

ABN 63 119 997 590
PO Box 80, Thornleigh NSW 2120
ph 9980 2155 fax 9980 2166 E mail admin@fitzcert.com.au

CONSTRUCTION CERTIFICATE No 2009/759

Signature

Approval Date 15/07/09

Issued in accordance with the provisions of the Environmental & Assessment Act 1979 under Sections 109C(1)(b) and 109F

Date Application Received 24/06/09

COUNCIL

Pittwater

DEVELOPMENT CONSENT NO

N0607/08

APPROVAL DATE 17/06/09

Name of Certifying Authority

Fitzgerald Building Certifiers Pty Ltd

Name of Accredited Certifier

Paul Fitzgerald - No BPB0119

Accreditation Body

BUILDING PROFESSIONALS BOARD

Applicant

Paul & Jennifer Fontes C/- Morrison Homes

Address

PO Box 7484 Baulkham Hills NSW 2153

Contact Number

0408 475 023

Owner

Paul & Jennifer Fontes

Address

96 Park St Mona Vale

Contact Number

—

Subject Land Lot 2 **DP** 222636 **No** 96 **Park St Mona Vale**

Description of Development — New Dwelling

Building Code of Australia Classification 1a **Value of Work \$** 550,000 00

Builder Details

Name

Morrison Homes Pty Ltd

Licence Number

151521C

Address

PO Box 7484, Baulkham Hills NSW 2153

Contact Number

0408 475 023

Approved Plans And Documents

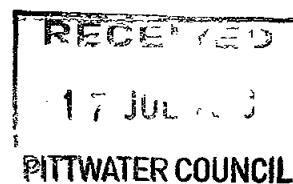
Plans Prepared By	Drawing Nos	Dated
Morrison Homes Pty Ltd	A09-001 Sheets 1 -3	14/04/09
Michael Dean	A09-001 Sheets 1 of 1	14/04/09
Unnamed	Driveway profile	undated

Engineers Details Prepared By	Drawing Nos	Dated
Consulting Civil & Structural Engineers	8375-S01	23/06/09
Palitha S Wijesena & Associates Pty Ltd	8380-01 — 8380-09	08/07/09

Basix Certificate	Certificate No	Dated
	248859S	20/05/09

17/7/09

R 262118
\$30.00.



SECTION 1 APPLICATION FORM
APPLICATION FOR CONSTRUCTION/COMPLYING DEVELOPMENT CERTIFICATE
Principle Certifying Authority Agreement
Issued under the Environmental Planning & Assessment Act 1979

Privacy policy - The information you provide in this application will enable your application to be assessed by the certifying authority under the Environmental Planning and Assessment Act 1979. If the information is not provided, your application may not be accepted. The application can potentially be viewed by members of the public. Please contact Fitzgerald Building Certifiers if the information you have provided in your application is incorrect or requires modification.

☒ **Construction Certificate** ☐ **Complying Development Certificate**
Dev Application No _____ ☐ **Engagement As PCA**
Approval Date _____ ☒ **Application for Occupation Certificate**

APPLICANT (This Must Be The Owner)

Name Ryan Morrison
Postal Address Pobox 7484 Baulkham Hill
Ph 0408475023 FAX 98947399

LAND TO BE DEVELOPED

Address 96 Park st, Mona Vale
Lot _____ DP _____ Council Area Pittwater

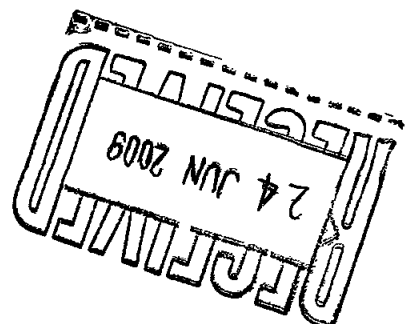
DETAILS OF DEVELOPMENT

Description of work New Brick Veneer Home
Estimated Cost of Works \$550,000.00

DETAILS OF BUILDER

Name Morrison Homes Pty Ltd License No 151521C
Address Pobox 7484 Baulkham Hill Ph No 0408475023
2153

**Council
Copy**



Section 4 Owners Declaration/Signatures

OWNERS DECLARATION

I, the aforementioned person or authorised representative of a legal entity as described as the Applicant in Section 1 of the Application Form hereby declare the following

- 1 I, to the best of my knowledge, have completed all details in the Application Form in a correct and accurate manner and hereby indemnify Fitzgerald Building Certifiers against any damages, losses or suffering as a result of incorrect information provided under that section**
- 2. I have obtained consent from the owner/s of the property as indicated in the PARTICULARS section to apply and obtain a Construction Certificate. Such written consent will be provided with this application**
- 3 I have read, understood and hereby accept the terms and conditions outlined in Section 2 of this form**
- 4. I understand that the Application for a/the Construction Certificate is not complete until all required documentation has been received by Fitzgerald Building Certifiers**
- 5 I understand that the Application for and acquisition of a/the Construction Certificate does not authorise Commencement of Building Work. (Refer to appointment of PCA on Fitzgerald Building Certifiers PCA Form)**

As owners of the above mentioned property we consent to this application

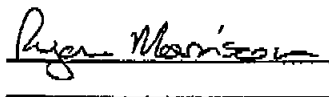
As owners of the above mentioned property I/we wish to appoint Paul Fitzgerald as PCA

Owners Signature/s



Date 24/6/09

Name/s:



Section 3 Declaration By The Appointer/s

I/We the aforementioned persons as described as the Appointer/s in the PARTICULARS section hereby declared the following that

- 1 I/We "have the benefit of the Development Consent or Complying Development Certificate" within the meaning and under EP&A Act 1979 for the proposed works as indicated on this form
- 2 I/We, to the best of my/our knowledge, have completed all details in the PARTICULARS section in a correct and accurate manner and hereby indemnify the appointed PCA and Fitzgerald Building Certifiers against any damage losses or suffering as a result of incorrect information provided under that section
- 3 I/We hereby consent to the Builder as shown within the "Particulars" section of this form to apply and obtain on my/our behalf a Construction Certificate, Complying Development Certificate, Occupation Certificate/s or any other "Part 4A Certificate" within the meaning of the EP&A Act 1979
- 4 I/We have read understood and hereby accept the terms and conditions outlined within the PCA Service Agreement on this form
- 5 I/We understand that the Appointment of the PCA is not taken to be have been accepted until a copy of the acceptance has been signed by the proposed PCA and released to the Appointer and Council, effective from the date of the acceptance
- 6 I/We understand that the Commencement of Building Work cannot be any earlier than 2 business days after the appointment of PCA has been accepted and therefore declare that no building works will commence until after such date
- 7 I/We authorise the right of entry for any certifying authority arranged by Fitzgerald Accredited Certifiers to carry out inspection required by the PCA under this agreement
- 8 I/We authorise the transfer of PCA to another employee of Fitzgerald Building Certifiers if the original PCA ceases employment with Fitzgerald Building Certifiers for any reason or becomes unable to fulfill their duties as the PCA at no cost to Fitzgerald Building Certifiers
- 9 I/We understand the appointment of PCA will not be accepted by Fitzgerald Building Certifiers until documentation of required insurances or owner builder permit is submitted to Fitzgerald Building Certifiers, in accordance with the Home Building Act 1989
- 10 I/We understand that it is my/our responsibility to ensure that sufficient notice is given to Fitzgerald Building Certifiers in writing, to carry out critical stage inspections or make arrangements with your builder to carry out this function on your behalf as a condition of your Building Contract
- 11 I/We declare that I/we will notify the PCA at the earliest possible instance of any changes of the appointment of the builder and ensure any mandatory insurances required by the incoming builder in accordance with Home Building Act 1989 are in place

SECTION 2 PCA SERVICE AGREEMENT

Engagement

The engagement or the appointment of the PCA will not commence until the proposed PCA has accepted and notified their acceptance of the appointment to the Appointer and the Local Council. The proposed PCA or Fitzgerald Building Certifiers will not accept any responsibility for any damages, losses or delays suffered by the Appointer as a result of omissions or errors contained within this form or failure of the Appointer to comply with all items contained in this form.

Scope

The scope of works covered under this appointment is restricted to those building works as described in the "Details of Development" section of the form.

Terms and Conditions

- 1 All information provided by the Appointer on this form will be taken to be accurate and correct. The PCA does not accept any responsibility for any intentional or unintentional error or omission made by the Appointer on this form.
- 2 Where building works have commenced prior to the acceptance of appointment of PCA without the knowledge of the intended PCA the appointment shall be invalid and acceptance of the appointment will be withdrawn.
- 3 The Appointer is obliged to keep the PCA informed of any changes to the details of Principal Contractor (Builder) and any relevant insurances required by the builder. Failure to meet this obligation will result in the Appointer indemnifying the PCA against any losses or suffering as a result of non-compliance with the legislative requirements.
- 4 The Appointer is responsible for ensuring that a copy of Home Warranty Insurance or Owner Builder Permit is submitted to the PCA prior to the commencement of building works. The acceptance of the appointment will not occur until this requirement has been met.
- 5 It is the responsibility of the Appointer to ensure that critical stage inspections are booked in with our office or make arrangements for your builder to do this on your behalf no later than 3pm on the prior business day via fax, post or email.
- 6 The PCA will not accept responsibility for any damages or costs associated for the inability to issue an Occupation Certificate due to, but not limited to, the following - non-compliance with a development consent condition, unsatisfactory final inspection, non-compliance with Basix commitments, missed critical stage inspections, non-compliance with approved building plans or failure to pay the required inspection or Occupation Certificate fees.

Fees

Failure to pay the prescribed Appointment of PCA fee will generally result in a refusal to accept the appointment of PCA. Should an appointment be accepted and payment not honored, the Appointer will be ultimately liable for unpaid fees, regardless of whether the fee was paid directly to the Builder, and any associated debt recovery costs plus interest incurred from the time of the appointment.

It is noted that the PCA and/or Fitzgerald Building Certifiers may suspend its services provided to the appointer or the builder where fees have not been paid, within the provisions of the Building and Construction Industry Security of Payment Act 1999.

MBIS/033922 PermitAuthority
23/06/2009

Morrison Homes Pty Ltd
PO Box 7484
BAULKHAM HILLS NSW 2153



**Master Builders
Queensland
Insurance Services**

A Division of Queensland Master Builders Association
Industrial Organisation of Employers
ABN 96 641 989 386 AFS Licence 246834
18 Central Park Avenue Ashmore Queensland 4214
Phone 1300 13 13 24 FAX 1300 13 13 24

Certificate of Insurance RESIDENTIAL BUILDING WORK BY CONTRACTORS

A contract of insurance complying with sections 92 and 96 and 96A of the Home Building Act 1989 has been issued by
Calliden Insurance Limited (ABN 47 004 125 268) (AFSL 234438)

In respect of	Single Dwelling plus a swimming pool
At	96 Park Street MONA VALE NSW 2103
Carried out by	Morrison Homes Pty Ltd
Licence Number	151521C
ABN	75 097 342 231
For	Paul & Jenny Fontes
In the amount of	\$550 038 51

Subject to the Act and the Home Building Regulation 2004 and the conditions of the insurance contract, cover will be provided to

- a beneficiary described in the contract and successors in title to the beneficiary
OR

- the immediate successor in title to the contractor or developer who did the work and subsequent successors in title

Authorisation In Witness Whereof the Insurer issuing this Certificate of Eligibility has caused this Certificate of Eligibility to
be signed by Authorised Signatory of the Insurer's Agent
Issued on the 23rd day of June 2009

A handwritten signature in black ink, appearing to read 'Paul & Jenny Fontes'.

Master Builders Queensland Insurance Services (ABN 96 641 989 386) (AFS
Licence 246834)

For and on behalf of Calliden Insurance Limited (ABN 47 004 125 268) (AFS
Licence 234438) as their authorised agent

NOTICE: To download a copy of your insurance policy wording visit <http://www.policywording.com.au>

BASIC Certificate

Certificate number 248859S

This certificate confirms that the proposed development will meet the NSW government's requirements for sustainability, if it is built in accordance with the commitments set out below. Terms used in this certificate, or in the commitments, have the meaning given by the document entitled "BASIX Definitions" dated 05/11/2008 published by the Department of Planning. This document is available at www.basix.nsw.gov.au

Director-General
Date of issue Wednesday, 20 May 2008



NSW GOVERNMENT
Department of Planning

**This plan forms part of the approved
Certificate as issued by
Fitzgerald Building Certifiers Pty Limited**

Score

- ✓ Water 43 (Target 40)
- ✓ Thermal comfort pass (Target pass)
- ✓ Energy 40 (Target 40)

Project address	
Project name	MORRISON/MONA VALE POOL
Street address	96 PARK Street MONA VALE 2103
Local Government Area	Pittwater Council
Plan type and plan number	Deposited Plan 222639
Lot no	2
Section no	0 0
Project type	
Project type	separate dwelling house
No. of bedrooms	4
Site details	
Site area (m ²)	1138
Roof area (m ²)	260
Conditioned floor area (m ²)	274
Unconditioned floor area (m ²)	79
Total area of garden and lawn (m ²)	300
Assessor details and thermal loads	
Assessor number	20350
Certificate number	68116373
Climate zone	5c
Area adjusted cooling load (MJ/m ² year)	23
Area adjusted heating load (MJ/m ² year)	51
Other	
none	n/a

Schedule of BASIX commitments

The commitments set out below regulate how the proposed development is to be carried out. It is a condition of any development consent granted, or complying development certificate issued, for the proposed development, that BASIX commitments be complied with.

Water Commitments		Show on DA plans	Show on CC/CDC plans & specs	Certifier check
Fixtures				
The applicant must install showerheads with a minimum rating of 3 star in all showers in the development			✓	✓
The applicant must install a toilet flushing system with a minimum rating of 3 star in each toilet in the development			✓	✓
The applicant must install taps with a minimum rating of 4 star in the kitchen in the development			✓	
The applicant must install basin taps with a minimum rating of 4 star in each bathroom in the development			✓	
Alternative water				
Rainwater tank				
The applicant must install a rainwater tank of at least 8000 litres on the site. This rainwater tank must meet, and be installed in accordance with, the requirements of all applicable regulatory authorities.		✓	✓	✓
The applicant must configure the rainwater tank to collect rain runoff from at least 180 square metres of the roof area of the development (excluding the area of the roof which drains to any stormwater tank or private dam).			✓	✓
The applicant must connect the rainwater tank to: • all toilets in the development - the cold water tap that supplies each clothes washer in the development - at least one outdoor tap in the development (Note: NSW Health does not recommend that rainwater be used for human consumption in areas with potable water supply.)			✓ ✓ ✓	✓ ✓ ✓
Swimming pool				
The swimming pool must not have a volume greater than 55 kilolitres		✓	✓	
The swimming pool must have a pool cover			✓	
The swimming pool must be outdoors		✓	✓	

Thermal Comfort Commitments

Show on DA plans	Show on CC/CDG plans & specs	Certified check
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Simulation Method

The applicant must attach the certificate referred to under "Assessor Details" on the front page of this BASIX certificate (the "Assessor Certificate") to the development application and construction certificate application for the proposed development (or if the applicant is applying for a complying development certificate for the proposed development, to that application). The applicant must also attach the Assessor Certificate to the application for an occupation certificate for the proposed development.

