CERTGROUP
BUILDING CERTIFIERS

RECEIVED MONA VALE
20 SEP 2012
CUSTOMER SERVICE

20 September 2012

Pittwater Council
Po Box 882
MONA VALE NSW 1660

Dear Sir/Madam,

Re: Development Application No. N0218/11
Our Construction Certificate No. 124/2012
Premises: 11 Emma Street, Mona Vale

Please find attached a copy of the following:-

- Construction Certificate, stamped approved plans and relevant documentation.
- Notice to Commence Building Work.
- Appointment of a Principal Certifying Authority.

In accordance with the regulations we have enclosed a cheque for the sum of $36.00 for the submission of the Part 4A certificate.

Should you have any further enquiries please do not hesitate to contact us and we will be pleased to assist you.

NB: Please forward receipt for the above $36.00 fee to CERTGROUP Building Certifiers, PO Box 870 Narrabeen NSW 2101

Yours faithfully,

Mark Wysman
CERTGROUP Building Certifiers

Rec 329653

CERTGROUP
BUILDING CERTIFIERS

CONSTRUCTION CERTIFICATE DETERMINATION

Issued under the Environmental Planning and Assessment Act 1979
Section 109C (1) (b), 81A (2) and 81A (4)

CONSTRUCTION CERTIFICATE NO:	**124/2012**

DETERMINATION

Decision:	**Approved**
Date of Decision:	20 September 2012

SUBJECT LAND

Address:	11 Emma Street, Mona Vale
Lot No, DP:	Lot 2 DP 236500

DESCRIPTION OF DEVELOPMENT

Deck & pergola to the existing dwelling

APPLICANT

Name:	Ian Clement
Address:	11 Emma Street, Mona Vale
Contact Number: (tel)	tel 0412883615

OWNER

Name:	Ian Clement
Address:	11 Emma Street, Mona Vale
Contact Number: (tel)	tel 0412883615

BUILDER

Contractor License No:	Saltwater Constructions NSW P/L, Lic No. 202056C

PLANS AND SPECIFICATIONS

The development is to be carried out in compliance with the following plans and documentation listed below and endorsed with "CERTGROUP Building Certifiers" stamp.

DRAWING NUMBER	DATE
Architectural Plan No's:L-01, L-02, L-03 prepared by: Space Landscape Designs	Rev B – 27/04/11

ATTACHMENTS

Specification	Undated
Certificate of Structural Adequacy, prepared by: VDM Consulting Engineers	5/09/12
Structural Plan No's: SD1209-004 1 to 4 prepared by: VDM Consulting Engineers	Sept 2012
Stormwater Management detail, prepared by: Jim Morison Plumbing	undated
Long Service Levy receipt	19/09/12
Sydney Water quick check	12/09/12
Construction Certificate Application Received	12/09/12

CERTIFICATE

I certify that work completed in accordance with documentation accompanying the application for this certificate (with such modifications as verified by the undersigned as may be shown on that documentation) will comply with the requirements of the Environmental Planning and Assessment Regulation, as are referred to in section 81A(5) of the Environmental Planning and Assessment Act, 1979"

SIGNATURE

DATE OF ENDORSEMENT **20 September 2012**

CERTIFICATE NO **124/2012**

CERTIFYING AUTHORITY

Name of Certifying Authority	CERTGROUP BUILDING CERTIFIERS
Name of Accredited Certifier	Mark Wysman
Registration No	BPB 0449 – NSW Building Professionals Board
Contact No	PH (02) 9944 8222, FAX (02) 9944 6330
Address	PO BOX 870 NARRABEEN NSW 2101

DEVELOPMENT CONSENT

Council	Pittwater
Development Consent No	N0218/11
Date of Determination	1 September 2011

BUILDING CODE OF AUSTRALIA CLASSIFICATION **10a**

CERTGROUP
BUILDING CERTIFIERS

RECORD OF SITE INSPECTION
Issued under clauses 143B & 143C EPAR 2000

☒ **SITE INSPECTION** ☒ **MEMORANDUM**

Project: Deck & Pergola to existing dwelling. **DA No:** N0218/11

Address: 11 Emma Street, Mona Vale **Date:** 18/09/12

Type of Inspection: Prior to issue of Construction Certificate

Result of Inspection

* The current fire safety measures in the existing building the subject of the inspection are satisfactory. ☐ Yes ☐ No ☑ N/a

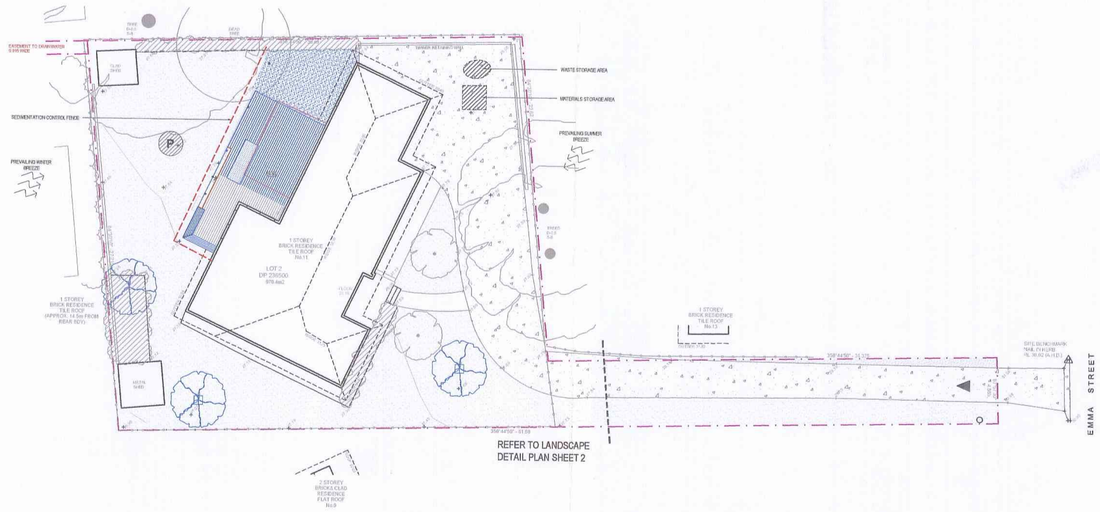
Details: _____

* Whether or not the plans and specifications accompanying the application for the construction certificate adequately and accurately depict the condition of the existing building the subject of the inspection are satisfactory. ☑ Yes ☐ No ☐ N/a

Details: _____

* Whether or not any building work authorised by the relevant development consent has commenced on the site. ☐ Yes ☑ No ☐ N/a

Mark Wysman
Accredited Certifier: **NSW Building Professional Board 0449**



LANDSCAPE SPECIFICATION NOTES

SITE PREPARATION

Locate any underground and overground services & ensure no damage occurs. Levels on plan are nominal only & all dimensions to be checked on site prior to commencement. Final structural integrity of all items shall be the sole responsibility of landscape contractor.

ELIMINATE WEEDS

Remove all existing weeds by hand, wiping or spraying with a glyphosate based herbicide. Weed control shall never be performed by mechanical cultivation or by scraping. Herbicide spraying is to be used to eliminate all existing weeds 30 days prior to planting.

EXCAVATION & SUB SOIL PREPARATION

Excavate garden beds to the depth required and rip or scarify base & sides of pit to a minimum depth of 150mm.

SUB SOIL DRAINAGE

Install drainage layer where there is surface water runoff draining into garden bed areas & where the existing sub-soil has more than 50% clay composition & there is a risk of subsurface water ponding.

Install perforated corrugated ag. line 75-100mm Dia. with geotextile filter sock & backfill to a minimum 200mm using free draining material, reclaimed/recycled where available. Direct flows at a minimum 0.5% fall to sw system. In areas isolated from stormwater system excavate & backfill an appropriate water dispersion pit.

REUSE EXISTING TOPSOIL

Existing site topsoil should be salvaged & appropriately stockpiled where possible.

IMPORTED TOPSOIL

Quality System: AS 4419 or as specified below.

Turf Areas: 'Turf Underlay' as supplied by, ANL p: 02 9450 1444 or approved alternative.

Tree Pit and Shrub Planting: 'Premium Garden Mix' as supplied by, ANL p: 02 9450 1444 or approved alternative.

PLANTING

Health & Vigour: Supply plants with foliage size, texture & colour consistent with that shown in healthy specimens of the species.

Balance of Crown: Supply plants with max. variation in crown bulk on opposite sides of stem axis, +/- 20%.

Stock selection should be based on NATSPEC Guide *Specifying Trees: a Guide to Assessment of Tree Quality*.

STAKING

Install 2 x 1800mm 40x40 hardwood timber stakes with hessian ties to all trees. Provide appropriate support considering exposure to prevailing winds. Stakes and hessian ties to be removed as soon as the tree is self supporting.

MULCHING

Quality system: AS 4454

All planting area impacted by building works to receive 50-75mm of garden Mulch, Droughtmaster, ANL p: 02 9450 1444 or approved alternative. Keep mulch 100mm away from plant stem & form a well to stop excessive water runoff. Finish flush with adjacent surfaces.

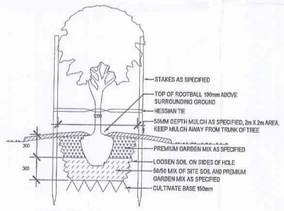
TURFING

New turf- Sir Walter Soffed Leafed Buffalo.

