the development.
- Install a toilet flushing system with a minimum rating of 4 star in each toilet in the development.
- Install taps with a minimum rating of 3 star in the kitchen in the development.
- Install basin taps with a minimum rating of 3 star in each bathroom in the development.

Alternative water
- Install a rainwater tank of at least 18000 litres on the site. This rainwater tank must meet, and be installed in accordance with, the requirements of all applicable regulatory authorities.
- The rainwater tank to collect rain runoff from at least 271 square metres of the roof area of the development (excluding the area of the roof which drains to any stormwater tank or private dam).
- Connect the rainwater tank to at least one outdoor tap in the development

Windows, glazed doors and skylights
- Install the windows, glazed doors and shading devices described in BASIX, in accordance with the specifications listed in BASIX. Relevant overshadowing specifications must be satisfied for each window and glazed door.
- The dwelling may have 1 skylight (<0.7 square metres) and up to 2 windows/glazed doors (<0.7 square metres) which are not listed in BASIX.
- 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.
- 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 BASIX.
- Pergolas with polycarbonate roof or similar translucent material must have a shading coefficient of less than 0.35.
- Unless they have adjustable shading, pergolas must have fixed battens parallel to the window or glazed door above which they are situated, unless the pergola also shades a perpendicular window. The spacing between battens must not be more than 50 mm.
- Overshadowing buildings/vegetation must be of the height and distance from the centre and the base of the window and glazed door, as specified in the 'overshadowing' column.

Hot water
- 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
- Install the following cooling system, or a system with a higher energy rating, in at least 1 living area: 3-phase airconditioning; Energy rating: EER 3.0 - 3.5
- Install the following cooling system, or a system with a higher energy rating, in at least 1 bedroom: 3-phase airconditioning; Energy rating: EER 3.0 - 3.5the cooling system must provide for day/night zoning between living areas and bedrooms.

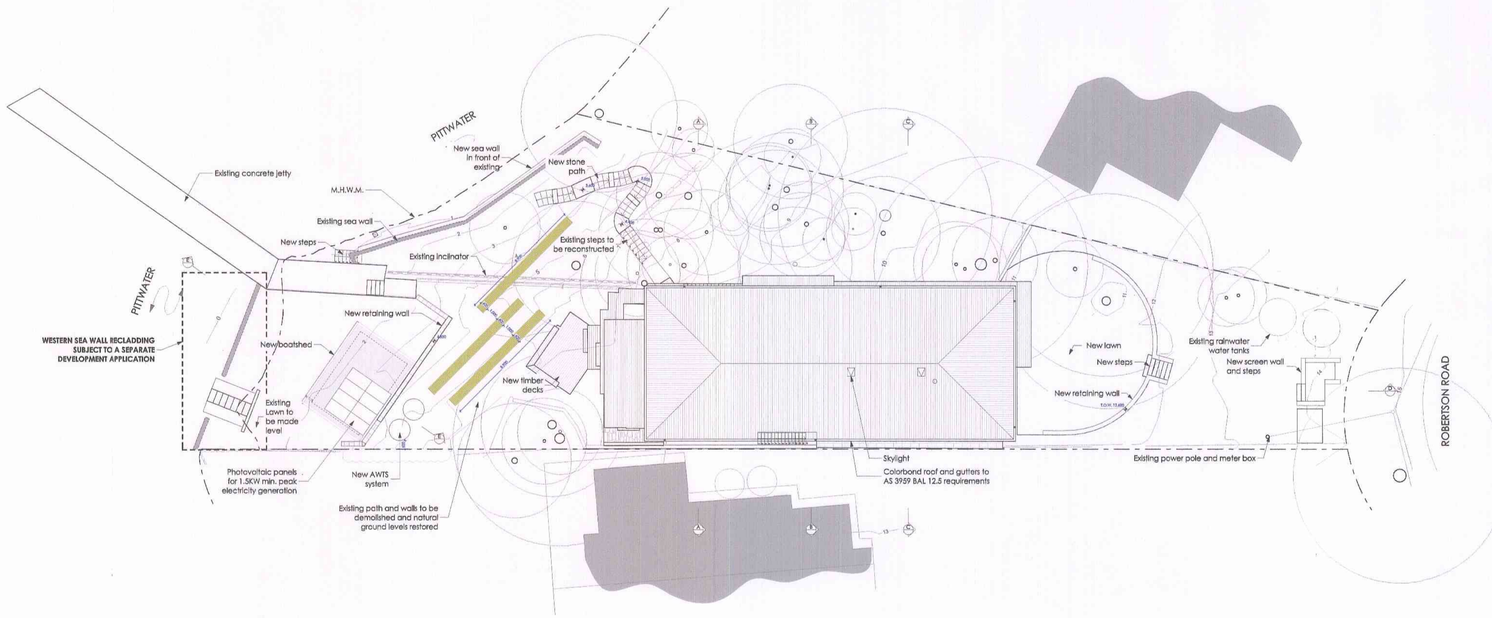
Heating system
- Install the following heating system, or a system with a higher energy rating, in at least 1 living area: 3-phase airconditioning; Energy rating: EER 3.0 - 3.5
- Install the following heating system, or a system with a higher energy rating, in at least 1 bedroom: 3-phase airconditioning; Energy rating: EER 3.0 - 3.5
- The heating system must provide for day/night zoning between living areas and bedrooms.

Ventilation
- 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

Natural lighting
- Install a window and/or skylight in 3 bathroom(s)/toilet(s) in the development for natural lighting.

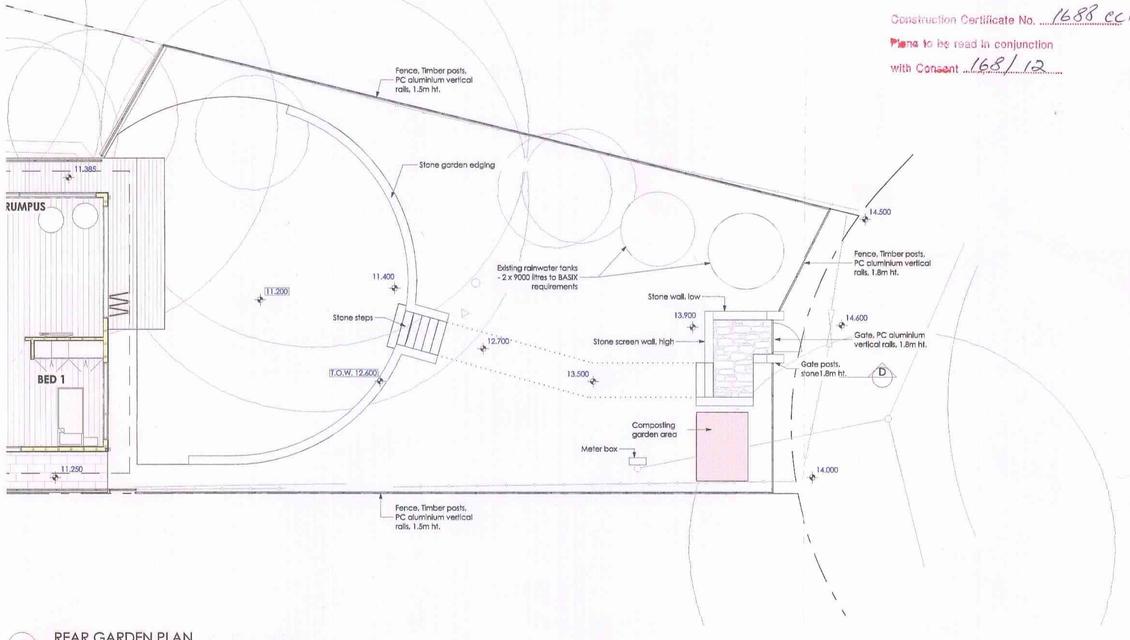
Alternative energy
- Install a photovoltaic system with the capacity to generate at least 1.5 peak kilowatts of electricity as part of the development. The applicant must connect this system to the development's electrical system.

Other
- Install an induction cooktop & electric oven in the kitchen of the dwelling.
- Construct each refrigerator space in the development so that it is "well ventilated", as defined in the BASIX definitions.



1 SITE
1:200

Construction Certificate No. 1688 CC1 - 18.4.13.
Plans to be read in conjunction
with Consent 168/12



2 REAR GARDEN PLAN
1:100

REV	DATE	REVISION	BY
A	26/03/13	Issued for CC	MH

N

de Soyres Malone Architects Pty Ltd
Nominated Architect: James de Soyres #6769

PO BOX 657 NEWPORT BEACH NSW 2106
5 ROWELL MARINA
QUEEN'S PARADE WEST NEWPORT
contact@dsmarchitects.com
TELEPHONE: (02) 9979 1823

CLIENT
The Crafter family

LOCATION
41 Robertson Road,
Scotland Island, NSW 2105.
Lot 301 in D.P. 514985

DRAWING TITLE
Site Plan

DATE OF ISSUE 26/03/2013

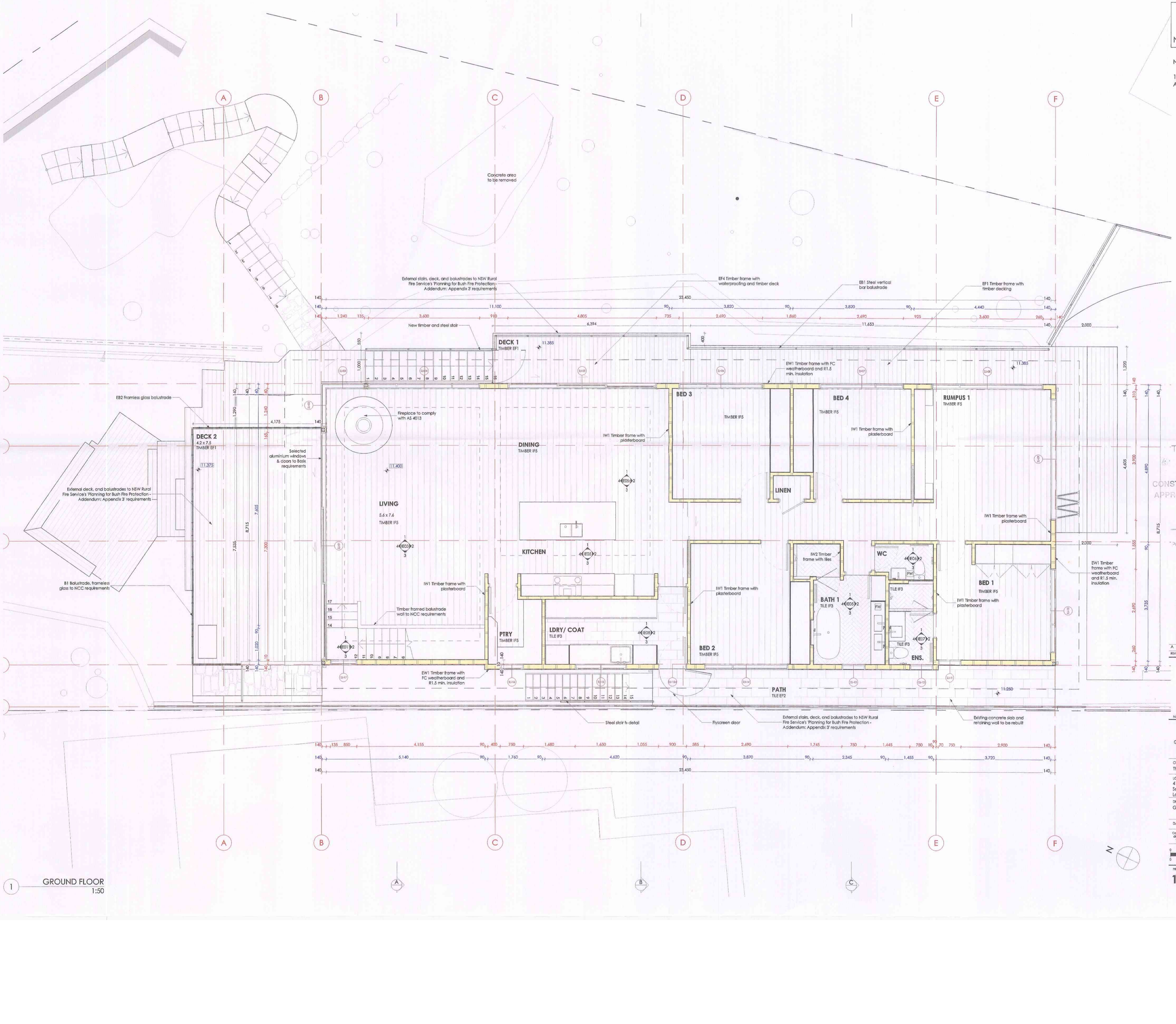
Scale in metres: 1:00 at A1 original size
0 0.5 1.5 2 2.5
0 1 2 3 4 5
Scale in metres: 1:100 at A1 original size

PROJECT No	DRAWING No	REVISION
1108	CC-01	A

FOR CONSTRUCTION CERTIFICATE
Not for Construction

NOTES :

1. ALL CONSTRUCTION TO A.S.3959.2009 BAL 12.5



1 GROUND FLOOR
1:50

This Plan / Detail is to be read in conjuction with CONSTRUCTION CERTIFICATE APPROVAL NO. 1688 cc1

JJ BRIGGS ASSOCIATES
PO BOX 800 BROOKVALE 2100

REV	DATE	REVISION	BY
A	26/03/13	Issued for CC	MH

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CLIENT
The Crafter family

LOCATION
41 Robertson Road,
Scotland Island, NSW 2105.
Lot 301 in D.P. 514985

DRAWING TITLE
Ground Floor Plan

DATE OF ISSUE 26/03/2013

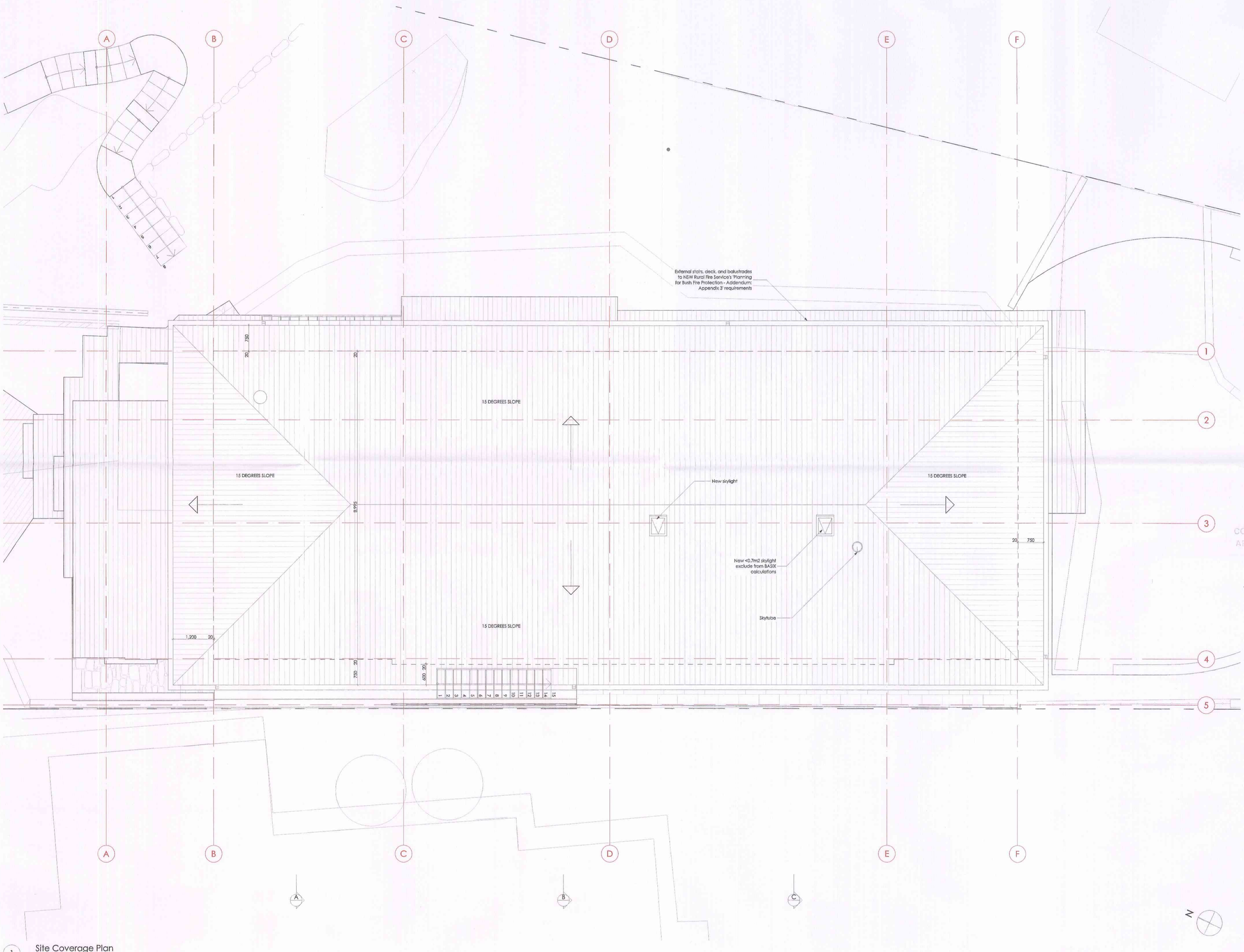
Scale in metres: 1:50 of A1 original size
0 0.5 1 1.5 2 2.5
Scale in metres: 1:100 of A1 original size
0 1 2 3 4 5

PROJECT No:	DRAWING No:	REVISION
1108	CC-12	A

FOR CONSTRUCTION CERTIFICATE
Not for Construction

NOTES :

1. ALL CONSTRUCTION TO A.S.3959.2009 BAL 12.5



1 Site Coverage Plan
1:50

This Plan / Detail is to be read in conjuction with CONSTRUCTION CERTIFICATE APPROVAL NO. 1688 cc1

JJ BRIGGS ASSOCIATES
PO BOX 800 BROOKVALE 2100

REV	DATE	REVISION	BY
A	26/03/13	issued for CC	MH

de Soyres Malone Architects Pty Ltd
Nominated Architect: James de Soyres #6769
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CLIENT
The Crafter family

LOCATION
41 Robertson Road,
Scotland Island, NSW 2105.
Lot 301 in D.P. 514985

DRAWING TITLE
Roof Plan

DATE OF ISSUE 26/03/2013

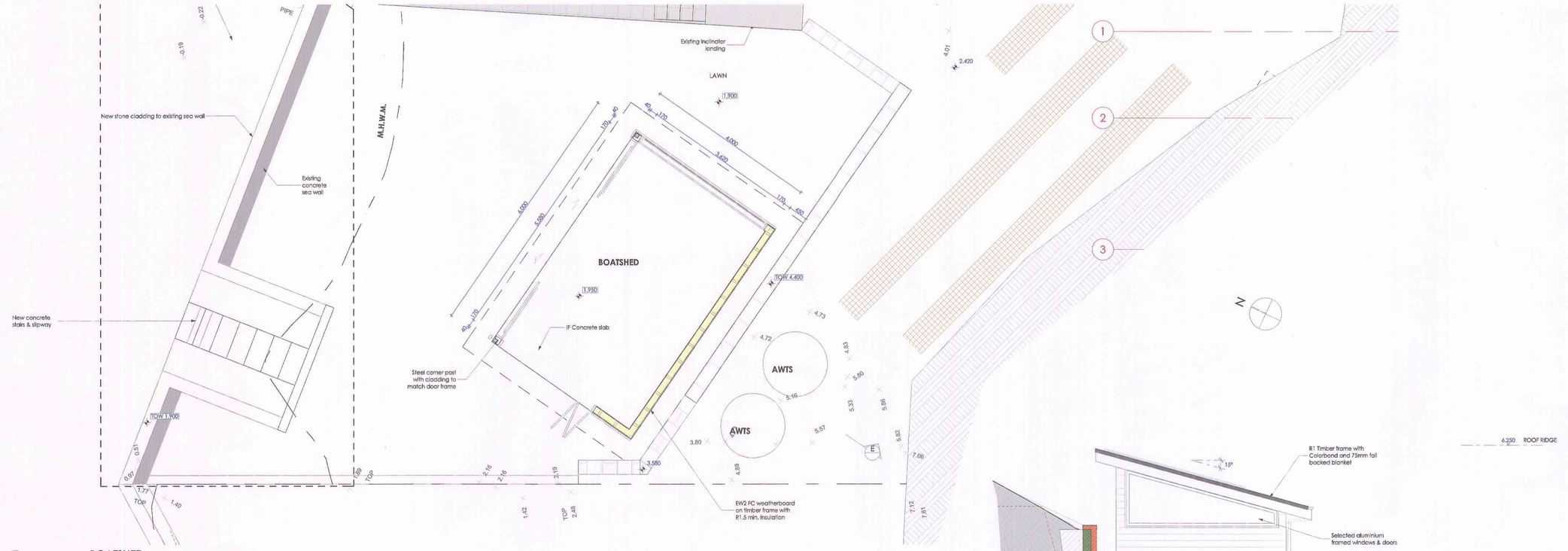
Scale in metres: 1:50 at A1 original size
0 0.5 1 1.5 2 2.5
Scale in metres: 1:100 at A1 original size
0 1 2 3 4 5

PROJECT No:	DRAWING No:	REVISION
1108	CC-13	A

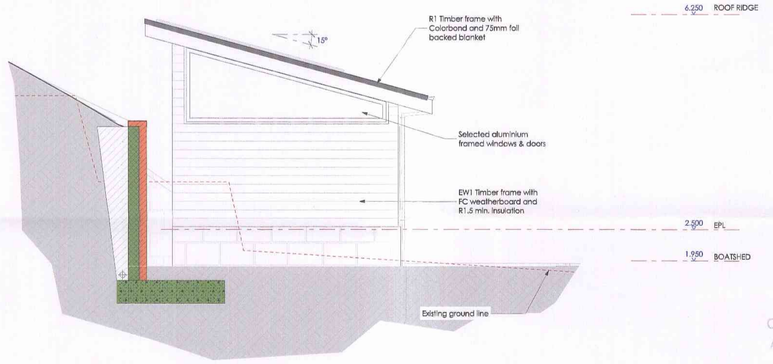
FOR CONSTRUCTION CERTIFICATE
Not for Construction

NOTES :

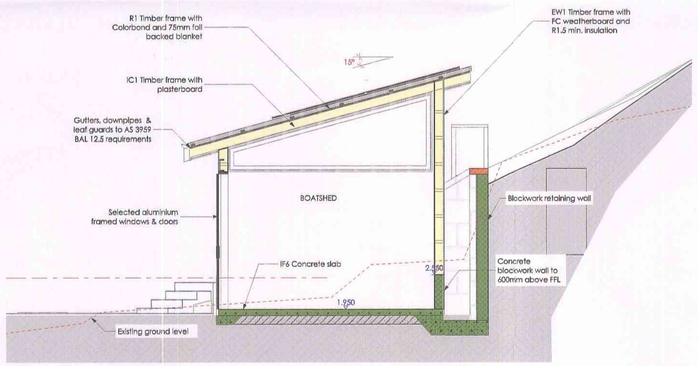
1. ALL CONSTRUCTION TO A.S.3959.2009 BAL 12.5



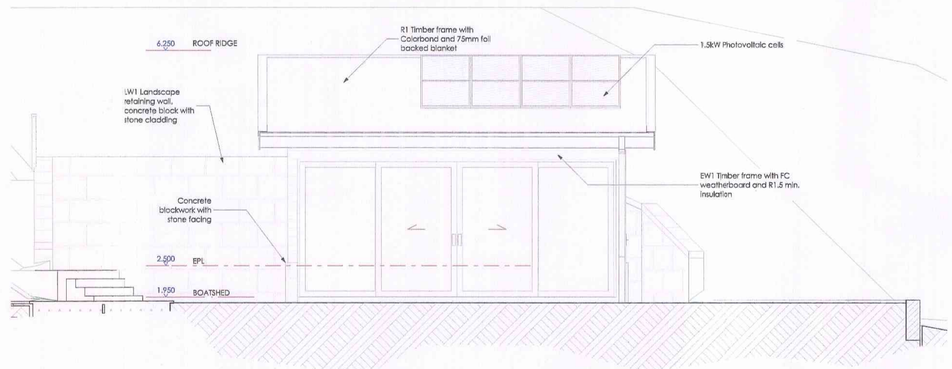
1 BOATSHED
1:50



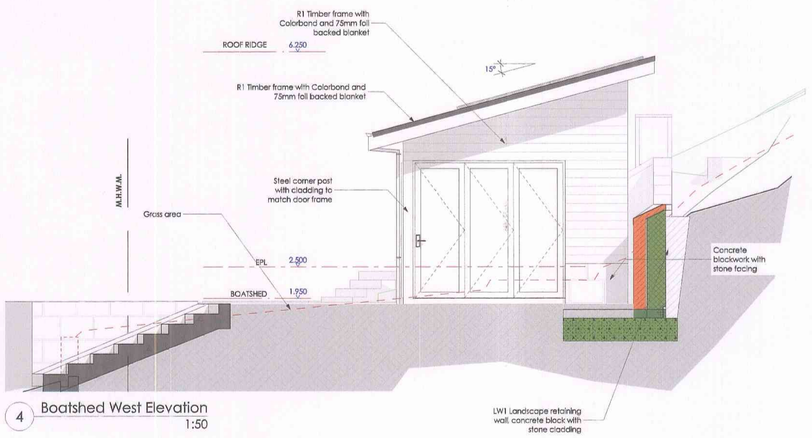
2 Boatshed East Elevation
1:50



5 SECTION E-E
1:50



3 Boatshed North Elevation
1:50



4 Boatshed West Elevation
1:50

This Plan / Detail is to be read in conjuction with CONSTRUCTION CERTIFICATE APPROVAL NO. 16 88 CC1

JJ BRIGGS ASSOCIATES
PO BOX 500 BROOKVALE 2100

REV	DATE	REVISION	BY
A	26/03/13	Issued for CC	MH

de Soyres Malone Architects Pty Ltd
Nominated Architect: James de Soyres #6769
PO BOX 657 NEWPORT BEACH NSW 2106
5 ROWELL MARINA
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TELEPHONE: (02) 9979 1823

CLIENT
The Crafter family

LOCATION
41 Robertson Road,
Scotland Island, NSW 2105.
Lot 301 In D.P. 514985

DRAWING TITLE
Boatshed

DATE OF ISSUE 26/03/2013

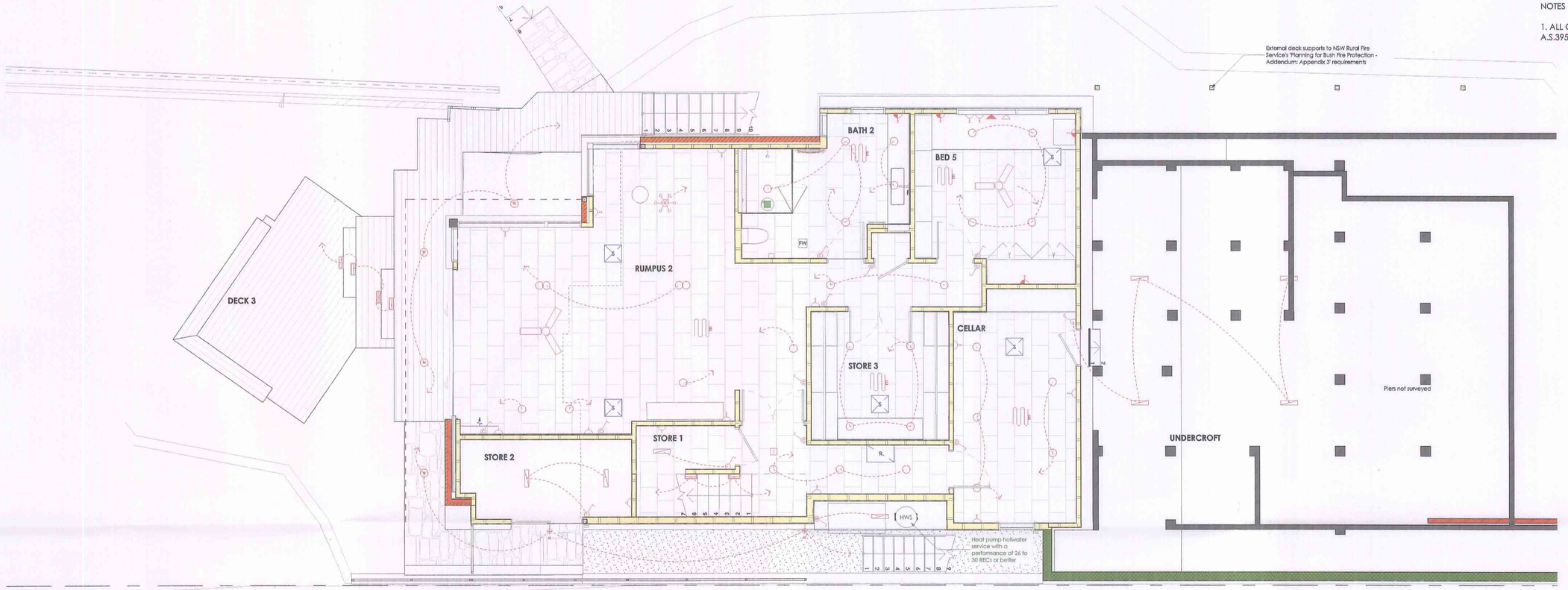
Scale in metres: 1:00 at A1 original size
0 0.5 1 1.5 2 2.5
Scale in metres: 1:100 at A1 original size
0 1 2 3 4 5

PROJECT No:	DRAWING No:	REVISION
1108	CC-14	A

FOR CONSTRUCTION CERTIFICATE
Not for Construction

NOTES :

1. ALL CONSTRUCTION TO A.S.3959.2009 BAL 12.5



1 BASEMENT Services
1:50

SERVICES LEGEND

- Switch
- 2 way switch
- C-Bus Control
- Switch with dimmer
- Weatherproof switch
- Smoke detector
- Fluorescent strip light
- LED Strip light
- LED Vertical Strip Light
- Adjustable LED Downlight
- Low voltage floor light
- 240V Light fitting
- Weatherproof 240V light fitting
- Low voltage downlight
- Weatherproof Low voltage ceiling light
- Adjustable low voltage Light
- Wall mount light
- weatherproof wall mount light
- low voltage wall mount downlight
- low voltage wall mount up light
- low voltage wall mount up/down light
- low voltage step light
- recessed step light
- mirror light
- picture light
- Garden Spike light
- Bollard Light
- double spotlight
- weatherproof spotlight
- emergency light
- floodlight
- 3 light track system
- trapeze wires & low voltage light
- decorative pendant
- ceiling fan
- Ceiling fan light
- GPO (skirting level)
- GPO (benchtop level)
- double GPO (skirting level)
- double GPO (benchtop level)
- GPO inset into floor
- weatherproof GPO
- Ceiling / Blinds GPO
- Wall fan
- telephone point
- CAT 6 data socket
- CAT 6 patch panel
- distribution box
- ducted vacuum outlet
- Heated towel rail
- Hydronic Radiator
- dehumidifier bar
- tyre spur
- cooker point
- television point
- Pay TV point
- shaver point
- Door station
- Speaker
- telecom frame
- panic button
- hot water system
- hot water system, wall mount
- FCU AC indoor unit
- AC AC outdoor unit
- AC ceiling grille - supply
- AC floor grille - supply
- AC wall grille - supply
- AC wall grille - return
- AC ceiling grille - return
- AC floor grille - return
- extract fan
- bathroom fan/ light
- bathroom fan/ heat/ light
- Floor Heating - Electrical
- Floor Heating - Hydronic
- Wire to door operator
- Outdoor siren / Strobe (box)
- Internal Screamer (flush)
- Keypad
- 15"D display (NVR)
- gas bayonet point
- External tap point
- Magnetic Door Lock
- Reed sensor
- Latch (standard, electric)
- Rollershutter contact detector
- I.P camera
- Prax head
- Prax / P.I.N head
- P.I.R detector
- P.E beam (1 of 2)
- Intercom Speaker
- Door Intercom external video entry station
- Audio only intercom (internal)
- Video / audio intercom (internal)
- Equipment pod
- Flush Speaker
- Flush single stereo speaker
- Boxed speaker
- Wall volume control (knob)
- Boxed subwoofer 12"
- C-bus P.I.R detector
- Flush PIR 360° sensor
- Window motor point
- Temperature detector
- Conduit
- C-BUS switched outlet
- speaker - ceiling
- speaker - wall

Notes:
1. **Final location of all fittings is to be confirmed on site with the architect.**
2. **All light switches to be located 1200mm above FFL to bottom of the back plate**
3. **All low level GPO's to be located at a uniform height on the 140mm skirting**
4. **All GPO's and switches located on lining boards, to be positioned central to a single board**
5. **Security - extent of system to be confirmed with specialist sub contractor**
6. Audio / Visual - extent of system, position of speakers etc. to be confirmed with specialist sub contract
7. Data cabling - extent of data cabling & points to be confirmed with specialist sub contractor

SYMBOLS IN GREEN INDICATE **BASIX** REQUIREMENTS
SYMBOLS IN BLUE & RED INDICATE **NEW** FITTINGS
SYMBOLS IN BLACK INDICATE **EXISTING** FITTINGS

This Plan / Detail is to be read in conjuction with CONSTRUCTION CERTIFICATE APPROVAL NO. 16 88cc/

JJ BRIGGS ASSOCIATES
PO BOX 500 BROOKVALE 2100

REV	DATE	REVISION	BY
A	26/03/13	Issued for CC	MH

de Soyres Malone Architects Pty Ltd
Nominated Architect: James de Soyres #6769
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contact@dsmarchitects.com
TELEPHONE: (02) 9979 1823

CLIENT
The Crafter family

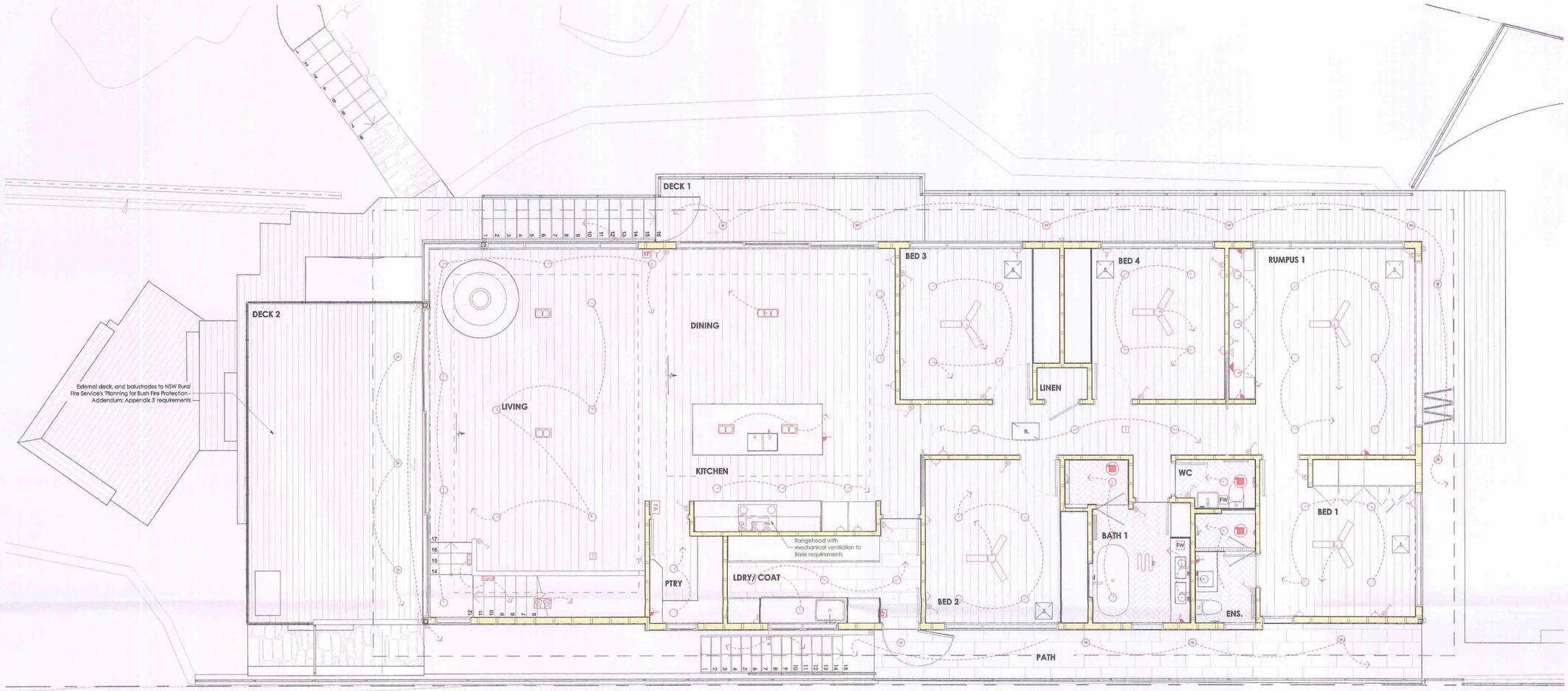
LOCATION
41 Robertson Road,
Scotland Island, NSW 2105.
Lot 301 in D.P. 514985

DRAWING TITLE
Services Plan - Basement

DATE OF ISSUE 26/03/2013

Scale in metres: 1:50 at A1 original size
0 0.5 1 1.5 2 2.5
Scale in metres: 1:100 at A1 original size
0 1 2 3 4 5

PROJECT No:	DRAWING No:	REVISION
1108	CC-18	A



1 GROUND FLOOR Services
1:50

FOR CONSTRUCTION CERTIFICATE
Not for Construction

NOTES :

1. ALL CONSTRUCTION TO A.S.3959.2009 BAL 12.5

This Plan / Detail is to be read in conjuction with

CONSTRUCTION CERTIFICATE
APPROVAL NO. 16 88 cc1

JJ BRIGGS ASSOCIATES
PO BOX 500 BROOKVALE 2100

SERVICES LEGEND

Switch
2 way switch
C-Bus Control
Switch with dimmer
Weatherproof switch
Smoke detector
Fluorescent strip light
LED Strip light
LED Vertical Strip Light
Adjustable LED Downlight
Low voltage floor light

240V Light Fitting
Weatherproof 240V light fitting
Low voltage downlight
Weatherproof Low voltage ceiling light
Adjustable low voltage Light
Wall mount light
weatherproof wall mount light
low voltage wall mount cabwlight
low voltage wall mount up light
low voltage wall mount up/down light

low voltage step light
recessed step light
mirror light
picture light
Garden Solke light
Bollard Light
double spotlight
weatherproof spotlight
emergency light
floodlight

3 light track system
trapeze wires & low voltage light
decorative pendant
ceiling fan
Ceiling fan light

GPO (skirting level)
GPO (benchtop level)
double GPO (skirting level)
double GPO (benchtop level)
GPO inset into floor
weatherproof GPO
Ceiling / Blinds GPO
Wall fan
telephone point
CAT 6 data socket
CAT 6 patch panel
distribution box

ducted vacuum outlet
Heated towel rail
Hydronic Radiator
dehumidifier bar
fuse spur
cooker point
television point
Pay TV point
shaver point
Door station
Speaker

telecom frame
panic button
hot water system
hot water system, wall mount
FCU AC indoor unit
AC AC outdoor unit
AC ceiling grille - supply
AC floor grille - supply
AC ceiling grille - return
AC floor grille - return
AC wall grille - supply
AC wall grille - return

extract fan
bathroom fan/ light
bathroom fan/ heat/ light

Floor Heating - Electrical
Floor Heating - Hydronic
MOTOR Wire to door operator
Outdoor siren / Strobe (box)
Internal Screamer (flush)
KP Keypad
18"D 18" display (NVR)
Gas gas bayonet point
Hosecock External tap point

Magnetic Door Lock
Reed sensor
Latch (standard, electric)
RSC Rollershutter contact detector
LP camera
Prax head
Prax / P.I.H head
P.I.R detector
P.E beam (1 of 2)
1.5 Intercom Speaker

DJ Door Intercom external video entry station
AJ Audio only intercom (internal)
VJ Video / audio intercom (internal)
Equipment pod
S Flush Speaker
SS Flush single stereo speaker
Boxed speaker
V Wall volume control (knob)
SUB12 Boxed subwoofer 12"

C-bus P.I.R detector
Flush PIR 360° sensor
Window motor point
TH Temperature detector
Conduit
C-BUS switched outlet

speaker - ceiling
speaker - wall

Notes:
1. **Final location of all fittings is to be confirmed on site with the architect.**
2. **All light switches to be located 1200mm above FFL to bottom of the back plate**
3. **All low level GPO's to be located at a uniform height on the 140mm skirting**
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6. Audio / Visual - extent of system, position of speakers etc. to be confirmed with specialist sub contract
7. Data cabling - extent of data cabling & points to be confirmed with specialist sub contractor

SYMBOLS IN GREEN INDICATE **BASIX** REQUIREMENTS
SYMBOLS IN BLUE & RED INDICATE **NEW** FITTINGS
SYMBOLS IN BLACK INDICATE **EXISTING** FITTINGS

N

REV.	DATE	REVISION	BY

de Soyres Malone Architects Pty Ltd
Nominated Architect: James de Soyres #6769
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TELEPHONE: (02) 9979 1823

CLIENT
The Crafter family

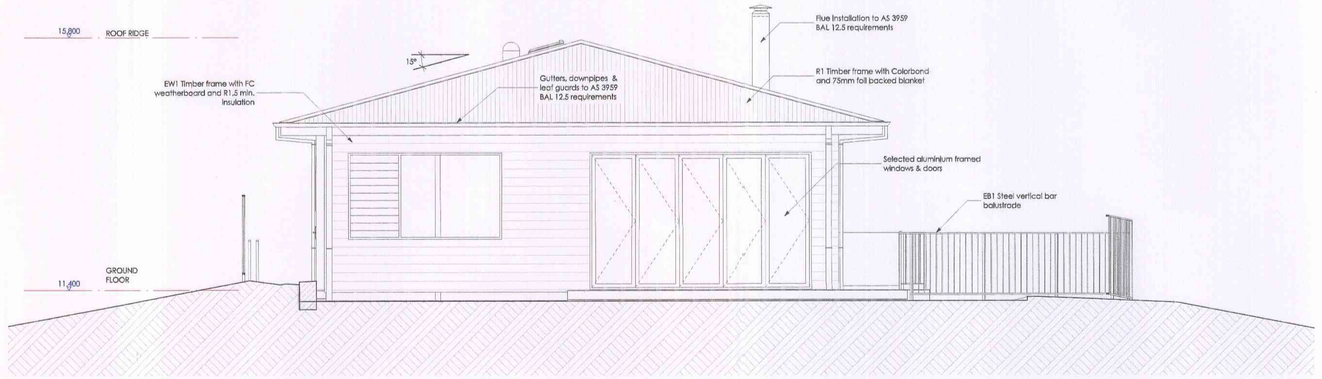
LOCATION
41 Robertson Road,
Scotland Island, NSW 2105.
Lot 301 in D.P. 514985

DRAWING TITLE
Services Plan - Ground Floor

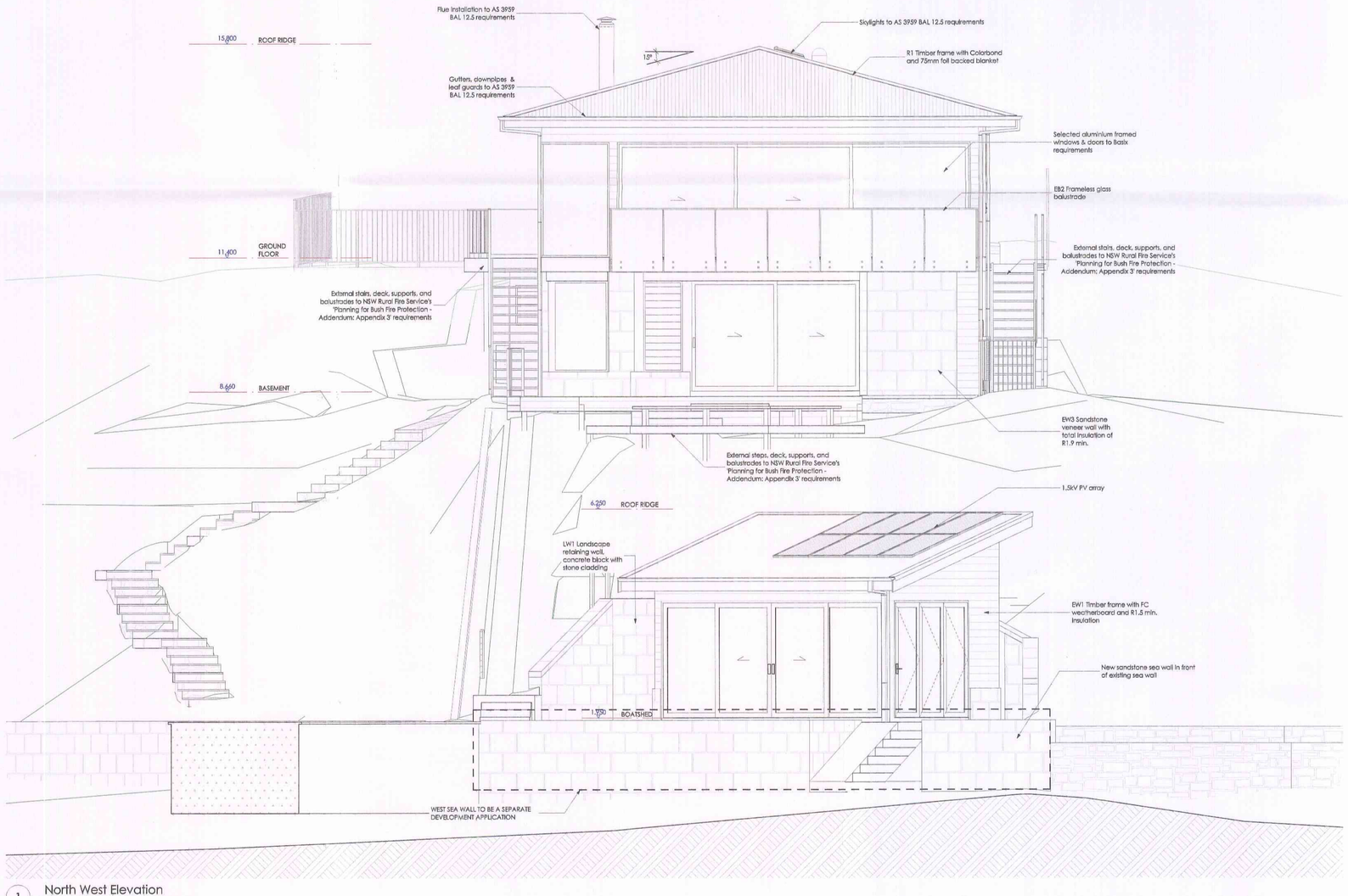
DATE OF ISSUE 26/03/2013

Scale in metres: 1:50 at A1 original size
0 0.5 1 1.5 2 2.5
0 1 2 3 4 5
Scale in metres: 1:100 at A1 original size

PROJECT No:	DRAWING No:	REVISION
1108	CC-19	



2 South East Elevation
1:50



1 North West Elevation
1:50

FOR CONSTRUCTION CERTIFICATE
Not for Construction

NOTES :

1. ALL CONSTRUCTION TO A.S.3959.2009 BAL 12.5

This Plan / Detail is to be read in conjuction with CONSTRUCTION CERTIFICATE APPROVAL NO 1688 CC/

JJ BRIGGS ASSOCIATES
PO BOX 600 BROOKVALE 2100

REV	DATE	REVISION	BY
A	26/03/13	Issued for CC	MH

de Soyres Malone Architects Pty Ltd
Nominated Architect: James de Soyres #4769
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TELEPHONE: (02) 9979 1823

CLIENT
The Crafter family

LOCATION
41 Robertson Road,
Scotland Island, NSW 2105.
Lot 301 in D.P. 514985

DRAWING TITLE
North and South Elevations

DATE OF ISSUE 26/03/2013

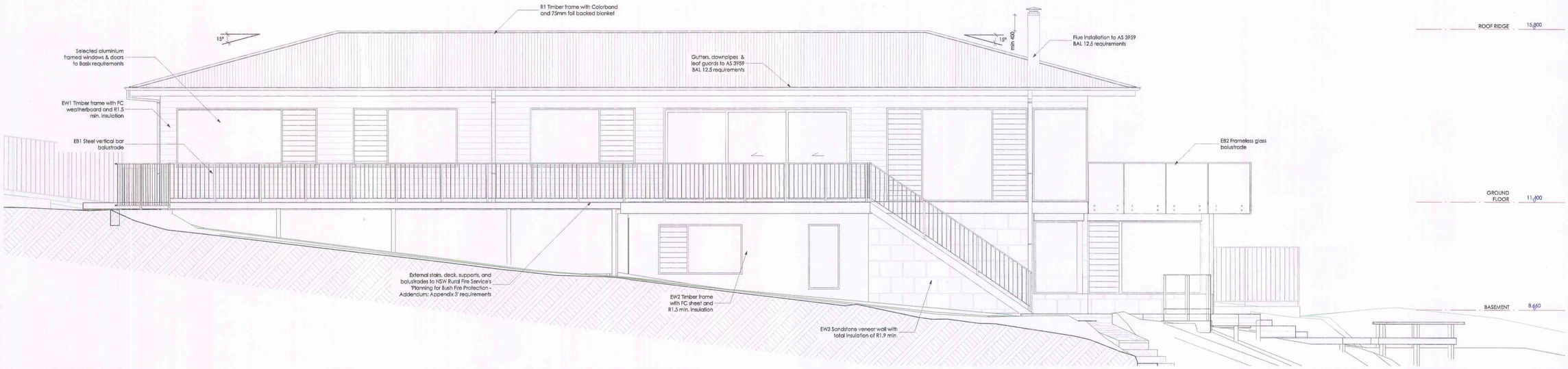
Scale in metres: 1:50 at A1 original size
0 0.5 1 1.5 2 2.5
Scale in metres: 1:100 at A1 original size
0 1 2 3 4 5

PROJECT No:	DRAWING No:	REVISION
1108	CC-21	A

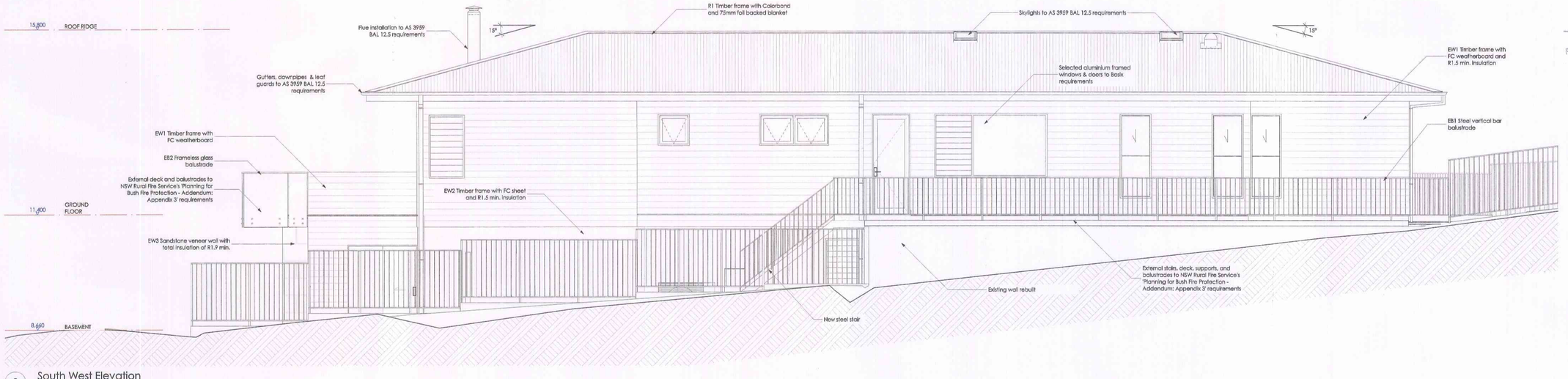
FOR CONSTRUCTION CERTIFICATE
Not for Construction

NOTES :

1. ALL CONSTRUCTION TO A.S.3959.2009 BAL 12.5



1 North East Elevation
1:50



2 South West Elevation
1:50

This Plan / Detail is to be read in conjuction with CONSTRUCTION CERTIFICATE APPROVAL NO 1688 cc1

JJ BRIGGS ASSOCIATES
PO BOX 500 BROOKVALE 2100

REV	DATE	REVISION	BY
A	26/03/13	Issued for CC	MH

de Soyres Malone Architects Pty Ltd
Nominated Architect: James de Soyres #6769
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contact@dsmarchitects.com
TELEPHONE: (02) 9979 1823