The Assessor Certificate must have been issued by an Accredited Assessor in accordance with the Thermal Comfort Protocol

The details of the proposed development on the Assessor Certificate must be consistent with the details shown in this BASIX certificate, including the Cooling and Heating loads shown on the front page of this certificate

The applicant must show on the plans accompanying the development application for the proposed development, all matters which the Assessor/Certificate requires to be shown on those plans. Those plans must bear a stamp of endorsement from the Accredited Assessor to certify that this is the case. The applicant must show on the plans accompanying the application for a construction certificate (or complying development certificate, if applicable), all thermal performance specifications set out in the Assessor Certificate, and all aspects of the proposed development which were used to calculate those specifications.

The applicant must construct the development in accordance with all thermal performance specifications set out in the Assessor Certificate, and in accordance with those aspects of the development application or application for a complying development certificate which were used to calculate those specifications

The applicant must construct the floors and walls of the dwelling in accordance with the specifications listed in the table below

[illegible]

Floor and wall construction

Floor and wall construction	Area
floor - concrete slab on ground	All or part of floor area square metres
floor - suspended floor above garage	All or part of floor area

Energy Commitments

Show on DA plans	Show on CC/CDC plans & specs	Certifier check
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Hot water

The applicant must install the following hot water system in the development or a system with a higher energy rating solar (gas boosted) with a performance of 26 to 30 RECs or better

1

1

Cooling system

The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 living area 3-phase airconditioning, Energy rating EER 2.5 - 3.0

The applicant must install the following cooling system, or a system with a higher energy rating, in at least 1 bedroom 3 phase airconditioning, Energy rating EER 2.5 - 3.0

125

The cooling system must provide for day/night zoning between living areas and bedrooms

1

Heating system

The applicant must install the following heating system, or a system with a higher energy rating, in at least 1 living area 3 phase airconditioning Energy rating EER 3.0 - 3.5

1

The applicant must install the following heating system, or a system with a higher energy rating. In at least 1 bedroom 3 phase airconditioning Energy rating EER 3.0 - 3.5

100

The healing system must provide for day/night zoning between living areas and bedrooms

1

Ventilation

The applicant must install the following exhaust systems in the development

At least 1 Bathroom no mechanical ventilation (ie natural), Operation control n/a

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

7

Artificial lighting

The applicant must ensure that the "primary type of artificial lighting" is fluorescent or light emitting diode (LED) lighting in each of the following rooms and where the word "dedicated" appears, the fittings for those lights must only be capable of accepting fluorescent or light emitting diode (LED) lamps

- at least 4 of the bedrooms / study,
- at least 2 of the living / dining rooms,

Energy Commitments

- all bathrooms/toilets,
- the laundry,
- all hallways,

Natural lighting

The applicant must install a window and/or skylight in the kitchen of the dwelling for natural lighting

The applicant must install a window and/or skylight in 3 bathroom(s)/toilet(s) in the development for natural lighting

Swimming pool

The applicant must install the following heating system for the swimming pool in the development (or alternatively must not install any heating system for the swimming pool) solar only

The applicant must install a timer for the swimming pool pump in the development.

Other

The applicant must install an induction cooktop & electric oven in the kitchen of the dwelling

The applicant must construct each refrigerator space in the development so that it is "well ventilated", as defined in the BASIX definitions

The applicant must install a fixed outdoor clothes drying line as part of the development

The applicant must install a fixed indoor or sheltered clothes drying line as part of the development.

Legend

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

Commitments identified with a ✓ in the "Show on DA plans" column must be shown on the plans accompanying the development application for the proposed development (if a development application is to be lodged for the proposed development)

Commitments identified with a ✓ in the "Show on CC/CDC plans and specs" column must be shown in the plans and specifications accompanying the application for a construction certificate / complying development certificate for the proposed development

Commitments identified with a ✓ in the "Certifier check" column must be certified by a certifying authority as having been fulfilled, before a final occupation certificate (either interim or final) for the development may be issued

Assessor Certificate

Single Dwelling

Certificate Version 6.1 Prior versions not valid after 1 March 2006

Issued in accordance with the requirements of
BASIX THERMAL COMFORT - Simulation Method



Assessor			
Name	Bryan Roles	Company	B L Roles and Associates
Address	PO Box 6649 BAULKHAM HILLS BC NSW 2153		
Phone	(02) 8004 1550	Fax	(02) 9836 4675
Email	roles@people.net.au		
Declaration of Interest: None			
Client			
Name	Michael Dean	Company	M Dean & Associates
Address	66 Moana Street WOY WOY NSW 2256		
Phone	0243 412 070	Fax	
Email			
Project			
Address	96 Park Street MONA VALE NSW 2103		
Lot / DP	2 / 222639	LGA	Pittwater Council
Applicant			
Assessment			
Date	14/05/2009	Job ID	1825
Filename	1825	Run #	1
Software	BERS	Version	Pro
Climate Zone	56		
Referenced documents			
All details, upon which this Assessment has been based, are included in the project documentation which has been stamped and signed by the Assessor issuing this Certificate, as detailed below			
Thermal Performance Specification / Commitments attached and affixed to drawings, page 1			
Drawings Morrison Homes Drawingb No A09-001			
Specifications Only specifications, detailed on Drawings identified above have been referenced			

ABSA Assessor Certificate Assessor # 20350 Certificate # 68116373 Issued 20-May-09

THERMAL COMFORT - Simulation Method

The details must be entered into your BASIX Assessment

Area calculations (M2)	
Net Conditioned Floor Area	274
Net Unconditioned Floor Area	79
Concessions / Ventilation Bonus	
Eligible Concessions	None
The dwelling has the required shading to qualify for BASIX cross ventilation bonus N/A	

Predicted annual energy loads

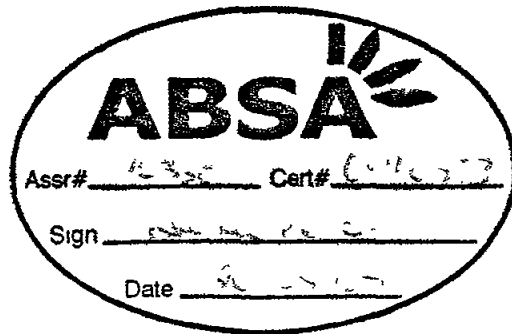
Heating: 51

Cooling: 23

(sensible + latent)

Total: 74

ABSA Assessor stamp



ABSA Assessor Certificate	Assessor # 20350	Certificate # 68116373	Issued. 20-May-09
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Thermal Performance Specifications - BASIX THERMAL COMFORT - Simulation Method
These are the Specifications upon which the Certified Assessment is based. If details included in these Specifications vary from other drawings or written specifications, these Specifications shall take precedence. If only one specification option is detailed for a building element, that specification must apply to all instances of that element for the project. If alternate specifications are detailed for a building element, the location and extent of alternate specifications must be detailed below and / or clearly indicated on referenced documents.

Windows	Product ID	Glass	Frame	U value	SHGC	Area M2	Detail
		Custom single	Custom	3.98	0.63		All downstairs glazing
		Single clear	Aluminium				All other glazing

Skylights	Product ID	Glass	Frame	U value	SHGC	Area M2
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Any U and SHGC values specified on Certificates issued after 1 May 2007 are according to NFRC 100. All values prior to this date are ANAC. Alternate products may be used if their U value is lower and the SHGC value is less than 10% higher or lower.

External walls	Construction	Insulation	Colour - Solar absorptancy	Detail
Brick Veneer	R2.5		Medium - SA 0.475 - 0.7	As per plans
Weatherboard				

Internal walls	Construction	Insulation	Detail
Plasterboard on Studs	None		As per plans

Floors	Construction	Insulation	Covering	Detail
Concrete		None	Carpet	As per plans
Timber			Ceramic Tile	

Ceilings	Construction	Insulation	Detail
Plasterboard	R3.5		As per plans

Roof	Construction	Insulation	Colour - Solar absorptancy	Detail
Metal Deck	R1.0		Dark - SA > 0.7	As per plans

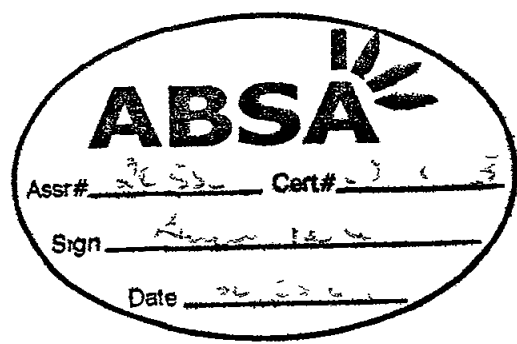
Window cover	Internal (curtains)	External (awnings, shutters etc)
None		None

Fixed shading	Eaves (width - inc gutters height above windows)	Verandahs Pergolas (type description)
450 0	As per plans	

Overshadowing	Overshadowing structures	Overshadowing trees
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Orientation, Exposure, Ventilation and Infiltration	
Orientation of nominal north elevation	30
Terrain category	Suburban
Roof ventilation	Ventilated >2% of area
Cross ventilation	Standard
Subfloor ventilation	On ground
Living area open to entry	Yes
Living areas separated by doors	No
Stair open to heated areas	Yes
Weather seals to windows and doors	Yes
Exhaust fans without dampers	No
Ventilated skylights	No
Open fireplace or unflued gas heater	No
Vented downlights	No
Wall and ceiling vents	No

ABSA Assessor stamp



The stamp is an oval shape containing the ABSA logo at the top. Below the logo, there are fields for 'Assr #' (with handwritten '20350'), 'Cert #' (with handwritten '68116373'), 'Sign' (with a handwritten signature), and 'Date' (with handwritten '26-5-09').

Assessor # 20350	Certificate # 68116373	Issued 20-May-09
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Thermal Performance Specifications

These are the Specifications upon which the Certified Assessment is based. If details included in these Specifications vary from other drawings or written specifications, these Specifications shall take precedence. If only one specification option is detailed for a building element, that specification must apply to all instances of that element for the project. If alternate specifications are detailed for a building element, the location and extent of alternate specifications must be detailed below and / or clearly indicated on referenced documents.

Windows	Product ID	Glass	Frame	U value	SHGC	Area M	Detail
		Custom single	Custom	3.98	0.63		All downstairs glazing
		Single clear	Aluminium				All other glazing

Skylights	Product ID	Glass	Frame	U value	SHGC	Area M	Detail
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Window and skylight U and SHGC values, if specified, are according to ANAC 2005. Alternate products or specifications may be used if their U value is lower and the SHGC value is less than 10% higher or lower than the U and SHGC values of the product specified above.

External walls	Construction	Insulation	Colour	Solar absorptanc	Detail
Brick Veneer		R2.5	Medium	SA 0.475 0.7	As per plans
Weatherboard					

Internal walls	Construction	Insulation	Detail
Plasterboard on Studs		None	As per plans

Floors	Construction	Insulation	Covering	Detail
Concrete		None	Carpet	As per plans
Timber			Ceramic Tile	

Ceilings	Construction	Insulation	Detail
Plasterboard		R3.5	As per plans

Roof	Construction	Insulation	Colour	Detail
Metal Deck		R1.0	Dark SA > 0.7	As per plans

Window cover	Internal (curtains)	External (awnings, shutters, etc)
None		None

Fixed shading	Eaves (width - inc. gutters, height above windows, Verandahs, Pergolas (type, description)
450 0	As per plans

Overshadowing	Overshadowing structures	Overshadowing trees
---------------	--------------------------	---------------------

Orientation, Exposure, Ventilation and Infiltration					
Orientation of nominal north:	30	Living area open to entry:	Yes	Ventilated skylights:	No
Terrain category:	Suburban	Living areas separated by doors:	No	Open fire or unfired gas heaters:	No
Roof ventilation:	Ventilated >2% of area	Star open to heated areas:	Yes	Vented downlights:	No
Cross ventilation:	Standard	Seals to windows and doors:	Yes	Wall and ceiling vents:	No
Subfloor ventilator:	On ground	Exhaust fans without dampers:	No		



PITTWATER COUNCIL
APPROVED DEVELOPMENT CONSENT PLANS

NOTE: THESE PLANS MUST BE READ IN
CONJUNCTION WITH THE CONDITIONS OF
DEVELOPMENT CONSENT

THESE PLANS ARE TO BE READ
IN CONJUNCTION & COMPLY WITH
THE DCA & NATIENS REPORT.

NOTES

1. ALL RETAINING WALLS ARE APPROVED TO BE VIEWED ON SITE
2. USE PAVED DRIVEWAYS IN PROVISION TO SOILING
3. ALL ADDITIONAL FENCES & RETAINING WALLS BY THE OWNER
4. ALL SITES TO BE OVERSEEN BY THE DCA.

NO	DATE	DESCRIPTION
1	10-01	ADDITIONAL INFORMATION AS REQUESTED BY COUNCIL
2	11-01	COPLANES

THE DRAWING IS THE PROPERTY OF MORRISON HOMES. IT IS TO BE USED ONLY FOR THE PROJECT AND NOT BE REPRODUCED OR USED FOR ANY OTHER PURPOSE. MORRISON HOMES TAKES NO RESPONSIBILITY FOR DESIGN OR CONSTRUCTION OF ANY OTHER WORKS THAT MAY BE REQUIRED.

