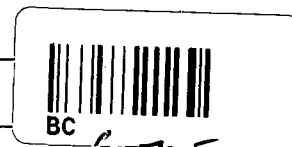


DESTINATION ROTORUA ROTOMAHANA DISTRICT COUNCIL	BIM/BC Building Consent File – Front Cover No 60725	Ref: TP 03 – FP 04
		Ver: 01
		Issued: 30 May 2007
		Doc No: IT-639924
		1 of 1

BC No. _____ Valuation No. _____
 Owner: Generation Dev Property No. P 32209
 Date Received: 16.7.07 CCC Date: 5.12.07

PROJECT DESCRIPTION / COMMENTS:



Lot 8 - 23 Harris St

THIS BUILDING CONSENT RELATES TO BC No :

No Bonds
taken

NB: The inspection cards are kept with the inspection file in the Building Services offices.

Any pertinent information regarding inspections will be with this file and can be viewed during the hours of 8am – 4.30 pm week days.

LARGE PLANS HELD IN PLAN TUBE



Rotorua District Council
1061 Haupapa Street
Private Bag 3029
Rotorua Mail Centre
Rotorua 3046
New Zealand
P: 07 348 4199
F: 07 346 3143
E: mail@rdc.govt.nz
W: www.rdc.govt.nz

File Ref: P32809

December 5, 2007

Generation Developments Ltd
PO Box 14232
TAURANGA

Dear Sir/Madam,

CODE OF COMPLIANCE CERTIFICATE
BUILDING CONSENT No: 60725

Please find attached your copy of the Code Compliance Certificate that has been issued in relation to the above Building Consent.

This is an important document and should be retained by you as it specifies the work carried out under the Consent has been completed and meets the requirements of the Building code supporting documents.

If in future you should desire to sell your property your solicitor may ask you to produce this Certificate to prove that your building complies with the Building code to the extent required by the above Building consent. A copy is also placed on your property file.

Yours faithfully


Diane MacLeod
Administration Officer – Building

Encl

Code Compliance Certificate: 60725
Section 95, Building Act 2004

Issued: 05 DEC 2007



Rotorua District Council
1061 Haupapa Street
Private Bag 3029
Rotorua Mail Centre
Rotorua 3046
New Zealand
P: 07 348 4199
F: 07 346 3143
E: mail@rdc.govt.nz
W: www.rdc.govt.nz

The Building

Property ID: 32309
Street Address: 23 HARRIS STREET
Valuation number 07065 169 56
Legal Description:: LOT 8 DP387252
Intended Use NEW BUILDING
Description of Work: NEW DWELLING WITH ATTACHED GARAGE 156SM2

The Owner

Name of Owner: GENERATION DEVELOPMENTS LTD
Contact Person: GENERATION DEVELOPMENTS LTD
Mailing Address: GENERATION DEVELOPMENTS LTD
P O BOX 14232
TAURANGA

*- Faxed
8.12.7*

Phone Number:

Facsimile Number:

Email Address:

Website:

First point of contact for communications with Council Building Consent Authority: RDC BUILDING SERVICES

Building Work

Building Consent no: 60725
Issued by: Rotorua District Council

Code Compliance

The building consent authority named below is satisfied, on reasonable grounds, that –

- (a) the building work complies with the building consent.

Council Charges

The Council's total charges payable on the uplifting of this code compliance certificate in accordance with the attached details are:

\$0.00

This is a final code compliance certificate issued in respect of all of the building work under the above building consent.

Signed for and on behalf of the Council:

Name: Diane MacLeod

Position: Building Administration

Signed: _____

Date: 05 DEC 2007

Ser	Item	P	F	N/A	Remarks
7	Waterproofing			✓	
8	Structural reviews			✓	
9	Site welding			✓	
10	Electrical or gas energy work certificates	✓			Electrical
11	Home heating (fires)			✓	
12	Glazing			✓	
13	Drainage	✓			On file
14	Smoke alarms and sprinklers	✓			noted on
15	Emergency warning systems	✓			check sheets
16	Fire doors			✓	
17	Spread of flame			✓	
18	Backflow			✓	
19	Lifts (electrical and installation)			✓	
20	Mechanical ventilation			✓	
21	List of consultants			✓	
22	Exterior plaster systems			✓	
23	Producer Statements are correctly formatted?			✓	
24	Form 6 received and complete	✓			
25	Development Contribution Paid (suspend/note in screen if not)			✓	
26	Outstanding Fees paid			✓	
27	Other				

Property file is requested from records and used as a reference when carrying out peer reviews – check elevations against photos.

NOTES

All information and documentation is present and correct. A Code Compliance Certificate can be issued providing all outstanding additional fees and/or development contribution has been paid (Team Leader or Manager Building Services).

Name: D HOLDER

Signature: [Signature]

Date: 5.12.07

Date Received When satisfied all conditions of BC have been met, all supporting documentation & fees have been received (this is the date when the clock starts)
26.11.07

Date Approved by TL or MBS Date approved by Team Leader or Manager Building Services
5.12.07

Date Issued By AAB Date when Administration Assistant Building issues CCC
5/12/7

CONSENT COMPLIANCE ASSESSMENT FORM

BC NO.: 60725

P. File No.: 32309

Address: 23 Harris St

P = Pass, F = Fail, N/A = Not Applicable – Tick appropriate box

Ser	Item	P	F	N/A	Remarks
1	Work complies with the approved BC documentation (sect 94(1))	✓			
2	All the required inspections have been completed	✓			
3	BC conditions have been complied with	✓			
4	PIM requirements have been complied with	✓			
5	Damage deposit can be released			✓	
6	Crossing deposit can be released			✓	
7	All documents have BC number on them	✓			
8	Section 75-77 registered if applicable			✓	
9	Section 72-74 registered on title if applicable			✓	
10	Energy work certificate has been provided (if required) (section 94(3))			✓	
11	Specified systems are capable of performing in accordance with performance standards (section 94(1b))			✓	
12	Is a compliance schedule required or requires amending? (Section 100(2))			✓	
13	Has there been a change of ownership (section 94(2))			✓	
14	Any warnings or bans have been applied (section 94(2))			✓	
15	Has the territorial authority received any certificates issued by licensed building practitioners that relate to restricted work? (Section 88(1) and (2))			✓	
16	Check the territorial authority has been advised by a licensed building practitioner that building work carried out under a building consent does not comply with that consent. Note A building consent authority may not be aware if a territorial authority has been informed of non-complying work by a licensed building practitioner (section 89)			✓	
17	Any amendments have been issued and whether documentation associated with these has been properly completed.			✓	
Any outstanding documentation still to be collected such as:					
1	Photographs of elevations/check against elevations				
2	Survey certificates – siting, height in relation to boundary, maximum height of building or minimum floor level	✓			<i>Mtec</i>
3	Concrete strength			✓	
4	Pile driving			✓	
5	Foundation observation			✓	
6	Ground conditions including compaction	✓			<i>Mtec</i>

DESTINATION
ROTORUA
ROTORUA DISTRICT
COUNCIL

PIM/BC

Ref: TP04 – F03
Ver: 1
Issued: 30 May 2007
Doc No: IT-639923
Page 1 of 2

BUILDING CONSENT NO. 60725	DATE ISSUED: 06.09.07
RESOURCE CONSENT REQUIRED? YES NO	DATE ISSUED:
OWNER: Generation Dev PH.	BUILDER: Generation Dev. PH. 07. 578 8561.
SITE: 23 Harris St. Ngn. (Lot 8)	PLUMBER: Plumber PH. REG. # 07. 571 0625
VALUATION NO.	DRAINLAYER: REG. #
PROPERTY FILE NO. P32309	PH.
LEGAL DESCRIPTION:	LOT / SEC: 8
	DPS / BLK:

DESCRIPTION OF WORK: New Dwelling with Attached Garage (156m²)

[illegible]

[illegible]

Project Information Memorandum No: 60725

Section 34, Building Act 2004

Received: 17 Jul 2007

Issued: 27 Jul 2007

Rotorua District Council
 1061 Haupapa Street
 Private Bag 3029
 Rotorua Mail Centre
 Rotorua 3046
 New Zealand
 P: 07 348 4199
 F: 07 346 3143
 E: mail@rdc.govt.nz
 W: www.rdc.govt.nz

Owner

GENERATION DEVELOPMENTS LTD
 P O BOX 14232
 TAURANGA

Site Information

Property ID: 32309
Street Address: 23 HARRIS STREET
Valuation number
Legal Description::

Project Information

Project is for NEW DWELLING WITH ATTACHED GARAGE 156SM2
Intended Use
Intended life: Indefinite but not less than 50 years
Value of Work: 187,680
Number of Stages:

PIM Status

The proposed building work may be undertaken, subject to the provisions of the Building Act 2004, and any condition of the Building Consent.

Conditions . . .**INSPECTIONS BY TERRITORIAL AUTHORITY****SUBJECT TO BUILDING CONSENT CONDITIONS**

The proposed building work may be undertaken, subject to the provisions of the Building Act 2004, and any condition of the Building Consent.

SPECIAL FEATURES OF LAND

The building work is sited on land which has been subject to controlled filling. The land has been certified as suitable for normal residential development. The minimum floor level for the house must be 1.3m above the ground water level.

PUBLIC UTILITIES/ROADING**ACCESS FROM FORMED ROAD**

The proposed building work is to be sited on land which the Council has identified in its records as being able to have vehicular access from a formed road or street under the control or ownership of the Rotorua District Council.

PUBLIC UTILITIES/STORMWATER**STORMWATER SYSTEM**

The proposed building work is to be sited on land which the Council has identified in its records as having a connection to a public stormwater system owned by Council and As Built connection details are attached hereto. (Services Plan)

WATER/URBAN SUPPLY

SUPPLY AVAILABLE

The proposed building work is to be sited on land which the Council has identified in its records as being within a Public Urban Water Supply.

SEWERAGE

CONNECTED TO SYSTEM

The proposed building work is to be sited on land which the Council has identified in its records as having a connection to a Public Sewerage System administered by the Council and As Built connection details are attached (Services Plan).

VEHICLE CROSSINGS

RD 13 STANDARDS

The vehicle crossing shall comply with, and if necessary be upgraded to Council's RD 13 standards (attached). Note: If the vehicle crossing requires upgrading, a Road Opening Application (attached) is required to be completed and returned to Resource Engineers for approval prior to the commencement of works on the crossing. Turn around time will be 15 working days and there is no charge associated with this. Plans in triplicate showing the location of the works will also be required.

WATER SUPPLY

APPLICATION FOR APPROVAL

Should a connection to this water supply be required, an application is to be made to Council's Utilities Network Manager for approval. Restrictions or conditions as to water usage may be imposed. Please be advised that this application may not be approved.

SEWERAGE DISPOSAL

APPROVAL GRANTED

Authorisation to connect to the public sewer system has been granted.

LAND USE CONSENTS

CONSENT GRANTED

The proposed building work is in accordance with the Land Use Consent granted by Council

62-06-012 granted 28 June 2006,

COMPULSORY PLANNING STATEMENTS

DISTRICT PLAN

The District Plan does not indicate any proposed road widening, proposed service lane, designations, scheduled sites or protected historic buildings, sites or trees on the land the building work is proposed.

NOT A DEVELOPMENT The proposal is not a development as defined in the District Plan.

DEVELOPMENT CONTRIBUTIONS

NO DEVELOPMENT CONTRIBUTION PAYABLE

A Development Contribution has been assessed for this building work, and there is no amount payable as shown on the sheet attached.

Signed for and on behalf of the Council:

Name: Belinda Robertson

Position: Building Services Administration

Signed: B. Robertson

Date: 27 JUL 2007

Building Consent No: 60725

Section 51, Building Act 2004

Issued: 06 Sep 2007

Rotorua District Council
1061 Haupapa Street
Private Bag 3029
Rotorua Mail Centre
Rotorua 3046
New Zealand
P: 07 348 4199
F: 07 346 3143
E: mail@rdc.govt.nz
W: www.rdc.govt.nz

Owner

GENERATION DEVELOPMENTS LTD
P O BOX 14232
TAURANGA

The Building

Property ID: 32309
Street Address: 23 HARRIS STREET
Valuation number:
Legal Description:
Building Name:

First point of contact for communications with council building consent authority:
RDC Building Services

Building Work

The following building work is authorised by this consent:

Project is for: NEW DWELLING WITH ATTACHED GARAGE 156SM2
Intended Use:

This building consent is issued under section 51 of the Building Act 2004. This building consent does not relieve the owner of the building (or proposed building) of any duty or responsibility under any other Act relating to or affecting the building (or proposed building).

This building consent also does not permit the construction, alteration, demolition, or removal of the building (or proposed building) if that construction, alteration, demolition, or removal would be in breach of any other Act.

This building consent is subject to the following conditions:

Conditions . . .

IMPORTANT CONDITIONS.

Section 52 Building Act 2004 (Lapse of Building Consent).

A Building Consent lapses and is of no effect if the building work to which it relates does not commence within 12 months of the date of issue unless prior arrangements are made with the Building Consent Authority.

Section 364 Building Act 2004 (Residential Property Developer)

1. A Residential Property Developer commits an offence if the Residential Property Developer does either or both of the following things before a Code Compliance Certificate is issued in relation to a household unit:

- a) completes a sale of the household unit:
- b) allows a purchaser of the household unit to enter into possession of the household unit.

2. Subsection (1) does not apply if the Residential Property Developer and the purchaser of the household unit enter into a written agreement, in the prescribed form, that the Residential Property Developer may do either or both of the things referred to in that subsection before a Code Compliance Certificate is issued in relation to the household unit concerned.

3. A person who commits an offence under this section is liable to a fine not exceeding \$200,000. Offences relating to administration of the Act.

INSPECTIONS BY TERRITORIAL AUTHORITY.

Siting, Footings, Foundations and Reinforcing. ✓

Prefloor plumbing and drainage. ✓

Concrete Floors. ✓

Pre-wrap – all fixings to framing and roof structure (access to be provided). ✓

Wrap/Cavity battens – all battens, flashings etc (access to be provided). ✓

Half high brick inspection. ✓

Exterior Cladding – at completion of cladding (access to be provided). ✓

Pre-line building including insulation. ✓

Pre-line plumbing – when under test including internal stacks. ✓

Post line – all bracing elements and fire linings/collars completed. ✓

Sanitary and stormwater drainage – under test and prior to backfilling. ✓

At completion of work authorised by this consent the Building Act requires you to apply for a Code of Compliance Certificate within two years of the Building Consent being issued. ✓

STANDARD CONDITIONS.

Permission to undertake building work in accordance with the approved plans and specifications. All work must comply with the provisions of the Building Code. Any alterations from the original plans and specifications must have prior written approval from the Building Control Manager.

Any endorsement on Plans and Specifications for part of this approval.

The owner of the property is responsible for the correct siting of buildings or additions in relation to boundary pegs.

Any deficiency not specifically drawn to the attention of the builder or owner by the Building Official shall not be deemed to have been approved.

The use is limited to that stated on the Building Consent. Any change of use would require a separate approval.

Plumbing and drainage work to be carried out by licensed tradesperson only.

Type 1 Domestic Smoke Alarm System Clause F7 Warning Systems:

- Requires that an appropriate means of detection and warning for fire must be provided with each household unit.
- Smoke alarms shall be located on the escape routes on all levels within household units.
- On all levels containing the sleeping spaces, the smoke alarms shall be located either:

- Smoke alarms must be fitted with a hush facility having a minimum duration of 60 seconds
- a) in every sleeping space; or
- b) within three metres of every sleeping space. In this case, the smoke alarms must be audible to sleeping occupants on the other side of closed doors.
- These will be required on all new dwellings and retrospectively fitted in dwellings when, and if, a Building Consent for additions or alterations is applied for.

A Code Compliance Certificate will not be issued until the smoke alarms have been installed and seen operating.

The hot water supply to sanitary fixtures used for personal hygiene is to be fitted with tempering valves or other approved devices to limit the water temperature to 55°.

Signed for and on behalf of the Council:

Name: Belinda Robertson

Position: Building Services Administration.

Signed: B Robertson Date: 06 SEP 2007

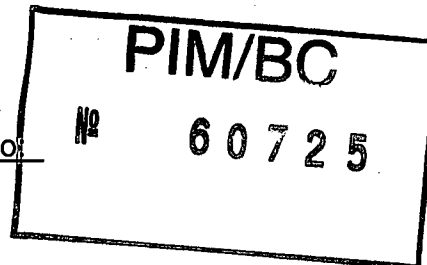
	APPLICANT SITE INSPECTION RECORD SHEET	Ref: TP-04-F02
		Ver: 1
		Issued: 30 May 07
		DocNo: IT-639920
		Page 1 of 2

IMPORTANT !!

this card must be produced **ON SITE AT EVERY INSPECTION EITHER BY THE OWNER OR THEIR AGENT.**

File No: P32309

Application No:



Owner: Generation Development Contractor:

Lot/Sec: 8

DPS/Blk:

Site Address: 23 Harris St Ngm.

Proposed Work: New Dwelling (156.m2) & attached Garage

- The **OWNER** or their **AGENT** is required to be on-site at the time of the inspection and they shall have a set of stamped, approved consented documents on-site.
- The property owner is responsible for locating legal boundaries.
- Check Building Consent conditions for relevant inspections.

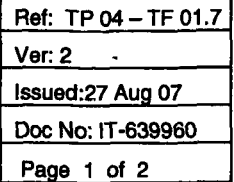
PLEASE NOTE: Additional charges may be made for the following if the Building Officer arrives and:

1. The work is not ready for the inspection.
2. Owner/agent/plans not on site.
3. Inspection not cancelled.
4. Boundaries not located.
5. A failed inspection will require a recheck. This should be booked via council's phone booking system. Ph 07 3500209.

It is important to note that should the necessary inspection not be done, a **CODE COMPLIANCE CERTIFICATE** will not be issued.

This APPLICANT SITE INSPECTION RECORD SHEET MUST be submitted with the completed FORM 6 before CCC will be issued.

Building officer only to complete



F =	Fail	= Non-compliance with approved plans & documentation
P =	Pass	= Compliance with approved plans & documentation.
N/A		= Means that Building officer feels that this portion of the prompt sheet is not relevant

Wrap		Comments	P, F, N/A
1	Approved Consent documents on site		P
2	Check previous comments	Card not available.	-
3	Approved Building Consent documents on site		P
4	Check previous comments	is above	
5	Flashing details for window & door openings as per approved plans & specifications <i>If not amended plans will be required if flashing system is to be changed from approved.</i>	Aluminium flashings to complete on top corners.	
6	Wrap is free of punctures	None at insp time.	P
7	Internal & external corner junctions as per approved plans & specifications? <i>If not, issue NTF. A request for amended plans will be required if corner junctions are to be changed from approved.</i>	Brick exterior	P
8	Building wrap installed & lapped correctly? <i>Refer 2, Table 23, Horizontal, lapped 75 mm at joints, upper lapped over lower</i>	200 H diFlex 130.	P
9	Has a rigid or non-rigid 'Wind Barrier' been installed in accordance with the approved plans & specification? <i>Refer NZS 3604:1999, section 11.5.2.6. A rigid or non-rigid 'Wind Barrier' shall be required behind all types of weatherboards in 'High & Very High' wind zones.</i>		N/A
WRAP INSPECTION			
10	Correct wrap is installed as detailed	Tape at 300mm H to ft.	F
11	Building wrap is restrained if studs at more than 450C for cavities		N/A
12	Wrap is returned around windows		P
13	Double studs & battens provided behind sheet joints for 'Expressed joints' &/or 'Sealant joints'? <i>Refer approved plans & specification or E2, Fibre cement sheet, figure 103 & 106 & Plywood, figure 120, double stud required behind joints for sheet fixing.</i>		N/A
14	Window flashing tape installed correctly		F
15	Window sill trays are fixed/ fitted where required or detailed		N/A
16	penetrations through building wrap sealed		P
CAVITY BATTENS			
	Approved Building Consent documents on site		
17	Check previous comments		
18	Batten treatment is correct		
19	Extra restraints fitted to wrap if studs at more than 450C	N/A	
20	Batten is correct thickness		
21	Battens fixed at 300c where claddings fixed to battens		
22	Battens are fixed correctly		
23	Nogs are to correct fall and length		
24	Moisture content of battens comply		
25	Vermin/ drip flashing installed		

DESTINATION

ROT@RUA

ROTORUA DISTRICT COUNCIL

Rotorua District Council
1061 Haupapa Street
Private Bag 3029, Rotorua
P: 07 348 4199
F: 07 349 0993
E: mail@rdc.govt.nz
W: www.rdc.govt.nz

Lot 8
Somerly

B/c 60725
P 32309

23 Harro's St

Form 6

APPLICATION FOR CODE COMPLIANCE CERTIFICATE

Section 92, Building Act 2004

RECEIVED

21 NOV 2007

60725

THE BUILDING CONSENT

Building consent number: _____

Issued by [name of building consent authority that granted building consent]: _____

Rotorua District Council

THE OWNER

Name of owner [include preferred form of address, eg, Mr, Miss, Dr, if an individual]: _____

Generation Developments Ltd

Contact person: _____

Ruth Butzbach

Mailing address: _____

P O Box 14232, Tauranga

Street address/registered office: _____

36 Cameron Rd, Tauranga

Phone number: _____

Landline: 07-928-3942

Mobile: _____

Daytime: _____

After hours: _____

Facsimile number: _____

07-578-8561

Email address: _____

luthb@generation.co.nz

Website: _____

The following evidence of ownership is attached to this application: [copy of certificate of title, lease, agreement for sale and purchase, or other document showing full name of legal owner(s) of the building]

AGENT

Name of agent [only required if application is being made on behalf of the owner]: _____

Contact person: _____

Mailing address: _____

Street address/registered office: _____

Phone number: _____

Landline: _____

Mobile: _____

Daytime: _____

After hours: _____

Facsimile number: _____

Email address: _____

Website: _____

60725

Relationship to owner [state details of the authorisation from the owner to make the application on the owner's behalf]:

First point of contact for communications with the council/building consent authority [Contact details must be in NZ]:

Full name: _____

Mailing address: _____

Phone number(s): _____

Facsimile number(s): _____

Email address(es): _____

APPLICATION

All building work to be carried out under the above building consent was completed on: _____

The personnel who carried out the building work are as follows [list names, addresses, phone numbers, and (where relevant) registration numbers]:

Generation Developments Ltd - See attached
Lot 8 Somerly, Ngongotaha
23 Harris St, "

The following specified systems are contained on the compliance schedule for the building and, in the opinion of the personnel who installed them, are capable of performing to the performance standards set out in the building consent:

I request that you issue a code compliance certificate for this work under section 95 of the Building Act 2004.
The code compliance certificate should be sent to [state which address, and whether owner or agent]:

Signature of [owner/agent on behalf of and with the authority of the owner]: _____

Name of person signing: _____

Date: _____

Ruth Butzbach

~~29/8/2007~~ 26/10/07

ATTACHMENTS

The following documents are attached to this application:

- ☒ Certificates from the personnel who carried out the work
- ☒ Certificates that relate to the energy work
- ☐ Evidence that specified systems are capable of performing to the performance standards set out in the building consent

*Delete this section if details have not changed from the building consent.

†Delete if owner is an individual.

‡Delete this section if the application is not being made on behalf of the owner.

ELECTRICAL WORKERS
REGISTRATION BOARD

Safety • Competency

Electrical Certificate of Compliance

for prescribed electrical work that is carried out on electrical installations and involves the placing or positioning or the replacing or repositioning of conductors (including fittings attached to those conductors).

To be completed whether or not an inspection is required.

No. 2376334

No. of attachments

60725

CUSTOMER INFORMATION - PLEASE PRINT CLEARLYName of customer GENERATION DEVELOPMENTS LTD Phone: 07Address of installation LOT 8 23 HARRIS ST SOMERLEYPostal address of customer (if not as above) P.O. BOX 14232 TAYRANKA**WORK DETAILS**☒ 28 No. of lighting outlets☐ 1 No. of ranges☒ 29 No. of socket outlets☐ 1 No. of water heaters

Was any installation work carried out by the homeowner?

☐ Yes ☒ No

Please tick (✓) as appropriate where work includes:

☒ Mains☒ Main earthing system☒ Switchboard☐ Electric lines

Description Wire and connect 28
lights, 29 power points,
2 inline fans, 2 x 3+1 heat
light units, 2 T/Rails
Peter Bdl, DB Board, 16"
submain, earthing cable

It is recommended that test results be recorded here:

Visual Examination ☒Earth Continuity ☒Bonding ☒Polarity ☒

Insulation Resistance _____ Mohm

Other _____

If necessary attach any pages with sketches of work done

CERTIFICATION OF WORK

I certify that the above electrical work has been carried out in accordance with the requirements of the Electricity Act 1992 and Electricity Regulations 1997.

ELECTRICAL WORKER DETAILSName L. J. HALLAMRegistration no. E9580Company MAC MURDO ELECTSignature L. J. HallamDate 15/11/07Contact Ph No. 07/5380578**CERTIFICATION OF ELECTRIC LINES**

(to be completed where a separate electrical worker has installed the electric line portion of the mains)

Name _____

Registration no. _____

Company _____

Signature By other

Date _____

Contact Ph No. _____

INSPECTION DETAILS Electrical work requiring inspection by a registered electrical inspector☒ New mains☒ Switchboard☒ Earthing system☐ Installation work in hazardous areas

I certify that the inspection has been carried out in accordance with the requirements of regulation 41 of the Electricity Regulations 1997.