CLIENT
The Crafter family

LOCATION
41 Robertson Road,
Scotland Island, NSW 2105.
Lot 301 in D.P. 514985

DRAWING TITLE
East and West Elevations

DATE OF ISSUE 26/03/2013

Scale in metres: 1:50 at A1 original size
0 0.5 1 1.5 2 2.5

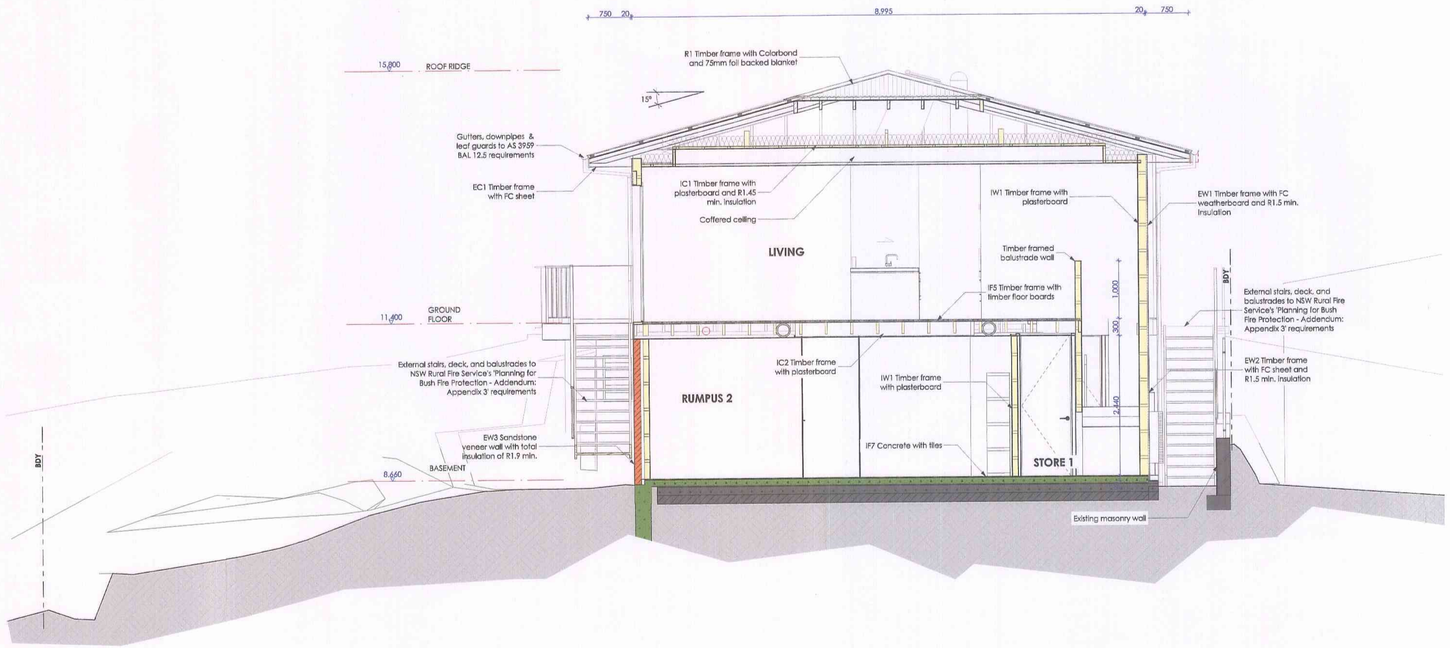
Scale in metres: 1:100 at A1 original size
0 1 2 3 4 5

PROJECT No:	DRAWING No:	REVISION
1108	CC-22	A

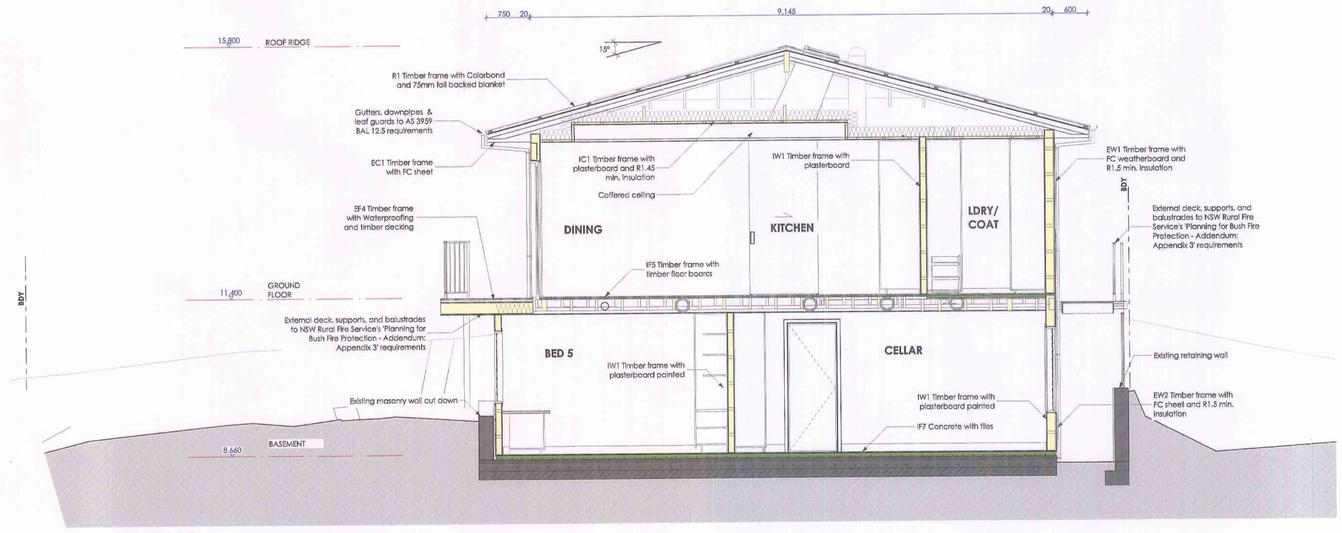
FOR CONSTRUCTION CERTIFICATE
Not for Construction

NOTES :

1. ALL CONSTRUCTION TO A.S.3959.2009 BAL 12.5



1 SECTION A-A
1:50



2 SECTION B-B
1:50

This Plan / Detail is to be read in conjuction with CONSTRUCTION CERTIFICATE APPROVAL NO. 1688cc1

JJ BRIGGS ASSOCIATES
PO BOX 600 BROOKVALE 2100

REV	DATE	REVISION	BY
A	26/03/13	Issued for CC	MH

de Soyres Malone Architects Pty Ltd

Nominated Architect: James de Soyres #6769

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TELEPHONE: (02) 9979 1823

CLIENT
The Crafter family

LOCATION
41 Robertson Road,
Scotland Island, NSW 2105.
Lot 301 in D.P. 514985

DRAWING TITLE
Sections A-A and B-B

DATE OF ISSUE 26/03/2013

Scale in metres: 1:50 at A1 original size
0 0.5 1 1.5 2 2.5

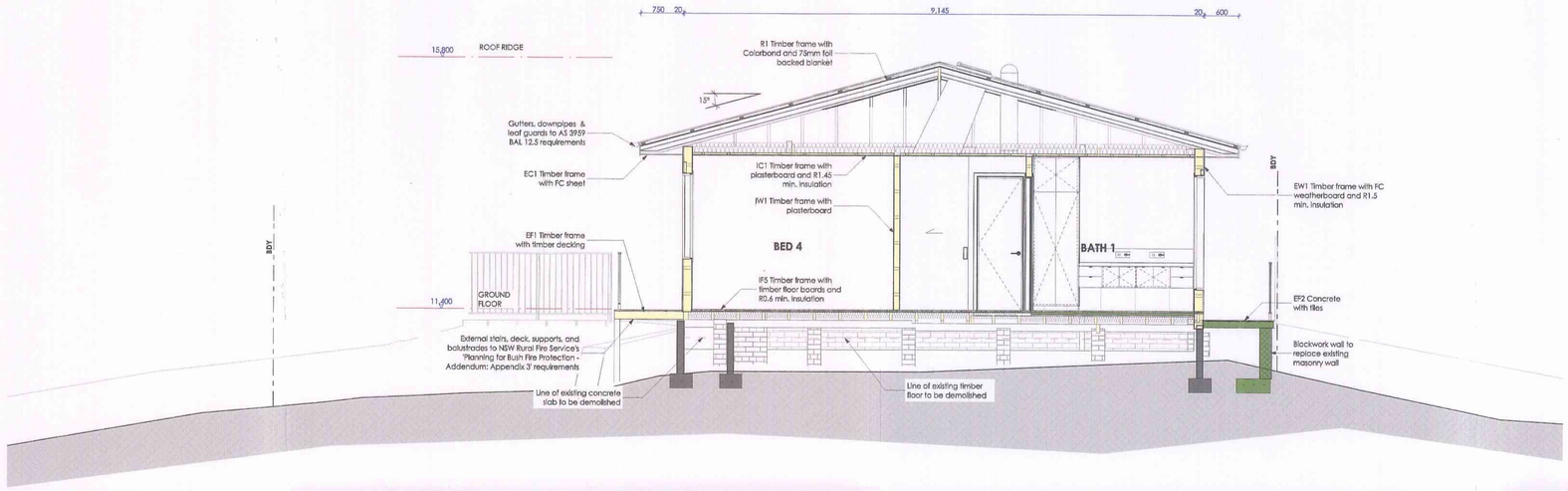
Scale in metres: 1:100 at A1 original size
0 1 2 3 4 5

PROJECT No:	DRAWING No:	REVISION
1108	CC-31	A

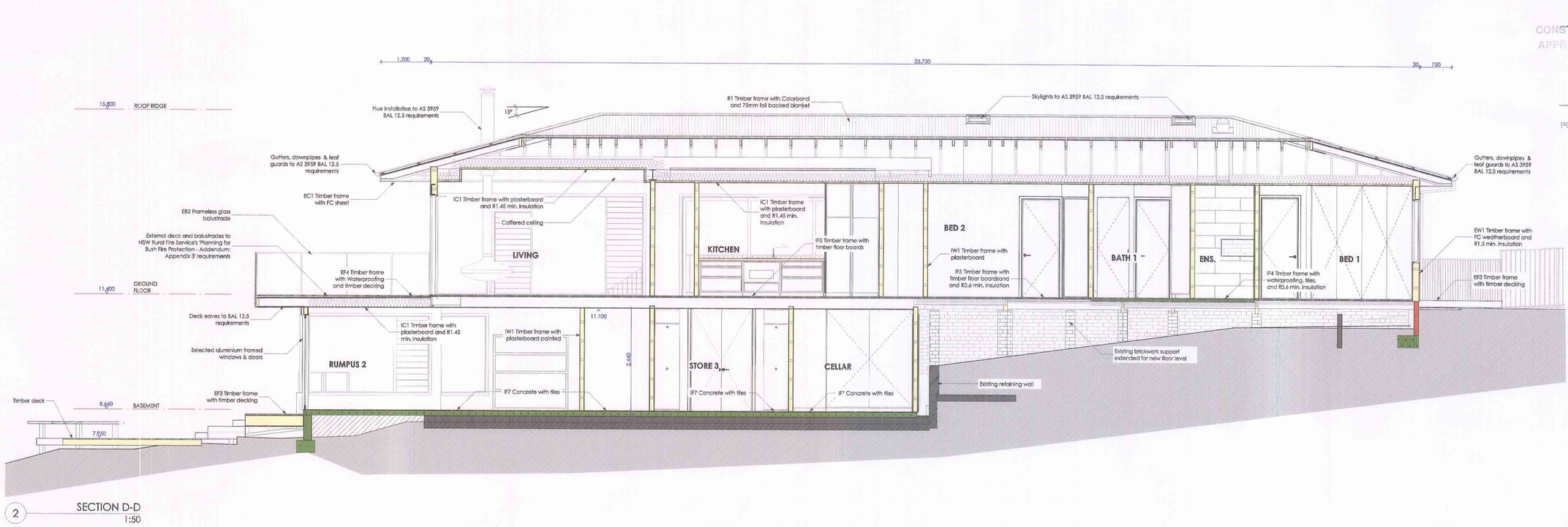
FOR CONSTRUCTION CERTIFICATE
Not for Construction

NOTES :

1. ALL CONSTRUCTION TO A.S.3959.2009 BAL 12.5



1 SECTION C-C
1:50



2 SECTION D-D
1:50

This Plan / Detail is to be read in conjuction with CONSTRUCTION CERTIFICATE
APPROVAL NO 1688 cc1

JJ BRIGGS ASSOCIATES
PO BOX 600 BROOKVALE 2100

REV.	DATE	REVISION	BY
A	26/03/13	Issued for CC	MH

de Soyres Malone Architects Pty Ltd
Nominated Architect: James de Soyres #6769
PO BOX 657 NEWPORT BEACH NSW 2106
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contact@dsmarchitects.com
TELEPHONE: (02) 9979 1823

CLIENT
The Crafter family

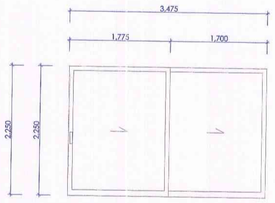
LOCATION
41 Robertson Road,
Scotland Island, NSW 2105.
Lot 301 In D.P. 514985

DRAWING TITLE
Sections C-C and D-D

DATE OF ISSUE 26/03/2013

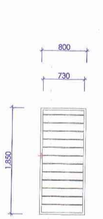
Scale in metres: 1:00 at A1 original size
0 0.5 1 1.5 2 2.5
0 1 2 3 4 5
Scale in metres: 1:100 at A1 original size

PROJECT No:	DRAWING No:	REVISION
1108	CC-32	A



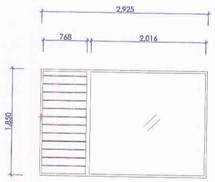
1J-01

Opening type	Sliding doors
Frame	Vantage 704 or multislider (TBA)
Sash	Aluminium framed glass
Glazing	Grade A safety glass to AS 1288 & AS 3959
Flyscreen	Yes, Center S1
Opening Gear	Corrosion resistant sliding gear
Weatherseal	Yes
Hardware	Hallidy & Baillie HB630
Basix Spec	Improved aluminium, single pyrolytic low-e (U-value:4.48, SHGC:0.46)
Bushfire Grade	AS 3959 BAL 12.5
Reveal	Yes
Notes	



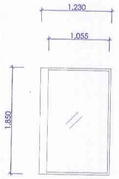
1J-02

Opening type	Louvred window
Frame	Vantage 525 with splayed sill beads
Sash	n/a
Glazing	Grade A safety glass 4mm min. to AS 1288 & AS 3959
Flyscreen	Yes, corrosion resistant metallic security screen mesh with no midrail
Opening Gear	Breezeway Altair 152mm blades, standard handle
Weatherseal	Yes
Hardware	Standard handle
Basix Spec	Timber or uPVC, single toned (or U-value:5.67, SHGC:0.49)
Bushfire Grade	AS 3959 BAL 12.5
Reveals	Yes
Notes	Frame height to be adjusted to suit full louvre blades



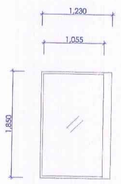
1J-03

Opening type	Fixed and louvred window
Frame	Vantage 525 with splayed sill bead to fixed frame
Sash	n/a
Glazing	Grade A safety glass 4mm min. to AS 1288 & AS 3959
Flyscreen	Yes, corrosion resistant metallic mesh, no midrail to screens
Opening Gear	Corrosion resistant louvre gear, Breezeway altair 152mm, standard handle
Weatherseal	Yes
Hardware	TBC
Basix Spec	Timber or uPVC, single toned (or U-value:5.67, SHGC:0.49)
Bushfire Grade	AS 3959 BAL 12.5
Reveal	Yes
Notes	Frame heights adjusted to suit full louvre blades



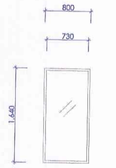
1J-04

Opening type	Fixed Window
Frame	Semi-commercial aluminium
Sash	n/a
Glazing	Grade A safety glass 4mm min. to AS 1288 & AS 3959
Flyscreen	No
Opening Gear	n/a
Weatherseal	No
Hardware	n/a
Basix Spec	Timber or uPVC, single toned (or U-value:5.67, SHGC:0.49)
Bushfire Grade	AS 3959 BAL 12.5
Reveal	Yes
Notes	



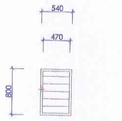
1J-05

Opening type	Fixed Window
Frame	Semi-commercial aluminium
Sash	n/a
Glazing	Grade A safety glass 4mm min. to AS 1288 & AS 3959
Flyscreen	No
Opening Gear	n/a
Weatherseal	No
Hardware	n/a
Basix Spec	Timber or uPVC, single toned (or U-value:5.67, SHGC:0.49)
Bushfire Grade	AS 3959 BAL 12.5
Reveal	Yes
Notes	



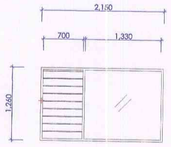
1J-06

Opening type	Fixed Window
Frame	Semi-commercial aluminium
Sash	n/a
Glazing	Grade A safety glass 4mm min. to AS 1288 & AS 3959
Flyscreen	No
Opening Gear	n/a
Weatherseal	No
Hardware	n/a
Basix Spec	Timber or uPVC, single toned (or U-value:5.67, SHGC:0.49)
Bushfire Grade	AS 3959 Level 1
Reveal	Yes
Notes	



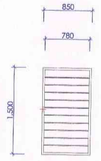
1J-06a

Opening type	Louvred window
Frame	Vantage 525 with splayed sill beads
Sash	n/a
Glazing	Grade A safety glass 4mm min. to AS 1288 & AS 3959
Flyscreen	Yes, corrosion resistant metallic security screen mesh with no midrail
Opening Gear	Breezeway Altair 152mm blades
Weatherseal	Yes
Hardware	Low profile handle
Basix Spec	<0.7m2 window excluded from Basix
Bushfire Grade	AS 3959 BAL 12.5
Reveals	Yes
Notes	Frame height to be adjusted to suit full louvre blades



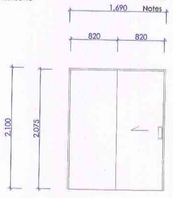
1J-07

Opening type	Fixed and louvred window
Frame	Vantage 525 with splayed sill bead to fixed frame
Sash	n/a
Glazing	Grade A safety glass 4mm min. to AS 1288 & AS 3959
Flyscreen	Yes, corrosion resistant metallic mesh, no midrail to screens
Opening Gear	Breezeway altair 152mm
Weatherseal	Yes
Hardware	Standard handle
Basix Spec	Timber or uPVC, single toned (or U-value:5.67, SHGC:0.49)
Bushfire Grade	AS 3959 BAL 12.5
Reveal	Yes
Notes	Frame heights adjusted to suit full louvre blades



1J-08

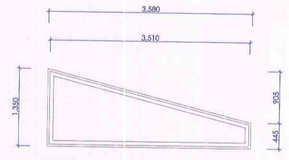
Opening type	Louvred window
Frame	Vantage 525 with splayed sill beads
Sash	n/a
Glazing	Grade A safety glass 4mm min. to AS 1288 & AS 3959
Flyscreen	Yes, corrosion resistant metallic security screen mesh with no midrail
Opening Gear	Breezeway Altair 152mm blades, standard handle
Weatherseal	Yes
Hardware	Low profile handle
Basix Spec	Timber or uPVC, single toned (or U-value:5.67, SHGC:0.49)
Bushfire Grade	AS 3959 BAL 12.5
Reveals	Yes
Notes	Frame height to be adjusted to suit full louvre blades



1J-10

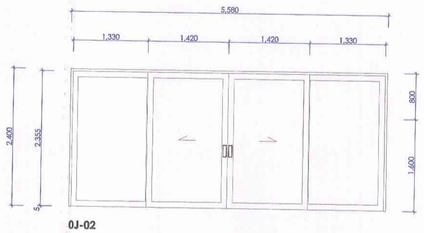
Opening type	Fixed Window
Frame	Semi-commercial aluminium
Sash	TBC to AS 3959
Glazing	n/a
Flyscreen	No
Opening Gear	n/a
Weatherseal	Yes
Hardware	n/a
Basix Spec	n/a
Bushfire Grade	AS 3959 Level 1
Reveal	Yes
Notes	

1 Basement Doors and Windows
1:50



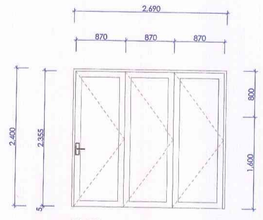
0J-01

Opening type	Fixed Window
Frame	Vantage 525 with splayed sill bead
Sash	n/a
Glazing	Grade A safety glass 4mm min. to AS 1288 & AS 3959
Flyscreen	No
Opening Gear	n/a
Weatherseal	No
Hardware	n/a
Basix Spec	Improved aluminium, single clear (U-value:6.44, SHGC:0.75)
Bushfire Grade	AS 3959 Level 1
Reveal	Yes
Notes	



0J-02

Opening type	Sliding doors
Frame	Vantage 704 or multislider (TBA)
Sash	Aluminium framed glass
Glazing	Grade A safety glass to AS 1288 & AS 3959
Flyscreen	No
Opening Gear	Corrosion resistant sliding gear
Weatherseal	Yes
Hardware	Hallidy & Baillie HB630
Basix Spec	n/a
Bushfire Grade	AS 3959 BAL 12.5
Reveal	Yes
Notes	



0J-03

Opening type	Bi-fold doors
Frame	Vantage 411
Sash	Aluminium framed glazing
Glazing	Grade A glass 4mm min. to AS 1288 & AS 3959
Flyscreen	No
Opening Gear	Corrosion resistant bi-fold gear
Weatherseal	Yes
Hardware	Icon Bifold operator and lever handle
Basix Spec	n/a
Bushfire Grade	AS 3959 BAL12.5
Reveal	Yes
Notes	

2 Boatshed Doors and Windows
1:50

FOR CONSTRUCTION CERTIFICATE
Not for Construction

NOTES :

1. ALL CONSTRUCTION TO A.S.3959.2009 BAL 12.5
2. ALL DOORS & WINDOWS SCREEN MESHES IS TO BE CORROSION-RESISTANT STEEL, BRONZE, OR ALUMINIUM TO BAL 12.5
3. ALL LOCKS TO BE KEYED ALIKE

This Plan / Details to be read in conjuction with CONSTRUCTION CERTIFICATE APPROVAL NO 1688cc1

JJ BRIGGS ASSOCIATES
PO BOX 800 BROOKVALE 2100

REV	DATE	REVISION	BY
A	26/03/13	Issued for CC	MH

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Nominated Architect: James de Soyres #6769
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contact@dsmarchitects.com
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CLIENT
The Crafter family

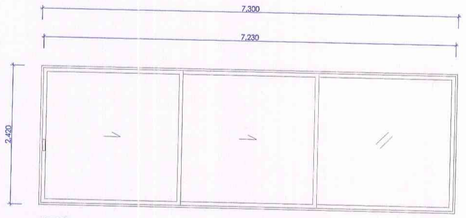
LOCATION
41 Robertson Road,
Scotland Island, NSW 2105.
Lot 301 In D.P. 514985

DRAWING TITLE
Doors and Windows Schedule - Basement and Boatshed

DATE OF ISSUE 26/03/2013

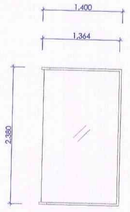
Scale in metres: 1:50 at A1 original size
0 0.5 1 1.5 2 2.5
Scale in metres: 1:100 at A1 original size
0 1 2 3 5

PROJECT No:	DRAWING No:	REVISION
1108	CC-41	A



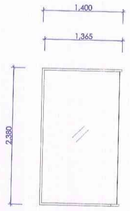
2J-01

Opening type	Sliding doors
Frame	Vantage 704 or multislider (TBA)
Sash	Aluminium framed glass
Glazing	Grade A safety glass to AS 1288 & AS 3959
Flyscreen	No
Opening Gear	Corrosion resistant sliding gear
Weatherseal	Yes
Hardware	Halliday & Baillie HB630
Basix Spec	Improved aluminium, single pyrolytic low-e (U-value:4.48, SHGC:0.46)
Bushfire Grade	AS 3959 BAL 12.5
Reveal	Yes
Notes	



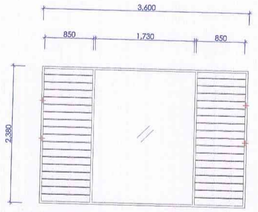
2J-02

Opening type	Fixed Window
Frame	Vantage 525 with splayed sill bead
Sash	n/a
Glazing	Grade A safety glass 4mm min. to AS 1288 & AS 3959
Flyscreen	No
Opening Gear	n/a
Weatherseal	No
Hardware	n/a
Basix Spec	Timber or uPVC, single toned (or U-value:5.67, SHGC:0.49)
Bushfire Grade	AS 3959 Level 1
Reveal	Yes
Notes	Silicon join to 2J-03



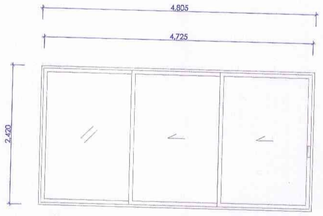
2J-03

Opening type	Fixed Window
Frame	Vantage 525 with splayed sill bead
Sash	n/a
Glazing	Grade A safety glass 4mm min. to AS 1288 & AS 3959
Flyscreen	No
Opening Gear	n/a
Weatherseal	No
Hardware	n/a
Basix Spec	Timber or uPVC, single toned (or U-value:5.67, SHGC:0.49)
Bushfire Grade	AS 3959 Level 1
Reveal	Yes
Notes	Silicon join to 2J-02



2J-04

Opening type	Fixed and louvred window
Frame	Vantage 525 with splayed sill bead to fixed frame
Sash	n/a
Glazing	Grade A safety glass 4mm min. to AS 1288 & AS 3959
Flyscreen	Yes, corrosion resistant metallic mesh, no midrail to screens
Opening Gear	Breezeway 152mm blades, low profile handle, stonghold louvre clips, restricted opening to blades below 1m, lower handle to be located at top of gallery
Weatherseal	No
Hardware	TBC
Basix Spec	Timber or uPVC, single toned (or U-value:5.67, SHGC:0.49)
Bushfire Grade	AS 3959 BAL 12.5
Reveal	Yes
Notes	



2J-05

Opening type	Sliding doors
Frame	Vantage 704 or multislider (TBA)
Sash	Aluminium framed glass
Glazing	Grade A safety glass to AS 1288 & AS 3959
Flyscreen	No
Opening Gear	Corrosion resistant sliding gear
Weatherseal	Yes
Hardware	Halliday & Baillie HB630
Basix Spec	Improved aluminium, single pyrolytic low-e (U-value:4.48, SHGC:0.46)
Bushfire Grade	AS 3959 BAL 12.5
Reveal	Yes
Notes	

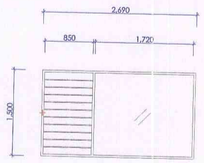
FOR CONSTRUCTION CERTIFICATE
Not for Construction

NOTES :

1. ALL CONSTRUCTION TO A.S.3959.2009 BAL 12.5

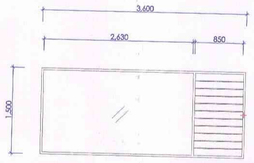
2. ALL DOORS & WINDOWS SCREEN MESHES IS TO BE CORROSION-RESISTANT STEEL, BRONZE, OR ALUMINIUM TO BAL 12.5

3. ALL LOCKS TO BE KEYED ALIKE



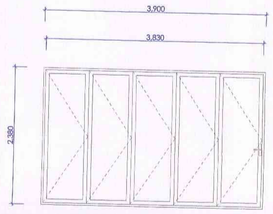
as shown; (2J-07, 2J-10, 2J-14); handed (2J-06)

Opening type	Fixed and louvred window
Frame	Vantage 525 with splayed sill bead to fixed frame
Sash	n/a
Glazing	Grade A safety glass 4mm min. to AS 1288 & AS 3959
Flyscreen	Yes, corrosion resistant metallic mesh, no midrail to screens
Opening Gear	Corrosion resistant louvre gear, Breezeway altair 152mm, standard handle
Weatherseal	Yes
Hardware	TBC
Basix Spec	Timber or uPVC, single toned (or U-value:5.67, SHGC:0.49)
Bushfire Grade	AS 3959 BAL 12.5
Reveal	Yes
Notes	Frame heights adjusted to suit full louvre blades



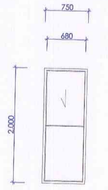
2J-08

Opening type	Fixed and louvred window
Frame	Semi-commercial aluminium frame
Sash	n/a
Glazing	Grade A safety glass 4mm min. to AS 1288 & AS 3959
Flyscreen	Yes, corrosion resistant metallic mesh
Opening Gear	Corrosion resistant louvre gear
Weatherseal	Yes
Hardware	TBC
Basix Spec	Timber or uPVC, single toned (or U-value:5.67, SHGC:0.49)
Bushfire Grade	AS 3959 BAL 12.5
Reveal	Yes
Notes	



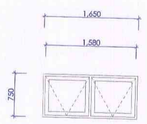
2J-09

Opening type	Bi-fold doors
Frame	Vantage 411
Sash	Aluminium framed glazing
Glazing	Grade A glass 4mm min. to AS 1288 & AS 3959
Flyscreen	Yes, Centor S1
Opening Gear	Corrosion resistant bi-fold gear
Weatherseal	Yes
Hardware	Icon Bifold operator and lever handle
Basix Spec	Standard aluminium, toned/air gap/clear (U-value:5.31, SHGC:0.48)
Bushfire Grade	AS 3959 BAL12.5
Reveal	Yes
Notes	



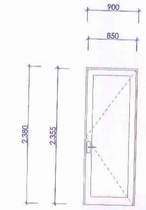
2J-11, 2J-12, 2J-13

Opening type	Sashless double hung
Frame	Semi-commercial aluminium
Sash	n/a
Glazing	Grade A glass 4mm min. to AS 1288 & AS 3959
Flyscreen	Yes, corrosion resistant metallic security screen, with no midrail
Opening Gear	Aneeta sashless double hung window
Weatherseal	Yes
Hardware	TBC
Basix Spec	Standard aluminium, toned/air gap/clear (U-value:5.31, SHGC:0.48)
Bushfire Grade	AS 3959 BAL 12.5
Reveal	Yes
Notes	



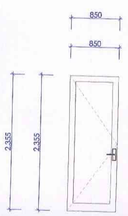
2J-15

Opening type	Awning
Frame	Semi-commercial aluminium frame
Sash	Aluminium framed glazing
Glazing	Grade A glass 4mm min. to AS 1288 & AS 3959
Flyscreen	Yes, Corrosion resistant metallic security screen mesh
Opening Gear	Truth winder with folding handle
Weatherseal	Yes
Hardware	TBC
Basix Spec	Timber or uPVC, single toned (or U-value:5.67, SHGC:0.49)
Bushfire Grade	AS 3959 BAL12.5
Reveal	Yes
Notes	



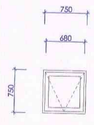
2J-15a

Opening type	Swing door
Frame	Semi-commercial aluminium frame
Sash	Aluminium framed glazing
Glazing	Grade A glass 4mm min. to AS 1288 & AS 3959
Flyscreen	Yes, external swing Corrosion resistant metallic screen
Opening Gear	Corrosion resistant swing gear
Weatherseal	Yes
Hardware	TBC
Basix Spec	Improved aluminium, single pyrolytic low-e (U-value:4.48, SHGC:0.46)
Bushfire Grade	AS 3959 BAL12.5
Reveal	Yes
Notes	



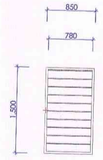
2J-15a

Opening type	Swing door
Frame	Semi-commercial aluminium frame
Sash	Aluminium framed glazing
Glazing	Grade A glass 4mm min. to AS 1288 & AS 3959
Flyscreen	Yes, external swing Corrosion resistant metallic screen
Opening Gear	Corrosion resistant swing gear
Weatherseal	Yes
Hardware	TBC
Basix Spec	Improved aluminium, single pyrolytic low-e (U-value:4.48, SHGC:0.46)
Bushfire Grade	AS 3959 BAL12.5
Reveal	Yes
Notes	



2J-16

Opening type	Awning
Frame	Semi-commercial aluminium frame
Sash	Aluminium framed glazing
Glazing	Grade A glass 4mm min. to AS 1288 & AS 3959
Flyscreen	Yes, Corrosion resistant metallic
Opening Gear	Corrosion resistant Awning winder
Weatherseal	Yes
Hardware	TBC
Basix Spec	<0.7m2 window excluded from Basix
Bushfire Grade	AS 3959 BAL12.5
Reveal	Yes
Notes	



2J-17

Opening type	Louvred window
Frame	Vantage 525 with splayed sill beads
Sash	n/a
Glazing	Grade A safety glass 4mm min. to AS 1288 & AS 3959
Flyscreen	Yes, corrosion resistant metallic security mesh screen with no mid-rail
Opening Gear	Breezeway Altair 152mm blades, low profile handle
Weatherseal	Yes
Hardware	Low profile handle
Basix Spec	Timber or uPVC, single toned (or U-value:5.67, SHGC:0.49)
Bushfire Grade	AS 3959 BAL 12.5
Reveals	Yes
Notes	Frame height to be adjusted to suit full louvre blades

1 Ground Floor Doors And Windows
1:50

REV	DATE	REVISION	BY
A	26/03/13	Issued for CC	MH

de Soyres Malone Architects Pty Ltd
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QUEEN'S PARADE WEST NEWPORT
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TELEPHONE: (02) 9979 1823

CLIENT
The Crafter family

LOCATION
41 Robertson Road,
Scotland Island, NSW 2105.
Lot 301 in D.P. 514985

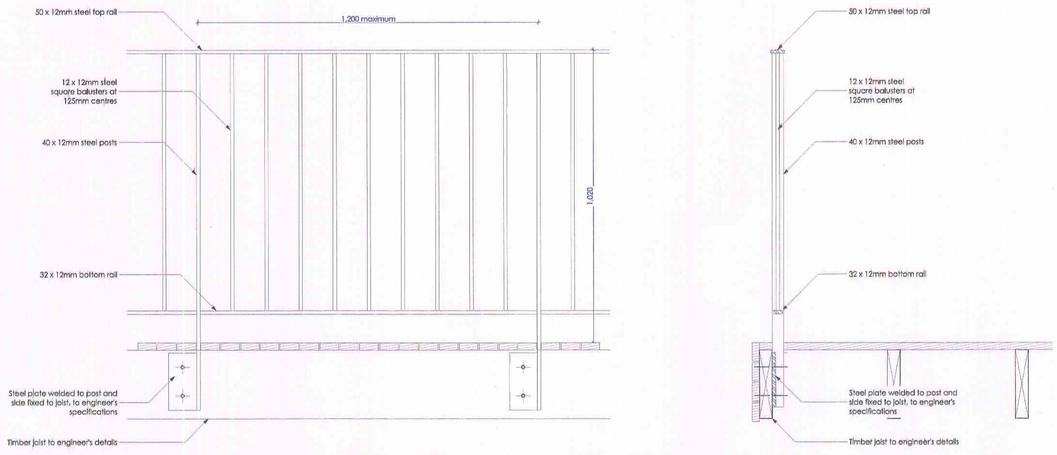
DRAWING TITLE
Doors and Windows Schedule - Ground Floor

DATE OF ISSUE 26/03/2013

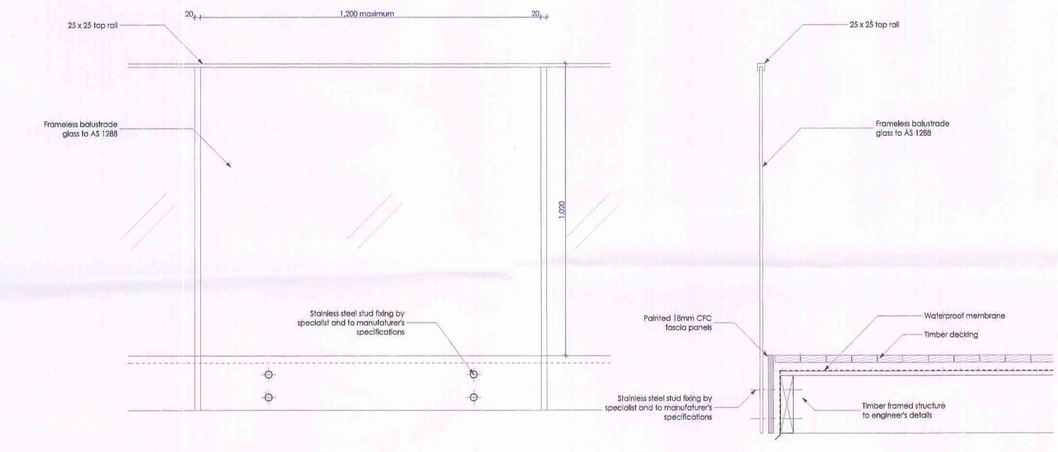
Scale in metres: 1:50 at A1 original size
0 0.5 1 1.5 2 2.5

Scale in metres: 1:100 at A1 original size
0 1 2 3 4 5

PROJECT No:	DRAWING No:	REVISION
1108	CC-42	A



1 EB1 Balustrade Detail
1:10



2 EB2 Balustrade Detail
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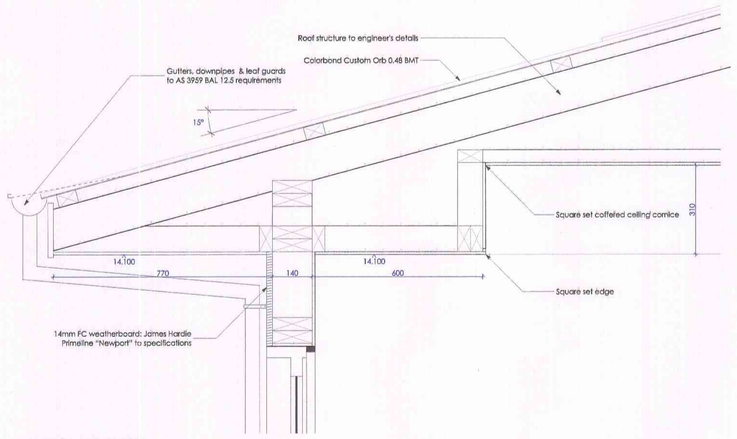
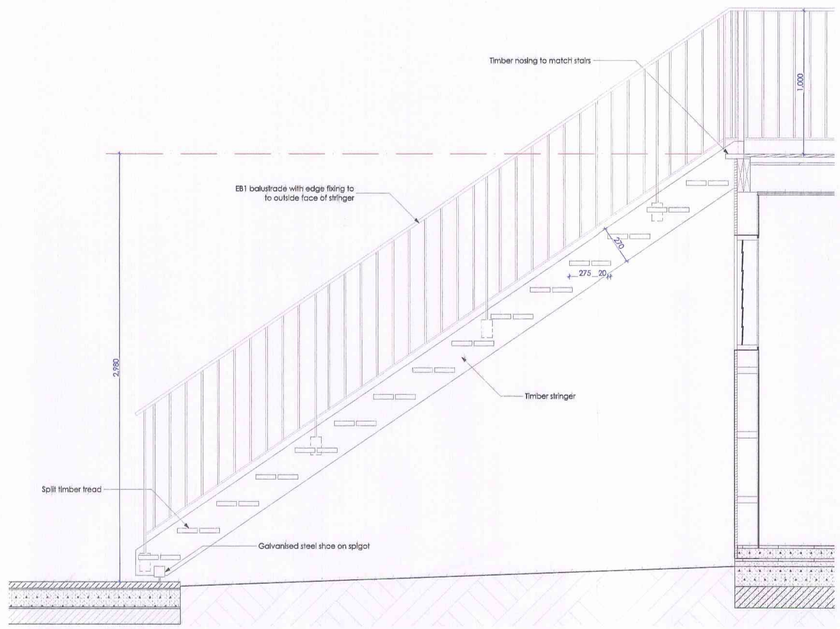
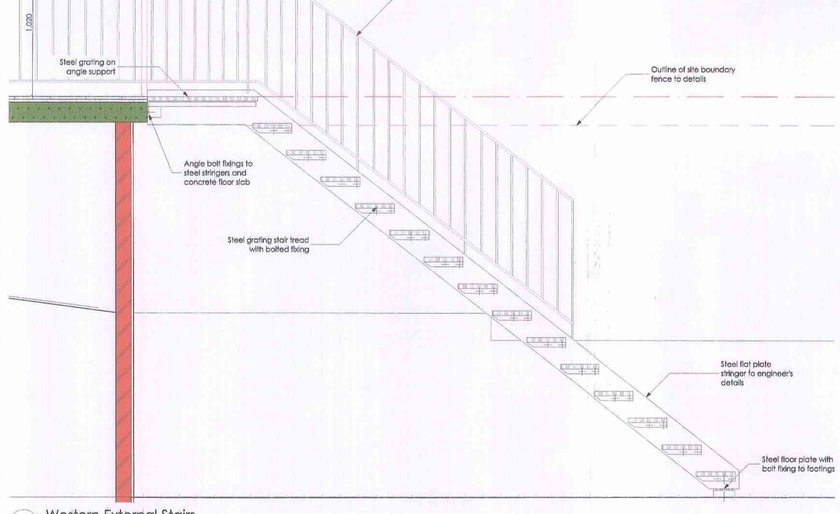


3 Building Detail 01
1:10



4 Eastern External Stairs
1:20



5 Western External Stairs
1:20

FOR CONSTRUCTION CERTIFICATE
Not for Construction

NOTES :

1. ALL CONSTRUCTION TO A.S.3959.2009 BAL 12.5

This Plan / Details to be read in conjuction with CONSTRUCTION CERTIFICATE APPROVAL NO 1688 ec1

JJ BRIGGS ASSOCIATES
PO BOX 500 BROOKVALE 2100

REV.	DATE	REVISION	BY
A	26/03/13	Issued for CC	MH

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Nominated Architect: James de Soyres #6769
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CLIENT
The Crafter family

LOCATION
41 Robertson Road,
Scotland Island, NSW 2105.
Lot 301 in D.P. 514985

DRAWING TITLE
External Stairs, Eaves, and Balustrade Details

DATE OF ISSUE 26/03/2013

Scale in metres: 1:00 at A1 original size
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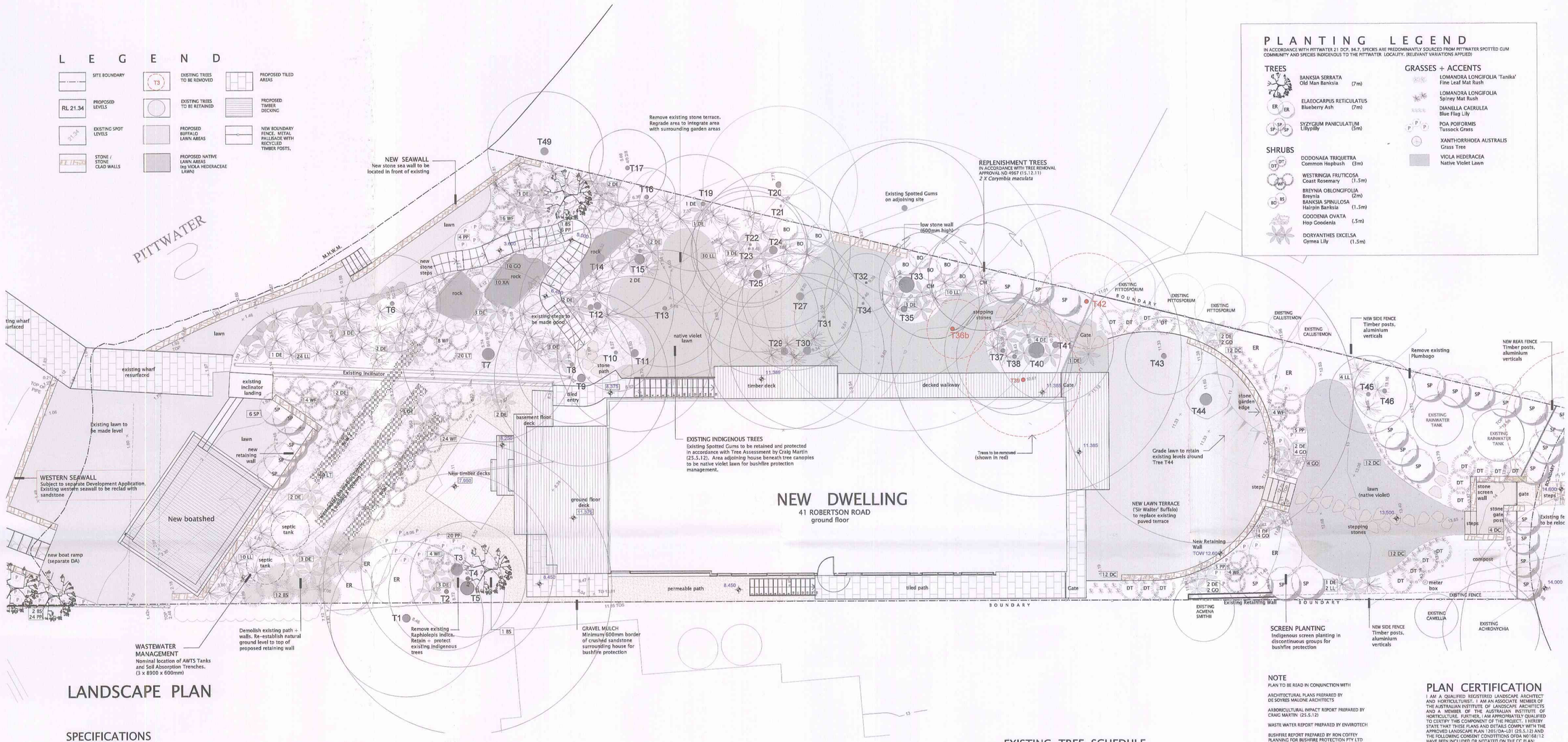
Scale in metres: 1:100 at A1 original size
0 1 2 3 4 5

PROJECT No:	DRAWING No:	REVISION
1108	CC-51	A



LANDSCAPE PLAN

SPECIFICATIONS

LANDSCAPE HARDWORKS
RETAINING WALLS, PAVING, DRAINAGE AND ALL SITE CONSTRUCTION SHALL BE EXECUTED IN ACCORDANCE WITH ENGINEER'S SPECIFICATIONS. ALL SITE STORMWATER SHALL BE DIRECTED IN ACCORDANCE WITH HYDRAULIC ENGINEER'S SPECIFICATIONS. ALL WASTEWATER SHALL BE DISCHARGED IN ACCORDANCE WITH ENVIRONMENTAL ENGINEER'S SPECIFICATIONS.

TREE PROTECTION
PRIOR TO COMMENCEMENT OF WORKS, PROTECTIVE FENCING SHALL BE ERECTED IN ACCORDANCE WITH TREE ASSESSMENT REPORT PREPARED BY CRAIG MARTIN. IN GENERAL, TREE PROTECTION SHALL CONSIST OF 1.8M CHAINWIRE FENCING WITH 50MM METAL POLE SUPPORTS. TRUNK PROTECTION SHALL BE INSTALLED TO TREES T9, T38, T40 AS SPECIFIED IN TREE ASSESSMENT REPORT. NO WORKS SHALL BE UNDERTAKEN WITHIN THE TREE PROTECTION ZONE UNLESS WITH COUNCIL APPROVAL. A 75MM LAYER OF COMPOSTED LEAF AND WOODCHIP MULCH SHALL BE INSTALLED UNDER THE CANOPIES OF TREES TO BE RETAINED. SITE SUPERINTENDENT SHALL MONITOR SITE TREES AND SHALL NOTIFY THE ARBORIST IN THE CASE OF CHANGES OR DECLINE IN VIGOUR.

SOIL PREPARATION
PLANTING BEDS SHALL BE PREPARED BY REMOVING UNWANTED VEGETATION AND WEED MATERIAL. GRUB OUT OR GRIND STUMPS. REMOVE BY HAND OR POISON WITH GLYPHOSATE ALL NOXIOUS WEEDS AND TURF ON SITE AND DISPOSE OF APPROPRIATELY. REMOVE ALL BUILDER'S RUBBLE AND WASTE FROM PLANTING BEDS. SPREAD 50mm 'GREENLIFE COMPOST' OVER SITE SOIL AND CULTIVATE TO A DEPTH OF 300mm TAKING CARE NOT TO DISTURB THE ROOTS OF EXISTING TREES. WHERE REQUIRED, IMPORTED SOIL SHALL BE A.N.L. NATIVE MIX LOW 'P'.

WEED ERADICATION
ALL NOXIOUS AND ENVIRONMENTAL WEED SPECIES SHALL BE REMOVED FROM THE SITE USING STANDARD INDUSTRY PRACTICES. ALL VEGETATIVE WEED MATERIAL SHALL BE SUITABLY DISPOSED OFF SITE. WEED RE-EMERGENCE SHALL BE MONITORED. FOLLOW UP TREATMENT OF RE-EMERGING WEED MATERIAL SHALL BE UNDERTAKEN ON AN 'AS NEEDED' BASIS DURING AND AFTER THE WORKS. NO WEED SPECIES SHALL BE PLANTED ON SITE.

TURF
TURF SHALL BE 'SIR WALTER' BUFFALO AND SHALL BE WEED FREE AND OF EVEN THICKNESS. TURF SHALL BE LAID ON A PREPARED BASE OF 50mm COMMERCIAL QUALITY TURF UNDERLAY. TOPDRESS JOINTS WITH COARSE WASHED RIVER SAND.

NATIVE LAWN / GROUNDCOVER
NATIVE LAWN AREAS SHALL BE VIOLA HEDERACEAE (NATIVE VIOLETS)

PLANTING
ALL PLANTS SHALL BE WELL GROWN AND DISEASE FREE. PLANTING SHALL BE STRICTLY IN ACCORDANCE WITH PLANTING SCHEDULE AND ONLY SUBSTITUTIONS APPROVED BY LANDSCAPE ARCHITECT SHALL BE PERMITTED. PLANT MATERIAL SHALL BE SOURCED FROM LOCAL MATERIAL WHERE POSSIBLE. ANY FUTURE LANDSCAPE WORKS SHOULD GIVE PREFERENCE TO LOCAL INDIGENOUS PITTWATER SPOTTED GUM SPECIES. A SLOW RELEASE FERTILIZER FOR NATIVE PLANTS SHALL BE APPLIED.

MULCH
PLANTING BEDS SHALL BE MULCHED WITH 75MM NATIVE LEAF / WOOD CHIP MULCH . MULCH SHALL BE RELIABLY SOURCED TO PREVENT INTRODUCTION OF NOXIOUS WEEDS.

IRRIGATION
FUTURE IRRIGATION IF REQUIRED SHALL BE SPECIFIED TO ARBORIST'S APPROVAL

BUSHFIRE HAZARD REDUCTION
IN ACCORDANCE WITH BUSHFIRE PROTECTION ASSESSMENT RON COFFEY, SITE SHALL BE MANAGED AS AN ASSET PROTECTION ZONE TO MEET THE INTENT AND OBJECTIVES OF PERFORMANCE REQUIRED AS DESCRIBED WITHIN 'PLANNING FOR BUSHFIRE PROTECTION' (NSWRFS 2006).

DA CONSENT CONDITIONS N0168/12
B17
ALL TREES MUST BE RETAINED FOR THE LIFE OF THE DEVELOPMENT OR OF THE SITE. TREES THAT DIE MUST BE REPLACED WITH ANOTHER LOCALLY NATIVE CANOPY TREE
B19
ANY VEGETATION PLANTED OUTSIDE THE APPROVED LANDSCAPE ZONES SHALL BE CONSISTENT WITH
(a) SPECIES LISTED IN THE ECOLOGICAL SUSTAINABILITY PLAN OR BUSHLAND MANAGEMENT PLAN (IF APPLICABLE)
(b) SPECIES LISTED FROM THE ENDANGERED SPECIES COMMUNITY
(c) LOCALLY NATIVE SPECIES GROWING ON SITE AND/OR SELECTED FROM THE LIST PERTAINING TO THE VEGETATION COMMUNITY GROWING IN THE LOCALITY AS PER THE VEGETATION MAPPING AND 'NATIVE PLANTS FOR YOUR GARDEN'
B20
ALL DECLARED NOXIOUS WEEDS SHALL BE REMOVED OR CONTROLLED IN ACCORDANCE WITH THE NOXIOUS WEEDS ACT 1993
B21
NO ENVIRONMENTAL WEEDS SHALL BE PLANTED ON THE SITE
B22
ANY NEW FENCING SHALL BE WILDLIFE PASSABLE. HOLE DIMENSIONS ARE TO BE A MINIMUM 150mm WIDE AND 100mm HIGH AT GROUND LEVEL AND SPACED AT 6M INTERVALS
B25
THE LANDSCAPE SHALL BE IMPLEMENTED IN ACCORDANCE WITH THE DA APPROVED LANDSCAPE PLAN PREPARED BY TRISH DOBSON LANDSCAPE ARCHITECT DWG NO 1205/DA-L01 (29.5.12). LANDSCAPE WORKS SHALL BE APPROVED AS COMPLETED BY AN ACCREDITED CERTIFIER. WORKS SHALL BE MAINTAINED FOR THE LIFE OF THE DEVELOPMENT.
B26
SCREEN PLANTS PROVIDED BY THE APPROVED PLAN SHALL BE MAINTAINED FOR THE LIFE OF THE DEVELOPMENT
B27
IN ACCORDANCE WITH PITTWATER TREE PRESERVATION ORDER ALL EXISTING TREES IDENTIFIED ON THE SURVEY AND THE LANDSCAPE PLAN SHALL BE RETAINED EXCEPT WHERE PRIOR WRITTEN APPROVAL HAS BEEN OBTAINED AS WITH TREES WITHIN THE BUILDING FOOTPRINT. FOR ALL OTHER TREE ISSUES NOT RELATING TO THE DEVELOPMENT, APPLICATION MUST BE MADE TO COUNCIL'S TREE MANAGEMENT OFFICERS.
B29
ALL LANDSCAPE WORKS MUST BE CARRIED OUT IN ACCORDANCE THE RECOMMENDATIONS CONTAINED WITHIN THE BUSHFIRE RISK MANAGMENT ASSESSMENT REFERENCE 666 (18.5.12) PREPARED BY PLANNING FOR BUSHFIRE PROTECTION PTY LTD
D10
TREE 49 LOCATED ON COUNCIL RESREVE LAND IS TO BE RETAINED AND MONITORED AND SHALL BE REFERRED TO COUNCIL'S TREE PRESERVATION OFFICER FOR ATTENTION SHOULD THE TREE BECOME UNSTABLE. THE SEAWALL WORKS IN THE VICINTY ARE TO BE CONDUTCTED UNDER THE SUPERVISION OF AN ARBORIST TO ENSURE NO DAMAGE TO THE TREE.
D11
PROTECTION FENCING MEASURES ARE TO BE INSTALLED IN ACCORDANCE WITH APPROVED PLANS INCLUDING THOSE SPECIFIED IN THE ARBORIST REPORT. PROTECTION MEASURES SHALL BE MAINTAINED FOR THE DURATION OF THE WORKS AND REMOVED ON COMPLETION.
D12
ALL TREES SHALL BE PROTECTED IN ACCORDANCE WITH ARBORIST REPORT PREPARED BY CRAIG MARTIN CONSULTING ARBORIST (MAY 2012) AND CONDITION C12 PARTS (a)-(e) AS DETAILED

PLANTING SCHEDULE

Plant species have been selected on the basis of the design intent and their suitability to the site location and conditions. In accordance with DCP 21, 80% of site not occupied by buildings or associated structures shall be derived from the Pittwater Spotted Gum Forest species. On the basis of variations applicable within DCP 21, this plan proposes 68.6% of site to be locally indigenous species. In accordance with previously approved Tree Removal Application No 4967 (15.12.11) 2 X Corymbia maculata have been proposed as replacement plantings for tree(s) approved to be removed.