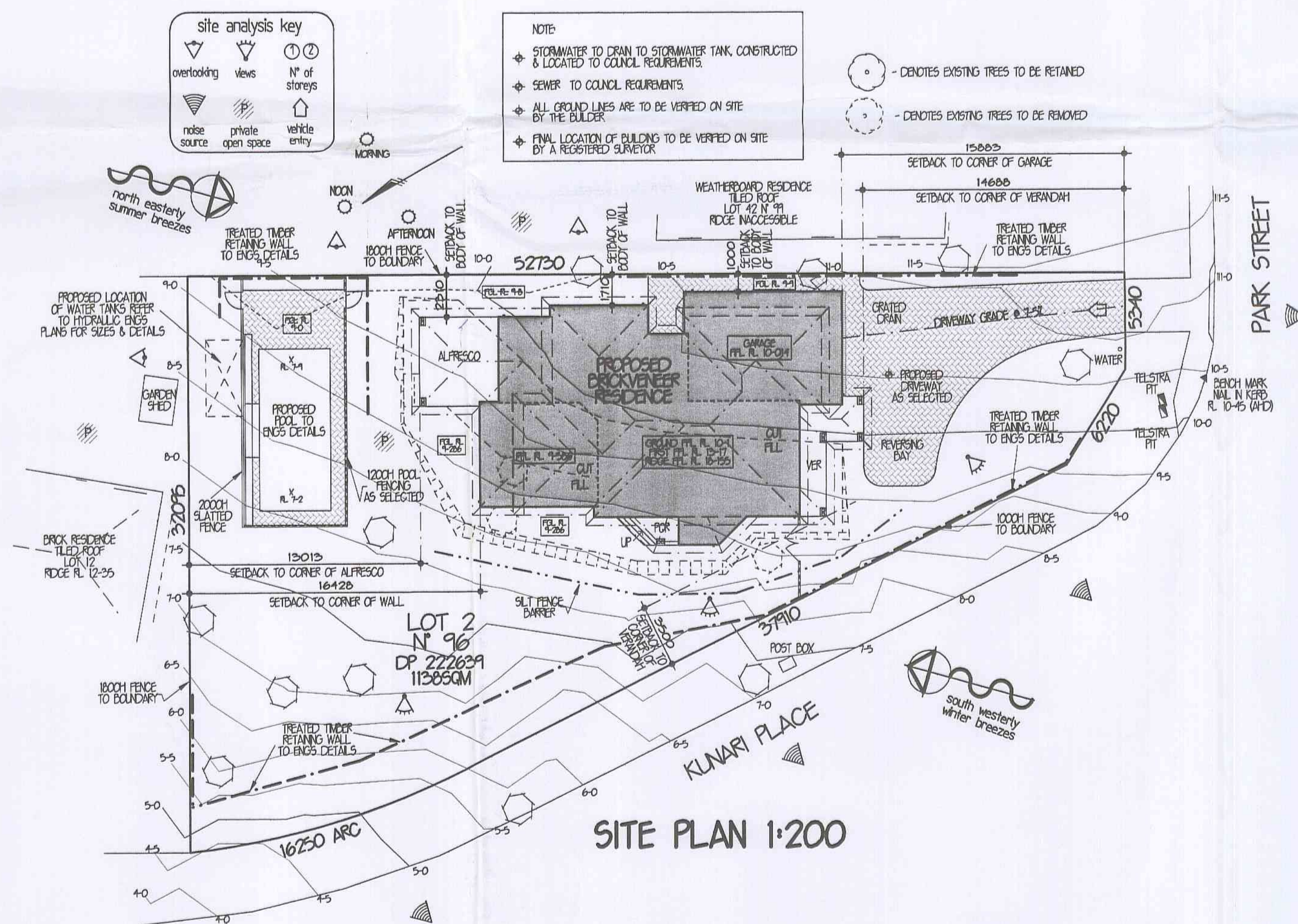
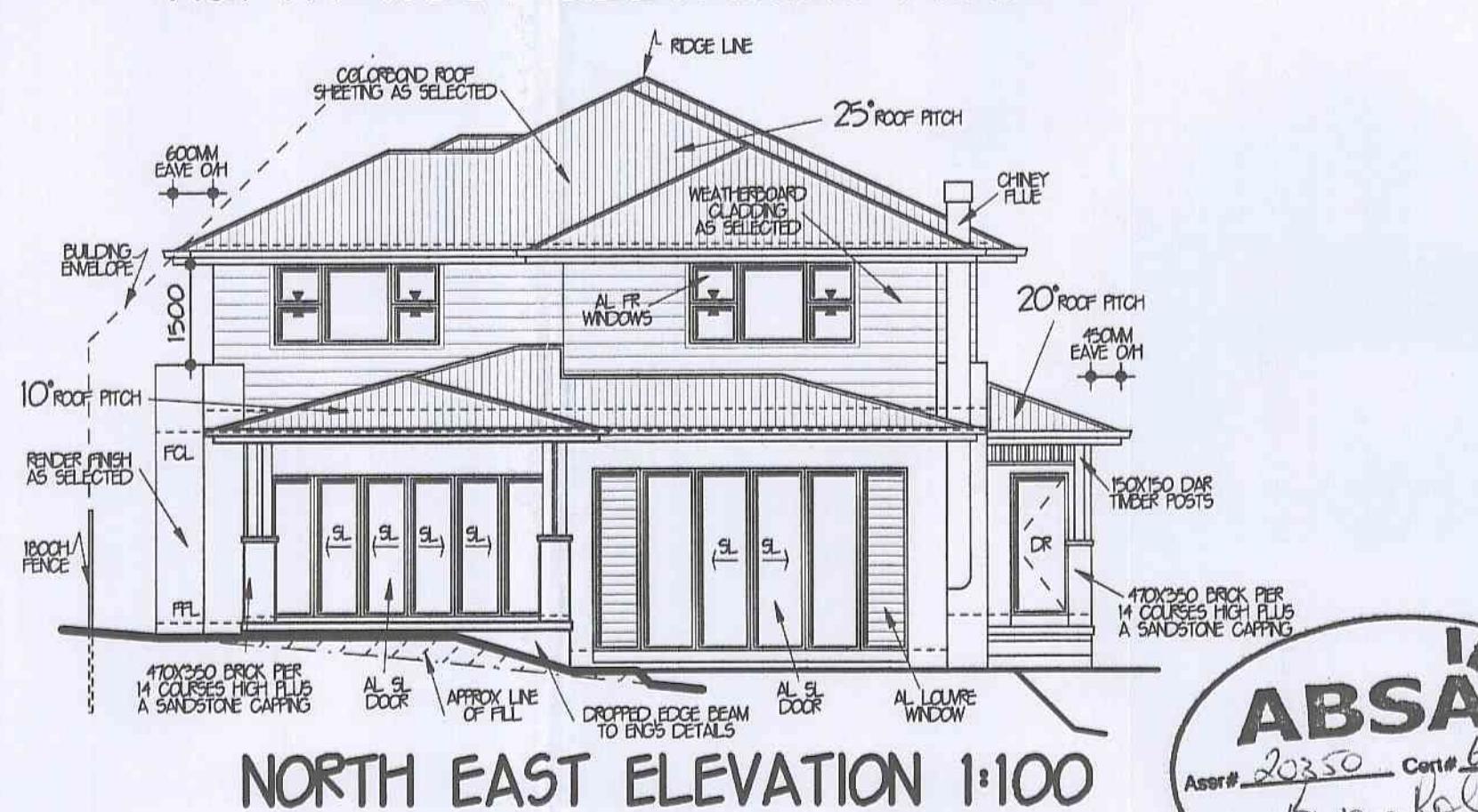
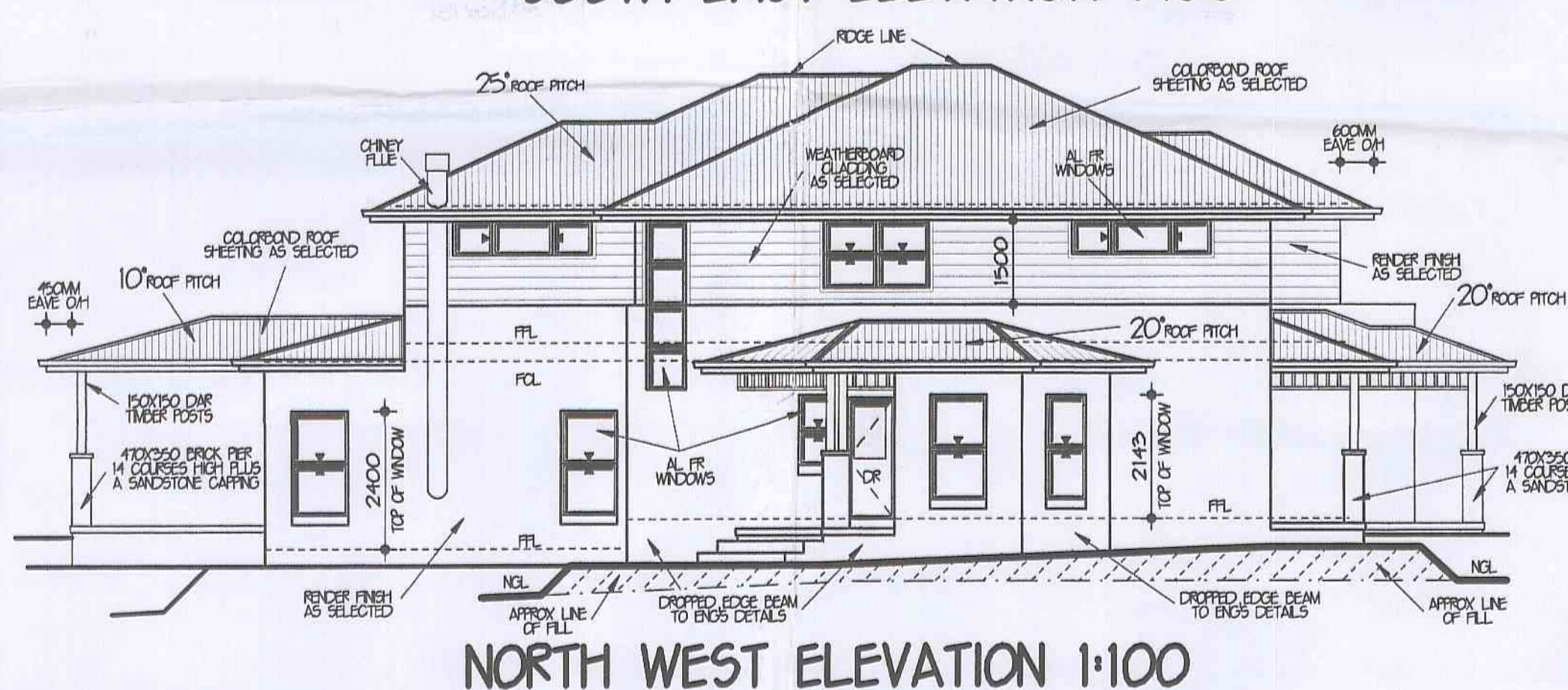
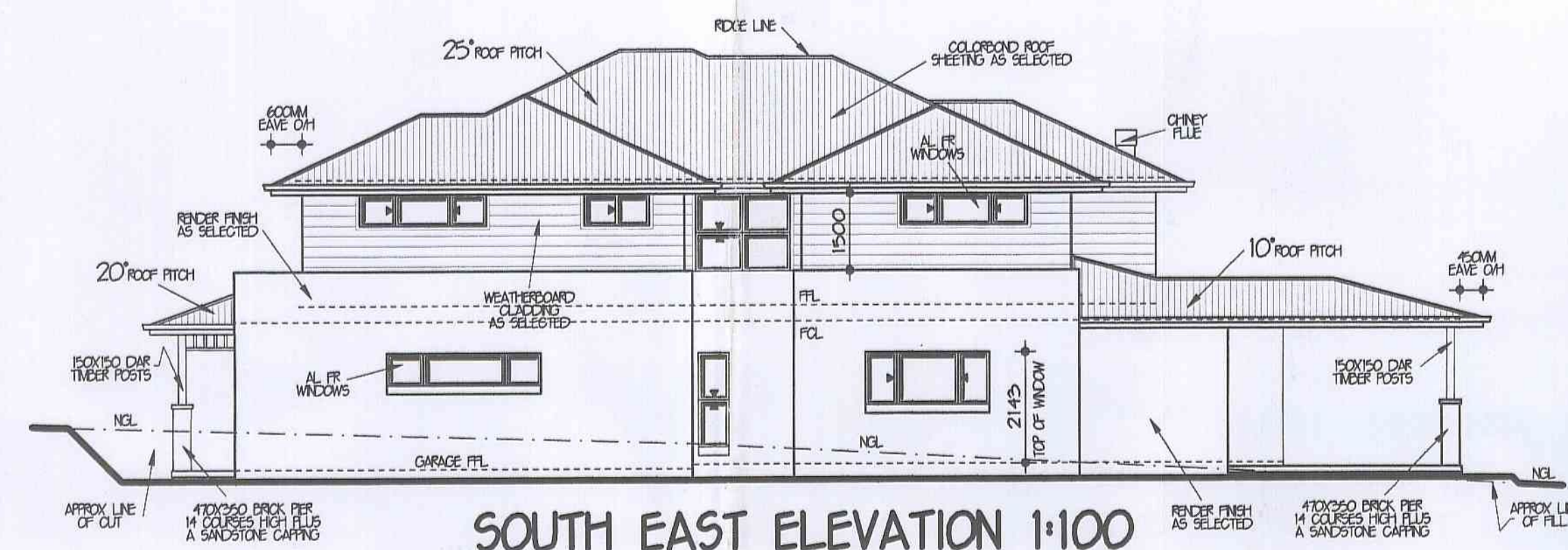
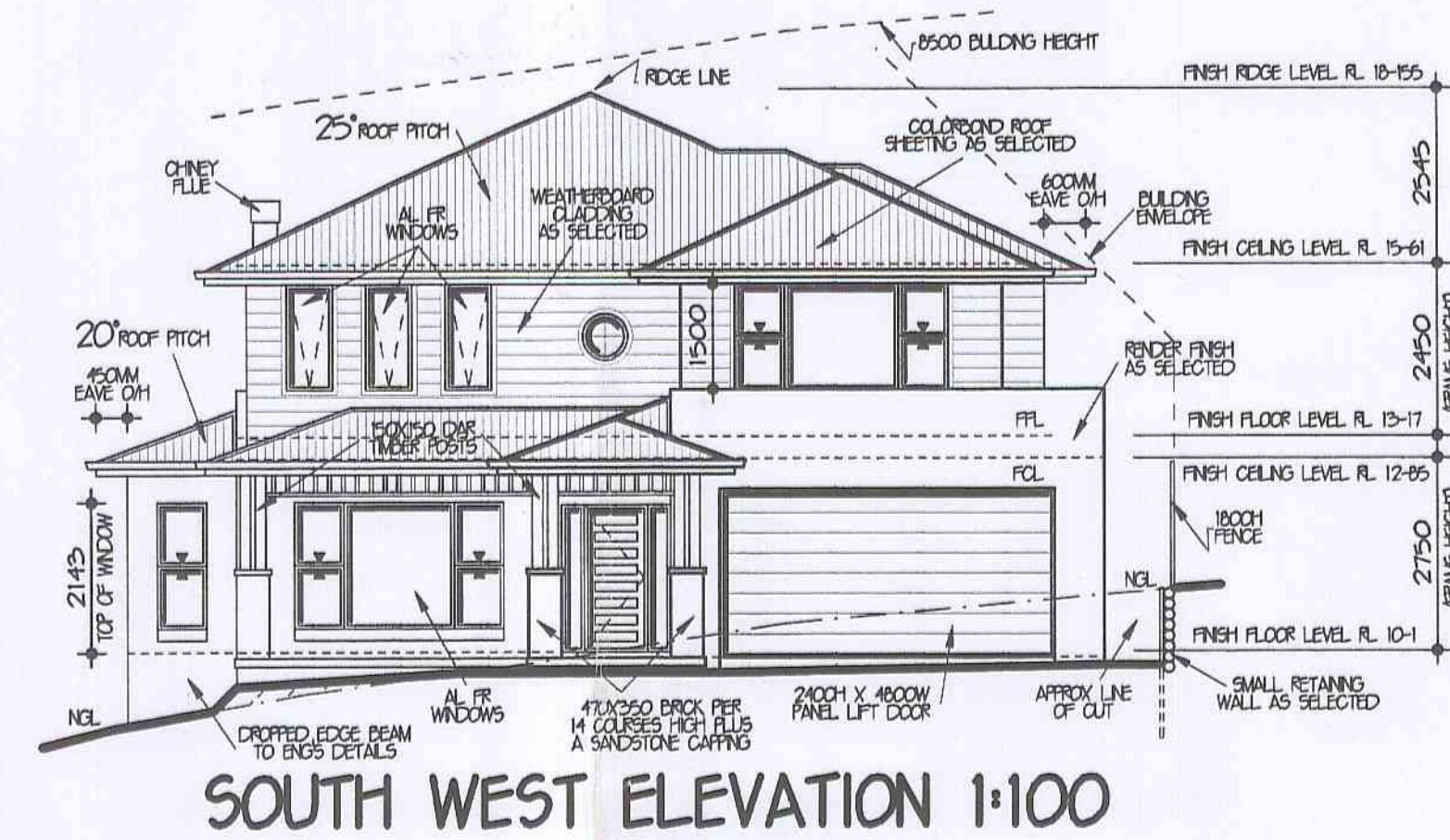
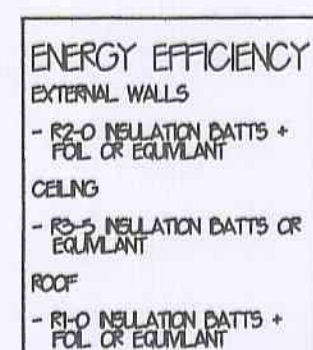
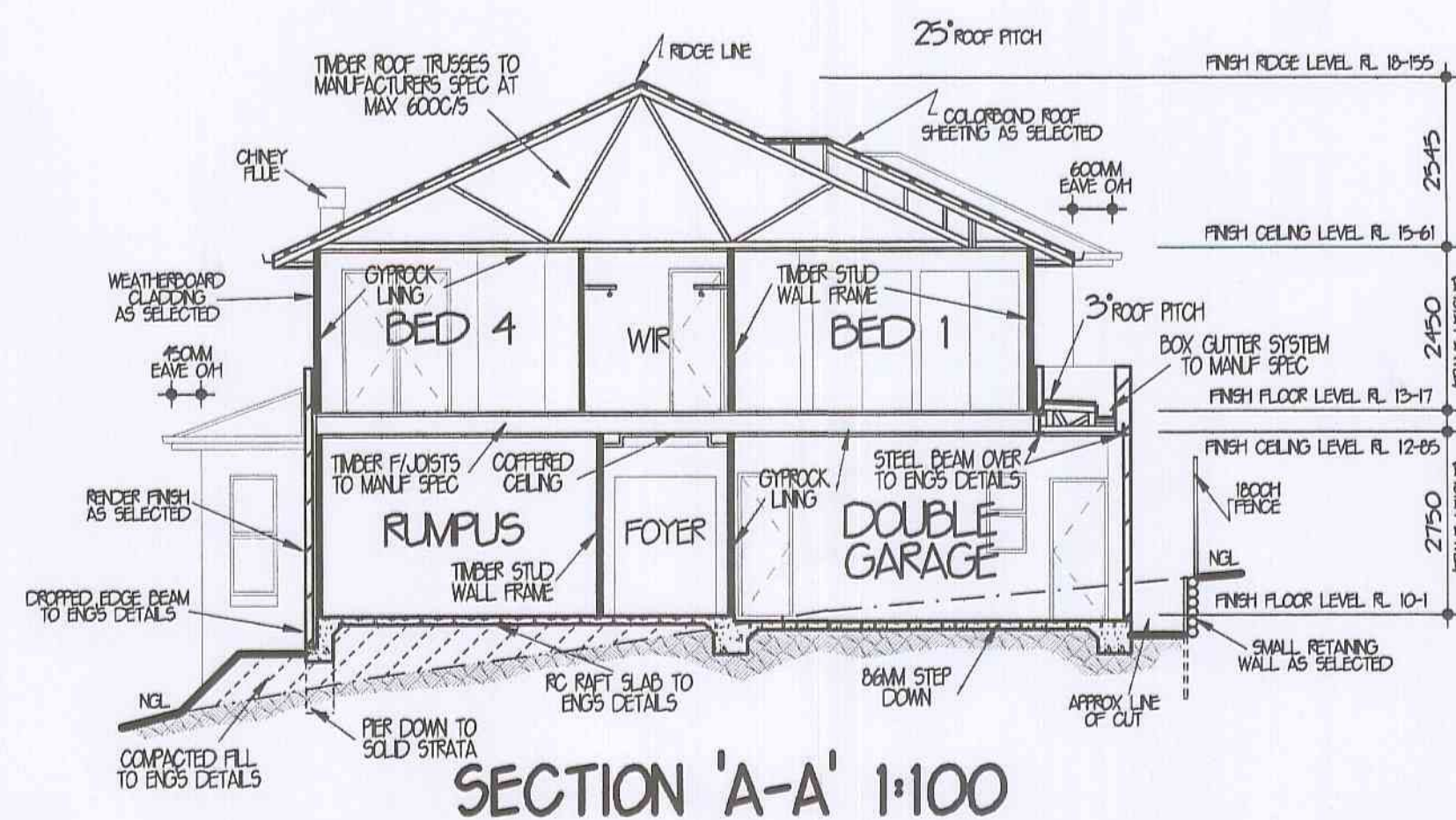
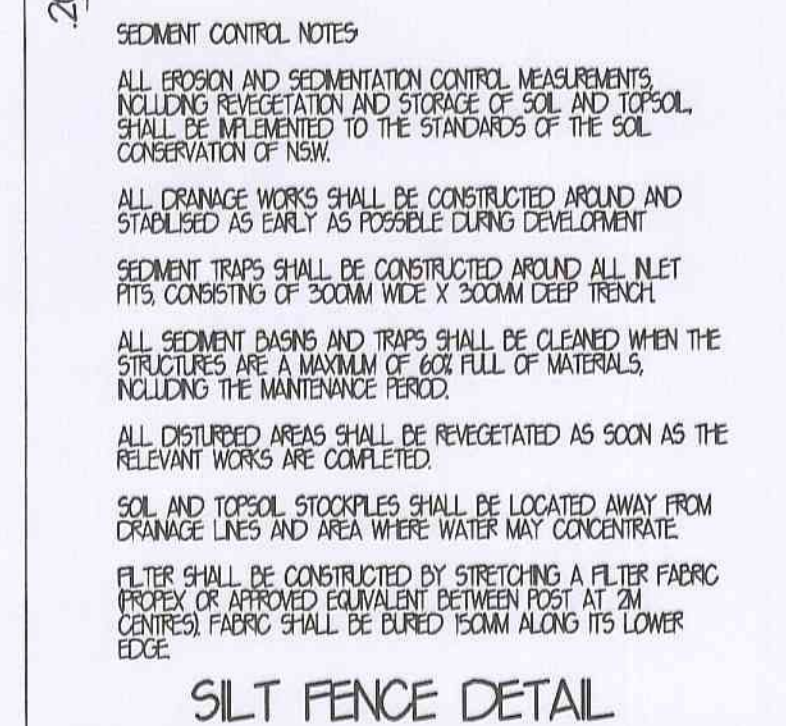
BUILDER: MORRISON HOMES
P.O. BOX 7404
DALLIGHAM HILLS BUSINESS CENTRE 2155
PH: 020 420 020