Name C.D. THOMASRegistration no. II42TSignature C.D. ThomasDate 15-11-2007Daytime Contact Ph No. 07) 3460506

CUSTOMER COPY - THIS IS AN IMPORTANT DOCUMENT AND SHOULD BE RETAINED

As Built**Drainage Plan**

Tauranga City

Drainage Plan for:

Street Number 23 Street Name Harris stLot 8 DPSuburb Ngongotaha

Owner

Type of Building DwellingDrainlayer Plumber Man

Date of Inspection Inspector

Drainage Permit No 6 0725

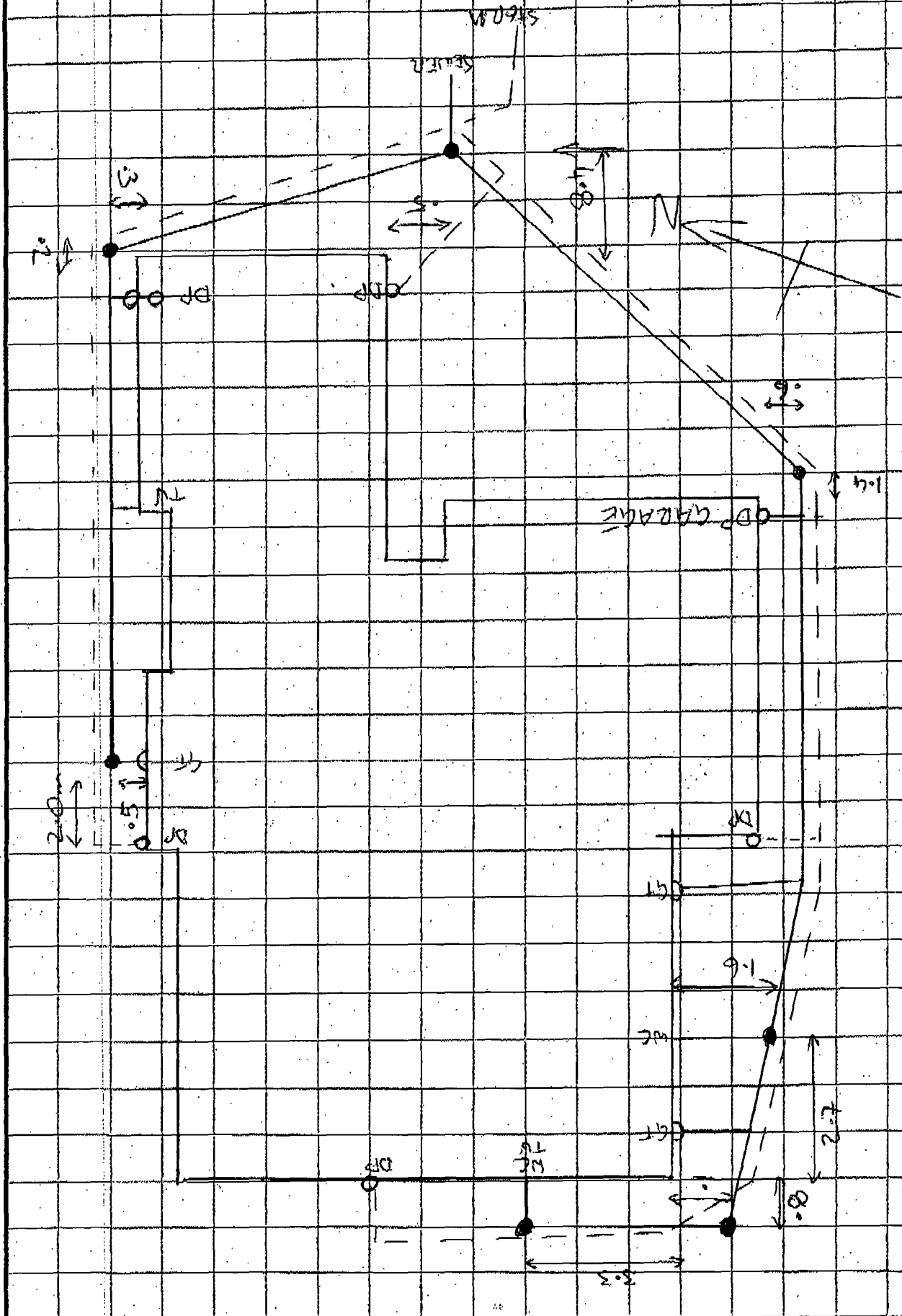
Note : Plan to be drawn in black ballpoint on graph opposite

Plan to include:

1. The correct position of the drains in relation to the building and boundaries.
2. The position of the street frontage.
3. Depth of drains at connection point.
4. Both foulwater and stormwater drains to be drawn.
5. Clearly define all inspection openings, with accurate measurements from two points.
6. Clearly define all buildings and boundaries.
7. Refer to example drain plan back page.

23 Harris ✓

#60725



FAX

MTEC CONSULTANTS LTD
P O Box 878, ROTORUA
Ph: (07) 347 7840
Fax: (07) 347 6191



SURVEYORS ENGINEERS PLANNERS

TO	CC	COMPANY	ATTENTION	FAX No.
x		RDC - BUILDING INSPECTORS	RAY	346 3143
	x		BRUCE HAYWARD	343 9944
	x	GENERATION DEVELOPMENTS LTD	MARK KOPKE	07 578 8561

SENDER CRAIG POLLARD

FILE No. 192725-R-E-C158

DATE 31/07/2007

No. OF PAGES 1 (Including this page)

FOR ☐ ACTION

☐ COMMENT

☒ INFORMATION

The information in this fax is confidential between MTEC Consultants Ltd and the intended recipient. If you have received this fax in error please immediately notify MTEC Consultants Ltd and destroy this fax.

RE : GENERATION DEVELOPMENTS - SOMERLY
HARRIS STREET, NGONGOTAHA
LOT 8 - FLOOR LEVEL

60725

We can confirm that the boxing for lot 8 has been set at RL 285.90, which is actually 200mm higher than the approved level of 285.70. It was raised to tie in better with the existing back boundary and in no cases will the floor levels be lower than the level shown on the approved floor level plan.

If you have any queries or require further information please contact me

Regards,
MTEC Consultants Ltd

A handwritten signature in black ink, appearing to read 'C. Pollard'.

Craig Pollard
Civil Engineer

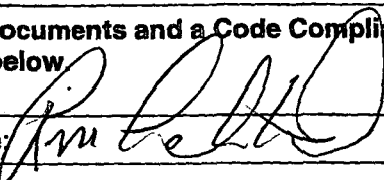
60725

Contractor Details List

Generation contractors who helped to create your new Generation Home.

Area of Expertise	Contractor Name	Contact Phone
Excavation	Graham (Anchorage)	0275 914 365
Concrete Floor	PlaceMakers	07 574-0820
Plumber	Plumberman Tga	07 5710625
Drainlayer	Plumberman Tga	07 5710625
Carpenter	Bruce Haywood	0274 887 777
Fascia/Spouting	Paul Harker	021 888 670
Roof	Chris Butler - Ross Roof	0274-920-219
Gib Fixing & Gib Stopping	Cliff Dines	025 953 749
Exterior Joinery	Darryl Drummond	027 233 2264
Bricklayer	Ian Summers (RIGS)	021 50 40 70
Electrician	MacMurdo	07 578 0538
TV Aerial	MacMurdo	07 578 0538
Gas Fitter (if applicable)	Plumberman Tga	07 5710625
Insulation	Des Philip	07 574-0820
Garage Door	Russell	0274 953 749
Plumbing Hardware	Julie (Zips)	07 574-8327
Kitchen	Brett Chatfield	07 578-6361
Painter	John Stanley	0274 716 589
Tiling	Colleen (European Tiles)	07-575 2968
Fencing	Charlie - Knowa Fence	021-242-1690
Concrete Drive, Tce, Paths	Bruce Haywood	0274 887 777
Carpets	Diane Matenga	07 542 0498
Blinds	Bryan Curran	0274-522-725
Shelving	Chris Dominikovich	027 688 8178
Garden Kerbing	N/A	0
Landscaper	TBA	0
Lawns	Rapid Lawn Rot	0
Cleaner	TBA	0

DESTINATION ROT@RUA 	Inspection Checklist: Domestic Final	Ref: TP 04-TF 01.19
		Ver: 3
		Issued: 27 Aug 07
		Doc No: IT-639940
		Page 1 of 6

BC N ^o 60725	Address Lot 8 Harris St Nongplaka	
	Contractor on site: Lee	
Date Inspected	Inspection Comments / Notes: (Include comment on any alternative solutions identified, site observation statements, warranties or 'As Laid's to be provided, if applicable)	Inspector
26/11/07	Work complete with consent documents	EC
PASS If all works comply with the Consented documents and a Code Compliance Certificate can be issued please sign and date below		
Date: 26/11/07		Inspector's signature: 
If Inspection Result = FAIL then complete below		
Notices / Site Instructions		
Date Issued:	Site Instruction / N.T.F No.	If site inspection fails, record below reason(s) and reference to any site instruction or notice issued
Date:	Re-inspections:	Inspector:
Final Inspection – Domestic- inspection result: 'Pass' (Refer to checklist)		

F = Fail = Non-compliance with approved plans & documentation
P = Pass = Compliance with approved plans & documentation.
N/A = Means that Building officer feels that this portion of the prompt sheet is not relevant

Building Consent Documentation		Comments	P, F, NA
1	Has a Form 6 been completed/submitted?		P
2	Approved Building Consent documents on site		P
3	Have conditions of PIM been met?		P
4	Have all inspections referenced in BC document been undertaken?		P
5	Check conditions of BC have been fulfilled.		
6	Check instructions/commentary from previous inspection (have all outstanding instructions been complied with?)		
7	Sec 269 – Does the application involve any certified building methods or products? If so check registers to ensure that these are current.	No	P
8	Sec 364 – Is the building a household unit being constructed by or on behalf of a property developer for the purpose of sale? If so ensure that a condition is applied requiring the developer to obtain CCC before on-selling or allowing occupation of the property.	Yes	P
Kitchen			
9	Is food prep area layout as per the approved plans & specification? <i>The food preparation surface shall have the minimum dimensions shown in Figure 1, G3/AS1A drainer integral with and draining to the sink is acceptable.</i>		P
10	Bench top sealed at junction with wall linings		P
11	Is sink provided capable of containing cylinder of 300 mm dia & 125 mm depth? <i>Utensil washing and food rinsing facilities shall have a sink with free draining surfaces with continuous falls to the outlet. The sink shall be capable of fully containing a solid cylinder of 300 mm diameter and 125 mm depth.</i>		P
12	Is hot & cold supply provided to sink? <i>Hot and cold water supply shall be provided to the sink as required by NZBC G12 "Water Supplies".</i>		P
13	Trap & waste fitted to sink? <i>Plumbing and drainage for waste water from the sink shall be provided as required by NZBC G13 "Foul Water".</i>		P
14	Energy supply provided for cooking? <i>A cooker with an oven and a hot plate, or a wall oven and a separate hob, shall be provided for cooking.</i>		P
15	Has space & power been provided for refrigerator or ventilation for food safe? <i>The food storage space shall provide for either refrigeration, or ventilation to the outside air.</i>		P
16	Energy source as specified for cooking	Electric	P
17	Impervious, easily cleaned wall finishes been provided as per approved plans & specifications? <i>Wall linings adjacent to appliances and facilities shall have surfaces that can be easily maintained in a hygienic condition. Stainless steel, decorative high pressure laminate, tiles, wallboards with painted or applied impervious coatings or films, are examples of suitable materials for these surfaces.</i>		P

Laundry			
18	Are laundering facilities provided as per approved plans & specification? <i>If no, issue NTF & request amended plans if facilities differ from approved.</i>		P
19	Laundry tub installed adequate? G2/AS1, cl 1.0.2 A laundry tub shall: a) have a capacity to spill-level of no less than 35 litres, and b) be capable of fully containing a solid cylinder of 400mm diameter and 200mm depth		P
20	Have service connections been provided? <i>A min of a cold water supply provided for tub or cold water and electric power supply to a washing machine?</i>		P
21	Is the laundry tub securely fixed?		P
22	Is the laundry tub correctly trapped?		P
23	Has splash protection been provided to floor and wall linings? <i>E3/AS1 cl 3.1.1 'Floors' & 3.1.2 'Walls'. Floor and Wall linings and finishes must satisfy the performance for impervious and easily cleaned surfaces in areas exposed to water splash.</i>		P
Wet areas / WCs			P
24	Has the specified waterproofing membrane been applied in accordance with the manufacturer's specifications? <i>Ensure the specified waterproof membrane has been applied in accordance with the manufacturer's technical specification. If required ensure applicator provides a Producer Statement - Construction (PS3)</i>		P
25	Are joints in impervious surfaces as detailed? <i>Jointing of impervious surfaces as specified i.e. PVC jointer, flexible sealant etc.</i>		P
26	Has flexible sealant been provided at the floor/wall junction of the tiled floor? <i>Refer E3.2(C)'Buildings shall be constructed to avoid the likelihood of damage to building elements being caused by the use of water'.</i>		P
27	Safety glazing as specified for shower screens, doors & windows been installed and clearly labeled. <i>NZS 4223</i>		P
28	Shower cubicle watertight?		P
29	Has hot water been tempered to 55 degrees Celsius maximum at all personal hygiene fixture? <i>Record actual temperature readings:</i>	less than 40°C can be turned up	P
Ventilation			
30	Natural ventilation to occupied space in accordance with the approved plans and specification? <i>Refer G4, Clause 1.2 'Natural Ventilation'.</i>		P
31	Is all mechanical ventilation operational and ducted to outside air? <i>Refer G4, Clause 1.3 'Mechanical Ventilation'.</i>		P

Insulation		
32	Is the ceiling insulation installed correctly & as per the approved plans & specification? <i>If the insulation installed differs from that approved, ensure that the substitution complies & obtain written confirmation from the owner that they have approved the substitution.</i>	P
33	Is a loose fill insulation barrier / boundary required / provided around flue/s of domestic solid fuel appliance installations? <i>Check NZS 4721 or AS/NZS 2918 or manufacturer literature.</i>	P
34	Is the ceiling insulation clearance around light fittings appropriate for the type of fitting?	P
35	Is subfloor insulation protection provided? <i>Subfloor insulation in exposed locations such as under raised floor of a pole house may require protection.</i>	P
Glazing		
36	Does glazing comply with NZS 4223 Part 3? <i>Check that all glazing within 2m of floor level is of appropriate size and that safety glass is clearly labeled.</i>	P
P & D		
37	Are seismic restraints fitted to the water storage cylinder?	P
38	Discharge wastes correctly sized and vented and terminate outside the building clear of openings?	P
39	Waste pipe penetrations sealed at the back of gully	P
40	Down pipes fixed correctly?	P
41	Overflow relief gully 150mm below lowest fixture trap & FFL and 75mm above finished ground levels	P
42	Drains correctly vented? <i>Ensure all branch drain 10m or > are vented</i>	P
43	HWC vent protected against frost	P
44	HWC drain to the exterior	P
45	Is the HWC vented to the exterior / or TPRV	P
46	Are all AAV's accessible	P
47	Have all WC pans been securely fixed & sealed?	P
48	Has appropriate mechanical ventilation been provided to all internal laundries, bathrooms, WC's	P
49	Have all bench tops, vanities baths been sealed to stop water penetration?	P
50	Have all shower cubicles been sealed to stop water leaking? <i>Run shower & check corners</i>	P

Stairs / Landings / Handrails			
51	Have complying handrails been installed as per consent documentation? <i>Ensure handrail provided is graspable & are provided in accordance with the approved plans & specification</i>		
52	Have light switches been provided for the stairway lighting? Light switches shall be provided at the top & bottom of each stairway.		
53	Does the slip resistance comply? <i>Slip resistance shall be provided for all walking surfaces such as decks, patios & steps on the approach to the main entrance of the building.</i>		
54	Do the stairway type, tread & rise comply with the approved plans & specifications? <i>Ensure all treads & risers for exterior private steps & stairs comply with main private stairway.</i>		N/A
55	Barrier installed to all areas where there is a fall height of 1.000 or more can occur from the floor or opening in the exterior envelope of the building, or a change in level. <i>If yes a barrier is required. Ref NZBC Cl F4</i>		
Solid Fuel Burner (Free standing/Inbuilt)			
56	Refer Free Standing/Inbuilt solid fuel burner checklist		N/A
Smoke Alarms			
57	Smoke alarms installed <3m of bedroom and in escape paths		P
Swimming pool and fencing			
58	Refer swimming pool checklist		N/A
Exterior			
59	Exterior envelope complete and weatherproof		P
60	Flashings to openings complete and weathertight?		P
61	Elevations match consented documents?		P
62	Wall cladding fixings/soakers/scribers completed?		P
63	Brickwork weep holes/ventilation comply?		P
64	Ground/paving heights comply?		P
65	Decks/barriers/timber treatment/thresholds comply?		P
66	Sub floor access/insulation/ ventilation correct?		N/A
67	Roof cladding/flushing fixings/ roof penetration flashings completed?		P
68	Landscaping completed?		P
69	Retaining wall construction as per approved documentation?		N/A
Effluent Disposal Systems			
70	System installed as per the approved consent?		
71	Producer statement (construction review) supplied from the installer or designer? <i>If so are they a recognized author?</i>		N/A
72	If required, can effluent disposal area be isolated from stock damage, etc? <i>Measures to keep stock off the disposal area ref to the approved design in the consent documents.</i>		
Damage Deposit			
73	Is footpath and/or kerb damaged?		P
74	Can damage deposit be refunded? <i>If yes, take photographs for evidence</i>		P

Crossing Deposit			
75	Is crossing formed in accordance with RDC requirements?		P
76	Can crossing deposit be refunded? <i>If no, take photographs for evidence</i>		P
PHOTOGRAPHS (compulsory)			
77	Photographs taken of all exterior elevations!		P
Producer Statements/Certificates			
78	Energy Certificate for Electrical work		P
79	Energy Certificate for Gas work		N/A
	Exterior Plaster:		
80	Installers – PS3		
81	Product/System manufacturer –PS4		
	Plumbing:		
82	Fusiotherm Installers – PS3		
	Drainage		
83	As built plan provided?		
	Tiles/Tanking:		
84	Installers – PS3		
85	Product Manufacturer (Warranty)		
	Structural (including precast elements)		
86	PS3 – Construction		
87	PS4 – Construction Review		
	Geotechnical:		
88	PS3 – Construction		
89	PS4 – Construction Review		
	ST Ratings:		
90	PS3 – Construction		
91	PS4 – Construction Review		
	Glazing:		
92	PS3 – Construction		
93	PS4 – Construction Review		
	Proprietary Systems:		
94	PS3 – Construction		
95	PS4 – Construction Review		

	Inspection Checklist: Pre-floor P&D	Ref: TP 04 – TF 01.3
		Ver: 2
		Issued: 27 Aug 07
		Doc No: IT-639957
		Page 1 of 2

BC N ^o 60725	Address Lot 8 23 Harris St
Contractor on site: Kerry	

Date Inspected	Inspection Comments / Notes: (Include comment on any alternative solutions identified, site observation statements, warranties or 'As Laid's to be provided, if applicable)	Inspector
10/9/07	by Steve of Plumberman	EL
has		
800		

If Inspection Result ≠ PASS then date and sign below	
Date: 10/9/07	Inspector's signature: 
If Inspection Result = FAIL then complete below	

Notices / Site Instructions			
Date Issued:	Site Instruction / N.T.F No.	If site inspection fails, record below reason(s) and reference to any site instruction or notice issued	

Date:	Re-inspections:	Inspector:

Subfloor P&D inspection result: 'Pass' (Refer to checklist)

F = Fail = Non-compliance with approved plans & documentation
P = Pass = Compliance with approved plans & documentation.
N/A = Means that Building officer feels that this portion of the prompt sheet is not relevant

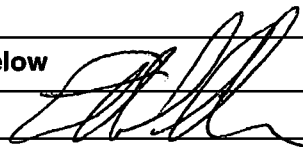
	PRE-FLOOR PLUMBING	Comments	P, F, N/A
1	Approved Building Consent documents on site	Yes	P
2	Check previous comments	OK	P
3	Confirm plumbers details are correct and record <u>license number</u>	Steve	P
4	Water pipes are run under floor (50 year warranty)	G17	P
5	Identify system being used, G13, AS3500 Match plans?	G13	P
6	Correct gradient for wastes and drains	OK	P
7	Fixture discharge pipe sizes are correct	OK	P
8	Unvented waste pipe is under 3.5m for G13	NA	
9	2.5m max Length for wastes under AS3500 to FWG	NA	
10	Terminal Vent is in correct position/ one fixture max upstream	OK	P
11	Stacks have two 45 degree bends at base	NA	
12	Pipes are protected where they pass through concrete	OK	P
13	HWC drain is to correct fall & length and to a visible position at ext.	OK Copper	P
14	Additional branch drains over 6m/ 10m to be vented	NA	
15	One gully is 150mm below lowest fixture trap & FFL and 75 mm above finished ground levels	OK	P
16	Min vent sizes met 50mm AS3500/ 80mm G13	G13	P
17	80mm W/C pipe max length is 2.5 unvented	G13	P
18	Soffits of all pipes are level at top of pipes	OK	P
19	FWG have concrete support at base	NA	
20	Test on drains/ AS3500	NA	
21	Correct pipe used	OK	P
22	Primer used on all joints	Yes	P

	Inspection Checklist: Sanitary & Storm Water Drainage	Ref: TP 04 – TF 01.16
		Ver: 2
		Issued: 27 Aug 07
		Doc No: IT-639953
		Page 1 of 2

BC N° 60725.	Address lot 8 Harris St.
	Contractor on site: Steve (Plumberman)

Date Inspected	Inspection Comments / Notes: (Include comment on any alternative solutions identified, site observation statements, warranties or 'As Laid's to be provided, if applicable)	Inspector
21/9/07	Steve Mitchel Limited Licence.	21367.
	Kevin Johnson. Reg Drainlayer	09687.
	Plumber man T.G.	
	Drains approved as copy with AS 3500.	

If Inspection Result = **PASS** then date and sign below

Date: **21/9/07** Inspector's signature: 

If Inspection Result = **FAIL** then complete below

Notices / Site Instructions

Date Issued:	Site Instruction / N.T.F No.	If site inspection fails, record below reason(s) and reference to any site instruction or notice issued	
21/9/07	1011	See inst. sheet.	ED

Date:	Re-inspections:	Inspector:
21/9/07	Approved see above.	ED.

Sanitary & Storm Water Drainage inspection result: 'Pass' (Refer to checklist)

F = Fail = Non-compliance with approved plans & documentation
P = Pass = Compliance with approved plans & documentation.
N/A = Means that Building officer feels that this portion of the prompt sheet is not relevant

	DRAINAGE INSPECTION	Comment	P, F, N/A
1	Approved Building Consent documents on site		P
2	Check previous comments		P
3	Confirm Drainlayers details		P
4	License number		
	SEWER		
5	Correct lateral is being connected to		P
6	Pipe size is correct	110mm P.V.C.	P
7	Primer and glue on all joints		P
8	Bedding material is correct		P
9	Pipes laid straight with correct gradient	1:60.	P
10	Correct fittings and bends		P
11	Terminal Vent location	2x 65mm vents.	P
12	Waste pipe's to gullies sealed		P
13	Drain is to sufficient depth		P
14	Drains are on test and holding	water test.	P
15	As-built plan received	TO Come.	-
	STORM WATER		
16	Approved Building Consent documents on site		P
17	Check previous comments		P
18	Confirm Drainlayers details are correct (license)		P
19	Pipe size is correct and is an approved product	90 & 100mm.	P
20	Pipe is glued and primer used		P
21	Bedding material the right type		P
22	Pipes laid straight with correct gradient		P
23	Correct fittings / bends are used		P
24	Soak holes are used		N/A
25	Correct lateral is being connected too		P
26	As built plan received	TO Come.	

INSTRUCTION BOOK

BUILDING SERVICES

NO: 1009



P. No: _____

Building Consent No: 60681.

Date Issued: _____

Rotorua District Council
1061 Haupapa Street
Private Bag 3029
Rotorua Mail Centre
Rotorua 3046
New Zealand
P: 07 348 4199
F: 07 346 3143
E: mail@rdc.govt.nz
W: www.rdc.govt.nz

Instructions:

Wrap Inspection

1. Aluband tape to be fitted in all windows and door openings top + bottom.
2. Blue band to be fitted as wrap restraint at 300mm centres horizontal.
3. Spoke to carpenter on site about ceiling access in garage. This will require re position. for preline inspection.
4. At the wrap recall inspection a check of hose tap pipes etc through the wrap will need to be checked.
5. I have agreed that windows can be fitted as Aluband can be seen after being fitted.

Date Instructions must be complied with: Before Cladding fitted.

Signed: [Signature]

Position: Part Leader Inspections.

Date: 21/9/07.

Inspection Checklist: Preline P&D

Ref: TP 04 – TF 01.13

Ver: 3

Issued: 27 Aug 07

Doc No: IT-639947

Page 1 of 2

BC N ^o 60725		Address 23 Harris Street	
		Contractor on site no one on site	
Date Inspected	Inspection Comments / Notes: (Include comment on any alternative solutions identified, site observation statements, warranties or 'As Laid's to be provided, if applicable)		Inspector
9-10-07	cladding complete. need to verify brick inspector, let a color well appear on water hammer protector no lost protector in places. see photos.		Allen
If Inspection Result = PASS then date and sign below			
Date:		Inspector's signature:	
If Inspection Result = FAIL then complete below			
Notices / Site Instructions			
Date Issued:	Site Instruction / N.T.F No.	If site inspection fails, record below reason(s) and reference to any site instruction or notice issued	
9-10-07	0342		Allen
Date:	Re-inspections:		Inspector:
10/10/07	Plumbing on test and holding wrap		RC
3:30	Patched where pipes penetrati		
	Work passed as complies with		
	consent documents		
Preline P&D inspection result: 'Pass' (Refer to checklist)			

Preline P&D			P, F, NA
1	Approved Building Consent Documents on site		P
2	Check previous comments		P
3	Is the hot & cold water supply system under water tightness pressure test? <i>Ensure the water supply system is subjected to a pressure test of 1500kPa and retains the pressure for a min of 15 minutes without failure/leaks occurring.</i>	ma-ins only. need to be pumped up to 200psi	Fail
4	Is the pipe material as specified? <i>Refer approved plans & specifications, If not, issue NTF & request confirmation from owner/designer that substitution was approved.</i>	Rehan Hot & Cold	P
5	Are pipes sized as per consent documentation?		P
6	Are fixture & branch vents sized correctly? (Refer Table 6 - G13)		P
7	Primer used on waste pipes		P
8	Water hammer protection		P
9	Frost protection to pipes inc overflow <i>Ensure pipework within 300mm of the exterior roofline has been insulated. Pipes in external walls shall be positioned not less than 20mm away from the external surface (G12, AS NZS 3500).</i>	not all pipes protected within 300mm of roof	Fail
10	Stack test		N/A
11	Pipe used complies with plans		P
12	Fixing of (clipping) of pipes complies		P
13	Fixture waste pipes are sized and graded correctly		P
14	TV is in correct position and to air	through the roof	P
15	AAV is in accessible area		N/A
16	HWC drain is installed (copper)	40 PVC through floor	P
17	Pipes are under test and holding pressure		N/A
18	Notches and holes in framing / joists		P
19	Fire hose reel plumbing in copper only		N/A

P = Pass = Compliance with the Building Code
F = Fail = Non-compliance with the Building Code – further information required
NA = Not Applicable

INSTRUCTION BOOK BUILDING SERVICES

NO: 1011



P. No: _____

Building Consent No: 60725

Date Issued: _____

Steve (Ruberman),

Instructions:

Drainage
The Building Consent must be on
site for any inspection.

Rotorua District Council
1061 Haupapa Street
Private Bag 3029
Rotorua Mail Centre
Rotorua 3046
New Zealand
P: 07 348 4199
F: 07 346 3143
E: mail@rdc.govt.nz
W: www.rdc.govt.nz

Date Instructions must be complied with: _____

Signed: _____

Position: Pen Leader Inspection

Date: 21/9/07

INSTRUCTION BOOK BUILDING SERVICES

NO: 1013

DESTINATION

ROT@RUA

ROTORUA DISTRICT
COUNCIL

P. No: 32309.

Building Consent No: 60725.

Date Issued:

Bruce

Instructions:

Pre Wrap inspection.

- To be checked at Post wrap insp.
1. Bolts & washers each side of cut out bottom plates.
 2. Ceiling braces to be connected to brace walls correctly also butt joint to turn over garage.
 3. Provide rotation support to chapsman ceiling beam in lounge.