SYMBOL	SPECIES	COMMON NAME	HEIGHT	NO	POT SIZE
TREES					
BS	BANKSIA SERRATA	OLD MAN BANKSIA	7m	4	200mm
CM	CORYMBIA MACULATA	SPOTTED GUM	20m	2	200mm
ER	ELAEOCARPUS RETICULATUS	BLUEBERRY ASH	7m	6	200mm
SP	SYZYGIUM PANICULATUM	MAGENTA LILLYPILLY	5m	28	200mm
SHRUBS + FERNS					
BO	BREYNIA OBLONGIFOLIA	BREYNIA	1m	8	150mm
BS	BANKSIA SPINULOSA	HAIRPIN BANKSIA	1m	12	150mm
DT	DODONAEA TRIQUETRA	COMMON HOPBUSH	2m	17	150mm
DE	DORYANTHES EXCELSA	GYMEA LILY	1.5m	48	150mm
WF	WESTRINGIA FRUTICOSA	COAST ROSEMARY	1.5m	74	150mm
XA	XANTHORRHOEA AUSTRALIS	GRASS TREE	1m	12	200mm
GRASSES, ACCENTS + GROUNDCOVERS					
DC	DIANELLA CAERULEA	BLUE FLAG LILY	0.5m	52	150mm
GO	GOODENIA OVATA	GOODENIA	0.3m	22	150mm
LL	LOMANDRA LONGIFOLIA	SPINY MAT RUSH	0.8m	86	150mm
LT	LOMANDRA 'TANIKA'	FINE LEAF MAT RUSH	0.6m	60	150mm
PP	POA POIFORMIS	TUSSOCK GRASS	0.6	64	150mm
VH	VIOLA HEDERACEA	NATIVE VIOLETS	g/cover	open	open

EXISTING TREE SCHEDULE

TO BE READ IN CONJUNCTION WITH ARBORIST'S TREE ASSESSMENT PREPARED BY CRAIG MARTIN (MAY 2012)

TREE NO	SPECIES	COMMON NAME	D.B.H.	HEIGHT	SPREAD	STATUS
T1	CORYMBIA MACULATA	SPOTTED GUM	300mm	12m	5m	Retain on adjoining site
T2	CORYMBIA MACULATA	SPOTTED GUM	180mm	9m	8m	Retain + Protect
T3	CORYMBIA MACULATA	SPOTTED GUM	500mm	15m	9m	Retain + Protect
T4	CORYMBIA MACULATA	SPOTTED GUM	180mm	6m	4m	Retain + Protect
T5	CORYMBIA MACULATA	SPOTTED GUM	700mm	17m	14m	Retain + Protect
T6	CORYMBIA MACULATA	SPOTTED GUM	150mm	7m	15m	Retain + Protect
T7	CORYMBIA MACULATA	SPOTTED GUM	700mm	13m	7m	Retain + Protect
T8	CORYMBIA MACULATA	SPOTTED GUM	150mm	7m	3m	Retain + Protect
T9	CORYMBIA MACULATA	SPOTTED GUM	350mm	18m	9m	Retain + Protect
T10	CORYMBIA MACULATA	SPOTTED GUM	120mm	6m	1m	Retain + Protect
T11	CORYMBIA MACULATA	SPOTTED GUM	300mm	18m	5m	Retain + Protect
T12	CORYMBIA MACULATA	SPOTTED GUM	250,350mm	18m	6m	Retain + Protect
T13	CORYMBIA MACULATA	SPOTTED GUM	180mm	8m	4m	Retain + Protect
T14	CORYMBIA MACULATA	SPOTTED GUM	300mm	8m	5m	Retain + Protect
T15	CORYMBIA MACULATA	SPOTTED GUM	150,250mm	17m	8m	Retain + Protect
T16	CORYMBIA MACULATA	SPOTTED GUM	120mm	5m	1m	Retain + Protect
T17	CORYMBIA MACULATA	SPOTTED GUM	200mm	1m	3m	Retain + Protect
T20	CORYMBIA MACULATA	SPOTTED GUM	280mm	16m	6m	Retain + Protect
T21	CORYMBIA MACULATA	SPOTTED GUM	150mm	9m	4m	Retain + Protect
T22	CORYMBIA MACULATA	SPOTTED GUM	150mm	7m	5m	Retain + Protect
T23	CORYMBIA MACULATA	SPOTTED GUM	150mm	8m	4m	Retain + Protect
T24	CORYMBIA MACULATA	SPOTTED GUM	300mm	12m	4m	Retain + Protect
T25	CORYMBIA MACULATA	SPOTTED GUM	400mm	18m	7m	Retain + Protect
T27	CORYMBIA MACULATA	SPOTTED GUM	280mm	17m	6m	Retain + Protect
T29	CORYMBIA MACULATA	SPOTTED GUM	250mm	11m	3m	Retain + Protect
T30	CORYMBIA MACULATA	SPOTTED GUM	220mm	8m	8m	Remove on Arborist recommendation
T31	CORYMBIA MACULATA	SPOTTED GUM	120mm	7m	1m	Retain + Protect
T32	CORYMBIA MACULATA	SPOTTED GUM	120mm	6m	3m	Retain + Protect
T33	CORYMBIA MACULATA	SPOTTED GUM	800mm	22m	10m	Retain + Protect
T34	CORYMBIA MACULATA	SPOTTED GUM	120mm	6m	2m	Retain + Protect
T35	CORYMBIA MACULATA	SPOTTED GUM	300mm	16m	4m	Retain + Protect
T36b	CORYMBIA MACULATA	SPOTTED GUM	250mm	13m	4m	Remove on Arborist recommendation
T37	CORYMBIA MACULATA	SPOTTED GUM	250mm	15m	5m	Retain + Protect
T38	CORYMBIA MACULATA	SPOTTED GUM	270mm	6m	3m	Retain + Protect
T39	CORYMBIA MACULATA	SPOTTED GUM	280mm	13m	5m	Remove on Arborist recommendation
T40	CORYMBIA MACULATA	SPOTTED GUM	700mm	26m	11m	Retain + Protect
T41	CORYMBIA MACULATA	SPOTTED GUM	280mm	16m	8m	Retain + Protect
T42	LIGUSTRUM LUCIDUM	PRIVET	200mm	6m	5m	Remove (Noxious weed)
T43	CORYMBIA MACULATA	SPOTTED GUM	250mm	12m	6m	Retain + Protect
T44	CORYMBIA MACULATA	SPOTTED GUM	500mm	20m	8m	Retain + Protect
T45	CORYMBIA MACULATA	SPOTTED GUM	250mm	8m	3m	Retain + Protect
T46	CORYMBIA MACULATA	SPOTTED GUM	250mm	11m	3m	Retain + Protect
T47	LIGUSTRUM LUCIDUM	PRIVET	500mm	8m	7m	Remove (Noxious weed)
T48	CORYMBIA MACULATA	SPOTTED GUM	800mm	24m	8m	Retain (on adjoining road reserve)
T49	CORYMBIA MACULATA	SPOTTED GUM	300mm	11m	5m	Retain (on adjoining road reserve)

NOTE
PLAN TO BE READ IN CONJUNCTION WITH

ARCHITECTURAL PLANS PREPARED BY DE SOYRES MALONE ARCHITECTS

ARBORICULTURAL IMPACT REPORT PREPARED BY CRAIG MARTIN (25.5.12)

WASTE WATER REPORT PREPARED BY ENVIROTECH

BUSHFIRE REPORT PREPARED BY RON COFFEY PLANNING FOR BUSHFIRE PROTECTION PTY LTD

PLAN CERTIFICATION

I AM A QUALIFIED REGISTERED LANDSCAPE ARCHITECT AND HORTICULTURIST. I AM AN ASSOCIATE MEMBER OF THE AUSTRALIAN INSTITUTE OF LANDSCAPE ARCHITECTS AND A MEMBER OF THE AUSTRALIAN INSTITUTE OF HORTICULTURE. FURTHER, I AM APPROPRIATELY QUALIFIED TO CERTIFY THIS COMPONENT OF THE PROJECT. I HEREBY STATE THAT THESE PLANS AND DETAILS COMPLY WITH THE APPROVED LANDSCAPE PLAN 1205/DA-L01 (29.5.12) AND THE FOLLOWING CONSENT CONDITIONS OF DA N0168/12 HAVE BEEN INCLUDED OR NOTATED ON THE CC PLAN:

B17, B19, B20, B21, B22, B25, B26, B27, B29, B37, D10, D11, 12,

TRISH DOBSON

TRISH DOBSON
REGISTERED LANDSCAPE ARCHITECT, HORTICULTURIST
34A MARINE PARADE AVALON NSW 2107
P 02 9918 8005 M 0405 980320 E trish@trishdobson.com.au

PROJECT
CRAFTER HOUSE
41 ROBERTSON ROAD
SCOTLAND ISLAND

DRAWING
LANDSCAPE PLAN
CONSTRUCTION CERTIFICATE

SCALE 1:100 DATE 19.3.13
JOB 1205 ISSUE CC

DWG 1205 / CC-L01

JJ BRIGGS ASSOCIATES PO BOX 690 BROOKVALE 2100

This Plan / Detail is to be read in conjuction with CONSTRUCTION CERTIFICATE APPROVAL NO 168/12 CC1

PROPOSED ALTERATIONS & ADDITIONS
at: 41 ROBERTSON RD, SCOTLAND ISLAND
for: The CRAFTER FAMILY

STRUCTURAL DRAWINGS

10588-S0.00.....STRUCTURAL NOTES SHT 1 of 2
10588-S0.01.....STRUCTURAL NOTES SHT 2 of 2
10588-S1.00.....BASEMENT LEVEL SLAB PLAN
10588-S1.01.....BASEMENT LEVEL SLAB DETAILS
10588-S2.00.....GROUND FLOOR SLAB & FRAMING PLAN
10588-S3.00.....UPPER WALL & ROOF FRAMING PLAN & DETAILS

STRUCTURAL NOTES

GENERAL

G1 THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND OTHER CONSULTANTS' DRAWINGS AND SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT.

G2 THE INFORMATION CONTAINED ON THESE DRAWINGS IS FOR STRUCTURAL ENGINEERING PURPOSES ONLY. IN ALL OTHER MATTERS, THE APPROVED ARCHITECTS DRAWINGS SHALL TAKE PRECEDENCE. ALL DISCREPANCIES THAT COULD RESULT IN CHANGES TO THE STRUCTURAL DETAILS SHALL BE REFERRED TO THE ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.

G3 ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE RELEVANT AND CURRENT AUSTRALIAN STANDARDS AND WITH THE BY-LAWS AND ORDINANCES OF THE RELEVANT BUILDING AUTHORITIES.

G4 DURING CONSTRUCTION THE STRUCTURE SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART SHALL BE OVERSTRESSED. TEMPORARY BRACING SHALL BE PROVIDED BY THE BUILDER TO KEEP THE WORKS AND EXCAVATIONS STABLE AT ALL TIMES.

G5 THE BUILDER SHALL GIVE 48 HOURS NOTICE FOR ALL ENGINEERING INSPECTIONS.

G6 UNLESS NOTED OTHERWISE ALL LEVELS ARE IN METRES AND ALL DIMENSIONS ARE IN MILLIMETRES. ENGINEER'S DRAWINGS SHALL NOT BE SCALED FOR DIMENSIONS. ALL DIMENSIONS SHOWN SHALL BE VERIFIED BY THE BUILDER ON SITE.

G7 THE STRUCTURAL COMPONENTS DETAILED ON THESE DRAWINGS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE RELEVANT AUSTRALIAN STANDARDS AND LOCAL GOVERNMENT ORDINANCES.

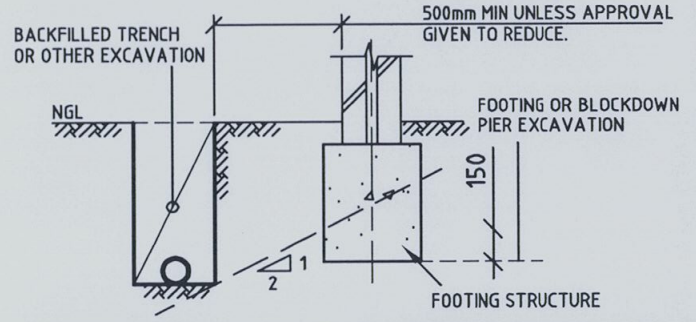
G8 WIND LOADS ARE DETERMINED IN ACCORDANCE WITH AS4055 FOR WIND CLASSIFICATION: 'N2' WITH A METAL SHEET ROOF.

FOUNDATIONS & EARTHWORKS

F1 FOUNDATIONS HAVE BEEN DESIGNED FOR AN ALLOWABLE BEARING INTENSITY OF 600kPa ON WEATHERED SANDSTONE BEDROCK. FOUNDATION MATERIAL TO BE CONFIRMED ON SITE. STIFFENED RAFT SLAB FOOTING DESIGNED FOR "FRAMED" CONSTRUCTION ON CLASS 'A' SITE IN ACCORDANCE WITH AS 2870.

F2 TOPSOIL INCLUDING GRASS ROOTS IS TO BE REMOVED FROM THE AREA TO SUPPORT SLABS AND FOOTINGS. FOOTINGS TO BE CONSTRUCTED AND BACKFILLED AS SOON AS POSSIBLE FOLLOWING EXCAVATION TO AVOID SOFTENING OR DRYING OUT BY EXPOSURE. TRENCHES TO BE DEWATERED & CLEANED OUT PRIOR TO CONCRETE PLACEMENT.

F3 UNLESS OTHERWISE APPROVED BY THE ENGINEER, THE LIMITS OF EXCAVATIONS NEAR EXISTING FOOTINGS SHALL BE AS SET OUT IN THE DETAIL BELOW.



PRIOR TO ANY EXCAVATION NEAR EXISTING FOOTINGS, THE BUILDER SHALL DETERMINE THE DEPTH OF FOUNDING OF EXISTING FOOTINGS BY LOCAL INVESTIGATORY EXCAVATION. GENERAL EXCAVATION SHALL NOT PROCEED BELOW A LEVEL 150mm ABOVE THE UNDERSIDE OF EXISTING FOOTINGS UNTIL INSTRUCTION IS OBTAINED FROM THE ENGINEER ON PROCEDURES & PRECAUTIONS TO BE TAKEN.

F4 CONTROLLED FILL: SAND FILL UP TO 0.8m DEEP, WELL COMPACTED IN NOT MORE THAN 300mm THICK LAYERS BY A VIBRATING PLATE OR VIBRATING ROLLER. NON-SAND FILL UP TO 0.4m DEEP, WELL COMPACTED IN LAYERS NOT MORE THAN 150mm DEEP BY A MECHANICAL ROLLER. CLAY FILL SHALL BE MOIST DURING COMPACTION.

REINFORCEMENT

R1 ALL REINFORCING BARS SHALL BE GRADE D500N TO AS4671 UNLESS NOTED OTHERWISE. ALL MESH SHALL BE GRADE 500L TO AS4671 AND SHALL BE SUPPLIED IN FLAT SHEETS.

R2 REINFORCEMENT NOTATION SHALL BE AS FOLLOWS IN THE FOLLOWING ORDER

NUMBER OF BARS IN GROUP — BAR GRADE AND TYPE
17N20-250
NOMINAL BAR SIZE IN mm — SPACING IN mm

R3 REINFORCEMENT SYMBOLS:

'N' - DENOTES GRADE 500 N BARS TO AS4671 GRADE N.
'R' - DENOTES GRADE 250 R HOT ROLLED PLAIN BARS TO AS1302.
'F' - DENOTES HARD-DRAWN WIRE REINFORCING FABRIC TO AS4671.
'W' - DENOTES HARD-DRAWN PLAIN WIRE TO AS1303.
'SL'or 'RL' - DENOTES WELDED GRADE 500 REINFORCING FABRIC TO AS 4671

R4 SPLICES IN REINFORCEMENT SHALL BE MADE ONLY IN POSITIONS SHOWN OR OTHERWISE APPROVED IN WRITING BY THE ENGINEER. LAPS SHALL BE IN ACCORDANCE WITH AS 3600 AND NOT LESS THAN THE DEVELOPMENT LENGTH FOR EACH BAR.
AS SHOWN IN THE TABLE BELOW.

SPLICE SCHEDULE

BAR DIA	TENSION SPLICE LENGTH	COMPRESSION SPLICE LENGTH
N12	475	450
N16	750	600
N20	1000	750
N24	1100	900

R5 REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY AND NOT NECESSARILY IN TRUE PROJECTION.

R6 WELDING OF REINFORCEMENT SHALL NOT BE PERMITTED UNLESS SHOWN ON THE STRUCTURAL DRAWINGS OR APPROVED BY THE ENGINEER.

R7 FABRIC SHALL BE LAPPED 2 TRANSVERSE WIRES PLUS 50mm. BUNDLED BARS SHALL BE TIED TOGETHER AT 30 BAR DIAMETER CENTRES WITH 3 WRAPS OF THE WIRE.

R8 SLAB REINFORCEMENT SHALL EXTEND AT LEAST 65mm ONTO MASONRY SUPPORT WALLS AND 50% OF BOTTOM REINFORCEMENT SHALL BE COGGED TO ACHIEVE ANCHORAGE AT SIMPLY SUPPORTED ENDS. IF THIS CANNOT BE ACHIEVED DUE TO COVER REQUIREMENTS THEN ALL THE BARS SHALL BE COGGED. FOR FABRIC THE LAST WELDED CROSS ROD SHALL BE LOCATED OVER THE WALL AND 50mm MINIMUM BEYOND THE FACE OF THE WALL.

REINFORCEMENT Cont

R9 WHERE TRANSVERSE TIE BARS ARE NOT SHOWN PROVIDE N12-400 SPLICED WHERE NECESSARY AND LAP WITH MAIN BARS 400MM UNLESS NOTED OTHERWISE.

R10 NO OPENINGS IN BEAMS OR COLUMNS SHALL BE MADE OTHER THAN THOSE SPECIFICALLY DETAILED. FOR OPENINGS IN SLABS UP TO 300mm SQUARE THE REINFORCEMENT SHALL BE DISPLACED TO THE SIDES. FOR OPENINGS BETWEEN 300mm SQUARE AND 600mm SQUARE THE REINFORCEMENT CROSSING THE PROPOSED OPENING SHALL BE CUT AND THE HOLES TRIMMED USING 2N12 BARS TOP AND BOTTOM EXTENDING 1500mm PAST EACH SIDE OF OPENING. OPENINGS LARGER THAN 600mm SQUARE SHALL BE DETAILED BY THE ENGINEER.

R11 JOGGLES TO BARS SHALL COMPRISE A LENGTH OF 12 BAR DIAMETERS BETWEEN BEGINNING AND END OF AN OFFSET OF 1 BAR DIAMETER.

R12 ALL REINFORCEMENT SHALL BE FIRMLY SUPPORTED ON MILD STEEL PLASTIC TIPPED CHAIRS, PLASTIC CHAIRS OR CONCRETE CHAIRS AT NOT GREATER THAN 1 METRE CENTRES BOTH WAYS, AND 800 EACH WAY FOR FABRIC. WHEN POURED ON GROUND AS FORMWORK PROVIDE PLATES UNDER ALL BAR CHAIRS.
PLASTIC TIPPED STEEL CHAIRS SHALL NOT BE USED ON EXPOSED FACES IN EXPOSURE CLASSIFICATION B1, B2 AND C ONLY PLASTIC OR CONCRETE CHAIRS.

R13 SITE BENDING OF REINFORCEMENT SHALL BE AVOIDED IF POSSIBLE. WHERE SITE BENDING IS UNAVOIDABLE IT SHALL BE CARRIED OUT COLD, WITHOUT THE APPLICATION OF HEAT, AND IN ACCORDANCE WITH THE PRACTICE NOTE 'RPN1' OF THE STEEL REINFORCEMENT INSTITUTE OF AUSTRALIA USING MECHANICAL BENDING TOOLS.

This Plan / Detail is
to be read in
conjuction with
CONSTRUCTION CERTIFICATE
APPROVAL NO 1688cc1

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ISSUE	DESCRIPTION	BY	APR	DATE
A	ISSUED FOR CONSTRUCTION	JC	SW	26.03.2013

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PROJECT: PROPOSED ALTERATIONS & ADDITIONS at: 41 ROBERTSON RD, SCOTLAND ISLAND for: The CRAFTER FAMILY

DRAWING TITLE: STRUCTURAL NOTES-SHT 1 of 2

DESIGN: S.W.	DATE: FEB 2013		
DRAWN: J.C.	SCALE: N/A		
FILENAME: 10588-S0.00 to S4.00.DWG			
SIGNED:		SIZE	A3
DRAWING No: 10588-S0.00		REV	A

CONCRETE

C1 ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3600 CURRENT EDITION WITH AMENDMENTS. READYMIX CONCRETE SUPPLY SHALL COMPLY WITH AS 1379. ALL CEMENT TO BE TYPE 'SL' PORTLAND.

C2 MAXIMUM DRYING SHRINKAGE SHALL BE 600 MICROSTRAIN AT 56 DAYS. PROJECT CONTROL TESTING SHALL BE CARRIED OUT IN ACCORDANCE WITH AS 1379. NO ADMIXTURES SHALL BE USED IN CONCRETE UNLESS APPROVED IN WRITING.

C3 CLEAR CONCRETE COVER TO ALL REINFORCEMENT SHALL BE AS FOLLOWS UNLESS SHOWN OTHERWISE.

LOCATION	CONCRETE GRADE (MPa)	CAST AGAINST GROUND	CAST IN FORMS WITH EXPOSURE	CAST IN FORMS & NOT EXPOSED
FOOTINGS	25	50	50	30
SLABS ON GROUND	32	40	40	25
SUSPENDED SLABS	32	40	40	25

NOTE: WHERE CONCRETE IS POURED ON A VAPOURPROOF MEMBRANE 0.2 mm MINIMUM THICKNESS, THE COVER TO CONCRETE CAST AGAINST GROUND MAY BE REDUCED BY 10 mm.

C4 NO ADMIXTURES OTHER THAN LOW RANGE WRA SHALL BE USED IN CONCRETE UNLESS APPROVED IN WRITING.

C5 DEPTHS OF BEAMS ARE GIVEN FIRST AND INCLUDE SLAB THICKNESS.

C6 CONCRETE SIZES SHOWN DO NOT INCLUDE THICKNESSES OF APPLIED FINISHES. FINISHES. NO FINISH WHICH DECREASES COVER IS ALLOWED WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER.

C7 FOR CHAMFERS, DRIP GROOVES, REGLETS, ETC REFER TO ARCHITECT'S DETAILS, MAINTAIN COVER TO REINFORCEMENT AT THESE DETAILS.

C8 NO HOLES, CHASES OR EMBEDMENT OF PIPES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT THE PRIOR WRITTEN APPROVAL OF THE ENGINEER.

C9 CONSTRUCTION JOINTS AND CLOSING STRIPS SHALL BE USED TO CONTROL AND REDUCE SHRINKAGE CRACKING IN WALLS AND FLOORS, AND COLD JOINTS IN LARGE POURS. THESE JOINTS SHALL BE PLANNED IN ADVANCE, TO THE APPROVAL OF THE ENGINEER.

C10 THE FINISHED CONCRETE SHALL BE A DENSE HOMOGENEOUS MASS, COMPLETELY FILLING THE FORMWORK THOROUGHLY EMBEDDING THE REINFORCEMENT AND FREE OF STONE POCKETS. ALL CONCRETE INCLUDING SLABS ON GROUND AND FOOTINGS SHALL BE COMPACTED WITH MECHANICAL VIBRATORS.

C11 CURING OF ALL CONCRETE IS TO BE ACHIEVED BY KEEPING SURFACES CONTINUOUSLY WET FOR A PERIOD OF 3 DAYS, AND PREVENTION OF LOSS OF MOISTURE FOR A TOTAL OF 7 DAYS FOLLOWED BY A GRADUAL DRYING OUT. APPROVED SPRAYED ON CURING COMPOUNDS COMPLYING WITH AS 3799 MAY BE USED WHERE NO FLOOR FINISHES ARE PROPOSED. POLYTHENE SHEETING OR WET HESSIAN MAY BE USED IF PROTECTED FROM WIND AND TRAFFIC.

C12 CONDUITS, PIPES, ETC, SHALL ONLY BE LOCATED IN THE MIDDLE ONE THIRD OF SLAB DEPTH AND SPACED AT NOT LESS THAN 3 DIAMETERS AND SHALL NOT BE PLACED WITHIN THE REINFORCEMENT COVER

C13 REPAIRS TO CONCRETE SHALL NOT BE ATTEMPTED WITHOUT THE PERMISSION OF THE ENGINEER.

STRUCTURAL STEEL

S1 ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 4100 AND AS 1554 EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.

S2 UNLESS NOTED OTHERWISE ALL MATERIAL SHALL BE:
- GRADE 250 HOT-ROLLED PLATES COMPLYING WITH AS 3678;
- GRADE 250 HOT-ROLLED FLATS, TFC, TFB, ANGLES 100x100EA OR 125x75UA AND SMALLER COMPLYING WITH AS 3679.1;
- GRADE 300PLUS UB, UC, PFC AND ANGLES 125x125EA OR 150x90UA AND LARGER;
- GRADE 300 WB, WC COMPLYING WITH AS 3679.2;
- GRADE C350 RHS, CHS COMPLYING WITH AS 1163;

S3 THREE(3) COPIES OF WORKSHOP FABRICATION DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AT LEAST 7 DAYS PRIOR TO COMMENCEMENT OF FABRICATION AND PERMISSION TO USE OBTAINED PRIOR TO FABRICATION. PERMISSION TO USE DOES NOT RELIEVE THE BUILDER OF THE FULL RESPONSIBILITY FOR DIMENSIONS, FIT AND COMPLIANCE WITH ARCHITECTURAL AND ENGINEERING DRAWINGS.

S4 BOLTS:-
4.6/S.....COMMERCIAL BOLTS OF GRADE 4.6 TO AS 1111, SNUG TIGHTENED.
8.8/S.....HIGH STRENGTH STRUCTURAL BOLTS OF GRADE 8.8 TO AS 1252, SNUG TIGHTENED.
8.8/TB.....HIGH STRENGTH STRUCTURAL BOLTS OF GRADE 8.8 TO AS 1252 FULLY TENSIONED TO AS 4100 AS BEARING JOINT
8.8/TF.....HIGH STRENGTH STRUCTURAL BOLTS OF GRADE 8.8 TO AS 1252 FULLY TENSIONED TO AS 4100 AS A FRICTION JOINT WITH FACING SURFACES LEFT UNCOATED
ALL BOLTS SHALL BE M20 GRADE 8.8/S UNLESS NOTED.
NO CONNECTION SHALL HAVE LESS THAN 2 BOLTS.
ALL BOLTS, NUTS & WASHERS TO BE GALVANISED.
TB AND TF BOLTS TO BE INSTALLED USING APPROVED LOAD INDICATING WASHERS, OR BY TURN OF NUT CONTROL OF TENSIONING.

S5 WELDING SHALL BE CARRIED OUT IN ACCORDANCE WITH AS 1554.1. WELDING CONSUMABLES SHALL BE E48XX OR W50X U.N.O. ALL WELD SHALL BE 6 mm CFW SP CATEGORY U.N.O. CPBW SHALL BE SP CATEGORY U.N.O. INSPECTION SHALL BE CARRIED OUT TO AS 1554.1. ALL GP/SP WELDS SHALL BE 100% VISUALLY SCANNED. SP WELDS ALLOW FOR 10% VISUAL EXAMINATION U.N.O. BUTT WELDS SHALL BE COMPLETE PENETRATION WELDS TO AS 1554.

S6 ALL DETAILS, GAUGE LINES ETC. WHERE NOT SPECIFICALLY SHOWN ARE TO BE IN ACCORDANCE WITH AISC DESIGN CAPACITY TABLES FOR STRUCTURAL STEEL AND AISC STANDARDIZED STRUCTURAL CONNECTIONS. PLATES TO BE 10mm THICK, EX-STANDARD SQUARE EDGE FLATS U.N.O.

S7 PROVIDE SEAL PLATES TO ALL HOLLOW SECTIONS. PROVIDE VENT HOLES TO HOLLOW MEMBERS & DRAIN HOLES TO ALL MEMBERS TO BE HOT DIP GALVANISED.

S8 IT IS THE BUILDER'S RESPONSIBILITY TO ENSURE THAT STEELWORK IS SECURELY TEMPORARILY BRACED AS NECESSARY TO STABILISE THE STRUCTURE DURING ERECTION.

S9 STRUCTURAL STEELWORK SHALL HAVE THE FOLLOWING SURFACE TREATMENT IN ACCORDANCE WITH THE SPECIFICATION.

ELEMENT	SURFACE CLEANING	PROTECTIVE COATING
INTERNAL	POWER WIRE BRUSHING or ABRASIVE GRIT BLASTING	1 COATRUST INHIBITIVE ALKYD PRIMER OR EQUIV. + 1 TOP COAT ALL WEATHER GLOSS ACRYLIC
EXTERNAL	ABRASIVE GRIT BLASTING (CLASS 2.5) or PICKLING	1 COAT INORGANIC ZINC SILICATE PRIMER OR EQUIV. + 1 TOP COAT ALL WEATHER GLOSS ACRYLIC WITH UV PROTECTOR
EXTERNAL (ALT.)	PICKLING	HOT DIP GALVANISED

S10 THE BUILDER SHALL PROVIDE ALL CLEATS AND DRILL ALL HOLES NECESSARY FOR FIXING STEEL TO STEEL AND TIMBER TO STEEL WHETHER OR NOT DETAILED ON THE DRAWINGS.
THE FABRICATIOIN AND ERECTION OF THE STRUCTURAL STEELWORK SHALL SUPERVISED BY A QUALIFIED PERSON EXPERIENCED IN SUCH SUPERVISION, ENSURING ALL REQUIREMENTS OF THE DESIGN ARE MET.

S11 ALL BEAMS AND RAFTERS SHALL BE FABRICATED AND ERECTED WITH NATURAL CAMBER UP.
ALL MEMBERS SHALL BE SUPPLIED IN SINGLE LENGTHS.
SPLICES SHALL ONLY BE PERMITTED IN LOCATIONS SHOWN ON THE STRUCTURAL DRAWINGS.

BLOCKWORK

BL1 ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS3700.

BL2 STRENGTHS OF MASONRY UNITS AND TYPE OF MORTAR SHALL BE AS FOLLOWS:
CHARACTERISTIC UNCONFINED COMPRESSIVE STRENGTH f'uc = 15 MPa
MORTAR (CEMENT : LIME : SAND) = 1 : 0.25 : 3
MORTAR ADMIXTURES SHALL NOT BE USED WITHOUT THE WRITTEN APPROVAL OF THE SUPERINTENDENT.

BL3 ONLY LOAD BEARING MASONRY WALLS ARE SHOWN UNDER CONCRETE SLABS.

BL4 OTHER THAN REINFORCED CONCRETE BLOCKWORK, MASONRY SUPPORTING SLABS AND BEAMS SHALL BE TROWELLED SMOOTH WITH MORTAR FILLING ALL VOIDS. TWO LAYERS OF MALTHOID SHALL BE PLACED FULL WIDTH ACROSS SUCH LOAD BEARING SURFACES EXCEPT WHERE PROPRIETARY BEARING STRIP IS NOTED OR ALTERNATIVE DETAIL IS DOCUMENTED. THE HEADS OF LOAD BEARING WALLS SHALL NOT EXTEND ABOVE THE SOFFIT OF THE CONCRETE SLAB ABOVE.

BL5 ALL MASONRY SUPPORTING OR SUPPORTED BY CONCRETE FLOORS SHALL BE PROVIDED WITH VERTICAL JOINTS TO MATCH ANY CONTROL JOINTS IN THE CONCRETE.

BL6 NO CHASES OR RECESSES ARE PERMITTED IN LOAD BEARING MASONRY WITHOUT THE APPROVAL OF THE ENGINEER.

BL7 PROVIDE VERTICAL CONTROL JOINTS AT 10 m MAX. CENTRES GENERALLY, AND 5 m MAX. FROM CORNERS FOR BRICKWORK AND UNREINFORCED BLOCKWORK.

BL8 REFER TO CONCRETE NOTES FOR DE-PROPPING PRIOR TO CONSTRUCTION OF MASONRY WALLS ON SUSPENDED SLABS.

BL9 REINFORCED CONCRETE BLOCKWORK SHALL COMPLY WITH THE FOLLOWING, UNLESS NOTED:
* PROVIDE CLEANOUT HOLES 100 mm SQUARE MINIMUM AT BASE OF ALL WALLS AND ROD CORE HOLES TO REMOVE PROTRUDING MORTAR FINS PRIOR TO GROUTING.
* CORE FILLING GROUT SHALL BE :- f'c = 20 MPa
MINIMUM CEMENT CONTENT = 300 kg/m,
SLUMP = 230 ± 30 mm.
* REINFORCEMENT PROJECTING FROM FOUNDATION OR SLABS INTO CORES, SHALL BE SET ACCURATELY IN PLACE USING TEMPLATES TO ALIGN WITH THE CENTRE OF THE LENGTH OF CORES AND WITH COVER AS NOTED. WHERE HORIZONTAL BARS ARE INDICATED, THE WEBS OF THE BLOCKS BELOW THE BARS SHALL BE CUT DOWN TO ACCOMMODATE THE BARS.
* GROUT ALL CORES IN REINFORCED BLOCKWORK UNLESS OTHERWISE NOTED. HEIGHT OF BLOCKWORK TO BE GROUTED ON ONE DAY SHALL BE 2400mm. GROUT SHALL BE PLACED IN LIFTS OF 1200mm MAXIMUM AND COMPACTED BY POKER VIBRATOR. A SHORT TIME SHOULD ELAPSE BETWEEN SUCCESSIVE LIFTS TO ALLOW PLASTIC SETTLEMENT TO OCCUR.
* PROVIDE 50 mm COVER FROM THE OUTSIDE OF THE BLOCKWORK UNLESS NOTED.

BL10 BACKFILL TO RETAINING WALLS SHALL BE FREE DRAINING GRANULAR MATERIAL. PROVIDE SUBSOIL DRAIN AT BASE OF WALL. DO NOT BACKFILL UNTIL 14 DAYS AFTER GROUTING, OR IF APPLICABLE, AFTER RESTRAINING SLAB OVER HAS BEEN POURED AND CURED FOR 7 DAYS. BACKFILL SHALL BE COMPACTED TO 98% STANDARD MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT ± 2 %.

BRICKWORK

Bk1 ALL MATERIALS AND WORKMANSHIP TO BE TO AS 3700.

Bk2 ONLY LOAD BEARING MASONRY WALLS ARE SHOWN UNDER CONCRETE SLABS.

Bk3 MINIMUM CLAY BRICK COMPRESSIVE STRENGTH TO BE 20MPa. RATE OF ABSORPTION TO BE LESS THAN 1.5KG/M2/MIN AT THE TIME OF LAYING. CLAY BRICKS SHALL BE AT LEAST 30 DAYS OUT OF THE KILN AND WILL OFTEN REQUIRE PRE-WETTING UNLESS PROOF OF A MOISTURE EXPANSION LESS THAN 0.6MM/M IS PRODUCED. UNLESS NOTED OTHERWISE MORTAR FOR CLAY BRICKWORK IS TO BE CEMENT: LIME: SAND IN THE RATIO OF 1 : 1 : 6 AND THE WATER RETENTIVITY MUST BE AT LEAST 90%. NO ADDITIVES SHALL BE USED UNLESS APPROVED IN WRITING. BRICKWORK IS TO BE ADEQUATELY CURED PRIOR TO CONSTRUCTION OF SUSPENDED SLABS OVER.

Bk4 UNLESS NOTED OTHERWISE CLAY BRICKWORK IS TO CONTAIN MOVEMENT JOINTS 20MM WIDE AT MAXIMUM SPACING OF 10M (15M IN INDUSTRIAL USE) AND ARE TO CONTAIN 40MM TAR IMPREGNATED POLYURETHANE STRIP. WHERE INTERNAL SKIN IS INTERRUPTED BY STEEL FRAMES THE ABOVE JOINTING APPLIES TO EXTERNAL SKIN ONLY.

Bk5 ALL MASONRY SUPPORTING OR SUPPORTED BY CONCRETE FLOORS SHALL BE PROVIDED WITH VERTICAL JOINTS TO MATCH ANY CONTROL JOINTS IN THE CONCRETE.

Bk6 NON LOAD BEARING WALLS BUILT PRIOR TO POURING CONCRETE SHALL BE SEPARATED FROM CONCRETE ABOVE BY 16 mm THICK CLOSED CELL POLYSTYRENE STRIP. WHERE BUILT AFTER CONCRETE IS POURED LEAVE 12mm CLEAR OF CONCRETE SOFFIT.

Bk7 BRICKWORK SUPPORTING SLABS AND BEAMS SHALL BE TROWELLED SMOOTH WITH MORTAR FILLING ALL VOIDS. TWO LAYERS OF MALTHOID SHALL BE PLACED FULL WIDTH ACROSS SUCH LOAD BEARING SURFACES EXCEPT WHERE PROPRIETARY BEARING STRIP IS NOTED OR ALTERNATIVE DETAIL IS DOCUMENTED. THE HEADS OF LOAD BEARING WALLS SHALL NOT EXTEND ABOVE THE SOFFIT OF THE CONCRETE SLAB ABOVE.

Bk8 ALL DOUBLE SKIN SOLID WALLS SUCH AS 230mm THICK BRICKWORK SHALL BE BONDED BY A HEADER COURSE EVERY 4th COURSE.

TIMBER

T1 ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS1684 AND AS1720.1.

T2 TIMBER TO BE SEASONED & MINIMUM GRADE F7 UNLESS NOTED OTHERWISE.

T3 ALL BOLTS, NUTS AND WASHERS FOR TIMBER CONNECTIONS TO BE HOT-DIP GALVANISED & GRADE 4.6. WHERE POSSIBLE, BOLTS SHALL BE RETIGHTENED AT THE END OF THE MAINTAINANCE PERIOD. BOLT HOLES SHALL BE DRILLED NO MORE THAN 1 mm OVERSIZE. WASHERS UNDER ALL HEADS AND NUTS SHALL BE AT LEAST 2.5 x BOLT DIA.

T4 MINIMUM BOLT SPACINGS IN TIMBER TO BE 5xBOLT DIAMETER. MIN EDGE DISTANCES FOR BOLTED CONNECTIONS TO BE 4xBOLT DIAMETER. MIN END DISTANCE FOR BOLTED CONNECTIONS TO BE 5xBOLT DIAMETER.

T5 MINIMUM TIMBER CONNECTIONS TO BE NOMINAL FIXINGS IN ACCORDANCE WITH AS 1684 UNLESS NOTED OTHERWISE.

T6 TIE-DOWN SHALL BE IN ACCORDANCE WITH AS1684.2 SECTION 9 UNLESS NOTED OTHERWISE.

T7 ALL TIMBER JOINTS AND NOTCHES ARE TO BE 100mm MINIMUM AWAY FROM LOOSE KNOTS, SEVERE SLOPING GRAIN, GUM VEINS OR OTHER MINOR DEFECTS.

T8 ALL TIMBER TO BE EITHER PLANTATION TIMBERS, TIMBER PRODUCTS MANUFACTURED FROM SUSTAINABLY MANAGED FORESTS OR RECYCLED TIMBERS.

T9 EXTERNAL TIMBER SHALL BE EITHER HARDWOOD DURABILITY CLASS I OR II TO AS 1720.2 OR IMPREGNATED PINE GRADE F7, PRESSURE TREATED TO AS1604 AND RE-DRIED PRIOR TO USE. SUPPLEMENTARY TREATMENT SHALL BE APPLIED TO ALL CUT SURFACES. SUPPLY SUPPORTING DOCUMENTATION FOR PRESERVATIVE TREATMENT.

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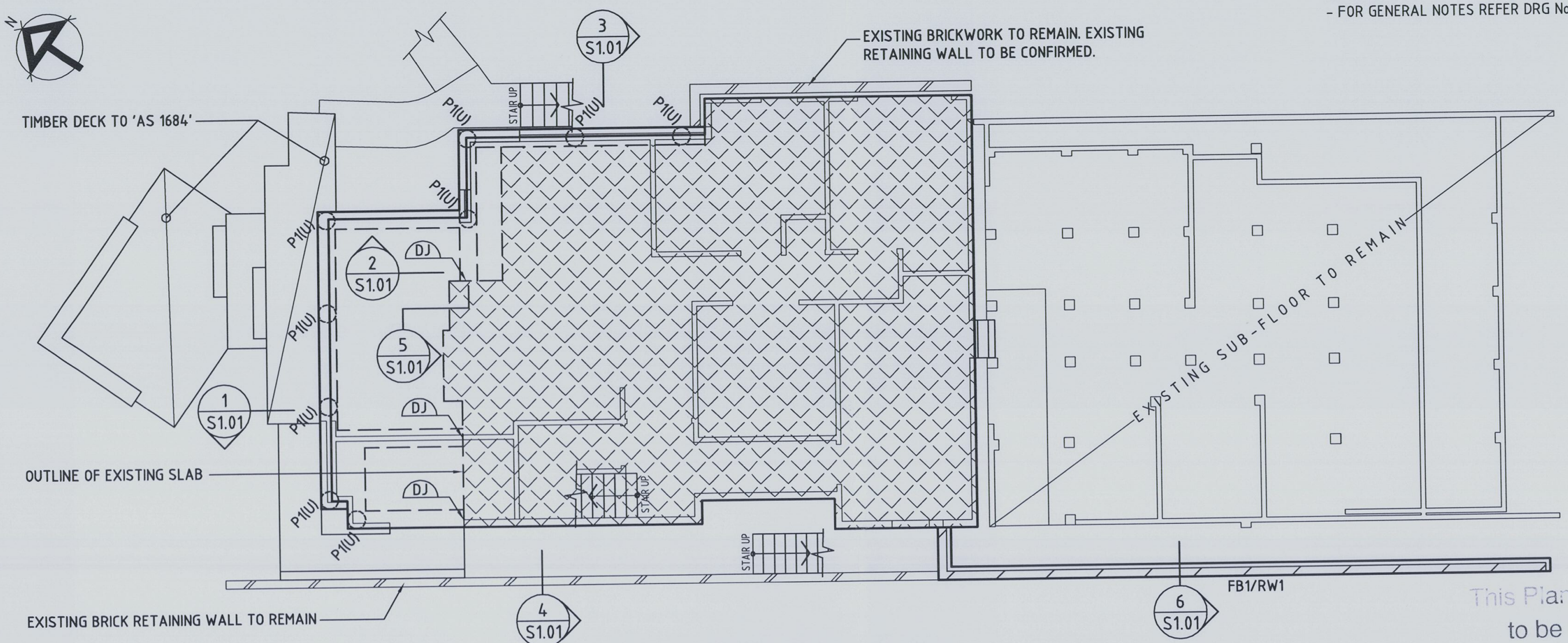
PROJECT:
PROPOSED ALTERATIONS & ADDITIONS
at: 41 ROBERTSON RD, SCOTLAND ISLAND
for: The CRAFTER FAMILY

DRAWING TITLE:
STRUCTURAL NOTES-SHT 2 of 2

DESIGN: S.W.	DATE: FEB 2013		
DRAWN: J.C.	SCALE: N/A		
FILENAME: 10588 - S0.01.DWG			
SIGNED:		SIZE	A3
DRAWING No:	10588-S0.01	REV	A

NOTES:
- FOR GENERAL NOTES REFER DRG No 10588-S0.00 & S0.01



BASEMENT LEVEL SLAB PLAN

SCALE 1:100

1. ALL FOOTINGS TO BEAR ON NATURALLY OCCURRING WEATHERED SANDSTONE OF MINIMUM SAFE BEARING VALUE 600 kPa.
   NOTE: IF ROCK IS NOT FOUND AT FOUNDATION LEVEL PROVIDE 300mm DIA MASS CONCRETE BLOCKDOWNS AT 1800mm MAX CTS. TO BE CONFIRMED ON-SITE.
2. ALL SLABS ON-GROUND TO BE 110mm THICK THROUGHOUT, UNLESS NOTED OTHERWISE AND POURED OVER VAPOURPROOF MEMBRANE OVERLYING 20mm NOMINAL SAND BLINDING LAYER.
3. ALL SLABS TO BE REINFORCED WITH SL82 FABRIC TOP THROUGHOUT, UNLESS NOTED OTHERWISE, PLUS EXTRA BARS AS SHOWN ON PLAN & SECTIONS.
4. DENOTES
   - ..... EXTENT OF 110mm MIN TOPPING SLAB, POURED OVER VAPOURPROOF MEMBRANE ON EXISTING CONCRETE SLAB.
   - (DJ) ..... PROPOSED DOWEL JOINT LOCATIONS, REFER TYPICAL DETAILS DRG No 10588-S1.01.
   - P1 ..... PROPOSED MASS CONCRETE PILE LOCATION
   - FB1 ..... PROPOSED FOOTING BEAM LOCATION, REFER TYPICAL DETAILS DRG No 10588-S1.01.
   - RW1 ..... PROPOSED RETAINING LOCATION, REFER TYPICAL DETAILS DRG No 10588-S1.01.
   - (U) ..... STRUCTURE UNDER

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PROJECT:
PROPOSED ALTERATIONS & ADDITIONS
at: 41 ROBERTSON RD, SCOTLAND ISLAND
for: The CRAFTER FAMILY

DRAWING TITLE:
BASEMENT LEVEL SLAB PLAN

DESIGN: S.W.	DATE: FEB 2013		
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FILENAME: 10588-S0.00 to S4.00.DWG			
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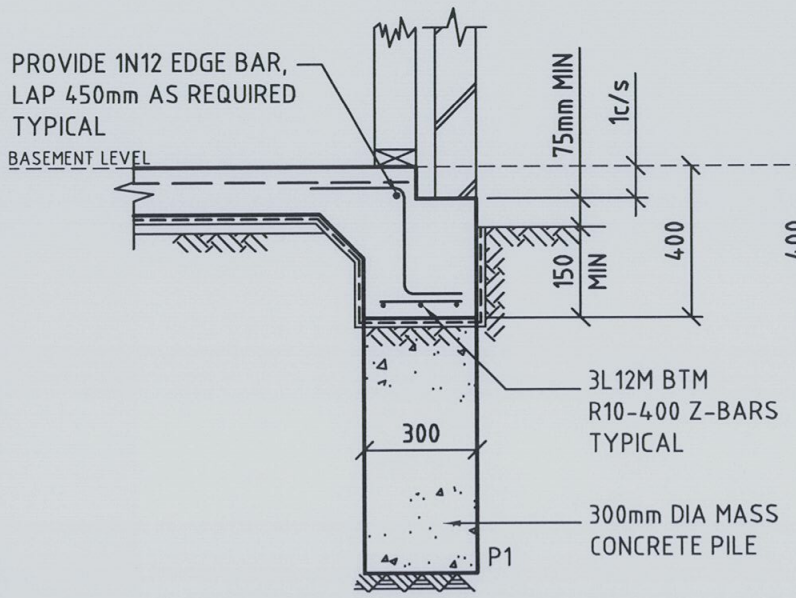
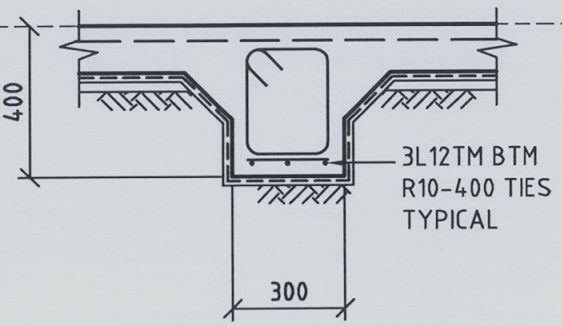


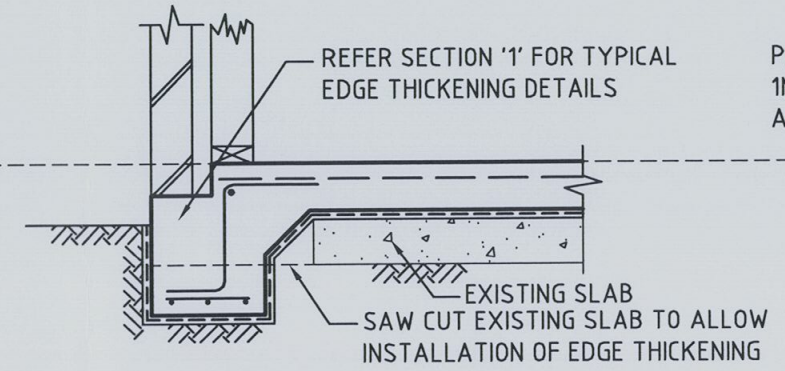
TYPICAL PILE 'P1' DETAILS
TYPICAL EDGE THICKENING DETAILS

SECTION 1 / SCALE 1 : 20 / S1.00



TYPICAL INTERNAL RIB DETAILS

SECTION 2 / SCALE 1 : 20 / S1.00



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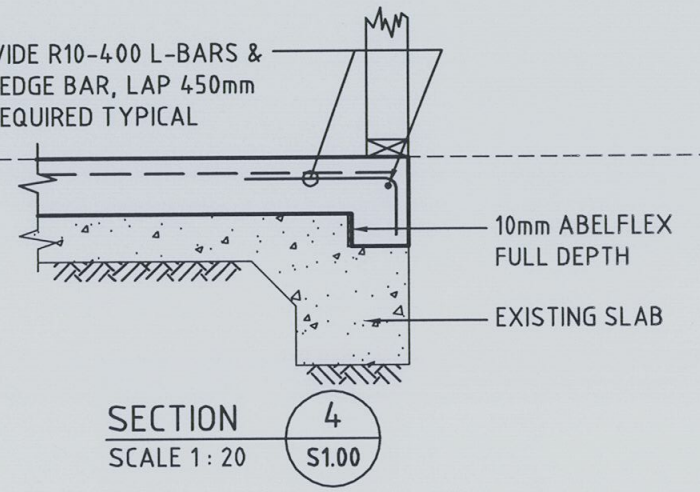
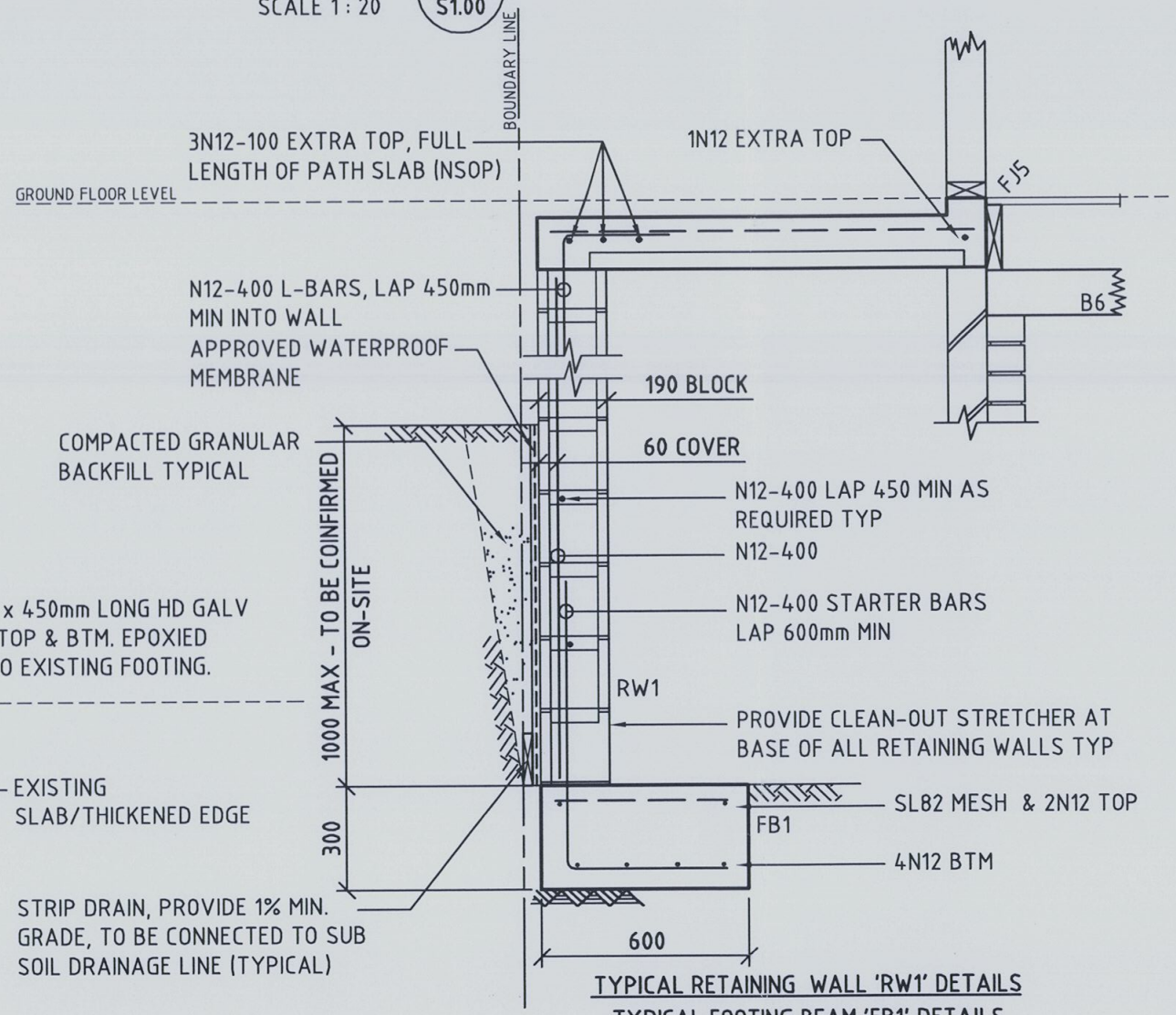
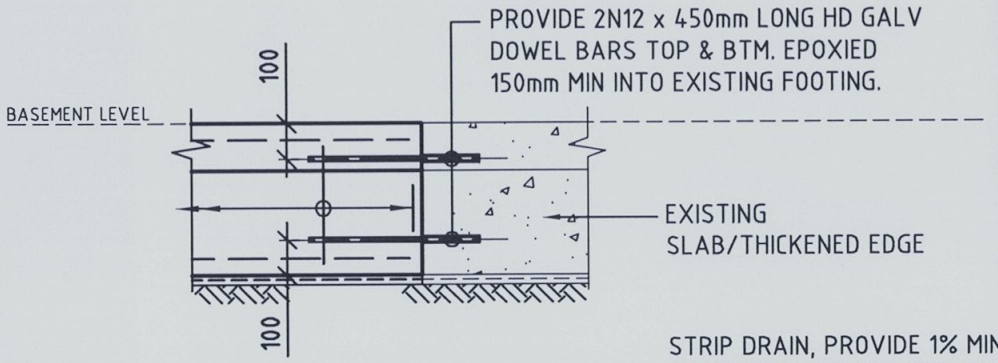