LOT 2 IN 96 PARK STREET
MONA VALE

SHEET CONTENTS:
RETAINING WALL ELEVATION
AND DCA REQUIREMENTS

PROPOSED RESIDENCE FOR
MR & MRS FONTES
SHEET NO: 3 / 5, DRAWN BY: ADI-001, DATE: 11-01

PLANS PREPARED BY:
MORRISON HOMES
P.O. BOX 7404
DALLIGHAM HILLS BUSINESS CENTRE 2155
PH: 020 420 020



THESE PLANS ARE TO BE READ
IN CONJUNCTION & COMPLY WITH
THE BASIX & NATHERS REPORT.

NOTES

1. ALL GROUND LINES ARE APPROXIMATE TO BE VERIFIED ON-SITE BY THE BUILDER
2. USE FIGURED DIMENSIONS IN PREFERENCE TO SCALING.
3. ALL AGRICULTURAL PIPES & RETAINING WALLS BY THE OWNER
4. ALL SIZES TO BE CHECKED ON-SITE BY THE BUILDER

B	13-5-09	ADDITIONAL INFORMATION AS REQUESTED BY COUNCIL
A	14-4-09	CC-PLANS
FILE#	DATE	DESCRIPTION

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BUILDER **MORRISON HOMES**
P.O. BOX 7484
BALUKHAM HILLS BUSINESS CENTRE 2153
PH. 0408 475 003 FAX. 02 98

JOB AT:
LOT 2 N° 96 PARK STREET
MONA VALE

SHEET CONTENTS :

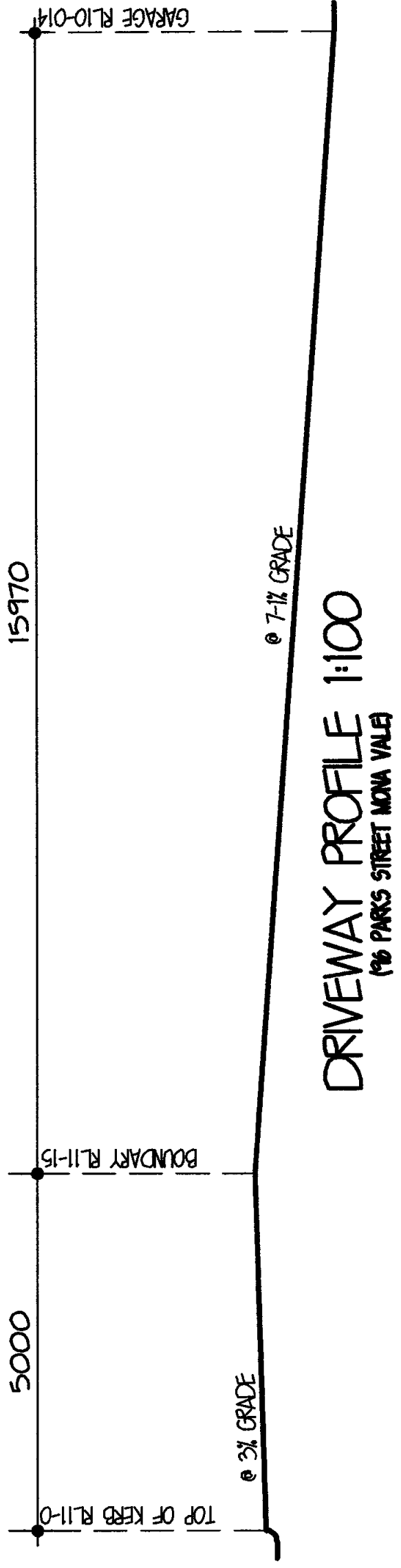
SITE PLAN, ELEVATIONS
& SECTION

PROPOSED RESIDENCE FOR MR & MRS FONTES			
SHEET NO 1	SET OF 3	DRAWING NO A09-001	DATE 1-

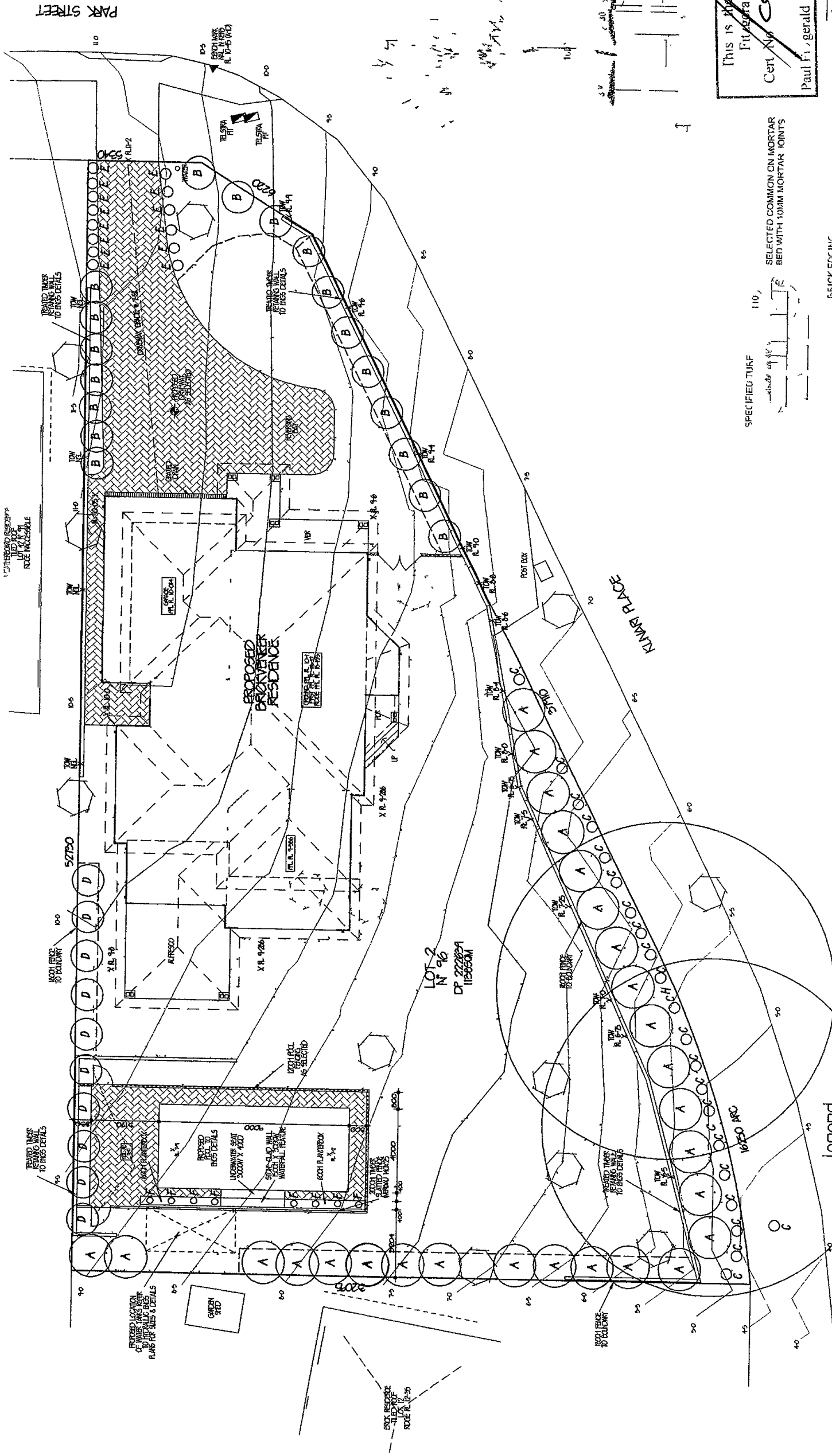
PLANS PREPARED BY: General Accreditation No BPB 0111

