

Association of
Consulting
Engineers
New Zealand

New Zealand
Institute of
Architects

Institution of
Professional
Engineers
New Zealand

P.I.M No.
Building Regulation Clause(s)

PRODUCER STATEMENT - PS1 - DESIGN

(Guidance notes on the use of this form are printed on the reverse side)

ISSUED BY: John Kevin SPURR
(Suitably qualified Design Professional)

TO: Leo and Kay Goodman
(Owner)

TO BE SUPPLIED TO: Kapiti Coast District Council
(Territorial Authority)

IN RESPECT OF: Standard Initial Homes Designs – as attached list
(Description of Building Work)

AT: 2A Otaihangā Road
Paraparaumu
(Address)

LOT 2 D.P. 56172 or Part of Lot 3 D.P. 56172 so
BSK Consulting Engineers Ltd has been engaged by La Grouw Corporation Limited
(Design Firm) (Owner/Developer/Contractor)

to provide Structural design check from underside of bearers up services in respect of the
(Extent of Engagement)
B1

requirements of Clause(s) of the Building Regulations 1992 for
☐ All ☒ Part only as specified trusses by others
foundations by others
of the building work. The design has been prepared in accordance with B1 / VM1
(verification method(s)/acceptable solutions(s))

(respectively) of the approved documents issued by the Building Industry Authority and the work is described on
BSK Consulting Engineers Ltd attached list 8/6/2000
drawings titled
(Design Firm)

and numbered Sheet 1 Ref 11984 and the specification and other documents according to which the
building is proposed to be constructed.

As an independent design professional covered by a current policy of Professional Indemnity Insurance to a minimum value
of \$200,000, I BELIEVE ON REASONABLE GROUNDS that subject to:

- (i) the site verification of the following design assumptions Maximum Wind Zone – Very High in terms
of NZS 3604 (1999). Maximum Basic Roof Snow Load 0.5 KPa.

and (ii) all proprietary products meeting the performance specification requirements, the drawings, specifications, and
other documents according to which the building is proposed to be constructed comply with the relevant provisions of the
building code.

(Signature suitably qualified Design Professional)
B. E. MIPENZ PO Box 23, ROTORUA
(Professional Qualifications)

Date: 8/6/2000

ERB/AERB Reg No. 3627

Member ACENZ ☐
IPENZ ☒ NZIA

(Address)

8 June 2000

La Grouw Corporation
Private Bag RO 3034
ROTORUA

Attention: Mr J. Parrott

ADDRE
144 Humeon St
PO Box
Rotorua
New Zealand
TELEPHONE
07 348 5
FACSIMILE
07 348 7

Dear Sir,

RE: INITIAL NEW DESIGNS – JUNE 2000

OUR REF: 11984

As requested, we have completed the structural design work relating to these standard plans and provide below our report.

The following plans and Detail Sheets accompany this report.

Sheet 1	Ref: 11984	Fantail Standard
Sheet 2	Ref: 11984	Fantail Villa
Sheet 3	Ref: 11984	Fantail Beach
Sheet 4	Ref: 11984	Fantail Mediterranean
Sheet 5	Ref: 11984	Kereru Standard
Sheet 6	Ref: 11984	Kereru Beach
Sheet 7	Ref: 11984	Weka Standard
Sheet 8	Ref: 11984	Weka Cottage
Sheet 9	Ref: 11984	Weka Settler
Sheet 10	Ref: 11984	Weka Gables

Detail Sheet 1 – applicable to Fantail Beach and Kereru Beach.
Detail Sheet 2 – applicable to Weka Settler.

1. DESIGN BASIS

All structural design has been based on Very High Wind and Earthquake A in terms of NZS 3604 (1999).

2. SUPERSTRUCTURE CONSTRUCTION GENERALLY

All construction shall comply with Initial Homes Specifications, Initial Homes Assembly Manual and Video and BSK connection details Ref: 7215 except where superseded by this report and accompanying details.

The structural design makes allowance for "Michaelangelo Tile" or gibraltar board ceiling systems.

C:\My Documents\Winword\jks\11984.doc 1

DIRECTORS
E. Don Stotter
C.Eng., M.I.C.E.,
M.I.P.E.N.Z
Reg. Engineer
John W Kronast
B.E., M.I.P.E.N.Z
Reg. Engineer

3. FOUNDATIONS AND SUB-FLOOR BRACING

This report and Producer Statement relate to the structure from the underside of the floor bearers up. All foundations and sub-floor bracing are to be designed by others to suit the specific site conditions.

4. LATERAL BRACING

Bracing Unit calculations are attached. Tie rods shown on Sheets No's 1 to 10 inclusive.

We have marked on the drawings the essential bracing walls. Changes to the standard designs which disrupt the integrity of any of these walls should be the subject of special design consideration. For specific designs the specific bracing requirements for the site can be taken into account.

Bracing upgrading to the remaining walls could also be considered.

5. LAMINATED TIMBER WALL STIFFENERS

124 x 86 (No. 7) in positions shown.

At tops extend 150mm above top of 14th board and bolt fix.

1/M10 bolt centrally through 124 x 86 and 100 x 50 top plate as Initial Standard Details ID3

At floor provide two Pryda Multigrips onto each 124 x 86 stiffener as Initial Standard Details IC 13.

6. 100 X 40 CEILING BRACE (DRAGON TIES)

Refer plans.

Locate as shown on top of bottom chord trusses.

At each connection position to top plate at exterior walls provide solid timber packing off the top plate, two layers each 50mm thick.

Progressively nail each layer with five nails, 100mm x 3.75mm diameter FH galvanised.

Nail 100 x 40 ceiling brace to packing off top plates at each end with four nails, and to intermediate trusses with two nails per truss.

Provide Pryda Multigrips at ends of 100 x 40 ceiling braces in accordance with the standard engineering details, dated 29/6/1999.

7. DOUBLE FULL HEIGHT BATTENS

46 x 46 battens doubled each side of joinery frames for all window wall panels where the wall panel length exceeds 3200mm. Fix to subfloor and to top plate as Initial Standard Details IC10 and IC11.

8. TIE RODS

Tie rods shown on Sheets No's 1 to 10 inclusive are for bracing and roof tie down purposes only – extra non structural tie rods may be required at some wall ends and on internal walls to meet construction and wall straightening requirements. In line with the established procedure, these additional tie rods are to be added in by the design office.

9. TRUSS FIXINGS GENERALLY

Except as Clauses 10 and 11 below, all trusses are to be fixed to the 100 x 50 top plates with two nails 100mm x 3.75mm diameter skewed, plus one Pryda Multigrip, plus one Z nail – all as Initial Standard Detail ID1.

~~10. TRUSSES WITH 1200mm CANTILEVER OVERHANGS~~

~~Applicable to Fantail Beach; Kereru Standard, Kereru Beach and the Weka Standard.~~

~~On the Kereru Standard, and the Weka Standard, the 1200mm cantilever overhangs are provided for by additional 100 x 50 rafter members on each side of each 1200mm truss rafter cantilever – as initial Standard Detail ID2. (Trusses at 1200mm centres)~~

~~On the Fantail Beach and Kereru Beach designs, the 1200mm cantilever overhangs are provided by 150 x 50 top truss chords. (Trusses at 900mm centres)~~

~~In all of the above cases for 1200mm truss overhangs, each truss shall be fixed similarly to the initial Standard Detail ID2, incorporating two nails 100mm x 3.75mm diameter skewed, plus two Pryda Multigrips, one on each side of each 1200mm rafter cantilever, and one M10 galvanised coach screw 150mm long through the top plate into the top board under, and 125mm approximately from the truss centreline.~~

~~11. WEKA SETTLER – CENTRAL TRUSS SUPPORT~~

~~Refer Detail 2 and Sheet 10.~~

~~Provide a 250 x 50 No. 1 Framing Grade Radiata Pine lintel stiffening 2.7m long approximately in the batten space, at each exterior wall. Locate 250 x 50 hard under the top plate and centrally with respect to the main truss. Provide double 46 x 46 battens as supports near each end of each 250 x 50. Fix as for Initial Standards IC10 and IC11.~~

~~Nail through 250 x 50 lintel into boards behind with 75mm x 3.15mm diameter FH galvanised nails at 150mm c/c, staggered as Detail 2.~~

~~Nail through top 100 x 50 plate into top board under, and into 250 x 50 lintel under, each with 100mm x 3.75mm diameter FH galvanised nails @ 300mm c/c.~~

~~Fix each end of central truss to 100 x 50 top plate, and to 250 x 50 lintel with two Pryda Multigrips and two 25mm x 0.8mm Pryda Strapbrace ties, all as Detail 2.~~

~~12. PRYDA STRAPBRACING ON TRUSSES~~

~~Applicable to Fantail Beach, and Fantail Mediterranean, Kereru Standard, Kereru Beach, Weka Standard, Weka Settler, and Weka Gables.~~

~~25mm x 0.8mm Pryda Strapbracing provided in locations shown on the drawings on top of the trusses. Nail at each end of each truss with six nails. Tension with purpose made tensioners, and nail to each intermediate truss with two nails. All nails 30mm x 3.15mm diameter FH galvanised.~~

~~13. PRYDA STRAPBRACING ON UNDERSIDE OF TRUSSES~~

~~Applicable to the Weka Gables plan. Refer Sheet 10.~~

~~25mm x 0.8mm Pryda Strapbracing on underside of trusses. Nail at each end of each brace, onto H beams under with six nails. Tension and nail to truss soffits similar to Clause 12.~~

14 STANDARD PURLINS

75 x 50 No. 1 Framing Grade Radiata Pine purlins on edge at 900mm c/c.
Applicable to all designs except Fantail Beach and Kereru Beach.

Fix to top of truss rafters with two 100mm x 3.75mm diameter FH galvanised nails skewed one each side of purlin centrally into the truss rafter under.

15. PURLINS FANTAIL BEACH AND KERERU BEACH PLANS

100 x 50 No. 1 Framing Grade Radiata Pine purlins at 800mm approximate maximum centres on edge, cantilevering 800mm at gable ends and doubled over central 3.6m approximately section at each end of Fantail Beach plan to provide for 1200mm cantilevers.

All doubled purlins, 3.0m approximately O/A length, to extend the full length of the 1200mm cantilever and across to the second truss. Side nail doubled purlin

together with 90mm x 3.55mm diameter F.H. galvanised nails at 300mm maximum centres.

Minimum purlin fixing in enclosed roof areas, except purlin fixing to gable end trusses – fix to top of truss rafters with two 100mm x 3.75mm diameter FH galvanised nails skewed one each side of purlin centrally into truss rafter under.

Minimum purlin fixing at exposed eaves situations, except purlin fixing at gable end trusses. – fix to top of truss rafters with two 100mm x 3.75mm diameter FH galvanised nails as above, plus one 5mm diameter galvanised Z nail. (Or stainless steel Z nail, as Clause 17 below.)

(Or alternative screw fixing as Clause 18 below.)

Minimum purlin fixing at exposed eaves situations at gable end trusses. Fix as for purlin fixing at gable ends, as below. (Note however that the Multigrips will be exposed, and that stainless steel Multigrips shall be used in Exposure Zones, as Clause 17 below.)

(Or alternative screw fixing as Clause 18 below.)

Minimum purlin fixing at gable ends with 800mm or 1200mm cantilever overhang. Fix each 100 x 50 purlin, or each doubled 100 x 50 purlin with two 100mm x 3.75mm diameter FH galvanised nails as above, plus two Pryda Multigrips, fixed each side of purlin or double purlin and hidden behind exterior cladding. Fix with 5 nails through each Multigrip into side of purlin and 5 nails through each Multigrip into side of top chord of truss. All nails 30mm x 3.15mm diameter F.H. galvanised..

16. GUTTER PURLINS FANTAIL BEACH AND KERERU BEACH PLANS

Refer Detail 1.

Fix each 100 x 50 purlin with two 100mm x 3.75mm diameter FH galvanised nails skewed through exterior face of purlin into truss rafter under, plus two 5mm diameter galvanised Z nails, left hand and right hand, each side of 150 x 50 truss rafter into 100 x 50 fascia purlin. (Or stainless steel Z nails, as Clause 17 below.)

(Or alternative screw fixing as Clause 18 below.)

17. STAINLESS STEEL Z NAILS AND MULTIGRIPS.

With reference to Clauses 15 and 16, stainless steel Z nails, and stainless steel Multigrips are to be used in Sea Spray Zones, and in Exposure Zones 1 and 4 in accordance with N.Z S. 3604 (1999), in all exposed situations.

18 ALTERNATIVE SCREW FIXING FOR PURLINS.

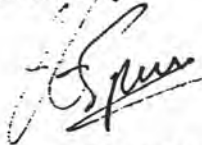
Applicable to Fantail Beach and Kereru Beach plans, purlins and gutter purlins at exposed eaves situations, and purlins at eaves at gable end trusses.

As an alternative to the nail plus Z nail or Multigrip fixings specified in Clauses 15 and 16 above, 178mm x 14 gauge wood screws (Climaseal coated) may be used to fix purlins and gutter purlins to the truss rafters. One wood screw at each purlin, centrally into the truss rafter under. At joints in purlins, butt join purlins together centrally over rafter and screw (slightly skewed) through each purlin into the truss rafter under.

We enclose the Bracing Unit Calculations and the Producer – Statement – Design referenced to this report.

Please advise if we can assist further in this matter in any way.

Yours faithfully



J. K. Spurr (Consultant)
BSK CONSULTING ENGINEERS LTD

LOCKWOOD WALL BRACING CALCULATION SHEET B
Along

Fantail
2/6/00 P2

Wall or Bracing Line		Bracing Elements Provided			Test Panel Capacities		
Line label	Min BUs Required	Bracing Element No.	Bracing Type	Length Element (m)	Test Panel Length	B/U Wind achieved	B/U E/Q achieved
A	0.25 882 221	A1	Int S.	3.8	3.6	126	143
		A2	Int 1	3.5	3.4	268	289
B	0.54 882 442	B1	Int 3	2.2	2.2	226	246
C	0.25 882 221	C1	Int 1	3.3	3.3	268	289
		C2	Int 2	4.3	3.3	307	322
D							
E							
Total B/U Achieved						1195.	1289.
From Sheet A Total B/U Required						693	882

If Wind required > E/Q required complete the Wind achieved column only. If E/Q required > 1.25 Wind required complete the E/Q achieved column only. Otherwise complete both Wind and E/Q. achieved columns.

Across

Wall or Bracing Line		Bracing Elements Provided			Test Panel Capacities		
Line Label	Min. BUs Required	Bracing Element	Bracing Type	Length Element (m)	Test Panel Length	B/U Wind achieved	B/U E/Q achieved
M	93.8x2.9 222	M1	Int 6	3.6	3.6	233	218
		M2	Int 5	3.6	3.6	126	143
N	93.8x 4.3 403	N1	Int 4	3.6	3.2	302	313
O	93.8x 4.3 403	O1	Int 3	2.5	2.2	226	246
P	93.8x 2.9 222	P1	Int 2	3.6	3.3	307	322
Q							
Total B/U Achieved						1198	1242
From Sheet A Total B/U Required						1370	882

LOCKWOOD WALL BRACING CALCULATION SHEET A

2/6/00 P1

Job Details

Name	<u>Initial Fantail - Standard Villa, Beach Mediterranean</u>		
Street and Number	<u>Mediterranean height (5.2m) critical.</u>		
Lot and DP Number			
City/Town/District			
Location of Storey:	<u>single/upper of two</u> lower of two		
Building height to apex	<u>5.2</u> m	Roof weight	<u>light</u> / heavy
Roof height above eaves	<u>2.8</u> m	Cladding weight	light / heavy <u>medium</u>
Stud height	<u>2.4</u> m	Room in roof space	<u>yes</u> / no
Average roof pitch	<u>35°</u> degrees	Gross Building Plan Area GPA =	<u>105</u> m ²
Building Length BL =	<u>14.6</u> m		
Building width BW =	<u>7.2</u> m		
Note: When the average roof pitch is over 25 degrees, use the eaves length and width to determine BL and BW			

Wind Zone

Determine Wind Zone by application of NZS 3604 Figures 2.3 and 2.4 and Tables 2.4 and 2.5				
LOW ☐	MEDIUM ☐	HIGH ☐	VERY HIGH ☒	SPECIAL DESIGN ☐

Earthquake Zone

Select E/Q Zone from Fig. 2.2 NZS 3604	A ☒	B ☐	C ☐
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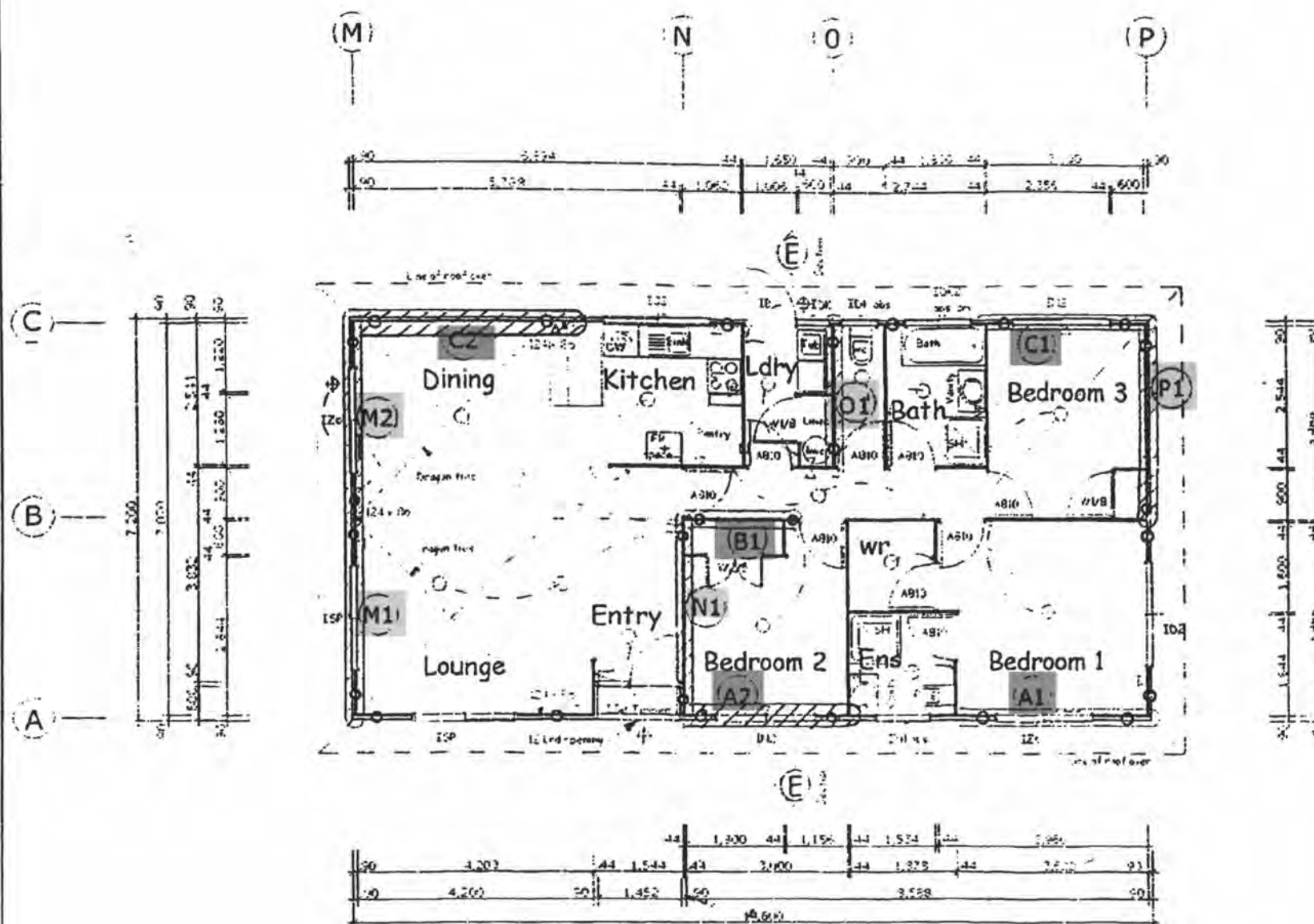
BUs required Wind

W along =	<u>96.2</u>	BU/s/m
W across =	<u>93.8</u>	BU/s/m
Total wind load,		
W along x BW =	<u>693</u>	BU/s
W across x BL =	<u>1370</u>	BU/s

BUs required Earthquake

E =	<u>8.4</u>	BU/s/m ²
Note: For a room in the roof space use E + 1 (See NZS 3604 Cl.6.3.2.5)		
Total earthquake load,		
EQ ALONG and EQ ACROSS		
E x GPA BU/s =	<u>882</u>	BU/s

All foundations are to be set out from production drawings.
All dimensions to be provided by La Group Corporation Ltd.



FLOOR PLAN Scale 1:100 Area 104.25m²

APPROVED
BY BUILDING

PETER WILKINSON
Officer

NOTES :-

1. All construction to comply with NZS 3604 and the NZ building code.
2. All foundations are to bear into firm, undisturbed subsoils with a minimum safe bearing capacity of 100KPa or on to hardfilling or backfilling thoroughly compacted to an equivalent standard.
3. For all exterior wall window panels in excess of 3200mm o/a, double battens are required on each side of joinery unit. Full height fixed top and bottom as per std.
4. All plumbing and kitchen fittings are indicative only and are at the final selection by builder/owner. Eg taps, shower tray profiles vanity sizes etc.

ELECTRICAL KEY :-

- Ceiling light
- ⊕ Wall light
- ⊕ Exterior ceiling light
- ⊕ Exterior wall light
- Light switch
- ▽ Telephone point
- ▽ Single power point
- ▽ Shaver point
- ▽ Range connection
- ▽ T V aerial
- ▽ Heated towel rail
- ▽ Exterior halogen wall light
- ▽ Double power point exterior
- Pre drilled hole

All work carried out under jurisdiction of producer statement to meet the engineer requirements fully.

BRACING KEY :-

- Z1: Bracing element number
- ⊕ Tie Rod 10mm
- Walls shown thus are essential bracing walls and are to be maintained completely in all plan alternatives. All tie rods and profile connections are to be maintained in accordance with the relevant enhancement details.

ELEVATION ORIENTATION :-



Drawn: Yvonne
Date: 28/4/2000
Checked:

Franchisee:

Fantail
Standard



3/6/00

Sheet: 1
of: 4

Floor Area:
104.12 m²



Initial Homes.
Russett Rd
Private Bag 1034
Rotorua
Telephone (07) 347 7691
Facsimile (07) 347 7614

Client:

..

Sheet 1 Ref 11984.

PRYDA PRODUCER STATEMENT (DESIGN) No A8150

I, **TIMOTHY DAVID CROSS**, being registered under the provisions of the Engineers Registration Act 1924 (Registration No. 9654) and currently holding an Annual Practicing Certificate, hereby certify that I have certified the design of the Claw Nailplate Trusses for:

Design: Albatross, Kereru, Kea, Kiwi, Mallard, Takahē, ~~Weka~~, Lounge extension, Bed room extension, Bellbird, Fantail, Goldfinch, Grenadier, Kahu, Kakariki, Kokako, Manu, Robin, Tara, saddleback and Enhancements no., 4, 6, 9, 10 plans.
Design wind speed (NZS 3604: 50 m/sec., very high wind speed).

Fabricator: NZ Building systems Ltd.

Drawings: Truss Layout & Truss Detail sheets for above plans.

These designs have been prepared in accordance with sound and widely accepted engineering principles, to support dead and imposed loads specified in NZS 4203: 1992 *General Structural Design and Design Loadings for Buildings*, with stresses so induced not exceeding the maximum specified in NZS 3603:1993 *Timber Structures Standard*.

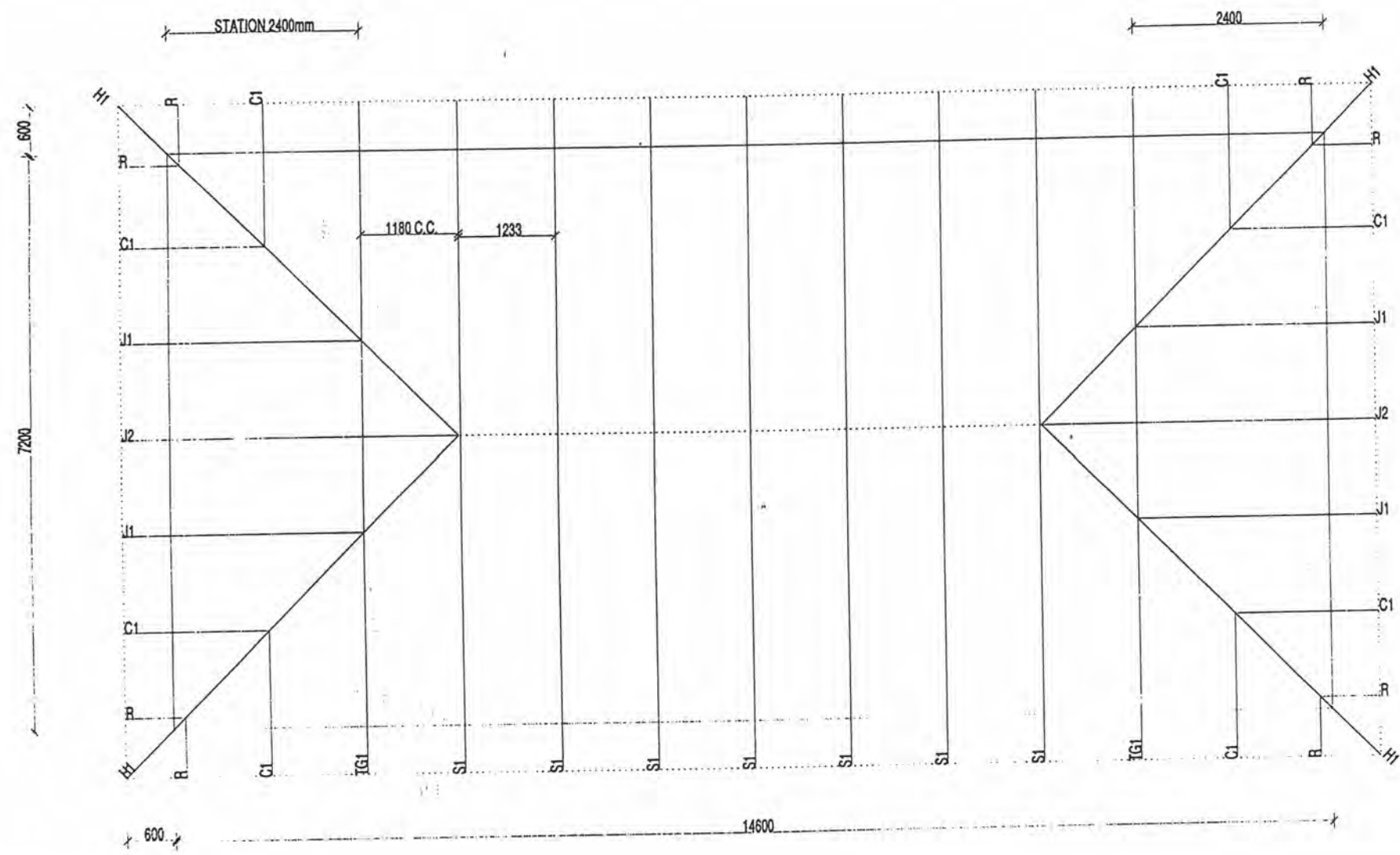
As an independent design professional covered by a current policy of Professional Indemnity Insurance to a minimum value of \$200,000 I believe on reasonable grounds that the design of these nailplate trusses complies with the relevant provisions of the NZ Building Code (Approved Documents B1 - Verification method VM 1, and B2)

Signed: Tim Cross

T D Cross BE. (Civil), MIPENZ, Reg. Eng.
CHIEF ENGINEER - PRYDA TIMBER CONNECTORS

Date: 28th April 1998.