SECTION 4 / SCALE 1 : 20 / S1.00



TYPICAL RETAINING WALL 'RW1' DETAILS
TYPICAL FOOTING BEAM 'FB1' DETAILS

SECTION 6 / SCALE 1 : 20 / S1.00

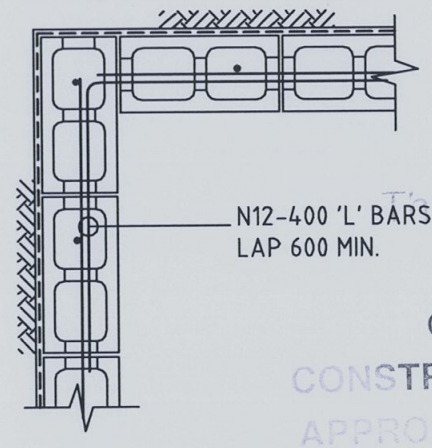


TYPICAL DOWEL JOINT 'DJ' DETAIL

SECTION 5 / SCALE 1 : 20 / S1.00

NOTE:

1. ALL HORIZONTAL RETAINING WALL REINFORCEMENT SHALL BE HOT DIP GALVANISED IF STANDARD BLOCKWORK IS USED.
2. HORIZONTAL RETAINING WALL REINFORCEMENT SHALL NOT REQUIRE GALVANISING IF 'H' BLOCKS ARE USED.
3. ALL DIMENSIONS MARKED THUS ✱ TO BE CONFIRMED BY THE ARCHITECT



TYPICAL BLOCKWORK CORNER DETAIL
SCALE 1 : 20

This Plan / Detail is to be read in conjuction with CONSTRUCTION CERTIFICATE APPROVAL NO 1688 CC 1

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NOTES:
- FOR GENERAL NOTES REFER DRG No 10588-S0.00 & S0.01

ISSUED FOR CONSTRUCTION

ISSUE	DESCRIPTION	BY	APR	DATE
A	ISSUED FOR CONSTRUCTION	JC	SW	26.03.2013

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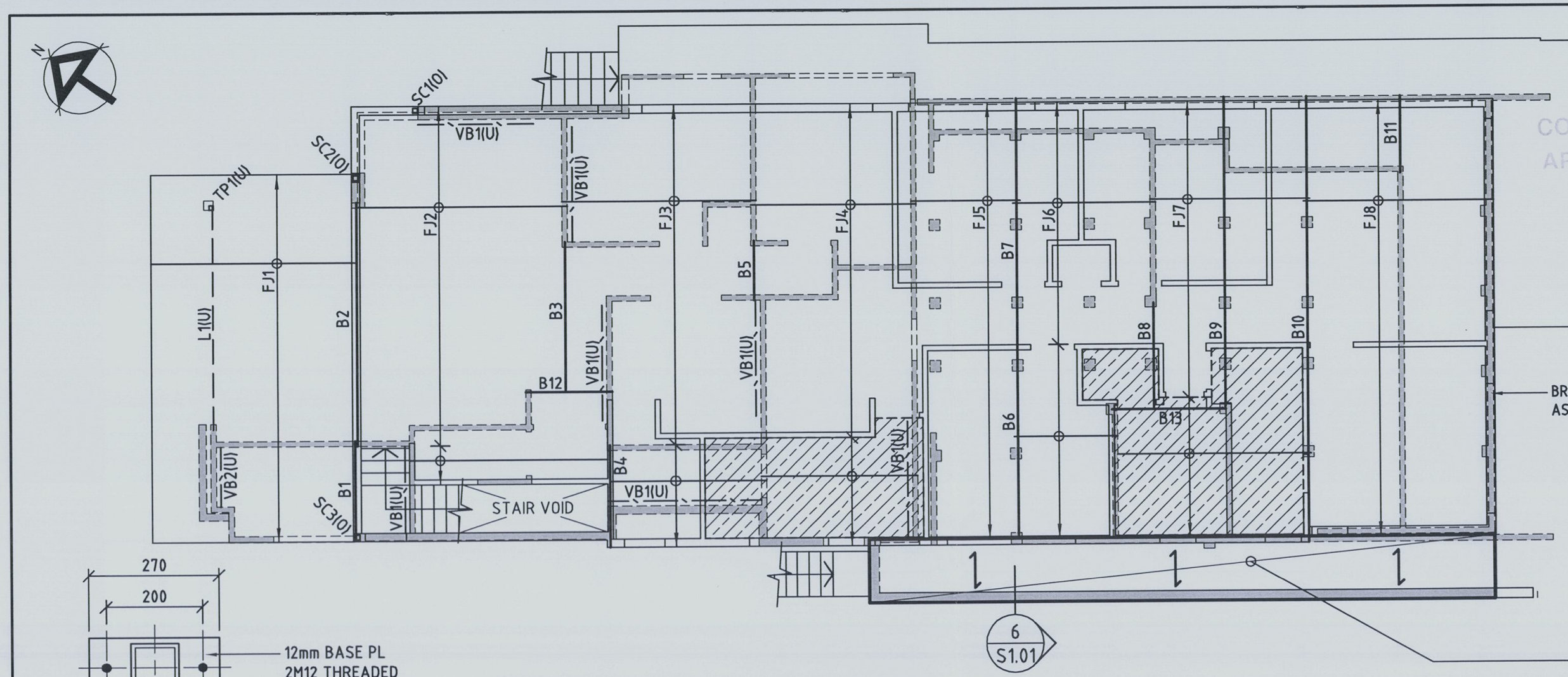
PROJECT:
PROPOSED ALTERATIONS & ADDITIONS
at: 41 ROBERTSON RD, SCOTLAND ISLAND
for: The CRAFTER FAMILY

DRAWING TITLE:
BASEMENT LEVEL SLAB PLAN

DESIGN: S.W.	DATE: FEB 2013
DRAWN: J.C.	SCALE: 1:20
FILENAME: 10588-S0.00 to S4.00.DWG	
SIGNED:	SIZE: A3
DRAWING No: 10588-S1.01	REV: A



BRICK UP EXISTING SUB-FLOOR WALLS & PIERS AS REQUIRED

SLAB TO BE 110mm THICK THROUGHOUT, UNLESS NOTED OTHERWISE AND POURED OVER 1.0 BMT BONDEK SHEETING. SLAB TO BE REINFORCED WITH SL82 FABRIC TOP THROUGHOUT, PLUS EXTRA BARS AS SHOWN ON PLAN & SECTIONS.
⟷ DENOTES DIRECTION OF BONDEK SHEETING

GROUND FLOOR SLAB & FRAMING PLAN

SCALE 1:100

1. THIS DRAWING SHOWS PRIMARY STEEL/TIMBER FLOOR SUPPORT BEAMS ONLY. ALL TIMBER FLOOR FRAMING INCLUDING CONNECTIONS, BRACING & TIE DOWNS SHALL BE BY THE BUILDER IN ACCORDANCE WITH 'AS1684'.
2. DENOTES
   ▨ .....EXTENT OF WET-AREA SET-DOWN. PACK ADJACENT JOISTS TO SUIT PROPOSED SET-DOWN.

MEMBER SCHEDULE

GROUND FLOOR BEARERS

B1	200 x 45 LVL	B7	2/130 x 45 LVL - CONTINUOUS SPAN
B2	230 PFC (DOUBLE STUD UNDER EACH END)	B8	130 x 63 LVL or 2/140 x 45 F7
B3	2/240 x 45 LVL	B9	130 x 63 LVL or 2/140 x 45 F7
B4	240 x 45 F7	B10	130 x 63 LVL or 2/140 x 45 F7
B5	240 x 45 F7	B11	130 x 63 LVL or 2/140 x 45 F7
B6	2/130 x 45 LVL - CONTINUOUS SPAN	B12	240 x 63 LVL
		B13	150 x 63 LVL

LINTELS - BASEMENT WALLS (U) UNDER

L1	200 PFC

GROUND FLOOR JOISTS

FJ1	200 x 45 LVL AT 450mm MAX CTS	FJ5 & FJ7	140 x 45 F7 AT 450mm MAX CTS
FJ2 to FJ4	200 x 45 LVL or 240 x 45 F7 AT 450mm MAX CTS	FJ6	190 x 45 F7 AT 450mm MAX CTS

VERTICAL WALL BRACING

VB1	GALV STRAP CROSS BRACING or 20 x 20 ANGLE BRACE WITH STRAP LOOPED OVER TOP & BTM PLATES & NAILED TO STUDS AT ENDS OF BRACING PANEL.
VB2	4mm STRUCTURAL HARDWOOD PLY BRACING. NAIL TOP & BTM OF SHEETS @ 50mm CTS - VERTICAL EDGES @ 150mm CTS & INTERNAL STUDS @ 300mm CTS. PROVIDE M12 TIE DOWN TO FLOOR AT EACH END OF BRACING PANEL & AT 1200mm MAX CTS.

STEEL COLUMNS

SC1 to SC3	100 x 100 x 5 SHS

NOTES:
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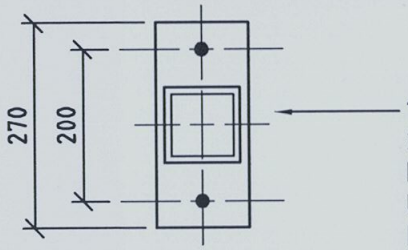
ISSUED FOR CONSTRUCTION

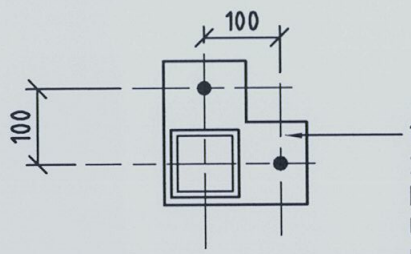


12mm BASE PL
2M12 THREADED RODS THROUGH TO U/S OF GROUND FLOOR TOP PLATE

BASE PLATE DETAILS -'SC1'

12mm BASE PL
2M12 THREADED RODS THROUGH TO U/S OF GROUND FLOOR TOP PLATE

BASE PLATE DETAILS -'SC2'



12mm BASE PL
2M12 THREADED RODS THROUGH TO U/S OF GROUND FLOOR TOP PLATE

BASE PLATE DETAILS -'SC3'

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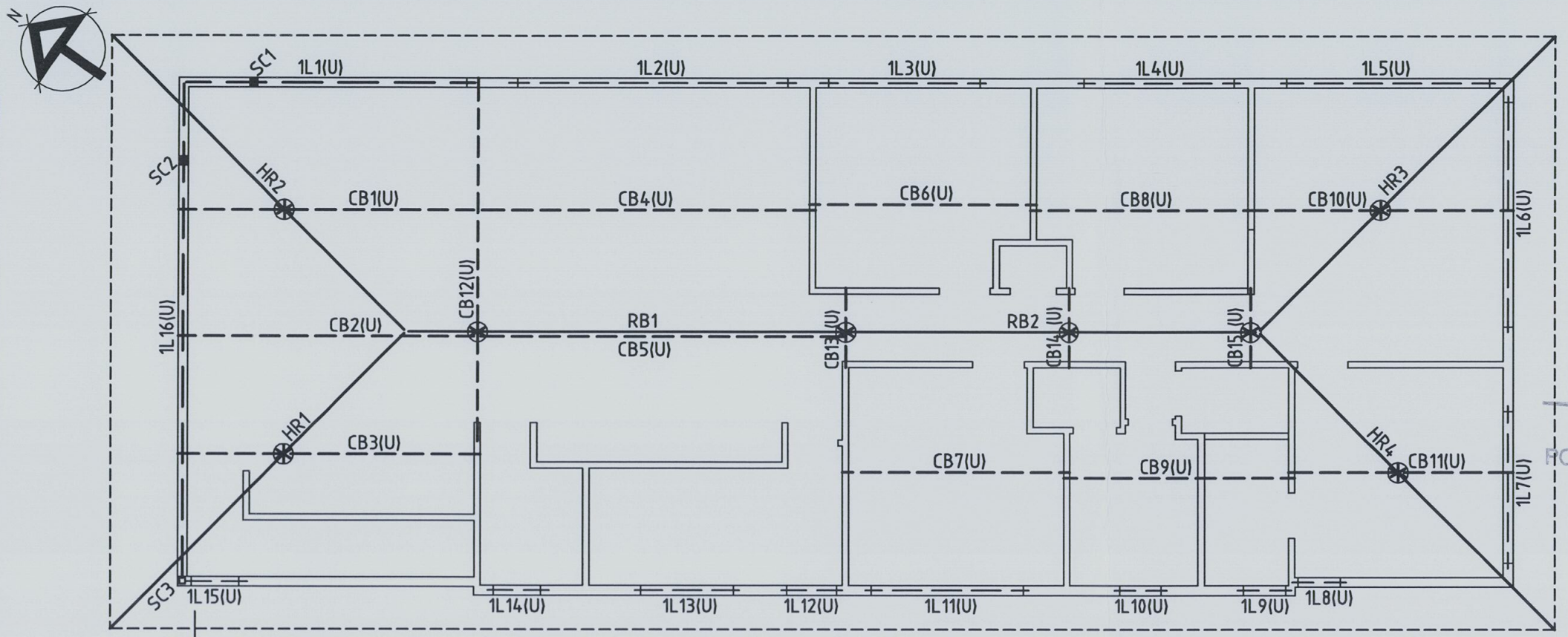
PROJECT:
PROPOSED ALTERATIONS & ADDITIONS
at: 41 ROBERTSON RD, SCOTLAND ISLAND
for: The CRAFTER FAMILY

DRAWING TITLE:
GROUND FLOOR SLAB/FRAMING PLAN

DESIGN: S.W.	DATE: FEB 2013		
DRAWN: J.C.	SCALE: 1:10, 1:100		
FILENAME: 10588-S0.00 to S4.00.DWG			
SIGNED:	SIZE A3	DRAWING No: 10588-S2.00	REV A



UPPER WALL & ROOF FRAMING PLAN

SCALE 1:100

1. THIS DRAWING SHOWS PRIMARY STEEL/TIMBER ROOF SUPPORT BEAMS ONLY. ALL TIMBER ROOF FRAMING INCLUDING CONNECTIONS, BRACING & TIE DOWNS SHALL BE BY THE BUILDER IN ACCORDANCE WITH 'AS1684'.
2. ROOF TRUSSES CAN BE USED AS ALTERNATIVE TO CONVENTIONAL ROOF FRAMING SHOWN ABOVE WITH ROOF TRUSS FRAMING DESIGNED BY THE TRUSS MANUFACTURER IN ACCORDANCE WITH 'AS1684', 'AS1720' & 'AS4440'. TRUSS FRAMING PLAN IS TO BE SENT TO THE STRUCTURAL ENGINEER TO RE-DESIGN/CONFIRM THE LINTELS ACCORDINGLY.
3. DENOTES
   ⊛..... STRUT FROM ROOF TO CEILING BEAM UNDER.

MEMBER SCHEDULE

LINTELS - GROUND FLOOR WALLS (U) UNDER

1L1	240 x 63 LVL	1L9	90 x 45 MGP10
1L2	2/300 x 45 LVL	1L10	90 x 45 MGP10
1L3	190 x 45 F7	1L11	190 x 45 F7
1L4	190 x 45 F7	1L12	90 x 45 MGP10
1L5	2/240 x 45 F7	1L13	140 x 45 F7
1L6	300 x 45 LVL	1L14	90 x 45 MGP10
1L7	190 x 45 F7	1L15	90 x 45 MGP10
1L8	90 x 45 MGP10	1L16	250 PFC

ROOF BEAMS

RB1	2/360 x 45 LVL
RB2	240 x 45 LVL

CEILING BEAMS (HANGING/STRUTTING BEAMS U.N.O.)

CB1 & CB3	2/300 x 45 LVL	CB9	140 x 45 F7-HANGING BEAM
CB2	240 x 45 LVL-HANGING BEAM	CB10	2/240 x 45 LVL
CB4 & CB5	300 x 45 LVL-HANGING BEAM	CB11	2/200 x 45 LVL
CB6 to CB8	190 x 45 F7-HANGING BEAM	CB12	2/250 PFC-FIXED TOGETHER WITH M16 BOLTS AT 600 CTS
		CB13 to CB15	150 x 63 LVL

HIP RAFTERS

HR1 to HR4..... 200 x 45 LVL - CONTINUOUS OVER 2 SPANS

CEILING JOISTS - NOT SHOWN ON PLAN FOR CLARITY

GENERALLY 90 x 45 MGP10 AT 600mm MAX CTS - CONTINUOUS OVER 2 SPANS

RAFTERS - NOT SHOWN ON PLAN FOR CLARITY

GENERALLY 150 x 45 LVL or 190 x 45 F7 AT 600mm MAX CTS

NOTES:
- FOR GENERAL NOTES REFER DRG No 10588-S0.00 & S0.01

This Plan / Detail is to be read in conjuction with CONSTRUCTION CERTIFICATE APPROVAL NO 1688 cc1

JJ BRIGGS ASSOCIATES
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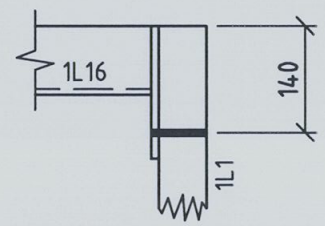
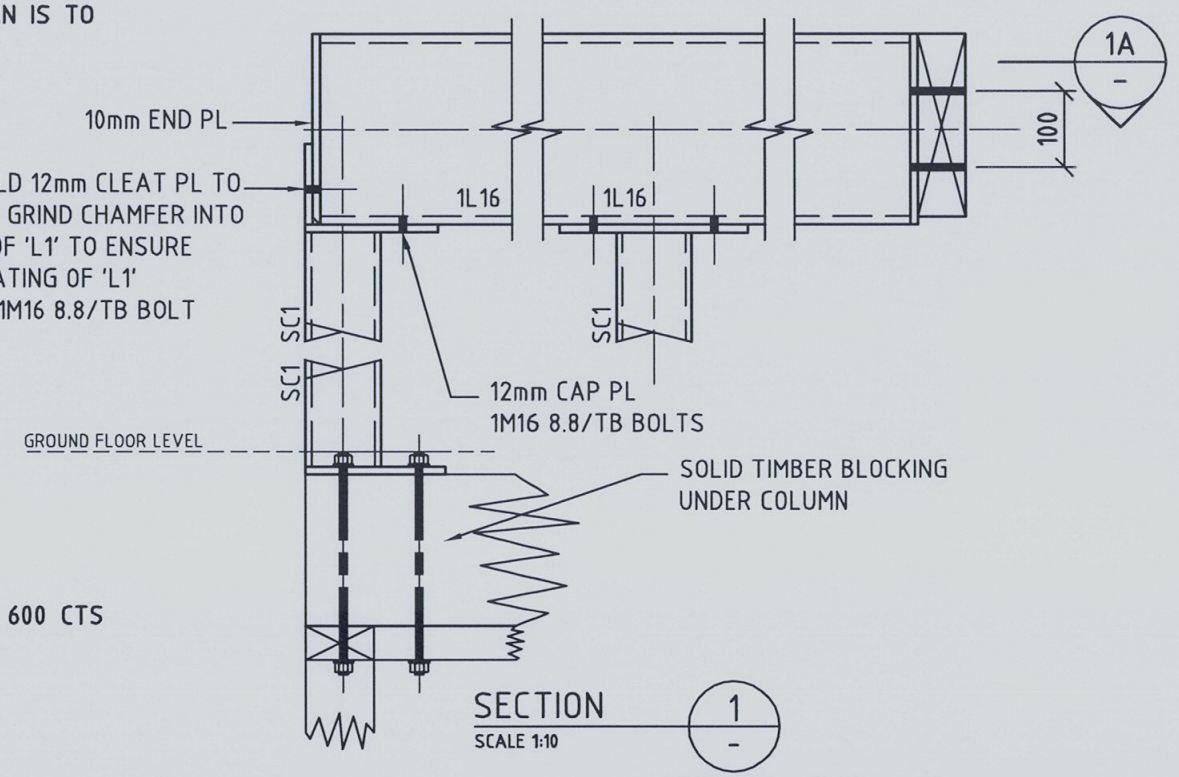


SECTION 1A
SCALE 1:10



SECTION 1
SCALE 1:10

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PROJECT:
PROPOSED ALTERATIONS & ADDITIONS
at: 41 ROBERTSON RD, SCOTLAND ISLAND
for: The CRAFTER FAMILY

DRAWING TITLE:
UPPER WALL & ROOF FRAMING PLAN & DETAILS

DESIGN: S.W.	DATE: FEB 2013		
DRAWN: J.C.	SCALE: 1:100		
FILENAME: 10588-S0.00 to S4.00.DWG			
SIGNED:	SIZE A3		
DRAWING No: 10588-S3.00	REV A		

PROPOSED BOAT HOUSE
at: 41 ROBERTSON RD, SCOTLAND ISLAND
for: The CRAFTER FAMILY

STRUCTURAL DRAWINGS

10588-S10.00.....STRUCTURAL NOTES SHT 1 of 2
10588-S10.01.....STRUCTURAL NOTES SHT 2 of 2
10588-S11.00.....BOAT HOUSE SLAB & ROOF PLANS
10588-S11.01.....BOAT HOUSE DETAILS

This Plan / Detail is to be read in conjuction with CONSTRUCTION CERTIFICATE APPROVAL NO 1688 CC1

JJ BRIGGS ASSOCIATES
PO BOX 800 BROOKVALE 2100

STRUCTURAL NOTES

GENERAL

G1 THESE DRAWINGS SHALL BE READ IN CONJUNCTION WITH ALL ARCHITECTURAL AND OTHER CONSULTANTS' DRAWINGS AND SPECIFICATIONS AND WITH SUCH OTHER WRITTEN INSTRUCTIONS AS MAY BE ISSUED DURING THE COURSE OF THE CONTRACT.

G2 THE INFORMATION CONTAINED ON THESE DRAWINGS IS FOR STRUCTURAL ENGINEERING PURPOSES ONLY. IN ALL OTHER MATTERS, THE APPROVED ARCHITECTS DRAWINGS SHALL TAKE PRECEDENCE. ALL DISCREPANCIES THAT COULD RESULT IN CHANGES TO THE STRUCTURAL DETAILS SHALL BE REFERRED TO THE ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.

G3 ALL MATERIALS AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE RELEVANT AND CURRENT AUSTRALIAN STANDARDS AND WITH THE BY-LAWS AND ORDINANCES OF THE RELEVANT BUILDING AUTHORITIES.

G4 DURING CONSTRUCTION THE STRUCTURE SHALL BE MAINTAINED IN A STABLE CONDITION AND NO PART SHALL BE OVERSTRESSED. TEMPORARY BRACING SHALL BE PROVIDED BY THE BUILDER TO KEEP THE WORKS AND EXCAVATIONS STABLE AT ALL TIMES.

G5 THE BUILDER SHALL GIVE 48 HOURS NOTICE FOR ALL ENGINEERING INSPECTIONS.

G6 UNLESS NOTED OTHERWISE ALL LEVELS ARE IN METRES AND ALL DIMENSIONS ARE IN MILLIMETRES. ENGINEER'S DRAWINGS SHALL NOT BE SCALED FOR DIMENSIONS. ALL DIMENSIONS SHOWN SHALL BE VERIFIED BY THE BUILDER ON SITE.

G7 THE STRUCTURAL COMPONENTS DETAILED ON THESE DRAWINGS HAVE BEEN DESIGNED IN ACCORDANCE WITH THE RELEVANT AUSTRALIAN STANDARDS AND LOCAL GOVERNMENT ORDINANCES.

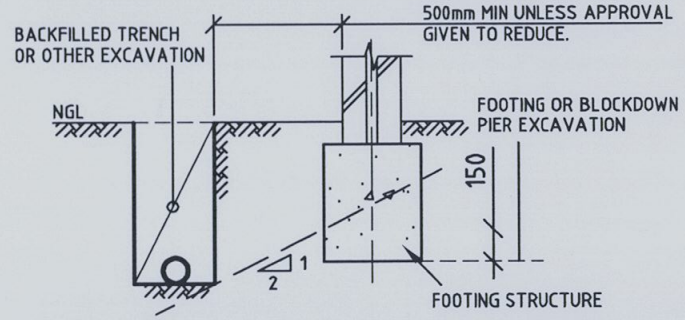
G8 WIND LOADS ARE DETERMINED IN ACCORDANCE WITH AS4055 FOR WIND CLASSIFICATION: 'N2' WITH A METAL SHEET ROOF.

FOUNDATIONS & EARTHWORKS

F1 FOUNDATIONS HAVE BEEN DESIGNED FOR AN ALLOWABLE BEARING INTENSITY OF 600kPa ON WEATHERED SANDSTONE BEDROCK. FOUNDATION MATERIAL TO BE CONFIRMED ON SITE. STIFFENED RAFT SLAB FOOTING DESIGNED FOR "FRAMED" CONSTRUCTION ON CLASS 'A' SITE IN ACCORDANCE WITH AS 2870.

F2 TOPSOIL INCLUDING GRASS ROOTS IS TO BE REMOVED FROM THE AREA TO SUPPORT SLABS AND FOOTINGS. FOOTINGS TO BE CONSTRUCTED AND BACKFILLED AS SOON AS POSSIBLE FOLLOWING EXCAVATION TO AVOID SOFTENING OR DRYING OUT BY EXPOSURE. TRENCHES TO BE DEWATERED & CLEANED OUT PRIOR TO CONCRETE PLACEMENT.

F3 UNLESS OTHERWISE APPROVED BY THE ENGINEER, THE LIMITS OF EXCAVATIONS NEAR EXISTING FOOTINGS SHALL BE AS SET OUT IN THE DETAIL BELOW.



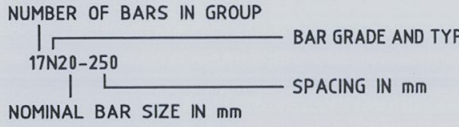
PRIOR TO ANY EXCAVATION NEAR EXISTING FOOTINGS, THE BUILDER SHALL DETERMINE THE DEPTH OF FOUNDING OF EXISTING FOOTINGS BY LOCAL INVESTIGATORY EXCAVATION. GENERAL EXCAVATION SHALL NOT PROCEED BELOW A LEVEL 150mm ABOVE THE UNDERSIDE OF EXISTING FOOTINGS UNTIL INSTRUCTION IS OBTAINED FROM THE ENGINEER ON PROCEDURES & PRECAUTIONS TO BE TAKEN.

F4 CONTROLLED FILL: SAND FILL UP TO 0.8m DEEP, WELL COMPACTED IN NOT MORE THAN 300mm THICK LAYERS BY A VIBRATING PLATE OR VIBRATING ROLLER. NON-SAND FILL UP TO 0.4m DEEP, WELL COMPACTED IN LAYERS NOT MORE THAN 150mm DEEP BY A MECHANICAL ROLLER. CLAY FILL SHALL BE MOIST DURING COMPACTION.

REINFORCEMENT

R1 ALL REINFORCING BARS SHALL BE GRADE D500N TO AS4671 UNLESS NOTED OTHERWISE. ALL MESH SHALL BE GRADE 500L TO AS4671 AND SHALL BE SUPPLIED IN FLAT SHEETS.

R2 REINFORCEMENT NOTATION SHALL BE AS FOLLOWS IN THE FOLLOWING ORDER



R3 REINFORCEMENT SYMBOLS:

'N' - DENOTES GRADE 500 N BARS TO AS4671 GRADE N.
'R' - DENOTES GRADE 250 R HOT ROLLED PLAIN BARS TO AS1302.
'F' - DENOTES HARD-DRAWN WIRE REINFORCING FABRIC TO AS4671.
'W' - DENOTES HARD-DRAWN PLAIN WIRE TO AS1303.
'SL'or 'RL' - DENOTES WELDED GRADE 500 REINFORCING FABRIC TO AS 4671

R4 SPLICES IN REINFORCEMENT SHALL BE MADE ONLY IN POSITIONS SHOWN OR OTHERWISE APPROVED IN WRITING BY THE ENGINEER. LAPS SHALL BE IN ACCORDANCE WITH AS 3600 AND NOT LESS THAN THE DEVELOPMENT LENGTH FOR EACH BAR.
AS SHOWN IN THE TABLE BELOW.

SPLICE SCHEDULE

BAR DIA	TENSION SPLICE LENGTH	COMPRESSION SPLICE LENGTH
N12	475	450
N16	750	600
N20	1000	750
N24	1100	900

R5 REINFORCEMENT IS REPRESENTED DIAGRAMMATICALLY AND NOT NECESSARILY IN TRUE PROJECTION.

R6 WELDING OF REINFORCEMENT SHALL NOT BE PERMITTED UNLESS SHOWN ON THE STRUCTURAL DRAWINGS OR APPROVED BY THE ENGINEER.

R7 FABRIC SHALL BE LAPPED 2 TRANSVERSE WIRES PLUS 50mm. BUNDLED BARS SHALL BE TIED TOGETHER AT 30 BAR DIAMETER CENTRES WITH 3 WRAPS OF THE WIRE.

R8 SLAB REINFORCEMENT SHALL EXTEND AT LEAST 65mm ONTO MASONRY SUPPORT WALLS AND 50% OF BOTTOM REINFORCEMENT SHALL BE COGGED TO ACHIEVE ANCHORAGE AT SIMPLY SUPPORTED ENDS. IF THIS CANNOT BE ACHIEVED DUE TO COVER REQUIREMENTS THEN ALL THE BARS SHALL BE COGGED. FOR FABRIC THE LAST WELDED CROSS ROD SHALL BE LOCATED OVER THE WALL AND 50mm MINIMUM BEYOND THE FACE OF THE WALL.

REINFORCEMENT Cont

R9 WHERE TRANSVERSE TIE BARS ARE NOT SHOWN PROVIDE N12-400 SPLICED WHERE NECESSARY AND LAP WITH MAIN BARS 400MM UNLESS NOTED OTHERWISE.

R10 NO OPENINGS IN BEAMS OR COLUMNS SHALL BE MADE OTHER THAN THOSE SPECIFICALLY DETAILED. FOR OPENINGS IN SLABS UP TO 300mm SQUARE THE REINFORCEMENT SHALL BE DISPLACED TO THE SIDES. FOR OPENINGS BETWEEN 300mm SQUARE AND 600mm SQUARE THE REINFORCEMENT CROSSING THE PROPOSED OPENING SHALL BE CUT AND THE HOLES TRIMMED USING 2N12 BARS TOP AND BOTTOM EXTENDING 1500mm PAST EACH SIDE OF OPENING. OPENINGS LARGER THAN 600mm SQUARE SHALL BE DETAILED BY THE ENGINEER.

R11 JOGGLES TO BARS SHALL COMPRISE A LENGTH OF 12 BAR DIAMETERS BETWEEN BEGINNING AND END OF AN OFFSET OF 1 BAR DIAMETER.

R12 ALL REINFORCEMENT SHALL BE FIRMLY SUPPORTED ON MILD STEEL PLASTIC TIPPED CHAIRS, PLASTIC CHAIRS OR CONCRETE CHAIRS AT NOT GREATER THAN 1 METRE CENTRES BOTH WAYS, AND 800 EACH WAY FOR FABRIC. WHEN POURED ON GROUND AS FORMWORK PROVIDE PLATES UNDER ALL BAR CHAIRS.
PLASTIC TIPPED STEEL CHAIRS SHALL NOT BE USED ON EXPOSED FACES IN EXPOSURE CLASSIFICATION B1, B2 AND C ONLY PLASTIC OR CONCRETE CHAIRS.

R13 SITE BENDING OF REINFORCEMENT SHALL BE AVOIDED IF POSSIBLE. WHERE SITE BENDING IS UNAVOIDABLE IT SHALL BE CARRIED OUT COLD, WITHOUT THE APPLICATION OF HEAT, AND IN ACCORDANCE WITH THE PRACTICE NOTE 'RPN1' OF THE STEEL REINFORCEMENT INSTITUTE OF AUSTRALIA USING MECHANICAL BENDING TOOLS.

ISSUED FOR CONSTRUCTION

ISSUE	DESCRIPTION	BY	APR	DATE
A	ISSUED FOR CONSTRUCTION	JC	SW	26.03.2013

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PROJECT:
PROPOSED BOAT HOUSE
at: 41 ROBERTSON RD, SCOTLAND ISLAND
for: The CRAFTER FAMILY

DRAWING TITLE:
STRUCTURAL NOTES-SHT 1 of 2

DESIGN: S.W.	DATE: FEB 2013		
DRAWN: J.C.	SCALE: N/A		
FILENAME: 10588-S11.00.DWG			
SIGNED:		SIZE	A3
DRAWING No:	10588-S10.00	REV	A

CONCRETE

C1 ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 3600 CURRENT EDITION WITH AMENDMENTS. READYMIX CONCRETE SUPPLY SHALL COMPLY WITH AS 1379. ALL CEMENT IN SLABS TO BE TYPE 'SL' PORTLAND EXCEPT STRUCTURES IN THE TIDAL/SPLASH ZONE TO USE 'MARINE CEMENT' TYPE LH/SR.

C2 MAXIMUM DRYING SHRINKAGE SHALL BE 600 MICROSTRAIN AT 56 DAYS. PROJECT CONTROL TESTING SHALL BE CARRIED OUT IN ACCORDANCE WITH AS 1379. NO ADMIXTURES SHALL BE USED IN CONCRETE UNLESS APPROVED IN WRITING.

C3 CLEAR CONCRETE COVER TO ALL REINFORCEMENT SHALL BE AS FOLLOWS UNLESS SHOWN OTHERWISE.

LOCATION	CONCRETE GRADE (MPa)	CAST AGAINST GROUND	CAST IN FORMS WITH EXPOSURE	CAST IN FORMS & NOT EXPOSED
FOOTINGS	32	50	50	30
SLABS ON GROUND	40	40	40	25
SUSPENDED SLABS	40	40	40	25

NOTE: WHERE CONCRETE IS POURED ON A VAPOURPROOF MEMBRANE 0.2 mm MINIMUM THICKNESS, THE COVER TO CONCRETE CAST AGAINST GROUND MAY BE REDUCED BY 10 mm.

C4 NO ADMIXTURES OTHER THAN LOW RANGE WRA SHALL BE USED IN CONCRETE UNLESS APPROVED IN WRITING.

C5 DEPTHS OF BEAMS ARE GIVEN FIRST AND INCLUDE SLAB THICKNESS.

C6 CONCRETE SIZES SHOWN DO NOT INCLUDE THICKNESSES OF APPLIED FINISHES. FINISHES. NO FINISH WHICH DECREASES COVER IS ALLOWED WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER.

C7 FOR CHAMFERS, DRIP GROOVES, REGLETS, ETC REFER TO ARCHITECT'S DETAILS, MAINTAIN COVER TO REINFORCEMENT AT THESE DETAILS.

C8 NO HOLES, CHASES OR EMBEDMENT OF PIPES OTHER THAN THOSE SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE MADE IN CONCRETE MEMBERS WITHOUT THE PRIOR WRITTEN APPROVAL OF THE ENGINEER.

C9 CONSTRUCTION JOINTS AND CLOSING STRIPS SHALL BE USED TO CONTROL AND REDUCE SHRINKAGE CRACKING IN WALLS AND FLOORS, AND COLD JOINTS IN LARGE POURS. THESE JOINTS SHALL BE PLANNED IN ADVANCE, TO THE APPROVAL OF THE ENGINEER.

C10 THE FINISHED CONCRETE SHALL BE A DENSE HOMOGENEOUS MASS, COMPLETELY FILLING THE FORMWORK THOROUGHLY EMBEDDING THE REINFORCEMENT AND FREE OF STONE POCKETS. ALL CONCRETE INCLUDING SLABS ON GROUND AND FOOTINGS SHALL BE COMPACTED WITH MECHANICAL VIBRATORS.

C11 CURING OF ALL CONCRETE IS TO BE ACHIEVED BY KEEPING SURFACES CONTINUOUSLY WET FOR A PERIOD OF 3 DAYS, AND PREVENTION OF LOSS OF MOISTURE FOR A TOTAL OF 7 DAYS FOLLOWED BY A GRADUAL DRYING OUT. APPROVED SPRAYED ON CURING COMPOUNDS COMPLYING WITH AS 3799 MAY BE USED WHERE NO FLOOR FINISHES ARE PROPOSED. POLYTHENE SHEETING OR WET HESSIAN MAY BE USED IF PROTECTED FROM WIND AND TRAFFIC.

C12 CONDUITS, PIPES, ETC, SHALL ONLY BE LOCATED IN THE MIDDLE ONE THIRD OF SLAB DEPTH AND SPACED AT NOT LESS THAN 3 DIAMETERS AND SHALL NOT BE PLACED WITHIN THE REINFORCEMENT COVER

C13 REPAIRS TO CONCRETE SHALL NOT BE ATTEMPTED WITHOUT THE PERMISSION OF THE ENGINEER.

STRUCTURAL STEEL

S1 ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS 4100 AND AS 1554 EXCEPT WHERE VARIED BY THE CONTRACT DOCUMENTS.

S2 UNLESS NOTED OTHERWISE ALL MATERIAL SHALL BE:
- GRADE 250 HOT-ROLLED PLATES COMPLYING WITH AS 3678;
- GRADE 250 HOT-ROLLED FLATS, TFC, TFB, ANGLES 100x100EA OR 125x75UA AND SMALLER COMPLYING WITH AS 3679.1;
- GRADE 300PLUS UB, UC, PFC AND ANGLES 125x125EA OR 150x90UA AND LARGER;
- GRADE 300 WB, WC COMPLYING WITH AS 3679.2;
- GRADE C350 RHS, CHS COMPLYING WITH AS 1163;

S3 THREE(3) COPIES OF WORKSHOP FABRICATION DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AT LEAST 7 DAYS PRIOR TO COMMENCEMENT OF FABRICATION AND PERMISSION TO USE OBTAINED PRIOR TO FABRICATION. PERMISSION TO USE DOES NOT RELIEVE THE BUILDER OF THE FULL RESPONSIBILITY FOR DIMENSIONS, FIT AND COMPLIANCE WITH ARCHITECTURAL AND ENGINEERING DRAWINGS.

S4 BOLTS:-
4.6/S.....COMMERCIAL BOLTS OF GRADE 4.6 TO AS 1111, SNUG TIGHTENED.
8.8/S.....HIGH STRENGTH STRUCTURAL BOLTS OF GRADE 8.8 TO AS 1252, SNUG TIGHTENED.
8.8/TB.....HIGH STRENGTH STRUCTURAL BOLTS OF GRADE 8.8 TO AS 1252 FULLY TENSIONED TO AS 4100 AS BEARING JOINT
8.8/TF.....HIGH STRENGTH STRUCTURAL BOLTS OF GRADE 8.8 TO AS 1252 FULLY TENSIONED TO AS 4100 AS A FRICTION JOINT WITH FACING SURFACES LEFT UNCOATED
ALL BOLTS SHALL BE M20 GRADE 8.8/S UNLESS NOTED.
NO CONNECTION SHALL HAVE LESS THAN 2 BOLTS.
ALL BOLTS, NUTS & WASHERS TO BE GALVANISED.
TB AND TF BOLTS TO BE INSTALLED USING APPROVED LOAD INDICATING WASHERS, OR BY TURN OF NUT CONTROL OF TENSIONING.

S5 WELDING SHALL BE CARRIED OUT IN ACCORDANCE WITH AS 1554.1. WELDING CONSUMABLES SHALL BE E48XX OR W50X U.N.O. ALL WELD SHALL BE 6 mm CFW SP CATEGORY U.N.O. CPBW SHALL BE SP CATEGORY U.N.O. INSPECTION SHALL BE CARRIED OUT TO AS 1554.1. ALL GP/SP WELDS SHALL BE 100% VISUALLY SCANNED. SP WELDS ALLOW FOR 10% VISUAL EXAMINATION U.N.O. BUTT WELDS SHALL BE COMPLETE PENETRATION WELDS TO AS 1554.

S6 ALL DETAILS, GAUGE LINES ETC. WHERE NOT SPECIFICALLY SHOWN ARE TO BE IN ACCORDANCE WITH AISC DESIGN CAPACITY TABLES FOR STRUCTURAL STEEL AND AISC STANDARDIZED STRUCTURAL CONNECTIONS. PLATES TO BE 10mm THICK, EX-STANDARD SQUARE EDGE FLATS U.N.O.

S7 PROVIDE SEAL PLATES TO ALL HOLLOW SECTIONS. PROVIDE VENT HOLES TO HOLLOW MEMBERS & DRAIN HOLES TO ALL MEMBERS TO BE HOT DIP GALVANISED.

S8 IT IS THE BUILDER'S RESPONSIBILITY TO ENSURE THAT STEELWORK IS SECURELY TEMPORARILY BRACED AS NECESSARY TO STABILISE THE STRUCTURE DURING ERECTION.

S9 STRUCTURAL STEELWORK SHALL HAVE THE FOLLOWING SURFACE TREATMENT IN ACCORDANCE WITH THE SPECIFICATION.

ELEMENT	SURFACE CLEANING	PROTECTIVE COATING
INTERNAL	POWER WIRE BRUSHING or ABRASIVE GRIT BLASTING	1 COATRUST INHIBITIVE ALKYD PRIMER OR EQUIV. + 1 TOP COAT ALL WEATHER GLOSS ACRYLIC
EXTERNAL	ABRASIVE GRIT BLASTING (CLASS 2.5) or PICKLING	1 COAT INORGANIC ZINC SILICATE PRIMER OR EQUIV. + 1 TOP COAT ALL WEATHER GLOSS ACRYLIC WITH UV PROTECTOR
EXTERNAL (ALT.)	PICKLING	HOT DIP GALVANISED

S10 THE BUILDER SHALL PROVIDE ALL CLEATS AND DRILL ALL HOLES NECESSARY FOR FIXING STEEL TO STEEL AND TIMBER TO STEEL WHETHER OR NOT DETAILED ON THE DRAWINGS.
THE FABRICATIOIN AND ERECTION OF THE STRUCTURAL STEELWORK SHALL SUPERVISED BY A QUALIFIED PERSON EXPERIENCED IN SUCH SUPERVISION, ENSURING ALL REQUIREMENTS OF THE DESIGN ARE MET.

S11 ALL BEAMS AND RAFTERS SHALL BE FABRICATED AND ERECTED WITH NATURAL CAMBER UP.
ALL MEMBERS SHALL BE SUPPLIED IN SINGLE LENGTHS.
SPLICES SHALL ONLY BE PERMITTED IN LOCATIONS SHOWN ON THE STRUCTURAL DRAWINGS.

BLOCKWORK

BL1 ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS3700.

BL2 STRENGTHS OF MASONRY UNITS AND TYPE OF MORTAR SHALL BE AS FOLLOWS:
CHARACTERISTIC UNCONFINED COMPRESSIVE STRENGTH f'uc = 15 MPa
MORTAR (CEMENT : LIME : SAND) = 1 : 0.25 : 3
MORTAR ADMIXTURES SHALL NOT BE USED WITHOUT THE WRITTEN APPROVAL OF THE SUPERINTENDENT.

BL3 ONLY LOAD BEARING MASONRY WALLS ARE SHOWN UNDER CONCRETE SLABS.

BL4 OTHER THAN REINFORCED CONCRETE BLOCKWORK, MASONRY SUPPORTING SLABS AND BEAMS SHALL BE TROWELLED SMOOTH WITH MORTAR FILLING ALL VOIDS. TWO LAYERS OF MALTHOID SHALL BE PLACED FULL WIDTH ACROSS SUCH LOAD BEARING SURFACES EXCEPT WHERE PROPRIETARY BEARING STRIP IS NOTED OR ALTERNATIVE DETAIL IS DOCUMENTED. THE HEADS OF LOAD BEARING WALLS SHALL NOT EXTEND ABOVE THE SOFFIT OF THE CONCRETE SLAB ABOVE.

BL5 ALL MASONRY SUPPORTING OR SUPPORTED BY CONCRETE FLOORS SHALL BE PROVIDED WITH VERTICAL JOINTS TO MATCH ANY CONTROL JOINTS IN THE CONCRETE.

BL6 NO CHASES OR RECESSES ARE PERMITTED IN LOAD BEARING MASONRY WITHOUT THE APPROVAL OF THE ENGINEER.

BL7 PROVIDE VERTICAL CONTROL JOINTS AT 10 m MAX. CENTRES GENERALLY, AND 5 m MAX. FROM CORNERS FOR BRICKWORK AND UNREINFORCED BLOCKWORK.

BL8 REFER TO CONCRETE NOTES FOR DE-PROPPING PRIOR TO CONSTRUCTION OF MASONRY WALLS ON SUSPENDED SLABS.

BL9 REINFORCED CONCRETE BLOCKWORK SHALL COMPLY WITH THE FOLLOWING, UNLESS NOTED:
* PROVIDE CLEANOUT HOLES 100 mm SQUARE MINIMUM AT BASE OF ALL WALLS AND ROD CORE HOLES TO REMOVE PROTRUDING MORTAR FINS PRIOR TO GROUTING.
* CORE FILLING GROUT SHALL BE :- f'c = 20 MPa
MINIMUM CEMENT CONTENT = 300 kg/m,
SLUMP = 230 ± 30 mm.
* REINFORCEMENT PROJECTING FROM FOUNDATION OR SLABS INTO CORES, SHALL BE SET ACCURATELY IN PLACE USING TEMPLATES TO ALIGN WITH THE CENTRE OF THE LENGTH OF CORES AND WITH COVER AS NOTED. WHERE HORIZONTAL BARS ARE INDICATED, THE WEBS OF THE BLOCKS BELOW THE BARS SHALL BE CUT DOWN TO ACCOMMODATE THE BARS.
* GROUT ALL CORES IN REINFORCED BLOCKWORK UNLESS OTHERWISE NOTED. HEIGHT OF BLOCKWORK TO BE GROUTED ON ONE DAY SHALL BE 2400mm. GROUT SHALL BE PLACED IN LIFTS OF 1200mm MAXIMUM AND COMPACTED BY POKER VIBRATOR. A SHORT TIME SHOULD ELAPSE BETWEEN SUCCESSIVE LIFTS TO ALLOW PLASTIC SETTLEMENT TO OCCUR.
* PROVIDE 50 mm COVER FROM THE OUTSIDE OF THE BLOCKWORK UNLESS NOTED.

BL10 BACKFILL TO RETAINING WALLS SHALL BE FREE DRAINING GRANULAR MATERIAL. PROVIDE SUBSOIL DRAIN AT BASE OF WALL. DO NOT BACKFILL UNTIL 14 DAYS AFTER GROUTING, OR IF APPLICABLE, AFTER RESTRAINING SLAB OVER HAS BEEN POURED AND CURED FOR 7 DAYS. BACKFILL SHALL BE COMPACTED TO 98% STANDARD MAXIMUM DRY DENSITY AT OPTIMUM MOISTURE CONTENT ± 2 %.

This Plan / Detail is
to be read in
conjuction with
CONSTRUCTION CERTIFICATE
APPROVAL NO 1688 cc1

JJ BRIGGS
ASSOCIATES
PO BOX 800 BROOKVALE 2100

BRICKWORK

Bk1 ALL MATERIALS AND WORKMANSHIP TO BE TO AS 3700.

Bk2 ONLY LOAD BEARING MASONRY WALLS ARE SHOWN UNDER CONCRETE SLABS.

Bk3 MINIMUM CLAY BRICK COMPRESSIVE STRENGTH TO BE 20MPa. RATE OF ABSORPTION TO BE LESS THAN 1.5KG/M2/MIN AT THE TIME OF LAYING. CLAY BRICKS SHALL BE AT LEAST 30 DAYS OUT OF THE KILN AND WILL OFTEN REQUIRE PRE-WETTING UNLESS PROOF OF A MOISTURE EXPANSION LESS THAN 0.6MM/M IS PRODUCED. UNLESS NOTED OTHERWISE MORTAR FOR CLAY BRICKWORK IS TO BE CEMENT: LIME: SAND IN THE RATIO OF 1 : 1 : 6 AND THE WATER RETENTIVITY MUST BE AT LEAST 90%. NO ADDITIVES SHALL BE USED UNLESS APPROVED IN WRITING. BRICKWORK IS TO BE ADEQUATELY CURED PRIOR TO CONSTRUCTION OF SUSPENDED SLABS OVER.

Bk4 UNLESS NOTED OTHERWISE CLAY BRICKWORK IS TO CONTAIN MOVEMENT JOINTS 20MM WIDE AT MAXIMUM SPACING OF 10M (15M IN INDUSTRIAL USE) AND ARE TO CONTAIN 40MM TAR IMPREGNATED POLYURETHANE STRIP. WHERE INTERNAL SKIN IS INTERRUPTED BY STEEL FRAMES THE ABOVE JOINTING APPLIES TO EXTERNAL SKIN ONLY.

Bk5 ALL MASONRY SUPPORTING OR SUPPORTED BY CONCRETE FLOORS SHALL BE PROVIDED WITH VERTICAL JOINTS TO MATCH ANY CONTROL JOINTS IN THE CONCRETE.

Bk6 NON LOAD BEARING WALLS BUILT PRIOR TO POURING CONCRETE SHALL BE SEPARATED FROM CONCRETE ABOVE BY 16 mm THICK CLOSED CELL POLYSTYRENE STRIP. WHERE BUILT AFTER CONCRETE IS POURED LEAVE 12mm CLEAR OF CONCRETE SOFFIT.

Bk7 BRICKWORK SUPPORTING SLABS AND BEAMS SHALL BE TROWELLED SMOOTH WITH MORTAR FILLING ALL VOIDS. TWO LAYERS OF MALTHOID SHALL BE PLACED FULL WIDTH ACROSS SUCH LOAD BEARING SURFACES EXCEPT WHERE PROPRIETARY BEARING STRIP IS NOTED OR ALTERNATIVE DETAIL IS DOCUMENTED. THE HEADS OF LOAD BEARING WALLS SHALL NOT EXTEND ABOVE THE SOFFIT OF THE CONCRETE SLAB ABOVE.

Bk8 ALL DOUBLE SKIN SOLID WALLS SUCH AS 230mm THICK BRICKWORK SHALL BE BONDED BY A HEADER COURSE EVERY 4th COURSE.

TIMBER

T1 ALL WORKMANSHIP AND MATERIALS SHALL BE IN ACCORDANCE WITH AS1684 AND AS1720.1.

T2 TIMBER TO BE SEASONED & MINIMUM GRADE F7 UNLESS NOTED OTHERWISE.

T3 ALL BOLTS, NUTS AND WASHERS FOR TIMBER CONNECTIONS TO BE HOT-DIP GALVANISED & GRADE 4.6. WHERE POSSIBLE, BOLTS SHALL BE RETIGHTENED AT THE END OF THE MAINTAINANCE PERIOD. BOLT HOLES SHALL BE DRILLED NO MORE THAN 1 mm OVERSIZE. WASHERS UNDER ALL HEADS AND NUTS SHALL BE AT LEAST 2.5 x BOLT DIA.

T4 MINIMUM BOLT SPACINGS IN TIMBER TO BE 5xBOLT DIAMETER. MIN EDGE DISTANCES FOR BOLTED CONNECTIONS TO BE 4xBOLT DIAMETER. MIN END DISTANCE FOR BOLTED CONNECTIONS TO BE 5xBOLT DIAMETER.