MORRISON HOMES
P.O. BOX 7404
BALUKHAM HILLS BUSINESS CENTRE 2153

PH: 0408 475 023 FAX: 02 9366 4265



This is the plan/spec referred to in
Fitzgerald Certifiers Certificate
Cert No **CC20091759**
Paul Fitzgerald Accreditation No BPB 0119
15-7-09



landscaping plan 1:100

plant schedule

NAME	KEY	COMMON NAME	QTY	POT SIZE	MATURE SIZE
** grevillea sericea	A	pink spider flower	27	200mm	2.0M
** murraya paniculata	B	orange jessamine	18	200mm	3.0M
** lomandra longifolia	C	red rush	21	200mm	1.0M
** pittosporum tenuifolium	D	pittosporum james string	10	200mm	3.0M - 4.0M
clivia miniata	E	clivia	14	200mm	0.5M
** dracaena sanderiana	F	sydney red gum	8	200mm	1.0M - 3.0M
** anegophora costata	G	spotted gum	1	35L	2.0M - 3.0M
** corymbia maculata	H		1	35L	2.0M

total plants 100
** local natives = 50
other = 50

NOTE: street tree selection to be approved by council prior to planting

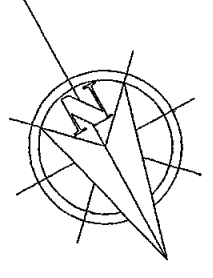
existing contours

CRONTS EXISTING TREES TO BE REMOVED

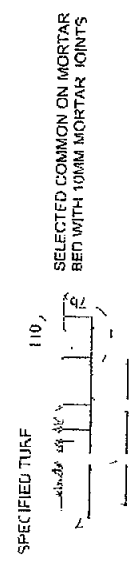
CRONTS EXISTING TREES TO BE REMOVED

proposed turfed area

brick edging to mass planted areas



legend



BLACK EDCING
CC-CC-11

SPECIFIED TURF

SPECIFIED T.O.P. SOIL
CULTIVATE SUBGRADE
TO ASSIST DRAINAGE

TURF AREAS
SCALE 1:10

SPECIFIED MULCH
ENSURE MULCH IS NOT
MIXED WITH PLANTING SOIL
SPECIFIED PLANTING
SOIL MIXTURE

CULTIVATE SUBGRADE
TO ASSIST DRAINAGE
MASS PLANTED AREAS
SCALE 1:10

This is the plan/spec referred to in
Fitzgerald Certifiers Certificate
Cert No **CC2009/1759**
15-7-09
Paul Fitzgerald Accreditation No BPB 11119

NO	DATE	WORKS AS REQUIRED	DESCRIPTION
1	14-01-09	CONCRETE	
2	14-01-09	CONCRETE	

PLANS PREPARED BY
MICHAEL DEAN

66 MONA STREET WOY WOY
RI 244 270

BUILDER
MORRISON HOMES

80 BOX 104 PALLAHAM HILLS
BUSINESS CENTRE 2155

RI 005 45 025
RI 02 025 455

PROPOSED RESERVE FOR
MR & MRS FONTES

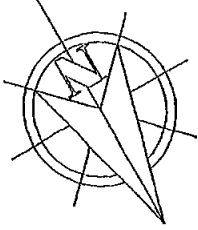
JOB AT
LOT 2 N° 96 PARK STREET

MONA VALE

DATE 14-01-09

JOB NUMBER A07-01

STREET NUMBER 1 OF 1



All stormwater will run into 2x5000 Litres Rain tanks
overflow to run to kibre gutter

This is the plan/spec referred to in
Fitzgerald Certifiers Certificate
Cert No C020091759
Paul Fitzgerald Accreditation No BPB 0119

Palitha S. Wijesena & Associates Pty Ltd

ABN 71 067 121 091

Consulting Civil & Structural Engineers

36 Doulton Drive, Cherrybrook, NSW 2126

Tel: 02 9894 8166 Fax: 02 9894 8133 Mob: 0404 047 161

PROPOSED RESIDENCE AT

LOT 2 (NO 96) PARK STREET
MONA VALE
FOR PAUL & JENNY SONTES

Builder

MORRISSON HOMES

Certified

This is the plan/spec referred to in
Fitzgerald Certifiers Certificate
Cert No **CC20091759**
Paul Fitzgerald Accreditation No BPB 0119
15-7-09

Palitha S. Wijesena
B Sc (Eng), CP Eng MIE Aust MICE (UK) NPER

Date 08/07/09 Drawing No

Drawn

PSW

Design

PSW

8380-01

DRAWING SCHEDULE

GENERAL NOTES- POOL

POOL DETAILS

SWIMMING POOL DETAILS

SWIMMING POOL PLAN

FIRST FLOOR FRAMING PLAN

TYPICAL SLAB DETAILS

GROUND FLOOR SLAB PLAN

GENERAL NOTES

TITLE SHEET

DESCRIPTION

REV

DESIGN LIVE LOADS

FLOORS 15 Kpa GARAGES 30 Kpa BALCONIES STAIR ROOFS

GENERAL NOTES

- 1 This drawing is to be read in conjunction with Architect's and other Consultant's drawings and specifications and with such other written instructions as may be issued during the course of the contract any discrepancies in these documents shall be referred to the Engineer for decision before proceeding with the work
- 2 Dimensions shall not be obtained by scaling
- 3 All workmanship and materials to be in accordance with all current SAA Codes of Practice and Local Government Ordinances
- 4 All vegetable soil including organic soil and roots to be removed from beneath all concrete work
- 5 All footings to be founded in natural ground with bearing capacity specified
- 6 Footings are not to be constructed in fill material
- 7 Footings have been designed for allowable equal uniform bearing pressure of 100Kpa on firm natural ground

Foundation material shall be approved for this bearing capacity before placing reinforcement

- 8 Footing details shown are for the site classification stipulated Whilst every care has been taken to verify that all the information shown is correct Palitha S Wijesena & Associates take no responsibility for variations that may occur due to variations in site conditions

- 9 Depths of structural members are noted first on plan and includes slab thickness followed by width of member
- 10 Provide 200 um polythene membrane beneath slab joints lapped 150 mm minimum and taped continuously
- 11 Provide one layer of two ply Malthoid or similar between brickwork and underside of concrete surfaces
- 12 Design based upon use of a trussed roof conventional roof supporting tiles/metal deck roofing
- 13 The whole of the area under concrete slabs on ground shall be treated for the prevention of termites

This treatment shall take place after all filling and compaction has been carried out and just prior to placing the waterproof membrane

- 14 The Owner's attention is drawn to appendix A of AS 2870 performance Requirements and Foundation Maintenance
- 15 Site classified as Class M Subject to Confirmation by a Geotechnical Engineer

The design of the slab details on this drawing has been prepared taking into account the requirements and provisions of AS 2870 and is considered satisfactory for the site conditions

- 17 Fill used in the construction of the slab except where the slab is suspended shall consist of control or rolled fill in accordance with AS 2870 1-1988

18 Formwork to remain in place for

- 19 Stability of the structure during construction and excavation is the responsibility of the Builder also the stability of existing buildings in the vicinity of any excavations

BLOCKWORK NOTES

- 1 All blockwork shall be constructed in accordance with AS 1475
- 2 All blocks to be Class A to AS 1500
- 3 All blockwork to be constructed in mortar 1:1:6
- 4 Core filling where specified to be placed in heights not exceeding 1200 mm Clean out openings to be provided at base of each lift in which is to be filled

Mandatory Requirements

For Salinity Affects
(A) The following measures must be used for house slabs and footings

- 1 For slab on ground construction a layer of sand at least 50 mm deep under the slab must be provided
- 2 A high impact damp proof membrane (rather than a vapour proof membrane) must be laid under slab (NSW BCA 3.2.2.6)
- 3 The damp proof membrane must be extended to the outside face of the external edge beam up to the finished ground level (as per clause 3.2.2.6 and figure 3.2.2.3 of the BCA)
- 4 Class 32 MPa(N32) concrete must be used OR a sulphate resisting Type SR cement with a water cement ratio of 0.5 must be used Water which will reduce the concrete strength below 32 MPa must not be added to the concrete at the construction site
- 5 Slabs must be vibrated and cured for a minimum of three days Care must be taken not to over vibrate the concrete during placement as segregation of the concrete aggregates will occur
- 6 The minimum cover to reinforcement must be 50 mm from unprotected ground Chairs including lateral supports should be in position prior to inspection and subsequent pouring of the concrete
- 7 The minimum cover to reinforcement must be 30 mm from a membrane in contact with the ground

ABBREVIATIONS

APPROX	Approximate	MIN	Maximum
B	Bottom	MAX	Maximum
B/W	Boilways	N T S	Not To Scale
BTM	Bottom	No	Number
C&C	Concrete	O/A	Overall
COL	Column	REINF	Reinforcement
CRS	Centers	R C	Reinforcement Concrete
†	Centre Line	S S	Stainless Steel
C/S	Confirm On Site	STD	Standard
C/W	Complete With	S W	Storm Water
CFW	Continuous Fillet Weld	S	Sewer
FW	Fillet Weld	SQ	Square
DWG	Drawing	T	Top
EGL	Existing Ground Level	TM	Trench Mesh
EXIST	Existing	TYP	Typical
FTG	Footing	UNO	Unless Noted Otherwise
FGL	Finish Ground Level	UG	Underground
G&V	Galvanised	U/S	Underside
HD	Heavy Duty		
IL	Invert Level		
IJ	Isolation Joint		

CONCRETE NOTES

- 1 All concrete work is to comply with AS 3600 and AS 2870
- 2 Concrete mix to be Fc 32 MPa
- Maximum aggregate 20 mm Slump 80 mm
- 3 Concrete cover to reinforcement in slabs 25 mm in footings 65 mm
- 4 Concrete to be mechanically vibrated during placing
- 5 Concrete to be cured by being constantly wet for a minimum of 7 days after casting or by any other method approved in writing by the Engineer

REINFORCEMENT NOTES

- 1 Mesh reinforcement to comply with AS 1304
- 2 Y denotes hot rolled deformed bar to AS 1302
- R denotes plain round bar to AS 1302
- 3 Laps to reinforcement Mesh sides 300 mm/ends 450 mm Trench Mesh 600 mm Bars as noted on drawing
- 4 Reinforcement to be supported on approved plastic tipped chairs at 900 mm centres in both directions

BRICKWORK NOTES

- 1 All brickwork shall be constructed in accordance with AS 1640
- 2 All bricks to be Class A
- 3 All brickwork to be constructed in mortar 1:1:6

TIMBER NOTES

- 1 Timber construction shall be in accordance with the requirements of AS 1684 Light Timber Framing Code and AS 1720 Timber Engineering Code
- 2 Softwood structural timbers shall be F 7 grade or better and hardwood shall be F 11 grade or better unless noted otherwise
- 3 Trussed roofs shall have vertical plane ridge bracing and 4:5 diagonal rafter bracing from the ridge to the wall plates on each side of the ridge terminating at building corners or cross walls
- 4 Internal stud walling shall be braced using Gangnail Speed Brace bracing or similar approved by the Engineer
- Braces shall be triple nailed at each end and single nailed to each stud using 2.5 mm diameter nails
- 5 Timber exposed to decay hazard shall be treated with Tanolth Creosote or similar preservative in accordance with AS 1604
- 6 Anchor rods and tie down straps to the roof shall be installed that ensure uplift forces from wind are transmitted to the foundations unless special fixings are nominated
- 7 Major structural connections shall be bolted The Builder shall obtain details from the Engineer if not shown on the drawings

This plan forms part of the approved Certificate as issued by Fitzgerald Building Certifiers Pty Limited

REV	DATE	AMENDMENTS
PROPOSED RESIDENCE AT LOT 2 (NO 96) PARK STREET MONA VALE FOR PAUL & JENNY SONTES		
Builder	MORRISON HOMES	Job No
Design	PSW	
Palitha S Wijesena & Associates Pty Ltd ABN 71 067 121 091 Consulting Civil & Structural Engineers 36 Boulton Drive Cherrybrook NSW 2126 Tel 02 9894 8166 Fax 02 9894 8133 Mob 0404 047 161		
Certified	Date	Scale
Palitha S Wijesena	08-07-09	Drawing No
B Sc (Eng)	PSW	8380-02
GENERAL NOTES		