House name	Roof pitch	Standard trusses		Standard girder		Truncated girder		Valley trusses		Creep trusses		Jack trusses			Hip trusses	
Bellbird	25	S1	2	SG1	1	TG1	2	V1	1	C1	12	J1	4		H1	4
		S1A	5							R	12	J2	2		H3	2
		S3	4									J4	1			
Fantail	25	S1	7			TG1	2			C1	8	J1	4		H1	4
										R	8	J2	2			
Goldfinch	25	S1	3			TG1	2			C1	8	J1	4		H1	4
										R	8	J2	2			
Grenadier	25	S1	5			TG1	2			C1	8	J1	4		H1	4
										R	8	J2	2			
Kahu	25	S1	6			TG1	2			C1	8	J1	4		H1	4
										R	8	J2	2			
Kakariki	25	S1	8	SG3	1	TG1	2	V1	1	C1	12	J1	6		H1	6
		S1A	6			TG1A	1	V8	1	R	12	J2	3			
Kokako	25	S7	1			TG1	2			C1	16	J1	8		H1	4
						TG3	2			R	16	J2	2		H4	4
Manu	25	S5	2	SG4	1	TG9	1	V1	1	C1	4	J1	2		H8	2
		S5A	2			TG6	1	V2	1	C5A	1	J9	1		H9	3
		S6	4			TG6A	1	V3	1	R	15	J10	2		H9A	1
						TG7	1			C3	7	J10A	2		H10	2
										C3A	1	J11	1			
										C5	8	J11A	1			
												J12	2			
												J13	1			



Customer : INITIAL HOMES
Site Address: FANTAIL PLAN

Roofing: Longrun
Pitch : 25.00 deg
Spacing: 1200 mm

Job Ref: FANTAIL
Scale 1:75

Roofing material to be installed to manufacturers requirements. In particular, fixing and minimum pitch (reference also Table 1 of E2 NZ Building Code.)

Supply copy of relevant warranties for roofing, membrane systems or fascia/gutter systems as appropriate to Council

GLAZING CONFORM NZS 4223 PARTS 1, 2, 3.
FIT SUITABLE FLASHINGS ETC.
JOINERY
HIGH WIND 1100pa DWP
VERY HIGH WIND 1550pa DWP

G2Z Colorsteel Roofing

F.F.L. +0 G.L.
670 min.

Propos PROPOSED G.L.

EXISTING G.L.

EARTHWORKS DETAIL - SEE WELLS REPORT

Aluminum Joinery

Cladding to be installed to manufacturers requirements in particular fixing and ground clearance.

subfloor ventilation/access to NZS.3604:1999.

Hardi 245 Series Frontere Cladding

Max height 5m

MINIMUM FLOOR LEVEL
3.2m R.L (KDC TO CONFIRM)

NEAREST BOUNDARY 24m

Ventilation between baseboards.

APPROVED
BY BUILDING
PETER WILKINSON
Officer

ELEVATIONS

SCALE 1 : 100

TASKMASTER BUILDERS LTD
488 TE MOANA ROAD WAIKANA
P.O.BOX 342 WAIKANA
PH 04 293 2406
FAX 04 293 1279

PROPOSED NEW INITIAL HOME FOR
LEO AND KAY GOODMAN
2A OTAIHANGA ROAD
PARAPARAUMU
LOT 2 DP 56172 AND PART LOT 3 DP 56172

DATE 08 /03/ 2001

PLAN NUMBER

2709 - 6

AMENDMENTS

APPROVED

DATE

G2Z ColorSteel - roofing on self supporting building paper, on ex 75 x 50 purlins on edge at 900 c/c max. over approved trusses at 1200 c/c.

Fibre glass insulation to ceiling

4.5mm Hardiflex soffit lining

9.5 Gib ceiling lining fixed to manufactures specifications

Hardies 245 Series - ' sheathing over building paper over ex 50 x 50 battens on aluminium foil over 44mm INITIAL solid wall construction system

100x25 or Hardies - base lining

20mm particle board flooring on ex 200 x 50 joists at 600 c/c max on 2/150 x 50 bearers over approved piles

Perforated aluminium foil

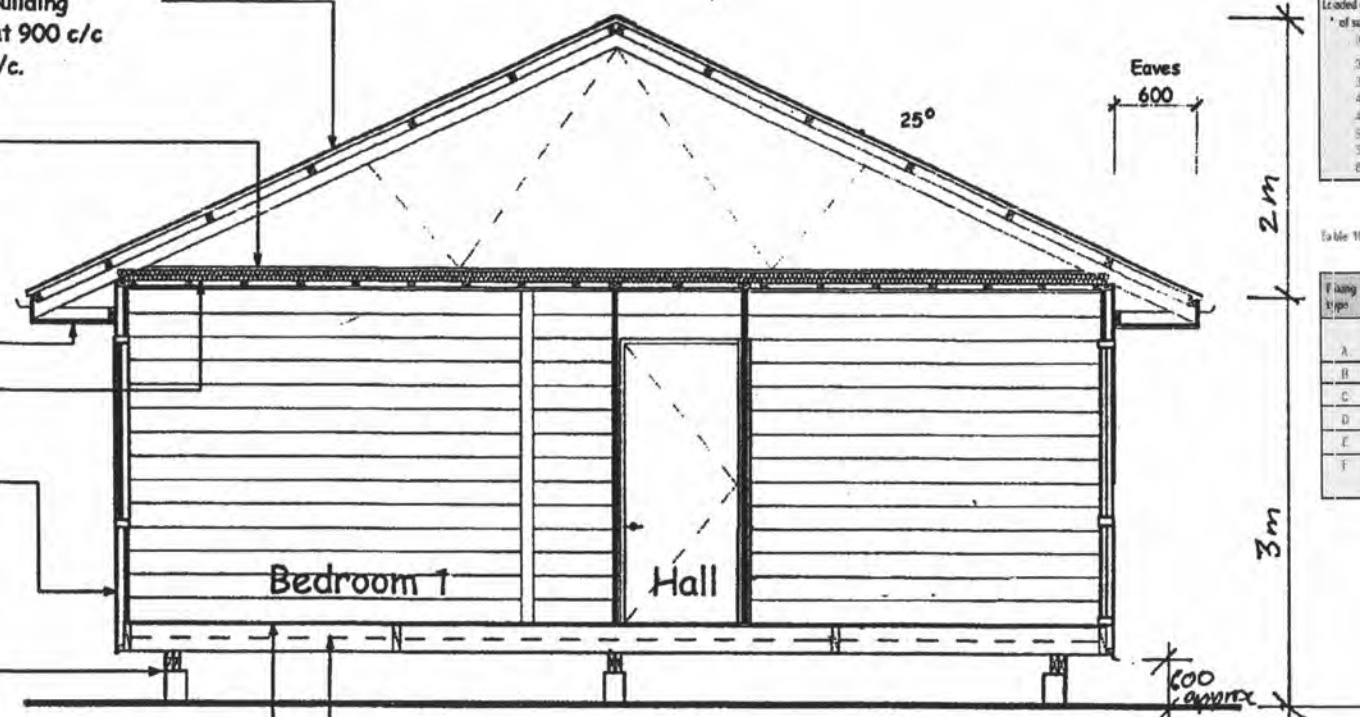


Table 10.12 - Fixing types of roof trusses at supports (see 10.2.2.5.1)

Truss spacing (mm)	Fixing type											
	Light roofs								Heavy roofs			
	900				1200				900			
Wind zone	L	M	H	VH	L	M	H	VH	L	M	H	VH
Loaded dimension of support (mm)												
3.0	C	C	C	D	C	C	C	D	A	A	C	C
3.5	C	C	C	D	C	C	C	D	A	A	C	C
4.0	C	C	C	D	C	C	C	D	A	A	C	C
4.5	C	C	C	D	C	C	C	D	A	A	C	C
5.0	C	C	C	D	C	C	C	D	A	A	C	C
5.5	C	C	C	D	C	C	C	D	A	A	C	C
6.0	C	C	C	D	C	C	C	D	A	A	C	C

Table 10.13 - Key to fixing types and capacity for rafters, roof trusses, underpurlins, ridge beams and strutting beams (see 10.2.2.6.1)

Fixing type	Fixing to resist uplift	Alternative fixing capacity
A	2/100 x 3.75 skewed nails	0.7
B	2/100 x 3.75 skewed nails + 1 wire clip	2.7
C	2/100 x 3.75 skewed nails + 2 wire clips	4.7
D	2/100 x 3.75 skewed nails + 3 wire clips	6.7
E	2/100 x 3.75 skewed nails + 4 wire clips	8.7
F	2/100 x 3.75 skewed nails + 4 clips of 27 mm x 12 mm 10/30 x 3.15 nails at each end	16.0

Table 10.10 - Key to fixing types and capacity for purlins or battens (see 10.2.1.16.5.1)

Purlin or batten size (mm x mm)	Maximum purlin span (mm)	Maximum purlin spacing and fixing*							
		Low		Medium		High		Very high	
		Spacing (mm)	Fixing	Spacing (mm)	Fixing	Spacing (mm)	Fixing	Spacing (mm)	Fixing
50 x 40	900	1000	AAP	800	AAP	400	AP	400	AP
50 x 50	1200	1400	AAP	400	AAP	400	AP	400	AP
75 x 50	900	1200	BP	1800	BP	1800	BP	1400	BP
75 x 50	1200	1400	BP	1400	BP	1000	BP	800	BP
100 x 50	1200	1400	BP	1800	BP	1400	BP	1100	BP

* In all wind zones, fixings within the higher wind uplift areas of roofs (as defined in figures 10.16 and 10.17) shall be increased by one class (i.e. if type AAP is used in the main roof, then type AP is required in the higher wind uplift areas).

Table 10.10 - Key to fixing types and capacity for purlins or battens (see 10.2.1.16.5.1)

Fixing type	Fixing description	Alternative fixing capacity
AAP	1/100 x 3.75 mild or 2/50 x 3.15 power driven nails	0.4
AP	2/100 x 3.75 skewed nails or 3/50 x 3.15 power driven nails	0.7
BP	2/100 x 3.75 skewed nails + 1 wire clip or 2/100 x 3.75 skewed nails + 1/12 g Type 17 screws*	2.7
EP	2/100 x 3.75 skewed nails + 2 wire clips or 2/100 x 3.75 skewed nails + 2/12 g Type 17 screws*	4.7

* If screw fixed, screws shall be 50 mm longer than the purlin depth.

NOTE:

1. Purlins on flat may be substituted for the following sizes:
On flat: 75 x 50
On edge: 75 x 50
100 x 50
2. Alternative fixings with reduced uplift capacity may be used.
3. Where purlins are fixed over existing steel lining material refer to 10.2.1.16.5.1(6).

SECTION E-E 1:50

APPROVED
BY BUILDING
PETER WILKINSON
Officer

SECTIONS AND DETAILS

SCALE 1:50

TASKMASTER BUILDERS LTD
488 TE MOANA ROAD WAIKANAE
P.O.BOX 342 WAIKANAE
PH 04 293 2406
FAX 04 293 1279

PROPOSED NEW INITIAL HOME FOR
LEO AND KAY GOODMAN
2A OTAIHANGA ROAD
PARAPARAUMU
LOT 2 DP 56172 AND PART LOT 3 DP 56172

DATE 08 /03/ 2001

PLAN NUMBER

2709 - 7

AMENDMENTS

APPROVED

DATE

All Metro Woodfires are tested to NZS 7421 and AS 2918. Specifications and clearances detailed below apply to both standard and EF Series Woodfires. Specifications may differ and those detailed below should be used as a guide only. Refer to the installation and operation manuals supplied with every Metro woodfire to ensure your Metro Woodfire.

SPECIFICATIONS

	METRO PIONEER'S & CHAMELEON	METRO X-TREME	METRO ASPIRE	METRO INSERTS COMPACT	METRO INSERTS HI OUTPUT
Tested = *, Estimated = () PEAK OUTPUT	14.6kw *	17.7kw *	19.8kw *	(13kw)	(16kw)
WIDTH	590mm	670mm	670mm	560mm	560mm ⁽²⁾
DEPTH	530mm	575mm	575mm	410mm	500mm ⁽²⁾
HEIGHT	665mm ⁽¹⁾	715mm	715mm	550mm ⁽²⁾	550mm ⁽²⁾
FASCIA DIMENSION	N.A.	N.A.	N.A.	650 high x 810 wide	
WETBACK INLET CENTRE HEIGHT	295mm ⁽¹⁾	335mm	340mm	170mm	170mm
WETBACK RETURN CENTRE HEIGHT	485mm ⁽¹⁾	530mm	530mm	360mm	360mm
FLUE CENTRE HEIGHT (Rear O/Let)	575mm ⁽¹⁾	N.A.	N.A.	N.A.	N.A.
WARRANTY - ALL MODELS	1 year unconditional, 5 years firebox with 10 year option				
FLUE SIZE - ALL MODELS	150mm diameter				
WETBACK - ALL MODELS	OPTIONAL - 3kw and 4kw (EF series 3kW only)				
FIREBOX - ALL MODELS	6mm Steel, Firebrick/Ceramic Lining				
BOILER	N.A.	X-TREME & ASPIRE	N.A.	N.A.	N.A.

⁽¹⁾ Minimum clearance to combustibles.
⁽²⁾ Minimum clearance to combustibles.

⁽¹⁾ Minimum clearance to combustibles.
⁽²⁾ Minimum clearance to combustibles.

CLEARANCES

		TOP FLUED PIONEER & METRO CHAMELEON	METRO PIONEER REAR OUTLET	METRO ASPIRE & METRO X-TREME
WITH PIONEER DOUBLE FLUESHIELD	REAR CLEARANCE	50mm	N/A	80mm
	SIDE CLEARANCE	300mm ⁽³⁾	N/A	240mm
	CORNER CLEARANCE	85mm	N/A	110mm
	MINIMUM HEARTH SIZE	680 Deep x 830 W	N/A	755 Deep x 910 W
WITHOUT FLUESHIELD Does not apply to EF Series	REAR CLEARANCE	430mm	60mm	650
	SIDE CLEARANCE	300mm	270mm	240
	CORNER CLEARANCE	280mm	100mm	250
	MINIMUM HEARTH SIZE	1,060 Deep x 830 W	690 Deep x 830 W	1,325 Deep x 910 W

⁽³⁾ Minimum clearance to combustibles.
⁽⁴⁾ Minimum clearance to combustibles.

⁽³⁾ Minimum clearance to combustibles.
⁽⁴⁾ Minimum clearance to combustibles.

HEARTHS

All Metro free standing woodfires comply with NZS 7421 when installed on a suitable hearth, which must extend 200mm forward to each side and rear of the door opening. AS 2918 requires 300mm forward and 200mm to each side and rear of the door opening. Metro inserts tested to NZS 7421 require a total hearth depth of only 260mm from behind the fascia subject to the thickness of the hearth. If hearth thickness is insufficient the Metro may be raised to achieve this 260mm minimum depth (refer to installation manual). AS 2918 requires a total hearth depth of 360mm.

THE HEATING CENTRE
3 IHAKARA STREET
PARAPARAUMU
PH. (04) 298-6356

METRO
Pioneer Manufacturing Limited
WAIKATO STREET, BOX 10
INGLEWOOD, NEW ZEALAND
PHONE 06 756 6540 FAX 06 756 6540
www.woodfire.co.nz email info@woodfire.co.nz





ORMOND STOCK
ASSOCIATES LTD

5016
DESIGN CERTIFICATE

QUIN CUSTOM BUILDINGS, ECONOMY GARAGES UP TO 81 SQ METRES

I, Andrew Scott Blain, being a Registered Engineer and holding a current annual practising certificate and being employed by Ormond Stock Associates Ltd, a member of the Association of Consulting Engineers New Zealand, hereby certify that:

This Consulting Practice has been engaged to design and execute the appropriate engineering calculations for a range of garage buildings up to 81 square metres in plan area for Quin Custom Buildings Ltd Palmerston North. We note that the buildings have been designed for wind loading up to the level for high wind regions defined in NZS 3604:1990.

The accompanying drawings titled and numbered: Quin Custom Buildings Ltd, Economy Garages up to 36 sq. m. 5016/j1, and Quin Custom Buildings Ltd, Economy Garages up to 81 sq. m. 5016/j2 adequately illustrate the design of the relevant structure.

I have exercised reasonable control over the design processes for the works defined above which have been designed in accordance with sound and widely accepted engineering principles to support the loads specified in NZS 4203:1984. Various aspects of the works are in accordance with the following relevant authorities: NZS 3101, NZS 3604 and NZS 3603.

I believe that the stresses in the various materials of construction and force resisting elements of the structure under the above loads are such as to ensure the safety and stability of the structure if the works are constructed in accordance with the above described drawings.

The name and qualifications of the principal structural designer are A. S. Blain BE (Civil), MIPENZ.

Signature:

AS Blain

Date: 16 January 1992

Professional Qualifications: As above. Registration Number: 9757
For and on behalf of

Ormond Stock Associates Ltd
36 Amesbury Street
P. O. Box 1389
Palmerston North

All work carried out under
jurisdiction of producer
statement to meet the engineer
requirements fully.

CONSULTING ENGINEERS

100/101 WILSON STREET PALMERSTON NORTH NEW ZEALAND
TEL: 04-535 2222 FAX: 04-535 2021 E-MAIL: JBL@OSALTD.CO.NZ



10.5 The Initial Homes components are supplied for erection into a building to be located in the exposure zone or environment specified when the order is placed. If the components are erected into a building located in a more severe exposure zone or environment or if the building once erected is transported to an exposure zone or environment more severe than the one for which the components are supplied then some of the components may not meet the period of durability specified for that component even with normal use and normal maintenance because they are in a more severe exposure zone or environment.

10.6 The Initial Homes components are supplied on the basis set out in "Important Information".

Customer Signature: _____

Customer Name: _____

Date: _____



All references to standards and codes etc shall be taken as reference to latest version including amendments.



Issue No: 05
Date: 01/02/01

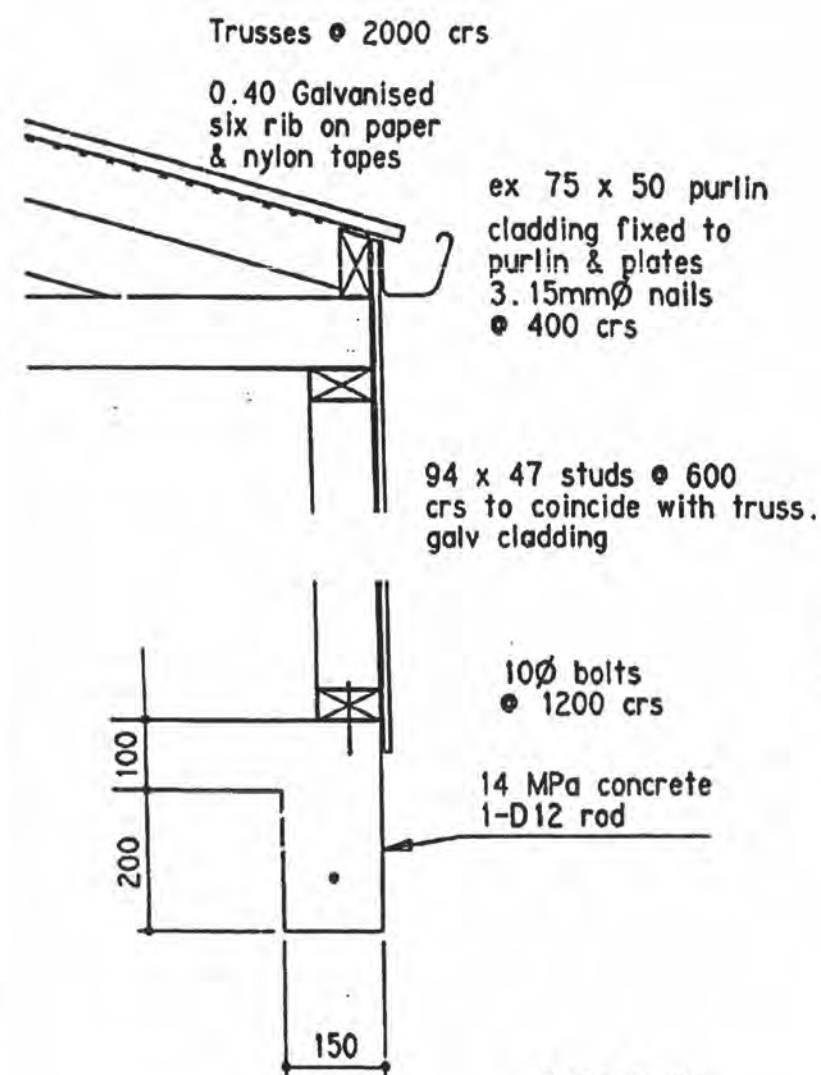
STANDARD SPECIFICATION FOR INITIAL HOMES COMPONENTS

ALL COMPONENTS CONFORM WITH THE NEW ZEALAND BUILDING CODE MINIMUM PERFORMANCE CRITERIA FOR DURABILITY SUBJECT TO NORMAL MAINTENANCE

Under the New Zealand Building Code, building materials, components and construction methods are required to be sufficiently durable to ensure that the building, without reconstruction or major renovation, satisfies the other functional requirements for the New Zealand Building Code. Durability does not include aesthetic appearance. NZS 3604:1999 is used as an acceptable solution in ensuring compliance with the durability provisions of the New Zealand Building Code.

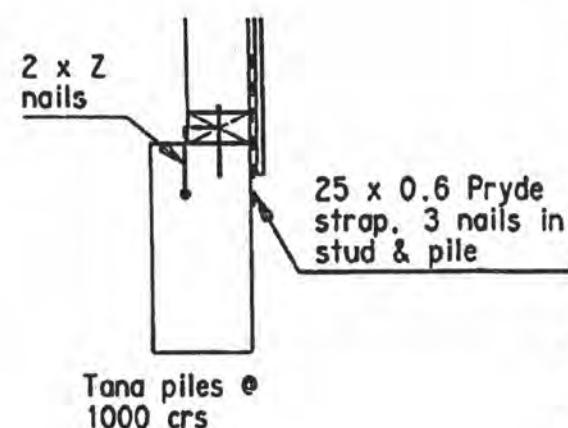
Statements relating to durability for each component are to be read in conjunction with the notices relating to durability that appear at the end of this specification. After each item, the periods of expected durability specified, are those specified by the Initial Homes division of La Grouw Corporation Limited ("Initial Homes") for those specified components supplied by Initial Homes. The items bracketed below, e.g. (BC 50 years) indicate the minimum performance criteria for the life of each of the specified components provided for under the New Zealand Building Code, when those components receive normal maintenance.

1. **BEARERS:** Pine (No. 1 Framing Grade) double ex 150mm x 50mm either rough sawn and gauged top and bottom edges only or gauged four sides, fingerjointed where necessary, treated to H1. Durability 50 years (BC 50 years).
2. **FLOOR JOISTS:** Pine (No. 1 Framing Grade) ex 150mm x 50mm and ex 200mm x 50mm either rough sawn and gauged top and bottom edges only, or gauged four sides. Nail plated or fingerjointed where necessary, treated to H1. Durability 50 years (BC 50 years).
3. **FLOORING:** 20mm thick, high density particle board, treated for weather resistance. Durability 50 years (BC 50 years).
4. **BLOCKING:** Pine ex 100mm x 50mm, 100mm x 75mm, 200mm x 50mm and 150mm x 50mm either rough sawn and gauged top and bottom edges only or gauged four sides. H1 treated for floor blocking and roof truss blocking and bracing. Durability 50 years (BC 50 years).
5. **PERFORATED ALUMINIUM FOIL:** Double sided, reinforced, underfloor foil insulation. Durability 50 years when protected from all the elements (BC 50 years).
6. **NAIL PLATES:** For joining or connecting bearers, joists, blocking and battens where applicable. Durability 50 years (BC 50 years).
7. **INTERIOR AND EXTERIOR WALLS:** Pine (Initial Homes grade) 43mm ex 200mm x 50mm H1 treated kiln dried, fingerjointed where necessary and shaped to a registered board design. Durability 50 years (BC 50 years). The boards have a wax based water protection system applied to repel water during construction.
8. **CLEATS:** 60mm long metal wall to floor fastening devices. Durability 50 years (BC 50 years).
9. **ALUMINIUM ALLOY INTERLOCKING EXTRUSIONS:** (refer to diagram headed "Horizontal Cross Section of Initial Homes Components"). Durability 50 years (BC 50 years).
10. **TRUSS PLATE:** Pine (No. 1 Framing Grade) ex 100mm x 50mm gauged H1 treated. Durability 50 years (BC 50 years).
11. **CAPPINGS:** Pine (Initial Homes grade) ex 100mm x 50mm fingerjointed where necessary to cap exposed ends of walls. Durability 15 years (BC 15 years). Structural Durability 50 years (BC 50 years).
12. **ALUMINIUM FOIL:** Reinforced double sided foil insulation for exterior wall application. Durability 50 years (BC 50 years) when protected from all the elements.
13. **WALL AND CEILING BATTENS:**
Wall: ex 50mm x 50mm Durability 50 years (BC 50 years).
Ceiling Battens: ex 75mm x 50mm Durability 50 years (BC 15 years).
Pine (Initial Homes grade) H1 treated.
14. **ROOF TRUSSES:** Manufactured from Pine (No. 1 Framing Grade) H1 treated or untreated Douglas Fir (No. 1 Framing Grade), rough sawn, gauged top and bottom only. Engineer designed. Certificate available on application. Durability 50 years (BC 50 years).
15. **ROOF PURLINS:** Pine (No. 1 Framing Grade) H1 treated or untreated Douglas Fir (No. 1 Framing Grade) ex 75mm x 50mm. Durability 50 years (BC 50 years).
16. **TRUSS FIXINGS:** 4.9mm diameter galvanised Z and U nails and multigrips to connect trusses to the truss plate. Durability 50 years (BC 50 years) when protected from the elements.
17. **TIE-RODS:** 10mm diameter galvanised steel rods complete with washers and nuts, threaded one end. Durability 50 years (BC 50 years) when protected from the elements.
18. **BUILDING PAPER:** For exterior walls. An impregnated paper manufactured to prevent water ingress. Durability 50 years (BC 50 years) when protected from the elements.
19. **SELF SUPPORTING PAPER:** For roof. A self supporting paper manufactured to prevent water ingress. Durability 50 years (BC 50 years).