Excavate / grade all areas to be turfed to 120mm below finished levels. Ensure that all surface runoff is directedaway from buildings. Ensure that no pooling or ponding will occur. Further rip the subgrade to 150mm. Install 100mm of imported turf underlay. Rolls to be closely butted and laid in a brickwork pattern. Fill any small gaps with topsoil and water thoroughly.

WATERING

Water in immediately after plant installation & allow for soil settlement. For the first 2 to 4 weeks after planting, the root zone & immediate surrounds must be kept moist. Continue watering until plants have established.

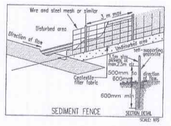


DETAIL A
TREE PIT NTS

DETAIL B
TURF DETAILNTS B

SITE ANALYSIS LEGEND

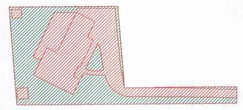
P	PRINCIPAL PRIVATE OPEN SPACE		NEW WORKS SHOWN BLUE
	PREVAILING WIND		SITE VEHICLE ENTRY
	WASTE STORAGE AREA		MATERIALS STORAGE AREA
	NEW TREE		EXISTING TREE



SEDIMENT & EROSION CONTROL NOTES

During earthworks the following procedures shall be followed:

1. Install silt barriers where shown on plan prior to commencement of works.
2. Silt barriers to be maintained regularly & after heavy rain by removal of built up silt & spreading silt on existing site when 50% capacity.
3. Repair any damages to fence immediately.
4. Clean up spillages outside silt fence immediately.
5. Sediment control measures to be left in place until works completed.
6. Topsoil from the work's area will be stockpiled for later use in landscaping if necessary.
7. Approved bins for building waste, concrete and mortar slurries, paints and acid washings will be provided by contractor.



Site Area	970.40m²
Required Landscape Area	485.20m² (50%)
Existing Landscape Area	462.53m² (47.66%)
Impervious area allowance	58.22 (6%)
Proposed Landscape Area	456.90m² (47.08%)
Total Landscape Area	515.12m² (53.08%)
Increase in impervious area (pergola roof)	36.61m²

LANDSCAPE CALCULATIONS

CERTGROUP BUILDING CERTIFIERS
APPROVED CONSTRUCTION CERTIFICATE
PLAN / DOCUMENTATION

Notes:
- Contractors to check and verify all dimensions and all levels on site prior to any works.
- Any discrepancies should be immediately referred to Space Landscape Designs.
- All work to comply with B.C.A. Statutory Authorities and relevant Australian Standards.
- Dimensions recognised over scaling. All measurements are in millimetres.

Rev.	Date:	Issue:	Checked:
A	30/03/11	Preliminary Issue	
B	27/04/11	DA Issue	AE

space landscape designs
Space Landscape Designs Pty Ltd
Suite 138, 117 Old Pittwater Road
Brookvale NSW 2100
Tel: 9905 7870 Fax: 9905 7657
www.spacedesigns.com.au
abn 60 799 663 974 acn 139 318 251

Client: Ian Clements

Address: 11 Emma Street MONA VALE

Drawn: B. FARRAR AILDM #825

Date Created: 30/03/11

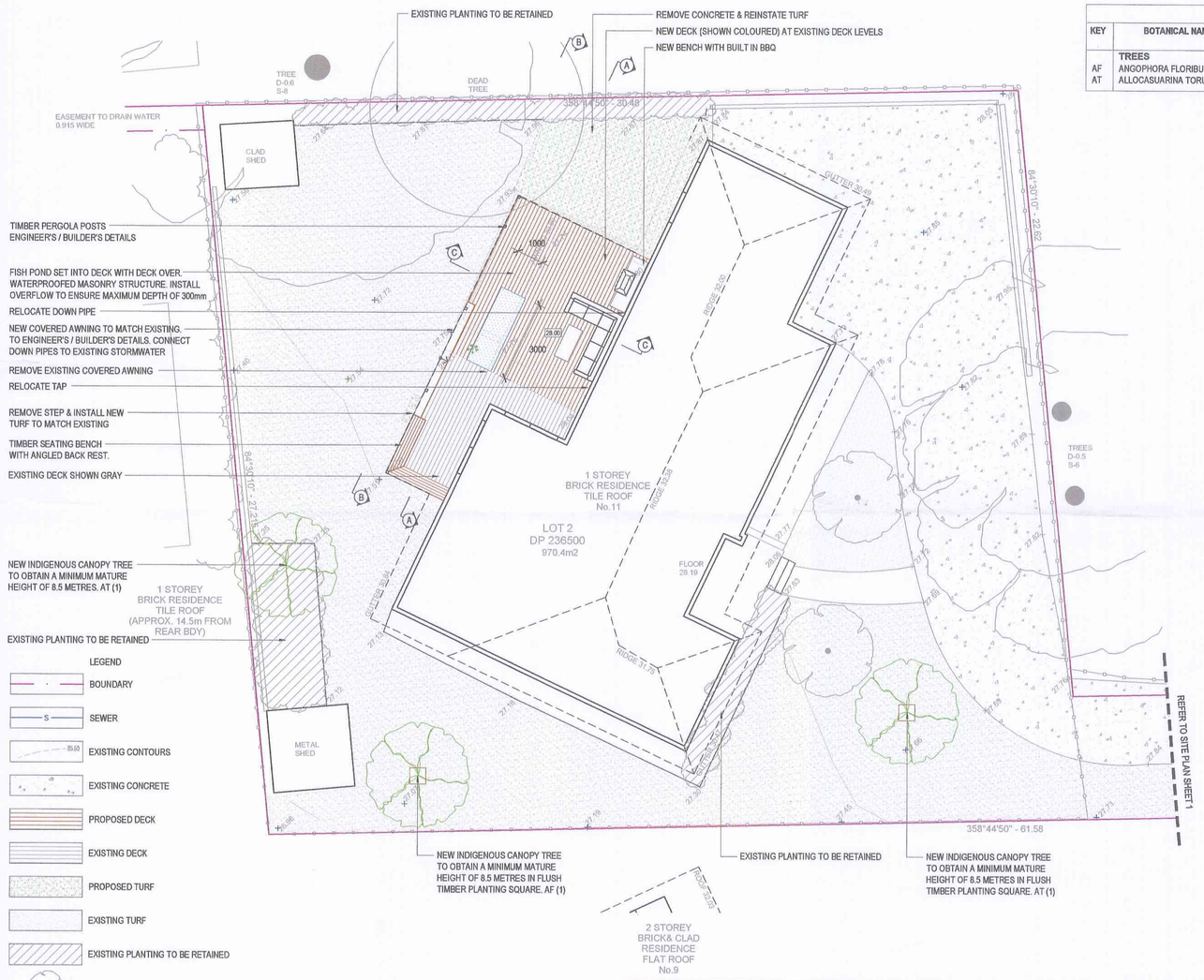
Scale: 1:200@A2

Project No: 11575

Title: SITE PLAN / SITE ANALYSIS / SEDIMENTATION CONTROL PLAN / LANDSCAPE SPECIFICATION & DETAILS / CALCULATIONS

Drawing No: L-01 OF 3

Rev: B



PROPOSED PLANT SCHEDULE

KEY	BOTANICAL NAME	COMMON NAME	QTY	MATURE HGT	POT SIZE
	TREES				
AF	ANGOPHORA FLORIBUNDA	ROUGH-BARKED APPLE	1	15m	45Ltr
AT	ALLOCASUARINA TORULOSA	FOREST OAK	2	15m	45Ltr

NOTE: NEW WORKS SHOWN COLOURED

CERTGROUP BUILDING CERTIFIERS
CONSTRUCTION CERTIFICATE No. 124/2012
Consent No. N0218/11 Date 1/7/11
Plans or documentation associated with the issue of the Construction Certificate
Date 20.9.12
Mark Wysman Accreditation No BPB0449

WARNING
PLEASE NOTE: The stamping of this plan by CERTGROUP BUILDING CERTIFIERS does not relieve the Applicant's responsibility to obtain approval from Sydney Water or other Authority or Council prior to commencement of any works.
DIAL BEFORE YOU DIG 1100

Note:
- Contractors to check and verify all dimensions and all levels on site prior to any works.
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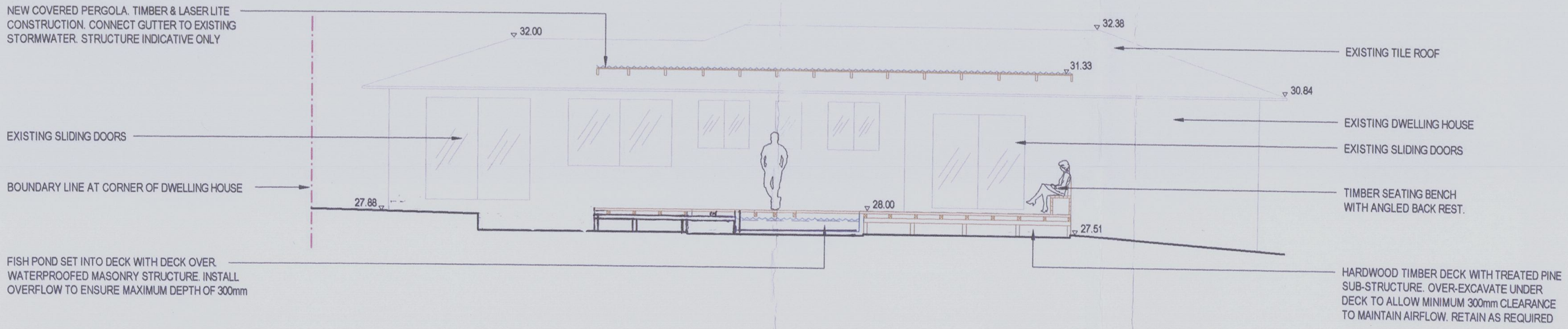
Tel: 9905 7870 Fax: 9905 7657
www.spacedesigns.com.au
abn 60 799 663 674 acn 130 316 251