SLAB NOTES

UNO SLAB=85mm THK WITH 1 LAYER OF SL72 FABRIC IN TOP UNLESS NOTED OTHERWISE LAID ON 200UM WATERPROOF MEMBRANE ON 50mm SAND BLINDING ON WELL COMPACTED GRANULAR FILL THE FILLING IS TO BE PLACED & COMPACTED TO AVOID ANY DEFLECTION & SETTLEMENT IN THE SLAB IF THE SITE IS CUT & FILLED THE EXTERNAL BEAMS INDICATED WHERE NOT BEARING ON FIRM NATURAL GROUND MUST BE PIERED TO FIRM NATURAL GROUND (HAVING A SAFE BEARING CAPACITY OF 300 kPa MINIMUM) BELOW THE FILL & TOP SOIL USING 400 DIA PIERS AT 1.8m ctrs

WHERE DEPTH OF ROLLED FILL BELOW SLAB EXCEEDS 400mm THE INTERNAL BEAMS INDICATED MUST BE PIERED TO FIRM NATURAL GROUND USING 400 DIA PIERS AT 3.3m max ctrs IF LOAD BEARING BEAMS ARE BEARING ON NON-STRUCTURAL FILL THE FOLLOWING PIER ARRANGEMENT SHALL BE USED FOR 210 kPa PRESSURE (CLAY STRATUM) 400 DIA BORED PIERS AT 1.8m ctrs OR 500x300 BULK PIERS FOR 400 kPa PRESSURE (SHALE OR ROCK) 300 DIA BORED PIERS AT 1.8m ctrs OR 500x300 BULK PIERS

ALL STRIP FOOTINGS ARE TO BE FOUNDED DIRECTLY ON OR PIERED DOWN TO FIRM NATURAL GROUND WITH AN ALLOWABLE MINIMUM BEARING PRESSURE OF 150 kPa PIERS SHOULD BE 400 DIA & SPACED AT 1.8m ctrs

IF SHALE OR ROCK IS ENCOUNTERED IN THE TRENCHES OR PIER HOLES THE ENTIRE BEAM SYSTEM MUST BE PIERED DOWN TO THIS STRATA THE EDGE BEAMS ARE TO HAVE A MINIMUM PENETRATION OF 150mm INTO THE FIRM NATURAL GROUND TOP OF SLAB IS TO BE 250mm ABOVE THE EXTERNAL GROUND LEVEL PROVIDE ADDITIONAL BRICK ARTICULATION JOINTS AS REQUIRED

PIERING NOTES

EXTERNAL PIERS - @ 2000 ctrs to be founded to firm natural bearing but only where rolled fill is located under edge beam or alternatively in order to achieve an even bearing ie if shale or rock is encountered in cut

INTERNAL PIERS - @ 3300x3300 c/ctrs only where depth of rolled fill beneath slab exceeds 300mm If internal ribs support brickwork then piers are required as per external edge beam

NOTE Where footings are not founded on natural ground or controlled fill provide 400mm dia mass concrete piers @ 2400mm ctrs (max) and socketed 300mm (min) into natural stratum of 250 kPa (min) bearing capacity

All piers are to be poured separate to raft slab

REV DATE AMENDMENTS

PROPOSED RESIDENCE AT
AT LOT 2 (NO 96) PARK ST
MONA VALE
FOR PAUL & JENNY SONTES

Builder MORRISON HOMES

Job No

Design

PSW

Palitha S Wijesena & Associates Pty Ltd

ABN 71 067 121 091

Consulting Civil & Structural Engineers

36 Doulton Drive Cherrybrook NSW 2126

Tel 02 9894 8166 Fax 02 9894 8133 Mob 0404 047 161

Certified

Palitha S Wijesena

B.Sc (Eng) M.E. Aust. M.I.C.E. (U.K.) N.P.E.R.

Drawn DW Date 08/07/09 Scale 1:100

Drawing Title

SLAB PLAN

8380-03

This plan forms part of the approved
Certificate as issued by

Fitzgerald Building Certifiers Pty Limited

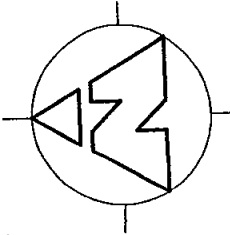
THE SITE CLASSIFICATION ASSUMED FOR
THIS DESIGN IS SUBJECT TO CONFIRMATION
BY A QUALIFIED GEOTECHNICAL ENGINEER

SLAB PLAN

PROPOSED PIER LAYOUT AS SHOWN
TO BE CONFIRMED ON SITE

BU* - INDICATES BRICK JOINT REFER TO
ARCHITECT'S DRAWINGS FOR POSITIONING

C1 - 76 X76 x 4.9 SHS



M

7
04

4
04

6
04

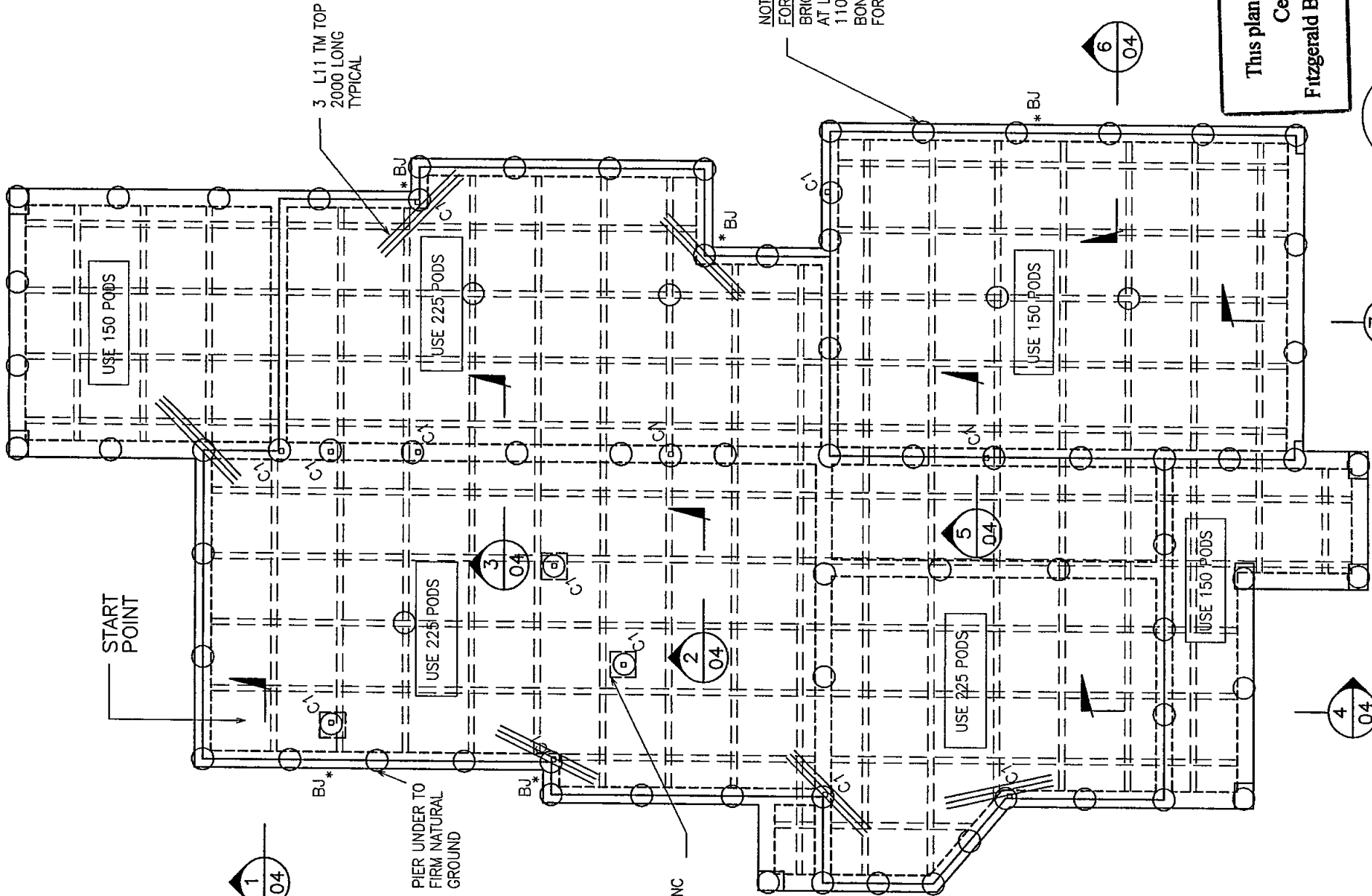
NOTE
FOR GARAGE WALLS > 2.4m IN HEIGHT
BRICK WALLS TO BE 230mm
AT LOWER SECTION
110mm WALL WITH 230x230
BONDED PIERS @ 1800 CTRS
FOR UPPER HEIGHT OF 2400mm

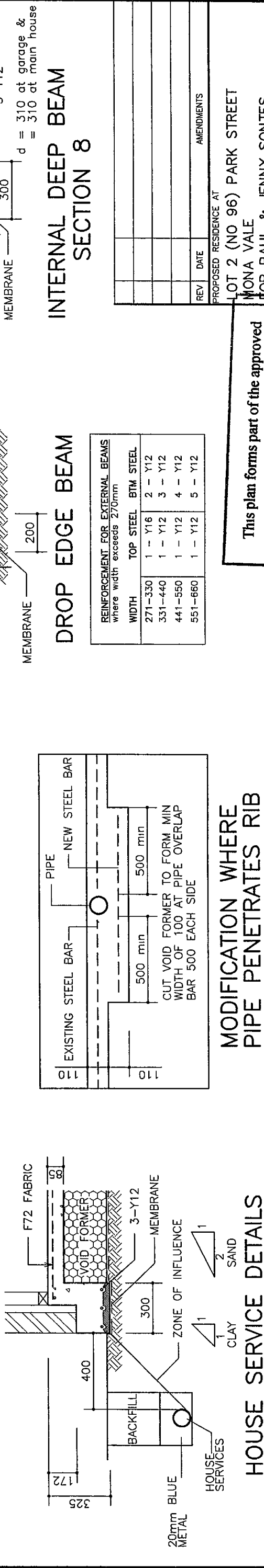
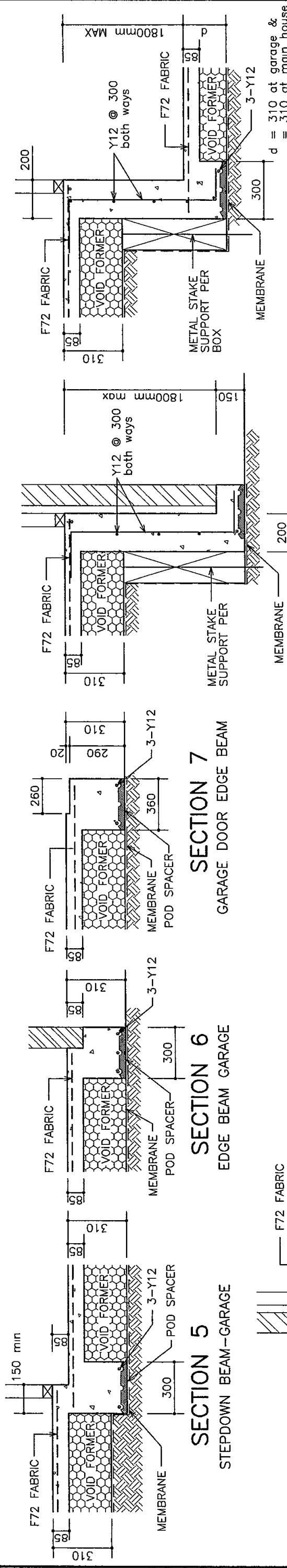
310 DP X 400 SQ MASS CONC
PAD OVER 400 DIA
BORED PIER

PIER UNDER TO
FIRM NATURAL
GROUND

3 L11 TM TOP
2000 LONG
TYPICAL

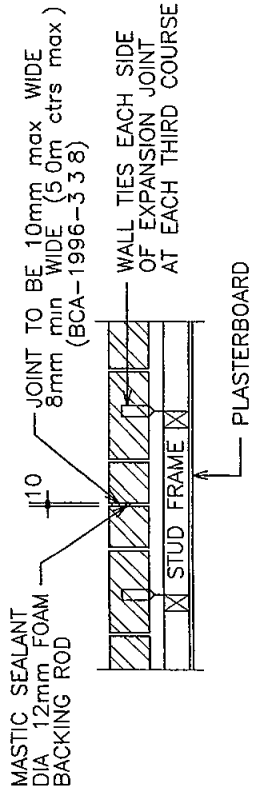
START
POINT





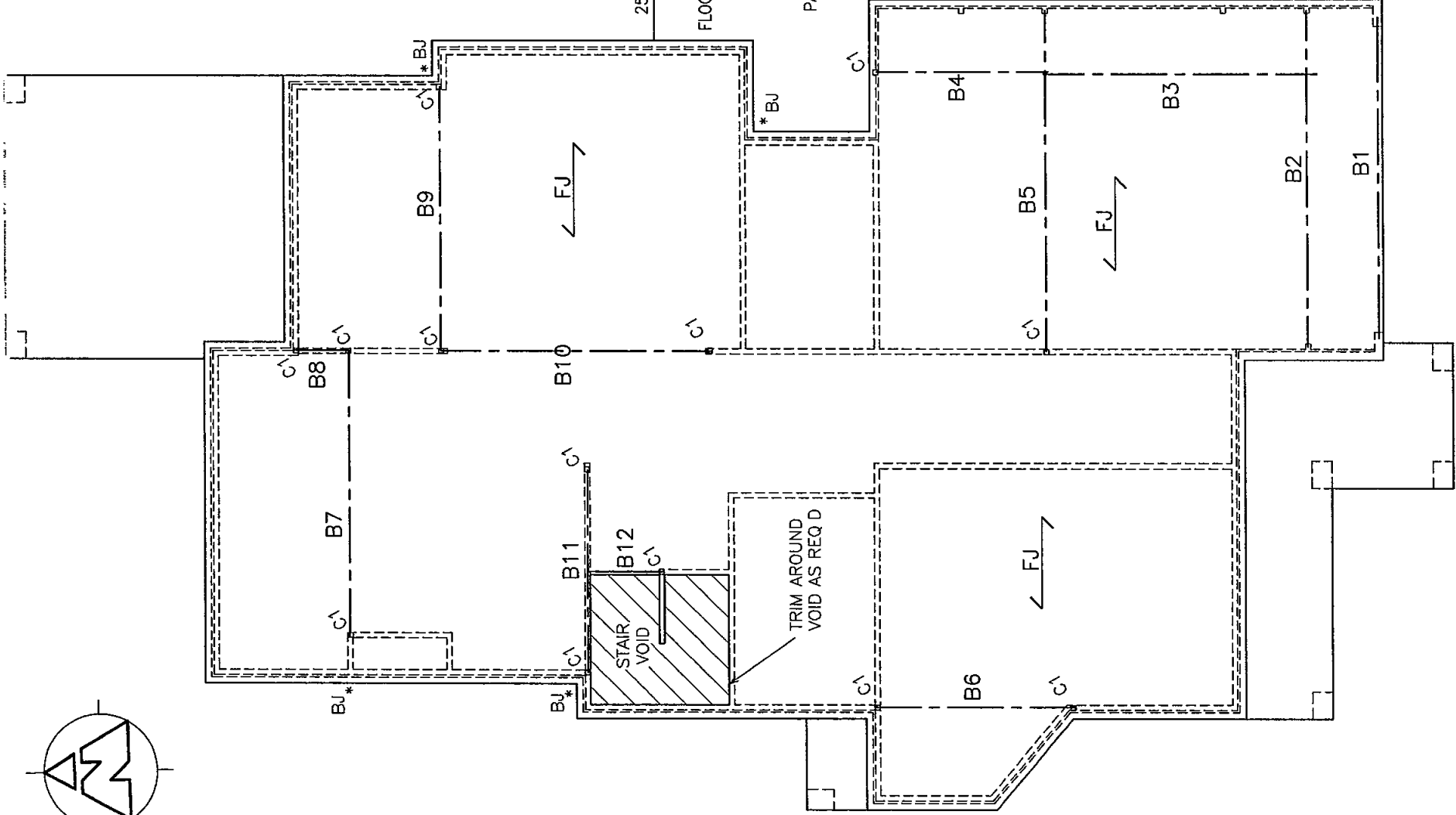
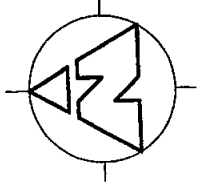
REINFORCEMENT FOR EXTERNAL BEAMS where width exceeds 270mm			
WIDTH	TOP STEEL	BTM STEEL	
271-330	1 - Y16	2 - Y12	
331-440	1 - Y12	3 - Y12	
441-550	1 - Y12	4 - Y12	
551-660	1 - Y12	5 - Y12	