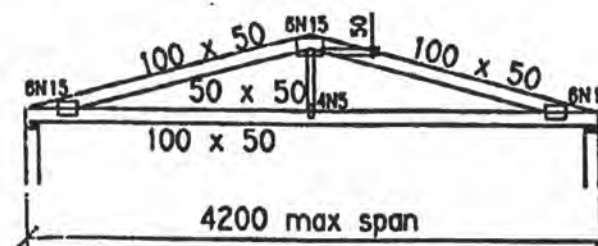


Scale 1:10

ground bearing to be checked after footing excavations and prior to placing steel etc. Soft ground will require raft foundation to inspectors on-site direction or Engineer specific design.

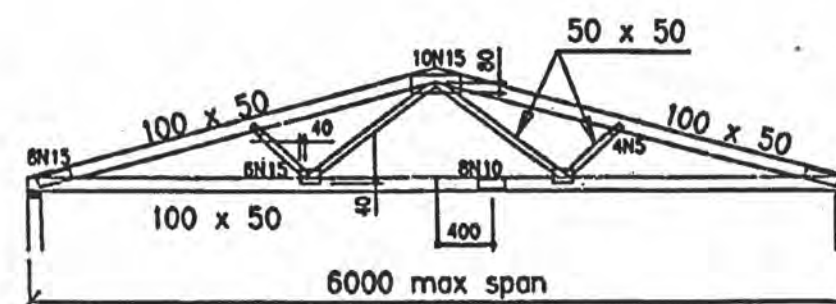


APPROVED
BY BUILDING
OFFICER
PETER WILKINSON
Officer



Single Garage

Truss fixing:
low, med wind - 2 x Z nails
high wind - Pryde Windstrap



Workshop / Garage

Truss fixing:
low wind - 2 x Z nails
med, high wind - Pryde Windstrap

Notes: Economy Garages up to 81 sq m

Studs: 94 x 47 @ 600 max crs
Plates: 94 x 47 fixed down @ 1200 max crs with M10 bolts
Dwangs: 94 x 47, 1 row only
DPC: Malthoid
Foundation: 200 x 150 D12 rods
Floor: 100 thick concrete
Trusses: as shown @ 2000 crs
Purlins: 75 x 50 rough sawn @ 1000 max crs
Roofing: 0.40 Galvanised six rib on nylon tape & paper
Wall Cladding: Galvanised long run Iron
Spouting: 100 quarter round PVC

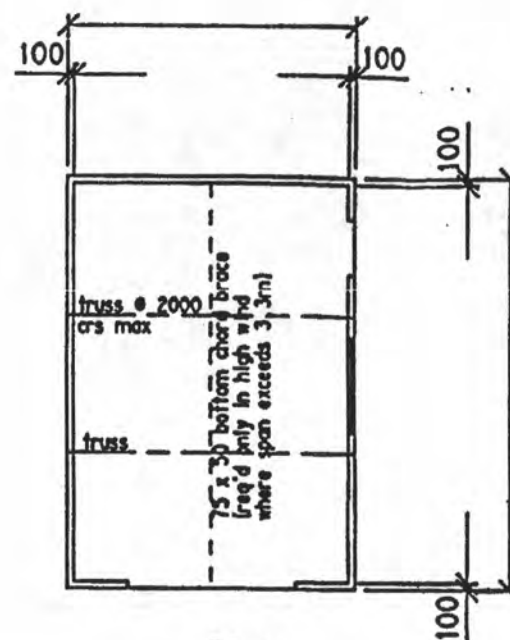
Framing: trusses & purlins - Pinus Radiata treated
walls - Douglas Fir
Construction & Workmanship: to NZS
Top Plates: 94 x 47
Bracing: side & rear walls let in Pryde angle brace @ 45 on external face of framing
-front walls
Pryde flat strap as shown, high wind - 5 nails each end low, med wind 4 nails each end

consult with Engineers re requirements to comply with VERY HIGH WIND ZONE.

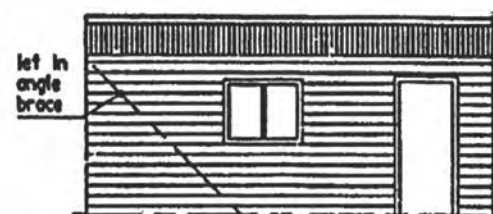
GARAGE DETAIL

SCALE	PROPOSED NEW INITIAL HOME FOR LEO AND KAY GOODMAN 2A OTAIHANGA ROAD PARAPARAUMU LOT 2 DP 56172 AND PART LOT 3 DP 56172	DATE 08/03/2001	PLAN NUMBER 2709-8
		AMENDMENTS	APPROVED DATE

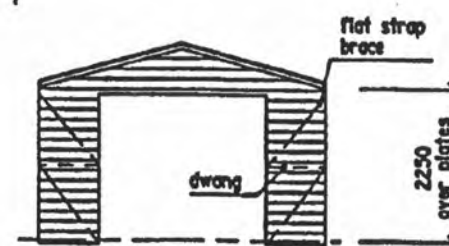
APPROVED
BY P & D
SIMON CORR
Officer
4/4/01



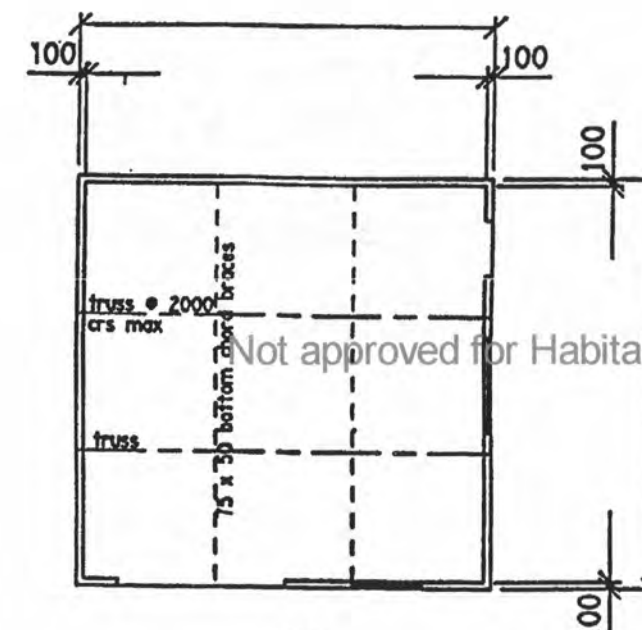
Plan



Side Elevation



Front Elevation
Single Garage
scale 1:100



Plan



Front Elevation
Workshop Garage
scale 1:100

Not approved for Habitable use

APPROVED
BY BUILDING
PETER WILKINSON
Officer

GARAGE DETAIL

SCALE	PROPOSED NEW INITIAL HOME FOR LEO AND KAY GOODMAN 2A OTAIHANGA ROAD PARAPARAUMU LOT 2 DP 56172 AND PART LOT 3 DP 56172	DATE 08 /03/ 2001	PLAN NUMBER	2709 -9	
		AMENDMENTS		APPROVED	DATE

ENGINEER STRUCTURAL DESIGN TAKES PRECEDENCE	
SUPPLY CALCULATIONS AND DETAILS TO COUNCIL	
RECEIVED	
FORWARD (URGENT)	

APPROVED BY BUILDING PETER WILKINSON Officer

DRAFT

**The Chief Building Inspector & Resource Consents Manager
Kapiti Coast District Council
Private Bag
Paraparaumu**

Attention: Ken Smith & Chris Shaw

All work carried out under jurisdiction of producer statement to meet the engineer requirements fully. Engineer to sign off work supervision after construction

LEO & KAY GOODMAN: APPLICATION TO CONSTRUCT A NEW DWELLING AND ASSOCIATED SERVICES AND OUTBUILDINGS AT OTAIHANGA.

1.0 The Application:	
Type of consents sought	a) Land use to carry out minor earthworks to create a flood free building site b) Building Consent to construct the dwelling as detailed on the appended plans
Previous applications	None
Neighbours consents	Not required

2.0 Site Description:	
Site address	No. 2a Otaihanga Road Otaihanga. Valuation No. 1527098800
Legal description	Lot 2 DP 56172, ½ interest in lot 3 DP 56172
The applicant	Leo & Kay Goodman
The owner	Kay Goodman
Total area of the site	1.720 ha
Zoning	Residential
Existing land use	Rural residential use, hobby farmlet
Existing Ground cover	Pasture
Existing services	Everything except sewerage
Improvements	Existing bach
Approx. elevation at the building site	2.0m MSL Wellington
Soil type	Sandy topsoil over sand
Drainage	To existing water courses and ground soakage
Topography	Coastal river flats. Flat to rolling with isolated high ground

Geology	<i>Waikanae river estuary, part a fixed coastal sand dune complex</i>
Rainfall	<i>Approximately 1700 mm/annum</i>
Site exposure	<i>Exposed to the north west</i>
Type of water supply	<i>Town supply with backup rain water collection</i>
Anticipated domestic water consumption	<i>Ex TP 58 app. F: (3 persons 5 bedrooms) = 700l/day</i>
Depth of watertable	<i>Sea level RL 0m</i>
Opinion on variation	<i>tidal variation</i>
Potential for inundation	<i>The site is in the ponding area of the Waikanae River 100 year event (see appended data)</i>
Required underside of joist/floor slab level to be above the 100 year flood, plus freeboard (data ex Wellington Regional Council)	2.7m

3.0 Typical subsoil profile at the building sites:

Depth	Description	indicative soil strength
0 – 200mm (varies)	Light sandy loam topsoil	25 kpa
200 - plus	Sand	See Scala logs

4.0 Tabulated results of Scala penetrometer testing: See also attached plan.

Depth mm	N / blows per 100mm penetration			
	A	B	C	D
0	-	-	-	-
100	1	1	1	1
200	2	2	2	1
300	2	2	2	2
400	3	2	3	2
500	3	2	2	2
600	3	2	3	2
700	4	2	2	2
800	6	1	3	2
900	5	3	3	3
1000	6	3	4	3
1100	6	2	4	3
1200	7	3	4	3
1300	7	3	4	4
1400	8	4	4	4
1500	7	4	5	4
1600	8	4	4	4
1700	8	5	4	4
1800	7	5	5	5
1900	8	5	5	4
20000	7	5	5	4

4.1 Result Analysis of Scala logs:

A structural fill has to be built on the site to provide a flood free building platform. The loose sand to 1300mm below egl is unsuitable unless excavated and compacted to test at 6 to 8 blows per 100mm with the Scala, before the main fill which provides the elevated platform (0.8m above egl) is placed.

The recommended method is to use a 12 to 14 ton front end loader, excavate to 1000mm below egl, proof roll and compact the floor of the excavation, then backfill in 300mm lifts. All the work needs to be done under an Engineers supervision.

5.0 Recommended method of effecting compaction to the existing soil

Use a 12 to 14 ton front end loader, excavate to 1000mm below egl, proof roll and compact the floor of the excavation, then backfill in 300mm compacted lifts. All the work needs to be done under an Engineers supervision. Volume of material to be reworked is approximately 950 m³

6.0 Construction of the main fill:

Once the existing ground has been prepared, import clean sand fill (approximately 800 m³ required) and form the building platform as per the plan. Compaction of the fill should be carried out in the recompaction detailed in 5.0 above. All the work needs to be done under an Engineers supervision.

7.0 Suitability of on soils for on site effluent disposal

Depth	Description	Soil category	Percolation value	Limitation for on site effluent disposal
0 - 200mm (varies)	Sandy topsoil	2	100mm/hr +	a) Slight where groundwater impacts are not important, severe where contamination of groundwater or surface water is an important constraint.
200mm plus	Sand	1/2	100mm/hr +	b) compliance with rules 6 & 7 of the regional discharges to land plan

7.1 Site constraints for on site effluent disposal

Need for groundwater and/or surface water protection	a) Shown as an area of low vulnerability to groundwater contamination in the Regional discharges to land plan. Ground water protection is not a significant issue b) Close to a river estuary with important cultural and amenity values, which is unfortunately already polluted. The disposal field should be located as far back from the river and tributaries as possible
--	---

Specific environmental, public health and other constraints	<i>The system must produce a high quality effluent and distribute it evenly to the entire infiltrative surface of the disposal field. (compliance with rules 6 & 7 of the Regional Discharges to Land Plan and the Kapiti Coast District Council District Scheme)</i>
--	---

7.2 Type of on site effluent disposal system most suited to the site		
Option 1: Low pressure sub-surface irrigation (LPSSIR)	<i>This is an aerobic system that produces a high quality effluent which is dosed to the topsoil layers of the receiving soil via drip irrigation lines. The system can also be used with Wisconsin mound disposal fields or be used to irrigate directly to the ground surface with mulch cover. The disposal lines may be routed to irrigate selected plantings gardens, lawns, hedgerows, shelter belts etc. The recommended system is the Gould Tanks GT 8000 (data attached) OR EQUIVALENT</i>	
Option 2: Low pressure effluent distribution (LPED) This is the preferred option	<i>An anerobic (two chamber septic) type system using low pressure effluent delivery to a standard trench layout for sand country. There are two options for dosed delivery:</i> <i>a) pumping, using a Goulds 45 FP (OR EQUIVALENT)</i> <i>b) where a 1.5m head is available between the tank outlet and the disposal field, dosing siphon delivery using a Goulds GT 45 FS (OR EQUIVALENT)</i> <i>See appended data</i>	
Requirement for additional drainage	<i>Not applicable</i>	
Minimum disposal area for the site	<i>LPSSIR</i>	<i>At 1000l/day, 250m² of well vegetated ground.</i>
	<i>LPED</i>	<i>for LPED at 700l/day with 20mm/m² loading the minimum area is 50m²</i>
Other options	<i>Not applicable</i>	

7.3 Cautions for on site effluent disposal
<i>Both the lid of the tank and the lowest irrigation line need to be above RL 2.7 to prevent pollution of flood waters, and ingress of flood waters into the system. As both options are pressurised the connecting lines may be laid at lower levels.</i>

8.0 Water supply: storage and treatment		
Type of supply	Storage & treatment	
Town supply with optional Rainwater collection	a) storage for rainwater only:	1500l, reusing a salvaged stainless steel tank.
	b) treatment, rainwater only	Option 1: UV treatment and filtration on the delivery side of the supply pump, the recommended device is the Water Systems RUV 50003 or equivalent (data attached).
		Option 2: home chlorination as detailed in the Department of Health Publication "Household Water Supplies, the selection, operation, and maintenance of individual household water supplies 1995". The relevant section of which is appended (preferred option)
Potential for bore water supply	A bore water supply for use in irrigation is a viable option on this site due to the known aquifers underlying the land	

9.0 Assessment of environmental affects of the proposal		
Description	effects	mitigation
1) earthworks, preparation of the existing land to accept fill	a) temporary disturbance of surface vegetation at the site	None required, work area to be covered over with fill
	b) noise from machinery	None, site is remote from other occupation, noise from earthmoving machinery will be well within statutory requirements
	c) dust	None, the actual areas and volumes are small and the site is remote from other occupation, dust nuisance is unlikely to be an issue.
2) earthworks, placement of the fill	a) the fill is to be sourced from minor maintenance to the long access driveway with the balance imported, the issue is disturbance to existing vegetation on the access berms.	Topsoiling and replanting of access berms to provide vegetative cover.
	b) Exposed sand at the main fill site	The main fill site is to be topsoiled and sown on all areas that are not going to be built on

2) earthworks, placement of the fill	c) Loss of ponding area to the 100 year flood	This matter has been discussed with the Wellington Regional Council and is not an issue (for further data contact Phil Purvis)
	d) Siting of the house, garage and septic tank on the fill at FFL 3.0m	No mitigation required, this prevents the buildings being flooded in events up to and exceeding the Q100 event. And a
3) The new dwelling	e) On site effluent disposal	It is not practical to connect to the town system, and in any case the land is ideally suited to on site effluent disposal. No mitigation measures are required

10.0 Summery and conclusion with regard to the land use proposals

As this is hobby/lifestyle block, (although it should be noted it is zoned residential) these proposed works are part and parcel of the owners carrying out a permitted activity (ie living on and enjoying their land). The proposal is not in any way contrary to the intent and purpose of the operative district scheme. I do not believe there is any VALID reason why applicants should not be permitted to proceed.

11.0 Building Consent checklist items

Certificate of title	<i>Appended (see the plans)</i>
Site plan	
Foundation plan	
Drainage plan	
Floor plans	
Bracing plan	
Elevations	
Specification	
Sections and details	
Bracing calculations	<i>Not applicable</i>
Structural calculations	
Producer statements	

It would be appreciated if you could process this application at your earliest possible convenience, if you require any further information, please contact me directly on 025 – 459 757.

Hamish Wells
TMIPENZ
20 December 2000

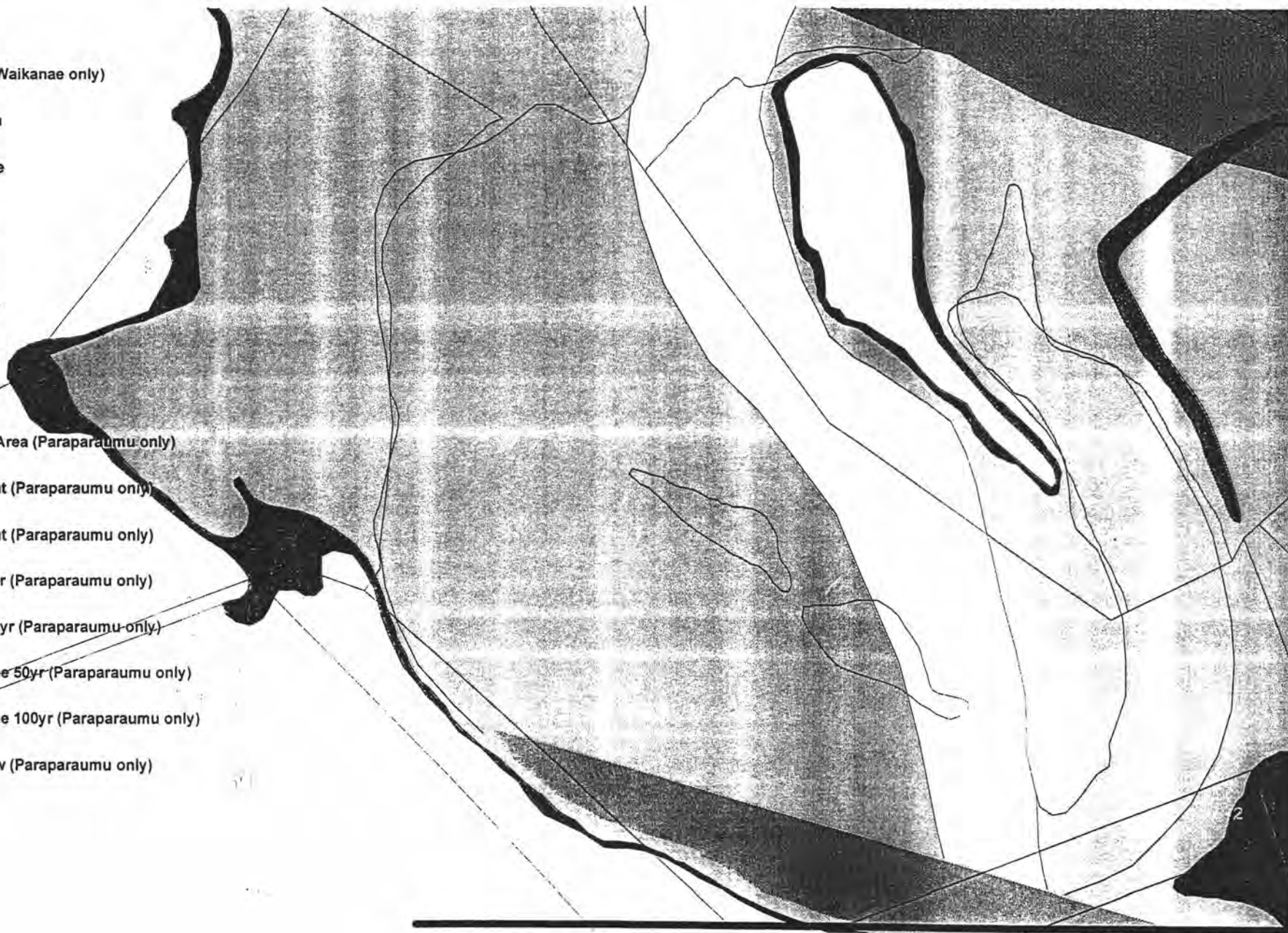
NORTH

lot 2 DP 56172
Residential
zone



NORTH

-  Fringe Extent (Waikanae only)
-  Clifftop Erosion
-  Overflow Fringe
-  Overflow Path
-  Ponding
-  Ponding Fringe
-  River Corridor
-  Stopbank
-  Flood Storage Area (Paraparaumu only)
-  2% Flood Extent (Paraparaumu only)
-  1% Flood Extent (Paraparaumu only)
-  Provisional 50yr (Paraparaumu only)
-  Provisional 100yr (Paraparaumu only)
-  Fill Control Zone 50yr (Paraparaumu only)
-  Fill Control Zone 100yr (Paraparaumu only)
-  Secondary Flow (Paraparaumu only)





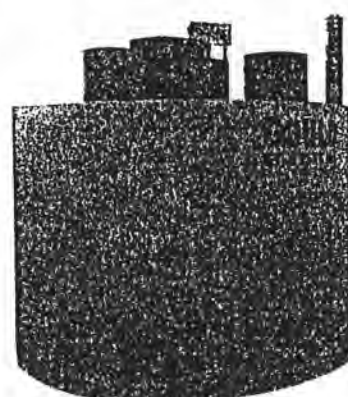
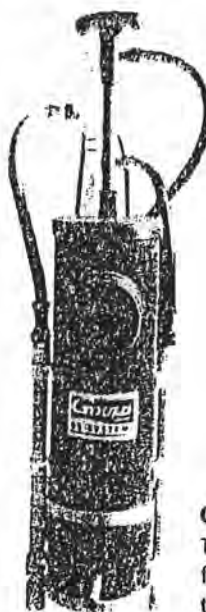
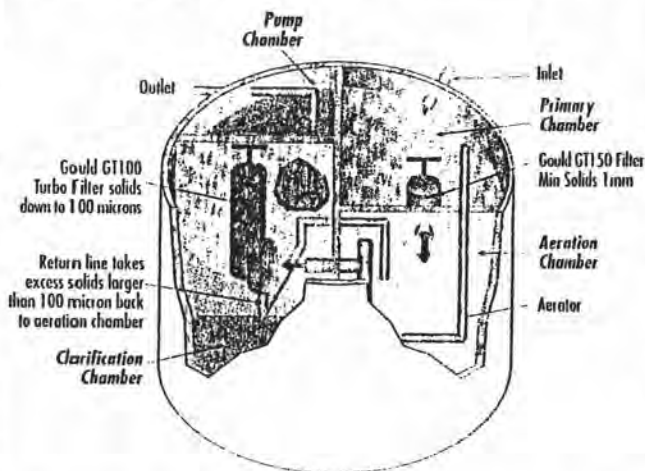
SITE AERIAL EX KUDZ GIS SYSTEM.

The Gould GT8000 Wastewater Treatment Plant

The GT8000 Wastewater Treatment Plant produces superior quality effluent and is ideal for use in environmentally sensitive locations or locations where high water table levels exist. The treatment plant uses the latest development in effluent filter technology, a Gould GT100 Turbo Effluent Filter.

The GT8000 Wastewater Treatment Plant offers:

- The opportunity to recycle your own effluent by using it to irrigate gardens, trees, lawns and shelter belts.
- An environmentally friendly system that is easily installed.
- Low maintenance requirements.
- Large 8000 litre capacity suited for domestic and small commercial properties.
- A three year service and parts replacement contract to ensure your systems optimal performance.
- Prompt and on-going support from Gould GT Systems.
- Resulting high-quality effluent at an affordable price.



The GT8000 ready for installation

Gould GT100 Turbo Effluent Filter

The GT100 Turbo Effluent filter is a self cleaning filter that reduces suspended solid particles size to a minimum of 100 microns in diameter.

The GT8000 Wastewater Treatment Plant comes complete with all internal components and is powered by mains supply electricity.

Gould GT Systems (NZ) Limited is committed to producing the best effluent systems available. We contribute substantial resources to the development of superior wastewater treatment plants so that our clients are assured of owning systems that provide long term effective and environmentally friendly sewerage treatment.

Gould GT Systems (NZ) Limited, or their Approved Installers, deliver and install the GT8000 Wastewater Treatment Plant.