Rotorua District Council
1061 Haupapa Street
Private Bag 3029
Rotorua Mail Centre
Rotorua 3046
New Zealand
P: 07 348 4199
F: 07 346 3143
E: mail@rdc.govt.nz
W: www.rdc.govt.nz

plumber Plumbing on line and holding wrap 2C
3:30 Patched where pipes penetrate
Work passed as complete with

Date Instructions must be complied with:

Before Post wrap.

Signed:

Position:

Team Leader Inspection

Date:

21/9/07.

	Inspection Checklist: Exterior Claddings	Ref: TP 04 – TF 01.8
		Ver: 3
		Issued: 27 Aug 07
		Doc No: IT-639938
		Page 1 of 5

BC N ^o 60725	Address Harris St Lot 8
Contractor on site:	

Date Inspected	Inspection Comments / Notes: (Include comment on any alternative solutions identified, site observation statements, warranties or 'As Laid's to be provided, if applicable)	Inspector
9/10/07	1/2 Brick	
	Work passed as per consent document,	RL

If Inspection Result = PASS then date and sign below	
Date: 9/10/07	Inspector's signature: 
If Inspection Result = FAIL then complete below	

Notices / Site Instructions		
Date Issued:	Site Instruction / N.T.F No.	If site inspection fails, record below reason(s) and reference to any site instruction or notice issued

Date:	Re-inspections:	Inspector:

Exterior Cladding inspection result: 'Pass' (Refer to checklist)
--

F = Fail = Non-compliance with approved plans & documentation
P = Pass = Compliance with approved plans & documentation.
N/A = Means that Building officer feels that this portion of the prompt sheet is not relevant

Approved Consent documents on site	Yes	P
Check previous comments	OK	P
Roof Cladding	Comments	P, F, N/A
Masonry Tiles		
1 Is roof underlay laid with 150mm laps min & lap upper over lower? <i>Refer E2, section 8, cl 8.1.5 'Underlay's'</i>	OK	P
2 Have tiles been fixed correctly. <i>Ref: NZS 4206</i>	OK	P
Pressed Metal Tiles		
3 Were the 'Gutters' barges & fascias' install after the wall cladding & any protective coatings were applied? <i>Refer E2, Section 8.3, cl 8.3.9, Where gutters, barges & fascias terminate against a cladding these shall be installed after the wall cladding & any protective finishes have been applied.</i>	N/A	
4 Do the Gutters, Barges & Fascias' terminate 10mm from the finished cladding? <i>Refer E2, section 8.3, cl 8.3.9 'Gutters, Barges & Fascias' shall terminate so as to leave a gap of 10mm from the finished cladding.</i>		
Profiled Metal		
5 Have flashings been installed as per the approved plans & specifications	N/A	
6 Is construction detail as per the approved plans & specifications		
Membrane Roofs		
7 Does the substrate comply with the approved plans & specifications	N/A	
8 Have certificates / statements for the product / system & installation been provided.		
9 Have overflow relief's been installed		
10 Are falls adequate for runoff		
11 Have all junctions & penetrations been sealed / flashed.		
12 Junctions between differing claddings flashed		
Brick Veneer		
13 Are ground clearance provisions correct? <i>Min 100mm to paved surface Min 150mm to finished ground level</i>	Yes	P
14 Are lintel bars spanning openings as per consent documentation? <i>100mm min seating each side for spans < 2m. 200mm min seating each side for spans > 2m</i>	N/A	N/A
15 Have shelf angles been installed correctly?	OK	P
16 Are wall ties, spacing and spans as specified?	Yes	P
17 Are weep holes correctly installed? <i>Every 3rd perps.</i>	Yes	P
18 Are window and door opening details correct, including flashings? <i>Check carefully against documentation.</i>	OK	P
19 Have control joints been correctly installed? <i>Check brick manufacturer specs.</i>		N/A

20	Is the minimum brick wall panel width equal to or greater than 230 mm?		P
21	Is vermin proofing provided where gaps more than 13mm occur?		N/A
22	Is cavity correctly formed including the installation & type of building paper, strapping >40mm<75mm		P
23	Cavity is sealed from roof space (Soffits is blocked off)		P
24	Is cavity ventilation provided? <i>10mm continuous gap at top of wall or replication of perps.</i>		P
Fibre Cement Weatherboard			P, F, N/A
34	Flashing details for window & door openings as per approved plans & specifications <i>If not, issue notice. A request for amended plans will be required if flashing system is to be changed from approved.</i>		
35	Horizontal laps and jointing method as per approved plans & specification? <i>If not, issue notice A request for amended plans will be required if horizontal lap or jointing method is to be changed from approved.</i>		
36	Fixing of weatherboards as per approved plans & specification?		
37	Internal & external corner junctions as per approved plans & specifications? <i>If not, issue notice. A request for amended plans will be required if internal and / or external corner detail is to be changed from approved.</i>		
38	Junctions with dis-similar materials as detailed on approved plans & specification? <i>If not, issue notice. A request for amended plans will be required if junction detail is to be changed from approved</i>		
39	Are top edges at sills & all bottom edges of weatherboards painted?		
Plywood			
40	Flashing details for window & door openings as per approved plans & specifications <i>If not, issue notice A request for amended plans will be required if flashing system is to be changed from approved.</i>		
41	All sheet edges fixed over support? <i>Refer details in approved plans or specification.</i>		
42	Horizontal laps and jointing method as per approved plans & specification? <i>If not, issue notice. A request for amended plans will be required if horizontal lap or jointing method is to be changed from approved.</i>		
43	Fixing of plywood as per approved plans & specification?		
44	Is the grade & treatment of ply appropriate for the intended use.		
45	Timber batten weather grooving provided as per approved detail. <i>Refer E2, Figure 105.</i>		
46	Double studs provided behind sheet joints for 'Expressed joints'? <i>Refer E2, 9.8.3.2, figure 120, double stud required behind joints for sheet fixing.</i>		
47	Internal & external corner junctions as per approved plans & specifications? <i>If not, issue notice A request for amended plans will be required if internal and / or external corner detail is to be changed from approved.</i>		

48	Junctions with dis-similar materials as detailed on approved plans & specification? <i>If not, issue notice. A request for amended plans will be required if junction detail is to be changed from approved.</i>		P, F, N/A N/A
Profiled Metal			
49	Flashing details for window & door openings as per approved plans & specifications <i>If not, issue notice. A request for amended plans will be required if flashing system is to be changed from approved.</i>		
50	Horizontal laps and jointing method as per approved plans & specification? <i>If not, issue notice. A request for amended plans will be required if horizontal lap or jointing method is to be changed from approved.</i>	N/A	
51	Fixing of profiled metal as per approved plans & specification?		
52	All sheet edges fixed? <i>Refer details in approved plans or specification, E2 or MRM Code of Practice.</i>		
53	Internal & external corner junctions as per approved plans & specifications? <i>If not, issue notice. A request for amended plans will be required if internal and / or external corner detail is to be changed from approved.</i>		
54	Junctions with dis-similar materials as detailed on approved plans & specification? <i>If not, issue notice. A request for amended plans will be required if junction detail is to be changed from approved.</i>		
Timber Weatherboard			
55	Has the cavity system been constructed in accordance with the approved plans & specifications? <i>If not, issue notice. A request for amended plans will be required if cavity system is to be changed from approved.</i>		
56	Has a rigid or non-rigid 'Wind Barrier' been installed in accordance with the approved plans & specification? <i>Refer NZS 3604:1999, section 11.5.2.6. A rigid or non-rigid 'Wind Barrier' shall be required behind all types of weatherboards in 'High & Very High' wind zones.</i>		
57	Flashing details for window & door openings as per approved plans & specifications <i>If not, issue notice. A request for amended plans will be required if flashing system is to be changed from approved.</i>		
58	Horizontal laps and jointing method as per approved plans & specification? -32mm min lap for non-rebated bevel back weatherboard. -25mm min lap for rebated bevel back and rusticated weatherboard. Where NZS3602 requires a protective finish, all end grain sealed against moisture penetration. <i>If not, issue notice.</i>	N/A	
59	Fixing of weatherboards as per approved plans & specification? <i>Weatherboards shall be fixed with a single nail @ 600mm centres max, located immediately above the lower board with:-75mm x 3.15mm for bevel back weatherboard, -60mm x 2.8mm for rusticated weatherboard</i>		
60	Internal & external corner junctions as per approved plans & specifications? <i>If not, issue notice. A request for amended plans will be required if internal and / or external corner detail is to be changed from approved.</i>		
61	Junctions with dis-similar materials as detailed on approved plans & specification? <i>If not, issue notice. A request for amended plans will be required if junction detail is to be changed from approved.</i>		

Parapets			P, F, N/A
62	Has the cavity system been constructed in accordance with the approved plans & specifications? <i>If not, issue notice A request for amended plans will be required if cavity system is to be changed from approved.</i>		
63	Is the top face of all parapets / barriers sloping & have they been adequately flashed.		
64	Has a rigid or non-rigid 'Wind Barrier' been installed in accordance with the approved plans & specification? <i>Refer NZS 3604:1999, section 11.5.2.6. A rigid or non-rigid 'Wind Barrier' shall be required behind all types of weatherboards in 'High & Very High' wind zones.</i>		
65	Have expansion joints been installed as detailed? <i>If 'No' issue notice A request for amended plans will be required if expansion joint detail is to be changed from approved.</i>	N/A	
66	Horizontal joints/laps and vertical jointing method as per approved plans & specification? <i>If not, issue notice A request for amended plans will be required if joint or lap detail(s) is to be changed from approved.</i>		
67	Fixing of weatherboards as per approved plans & specification? <i>Weatherboards shall be fixed with a single nail @ 600mm centres max, located immediately above the lower board with:-75mm x 3.15mm for bevelback weatherboard,-60mm x 2.8mm for rusticated weatherboard</i>		
68	Internal & external corner junctions as per approved plans & specifications? <i>If not, issue notice. A request for amended plans will be required if internal and / or external corner detail is to be changed from approved.</i>		
69	Junctions with dis-similar materials as detailed on approved plans & specification? <i>If not, issue notice. A request for amended plans will be required if junction detail is to be changed from approved.</i>		

INSTRUCTION BOOK

BUILDING SERVICES

NO: 0342

DESTINATION

ROT@RUA

ROTORUA DISTRICT
COUNCIL

P. No: P 32309

Building Consent No: BC 60725

Date Issued: 6-9-07

Rotorua District Council
1061 Haupapa Street
Private Bag 3029
Rotorua, New Zealand
P: 07 348 4199
F: 07 346 3143
E: mail@rdc.govt.nz
W: www.rdc.govt.nz

Instructions:

- 1) need to finish insulation to all pipes within 300mm of roof line ✓
- 2) needs to pressurize pipes to 200PSI and to have gauge fitted at preline inspection. Building ✓
- 3) While I was there check bottom plate fixings for brace walls, not all complete - see stamped plans for missing items ✓
- 4) Confirm Brick inspection carried out ✓

RML OK

Date Instructions must be complied with: Before Building Preline

Signed: [Signature]

Position: Team Leader Processing

Date: 9-10-07

	Inspection Checklist: Wrap Cavity Battens	Ref: TP 04 – TF 01.7
		Ver: 2
		Issued: 27 Aug 07
		Doc No: IT-639960
		Page 1 of 2

BC N° 60725	Address 1st 8 Harris St.
Contractor on site: Ben.	

Date Inspected	Inspection Comments / Notes: (Include comment on any alternative solutions identified, site observation statements, warranties or 'As Laid's to be provided, if applicable)	Inspector
28/9/07	Wrap & strapping to complete	ED.

If Inspection Result = **PASS** then date and sign below

Date: _____ Inspector's signature: _____

If Inspection Result = **FAIL** then complete below

Notices / Site Instructions

Date Issued:	Site Instruction / N.T.F No.	If site inspection fails, record below reason(s) and reference to any site instruction or notice issued	
28/9/07	1026.	See inst sh.	ED.

Date:	Re-inspections:	Inspector:

Wrap / Cavity inspection result: 'Pass' (Refer to checklist)

F = Fail = Non-compliance with approved plans & documentation
P = Pass = Compliance with approved plans & documentation.
N/A = Means that Building officer feels that this portion of the prompt sheet is not relevant

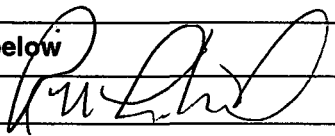
Wrap		Comments	P, F, N/A
1	Approved Consent documents on site		P.
2	Check previous comments		P.
3	Approved Building Consent documents on site		P.
4	Check previous comments		P.
5	Flashing details for window & door openings as per approved plans & specifications <i>If not amended plans will be required if flashing system is to be changed from approved.</i>	Alu band system used.	P.
6	Wrap is free of punctures	No plumbing fitted, no punctures.	P.
7	Internal & external corner junctions as per approved plans & specifications? <i>If not, issue NTF. A request for amended plans will be required if corner junctions are to be changed from approved.</i>		P.
8	Building wrap installed & lapped correctly? <i>Refer 2, Table 23, Horizontal, lapped 75 mm at joints, upper lapped over lower</i>	200 H. 300 V.	P.
9	Has a rigid or non-rigid 'Wind Barrier' been installed in accordance with the approved plans & specification? <i>Refer NZS 3604:1999, section 11.5.2.6. A rigid or non-rigid 'Wind Barrier' shall be required behind all types of weatherboards in 'High & Very High' wind zones.</i>		P.
	WRAP INSPECTION		
10	Correct wrap is installed as detailed	Difflex 130 & TheraKraft Cover Up.	P.
11	Building wrap is restrained if studs at more than 450C for cavities	TO complete.	F.
12	Wrap is returned around windows		P.
13	Double studs & battens provided behind sheet joints for 'Expressed joints' &/or 'Sealant joints'? <i>Refer approved plans & specification or E2, Fibre cement sheet, figure 103 & 106 & Plywood, figure 120, double stud required behind joints for sheet fixing.</i>		N/A.
14	Window flashing tape installed correctly	Alu band.	P.
15	Window sill trays are fixed/ fitted where required or detailed		N/A.
16	penetrations through building wrap sealed	None	P.
	CAVITY BATTENS		
	Approved Building Consent documents on site		
17	Check previous comments		
18	Batten treatment is correct		
19	Extra restraints fitted to wrap if studs at more than 450C	N/A.	
20	Batten is correct thickness		
21	Battens fixed at 300c where claddings fixed to battens		
22	Battens are fixed correctly		
23	Nogs are to correct fall and length		
24	Moisture content of battens comply		
25	Vermir/ drip flashing installed		

	Inspection Checklist: Exterior Claddings	Ref: TP 04 – TF 01.8
		Ver: 3
		Issued: 27 Aug 07
		Doc No: IT-639938
		Page 1 of 5

BC N° 60725	Address LOT 8 Harris St
Contractor on site:	

Date Inspected	Inspection Comments / Notes: (Include comment on any alternative solutions identified, site observation statements, warranties or 'As Laid's to be provided, if applicable)	Inspector
9/10/07		
	Work meets requirements of consent	RL

If Inspection Result = **PASS** then date and sign below

Date: 9/10/07 Inspector's signature: 

If Inspection Result = **FAIL** then complete below

Notices / Site Instructions			
Date Issued:	Site Instruction / N.T.F No.	If site inspection fails, record below reason(s) and reference to any site instruction or notice issued	

Date:	Re-inspections:	Inspector:

Exterior Cladding inspection result: 'Pass' (Refer to checklist)

F = Fail = Non-compliance with approved plans & documentation
P = Pass = Compliance with approved plans & documentation.
N/A = Means that Building officer feels that this portion of the prompt sheet is not relevant

Approved Consent documents on site			
Check previous comments			P
Roof Cladding	Comments		P, F, N/A
Masonry Tiles			
1	Is roof underlay laid with 150mm laps min & lap upper over lower? <i>Refer E2, section 8, cl 8.1.5 'Underlay's'</i>		P
2	Have tiles been fixed correctly. <i>Ref: NZS 4206</i>		
Pressed Metal Tiles			
3	Were the 'Gutters' barge & fascias' install after the wall cladding & any protective coatings were applied? <i>Refer E2, Section 8.3, cl 8.3.9, Where gutters, barge & fascias terminate against a cladding these shall be installed after the wall cladding & any protective finishes have been applied.</i>		N/A
4	Do the Gutters, Barge & Fascias' terminate 10mm from the finished cladding? <i>Refer E2, section 8.3, cl 8.3.9 'Gutters, Barge & Fascias' shall terminate so as to leave a gap of 10mm from the finished cladding.</i>		N/A
Profiled Metal			
5	Have flashings been installed as per the approved plans & specifications		N/A
6	Is construction detail as per the approved plans & specifications		
Membrane Roofs			
7	Does the substrate comply with the approved plans & specifications		
8	Have certificates / statements for the product / system & installation been provided.		N/A
9	Have overflow relief's been installed		
10	Are falls adequate for runoff		
11	Have all junctions & penetrations been sealed / flashed.		
12	Junctions between differing claddings flashed		
Brick Veneer			
13	Are ground clearance provisions correct? <i>Min 100mm to paved surface Min 150mm to finished ground level</i>		P
14	Are lintel bars spanning openings as per consent documentation? <i>100mm min seating each side for spans < 2m. 200mm min seating each side for spans > 2m</i>		N/A
15	Have shelf angles been installed correctly?		P
16	Are wall ties, spacing and spans as specified?		P
17	Are weep holes correctly installed? <i>Every 3rd perps.</i>		P
18	Are window and door opening details correct, including flashings? <i>Check carefully against documentation.</i>		P
19	Have control joints been correctly installed? <i>Check brick manufacturer specs.</i>		P

20	Is the minimum brick wall panel width equal to or greater than 230 mm?		P
21	Is vermin proofing provided where gaps more than 13mm occur?		P
22	Is cavity correctly formed including the installation & type of building paper, strapping >40mm<75mm		P
23	Cavity is sealed from roof space (Soffits is blocked off)		P
24	Is cavity ventilation provided? 10mm continuous gap at top of wall or replication of perps.		P
Fibre Cement Weatherboard			P, F, N/A
34	Flashing details for window & door openings as per approved plans & specifications <i>If not, issue notice. A request for amended plans will be required if flashing system is to be changed from approved.</i>	N/A	
35	Horizontal laps and jointing method as per approved plans & specification? <i>If not, issue notice. A request for amended plans will be required if horizontal lap or jointing method is to be changed from approved.</i>		
36	Fixing of weatherboards as per approved plans & specification?		
37	Internal & external corner junctions as per approved plans & specifications? <i>If not, issue notice. A request for amended plans will be required if internal and / or external corner detail is to be changed from approved.</i>		
38	Junctions with dis-similar materials as detailed on approved plans & specification? <i>If not, issue notice. A request for amended plans will be required if junction detail is to be changed from approved</i>		
39	Are top edges at sills & all bottom edges of weatherboards painted?		
Plywood			
40	Flashing details for window & door openings as per approved plans & specifications <i>If not, issue notice. A request for amended plans will be required if flashing system is to be changed from approved.</i>	N/A	
41	All sheet edges fixed over support? <i>Refer details in approved plans or specification.</i>		
42	Horizontal laps and jointing method as per approved plans & specification? <i>If not, issue notice. A request for amended plans will be required if horizontal lap or jointing method is to be changed from approved.</i>		
43	Fixing of plywood as per approved plans & specification?		
44	Is the grade & treatment of ply appropriate for the intended use.		
45	Timber batten weather grooving provided as per approved detail. <i>Refer E2, Figure 105.</i>		
46	Double studs provided behind sheet joints for 'Expressed joints'? <i>Refer E2, 9.8.3.2, figure 120, double stud required behind joints for sheet fixing.</i>		
47	Internal & external corner junctions as per approved plans & specifications? <i>If not, issue notice. A request for amended plans will be required if internal and / or external corner detail is to be changed from approved.</i>		

48	Junctions with dis-similar materials as detailed on approved plans & specification? <i>If not, issue notice. A request for amended plans will be required if junction detail is to be changed from approved.</i>		N/A	P, F, N/A
Profiled Metal				
49	Flashing details for window & door openings as per approved plans & specifications <i>If not, issue notice. A request for amended plans will be required if flashing system is to be changed from approved.</i>			
50	Horizontal laps and jointing method as per approved plans & specification? <i>If not, issue notice. A request for amended plans will be required if horizontal lap or jointing method is to be changed from approved.</i>			
51	Fixing of profiled metal as per approved plans & specification?			
52	All sheet edges fixed? <i>Refer details in approved plans or specification, E2 or MRM Code of Practice.</i>			
53	Internal & external corner junctions as per approved plans & specifications? <i>If not, issue notice. A request for amended plans will be required if internal and / or external corner detail is to be changed from approved.</i>			
54	Junctions with dis-similar materials as detailed on approved plans & specification? <i>If not, issue notice. A request for amended plans will be required if junction detail is to be changed from approved.</i>			
Timber Weatherboard				
55	Has the cavity system been constructed in accordance with the approved plans & specifications? <i>If not, issue notice. A request for amended plans will be required if cavity system is to be changed from approved.</i>			
56	Has a rigid or non-rigid 'Wind Barrier' been installed in accordance with the approved plans & specification? <i>Refer NZS 3604:1999, section 11.5.2.6. A rigid or non-rigid 'Wind Barrier' shall be required behind all types of weatherboards in 'High & Very High' wind zones.</i>			
57	Flashing details for window & door openings as per approved plans & specifications <i>If not, issue notice. A request for amended plans will be required if flashing system is to be changed from approved.</i>			
58	Horizontal laps and jointing method as per approved plans & specification? <i>-32mm min lap for non-rebated bevel back weatherboard. -25mm min lap for rebated bevel back and rusticated weatherboard. Where NZS3602 requires a protective finish, all end grain sealed against moisture penetration. If not, issue notice.</i>			
59	Fixing of weatherboards as per approved plans & specification? <i>Weatherboards shall be fixed with a single nail @ 600mm centres max, located immediately above the lower board with:-75mm x 3.15mm for bevel back weatherboard, -60mm x 2.8mm for rusticated weatherboard</i>			
60	Internal & external corner junctions as per approved plans & specifications? <i>If not, issue notice. A request for amended plans will be required if internal and / or external corner detail is to be changed from approved.</i>			
61	Junctions with dis-similar materials as detailed on approved plans & specification? <i>If not, issue notice. A request for amended plans will be required if junction detail is to be changed from approved.</i>			

Parapets			P, F, N/A
62	Has the cavity system been constructed in accordance with the approved plans & specifications? <i>If not, issue notice A request for amended plans will be required if cavity system is to be changed from approved.</i>		
63	Is the top face of all parapets / barriers sloping & have they been adequately flashed.		
64	Has a rigid or non-rigid 'Wind Barrier' been installed in accordance with the approved plans & specification? <i>Refer NZS 3604:1999, section 11.5.2.6. A rigid or non-rigid 'Wind Barrier' shall be required behind all types of weatherboards in 'High & Very High' wind zones.</i>		
65	Have expansion joints been installed as detailed? <i>If 'No' issue notice A request for amended plans will be required if expansion joint detail is to be changed from approved.</i>		
66	Horizontal joints/laps and vertical jointing method as per approved plans & specification? <i>If not, issue notice A request for amended plans will be required if joint or lap detail(s) is to be changed from approved.</i>	N/A	
67	Fixing of weatherboards as per approved plans & specification? <i>Weatherboards shall be fixed with a single nail @ 600mm centres max, located immediately above the lower board with:-75mm x 3.15mm for bevelback weatherboard, -60mm x 2.8mm for rusticated weatherboard</i>		
68	Internal & external corner junctions as per approved plans & specifications? <i>If not, issue notice. A request for amended plans will be required if internal and / or external corner detail is to be changed from approved.</i>		
69	Junctions with dis-similar materials as detailed on approved plans & specification? <i>If not, issue notice. A request for amended plans will be required if junction detail is to be changed from approved.</i>		



Lot 8
Harris

RECEIVED
27 NOV 2007
C.O. NO. 60725

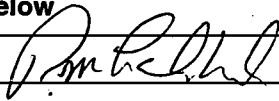


	Inspection Checklist: Siting, Footings, Foundations	Ref: TP 04 - TF 01.2
		Ver: 3
		Issued: 27 Aug 07
		Doc No: IT-639941
		Page 1 of 3

BC N ^o 60725	Address Lot 8 23 Harris St.
Contractor on site: Kerrs	

Date Inspected	Inspection Comments / Notes: (Include comment on any alternative solutions identified, site observation statements, warranties or 'As Laid's to be provided, if applicable)	Inspector
10/9/07	Ok Siting and bearing pad by M-Tec	RL

If Inspection Result = **PASS** then date and sign below

Date: 10/9/07 Inspector's signature: 

If Inspection Result = **FAIL** then complete below

Notices / Site Instructions

Date Issued:	Site Instruction / N.T.F No.	If site inspection fails, record below reason(s) and reference to any site instruction or notice issued

Date:	Re-inspections:	Inspector:

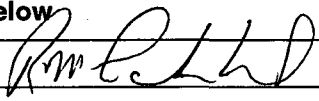
Footings, Foundations inspection result: 'Pass' (Refer to checklist)

Fail = Non-compliance with approved plans & documentation
 Pass = Compliance with approved plans & documentation.
 N/A = Means that Building officer feels that this portion of the prompt sheet is not relevant

Ground Works / Siting		Comment	Pass, Fail, N/A
1	Approved Consent documents on site	yes	P
2	Check previous comments	OK	P
3	Street No confirmed	23 Harris	N
4	Read conditions of BC & PIM and determine if Resource Consent had been required and approved	OK	P
5	Are all Site Hazards identified? <i>Record any specific hazards that may pose risk.</i>	yes	P
6	Are boundary peg locations confirmed? <i>If not, request boundaries be identified - owner may need to engage a surveyor.</i>	OK	P
7	Is building position as per plan? <i>Check siting is in accordance with approved site plan.</i>	yes	P
8	Is the floor level in accordance with plans? <i>If doubt exists instruct owner to establish datum (engage surveyor)</i>	OK By M-Tec	P
9	Building dimensions correct	OK	P
10	Siting by surveyor	yes	P
11	Excavations, Slopes, Retaining for site-safe OK	N/A	P
12	Pollution control considered to EBOP (discuss with owner or agent)	OK	
Footings/Foundation			Pass, Fail, N/A
13	Discuss finished floor levels/150 or 225 above ground		
14	Is ground bearing capacity satisfactory? <i>If not, request owner to obtain engineering advice.</i>		
15	Foundations are 200mm into ground		
16	Are all pad / post footings / footings as per approved details? <i>Check location, reinforcing details, concrete cover on reinforcing i.e. 75 mm side & bottom cover.</i>		
17	Foundations are clean, square and to correct dimensions		
18	Is reinforcing clean, properly supported, correctly lapped & tied with correct cover? <i>If not issue NTF & request reinspection.</i>	N/A Rb Ball.	
19	Are foundation wall details in accordance with approved documentation? <i>Check reinforcing details/ foundation size / concrete strengths. If not in compliance then issue NTF & request reinspection.</i>		
20	Steel size to consented documents		
21	Approved steel being used		
22	Correct grade of steel is used? High tensile or deformed etc		
23	Height pegs of correct material		
24	Starters are tied to horizontal rods		
25	Foundation is suitable for fire walls		
26	Floor height is correct		