Client: Ian Clements
Address: 11 Emma Street MONA VALE
Drawn: B. FARRAR AILDM #925
Date Created: 30/03/11
Scale: 1:100@A2
Project No: 11575
Title: LANDSCAPE DETAIL PLAN
Drawing No: L-02 OF 3
Rev: B

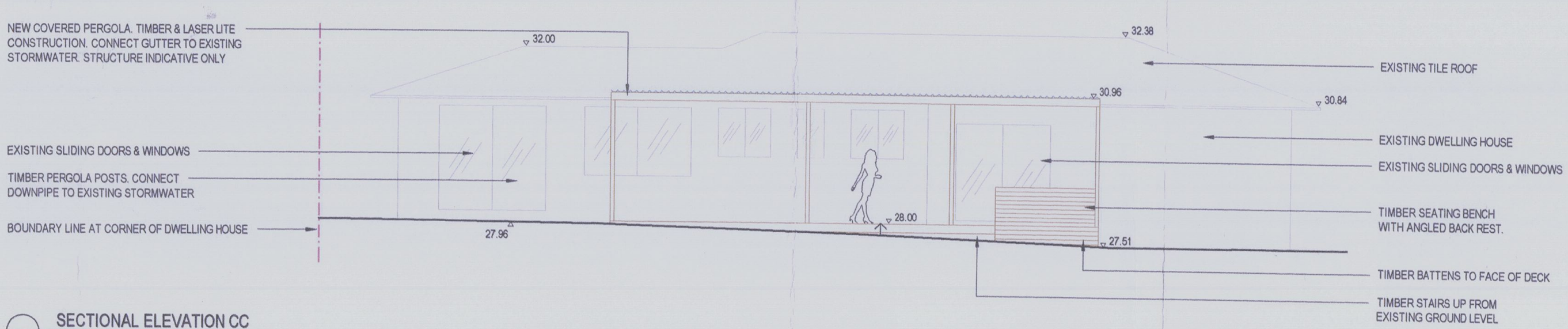
SECTIONAL ELEVATION AA

SCALE 1:100



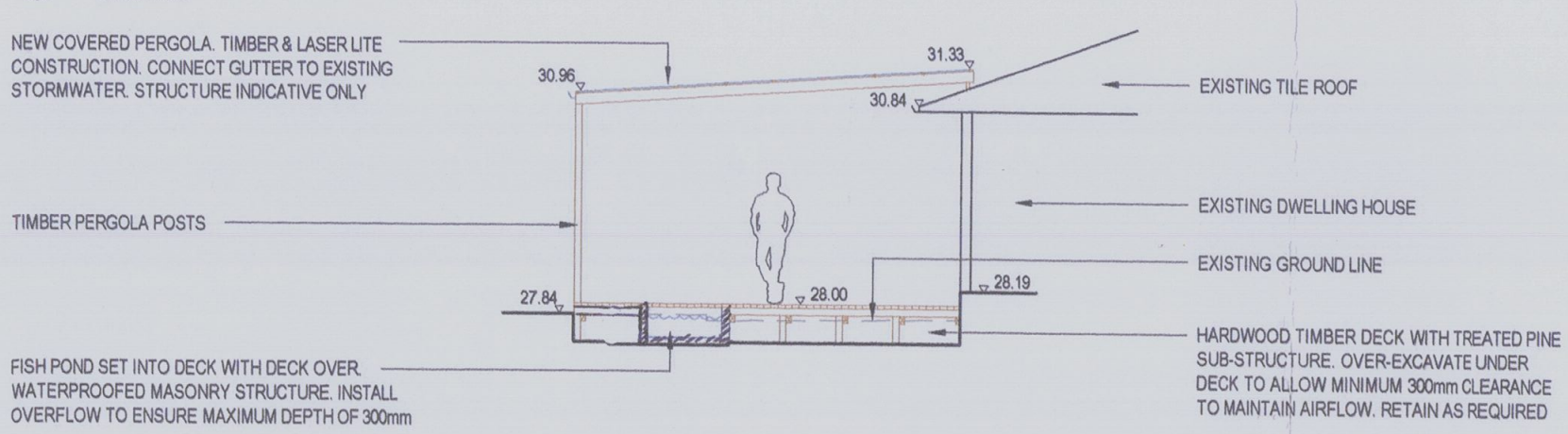
SECTIONAL ELEVATION BB

SCALE 1:100



SECTIONAL ELEVATION CC

SCALE 1:100



CERTGROUP BUILDING CERTIFIERS
APPROVED CONSTRUCTION CERTIFICATE
PLAN / DOCUMENTATION

NOTE: NEW WORKS SHOWN COLOURED

Note:
- Contractors to check and verify all dimensions and all levels on site prior to any works.
- Any discrepancies should be immediately referred to Space Landscape Designs.
- All work to comply with B.C.A. Statutory Authorities and relevant Australian Standards.
- Dimensions recognised over scaling. All measurements are in millimetres.

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A	30/03/11	Preliminary Issue	
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space landscape designs

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www.spacedesigns.com.au
abn 60 799 663 674 acn 139 316 251

Client: Ian Clements	Drawn: B. FARRAR AILDM #625	Title: SECTIONAL ELEVATIONS	
	Date Created: 30/03/11		
Address: 11 Emma Street MONA VALE	Scale: 1:100@A3	Drawing No: L-03 OF 3	Rev: B
	Project No: 11575		

CERTGROUP BUILDING CERTIFIERS
APPROVED CONSTRUCTION CERTIFICATE
PLAN / DOCUMENTATION

SPECIFICATION

All work to be carried out in a tradesman like manner and in accordance with the standards codes and regulations of the Standards Association of Australia, Building Code of Australia and any statutory authority having jurisdiction over the works

Builder is to check and confirm all necessary dimensions on site prior to construction. Do not scale from drawings.

Demolition work must be undertaken in accordance with the provisions of AS2601- 2001 - Demolition of Structures.

For the protection of the health and safety of workers, adjoining property owners, the public and the environment, any person renovating or demolishing any building built before the 1970's should be aware that any surfaces may be coated with lead based paint. Lead dust is a hazardous substance. The requirements of AS 4361.2 Guide to lead paint management are to be followed in this regard.

All structural work is to be inaccordance with the structural details prepared by a structural engineer (i.e) piers, footings, concrete slabs, retaining walls, steelwork, formwork, underpinning, additional structural loads, timber framing, wind bracing and associated connections. Builder to obtain prior to finilising tender.

All brickwork is to be selected by the owner and is to comply with AS1640. All masonary is to comply with AS3700.

Provide all metalwork and flashing items neccessary to satisfactory complete works. All gutters, downpipes to be colourbond.

All Timber construction to be in accordance with the Australian Standard 1684 "Timber Framing Code".

All glazing installed to comply with AS 1288, 2047 and in accordance with manufacturers recommendation.

All wall and ceiling linings to be plasterboard or cement renderd as selected and villaboard in wet areas, to comply with the relevant Australian Standards or installed inaccordance to manufacturers specification. All bathrooms and wet areas to be adequately waterproofed to manufacturers specification and AS3740 and Part 3.8.1.of the Buidling Code of Australia Housing Provisions.

All Architraves and skirtings to be to owners satisfaction or standard colonial moulding or to match existing in paint or stain finish as selected.

All roofing and roof plumbing work to be in accordance with manufacturers specification and be completely watertight.

All plumbing and drainage work to be installed and completed by a licenced tradesman and inaccordance with the statutory body having authority over the works. Connect all waste to Sydney Water sewer line.

Connect all stormwater to existing system or street drainage system inaccordance with AS 3500 and part 3.1.2 Drainage of the Building Code of Australia Housing Provisions.

Smoke detector alarms to be installed inaccordance with AS3786 and the Building Code of Ausralia.

Termite protection measures to comply with AS3660 and be installed to manufacturers specification

Stairs and Balustrades to comply with part 3.9.1 & 3.9.2 of the Building Code of Australia Housing Provisions

Electrical works to be inaccordance with SAA wiring rules and be done by a licenced tradesman. Obtain electical layout prior to proceeding. All electrical power (GPO) and light outlets to be determined by owner.

The Builder is to make all applications, pay all fees, obtain all certificates and approvals, provide all insurances required for the building work. The Builder is to clean the site and remove all rubbish on completion.

Any workmanship and materials not shown on this drawing (or unless specifically excluded from the Builders Quote,) which are required to complete the building works shall be provided and installed at the builders expense.

Any detailing additional to that supplied, shall be resolved between the owner and the builder to owner's approval. Except for any structural details or design which is to be supplied by the structural engineer.

VDM
CONSULTING ENGINEERS
Structural-Civil-Geotechnical

VDM Consulting Engineers Pty Ltd
ABN 40 101 544 763
94 Bassett Street
Mona Vale, NSW, 2103
T: (02) 9999 4285
F: (02) 9999 0193
E:vdm1@optusnet.com.au

CERTGROUP BUILDING CERTIFIERS
APPROVED CONSTRUCTION CERTIFICATE
PLAN / DOCUMENTATION

CERTIFICATE OF ADEQUACY

STRUCTURAL ENGINEERING

Re: 11 EMMA ST.