Dimensions:

Diameter: 2.5 metres

Height: 2.3 metres from base to top of inspection risers

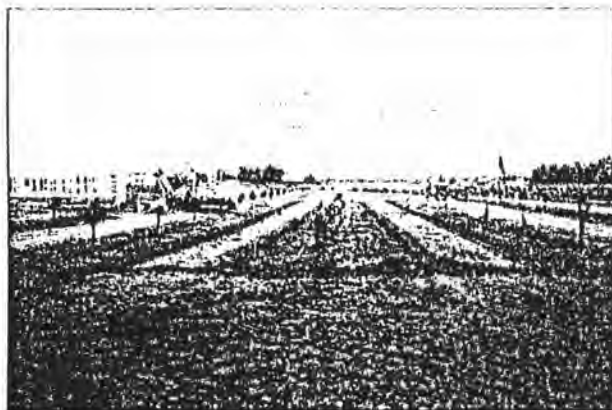
Installed price \$

FREEPHONE 0800 253 273

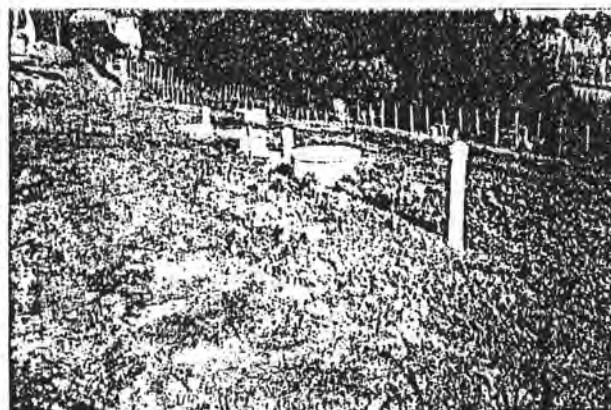
• TEL: 04-6-353 6157 • FAX: 04-6-353 3020 • MOBILE: 021-505-198
• PO BOX 4196 • PALMERSTON NORTH
• EMAIL: gouldsystems@xtra.co.nz
• WEBSITE: <http://gouldgtsystems.nzmade.com>



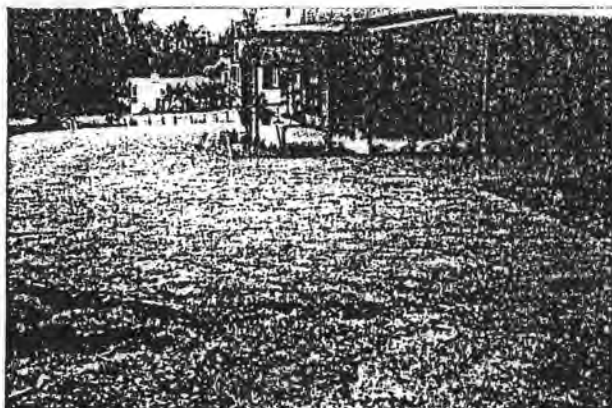
Specialist Manufacturers of Wastewater Treatment Plants and Filtered Septic Tanks



An example of treated effluent assisting a commercial enterprise by irrigating olive trees.



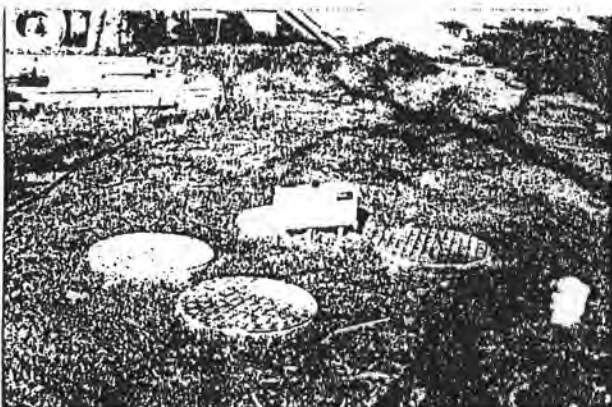
A fully installed commercial treatment plant located at a rural primary school.



Drip Lines are buried under the lawn and are completely unobtrusive.



Gould treatment plants are delivered by trucks fitted with hiab lifting cranes to minimise the machinery required on your property.



An installed GT8000 Wastewater Treatment Plant has minimal components protruding above ground level.

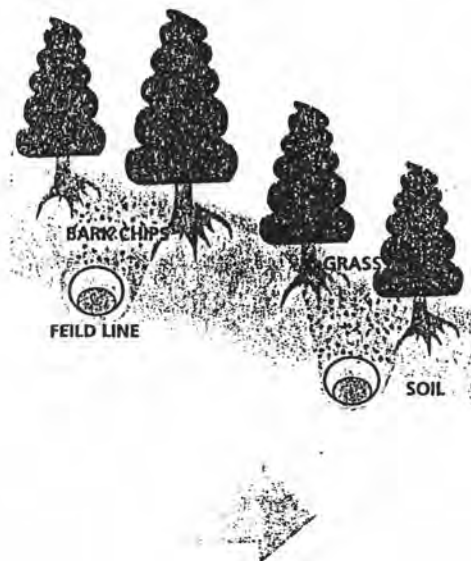
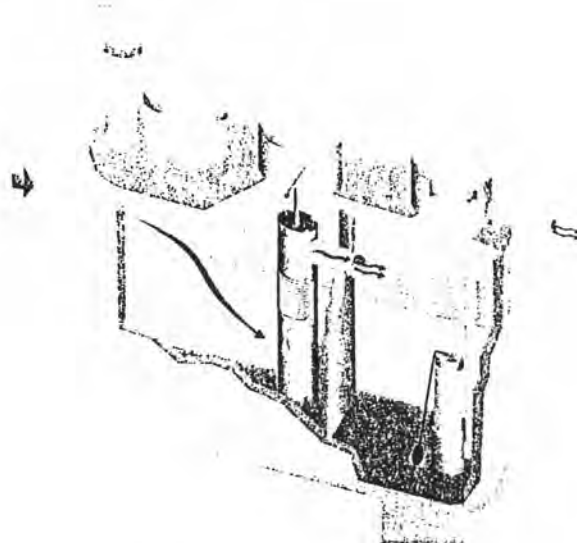


Installing drip irrigation lines into existing lawns causes little disruption and can be completed before your house is built.

FREEPHONE 0800 253 273

TEL: 64 6 353-6157 - FAX: 64 6 353-3020 - MOBILE: 021-505-198
 PO BOX 4196 - PALMERSTON NORTH
 EMAIL: gouldsystems@extra.co.nz
 WEBSITE: <http://gouldgtsystems.nzmade.com>

The Gould GT45FP



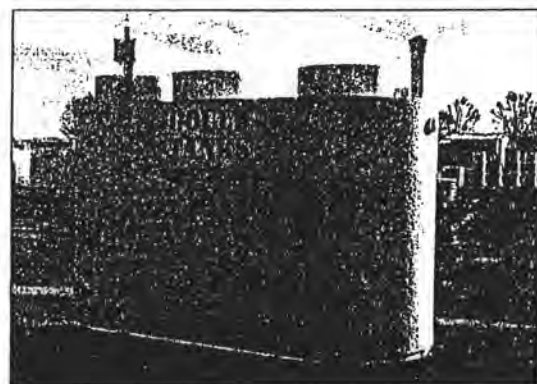
- Fitted with Gould GT150 Effluent Tank Filter.
- 3500 litre main chamber with 1200 litre pump chamber.
- Fitted with 600 x .3 concrete access riser and 600 x .3 filter access riser.
- Effluent quality - BOD: 90 TSS 25 ppm
- Cleaning every 3-5 years.
- Dimensions: 3.1m long, 1.3m wide, 1.780m high, 1.525m inlet to base.
- * GT45FP with pump fitted and a non return valve, pipe work ready to connect up.

With pump

\$

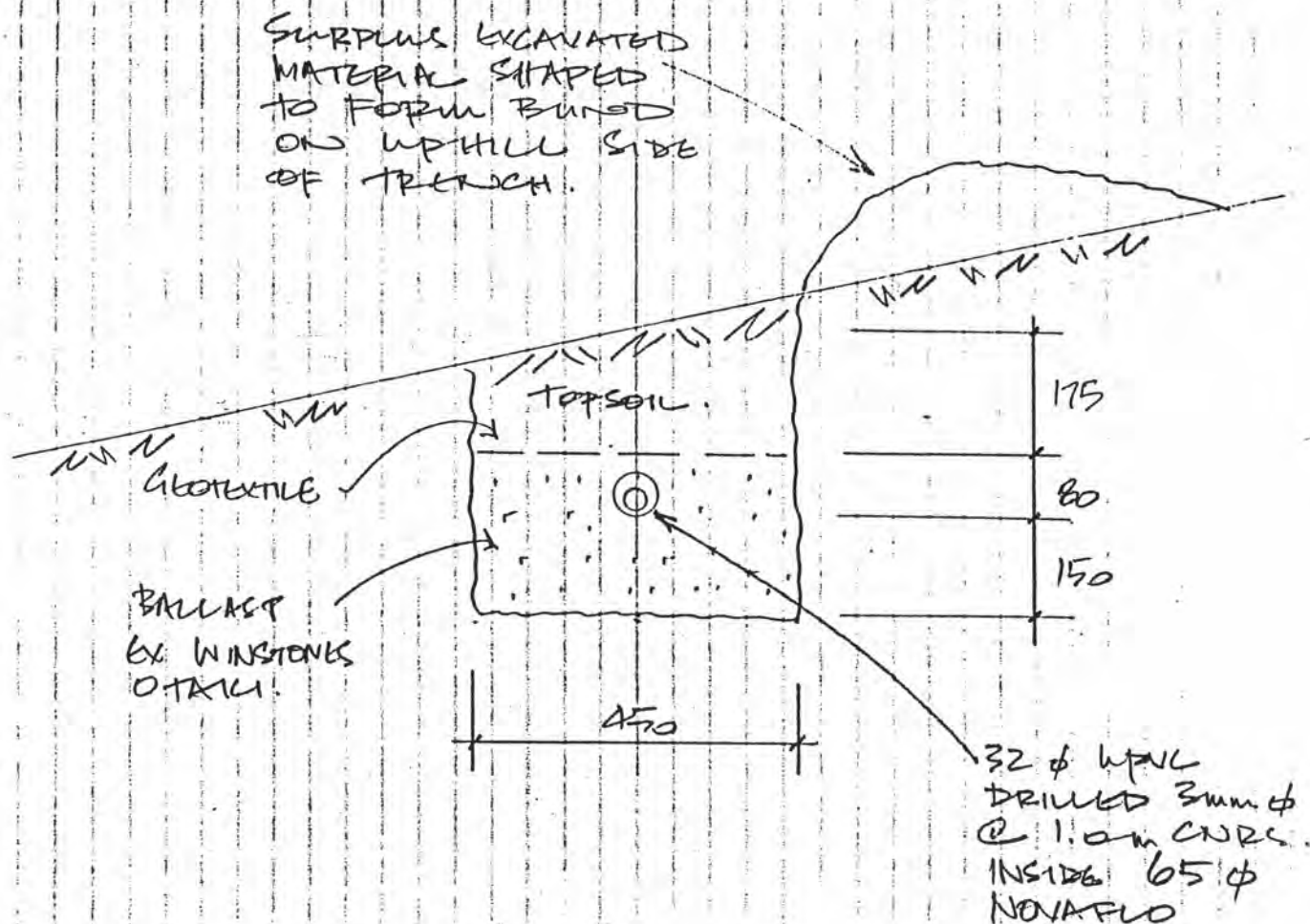
Without pump

\$

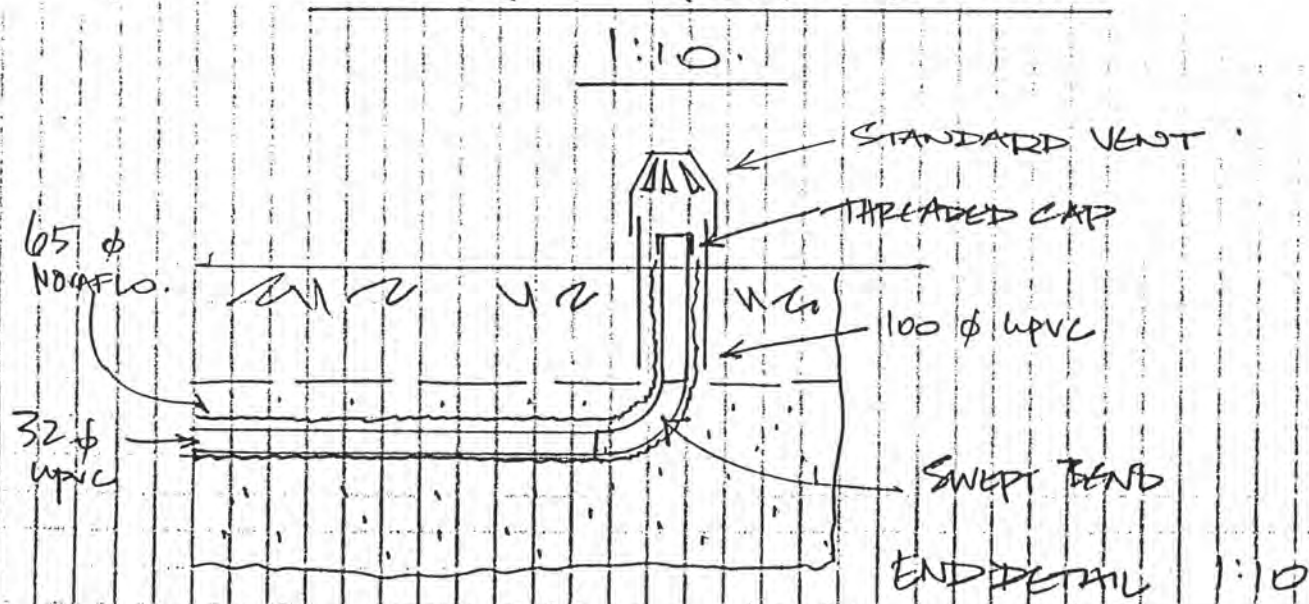


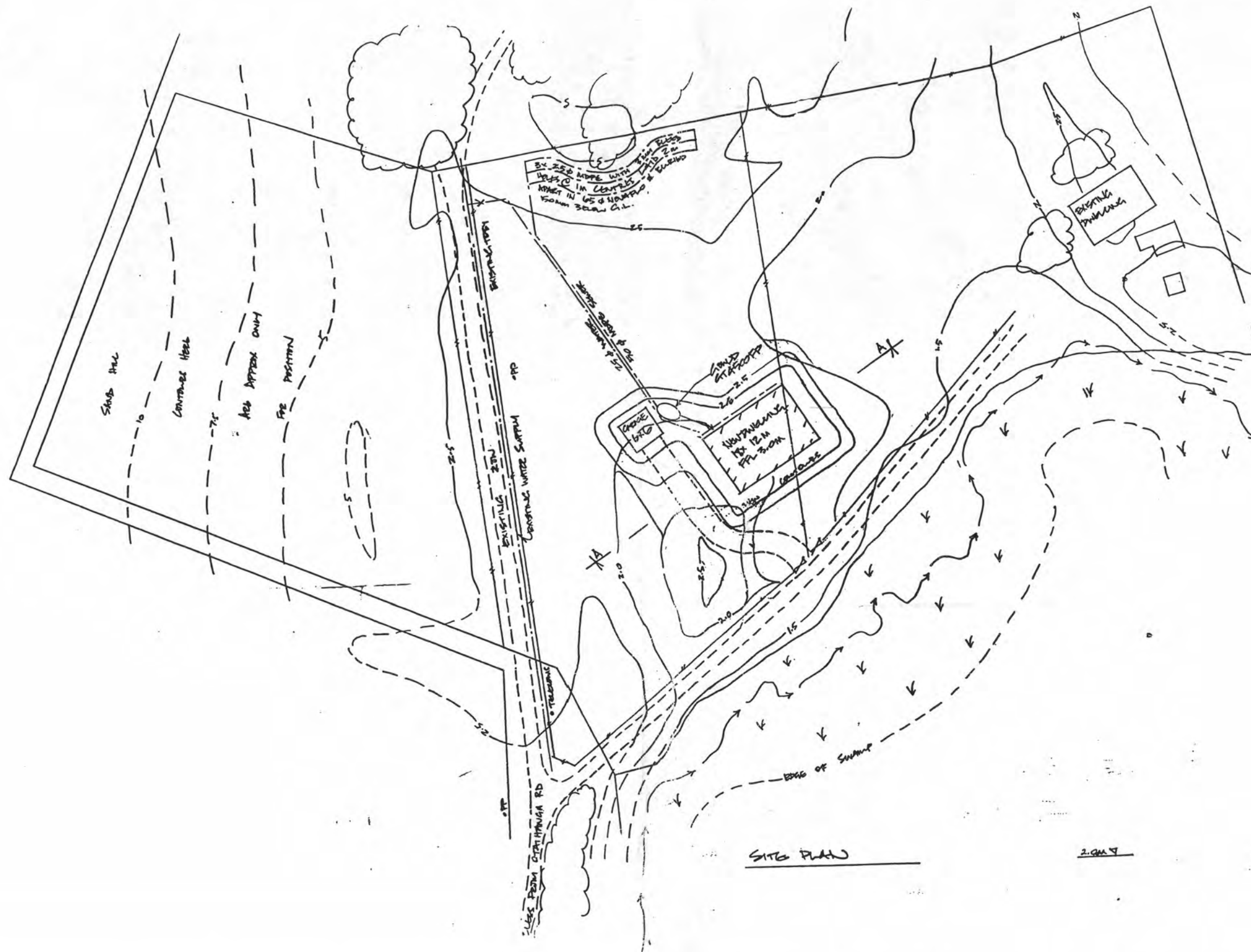
7
FREEPHONE 0800 253 273

• TEL: 64-6-353-6157 • FAX: 64-6-353-3020 • MOBILE: 021-505-198
• PO BOX 4196 • PALMERSTON NORTH
• EMAIL: gouldsystems@xtra.co.nz
• WEBSITE: <http://gouldgtsystems.nzmade.com>



TRENCH - TYPICAL X SECTION





REDUCED A3 COPY

PROPOSED NEW INITIAL HOME FOR
LEO AND KAY GOODMAN
2A OTAIHANGA ROAD
PARAPARAUMU
LOT 2 DP 56172 AND PART LOT 3 DP 56172

DATE 08 /03/ 2001

PLAN NUMBER

AMENDMENTS

APPROVED

DATE

BUILDING CONSENT NOTES

ADDRESS: _____

LEGAL DESCRIPTION: _____

Zone: Residential Zones.

NOTES _____

No Section 221

No LIM.

Rm 010061 - Earthworks for construction of building site
for dwelling and accessory building in
ponding area.

No Section 221

No Section 36

No CWP

No District Plan Features

Geoprocess - Within Horizontal Surface 50m AMSL

* Ponding on North eastern part of site - No flood levels given
No hazards. Regional Council

No Cultural Sites

No Designations

No ECo

No Fault-trace

No IWI

No change in footprint

Change in height OK.

Set well back from boundaries

Neighbours Written Approval:

•
•

Consulted Parties:

•
•
•

Approved/Approved with Conditions

Name: Jeff Harris Date: 6/04/06



Project Information Memorandum No. 060285P.

Building Project... Alteration to existing house.
2A OTAIHANGA RD, OTAIHANGA

FOR OFFICE USE ONLY

	FEES		PIM Fee	\$.....
	\$.....			
	\$.....		RECEIPT NO.	DATE
	\$.....			
	\$.....		INVOICE NO	DATE
	\$.....			
	\$.....		RECEIPT NO	DATE
SUBTOTAL	\$.....			
Less Deposit Paid	\$.....			
TOTAL	\$.....			
GST INCLUDED	\$.....			



Project Information Memorandum

Section 34, Building Act 2004

Application

Brynn McCauley & Joanne Welch
PO Box 757
Paraparaumu

No.	060285P
Issue date	21/04/06
Application date	27/03/06

Project

Description	Dwellings - Alterations & additions Being Stage 1 of an intended 1 Stages Recladd, repitching roof, moving kitchen, lining room downstairs
Intended Life	Indefinite, but not less than 50 years
Intended Use	Residential
Estimated Value	\$50,000
Location	2A Otaihanga Rd, Paraparaumu
Legal Description	LOT 2 DP 56172 & 1/2 SH IN LOT 3 DP 5617 2 BEING 6824 SQ METRES - SUBJ TO EASES O
Valuation No.	1527098800

This project information memorandum is confirmation that the proposed building work may be undertaken, subject to the provisions of the Building Act 2004, and any requirements of the building consent.

This project information memorandum includes:

- ☐ Information identifying special features of the land concerned
- ☐ Details of relevant utility systems
- ☐ Details of authorisations which have been granted

Signed for and on behalf of the Council:

Name:

Date:

21/4/06

Kapiti Coast District Council

Phone (04) 904 5700, Fax (04) 904 5830 175 Rimu Road, Private Bag 601, Paraparaumu. Website www.kapiticoast.govt.nz



PROJECT INFORMATION MEMORANDUM - BC 060285P

Application Details

Applicant Name :	Name Brynn McCaulley & Joanne Welch
Contact Address :	PO Box 757 Paraparaumu
Location :	2A Otaihanga Rd, Paraparaumu
Legal Description :	LOT 2 DP 56172 & 1/2
Proposal :	Recladd, repitching roof, moving kitchen,

Application Details

Use Permitted :	Permitted activity
Resource consent granted :	None listed
Designations on property :	None listed
Easements :	ROW, drainage, electricity, telecommunications
Site subject to inundation :	Ponding - but not at the proposed development
Relocatable zone :	N/A
Coastal building line restriction :	N/A
Minimum floor level (50 year event) :	Refer to Wellington Regional Council
Floor level (100 year event) :	Refer to Wellington Regional Council
Yard and height requirements :	Comply
Tree/building preservation :	None listed

Comments

Consent notices, covenants, and like listings registered on the title are the responsibility of the applicant. Search this property title for any impediments to this proposal.

Note: Within horizontal surface 50m AMSL of Areodrome

Note: Minimum floor levels must use Mean Sea Level Wellington Datum 1953. Certification that the floor level complies with the minimum floor level will be required from a registered surveyor prior to foundation inspection.

Special Features of the Land

Potential erosion :	Not known to be
Potential avulsion :	Not known to be
Potential subsidence :	Not known to be
Potential slippage :	Not known to be
Potential alluvion :	Not known to be
Potential inundation :	Ponding
Presence of hazardous contaminants :	Not known to be

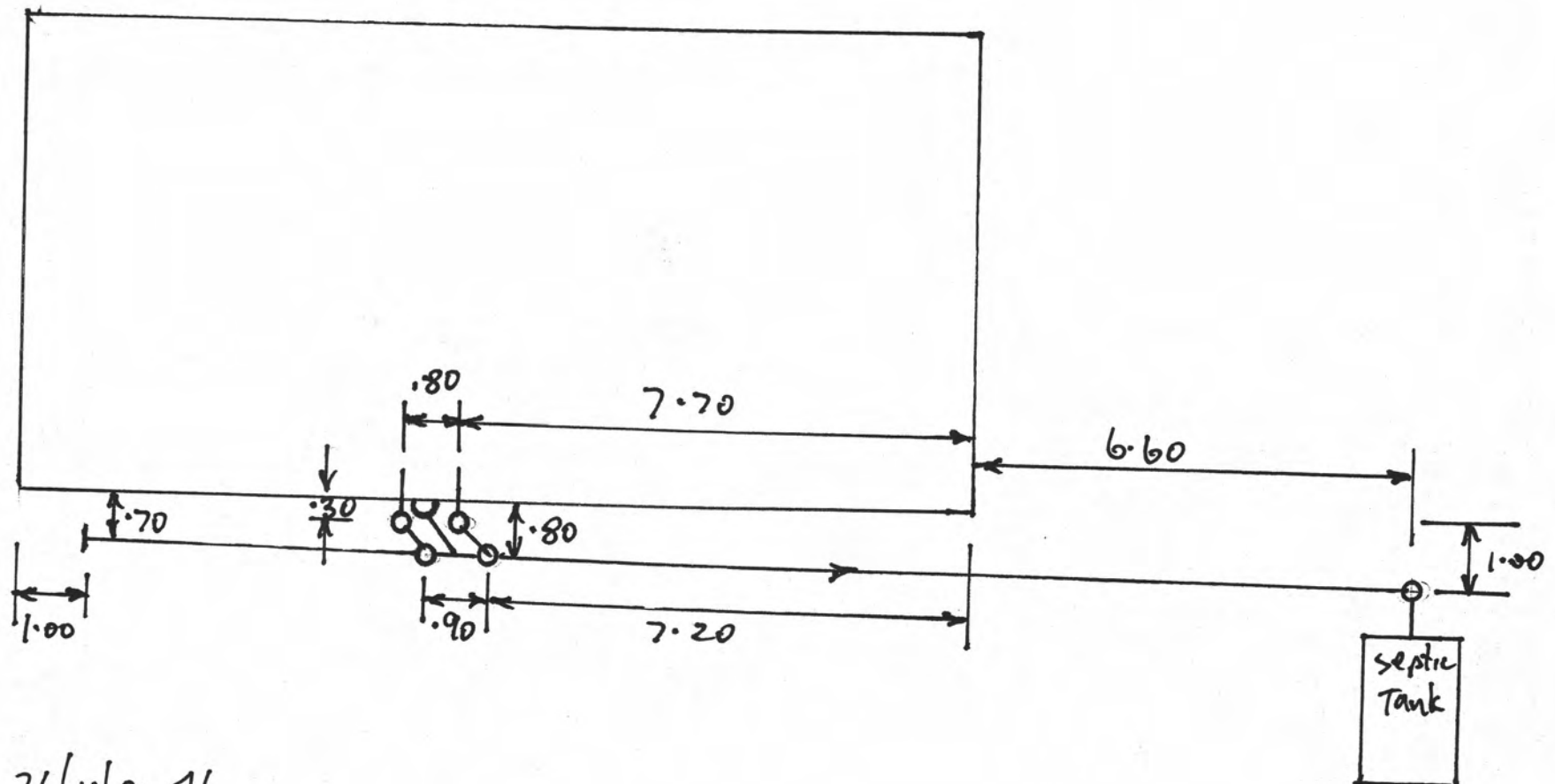
Other features

Plumbing and Drainage Details

Sewer available / connected :	Not available
Water available / connected :	Connected
Site plan of existing services :	Not supplied
Location of sewer lateral :	none
Location and size of water toby :	20mm
Location of public drains (if any) :	N/A
Location of easments (if any) :	see planners comments
Stormwater disposal to :	Soak pits

Plumbing and drainage notes

SCANNED



Pvc
TESTED 26/11/01 GH
R. RALPH D/L

2A OTAIHANGA RD

KAPITI COAST DISTRICT COUNCIL

APPLICATION FOR WATER SUPPLY AND CONNECTION PERMIT

The Borough Engineer
Private and
PARAPARAUMU



1. MRS GAYLE LODGE

PLEASE PRINT

(full name) Plumbing/Drainage Inspector (Postal address)

55 KEMPTON ST. KILBIRNIE, WELLINGTON

hereby apply for an "ORDINARY" service to be laid from the Kapiti Borough Water Supply to the premises owned by me at:

(PROPERTY Address in full if different from above) "DRAPOWATI" OTAHUANGA ROAD PARAPARAUMU

Lot 1-3 DP 56122 In 8 sq to road

Fees Payable (on application)

Inspection \$ 36 -
Connection \$ 135 -
Total \$ 171 -

Note: All dwelling units to pay full inspection fees.