T5 MINIMUM TIMBER CONNECTIONS TO BE NOMINAL FIXINGS IN ACCORDANCE WITH AS 1684 UNLESS NOTED OTHERWISE.

T6 TIE-DOWN SHALL BE IN ACCORDANCE WITH AS1684.2 SECTION 9 UNLESS NOTED OTHERWISE.

T7 ALL TIMBER JOINTS AND NOTCHES ARE TO BE 100mm MINIMUM AWAY FROM LOOSE KNOTS, SEVERE SLOPING GRAIN, GUM VEINS OR OTHER MINOR DEFECTS.

T8 ALL TIMBER TO BE EITHER PLANTATION TIMBERS, TIMBER PRODUCTS MANUFACTURED FROM SUSTAINABLY MANAGED FORESTS OR RECYCLED TIMBERS.

T9 EXTERNAL TIMBER SHALL BE EITHER HARDWOOD DURABILITY CLASS I OR II TO AS 1720.2 OR IMPREGNATED PINE GRADE F7, PRESSURE TREATED TO AS1604 AND RE-DRIED PRIOR TO USE. SUPPLEMENTARY TREATMENT SHALL BE APPLIED TO ALL CUT SURFACES. SUPPLY SUPPORTING DOCUMENTATION FOR PRESERVATIVE TREATMENT.

ISSUED FOR CONSTRUCTION

ISSUE	DESCRIPTION	BY	APR	DATE
A	ISSUED FOR CONSTRUCTION	JC	SW	26.03.2013

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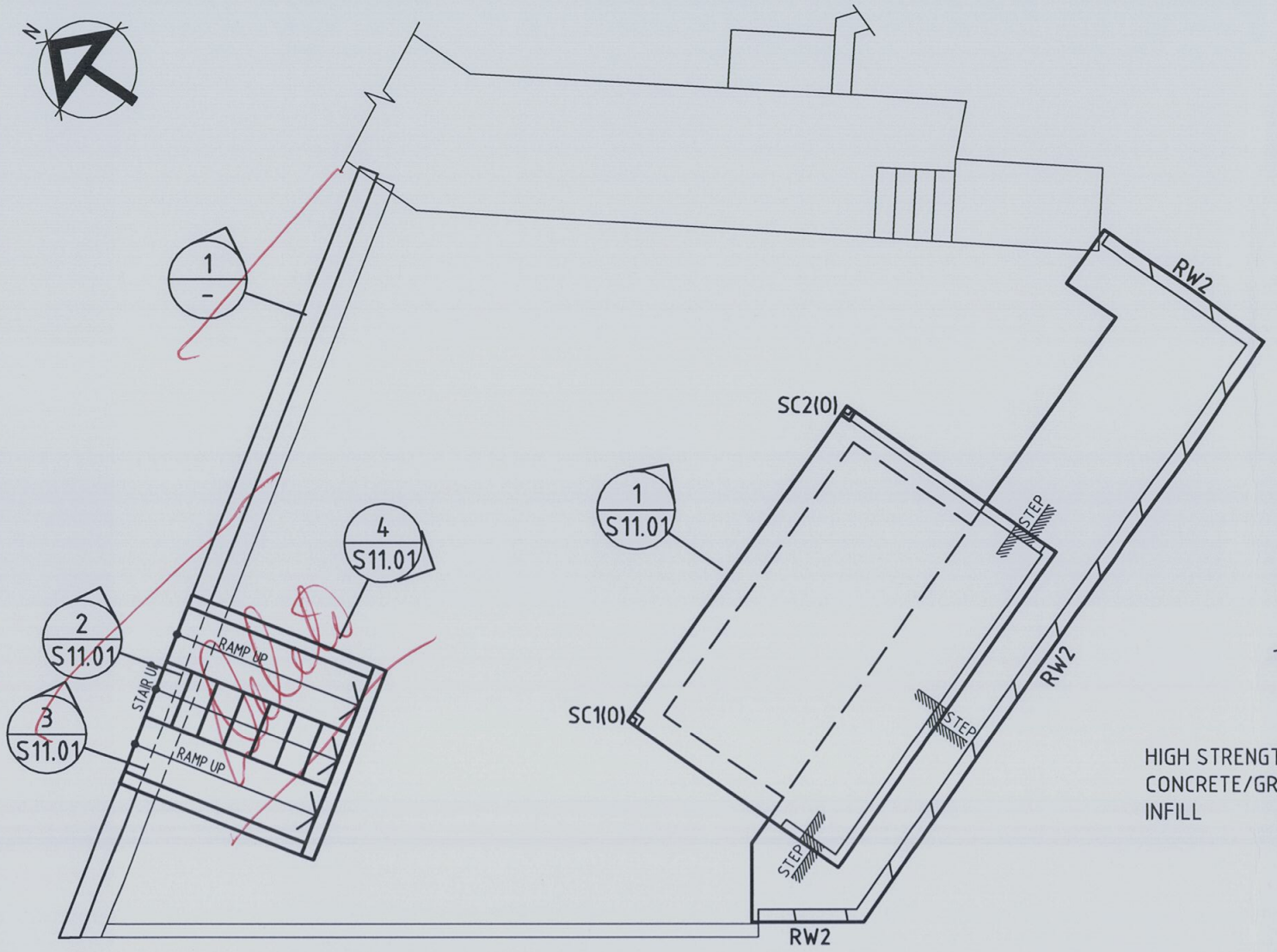
PROJECT:
PROPOSED BOAT HOUSE
at: 41 ROBERTSON RD, SCOTLAND ISLAND
for: The CRAFTER FAMILY

DRAWING TITLE:
STRUCTURAL NOTES-SHT 2 of 2

DESIGN: S.W.	DATE: FEB 2013
DRAWN: J.C.	SCALE: N/A
FILENAME: 10588 - S11.00.DWG	
SIGNED:	SIZE A3
DRAWING No: 10588-S10.01	REV A



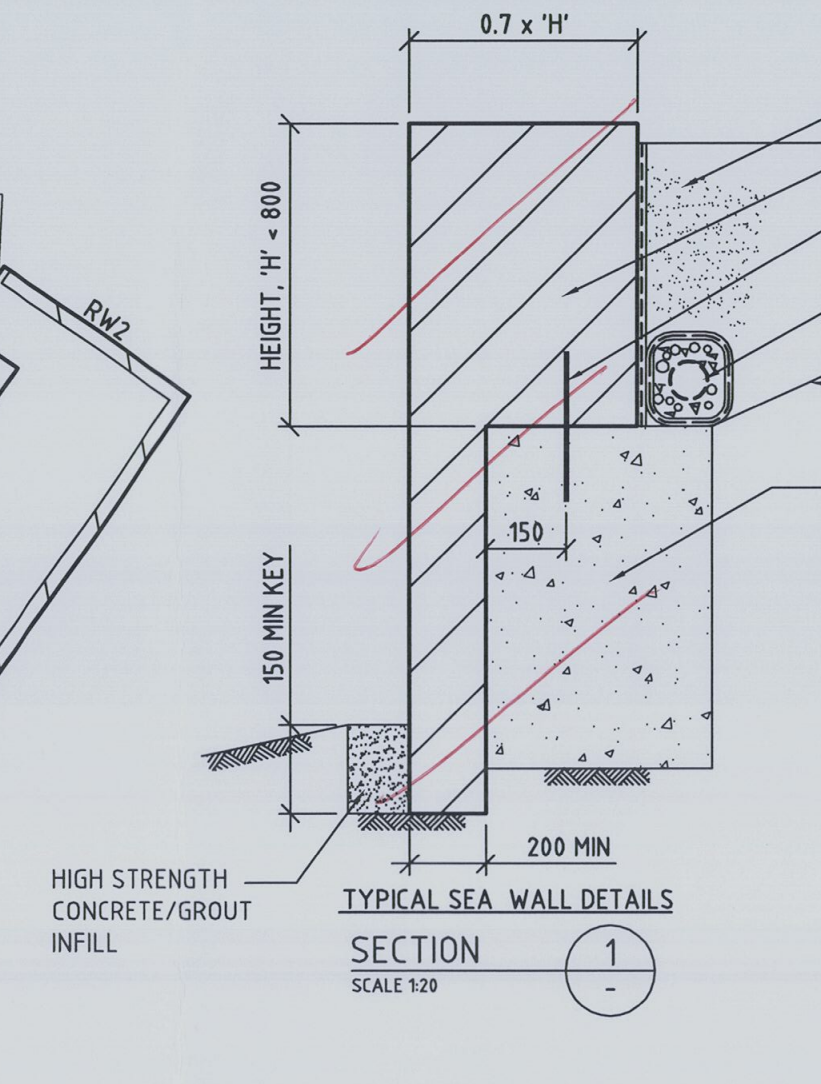
BOAT HOUSE SLAB PLAN

SCALE 1:100

1. ALL SLABS ON-GROUND TO BE 110mm THICK THROUGHOUT, UNLESS NOTED OTHERWISE AND POURED OVER VAPOURPROOF MEMBRANE OVERLYING 20mm NOMINAL SAND BLINDING LAYER.
2. ALL SLABS TO BE REINFORCED WITH SL82 FABRIC TOP THROUGHOUT, UNLESS NOTED OTHERWISE, PLUS EXTRA BARS AS SHOWN ON PLAN & SECTIONS.
3. DENOTES
   RW2.....PROPOSED RETAINING LOCATION, REFER TYPICAL DETAILS DRG No 10588-S11.01.

MEMBER SCHEDULE

STEEL COLUMNS
SC1 & SC2 ..... 90 x 90 x 5.0 SHS



TYPICAL SEA WALL DETAILS

SECTION 1 / SCALE 1:20

NOTES:
- FOR GENERAL NOTES REFER DRG No 10588-S0.00 & S0.01

COMPACTED GRANULAR BACKFILL TYP

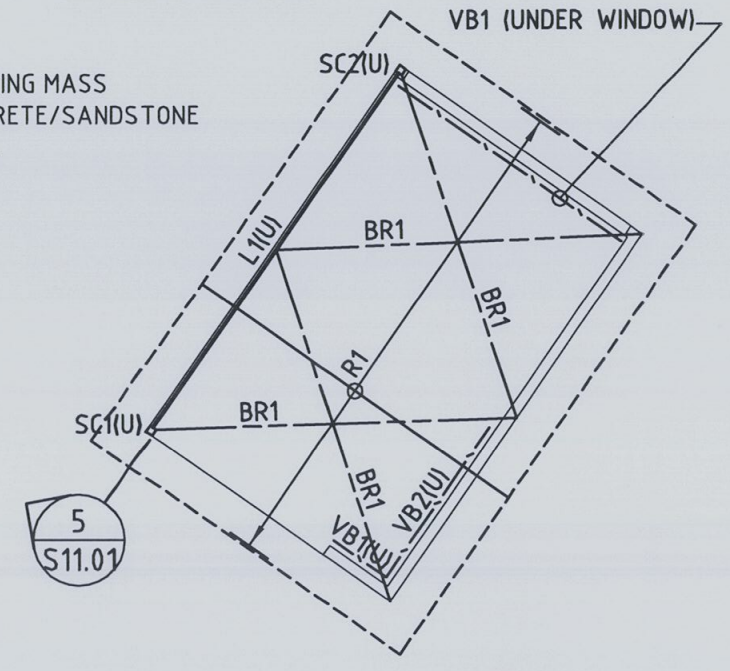
MASS CONCRETE/SANDSTONE 'GRAVITY' RETAINING WALL

R16 STAINLESS STEEL DOWELS (300 LONG) 'CHEMSET' 150mm INTO EXISTING WALL AT 600mm NOMINAL CENTRES.

ø100 AGG LINE, WITH GEOTEXTILE SLEEVE AND GRAVEL FILTER, 1% MIN. GRADE, TO BE CONNECTED TO SUB SOIL DRAINAGE LINE (TYPICAL)

EXISTING GROUND LINE

EXISTING MASS CONCRETE/SANDSTONE WALL



BOAT HOUSE ROOF FRAMING PLAN

SCALE 1:100

1. THIS DRAWING SHOWS PRIMARY STEEL/TIMBER ROOF SUPPORT BEAMS ONLY. ALL TIMBER ROOF FRAMING INCLUDING CONNECTIONS, BRACING & TIE DOWNS SHALL BE BY THE BUILDER IN ACCORDANCE WITH 'AS1684'.

MEMBER SCHEDULE

LINTELS
L1 ..... 200 PFC

RAFTERS
R1 ..... 150 x 45 LVL AT 600mm MAX CTS

VERTICAL WALL BRACING
VB1 ..... GALV STRAP CROSS BRACING or 20 x 20 ANGLE BRACE WITH STRAP LOOPED OVER TOP & BTM PLATES & NAILED TO STUDS AT ENDS OF BRACING PANEL.
VB2 ..... 4mm STRUCTURAL HARDWOOD PLY BRACING. NAIL TOP & BTM OF SHEETS @ 50mm CTS - VERTICAL EDGES @ 150mm CTS & INTERNAL STUDS @ 300mm CTS. PROVIDE M12 TIE DOWN TO FLOOR AT EACH END OF BRACING PANEL & AT 1200mm MAX CTS.

BRACING
BR1 ..... GALV STEEL STRAP BRACING. BRACING FLATTENED OVER EACH RAFTER & FIXED WITH 2 NAILS, TYPICAL. BRACING POSITIVELY FIXED TO WALL PLATE OR TIMBER BEAM AT ENDS WITH 5 NAILS PREFERABLY 2 TO SIDE & 3 TO UNDERSIDE WALL PLATE/TIMBER BEAM. NO NAIL TO BE CLOSER THAN 10 mm TO EDGE OF TIMBER.

ISSUED FOR CONSTRUCTION

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A	ISSUED FOR CONSTRUCTION	JC	SW	26.03.2013

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PROJECT:
PROPOSED BOAT HOUSE
at: 41 ROBERTSON RD, SCOTLAND ISLAND
for: The CRAFTER FAMILY

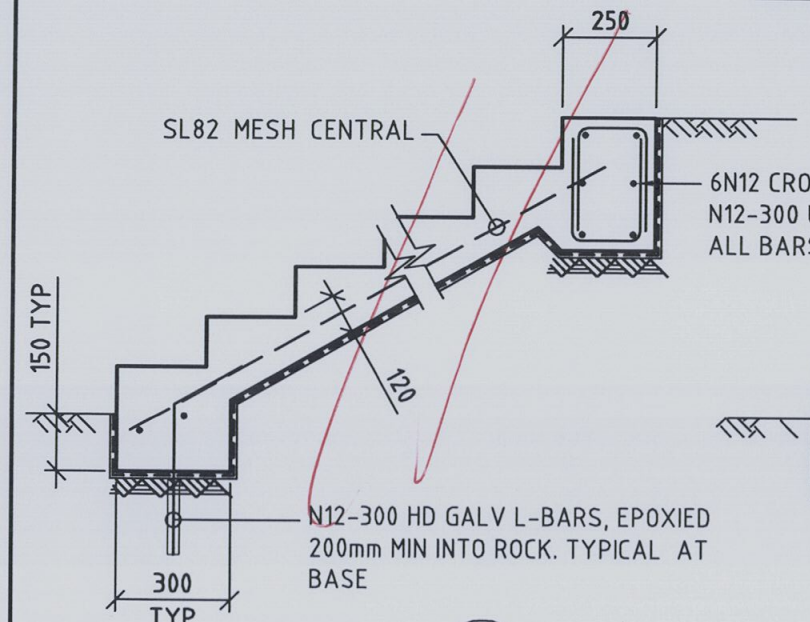
DRAWING TITLE:
BOAT HOUSE SLAB & ROOF PLANS

DESIGN: S.W.	DATE: FEB 2013		
DRAWN: J.C.	SCALE: 1:100		
FILENAME: 10588-S11.00.DWG			
SIGNED:		SIZE	A3
DRAWING No:		REV	A

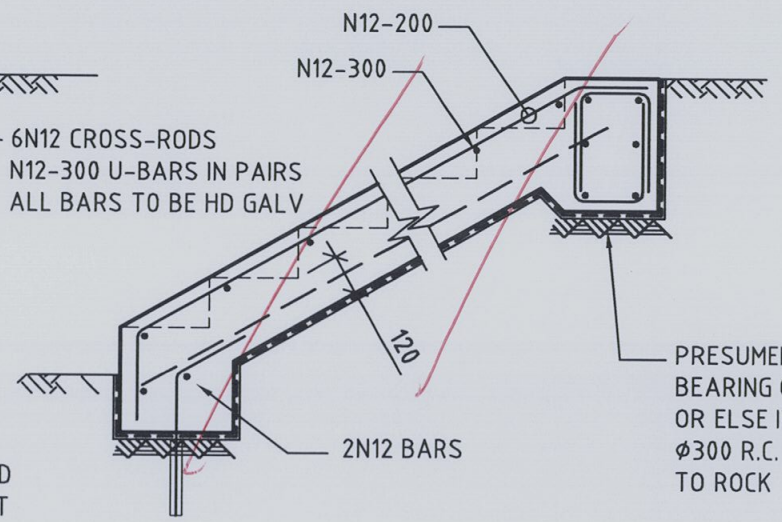
10588-S11.00

NOTES:
- FOR GENERAL NOTES REFER DRG No 10588-S0.00 & S0.01

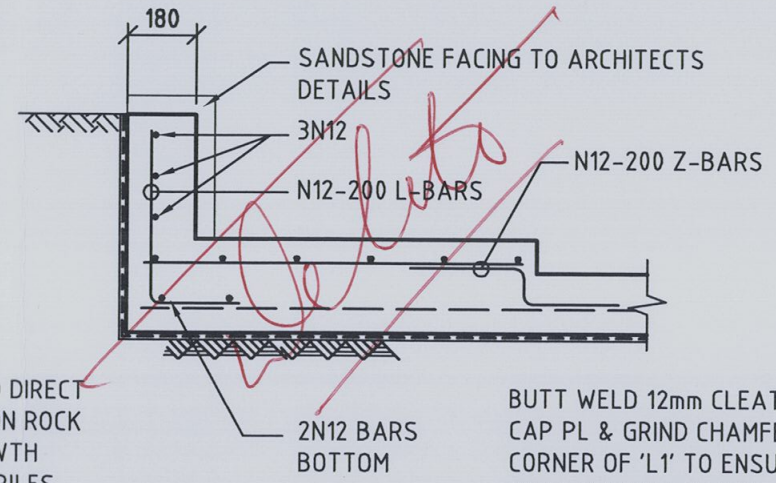
NOTE: ALL BARS IN SLIPWAY TO BE HD GALV



SECTION 2 / S11.00
SCALE 1:20



SECTION 3 / S11.00
SCALE 1:20



SECTION 4 / S11.00
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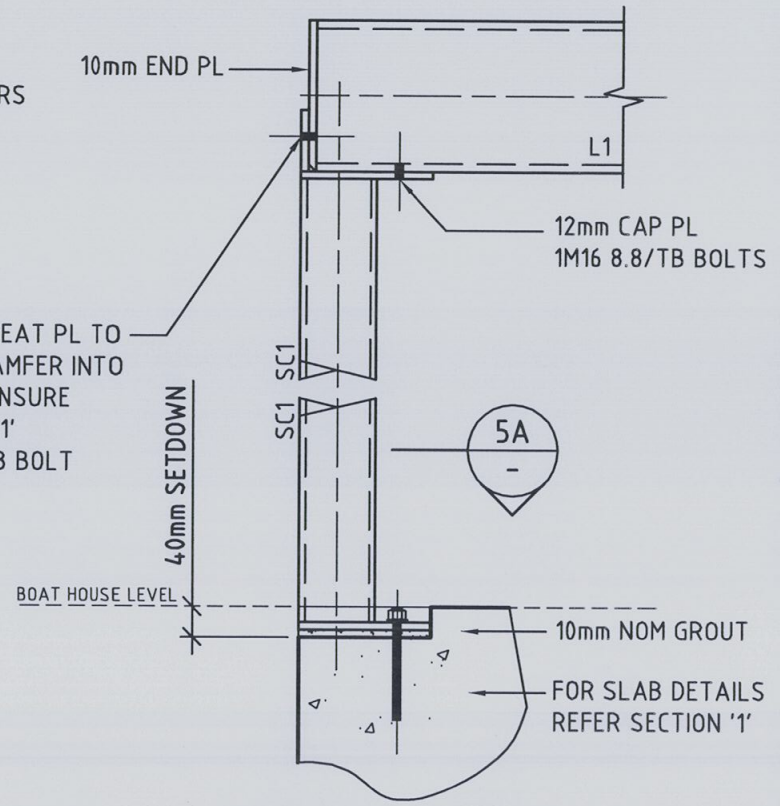
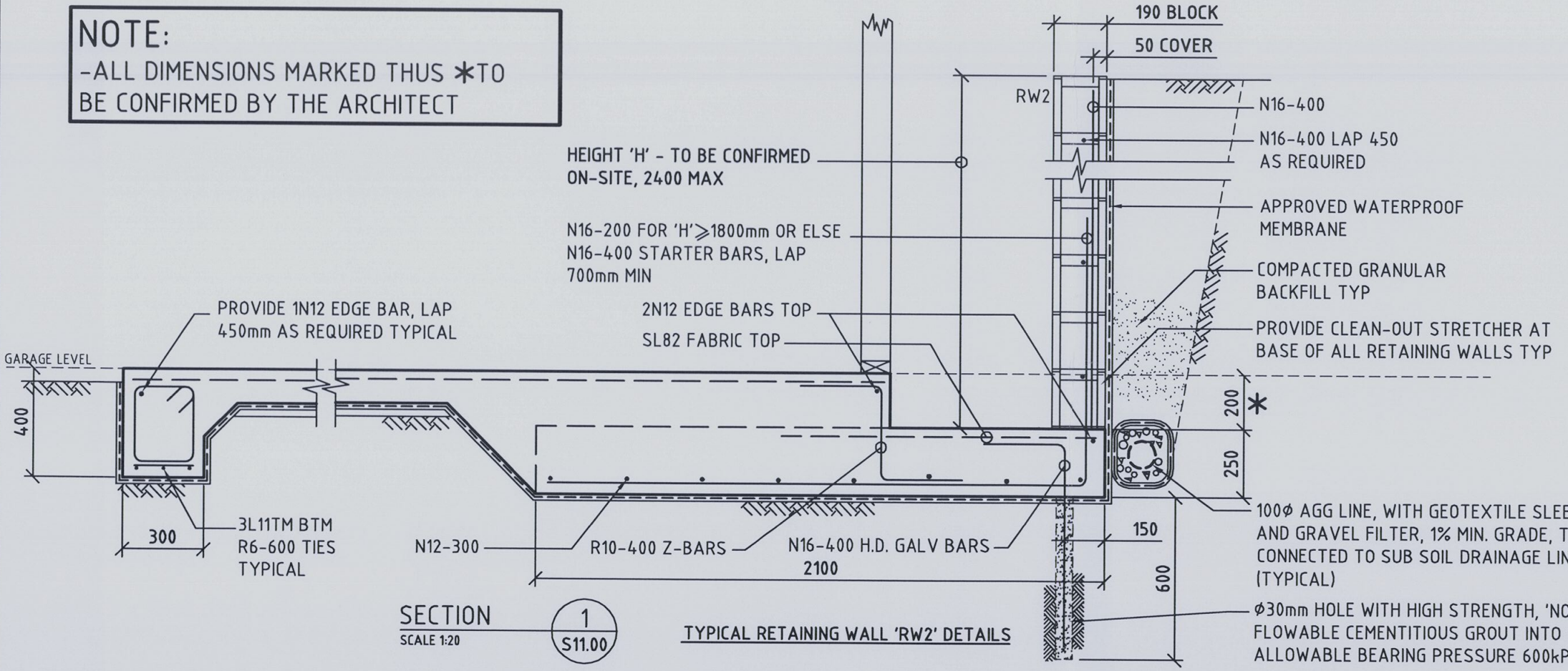


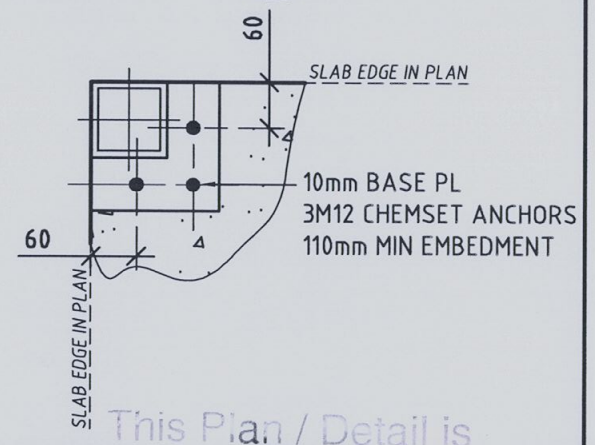
SECTION 5 / S11.00
SCALE 1:10

NOTE:
-ALL DIMENSIONS MARKED THUS * TO BE CONFIRMED BY THE ARCHITECT



SECTION 1 / S11.00
SCALE 1:20

TYPICAL RETAINING WALL 'RW2' DETAILS



SECTION 5A / -
SCALE 1:10

JJ BRIGGS ASSOCIATES
PO BOX 600 BROOKVALE 2100

This Plan / Detail is to be read in conjuction with CONSTRUCTION CERTIFICATE APPROVAL NO 1688cc1

ISSUED FOR CONSTRUCTION

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PROJECT:
PROPOSED BOAT HOUSE
at: 41 ROBERTSON RD, SCOTLAND ISLAND
for: The CRAFTER FAMILY

DRAWING TITLE:
BOAT HOUSE DETAILS

DESIGN: S.W.	DATE: FEB 2013
DRAWN: J.C.	SCALE: AS SHOWN
FILENAME: 10588-S11.00.DWG	
SIGNED:	SIZE A3
DRAWING No: 10588-S11.01	REV A

SCHEDULE OF WORKS:

1. INSTALL STORMWATER PITS, PIPES & OUTLET CONTROL STRUCTURE IN ACCORDANCE WITH STORMWATER MANAGEMENT PLAN & DETAILS.
2. COVER GRATES OF STORMWATER INLET PITS & DRAINS WITH GEOFABRIC & FORM SANDBAG BUND AROUND STORMWATER PITS TO DIRECT WATER INTO PIT.
3. INSTALL TEMPORARY STORMWATER INTERCEPT DRAINS & CHANNELS AROUND BULK EARTHWORKS TO DIRECT SURFACE RUNOFF AWAY FROM TEMPORARY BATTERS.
4. EXCAVATIONS IN SOIL GENERALLY TO HAVE TEMPORARY BATTERS AT 1:1 IN ACCORDANCE WITH GEOTECHNICAL REPORT. IF THIS BATTER IS NOT PRACTICAL OR IF EXISTING GROUND CONDITIONS VARY FROM WHAT IS ASSUMED IN THE GEOTECHNICAL REPORT THEN FURTHER ADVICE SHALL BE SOUGHT FROM THE GEOTECHNICAL ENGINEER. STEEPER BATTERS CAN BE ACHIEVED IN ROCK CUTTINGS. REFER ALSO TO GEOTECHNICAL REPORT RECOMMENDATIONS IN THAT REGARD.
5. PERMANENT BATTERS IN SOIL TO BE MAXIMUM AT 1V:1.5V IN ACCORDANCE WITH GEOTECHNICAL REPORT.

LEGEND:

+1.950 — PROPOSED SPOT LEVELS. ALL PROPOSED LEVELS TO BE CONFIRMED BY THE ARCHITECT.

5 — EXISTING CONTOUR LINES.

(5) — PROPOSED ADJUSTED CONTOUR LINES TO APPROXIMATELY MATCH PREVIOUS GROUND LEVELS

× 8.06 — EXISTING SPOT LEVELS.

EXISTING FOOTPATH TO BE REMOVED AND AREA GENERALLY TO BE LEVELLED WITH MINOR FILLING UP TO 400mm AND MINOR EXCAVATION LESS THAN 200mm

EXCAVATION TO APPROX RL 1.500, FOR NEW BOATSHED & RETAINING WALL FOOTINGS TO BEAR ON WEATHERED SANDSTONE BEDROCK

MINOR EXCAVATION TO APPROX RL 1.750, FOR SLAB ON GROUND FOR NEW BOATSHED

REMOVAL OF EXISTING PATH, RETAINING WALLS & SEWER TANK & EXCAVATION BEHIND NEW RETAINING WALL WITH TEMPORARY BATTERS TO GEOTECHNICAL ENGINEER'S RECOMMENDATIONS

REMOVAL OF EXISTING PATH & RETAINING WALLS & PROPOSED GROUND LEVELS TO TIE INTO EXISTING EASTERN BOUNDARY LEVELS & EXISTING LEVELS ALONG MASONRY RETAINING WALL ADJACENT THE INCLINATOR. MAXIMUM SLOPE 1V:1.5H IN ACCORDANCE WITH GEOTECHNICAL ENGINEER'S RECOMMENDATIONS

JJ BRIGGS ASSOCIATES
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This Plan / Detail is to be read in conjuction with CONSTRUCTION CERTIFICATE APPROVAL NO 1688 CC1

BULK EARTHWORKS NOTES:

GENERAL

GE1 THE INFORMATION CONTAINED ON THESE DRAWINGS IS FOR CIVIL ENGINEERING PURPOSES ONLY. ALL DISCREPANCIES WITH OTHER CONSULTANTS DOCUMENTATION THAT COULD RESULT IN CHANGES TO THE CIVIL ENGINEERING DETAILS SHALL BE REFERRED TO THE ENGINEER PRIOR TO PROCEEDING WITH CONSTRUCTION.

GE2 ALL WORKS SHALL BE CARRIED OUT IN ACCORDANCE WITH THE SPECIFICATIONS FOR THESE WORKS AND/OR AS DIRECTED BY THE SUPERINTENDENT.

GE3 THE CONTRACTOR SHALL LOCATE AND LEVEL ALL EXISTING SERVICES PRIOR TO COMMENCING CONSTRUCTION AND PROTECT AND MAKE ARRANGEMENTS WITH THE RELEVANT AUTHORITY TO RELOCATE AND/OR ADJUST IF NECESSARY. INFORMATION GIVEN ON THE DRAWINGS IN RESPECT TO SERVICES IS FOR GUIDANCE ONLY IS NOT GUARANTEED COMPLETE NOR CORRECT.

GE4 CONTRACTOR IS NOT TO ENTER UPON NOR DO ANY WORK WITHIN ADJACENT LANDS WITHOUT THE PERMISSION OF THE OWNER AND SUPERINTENDENT.

GE5 CONTRACTOR SHALL CLEAR THE SITE BY REMOVING ALL RUBBISH, FENCES AND DEBRIS, ETC. TO THE EXTENT SPECIFIED.

GE6 ALL SITE REGRADING AREAS SHALL BE FINALLY GRADED TO THE SATISFACTION OF THE SUPERINTENDENT.

GE7 SURPLUS EXCAVATED MATERIAL SHALL BE PLACED WHERE DIRECTED OR REMOVED FROM SITE.

GE8 ALL NEW WORKS SHALL MAKE A SMOOTH JUNCTION WITH EXISTING.

GE9 ALL EXCAVATION SLOPES ARE TO BE PROTECTED FROM STORMWATER RUN-OFF. STORMWATER MANAGEMENT TO BE IN ACCORDANCE WITH HYDRAULIC ENGINEER'S DRAWINGS AND ADVICE.

GE10 ALL WORKS ARE TO BE IN ACCORDANCE WITH GEOTECHNICAL REPORT BY 'CROZIER GEOTECHNICAL CONSULTANTS' DATED MAY 2012 REF. 2012-074

GE11 FOUNDATION STRATA & EXCAVATION BATTERS TO BE INSPECTED & CONFIRMED ON SITE BY A GEOTECHNICAL ENGINEER.

SURVEY

SU1 CO-ORDINATES AND LEVELS OBTAINED FROM SURVEY BY 'SOUTER & ASSOCIATES' SURVEYORS DATED 13.12.2011 REF No. 25-77.

SU2 ALL LEVELS ARE TO A.H.D.

SU3 ALL CHAINAGES AND LEVELS ARE IN METRES, AND DIMENSIONS IN MILLIMETRES.

SU4 CONTRACTORS SHALL ARRANGE FOR THE WORKS TO BE SET OUT BY A REGISTERED SURVEYOR.

EARTHWORKS

BE1 OVER FULL AREA OF BULK EARTHWORKS, CLEAR VEGETATION, RUBBISH, SLABS ETC. AND STRIP TOPSOIL.

BE2 CUT AND FILL OVER THE SITE TO LEVELS REQUIRED.

BE3 EXCAVATE AND REMOVE ANY SOFT SPOTS ENCOUNTERED DURING EXCAVATION AND REPLACE WITH APPROVED FILL.

BE4 GENERALLY ON THIS PROJECT ALL NEW STRUCTURES ARE FOUNDED DIRECTLY ON ROCK OR ON PILED FOOTINGS ON ROCK. THE AREAS OF FILL SHOWN ON THE PLAN ARE BEHIND RETAINING WALLS AND/OR RETURN PART OF THE SITE GENERALLY TO THE EXISTING SLOPE AFTER REMOVAL OF EXISTING STRUCTURES. THIS FILL MATERIAL SHALL BE PLACED IN 250mm MAX LAYERS WITH MINIMAL COMPACTION BY MEANS OF SEVERAL PASSES BY EARTH MOVING EQUIPMENT SELECTED.

BE5 ROCK IS TO BE EXCAVATED IN ACCORDANCE WITH GEOTECHNICAL ENGINEER'S RECOMMENDATIONS IN ORDER TO MINIMISE VIBRATIONS TO ADJOINING PROPERTIES.

ISSUED FOR CONSTRUCTION

ISSUE	DESCRIPTION	BY	APR	DATE
A	ISSUED FOR CONSTRUCTION	JC	SW	26.03.2013

ARCHITECT:
de soyres Malone Architects Pty Ltd
Po Box 657 Newport Beach NSW 2106
5 Heron Cove Marina Queen's Parade, West Newport
Contact@dsmarchitects.com
Telephone: (02) 9979 1823
Facsimile: (02) 9979 5263

CHARTERED PROFESSIONAL ENGINEERS:
Waddington Consulting Pty Ltd
ACN 130 522 851
Structural and Civil Engineering Consultants
Suite 6, Level 5, 22 Central Avenue Manly NSW
P.O. Box 1044 Manly NSW 1655
Phone (02) 9976 0070 Fax (02) 9976 0095
Email enquiries@wadconsulting.com

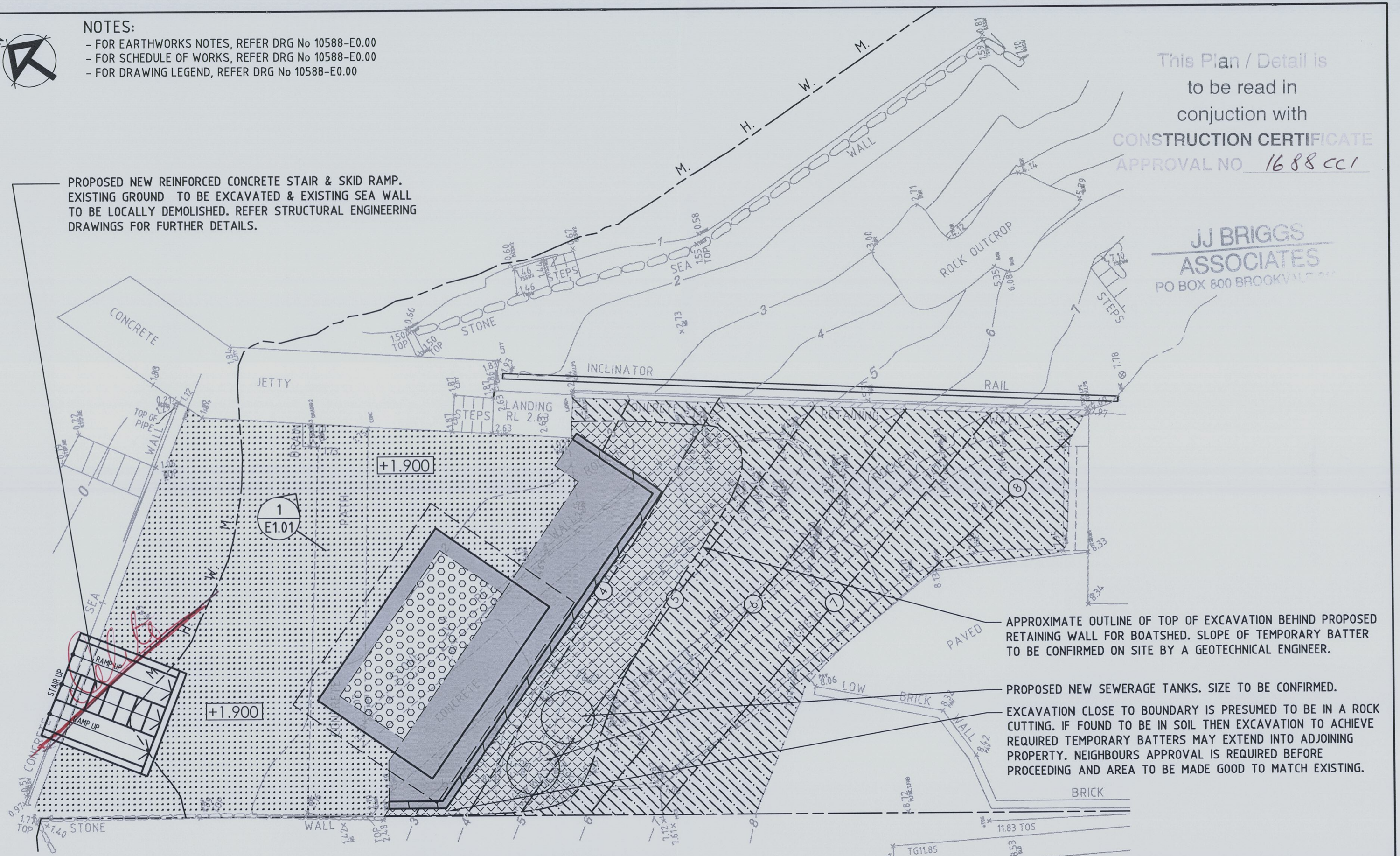
PROJECT:
PROPOSED ALTERATIONS & ADDITIONS
at: 41 ROBERTSON RD, SCOTLAND ISLAND
for: The CRAFTER FAMILY

DRAWING TITLE:
EARTHWORKS NOTES SHEET

DESIGN: K.W.	DATE: MAR 2013
DRAWN: J.C.	SCALE: 1:100
FILENAME: 10588-E1.00.DWG	
SIGNED: K Waddington	SIZE A3
DRAWING No: 10588-E0.00	REV A

NOTES:
- FOR EARTHWORKS NOTES, REFER DRG No 10588-E0.00
- FOR SCHEDULE OF WORKS, REFER DRG No 10588-E0.00
- FOR DRAWING LEGEND, REFER DRG No 10588-E0.00

PROPOSED NEW REINFORCED CONCRETE STAIR & SKID RAMP. EXISTING GROUND TO BE EXCAVATED & EXISTING SEA WALL TO BE LOCALLY DEMOLISHED. REFER STRUCTURAL ENGINEERING DRAWINGS FOR FURTHER DETAILS.



APPROXIMATE OUTLINE OF TOP OF EXCAVATION BEHIND PROPOSED RETAINING WALL FOR BOATSHED. SLOPE OF TEMPORARY BATTER TO BE CONFIRMED ON SITE BY A GEOTECHNICAL ENGINEER.

PROPOSED NEW SEWERAGE TANKS. SIZE TO BE CONFIRMED.

EXCAVATION CLOSE TO BOUNDARY IS PRESUMED TO BE IN A ROCK CUTTING. IF FOUND TO BE IN SOIL THEN EXCAVATION TO ACHIEVE REQUIRED TEMPORARY BATTERS MAY EXTEND INTO ADJOINING PROPERTY. NEIGHBOURS APPROVAL IS REQUIRED BEFORE PROCEEDING AND AREA TO BE MADE GOOD TO MATCH EXISTING.

This Plan / Detail is to be read in conjuction with CONSTRUCTION CERTIFICATE APPROVAL NO 1688 CC1

JJ BRIGGS ASSOCIATES
PO BOX 800 BROOKVALE

BULK EARTHWORKS PLAN
SCALE 1:100

ISSUED FOR CONSTRUCTION

ISSUE	DESCRIPTION	BY	APR	DATE
A	ISSUED FOR CONSTRUCTION	JC	SW	26.03.2013

ARCHITECT:
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Email enquiries@wadconsulting.com

PROJECT:
PROPOSED ALTERATIONS & ADDITIONS
at: 41 ROBERTSON RD, SCOTLAND ISLAND
for: The CRAFTER FAMILY

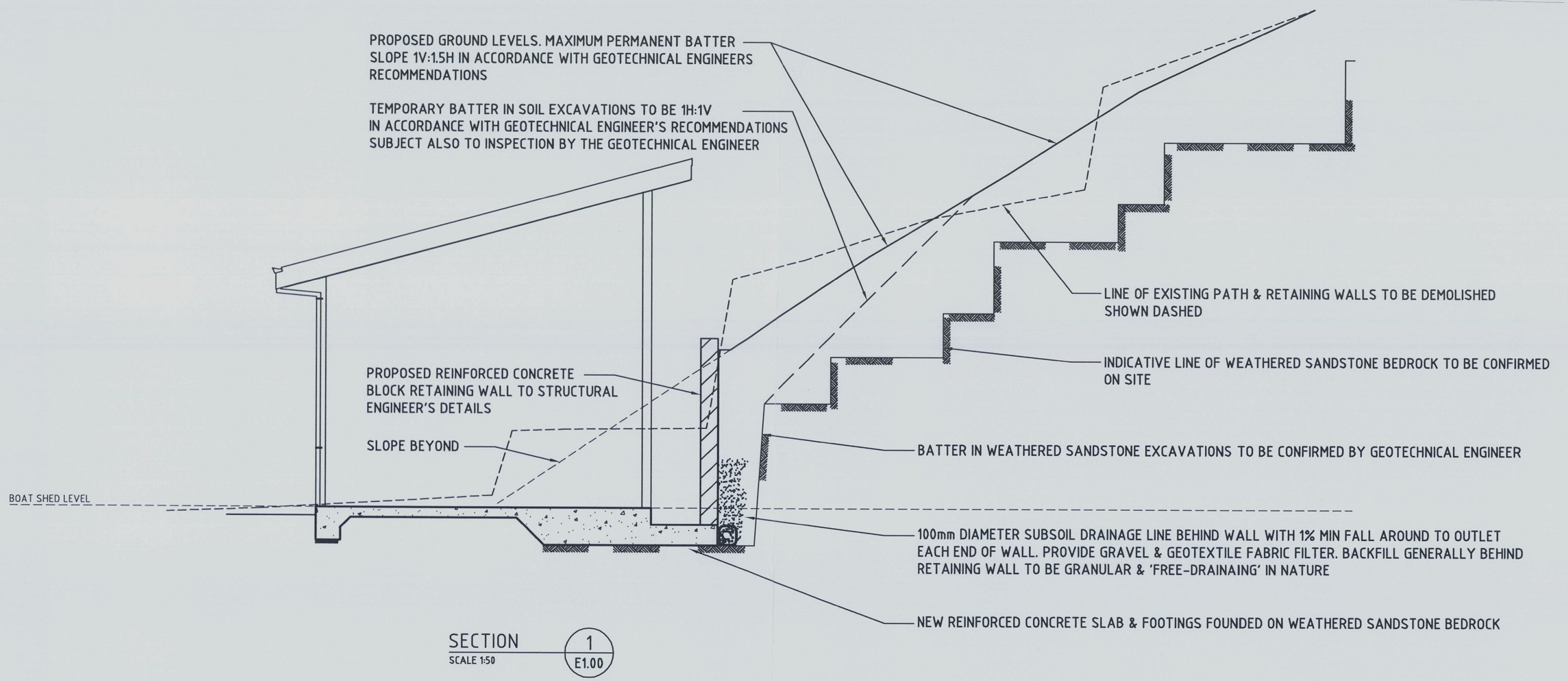
DRAWING TITLE:
EARTHWORKS PLAN

DESIGN: K.W.	DATE: MAR 2013
DRAWN: J.C.	SCALE: 1:100
FILENAME: 10588-E1.00.DWG	
SIGNED: K Waddington	SIZE A3
DRAWING No: 10588-E1.00	REV A

NOTES:
- FOR TYPICAL EARTHWORKS NOTES REFER DRG No 10588-E0.00

JJ BRIGGS ASSOCIATES
PO BOX 800 BROOKVALE 2100

This Plan / Detail is to be read in conjuction with CONSTRUCTION CERTIFICATE APPROVAL NO 1688 EC1



SECTION 1 / E1.00
SCALE 1:50

ISSUED FOR CONSTRUCTION

ISSUE	DESCRIPTION	BY	APR	DATE
A	ISSUED FOR CONSTRUCTION	JC	SW	26.03.2013

ARCHITECT:
de soyres Malone Architects Pty Ltd
Po Box 657 Newport Beach NSW 2106
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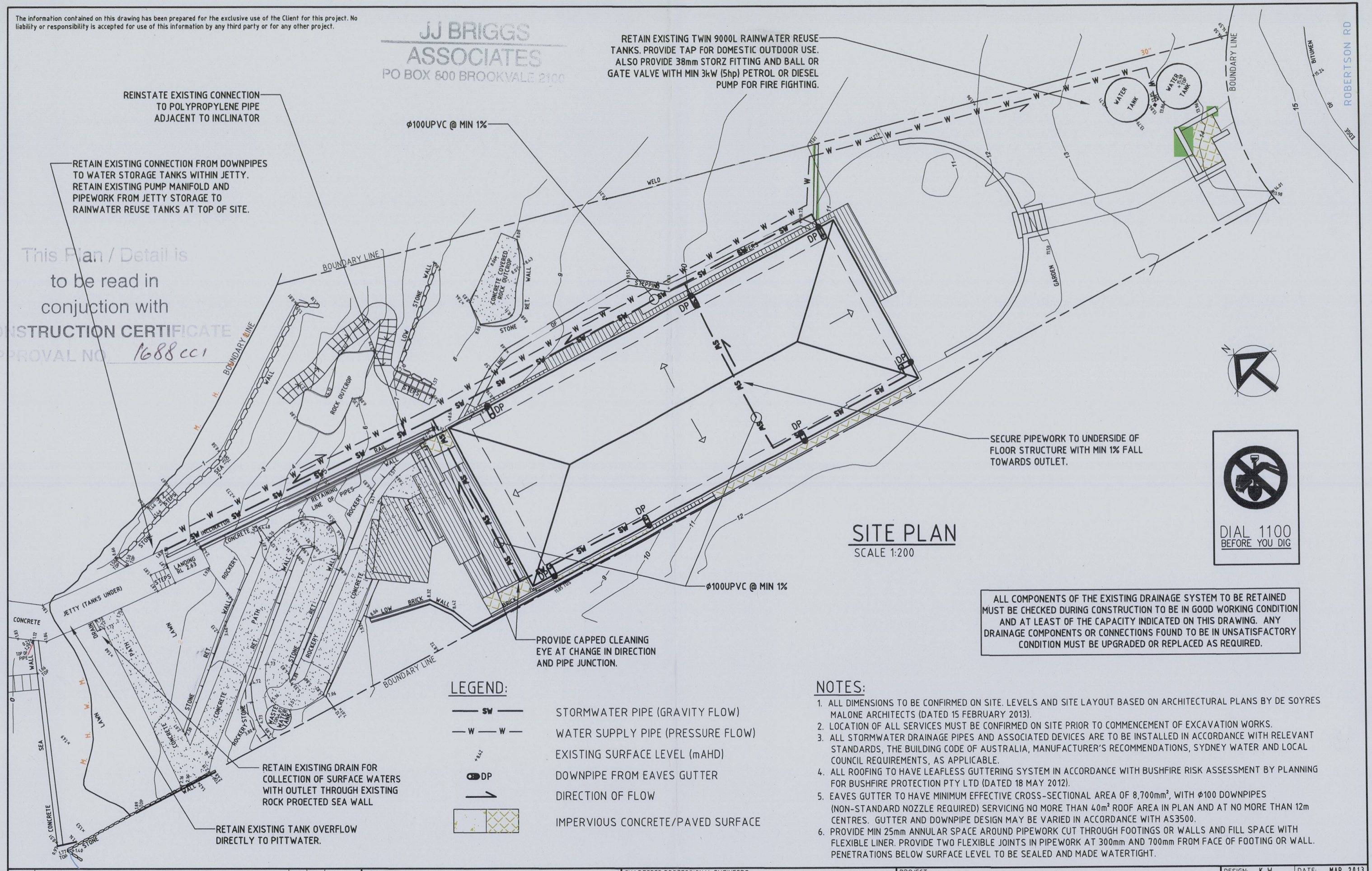
CHARTERED PROFESSIONAL ENGINEERS:
Waddington Consulting Pty Ltd
ACN 130 522 851
Structural and Civil Engineering Consultants
Suite 6, Level 5, 22 Central Avenue Manly NSW
P.O. Box 1044 Manly NSW 1655
Phone (02) 9976 0070 Fax (02) 9976 0095
Email enquiries@wadconsulting.com

PROJECT:
PROPOSED ALTERATIONS & ADDITIONS
at: 41 ROBERTSON RD, SCOTLAND ISLAND
for: The CRAFTER FAMILY

DRAWING TITLE:
EARTHWORKS SECTION

DESIGN: K.W.	DATE: MAR 2013		
DRAWN: J.C.	SCALE: 1:50		
FILENAME: 10588-E1.00.DWG			
SIGNED: K Waddington		SIZE	A3
DRAWING No: 10588-E1.01		REV	A



SITE PLAN
SCALE 1:200

DIAL 1100 BEFORE YOU DIG

ALL COMPONENTS OF THE EXISTING DRAINAGE SYSTEM TO BE RETAINED MUST BE CHECKED DURING CONSTRUCTION TO BE IN GOOD WORKING CONDITION AND AT LEAST OF THE CAPACITY INDICATED ON THIS DRAWING. ANY DRAINAGE COMPONENTS OR CONNECTIONS FOUND TO BE IN UNSATISFACTORY CONDITION MUST BE UPGRADED OR REPLACED AS REQUIRED.

LEGEND:

- SW — STORMWATER PIPE (GRAVITY FLOW)
- W — W — WATER SUPPLY PIPE (PRESSURE FLOW)
- EXISTING SURFACE LEVEL (mAHD)
- DP — DOWNPIPE FROM EAVES GUTTER
- DIRECTION OF FLOW
- IMPERVIOUS CONCRETE/PAVED SURFACE

NOTES:

1. ALL DIMENSIONS TO BE CONFIRMED ON SITE. LEVELS AND SITE LAYOUT BASED ON ARCHITECTURAL PLANS BY DE SOYRES MALONE ARCHITECTS (DATED 15 FEBRUARY 2013).
2. LOCATION OF ALL SERVICES MUST BE CONFIRMED ON SITE PRIOR TO COMMENCEMENT OF EXCAVATION WORKS.
3. ALL STORMWATER DRAINAGE PIPES AND ASSOCIATED DEVICES ARE TO BE INSTALLED IN ACCORDANCE WITH RELEVANT STANDARDS, THE BUILDING CODE OF AUSTRALIA, MANUFACTURER'S RECOMMENDATIONS, SYDNEY WATER AND LOCAL COUNCIL REQUIREMENTS, AS APPLICABLE.
4. ALL ROOFING TO HAVE LEAFLESS GUTTERING SYSTEM IN ACCORDANCE WITH BUSHFIRE RISK ASSESSMENT BY PLANNING FOR BUSHFIRE PROTECTION PTY LTD (DATED 18 MAY 2012).
5. EAVES GUTTER TO HAVE MINIMUM EFFECTIVE CROSS-SECTIONAL AREA OF 8,700mm², WITH ϕ100 DOWNPIPES (NON-STANDARD NOZZLE REQUIRED) SERVICING NO MORE THAN 40m² ROOF AREA IN PLAN AND AT NO MORE THAN 12m CENTRES. GUTTER AND DOWNPIPE DESIGN MAY BE VARIED IN ACCORDANCE WITH AS3500.
6. PROVIDE MIN 25mm ANNULAR SPACE AROUND PIPEWORK CUT THROUGH FOOTINGS OR WALLS AND FILL SPACE WITH FLEXIBLE LINER. PROVIDE TWO FLEXIBLE JOINTS IN PIPEWORK AT 300mm AND 700mm FROM FACE OF FOOTING OR WALL. PENETRATIONS BELOW SURFACE LEVEL TO BE SEALED AND MADE WATERTIGHT.

ISSUE	DESCRIPTION	BY	APR	DATE
A	ISSUED FOR CONSTRUCTION	JC	KW	26.03.13

ARCHITECT:
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Suite 6, Level 5, 22 Central Avenue Manly NSW
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Phone (02) 9976 0070 Fax (02) 9976 0095
Email enquiries@wadconsulting.com

PROJECT:
PROPOSED ALTERATIONS & ADDITIONS
41 ROBERTSON ROAD
SCOTLAND ISLAND

DRAWING TITLE:
STORMWATER MANAGEMENT PLAN

DESIGN: K.W.	DATE: MAR 2013
DRAWN: J.C.	SCALE: 1:200
FILENAME: 10588-C1.00 (A).DWG	
SIGNED:	SIZE A3
DRAWING No: 10588-C1.00	REV A

Waddington Consulting Pty Ltd
ACN 130 522 851
Structural and Civil Engineering
Suite 506, Level 5
22 Central Ave, Manly
P.O. Box 1044
Manly NSW 1655

P (02) 9976 0070
F (02) 9976 0095

Our ref: 10588-L2

7 March 2013

Mr L and Mrs P Crafter
41 Robertson Rd
Scotland Island NSW

Dear Lochiel and Peta,

Subject: ***Proposed Alterations & Additions at 41 Robertson Road, Scotland Island***
Certificate for Engineering Design & Structural Adequacy

Please find attached copies of engineering drawings 10588-S0.00, S0.01, S1.00, S1.01, S2.00, S3.00, relating to the proposed alterations and additions at 41 Robertson Rd, Scotland Island.