MONA VALE, NSW, 2103

Project N°: SD1209-004

Reference: DA **N0218/11**

Date: 5 September 2012

1. Aim

To assess the structural integrity and stability of the existing dwelling and to ensure that the proposed alterations and additions to 11 Emma St Mona Vale DA N0218/11, can be carry out without causing significant damages.

2. Introduction

The existing residence is a single storey dwelling consisting of brick veneer walls and founded on a mix of concrete slab-on-ground and single brick peers.

The proposed alterations and additions encompass mainly the changing the South by adding another timber deck with roof; refer to Appendix figures 1.

VDM Consulting Engineers Pty Ltd (VDM) inspected the dwelling on 15th August 2012 taken photographic records and geometrical measurements. The inspection (by VDM) focused mainly on sections of the existing residence where additions and alterations will occur.

Calculations and analyses were carry-out in order to ascertain the capability of the existing footings and structural components and to maintain its integrity, stability and adequate load-bearing capacity as determined by:

- AS/NZS 1170.0:2002: *Structural design actions – General principles,*
- AS/NZS 1170.1:2002: *Structural design actions – Permanent, imposed and other actions,*
- AS/NZS 1170.1:2002: *Structural design actions – Wind actions*
- AS 1684:1996: *Residential timber-frame construction*
- AS 1720:1997: *Timber structures – Part 1- design methods*
- AS 2870:1996: *Residential slabs and footings - Construction*
- AS 3600:2001: *Concrete Structures*
- AS 3700:2001: *Masonry Structures*
- Building Code of Australia (BCA)
- Principles of structural mechanics.

Loads used for the analysis included:

- Dead load (DL) – 0.10kPa (9.81 kg/m^2) self weight
- Live load (LL) – 3.0kPa (306 kg/m^2) (Deck)
- Live load (LL) – 1.5kPa (153 kg/m^2) elsewhere
- Concrete self weight (sw) – 25 kN/m^3 (2,548 kg/ m^3) includes steel reinforcement
- Concrete – f'_c = 25MPa

Serviceability factors:

- Short term $\psi_s = 0.7$
- Long term $\psi_l = 0.4$

Strength factors

- Dead load – 1.2
- Live load – 1.5

3. Conclusions

The structural condition of the existing dwelling footings and structural elements inspected was generally found to be satisfactory.

Based on the analyses results and the visual inspection it is our opinion that the existing structure shall resist the proposed loads.

This analysis has been based on loads applied on areas inspected and mentioned in this report only, any attempt to place these loads elsewhere shall required further analysis to ensure the integrity of the structure is maintain.

This certificate shall not construe as relieving any other party of their responsibilities, liabilities, or contractual obligations.

Digitally signed by Mario F Benitez
DN: cn=Mario F Benitez, o=VDM Consulting Engineers Pty Ltd, ou, email=vdm1@optusnet.com.au, c=AU
Date: 2012.09.11 12:57:26 +10'00'

Mario F. Benítez, *(B.E.(Structural)), CPEng., MIEAust. (418917) MIPENZ(111943)*
Senior Structural Engineer

Appendix

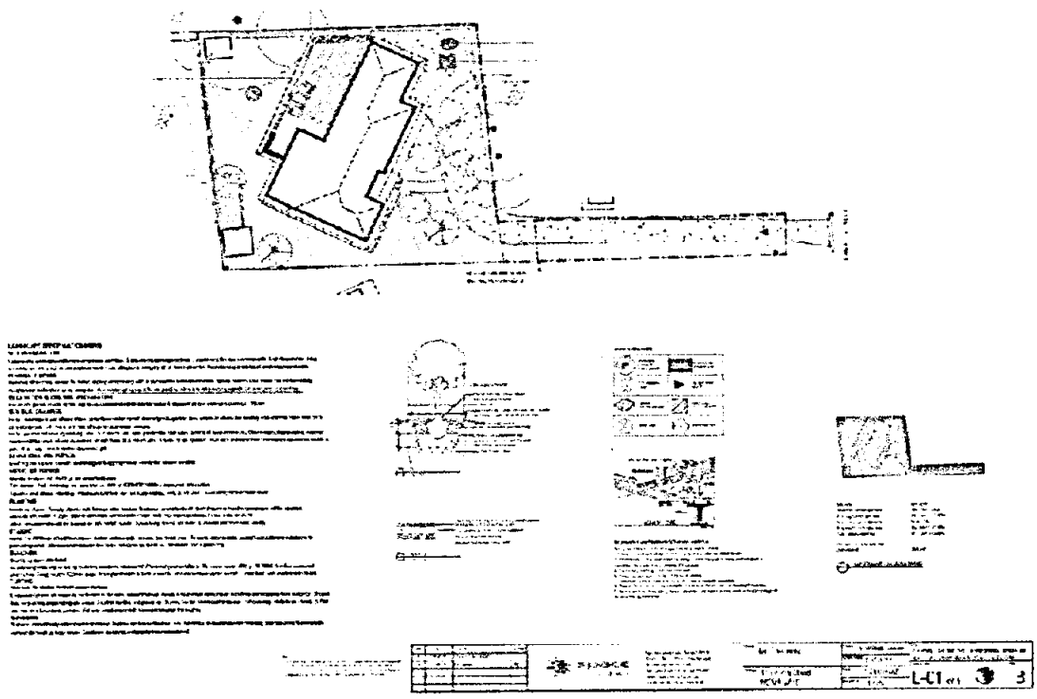


Figure 1 – Plan View showing new additions and alterations

CONSTRUCTION NOTES

GENERAL

G1 These drawings is to be read in conjunction with the architectural drawings.
G2 During construction the structure shall be maintained in a stable condition and no part shall be over stressed. Builder to ensure stability of exisitng structuresin the vicinity of excavation works.
G3 U.N.O. stands for unless noted otherwise.
G4 The structural elements shown on these drawings have been designed for live loads as follows:
- a. Balconies & Stairs - 4.0kPa
- b. Office & Garage - 3.0kPa
- c. Roofs - 0.25kPa
- d. Elsewhere -1.5/1.8/2.0kPa
- e. as required in accordance with AS 1170

G5 Dimensions shall not be obtanied by scaling from the drawings. All setting out dimensions shall be verified and any discrepancies shall be referred to the Engineer prior to commencement of works.

G6 Annual probabilities of exceedance - Importance level
The importance level for this structure has been ascertained using AS/NZS 1170.0 Structural design actions Part 0: General Principles and the Building Code of Australia (BCA) as described below:
- Consequence of failure - Ordinary
- Description - Medium consequence for loss of human life, or considerable economic, social or environmental consequences
- Importance level - 2

G7 Probability of Exceedance
- Design working life - 100 years
- Importance level - 2
- Wind (non-cyclonic) - 1/1000 (Category - N3)
- Earthquake - 1/1000

CONCRETE

C1 All workmanship and materials shall be in accordance with current editions of AS3600 except as varied by contract documents.
C2 Cement to Type 'A' U.N.O. Concrete components and quality shall be as follows:-

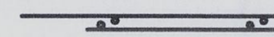
Element	f'c MPa	Slump mm	Max Size Agg.	Density (kg/cu.m)
Piers	25	80	20	2400
Footings	25	80	20	2400
Slabs on ground	32	80	20	2400
Suspended concrete	32	80	20	2400
Columns	32	80	20	2400
Beams	32	80	20	2400

C3 **Clear cover to reinforcement unless otherwise shown shall be:**

Element	Exposure classi-fication	Formed not Exposed to Weather	Formed exposed to weather or Earth backfill	Not formed Poured against Membrane
Slab on ground	A1	30	40	45
Susp Slabs (ext)	B1	30	40	45
Susp Slabs (Int.)	B1	25	40	45
Beams	B1	25	40	45
Columns	B1	30	40	45
Piers	A1	30	40	45
Footings	A1	40	60	45

C4 Mechanically vibrate all concrete in the forms to give maximum compaction without segregation.
C5 Conduits shall not be placed between reinforcement and concrete shown or specifically approved by the Engineer.
C6 Construction joints shall be properly formed and used only where shown or specifically approved by the Engineer.
C7 No holes, chases or embedment of pipes, other than those shown on the structural drawings, shall be made in concrete members without prior approval by the Engineer.
C8 Splices in reinforcement shall be made only in the positions shown or as otherwise approved by the Enginner.

C9 Lapped fabric splices shall be so made that the overlap, measured between outermost transverse wires of each sheet of fabric, is not less than the spacing of the wires plus 25mm.



C10 Reinforcement is shown diagramatically: it is not necessarilly shown in true projection

C11 All reinforcement fabric shall be to AS 1304 **Galvanized where external**
All reinforcement bars shall be to AS 1302 **Galvanized where external**
Symbols SL: wire reinforcing fabric, R: structural grade round bar, N: ribbed bar 500MPa structural grade, Y: ribbed bar 410MPa structural, BTM: bottom, T: Top, TM/L#TM trench mesh. Example of designation code for reinforcing bars:-

No of bars in group — bar grade and type
17N20 - 350
nominal bar size in mm — spacing in mm

C12 Where transverse tie bars are not shown, provide N12-400. Splice where necessary and lap with main bars for 400mm.
C13 All concrete shall be placed and "cured" in accordance with AS 3600. Where curing compound is used it must applied (a) onto slabs within 2 hours of finishing operation, (b) onto walls and columns immediately after removal of formwork.
C14 Horizontal formwork shall be stripped when approved by the Engineer.
C15 Slabs and beams shall bear only on the beams, walls,etc., shown on the drawings; all other building elements shall be kept 15mm clear from soffit os structure
C16 All slabs-on-ground shall be placed on 200μm damp proof membrane over 50mm layer of compacted sand UNO.
C17 No concrete shall be placed directly with the ground. Isolate all surfaces from contact with Forticon (or similar) with taped joints, UNO.
C18 Compact fill areas and subgrade under building and pavement to minimum 98% standard maximum dry density in accordance with AS 1289 Cl 5.2.1

EXCAVATION

E1 All excavation and backfill shall be carried out neatly to the lines. Levels and grades specified
E2 Any backfill material required or specified shall be compacted generally to at least 95% of its maximum dry density (test method in accordance with AS 1289-E1.1 - Standard Compactive effort).
E3 Fill material beneath edge beams to be compacted in accordance with clause 6.4.2 of AS 2810-1996 and as specified in E2 above.
E4 All top soil, vegetation and deleterious material shall be stripped from the building platform prior to the commencement of earthworks.