The connection fee to be divided equally between dwelling units situated on the same lot sharing a common lateral.

A. Miller (in owner's name)
Owners Signature

26.3.91
Date

THIS PART TO BE COMPLETED BY PLUMBER

I, MICHAEL J. THOSMANIAN (full name)
of 12 Alexander Road, Paraparaumu (address)

being a Licensed Craftsman Plumber apply for permission to connect the above premises to the Kapiti Borough Water Supply. I agree to comply in every respect with the Kapiti Borough Water Supply By-laws. N.B. Connection NOT permitted until permit obtained.

M. J. Thosmanian
(Signature)

042723
(Craftsman Licence No.)

18-3-91
(Date)

- Existing Water Supply Retained To be retained/discontinued
- Pressure: high/low "Header Tank"/Pressure Reducing Valve
- B/W Cylinder Type Exhaust Pipe/Pressure Relief Valve
- Approximate Age of Water Piping Copper/PVC/Alkathene
- If premises have swimming pool what capacity As per plan Filter plant Yes/No
- State precisely how it is proposed to make the new connection:

As per K.C.D.C. plan

OFFICE USE ONLY

Permit No. 95	Job Inspected 9.4.91	Building Register Entry
Date Issued 9.4.91	Connection Recored April 1991	

APPLICATION FOR WATER SUPPLY AND CONNECTION PERMIT

The Borough Engineer
Private and
PARAPARAUMU

I, J. Goodman (full name)
PLEASE PRINT

hereby apply for an "ORDINARY" service to be laid from the Kapiti Borough Water Supply to the premises owned by me at:

(PROPERTY Address in full
if different from above)

2a Otahanga Rd

Lot

2

DP

56172

Fees Payable (on application)

Inspection

\$

Connection

\$

Total

\$

Note: All dwelling units to pay full inspection fees.

The connection fee to be divided equally between dwelling units situated on the same lot sharing a common lot

Owners Signature

Date

THIS PART TO BE COMPLETED BY PLUMBER

I, J (full name)

of (address)

being a Licensed Craftsman Plumber apply for permission to connect the above premises to the Kapiti Borough Water Supply. I agree to comply in every respect with the Kapiti Borough Water Supply By-Laws. Connection NOT permitted until permit obtained.

(Signature)

(Craftsman Licence No.)

(Date)

1. Existing Water Supply

To be retained/dismantled

2. Pressure: high/low

"Header Tank"/Pressure Reducing Valve

3. B/W Cylinder Type new cheap one existing?

Exhaust Pipe/Pressure Relief Valve

4. Approximate Age of Water Piping

Copper/PVC/Alkathene

5. If premises have swimming pool what capacity

Filter plant Yes/No

6. State precisely how it is proposed to make the new connection:

OFFICE USE ONLY

Permit No. <u>010272</u>	Job Inspected	Building Register Entry
Date Issued	Connection Recorded	

RECEIPT NO.	DATE
-------------	------

VALUATION ROLL NUMBER									
1	5								

LOT	D.P.
<u>2</u>	<u>56172</u>

NO. DWELLING	17-18	UNITS	14-15	UNITS
	AVAILABLE			
			19-20	UNITS

new cheap + one existing?

VALUATION ROLL NUMBER									
1	5								

WATER CONNECTION FEE

INSPECTION \$

CONNECTION \$



KAPITI COAST DISTRICT COUNCIL

Ref:

LAND INFORMATION MEMORANDUM

HOLLINGS PARTNERS
BARRISTERS & SOLICITORS
P O BOX 11
PARAPARAUMU

NO.: 940211
DATE OF ISSUE: 25/08/94

VALN NO: 1527098800
LOCATION: OTAIHANGA RD, PARAPARAUMU
LEGAL DESCRIPTION: LOT 2 DP56172 1/2 INT 6824 M2 BEING LOT
3 DP56172 CT 29B/843

CHARGES:

The Council's total charges paid on uplifting this Land Information Memorandum, in accordance with the attached details, are \$ 60.00.

RATES:

GOVERNMENT VALUATION	LAND	\$	80,000
	CAPITAL	\$	110,000
CURRENT RATES YEAR 1994 TO 1995			
ANNUAL RATES		\$	1,073.65
CURRENT INSTALMENT		\$	268.40
CURRENT YEAR - OUTSTANDING RATES		\$	96.95-
ARREARS FOR PREVIOUS YEARS		\$	0.00

PLANNING/RESOURCE MANAGEMENT:

PERMITTED USE RESIDENTIAL
NO RECORD OF EASEMENTS ON PROPERTY
NEW BUILDINGS WILL BE SUBJECT TO A MINIMUM FLOOR
LEVEL AS PART OF THIS PROPERTY IS SUBJECT TO
INUNDATION [dwellings must be above 50 year flood]

BUILDING:

01 NO RECORD OF ANY BUILDING PERMITS EVER BEING ISSUED

SEWERAGE & WATER:

NO SEWER AVAILABLE
PERMIT ISSUED FOR WATER CONNECTION 9/4/91
NO RECORD OF EXISTING SERVICES EASEMENTS OR PUBLIC
DRAINS ON PROPERTY

WATER CONNECTED

LAND REQUISITIONS:

No land requisitions located.

LAND & BUILDING CLASSIFICATIONS:

No land & building classifications located.

Ngarara Building, Rimu
Road. Private Bag 601,
Paraparaumu.
Telephone (04) 298-5139
Fax (04) 297-2563



KAPITI COAST DISTRICT COUNCIL

Ref:

LAND INFORMATION MEMORANDUM 940211 [Continued]

LAND TRANSPORT REQUIREMENTS:

No land transport requirements located.

NETWORK UTILITY OPERATORS:

CONTACT ELECTRA FOR POWER AVAILABILITY

CONTACT GAS CO FOR GAS AVAILABILITY

SPECIAL LAND FEATURES:

GROUND CONDITIONS IN THIS AREA ARE SUCH THAT ENGINEERS
DESIGN IS REQUIRED FOR ALL FOUNDATIONS TO ANY NEW
BUILDINGS

INUNDATION PART OF PROPERTY IS SUBJECT TO INUNDATION

WIND PROPERTY IS LOCATED WITHIN THE VERY HIGH WIND ZONE

NOTE:

1. The information set out in this summary is made available in good faith pursuant to the Local Government Official Information and Meetings Act 1987.
2. The information has been prepared from records held by Kapiti Coast District Council. The information is made available in reliance on Council's records. However, Council does not warrant that the information is correct and will not accept any liability for errors or omissions in its records or for errors or omissions in the presentation of information from those records, or for any cost damages or expenses incurred in consequence of errors or omissions or reliance on the information:
 - (a) Some categories of information are based on records supplied to Council by property owners or developers or tradesmen.
 - (b) In preparing the information, no inspections of the property have been undertaken.
 - (c) Where the information indicates the existence of some requisition or Council interest in the land, it is the responsibility of the person seeking the information to follow up.

For further explanation of any of the information supplied please contact the District Inspector extension 850.

SIGNED FOR AND ON BEHALF OF THE COUNCIL:

NAME: [Signature]

DATE: 25.8.94

Ngarara Building, Rimu

Road. Private Bag 601,

Paraparaumu. 25.8.94

Telephone (04) 298-5139

Fax (04) 297-2563

8 June 2001

Leo and Faith Goodman
C/- Hamish Wells
PO Box 188
OTAKI

Dear Mr & Mrs Goodman

RM010061: LAND USE CONSENT 2 OTAIHANGA ROAD FOR EARTHWORKS

We are pleased to enclose your Resource Consent for the above planning application.

As you will see from the Resource Consent there are a number of conditions that need to be complied with.

If you do not agree with the conditions of your consent you may object and have the matter considered by Hearing Commissioners. This is done by lodging a written objection in accordance with Section 357 of the Resource Management Act 1991. Please note that, if you do wish to object, you must advise the Resource Consents Manager within 15 working days from the date of receiving this consent.

The deposit for an objection is \$250 (including GST) plus an extra \$90 if Council's Subdivisional Engineer will be involved. Other staff time and costs will also be charged unless waived by the Hearing Commissioners. If an objection is upheld the deposit will be refunded in full; if upheld in part then half the deposit will be refunded.

Please note also that this consent will expire unless you give effect to the consent within 2 years (unless a longer period is specified in the consent conditions). Alternatively, you have until 3 months after the expiry of the consent to apply for an extension of the consent. Council may grant an extension if it is satisfied that the criteria set out in Section 125 of the Resource Management Act 1991 are met.

You are also advised that you will need to obtain all other necessary consents and permits, including those under the Building Act 1991, and comply with all relevant Council Bylaws.

Thank you for dealing with the Kapiti Coast District Council.

If you have any concerns or enquiries about the conditions please do not hesitate to contact the writer on (04) 9045 856.

Yours faithfully

A handwritten signature in black ink, appearing to read 'Dan Rodie', with a stylized, cursive script.

Dan Rodie
RESOURCE CONSENTS PLANNER

for

Chris Shaw
RESOURCE CONSENTS MANAGER



RESOURCE CONSENT NUMBER: RM 010061

That pursuant to section 105 of the Resource Management Act 1991, the Kapiti Coast District Council (hereinafter called "the Council") does hereby grant a Land use Resource Consent to:

FAITH AND LEO GOODMAN, 2 OTAIHANGA ROAD, PARAPARAUMU

to undertake earthworks to create a building site and access at 2 Otaihanga Road, Paraparaumu (Lots 2 & 3 DP 56172), as shown on the plans and as described within the information submitted with application No. RM 010061, subject to the following conditions:

1. The earthworks shall be completed as described in the application documents (RM 010061) and shown on the plans "Site works plan 1:500 Leo and Kay Goodman, New Home Otaihanga" accompanying the application and approved by Council and date stamped 7-06-01.
2. The consent holder shall enter into a deed of covenant to ensure that the property cannot be further subdivided until all existing dwellings and building platforms are at or above the Q100 flood level.

To ensure compliance with this condition a bond or cash deposit of \$750 is to be paid to Council prior to the building being constructed. The bond or cash deposit is to be refunded on receipt of a copy of the Certificate of Title confirming that the covenant has been registered.

3. The earthworked areas shall be landscaped within one month of the erection of the proposed dwelling. Landscaping shall consist of suitable native coastal species that will aid in the restoration and stabilisation of the dune located within this high wind environment.

Within one month of the release of this decision the applicant shall submit a planting plan to be approved by the Manager Resource Consents detailing the species, location and planting size of the landscaping proposed.

4. Encroachment onto adjacent land owned by others, is not permitted without having first obtained their written consent. This evidence shall be provided to Council prior to the commencement of any earthworks.
5. The removal of soil support from adjacent lots is not permitted.
6. Testing and certification of compaction/filling and the stability of batter slopes shall be carried out by a suitably qualified person experienced in soils engineering.
7. All batters shall be self-supporting. Sand batter slopes shall not be steeper than 1:3.
8. The natural drainage patterns shall be preserved and contravention of the Land

Drainage Act is not permitted.

9. Where the existing land or vegetative cover is disturbed, suitable ground cover is to be established immediately following earthworks and with a minimum of delay to ensure the wind erosion of soil, sand and other material does not become a nuisance.
10. The Subdivisional Engineer may require the immediate erection of suitable fabric fencing or other acceptable mitigation measures to provide protection for adjacent property owners from wind-blown sand, soil or other material (sarlun cloth or similar).
11. The payment of an engineering fee of \$90.00 (GST incl.) within one month of the date of this approval.
12. The Soils Engineer is to confirm in writing that all conditions of this consent have been met.
13. Council is to be advised of the intended suitably qualified person. If that person is not acceptable to Council, then Council shall have the right to require the applicant to employ the services of someone who is, at the applicant's cost.
14. Should a waahi tapu or other cultural site be unearthed during earthworks the operator and/or owner shall :-
 - (a) cease operations;
 - (b) inform local iwi (Te Ati Awa ki Whakarongotai,);
 - (c) inform the NZ Historic Place Trusty (NZHPT) and apply for an appropriate authority if required;
 - (d) take appropriate action, after discussion with the NZHPT, Council and iwi to remedy damage and/or restore the site.

Note : In accordance with the Historic Places Act 1993, where an archaeological site is present (or uncovered), an authority from the NZ Historic Place trust is required if the site is to be modified in any way.

Advice Note:

1. A copy of these consent conditions will be held on the building consent file for this property.

REASONS FOR DECISION:

Pursuant to Section 113 of the Resource Management Act 1991, the reasons for this non-notified discretionary activity consent decision are as follows:

1. There are considered to be little or no adverse effects relating to the proposal.
2. Granting of the consent will not contravene the Act's focus of sustainable management of natural and physical resource.

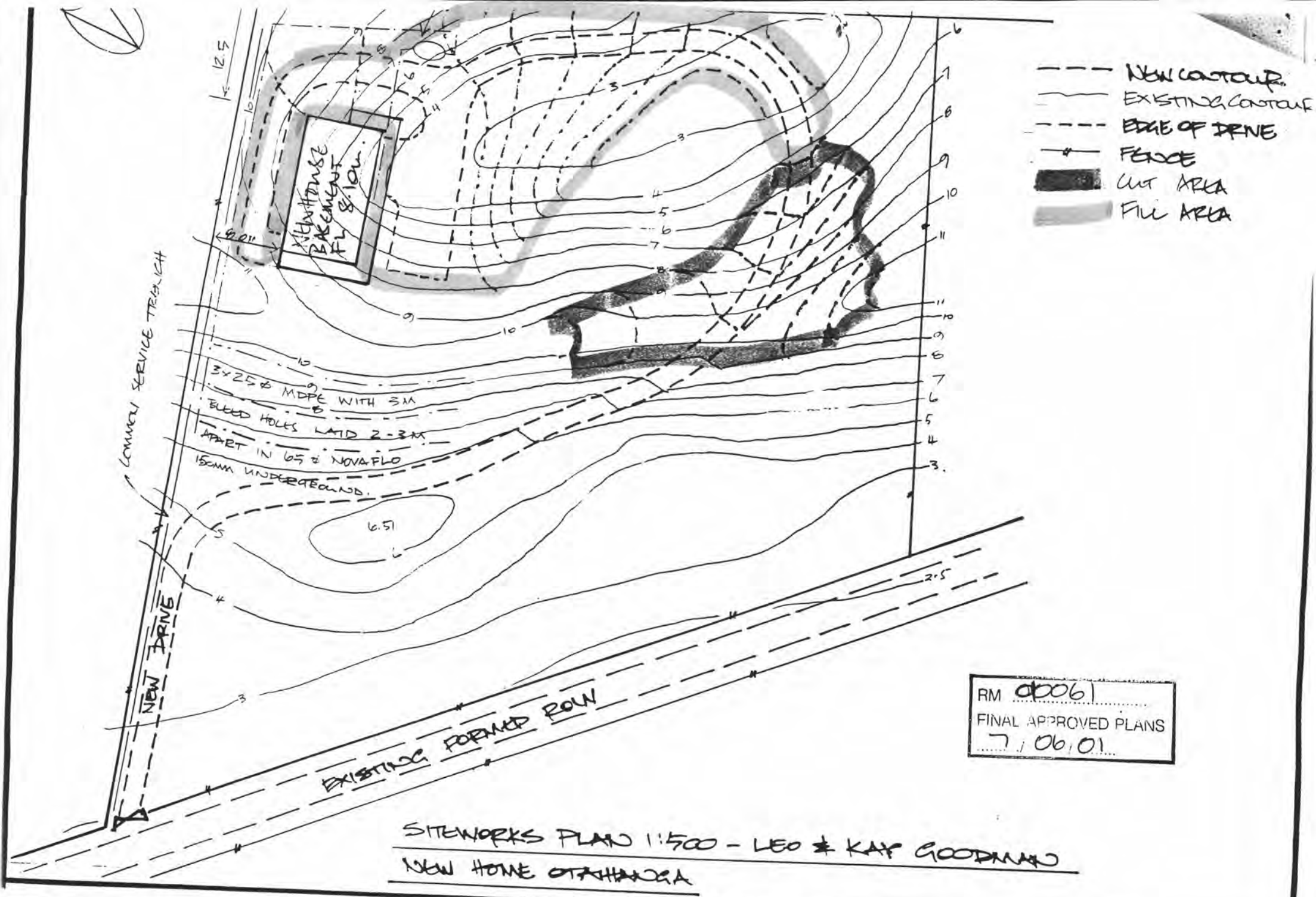
ISSUED: 7 June 2001

A handwritten signature in black ink, appearing to read 'Dan Rodie', with a stylized, cursive script.

**Dan Rodie
RESOURCE CONSENTS PLANNER**

for

**Christopher P Shaw
RESOURCE CONSENTS MANAGER**



- NEW CONTOUR
- EXISTING CONTOUR
- EDGE OF DRIVE
- + FENCE
- CUT AREA
- FILL AREA

RM 00061
 FINAL APPROVED PLANS
 7/06/01

SITEWORKS PLAN 1:500 - LEO & KAY GOODMAN
 NEW HOME OTTAWA

At 1.2m truss overhang position and for a maximum truss span of 7.2m (most critical load situation) the maximum net uplift at the truss connection

$$= \frac{(7.2 + 1.2) \times 1.2 \times 0.986}{2}$$

= 5.68KN which is adequately resisted by the 2 Pryda Multigrip connection (8.48KN).

Check top plate connection to top board at 1.200m eaves overhang. Refer Standard Initial details IC11 and ID2.

Worst case for a single truss, restrained against uplift by -

- 4/100mm x 3.75mm ϕ nails through top plate
- Three 46 x 46 battens each with 4/75mm x 3.15mm ϕ side nails into the top two boards (minimum nailing critical, rather than 4N5 nail plates).
- One M10 galvanised coach screw

Per truss

$$a) \text{ Holding power } 4 \times 0.8 \times 10.35 \times 33 \times 10^{-3} = 1.093 \text{ KN}$$

$$b) \text{ Holding power } 4 \times 0.8 \times 0.631 \times 3 = 6.057 \text{ KN}$$

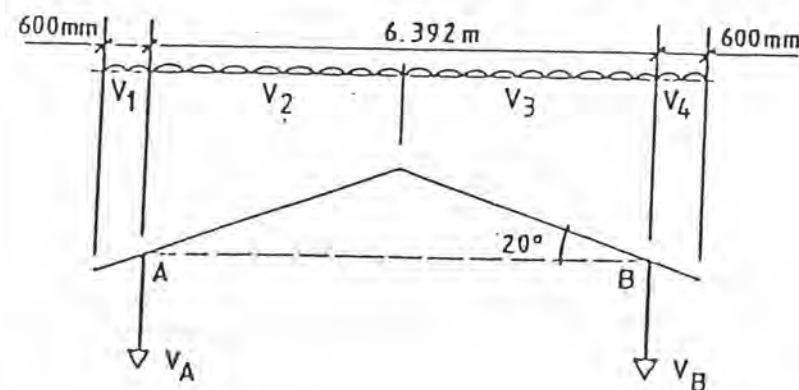
$$c) \text{ Holding power } 0.8 \times 83 \times 0.107 = 7.10 \text{ KN}$$

$$\text{Total} = 14.25 \text{ KN}$$

which is adequate (5.68 KN required for worst case).

4. Truss Fixing at 600mm Overhang

Check Uplift of Truss at A (600 overhang) by Taking Moments about B



V_1, V_2, V_3 , and V_4 as before

$$V_A \times 6.392 = V_1 \times 0.6 \times (6.392 + 0.3) + V_2 \times 3.196 \times 4.794 + V_3 \times 3.196 \times 1.598 \text{ (neglect } V_4)$$

$$V_A \times 6.392 = 1.272 \times 0.6 \times 6.692 + 0.338 \times 3.196 \times 4.794 + 0.597 \times 3.196 \times 1.598$$

$$= 5.107 + 5.179 + 3.049 = 13.335$$

$$V_A = 2.086 \text{ KN per metre}$$

$$= 2.086 \times 1.2 = 2.503 \text{ KN per truss at 1.2m c/c.}$$

Use one Pryda Multigrip plus one Pryda Z nail. Refer Initial Standard Detail ID-1

Allowable design strength of one Pryda Multigrip and one Pryda Z nail, truss connection onto wall framing. Refer Initial Standard Detail ID-1.

Design Strength = ϕQ_n

$$= 0.8 \times 5.3 + 0.8 \times 2.2 \text{ KN per truss connection}$$

$$= 6.00 \text{ KN per truss connection which is adequate}$$

Check uplift condition, roof truss connections with wind parallel to ridge -

From NZS 4203 (1992) Cpe maximum = -0.9

$$\text{Maximum nett uplift} = 0.9 \times 1.297 - 0.9 \times 0.201$$

$$= 0.986 \text{ KPa nett uplift}$$

At 600mm truss overhang position and for a maximum truss span of 7.2m the maximum nett uplift at the truss connection

$$= \frac{(7.2 + 0.6) \times 1.2 \times 0.986}{2}$$

$$= 4.97 \text{ KN which is adequately resisted by the Pryda Multigrip plus Z nail connection (6.00 KN).}$$

Check top plate connection to top board for 600mm truss overhang situation. Refer Initial Standard Details IC-11 and ID-1.

Worst case for a single truss, restrained against uplift by -

(a) 4/100mm x 3.75mm ϕ nails through top plate

(b) Three 46 x 46 battens with Pryda 4N5 Knuckle nail plates onto top plate

Trusses

* Extra to std components
supplied by La Grouw
Corporation Ltd

Truss Fixing

One Pryda Multigrip, plus
one Z nail, and two
* 100mmx3.75mm $\emptyset$ FH nails
through truss rafter
into truss plate.

Nailplate

Z nail

* 4 nails min.
into side of
truss rafter

* 2 nails min.
top truss plate

* 2/100x3.75 $\emptyset$
FH nails,skewed

Ex 100x50
Truss plate

* 4 nails min.
side truss plate

44mm
wall

Nailplate

Ex 50x50 batten

La Grouw Corporation Ltd, Private Bag R03034, Rotorua, New Zealand. Ph (07) 3477691, Fax (07) 3477614

Fixing of truss to
top plate (600 overhang)

REVISIONS:	Drawn	SHEET
	Oliver	
	Date	
	20/11/00	
APPROVED:	Scale	
	1:2	

ID-1

Amd 1
Dec '00

Table 10.12 – Fixing types of roof trusses at supports (see 10.2.2.6)

Truss spacing (mm)	Fixing type											
	Light roofs								Heavy roofs			
	900				1200				900			
Wind zone	L	M	H	VH	L	M	H	VH	L	M	H	VH
Loaded dimension of support (m)												
3.0	C	C	C	D	C	B	C	D	A	A	C	C
3.5	C	C	C	D	C	C	D	E	A	A	C	C
4.0	C	C	C	D	C	C	D	E	A	C	C	C
4.5	C	C	D	E	C	C	D	F	A	C	C	D
5.0	C	C	D	E	C	C	E	F	A	C	C	D
5.5	C	C	D	E	C	C	E	F	A	C	C	D
6.0	C	C	D	F	C	D	E	F	A	C	C	D

Amd 1
Dec '00

Table 10.13 – Key to fixing types and capacity for rafters, roof trusses, underpurlins, ridge beams and strutting beams (see 10.2.2.6)

Fixing type	Fixing to resist uplift	Alternative fixing capacity
		(kN)
A	2/100 x 3.75 skewed nails	0.7
B	2/100 x 3.75 skewed nails + 1 wire dog	2.7
C	2/100 x 3.75 skewed nails + 2 wire dogs	4.7
D	2/100 x 3.75 skewed nails + 3 wire dogs	6.7
E	2/100 x 3.75 skewed nails + 4 wire dogs	8.7
F	2/100 x 3.75 skewed nails + U strap of 27 mm x 1.2 mm 10/30 x 3.15 nails at each end	16.0

SPECIFICATION

2a Otaihanga Rd Otaihanga

SPEC FOR REVISIONS TO BC. 10127Z.
MARCH 2006.

CONTENTS

PREFIX	SECTION	NO. OF PAGES
P	Preliminary and General	9
D	Demolition	1
M	Metalwork	2
C	Carpentry	9
R	Roofing	3
PL	Plumber	6

Appendix 1

Engineers dwg re footing for veranda posts
Risk matrix for reclad of house

PRELIMINARY AND GENERAL (P)

P.1 SITE

2a Otaihanga Road Otaihanga

P.2 OWNER

Welch McCauley House

P.3 LOCAL AUTHORITY

Kapiti Coast District Council

P.4 SITE AND ACCESS

The Contractor and all sub-contractors shall visit the site and acquaint themselves with the means of access, the nature of existing services and all existing conditions which may affect their work. No allowance will be made for any work which would have been foreseen following proper inspection.

Confine works to the area of site indicated on drawings.

P.5 BY-LAWS

All work shall comply with the New Zealand Building Act. The whole of the work comprised in this contract shall be completed in accordance with NZS Model Building By-Law and to the satisfaction of the Local Authority Engineer and Inspectors.

Wherever the letters NZS occur in the specification, they shall be taken to mean New Zealand Standard as issued by the Standards Association of New Zealand. Relevant Electrical, Plumbing, Drainage and Gasfitting Regulations are to be complied with in their entirety.

P.6 AMBIGUITIES

Should any ambiguities or contradictions appear to exist in the drawings and specifications, the contractor shall report to the Architect prior to submitting his tender. Failing this, should any ambiguities appear to exist, the tenderer shall allow for that method or materials which, in his opinion, will involve the greater costs. Figured dimensions on the drawings shall be taken in preference to scaled dimensions. All dimensions must be checked on site throughout the course of construction by all workmen before carrying out work on site or fabricating items off site. The words "supply" and "install" shall mean "supply and install" unless otherwise clearly stated. It is expected that the tender is based on the information in the full set of documents and that all subcontractors are provided with all the documentation required i.e as an example a joiner is expected to have read the specification, all joinery drawings, schedules, overall plans, elevations and details. It is the responsibility of the main contractor to notify the Architect should any ambiguity appear between documentation at time of tender. **If in doubt, check with Architect.**

P.7 WORK INVOLVED

The contract comprises the erection and completion of the works in accordance with present day good trade practice, and the supply of all plant, tools and materials and fulfilment of any guarantees explicitly demanded by the specification.