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Certificate as issued by
Fitzgerald Building Certifiers Pty Limited**

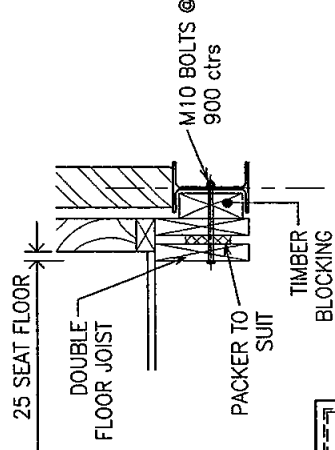
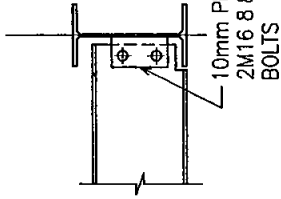
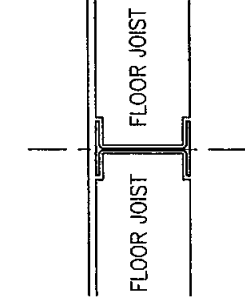
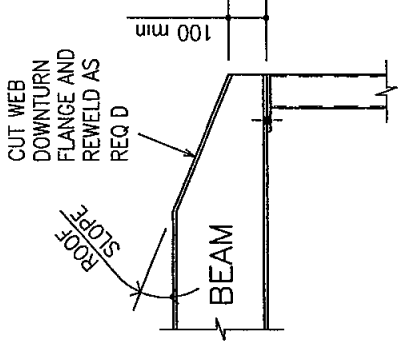
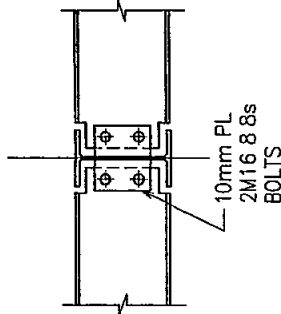


BRICK JOINT DETAIL (BJ*)

- 1 Piers are to be used only in those areas where either
 - Edge or stiffening beams encounter a soft spot ie bearing capacity of less than 50Kpa
 - Edge or stiffening beams are located in the fill portion of an uncontrolled / non compacted building platform
- If any part of the edge or stiffening beam is founded on rock / shale then the remaining portion not founded on rock / shale must be piered to a similar material Pier dimension may be reduced to 300 in this case
- 2 Piers spacing
 - edge beams max 2000
 - internal beams 3300x3300
- 3 Pier diameter
 - Clay 400mm



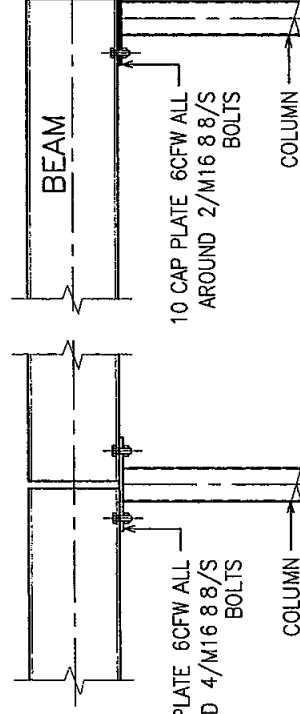
TYPICAL BEAM DETAILS



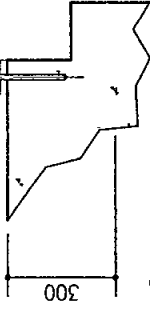
100x10x230
BEARER PLATE

NOTE
6mm FILLET WELDED
CONNECTIONS MAY BE USED
FOR BEAM TO BEAM AND BEAM
TO COLUMN CONNECTIONS

10 CAP PLATE 6CFW ALL
AROUND 4/M16 8 8/S
BOLTS



10 BASE PLATE ON 20 DRY
PACK LEVELLING GROUT
PROVIDE 2/M16 GALV
ANCHOR BOLTS



TYPICAL COLUMN DETAILS

BEAM SCHEDULE

MARK No	SIZE
B1	250X90 PFC with 10mm Plate
B2	310UB40
B3	310UB40
B4	200UB25
B5	310UB40
B6	200UB25
B7 B8 B9	250UB31
B10	250UB31
B11 B12	245X45 HYPAN Beam Trimmer
C1	76 x 76 x 4 9 SHS
FJ	HI 245x70 HYPAN Beam @450CTS MAX SPAN 5 20MX

This plan forms part of the approved
Certificate as issued by
Fitzgerald Building Certifiers Pty Limited

STEELWORK NOTES

STEELWORK DESIGNED IN ACCORDANCE WITH AS4100
STEEL STRUCTURES CODE & AS1170 1/AS1170 2
DEAD & LIVE LOADS & WIND LOADS
STRUCTURAL STEEL TO BE GRADE (BHP 300 Plus) U N O
SURFACE PREPARATION & FINISH TO COMPLY WITH
AS/NZS 2312/1994

FIRST FLOOR FRAMING PLAN

NOTE
THIS DRAWING IS SIGNED SUBJECT TO A INSPECTION
CERTIFICATE BEING ISSUED BY THIS OFFICE

REV DATE AMENDMENTS
PROPOSED RESIDENCE AT
AT LOT 2 (NO 96) PARK ST
MONA VALE
FOR PAUL & JENNY SONTES

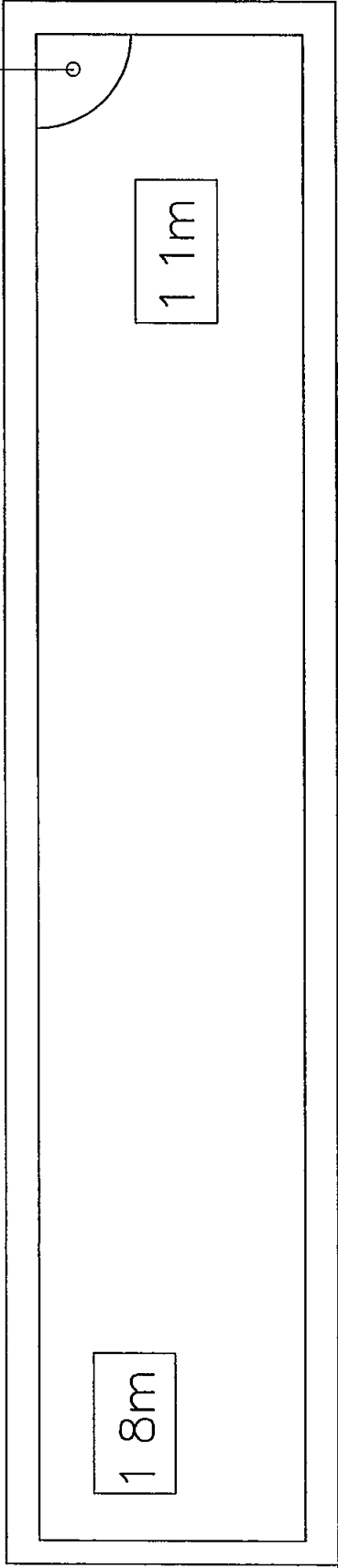
Builder Job No
MORRISON HOMES Design PSW

Halitha S Wijesena & Associates Pty Ltd
ABN 71 067 121 091
Consulting Civil & Structural Engineers
36 Doughton Drive Cherrybrook NSW 2126
Tel 02 9894 8166 Fax 02 9894 8133 Mob 0404 047 161

Certified
Palitha S Wijesena
B Sc (Eng) MPE Eng MIE Aust MICE (U.K) NPER
Drawn Date Scale
DW 08/07/09 1:100 & 1:20
Drawing Title
FIRST FLOOR FRAMING

8380-05

SWIM-OUT



18m

11m



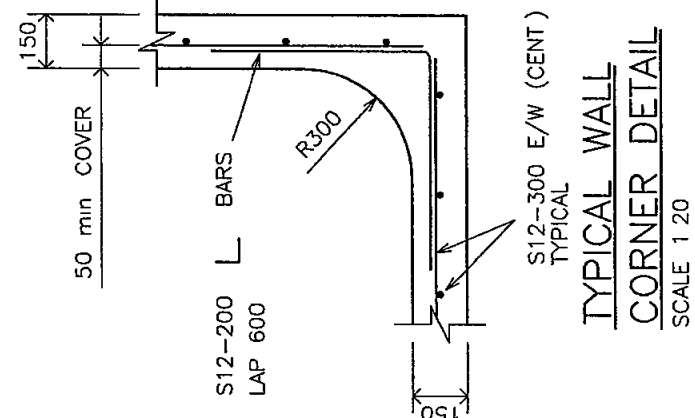
5000 (NTS)

300
COPING

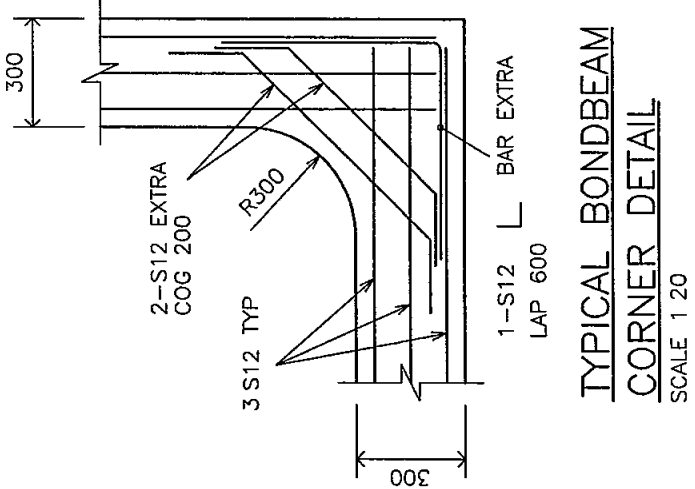
12500 (NTS)

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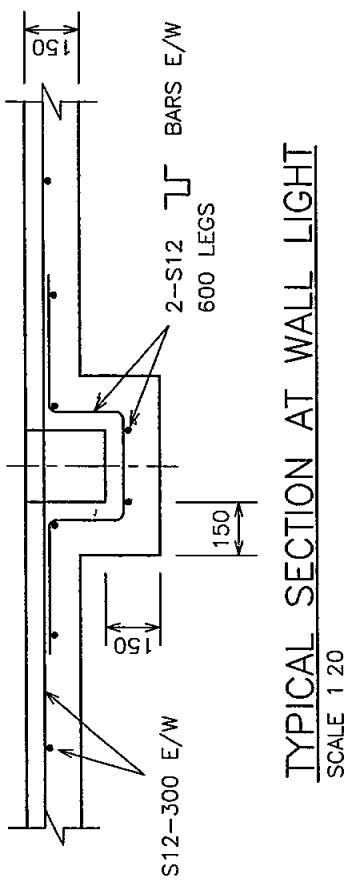
REV	DATE	AMENDMENTS
PROPOSED RESIDENCE AT		
LOT 2 (NO 96) PARK STREET		
MONA VALE		
FOR PAUL & JENNY SONTES		
Builder	Job No	
MORRISON HOMES		
Design	P S W	
Paltha S Wijesena & Associates Pty Ltd		
ABN 71 067 121 091		
Consulting Civil & Structural Engineers		
36 Doulton Drive Cherrybrook NSW 2126		
Tel 02 9894 8166 Fax 02 9894 8133 Mob 0404 047 161		
Certified		
Paltha S Wijesena		
B Sc (Eng) CPEng MIE Aust MICE (UK) NPER		
Drawn	Date	Scale
PSW	07-07-09	
Drawing Title	POOL PLAN	
		8380-06