I certify that the structural engineering design of the elements shown on the above-mentioned plans has been carried out in accordance with the BCA, relevant Australian Standards and normal engineering practice.

The existing double storey residence consists mainly of timber frame construction with masonry su- floor walls bearing on weathered sandstone bedrock. Overall, the structure appeared to be generally in good condition for its age and capable of withstanding the additional loading from the proposed additions if constructed in accordance with the above mentioned plans, the Building Code of Australia, generally accepted good building practice and relevant Australian Standards.

Please do not hesitate to contact me if you have any queries regarding this project or require any further structural engineering advice.

Yours sincerely,

Simon Waddington
MIEAust CPEng NPER (Structural)
Director
Waddington Consulting Pty Ltd

to be read in
conjuction with
TRUCTION CERTI
1688cc1

JJ BRIGGS
ASSOCIATES

Waddington Consulting Pty Ltd
ACN 130 522 851
Structural and Civil Engineering
Suite 506, Level 5
22 Central Ave, Manly
P.O. Box 1044
Manly NSW 1655

P (02) 9976 0070
F (02) 9976 0095

Our ref: 10588-L3

7 March 2013

Mr L and Mrs P Crafter
41 Robertson Rd
Scotland Island NSW

Dear Lochiel and Peta,

Subject: ***Proposed Boat House at 41 Robertson Road, Scotland Island***
Certificate for Structural Engineering Design

Please find attached copies of engineering drawings 10588-S10.00, S10.01, S11.00, S11.01 relating to the proposed boat house and skid ramp at 41 Robertson Rd, Scotland Island.

I certify that the structural engineering design of the elements shown on the above-mentioned plans has been carried out in accordance with the BCA, relevant Australian Standards and normal engineering practice.

Please do not hesitate to contact me if you have any queries regarding this project or require any further structural engineering advice.

Yours sincerely,

Simon Waddington
MIEAust CPEng NPER (Structural)
Director
Waddington Consulting Pty Ltd

This Plan is
to be read in
conjuction with
CTRUCTION CERTI
1688 CC1

JJ BRIDGE
ASSOCIATES
PO BOX 500 BROOKVALE

Waddington Consulting Pty Ltd
ACN 130 522 851
Structural and Civil Engineering
Suite 506, Level 5
22 Central Ave, Manly
P.O. Box 1044
Manly NSW 1655

P (02) 9976 0070
F (02) 9976 0095

Our ref: 10588-L4

26 March 2013

Mr L and Mrs P Crafter
41 Robertson Rd
Scotland Island NSW

Dear Lochiel and Peta,

Subject: ***Proposed Alterations & Additions at 41 Robertson Road, Scotland Island***
Engineer's Certificate for Stormwater Design

Please find attached a copy of drawing 10588-C1.00 (Waddington Consulting, Rev A, dated 26 March 2013) *Stormwater Management Plan*, relating to the stormwater drainage for the proposed alterations and additions at 41 Robertson Road, Scotland Island.

I certify that the design of the elements shown on the above-mentioned plans has been carried out in accordance with Pittwater Council's Conditions of Consent for DA N0168/12, the BCA, relevant Australian Standards and normal engineering practice.

Please do not hesitate to contact me if you have any queries regarding this project or require any further engineering advice.

Yours sincerely,

K Waddington

Kate Waddington
MIEAust CPEng NPER (Civil)
Director
Waddington Consulting Pty Ltd

to be read in
conjuction with
CTRUCTION CERTI
1688 CC1

JJ BRIGGS
ASSOCIATES
PO BOX 800 BROOKVALE

Waste Management Plan

Outline of Proposal

Site Address: 41 Robertson Road Scotland Island 2105

Proposal prepared by: R W Stidwill Constructions Pty Ltd

Building and other structures currently on site: Existing Dwelling

Brief Description of Proposal: Construction of a new dwelling and boatshed, new waste water system and site landscaping.

The details provided on this form are the intentions for managing waste related to this project.

Dated: 17.3.13

.a.
to be read in
conjuction with
TRUCTION CERTI
1688 CC /

JJ BRIGGS
ASSOCIATES
PO BOX 600 BROOKVALE

Demolition Stage One

Materials on site	Destination			
	Reuse and Recycling			Disposal
Type of material	**Estimated volume (m^3) or Area (m^2) or weight (t)**	**ON SITE**	**OFF SITE**	**DISPOSAL**
Excavation material	5 m^3	Reuse part as on site fill	Nil	Remainder to landfill site by waste contractor
Green Waste	4 m^3	Nil	Kimbriki Recycling by ANL for woodchip mulch and soils	Nil
Bricks	10 m^3	Small amount to be used in landscaping /garden	Kimbriki Recycling for reuse as aggregates, sand and recycled road bases	Nil
Tiles	2 m^3	Some for reuse as fill on site behind walls or as site fill	Kimbriki Recycling for reuse as aggregates, sand and recycled road bases	Nil
Concrete	4 m^3	Slab remains to be included in new build	Nil	Nil
Timber	15 m^3 Oregon and Cypress	Reuse for formwork, studwork, and structural beams etc.	Potential for firewood within the community	Remainder to landfill site by waste contractor
Plasterboard	4 m^3			To landfill site by waste contractor
Metals	3 m^3 Copper, Steel	Nil	Some to metal recyclers for reuse	Small remainder to site landfill
Asbestos	2 m^3	Nil	Nil	Certified asbestos abatement contractor to remove to approved landfill site
Other waste eg. Ceramic, paints	1 m^3	Small amount for onsite fill	Nil	Remainder to landfill site by waste contractor
Plastics, PVC tubing, cardboard	1 m^3	Nil	Nil	Remainder to landfill site by waste contractor

Demolition Management Notes

Measures to be considered that may also save resources and minimise waste at the demolition stage:

- Selected deconstruction versus straight demolition
- Builder will ensure the site is wetted down to keep dust to a minimum.
- All existing trees are to be retained unless noted otherwise on the approved architectural or landscape drawings.
- Waste will be separated and stored on site for reuse or recycling. The site operations will be managed in such a way as to ensure minimal waste creation and maximum reuse and recycling.
- Through staff training and stipulated in contracts with sub contractors waste management will be considered and effective measures in place to minimise waste going to landfill.
- Ongoing checks by site foreman will ensure systems and procedures are in place and adhered to.
- A separate area will be set aside for sorted wastes.

Stage Two Construction

Measures to be considered that may also save resources and minimise waste at the construction stage:

- Purchasing-ordering the correct quantities of materials and prefabrication of materials where possible
- Reusing formwork
- Minimising site disturbance, limiting unnecessary excavation
- Careful source separation of off cuts to facilitate reuse, resale or efficient recycling
- Co ordination/ sequencing of various trades

For purposes involving construction

Materials on site	**Destination**			
	Reuse and Recycling			**Disposal**
Type of material	**Estimated volume (m^3) or Area (m^2) or weight (t)**	**ON SITE**	**OFF SITE**	**DISPOSAL**
Excavation material		Covered in section Stage 1 as part of demolition	Nil	Nil
Green Waste		Covered in section Stage 1 as part of demolition	Nil	Nil
Bricks	$0.5m^3$	Some for reuse as fill on site behind walls or as site fill	Kimbriki Recycling for reuse as aggregates, sand and recycled road bases	Nil
Tiles	$0.5m^3$	Some offcuts for reuse as fill on site behind walls or as site fill	Offcuts to Kimbriki Recycling for reuse as aggregates, sand and recycled road bases	Nil
Concrete		Nil	Nil	Nil
Timber	$0.5m^3$ Hardwoods, oregon and pine	Offcuts used for studwork and formwork	Pallets returned and excess timber returned to supplier. Certain timber for firewood	Small amount to landfill site by waste contractor
Plasterboard	$1m^3$	Offcuts used where possible	Nil	Remainder to landfill site by waste contractor
Metals	$0.5m^3$ Copper, Stainless Steel, Galvanised Steel	Nil	Some to metal recyclers for reuse	Small amount to landfill site by waste contractor
Asbestos		Nil	Nil	Nil

Other waste eg. Ceramic, paints	$1m^3$	Some for reuse as fill on site behind walls or as site fill	Nil	Nil
Plastics, PVC tubing, cardboard	$1m^3$	Cardboard used in walkways to keep site clean	Kimbriki Recycling for reuse in paper production	Nil

Construction management notes

- Builder will ensure the site is wetted down to keep dust to a minimum.
- All existing trees are to be retained unless noted otherwise on the approved architectural or landscape drawings.
- Make good all areas of disturbed vegetation at the completion of the work.
- Waste will be separated and stored on site for reuse or recycling. The site operations will be managed in such a way as to ensure minimal waste creation and maximum reuse and recycling.
- Through staff training and stipulated in contracts with sub contractors waste management will be considered and effective measures in place to minimise waste going to landfill by contractors.
- Ongoing checks by site foreman will ensure systems and procedures are in place and adhered to.
- A separate area will be set aside for sorted wastes.

PITTWATER COUNCIL

GEOTECHNICAL RISK MANAGEMENT POLICY FOR PITTWATER
FORM NO. 2 – PART B – To be submitted with detailed design for Construction Certificate

PART B Declaration made by Geotechnical Engineer or Engineering Geologist and/or Coastal Engineer (where applicable) in relation to the incorporation of the Geotechnical issues into the project design

I Trent Crozier (insert name) on behalf of Crozier Geotechnical Consultants (trading or company name)

on this the 26th March 2013 (date)

certify that I am a Geotechnical Engineer or Engineering Geologist and/or Coastal Engineer as defined by the Geotechnical Risk Management Policy for Pittwater - 2009 and I am authorised by the above organisation/company to issue this document and to certify that the organisation/company has a current professional indemnity policy of at least $2million. I also certify that I have reviewed the design plans and structural design plans for the Construction Certificate Stage and that I am satisfied that

Please mark appropriate box

☑ the structural design meets the recommendations as set out in the Geotechnical Report or any revision thereto

☐ the structural design has considered the requirements set out in the Geotechnical Report for Excavation and Landfill both for the excavation/construction phase and the final installation in accordance with Clause 3.2 (b)(iv) of the Geotechnical Risk Management Policy.

Geotechnical Report Details:

Report Title: Alterations & Additions #2012-074
Report Date: 21st May 2012
Author: T. Crozier

Documentation which relates to or is relied upon in report preparation:

Structural Design & Earthworks
- Waddington Consulting - Dwg. Nos. 10588-EO.00, 1.00, 1.01, Rev. A, March 2013
" 50.00 → 11.01 Rev. A, Feb 2013

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

Plans to be read in conjuction with CONSTRUCTION CERTIFICATE 1688 CC/

Registered Professional Engineer 691550
Mr Peter Crozier
MIEAust CPEng (Civil / Geotechnical)
NPER
Signature ..... Date 26/3/2013
Registered on the NPER in the area of practice of
Civil / Geotechnical
National Professional Engineers Register

PITTWATER COUNCIL

JJ BRIGGS
ASSOCIATES
PO BOX 500 BROOKVALE

GEOTECHNICAL RISK MANAGEMENT POLICY FOR FITTWATER
FORM NO 2 - PART A - To be submitted with detailed design for Construction Certificate

JJ BRIGGS
ASSOCIATES
BROCKVALE 2100

This Plan / Detail is
to be read in
conjuction with
CONSTRUCTION CERTIFICATE
APPROVAL NO 1688CC1

B8, B15, B15

NSW HEALTH

Certificate of Accreditation

Aerated Wastewater Treatment System

This Certificate of Accreditation is hereby issued by the Director-General of the NSW Department of Health pursuant to Clause 41(1) of the Local Government (General) Regulation 2005.

System: ***Econocycle model ENP 10-2 AWTS***

Manufacturer: ***Eco-Septic Pty Ltd trading as Econocycle***

Of: ***15 Econo Place, Silverdale, NSW, 2752***

This is to certify that the Econocycle model ENP 10-2 AWTS as described in Schedule 1, has been accredited as a sewage management facility for use in a single domestic premises in NSW. This accreditation is subject to the conditions of accreditation and permitted uses specified in Schedule 2, and in accordance with the Sewage Management Facility Accreditation Guideline, May 2005.

to be read in conjuction with
TRUCTION CERTI
1688 cc

Director, Environmental Health Branch
for Director-General (delegation PH335)

Date of Issue: 27 October 2010

Certificate No: AWTS 017

This Certificate of Accreditation is in force until 31 December 2015

JJ BRIG
ASSOCIATES

Schedule 1: Specification

Econocycle model ENP 10-2 Aerated Wastewater Treatment System

General Description

The Econocycle ENP 10-2 Aerated Wastewater Treatment System (AWTS) is designed to treat the wastewater from a residential dwelling occupied by a maximum of 10 persons. The Econocycle ENP 10-2 AWTS is contained in a vertical axis type cylindrical tapered injection moulded polypropylene septic tank and collection well each with design capacities of either 3000 litres (Everhard tanks) or 3200 litres (Reln tanks). The operational water level in the system is 1300 mm. The system consist of:

- A primary treatment/septic tank with a capacity of 3000 litres;
- A secondary treatment/collection well with a capacity of 3000 litres and containing:
    - A contact aeration chamber with a total capacity of 2100 litres, divided into two sections and each containing a block of contact filter media measuring 800 mm long x 800 mm wide x 1200 mm high with a surface area of 50 m^2;
    - A sedimentation/clarification chamber with a capacity of 380 litres;
    - An irrigation pump chamber with a capacity of 380 litres incorporating a capacity of 300 litres for chlorine contact of the effluent;
- A chlorine disinfection unit installed on the outlet of the clarifying filter;
- Air is supplied to the contact aeration chamber by an air blower with an output of 80 litres/minute at 1.5 m water depth;
- An submersible irrigation pump which delivers a minimum flow of 2.0 m^3/hour at a minimum head of 7 m, or better.

Schedule 2: Conditions of Accreditation

1.0 General

1.1 For each installation the owner/occupier of a premises shall make an application to the Local Authority to install an Econocycle ENP 10-2 AWTS as a waste management facility in accordance with Section 68, Part C of the Local Government Act 1993 and Clause 26 of the Local Government (General) Regulation 2005.

1.2 The Econocycle ENP 10-2 AWTS shall be supplied, constructed and installed in accordance with the design as submitted and accredited by the NSW Department of Health.

1.3 Any modification or variations to the accredited design of the Econocycle ENP 10-2 AWTS shall be submitted for separate consideration and variation of the Certificate of Accreditation by the Director-General of the NSW Department of Health.

1.4 Each Econocycle ENP 10-2 AWTS shall be permanently and legibly marked on a non-corrosive metal plaque or equivalent, attached to the lid with the following information:

- The brand name of the system;
- The manufacturer's name or registered trademark;
- The month and year of manufacture.

1.5 The manufacturer shall supply with each Econocycle ENP 10-2 AWTS and owner's manual, which sets out the care, operation, maintenance and on-going management requirements of the system.

1.6 The manufacturer shall provide the following information to each local authority where it is intended to install an AWTS in their area once Departmental accreditation has been obtained:

- Statement of warranty
- Statement of service life
- Quality Assurance Certification
- Installation Manual
- Service Manual
- Owner's Manual
- Service Report Form
- Engineering Drawings on A3 format
- Detailed Specifications
- A4 Plans
- Accreditation documentation from NSW Health.

2.0 Installation and Commissioning

2.1 The Council should require that on completion of the installation of the Econocycle ENP 10-2 AWTS, the system is inspected and checked by the manufacturer or the manufacturer's agent. The manufacturer or the agent is to certify that the system has been installed and commissioned in accordance with its design, conditions of accreditation and any additional requirements of the council.

2.2 The Council should require that all electrical work must be carried out by a licensed electrician and in accordance with the relevant provisions of AS/NZS 3000.

3.0 Maintenance

3.1 The Council shall require the owner/occupier of a premises to enter into an annual service contract with a representative of Econocycle or a service contractor or company acceptable to the Council.

3.2 The Econocycle ENP 10-2 AWTS shall be serviced at three monthly intervals in accordance with the details set out in the owner's and service manual.

3.3 Each three monthly service shall include a check on all mechanical, electrical and functioning parts of the system including:

- The chlorinator and replenishment of the disinfectant,
- Pumps, air blower, fan or air venturi,
- The alarm system (where possible),
- Slime growth on the filter media,
- Operation of the sludge return system,
- The effluent irrigation area,
- On-site testing for free residual chlorine, pH and dissolved oxygen.

3.4 The Council should require that a service report sheet, in triplicate, is completed for each service. The original shall be given to the owner, the duplicate forwarded to the Council and the triplicate retained by the service contractor.

4.0 On-going Management

4.1 The owner's manual prepared by the manufacturer shall contain a plan for the on-going management of the Econocycle ENP 10-2 AWTS. The plan shall include details of:

- the treatment process,
- procedures to be followed in the event of a system failure,
- emergency contact numbers,
- maintenance requirements,
- inspection and sampling procedures to be followed as part of the on-going monitoring program developed by the local authority.

4.2 Effluent from the Econocycle ENP 10-2 AWTS taken in any random grab sample shall comply with the following standard:

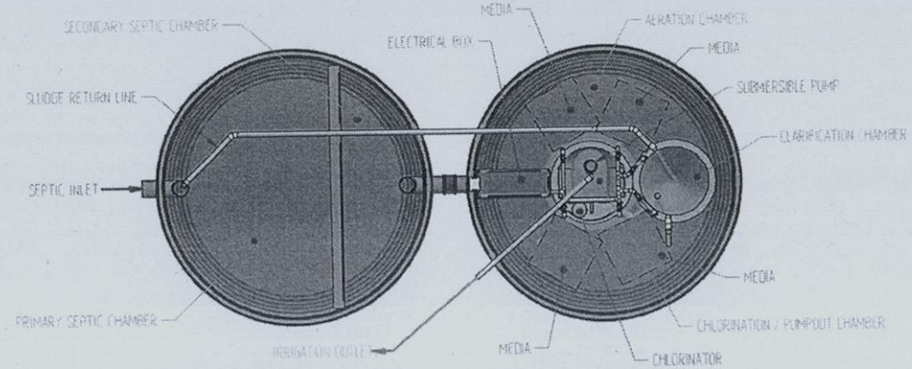
- BOD^5 (less than 30 mg/L)
- SS (less than 45 mg/L)
- Thermotolerant coliforms (less than 100 cfu/100 ml)
- Free residual chlorine (greater than 0.2 and less than 2.0 mg/L)

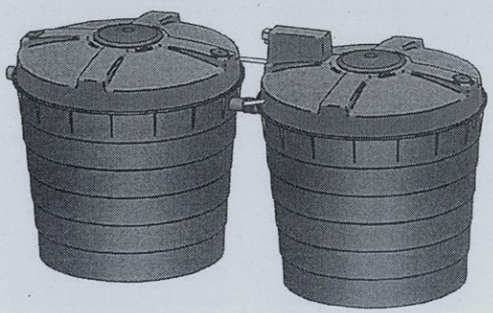
5.0 Permitted uses

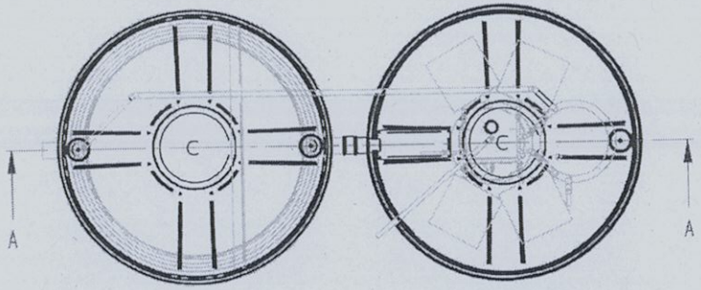
5.1 The effluent is suitable for re-use for garden purposes by way of any of the forms of irrigation as described in AS/NZS 1547:2000:

- above ground spray irrigation; or
- surface drip irrigation covered by mulch; or
- sub-surface drip irrigation installed at around 100 mm depth.

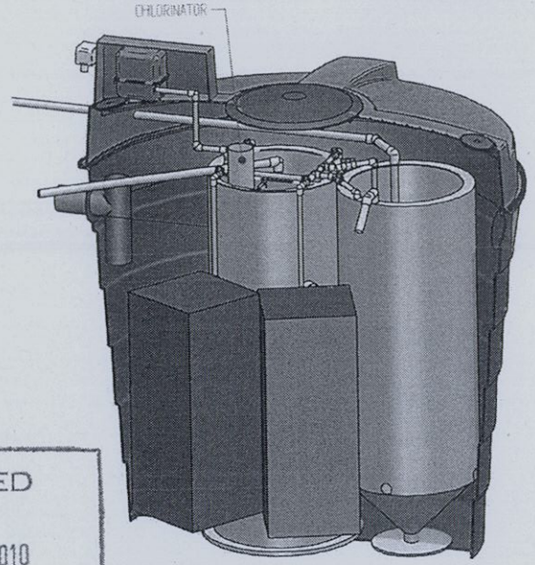
Each of the three forms of irrigation is subject to the approval of the Council.

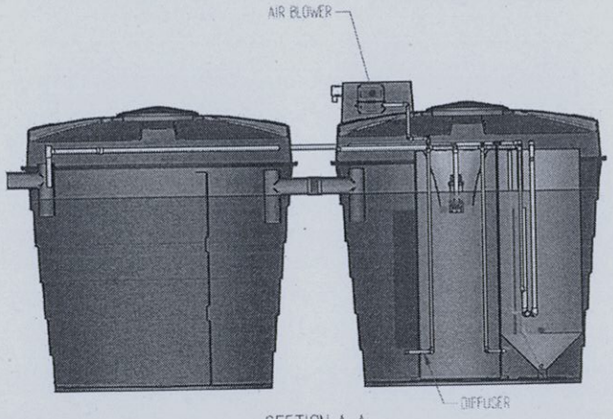






SEPTIC TANK TREATMENT TANK





SECTION A-A

APPROVED

27 OCT 2010

DEPARTMENT OF HEALTH, N.S.W.

NOTES:
1. PARTS AND/OR CONFIGURATIONS MAY CHANGE WITHOUT NOTICE.
2. SEPTIC TANKS MANUFACTURED AND TESTED IN ACCORDANCE WITH AS/NZS 1546.1:2008

Econocycle
AERATED WASTEWATER TREATMENT SYSTEMS

UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE IN MM

SCALE	DO NOT SCALE
DRAWN BY	P. MCKAY
CHECKED BY	P. MCKAY
DATE PLOTTED	19/10/2010
DRAWING LAST MODIFIED BY	P. MCKAY
MODEL LAST MODIFIED BY	P. MCKAY

PROJECT: PLASTIC TWIN TANK

TITLE: PLASTIC TWIN TANK SYSTEM CERTIFICATION DRAWING

SHEET SIZE: A3

COAT/TREAT: -

PART #: 124_2210

REVISION: A.3

SHEET No: 1 OF 1

1108

Levy Online Payment Receipt

LONG SERVICE CORPORATION

Thank you for using our Levy Online payment system. Your payment for this building application has been processed.

Applicant Name:	PETA CRAFTER
Levy Application Reference:	5041173
Application Type:	DA
Application No.:	N0168/12
Local Government Area/Government Authority:	PITTWATER COUNCIL
Site Address:	41 ROBERTSON ROAD
	SCOTLAND ISLAND
	NSW
	2105
Value Of Work:	$963,317
Levy Due:	$3,371
Levy Payment:	$3,371
Online Payment Ref.:	693178506
Payment Date:	18/03/2013 4:11:37 PM

H/W I F
Contract $1.02 million

This Plan / Detail is
to be read in
conjuction with
CONSTRUCTION CERTIFICATE
APPROVAL NO 1688CC

JJ BRIGGS
ASSOCIATES
800 BROOKVALE 210

Mechanical and Construction Insurance Pty Ltd
A.B.N 58 106 907 055
AR 270 984

www.mecon.com.au

03 May 2012 **Policy Number: AP -36934**

CERTIFICATE OF CURRENCY

Dear Sir/Madam

This is to certify that the undermentioned policy is current to the due date shown below.

Type of Insurance:	Construction - Annual Project
Insured Name:	RW Stidwill Constructions Pty Ltd
Territorial Limit:	Within Australia but not north of the 25th parallel south
Current Period of Insurance:	06 April 2012 to 06 April 2013

INTEREST INSURED	SUM INSURED
Section One - Material Damage	
Maximum Project Value	$2,500,000
Principal Supplied Materials	$20,000
Existing Structures	$20,000
Contractors Plant	$20,000
Sublimit $2500 Any one plant item	
Variations & Escalation	$504,000
Removal of Debris	$256,000
Professional Fees	$252,000
Expediting Costs	$125,000
Mitigation Costs	$126,000
Section Two - Public Liability	
Public Liability	$20,000,000
Products Liability	$20,000,000
Vibration, Weakening or the Removal of Support	$20,000,000
Property in Care, Custody or Control	$50,000

JJ BRIGGS
ASSOCIATES
PO BOX 800 BROOKVALE 2100

This Plan / Detail is
to be read in
conjuction with
CONSTRUCTION CERTIFICATE
APPROVAL NO 16880/1

INSURER	PERCENT
Great Lakes Australia, ABN 18964580576, AFSL 318603	100.00%

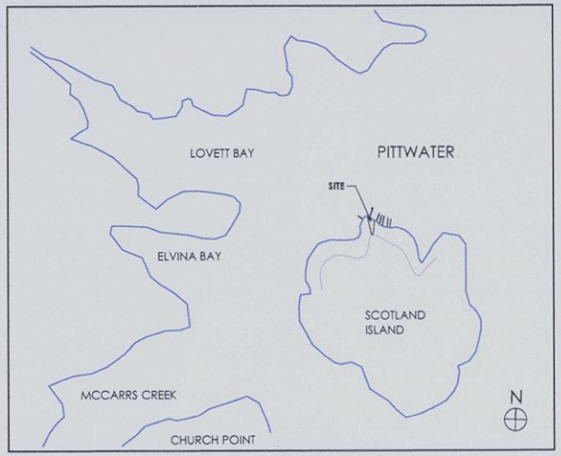
Simon Marr

SYDNEY
Level 4, 50 Margaret Street
Sydney NSW 2000 Australia
PO Box R1789
Royal Exchange NSW 1225
Tel: (02) 9252 1040
Fax: (02) 9252 1050

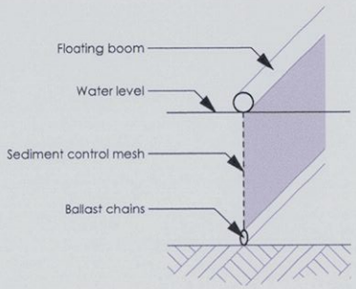
MELBOURNE
271-273 Wellington Road
Mulgrave VIC 3170
PO Box 8226 Monash University LPO
Clayton VIC 3800
Tel: (03) 8562 9180
Fax: (03) 8562 9181

BRISBANE
Suite 21, Level 3, 50-56 Sanders Street
Upper Mt Gravatt QLD 4122
PO Box 6037
Upper Mt Gravatt QLD 4122
Tel: (07) 3146 0100
Fax: (07) 3114 0445

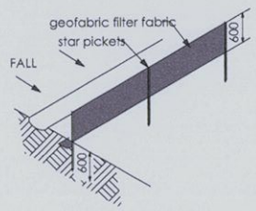
FOR CONSTRUCTION CERTIFICATE
NOT FOR CONSTRUCTION



2 Location Sketch



3 Floating Sediment Boom Fence

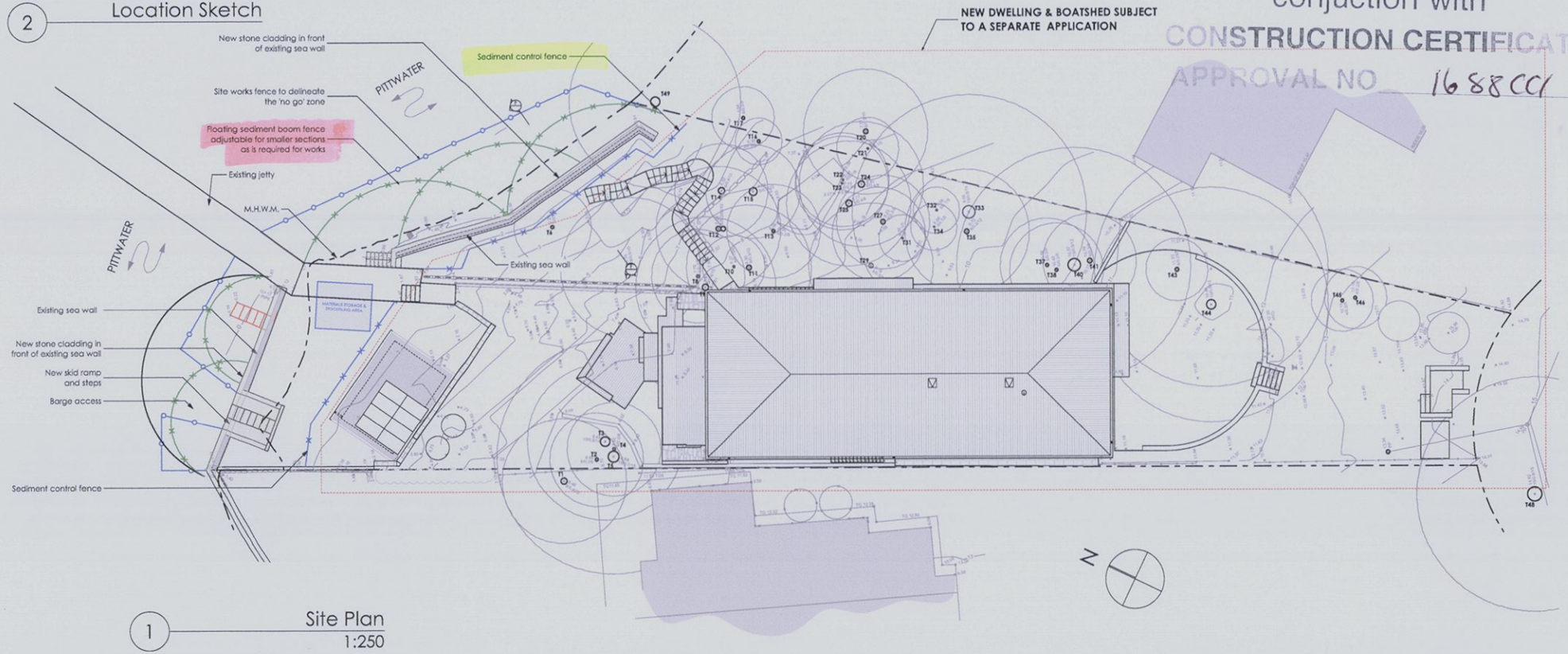


4 Sediment Control Fence

SEDIMENT CONTROL FENCE - TYPE 1
1.2m star pickets to be driven in a minimum of 600mm at a maximum of 1800mm centres.
Self-supporting geotextile fabric to be securely fastened to the upslope side of each picket with tie wires and turned upslope in a trench at least 200mm deep.
void joints in the filter fabric if possible but if necessary, joints are to be made at a support post with a minimum of 150mm overlap of fabric, securely stitched together with both ends fixed to the post.
Backfill the trench over the toe of the fabric.
Inspect for any sagging, undercutting or overtopping after rain and repair as necessary.

JJ BRIGGS ASSOCIATES
PO BOX 800 BROOKVALE 2100

This Plan / Detail is to be read in conjuction with CONSTRUCTION CERTIFICATE APPROVAL NO 1688 CC/



1 Site Plan
1:250

de Soyres Malone Architects Pty Ltd
Nominated Architect: James de Soyres Reg. No. 6769
PO Box 657, Newport Beach, New South Wales 2106
5 Rowell Marina, Queens Parade West, Newport
E: contact@dsmarchitects.com T: (02) 9979 1823

Proposed Skid Ramp and Sea Wall Cladding
at 41 Robertson Road, Scotland Island, NSW 2105
Lot 301 in D.P. 514985 / Lic. 495843

Location and Site Plan	Scale:	1:250/nts
02/04/2013	Project No:	1108 a
Construction Certificate	Drawing No:	CC-51

BUILDING SPECIFICATION

for

Additions and Alterations
to an Existing Dwelling

at

41 Robertson Road, Scotland Island, NSW 2105

for

Lochiel and Peta Crafter

Prepared by:

de Soyres Malone Architects Pty Ltd
PO Box 657, Newport Beach, NSW 2106
T: 02 9979 1823 / E: contact@dsmarchtitects.com
W: www/dsmarchitects.com

Date of issue: 27 March 2013

Project reference no: 1108

to be read in
conjuction with
CTRUCTION CERTI
1688cc1

JJ BRIGGS
ASSOCIATES
PO BOX 500 BROOKVALE

GENERAL BUILDING SPECIFICATION – CONTENTS PAGE

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6	Excavation and Fill
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7	Water Distribution
9	Sanitary Sewerage
9	Greywater Collection and Reuse
10	Piped Energy Distribution
10	Storm Drainage
	Masonry
11	Brickwork and Blockwork
	Metals
12	Glass Balustrades
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	Timber and Plastics
13	Carpentry
14	Fibre Cement Products
15	Timber Trusses (Nailplate)
15	Waterproofing
15	Wet Area Membrane
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	Doors and Windows
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22	Painting
	Mechanical
23	Floor Drains
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24	Domestic Air-conditioning
24	Floor Heating and Equipment
	Electrical
24	Electrical Distribution
25	Lighting
26	Communication Cabling

GENERAL CONDITIONS FOR CONDUCTING WORK

Certificate of Insurance
The contractor shall submit the following certificates of insurance to the owner before commencement of work:
a. Home owner's warranty insurance;
b. Public liability insurance;
c. Workers compensation and employer's liability.

Project Identification Signage
The contractor shall erect signs identifying the private certifier and the contractor and other signs, which are supplied by other consultants. The signs shall be maintained in good condition throughout the currency of the contract and be removed upon the completion of the works.

National Construction Code
There shall be compliance with the current edition of the National Construction Code throughout the project.

Building Standards and Other Documents
There shall be compliance with the applicable clauses of the current Australian building standards, documents referred to in this specification, the project specification and other relevant building regulations and technical bulletins throughout the currency of the contract.

Services, Fees and Taxes
The contractor shall be responsible for connecting services such as water, sewerage, drainage, electricity and gas and shall apply for the relevant permits or certificates and pay associated fees levied by the relevant bodies for these connections. Where required, notices shall be issued to such bodies.

The contractor shall obtain and pay for a scaffolding permit.

Fees relating to occupational health and safety legislation shall be paid, where applicable.

Tax shall be paid on items where such tax is applicable. If tax is not applicable, tradesmen shall request from the owner, via the contractor, a tax exemption certificate for use when ordering specified materials.

Cooperation with Other Trades
The contractor shall advise sub-contractors, suppliers and installers of material of the requirements of this general specification. There shall be cooperation with other trades as necessary to resolve possible problems before starting work and during work.

Commencing Work on Site
Notwithstanding that possession of the site has been given to the contractor, the contractor shall not commence work on the site until he has supplied the certificates of insurance.

Conditions at the site shall be inspected and the dimensions on site need to be checked prior to commencing work. Do not scale drawings, which are clearly diagrammatic and/or marked 'not to scale' or NTS. The architect shall be notified of any omissions or conflict between the drawings and the specification. Starting work means that the contractor and sub-contractors totally accept the conditions of this general specification and the project specification.

Site Control
The contractor shall be responsible for activities on the site, including:
a. Providing access for authorised persons and restricting access by unauthorised persons.
b. Taking necessary precautions to secure the assets of the owner.
c. Except as otherwise provided in the contract, directing the delivery of materials (including sub-contractor's materials) for the works, providing appropriate space for storage; note: waste building materials and flammable liquids shall not be stored in the building.
d. Providing ample working space and equipment for sub-contractors to work and protect finished work.

e. Taking appropriate precautions to keep poisons and other injurious substances in places secured against access by unauthorised persons.
f. Providing statutory and necessary amenities and sanitary facilities for site workers where such are not already available in suitable locations. These facilities shall be maintained in good working condition and cleaned frequently.
g. Providing temporary power, light, water and telephone services and ensure that these services are maintained sufficiently for executing the work under the contract. Relevant authorisation shall be obtained and fees paid accordingly. Disconnect and remove where relevant upon completion of the project.
h. Being responsible for the maintenance of a satisfactory safety system on site, in accordance with current occupation health and safety legislation.
i. Maintain fully charged and accessible fire extinguishers as necessary for the care and safety of the works as required by current legislation.
j. Ensuring that refuse from the construction operation (including food scraps and the like) is removed from the site at frequent intervals
k. Ensuring that work is carried out without damage to and with a minimum of nuisance or annoyance to the occupants of adjacent premises.

Asbestos
No asbestos products or asbestos based materials shall be used in any part of the building works or its services. The contractor shall ensure that sub-contractors, nominated sub-contractors, suppliers and others are advised of this restriction. No compensation will be paid if asbestos is brought onto the site and subsequently discovered. If asbestos is discovered such removal and the consequential making good and costs will be totally at the expense of the contractor.

Explosive Devices
Only a licensed operator shall use powder powered fixing tools.

Solid, Liquid and Gaseous Contaminants
Solids, liquid and gaseous contaminants shall be property disposed of. Gaseous contaminants shall be discharged in such a manner that they will be sufficiently diluted with fresh air that the toxicity will be reduced to an acceptable level. Subject to statutory and local requirements, liquid contaminant may be diluted with water to a level of quality acceptable in the sewer system or contained in approved vessels for disposal at sites approved by the relevant authority. Solid contaminants shall be removed from the site to locations approved by the relevant authority.

Existing Services
The owner shall be notified of the connection, disconnection or interference with existing services.
The contractor shall be responsible for repairing, damage, which occurs to the services during the currency of the contract. Where existing services at or adjacent to the site are in non-optimum condition, the contractor shall arrange for an inspection by the owner.

Compliance with Ordinances
Whenever work or type of plant or machinery, etc, is required either by the specification or by the relevant statutory authority, full details of such work, plant or machinery, etc shall be supplied to the relevant authority together with the relevant application (s) and fees.

Joining up to Existing Buildings
Where the method of joining up old and new work is not otherwise specified, the cutting away and joining up shall be carried out in a manner approved by the architect and made good by the relevant trades to match existing adjacent work.

Shop drawings
Shop drawings mean complete drawings showing details of fabrication, assembly, installation, fixing and waterproofing methods of specific items or components, and they shall include necessary explanatory notes and specifications. When preparing shop drawings, do the following:
a. Include provision in the construction programme for the production and distribution of shop drawings.
b. Refer discrepancies discovered in the contract documents, general specification and project specification to the architect for direction.

c. Verify relevant dimensions. Dimension drawings so that the items or components fit accurately into the required positions.
d. Submit shop drawings to the architect and relevant consultant for approval.
e. Acceptance of shop drawings shall imply only that the contractor's interpretations of the relevant requirements of the contract are generally correct, but shall in no way relieve the contractor of his obligations under the contract to construct and complete the works correctly and accurately.
f. Do not order, manufacture, assemble or supply any item or component needed according to requirements of shop drawings until the architect returns the applicable stamped drawings.

Product Compliance

The following requirements shall be adhered to:

a. Provide products which are specified, are undamaged and unused at the time of installation, which are complete with accessories, trim, finish, features required by regulation, and other devices and details needed for a complete installation and for intended use and effect.
b. Standard products - where available, provide standard products of types, which have been produced and used previously and successfully on other projects and in similar applications.
c. Continued availability - where additional amounts of a product, by its application, are likely to be needed by owner at a later date for maintenance and repair or replacement work, provide a standard, domestically produced product which is likely to be available to the owner at such later date.
d. Manufacturer's data sheets - where this specification requires, obtain two copies of the current data sheets issued by the manufacturer of the specified component. Retain one copy for use on site and submit the other to the architect as a record of instructions followed on the site.

Care of the Works

General - Unless otherwise specified in the contract, general specification and product specification and in the absence of statutory requirement to the contrary, observe the relevant current Australian Standards relating to transportation, storage and use of materials, explosives, fire precautions, plant and equipment, work processes and safety precautions.

Delivery, handling and storage - deliver, handle and store products in accordance with the manufacturer's recommendations and by methods and means, which will prevent damage, deterioration and loss, including theft. Control delivery schedules to minimise long-term storage of products at site and over-crowding of construction spaces. In particular, co-ordinate delivery and/or installation to ensure minimum holding or storage times for products recognised to be flammable, hazardous, easily damaged, or sensitive to deterioration, theft and other sources of loss.

Limiting exposure of work - to the extent possible, through control and protection methods, supervise performance of work in a manner which will ensure that none of the work, whether completed or in progress, will be subjected to harmful, dangerous, or damaging exposure during the construction period.

Cleaning and protection of finished work - during handling and installation of work as project proceeds, clean the site and protect the work in progress and adjoining work on the basis of perpetual maintenance. Apply suitable protective covering on newly installed work and, where required, ensure freedom from damage or deterioration. Clean and perform maintenance on newly installed work as frequently as necessary throughout remainder of the construction period. Adjust and lubricate operable components to ensure equipment operates as intended.

Quality Control

The contractor / sub-contractor (s) shall:

a. Inspect each item of material or equipment immediately prior to installation and reject damaged or defective items.
b. Provide attachment and connection devices and methods for securing materials properly as they are installed, true to line and level, and within recognised industry tolerances unless otherwise specified. Allow for expansion and building movements. Provide uniform joint widths in exposed work, organised for best possible visual effect. Refer questionable visual effect choices to the architect.
c. Re-check measurements and dimensions of the work as an integral step before starting each installation.
d. Install work during conditions of temperature, humidity, exposure and weather, which will ensure the best possible results for each part of the work, or component or treatment as necessary to prevent damage and deterioration.

e. Co-ordinate enclosure and closing-in of work with required inspections and tests to avoid the necessity of uncovering work for that purpose.

Record of Services
The following records shall be made:
a. Obtain from the architect, two additional copies of the drawings and mark thereon the exact position and route of underground piping as actually laid, by dimensions from boundaries, buildings and other fixed points.
b. The position of valves, branches, inspection openings and the like shall be dimensioned and checked by the contractor before the work is covered up. Record on the drawings the invert levels of drains and other relevant piped services. Variations in position of size of the pipes, valves and the like within the building shall also be marked on these sets of drawings and checked by the contractor.
c. The dimensioned drawings shall be returned to the architect on completion to enable an exact record of the whole installation to be made for use in future maintenance.

Cleaning – On-going for Site and Access Roads
The contractor and sub-contractors, where relevant, shall be responsible for maintaining clean roads and access. Mud and building debris shall be removed from footpaths, gutters, drains, walls etc. when such occurs.

Completing Procedures - Trade
Except as otherwise indicated or requested by the contractor, temporary protection devices and facilities installed during course of the work to protect previously completed work shall be removed within 5 days before practical completion.

As each trade completes its work in each area, the sub-contractor shall be responsible for a "broom clean" standard of cleaning in that area.

Completing Work on Site
Upon completion of work, the work area shall be cleaned appropriately and debris removed. Finished work shall be protected appropriately until the completion of the project. Any damage shall be made good at no cost to the owner.

Cleaning – Final
Clean the completed work to the standard of a first class building cleaning and maintenance programme. Cleaning will include:
a. Removing labels, which are not required to be permanent.
b. Cleaning transparent materials, including mirrors and window/door glass, to a polished condition, removing substances, which are noticeable as vision-obscuring materials.
c. Replacing broken glass and damaged transparent materials.
d. Cleaning exposed exterior and interior hard surfaces finished, to a dirt free condition, free of dust, stains, fingermarks, films and similar noticeable distracting substances. Except as otherwise specified, avoid disturbance of natural weathering of exterior surfaces.
e. Restoring reflective surfaces to original reflective condition.
f. Wiping clean surfaces of mechanical and electrical equipment, including lift and similar equipment; remove excess lubrication and other substances.
g. Removing debris and surface dust from limited access spaces.
h. Cleaning concrete floors broom clean.
i. Vacuum cleaning carpet and similar soft surfaces.
j. Cleaning plumbing fixtures to a sanitary and polished condition, free of stains including those resulting from water exposure.
k. Cleaning light fixtures and lamps so as to function with full efficiency.
l. If permanent lighting fixtures have been used for construction purposes replacing globes with new.
m. Cleaning the project site, including planted sections and footpaths, of litter and foreign substances. Sweep paved areas to a broom clean condition; remove stains, petro-chemical spills and other foreign deposits.
n. Labelling keys for locks accurately and providing in duplicate to the architect at the completion of the project.

Practical Completion
Prior to the issue of the practical completion notice for the whole or section of the work, the contractor shall lodge required documents, including the following:

a. Relevant certificates issued by local authorities.
b. A certificate of clearance of reinstatement of damage to footpaths and road, etc, from the appropriate road authority.
c. Written warranties (detailing warranty periods.)

CONTRACTOR'S WORK SCHEDULES

The contractor shall carry out work for the sub-contractors appointed for mechanical services, electrical services and hydraulic services, including but not limited to the following:

Mechanical Services
1. Clear openings through the building structure for the passage of ductwork, pipes etc, and openings in doors or walls for the passage of return and relief air.
2. Provide access openings in ceilings, bulkheads, walls and at other positions as required for adjustment and access by mechanical services sub-contractor.
3. Cut, patch, frame up, fur in and make good the building structure for the passage of pipes, ductwork, grilles, etc. Details shall be supplied by the mechanical services sub-contractor.
4. Seal air-tight ceilings plenums where used for the passage of return air.
5. Make penetrations through the roof and walls, including flashings, collars, etc.

Electrical Services
1. Make slab penetrations for floor-mounted GPOs, telephone outlets, etc.
2. Chase and make good for conduit access for skirting wiring duct, GPOs, switches, etc.
3. Provide access openings, where required.
4. Provide sign writing to the main distribution board, etc.
5. Prove openings for luminaries to the sizes required.

Hydraulic Services
1. Clear openings through the building structure for the passage of piping and fittings.
2. Provide access openings, as required.
3. Provide access doors as required for sewer inspection points.
4. Trench, back-fill and make good existing road works, for underground hydraulic works, including gas.

DEMOLITION

Scope of work - Demolish in accordance with the project specification, provide suitable containers for disposal and clean the site thoroughly upon completion of the work.

Comply with applicable clauses of these building standards (in current edition, amendments and supplements.)
AS 2187 (1993) Explosives - storage, transport and use.
AS 2187.0 (1998) Terminology.
AS 2187.2 (2006) Use of explosives.
AS 2436 (2010) Guide to noise control on construction, maintenance and demolition sites.
AS 2601 (2001) The demolition of structures.
AS/NZS 3012 (2010) Electrical installations – construction and demolition sites.

On-site action
1. Before demolishing and removing parts of building having electrical wiring, gas and water pipes, conduit or similar items embedded in them, notify the architect and authorities having jurisdiction, and make sure that these items are out of service so that they can be removed without danger.
2. Provide measures required by relevant legislation and regulations for the protection of surrounding property, footpaths, streets, kerbs, the public, occupants and workmen during demolition operations, including the installation of barricades, fences, warning lights, signs and rubbish chutes.
3. Blasting for demolition purposes is not permitted.
4. Material required to be demolished becomes the property of the contractor. Remove the debris from the site. Exceptions to this clause are noted in the project specification. Do not burn debris on site.
5. Provide necessary shoring in accordance with the structural engineer's instructions.
6. Alter, adapt, and maintain temporary works as necessary, and strike or withdraw them progressively as the work proceeds. Obtain the written consent of the architect/structural engineer if such works shall be left in position at the completion of the work.

7. Restore to original condition, and without expense to the owner, any damage to remaining structures and to adjacent property, which results from the demolition operations.
8. Give notice immediately if hazardous materials or conditions are found, including the following:
   - Asbestos or material containing asbestos.
   - Flammable or explosive liquids or gases.
   - Toxic, infective or contaminated materials.
   - Radiation or radioactive materials.
   - Noxious or explosive chemicals.
   - Tanks or other containers, which have been used for storage of explosive, toxic, infective or contaminated substances.

ASBESTOS REMOVAL

Scope of work – Identify, remove and safely dispose of materials containing asbestos fibres in accordance with the project specification.

Comply with applicable clauses of these building standards (in current edition, amendments and supplements.)
National Code Practice for the Safe removal of Asbestos 2nd edition [NOHSC 2002 (2005)]

On-site action
1. Prepare for asbestos removal in full accordance with the relevant requirements set out in the documents above.
2. Provide notices and submit reports to the relevant statutory authority requiring data relating to asbestos removal and pay appropriate fees.
3. Install decontamination facilities in a location agreed upon with the architect and other relevant parties.
4. Install required labelling and warning signs.Remove from the work area items, which may be damaged by the work of this trade section.Protect items of furniture, surface, equipment or plant, which may be damaged or soiled during the preparation for and action of asbestos removal. Be responsible for damage resulting from asbestos removal actions, processes and other works.
7. Arrange with the relevant local authority to identify the place to which asbestos material is to be taken from the site.
8. Remove and dispose of traces of the asbestos removal, including protective materials.
9. Clean thoroughly the area in which the work has been performed and those areas adjacent to it.
10. Leave the site in a condition suitable for the work of other trades.

EXCAVATION AND FILL

Scope of work - Prepare the site, excavate for driveways, paving, drains, pits, foundations, slabs, etc. Remove trees and other vegetation, including roots, where they prevent building work.

Comply with applicable clauses of these building standards (in current edition, amendments and supplements.)
AS 1289.0 (2000) Methods of testing soils for engineering purposes.
AS 1726 (1993) Geotechnical site investigations.
AS 2187 (1993) Explosives - storage, transport and use.
AS 3660 (2000) Termite management.
AS 3798 (2007) Guidelines on earthworks for commercial and residential buildings.
AS 4678 (2002) Earth-retaining structures.
AS/NZS 4200 (1994) Pliable building membranes and underlays.
AS/NZS 4200.2 (1994) Installation requirements.

Definitions
1. Rock: natural or artificial material encountered during excavation which cannot be removed until broken up by mechanical means such as rippers, jack-hammers or percussion drills.
2. Rippable rock: rock, which can be removed by a single tine, "D9" ripper.
3. Non-rippable rock: all other rock.
4. Other than rock: other material encountered during excavation.
5. Sub-Grade: the natural ground below the excavations.
6. Filling: a general term for material spread and compacted over the sub-grade to make up levels to the underside of the base.
7. Sub base: a selected filling, spread and compacted over sub-grade to make up levels to the underside of the base.

8. Base: a selected filling layer, spread and compacted to form an acceptable working surface directly under the building.

On-site action

1. Clear site under building and paving of plants, trees, rocks shown on the plans.
2. Protect trees in accordance with the conditions of the development consent.
3. Avoid erosion, contamination, and sedimentation of the site, surrounding areas, and drainage system.
4. Remove the topsoil layer of the natural ground which contains substantial organic matter over the areas to be occupied by construction and paving; maximum depth - 100 mm.
5. Stockpile on site topsoil required for re-use. Protect stockpiles from contamination by other excavated material, weeds and building debris. Do not stockpile within the drip-line of trees.
6. Take possession of surplus material and remove it from the site.
7. After excavation, confirm the bearing capacity of the existing foundations, where applicable, is adequate.
8. If rock or bad ground is encountered, notify the architect immediately.
9. Place hardcore below slabs. Place concrete of strength (minimum 15Mpa) equal to the structural element below footings, beams and other structural elements. Place 1:2:4 concrete/approved compacted pipe bedding material in service trenches.
10. Excavate for strip footings and edge beams, paving, water and piped supply and drains, pits.
11. Apply termite protection.
12. Provide fill and compact in 150 mm layers, to 95% of maximum density, by vibrating or watering.
13. Protect excavations from damage, including maintaining the work free of water. Install waterproof membrane over sand and seal laps.
14. After inspection (and testing) where required, back-fill with material approved by the Engineer and the architect.
15. Take the underlay in the walls to the level of the top of the slab.
16. Seal the service pipes.
17. Inspect and repair membrane before concrete pour.

TERMITE CONTROL MANAGEMENT

Scope of work – Control and manage termites on site.

Comply with applicable clauses of these building standards (in current edition, amendments and supplements.)
AS 3660 (2000) Termite management.
AS 3660.1(2000) New building work.
AS 3660.2 (2000) In and around existing building structures.
AS 4349 (2000) Inspection of buildings.
AS 4349.3 (2010) Timber pest inspections.

Preparation

1. Contact the Australian Environmental Pest Managers Association via www.aepma.com.au to obtain a list of approved members who may quote for the work required.
2. Request the nominated sub-contractor to supply a list of the materials to be used.
3. Visit the site and inspect conditions to ensure suitability of substrata.
4. Take care of the materials to be used.

On-site action

1. Ensure property protection of the surrounding work, including other finishes, equipment and components and provide protective covering where necessary.
2. After installation, removed surplus material and protect finished work.

WATER DISTRIBUTION

Scope of work - Supply and install pipes to distribute water from the water mains supply to each required outlet; supply and install pipes from hot water heater to each required outlet. Install taps, heaters, etc, as set out in the project specification to complete the system.

Comply with applicable clauses of these building standards (in current edition, amendments and supplements.)

For design, installation and related standards:
AS/NZA 1547 (2000) On-site domestic wastewater management.
AS/NZS 2556.1 (1998) Buried flexible pipelines – structural design.