P.8 LOCAL BODY FEES AND CHARGES

Give all usual notice to the Local Authorities and arrange for the connection, inspection and testing of gas, electrical, plumbing and drainage work by the Authorities Inspectors.

The contractor will pay directly to the Local Authorities any fees in connection with the inspecting and testing of work, and any charges for connection to the Local Authority services. The owner will uplift and pay for the Building Permit.

Any deposits or charges in connection with roads, temporary connections, etc. to any Local Authorities services shall be paid for by the contractor. Charges for the use of electricity or water in connection with the construction of the building shall be paid for by the owner.

P.9 DOCUMENTS

- Drawings A0-A7

P.10 CONDITIONS OF CONTRACT

The conditions of Contract shall be as set out in the NZIA National Building contract general works NBC-G1 1998 and shall apply to all trades. A copy is available on request for inspection.

P.11 DOCUMENTS

The specification is to be read in conjunction with the full set of drawings and documentation prepared for this contract. Any item contained in the specification and not, shown in the drawings or vice versa, shall be equally binding as though included in both.

P.12 DRAWINGS AND SPECIFICATIONS

The following sets of the specification and drawings available free of charge:

For tendering	one set.
For construction	one set.

Further prints may be obtained from the Architect at a cost of \$2.50 + GST per print.

The specification is divided into various sections for convenience and reference only. Whilst reasonable care has been taken to classify by trades, no claims will be admitted in respect of work not specifically mentioned in a particular section but which is provided for, expressed or implied, elsewhere in the specification or the drawings. It shall not be construed that each section is a separate contract.

All sections are to be read in conjunction with the Preliminary and General Section.

P.13 ACCURACY OF DOCUMENTS

These documents are as accurate as existing drawings and partial on site measurements allow, and the contractor shall check all existing work before beginning adjacent and affected new work. The contractor must verify all site boundaries, levels, existing building dimensions and levels on site prior to commencing work.

P.14 EXISTING SERVICES

The information concerning existing services indicated on the drawings is supplied in good faith to indicate to the contractor the services which are likely to be encountered. However, no warranty is expressed or implied, that the information given presents a complete and accurate picture of all services on, and adjacent to, the site.

It shall be the contractor's responsibility to ascertain the existence of all underground services and to protect these services from damage.

P.15 SITE SERVICES

Power, water, toilet and telephone services available on site.

P.16 CONTINGENCY SUM

Allow the sum of 5% of the contract sum as a contingency sum. This sum is to be used for contingent items of work which may arise, only on certification of the Architect. The whole, or any unexpected, portion of this sum not so expended, shall be deducted from the contract price on completion.

P.17 SCOPE OF WORKS

The work consists the amendment to the existing building (bc 101272) consent, recladding and repitching the roof, lining the downstairs lounge area and relocating the kitchen.

P.18 INSURANCE

P.18.1 Public Liability Insurance and Motor Vehicle Public Liability Insurance:

Public Liability Insurance and Motor Vehicle Public Liability Insurance shall be effected by the contractor for the amounts stated in the Specific Conditions. The Policies shall:

- a. Indemnify the employer and the contractor and his sub-contractors jointly and independently to the effect that each are separately insured.
- b. Be extended so that liability in respect of the following shall not be exceptions to the Indemnity:
 - i. Fire and explosion from any cause whatsoever.
 - ii. Materials, goods and/or services supplied, constructed, repaired, altered, renovated, serviced, or installed in the Works.
 - iii. Damage to any property, land or building caused by, or in connection with or arising from, vibration or by the removal or weakening of, or interference with, support.
 - iv. Liability to persons or for property arising from ownership or use of any form of mobile plant, equipment, vehicle or lifting device of any description.
 - v. Responsibility for loss or damage to property of any description in the care, custody or control of the contractor.

- vi. Liability accepted and, to the account of, the contractor under the terms of this contract and/or any other agreement entered into by the contractor for the performance of this contract.
- vii. Liability arising from the contractor's design, workmanship or materials supplied for the works.
- viii. Allow for any further insurance protection necessary over and above the principal insurances to completely indemnify the employer against any claims whatsoever relating to this contract.

P.18.2 Insurance Value of Works:

For insurance purposes, "the fully insurable value of the works" shall be the sum of the original contract sum plus the amount of + GST for professional fees. The employer shall keep the premises and the contract works insured against loss or damage by fire and other usual risks, to their full insurable value, at all times until completion.

P.18.3 Additional Insurance:

The contractor shall comply with Statutory Insurance requirements including the Accident Compensation Act 1972 and its amendments. The contractor shall provide additional insurance for:

- Erection and dismantling risks of plant and machinery.
- Goods in Transit Cover for loss or damage to materials destined for incorporation in the contract works whilst in transit within New Zealand to or from the contract site.

P.18.4 Period of Insurance and Evidence of Insurance:

Period of insurance shall be as per General Conditions of Contract. Before work starts on site, the contractor shall furnish the Architect with a certificate from his insurance company(ies) that the insurance requirements of the contract have been complied with.

P.19 TRADE SEQUENCE

Each trade shall, before proceeding with any work, inspect the work for any other trade against which the material or work is to be placed and report immediately to the contractor any defects or irregularities in the work which would prevent the satisfactory execution of performance of their work. Work shall not proceed until all defective preparatory work has been corrected.

P.20 MAIN CONTRACTORS' RESPONSIBILITIES

The main contractor is required to draw the attention of his Sub-contractors to all matters, specified under Preliminary and General, affecting their section of the work.

He shall attend on, and render reasonable assistance to, all sub-contractors employed on the work.

He shall be responsible to the Architect for all matters regarding the contract documents, methods of construction, all variations and extras to the work, and any other matters relating to the work.

He shall be responsible for and ensure all practicable steps are taken to make sure the site and contract works are safe for any persons on or in the general vicinity of the site and contract works and that all works are carried out in accordance with all Department of Occupational Safety and Health Standards.

P.21 SCAFFOLDING

The main contractor is required to provide the necessary scaffolding, lifting equipment and protective measures required by the sub-contractors, to the satisfaction of the Scaffolding Inspector and in accordance with the Construction Act 1959 and its amendments.

P.22 SPECIALIST PRODUCTS

The insertion of the name of any firm or proprietary article in this specification is to be read merely as an indication of the class or quality required, such goods may be obtained from any other firm subject to the approval of the Architect.

P.23 PROTECTION OF PROPERTY

All contractors shall take precautions to protect all property and, make good at their own expense, any damage caused by and during their operations. The contractor shall take all care not to damage any planting. The owner shall be advised of any trees which require pruning to allow the building operations to proceed.

All operations must be suspended during weather which would affect the quality of work in progress.

All materials and work in progress and completed must be protected from the weather, all fittings and surface finishes from dirt, plaster, damage and moisture for the period of the Contract. In the event of such damage, the contractor shall make good, to the satisfaction of the Architect at his own expense.

P.24 PROGRESS CLAIMS

To be discussed to further detail before contract is arranged. Progress claims shall be made monthly and shall be the value of the work done and of the materials on the site to date less retentions and previous progress claims. Certified claims shall be paid within seven (7) days of certification.

P.25 RETENTIONS

Retention on progress claims of 10% shall apply. A maintenance retention of 2.5% shall apply.

P.26 COMPLETION

On completion of the contract, the contractor shall clean up all shavings, sawdust, etc. check all spouting and downpipes are clear, clean all windows inside and out and leave the building ready for occupation, and the site clean and tidy.

P.27 GUARANTEES

The contractor is to obtain all necessary guarantees and hand them to the owners on completion of the Contract. The guarantees required are:

Roof & Side Cladding 20 (twenty) years

P.28 MAINTENANCE

All sub-contractors and the main contractor carrying out their work on this contract, shall maintain their section of the work for a period of sixty (60) days after practical completion and, any damage arising during that period through faulty workmanship or materials, shall be made good at the sub-contractors or contractor's expense.

P.29 GENERAL CLAUSES

The whole of the foregoing preliminary clauses shall be read in conjunction with, and shall apply to each and every trade section of the contract, to their full extent and meaning.

P.30 VARIATIONS

The contractor shall not be bound to perform any variations to the works not altered in writing by the Architect. Equally no claims for additional costs in performing a variation or site instruction shall be accepted if a variation in cost has not been presented by the contractor and approved in writing, prior to the variation or site instruction being performed. **It is understood that if no written variation in cost is presented by the contractor for approval and the variation or site instruction is performed that there is no additional cost to the contract.** The contractor shall not perform any such variations without prior written consent of the Architect. Variations that can be performed separately and impede work flow, shall not be begun until the contract is completely finished.

P.31 NETT SUMS

N/A

P.32 WEATHER PROOFING

The contractor is to ensure that the interior of the building is to be protected from the weather at all times, regardless of the work undertaken, and he is responsible for the rectification of any damage resulting from weather penetration for the duration of the contract.

P.33 PERFORMANCE

Tenderers are to submit, with their quotation, a programme for commencement, execution and completion of the work. This programme is part of this contract and the Architect has the right to dismiss the contract for unsatisfactory performance adjudged against the programme.

P.34 TENDER BREAKDOWN

Upon request, tenderers are to supply to the Architect a full trade breakdown of all sub-contractors' prices. This is to be in the form requested by the Architect and is to be used as a base for all payments.

P.35 TENDERS

No claim for alleged misunderstanding of requirements will be accepted. It shall be understood that the submission of a tender establishes the tenderer's comprehension of all details contained in the full contract documents and his agreement to all conditions and details indicated or implied by the contract documents.

P.36 CLIENT SUPPLY ITEMS TBA

Contractor to supply and install all other items as shown in the complete set of documents

P.37 P.C. SUMS

No P.C. sums to be used.

P.38 NOMINATED SUB-CONTRACTORS N/A

P.39 EMPLOYER PERFORMED TASKS N/A

DEMOLITION (D)

D.1 SPECIFIC SCOPE OF WORKS

Demolition as shown on plan. Terminate all services in wall and ceiling spaces.

D.2 WORKMANSHIP

All demolition to be such as to create minimum disturbances and nuisance. Burning of materials arising from demolition will not be permitted.

No damage shall be done to any property beyond the scope of the demolition, including all walls, which are to remain. Protect all shrubs and trees from damage.

The contractor shall protect existing property by whatever means he deems fit, to prevent the entry of the elements or intruders. He shall ensure stability and support of the existing buildings at all times, until it is supported by the completed works.

Any damage due to the failure to provide adequate protection shall be made good at the contractor's expense.

Take particular care to protect all materials and fittings etc. which are to be re-used in the proposed work.

D.3 CO-OPERATION

Allow to co-operate with all other contractors and sub-contractors on site.

D.4 SALVAGE

Arrange with client an area to be set aside for demolition materials that are indicated on plan for reuse or to be sold by client.

D.5 SITE

Leave site clear of all rubble arising from demolition.

METALWORK (M)

M.1 PRELIMINARY

Refer also to the General Conditions and Preliminary clauses which shall apply to this section.

Refer also to the engineers specification on structural steel

M.2 SCOPE

The work of this section comprises the fabrication, supply, surface treatment, delivery and erection of all metalwork and related items necessary to complete the work as indicated on the drawings and/or as specified under.

M.3 GENERAL

Provide all metalwork as specified and/or indicated in the drawings. All metalwork shall comply with relevant New Zealand or British Standards.

Provide all straps, bolts, nuts, washers and other miscellaneous metalwork necessary in conjunction with the building and as may be required for all fixings and fittings mentioned throughout this specification or shown on the drawings. All materials shall be the best of their several kinds, free from all defects. Note that all exposed metalwork is to be thoroughly cleaned before the application of finishing paint, etc.

M.4 WORKMANSHIP

All metalwork shall be fabricated by thoroughly experienced and competent tradesmen, in such a manner as to provide a first class finish, free from all defects.

Avoid bimetallic contact of dissimilar metals to prevent electrolytic corrosion. Check all dimensions on site.

M.5 BOLTS, NUTS, WASHERS

All bolts shall have hexagon heads and nuts and must be of such length that the nut is fully engaged when screwed up in the work, with no less than two threads outstanding.

Washers, tapered where necessary, and not less than 3mm thick are to be used at all important connections. Bolts, etc. shall be of the lengths and diameters shown on the drawings or specified. Washers under nuts, or heads contacting timber, shall be three times that of the bolt in diameter. Where nuts are not embedded in concrete, they shall be secured by adequate riveting over the bolt ends or by approved spring washers.

All bolts not specifically detailed or specified shall be adequate strength and length to satisfactorily perform their function, all exterior fixings non corrosive.

All to be in accordance with NZS3604 1999 Durability requirements specific to local zoning

M.6 BRACKETS, CLEATS, ETC.

Fabricate and supply contractor with all sundry brackets, cleats, angles as required and as detailed. Do not distort metal work when tightening fastenings.

Refer to NZS3604 1999 for Durability Requirements for all clients and fastenings in accordance with Durability zone of this site as per NZS3604 1999

M.7 WELDING

Welding shall be according to the standard specified by engineer. Do not weld or braze on site without approval.

M.8 PRIMING

Where noted to be primed only, system shall be one of the systems specified by engineer.

M.9 DURABILITY REQUIREMENTS OF FIXINGS AND FASTENINGS

All metal brackets and fixings and fasteners are to be in accordance with requirements of NZS3604 1999 Durability requirements for this sites zone.

M.10 STAIRS

N/A

M.11 CO-OPERATION

Allow to co-operate with all other contractors and sub-contractors on site.

CARPENTRY (C)

C.1 PRELIMINARY

Refer to the Preliminary and General clauses for items affecting this trade section.

C.2 SCOPE OF WORKS

The carpenter is to organise supply and installation of all joinery.

This section includes the measuring, ordering, receiving, stacking and storage of all carpenter's materials and the fabrication, erection and fixing of all framing, lining, finishing and installation of joinery timbers and all temporary work and temporary bracing, and supply and erection and fixing of all steelwork.

The carpenter shall attend upon all trades, he shall co-ordinate their work and determine their timing sequence of operations. He shall supply them with all required drawings and details, and provide dimensions of parts and services.

He shall co-operate fully with and liaise with other sub-contractors. Liaise for building in of electrical boxes. Assist plumber with openings for pipes and dwangs for fixing.

He shall supply and fix all obviously necessary, but not specifically mentioned, fixings and materials.

He shall supply all carpenters and labourers' tools, plant and equipment necessary for the work.

C.3 WORKMANSHIP

All work shall be carried out by, or under the supervision of, competent and experienced tradesmen, in accordance with the best trade practices and to the requirements of all local By-laws and NZS:3604:1992 and the Building Act 1993.

All timber shall be strongly nailed, plates halved or connected with nail plates at joints. Galvanised metal braces and concealed nail plates may be use. All finishing timber exposed to sight, shall be machine dressed and sanded to remove all machine marks and defects. Punch and putty all nail holes with putty matching timber colour. Timber which is split or hammer marked shall be removed. (Leave nails to exterior cladding unpunched, if cedar clad).

The cutting, boring or checking of framing timber for pipes etc. shall be reduced to a minimum.

When nailing to existing framing timber, holes to be drilled first.

Refer the cutting of structural members to Architect if in doubt as to location and size.

Framing timbers exposed internally shall be machine sanded. All exposed timbers shall be finished and coated before fixing and all inside work shall be hand dressed and glass papered to a smooth surface.

C.4 TIMBER

All timber used shall be the best of the kinds and quality shown and specified, straight and of reasonable lengths. Any variations must have the written approval of the Architect before ordering.

Timber shall comply with the following New Zealand Standards:

- NZS:632 Kiln drying of timber.
- NZS:3601 Metric dimensions of sawn timber.
- NZS:3602 Timber and wood based products for use in buildings.
- NZS:3604 Light timber frame buildings.
- NZS:3631 Classification and grading of NZ Building timbers.

Timber shall be fillet stacked immediately on arrival on the site. Joinery and all other timbers shall be protected from the weather and from damage during the duration of the contract.

Timber will be treated to NZTPA specifications suitable for the situation of use. Any timber incorrectly placed shall be removed and replaced at the contractor's expense.

Timber framing to be exposed will be selected to be free of all defects that would prevent a good dressed surface being obtained.

Protect all timber that would otherwise be in contact with concrete, block or brickwork with a 3-ply Malthoid DPC.

Carpenter is responsible for ensuring all joinery, finishing timber, architraves, skirtings and exposed timber floor boards to have a protective sandable sealer coat before installation. Strip flooring is not to be laid before building is weathertight. Continuously support all joints and edges. Fix according to manufacturer's instructions. Protect flooring throughout contract.

Note: All timber to be tested, pre-installation for moisture content.
All framing timber should be under 20%.
All finishing timber should be under 12-15%.

C.5 FIXINGS

Fix members to resist all forces, refer to NZS:3604. Use flat head nails in timbers except where exposed.

Use nails three times longer than thickness of attached material with minimum length of 20mm. Use galvanised nails in exterior painted framing etc. and where in contact with plasterboard, waterpaints, etc., as recommended by manufacturers.

Provide sundry nail plates and trip-1-grip fasteners galvanised.

Laps, corners, and control joints to be fixed strictly in accordance with manufacturer's instructions.

Note: Where re-cladding over existing framework, all fixing holes to be drilled. For durability requirements refer Durability Requirements for this sites Zone as per NZS3604.

C.6 SCREWING GENERALLY

To all exterior work, screws shall be galvanised, brass or stainless steel as per durability requirements of NZS3604

Generally screws shall be countersunk. Centres of screws as required for a strong, firm finish and to avoid warping and movement. Generally drill attached member for sliding fit of screw and drill holding member of suitable diameter to produce a firm fixing.

C.7 BOLTING

Unless detailed or specified otherwise, generally secure all framing timber to concrete or masonry by galvanised bolting at 900crs with M12 bolts.

Refer NZS3604 for metal fastening durability requirements for the sites Durability Zone as set out in NZS3604 1999

C.8 SEALANTS

Generally Silaflex MS or approved paintable silicone sealant. All exposed fillets kept as fine as possible and finished to neat, even line.

Note: No sealants to be used instead of flashings on exterior joinery. Flash heads, sill and jambs of all joinery.

C.9 STRAPPING

Strapping as scheduled shall be non-corrosive ramset fixed to concrete surfaces. Refer services to ensure thickness is adequate to cover pipe-runs, joints etc.

C.10 Building wrap and roofing underlay

Line exterior of all additions with gib framegard 2 building wrap, lap minimum of 100mm all fixed to manufacturer's instructions and recommendations. .Replace all torn or damaged paper to approval. Use heavy duty AHI flame stop building paper under roofing over netting.

C.11 MATERIALS

Note: All joinery must be No. 1 grade.

Location	Species	Grade
Exterior timber deck joists and cladding cavity battens		Pinus Rad H3.2
Barges, fascias, soffits and finishing timbers	Pinus Radiata	H3.2
Subfloor framing	Pinus Radiata	H3.2 joists & H4 bearers refer drawings
Piles	Pinus Radiata	H5
Rafters and house joists rafters etc.	Pinus Radiata	H3.1
Wall linings (interior)	10mm Gibraltar Board	
Ceiling linings	13mm Gibraltar Board/ 10mm Ultraline	
exterior claddings	H3. pine texture 2000 ply 12mm , hardiflex cement sheet	

C.12 SUBFLOOR FRAMING

All metal connections must be in accordance with NZS3604 Durability requirements. Where hot dipped galvanised, protect to all external surfaces with calcium plumbate or zinc chromate paint.

C.13 FLOOR FRAMING

Joist sizes and spacings as shown on drawings, with full depth blocking. Allow adequate joists for particle board flooring to be laid after a weathertight shell is completed and for door sills to be fully supported.

Provide double joists under load bearing partitions in accordance with NZS:3604, and as necessary for solid bearing.

C.14 WALL AND PARTITION FRAMING

Lintels as shown on drawings and NZS:3604. Allow double stud for support of roof beams and of all openings in exterior walls.

Build all framing straight, true, rigid and securely jointed. Walls shall be straight and ceiling surfaced planed. Wavy, uneven surfaces shall be corrected at the contractor's expense.

Note: All curved walls are to have sheets fixed horizontally with studs at 300 centres maximum set out to ensure that there is no faceting.

C.15 ROOF AND CEILING FRAMING

Rafter size and spacing are to be in accordance with NZS 3604, birdsmouthed over top plates and roof beams and securely fixed. Cut accurately to ensure close contact at fixing points with edges in an even plane.

Ensure the rafter sizes are in accordance with local wind zone loading in accordance with NZS3604 1999.

C.16 SHEET FLOORING

Store and nail in accordance with manufacturer's limits. Nails to be punched. Lay sheets in staggered pattern. Allow gap between material and masonry. Particle board to be laid and sanded ready for coverings. Prelaid sheets should not be exposed to the weather for more than two months.

C.17 INSULATION

Forman Pink Fibre Glass Batts fitted between ceiling rafters/ceiling joists as detail to grade recommended by manufacturer. Insulation between studs to grade recommended by manufacturer. Insulate to NZS:4218 1996 in all possible situations.

C.18 WALL/CEILING LININGS

Gibraltar Board: 10mm Gibraltar fixed vertically to studs in accordance with Winstone's specifications for tape and compound stopping. Tape butted ends. Fix with galvanised clouts or Gibraltar adhesive at recommended spacings. Use "Beadex" or similar to corners and ends.

Fix to ceilings 13mm gibraltar or 10 Gib Ultraline board lining in accordance with Winstone's specifications for tape and compound stopping.

C.19 TRIM

Architraves	To match existing
Skirtings	To match existing

Provide and fix all necessary skirtings, beads, architraves, facings and other interior trim as shown or implied on the drawings and in accordance with best trade practice. Sizes as detailed. Fix with suitable brads, spaced close enough to ensure close contact and correct alignment. Scribe mitre or otherwise cut all junctions as close as practicable, punch all brads and remove all irregularities. Running joints shall be kept to a minimum and splay cut.

C.20 INTERIOR JOINERY

Install all interior joinery supplied by joiner.

- Scribe all toe spaces to floor.
- Ensure good fixing for all joinery units in framed areas.
- Supply and install all window reveal boards.
- Fix all associated hardware and finish as detailed.
- Sand all internal finishing timbers to remove machine marks.

C.21 EXTERIOR JOINERY

Install all exterior joinery supplied by joiner. Confirm rough opening sizes with joiner to detail on site items before construction commences. Fix all associated hardware, finishing timber as necessary.

All windows and doors are to have a full architrave.

Note: Specific attention is necessary to dimensions of joinery - all details are not standard and to match existing on site information.

C.22 SKYLIGHT

Carpenter to supply and install all roof glazing and all accessories for roof glazed areas.

C.23 FLASHINGS

Fix all flashings associated with the carpenter and joiner's work. Flashings to be supplied by the plumber. Aluminium eiterpan flashings. All flashings to detail. All joinery flashings aluminium.

Note: External joinery to have head sill and jamb flashings.

C.24 HARDWARE

Carpenter to confirm quantities with Owner immediately after signing of contract. All door handles to be supplied owner for installation by contract

All hardware shall be supplied and installed by the contract. These items will include but will not necessarily be restricted to the following

- all hold back hooks on french doors, all necessary window stays and window latches
- to external french door 5 lever mortice latching dead locks with rebate kits to french doors and flush bolts top and bottom and handles
- handles and latches to match

Note: Hinges not to be painted.
Finish all hardware satin chrome (to be confirmed by employer)
Ensure that hardware roses are screwed through to rose on opposite side of frame
Ensure that all hardware type and finish is confirmed on site by employer.

C.25 SCOTIA

To be square stopped in new areas.

C.26 PLASTERING

Carpenter to organise the plastering of all Gibraltar Board walls and ceilings as follows:

Wall Starts and Corners

No tapered edged Gibraltar Board shall be used at either of wall starts or corners.

All external 90° corners shall be "Beadex" steel angles (or similar) fixed and skimmed over.

Stopping

All stoppers are to be experienced and qualified tradesmen and all stopping shall be carried out according to "Winstone Ltd" recommendations and specifications.

Unless otherwise specified, the standard of works shall be that necessary for subsequent application of gloss paint. A top quality skim coat should be over entire sheet.

A superior finish is expected and plasterer must allow for this. Plasterer must sand his own work ready for painter.

A complete skim coat is required over all areas of plaster.

Excess Plaster

All excess plaster on walls, floors and surfaces generally will be removed prior to the painting sub-contractor commencing work. This will be the responsibility of the stopper.

Protrusions, indentations and the like on all joints shall be rectified to the point where plaster work needs only a light sanding prior to painting or paper hanging.

Allow to jointly inspect (with the painter) all surfaces after the first seal coat has been applied by the painter and make good any marks or defects encountered.

C.27 COMPLETION

At the completion of the contract, remove all rubbish caused by the operation of any trade, generally leave the whole site clean.

Leave all floors broom clean, clean all glass inside and out. Replace all cracked and broken glass.

Leave the building weather tight, clean and fit for immediate occupation.

C.28 MISCELLANEOUS

- Any interior sealants shall be silicone based formulated to accept paint, or tinted to approval to match tile grouting.
- Carpenter is responsible for ensuring all joinery, finishing timber, architraves, skirting and exposed timber floor has a protective sandable sealer coat given when material arrives on site.
- sellwood attic stair to be by this contract

C.29 COOPERATION

Allow to co-operate with all other contractors and sub-contractors on site.

ROOFING (R)

R.1 PRELIMINARY

Refer to the Preliminary and General clauses of this specification and to the general Conditions of Contract which are equally binding on all trades.

R.2 SCOPE OF WORKS

This section of the specification consists of the supply and fixing of the proprietary roofing and corrugated cladding including all battens, netting, underlay and birdproofing.

Note: All roof flashings supplied by plumber. Installed by Roofer.

R.3 STANDARD SPECIFICATIONS

All materials and workmanship shall conform to the following standard specifications:

- N.Z.S:2299:1969 Breather type building papers.
- N.Z.S:3601:1973 Metric dimensions for timber.
- N.Z.S:3602:1975 Code of Practice for specifying timber and wood-based products for use in buildings.
- N.Z.S:4203:1984 Code of Practice for general structural design and design loadings for buildings.
- N.Z.S:3604:1978 Code of Practice for light timber framed buildings not required specific design.

R.4 MATERIALS

- Roofing underlay shall be breather type self supporting
- Roof and flashings shall be Colour steel endura 0.55 gauge

R.5 WORKMANSHIP

All roofing work shall be carried out by experienced, competent tradesmen familiar with the products being used, in accordance with the best trade practice to produce a high standard of work.