Piles			
27	Does pile layout comply with approved plans? <i>Check that the location, type, number of piles & spacing's (centres) are consistent with the approved layout.</i>		
28	Do pile footing sizes comply? <i>Anchor - 900d x 350 x 350 Brace - 450d x 350 x 350 Driven - Obtain certificate If incorrect issue NTF & request reinspection.</i>		
29	Are load paths correctly supported? <i>Undertake an on site check to confirm that all point loads are supported.</i>		
30	Have cut piles been properly treated? <i>Minimum treatment for cut piles shall be undertaken in accordance with NZS3604:1999, cl 6.4.3.3.</i>		
31	Is pile reinforcing as per consent detail?		
32	Driven Piles - has an engineer report been provided? If not, issue NTF requesting a copy before permitting work to continue.	N/A	
33	Confirm floor height	Pb R.A.	
34	Correct treatment to piles		
35	Pile spacing correct		
36	Excavations are to correct depth and size		
37	Bearing is 100 KPA min		
38	Floor heights conform to bracing elements provided		
39	Discuss durability of fixings		
40	Crawl space/ 450 mm		
41	Layout of bracing matches plan		
42	Pile heights are correct for types		
	Columns		
43	Right size and grade of steel used		
44	Stirrups are at correct Centres		
45	Laps are correct		
46	Cover of steel is correct		
47	Spiral steel to be welded		
48	Steel radius bends correct		

	Inspection Checklist: Concrete Floor Building	Ref: TP 04 – TF 01.5
		Ver: 2
		Issued: 27 Aug 07
		Doc No: IT-639936
		Page 1 of 2

BC N ^o 60725		Address 23 Harris Lorb	
		Contractors on site: Kerry	
Date Inspected	Inspection Comments / Notes: (Include comment on any alternative solutions identified, site observation statements, warranties or 'As Laid's to be provided, if applicable)	Inspector	
10/9/07	Rib Rall to consent documents	RL	
8.00			
If Inspection Result = PASS then date and sign below			
Date: 10/9/07		Inspector's signature: 	
If Inspection Result = FAIL then complete below			
Notices / Site Instructions			
Date Issued:	Site Instruction / N.T.F No.	If site inspection fails, record below reason(s) and reference to any site instruction or notice issued	
Date:	Re-inspections:		Inspector:
Concrete Floor inspection result: 'Pass' (Refer to checklist)			

F = Fail = Non-compliance with approved plans & documentation
P = Pass = Compliance with approved plans & documentation.
N/A = Means that Building officer feels that this portion of the prompt sheet is not relevant

Concrete Prefloor			P, F, N/A
1	Approved Consent documents on site	Yes	P
2	Check previous comments	NA	N/A
3	Approved Building Consent documents on site	NA	N/A
5	Are shrinkage control & construction joints as per consent documentation? <i>If no - fail inspection</i>	NA	N/A
6	Is floor height above finished ground level correct? <i>NZS 3604, Section 7, Fig 7.10.</i>	Yes	P
7	Is compacted hard fill as per consent documentation? (< 600 mm in depth) <i>compacted in layers no greater than 150 mm</i>	OK M-Tec	P
8	Is DPM correctly lapped & sealed? <i>Ensure penetrations through DPM are correctly sealed & pipes lagged.</i>	OK	P
9	Are slab thickenings / pads as per consent documentation? <i>(Reinforcing bars / mats)</i>	Yes	P
10	Does reinforcing comply (is it detailed & is edge, top & bottom cover & supplementary bar detail provided? <i>ref. 7.5.8.6.4 - Supplementary bars not required across shrinkage control joints (2 x D10 @ 1.2 m long)</i>	Yes	P
11	Is slab thickness correct?	Yes	P
12	Is reinforcing supported? <i>(Bar chair / Biscuits / other?)</i>	Yes chair	P
13	If SED, has Engineer inspected design? <i>Confirm that engineer has inspected design. no inspection - no pour.</i>	NA	
14	600mm Compaction only NZS3604 Engineer PS4 for deeper back fill	By M-Tec	P
15	Steel in thickenings correct	OK HD12	P
16	All steel laps correct	Yes	P
17	Perimeter rod is under starters	Yes	P
18	Mesh is correct type, gauge and laps tied	665	P
19	Mesh is cut for expansion joints if required	OK	P
20	Mesh is supported on chairs	OK	P
21	Bottom plate connectors are at correct spacing	OK	P
22	Steel radius bends correct	Yes	P
23	Floor level meets NZS3604 or NZBC		P

	Inspection Checklist: Preline Building	Ref: TP 04 – TF 01.12
		Ver: 2
		Issued: 27 Aug 07
		Doc No: IT-639950
		Page 1 of 2

BC N ^o 60725		Address 23 Harris St Lot 8	
		Contractor on site: Kerry & Sue	
Date Inspected	Inspection Comments / Notes: (Include comment on any alternative solutions identified, site observation statements, warranties or 'As Laid's to be provided, if applicable)	Inspector	
10/10/07	Preline plus recheck of PWD	RL	
3:15 pm	Work complies with consent documents. Passed		
If Inspection Result = PASS then date and sign below			
Date: 10/10/07		Inspector's signature: 	
If Inspection Result = FAIL then complete below			
Notices / Site Instructions			
Date Issued:	Site Instruction / N.T.F No.	If site inspection fails, record below reason(s) and reference to any site instruction or notice issued	
Date:	Re-inspections:	Inspector:	

Preline Building inspection result: 'Pass' (Refer to checklist)

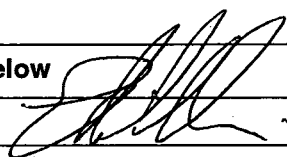
F = Fail = Non-compliance with approved plans & documentation
 P = Pass = Compliance with approved plans & documentation.
 N/A = Means that Building officer feels that this portion of the prompt sheet is not relevant

Preline			P, F, N/A
1	Approved Building Consent documents on site	yes	P
2	Check previous comments	OK D & D Recheck	P
3	Is insulation provided to masonry walls in habitable spaces? <i>200 series block generally requires 50 mm insulation. Ensure strapping to masonry wall is min. 45 mm x 45 mm.</i>		N/A
4	Exterior cladding complete		P
5	Bottom plate fixings are correct		P
6	H3.1 for at risk areas e.g. showers		P
7	Nogs for wall support		P
8	Solid blocking to centre of floor joist spans of span?		N/A
9	Holes and notches in framing and joists		P
10	Bottom plate fixings for bracing elements		P
11	Framing for ceiling diaphragms		N/A
12	Moister content correct for linings	14.7% to 17.3%	P
13	Confirm wall cladding	Gib board	P
14	Air seal to window/ door jams	6mm	P
15	Wind rated joinery	high	P
16	Mid floor joists are correct size and fixed correctly		N/A
17	Mid floor joist nogging correct		N/A
Fire Rated Systems			
18	Fire wall framing / multi-unit dwellings	N/A	
19	Penetrations in fire walls		
20	STC ratings for multi-unit dwellings		
21	Timber/steel dimensions correct for system		
22	Framing member spacings correct		
23	Nog/Dwang and solid blocking placement correct		
24	Steel studs 'friction fitted' where specified		
25	Expansion gap to steel studs where specified		
Insulation			
26	Correct R rating of insulation installation is correct (no gaps)	R1.8	P
27	Insulation to ceilings	R2.2	P
28	Inter tenancy insulation STC ratings		N/A
29	Discuss down lights	yes	P
30	Insulation to walls in roof space		N/A

	Inspection Checklist: Pre-Wrap	Ref: TP 04 – TF 01.6
		Ver: 2
		Issued: 27 Aug 07
		Doc No: IT-639951
		Page 1 of 4

BC N° 60725	Address lot 8 Harris
	Contractor on site: Baine

Date Inspected	Inspection Comments / Notes: (Include comment on any alternative solutions identified, site observation statements, warranties or 'As Laid's to be provided, if applicable)	Inspector
21/9/07	Wrap inspection approved as items in instruction sheet can be checked at post wrap. Work in accordance with Consent does or will be at next insp.	ED

If Inspection Result = PASS then date and sign below	
Date: 21/9/07	Inspector's signature: 
If Inspection Result = FAIL then complete below	

Notices / Site Instructions		
Date Issued:	Site Instruction / N.T.F No.	If site inspection fails, record below reason(s) and reference to any site instruction or notice issued
21/9/07	10/9/07	See instruction sheet

Date:	Re-inspections:	Inspector:

Pre - Wrap inspection result: 'Pass' (Refer to checklist)
--

F = Fail = Non-compliance with approved plans & documentation
P = Pass = Compliance with approved plans & documentation.
N/A = Means that Building officer feels that this portion of the prompt sheet is not relevant

Wall Framing			P, F, N/A
1	Approved Building Consent documents on site		P.
2	Check previous comments	None available.	P.
3	Confirm wind zone	Med.	P.
4	Has blocking been installed under top plates to accommodate point loads? <i>Check for point loads</i>		P.
5	Is the framing setout appropriate for the cladding system? <i>NZS 3604 - Cl 11.5.2480 mm centres for some vertical shiplap / Board & Batten claddings</i>	600 max. Brick.	P.
6	Do stud height, grade, size, spacing, & treatment comply? <i>Refer 'Amendment 2' NZS 3604 for changes to 'Timber Grades' & call size, now 'Actual Minimum Dried Size'</i>	2.4 stud. H3.1 exterior	P.
7	Is SED frame in accordance with engineer design? <i>If engineer is retained to verify design then obtain PS4.</i>	Pinglan Garage Inlet.	N/A
8	Have Nogs been installed behind apron flashing upstand to roof, deck, etc?		N/A.
9	Timber treatment recorded and is correct	Lumber + the bolts.	P.
10	Bottom plate fixings are correct		P.
11	Top plate to stud fixings are correct		P.
12	Brace fixings correct (nogs, straps & belts)		P.
13	Sheet bracing treatment is correct	H3.2 ply.	P.
14	Sheet bracing is fixed correctly	as per Eco ply. spec.	P.
15	Saddle flashings are installed correctly		N/A
16	Nogging for vertical cladding 460mm max		N/A.
Lintels & Sills			
17	Are uplift connects correctly installed? <i>Comment on this</i>	All type B.	P.
18	Are lintel fixings as per approved documentation?		P.
19	Is lintel and sill spacing, size, grade, treatment as per approved documentation?		P.
20	Do lintels support point loads? <i>Check roof truss layout and girder truss point loads, blocking requirements, etc, NZS 3604 Section 10 Refer to relevant manufacturers specifications (if applicable) for specific criteria relating to point loads.</i>		P.
21	Do engineer design lintels require site observation & PS4? <i>If so apply this as a building consent condition</i>		N/A.
Posts & Beams			
22	Do beams sizes & treatment comply with approved documentation?	Front door post x nail plates.	P.
23	Are beams properly supported? <i>Have load paths been considered?</i>		P.
24	Do post / footing connections comply? <i>Check durability of connections</i>	400 x 400 x 500 deep	P.
25	Do beam / post connections comply? <i>Check location and durability of connections.</i>		P.
26	Are SED beams & connections as per approved documentation? <i>Is design engineer undertaking on site observations & issuing PS4?</i>		N/A.

Trussed Roof		P, F, N/A
27	Are roof truss fixings per approved layout? <i>Check location and durability</i>	P
Framed Roof		
Roof Bracing		
28	Does roof bracing comply with approved documentation? <i>Check connections and location of bracing components.</i>	
Rafters		
29	Do hip rafter spacing, size, spans, grade, treatment, & connections comply with approved documentation? <i>ref. NZS 3604 Table 10.2</i>	
30	Do rafter spacing, size, spans, grade, treatment, & connections comply with approved documentation? <i>Check wind zone, roof loads - ref. NZS 3604 Sec. 10</i>	
31	Do valley rafter spacing, size, spans, grade, treatment, & connections comply with approved documentation? <i>ref. NZS 3604 Table 10.2</i>	
Ridge Beams		
32	Do ridge beam, spans, supports & fixings comply with consent documentation? <i>Give careful attention to spans, support, connection details.</i>	
33	Has load path from ground to beam support been properly addressed?	
Collar Ties & Cleats		
34	Do collar tie & cleats and fixings comply with approved consent? <i>Collar ties or cleats at 1.8 c. max. or every 3rd rafter where no under purlins. Use collar ties only where under purlins are used. Cleat must be min 100 x 25. Collar ties 150 x 25 min.</i>	N/A
Ceiling Joists		
35	Check that close coupled roof have a ceiling joist connected to each rafter.	
36	Do ceiling joist spacing, size, span, grade, & treatment comply with the plans and specifications? <i>Record grade & treatment.</i>	
Ceiling Runners (Strong backs)		
37	Does ceiling runner (strong back) spacing, span, size, grade, & treatment comply with documentation? <i>Ref Table 10.5 NZS 3604 Section 10</i>	
38	Do strong backs have a minimum landing of 65 mm on top of a packer supported on the top plate? <i>ref. 10.2.1.7.3</i>	
39	If the end of the strong back is chamfered ensure that depth of the strong back is not less than 50% at point of support. <i>10.2.1.7.4</i>	
40	Is ceiling runner restrained from twisting at each end? <i>10.2.1.7.5</i>	
41	Is strong back fixing correctly? <i>ref fig. 10.9</i>	

42	Is the packer supporting the strong back directly over a stud or spanning between studs? <i>If not request this is rectified.</i>		P, F, N/A N/A.
Valley Boards			
43	Does valley board size, treatment, grade, comply with documentation? <i>Must be min. 25mm thick and wide enough to support valley gutter. Min. H3.1 - NZS 3602 - Table 1. 1D.4</i>	H3.2.	P
Under purlins			
44	Are the under purlin struts correctly supported? <i>refer Table 10.10. Directly supported 100 x 50 for < 1.75m long 100 x 75 for > 1.75 m - 3.75 m long Check that struts are at no greater than 90 degrees to roof plane.</i>		
45	Does cantilever of under purlin comply? <i>25% of span in Table 10.6 or 15.7 (snow load)</i>	N/A.	
46	Do under purlin size, span, fixing, grade, and treatment comply with documentation? <i>ref. Tables 10.3 & 15.7 - consider .5 kPa snow loads</i>		
Strutting Beams			
47	Are strutting beams clear of ceiling joists by > 25 mm?		
48	Do strutting beam dimensions, spans, fixings, and & support comply with consent documentation?		
Purlins			
49	Are purlin spacing, size, span, grade, & treatment as specified? <i>Ref 3602, Table 1, Section E, H1.1 min. or Section D, if skillion roof - H1.2 min. or Flat roof - H3.1 min. respectively for roof framing & associated members.</i>	Concrete tile battens to fit not on site	P
50	Timber treatment recorded & is correct		P
51	Bottom plate fixings are correct		P
52	Additional 6&12kn fixings are fitted		P
53	Top plate to stud fixings are correct		P
54	Additional lintel fixings are fitted as detailed		P
55	Brace fixings correct (nogs, straps & bolts)		P
56	Truss To Truss connections correct		P
57	Purlin fixings correct		N/A
58	Space bracing is correct		N/A
59	Plane bracing installed	100 x 75.	P
60	Sheet bracing treatment is correct	H3.2.	P
61	Sheet bracing is fixed		P
62	Saddle flashings are installed correctly		N/A
63	Post beam connections are correct		P
64	Dragon ties		N/A

Postline			P, F, NA
1	Approved Consent documents on site		P
2	Check previous comments		P
3	Sheet bracing elements are correctly fixed		P
4	Bracing elements in correct position		P
5	No bracing elements behind showers/bath		P
6	Fire Rated System		
7	Board type		
8	Board thickness		
9	Fastener type and gauge		
10	Fastener length		
11	Correct fastener positions and spacings		
12	Mechanical fixing as required		
13	Sheet edges all fixed to framing		
14	Joints on opposite sides of the wall are staggered		N/A
15	Joints on opposite sides of the wall are staggered		
16	Sheets fixed hard to floor where specified		
17	Sheet end butt joints made over nogs		
18	Wall/ceiling junction either GIB-Cover® or square stopped		
19	Longitudinal joints correctly backblocked (single layer systems only)		
20	Penetrations comply with details in publication; Penetrations in GIB® Fire Rated Systems		

INSTRUCTION BOOK

BUILDING SERVICES

NO: 0293

DESTINATION

ROT@RUUA

ROTORUA DISTRICT
COUNCIL

P. No: 32309

Building Consent No: 60725

Date Issued: 6/9/07

Rotorua District Council
1061 Haupapa Street
Private Bag 3029
Rotorua, New Zealand
P: 07 348 4199
F: 07 346 3143
E: mail@rdc.govt.nz
W: www.rdc.govt.nz

Instructions:

1/ Diapham ceiling in Living area
to complete. ✓

Date Instructions must be complied with:

before gib sloppy

Signed: _____

Position: _____

Date: _____

INSTRUCTION BOOK BUILDING SERVICES

NO: 1026

DESTINATION

ROT@RUA

ROTORUA DISTRICT
COUNCIL

P. No: 32309.

Building Consent No: 60725.

Date Issued: 6/9/07.

Rotorua District Council
1061 Haupapa Street
Private Bag 3029
Rotorua Mail Centre
Rotorua 3046
New Zealand
P: 07 348 4199
F: 07 346 3143
E: mail@rdc.govt.nz
W: www.rdc.govt.nz

Instructions:

- Wrap Inspection:*
1. Complete fitting of wrap.
 2. Wrap restraint to complete.
 3. Alusand Flashings to complete at front door and high narrow windows front door side of living room.
 4. Approval given to fit all other doors and windows.

Date Instructions must be complied with:

Before brick work.

Signed:

Position:

Team Leader Inspection

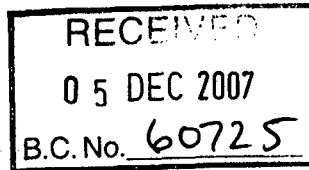
Date: 28/9/07.



C.No. 60725
 27 NOV 2007
 RECEIVED



I-174513



192725-R-E-C168

9 October 2007

Rotorua District Council
Private Bag
ROTORUA

ROTORUA DISTRICT COUNCIL	
Referred to	building
Rec'd	10 OCT 2007
Copy to	
Instructions	



Attention Darryl Holder

re: **GENERATION DEVELOPMENTS LTD- HARRIS STREET,
NGONGOTAHA
CERTIFICATION OF ENGINEERED FILL FOR LOTS 1 TO 48
RDC SUBDIVISION REF: 63-06-012**

We confirm that we have observed the following as part of the subdivision works for the above project:

- (a) Excavation of topsoil on each Lot.
- (b) Placement and compaction of the imported pumice / rhyolite fill material into the excavation.

The compacted fill has been tested with a scala penetrometer to a depth of 1m. The penetrometer test results and location plan can be found in MTEC Consultants Earthwork Completion Report Ref: 192725-R-E-C115.

The test results indicate that the all the tests achieved the required 150 kPa Factored Ultimate Bearing Capacity (100kPa Allowable Bearing Capacity) over the 1m depth of testing

I, Stephen Michael Pittman, believe on reasonable grounds that the engineered fill is suitable to support a residential building designed according to NZS 3604.

If you have any queries or require further information please do not hesitate to contact the undersigned.

Yours faithfully
MTEC Consultants Ltd

Steve Pittman
BE, MIPENZ (Civil, Structural) CPEng, IntPE.

Encl Copy of Earthworks Completion Report, PS 4

Cc Generation Developments Ltd, P.O Box 14232, Tauranga
Attn : Ruth Butzbach

**SURVEYORS
ENGINEERS
PLANNERS**

1268 Haupapa Street
P O Box 878
ROTORUA

Ph 0-7-347 7840
Fax 0-7-347 6191
rotorua@mtec.co.nz

OFFICES AT
Rotorua
Tauranga
Te Puke
Whakatane
Opotiki

192725-R-E-C168-Cp L-ew report.doc

PRODUCER STATEMENT – PS4 – CONSTRUCTION REVIEW

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

ISSUED BY: MTEC CONSULTANTS LTD
(Construction Review Firm)

TO: GENERATION DEVELOPMENTS LTD
(Owner/Developer)

TO BE SUPPLIED TO: ROTORUA DISTRICT COUNCIL
(Building Consent Authority)

IN RESPECT OF: NEW HOUSES
(Description of Building Work)

AT: LOTS 1 - 48 HARRIS ST. NGONGOTAHA
(Address)

..... LOT DP SO

MTEC CONSULTANTS LTD has been engaged by GENERATION DEVELOPMENTS LTD
(Construction Review Firm)

to provide ☐ CM1 ☐ CM2 ☐ CM3 ☐ CM4 ☐ CM5 (engineering categories) or ☐ OL1 ☐ OL2 ☐ OL3 ☐ OL4 (architecture categories)

☒ or other TESTING/FILL ON HOUSE SITES services
(Extent of Engagement)

in respect of clause(s) B1 of the Building Code for the building work described in documents relating to Building Consent No. VARIOUS and those relating to Building Consent Amendment(s) Nos. NIL issued during the course of the works.

We have sighted these Building Consents and the conditions attached to them.

On the basis of ☒ this ☐ these review(s) and information supplied by the contractor during the course of the works, I believe on reasonable grounds that ☐ All ☒ Part only of the building works have been completed in accordance with the relevant requirements of the Building Consents and Building Consent Amendments identified above, with respect to Clause(s) B1 of the Building Regulations.

STEPHEN MICHAEL PITTMAN am: ☒ CPEng 163846 #
(Name of Design Professional)

☐ Reg Arch #

I am a Member of: ☒ IPENZ ☐ NZIA and hold the following qualifications:

The Construction Review Firm issuing this statement holds a current policy of Professional Indemnity Insurance no less than \$200,000*.

The Construction Review Firm is a member of ACENZ ☒ YES ☐ NO

SIGNED BY STEPHEN MICHAEL PITTMAN ON BEHALF OF MTEC CONSULTANTS LTD
(Name of Construction Review Firm)

Date: 9/10/2007 (signature) [Signature]

Note: This statement shall only be relied upon by the Building Consent Authority named above. Liability under this statement accrues to the Construction Review Firm only. The total maximum amount of damages payable arising from this statement and all other statements provided to the Building Consent Authority in relation to this building work, whether in contract, tort or otherwise (including negligence), is limited to the sum of \$200,000.*

This form is to accompany Forms 6 or 8 of the Building (Form) Regulations 2004 for the issue of a Code Compliance Certificate.

192725-R-E-C168

9 October 2007

Rotorua District Council
Private Bag
ROTORUA

Attention Darryl Holder

ROTORUA DISTRICT COUNCIL	
Referred to	building
Rec'd	10 OCT 2007
Copy to	
Instructions	

re: **GENERATION DEVELOPMENTS LTD- HARRIS STREET,
NGONGOTAHA
CERTIFICATION OF ENGINEERED FILL FOR LOTS 1 TO 48
RDC SUBDIVISION REF: 63-06-012**

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If you have any queries or require further information please do not hesitate to contact the undersigned.

Yours faithfully
MTEC Consultants Ltd



Steve Pittman
BE, MIPENZ (Civil, Structural) CPEng, IntPE.

Encl Copy of Earthworks Completion Report, PS 4

Cc Generation Developments Ltd, P.O Box 14232, Tauranga
Attn : Ruth Butzbach

192725-R-E-C168-Cp L-ew report.doc

**SURVEYORS
ENGINEERS
PLANNERS**

1268 Haupapa Street
P O Box 678
ROTORUA

Ph 0-7-347 7540
Fax 0-7-347 5191
rotorua@mtcc.co.nz

OFFICES AT
Rotorua
Tauranga
Te Puke
Whakatane.
Opotiki

PRODUCER STATEMENT – PS4 – CONSTRUCTION REVIEW

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

ISSUED BY: MTEC CONSULTANTS LTD
(Construction Review Firm)

TO: GENERATION DEVELOPMENTS LTD
(Owner/Developer)

TO BE SUPPLIED TO: ROTORUA DISTRICT COUNCIL
(Building Consent Authority)

IN RESPECT OF: NEW HOUSES
(Description of Building Work)

AT: LOTS 1-48 HARRIS ST. NGONGOTAHA
(Address)

..... LOT DP SO

MTEC CONSULTANTS LTD has been engaged by GENERATION DEVELOPMENTS LTD
(Construction Review Firm)

to provide ☐ CM1 ☐ CM2 ☐ CM3 ☐ CM4 ☐ CM5 (engineering categories) or ☐ OL1 ☐ OL2 ☐ OL3 ☐ OL4 (architecture categories)

☒ or other TESTING/FILL ON HOUSE SITES services
(Extent of Engagement)

in respect of clause(s) B1 of the Building Code for the building work described in documents relating to Building Consent No. VARIOUS and those relating to

Building Consent Amendment(s) Nos. NIL issued during the course of the works.

We have sighted these Building Consents and the conditions attached to them.

On the basis of ☒ this ☐ these review(s) and information supplied by the contractor during the course of the works,

I believe on reasonable grounds that ☐ All ☒ Part only of the building works have been completed in accordance with the relevant requirements of the Building Consents and Building Consent Amendments identified above, with respect to Clause(s) B1 of the Building Regulations.

I, STEPHEN MICHAEL PITTMAN am: ☒ CPEng 163846 #
(Name of Design Professional)

☐ Reg Arch #

I am a Member of: ☒ IPENZ ☐ NZIA and hold the following qualifications:

The Construction Review Firm issuing this statement holds a current policy of Professional Indemnity Insurance no less than \$200,000*.

The Construction Review Firm is a member of ACENZ ☒ YES ☐ NO

SIGNED BY STEPHEN MICHAEL PITTMAN ON BEHALF OF MTEC CONSULTANTS LTD
(Name of Construction Review Firm)

Date 9/10/2007 (signature) 

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This form is to accompany Forms 6 or 8 of the Building (Form) Regulations 2004 for the issue of a Code Compliance Certificate.

Building Consent No: 60725

Section 51, Building Act 2004

Issued: 06 Sep 2007

Rotorua District Council
1061 Haupapa Street
Private Bag 3029
Rotorua Mail Centre
Rotorua 3046
New Zealand
P: 07 348 4199
F: 07 346 3143
E: mail@rdc.govt.nz
W: www.rdc.govt.nz

Owner

GENERATION DEVELOPMENTS LTD
P O BOX 14232
TAURANGA

The Building

Property ID: 32309
Street Address: 23 HARRIS STREET
Valuation number:
Legal Description:
Building Name:

First point of contact for communications with council building consent authority:
RDC Building Services

Building Work

The following building work is authorised by this consent:

Project is for: NEW DWELLING WITH ATTACHED GARAGE 156SM2
Intended Use:

This building consent is issued under section 51 of the Building Act 2004. This building consent does not relieve the owner of the building (or proposed building) of any duty or responsibility under any other Act relating to or affecting the building (or proposed building).

This building consent also does not permit the construction, alteration, demolition, or removal of the building (or proposed building) if that construction, alteration, demolition, or removal would be in breach of any other Act.

This building consent is subject to the following conditions:

Conditions . . .

IMPORTANT CONDITIONS.