FOUNDATIONS

F1 Footings have been designed for a uniform allowable bearing pressure of **150kPa** ~~and as stipulated inthe Geotech report~~. Foundation material shall be approved for this pressure before placing concrete in footings.
F2 Footings must bear into undisturbed natural ground clear of organic material.
F3 Footings to be constructed and back filled as soon as practical following excavations to avoid softening by rain or drying out by exposure.

STRUCTURAL REINFORCEMENT STEELWORK

SR1 All workmanship and materials to be in accordance with AS 4100, AS 1554 and for tubular members AS 1163.
SR2 Unless otherwise noted all structural steel shall be Fy = 300MPa in accordance with AS 3679, tubular members AS1163, black bolts AS1111 and high strength bolts AS1252.
SR3 All welds to be min. 6.0mm continuous filet U.N.O. and welding to be in accordance with AS1554.
SRA U.N.O. all structural steel work bearing on mansory to be bedded on 20mm thick and full width non-shrinkable cement mortar grout pad.
SR5 Except where steelwork is concrete encased or where noted otherwise all **structural steelwork to be Galvanized Steel**. Should welding *in-situ* is required on any galvanized material the affected area MUST be painted/coated using galvanized paint in accordance with AS/NZS 4680 .
SR6 Two copies of checked workshop drawing to be submited to the Engineer and approval obtained in writing from him/her before fabrication is commenced. Approval covers structural sufficiency of joints and members and not dimensioning accuracy.
SR7 Trench mesh shall be spliced where necessary by a lap of 500mm. All cross wires to trench mesh shall be cut flush with outer main wires.
SR8 All reinforcement shall be supported **@ 800mm maximum centres** to maintain the nominated position and covers
SR9 Splices in reinforcement shall be made in accordance with the provisions of Table 13.1.2.2.A of AS3600-2000 or in accordance with the following table:

Bar Size	N12	N16	N20	N24	N28	N32
Splice Length (in mm)	400	600	800	1200	1200	1200

MASONRY

M1 Provide sliding surface consisting of 2 layers of galvanised iron sheets with graphite grease in between top an bottom of all load bearing masonry walls in contact with suspended slabs. Prior to application of sliding surface the concrete or masonry shall be level and smooth.
M2 No masonry walls to be erected on suspended slabs and beams until all propping has been removed.
M3 Bricks used in load bearing construction shall have a minimum compressive strength (as per A.S. 3700) of 20 MPa unless otherwise noted.
M4 Provide 12mm polystyrene bond breaker between vertical face of masonry walls and concrete.

STRUCTURAL TIMBER

T1 All workmanship and materials to be in accordance with current editions of AS 1720 and AS 1684,
T2 All timber to be minimum stress grade F7 U.N.O. All hardwood to be minimum stress grade F14 U.N.O.,
T3 No timber beams or joists to be notched unless specified by the Engineer,
T4 Provide double joists around openings and under walls above U.N.O.,
T5 External timber to be durability class 1 or 2,
T6 Treat all exposed cut ends with Reseal by Protin to manufacturer's specifications to achieve required hazard level exposure classification,
T7 Joists deeper than 150mm shall be bloked over supports and at a maximum of 3,000mm centres,
T8 All holes for bolts to be exact size. Washers shall be 3.0mm thickness (min.) and at least 2 $\frac{1}{2}$ times the bolt diameter. All bolts shall be M16 Grade 4.6 U.N.O.,
T9 Hot dip galvanized nails/clouts/screws to be used with all the timber connections.

BLOCKWORK

B1 Block walls shall be constructed with Double "U" blocks throughout.
B2 "Clean-Out" openings shall be provided at the base of the wall to permit removal of mortar droppings.
B3 Where horizontal reinforcement is used, special block units with recessed webs are to be provided.
B4 Grout shall have a 28 day compressive strength of 25 MPa (min) and a slump of 120 mm.
B5 Mortar shall be composed of one part cement, one tenth part lime and three parts sands.
B6 Mortar droppings at joints to be rodded and removed at bottom of blocks through clean out openings prior to filling all cores.
B7 Where vertical reinforcement is to be provided in both faces, bars are to be located in alternate cores.
B8 Where horizontal reinforcement is to be provided in both faces it shall be provided in staggered courses.
B9
- a. total cover to outside of blockwork shall 65mm,
- b. vertical & horizontal bars shall be galv. & if inspection reveals the vertical steel cannot be placed accurately the wall must be demolished
- c. starter bars must be accurately positioned by templates or similar means. Starter bars must be approved by Council's Building Surveyor and by the Structural Engineer prior to commencement of blockwor,
- d. vertical bars shall be tied to starter bars through inspection openings at the base of the wall & also accurately fixed in position at the top by an appropriate method.
- e. steel shall be accurately placed and firmly held into position to a tolerance of 10mm
- f. grout shall be compacted by vibrating or rodding

STRUCTURAL STEELWORK

S1 All workmanship and materials to be in accordance with AS 4100, AS 1554 and for tubular members AS 1163.
S2 Unless otherwise noted all structural steel shall be Fy = 300MPa in accordance with AS 3679, tubular members AS1163, black bolts AS1111 and high strength bolts AS1252.
S3 Unless shown otherwise minimum connection shall be 2M16 Grade 8.8S bolts, 10mm gusset plates, and 6mm CFW (continuous fillet weld)
S4 Bolt designation
- a. 4.6S - commercial bolts Grade 4.6, snug tighened,
- b. 8.8S - high strength structural bolts Grade 8.8, snug tightened,
- c. 8.8TB - high strength structural bolts Grade 8.8, fully tightened to AS 1511 and acting as a bearing joint,
- d. 8.8TF - high strength structural bolts Grade 8.8, fully tensioned to AS 1511 abd acting as a bearing joint.

S5 All welds to be min. 6.0mm continuous filet U.N.O. and welding to be in accordance with AS1554.
S6 U.N.O. all structural steel work bearing on mansory to be bedded on 20mm thick and full width non-shrinkable cement mortar grout pad.
S7 Except where steelwork is concrete encased, used internally or where noted otherwise all **structural steelwork to be Galvanized Steel**. Should welding *in-situ* is required on any galvanized material the affected area MUST be painted/coated using galvanized paint in accordance with AS/NZS 4680 .
S8 Two copies of checked workshop drawing to be submited to the Engineer and approval obtained in writing from him/her before fabrication is commenced. Approval covers structural sufficiency of joints and members and not dimensioning accuracy.
S9 Rolled steel sections including steel plates shall comply with AS 1538-1988
S10 UNO al welds shall be category SP using E41xx electrodes. All butt welds shall be complete penetration category SP.
S11 Grouting of anchor bolt sleevesand base plates shall be completed by the contractor using high strength, non-shrinkable grout.
S12 Purlin bolts shall be M12 - 4.6S
S13 Steel work shall have one of the following grades of corrosion protection:-

INTERNAL
- a. thoroughly cleaned wire brushing, followed by two coats of zinc phosphate primer equivalent to Dulux Luxaprime applied by hand using brushes to achieve a total dry film thickness (dft) of 70µm (microns)

EXTERNAL ELEMENTS & ELEMENTS WITHIN EITHER SKIN OF EXTERNAL CAVITY WALLS
- b. Preparation blast clean to a minimum standard class 2.5 in accordance with AS 1627 Part 4,
  Primer 2-pack epoxy phosphate at dft of 75µm (Dulux Durepon P14)
  Barrier coat 2-pack epoxy micaeous iron oxide, dft of 100µm
  Finish coat 2-pack epoxy high gloss acrylic to dft of 75µm(e.g. Dulux Acrathane 1 F) in an approve colour.
- c. Hot dipped galvanized to AS 4680
  Where the galvanic (hot dip galvanized) coating is compromised by welding, bolting or damage, inorganic zinc-rich paint (minimum 95% zinc content) is to be applied after wire brushing affected area (use 3 coats minimum) or hot metal spray in accordance with AS 4680.