Ensure all preparatory support work, substrate, flashings, underlays etc. have been completed satisfactorily. Set out layout before fixing commences to ensure to lines and roof features.

All gutters to be blocked out before roofing commences for protection. No damage to any guttering will be accepted.

On completion of work, the roof area and gutters shall be cleaned of debris and the roof left sound and weathertight.

R.6 INSPECTION OF ROOF STRUCTURE AND ROOF MEMBRANE SUBSTRATE

The roofing contractor, or his representative, shall inspect the roof structure and roof membrane ply substrate before roof is delivered or roofing commences. He shall ensure that the roof structure is standing ready for work and that work needed to be carried out by the main contractor or other trades in preparation for roofing has been completed. If any aspect of the roof structure or preparatory work by other trades is not to the satisfaction of the roofing contractor, he shall bring this to the notice of the main contractor.

R.7 ROOF STRUCTURE

Roofing and ply substrate shall be laid over timber rafters at centres shown on the drawings. Roof pitch is to match existing and manufacturers specification.

R.8 ROOFING UNDERLAY

Roofing underlay shall be laid and lapped over the rafters so as to drain into the gutter of the roof. A minimum lap of 150mm shall be allowed for horizontal laps and all vertical laps shall be carried over rafters. Where the rise of the fascia above rafter top could cause ponding, an anti-ponding board or device giving similar results shall be provided.

The underlay shall be sufficiently stiff to span between rafters or trusses without undue sagging. Underlay shall be installed under the valley boards of sufficient width to extend at least 200mm on each side of the valley and shall be carried over the fascia.

R.9 PURLINS

Purlins shall be nailed at every intersection with rafters or trusses. All purlin joints shall be located at the centre of a rafter or a truss member. There shall not be more than two joins on any one rafter or truss and there shall be no less than two continuous battens between such joins.

Where ponding behind normally laid purlins could occur, the roof shall be counter battened or other measures taken to ensure that any water retained by the underlay can escape into the gutter.

R.10 METAL PROFILED SHEETS

Use only fixers approved by the manufacturer.

Fixing should be designed to accommodate thermal movement.

Zinc or cadmium plated fasteners without additional protection are not recommended. Use stainless steel screws in severe marine environments.

Profile metal roofing can be fixed to roof framing using several different fixing methods to manufacturer's instruction.

Screw fixing is recommended in preference to nailing. Where nails are used they must be hot dipped galvanised and spiral or angular threaded types.

All fasteners used externally should have sealing washers and metal washers as recommended by manufacturer.

Includes the supply and installation of all necessary proprietary flashings , valleys ridges and barge flashings.

R.11 GUARANTEE

The roofing contractor shall provide a written twenty (20) year guarantee to cover roofing workmanship and material.

R.12 CO-OPERATION

Allow to co-operate with all other contractors and sub-contractors on site.

PLUMBER, GASFITTER (PL)

PL.1 PRELIMINARY

Refer to the General Conditions of Contract and to all provisions of the Preliminary Section of this specification as appropriate.

PL.2 SCOPE

Plumber:

Install fittings and fixtures supplied by owner. Connect to cold water supply and hwc. Install fittings in position shown on plan.

Gasfitter: Not applicable

PL.3 GENERAL

All plumbing work shall comply with all provisions of the Drainage and Plumbing Regulations and any amendments thereto all as currently in operation, together with the appropriate Local laws and the requirements of the Health Department Regulations where appropriate. The Plumbing sub-contractor shall obtain all necessary permits and consents, serve all notices, arrange for all tests and pay all fees and customary charges in connection with his work.

The plumber shall carry out all of the works required to leave the water, waste and vents systems serving the sanitary fittings and plumbing hardware shown on the drawings in correct working order and complete with all normal incidental works customarily performed by this trade, notwithstanding any omission herein.

The plumber shall install and supply all flashings to roof and exterior of building.

Attend upon the concreter, blocklayer, drainlayer and carpenter to set out the exact positions of pipe runs before adjacent work is put in hand and ensure that all pipes, sleeves, fixings, flashings etc. are correctly incorporated as work proceeds.

PL.4 WORKMANSHIP

All plumbing work shall be carried out by, or under the direct control of, properly qualified tradesmen, and shall be to recognised high standards of performance.

Where the drawings show the exact arrangement of the overall waterpipe network or duct area pipework or any exposed pipework, this arrangement may be varied in detail or completely by the plumbing sub-contractor providing the Architect's approval is first obtained.

The cutting away and checking of timbers shall be limited to such dimensions as will not prejudice the purpose for which the timber is used, and wherever possible beams and joists shall be holed at the neutral axis and the hole limited to one-fifth of the depth of the member. The cutting away and checking of other materials shall be always subject to the Architect's approval.

Adequately protect all surfaces. Any damage to fittings or surfaces shall be made good by the appropriate trade at the plumber's expense.

Bending and folding of sheet metals shall be done by machines wherever possible. All joints between pipes of different materials shall be to the complete satisfaction of the Plumbing Inspector.

PL.5 PIPEWORK

All pipework in the building shall be concealed except where otherwise indicated or approved and all exposed pipework shall be accurately and neatly run with smooth bends, junctions etc. Arrange all pipes (and especially traps) in a manner which will allow the utmost future accessibility for repairs and maintenance, arrange for the main contractor to provide access panels to important maintenance positions and provide accessible gate valves and "Ballofix" valves to close off the supply to each section of the system for the replacement of washers etc.

Where pipes are to be covered by nail fixed linings or other finish, special care shall be exercised to mark their locations after the linings are fixed to minimise the hazard of further nailings penetrating pipes and all such damage arising from nailings or otherwise shall be remedied without delay with all consequential work made good.

Waterpipes shall be set out in straight runs and in even gradients, with easy bends, and, unless unavoidable, elbow fittings shall not be used. Where rigid PVC pipes are used for pressure systems, adequate precautions shall be taken to ensure that no hammer effect occurs in the completed system.

Supply all necessary fixings to adequately secure all pipes throughout their length, both vertically and horizontally, to prevent sagging or vibration. Fixings of same material as the pipe for internal work. Fittings, brackets, bolts, screws etc., for external pipework generally brass or copper.

All sleeves for exposed pipework, penetrating concrete or masonry, shall be heavy gauge galvanised steel, 25mm greater internal diameter than the outside diameter of the pipe and of length to finish flush with the finished surfaces as appropriate. Pack with mastic or compo or flash as necessary to seal around pipe.

PL.6 MATERIALS

Materials not otherwise specified shall be the best of their respective kinds. All materials shall conform to the relevant NZ Standard Specification, and unless otherwise specified or detailed, shall be of weights, gauges etc. as specified hereunder. All incidental materials (fittings, fixings, jointing compounds etc.) shall be correct for the application involved and shall be used in accordance with the manufacturer's instructions. All pipes, and especially cast iron pipes, shall be smooth, full bore and to the full diameter throughout all joints and junctions.

Cast iron pipes (N.Z.S:286 and 512).

Screwed galvanised wrought iron pipes (N.Z.S:219) water quality.

Lead pipes (N.Z.S:1053).

Copper tube (N.Z.S:546) 12mm and 19mm internal diameter 1mm gauge. 225mm, 30mm and 38mm internal diameter, 1.2mm gauge.

Confirm gauges of copper with Architect and owner before purchase.

Rigid PVC pipes for pressure systems (N.Z.S:1920).

Rigid PVC pipes for soil, waste or rainwater (B.S:3506).

Galvanised steel sheet (N.Z.S:1343) 0.6mm gauge.

Aluminium sheet (N.Z.S:1418) 0.71mm.

Copper sheet (N.Z.S:835). For flashings etc. 450g soft (roofing temper). For unsupported work 450g hard (cornice temper).

Zinc sheet. 'Century' or equivalent. For flashings etc. half hard Titan grade. For unsupported work hard Titan grade.

Lead sheet. 19.5kg/sq meter (4lbs per sq. foot grade).

PL.7 SEPARATION OF MATERIALS

Wherever dissimilar metals occur in circumstances which could produce contact or electrolytic action by a water film, full precautions shall be taken to ensure adequate separation by use of bituminous felt separators and bituminous paint. Wherever pipes are in contact with, or built into concrete or masonry work, they shall be spiral wrapped with Denso Tape or similar material to provide separation and freedom of movement.

PL.8 TEMPERATURE MOVEMENT

All plumbing work shall be carried out in a manner which will respect in full the adjustments arising from contraction or expansion under temperature changes. All such plumbing work shall be arranged with tolerances and form of jointing which will allow for full temperature movement without risk or prejudice to watertight conditions, or damage from straining to pipes which will generate failures and leaks.

PL.9 TESTING

All water or other plumbing services shall be completed in stages which will allow for proper testing under normal working pressures prior to the application of insulation, concealment or other enclosures to pipework. All leaks disclosed from such testing shall be remedied and retested before proceeding.

On completion, of the whole of the plumbing services shall be subjected to full operational tests in the presence of the Plumbing Inspector with all defects properly remedied.

Note: Pressure test on water to satisfaction of owner.

PL.10 WATER SEAL AT BOLTS

Wherever bolts, screws or other fastenings or pipes pass through exterior finish such as roofing, sheathing, plasterwork, etc. such bolts or other fastenings shall be provided with a suitable compressible weather seal gasket of the correct size bedded both sides in mastic and compressed to ensure absolute security of weather seal.

PL.11 COLD WATER SUPPLY

Leads shall be 15mm or 12mm Polybutylene tubing run within framing cavities to suit fittings. To include all outside taps.

PL.12 HOT WATER SUPPLY

Connect to hwc and run outlets in 15mm copper tubing to all fittings. Insulate with foil as per BRANZ.

PL.13 GASFITTER N/A

PL.14 WASTES AND VENTS

All wastes shall be in PVC. All vents, where accessible, shall be polypropylene, where inaccessible copper tube. All fittings shall be trapped and vented in accordance with the Local By-laws, and where allowed, anti siphonage traps shall be used to avoid venting.

Note: Note that gully traps are back inlet type.

All vent pipes through roof to be flashed with purpose made rubber fitting screwed to roof and pipe. Vent pipes above roof to be compatible with zincalume roofing.

PL.15 FLASHINGS

Provide for fixing by others, all flashings shown detailed to all exterior joinery from 0.55mm G2Z coloursteel endura and aluminium sheet neatly machine folded.

PL.16 SPOUTINGS

marley to match existing

PL.17 DOWNPIPES

Shall be 80mm diameter marley downpipes. Fix to wall with clips at 1200 centres and extend below ground level with Neoprene sleeve to drainage pipe, all to match existing.

PL.18 APPLIANCES

Allow to supply 12mm hot and cold water supply to dishwasher and PVC outlets to wastes. Fix according to manufacturer's instructions.

Allow to extract dryer and laundry extract fan to exterior. Connect washing machine with separate taps and waste to that of the tub waste.

PL.19 FITTINGS

The contractor is to confirm that the items supplied are in fact as specified prior to siting out and fitting of fixtures.

Allow to take receipt and to install all fixtures and fittings provided by owner as per the P and G section of this specification.

Note: all other fittings shown on plans and not listed as client supplied are to be supplied by this contract i.e. venting and fitting of extract fan vents and cowl.

Store under cover and keep dry.

Remove all labels and clean all appliances. Dispose of packing and other rubbish. Check and test all installations and leave in working order.

PL.20 CO-OPERATION

Allow to co-operate with all other contractors and sub-contractors on site.

Appendix One

Engineers dwg for verandah posts

IN ADDITION TO MANUFACT SPECIFICATIONS @ 900 CFS MAX.
 10° MIN PITCH - FIX WITH CYLINDRICAL 12KN TIES TO
 WALLS

FIX 125 PLATE TO
 WALL WITH M12 BOLTS
 OVER EX. SD (125 PACKING)
 DESIGN @ 1/2 HANDBOOK

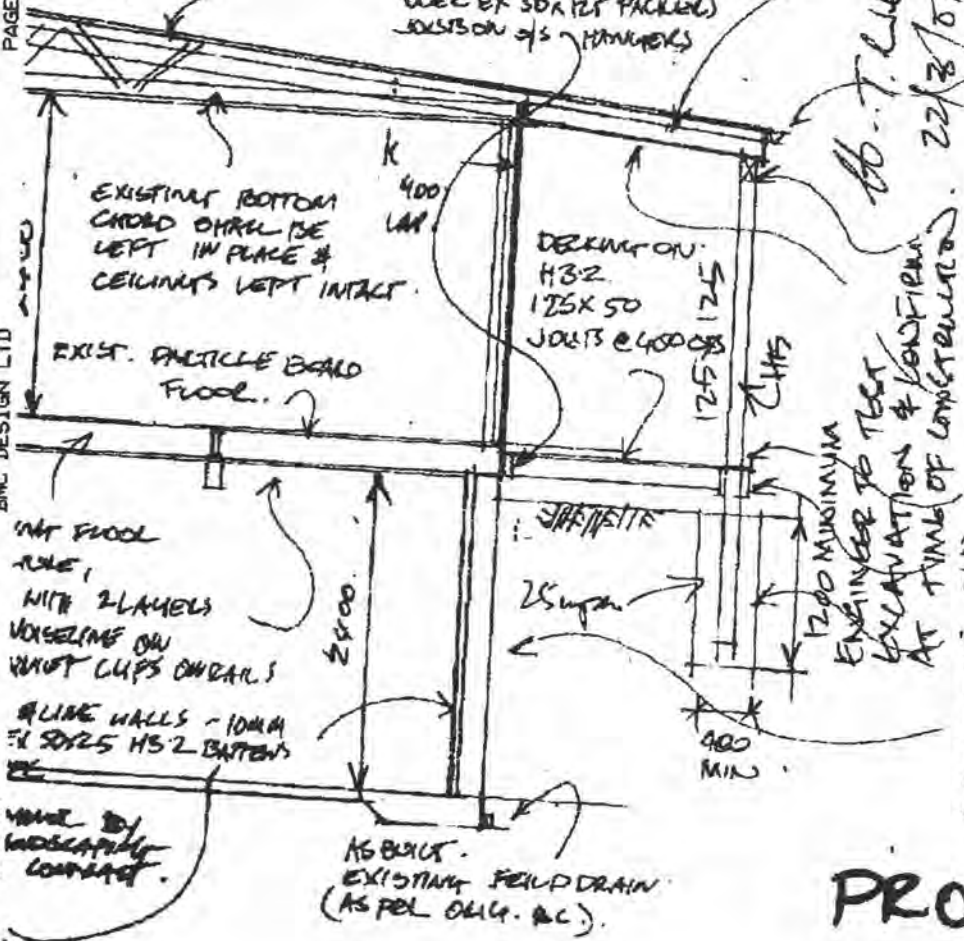
EX 125X50 H31 RAFTERS
 @ 900 CFS. - NOTE EXTEND BACK INTO
 WALLS & FIX WITH 2X M12 WASH SCREWS
 MILLER SPOTWELD
 CONNECT DPS TO EXISTING
 OUTLETS ON H32 PAINTED
 FASCIA

ROOFED VOLUMES H32
 BEAM,
 FIX WITH 2" 4/3 M12
 BOLTS, BOLWAC
 S/C BRACKETS B 85

WAS OFFIT
 HARD OFFIT
 BATTERED & JOINTS & PAINT FINISH

125² H5 DRESSED POSTS
 200X50X2 BEAM 3. BOLTS H4
 TO POSTS 2X M12 4/3

400X500²
 FOOTINGS TO ENGINEER'S DESIGN REPEL
 EXIST. B.C.
 EXISTING 200 SERIES (AS EXIST)
 BLOCK RETAINMENT - TANKED
 WITH 300MS MUSEAL AS FEL
 ORIGINAL BUILDING CONSENT



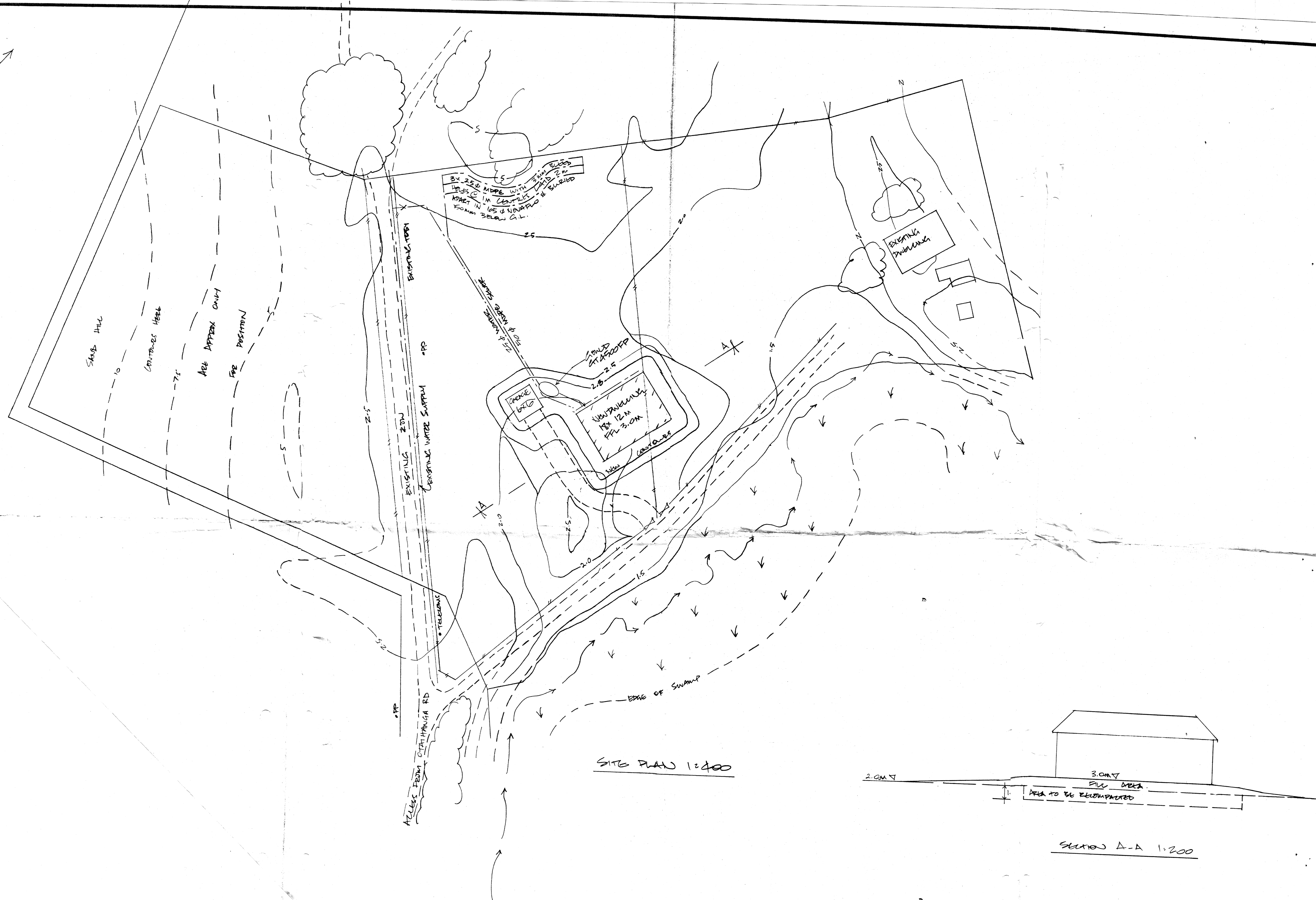
PROPOSED SECTION 1:50

PROPOSED AMENDMENTS TO
 EX 10/272 FOR B. McCLELLAN & J. WELSH

DRAWN: BMC DESIGN LTD
 PH 2485449
 NGL 2805

Hamish Wells Limited
 P.O. Box 188
 OTAKI

A6



KAN & LEO GOODMAN - SHOWWORKS & SERVICES FOR NEW BUILDING
2A STATHANGA ROAD

WRIGHT TANKS LTD

13th June 2012

Kapiti Coast District Council
Private Bag 60601
Paraparaumu 5254
Attention: Building Inspector

Dear Building Inspector,

Re: PRODUCER STATEMENT 4
Aaron Craig
2A Otaihanga Road
Paraparaumu Beach
Paraparaumu

I write to confirm that Wright Tanks Limited was contracted to repair the LPED field under maintenance at the Craig property at 2A Otaihanga Road Paraparaumu Beach. This work was subcontracted to RCS to carry out to Wright Tanks Ltd specifications.

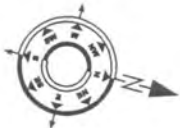
As suitably qualified professionals to complete this work (and covered by a current policy of professional indemnity insurance to a minimum value of \$250,000) I hereby declare that all of the work for the above LPED field has been completed to Wright Tank Limited specifications.

Wright Tanks Limited are a member of the New Zealand Concrete Tank Manufacturers Association and comply with AS/NZS1546.1 and AS/ NZS 1547.2000 and TP58 standards.

Regards,



Andrew Wright
Director
Registration Number: 23958



As Built
 Drawn 13/06/2012
 Revision 1:1

**WRIGHT
TANKS LTD**
Environmental Solutions for your...
 Wastewater & Fresh Water Requirements
 Specialists in Septic Tanks, Wastewater Treatment
 Plants and Fresh Water Tanks.

T 06 353 6157 F 06 353 3020
 E: wrighttanks@inspire.net.nz Web: www.wrighttanks.co.nz
 PO Box 4777 Palmerston North 4442

The existing LPED field was repaired under maintenance.

Disposed over 100m²

There are 5 rows of LPED trenches 20m long and 2m apart, buried from 400 - 500mm deep.

House and driveway locations are approximate and may vary to exact locations. See architectural site plan for exact measurements.

As Built plans are drawn off the supplied drawing from the installer. Wright Tanks Ltd do not survey the site and therefore take no responsibility for the accuracy of such plots.

Plans are drawn off a supplied drawing. Wright Tanks Ltd do not survey the site for boundary dimensions and therefore take no responsibility for the accuracy of such dimensions. Including house dimensions and it's exact location.

Site Plan to be read in conjunction with the enclosed site inspection report.

Name:	Aaron Craig
Address:	2A Otaihang Road
Drawn By:	Lozza
Scale:	1:500 - A4
Date:	13/06/2012
Ref #:	LOT 2 DP 389413
Signed:	

TEL: 06 353 6157 FAX: 06 353 3020
 PO BOX 4777 PALMERSTON NORTH 4442
 Email: wrighttanks@inspire.net.nz
www.wrighttanks.co.nz

This design remains the property of Wright Tanks Limited and may not be altered, reproduced or installed (wholly or in part) by any person not accredited as a Wright Tanks Limited Approved Installer.

KEY

existing septic tank

flushing tap

Effluent Management Systems Limited

CALCULATION REPORT

Project Description

Owner : aaron craig
Location : 2a othanga road
Assessor : andrew wright
Date :23/5/12

Household Information

No. of Occupants	5
Volume per person (Litres per day)	180
Design loading rate (litres per square metre per day)	6

Dosing Tank Information

Diameter of Tank (metres)	.9
Drawdown per discharge (mm)	315
Overall flow rate (litres/minute)	33

Supply line Information

Pump head (metres)	8
Initial Line drop (metres)	0
Initial Line Length (metres)	0
Initial Line Diameter (mm)	0
Main Line Drop (metres)	0
Main Line Length (metres)	100
Main Line Diameter (mm)	25

Pipe Network Information

Drop over Network (metres)	0
Trench Width (metres)	1.5
No. of Lines	5
Network Line Diameter (mm)	25

SYSTEM CALCULATIONS

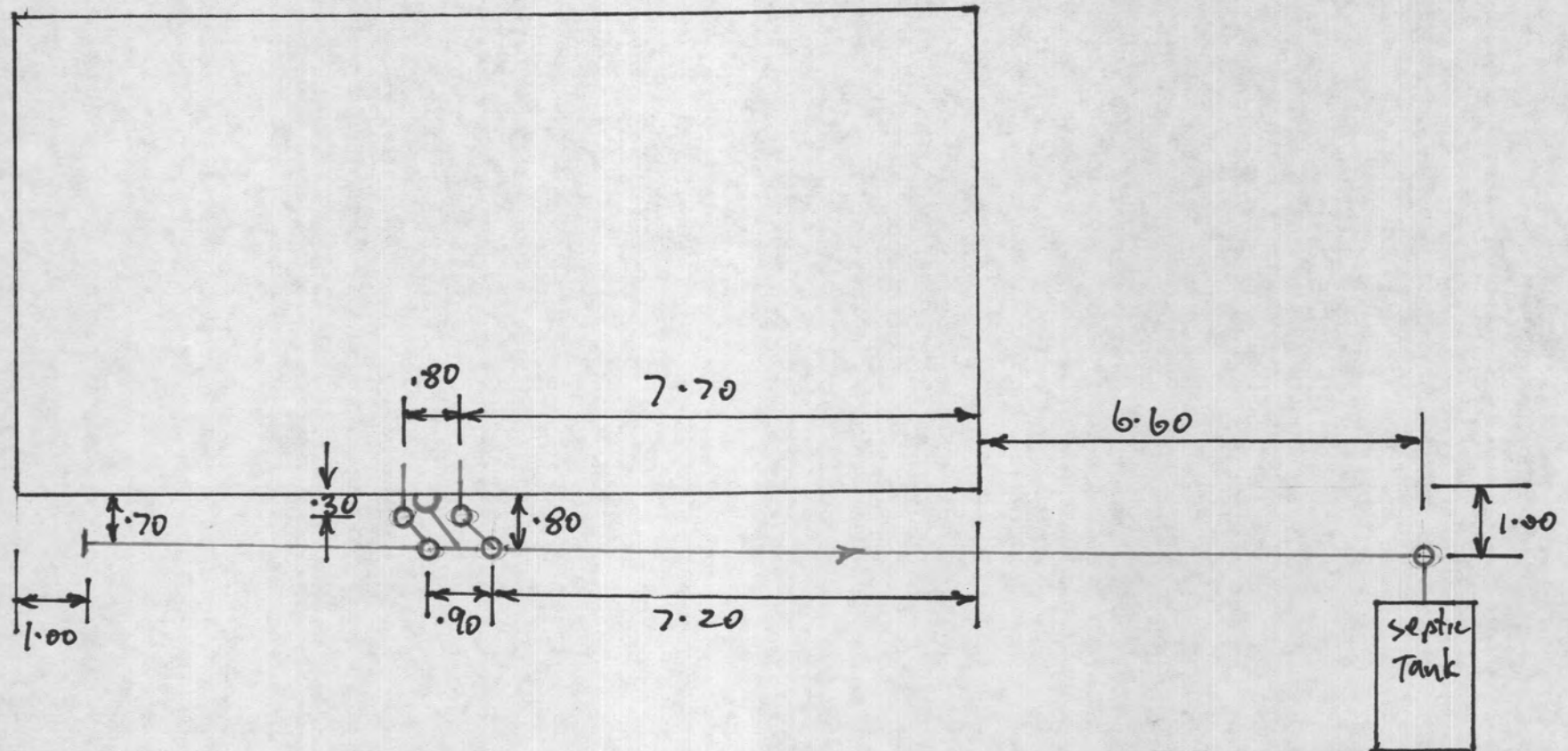
Volume per discharge (litres)	200.394
Volume per day (Litres)	900
Field area (square metres)	150
Total line length	100
Flow per metre of line (litres/minute)	0.33
Discharge time (minutes)	6.073
Pressure head at top of pipe network	1.2

LINE CALCULATIONS

Line No.	Length (m)	Head (m)	Flow/hole (l/min)	No. Holes	Hole spacing (m)	Hole size (mm)
1	20	1.159	1.114	6	3.375	3
2	20	1.09	1.08	6	3.272	3
3	20	1.049	1.058	6	3.207	3
4	20	1.028	1.048	6	3.175	3
5	20	1.022	1.045	6	3.166	3

This LPED effluent field design has been based on information supplied by the Site Assessor.