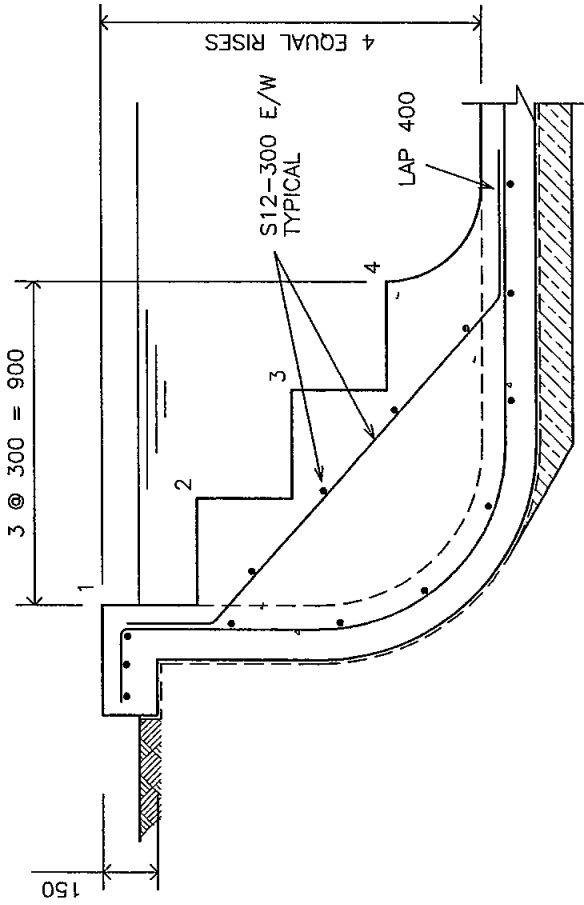
TYPICAL WALL CORNER DETAIL
SCALE 1 20



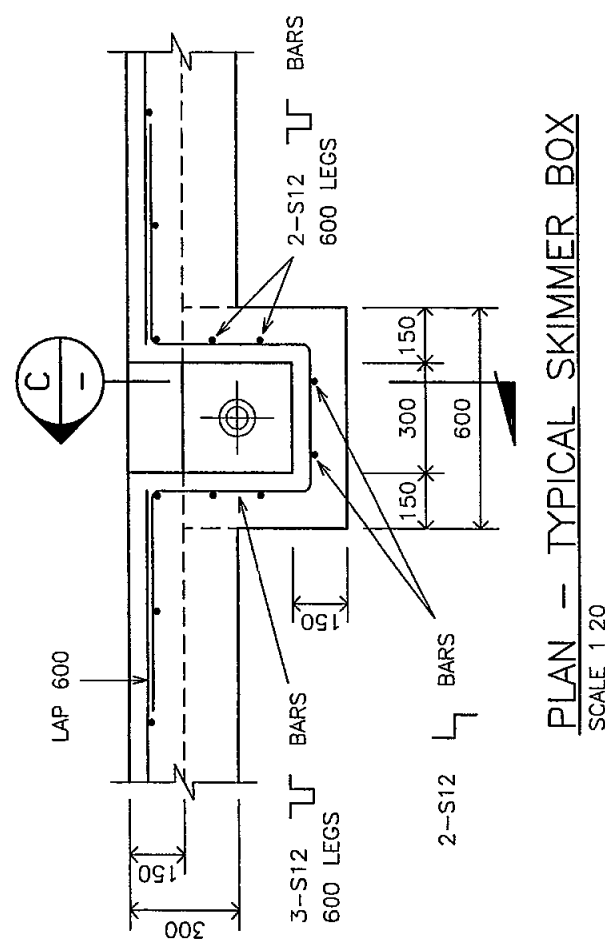
TYPICAL BONDBEAM CORNER DETAIL
SCALE 1 20



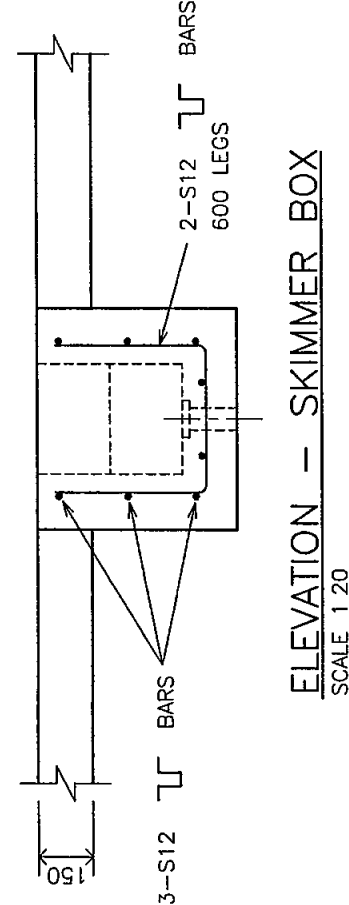
TYPICAL SECTION AT WALL LIGHT
SCALE 1 20



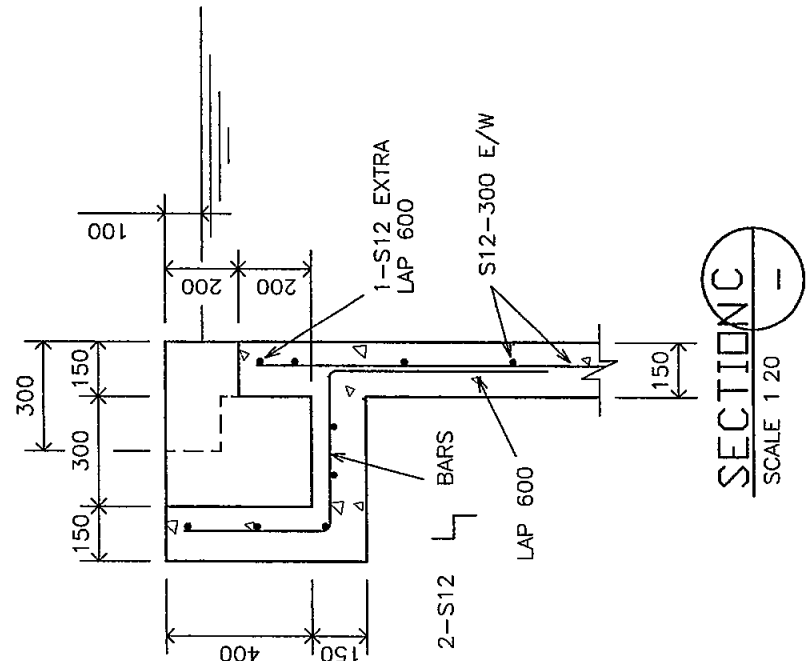
TYPICAL STEPS DETAIL
SCALE 1 20



PLAN - TYPICAL SKIMMER BOX
SCALE 1 20



ELEVATION - SKIMMER BOX
SCALE 1 20

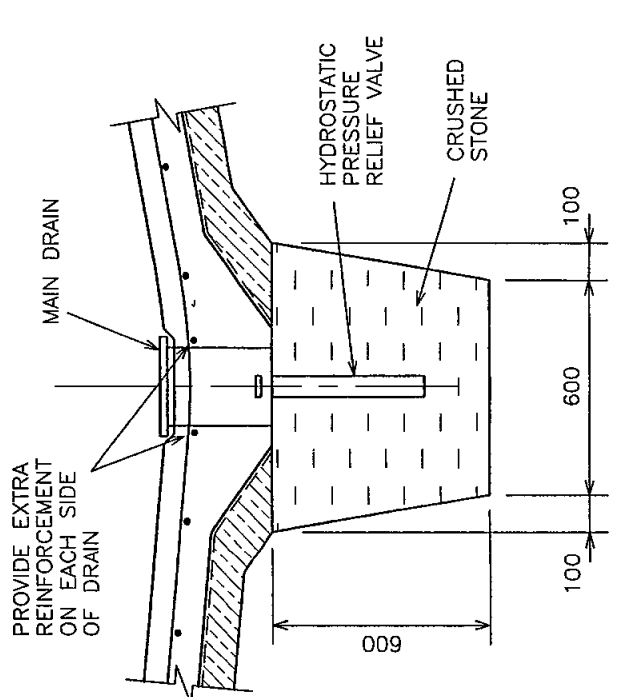


SECTION C
SCALE 1 20

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NOTE
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ALL REINFORCEMENT SHALL BE INSPECTED BY THIS OFFICE PRIOR TO POURING CONCRETE

REV	DATE	AMENDMENTS
PROPOSED RESIDENCE AT LOT 2 (NO 96) PARK STREET MONA VALE FOR PAUL & JENNY SONTES		
Builder	Job No	Design
MORRISON HOMES		P.S.W.
Palitha S Wijesena & Associates Pty Ltd ABN 71 067 121 091 Consulting Civil & Structural Engineers 36 Doullton Drive Cherrybrook NSW 2125 Tel 02 9894 8166 Fax 02 9894 8133 Mob 0404 047 161		
Drawn	Date	Scale
Palitha S Wijesena B.Sc. Eng. C.P. Eng.	08-07-08	
Drawing No	Drawing Title	
	POOL DETAILS	
		8380-07



HYDROSTATIC PRESSURE RELIEF VALVE
SCALE 1 20

VARIES

3 S12 TYP

300

150/150

840

300

1100

S12-300 E/W
TYPICAL

DRAINAGE LAYER
REFER NOTES

WATERPROOF MEMBRANE

WATER LEVEL

S12-300 E/W
TYPICAL

1300

300

300

150/150

150

1800

SECTION A
SCALE 1:25 03

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REV

DATE

AMENDMENTS

PROPOSED RESIDENCE AT

LOT 2 (NO 96) PARK STREET

MONA VALE

FOR PAUL & JENNY SONTES

Builder

MORRISON HOMES

Job No

Design

Palitha S Wijesena & Associates Pty Ltd
ABN 71 067 121 091

Consulting Civil & Structural Engineers
36 Doulton Drive Cherrybrook NSW 12128
Tel 02 9894 8166 Fax 02 9894 8133 Mob 0404 047 161

Certifier

Palitha S Wijesena
B.Sc (Eng) & CP Eng MIE Aust MICE (UK) NPER

Scale

Date

Drawing No

Drawing Title

00-67-03

POOL SECTIONS

8380-08

SECTION B
SCALE 1:25 03

1900

100

VARIES

VARIES

WATER LEVEL

300

150/150

90

3 S12 TYP

S12-300 E/W
TYPICAL

S12-300 E/W
TYPICAL

150

300

3 S12 TYP

S12-300 E/W
TYPICAL

POOL NOTES

- 1

POOL SET-OUT
Pool setout size location and height levels deemed to be acceptable to the owner unless the builder is advised otherwise Such advice must be prior to placement of re-inforcement
- 2

CURING CONCRETE
After concreting the pool shell is to be thoroughly wetted down twice daily for at least 7 days (10 days in summer)
- 3

SAFETY FENCES
Safety fencing is to be council approved prior to the pool being filled
- 4

FILLING POOL
Hose to be prevented from swishing around during filing DO NOT use rubber hoses
- 5

UNDERWATER LIGHTS
Lights must be fully submerged during use
- 6

WALKWAYS AND COPINGS
Walkways and copings are designed for a 2kPa live load and are not designed to support masonry walls unless noted otherwise

SPECIFICATIONS

- 1

All workmanship and materials to be in accordance with Australian Standards AS2783
- 2

Site plan dimension are to water face
- 3

Dimension take preference to scaling
- 4

All level and dimensions are relative to concrete coping level Fixed datum represents the fixed coping height/level Approximate coping levels are represented as follows
a) NGL +200 represents 200mm above existing Natural ground level
b) NGL -400 represents 400mm below existing natural ground level
- 5

Provide filter with matched pump and plumbing to manufacturers recommendations
- 6

Supporting rock - minimum safe bearing capacity of 600kPa
- 7

Advise Engineer if water is encountered during excavation in fill or ground Provide temporary penetrations to floor slab if ground water level exceeds 500mm above deep floor level
- 8

The excavation base is to be provided with an under shell drainage layer as follows
a) 75min blue metal drainage layer or 50min thick layer with plastic over
b) Corrugated iron sheeting & membrane if over rock
c) Plastic layer only if base is entirely in sand
d) Main drain pit is to be blue metal filled irrespective of drainage layer type
- 9

All re-inforcement to be of Australian manufacture in accordance with SAA standards
S- Grade 230 structural grade deformed
R- Grade 230 plain grade found
Y- Grade 410 tempcore grade bars
F- Grade 450 hard drawn wire fabric
- 10

Re-inforcing bars unless noted otherwise are to be lapped 40 bar diameters min Fabric to be lapped 400mm min All laps should be staggered
- 11

All re-inforcement to be securely supported by bar chairs at 1000 max cts
- 12

Minimum concrete cover to re-inforcement from closest concrete surface to be as follows
- Water face Salt Chlorination 65mm water face standard chlorination - 50mm
- Coping/Walkway surface 50mm Rear face formed 40mm Rough Ground 65mm
- 13

Concrete to be pneumatically placed and have a min depth strength of F c 25MPa at 28 days
- 14

Upon completion of concreting the hydrostatic valve is to be cleaned & checked to ensure correct operation

NOTE

- 1

CONCRETE TO BE PLACED PNEUMATICALLY USING A PUMPING MACHINE AND TO HAVE AN F c AT 28 DAYS OF 25 MPa
- 2

S12 BARS TO HAVE A SPLICE LENGTH OF 500mm
- 3

SPLICES IN BOND BEAM TO BE STAGGERED
- 4

THE DESIGN APPLIES WHEN POOL WALL DOES NOT PROJECT MORE THAN 900mm ABOVE FIRM GROUND LEVEL
- 5

SUPPORTING SOIL TO BE STABLE NATURAL MATERIAL OF UNIFORM MOISTURE CONTENT WITH A SAFE BEARING CAPACITY OF AT LEAST 100 kPa
- 6

ENGINEER TO BE ADVISED IF EXCAVATION IS IN FILL OR IF EXCESSIVE GROUND WATER IS ENCOUNTERED
- 7

ALL REINFORCEMENT TO HAVE 50 COVER TO WATER FACE UNLESS NOTED OTHERWISE
- 8

FINISH TILES LOCATION OF SKIMMER AND LIGHT TO ARCHITECTS DETAILS
- 9

PIERS UNDER WALLS AT 2300mm ctrs max AND PIERS UNDER FLOOR AT 1500 ctrs max WHERE POOL IS PARTIALLY ON ROCK SUSPEND THE REMAINDER OF THE POOL ON 450Ø MASS CONCRETE PIERS TO ROCK PIERS LONGER THAN 1000mm TO BE REINFORCED WITH 6-S12 AND AND R10 TIES AT 300mm ctrs
- 10

WALKWAYS AND COPINGS ARE DESIGNED FOR A 2 kPa LOAD AND ARE NOT DESIGNED TO SUPPORT MASONRY WALLS

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REV	DATE	AMENDMENTS			
PROPOSED RESIDENCE AT					
LOT 2 (NO 96) PARK STREET					
MONA VALE					
FOR PAUL & JENNY SONTES					
Builder	MORRISON HOMES				Job No
Design				P.S.W	
Paltha S Wijesena & Associates Pty Ltd					
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Drawn	Date	Scale	Drawing No		
PSW	08-07-09				
Drawing Title			GENERAL NOTES - POOL		
			8380-09		