INSPECTION BY ENGINEER
48 HOURS NOTICE IS REQUIRED BEFORE ANY SITE INSPECTION
1. Bearing strata of all footings prior to concrete pour
2. Any reinforcement prior to concrete pour
3. Timber & Steel framing prior to cladding and/or lining
4. Lintels after instalation
5. CONTACT YOUR PCA (Principal Certifying Authority) AS TO REQUIREMENTS FOR MANDATORY CRITICAL STAGE INSPECTIONS IN ACCORDANCE WITH REVISED EP&A ACT REGULATIONS EFFECTIVE JULY 1, 2004

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REGISTERED PROFESSIONAL ENGINEER
Mario F. Benitez, *BE (Struct.) MIEAust., CPEng.,(418917) MIPENZ (111943)*
I am appropriately qualified to certify this component of the project.
I hereby state that these plans or details comply with the conditions fo development consent provisions of the BCA (Building Code of Australia),

VDM
94 Bassett Street
Mona Vale, NSW, 2103
Ph: (02) 9999 4281
Fax: (02) 9999 0193
ACN 101 344 763

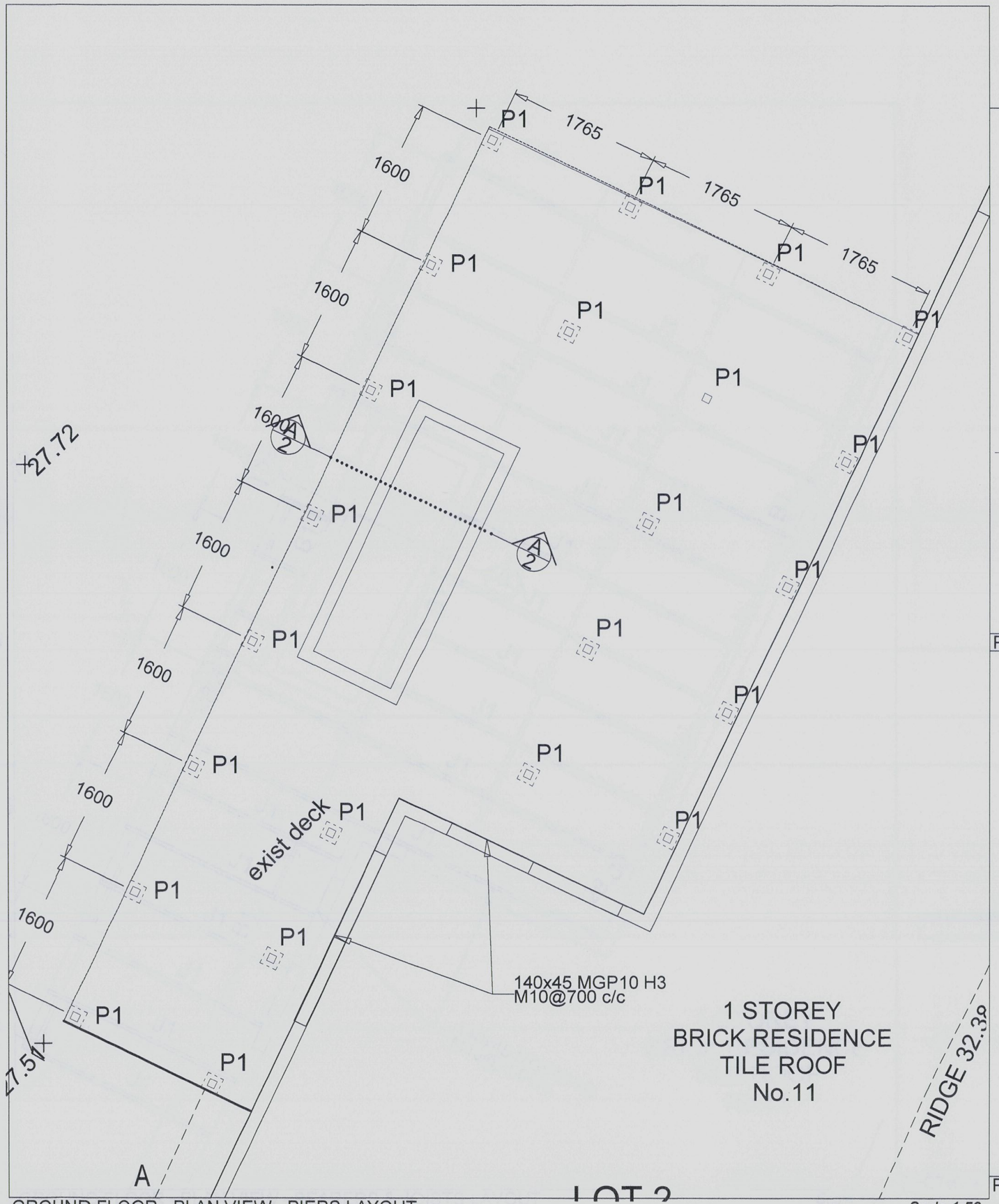
CERTGROUP BUILDING CERTIFIERS
APPROVED CONSTRUCTION CERTIFICATE
PLAN / DOCUMENTATION

Mario F. Benitez
B.E.(Struct), CPEng., MIEAust.,(418917), MIPENZ(111943)
September 2012
A

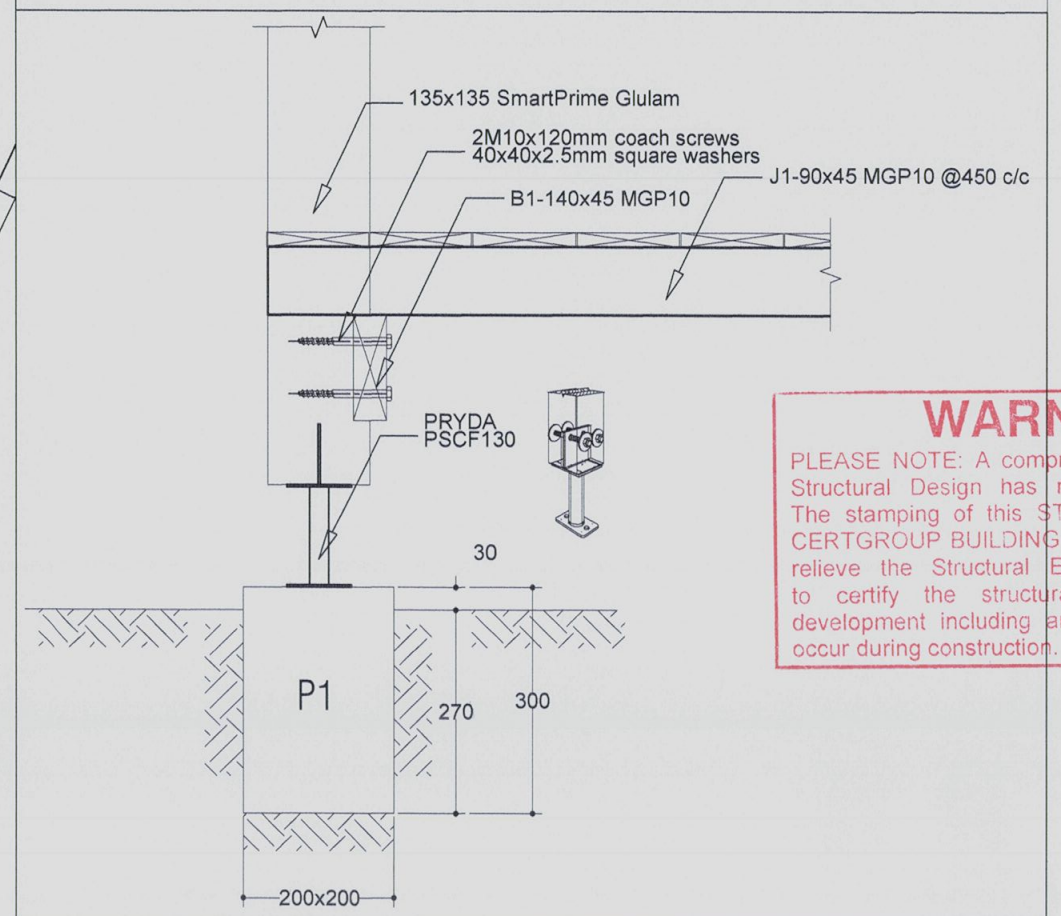
PROJECT ALTERATIONS & ADDITIONS
FOR: Mr Ian Clements
11 Emma St
Mona Vale, NSW, 2103
DETAILS CONSTRUCTION NOTES
DRAWING No. 1/4 JOB No. SD1209-004

notes. 11/09/2012 12:59:08 PM. A3. 1:1.04018

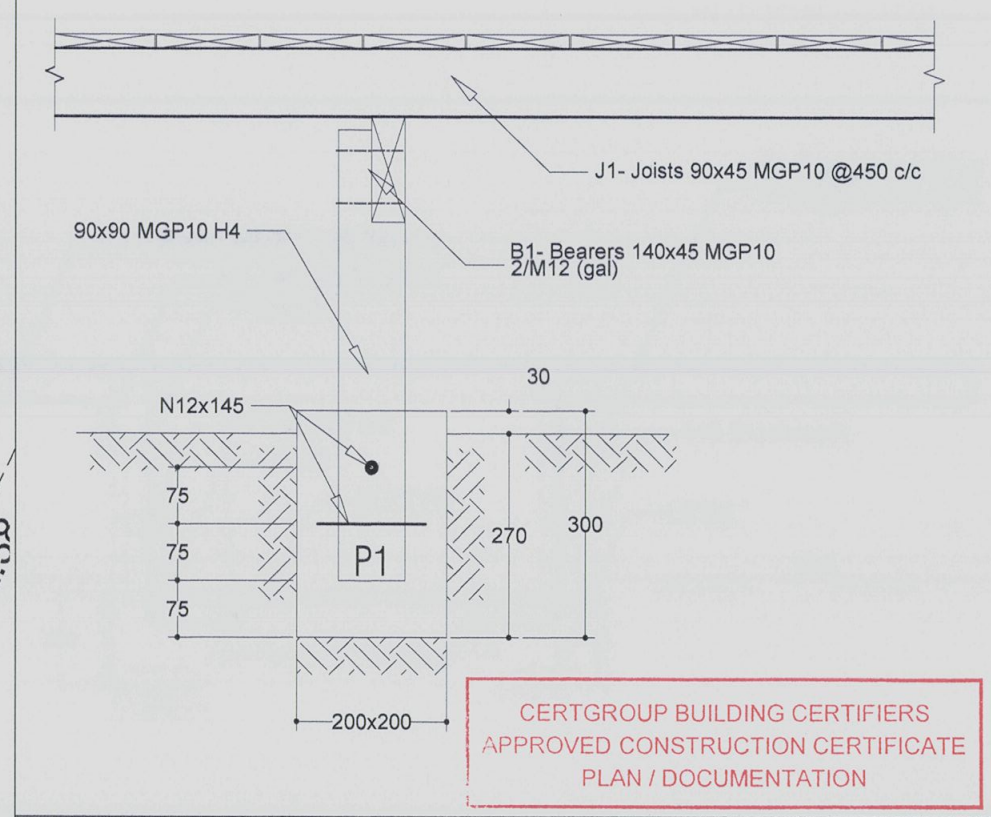
VDM CONSULTING ENGINEERS
94 Bassett Street
Mona Vale, NSW, 2103
Ph: (02) 9999 4285
Fax: (02) 9999 0193
ACN 101 544 763
ABN 40 101 544 763