EMS Ltd takes no responsibility for LPED effluent field design failure due to incorrect initial site assessments.



Pvc
TESTED 26/11/01 GH
R. RALPH D/L

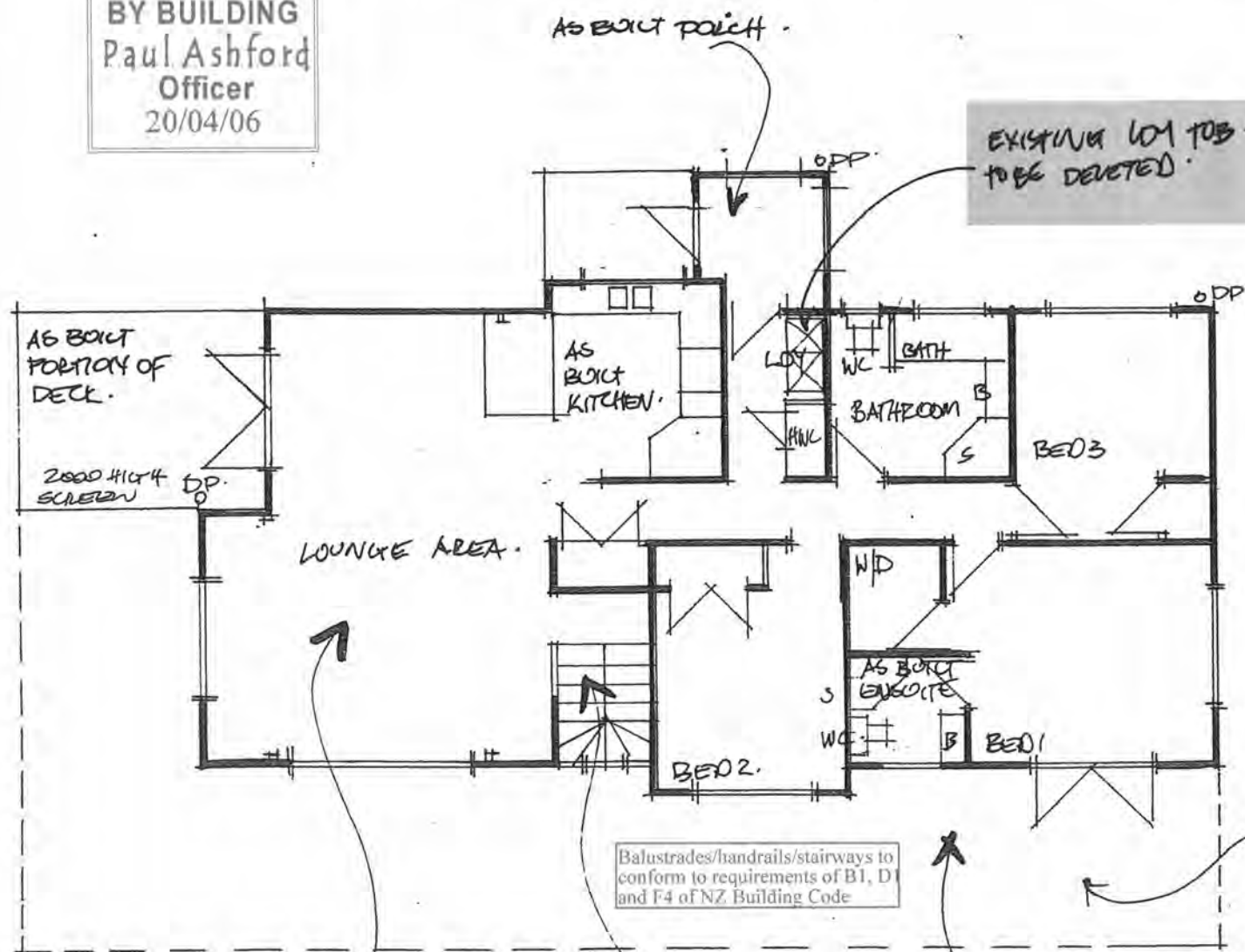
2A OTATHANGA RD

APPROVED
BY BUILDING
Paul Ashford
Officer
20/04/06

AS BUILT BASEMENT LEVEL 1:100

AS BUILT
EXISTING 200 BLOCK
RETAINING WALLS AS PER
BC N° 101272.
010272
WALL LINE ONE SIDE ONLY.

NOTE FIT BOWMAC S/S
BBS BRACKETS TO EXISTING
POSTS/BEAMS



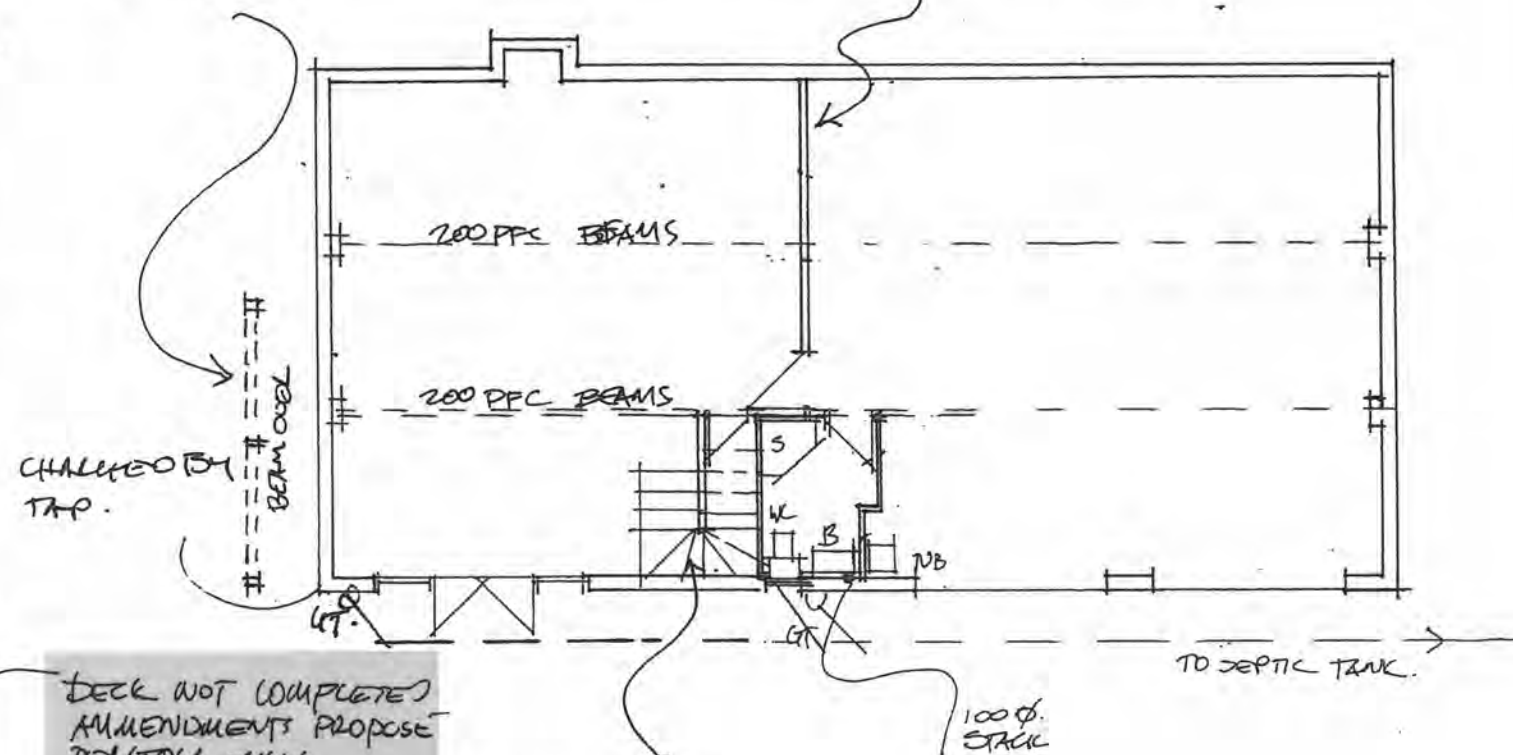
AS BUILT HOUSE LOCKWOOD
INITIAL HOME 'FANTAIL'
HOME - VIRTUALLY COMPLETE
HALDIPANK EXTERIOR,
COMPLETED BUT NOT PAINTED
BEYOND UNDERCOAT.

AS BACK STAIR &
WINDOW

OUTLINE OF PROPOSED
DECK NOT TO BE
CONSTRUCTED.

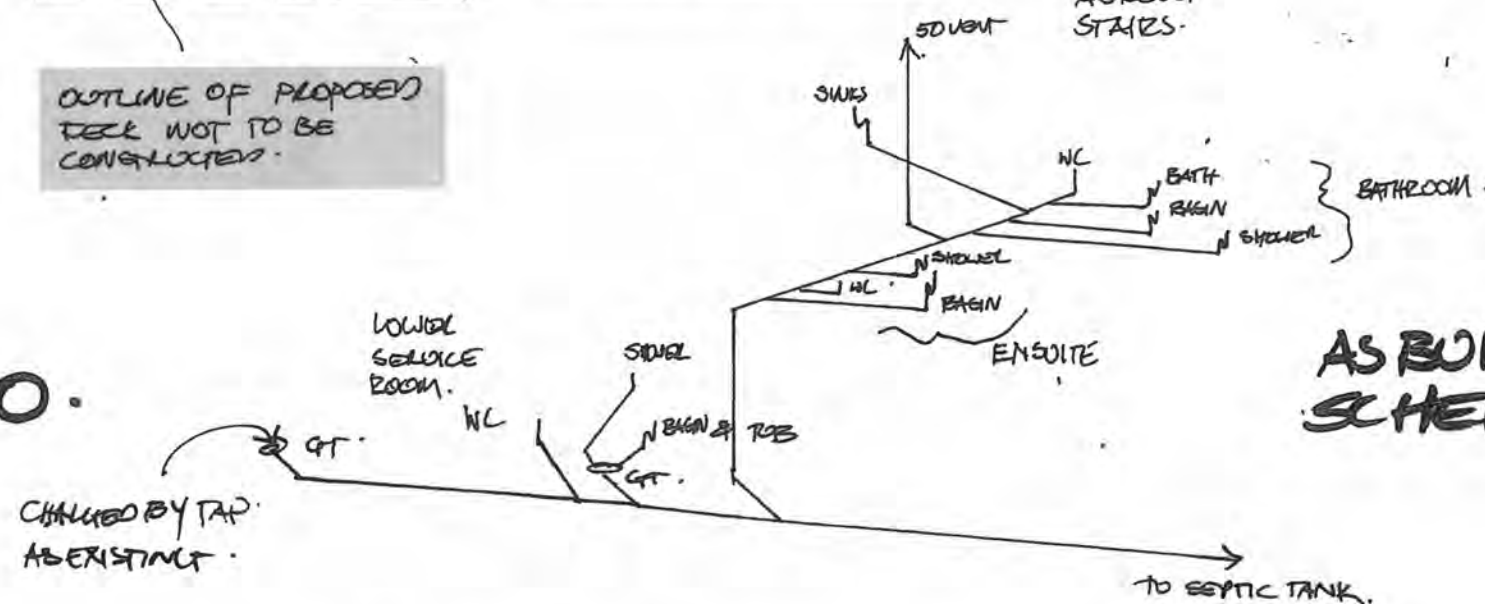
AS BUILT PLAN. 1:100.
MAIN LEVEL

DECK NOT COMPLETED
AMMENDMENTS PROPOSE
PELTOLA ONLY.



AGBUT
STATES.

AS BUILT PLUMBING
SCHEMATIC. NTS.



2A OTAIHANGA RD.

PROPOSED AMENDMENTS TO BC 101272
FOR B McCauley & J Welch.

DRAWN B MCCAULEY
BMC DESIGN LTD.

PH 2985448.

Ala.

Provide Electrical Certification after completion and prior to Code Compliance Certificate being issued

craftsman plumber to fill out attached producer statement and return to council.

APPROVED
BY P & D
Simon Copp
Officer

10/4/2006

CONNECT NEW GULLY
LOCATION VIA 65 OF WASTE
TO EXISTING GUT

EX
125X125 HS
DRESSED POSTS IN
100X500² FOOTINGS

RELOCATE
EXISTING KITCHEN
EXTEND WASTE
TO EXISTING
BRANCH DRAIN

RELOCATE HALL
DOOR.

EXISTING PORTION OF DECK.
BUILT 200X30 JOISTS @ 400 CS

AS BUILT
STAIR - MIN. 255+25
NOSE/ST. MAX 10 RISES.
1000 HIGH BARS MADE
GIBLINED EXSD OF HAIL ANTI-CORROSION
AS DISCUSSED WITH MIKE MORBY
KDC DEC. 2004.

NOTE REMAINDER OF
DECK PROPOSED IN
BC 101272 NOT TO BE
BUILT.

SEE NOTE 3.

EX. H32.
150X100 VELANDAH BEAM
200X50 X2
BRIDGE
H4

VELUX LOW PITCH (MIN 5°)
SKYLIGHT 1200X1200
FITTED IN NEW ROOF

EXISTING UNLINED POLYCH ENTRY AREA.
RAISE POLCH FFL TO
HOUSE LEVEL. INSULATE &
LINE WITH R 2.2 Batts TO
CEILING, R 1.8 TO WALLS.

EXISTING POOL/WINDOW REMOVED.
ADD FEES TO OLD LHM ALONE FOR WATS
REMOVED POOL & RELOCATE
TO NEW BED 4. / STUDY.

EXISTING REMOTE
MONITORED SMOKE ALARM.
HALF WIRE.
OP EXIST.

Section F7 of the New Zealand Building Code
requires the installation of an approved smoke
alarm system for detection and warning of fire.

NOTE ALL WINDOW SCREWS
TO REMAIN. THRU OUT.

HOUSE TO BE RECLAD WITH
TEXT. 2000 PLY OVER B' PAPER.
REFEL DETAILS ATTACHED

DOORS TO REMAIN
BUT TO BE DISABLED
BY SCREW FIXING AT HEAD.
TO BE USED IN FUTURE
DECK.

MAIN LEVEL PROPOSED PLAN. 1:100

- NOTE UPPER LEVEL IS INITIAL HOME LOCKWOOD CONSTRUCTION.
- LOWER POOL 200 BAYES CONCRETE BLOCK.
- THE PROPOSED AMENDMENTS INVOLVE RELOCATION OF KITCHEN & A NEW INTERNAL PARTITION TO CLOSE OFF OLD KITCHEN, RECLADDING OF HOUSE, AND FORM VELANDAH; CONSTRUCTION OF NEW ROOF STRUCTURE TO REPLACE AS BUILT 4 PITCHED ROOF STRUCTURE, ENTRY/POLCH TO BE LINED. EXISTING UNFINISHED LOWER AREA LINED. DECKS TO FRONT BELIEVED, VELANDAH ONLY TO BE FITTED.

DOOR / WINDOWS. SCHEDULE.

- D1. 2X610 X1980 BIFOLD.
- D2. RELOCATE OLD CLOSET DOOR.
- D3. RELOCATE EXIST GARAGE DOOR
- D4. 1980 X610. DOOR.
- D5. SLIDING DOORS 3 PANELS
2200 HIGH TO FIT ALLOVE WIDTH.

- W1. CHANUTE ALUM. DOOR FIT T & G & SIDE
PANEL DOOR (LIGHT SUPPLY).
- W3. 1200X1200 5° NEW PITCH VELUX.

NOTE ALL DOOR & WINDOW
UNITS TO MATCH EXISTANT.

NOTE REFEL BC. DOCUMENTS
BC. N° 101272 FOR
EXISTING HOUSE DOCUMENTATION

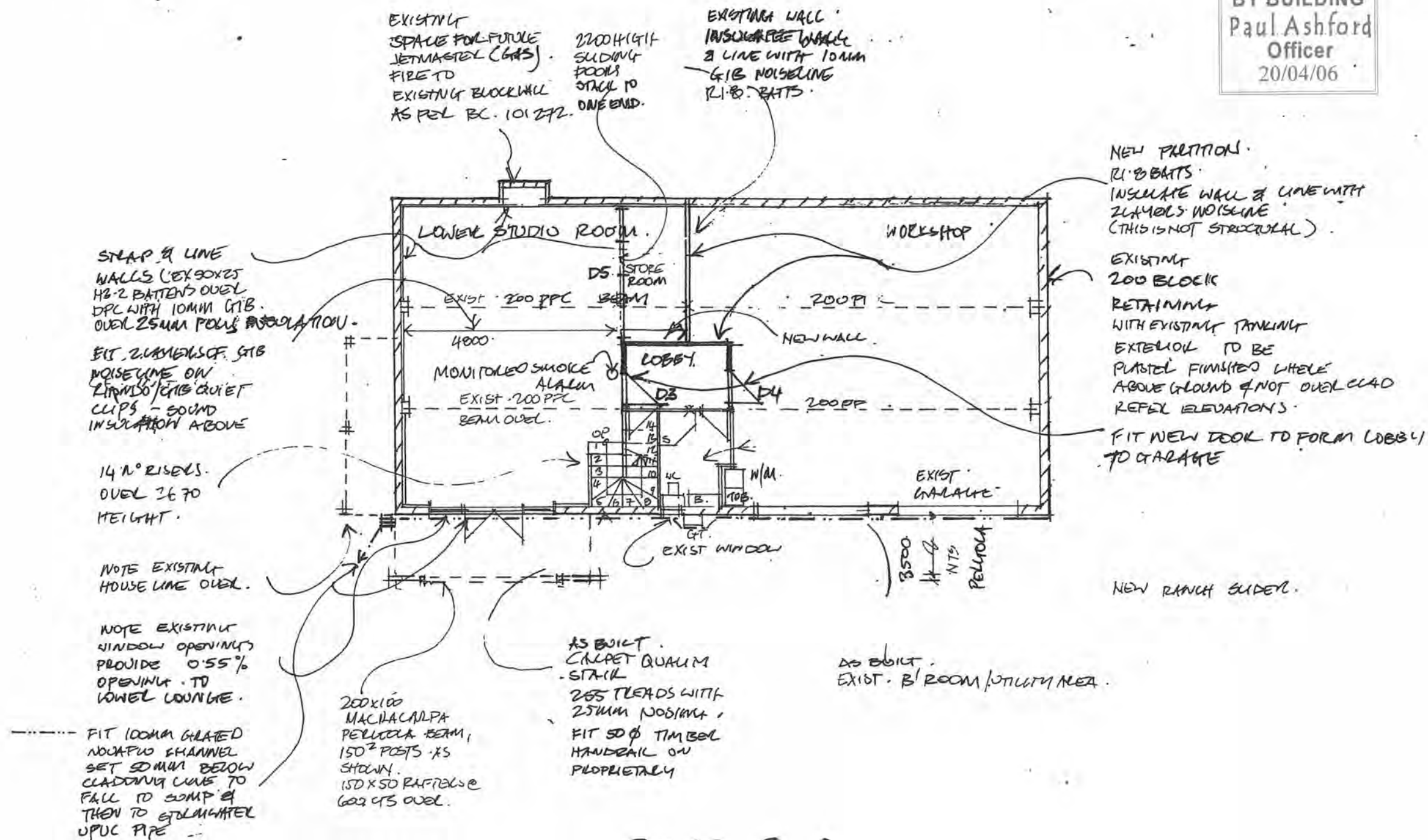
ALL NEW CONSTRUCTION (VELANDAH)
TO BE IN ACCORDANCE WITH NZBC
& NZS3604 1999.

2A OTAIHANGA RD.

PROPOSED AMENDMENTS TO BC 101272
FOR B McCARTHY & J WELCH. 010272

DRAWN B McCARTHY BML DESIGN
PH. 2185449.
AUG 2005.

A1b.



PROPOSED GROUND FLOOR . 1:100

- NOTE APART FROM STAIR & LOBBY TO GARAGE ALL IS EXISTING AS BUILT.
- STAIR INSTALLED AS AMENDMENT FOLLOWED IN JANUARY 2005, AND AS DISCUSSED WITH MIKE MOLBY IN RCDC OFFICES DEC. 2004.

2A OTAIHANGA RD.

PROPOSED AMMENDMENTS TO EXIST
BUILDING CONSENT NO. Q10272

FOR B. M. KALLEY & J. WELLS
DRAWN B.M.C. DESIGN LTD. PO BOX 757 PARAPARAUMU.
PH 2905449, AUG 2005.

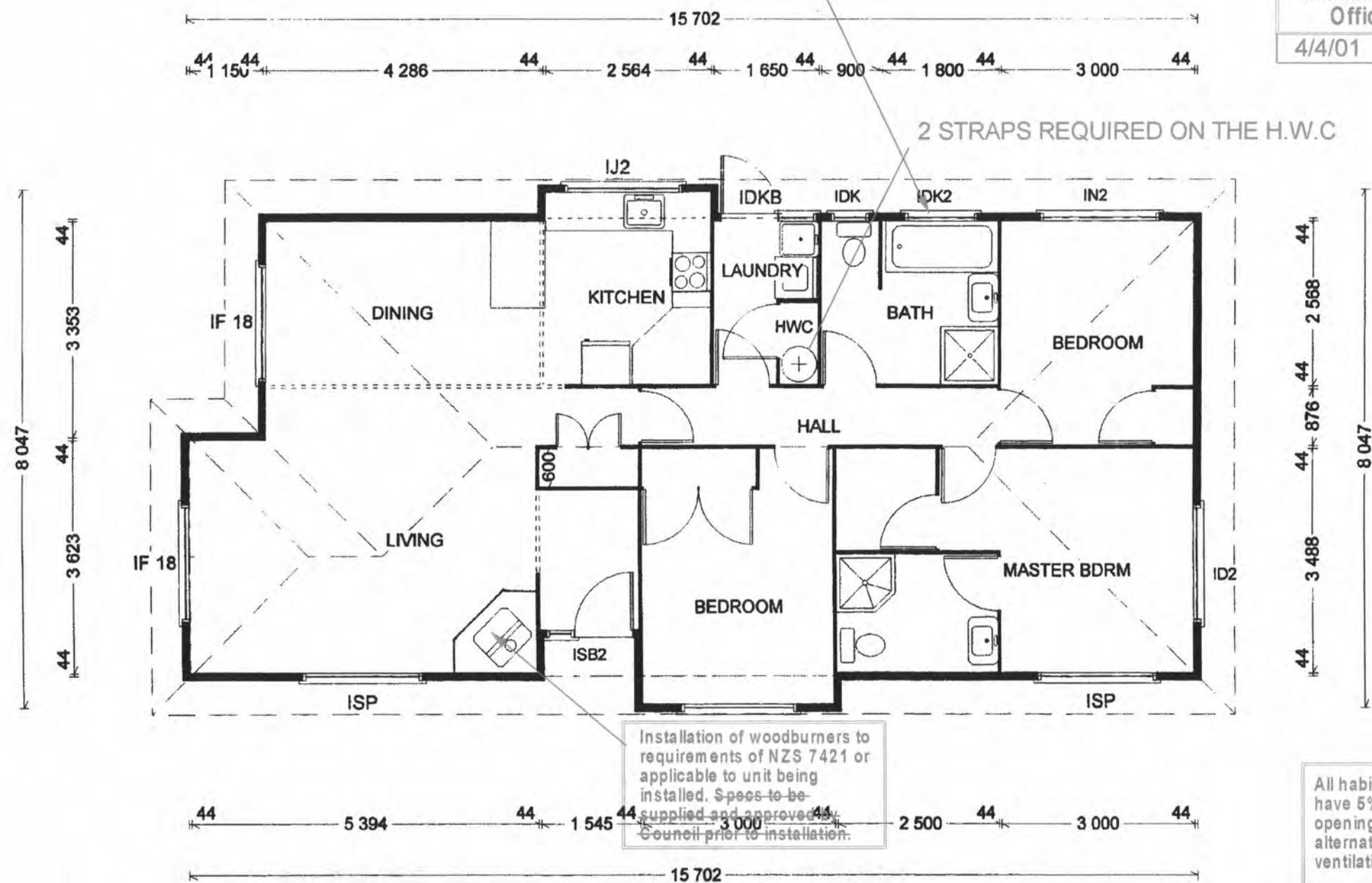
A2

GLAZING CONFORM NZS 4223
PARTS 1, 2, 3.

FIT SUITABLE FLASHINGS ETC. JOINERY	
HIGH WIND	1100pa DWP
VERY HIGH WIND	1550pa DWP

APPROVED
BY P & D
SIMON COPP
Officer
4/4/01

APPROVED
BY BUILDING
PETER WILKINSON
Officer



Floor Area 112m2

FLOOR PLAN

SCALE 1 : 75

TASKMASTER BUILDERS LTD
488 TE MOANA ROAD WAIKANAE
P.O.BOX 342 WAIKANAE
PH 04 293 2406
FAX 04 293 1279

PROPOSED NEW INITIAL HOME FOR
LEO AND KAY GOODMAN
2A OTAIHANGA ROAD
PARAPARAUMU
LOT 2 DP 56172 AND PART LOT 3 DP 56172

DATE 08 /03/ 2001

PLAN NUMBER

2709 - 5

AMENDMENTS

APPROVED

DATE