Section 52 Building Act 2004 (Lapse of Building Consent).

A Building Consent lapses and is of no effect if the building work to which it relates does not commence within 12 months of the date of issue unless prior arrangements are made with the Building Consent Authority.

Section 364 Building Act 2004 (Residential Property Developer)

1. A Residential Property Developer commits an offence if the Residential Property Developer does either or both of the following things before a Code Compliance Certificate is issued in relation to a household unit:

- a) completes a sale of the household unit:
- b) allows a purchaser of the household unit to enter into possession of the household unit.

2. Subsection (1) does not apply if the Residential Property Developer and the purchaser of the household unit enter into a written agreement, in the prescribed form, that the Residential Property Developer may do either or both of the things referred to in that subsection before a Code Compliance Certificate is issued in relation to the household unit concerned.

3. A person who commits an offence under this section is liable to a fine not exceeding \$200,000. Offences relating to administration of the Act.

INSPECTIONS BY TERRITORIAL AUTHORITY.

Siting, Footings, Foundations and Reinforcing.

Prefloor plumbing and drainage.

Concrete Floors.

Pre-wrap – all fixings to framing and roof structure (access to be provided).

Wrap/Cavity battens – all battens, flashings etc (access to be provided).

Half high brick inspection.

Exterior Cladding – at completion of cladding (access to be provided).

Pre-line building including insulation.

Pre-line plumbing – when under test including internal stacks.

Post line – all bracing elements and fire linings/collars completed.

Sanitary and stormwater drainage – under test and prior to backfilling.

At completion of work authorised by this consent the Building Act requires you to apply for a Code of Compliance Certificate within two years of the Building Consent being issued.

STANDARD CONDITIONS.

Permission to undertake building work in accordance with the approved plans and specifications. All work must comply with the provisions of the Building Code. Any alterations from the original plans and specifications must have prior written approval from the Building Control Manager.

Any endorsement on Plans and Specifications for part of this approval.

The owner of the property is responsible for the correct siting of buildings or additions in relation to boundary pegs.

Any deficiency not specifically drawn to the attention of the builder or owner by the Building Official shall not be deemed to have been approved.

The use is limited to that stated on the Building Consent. Any change of use would require a separate approval.

Plumbing and drainage work to be carried out by licensed tradesperson only.

Type 1 Domestic Smoke Alarm System Clause F7 Warning Systems:

- Requires that an appropriate means of detection and warning for fire must be provided with each household unit.
- Smoke alarms shall be located on the escape routes on all levels within household units.
- On all levels containing the sleeping spaces, the smoke alarms shall be located either:

- Smoke alarms must be fitted with a hush facility having a minimum duration of 60 seconds
- a) in every sleeping space; or
- b) within three metres of every sleeping space. In this case, the smoke alarms must be audible to sleeping occupants on the other side of closed doors.
- These will be required on all new dwellings and retrospectively fitted in dwellings when, and if, a Building Consent for additions or alterations is applied for.

A Code Compliance Certificate will not be issued until the smoke alarms have been installed and seen operating.

The hot water supply to sanitary fixtures used for personal hygiene is to be fitted with tempering valves or other approved devices to limit the water temperature to 55°.

Signed for and on behalf of the Council:

Name: Belinda Robertson

Position: Building Services Administration.

Signed: B. Robertson Date: 06 SEP 2007

BUILDING CONSENT ACCOUNT

TAX INVOICE: REGISTRATION NO. 10-801-397

Rotorua District Council
1061 Haupapa Street
Private Bag 3029, Rotorua.
Telephone: 07 348 4199. Facsimile 07 349 0993.

DESTINATION

ROT@RUA

ROTORUA DISTRICT
COUNCIL

Rotorua District Council
1061 Haupapa Street
Private Bag 3029
Rotorua Mail Centre
Rotorua 3046
New Zealand
P: 07 348 4199
F: 07 346 3143
E: mail@rdc.govt.nz
W: www.rdc.govt.nz

**GENERATION DEVELOPMENTS LTD
P O BOX 14232
TAURANGA**

Customer Reference:

Invoice No: 31224
Application No: 60725
Valuation No:
Legal Description:
Site Location: 23 HARRIS STREET
Owners Name: GENERATION DEVELOPMENTS LTD
Date: August 31, 2007
Agent Name:

DESCRIPTION	CHARGE	GST AMOUNT	TOTAL FEE
PIM PROCESSING FEE	426.67	53.33	\$480.00
CONSENT ADMIN FEE	380.00	47.50	\$427.50
CODE OF COMPLIANCE CERTIFICATE	68.89	8.61	\$77.50
CERTIFICATE OF TITLE	13.33	1.67	\$15.00
DBH LEVY	328.64	41.08	\$369.72
BRANZ LEVY	187.68	0.00	\$187.68
TECHNICAL PROCESSING	380.00	47.50	\$427.50
INSPECTION FEE	1,066.67	133.33	\$1,200.00
Building Consent Fees Chargeable	2,851.88	333.02	\$3,184.90
Prepaid at Lodgment 2008 6465 17 Jul 2007	888.89	111.11	1,000.00
Previous Payment	0.00	0.00	0.00
Invoice Payment due	1,942.13	242.77	\$2,184.90

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W: www.rdc.govt.nz

16 August 2007

Generation Developments
P O Box 14232
TAURANGA

Dear Sir/Madam,

Request for further information on PIM/BC Application

Property ID: P32309
Building Consent No.: 60725
Project Location: 23 Harris Street
Project Description: New dwelling and attached garage

You may or may not be aware that the Building Act 2004 now requires a territorial authority to be satisfied on reasonable grounds that the provisions of the Building Act will be met if the building work were properly completed in accordance with the plans and specifications that accompany the building consent application.

As Code Compliance Certificate will be issued against the approved plans and specifications it is now imperative that the plans and specifications clearly reflect Code Compliance.

Having assessed your plans and specifications, we require the following additional details/ amendments to ensure compliance is properly demonstrated and enable building consent to be issued:

1. Can you supply details and calculations for the 135 x 90 lintels over windows G3, G9 and G10
2. Please supply brace fixing details for all brace elements *Amended plan pg 3*
3. Show details for flashing penetrations. *Amended plan pg 6*

All further information is required to be lodged together and shall include a reference clearly indicating how and where this information has been provided and can be found within the documents.

We appreciate that requests for those items may be frustrating but, unless compliance can be clearly demonstrated, building consent cannot be issued. We have suspended the building consent processing until the above information is provided. Please be assured of our earliest attention to completion of processing and issue of building consent on receipt of this information.

Should this information not be provided within 28 working days or if we do not receive communication otherwise stating that you still wish to proceed with this project, then we will assume that you do not wish to proceed further with this application and accordingly your application for building consent will be refused.

Yours sincerely



PP Ian Lamb
Building Consents Officer



Building Consent Pre-Lodgement Form

P32309

Lot 8

Date	17/07/2007
Time	9:40:53 a.m.
Contact ID	156795
Contact Name and Address	GENERATION DEVELOPMENTS LTD P O BOX 14232 TAURANGA

Project Details New Dwelling & Garage

Erect a new dwelling and garage @ 23 Harris Street

Amount Payable	\$1412.50
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Only \$1000 showing in lodgement.

Please note until lodgement deposit has been paid, processing of your consent will not commence.

	Processing PIM / BC Master Checklist	Ref: TP 03 - TF0
		Ver: 1
		Issued: 30 May 07
		Doc No: IT-639963
		Page 1 of 31

CATEGORY	NZSFC	CONTRACTOR	INSPECTOR	INSPECTOR	PROCESSOR
1 B I		PIM/BC	Paul R	Paul R	

PIM/BC Application No.	No 60725	Valuation No.
------------------------	----------	---------------

Owner: Generation Development	Property File No. P 32309
-------------------------------	---------------------------

Project Location: 23 Harris St. Ngā (Lot 8) (156 ^{m2})
--

Description of Work: New Dwelling & attached Garage

Date Received: 16/7/07	Date Due:
------------------------	-----------

1 st Suspension:	2 nd Suspension: 31-08-07-lnw
-----------------------------	--

Processing Resumed:	Resumed:
---------------------	----------

Allocated by:	Date Issued:
---------------	--------------

PIM Issued: 27.07.07	BC Issued: 06.09.07
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Tracking Record:

Hazard/Caution/ Information (as noted on file)	Other Bldg Restrictions } may '06		Who to deal with		
Processing	Reviewed By	Date Received	Time Taken	Signed Off	Date
Admin Assistant - Building	Paul	24-07-07	40	BR	06-09-07
Planning <i>Rosie B</i>	Paul	25-7-07	10	Paul	25/7
Resource Engineer	Paul	26/7/07	5	Paul	26/7.
Pollution Control					
Hazardous Substances					
Development Contributions	Paul	26/7/07	5	Paul	26/7/07
Regulatory/Geothermal					
Environmental Health					
Recreation & Community					
Building	Ian	14.8.07	120 60	Ian	27-8-07
Disabled Persons					

Other					
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Summary of Information to be Recorded on PIM:

Insert notes, records of conversations, information requests, reasons for suspensions

Admin Assistant – Building:

Information Received

Planning:

Information Received

Resource Engineer:

Information Received

Pollution Control:

Information Received

Hazardous Substances

Information Received

Development Contributions:

Information Received

Geothermal:

Information Received
Environmental Health:
Information Received
Recreation & Community:
Information Received
Building:
Information Received

Team Leader Building (Check know Hazard/Information/Caution note on file)	Yes/No	Details (Have you circled the check box?)
What wind zone is the project in (Very High, H, M, L)		
What corrosion zone is the project in? (Detail: Sea spray, 1, 2, 3, 4)		
Fire Services – is an evacuation scheme required? (>10 employees, sleeping >5, assembly >100)		
Do Sections 326A–363C apply? (Public building being occupied during alteration)		
Does accessibility require upgrading? (Refer Sections 112, 115, 118)		
Provide details & copies of plans of all existing services that may be on site.		
Nominate Earthquake Zone (A, B, or C)		
Does application involve Change of Use, Subdivision or Extension of Life? (If so please detail requirements & conditions – ref. Section 114, 115, 116 * 118)		
Does application involve a Specified Intended Life? (If so, detail conditions – ref. Section 113)		
Does the application involve a Dam?		

(If so, notify Regional Authority)		
Other affected parties required to be notified of PIM information (Ref x38 i.e network utility operators/RAs)		
Other matters: (Please detail any other matters that may impinge on this project)		
Finding on site visit: (Provide brief report & with photos)		

PIM ENDORSEMENTS

300 a ☐ b c d e g h i j k l f	338 a b c d e g h ☐ i f
302 ☒ a b c d e g h i j k l m	340 a b c f
n o p q r s t u v w x ☐ f	342 a b c f
304 a b c f	344 a b c f
306 a b c d e g h i j k l	346 a f
m n o f	348 a b c d e g h i j k
308 a b c d e f	l m n o p q r s t u
310 a f	v w x y z f
312 a ☐ b c d e g h f	350 a b c d e g f
314 ☐ a b c d e g h f	352 a b c f
316 ☐ a b c d e f	354 a b c f
318 a b c d e g h i f	356 ☐ a b c d e g h ☐ f
320 a ☐ b c d e g h f	358 ☐ a ☐ b c d f
322 ☒ a b f	360 a b c d f
324 a b c d e g h i j f	362 a f
326 a b c d e g h i j k f	364 a f
328 a b c d e ☐ g h i j k l m	366 a b c d f
n f	368 a b f
330 a b c d f	370 a b c f
332 ☐ a b c d e g h i j f	372 a b c f
334 a ☐ b c d e g h i f	374 a b c f
336 a b f	376 a ☐ b c f

FREE TEXT: 356(f) 62-06-012 granted 28/06/06

302 (f) The building work is sited on land which has been subject to controlled filling. The land has been certified as suitable for normal residential development. The minimum floor level for the house must be 1.3 m above the ground water level.

Discipline Building, P&D, Structural, Mech, Fire etc.	List Building Consent Conditions Below:	Signature

Building Consent Endorsements:

200 a b c d e g h i j k 213 a b c d e g h i j k l
l m n o p q r s t u
~~v w x y z~~
201 a b c d e g f 214 a b f
202 a b f 215 a b c f
203 a f 216 a f
204 f 217 a b f
205 a b f 218 a b c d e g h i j k f
206 a b c f 219 f
207 a f 220 a b c d f
208 a b f 221 a b c d e g h i j k l
209 a f 222 a b c d e g h i j k l
210 a b c f m n o p q r s t u v w
211 a b c f x f
212 a f 223 a b c d e f

FREE TEXT:[illegible][illegible]

Alternative Solutions: Record assessment and decision making process below
 Include reference to comparison with acceptable solutions, other documents / standards / best practice guides / publications, expert opinion, determinations, in-service history, product certification, professional judgment, building code objectives. Refer BRANZ Bulletin # 456 (Dec 2004)

PROCESSING CHECKLIST			
Building Act		Yes = Y No = N N/A = X	Comments:
	Application Form Completed Correctly?		
1	Sec 31 – Has a PIM been issued for the project?		
2	Sec 36 - Has a Development Contribution Notice been attached to the PIM? <i>Check PIM</i>		
3	Sec 37 - Has a Certificate pursuant to Sec 37 of the BA 2004 been attached to the PIM requiring that a Resource Consent be obtained before building work may commence? <i>If so apply a building consent condition to this effect.</i>		
4	Sec 39 - Are there any issues associated with Historic Places Trust? <i>If so ensure that Historic Places Trust notification has occurred.</i>		

5	Sec 46 – Is the application of a nature that requires it to be sent to the NZFSC DRU. <i>Refer to Gazette notice 24th March 05 & updates.</i>		
4	Sec 67 - Is the building consent subject to a waiver or modification? <i>If so provide explanation for basis, & advise Chief Executive, Dept. of Building & Housing.</i>		
6	Sec 72 - Is land subject to natural hazards? <i>If so, identify hazards & document processes required, i.e. impose conditions, notify appropriate authorities, apply Sec 72, etc.</i>		
7	Sec 75 - Is the building constructed on 2 or more allotments? <i>If there are no party walls, or the allotments have been amalgamated, exempt from section 75 Certificate.</i>		
8	Sec 84 - Is any part of the work Restricted building Work? <i>If so ensure LBP is nominated and qualified. Not applicable until 2009.</i>		
9	Sec 112 – Is the application for an alteration to an existing building. <i>Will the altered building comply as near as reasonably practical to a new building.</i>		
10	Sec 113 - Does the building have a specified intended life? <i>Apply a condition that the building is to be removed, altered or demolished on or before end of specified life if life is less than 51 years.</i>		
11	Sec 114 – Is the proposed work a change in use, extension of life or subdivision of an existing building <i>If so has the owner provided appropriate written notification & addressed all other BA & BC requirements. Has a Fire Analysis been provided, if not suspend application. Peer review all jobs over \$500,000</i>		
12	Sec 118 – Are access and facilities for the disabled required? <i>If members of the public are to be permitted to enter the building on payment of fees or otherwise, access & facilities for the disabled will be required.</i>		
12 b	Earthquake Prone Building – Is the building listed on the TA Register for Earthquake Prone Buildings? <i>Check register or if the building is considered to be a potential risk then request an assessment be undertaken by a chartered professional engineer.</i>		
13	Sec 269 - Does the application involve any certified building methods or products? <i>If so check registers to ensure that these are current.</i>		
14	Sec 364 - Is the building a household unit being constructed by or on behalf of a property developer for the purpose of sale? <i>If so ensure that a condition is applied requiring the developer to obtain CCC before on-selling or allowing occupation of the property.</i>		
14 a	Does the application include any alternative solutions? <i>If so document the assessment and decision making process on appropriate section at front of Checklist.</i>		
14b	If this is an alteration, have records been checked to reconcile proposal against existing?		
14c	Is the building consent subject to a waiver or modification? <i>If so provide explanation for basis, & advice Chief Exec</i>		
14d	Is a new compliance schedule required or does existing CS require amending? <i>Follow internal process. Suspend if no CS maintenance program provided.</i>		

14e	Have any Producer Statements been supplied with the application to provide reasonable grounds that proposed work will comply with NZBC. <i>Refer to internal procedure for assessing Producer Statements. Is peer review supplied / required.</i>		
14f	Has supporting documentation been supplied with proprietary products or systems? <i>Eg manufacturers installation specifications, durability statements, calculations, test reports, certificates)</i>		
14g	Has a peer review been provided or engineering calculations for projects over \$500,000. If not suspend application.		

Producer Statements

Acceptance Guidelines 1. PS will be accepted from approved persons recognised as having appropriate technical competence / qualifications / experience / history within their specific discipline. 2. The author's competence will directly relate to the scope of work covered by their statement. If author's acceptability cannot be determined then the statement & all necessary documentation required to determine competence shall be returned to applicant to obtain peer review.	
Circle Statement Type: PS 1 – Design PS 2 – Design Review	Comments:
Circle Category: • Structural • Civil • Fire • Hydraulic • Glazing • Heating • Backflow • Architectural • Geotechnical • Plumbing • Drainage • Weathertightness • Air-conditioning • Mechanical	Comments:
Circle supporting information provided: • Calculations • Specifications • Soils reports • Fire reports • Inspection & Maintenance procedures	Comment:
Do engineering calculations reference the plans and specifications?	Comment:
Does the Statement provide the name of Statement Author & / or Company issuing the Statement?	Comment:
Does the Statement provide the name of party/s that the Statement is issued to?	Comment:
Does the Statement specifically nominate that the Statement is to be supplied to the BCA ?	Comment:
Does the Statement provide the address & Legal Description of the site where the building work is to be undertaken?	Comment:
Does the Statement provide the description of the work or part/s of work that is to be covered by the Statement? <i>i.e. foundations only, or building structure excluding roof structure, or all work</i>	Comment:
Does the Statement nominate the method of compliance with the Building Code i.e. AS / VM?	Comment:

Building Consent Processing Section:

[illegible]

Domestic Dwelling Processing Suite

Ref: TP 03 – TF26

Ver: 1

Issued: 13 July 07

Page 1 of 14

Preliminary			
Ground Works / Siting / Site Preparation		KEY	Comments
1	Does the site plan demonstrate distances to boundaries & other buildings on the site? <i>Recommend min. of 2 dimensions be provided.</i>	Y	
2	Are the boundary or building separation distances in relation to spread of fire correct? <i>Consider spread of fire provisions.</i>	Y	
3	Have special features of land or ground conditions been considered? <i>Check T/A records for indications of fill, vegetation, overland flow, slips, ponding, gradients, excavation, erosion etc. If present then obtain engineering & or geotechnical input.</i>	Y	
4	Is wind zone correctly specified for the site? <i>Refer Tables 5.1, 5.2 fig 5.1 NZS 3604</i>	Y	
5	Will proposed excavations affect or impact on other buildings / properties? <i>Consider easements, gradients, & provisions required to retain surcharge.</i>	N	
6	Is the nominated durability / corrosion zone correct for the site? <i>ref. Section 4 - 3604 Fig & Table 4.1</i>	Y	
7	Are floor levels & datum provided? <i>Request these if they are not provided.</i>	Y	
8	Do minimum floor levels apply? <i>If so then specify location of datum & determine if floor levels specified are appropriate.</i>	Y	
9	Are there any specific engineering design requirements? <i>If there are then apply condition or request further information.</i>	N	
10	Is the excavation within District Scheme requirements? <i>Check whether land use consent is required?</i>	Y	
Footings/Foundation			
11	Do special features of land require consideration in regard to footings/ foundations? <i>ref: NZS 3604 - 3.4 Bearing NB: Does Council have knowledge / record of poor ground bearing / flooding on the site of the proposed work or adjoining site?</i>	Y	MTEC Have done ground tests.
12	Have effects of sloping ground been considered? <i>Steps in footings per: NZS3604 - Section 6, Cl 6.11.2 & .4, fig 6.12</i>	X	
13	Has a comprehensive footing / foundation specification been provided? <i>Ensure the specification provides appropriate reference to: Standards, Workmanship, Materials, Durability, & Reinforcement.</i>	Y	
14	Are footing and foundations correctly detailed for the proposed floor loads/ cladding / # of storeys? <i>NZS 3604 – Cl. 6.11 & Table 6.4., Cl. 7.5 & Fig. 7.12 - 7.15</i>	Y	
15	Are all pad / post footing locations detailed & correctly sized? <i>Ref. Sec.9- 3604 - ensure all load paths have been considered.</i>	Y	
16	Does any aspect of the footing / foundation design require checking by a structural engineer? <i>If so, then send to engineer for checking. If an engineer is to be retained to undertake site observation then apply a condition to this effect.</i>	N	

17	Are masonry blockwork details provided? <i>Is a Registered Qualified Mason required to undertake structural blockwork? NZS 4210 & 4229. If so ensure that a condition is applied to this affect.</i>	X	
18	Do foundations require tanking? <i>Ensure complying tanking details are provided ref. E2/AS1 Section 12: Basements - Obtain manufacturer specification for tanking system.</i>	N	
19	Are foundation / plate fixings correctly detailed /specified? <i>ref: NZS 3604 - Section 6, Cl 6.11.9.1, fig 6.16. & Cl 7.5.12</i>	Y	1 umbolok. anchors
Piles			
20	Does pile size & layout comply with floor load requirements? <i>Ref. NZS3604:1999, Sec 6 & Sec 14 for 3 kPa.</i>		
21	Are subfloor bracing calculations correct & does framing setout meet floor load demand? <i>Check sub-floor bracing schedule 1.5 kPa / 3 kPa, & pile centres are correct for the bearer & joist spans?</i>		
22	Are pile footings size & connection details provided? <i>Anchor - 900 x 350 x 350 Brace - 450 x 350 x 350 Driven - Obtain specification (NZS 3604 or SED)</i>		
23	Is timber pile grade & treatment correctly specified? <i>Refer 'Amendment 2' NZS 3604 for changes to 'Timber Grades'</i>		
24	Do pile heights comply? <i>Min 150mm timber pile, consider min. floor level (550 mm timber floor) Max. 1.2m Cant. Max. 3m timber pile & 1.5m conc. ref. Sec 6 NZS 3604.</i>		
25	Has Driven Pile specification been provided? <i>Refer NZS3604:1999 Sec 6, Cl 6.6.</i>		
26	If SED have calculations & details been provided? <i>Forward to Engineer for review.</i>		
Bearers			
27	Are bearer spans, grade, spacing, fixings & treatment specified? <i>If 'No', suspend & request information.</i>		
28	Are bearer/ pile & bearer / joist fixings details provided? <i>Check Cl 6.12 & Fix 6.6- NZS 3604</i>		
29	Have load paths been considered? <i>Load bearing partitions within 200 mm of bearers</i>		
Floor Joists			
30	Do joist grade, treatment, size, span, spacing, fixings & blocking comply with floor load demand? <i>Refer 'Amendment 2' NZS 3604 for changes to 'Timber Grades' & call size, now 'Actual Minimum Dried Size' Consider 1.5 or 3 kPa Floor load</i>		
31	Is lateral support, blocking & midspan-blocking correct? <i>Refer NZS3604, section 7.1.2.2 & 7.1.2.3.</i>		
32	Have load paths been considered? <i>Ensure all point loads are adequately supported.</i>		
33	Has direction of services been considered? <i>Check services plan layout.</i>		
34	Do trimmer joists comply? <i>Refer NZS3604, Section 7.1.6 & fig 7.7</i>		
35	Are non-load bearing walls (with bracing elements) adequately supported? <i>Refer NZS3604, Section 7, Cl.7.1.3.5, 7.3.1.6 & figure 7.5</i>		
36	Are non-load bearing walls (without bracing elements) adequately supported? <i>Refer NZS3604, Section 7, Fig 7.5.</i>		

37	Are load bearing walls at right angle to joist within 200mm of bearer support? <i>Refer NZS3604, Section 7, Fig 7.3</i>		
38	Are double joists provided under load bearing walls? <i>Refer NZS3604, Section 7, Fig 7.3</i>		
39	Do cantilever joist grade, sizes & spans comply? <i>Refer NZS3604, Table 7.2</i>		
40	Do cantilever deck joist connections & set back comply? <i>Refer NZS3604, Section 7, Fig 7.6</i>		
Stringers			
41	Do stringer size, grade, treatment & fixing comply with floor load & durability demands? <i>Refer NZS3604, Section 6, Table 6.7 or 14.7 (for 3 kPa loading)</i>		
Flooring			
42	Check relationship between floor load & flooring thickness? <i>Refer NZS3604, Section 7, 7.2 & Section 4, 4.3. Check floor loadings, i.e. 1.5-2.0kPa or 3kPa.</i>		
43	Does flooring thickness & type comply? <i>Ref. Tables 7.4 & 14.9</i>		
44	Is joist spacing appropriate for flooring type? <i>Refer NZS3604, Section 7, 7.2</i>		
45	Is distance between underside of flooring & subfloor ground levels appropriate for flooring type? <i>Refer NZS3604, Section 4, 4.3. Minimum clearance for particle board above subfloor ground is 50mm, otherwise treated plywood is required.</i>		
Subfloor spaces			
46	Is subfloor ventilation provided? <i>If not specified request details</i>		
47	Is a damp proof ground cover to be used?		
48	Is subfloor insulation provided, appropriate & correct?		
49	Is tanking required & if so is it detailed?		
Concrete floor			
50	Is floor height above finished ground level correct? <i>NZS 3604, Section 7, Fig 7.10.</i>	✓	
51	Is hard fill detailed & correct? (< 600 mm in depth) <i>ref 7.5.3, If >600mm in depth obtain a geotech assessment report on the underlying ground conditions.</i>	✓	
52	Is DPM detailed?	✓	
53	Are slab thickenings required & if so are they detailed & complying? <i>ref. 7.5.11</i>	✓	
54	Does reinforcing comply (is it detailed & is edge, top & bottom cover & supplementary bar detail provided)? <i>ref. 7.5.8.6.4</i>	✓	
55	Does slab thickness comply? <i>ref. 7.5.8.2</i>	✓	
56	Is bottom plate fixing correctly specified? <i>Ref. 7.5.12</i>	✓	
57	If specific engineering design (SED), is Engineer detail provided? <i>Obtain PS 1</i>	X	

Wall Framing			
58	Is design within scope of the acceptable solutions? <i>If 'No' obtain SED.</i>	Y	
59	Do stud height, grade, size, spacing, & treatment comply? <i>Refer 'Amendment 2' NZS 3604 for changes to 'Timber Grades' & call size, now 'Actual Minimum Dried Size'</i>	Y	
60	Is the framing setout appropriate for the cladding system? <i>NZS 3604 - Cl 11.5.2, i.e. 480 mm centres for some vertical shiplap / Board & Batten claddings, etc</i>	Y	
61	Is stud height & spacing in relation to wind zone correct? <i>ref. Table 8.2</i>	Y	
62	Are top & bottom plate fixings / connections specified &/ or detailed? <i>Cl. 7.5.12 (bot plate) Cl. 8.7.3</i>	Y	
63	Do top & bottom plate grade, size, & treatment comply? <i>Refer 'Amendment 2' NZS 3604 for changes to 'Timber Grades' & call size, now 'Actual Minimum Dried Size'</i>	Y	
64	Is wall framing moisture content correctly specified? <i><24% for non insulated buildings, <20% for insulated buildings, or wall lining manufacturers specifications.</i>	N	
65	Has additional 150 x 40 ribbon top plates been provided where 6m brace lines are required?	Y	
66	Have Nogs been installed behind apron flashing up stand to roof, deck, etc?	X	
67	If the design contains SED, has this been peer reviewed / approved by engineer? <i>If not send to engineer for peer review.</i>	X	
Bracing			
68	Are wall bracing elements & fixings detailed & correct?	Y	
69	Are wall bracing elements clear of showers?	Y	
70	Is wall bracing schedule calculations & distribution of elements correct? <i>Refer manufacturer specs.</i>	Y	
71	Is a floor diaphragm required & if so does it comply? <i>Refer NZS3604, Section 7, 7.3</i>	X	
Lintels & Sills			
72	Is lintel and sill span, size, grade, treatment correct? <i>ref. NZS 3604 Table 8.8 - 8.15</i>	N	Need to check
73	Is lintel support correct? (roof, roof /wall)	Y	
74	Are Trimmer Stud Sizes correct? <i>ref. Fig 8.5 NZS 3604</i>	Y	
75	Are lintel fixings specified & correct?	N	Not specified
76	Do lintels support point loads? <i>Check roof truss layout and girder truss point loads. Refer to relevant manufacturers specifications (if applicable) for specific criteria relating to point loads,</i>	Y	on 2 600 windows with 90x90 l-intels
77	Do lintels required engineer design? <i>If so, is PS 4 required?</i>	Y	Garage door
78	If SED, have calculations been provided?	Y	

Posts & Beams			
79	Do beams sizes & treatment comply?	Y	
80	Do beam / post connections comply? <i>Check corrosion zone & durability requirements for exposed connections.</i>	Y	
81	Are beams properly supported? <i>Have load paths been considered?</i>	Y	
82	Do post / footing connections comply?	Y	
83	Does post footing size comply? – (consider uplift)	Y	
84	Are beams & connections SED?	X	
Trussed Roof			
85	Are roof truss fixings details specified and do they comply with wind zone & corrosion zone provisions? <i>ref. NZS 3604 Cl. 10.21</i>	Y	
86	Are roof truss layout details correct?	Y	
87	Is roof truss span >12m? if so request specific design <i>Although roof trusses with spans <12m are also outside the scope of NZS 3604 they can be specifically designed in accordance with NZS 3603.</i>	X	
88	Is the truss design criteria & certificate from approved fabricator provided	Y	
89	Is the timber grade and treatment for truss members correctly specified?	Y	
Framed Roof			
Roof Bracing			
92	Does roof bracing comply? <i>Check that bracing is appropriate for roof weight (heavy/ light), and locations of bracing is correctly demonstrated . May need diaphragm ceiling/dragon ties. NZS 3604 Section 8.3.3.4</i>		
90	Has plan bracing been detailed? <i>NZS 3604 10.3 and 10.14</i>		
91	Has roof space bracing been detailed? <i>NZS 3604 10.3 and 10.14</i>		
	Do heavy hip roofs have ceiling plane bracing in accordance with NZS 3604 10.3.3.3		
Rafters			
93	Do rafter spacing, spans, size, grade, treatment, & connections comply? <i>Check wind zone, roof loads - ref. NZS 3604 Sec. 10</i>		
94	Do rafter fixings comply?		
95	Have snow loads been considered? <i>ref. table 15.6</i>		
Ridge Beams			
96	Are ridge beam, spans, supports & fixings clearly detailed and complying? <i>ref. NZS 3604 sec 10.13</i>		
97	Have load paths been correctly addressed? <i>Check that the load path from ground to beam support is properly considered.</i>		
Collar Ties & Cleats			
98	Are collar tie & cleat details provided and are they complying? <i>ref. NZS 3604 10.13 / 14</i>		
Ceiling Joists			
99	Does ceiling joist spacing, size, span, grade, & treatment comply?		