GROUND FLOOR - PLAN VIEW - PIERS LAYOUT — Scale 1:50



POST & PIERS DETAILS (P1+TP1) — Scale 1:10



PIERS DETAILS (P1) — Scale 1:10

WARNING

PLEASE NOTE: A comprehensive check of the Structural Design has not been carried out. The stamping of this STRUCTURAL PLAN by CERTGROUP BUILDING CERTIFIERS does not relieve the Structural Engineers responsibility to certify the structural adequacy of this development including any variations that may occur during construction.

CERTGROUP BUILDING CERTIFIERS
APPROVED CONSTRUCTION CERTIFICATE
PLAN / DOCUMENTATION

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ISSUE	DESCRIPTION	DATE
A		

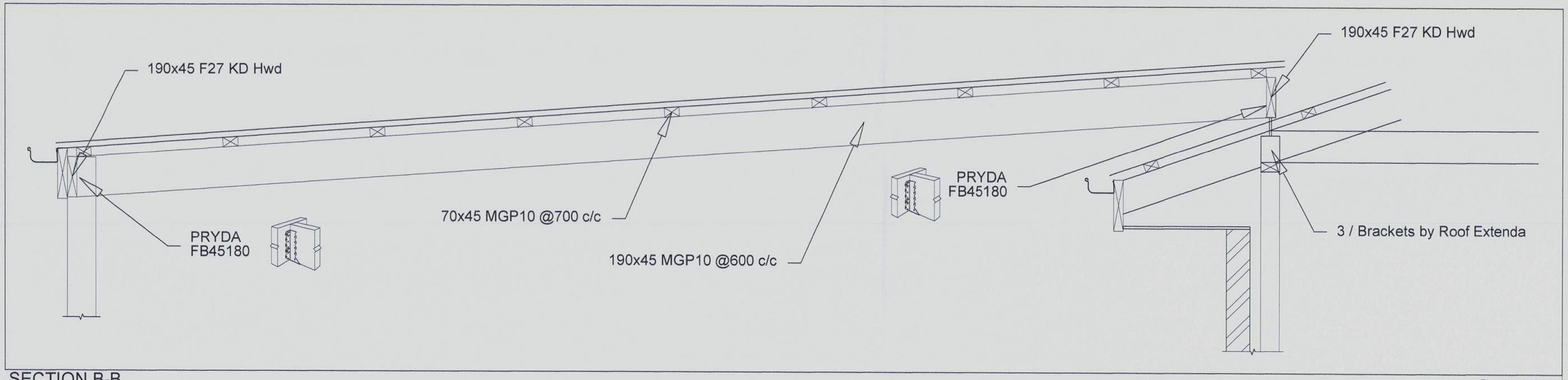
Mario F. Bensley
B.E.(Civil), CPEng., MIEAust(4708117), MPDA(2(111943))

DATE: Sept 2012
SCALE: 1:10, 1:50
A3

PROJECT: ALTERATIONS & ADDITIONS
for:- Mr Ian Clements
11 Emma St
Mona Vale, NSW, 2103

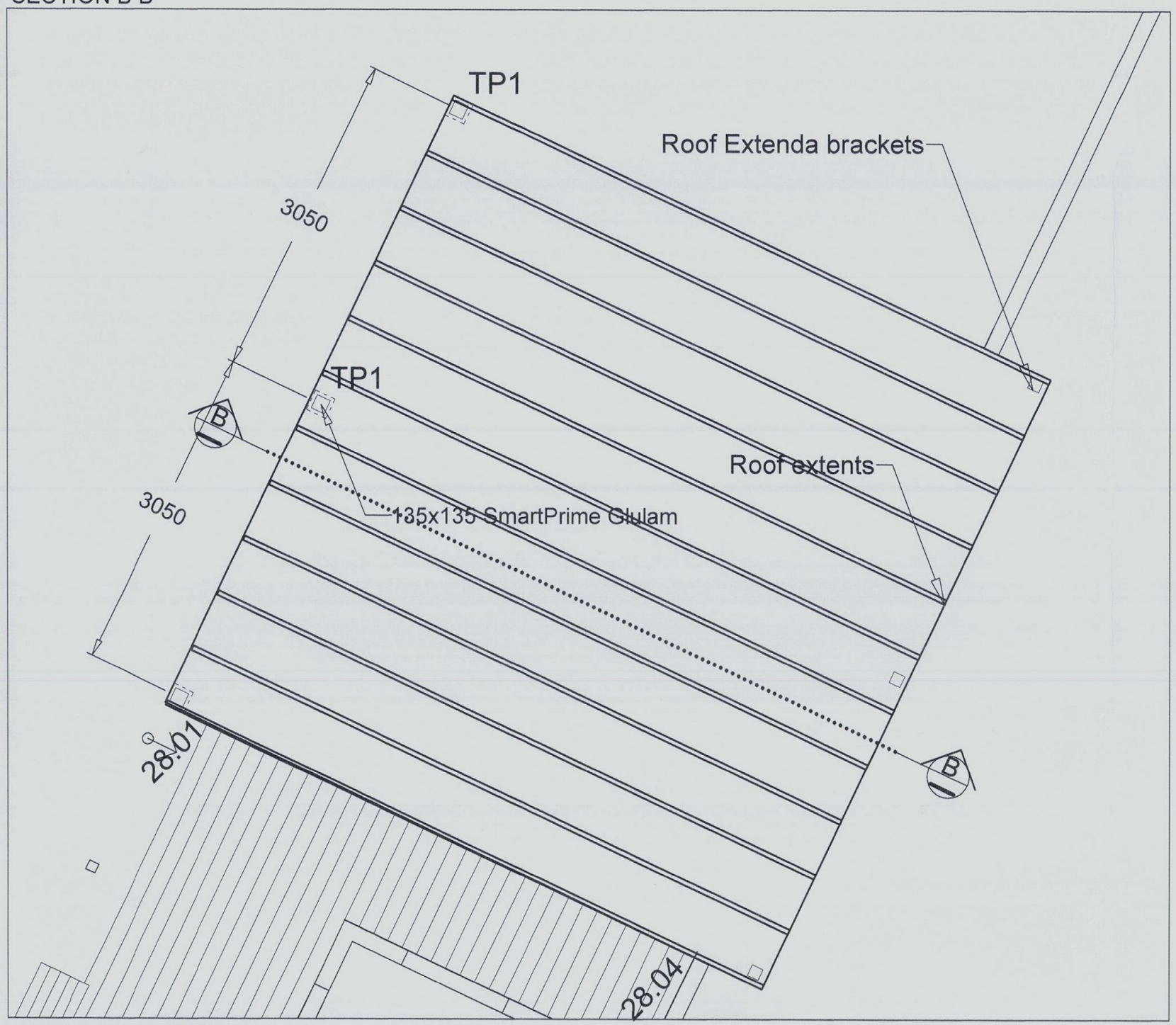
DETAILS: GROUND FLOOR PLAN VIEW

2 of: 11/09/2012 1:16:02 PM. A3. 1:100



SECTION B-B

Scale 1:20



ROOF - PLAN VIEW

Scale 1:50

VDM CONSULTING ENGINEERS
94 Bassett Street
Mona Vale, NSW, 2103
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PLAN / DOCUMENTATION

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Mario F. Bensley
B.E.(Civil), CPEng, NPER(11591?), MPEQ(?11943)

DATE Sept. 2012

ISSUE A

SCALE 1:20 1:50 A3

PROJECT
ALTERATIONS & ADDITIONS
for:- Mr Ian Clements
11 Emma St
Mona Vale, NSW, 2103

DETAILS
ROOF
PLAN VIEW + SECTIONS

Roof. 11/09/2012 1:11:41 PM. A3. 1:100

JIM MORISON PLUMBING
PLUMBING o DRAINING o GASFITTING
0488 979 248
Lic No 212550C

PO BOX 604
NEWPORT 2106
NSW AUSTRALIA
Ph: 0488 979 248 Email: jimmorison01@yahoo.com
A.B.N 19 067 142 506
Lic No 212550C

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PLAN / DOCUMENTATION

TO WHOM IT MAY CONCERN

STORMWATER MANAGEMENT COMPLIANCE STATEMENT

PROPERTY: 11 Emma st, Mona Vale, 2103.