AS/NZS 3500 Plumbing and drainage.

For jointing of pipelines:
AS 4041 (2006) Pressure piping.

For pipes and tubes:
AS 1074 (1989) Steel tubes and tubular for ordinary service.
AS 1192 (2004) Electroplated coatings – nickel and chromium.
AS 1432 (2004) Copper tubes for plumbing, gas fitting and drainage applications.
AS 1741 (1991) Vitrified clay pipes and fittings with flexible joints – sewer quality.
AS 1769 (1975) Welded stainless tubes for plumbing applications.
AS 2033 (2008) Installation of polyethylene pipe systems.
AS 2492 (2007) Cross-linked polyethylene (PE-X) pipe for hot and cold water applications.
AS 3688 (2005) Water supply - copper and copper alloy body compression and capillary fittings and threaded-end connectors.
AS 4041 (2006) Pressure piping.
AS 4058 (2007) Precast concrete pipes (pressure and non-pressure.)
AS/NZS 1254 (2002) PVC-U pipes and fittings for storm and surface water applications.
AS/NZS 1260 (2009) PVCU - pipes and fittings for drain, waste and vent applications.
AS/NZS 1477 (2006) PVC pipes and fittings for pressure applications.
AS/NZS 1547 (2000) On-site domestic wastewater management.
AS/NZS 2032 (2006) Installation of UPVC pipe systems.
AS/NZS 2033 (2008) Installation of polyethylene pipe systems.
AS/NZS 2642 (1994) Polybutylene pipe systems.
AS/NZS 3500 Plumbing and drainage.
AS/NZS 5065 (2005) Polyethylene and polypropylene pipes and fittings for drainage and sewage applications.

For sanitary plumbing fitting and fixtures:
AS 1172 (1999) Water closets.
AS 1361 (1995) Electric heat-exchange water heaters – for domestic applications.
AS 1589 (2001) Copper and copper alloy waste fittings.
AS 1756 (1999) Household sinks.
AS 1956 (1992) Vitreous china used in sanitary applications.
AS 1926 Swimming pool safety.
AS 2887 (1993) Plastic waste fittings.
AS 3861 (1991) Spa baths.
AS/NZS 1299 (2002) Laundry troughs and tubs.
AS/NZS 1547 (2000) – On-site domestic wastewater management.
AS/NZS 3982 (1996) Urinals.
AS/NZS 4129 (2008) Fittings for polyethylene (PE) pipes for pressure applications.

On-site action

1. Prepare trenches and paths of pipes through structure.
2. The contractor shall form cut-outs of minimum size to take pipes. This work shall not be done by the plumber.
3. Coordinate with others trades, as necessary, to connect supply pipes to fittings. Hot and cold water pipes shall be Rehau Rautitan.
4. Conceal where possible. Ensure correct pipe sizes and connect with complete seal.
5. Jointing of pipes: Rehau Rautitan MX brass fittings.
6. Install accessories and fittings necessary for the proper functioning of the plumbing systems, including taps, valves, outlets, pressure and temperature control devices, strainers, gauges and pumps.
7. Maximum temperature at ablution outlets shall be 50°C.
8. Provide isolation valves to water heaters.
9. Finishes to exposed piping, including fittings and supports shall be as follows: exposed internal locations – bright chrome plate; external locations – paint; concealed but accessible spaces- including cupboards - leave unpainted except for required identification markings.
10. Protect installation until completion of the project. Do not cover pipes until the relevant statutory authority has issued the appropriate approval certificate.
11. Upon completion, flush the system using water and leave it clean.
12. Provide "as built" drawings to the owner showing actual dimensions and locations of pipes.

SANITARY SEWERAGE

Scope of work - Supply and install a complete system of sewer drains to discharge sewage waste to the relevant supply authority's sewer main, or to an on-site septic tank. Install sanitary-ware, etc, as set out the project specification to complete the system.

Comply with applicable clauses of these building standards (in current edition, amendments and supplements.)
AS 2033 (2008) Installation of polyethylene pipe systems.
AS 4058 (2007) Precast concrete pipes (pressure and non-pressure.)
AS/NZS 1260 (2009) PVC U-pipes and fittings for drain, waste and vent applications.
AS/NZS 1254 (2010) PVC pipes and fittings for storm and surface water applications.
AS/NZS 1546.3 (2008) Aerated wastewater treatment systems.
AS/NZS 1546.2 (2001) Waterless composting toilets.
AS/NZS 1546.1 (2008) On-site domestic wastewater treatment units – septic tanks.
AS/NZS 1547 (2000) – On-site domestic wastewater management.
AS/NZS 2032 (2006) Installation of UPVC pipe systems.
AS/NZS 3500 Plumbing and drainage
AS/NZS 4494 (1998) Discharge of commercial and industrial liquid water to sewer – general performance requirements.
AS/NZS 4645.1 (2008) Gas distribution networks – network management.
AS/NZS 4645.2 (2008) Gas distribution networks – steel pipe systems.

On-site action
1. Form straight and true trenches, maintain size and keep free of water. The bottoms of trenches shall provide constant fall. Lay pipes 600mm clear of walls.
2. Sewer drainpipes and drains under buildings shall be UPVC sewer grade with solvent joints. Concrete for pits, shall be 20Mpa and the pit covers shall be cast iron.
3. Connect sanitary fittings to sewer pipes with permanently secure joints.
4. Backfill only after inspection.
5. If fixings or stays for vent pipes penetrate the roof covering, seal the penetrations and make watertight.
6. Vent pipes above the roof shall be coloured to match the roof. Vent pipe terminations are to have bird-proof vent cowls to match the vent pipes.
7. During construction, use temporary covers to openings and keep the system free of debris.
8. Protect installation until completion of the project.
9. Upon completion, flush the system using water and leave it clean.
10. Provide 'as built' drawings to the owner showing actual dimensions and locations of pipes.

GREYWATER COLLECTION AND RE-USE

Scope of work - Supply and install a complete system of greywater collection, treatment, storage and re-use, as set out in the project specification.

Comply with applicable clauses of these building standards (in current edition, amendments and supplements.)
AS/NZS 1260 (2002) PVC-U pipes and fittings for drain, waste and vent application.
AS 2032 (2006) Installation of PVC pipe systems.
AS/NZS 3500 Plumbing and drainage
AS/NZS 4494 (1998) Discharge of commercial and industrial liquid waste to sewer - general performance requirements.

And with the National Guidelines for Water Recycling (www.ephc.gov.au/ephc/water_recycling.html) and the requirements of the local environmental protection authority.

On-site action
1. Prepare the site for installation of equipment in cooperation with the excavator, drainer and plumber, where applicable.
2. Provide a concrete base where necessary and a firm base of crushed rock under submerged tanks.
3. Installation of piping: by a licensed plumber approved by the relevant authority.
4. Offer a maintenance contractor to the owner, which details recommended maintenance actions, including frequency and cost.

PIPED ENERGY DISTRIBUTION

Scope of works – Connect to the supply main pipe or to the on-site gas tank, install distribution material, fittings, valves and gas fuelled water and air heaters, cooking equipment, etc, as set out in the project specification.

Comply with applicable clauses of these building standards (in current edition, amendments and supplements.)

Generally:
AS 1432 (2004) Copper tubes for plumbing, gas fitting and drainage applications.
AS 2033 (2008) Installation of polyethylene pipe systems.
AS 4809 (2003) Copper pipe and fittings – installation and commissioning.
AS 5601.1 (2010) Gas installations – general instructions.
AS/NZS 1260 (2002) PVC-U pipes and fittings for drain, waste and vent application.
AS/NZS 4130 (2009) Polyethylene (PE) pipes for pressure applications.
AS/NZS 4645.1 (2008) Gas distribution networks – network management.
AS/NZS 4645.2 (2008) Gas distribution networks – steel pipe systems.

For hot water services:
AS/NZS 1056 (1985) Storage water heaters.
AS/NZS 1200 (2000) Pressure equipment.
AS 1308 (1987) Electric water heaters – thermostats and thermal cut-outs.
AS 1361 (1995) Electric heat-exchange water heaters – for domestic applications.
AS/NZS 2712 (2007) Solar and heat pump water heaters – design and construction.

On-site action
1. Prepare trenches and paths of pipes through the structure.
2. Coordinate with other trades, as necessary, to connect supply pipes to fittings.
3. Conceal where possible. Ensure correct pipe sizes and connect with complete seal.
4. Install gas heater flues in accordance with the manufacturer's written instructions. Ensure all required clearances from combustible structures are maintained.
5. Protect installation until completion of the project. Do not cover pipes until the relevant statutory authority has issued the appropriate approval certificate.

STORM DRAINAGE

Scope of works - Supply and lay a complete system of site storm water drainage including agricultural drains, drains below slabs and pavements, retaining wall drains, culverts, pits, frames and manhole covers and install rainwater tanks including a pressure pump system, overflows, etc as set out in the project specification.

Comply with applicable clauses of these building standards (in current edition, amendments and supplements.)
AS 1379 (2007) Specification and supply of concrete.
AS/NZS 3500 Plumbing and drainage
AS 3600 (2009) Concrete structures.

On-site action
1. Prepare trenches and paths of pipes through structure. The contractor shall form cut-outs of minimum size to take pipes. This work shall not be done by the plumber.
2. Form straight and true trenches 600mm clear of walls, maintain sides and free from water.
3. Form trenches and bedding to provide constant falls as approved by the relevant statutory body.
4. Agricultural drains, manhole frames, covers and pits shall be to the engineer's specification. Stormwater pipes shall be UPVC stormwater grade pipes and pipes, which pass underneath a building, shall be sewer grade pipes.
5. After inspection (and testing) where required, back-fill with material approved by the engineer and architect.
6. Ensure correct pipe sizes. Provide up-stands to gullies to receive downpipes and allow for leaf clearance. Lay pipelines with the spigot ends in the direction of flow.
7. Provide inspection openings where required at bends and junctions. Provide complete seals at junctions and ends in accordance with the manufacturer's written instructions.
8. All stormwater shall be piped to the engineer's specification.
9. Connect / into / modify the existing system as required.
10. Pit covers shall be located flush with the surface where set into paving and 25mm above the surface in landscaped areas.
11. Arrange for inspection by the relevant authority. When issued, back fill with material approved by that authority.
12. Remove debris and clean areas beside excavation for drains.

13. Provide cleaning access to all drainage pipes.
14. Provide pipe up-stands with covers flushing of agricultural drains.

BRICKWORK AND BLOCKWORK

Scope of work - Supply labour and install materials, build in miscellaneous materials (flashings, wall ties, damp proof courses, anchors, etc, as set out in the project specification. Include staging, scaffolding and cleaning.

Comply with applicable clauses of these building standards (in current edition, amendments and supplements.)
AS 1316 (2003) Masonry cement.
AS 1617 (2003) Refractory bricks and shapes.
AS 2701 (2001) Methods of sampling and testing mortar for masonry constructions.
AS 3660 (2000) Termite management.
AS 3700 (2007) Masonry structures.
AS 3972 (2010) Portland and blended cements.
AS/NZS 1576 Scaffolding.
AS/NZS 2699 (2000) Built-in components for masonry construction.
AS/NZS 2904 (1995) Damp-proof courses and flashings.
AS/NZS 4455 (1997) Masonry units and segmental pavers.

Materials

Item	Description / Supplier
Anchors to columns / beams	Stainless steel.
Blocks	To engineer's specification.
Bond beams	
Bricks	Approved common bricks. Exposure grade bricks below damp-proof course.
Damp proof course	'Alucore' or other approved.
Expansion (control) joints	To engineer's specification.
Lintels	See schedule below.
Mortar	6 parts sand, 1 part cement, 1 part lime.
Pigment for mortar	None.
Reinforcement	Galvanised mesh.
Vertical control joints	External: 10mm spandex external; Internal: Bitumastic fibreboard.
Wall ties	Stainless steel.

On-site action
1. Clean base before laying masonry.
2. Set doors and windows plumb and brace.
3. Machine mix. Mortar life: 2 hours.
4. Joints: flush struck unless otherwise advised in the project specification; weep holes at 1200mm centres, unless otherwise specified; bonding: stretcher bond; bed joints: 10mm.
5. Install DPC, wall ties, reinforcements and flashings to AS 3700.
6. Install ties to anchor masonry to structure, doors and windows etc.
7. Construction joints at maximum - 6000mm centre or in accordance with AS3700.
8. Chasing walls: not more than 1/3 wall thickness for conduits, etc.
9. Provide damp proof courses in the following locations, if applicable:
   a. Walls: adjoining infill floor slabs on membrane: in the course above the underside of the slab in internal walls and inner leaves of cavity walls. Project 40mm and dress down over the membrane turned up against the wall.
   b. Cavity walls: built off slabs on ground; in the bottom course of the outer leaf, continuous horizontally across the cavity and up the inner face bedded in mortar, turned 30mm into the inner leaf 1 course above. Project 10mm beyond the external slab edge and turn down at 45 degrees.
   c. Internal walls: built off slabs on ground: in the first course above floor level.
   d. Junctions: preserve continuity of damp proofing at junctions of damp-proof courses and waterproof membranes; locate at least 150mm above adjacent finished ground level.
10. Install the flashings by: sandwich flashings between mortar except where on the lintels or shelf angles. Point up joints around flashings, filling voids. Provide flashings and weatherings in the following locations, if applicable.
    a. Floors: full width of outer leaf immediately above slab or shelf angle, continuous across cavity and up the inner face bedded in mortar, turned 30mm into the inner leaf 2 courses above. Where the slab supports the outer skin and it is not rebated, bed the flashing in a suitable sealant.

b. Under sills: 30mm in to the outer leaf bed joint 1 course below the sill, extending up across the cavity and under the sill.
c. Over lintels to openings in cavity walls: full width of outer leaf immediately above the lintel, continuous across cavity, turned 30mm into the inner leaf 2 course above. Extend at least 50mm beyond the lintels.
d. At abutments with structural frames or supports: vertical flashing in the cavity using 150mm wide material, wedged and grouted into a groove in the frame opposite the cavity.
e. At stiles where cavities are closed: full height flashing extending 75mm beyond the closure into the cavity, interleaved with the sill and head flashing at each end. Fix to frame stiles.

11. Provide weepholes as follows:
    a. Form: open perpends.
    b. Maximum spacing: 720mm.
    c. Location: provide weepholes to external leaves of cavity walls in the course immediately above flashings, and cavity fill and at the bottoms of unfilled cavities.
12. Clean progressively to remove mortar stains and discolouration. Avoid using acid.
13. Hot dip galvanise lintels in external openings.
14. Remove mortar from wall ties in cavity walls at the end of each day.

LINTELS IN BRICKWALLS OR BLOCKWALLS

External openings			Internal openings	
Span (mm)	**SIZE**	**End Bearings (mm)**	**Span (mm)**	**Size**
up to 950	74 x 10 flat	150	up to 950	74 x 10 flat
950 to 1200	76 x 76 x 10L	200	950 to 1200	75 x 12 flat
1200 to 1650	102 x 76 x 10L	230	1200 to 1650	102 x 76 x 10L
1650 to 2400	127 x 76 x 10L	230	1650 to 2400	127 x 76 x 10L
2400 to 3000	152 x 89 x 10L	230	2400 to 3000	152 x 89 x 10L

GLASS BALUSTRADES

Scope of work - Supply and install glass balustrades with associated fixing materials, as set out in the project specification.

Comply with applicable clauses of these building standards (in current edition, amendments and supplements.)
AS 1231 (2000) Aluminium and aluminium alloys– anodic oxidation coatings.
AS 1288 (2006) Glass in buildings – selection and installation.
AS 1627 Metal finishing – Preparation and pre-treatment of surfaces.
AS 1657 (1992) Fixed platforms, walkways, stairways and ladders– design, construction and installation.
AS 3715 (2002) Metal finishing - Thermoset powder coatings for architectural applications of aluminium and aluminium alloys.

On-site action
1. Prepare surfaces and form recesses.
2. Comply throughout with the drawings of both architect and structural engineer.

ARCHITECTURAL METALWORK

Scope of work - Supply and install metalwork items as set out in the project specification.

Comply with applicable clauses of these building standards (in current edition, amendments and supplements.)
AS 1627 Metal finishing – preparation and pre-treatment of surfaces.
AS/NZS 1554 Structural steel welding.
AS/NZS 1664 (1997) Aluminium structures.
AS/NZS 1665 (2004) Welding of aluminium structures.
AS/NZS 1841 (1987) Portable fire extinguishers.
AS/NZS 4353 (1995) Portable fire extinguishers - aerosol type.
AS/NZS 4680 (2006) Hop dip galvanised (zinc) coatings on fabricated ferrous articles.

Preparation
1. Field measurements: Do not delay job progress. Allow for adjustments and fitting of the work in the field where taking of measurements might cause delay.

2. Provide smooth finishes to exposed surfaces with sharp well-defined lines and arrises. Mill to a close fit machined joints. Design necessary lugs, brackets and similar items so that the work can be assembled and installed in a neat, substantial manner.
3. Provide holes and connections as required to accommodate the work of other trades and for site assembly of metalwork. Drill or punch and ream in the shop.
4. Fasteners: Provide required bolts, screws, inserts, fasteners, templates and other accessories required for a complete installation. Co-ordinate with other trades regarding the proper fastening systems suitable for the substrates to which the item (s) will be secured. Refer to the architect if in doubt.
5. Fasten galvanised items with galvanised fasteners.

On-site action

1. Inspect fabrication upon arrival at site.
2. Do not repair on site. Replace damage items.
3. Install each item by bolting or screwing to the structural elements of the building.
4. Locate anchorages accurately and ensure secure installation.
5. Do not cut metal on site.
6. Remove weld spatter and touch up with zinc rich paint immediately.
7. Protect work until project completion.

CARPENTRY

Scope of work - Supply and erect framing both structural and substructural, as set out in the project specification. Include floor panels, wall cladding, roof framing and incidental framing.

Comply with applicable clauses of these building standards (in current edition, amendments and supplements.)

General:
AS 4226 (2008) Guidelines for safe housing design.
AS/NZS 1148 (2001) Timber – nomenclature – Australian, New Zealand and imported species.

Materials:
AS 1397 (2001) Steel sheet and strip – hot dipped zinc-coated or aluminium/zinc coated.
AS 1810 (1995) Timber – seasoned cypress pine – milled products.
AS 2334 (1980) Steel nails – metric series.
AS 2754.2 (1991) Adhesives for timber and timber products – polymer emulsion adhesives.
AS 2796 Timber – hardwood – sawn and milled products.
AS 4785 (2002) Timber – softwood – sawn and milled products.
AS/NZS 1328 (1998) Glued laminated structural timber.
AS/NZS 1859 Reconstituted wood based panels – specifications.
AS/NZS 2269 (2004) Plywood – structural.
AS/NZS 2270 (2006) Plywood and blockwood for interior use.
AS/NZS 2271 (2004) Plywood and blockwood for exterior use.
AS/NZS 2272 (2006) Plywood – marine.

Preservatives and Treated Timber:
AS 1604 (2004) Specification for preservative treatment.
AS 4785 (2002) Timber – softwood – sawn and milled products.

Stress Grading:
AS 1613 (2005) Timber – colours for marking F-grades.
AS 2082 (2007) Timber – hardwood – visually stress-graded for structural purposes.
AS 2858 (2008) Timber – softwood – visually stress-graded for structural purposes.
AS/NZS 1748 (2006) Timber – mechanically stress graded for structural purposes.
AS/NZS 2878 (2000) Timber – classification into strength groups.

Design and Installation:
AS 1684 (2010) Residential timber-framed construction.
AS 1720 (1990) Timber structures.
AS 1860.2 (2006) Particleboard flooring – installation.
AS 2159 (2009) Piling – design and installation.
AS 2329 (1999) Mastic adhesives for fixing wallboards.

AS 3566 Self-drilling screws for the building and construction industries.
AS 3623 (1993) Domestic metal framing.
AS 3740 (2010) Waterproofing of wet areas within residential buildings.
AS 3959 (2009) Construction of building in bushfire-prone areas.
AS 3999 (1992) Thermal insulation of dwellings – bulk insulation – installation requirements.
AS 4055 (2006) Wind loads for housing.
AS/NZS 4357 Structural laminated veneer lumber.
SAA HB44 (1993) Guide to the timber framing code.

Comply with recommendations of the National Association of Forest Industries Technical bulletins.

On-site action

1. Store the timber on site above ground, flat and horizontal and protect from rain, damage and other material.
2. Perform operations including grooving, rebating, framing, housing, beading, mitring, scribing, nailing, screwing and gluing as necessary to carry out the works. Use timber in single lengths whenever possible. If joins are necessary, make them over supports unless otherwise shown or specified.
3. Arris visible edges in sawn work. In dressed work arris with sandpaper to 1.5mm radius unless otherwise specified.
4. Back plough boards liable to warping (for example, if exposed on one face). Make the width, depth number and distribution of ploughs appropriate to the dimensions of the board and the degree of its exposure.
5. Provide necessary templates, linings, blocks, stops, ironwork and hardware, screws, bolts, stirrups, plugs and fixings generally.
6. Trim framing where necessary for openings, including those required by other trades.
7. Greasing: Before placing bolts in contact with CCA-treated timber, coat the shank of the bolt in grease or bituminous coating.
8. Beam framing: Where the depth of rafters or purlins is at least 4 times the width, provide solid blocking between them at the support points and at 1.8mm maximum intervals between supports unless rafters are exposed to the room below.
9. Ridge straps: Butt ends of rafters together at ridge and strap each pair together with 900mm long steel strap passing over ridge, triple nailed to each rafter.

FIBRE CEMENT PRODUCTS

Scope of work - Supply and install fibre cement and associated equipment and fixing to wall linings internal, ceiling linings internal, fire-rated walls, external cladding, wet area wall lining, eaves lining, fascias, partitions, wet area flooring, underlays, external decks, lattice, bracing panels, ceramic faced panels and fibre cement pipe columns, etc, as set out in the project specification.

Comply with applicable clauses of these building standards (in current edition, amendments and supplements.)
AS 2329 (1999) Mastic adhesives for fixing wall boards.
AS 2908 (2000) Cellulose - cement products.
AS/NZS 1562.2 (1999) Design and installation of sheet roof and wall cladding – corrugated fibre-reinforced cement.
AS/NZS 4389 (1996) Safety mesh.

On-site action

1. Materials: 18mm thick CFC sheets for substrate below waterproofed timber decks and 15mm thick CFC sheets for wet area floors (HardiPanel or CSR equivalent) and 6mm thick CFC sheets for wet area walls (Villaboard or CSR equivalent) are recommended.
2. Arrange for fixing grounds, including penetrations, as required.
3. Protect surrounding work, including other finishes, equipment and components, during installation. Provide protective covering where necessary.
4. Finish joints and secure fasteners. Remove surface defects to achieve uniform appearance of each type of installation.
5. Additional support - provide a frame member behind every joint in fibre cement sheeting or lining.
6. Wet areas, including box-gutters - provide the flashings, trim and sealants necessary to ensure wet areas are water proofed.
7. Joints in tiled areas - do not apply a topping coat after bedding perforated paper tape in bedding compound.
8. Control joints. Install control joints in accordance with the manufacturer's recommendations.
9. Remove spatterings, droppings and surplus material.
10. Clean exposed surfaces including trim and edge mouldings. Comply with the manufacturer's instructions for cleaning and touching up of minor finish damage.
11. Make good damage in every respect at no additional cost to the owner.

TIMBER TRUSSES (NAILPLATE)

Scope of work - Supply engineer and install timber trusses with nail plates, ties to wall and other structural components, including bracing, as set out in the project specification.

Comply with applicable clauses of these building standards (in current edition, amendments and supplements.)
AS 1170 Structural design actions.
AS 1613 (2005) Timber – colours for marking F-grades.
AS 1720 Timber structures.
AS 2082 (2007) Timber – hardwood – visually stress-graded for structural purposes.
AS 2858 (2008) Timber – softwood – visually stress-graded for structural purposes.
AS 4440 (2004) Installation of nail-plated timber roof trusses.
AS/NZS 1170 (1994) Structural design actions.
AS/NZS 1748 (2006) Timber – mechanically stress-graded for structural purposes.
AS/NZS 2878 (2000) Timber – classification into strength groups.

On-site action
1. Ensure wall and other building components are secure and that adequate grounds are in place.
2. Deliver trusses in waterproof wrapping.
3. Provide and install a safety system to comply with current occupational health and safety requirements.
4. Handle and erect trusses to avoid damage and permanent sets. Brace each truss as it is installed.
5. Ensure that trusses are placed at correct spacing.
6. Where necessary, request the structural engineer to check installation.

WATERPROOFING

Scope of work - Supply and install tanking to items, including, waterproofing garden containers, concrete and masonry patching and filling, membrane installation and surface protection as set out in the project specification Carry out preparatory and protective work.

Comply with applicable clauses of these building standards (in current edition, amendments and supplements.)
AS 3740 (2010) Waterproofing of wet areas within residential buildings.

On-site action
1. Remove projections, which could penetrate tanking membrane and fill holes in the surface to be tanked.
2. Do not install membrane during adverse weather conditions.
3. Install the complete sheet membrane tanking in compliance with the manufacturer's instructions..
4. Provide bond breaker along all walls and floor joints.
5. Execute seals around penetrations, up-stands, etc, as instructed by the manufacturer.
6. Apply protective sheeting over membrane on the outside of tanked walls.

WET AREA MEMBRANE

Scope of work – Supply and install wet area membrane to all floors and walls of wet areas, including bathrooms, ensuites and laundries. Carry the membrane under fixtures, baths, shower bases, toilets, vanities and the like.

Comply with applicable clauses of these building standards (in current edition, amendments and supplements.)
AS 3740 (2010) Waterproofing of wet areas within residential buildings.

Preparation
1. Material to be used - liquid applied, moisture curing, polyurethane liquid membrane, such as Vulkem 350NF system by Tremco Pty Ltd. Any alternative shall be a proprietary liquid applied or sheet membrane system which has a current Australian Building Product and Systems Certification Scheme certificate (Australian Building Codes Board); or has a current technical opinion issued by the Australian Building Systems Appraisal Council (CSIRO) stating that the system is suitable for use as a waterproofing system for use in wet areas, shower recess bases and associated floors and wall/floor junctions which are to be tiled.
2. Allow concrete to cure for a minimum of 28 days prior to the application of the membrane.

On-site action
1. Clean down the substrate surface to remove all curing agents, wax, grease, oil, dirt, dust and other foreign material and leave it clean, dry, dust free, smooth and free of undulations.

2. Patch voids with a non-shrinking quick setting grout and allow them to cure for a minimum of 7 days prior to applying the membrane.
3. Fillet: wherever a vertical penetration or up-stand occurs, install a 12mm x 12mm fillet of Vulkem 931 at the intersection of the vertical and horizontal surfaces.
4. Primer: prime porous substrate (concrete/cement) typically with Vulkem 171.
5. Prime non-porous materials (metals/plastics) typically with Tremco Primer No 181.
6. Joints and penetrations: on the same day of priming, seal joints and penetrations with Vulkem 931 sealant.
7. First coat: on the same day as priming, apply a coat of Tremco Vulkem 350NF to a minimum wet film thickness of 1.5mm to floors and walls in a single operation. If delayed beyond that day, re-prime in accordance with the manufacturer's instructions.
8. Detail as follows: a) turn the membrane down into the puddle flange of outlets; b) turn the membrane up at and seal to all penetrations, pipes, waste outlets, etc; c) turn the membrane up for 100mm at all walls, plinths, and other up-stands, d) dress the membrane over the horizontal leg of angle tile trims at doorways and turn up the vertical face of the angle to terminate level with the bottom of the floor tiles; e) similarly dress the membrane up the face of door jambs to terminate at the underside of the floor tiles - the membrane turn up is to create a complete waterproof envelope to the floor area of the space being treated; f) detail the membrane at movement joints in the substrate as detailed on the drawings.
9. Membrane curing: allow 72 hours for the membrane to cure prior to carrying out water tests or applying finishes, toppings etc.

THERMAL AND ACOUSTIC INSULATION

Scope of work - Supply and install thermal insulation as set out in the project specification.

Comply with applicable clauses of these building standards (in current edition, amendments and supplements.)
AS 3999 (1992) Thermal insulation of dwellings – bulk insulation – insulation requirements.
AS/NZS 4200 (1994) Pliable building membranes and underlays.
AS/NZS 4859 (2002) Materials for the thermal insulation of buildings - general criteria and technical provisions.
SAA HB63 (1994) Home insulation in Australia.

On-site action
1. Prepare surfaces and or framing material and ensure that no obstructions will prevent installation.
2. Batts: Fit tightly between framing members. If support is not otherwise provided, secure nylon twine to the framing and stretch tight.
3. Installation - apply to the other face of external stud walls from the top plate down over the bottom and flashing. Run across the studs and lap at least 150mm at joints.
4. Roof sarking: Provide heavy-duty roof sarking under metal roof.
5. Roof ventilation: Finish sarking 50mm clear of ridges.
6. Wall sarking: Provide vapour-permeable sarking under cladding.

METAL ROOFING, SIDING AND PLUMBING

Scope of work – Install metal roofing with associated gutters, down pipes, sarking, skylights and translucent roofing, as set out in the project specification.

Comply with applicable clauses of these building standards (in current edition, amendments and supplements.)
AS 1273 (1991) Un-plasticised PVC (UPVC) downpipe and fittings for rainwater.
AS 1562 (1992) Design and installation of sheet roof and wall cladding.
AS 3999 (1992) Thermal insulation of dwellings – bulk insulation – installation requirements.
AS 4285 (2007) Skylights.
AS/NZS 1170 Structural design actions.
AS/NZS 4389 (1996) Safety mesh.
AS/NZS 4859.1 (2002) Materials for the thermal insulation of buildings – general criteria and technical provisions.
SAA HB39 (1997) Code of common practice for steel roofing.
SAA HB63 (1994) Home insulation in Australia.
SAA HB114 (1998) Guidelines for the design of eaves and box gutters.

On-site action
1. Ensure framing is in place and secure. Ensure safety equipment is in place. Provide permanent safety anchors to each roof.

2. Do not allow Colorbond steel roofing to directly contact copper, lead, green or treated timber, stainless steel, mortar or concrete.
3. Lay foil-faced insulation blanket over battens with the foil face down.
4. Form penetration flashings neatly with material matching roofing material or install EPDM collars. Provide flashings at all up-stands lapped 150mm at junctions. Step flashings evenly. Finish top corners to a line parallel to the roof slope.
5. Close and seal ends of cut ribs.
6. Form back gutters not less than 100mm wide with falls towards the sides of the penetration collars. Seal joints with compatible sealant.
7. Secure downpipes through cladding to structure.
8. Seal at stormwater pipe up-stands.
9. Remove debris from gutters and downpipes.
10. Test on completion.

DOORS, WINDOWS AND HARDWARE

Scope of work - Install items including the following: door frames and doors for external and internal door openings, window frames and glass, sashes, glazed doors, flyscreens, hardware, flashings, acoustic and sun control material, as set out in the project specification.

Comply with applicable clauses of these building standards (in current edition, amendments and supplements.)
AS 1288 (2006) Glass in buildings – selection and installation.
AS 2047 (1999) Windows in buildings.
AS 2754.2 (1991) Adhesives for timber and timber products – polymer emulsion adhesives.
AS 3715 (2002) Metal finishing - Thermoset powder coatings for architectural applications.
AS 3959 (2009) Construction of buildings in bushfire prone areas.
AS 4055 (2006) Wind loads for housing.
AS 4145 Locksets and hardware for doors and windows.
AS 4145 (2008) Mechanical lockset for doors and windows in buildings.
AS 4145.1 (2008) Glossary of terms and rating system.
AS 4145.2 (2008) Mechanical locksets for doors and windows in buildings.
AS 4145.3 (2001) Mechanical locksets for windows in buildings.
AS 4145.4 (2002) Padlocks.
AS 4178 (1994) Electromagnetic door holders.
AS 5007 (2007) Powered doors for pedestrian access and egress.
AS 5039 (2009) Security screen doors and security window grilles.
AS/NZS 1170 Structural design actions.
AS/NZS 1664 (1997) Aluminium structures.
AS/NZS 1665 (2004) Welding of aluminium structures.
AS/NZS 2208 (1996) Safety glazing in buildings.
AS/NZS 2270 (2006) Plywood and blockboard for interior use.
AS/NZS 2271 (2004) Plywood and blockboard for exterior use.
AS/NZS 2924 (1998) High pressure decorative laminates – sheets made from Thermosetting resins.
AS/NZS 4680 (2006) Hop-dip galvanised (zinc) coatings on fabricated ferrous articles.
SAA HB 125 (2007) The glass and glazing handbook

Doors and Windows
1. Prepare openings in walls and provide necessary anchors for building into masonry openings.
2. Install fixing grounds to secure frames.
3. Isolate aluminium from steel wall frames.
4. Erect frames plumb and true. Ensure frames are well anchored.
5. Install flashings.
6. Install glass in accordance with AS 1288 and with correct sealants.
7. At head and jambs allow 3mm clearance to doors.
8. At floor allow 6 mm clearance over floor covering for doors.
9. Install flyscreens fixed, hinged, or removable, as specified.
10. Check and clean on completion.

Hardware
1. Check goods upon arrival.
2. Lock away until needed and assume responsibility for all the items' security.

3. Fit accurately at correct heights.
4. Install window winders, catches, locks etc, in accordance with AS 4145 and the written instructions of each manufacturer.
5. Oil hinges and locks and provides two keys to each lock.
6. Protect until completion of project.
7. At completion of project, change all locks and key alike as required by the owner.

SKYLIGHTS

Scope of work – Supply and install skylights with associated ventilation shafts as set out in the project specification.

Comply with applicable clauses of these building standards (in current edition, amendments and supplements.)
AS 4285 (2007) Skylights.

Preparation
1. Determine the material to used, eg, square skylight, set in plan of roof, pyramid skylight – set in plane of roof, circular skylight – set in plane of roof, sky window – hinged opening roof panel, ventilation – refer to manufacturer's instructions.
2. Obtain manufacture's installation instructions.
3. Ensure related parts of the building are secure and ensure adequate protection during installation.

On-site action
1. Cooperate with the trade installer, if applicable.
2. Install securely, applying appropriate sealants in accordance with the manufacturer's instructions.

CEMENT RENDER

Scope of work – Prepare substrate and apply cement render, as set out in the project specification.

Comply with applicable clauses of these building standards (in current edition, amendments and supplements.)
AS 1672 (1997) Limes and limestones.
AS 3972 (2010) Portland and blended cements.
CIA Z39 (2010) Render finishes.

Materials

Item	Description / Supplier
Lathing (over framed walls and construction joints)	Zinc-coated steel expanded metal mesh.
Materials – sand	Fine aggregate with low clay content, selected for grading.
Materials – cement	To AS 3972-1997 Portland and blended cements), type GP.
Materials – lime	To AS 1672.1-1997 Limes and limestones - limes for building.

On-site action
1. Ensure dirt, grease, and other materials, which could reduce bonding of render to the surface, are removed.
2. Provide cement-based key to smooth surfaces.
3. Check substrate for suitability.
4. Prevent damage to adjacent surfaces.
5. Fix lath over junctions of dissimilar substrates.
6. Mixes, generally: 3 parts sand:1 part cement; for render over masonry and concrete substrates, not greater than 6 parts sand, 1 part lime, 1 part cement by volume. Machine mix materials.
7. Apply material within 30 minutes of adding water.
8. Do not re-temper.
9. Finish external corners with a 4mm radius round.
10. Extend rendering into recesses, jambs, returns etc.
11. Form V-joints in render at junctions with other materials.
12. Apply base coat 13 - 15mm thick, screed to a smooth level and even surface. Allow to dry.
13. Finish with wood trowel to smooth even surface.
14. Finish plane surfaces within a tolerance of 6 mm in 3 m, determined using a 3 m straight edge placed anywhere in any direction. Finish corners, angles, edges and curved surfaces within equivalent tolerances.

15. Do not allow rapid or uneven drying out.

PLASTERBOARD

Scope of work - Supply and install plasterboard, including water-resistant plasterboard, flexible plasterboard, masonry walls, ceilings, drop-walls, bulkheads and fire-rated walls, as set out in the project specification.

Comply with applicable clauses of these building standards (in current edition, amendments and supplements.)
AS 2753 (1985) Adhesives - Mastic - for bonding gypsum plaster linings to wood and metal framing members
AS 3740 (2010) Waterproofing of wet areas within residential buildings.
AS/NZS 2588 (1998) Gypsum plasterboard.
AS/NZS 2589 (2007) Gypsum linings in residential and light commercial construction.

On-site action
1. Ensure the framing is complete and electrical and other wiring is in place.
2. Form recesses, drop-walls and manholes as required.
3. In wet areas ensure compliance with AS 3740.
4. Install cornices.
5. Framing and/or substrates shall be prepared to Level 4 finish specifications as detailed in the 'CSR Gyprock Plasterboard Residential Installation Guide'. No. GYP547. Framing must also conform to structural standards specified by the appropriate building authorities and/or Australian Standards.
6. Plasterboard fixing, jointing and finishing shall be to Level 4 finish specifications as detailed in the 'CSR Gyprock Plasterboard Residential Installation Guide'. No. GYP547.

TILING

Scope of work - Prepare surfaces to be tiled. Supply and install bedding, as required, and tiles including wall tiles, floor tiles and external paving tiles, as set out in the project specification. Clean the finished work.

Comply with applicable clauses of these building standards (in current edition, amendments and supplements.)
AS 2358 (1990) Adhesives for fixing ceramic tiles.
AS 3740 (2010) Waterproofing of wet areas within residential buildings.
AS 3958 Ceramic tiles.
AS/NZS 3661.2 (1994) Slip resistance of pedestrian surfaces – guide to the reduction of slip hazards.
AS/NZS 4586 (2004) Slip resistance classification of new pedestrian surface materials.
AS/NZS 4663 (2004) Slip resistance classification of existing pedestrian surfaces.

On-site action
1. Materials: Screed for walls and floors shall be 1 part cement / 4 parts sand. Grout for walls shall be Epoxy based mildew resistant and grout for floors shall be prepared grout acid resistant. Expansion joints for walls shall be 5mm, floors - 8mm. Fill both with silicone rubber. Apply waterproof membrane over floor screed.
2. Ensure surfaces are clean and dry and there is no variation on walls greater than 5mm under a 2000mm long straight edge.
3. Ensure waterproofing has been completed.
4. Install floor-backing boards as required for floor tiles on timber.
5. Form expansion joints no more than 2500mm apart.
6. Install wall tiles with expansions joints not more than 2500mm apart, at floor level, at corners of walls and at change of background material.
7. Install grout of selected colour. Clean each surface on completion. All corners to wet area shall be sealed with silicon pointing not grout.
8. Cut tiles neatly to fit around fixtures and fit tings and at margins where necessary. Drill holes without damaging the tile faces. Rub edges smooth without chipping. Return tiles into sills, reveals and openings. Butt up returns, frames, fittings and other finishes.
9. Distribute variations in hue, colour, or pattern uniformly, by mixing tiles or tile batches before laying.
10. Clean each surface upon completion.
11. Keep traffic off floors until the bedding has set and attained its working strength.

STONE FLOORING AND WALL PANELS

Scope of work – prepare and install stone flooring and wall panels in accordance with the project specification. Supply and install required accessories, screeds, anchorages, as required.

Comply with applicable clauses of these building standards (in current edition, amendments and supplements.)
AS 2358 (1990) Adhesives for fixing ceramic tiles.
AS 3700 (2007) Masonry structures.
AS 3972 (2010) Portland and blended cements.
BS 8298 (1994) Code of practice for design and installation of natural stone cladding and lining (British Standard).

Preparation

1. Provide a total of 2 samples of each stone panel specified. The samples of stone shall average 600 x 600mm be complete to the extent of surface finishes - face and edges.
2. The architect will make a selection of colours from a range offered by the supplier through the builder.
3. The stone to be installed will match the approved samples in all respects except size. Substitutions offered as a result of non-availability of stone will not be accepted.
4. Provide comprehensively detailed and dimensioned shop drawings for every panel, showing details of fabrication finishing, penetrations, anchor slots, dowel cores, steel stripping, angles, bolts, ties, etc, with locations in building and necessary explanatory notes.
5. Grinding and polishing: machine polish exposed faces, edges, bird's mouth, etc, to a distortion-free mirror finish. Grind the straight cut edges to a smooth finish. Reverse face: Rough surface to provide key for mortar bed for floor tiles.
6. Stone tolerances: finish polished stone with a tolerance of 0.5mm and thickness tolerance: +2mm or -2mm.
7. Grout floor and wall panels with cement coloured to match the wall panel colour, to architect's selection.
8. Weather conditions: do not proceed with installation of liquid sealants or wall sealers under unfavourable weather conditions.
9. Materials
   a. Cement: sulphate-resisting (Type D) Portland cement, conforming to AS 3972.
   b. Sand: washed concrete sand or screened gravel, conforming to AS 3700, with a maximum of 5% being less than 75 microns in sieve size. Ordinary mason's sand will not be permitted.
   c. Lime: hydrated lime, conforming to AS 3700.
   d. Water: drinkable quality.
   e. Mortar below floor panels
      - Mortar mix: 4 parts sand, 1 part cement, minimum 30mm thick.
      - Reinforcement: to entire area, with break under control joint, light gauge galvanised wire, minimum 2.5mm diameter wire at 100mm both ways.
      - Adhesive for stone flooring.

<u>Wall Panel Fixing Materials</u>

a. Metal fixings: required panel fixing materials include M12 bolts, nuts, shelf angles, pins, dowels, masonry anchors. Other fixing devices, between panels, shall be stainless steel type 304 or 316 austenitic stainless steel. Type 302 steel shall not be used.
b. Shim: pack or shim between masonry, concrete and stainless steel fixing angles with inert material such as nylon or other suitable material.
c. Sealant backer rod: compressible rod stock of closed cell polyethylene foam, polyethylene jacketed polyurethane foam, butyl rubber foam, neoprene foam or other flexible, permanent, durable non-absorptive material as recommended by sealant manufacturer for compatibility with sealant.
d. Bond breaker tape: polyethylene tape or other plastic as recommended by sealant manufacturer to be applied to sealant-contact surfaces where bond to substrate or joint filler is to be avoided for proper performance of sealant. Provide self-adhesive tape where applicable.
e. Joint filler: bitumen or acrylic saturated polyurethane foam strip (under shelf angles only).

<u>Adhesive and Sealant</u>

a. Epoxy adhesive: a 2-part epoxy adhesive specifically applicable to securing metal to stone and capable of being poured or readily inserted into small diameter holes in stone.
b. Joint sealant system: sealant - low modulus neutral curing polysulphide or silicone rubber compounds.
   - Composition: as recommended by the manufacturer for this installation
   - Colour: to match stone - a non-standard colour is required.
   - Primer: If recommended by the sealant manufacturer.

Panel Layout Schedule

f. Prepare layout plan(s) showing location of panels, each panel numbered with a coding system that gives each panel a unique number. After cutting, lay out each section of the wall or floor to determine the most aesthetic arrangement of the panels within the colour and figuring limitations of the control samples. Reject panels which do not blend into the overall colour and texture pattern.
g. Architect to inspect an approve layouts prior to panel numbering.
h. Make layout adjustments as requested by architect.
i. After receiving approval, number panels, to match the panel layout number system.
j. Panel fixings schedule for walls: fixing devices, bolts, anchors, clips, shims, spacers, lugs and other installation accessories shall be stainless steel.
   - General: drawings indicate typical arrangements for panel fixing.
   - Develop additional details in the shop drawings to describe those conditions not shown on the drawings.
   - Wall panels: schedule of fixings - subject to the detailed shop drawing development of fixing conditions or each panel condition, the following schedule applies: two (2) rod supports at the base of each panel up to 1200mm in width; two (2) pairs at the top of each panel greater than 800mm in height; lowest row: pack behind tiles with mortar to 300mm above floor surface.

1. On arrival at the site, inspect panels and ensure that stone supplied matches samples precisely. Panels with chipped or broken edges, cracks or other damage or of improper colour or texture, will be rejected, removed and replaced.
2. Check panel fit: before a panel is lifted onto the wall, accurately measure the panel and the supporting structure and check generally that requirements for the support of the panel are met, and in particular ensure that:
   a. Levels and projections are correct within the specified tolerances.
   b. Fixings are located within specified tolerances and are correctly aligned to receive panels.
   c. Flashings, baffles, seals and ancillary items on the adjoining panels are inserted or fixed to ensure proper sequential execution of the whole of the work.
   d. The erection tolerances of the surrounding panels and panel joints are correct. The maximum deviation from a 2m straight edge placed in position on a nominally plane surface should not generally exceed 2mm.
3. Location of dowels: + or -2mm relative to the theoretical line of the centre of the panel and + or -2mm relative to the width.
4. Maintain tolerances by preventing concavity or convexity of the unit caused by inaccuracies in the manner in which the surface is formed or finished.
5. Grouting: install a 1 metre long grout sample. Obtain architect's approval before proceeding further.
6. Cleaning: remove mortar, and other matter from both surfaces and interfaces of stone panels. Remove shims exposed to view.
7. Protection: protect installed stone from damage by suitable means until practical completion.

WOODSTRIP FLOORING

Scope of work - Supply, install and finish wood strip flooring on floor framing members, as set out in the project specification.

Comply with applicable clauses of these building standards (in current edition, amendments and supplements.)
AS 2796 Timber – hardwood - sawn and milled products.
AS 4786.2 (2005) Timber flooring - sanding and finishing.

Preparation
1. Deliver materials when the building is at lock-up stage.
2. Do not install boards until the building is completely weatherproof.
3. Concrete slabs must be dried to a maximum 5.5% moisture content before boards are delivered.
4. It is recommended that floor bearers and joists should be kiln-dried F17 or F27.
5. Open packages and spread across joists for 14 days before fixing.
6. Check moisture content of timber; coastal areas require a maximum of 13% moisture, dry areas and air conditioned spaces a maximum of 9% moisture.

On-site action

All internal flooring
1. Provide expansion gaps of 10-15mm around the edges of each floor area.

2. Provide 10mm compressible cork infill where boards abut exterior frames or other floor finishes.
3. Provide 10mm expansion joints where floors are greater than 6m wide.
4. Place straight waste wood before each board to be cramped.

Face nailed flooring
1. Nail at a minimum of 20mm from edge of the board. Two nails for wide boards.
2. Pre-drill nail holes in dense boards. Nails shall be no less than 2.5 times the thickness of the board.
3. Punch nails at a minimum of 3mm below the surface.

Secret nailed flooring
1. Apply a polyurethane adhesive to the top of the floor joists before nailing.
2. Fix boards up to 80mm wide with a secret nailing gun.

Screwed and plugged flooring
1. Floorboards shall be screwed and plugged, two screws across each board.
2. Pre-drill screw holes.
3. Lay in long lengths (minimum 3 spans.)

Internal floor finishing
1. Rough and fine sand and fill nail holes with fast drying nail filler.
2. Finish treatment to owner's specification.

External decking
1. Lay boards with a 2mm gap for unseasoned timber and a 4mm gap for seasoned timber
2. Coat the tops of joists and all sides of decking with a water repellent preservative and surface finish prior to laying boards. Ensure the cut ends of all timbers are well treated.
3. Stagger butt joints in boards and locate all joints over joists.
4. Nail every board with two nails at every joist. Stagger nails at intermediate joists and position nails at least 12mm from the edges and ends of boards.
5. Pre-drill nail holes to 80% of nail diameter.
6. Nail cypress boards with 50 x 2.5mm machine driven flat heads and hardwoods with 50 x 2.8mm bullet heads. Nails to finish flush with top of decking. All fixings shall be stainless steel.

PAINTING

Scope of work - Supply and apply paints and other finish coatings, as set out in the project specification.

Comply with applicable clauses of these building standards (in current edition, amendments and supplements.)
AS 1318 (1985) Use of colour for the marking of physical hazards and the identification of certain equipment in industry (known as the SAA Industrial Safety Colour Code.)
AS 1319 (1994) Safety signs for the occupational environment.
AS/NZS 2311(2009) Guide to the painting of buildings.
AS/NZS 2312 (2002) Guide to the protection of structural steel against atmospheric corrosion, by the use of protective coatings.

Materials – refer to the project specification for colours.

Item	Description / Supplier
Internal	
Ceilings: dry areas	Wattyl Professional Choice Matt Acrylic (spec DS 085.3)
Ceilings: wet areas	Wattyl Professional Choice Matt Acrylic (spec DS 085.3)
Doors – timber	Wattyl Professional Choice Easy Flow Gloss Enamel (spec DS 110.1 for previously painted and spec DS 100.4 for new work)
Joinery: trim	Wattyl Professional Choice Easy Flow Gloss Enamel (spec DS 110.1 for previously painted and spec DS 100.4 for new work)
Walls: new plasterboard in dry areas	Pascol Washable Interior Low Lustre (spec DS 065.3)
Walls: new plasterboard in wet / other areas	Pascol Washable Interior Low Lustre (spec DS 065.3)
Walls: previously painted	Pascol Washable Interior Low Lustre (spec DS 065.3)
External	
Block / brickwork	Wattyl Professional Choice Sunfast Low Sheen (spec DS 250.1 for previously painted and spec DS 250.6 for new work)

Concrete	Wattyl Professional Choice Sunfast Low Sheen (spec DS 250.1 for previously painted and spec DS 250.6 for new work)
Door and window frames (painted)	Wattyl Professional (as interior)
Door and window frames (clear)	Feast Watson Woodshield
Eaves and soffits	Exterior low sheen acrylic paint by Dulux or equivalent
Fibre cement	Wattyl Professional Choice Sunfast Low Sheen (spec DS 250.1 for previously painted and spec DS 250.6 for new work)
Hand rails	Feast Watson Decking Oil
Metalwork	High gloss enamel paint by Dulux or equivalent
Render	Wattyl Professional Choice Sunfast Low Sheen (spec DS 250.1 for previously painted and spec DS 250.6 for new work)
Screens, shutters and eaves linings	Feast Watson Woodshield
Steel brackets – galvanised	Pascol Sunscreen Satin Acrylic (spec DS235.4)
Weatherboard walls – clear	Feast Watson Woodshield
Weatherboard walls – painted	Wattyl Professional Choice Sunfast Low Sheen (spec DS 250.1 for previously painted and spec DS 250.6 for new work)

On-site action

1. Deliver materials in sufficient quantities in advance of the time needed so that work will not be delayed in any way.
2. Store materials in the manufacturer's original sealed containers, bearing the manufacturer's standard label, indicating type and colour and in designated spaces in a manner, which meets the requirements of applicable codes and fire regulations. Keep such spaces secure and provide each space with a fire extinguisher of carbon dioxide or dry chemical type bearing a tag of recent inspection.
3. Remove door furniture, switch plates, light fittings and other fixtures before starting to paint, and refix in position on completion of painting.
4. Prepare a sample panel of 2 square metres of each paint type. Stop. When approved by the architect, continue.
5. Clean off marks, paint spots and apply coats and paint types as specified. If a paint system is referred to by its final coat, provide the primers, sealers and undercoats which are suitable for the substrate and compatible with the finish coat and each other.
6. Do not combine paints from different manufacturers in a paint system.
7. Priming before fixing:
8. Timber: apply a first coat (two coats to end grain) to exposed roof trim, timber doors and window frames, tops and bottoms of doors, associated trims and glazing beads before fixing in position.
9. Steel: apply a priming coat of zinc-rich organic binder to GPC C-29/16-1997. Prime areas affected by cutting or welding to the same specification.
10. Stain progressively. Touch up damaged decorative paintwork or misses with the paint batch used in the original application.
11. Complete clear timber finishes before commencing opaque paint finishes in the same area. Provide a filler, tinted to match the substrate if the finish is transparent.
12. Apply the first coat immediately after substrate preparation and before contamination of the substrate can occur. Ensure each coat of paint or clear finish is uniform in colour, gloss, thickness and texture, and free of runs, sags, blisters or other discontinuities.
13. Complete clear timber finishes before commencing opaque paint finishes in the same area.

FLOOR DRAINS

Scope of work - Supply and install floor drains recessed into floor surfaces as set out in the project specification.

Comply with applicable clauses of these building standards (in current edition, amendments and supplements.)
AS/NZS 3500 (2003) Plumbing and drainage
AS/NZS 3500.3 (2003) Stormwater drainage.
AS/NZS 3500.3.1 (1998) Stormwater drainage – drainage requirements.
AS/NZS 3500.5 (2000) Domestic installations.

On-site action

1. Ensure that adequate depth, falls and other conditions exist before ordering and installing floor drains.
2. Prepare for installation of formwork and pipes through structures.
3. Locate accurately the depth and falls required. Install formwork and provide for openings to drain pipes, before pouring concrete or constructing floor.

4. Arrange for inspection by manufacturer.
5. Ensure that the surface level of installed work matches that of finished floor surfacing material
6. Connect to stormwater drains or sanitary drains as advised.

WATER STORAGE TANKS

Scope of work - Supply and install water storage materials and equipment for storage of rain and other potable water, including tanks, stands, filters and reticulation, as set out in the project specification.

On-site action

1. Ensure that each part of the site or building to which equipment will be connected is secure and will permanently support the components.
2. Ensure that adequate falls will maintain water flows.
3. Arrange installed components in logical sequence. Form secure connections without causing damage to existing building or structures.
4. Install reticulation pipes to match where possible the materials described in Water Distribution trade section.

DOMESTIC AIRCONDITIONING

Scope of work - Supply, install and commission split-system air-conditioning consisting of but not limited to a separate condenser unit and wall or ceiling mounted reverse cycle unit which supply heated or cooled air, as set out in the project specification.