Ceiling Runners (Strong backs)		
100	Does ceiling runner (strong back) spacing, span, size, grade, & treatment comply? <i>Ref Table 10.5 NZS 3604 Section 10</i>	
101	Do ceiling runner dimensions comply with Table 10.5?	
Valley Boards		
102	Does valley board size, treatment, grade, comply? <i>Must be min. 25mm thick and wide enough to support valley gutter. Min. H3.1 - NZS 3602 - Table 1. 1D.4</i>	Y
Underpurlins		
103	Do underpurlin size, span, fixing, grade, and treatment comply? <i>ref. Tables 10.3 & 15.7 - consider .5 kPa snow loads</i>	
Strutting Beams		
104	Do strutting beam spans, dimensions, fixings & support comply with Fig 10.10?	
Purlins		
105	Do purlin spacing's, span, size, grade, treatment comply? <i>Ref 3602, Table 1, Section E, H1.1 min. or Section D, if skillion roof - H1.2 min. or Flat roof - H3.1 min. respectively for roof framing & associated members.</i>	Y
106	Are purlin fixings clearly & correctly detailed? <i>Table 10.9 & 10.10 Consider periphery fixings - Fig 10.16</i>	Y
Ceiling Battens		
107	Do ceiling batten spacing, span, size & grade comply? <i>ref. Table 13.1</i>	Y
Roof Cladding		
108	Is the roof cladding within the limitations of E2/AS1 <i>Refer E2/AS1, Paragraph 3.2</i>	Y
109	Has a comprehensive & relevant 'Roofing' specification been provided? <i>Ensure the specification provided is comprehensive, relevant & has appropriate reference to: Standards(NZS4206,AS2049,NZS4217,etc),Workmanship, Materials, Durability, MRM Code of Practice,</i>	Y
110	Does the roof pitch comply? <i>Refer E2, Section 8.2, cl 8.2.3 & Table 10.</i>	Y
111	Have details & flashings been provided for the hips, ridges, valleys, aprons & barges? <i>Refer E2, section 8.2, cl 8.2.6 & figures 23-28.</i>	Y
112	Have relevant flashings, stop ends & turn-downs details been provided? <i>Refer E2, section 8.4, cl 8.4.11 - 8.4.14 & figures 41-49</i>	X
113	Do roof penetration comply? <i>Refer E2, Section 8, cl 8.1.7 'Roof penetrations'</i>	N
114	Is the method of flashing pipe penetrations through roof specified? <i>Refer E2, section 8.4, cl 8.4.17 & figures 53-55.</i>	A
115	Do the proposed masonry tiles specified meet the profile criteria? <i>Refer E2, Section 8.2, cl 8.2.1.1</i>	Y
116	Is the proposed design within pressed metal tile limitations? <i>Maximum length from eaves to ridge of 12 metres, No internal gutters(except hidden gutters & valley gutters as detailed in figure 37)</i>	X

117	Is the proposed design within profiled metal limitations. <i>This acceptable solution is limited to profiled metal roofing</i> a) Profiled as outlined in paragraph 8.4.4 b) without valley that change direction in plan form with sheets no more than 18m in length	X	
118	Has roofing profile and thickness been specified? <i>Refer E2, Section 8.4, cl 8.4.4.</i>	X	
119	Has material coating been specified? <i>Refer E2, Section 8.4, cl 8.4.3 to 8.4.3.3.</i>	X	
120	Are the proposed flashing, gutter & fixing compatible? <i>Refer E2, section 8.2, cl 8.2.4, & Tables 20, 21 & 22.</i>	Y	
121	Are projecting eaves or verges closed in? <i>Refer E2, 8.1.3.1 'Projecting eaves'</i>	Y	
122	Is roof underlay required, if 'yes' has it been correctly specified? <i>Refer E2, Section 8, cl 8.1.5 & 8.1.5.1 & for masonry tiles refer Table 10, for metal roofing refer Table 23.</i>	Y	
123	Is underlay specified where a spreader discharges over a concrete tile roof?	N	
124	Are anti-ponding boards specified for roof pitches <17 degrees (masonry tiles) <i>Refer E2, Section 8.2, cl 8.2.5. Anti-ponding boards shall be treated in accordance with NZS 3602.</i>	X N	
125	Are details provided demonstrating how 'Gutters, Barges, aprons & Fascias' terminate against finished cladding? <i>Refer E2, section 8.3, cl 8.3.9 'Gutters, Barges & Fascias' shall terminate so as to leave a gap of 10mm from the finished cladding.</i>	X	
126	Are gutters, downpipes and spreaders correctly detailed? <i>Refer E1, Table 5 for down pipe sizing & figures 15 & 16 for size of roof gutter. Refer E2, Section 8, cl 8.1.6 'Gutters'</i>	Y	
127	Does the purlin setout provide adequate provision for support & fixing of the roof cladding? <i>Refer E2, section 8.4, cl 8.4.6 'Structure' & Tables 11, 12 & 13.</i>	Y	
128	Does the specified method & setout of the fixings of the roof cladding comply? <i>Refer E2, For Corrugated & Trapezoidal roof cladding, section 8.4, cl 8.4.8 & 8.4.8.1 'Fixings & fixing requirements' & Tables 14 & 15, and for Trough roof cladding refer, section 8.4, cl 8.4.9 & 8.4.9.1 'Fixings & fixing requirements' & figure 40.</i>	Y	
130	Does the design provided allow for expansions? <i>Refer E2, section 8.4, cl 8.4.10 & Table 16.</i>	X	
131	Do the details provided for the internal, valley &/or hidden gutters comply? <i>Refer E2, section 8.4, cl 8.4.16 - 8.4.16.3 & figures 50 - 52.</i>	Y	

Membrane Roofs

132	Is the proposed design within membrane roof limitations? <i>Refer E2, Section 8.5, cl 8.5.1 'Limitations'</i>		
133	Is the substrate grade, thickness & treatment compatible with the proposed membrane? <i>Refer E2, Section 8.5, cl 8.5.3, 'Plywood substrates'.</i>		
133	Does the specified installation of the substrate & membrane comply? <i>Refer E2, Section 8.5, cl 8.5.5 - 8.5.5.2, 'Installation'.</i>		
134	Is the proposed membrane Butyl rubber or EPDM rubber? <i>Refer E2, Section 8.5, cl 8.5.4, 'Butyl & EPDM'.</i>		
135	Is the roof constructed with complying falls, drainage & gutters? <i>Refer E2, Section 8.5, cl 8.5.6, 'Roof & deck drainage' & figures 56, 63 & 64.</i>		

136	Has overflow relief been provided for enclosed roofs? <i>Refer E2, Section 8.5, cl 8.5.10, 'Gutters' & figure 64. Overflow relief shall have a cross-sectional area of 1.5 times the cross-sectional area of the calculated discharge down pipe.</i>		
137	Are the wall junctions & verge details provided? <i>Refer E2, Section 8.5, cl 8.5.8, 'Junctions' & figures 57, 58, 61, 62, & 63.</i>		
Drained Cavity			
138	Building wrap specified appropriate & compatible with cladding. <i>Refer E2, Table 23.</i>		
139	Is wrap restrained in accordance with NZBC 9.1.8.5?		
140	Have construction details been provided for the drained cavity system? <i>Ensure all relevant details are in accordance with the details provided in E2.</i>		
141	Have drainage paths been detailed?		
142	Have details been provided for the batten grade, treatment, size, spacing & fixing? <i>Ensure all relevant details are in accordance with the details provided in E2.</i>		
143	Flashing details provided for window & door openings? <i>Ensure all window & door opening details are in accordance with E2.</i>		
144	Details provided for Internal & external corner junctions? <i>Ensure details are in accordance with E2.</i>		
145	Double studs & battens details provided behind sheet joints for 'Expressed joints' &/or 'Sealant joints'? <i>Ensure details are provided for Expressed joints & Sealant joints, figure 103 & 106 & Plywood, figure 120, double stud required behind joints for sheet fixing.</i>		
146	Are junctions with dis-similar materials detailed?		
Exterior Cladding			
147	Has a product specific specification been supplied?	Y	
148	Does the cladding require a drainage cavity system. Has a risk matrix from NZBC E2 been supplied? <i>Refer to E2 Risk matrix. Risk score; 0-6, may be direct fixed, 7-12, must be installed on a 20mm drained cavity, 13-20, must be installed on a 20mm drained cavity.</i>	Y	
149	Is the proposed design within the limitations of E2? <i>Refer E2, 9.7.1 & 9.7.1.1.</i>	Y	
150	Have the construction details been provided for the cavity system? <i>Ensure the cavity system details contain the, Timber batten size, fixing requirements, spacing, treatment (H3.1 min), blocking requirements etc</i>	X	bricks.
151	Full flashing details provided for window & door openings <i>Refer E2, Refer E2, 9.1.10, 9.1.10.1-9.1.10.7 & figures 115 & 116, or manufacturers specifications.</i>	Y	
152	Cladding materials are clearly identified on plans?	Y	
153	Is the cladding an approved system?	Y	
154	Internal and external corner details are provided?	X	
155	Junctions between differing claddings are detailed?	X	
156	Joints in materials are in accordance with manufacturers details or comply with NZBC E2?	Y	
157	Have manufacturers installation/fixing details been supplied?	N	

158	Has the correct wrap/air barrier been specified for walls?	Y	
159	Has the correct wrap/air barrier been specified for unlined walls or gabled ends <i>NZBC E2 9.1.4</i>	X	No Gables
160	Have parapets/enclosed deck barrier junctions/flashings been detailed?	X	
161	Have construction/movement/shrinkage joints been detailed relevant to cladding?	X	
162	Is the structure appropriate for the proposed cladding? <i>Studs at 400cc for stucco on non-rigid backing?</i>	Y	
163	Have appropriate wall/soffit junctions been detailed?	Y	
164	Have durability requirements been met (particularly where certain materials drain on to flashings/roof)?	Y	
165	Have any penetrations in exterior cladding been correctly detailed (flushed)?	N	
166	Are brick lintels correctly sized and have appropriate treatment?	X	
167	Is brick cavity the correct size?	Y	
168	Are brick ties correctly referenced where appropriate?	Y	
169	Are all fixings relevant for corrosion zone? (eg galv or stainless steel?)	Y	
170	Any battens/boards have appropriate weather grooves?	X	
171	All plaster/coating systems are a complete and approved system (tested by an approved testing body)?	X	
172	Framing requirements for 'Expressed joints' or 'Sealant joints' clearly detailed. <i>Refer E2, figure 103 & 106, double stud required behind joints for sheet fixing.</i>	X	
Enclosed decks			
173	Is the correct timber treatment, grade, size span & spacing specified for the deck framing? <i>Refer NZS3604 & NZS 3602</i>		
174	Is the timber substrate specified & correct treatment? <i>Refer NZS3602</i>		
175	Have threshold details been provided		
176	Has details for stormwater drainage & overflow relief been provided?		
177	Have details been provided for the barrier/wall junction		
178	Is the membrane specified butyl Rubber or EPDM <i>If not the application is an alternative solution</i>		
179	Does the deck membrane extend up face of exterior wall and barrier min 150mm?		
180	Have correct falls been specified to the deck area & tops of the barriers?		
kitchen			
181	Is facility provided for washing utensils / food & waste water disposal? <i>G3, Section 1.1 & Figure 1: Preparation Area and Access to Facility Paragraphs 1.1.2 and 1.5</i>	Y	
182	Are facility provided for cooking? <i>A cooker with an oven and a hot plate, or a wall oven and a separate hob, shall be provided for cooking.</i>	Y	

183	Is space provided for food preparation G3.2.1	✓	
184	Energy source specified for cooking & refrigeration appliances <i>Where a building is connected to a reticulated energy source, cooking and refrigeration appliances shall be permanently connected to a gas supply, complying with NZBC G11, or provided with connections to electrical outlets complying with NZBC G9.</i>	✓	
185	Have impervious, easily cleaned wall finishes been specified? <i>Wall linings adjacent to appliances and facilities shall have surfaces that can be easily maintained in a hygienic condition. Stainless steel, decorative high pressure laminate, tiles, wallboards with painted or applied impervious coatings or films, are examples of suitable materials for these surfaces.</i>	✓	
Laundry			
186	Are laundering facilities required? <i>Laundering facilities are not required for detached dwelling with less than 2 people.</i>	✓	
187	Have facilities with a laundry tub or space & connections for a washing machine been provided? <i>G2/AS1, cl 1.0.1 Laundering facilities shall be provided with: a) A laundry tub, or b) Space and service connections for a washing machine.</i>	✓	
188	Are service connections to be provided? <i>A min of a cold water supply provided for tub or cold water and electric power supply to a washing machine?</i>	✓	
189	Has splash protection been specified for floor and wall linings? <i>E3/AS1 cl 3.1.1 'Floors' & 3.1.2 'Walls'. Floor and Wall linings and finishes must satisfy the performance for impervious and easily cleaned surfaces in areas exposed to water splash.</i>	✓	
Wet areas / WCs			
190	If the wet area has a timber floor, is the flooring treatment complying? <i>In wet areas where maintenance of an impervious coating cannot be assured plywood or timber flooring that has been treated to a min. of H3.1 shall be used (ref. NZS 3602: 2003 sec. 10.3.1)</i>	X	
191	If shower is level access is proposed, has non-slip flooring been specified? <i>Refer D1, Table 2.</i>	X	
192	If shower is level access is proposed, have adequate falls been provided to the floor drain? <i>Falls required to the floor of a level access shower to the floor drain are to be no less the 1:50. Refer NZS 4121: 2000, 10.5.11.3 'Floors'.</i>	X	
193	Has a complying waterproofing membrane been specified? <i>Ensure the specified waterproof membrane has been applied in accordance with the manufacturers technical specification. If required ensure applicator provides a Producer Statement - Construction (PS3)</i>	X	
194	Have complying floor & wall linings been specified (i.e. tiled, vinyl, wet wall linings, etc) <i>If tiled on wooden floor ensure a waterproof membrane has been specified and manufacturers' technical specification provided.</i>	✓	
195	Has specification demonstrating compliance been provided for the preparation, adhesive & application, laying & jointing of the impervious surface? <i>A relevant specification should be provided demonstrating compliance for the impervious surfaces for both floors & walls.</i>	✓	
196	Has the shower type been specified (tiled or proprietary cubicle) <i>If tiled shower, have construction details been provided for the tiling substrate and waterproofing membrane.</i>	✓	Cubicle

197	Has the glazing been specified (shower screens & windows) <i>NZS 4223</i>	Y	
198	Has provision been made to contain accidental overflow damage to adjoining household units? <i>If multi-unit dwelling, Refer E3, section 2.0 'Overflow'.</i>	X	
199	Has provision been made to temper the hot water to all personal hygiene fixtures? <i>Refer, G12 'Water Supplies' G12.3.6</i>	Y	
Ventilation			
200	Are openings providing natural ventilation to occupied space 5% or more of floor area? <i>Refer, G4, Clause 1.2 'Natural Ventilation'.</i>	Y	
201	Does the mechanical ventilation to be provided for extracting moisture & other contaminants comply? <i>Refer, G4, Clause 1.3 'Mechanical Ventilation'</i>	X	
202	Does the documentation demonstrate mechanical ventilation ducted to outside air? <i>Refer G4, clause 1.3 'Mechanical Ventilation'.</i>	X	
Insulation			
203	Is floor, wall and ceiling insulation correctly specified? <i>Refer BRANZ Home Insulation Guide, NZS 4218, AS/NZS 2918.</i>	Y	
204	Is insulation provided to masonry walls in habitable spaces? <i>200 series block generally requires insulation. Refer to BRANZ Home Insulation Guide - and BRANZ Bulletin 357.</i>	X	
205	Are a loose fill insulation barrier / boundary required around flue/s of domestic solid fuel appliance installations? <i>Check NZS 4721 or AS/NZS 2918 or manufacturer literature.</i>	X	
206	Is a 25 mm separation provided between the top of the insulation and the underside of the skillion roof underlay? <i>Ensure 25mm gap is specified between insulation & building paper, refer 'BRANZ Home Insulation Guide'.</i>	X	
207	Is subfloor insulation protection required? <i>Subfloor insulation in exposed locations such as under raised floor of a pole house may require protection.</i>	X	
208	Do the glazed areas exceed 30% of the wall area? <i>(Calculation method required NZS 4218)</i>	N	
Glazing			
209	Do vertical windows in external walls have a window area of not less than 10% of the floor area of the room? <i>Refer G7, clause 1.0.1 a).</i>	Y	
210	Is the window head height at least 1/2 the room width for windows on the same or adjacent sides & 1/4 the room width for windows on the opposite sides of the room? <i>Refer G7 - Clause 1.01 - 'Vertical Windows in External Walls' & Figs 1 & 2. Note in the event that this is impractical - equivalent of 10% of floor area of room may be necessary.</i>	Y	
211	Is the natural light entering the building restricted by other structures or natural land features? <i>Either the total window area requires increased or interior surfaces of suitable reflectance (refer 1.0.2).</i>	N	
213	Is at least 50% of the glazed area provided for natural light clear glazed? <i>(G7 2.0.1 & 2) It is acceptable for awareness of the outside to be provided via another space.</i>	Y	
214	Is glazing specified to comply with NZS 4223 Part 3?	Y	
Water Supplies			

215	Has a comprehensive specification been provided?	Y	
Sanitary Plumbing (NZBC G13)			
216	Do the plans & specifications provide adequate information to enable compliance to be properly assessed? <i>If information is not adequate then suspend the application and request further information from the applicant.</i>	Y	
217	Has a specification been provided for the proposed sanitary plumbing work? <i>Ensure the specification is relevant and provides reference to appropriate & current standards, materials, workmanship, durability, fittings, & fixtures.</i>	Y	
218	Has a schematic plan been provided for dwellings of 2 or more storey's?	X	
219	Are discharge stacks of appropriate size? (Refer Table 2)	X	
220	Is waste pipe size / length & venting correct?	Y	
221	Is the discharge pipe size correct? (Refer Table 1)	Y	
222	Is the discharge stack serving 3 floors fitted with a relief vent pipe? (Refer Fig 6)	X	
223	Is it to discharge to the foul water drainage system via a gully? A trap must be fitted to the fixture.	Y	
224	Is a floor waste installed? Is it for accidental overflow (required on multi-unit dwellings)?	Y	
225	Is more than one fixture discharging to the discharge pipe? (Refer Table 4 & 5 for sizing)	N	
226	Is provision for cleaning and maintenance allowed for?	Y	
227	Is the relief vent connected to the discharge stack and sized correctly?(Refer Table 3)	Y	
228	Is the gradient appropriate for the pipe size? (Refer 4.2)	Y	
Sanitary Drainage			
229	Has the correct lateral been detailed?	Y	
230	Does the lateral have an invert level that allows connection (compare IL to FFL)?	Y	
231	Are drainage pipes correctly sized?	Y	
232	Does the drain pass under a building? Is access provided on each side of the building?	N	
233	Does the drainage layout contain least one overflow relief gully ? (ORG)	Y	
234	Does the system incorporate access points, chambers, rodding points & inspection points as appropriate?	Y	
235	Has confirmation been provided that adequate council services are available? (Refer to PIM)	Y	
236	Is a drainage access area providing for drainage access points located within a building?	X	
237	Is the drain gradient specified correct? (Refer Table 2)	Y	
238	Are drains correctly vented? <i>Ensure all branch drains 10m or > are vented.</i>	Y	
Stormwater Drainage			
239	Adequate downpipes provide (see E1)?	Y	
240	Are drain invert levels provided?	Y	
241	Are drain sizes correct?	Y	

242	Are sump details provided (E1 surface water control for hardstand areas)?	Y	
243	Is alignment & gradient of drains correct?	Y	
244	Overflow relief provided?	N	
245	Roof gutters correctly sized?	Y	
Chimney			
246	Does chimney design comply? (Brick, pumice, concrete, precast) consider wall thickness, foundation size, breast size, reinforcing, restraints, bracing calculations etc.).		
247	If SED, have calculations been provided?		
248	Is cantilever less than 2.4 m?		
249	Is height less than 9m?		
Stairs / Landings / Handrails			
250	Are handrails specified & correctly located? <i>Refer D1, section 6.0 'Handrails' Clause 6.0.1, All stairways with a width less than 2.0m or less shall have a handrails on at least one side</i>		
251	Are visibility & lighting levels complying? <i>Refer D1, 4.6 'Visibility of stair treads', 4.6.1, 4.6.2 & Table 8.</i>		
252	Do stairs specified comply for the intended use & area to which they provide access? <i>-Minor private: stairway not on a main thoroughfare, and intended to provide infrequent access to a single room which is not a living area or kitchen. -Secondary private: stairway other than a main or minor private stairway, intended to provide access to another floor containing only bedrooms, bathroom or similar accommodation. -Main private: intended to provide access to and between frequently used spaces such as living areas, kitchens and garages, and includes all exterior private stairways.</i>		
253	Does the stair tread & rise construction comply with the stair type? <i>Minor Private: Max rise 220mm/Min tread 220mm, Secondary Private: Max rise 200mm/Min tread 250mm, Main Private: Max rise 190mm/Min tread 280mm. (Main private includes exterior stairs)</i>		
254	Do spiral or curved stair winder tread & rise comply? <i>Refer D1, section 4.4 'Curved & spiral stairways'</i>		
255	Is handrail provided if there is 2 or more risers? <i>Refer D1, section 6.0 'Handrails' clause 6.0.1.</i>		
256	Do landings provide 400mm clearance in front of door opening onto the landing? <i>Refer D1, clause 4.3.5, Fig.15</i>		
257	Do the location & size of the landing/s comply? <i>Refer D1, section 4.3.1, 'Landings required', 4.3.2, 'Maximum rise', 4.3.3, 'Landing width' & 4.3.4, 'Landing length', 4.3.5 'Obstructions', also refer figures 14,15, & 25.</i>		
Decks / Balconies / Barriers			
258	Are fixings correct & does compatibility / durability comply?		
259	Does design comply? – (Top rails, balusters, bottom rails, palings, boundary joist (NZBC B1))		
260	Does timber treatment comply with NZS 3602?		
261	Enclosed decks		
262	If SED are calculations provided?		
263	Is deck more than 3 m high if so SED?		
264	Does deck bracing comply? <i>Refer NZS 3604, Section 7, cl 7.2 Timber Decks. All decks which project >2m from the building shall be provided with subfloor bracing at half the light/light/light cladding calculated from Table 5.8.</i>		

265	Are the subfloor piles & bearers the correct grade, treatment, size, spacing & span correct? <i>All timber piles for decks are to be a minimum of 125x125mm HS.</i>		
266	Do deck joist sizes, grade, treatment, span & spacing comply? <i>Refer 'Amendment 2' NZS 3604 for changes to 'Timber Grades' & call size, now 'Actual Minimum Dried Size'</i>		
267	Does decking material comply for the joist spacing? <i>Refer NZS 3604, section 7, cl 7.4.3 'Decking' 32mm for joists @ 600mm centre's, or 19mm for joists @ 450mm centre's.</i>		
268	Does decking material comply for slip resistance? <i>If the deck surface provides access to the main entrance of the building, slip resistance must be considered in accordance NZS 3604, section 7, cl 7.4.4, & D1, cl 2.1 'Slip resistance'.</i>		
269	Is the substrate specified for the balcony waterproofing membrane appropriate? <i>Check the manufacturer's technical literature to ensure the products are compatible.</i>		
270	Is specialist information provided? <i>Has the manufacturer's technical literature demonstrating compliance with the NZ building Code been provided with the application?</i>		
271	Do stringer size & connections comply? <i>Refer NZS 3604, section 6, cl 6.3, table 6.7 & E2, Section 7, cl 7.2.1.1 & figure 15, Note: stringers spaced off cladding by 12mm.</i>		
272	Do the thresholds specified for the deck comply? <i>Refer E2, Section 7, cl 7.1.1 & figure 14.</i>		
Verandah			
273	Do concrete post footings specified provide adequate resistance against uplift? <i>Refer NZS 3604, section 9 'Posts', clause 9.2.2</i>		
274	Do top & bottom connections of posts provide required kN capacity to resistance against uplift? <i>Refer NZS 3604, section 10, cl 10.2.1.12 & table 10.8, (For snow loads refer table 15.8.) & NZS 3604, section 9, cl 9.3 & tables 9.1 & 9.2, figures 9.2 & 9.3.</i>		
275	Does the verandah beam treatment, grade, size & span comply? <i>Refer NZS 3602 for treatment requirements. Refer NZS 3604 for grade, size & span requirements.</i>		
Effluent Disposal Systems			
276	Has Regional Council approval been granted.		
277	Has a full engineering site investigation been provided <i>Site report provided stating soil categories, water table, etc.</i>		
278	Has a design specification & producer statement been provided?		
279	Does the design information provided specify the design criteria? <i>The design criteria should include; Capacity based on bedroom numbers, Loading calculation, site evaluation, soil profile, site characteristics.</i>		
C2 - Means of Escape from Fire			
280	Are domestic smoke alarms correctly specified and correctly located? (refer NZBC F7)	Y	
C4 - Structural Stability During Fire			
281	Designed to avoid structural collapse (fire wall when within 1m of boundary)?	/	/

Pass = Compliance with the Building Code

Fail = Non-compliance with the Building Code – further information required

NA = Not Applicable

Project Information Memorandum No: 60725

Section 34, Building Act 2004

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Rotorua District Council
1061 Haupapa Street
Private Bag 3029
Rotorua Mail Centre
Rotorua 3046
New Zealand
P: 07 348 4199
F: 07 346 3143
E: mail@rdc.govt.nz
W: www.rdc.govt.nz

Owner

GENERATION DEVELOPMENTS LTD
P O BOX 14232
TAURANGA

Site Information

Property ID: 32309
Street Address: 23 HARRIS STREET
Valuation number
Legal Description::

Project Information

Project is for NEW DWELLING WITH ATTACHED GARAGE 156SM2
Intended Use
Intended life: Indefinite but not less than 50 years
Value of Work: 187,680
Number of Stages:

PIM Status

The proposed building work may be undertaken, subject to the provisions of the Building Act 2004, and any condition of the Building Consent.