In my professional opinion, the above property complies with the following:

(a) The existing stormwater management system is functioning correctly.
(b) The existing stormwater management system will be capable of servicing the likely increase in load as a result of the proposed works.
(c) The existing stormwater management system when considered with the proposed works complies with council's policy for stormwater that applies to the land, i.e. no OSD is required as a result of the proposed works.

Kind Regards,

Jim Morison

CERTGROUP BUILDING CERTIFIERS
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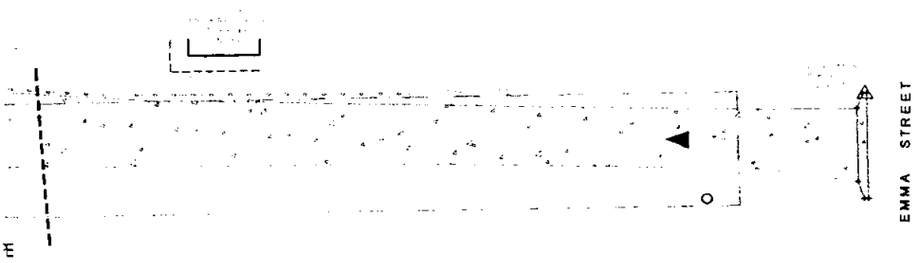
SYDNEY WATER
APPROVED

1. Position of structure in relation to Sydney Water's assets is satisfactory.
2. Connections to Sydney Water sewer/water services may only be made following the issue of a permit to a licensed plumber/drainer.
3. It is the owner's responsibility to ensure that all proposed fittings will drain to Sydney Water's sewer.
4. Any Plumbing and/or Drainage Work to be carried out in accordance with the Sydney Water Act 1994, AS [illegible] and the New Code of Practice.
5. Gullies, [illegible] shall not be [illegible] Verandahs [illegible] otherwise approved by Sydney Water.
6. Property No. 3415366

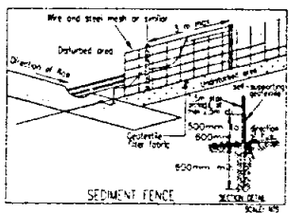
Reece, Mona Vale
Quick Check Agent on behalf of
SYDNEY WATER

Reece 12/04/12



SITE ANALYSIS LEGEND

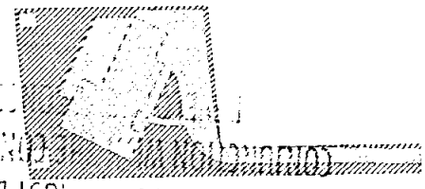
P	PRINCIPAL PRIVATE OPEN SPACE		NEW WORKS SHOWN BLUE
	PREVAILING WIND	▶	SITE VEHICLE ENTRY
	WASTE STORAGE AREA		MATERIALS STORAGE AREA
	NEW TREE		EXISTING TREE



SEDIMENT & EROSION CONTROL NOTES

During earthworks the following procedures shall be followed

1. Install silt barriers where shown on plan prior to commencement of works.
2. Silt barriers to be maintained regularly & after heavy rain by removal of built up silt & spreading silt on existing site when 50% capacity.
3. Repair any damages to fence immediately.
4. Clean up spillages outside silt fence immediately
5. Sediment control measures to be left in place until works completed.
6. Topsoil from the work's area will be stockpiled for later use in landscaping if necessary.
7. Approved bins for building waste, concrete and mortar slurries, paints and acid washings will be provided by contractor.



Site Area	970.40m²
Required Landscape Area	485.20m² (50%)
Existing Landscape Area	462.53m² (47.66%)
Impervious area allowance	58.22 (6%)
Proposed Landscape Area	456.90m² (47.08%)
Total Landscape Area	515.12m² (53.08%)
Increase in impervious area (pergola roof)	36.61m²

LANDSCAPE CALCULATIONS

Space Landscape Designs Pty Ltd Suite 138, 117 Old Pittwater Road Brookvale NSW 2100 Tel: 9905 7870 Fax 9905 7657 www.spacedesigns.com.au abn 60 799 663 674 acn 139 318 251	Client: Ian Clements	Drawn: B. FARRAR AILDM #625	Title: SITE PLAN / SITE ANALYSIS / SEDIMENTATION CONTROL PLAN / LANDSCAPE SPECIFICATION & DETAILS / CALCULATIONS
		Date Created: 30/03/11	
	Address: 11 Emma Street MONA VALE	Scale: 1:200@A2	Drawing No: L-01
		Project No: [illegible]	Rev: B

CERTGROUP BUILDING CERTIFIERS
APPROVED CONSTRUCTION CERTIFICATE
PLAN / DOCUMENTATION

Pittwater Council

Tax Invoice
Official Receipt

ABN: 61340837871

19/09/2012 Receipt No: 329591

To: SATWATER PRODUCTIONS
C/- GREG WATT
PO BOX 573
MONA VALE NSW 2103
N0218/11

Applic	Reference	Amount
GL Receipt		
GLSL-Builders Lsl 1 X 11 KERA ST MONA VALE:N0218/11		$247.00
CCGST-CCard +GST 1		$2.47

Transaction Total: $249.47
Includes GST of: $0.00

Amounts Tendered

Cash	$0.00
Cheque	$0.00
Db/Cr Card	$249.47
Money Order	$0.00
Agency	$0.00
Total	$249.47
Rounding	$0.00
Change	$0.00
Nett	$249.47

Printed 19/09/2012 5:23:46PM

CERTGROUP
BUILDING CERTIFIERS

APPLICATION FORM

Made under the Environmental Planning and Assessment Act 1979, Sections 81A(2), 84A, 85A, & 109C, Environmental Planning and Assessment Regulation 2000, clauses 126, 139.

To complete this form, please place a tick (✓) in the boxes and complete sections as appropriate. No Faxed applications please.

APPLICATION SOUGHT

- ☑ Construction Certificate
- ☑ Principal Certifying Authority
- ☐ Complying Development Certificate
- ☐ NSW Housing Code (SEPP Exempt & Complying Development Code)
- ☐ Council existing Exempt & Complying Development Policy

Office Use Only
CC: 124/2012
CDC:
Job: 144.12
Date Receipt: 12/9/12.

SUBJECT LAND

Address 11 emma st mona vale

Lot No 2 DP 236500 SP _____ Vol/Fol, Etc _____

DETAILS OF THE APPLICANT

Name / Company Ian Clement Contact Person Ian

Mailing Address 11 emma st mona vale

NSW Postcode 2103 State NSW

E-mail ian.clement@ozemail.com.au Tel _____ Mobile 0412 883615

Applicant Signature [signature] Date 1-8-12

CONSENT OF OWNER(S)

I/ We as the owner/s of the above property authorise for Mark Wysman to provide Construction or Complying Development Certification and to act as the Principal Certifying Authority for the subject building works, including site inspections and to lodge the Notice of Commencement/Appointment of the Principal Certifying Authority with the relevant Council.

Name / Company Ian Clement Contact Person _____

Owner's Address 11 emma street

Mona Vale Postcode 2103 State NSW

Mailing Address Ian.clement@ozemail.com.au

as Above Postcode _____ State _____

E-mail As Above - Tel - Mobile 0412 883615

Owner/ s Signature/s _____ Date _____

X [signature] Date 1-8-12

DESCRIPTION OF WORK

Type of work proposed:

☐ New Building ☑ Additions / Alterations

Class of Building under Building Code of Australia 10a.

Description of the work DECK AND PERGOLA to existing dwelling.

Construction Cost of Works $ $ 70 803

DETAILS OF THE RELEVANT CONSENTS

Consent No. No 218 / 11 Date issued: 01-09-11

Construction Certificate No. 124/2012 Date issued: 20-9-12

Complying Development Certificate No. _____ Date issued: _____

STATISTICAL RETURN FOR AUSTRALIAN BUREAU OF STATISTICS

What is the site area of land? In square metres 970m2

Gross floor area of existing building? NIL if building does not exist. In square metres Unaltered

What is the existing building or site used for at present? Main Uses House

Other Uses _____

Does the site contain dual occupancy? ☐Yes ☑No

Gross floor area of proposed building? In square metres 52 (Deck only)

What will the proposed building be used for? Main Uses Residential

Other Uses _____

HOW MANY DWELLINGS:-

Are pre-existing at this property? 1 Are proposed to be demolished? 0

Are proposed to be constructed? 0 Are attached to an existing building? 0

Are attached to a new building? 0 How many storeys will the building consist of? 1

WHAT ARE THE MAIN BUILDING MATERIALS (PLEASE TICK APPROPRIATE BOXES)

WALLS
- ☐ Full Brick
- ☐ Brick Veneer
- ☐ Concrete or Stone
- ☐ Steel
- ☐ Fibrous Cement
- ☑ Timber/weatherboard
- ☐ Cladding- aluminium
- ☐ Other

ROOF
- ☐ Aluminium
- ☐ Concrete of Slate
- ☐ Tile
- ☐ Fibrous Cement
- ☑ Steel
- ☐ Other

FLOOR
- ☐ Concrete or slate
- ☑ Timber
- ☐ Other
- ☐ Unknown

FRAME
- ☑ Timber
- ☐ Steel
- ☐ Aluminium
- ☐ Other

PRIVATE POLICY & TERMS

All information provided by the owner / applicant on this form will be taken to be accurate & correct. CERTGROUP Building Certifiers does not accept any responsibility for any intentional or unintentional error or omission made by the owner / applicant on this form. The information you provide in this notice is required under the Environmental Planning and Assessment Act 1979 if you erect a building. The information will be held by the consent authority and by the council (if the council is not the consent authority). Please contact CERTGROUP Building Certifiers if the information you have provided in this notice is incorrect or changes.