Comply with applicable clauses of these building standards (in current edition, amendments and supplements.)
AS 1324 (2001) Air filters for use in general ventilation and air-conditioning.
AS 1668 (1998) The use of ventilation and airconditioning in buildings.
AS 4254 (2002) Ductwork for air-handling systems in buildings.
AS/NZS 3000 (2007) Electrical installations (Australian/New Zealand Wiring Rules.)

On-site action

1. Provide necessary safety or security controls where required to ensure safe working practice and installation.
2. Provide needed penetration, openings, chases and structures for safe secure and effective installation of components. If installation is required in a duct or riser, cooperate with the other relevant trades.
3. Ensure that the structure required to support the equipment is adequate for the purpose. Make good any surfaces damaged or marked during the installation.
4. Arrange for an inspection by the manufacturer's representative to confirm correct installation.

FLOOR HEATING and EQUIPMENT

Scope of work – Prepare floor surface and install electrical floor heating, whether it be buried in concrete, placed between carpet and underlay, below ceramic tiles, terracotta or stone, on granolithic, below carpet, vinyl or stick-down timber, float flooring, as set out in the project specification; complete installation with electric controls and outlets.

Comply with applicable clauses of these building standards (in current edition, amendments and supplements.)
AS/NZS 3000 (2007) Electrical installations (Australian/New Zealand Wiring Rules.)

On-site action

1. Comply throughout with the supplier's written instructions.
2. Engage only a supplier's franchise holder (who is trained in the technology.)
3. Monitor to check on a fully satisfactory installation and continuity.

ELECTRICAL DISTRIBUTION

Scope of work - Design, supply and install electrical transmission and reticulation materials from the mains supply, including but not limited to: the specified required electrical power and light outlets, telephone, internal communication system and television antenna.

Comply with applicable clauses of these building standards (in current edition, amendments and supplements.)
AS 1603 Automatic fire detection and alarm systems.
AS 1680 Interior lighting.

AS 2560 Sports lighting
AS 3786 (1993) Smoke alarms.
AS/NZS 2293 Emergency evacuation lighting for buildings.
AS/NZS 3000 (2007) Electrical installation (known as the Australian / New Zealand Wiring Rules.)
AS/NZS 3012 (2010) Electrical installations – construction and demolition sites.
AS/NZS 3018 (2001) Electrical installations – domestic installations.

Note: Only licensed electrical technicians and who are experienced in the requirements of the project may perform work for this trade section and supply only products, which bear the required indication of approval of the relevant statutory authority.

On-site action

1. Provide necessary safety or security controls where required to ensure safe practices and installation.
2. The contractor shall carry out the following preparatory work prior to installation: form slab penetrations for floor-mounted GPOs, telephone outlets etc; chase and make good for conduit access for skirting; chase and wire ducting, GPOs, switches etc, supply and install access openings where required; provide sign-writing to main switch-room and distribution board, form, trim, patch and make good opening for luminaires to sized required by electrician, provide concrete, make good existing roadway, etc.
3. Ensure that pre-wiring of telephone, data, TV and telecommunications services is carried out before installation of linings, paving and landscaping.
4. Confirm location of all visible fittings on site with the owner before installation.
5. Arrange for temporary power supply.
6. Provide consumer mains and connect to the main service by underground cable.
7. Secure cable, using materials specified and at centres recommended by the regulations and / or the manufacturer.
8. Provide control switchgear, circuit breakers and earth leakage protection devices (RDCs) on a wall-mounted switchboard enclosed in a case with a hinge door. Make provision for the supply authority's equipment and arrange for it to be installed.
9. Conceal cables and conduits, including underground cable or conduit entering the building, in a manner that will allow wiring replacement without structural work or the removal of cladding or lining. Do not penetrate damp-proof courses.
10. Provide connecting devices with socket outlets and flush blank plates for fixed appliances.
11. Install flush-mounted accessories in mounting brackets in stud walls
12. Test the electrical installation and smoke alarms.
13. Obtain the relevant compliance certificate from the supply authority.

LIGHTING

Scope of work - Supply and install of mains voltage and low voltage lighting and reticulation, transformers, lamps, mounting devices and reflectors as set out in the particular specification.

Comply with applicable clauses of these building standards (in current edition, amendments and supplements.)
AS 1680 Interior lighting.
AS/NZS 3000 (2007) Electrical installation (known as the Australian / New Zealand Wiring Rules.)
AS/NZS 3947 Low-voltage switchgear and control gear.

Note: Only licensed electrical technicians and who are experienced in the requirements of the project may perform work for this trade section and supply only products, which bear the required indication of approval of the relevant statutory authority.

Materials

Where light dimmers of the thyristor type are used, provide a tuned inductance between the dimmer and the primary of the isolating transformer.

On-site action

1. Low voltage transformers shall be provided on a ratio of 1 transformer to 1 lamp and be compatible with the lamps they are servicing; each transformer shall be concealed from view, securely mounted and have 5% regulation or better short circuit protection, fitted with a fuse on the secondary output.
2. Confirm location of all fittings on site with the architect before installation.

3. Remove material or insulation from within 150mm above or beside lamp reflectors.
4. Ensure adequate ventilation.
5. Secure cables at centres as recommended by the relevant regulations and/or the manufacturer.
6. Conceal wiring and cable equipment. Use conduit cable where necessary.

COMMUNICATION CABLING

Scope of work - Supply and install telephone and high-speed data communication systems with a limit of four lines into each unit, including connecting to the carrier's main cable, designing cable routing, and installing distribution devices.

Comply with applicable clauses of these building standards (In current edition, amendments and supplements.)
ISO/IEC 15018:2005 Information technology – Generic cabling for homes.
AS/ACIF S008 2006 Requirements for customer cabling products.
AS/ACIF S009 2006 Installation requirements for customer cabling (Wiring Rules).

Note: only tradesmen who are AUSTEL-licensed in accordance with requirements of TS009 shall perform this work.

On-site action
1. Examine carefully the proposed route for cable installation and installation of other components and refer to specification for locations of connections, equipment and outlets.
2. Provide necessary safety or security controls where required to ensure safe practices and installations.
3. Provide penetration, openings, chases and structures for safe secure and effective installation of cable as required. If installation is required in the electrical riser, co-operate with the electrician.
4. Where requested by a supply authority, supply test data obtainable from the component manufacturer.
5. Arrange for inspections by component manufacturer's representative to ensure correct application, use and installation.
6. Adjust installation of components to ensure proper fit and alignment.
7. Remedy items of inefficient operation or of doubtful performance.
8. Clean visible items to original condition.
9. Remove debris from installation in open and concealed spaces.

PROJECT SPECIFICATION – CONTENTS PAGE

Page	Section Name
1	General information about the project
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6	Basic interior
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10	Ground floor – Deck 2
11	Ground floor – Living / Dining
12	Ground floor – Pantry
13	Ground floor – Kitchen
14	Ground floor – Laundry
15	Ground floor – Beds 2, 3 and 4
16	Ground floor – Corridor and Linen
17	Ground floor – Bath 1
19	Ground floor – WC
21	Ground floor – Bed 1
22	Ground floor – Ensuite 1
23	Basement – Store 1
24	Basement – Store 2
25	Basement – Bed 5 (Rumpus)
26	Basement – Bath 2
28	Basement – WIR (Store 3)
29	Basement – Study (Bed 5)
30	Basement – Gym (Cellar)
31	Basement – Deck 3

GENERAL INFORMATION ABOUT THE PROJECT

Last update: 27/3/13

1. Project description: Part a) - demolition of the majority of the existing dwelling, construction of a new dwelling and boatshed, installation of a new waste water system, site landscaping and Part b) - additions and alterations to the existing seawalls, construction of a new seawall with access stairs and a skid ramp.
2. Development consent: the project has development consent, number N0168/12 for Part a) endorsed by Pittwater Council on 18 October 2012 and development consent number N0244/12 for Part b) endorsed by Pittwater Council on 17 December 2012.
3. The contract to be used for the project: ...
4. Tender enquiries: All enquiries during the tender period should be directed to de Soyres Malone Architects Pty Ltd.
5. Architectural drawings in .PDF format may be obtained from this office upon request.
6. Permission to visit the site: Tenderers may visit the site by appointment only, and arranged with the architect.
7. The Building Code of Australia (BCA) is now called the National Construction Code (NCC.) Any reference to the BCA should be taken to mean reference to the NCC.
8. Consultants – the following consultants have been appointed for this project.

Architect: de Soyres Malone Architects Pty Ltd – James de Soyres
T: 02 9979 1823 / M: 0418 978 250 / E: james.de.soyres@dsmarchitects.com

Bushfire risk assessor: Planning for Bushfire Fire Protection Pty Ltd – Ron Coffey
T: 02 9913 7907 / E: roncoffey@optusnet.com.au

Environmental scientist: Cardno Ecology Lab – Rick Johnson
T: 02 9907 4440 / W: www.cardno.com.au

Geotechnical engineer: Crozier Geotechnical Consultants – Peter / Troy Crozier
T: 02 9452 5907 / E: pcrozier@bigpond.net.au

Hydraulic engineer: Waddington Consulting - Kate Waddington
T: 02 9400 2986 / M: 0420 823 178 / E: katewaddington@optusnet.com.au

Land surveyor: Souter & Associates (now SDG) – Ian Souter
T: 02 9630 7955 / E: is@sdg.net.au

Landscape architect: Trish Dobson
M: 0408 983 020 / E: trish@trishdobson.com.au

Structural engineer: Waddington Consulting – Simon Waddington
T: 02 9976 0070 / M: 0414 393 807 / E: simonwaddington@optusnet.com.au

DEMOLITION

	Description	*Supplier*
Preparation	Provide and maintain siltation control measures and site safety fencing in accordance with the development consent and proper site management practice.	Builder
Buildings	Demolish existing house and terraces, leaving basement floor slab and existing floorboards to the southern end. Asbestos may be present and should be removed and disposed of in accordance with the regulations. Demolish existing paths and walls as show on the plans.	Builder
Trees	Remove existing trees as shown on the drawings	Builder
Demolished materials to be retained	TBA	-

LANDSCAPING AND TERRACES

	Description	*Colour*	*Supplier*
Soft landscaping	To landscape architect's specification and drawings	-	Prov Sum
Retaining walls	Concrete blockwork to engineer's details	-	Builder
Finish to retaining walls	100mm	natural	Builder
Builder's work	General levelling, landscape retaining walls, dispersion trench and drainage trenches, stone and concrete paths and steps. Timber steps.	-	Builder

STAIRS & BALUSTRADES

	Description	*Colour*	*Supplier*
Balustrade Profile EB1	Steel vertical bar		
	Posts – 42 x 12mm galvanised steel		PC Item
	12 x 12mm balusters with 32 x 12 bottom rail and selected tap rail		Builder
Balustrade Profile EB2	Frameless glass		
	Top section 600mm ht - frameless textured glass balustrade – supplier Moondani – conceal fix in stainless steel channel - toughened glass to manufacturer's detail.		PC Item
	Bottom section – 1m ht - 140mm treated timber frame - James Hardie Primeline "Newport" cladding painted – sill Class 1 hardwood; painted 45mm thick.		Builder
Balustrade Profile EB3	SS wire & powder coated aluminium - Posts & handrail powder coated aluminium 40 diam. face fixed - stainless steel infill wire		Builder
Stair 1	Timber stair with timber support structure and aluminium balustrade with stainless steel infill wire		Builder
Sub-structure	Timber stringer hardwood class 1; 42mm thick, stringers on galvanised shoes		Builder
Finish	Timber treads, kiln dried Merbau, 38mm thick Note: Timber treads fixings to be concealed.		Builder
Applied finish	No finish, leave to go grey		-
Stair 1 landing	Concrete slab to engineer's details.		Builder
	Selected tile finish		PC Item
Balustrade east side	SS wire & powder coated aluminium profile EB3		Builder
Handrail	Powder coated aluminium profile EB3 – handrail &		Builder

west side	posts to top stair flight only, no infill wire	

FLOORS

	Description	*Finish*	*Supplier*
Termite protection	Kordon to AS 3660.1; seal all slab penetrations		Builder
Waterproof membrane	To AS3740-2004		Builder
Exterior floor profile EF1	Timber frame with timber decking		
Sub-structure	Timber framing to engineer's detail		Builder
Finish	Timber kiln dried merbau 90x19mm decking, fixed with countersunk stainless steel decking screws		Builder
Applied finish	No finish, leave to go grey		-
Exterior floor profile EF2	Concrete slab and tiles or stone paving		
Sub-structure	Concrete slab to engineer's details		Builder
Sub-finish	Screed to fall		Builder
Finish	Selected tiles or stone		PC Item
Applied finish	None		-
Exterior floor profile EF3	Timber frame with timber decking on galv. stirrups		
Sub-structure	Timber framing to NCC, set above ground with concealed hd galvanised stirrup supports on concrete footings to engineer's detail		Builder
Finish	Selected timber decking, fixed with countersunk stainless steel decking screws		PC Item
Applied finish	No finish, leave to go grey		-
Exterior floor profile EF4	Waterproofed timber deck		
Sub-structure	15mm CFC to falls with waterproofed battens		Builder
Sub-finish	Steel trowel to fall		Builder
Finish	Selected timber decking, fixed with countersunk stainless steel decking screws		-
Applied finish	No finish, leave to go grey		

EXTERNAL WALLS

	Description	*Colour*	*Supplier*
Fastenings/ties	Stainless steel		Builder
Exterior wall profile EW1	Timber frame with fibre cement weatherboard cladding		
Sub-structure	90mm or 140mm treated timber frame		Builder
Insulation	80 mm Rockwool batts, min R 2.0		Builder
Sarking	Medium duty Sisilation		Builder
Finish	14mm FC weatherboard: James Hardie Primeline "Newport"		Builder
Applied finish	Paint		Builder
Architraves	No		Builder
Corner beads	40 x 40mm primed pine, painted		Builder
Exterior wall profile EW2	Timber frame with FC sheet		
Sub-structure	90/140mm treated timber frame		Builder
Insulation	80mm Rockwool batts, min R 2.0		Builder
Sarking	Medium duty Sisilation		Builder
Finish	Hardietex 7.5mm FC sheet		Builder
Applied finish	Acrylic render and paint		Builder
Architraves	No		Builder
Corner beads	40 x 40mm primed pine, painted		Builder
Exterior wall profile EW3	Sandstone veneer wall		

Sub-structure	90mm treated timber frame		Builder
Insulation	80 mm Rockwool batts, min R 2.0		Builder
Sarking	Medium duty Sisilation		Builder
Finish	100mm selected sandstone wall		Builder
Applied finish	None		Builder
Architraves	No		Builder
Retaining wall waterproofing			
Waterproofing	Bituminous applied membrane	-	Builder
Filter drainage	Slotted 90mm geotextile wrapped PVC pipe x2 with vertical standpipe to surface for flushing	-	Builder
Drainage cell	Elmich VersiDrain 8 Geo or similar approved dimpled sheet with geotextile covering	-	Builder
Backfill	Imported granular material to engineer's approval		Builder

EXTERIOR CEILING

	Description	*Colour*	*Supplier*
Exterior ceiling profile EC1	Timber frame structure with fibre cement		Builder
Sub-structure	Timber structure to engineer's detail		Builder
Insulation	120 mm R 3.0 Rockwool insulation batts over rooms		Builder
Finish	6mm FC sheet, recessed edges, set joints		Builder
Applied Finish	Paint		Builder
Exterior ceiling profile EC2	Timber frame structure with fibre cement		Builder
Sub-structure	Timber structure to engineer's detail		Builder
Insulation	120 mm R 3.0 Rockwool insulation batts		Builder
Finish	4.5mm FC sheet, PVC joints		Builder
Applied Finish	Paint		Builder

ROOF

Wind loading N2 to AS 4055

Roof generally	*Description*	*Colour*	*Supplier*
Sub-structure	Timber structure to engineers detail		Builder
Bracing	To engineer's details		Builder
Sarking	75mm foil-faced insulation blanket	-	Builder
Battens	70 x 45mm H3 treated pine	-	Builder
Safety anchors	Provide permanent safety anchors to roof	-	Builder
Roof covering	Colorbond Custom Orb 0.48 BMT	Monument	Builder
Flashings	Colorbond	Monument	Builder
Ridges	Roll-top ridge, Colorbond	Monument	Builder
Fascia	Treated pine painted	Monument	Builder
Gutters	150mm half-round Colorbond	Monument	Builder
Gutter brackets	External		Builder
Leaf screening	Yes; Metal mesh with first flush diverter		Builder
Downpipes	100x75mm Colorbond rectangular	TBA	Builder

FENCES AND GATES

	Description	*Finish*	*Supplier*
Gate wall	To detail	-	Prov Sum
Laundry deck and bin deck screen ES1	Powdercoated aluminium posts & slats – 40x12mm slats, spacing 10mm, height laundry 1.8m, height bin area 1.5m	-	Builder
Side & rear fence	1.5m high aluminium railing	Monument	Builder

FITTINGS

	Description	*Finish*	*Supplier*

House number	Owner's selection	-	Owner
Clothes hoist	Owner's selection	-	Owner
Letterbox flap	Owner's selection	-	Owner
Notes:	Builder to allow for installation and connection of all fittings supplied by owner.		

ELECTRICAL

	Description	*Colour*	*Supplier*
Meter box	Existing	N/A	Builder
TV-aerial	Supply and tune FTA TV aerial	-	Builder
TV-cable	Provide connection point for cable TV service	-	Builder
External GPOs	HPM WS40 series IP53 or other approved	-	Builder
External switches	HPM WS171 series IP56 or other approved	-	Builder
Electrical installation	Yes – refer to service plans, (underground from street)		Builder
Lights	Yes – refer to service plans		PC Item
Incoming telephone & data lines	Underground supply to house from existing pole	-	Builder
Security system	No		-
Photovoltaic cells	Provide space for meter and conduit to roof space and boatshed		Builder

PIPED SERVICES

	Description	*Finish*	*Supplier*
Hot water service	**Solar & gas boosted**	-	Prov Sum
External taps	Exterior hose-cock with screw-thread for hose; refer to plans for locations; external **minimum of 1 tap to be fed from rainwater tank**		Builder
Sewerage system	New wastewater treatment system	-	Builder
Water supply	Existing	-	-
Gas supply	No	-	Builder
Rainwater tanks	Existing		-
Ducted air-con	Reverse cycle		Prov Sum

DOORS & WINDOWS

	Description	*Colour*	*Supplier*
Door and windows	Refer to door and window schedule; all external doors to be keyed alike		Builder
Glazing	Aluminium – powder-coated Dulux Duralloy	Monument	PC Item
	Clear glass = standard float glass Obscured glass = acid etched and sealed Low-e Glass = Comfort Plus Clear 82 Toughened safety glass to AS 1288		Builder
Flyscreens	Fibre-glass mesh. Refer to door and window schedule. Security mesh to laundry door 2J-05		PC Item
Skylights	Velux FCM 665x665 – painted plasterboard shaft		Builder

LANDSCAPING

Provide landscaping as specified in landscape plan prepared by Trish Dobson, reference no 120/DA-L01

Landscaping	Soil preparation, turfing, edging, planting, mulching and weeding	P Sum
Irrigation	-	Owner

FLOOR

	Description	*Supplier*
Interior floor profile IF1	Concrete with carpet	
Sub-structure	Concrete slab to engineer's detail	Builder
Finish	Carpet and underlay	Owner
Interior floor profile IF2	Timber frame with carpet	
Sub-structure	Timber framing to engineer's detail	Builder
Sub-finish	19mm particleboard on vapour barrier	Builder
Finish	Carpet and underlay	Owner
Insulation	Exposed floor areas - 40mm Polystyrene insulation	Builder
Interior floor profile IF3	Concrete with waterproofing and tiles	
Sub-structure	Concrete slab to engineer's detail	Builder
Sub-finish	Waterproofing and mortar bed to falls	Builder
Finish	Selected tiles	PC Item
Applied finish	Sealant to stone tiles	PC Item
Interior floor profile IF4	Timber frame with waterproofing and tiles	
Sub-structure	Timber framing to engineer's detail	Builder
Sub-finish	Waterproofing and mortar bed to falls on 15mm CFC	Builder
Finish	Selected tiles	PC Item
Applied finish	Sealant to stone tiles	PC Item
Insulation	Exposed floor areas - 40mm Polystyrene insulation	Builder
Interior floor profile IF5	Timber frame with timber floor boards	
Sub-structure	Timber framing to engineer's detail	Builder
Sub-finish	19mm particleboard	Builder
Finish	Selected pre-finished timber boards, glued and secret nailed	PC Item
Applied finish	None	Builder
Insulation	Exposed floor areas - 40mm Polystyrene insulation	Builder
Interior floor profile IF6	Concrete with tiles (as IF3 without waterproofing and tiles	Builder

WALLS

	Description	*Finish*	*Supplier*
Interior wall profile IW1	Timber frame with plasterboard		
Sub-structure	90mm treated timber frame		Builder
Insulation	R2.0		Builder
Finish	13mm plasterboard (moisture resistant to wet areas)		Builder
Applied finish	Paint		Builder
Interior wall profile IW2	Timber frame with waterproofed FC sheet and tile		
Sub-structure	90mm treated timber frame		Builder
Insulation	R2.0		Builder
Sub-finish	6mm fibre-cement sheet and waterproofing to AS 3740-2004		Builder
Finish	Selected tiles		PC Item
Applied finish	Sealant to stone tiles		PC Item
Interior wall profile	Timber frame with fibre-cement sheet		

IW3			
Sub-structure	90mm treated timber frame		Builder
Insulation	R2.5		Builder
Sub-finish	6mm fibre-cement sheet (Villaboard) – set joints		Builder
Applied finish	Paint		Builder
Interior wall profile IW4	Timber wall with timber boards		Builder
Substructure	*90/140mm treated timber frame*		
Insulation			
Sub-finish			
Applied finish			
Architrave	AR1 - 65 x 12mm bevel	TBA	Builder
Skirting	SK1 - 140 x 12mm bevel	TBA	Builder
Doors	Flush doors; refer to door and window schedule		Builder
Door and window hardware	Refer to door and window schedule. Lever handles, roses, escutcheons and door stops to timber doors		PC Item

CEILING

	Description	*Supplier*
Interior ceiling profile IC1	Timber frame with plasterboard	
Sub-structure	Timber framing to AS1684 unless specified by the engineer	Builder
Insulation	**88mm thick R2.5 CSR sound screen insulation batts**	Builder
Finish	13mm plasterboard (moisture resistant to wet areas)	Builder
Applied finish	Paint	Builder
Cornice profile CO1	Square set, painted	Builder

STAIRS

	Description	*Supplier*
Stair 1	Carpeted stair with solid balustrade	
Sub-structure	MDF	PC Item
Finish	Carpet and underlay	PC Item
Applied finish	None	Builder
Balustrade	Infill stainless steel wire & spigots, timber posts & ellipse handrail, screwed and plugged	Builder

PIPED SERVICES

	Description	*Colour*	*Supplier*
Air-conditioning	Yes – reverse cycle		Prov Sum
Toilets	Refer to layout – **minimum 3 star rating**		Builder
Showerheads	Refer to layout – **minimum 3 star rating**		Builder
Taps	Refer to layout – **minimum 3 star rating**		Builder
Ducted vacuum	No		

ELECTRICAL

	Description	*Colour*	*Supplier*
Electrical system	Conventional electrical system	-	Builder
GPOs/sockets	Clipsal Slimline	White	Builder
Switches	Clipsal 2000 series Slimline	White	Builder
Dimmers	To match switch system	White	Builder
Fan controllers	To match switch system	White	Builder
Exhaust fans	HPM R621/6L or Clipsal CE150AS 6 inch in line ducted fan with time delay switch	White	Builder
Exhaust grilles	HPM airflow shutter A800	White	Builder
Smoke alarms	Mains powered with battery back-up, recessed	White	Builder
Ceiling fans	Yes – refer to services drawings	TBA	PC Item
Lights	Selected fittings	TBA	PC Item
Floor heating	No	-	-
Security system	No	-	-
Note:	GPOs to be generally mounted above skirting.		

PAINTING

	Description	*Colour*	*Supplier*
Ceilings	Dulux Wash and Wear acrylic - matt	TBA	Builder
Plasterboard walls	Dulux Wash and Wear acrylic - low sheen	TBA	Builder
Internal doors, skirtings, architraves	Dulux enamel semi-gloss	TBA	Builder

Note: All items as specified in the Basic Interior Section unless noted here as otherwise.

FLOOR

	Description	*Supplier*
Profile	EF4 – waterproofed timber deck	Builder
Finish	None – leave to go grey	Builder
Applied finish		

WALL

	Description	*Finish*	*Supplier*
Ballustrade	EB2 – frameless glass		Builder

FITTINGS

	Description	*Finish*	*Supplier*
Joinery			
Fittings			PC Item
Appliances	BBQ cook-top – bottle LPG		Owner

Note: builder to allow for installation and connection of all appliances supplied by the owner.

ELECTRICAL

	Description	*Finish*	*Supplier*
GPOs	Yes – refer to electrical plans		Builder
Lighting	Yes – refer to electrical plans		PC Item
Audio			P Sum

Note: All items as specified in the Basic Interior Section unless noted here as otherwise.

FLOOR

	Description	*Supplier*
Profile 1	EF4 – waterproofed timber deck (over rooms)	Builder
Profile 2	EF1 – timber decking (elsewhere(	Builder
Finish		
Applied finish		

WALL

	Description	*Finish*	*Supplier*
Profile			Builder
Finish			Builder
Skirting profile			Builder

FITTINGS

	Description	*Finish*	*Supplier*
Joinery			
Fittings			
Appliances			

Note: builder to allow for installation and connection of all appliances supplied by the owner.

ELECTRICAL

	Description	*Finish*	*Supplier*
GPOs	Yes – refer to electrical plans		Builder
Lighting	Yes – refer to electrical plans		PC Item

Note: All items as specified in the Basic Interior Section unless noted here as otherwise.

FLOOR

	Description	*Finish*	*Supplier*
Profile	IF5 – Timber frame with 190 x 20mm Royal Oak engineered timber floorboards		Builder
Finish	Prefinished	Driftwood	Builder
Applied finish	None		
Note:	Non-combustible hearth required for fireplace.		

WALL

	Description	*Finish*	*Supplier*
Profile	IW1 – Timber frame with plasterboard	Paint	Builder
	IW4 – Timber frame with timber boards to staircase west wall areas	Driftwood	
Skirting profile	SK1	Paint	Builder
Architrave profile	AR1	Paint	Builder

CEILING

	Description	*Finish*	*Supplier*
Height	Coffered 2700 / 3000		
Profile	IC1 – Timber frame with plasterboard	Paint	Builder
Insulation	185mm R 3.0 Avlex polyester	-	Builder
Cornice profile	Square set	Paint	Builder

FITTINGS

	Description	*Finish*	*Supplier*
Joinery			
Window furnishing	Surface mounted roller blinds		Owner
Fireplace			PC Item
Hearth			P Sum
Fittings			
Appliances			

Note: builder to allow for installation and connection of all appliances supplied by the owner.

ELECTRICAL

	Description	*Finish*	*Supplier*
GPOs	Yes – refer to electrical plans		Builder
Lighting	Yes – refer to electrical plans		PC Item
Air-conditioning	Yes		P Sum
Audio			P Sum
Ceiling fan (s)	No		PC Item
Floor outlet			Builder
Telephone			Builder
TV / data			Builder

Note: All items as specified in the Basic Interior Section unless noted here as otherwise.

FLOOR

	Description	*Finish*	*Supplier*
Profile	IF5 – Timber frame with 190 x 20mm Royal Oak engineered timber floorboards		Builder
Finish	Prefinished	Driftwood	Builder
Applied finish	None		
Note:	Non-combustible hearth required for fireplace.		

WALL

	Description	*Finish*	*Supplier*
Profile	IW1 – Timber frame with plasterboard	Paint	Builder
	IW4 – Timber frame with timber boards to staircase west wall areas	Driftwood	
Skirting profile	SK1	Paint	Builder
Architrave profile	AR1	Paint	Builder

CEILING

	Description	*Finish*	*Supplier*
Height	Coffered 2700 / 3000		
Profile	IC1 – Timber frame with plasterboard	Paint	Builder
Insulation	185mm R 3.0 Avlex polyester	-	Builder
Cornice profile	Square set	Paint	Builder

FITTINGS

	Description	*Finish*	*Supplier*
Joinery	Shelving		P Sum
Window furnishing			P Sum
Fittings			

Note: builder to allow for installation and connection of all appliances supplied by the owner.

ELECTRICAL

	Description	*Finish*	*Supplier*
GPOs	Yes – refer to electrical plans		Builder
Lighting	Yes – refer to electrical plans		PC Item

PIPED SERVICES

	Description	*Finish*	*Supplier*
Item	Pantry sink		PC Item
	Sink waste		PC Item
	Sink taps		PC Item
	Refrigerator		PC Item

Note: All items as specified in the Basic Interior Section unless noted here as otherwise.

FLOOR

	Description	*Finish*	*Supplier*
Profile	IF5 – Timber frame with 190 x 20mm Royal Oak engineered timber floorboards		Builder
Finish	Prefinished	Driftwood	Builder
Applied finish	None		
Note:	Non-combustible hearth required for fireplace.		

WALL

	Description	*Finish*	*Supplier*
Profile	IW1 – Timber frame with plasterboard	Paint	Builder
	IW4 – Timber frame with timber boards to staircase west wall areas	Driftwood	
Skirting profile	SK1	Paint	Builder
Architrave profile	AR1	Paint	Builder

CEILING

	Description	*Finish*	*Supplier*
Height	Coffered 2700 / 3000		
Profile	IC1 – Timber frame with plasterboard	Paint	Builder
Insulation	185mm R 3.0 Avlex polyester	-	Builder
Cornice profile	Square set	Paint	Builder

FITTINGS

	Description	*Finish*	*Supplier*
Joinery	Bench-top		P Sum
	Cabinets		P Sum
	Splashback		
Window furnishing			P Sum
Fittings	Towel rail (not heated)		PC Item
Appliances	Cook-top – electric		Owner
	Dishwasher		Owner
	Freezer		Owner
	Microwave		Owner
	Oven – electric		Owner
	Range-hood – duct to exterior		Owner
	Refrigerator		Owner
	Water filter		Owner

Note: builder to allow for installation and connection of all appliances supplied by the owner.

ELECTRICAL

	Description	*Finish*	*Supplier*
GPOs	Yes – refer to electrical plans		Builder
Lighting	Yes – refer to electrical plans		PC Item
Air-conditioning	Yes		P Sum
Exhaust fan			Builder
Telephone			Builder
TV / data			Builder

PIPED SERVICES

	Description	*Finish*	*Supplier*
Item	Kitchen sink (s)		PC Item
	Sink waste		PC Item
	Sink taps		PC Item
	Refrigerator		PC Item
	Soap dispenser		PC Item
	Water filter		PC Item

Note: All items as specified in the Basic Interior Section unless noted here as otherwise.

ITEM (S) TO BE DEMOLISHED

FLOOR

	Description	*Supplier*
Profile	IF4 – Timber framing with waterproofed FC sheet and tile	Builder
Finish	Tiles	PC Item
Applied finish		Builder

WALL

	Description	*Finish*	*Supplier*
Profile	IW2 – Timber frame with waterproofed FC sheet and tile		Builder
Skirting profile	SK1		Builder

CEILING

	Description	*Finish*	*Supplier*
Height	2700mm		
Profile	IC1 – Timber frame with plasterboard	Paint	Builder
Insulation	185mm R3.0 Avtex Polyester		Builder
Cornice profile	Square set	Paint	Builder

FITTINGS

	Description	*Finish*	*Supplier*
Joinery	Bench-top		P Sum
	Splashback		P Sum
	Cabinets – hand painted		
Window furnishing			P Sum
Fittings	Towel rail (heated)		PC Item
	Towel rail (not heated)		PC Item
	Drying line		PC Item
Appliances	Dryer		Owner
	Washing machine		Owner

Note: builder to allow for installation and connection of all appliances supplied by the owner.

ELECTRICAL

	Description	*Finish*	*Supplier*
GPOs	Yes – refer to electrical plans		Builder
Lighting	Yes – refer to electrical plans		PC Item
Exhaust fan	Yes		Builder

PIPED SERVICES

	Description	*Finish*	*Supplier*
Item	Sink (s)		PC Item
	Sink waste (s)		PC Item
	Sink taps (s)		PC Item
	Floor waste		Builder

Note: All items as specified in the Basic Interior Section unless noted here as otherwise.

FLOOR

	Description	*Finish*	*Supplier*
Profile	IF5 – Timber frame with 190 x 20mm Royal Oak engineered timber floorboards		Builder
Finish	Prefinished	Driftwood	Builder
Applied finish	None		
Note:	Non-combustible hearth required for fireplace.		

WALL

	Description	*Finish*	*Supplier*
Profile	IW1 – Timber frame with plasterboard	Paint	Builder
	IW4 – Timber frame with timber boards to staircase west wall areas	Driftwood	
Skirting profile	SK1	Paint	Builder
Architrave profile	AR1	Paint	Builder

CEILING

	Description	*Finish*	*Supplier*
Height	Coffered 2700 / 3000		
Profile	IC1 – Timber frame with plasterboard	Paint	Builder
Insulation	185mm R 3.0 Avlex polyester	-	Builder
Comice profile	Square set	Paint	Builder

FITTINGS

	Description	*Finish*	*Supplier*
Joinery	Wardrobe	Hand painted	P Sum
Window furnishing	Venetian blinds	Paint	Owner
Fittings			

Note: builder to allow for installation and connection of all appliances supplied by the owner.

ELECTRICAL

	Description	*Finish*	*Supplier*
GPOs	Yes – refer to electrical plans		Builder
Lighting	Yes – refer to electrical plans		PC Item
Air-conditioning	Yes		P Sum
Ceiling fan (s)	Yes – 1 each?		PC Item
Telephone			Builder
TV / Data			Builder

Note: All items as specified in the Basic Interior Section unless noted here as otherwise.

FLOOR

	Description	*Finish*	*Supplier*
Profile	IF5 – Timber frame with 190 x 20mm Royal Oak engineered timber floorboards		Builder
Finish	Prefinished	Driftwood	Builder
Applied finish	None		
Note:	Non-combustible hearth required for fireplace.		

WALL

	Description	*Finish*	*Supplier*
Profile	IW1 – Timber frame with plasterboard	Paint	Builder
	IW4 – Timber frame with timber boards to staircase west wall areas	Driftwood	
Skirting profile	SK1	Paint	Builder
Architrave profile	AR1	Paint	Builder

CEILING

	Description	*Finish*	*Supplier*
Height	Coffered 2700 / 3000		
Profile	IC1 – Timber frame with plasterboard	Paint	Builder
Insulation	185mm R 3.0 Avlex polyester	-	Builder
Cornice profile	Square set	Paint	Builder

FITTINGS

	Description	*Finish*	*Supplier*
Joinery	Linen shelves		P Sum

Note: builder to allow for installation and connection of all appliances supplied by the owner.

ELECTRICAL

	Description	*Finish*	*Supplier*
GPOs	Yes – refer to electrical plans		Builder
Lighting	Yes – refer to electrical plans		PC Item
Air-conditioning	Yes		P Sum

Note: All items as specified in the Basic Interior Section unless noted here as otherwise.

FLOOR

	Description	*Colour*	*Supplier*
Profile	IF4 – Timber frame with waterproofing		Builder
Finish	Tiles	Silver Travertine	PC Item
Applied finish	Premium penetrating natural stone sealant		PC Item
Waterproofing	Approved applied membrane to AS 3740-2004		Builder
Floor heat	Yes		P Sum

WALL

	Description	*Finish*	*Supplier*
Profile	IW1 – Timber frame with MR plasterboard and paint		Builder
	IW2 – Timber frame with waterproofed FC sheet and tile		Builder
Skirting profile	Tiles – New York pattern with tile skirting to IW1	Silver Travertine	PC Item
Waterproofing	Approved applied membrane to AS 3740-2004		Builder
Note:	Form shampoo niche to suit tile sizes.		Builder

CEILING

	Description	*Finish*	*Supplier*
Height	2700mm		
Profile	IC1 – Timber frame with MR plasterboard	Paint	Builder
Insulation	185mm R3.0 polyester		Builder
Cornice profile	Square set	Paint	Builder

FITTINGS

	Description	*Finish*	*Supplier*
Joinery	Bench-top		P Sum
	Cabinets		P Sum
	Splashback		P Sum
Window furnishing	Venetian blind		Owner
Fittings	Mirror – flush mounted 6mm silver		P Sum
	Robe hooks		Owner
	Shower screen – frameless glass shower screen door		P Sum
	Soap dispenser		Owner
	Toilet roll holder		Owner
	Towel rail (heated)		PC Item
	Towel rail (not heated)		Owner
	Towel ring		Owner

Note: builder to allow for installation and connection of all appliances supplied by the owner.

ELECTRICAL

	Description	*Finish*	*Supplier*
GPOs	Yes – refer to electrical plans		Builder
Lighting	Yes – refer to electrical plans		PC Item
Exhaust fan	Yes		Builder
Floor heat	Yes – in-screed floor heat with programmable timer		P Sum
Towel rail - heated			PC Item

PIPED SERVICES

	Description	*Finish*	*Supplier*
Item	Basin (2) – Roger Seller Miky 50		PC Item
	Basin taps x 2		PC Item
	Basin waste x 2		PC Item
	Bath – Kaldewei Classic Duo Oval 1700 x 750 x 430		PC Item
	Bath mixer		Builder
	Bath spout – Kaldewei Muljfiller on bath		PC Item

Bath waste - Kaldewei	Builder
Shower	PC Item
Shower mixer / taps	PC Item
Shower rose – sliding	PC Item
Shower waste – selected linear floor waste	PC Item
Floor waste	Builder

Note: All items as specified in the Basic Interior Section unless noted here as otherwise.

FLOOR

	Description	*Colour*	*Supplier*
Profile	IF4 – Timber frame with waterproofing		Builder
Finish	Tiles	Silver Travertine	PC Item
Applied finish	Premium penetrating natural stone sealant		Builder
Waterproofing	Approved applied membrane to AS 3740-2004		Builder
Floor heat	Yes		P Sum

WALL

	Description	*Finish*	*Supplier*
Profile	IW1 – Timber frame with paint		Builder
	IW2 – Timber frame with waterproofed FC sheet and tile		
Skirting profile	Tile – Silver Travertine 400 x 100		Builder
Waterproofing	Approved applied membrane to AS 3740-2004		Builder
Applied finish	Premium penetrating natural stone sealant.		PC Item

CEILING

	Description	*Finish*	*Supplier*
Height	2700mm		
Profile	IC1 – Timber frame with MR plasterboard	Paint	Builder
Insulation	185mm R3.0 polyester		Builder
Cornice profile	Square set	Paint	Builder

CEILING

	Description	*Finish*	*Supplier*
Height	2700mm		
Profile	IC1 – Timber frame with plasterboard	Paint	Builder
Insulation	R3.0 Polyester		Builder
Cornice profile	Square set	Paint	Builder

FITTINGS

	Description	*Finish*	*Supplier*
Joinery	Bench-top		P Sum
	Vanity cabinet		P Sum
	Splashback		P Sum
Fittings	Mirror – flush mounted 6mm silver		P Sum
	Robe hooks		Owner
	Soap dispenser		Owner
	Toilet roll holder		Owner
	Towel rail (not heated)		Owner
	Towel ring		Owner

Note: builder to allow for installation and connection of all appliances supplied by the owner.

ELECTRICAL

	Description	*Finish*	*Supplier*
GPOs	Yes – refer to electrical plans		Builder
Lighting	Yes – refer to electrical plans		PC Item
Exhaust fan	Yes		Builder
Floor heat	No		-

PIPED SERVICES

	Description	*Finish*	*Supplier*
Item	Basin – Studio Bagno Manhatten 50		PC Item

Basin taps	PC Item
Basin waste	PC Item
Toilet pan – Parisi Elisse BTW suite - white	PC Item
Floor waste	Builder

Note: All items as specified in the Basic Interior Section unless noted here as otherwise.

FLOOR

	Description	*Finish*	*Supplier*
Profile	IF5 – Timber frame with 190 x 20mm Royal Oak engineered timber floorboards		Builder
Finish	Prefinished	Driftwood	Builder
Applied finish	None		
Note:	Non-combustible hearth required for fireplace.		

WALL

	Description	*Finish*	*Supplier*
Profile	IW1 – Timber frame with plasterboard	Paint	Builder
	IW4 – Timber frame with timber boards to staircase west wall areas	Driftwood	
Skirting profile	SK1	Paint	Builder
Architrave profile	AR1	Paint	Builder

CEILING

	Description	*Finish*	*Supplier*
Height	Coffered 2700 / 3000		
Profile	IC1 – Timber frame with plasterboard	Paint	Builder
Insulation	185mm R 3.0 Avlex polyester	-	Builder
Cornice profile	Square set	Paint	Builder

FITTINGS

	Description	*Finish*	*Supplier*
Joinery	Wardrobe	Hand painted	P Sum
Window furnishing	Venetian blinds		Owner

Note: builder to allow for installation and connection of all appliances supplied by the owner.

ELECTRICAL

	Description	*Finish*	*Supplier*
GPOs	Yes – refer to electrical plans		Builder
Lighting	Yes – refer to electrical plans		PC Item
Air-conditioning	Yes		P Sum
Ceiling fan (s)	Yes – 1		PC Item
Telephone			Builder
TV / Data			Builder

? Wallpaper to wardrobe door?

Note: All items as specified in the Basic Interior Section unless noted here as otherwise.

FLOOR

	Description	*Colour*	*Supplier*
Profile	IF4 – Timber frame with waterproofing		Builder
Finish	Tiles	Silver Travertine	PC Item
Applied finish	Premium penetrating natural stone sealant		PC Item
Waterproofing	Approved applied membrane to AS 3740-2004		Builder
Floor heat	Yes		P Sum

WALL

	Description	*Finish*	*Supplier*
Profile	IW1 – Timber frame with MR plasterboard and paint		Builder
	IW2 – Timber frame with waterproofed FC sheet and tile		Builder
Skirting profile	Tiles – New York pattern with tile skirting to IW1	Silver Travertine	PC Item
Waterproofing	Approved applied membrane to AS 3740-2004		Builder
Note:	Form shampoo niche to suit tile sizes.		Builder

CEILING

	Description	*Finish*	*Supplier*
Height	2700mm		
Profile	IC1 – Timber frame with MR plasterboard	Paint	Builder
Insulation	185mm R3.0 polyester		Builder
Cornice profile	Square set	Paint	Builder

FITTINGS

	Description	*Finish*	*Supplier*
Joinery	Bench-top		P Sum
	Vanity cabinet		P Sum
	Splashback		P Sum
Window furnishing	Venetian blinds		Owner
Fittings	Mirror – flush mounted 6mm silver		P Sum
	Robe hooks		Owner
	Shower screen – frameless glass shower screen and door		
	Toilet roll holder		Owner
	Towel rail (heated)		PC Item
	Towel rail (not heated)		Owner

Note: builder to allow for installation and connection of all appliances supplied by the owner.

ELECTRICAL

	Description	*Finish*	*Supplier*
GPOs	Yes – refer to electrical plans		Builder
Lighting	Yes – refer to electrical plans		PC Item
Exhaust fan	Yes		Builder
Floor heat	Yes		P Sum

PIPED SERVICES

	Description	*Finish*	*Supplier*
Item	Basin – Roger Seller Miky 42		PC Item
	Basin taps		PC Item
	Basin waste		PC Item
	Shower		PC Item
	Shower mixer / taps		PC Item
	Shower rose – sliding		PC Item
	Shower waste		PC Item
	Toilet pan – Parisi Elisse BTW suite – white		PC Item
	Floor waste		Builder

Note: All items as specified in the Basic Interior Section unless noted here as otherwise.

FLOOR

	Description	*Supplier*
Profile		Builder
Finish		Builder
Applied finish		

WALL

	Description	*Finish*	*Supplier*
Profile	IW1 – Timber frame with plasterboard	Paint	Builder
Skirting profile	SK1	Paint	Builder
Architrave profile	AR1	Paint	Builder

CEILING

	Description	*Finish*	*Supplier*
Height	2400mm		
Profile	IC1 – Timber frame with plasterboard	Paint	Builder
Insulation	Rockwool		Builder
Cornice profile	Square set	Paint	Builder

FITTINGS

	Description	*Finish*	*Supplier*
Joinery	Eg, bench-top		P Sum
	Shelves		P Sum
Window furnishing	None		P Sum
Fittings			
Appliances			

Note: builder to allow for installation and connection of all appliances supplied by the owner.

ELECTRICAL

	Description	*Finish*	*Supplier*
GPOs	Yes – refer to electrical plans		Builder
Lighting	Yes – refer to electrical plans		PC Item
Air-conditioning			P Sum

Note: All items as specified in the Basic Interior Section unless noted here as otherwise.

FLOOR

	Description	*Supplier*
Profile	IF6 - Concrete	Builder
Finish		
Applied finish	Concrete sealer	Builder

WALL

	Description	*Finish*	*Supplier*
Profile	IW1 – Timber frame with plasterboard	Paint	Builder
Skirting profile	SK1	Paint	Builder
Architrave profile	AR1	Paint	Builder

CEILING

	Description	*Finish*	*Supplier*
Height	2400mm		
Profile	IC1 – Timber frame with plasterboard	Paint	Builder
Insulation	Rockwool		Builder
Cornice profile	Square set	Pint	Builder

FITTINGS

	Description	*Finish*	*Supplier*
Joinery			
Window furnishing	None		
Fittings			
Appliances			

Note: builder to allow for installation and connection of all appliances supplied by the owner.

ELECTRICAL

	Description	*Finish*	*Supplier*
GPOs	Yes – refer to electrical plans		Builder
Lighting	Yes – refer to electrical plans		PC Item

Note: All items as specified in the Basic Interior Section unless noted here as otherwise.

FLOOR

	Description	*Supplier*
Profile	IF6 – Concrete with tiles	Builder
Finish	Selected stone tiles, 600 x 400 laid NY bond	PC Item
Applied finish	Premium penetrating stone sealant	

WALL

	Description	*Finish*	*Supplier*
Profile	IW1 – Timber frame with plasterboard	Paint	Builder
	IW4 – Timber wall with timber boards		
Skirting profile	SK1	Paint	Builder
Architrave profile	AR1	Paint	Builder

CEILING

	Description	*Finish*	*Supplier*
Height	2400mm minimum		
Profile	IC1 – Timber frame with plasterboard	Paint	Builder
Insulation	88mm R2.5 CSR sound screen		Builder
Cornice profile	Square set	Pint	Builder

FITTINGS

	Description	*Finish*	*Supplier*
Joinery	Eg, bench-top		P Sum
	Shelves		P Sum
Window furnishing			P Sum
Fittings			
Appliances			

Note: builder to allow for installation and connection of all appliances supplied by the owner.

ELECTRICAL

	Description	*Finish*	*Supplier*
GPOs	Yes – refer to electrical plans		Builder
Lighting	Yes – refer to electrical plans		PC Item
Air-conditioning	Yes		P Sum
Audio			P Sum
Ceiling fan (s)	Yes x 1		PC Item
Telephone			Builder
TV / Data	Yes		Builder

Note: All items as specified in the Basic Interior Section unless noted here as otherwise.

FLOOR

	Description	*Supplier*
Profile	IF3 – Concrete with waterproofing and tiles	Builder
Finish	Tiles	PC Item
Applied finish		Builder
Waterproofing	Approved applied membrane to AS 3740-2004	Builder
Floor heat	Yes	P Sum

WALL

	Description	*Finish*	*Supplier*
Profile	IW1 – Timber frame with plasterboard	Paint	Builder
Profile	IW2 – Timber frame with waterproofed FC sheet and tile		Builder
Skirting profile	Tile		Builder
Waterproofing	Approved applied membrane to AS 3740-2004		Builder

CEILING

	Description	*Finish*	*Supplier*
Height	2400mm		
Profile	IC1 – Timber frame with plasterboard	Paint	Builder
Insulation	Rockwool		Builder
Cornice profile	Square set	Paint	Builder

FITTINGS

	Description	*Finish*	*Supplier*
Joinery	Bench-top – selected Calcatta marble 80mm edge		P Sum
	Cabinets – hand painted		P Sum
	Splashback – selected Calcatta marble		P Sum
Window furnishing	Venetian blinds		
	Mirror		Owner
	Robe hooks		Owner
	Toilet roll holder		Owner
	Towel rail (heated)		PC Item
	Towel rail (not heated)		Owner

Note: builder to allow for installation and connection of all appliances supplied by the owner.

ELECTRICAL

	Description	*Finish*	*Supplier*
GPOs	Yes – refer to electrical plans		Builder
Lighting	Yes – refer to electrical plans		PC Item
Air-conditioning			P Sum
Audio			P Sum
Exhaust fan			Builder
Fan heater			PC Item
Floor heat	Yes		P Sum
Towel rail - heated			PC Item

PIPED SERVICES

	Description	*Finish*	*Supplier*
Item	Basin		PC Item
	Basin taps		PC Item
	Basin waste		PC Item
	Shower		PC Item
	Shower mixer / taps		PC Item
	Shower rose – fixed		PC Item
	Shower waste – linear floor waste		PC Item

Toilet pan – Parisi Ellisse BTW suite - white	PC Item
Floor waste	PC Item

PROJECT SPECIFICATION **BASEMENT – WIR (STORE 3)**

Note: All items as specified in the Basic Interior Section unless noted here as otherwise.

FLOOR

	Description	*Supplier*
Profile		Builder
Finish	Carpet and underlay / timber floor boards	Builder
Applied finish		

WALL

	Description	*Finish*	*Supplier*
Profile	IW1 – Timber frame with plasterboard	Paint	Builder
Skirting profile	SK1	Paint	Builder
Architrave profile	AR1	Paint	Builder

CEILING

	Description	*Finish*	*Supplier*
Height	2400mm		
Profile	IC1 – Timber frame with plasterboard	Paint	Builder
Insulation	Rockwool		Builder
Cornice profile	Square set	Pint	Builder

FITTINGS

	Description	*Finish*	*Supplier*
Joinery	Wardrobes		P Sum
	Shoe drawers to fit IKEA Komplement shoe organisers 801.718.75, 1000 x 580mm		Owner
Window furnishing			
Fittings	Mirror		P Sum
Appliances			PC Item

Note: builder to allow for installation and connection of all appliances supplied by the owner.

ELECTRICAL

	Description	*Finish*	*Supplier*
GPOs	Yes – refer to electrical plans		Builder
Lighting	Yes – refer to electrical plans		PC Item
Air-conditioning	Yes		P Sum
Audio			P Sum

Note: All items as specified in the Basic Interior Section unless noted here as otherwise.

FLOOR

	Description	*Supplier*
Profile		Builder
Finish	Carpet and underlay / timber floor boards	Builder
Applied finish		

WALL

	Description	*Finish*	*Supplier*
Profile	IW1 – Timber frame with plasterboard	Paint	Builder
Skirting profile	SK1	Paint	Builder
Architrave profile	AR1	Paint	Builder

CEILING

	Description	*Finish*	*Supplier*
Height	2400mm		
Profile	IC1 – Timber frame with plasterboard	Paint	Builder
Insulation	Rockwool		Builder
Cornice profile	Square set	Pint	Builder

FITTINGS

	Description	*Finish*	*Supplier*
Joinery	Book shelves		P Sum
	Desk		P Sum
Window furnishing			P Sum
Fittings			
Appliances			

Note: builder to allow for installation and connection of all appliances supplied by the owner.

ELECTRICAL

	Description	*Finish*	*Supplier*
GPOs	Yes – refer to electrical plans		Builder
Lighting	Yes – refer to electrical plans		PC Item
Air-conditioning	Yes		P Sum
Audio			P Sum
Ceiling fan (s)			PC Item
Telephone			Builder
TV / Data			Builder

Note: All items as specified in the Basic Interior Section unless noted here as otherwise.

FLOOR

	Description	*Supplier*
Profile		Builder
Finish	Carpet and underlay / timber floor boards	Builder
Applied finish		

WALL

	Description	*Finish*	*Supplier*
Profile	IW1 – Timber frame with plasterboard	Paint	Builder
Skirting profile	SK1	Paint	Builder
Architrave profile	AR1	Paint	Builder

CEILING

	Description	*Finish*	*Supplier*
Height	2400mm		
Profile	IC1 – Timber frame with plasterboard	Paint	Builder
Insulation	Rockwool		Builder
Cornice profile	Square set	Pint	Builder

FITTINGS

	Description	*Finish*	*Supplier*
Joinery	Cupboard		P Sum
Window furnishing			P Sum
Fittings	Mirror		PC Item
Appliances			

Note: builder to allow for installation and connection of all appliances supplied by the owner.

ELECTRICAL

	Description	*Finish*	*Supplier*
GPOs	Yes – refer to electrical plans		Builder
Lighting	Yes – refer to electrical plans		PC Item
Air-conditioning	Yes		P Sum
Audio			P Sum
Ceiling fan (s)			PC Item
Telephone			Builder
TV / Data			Builder

Note: All items as specified in the Basic Interior Section unless noted here as otherwise.

FLOOR

	Description	*Supplier*
Profile	EF1 – Timber frame with timber decking	Builder
Finish	Timber floor boards	Builder
Applied finish	None	

WALL

	Description	*Finish*	*Supplier*
Profile			Builder
Finish			Builder
Skirting profile			Builder

FITTINGS

	Description	*Finish*	*Supplier*
Joinery			
Fittings			
Appliances			

Note: builder to allow for installation and connection of all appliances supplied by the owner.

ELECTRICAL

	Description	*Finish*	*Supplier*
GPOs	Yes – refer to electrical plans		Builder
Lighting	Yes – refer to electrical plans		PC Item