Conditions . . .

INSPECTIONS BY TERRITORIAL AUTHORITY

SUBJECT TO BUILDING CONSENT CONDITIONS

The proposed building work may be undertaken, subject to the provisions of the Building Act 2004, and any condition of the Building Consent.

SPECIAL FEATURES OF LAND

The building work is sited on land which has been subject to controlled filling. The land has been certified as suitable for normal residential development. The minimum floor level for the house must be 1.3m above the ground water level.

PUBLIC UTILITIES/ROADING

ACCESS FROM FORMED ROAD

The proposed building work is to be sited on land which the Council has identified in its records as being able to have vehicular access from a formed road or street under the control or ownership of the Rotorua District Council.

PUBLIC UTILITIES/STORMWATER

STORMWATER SYSTEM

The proposed building work is to be sited on land which the Council has identified in its records as having a connection to a public stormwater system owned by Council and As Built connection details are attached hereto. (Services Plan)

WATER/URBAN SUPPLY

SUPPLY AVAILABLE

The proposed building work is to be sited on land which the Council has identified in its records as being within a Public Urban Water Supply.

SEWERAGE

CONNECTED TO SYSTEM

The proposed building work is to be sited on land which the Council has identified in its records as having a connection to a Public Sewerage System administered by the Council and As Built connection details are attached (Services Plan).

VEHICLE CROSSINGS

RD 13 STANDARDS

The vehicle crossing shall comply with, and if necessary be upgraded to Council's RD 13 standards (attached). Note: If the vehicle crossing requires upgrading, a Road Opening Application (attached) is required to be completed and returned to Resource Engineers for approval prior to the commencement of works on the crossing. Turn around time will be 15 working days and there is no charge associated with this. Plans in triplicate showing the location of the works will also be required.

WATER SUPPLY

APPLICATION FOR APPROVAL

Should a connection to this water supply be required, an application is to be made to Council's Utilities Network Manager for approval. Restrictions or conditions as to water usage may be imposed. Please be advised that this application may not be approved.

SEWERAGE DISPOSAL

APPROVAL GRANTED

Authorisation to connect to the public sewer system has been granted.

LAND USE CONSENTS

CONSENT GRANTED

The proposed building work is in accordance with the Land Use Consent granted by Council

62-06-012 granted 28 June 2006,

COMPULSORY PLANNING STATEMENTS

DISTRICT PLAN

The District Plan does not indicate any proposed road widening, proposed service lane, designations, scheduled sites or protected historic buildings, sites or trees on the land the building work is proposed.

NOT A DEVELOPMENT The proposal is not a development as defined in the District Plan.

DEVELOPMENT CONTRIBUTIONS

NO DEVELOPMENT CONTRIBUTION PAYABLE

A Development Contribution has been assessed for this building work, and there is no amount payable as shown on the sheet attached.

Signed for and on behalf of the Council:

Name: Belinda Robertson Position: Building Services Administration

Signed: B. Robertson Date: 27 JUL 2007

PIM / APPLICATION No.

DATE RECEIVED

16-7-07

DATE ISSUED

06-09-07

SITE FILE No.

13788

P 32309



Form 2

APPLICATION FOR PROJECT INFORMATION
MEMORANDUM AND/OR BUILDING CONSENT

Section 33 or section 45, Building Act 2004

THE BUILDING

Street address of building:

[for structures that do not have a street address, state the nearest street intersection and the distance and direction from that intersection]

Lot 8 Somerly

23 Harris St

Ngongotaha, Rotorua

Legal description of land where building is located:

[state legal description as at the date of application and, if the land is proposed to be subdivided, include details of relevant lot numbers and subdivision consent]

Subdivision Consent (if applicable)

Valuation No.

Lot No. 8

DPS

Section

Block

Survey District

Building name:

Hibiscus

Location of building within site/block number:

[include nearest street access]

Lot 8 Somerly

23 Harris St

Ngongotaha, Rotorua

Number of levels:

One

[include ground level and any levels belowground]

Level/unit number:

[insert level/unit number if applicable]

Area: 156.4 m²

[total floor area; indicate area affected by the building work if less than the total area]

Current, lawfully established, use:

[include number of occupants per level and per use if more than 1]

Residential dwelling

with attached garage

Year first constructed:

[insert year, approximate date is acceptable e.g: c1920s or 1960-1970]

Expected completion date:

2007

[insert month year]

THE OWNER

Name of owner:

[include preferred form of address, eg,
Mr, Miss, Dr, if an individual]

Generation Developments Ltd
P O Box 14232, Tauranga

Contact person:

[insert contact name]

Ruth Butzbach

Mailing address:

[insert mailing address]

As above

Street address/registered office:

[insert street address/registered office]

36 Cameron Road
Tauranga

Phone numbers:

Landline:

07-928-3939

Daytime:

Mobile:

After Hours:

Facsimile number:

07-578-8561

Email address:

ruthb@generation-co.nz

Website:

[website address if applicable]

The following evidence of ownership is attached to this application:

[current copy of certificate of title, lease, agreement for sale and purchase, or other document showing full name of legal owner(s) of the building]

AGENT

Name of agent:

[include preferred form of address, eg,
Mr, Miss, Dr, if an individual]

Contact person:

[insert contact name]

Mailing address:

[insert mailing address]

Street address/registered office:

[insert street address/registered office]

Phone numbers:

Landline:

Daytime:

Mobile:

After Hours:

Facsimile number:

Email address:

Website:

[website address if applicable]

Relationship to owner:

[state details of the authorisation from the owner to make the application on the owner's behalf]

First point of contact for
communications with the council/
building consent authority:

[all invoices and refunds related to
this application will be directed to this
person in all instances]

THE PROJECT

Description of the building work:
[provide sufficient description of building work to enable scope of work to be fully understood]

New dwelling with attached garage.

Will the building work result in a change of use of the building?

Yes ☐ No ☒

If Yes, provide details of the new use:
[provide description of new use]

List building consents previously issued for this project (if any):
[list who issued the consent, the date of issue and the consent number]

Intended life of the building if less than 50 years: _____

Estimated value of the building work on which the building levy will be calculated (including goods and services tax):

[state estimated value as defined in section 7 of the Building Act 2004]

\$ 187,680 -

Number of Toilet Pans: N/A
(Commercial properties only)

BUILDING PRACTITIONERS

Builder:

Business/name: Generation Developments Ltd Address: PO Box 14232, Tauranga

Phone: 07-578-8561 Mobile: _____ After hours: _____ Facsimile: _____

Email: _____ Registration/qualification: _____

Designer/Architect:

Business/name: Colin J Davis Address: PO Box 884, Tauranga

Phone: 07-578-3792 Mobile: _____ After hours: _____ Facsimile: 07-578-3700

Email: _____ Registration/qualification: _____

Plumber/Gas Fitter:

Business/name: Plumberman Address: PO Box 151, Tauranga

Phone: 07-571-0625 Mobile: _____ After hours: _____ Facsimile: _____

Email: _____ Registration/qualification: _____

Drainlayer:

Business/name: Plumberman Address: PO Box 151, Tauranga

Phone: 07-571-0625 Mobile: _____ After hours: _____ Facsimile: _____

Email: _____ Registration/qualification: _____

Electrician:

Business/name: _____ Address: _____

Phone: _____ Mobile: _____ After hours: _____ Facsimile: _____

Email: _____ Registration/qualification: _____

BUILDING PRACTITIONERS

Structural Engineer:

Business/name: _____ Address: _____

Phone: _____ Mobile: _____ After hours: _____ Facsimile: _____

Email: _____ Registration/qualification: _____

Engineer (identify practice college):

Business/name: _____ Address: _____

Phone: _____ Mobile: _____ After hours: _____ Facsimile: _____

Email: _____ Registration/qualification: _____

Head Contractor/Site Manager

Business/name: _____ Address: _____

Phone: _____ Mobile: _____ After hours: _____ Facsimile: _____

Email: _____ Registration/qualification: _____

Other:

Business/name: _____ Address: _____

Phone: _____ Mobile: _____ After hours: _____ Facsimile: _____

Email: _____ Registration/qualification: _____

Other:

Business/name: _____ Address: _____

Phone: _____ Mobile: _____ After hours: _____ Facsimile: _____

Email: _____ Registration/qualification: _____

Other:

Business/name: _____ Address: _____

Phone: _____ Mobile: _____ After hours: _____ Facsimile: _____

Email: _____ Registration/qualification: _____

Other:

Business/name: _____ Address: _____

Phone: _____ Mobile: _____ After hours: _____ Facsimile: _____

Email: _____ Registration/qualification: _____

Other:

Business/name: _____ Address: _____

Phone: _____ Mobile: _____ After hours: _____ Facsimile: _____

Email: _____ Registration/qualification: _____

The building work will comply with the building code as follows: *[Delete this section if this is an application for a PIM only]*

Clause <i>[which of the following clauses will be involved in the proposed building work?]</i>	Means of compliance <i>[refer to the relevant compliance document(s) or detail of alternative solution in the plans and specifications]</i>	Proposed inspections <i>[state means of inspection. Note PS4 or certification may be required]</i>
☒ B1 Structure	☐ B1/AS2 ☒ NZS 3604 ☐ NZS 4203 ☐ NZS 4229 ☐ Other _____ <i>[Specify]</i>	☐ Council ☐ Engineer ☐ Other _____ <i>[Specify]</i>
☒ B2 Durability	☐ B2/AS1 ☐ NZS 3101 ☐ NZS 3602 ☒ NZS 3604 ☐ Other _____ <i>[Specify]</i>	☐ Council ☐ Engineer ☐ Other _____ <i>[Specify]</i>
☐ C1-4 Fire N/A	☐ C1/AS1 ☐ Other _____ <i>[Specify]</i>	☐ Council ☐ Engineer ☐ Other _____ <i>[Specify]</i>
☒ D1 Access Routes	☒ D1/AS1 ☐ NZS 4121 ☐ NZS 4121 ☐ Other _____ <i>[Specify]</i>	☐ Council ☐ Engineer ☐ Other _____ <i>[Specify]</i>
☐ D2 Mechanical installations for access N/A	☐ D2/AS1 ☐ NZS 4332 ☐ EN 81 ☐ EN 115 ☐ Other _____ <i>[Specify]</i>	☐ Engineer ☐ Other _____ <i>[Specify]</i>
☒ E1 Surface water	☒ E1/AS1 ☐ AS/NZS3500.3 ☐ Other _____ <i>[Specify]</i>	☐ Council ☐ Other _____ <i>[Specify]</i>
☒ E2 External moisture	☒ E2/AS1 ☐ Specific design & testing	☐ Council ☐ Other _____ <i>[Specify]</i>
☒ E3 Internal moisture	☒ E3/AS1 ☐ Other _____ <i>[Specify]</i>	☐ Council ☐ Other _____ <i>[Specify]</i>
☐ F1 Hazardous substances etc N/A	☐ F1/AS1 ☐ Other _____ <i>[Specify]</i>	☐ Council ☐ Other _____ <i>[Specify]</i>
☒ F2 Hazardous building materials	☒ F2/AS1 ☐ NZS 4223 ☐ Other _____ <i>[Specify]</i>	☐ Council ☐ Other _____ <i>[Specify]</i>
☐ F3 Hazardous substances N/A	☐ F3/AS1 ☐ Other _____ <i>[Specify]</i>	☐ Council ☐ Other _____ <i>[Specify]</i>
☐ F4 Safety from falling N/A	☐ F4/AS1 ☐ FSP Act ☐ Other _____ <i>[Specify]</i>	☐ Council ☐ Other _____ <i>[Specify]</i>
☐ F5 Construction and demolition hazards N/A	☐ F5/AS1 ☐ Other _____ <i>[Specify]</i>	☐ Council ☐ Other _____ <i>[Specify]</i>
☐ F6 Lighting for emergency N/A	☐ F6/AS1 ☐ Other _____ <i>[Specify]</i>	☐ Council ☐ Other _____ <i>[Specify]</i>
☐ F7 Warning systems N/A	☐ F7/AS1 ☐ AS/NZS 1668 ☐ NZS 4512 ☐ NZS 4515 ☐ Other _____ <i>[Specify]</i>	☐ Council ☐ Engineer ☐ Other _____ <i>[Specify]</i>
☐ F8 Signs N/A	☐ F8/AS1 ☐ Other _____ <i>[Specify]</i>	☐ Council ☐ Other _____ <i>[Specify]</i>
☒ G1 Personal hygiene	☒ G1/AS1 ☐ Other _____ <i>[Specify]</i>	☐ Council ☐ Other _____ <i>[Specify]</i>

☒ G2	Laundering	☒ G2/AS1	☐ Other _____ [Specify]	☐ Council ☐ Other _____ [Specify]
☒ G3	Food preparation and prevention of contamination	☒ G3/AS1	☐ Other _____ [Specify]	☐ Council ☐ Other _____ [Specify]
☒ G4	Ventilation	☒ G4/AS1	☐ AS/NZS 1668.2 ☐ Other _____ [Specify]	☐ Council ☐ Other _____ [Specify]
☒ G5	Interior environment	☒ G5/AS1	☐ Other _____ [Specify]	☐ Council ☐ Other _____ [Specify]
☐ G6	Airborne & impact sound N/A	☐ G6/AS1	☐ Other _____ [Specify]	☐ Council ☐ Other _____ [Specify]
☒ G7	Natural light	☒ G7/AS1	☐ Other _____ [Specify]	☐ Council ☐ Other _____ [Specify]
☐ G8	Artificial light N/A	☐ G8/AS1	☐ NZS 6703 ☐ Other _____ [Specify]	☐ Council ☐ Other _____ [Specify]
☒ G9	Electricity	☒ G9/AS1	☐ Other _____ [Specify]	By certification only
☒ G10	Piped services	☒ G10/AS1	☐ NZS 5261 ☐ Other _____ [Specify]	By certification only
☒ G11	Gas as an energy source	☒ G11/AS1	☐ Other _____ [Specify]	By certification only
☒ G12	Water supplies	☒ G12/AS1	☐ AS/NZS 3500.1 ☐ AS/NZS 3500.4 ☐ Other _____ [Specify]	☐ Council ☐ Other _____ [Specify]
☒ G13	Foul water	☒ G13/AS1	☐ AS/NZS 3500.2 BS 5572 ☐ Other _____ [Specify]	☐ Council ☐ Other _____ [Specify]
☐ G14	Industrial liquid waste N/A	☐ G14/AS1	☐ Other _____ [Specify]	☐ Council ☐ Other _____ [Specify]
☐ G15	Solid waste N/A	☐ G15/AS1	☐ Other _____ [Specify]	☐ Council ☐ Other _____ [Specify]
☒ H1	Energy efficiency	☒ H1/AS1	☐ NZS 4218 ☐ NZS 4243 ☐ ALF Design Manual ☐ NZS 4214 ☐ Other _____ [Specify]	☐ Council ☐ Other _____ [Specify]

(Strike out where not applicable)

GENERAL	Yes	No	N/A
---------	-----	----	-----

Plans and specifications of an acceptable standard (Reference BRANZ Bulletin 365 Acceptable Plans and Specifications)	☒	☐	☐
Plans, elevations, cross sections of the proposal in duplicate	☒	☐	☐
Certificate of Title (recent search copy less than 6 months old)	☒	☐	☐
Wind Zone classification	☒	☐	☐
Earthquake Zone classification	☒	☐	☐
Corrosion Zone classification	☒	☐	☐
Presence of natural hazards eg. Flooding, falling debris, erosion	☐	☒	☐

Site Plan: Fully dimensioned, scaled, showing all buildings and easements (proposed/existing)	☒	☐	☐
Site boundaries nominated	☒	☐	☐
Site area per unit indicated	☒	☐	☐
Site coverage and plot ration calculations %	☒	☐	☐
Shared access ways/other areas	☒	☐	☐
Foulwater (sewer) drains	☒	☐	☐
Stormwater drains and soakholes	☒	☐	☐
Water service details	☒	☐	☐
Site levels and finished floor level indicated	☒	☐	☐
Vehicle crossing position indicated on plan	☒	☐	☐
Vehicle access manoeuvre and parking areas indicated	☒	☐	☐
Street trees, poles, sumps, manholes, traffic islands affecting vehicle access	☒	☐	☐
Hill sites: indicate contours, drive gradients and building heights	☐	☐	☒
Landscaped areas indicated and planting plan produced	☐	☐	☒
Earthworks: identify proposal for cut and/or fill where cut is more than 1.5m deep or 20 cubic metres.	☐	☐	☒

Demolition details	☐	☐	☒
Swimming pool: design, fence and discharge	☐	☐	☒
Backflow prevention	☐	☐	☒
Notable and protected trees indicated	☐	☐	☒
Heritage site or building affected	☐	☐	☒
Resource Consent application	☐	☐	☒
Subdivision details	☐	☐	☒

[illegible]

CONSTRUCTION DETAILS	Yes	No	N/A	Full details of alternative solutions if used	Yes	No	N/A
Products and designs match selected earthquake, wind and corrosion zones	☒	☐	☐	Producer Statement: specific design details for work outside the scope of acceptable solutions and non specific design codes.	☐	☒	☐
Timber treatment specifications	☒	☐	☐	Fire Safety Summary or Fire Design statement	☐	☒	☐
Foundation plans and design included. Plans to show details on reinforcing, all fixings and subfloor bracing for timber floors.	☒	☐	☐	Drainage and/or plumbing	☐	☒	☐
Floor slab details including location of expansion joints	☒	☐	☐	Lifts, escalators, moving walkways	☐	☒	☐
Geotechnical reports on ground condition as required	☒	☐	☐	Acoustic and thermal insulation	☐	☒	☐
Floor plans with fire partitions, common walls & dividing walls & identification of all rooms & their intended uses	☒	☐	☐	HVAC systems	☐	☒	☐
Elevations with maximum height and daylighting recession planes	☒	☐	☐	Energy	☐	☒	☐
Beam designs including fixings, design charts for manufactured beams where used	☒	☐	☐	People with disabilities access & facilities	☐	☒	☐
Roof plan complete with truss design statement and details	☒	☐	☐	Independent peer review for specialist design above	☐	☒	☐
Details to resist roof uplift	☒	☐	☐	Compliance Schedule details	☐	☒	☐
Bracing calculations and layout plans	☒	☐	☐	ADDITIONAL INFORMATION			
Brace fixing details	☒	☐	☐				
Blockwork design, including cover to reinforcing, locations and detail of expansion joints, fixings.	☐	☒	☐				
Retaining walls: design, heights, position, subsoil drainage and safety barriers	☐	☒	☐				
Windows: opening and fixed windows indicated, cantilevered lintel details included where appropriate	☒	☐	☐				
Glazing: safety glass specifications included	☒	☐	☐				
Sound insulation indicated	☐	☒	☐				
Location of smoke detectors	☒	☐	☐				
Claddings and weathertightness details provided for all claddings, including risk matrix or equivalent	☒	☐	☐				
Stairs/steps/landings/balconies: dimensions, handrail and barrier details	☐	☐	☒				
Decks: membrane specifications (especially compatible substrates), threshold details, position and size of overflows, gutter size calculations,	☐	☐	☒				
Solid fuel heater: make, model & location	☐	☐	☒				
Accurate layout of plumbing & drainage systems	☒	☐	☐				

MATERIALS USED (identify materials used. Required for Department of Building and Housing records)

What materials will be used for the:

Floor

- 1 ☐ Timber 2 ☒ Concrete 3 ☐ Wood Products
4 ☐ Other Specify: _____

Framing

- 1 ☒ Timber 2 ☐ Concrete 3 ☐ Steel 4 ☐ Aluminium
5 ☐ Other Specify: _____

Roof

- 1 ☐ Steel sheeting 2 ☐ Steel tiles 3 ☒ Concrete tiles 4 ☐ Shingles
5 ☐ Aluminium 6 ☐ Other Specify: _____

Internal

- 1 ☒ Plaster board 2 ☐ Fibrous Plaster 3 ☐ Wood Products
4 ☐ Other Specify: _____

External Cladding

- 1 ☒ Brick 2 ☐ Concrete 3 ☐ Concrete block 4 ☐ Cement board
5 ☐ Plaster 6 ☐ Timber 7 ☐ Steel 8 ☐ Aluminium
9 ☐ XPS 10 ☐ Other Specify: _____

Energy

Energy source Electricity

Cooking: Electricity

Insulation Fibre glass Pink Batts

Connection to or disconnection from:

- ☒ Council water supply (Please attach "Application for Water Connection" form.) ☒ Council sewerage

COMPLIANCE

The specified systems for the building are as follows: *[specified systems are defined in regulations]*

N/A

The following specified systems are being altered, added to, or removed in the course of the building work: *[specify]*

There are no specified systems in the building. ☐

PROJECT INFORMATION MEMORANDUM

The following matters are involved in the project

- | | |
|--|--|
| ☐ Subdivision | ☒ New or altered locations and/or external dimensions of buildings |
| ☐ Alterations to land contours | ☒ Building work over or adjacent to any road or public place |
| ☒ New or altered connections to public utilities | ☐ Building work over any existing drains or sewers or in close proximity to wells or water mains |
| ☒ New or altered access for vehicles | ☐ Other matters known to the applicant that may require authorisations from the territorial authority: <i>[specify]</i> |
| ☒ Disposal of stormwater and wastewater | |

BUILDING CONSENT

The following plans and specifications are attached to this application:

07/085

ATTACHMENTS

The following documents are attached to this application:

- ☐ Certificate attached to project information memorandum
- ☒ Plans and specifications *[list]* _____
- ☐ Project information memorandum
- ☐ Development contribution notice

[illegible]

APPLICATION	
I request that you issue a † project information memorandum /project information memorandum and building consent/ building consent <i>[delete which is not applicable]</i> for the building work described in this application	
If you do not want information contained in this application to be made available for purposes of marketing please tick the box ☐	
Signature of [owner/agent on behalf of and with the authority of the owner]	Date: 16-7-07

COUNCIL USE ONLY

CONSENT CONDITIONS / COMMENTS

This image shows a single sheet of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

BCO	P&D	CONSULTANT	PLANNER	EHO	NZFS

COUNCIL USE ONLY

ESTIMATED TOTAL VALUE OF WORK

\$ 187,680-00 gst inclusive Project floor area 156.4 m²

FEE PAYABLE

Consent deposit

Project Information Memorandum \$ 480-00

Building Administration \$ 840-00 - 127.50

Technical Processing \$ 412.50

Industry Levy (DBH) \$ 369.72

Industry Levy (BRANZ) \$ 187.68

Developmental Contribution

\$ _____

\$ _____

\$ _____

\$ _____

Certificate of Title \$ 15-00

Producer Statements \$ _____

Compliance Schedules \$ _____

Rural Number \$ _____

Vehicle Crossing \$ _____

Street Damage \$ _____

Water Connection \$ _____

Sewer Connection \$ _____

Other(s) CCC \$ 77.50

Total consent deposit \$ _____

Consent fee balance \$ 1200-

Inspections \$ _____

Other(s) \$ _____

Total balance payable \$ _____

Lodgement deposit \$ 1000-00

Date paid 17.7.07

Receipt No. 2007/6465

Consent fee balance \$ _____

Date paid _____

Receipt No. _____

Granted by Alb. Hama

Signature [Signature]

Date 28-6-07

Issued by _____

Signature _____

Date _____

Please complete

Forward any refunds or further invoices to:

Site Inspection Calculation Sheet

Building Consent No <u>60725</u>	Client <u>Generation Developments Ltd</u>		
Property File No <u>32307</u>	Address <u>23 Harris St</u>		
<u>PROCESSING</u>	NUMBER REQUIRED ¼ hr (\$40.00)	TIME REQUIRE D (Quantity)	TOTALS in Dollars
Processing Hrs ADMIN			320
Processing Hrs INSPECTOR			640
Further INFORMATION			—
SUB TOTAL			960
LESS MONIES RECEIVED			840
SUBTOTAL			120
ADD INSPECTION CREDITS			—
INVOICE/CREDIT			0
<u>INSPECTIONS</u>	GUIDE ONLY – DEPENDENT ON COMPLEXITY & SIZE OF PROJECT.	No of Inspectio ns	No of ¼ HR Increments
a. Siting, Footings, Foundations	3	0.75	1
a. Retaining Walls	2/3	0.5-0.75	
b. Subfloor Bracing & Fixing	2	0.5	
c. Pre-floor P&D	2	0.5	1
d. Concrete Floor Building	2	0.5	
e. Pre-Wrap	3	0.75	1
g. Wrap Only	2	0.5	1
g. Wrap/Cavity Battens	3	0.75	
h. ½ High Brick	2	0.5	1
i. Bond Beams (One Block)	2	0.5	
i. Bond Beams (Full Basement)	3	0.75	
j. Precast Concrete Work	2	0.5	
k. Stucco – Pre Plaster on site	3	0.75	
l. Exterior Cladding	3	0.75	1
m. Preline Building	3	0.75	1
n. Preline P&D	2	0.5	1
o. Wet Areas/Tanking/Basements	2	0.5	
p. Postline (Addition)	2	0.5	
p. Postline (New Dwelling)	3	0.75	1
q. Sanitary & Stormwater Drainage (Alteration – New Conn)	2	0.5	
q. Sanitary & Stormwater Drainage (New Dwelling)	3	0.75	1
Solid Fuel Burners	2	0.5	
Inbuilt Burners	2	0.5	
r. Enclosed Decks	2	0.5	
s. Disconnection drainage	2	0.5	
t. Swimming Pools (Pool fencing)	3	0.75	
u. Final Inspection	4/5	1.0-1.25	1
Other			
TOTAL INSPECTIONS			30
LESS INSPECTIONS ALLOWED FOR ABOVE			0
SUBTOTAL			30 / 1200
PLUS/MINUS INVOICE/CREDIT FROM ABOVE			
TOTAL TO INVOICE			1200

PIM/BC**№****60725**

DESTINATION

ROT@RUAROTORUA DISTRICT
COUNCIL

28 June 2006

File Ref: 62-06-012\02
Your Ref: 192725-R-P-C010Doc No: OW-65043
Enquiries to: Joanne WattsRotorua District Council
1061 Haupapa Street
Private Bag 3029
Rotorua, New Zealand
P: 07 348 4199
F: 07 346 3143
E: mail@rdc.govt.nz
W: www.rdc.govt.nzMTEC Consultants Ltd
PO Box 878
ROTORUA

Attention: Bart Yetsenga

Dear Bart,

*20/7/07
Rick Dunn
- ISSUED***NON-NOTIFIED APPLICATION FOR RESOURCE CONSENT**
NOTICE OF DECISION

I wish to advise that the following decision has been made under authority delegated to staff in respect of the above application:

- (a) That pursuant to Section 93(1) of the Resource Management Act 1991, the Rotorua District Council resolves that as the application is for a controlled activity and the adverse effects of the proposal will be minor the application need not be notified. The Council is satisfied after taking into due consideration the requirements of Section 94, 94A(a) and Section 94B that all parties who, in the opinion of Council, may be adversely affected have provided their written consent to the proposal. Council is also satisfied that no special circumstances exist that require notification of the consent application in accordance with Section 94C(2) of the Resource Management Act 1991.
- (b) That pursuant to Sections 34(1), 104, 104A, 108, 220 and 221 of the Resource Management Act 1991, the Rotorua District Council resolves to grant consent to the application by Generation Developments Ltd to construct 48 dwellings prior to or concurrently with subdivision of the property at Harris St, Ariki St and Ngongotaha Rd legally described as Lots 1 - 3 DPs 79465 and Sec 1 SO 50280 into 48 residential lots:

This consent is subject to the following conditions:

General conditions

1. All conditions relating to this resource consent must be met in full and a Planning Compliance Certificate issued before occupation of any of the houses unless otherwise specified.
2. That the proposal proceeds in accordance with the application submitted numbered 192725-R-P-C015 and dated 27 April 2006 and the plans by Colin J Davis & Associates for houses on lots 1 - 42 as stamped 'approved' except where modified by any conditions of this consent.
3. That all engineering works required to be undertaken to satisfy the conditions of this consent shall be carried out in accordance with the Rotorua Civil Engineering Industry Standard (RCEIS) and the District Plan, to the satisfaction of the District Engineer.

4. That in carrying out the proposed works which includes construction of building platforms on each of the proposed lots no run off, silt, sediment or other materials shall be permitted to discharge off-site that could damage or disturb neighbouring properties, public roads or drains by installing and maintaining appropriate erosion and sediment controls, prior to and during the works and until the site is stabilised. The temporary stormwater control is required to achieve control of a 2% AEP storm event.

Prior to the commencement of any earthworks

5. That prior to the commencement of any earthworks associated with the excavation and filling of building platforms, a 'co-ordinated construction methodology' plan shall be provided to the satisfaction of the District Engineer that demonstrates that earthworks and associated access points are managed in a controlled way in association with the construction of the subdivision works that ensures the integrity of new roading and services is maintained without damage.
6. Written confirmation shall be provided from Environment Bay of Plenty Earthworks confirming that the proposed earthworks for the subdivision and building platform works do not require resource consent, mindful that the earthworks quantities will be cumulative.

Prior to construction of any dwellings

7. That the Engineering Plans and specifications required for the subdivision consent be approved prior to construction of the first house.
8. That survey pegs for the proposed lots be put in place in accordance with the subdivision consent or alternatively house locations be certified as being in accordance with the land use application plans and any amendments required by the subdivision consent & or engineering plan approval prior to foundation inspection.
9. That the existing abandoned sewer and stormwater mains shall be removed and the trenches backfilled and certified prior to construction of any house within the affected proposed lots.
10. That the minimum building platform level for each of the sites shall be 1.0 metres above the ground water level. The building platform shall be certified by a Chartered Professional Engineer as suitable for building prior to foundation inspection.
11. That the minimum finished floor level for any building requiring a building consent shall be 1.5 metres above the ground water level.
12. Stormwater disposal from any development on the Lots (roof, driveway and hard surfaces) shall be reticulated to the approved connection for that Lot and a secondary overland flow path formed to dispose of surface stormwater so that it discharges to the Council reticulated system.

Acoustic treatment of buildings

13. Any habitable buildings on Lots 9 - 16 & 28 & 29 shall comply with the appropriate NZS Standards for internal noise (NZS2107:2000) or latest version of the standard applicable at the time of building.

Prior to occupation of houses

14. That all roads, street lighting, sewerage, stormwater, water supply, electricity, and telecommunications facilities shall be provided to the standards required by Council as a service operator or other service operators in which the infrastructure will be vested. Certification from Council or other appropriate service operator that it is satisfied with the standard of the service provided, and that it will accept the particular service, shall be provided to Council as consent authority before it issues any Section 224 Certificates to enable a survey plan to be deposited and prior to occupation of any of the houses.

Access

15. That an on site turning area be provide for all lots where the vehicle entrance is 15m or less from any street intersection boundary (including the opposite side of a 'T' junction or where a vehicle entrance is 15m or less from any traffic calming or traffic control structure as required by Appendix 18 fl.2 of the District Plan.

Financial contribution

16. That the financial contribution for reserves and heritage purposes as set out in the subdivision consent conditions be paid to Council prior to occupation of the houses. The amount payable has been assessed at 5% of the value of the land area exclusive to 45 of the 48 additional dwelling less 50% of the land value of the Local Purpose Reserve to vest as part of the subdivision.

The reasons for this decision are that:

1. The site is zoned Residential B in the District Plan where the construction of additional houses to a density of one house per 450m² is a Controlled activity. This consent will allow construction of 48 houses along side construction of subdivision works which were approved on 19 May 2006.
2. As a controlled activity the Council is satisfied that there will not be any adverse effects which can not be avoided or remedied by the conditions of consent. Conditions require subdivision works to be carried out concurrently with housing construction so all is completed prior to occupation of any of the houses. This consent includes earthworks for building platforms hence conditions being placed within this consent which are ordinarily found within the subdivision consent.
3. There is a history of high Ground Water Level's (GWL), poor stormwater soakage disposal and ponding issues in the surrounding area. In addition, information contained in the subdivision application confirms the summer GWL is only 800mm Below Ground Level in some areas; It is expected this will be higher during winter conditions. Any particular limiting effects of the "saturated grey silt" and the perched water table (which is some 3 metres above lake level) as recorded by the preliminary borehole logs, should also be established. Subdivision consent conditions & condition of this consent require groundwater table investigation to ensure the proposed stormwater disposal system will provide adequate disposal prior to any construction.
4. Other conditions require those houses with boundaries adjacent to the State Highway and / or industrial zoned land to be acoustically designed to ensure residential amenity of a high standard is achieved for future residents.
5. The proposal is considered to be consistent with the relevant objectives & policies of the District Plan and the purposes and principles of the Resource Management Act 1991 given the land has been zoned for residential development.
6. A financial contribution is payable in accordance with Appendix U of the District Plan towards the development of existing, and purchase of additional, land to enhance the amenity and heritage value of reserves. Financial contribution conditions have been placed within the subdivision consent and will be required to be met at Sect 224 stage.

The applicants are advised that:

Engineering advice

- (a) In regard to the proposed water layout, Lots 9 & 10 does not meet the requirements for a rider in the access lot. Scour valves at the end of riders are not required. Riders can be flushed by demand and if necessary through the last connection. The link from the development to Ngongotaha Road (SH 36) is to be uPVC not mdpe.
- (b) There is an open drain in subdivision site behind properties fronting 52 - 58 Wikaraka Street that goes no where. This drain fills up and then overflows into the properties above. Suitable shaping of the contour will end this effect.
- (c) It is noted a piped reticulation system to collect the runoff from sites, hard surfacing, buildings and roads is proposed. Due to existing downstream pipe size constraints this will be a duplicate system discharging directly to the lake. An EBOP Discharge permit will be required.
- (d) This system is to be designed to cater for 2% (50 year) AEP flows within the pipe to minimise secondary flow effects on reserves, adjoining streets and property, although a 1% (100 year) AEP secondary flow path is also proposed.
- (e) The shaping of the lots and any filling will need to ensure that secondary flowpaths in relation to adjoining properties are provided for. A complaint regarding stormwater overflow from the subject site onto the rear of the properties at 52-58 Wikaraka Street has been received by Council.
- (f) Due to the nature of the site, more comprehensive ground water investigations is required, in particular to demonstrate that a satisfactory long term sub-soil ground water collection system can be installed within public areas that will maintain the winter water table at a minimum of 1 metre below the proposed roads. Council expects that an experienced Geotechnical Engineer would be consulted to confirm the suitability of the proposal.
- (g) Prior to any works in the road reserve, a Road Opening Notice must be obtained from Council. This is available free of charge, by contacting Tiki Galvin on Ext 8238.
- (h) The work on the public stormwater and sewer mains is to be carried out by an "approved" Council contractor.
- (i) Written confirmation is required from Environment Bay of Plenty Earthworks that the proposed works do not require resource consent, mindful that the earthworks will be cumulative.
- (j) The watermain location in the reserve is to be finalised as part of Engineering Plan approval.
- (k) The traffic safety audit is to look at vehicle crossing locations, in particular for the Lots 1, 17, 21, 33, 36, 45 and 48. The scale of the plans have made it difficult to assess but the report should also outline which additional Lots require on-site turning that have not been shown on the submitted plans for the Land Use Consent. Lots 17 and 33 have the vehicle access either sharing or particularly close to an access lot vehicle crossing.

Monitoring

- (l) Fulfilment of the conditions of this consent within the timeframe specified in the consent is necessary to carry out the proposal for which this consent relates. Your progress towards satisfying the conditions of consent will be monitored by Council's Monitoring & Compliance Officer. Please contact the Monitoring & Compliance Officer to schedule a final inspection when you have completed the conditions of consent so that a Planning Compliance Certificate can be issued.

Archaeological sites

- (m) Council has no records of an archaeological site on this property. This may be due to one of two factors. Either, there are no sites present or there has not been an archaeological survey undertaken. Please be advised that both known and unknown archaeological sites are protected under the Historic Places Act 1993. If during the exercising of this consent any archaeological site is uncovered work must stop and permission be obtained from the Historic Places Trust under the provisions of either Section 11 or 12 of the Historic Places Act 1993.

Right of objection

- (n) If you are dissatisfied with any aspect of the decision, you have a right of objection to Council under section 357 of the Resource Management Act 1991. Please advise Council in writing stating the reasons for the objection and the preferred outcome within 15 working days of receiving this decision. If no objection is received it will be assumed that the applicant accepts this decision.

Lapsing of consent

- (o) The above consent lapses on the expiry of 5 years after the date of receiving this letter, unless the consent is given effect to.

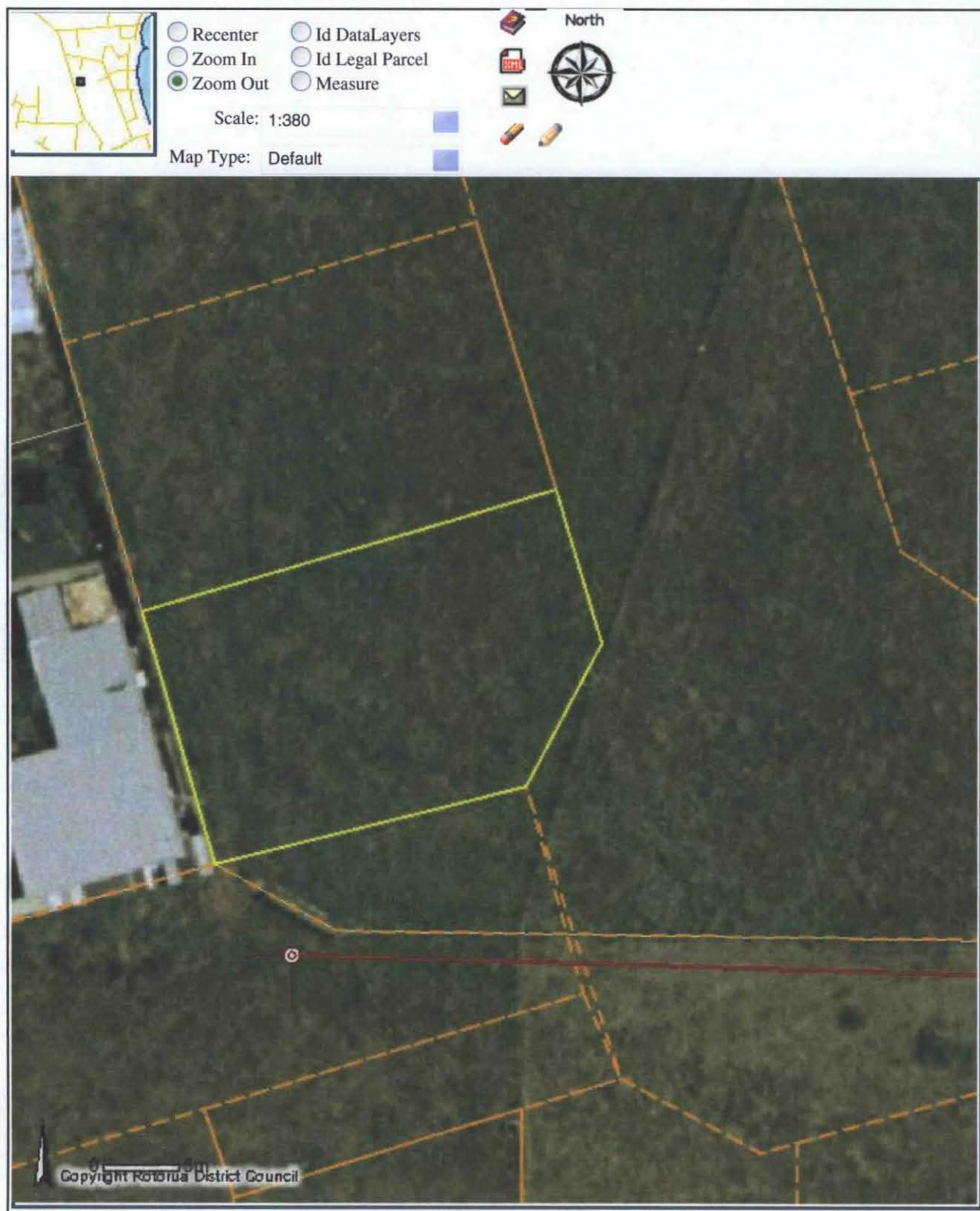
If you have any questions regarding this consent, please contact, Joanne Watts, Senior Resource Management Advisor or the Duty Planner.

Yours faithfully



Nigel Wharton
Director, Environmental Services

P 32309



PIM/BC

No

60725

DESTINATION

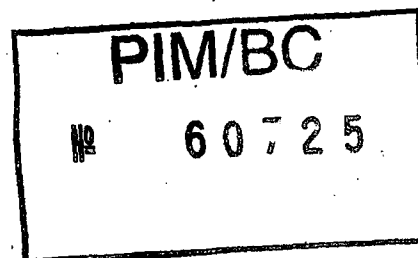
ROTORUA

ROTORUA DISTRICT
COUNCIL

28 June 2006

File Ref: 62-06-012\02
Your Ref: 192725-R-P-C010Doc No: OW-65043
Enquiries to: Joanne WattsRotorua District Council
1061 Haupapa Street
Private Bag 3029
Rotorua, New Zealand
P: 07 348 4199
F: 07 346 3143
E: mail@rdc.govt.nz
W: www.rdc.govt.nzMTEC Consultants Ltd
PO Box 878
ROTORUA

Attention: Bart Yetsenga



Dear Bart,

NON-NOTIFIED APPLICATION FOR RESOURCE CONSENT
NOTICE OF DECISION

I wish to advise that the following decision has been made under authority delegated to staff in respect of the above application:

- (a) That pursuant to Section 93(1) of the Resource Management Act 1991, the Rotorua District Council resolves that as the application is for a controlled activity and the adverse effects of the proposal will be minor the application need not be notified. The Council is satisfied after taking into due consideration the requirements of Section 94, 94A(a) and Section 94B that all parties who, in the opinion of Council, may be adversely affected have provided their written consent to the proposal. Council is also satisfied that no special circumstances exist that require notification of the consent application in accordance with Section 94C(2) of the Resource Management Act 1991.
- (b) That pursuant to Sections 34(1), 104, 104A, 108, 220 and 221 of the Resource Management Act 1991, the Rotorua District Council resolves to grant consent to the application by Generation Developments Ltd to construct 48 dwellings prior to or concurrently with subdivision of the property at Harris St, Arika St and Ngongotaha Rd legally described as Lots 1 - 3 DPs 79465 and Sec 1 SO 50280 into 48 residential lots:

This consent is subject to the following conditions:

General conditions

1. All conditions relating to this resource consent must be met in full and a Planning Compliance Certificate issued before occupation of any of the houses unless otherwise specified.
2. That the proposal proceeds in accordance with the application submitted numbered 192725-R-P-C015 and dated 27 April 2006 and the plans by Colin J Davis & Associates for houses on lots 1 - 42 as stamped 'approved' except where modified by any conditions of this consent.
3. That all engineering works required to be undertaken to satisfy the conditions of this consent shall be carried out in accordance with the Rotorua Civil Engineering Industry Standard (RCEIS) and the District Plan, to the satisfaction of the District Engineer.

4. That in carrying out the proposed works which includes construction of building platforms on each of the proposed lots no run off, silt, sediment or other materials shall be permitted to discharge off-site that could damage or disturb neighbouring properties, public roads or drains by installing and maintaining appropriate erosion and sediment controls, prior to and during the works and until the site is stabilised. The temporary stormwater control is required to achieve control of a 2% AEP storm event.

Prior to the commencement of any earthworks

5. That prior to the commencement of any earthworks associated with the excavation and filling of building platforms, a 'co-ordinated construction methodology' plan shall be provided to the satisfaction of the District Engineer that demonstrates that earthworks and associated access points are managed in a controlled way in association with the construction of the subdivision works that ensures the integrity of new roading and services is maintained without damage.
6. Written confirmation shall be provided from Environment Bay of Plenty Earthworks confirming that the proposed earthworks for the subdivision and building platform works do not require resource consent, mindful that the earthworks quantities will be cumulative.

Prior to construction of any dwellings

7. That the Engineering Plans and specifications required for the subdivision consent be approved prior to construction of the first house.
8. That survey pegs for the proposed lots be put in place in accordance with the subdivision consent or alternatively house locations be certified as being in accordance with the land use application plans and any amendments required by the subdivision consent & or engineering plan approval prior to foundation inspection.
9. That the existing abandoned sewer and stormwater mains shall be removed and the trenches backfilled and certified prior to construction of any house within the affected proposed lots.
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Access

15. That an on site turning area be provide for all lots where the vehicle entrance is 15m or less from any street intersection boundary (including the opposite side of a 'T' junction or where a vehicle entrance is 15m or less from any traffic calming or traffic control structure as required by Appendix 18 fl.2 of the District Plan.

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The applicants are advised that:

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- (a) In regard to the proposed water layout, Lots 9 & 10 does not meet the requirements for a rider in the access lot. Scour valves at the end of riders are not required. Riders can be flushed by demand and if necessary through the last connection. The link from the development to Ngongotaha Road (SH 36) is to be uPVC not mdpe.
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- (j) The watermain location in the reserve is to be finalised as part of Engineering Plan approval.
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If you have any questions regarding this consent, please contact, Joanne Watts, Senior Resource Management Advisor or the Duty Planner.

Yours faithfully



Nigel Wharton
Director, Environmental Services

PlaceMakers

Producer Statement : Page 1

Job: C0707-04

Client: GENERATION DEV'MENTS 1
Phone:

Site: Hibiscus

Description:

Building Consent No.:

MiTek 20/20 - Engineering 4.4 Gamma 1.4 (build 1597-16)

MiTek New Zealand Ltd.

Phone:

Printed: 11:03:44 10 Jul 2007

PRODUCER STATEMENT MiTek 20/20™ TRUSS DESIGN PROGRAM

Certification of MiTek 20/20™ Truss Design Program

The MiTek 20/20™ truss design program has been developed by MiTek New Zealand Ltd for the design of GANG-NAIL timber roof, floor and attic trusses in New Zealand. The truss designs computed by this program are prepared using sound and widely accepted engineering principles, and in accordance with NZS 4203, NZS 3603 and NZS 3604 as verification methods and acceptable solutions of the approved documents issued by the Building Industry Authority to satisfy the requirements of Clause B1:Structure of the Building Regulations 1992. This computer design for the proposed building complies with the relevant provisions of the NZ Building Code. This is subject to all proprietary products meeting their performance specification requirements, the provision of adequate bracing, fixings and the correct input of design data carried out by suitably trained personnel.

Summary of MiTek 20/20™ Truss Design Data and Output

The MiTek 20/20™ computer design output for this job titled and located at the site identified on the top of this page is based on the following parameters entered into the program. The owner must ensure that the following job details below are current and relevant to the project before fabrication and erection of the GANG-NAIL trusses.

Job Details

Roof Truss

Timber Group: MSG10-12b

Pitch: 1.000 deg

Std Overhang: 590 mm

Roof

Ceiling

Wind

Material: Monier Concrete Tiles

Material: Standard

Area: Medium (37.0 m/s)

Dead Load: 0.600 kPa

Dead Load: 0.200 kPa

Pressure Coeff: Cpe = varies; Cpl = -0.30, 0.20

Restraints: 400 mm centres

Restraints: 400 mm centres

Live Load: Q_{ur} = 0.250 kPa

Q_c = 1.000 kN

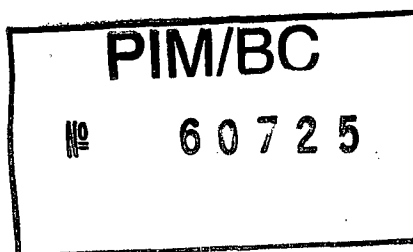
These trusses must be fabricated and erected in accordance with the GANG-NAIL manual. Proper erection bracing must be installed to hold the components true and plumb and in a safe condition until permanent bracing is fixed. All permanent bracing and fixing must be installed before any loads are applied. The specifications for timber shall be as shown on the output. The timber shall be standard gauged and treated to the requirements of NZMP 3640. Unless otherwise noted, this design assumes that the steel fixings and timber connectors are situated in a closed environment, as defined by NZS3604:1999 Section 4.

Truss List

Legend: * = detail only, ? = input only, Fxx = failed design, Unmarked trusses = designed successfully, LB = lateral bracing required

Truss	Qty	Span (mm)	Pitch (deg)	Spacing (mm)	Truss	Qty	Span (mm)	Pitch (deg)	Spacing (mm)	Truss	Qty	Span (mm)	Pitch (deg)	Spacing (mm)
V06	1	533	25.000	900	J09A	1	1957	25.000	900	J07A	1	3757	25.000	900
V09	1	605	25.000	900	J09B	1	1957	25.000	900	J07B	1	3757	25.000	900
R02B	1	901	25.000	900	J09C	1	1957	25.000	900	J07C	1	3757	25.000	900
*R02C	1	901	25.000	900	V05	1	1965	25.000	900	J07D	1	3757	25.000	900
*R02	4	903	25.000	900	J02	1	2152	25.000	900	*HB03	2	4033	18.249	900
*R02A	4	903	25.000	900	J02A	1	2152	25.000	900	GT02	1	4600	25.000	900
*R01	2	955	25.000	900	J02B	1	2152	25.000	900	T02	1	4600	25.000	900
*R01A	2	955	25.000	900	J02C	1	2152	25.000	900	T02A	1	4600	25.000	900
V08	1	1005	25.000	900	J02D	1	2152	25.000	900	T02B	2	4600	25.000	900
*R03	1	1080	25.000	900	J02E	1	2152	25.000	900	*HB01	4	5129	18.249	900
*R03A	1	1080	25.000	900	J02F	2	2152	25.000	900	GT04	1	3053	25.000	900
J03	1	1232	25.000	900	*HB06	1	2206	18.249	900	GT01	1	6150	25.000	900
*HB02	1	1251	18.249	900	J05	1	2277	25.000	900	T01	3	6150	25.000	900
J04A	1	1252	25.000	900	J05A	1	2277	25.000	900	T01A	1	6150	25.000	900
J04C	1	1252	25.000	900	J05B	1	2277	25.000	900	T03	1	6150	25.000	649
J04D	1	1252	25.000	900	V02	1	2318	25.000	900	T08	1	6150	25.000	900
V03	1	1333	25.000	900	*HB05	1	2567	18.249	900	TG01	1	6150	25.000	900
J06	1	1377	25.000	900	J08	1	2857	25.000	900	TG01A	1	6150	25.000	900
J06A	1	1377	25.000	900	J08A	1	2857	25.000	900	*HB04	2	7399	18.249	900
J06B	1	1377	25.000	900	J08B	1	2857	25.000	900	GT03	1	9360	25.000	900 LB
J06C	1	1377	25.000	900	J08C	1	2857	25.000	900	T04	1	9360	25.000	900
V10	1	1460	25.000	900	V04	1	2865	25.000	900	T05	2	9360	25.000	633
*R04	1	1660	25.000	900	J01	1	3032	25.000	900	TG02	1	9360	25.000	900
*R04A	1	1660	25.000	900	J01A	1	3032	25.000	900	T06	1	3053	25.000	900
V07	1	1751	25.000	900	V01	1	3064	25.000	900	T07	1	3053	25.000	746
J09	1	1957	25.000	900	J07	1	3757	25.000	900					

Total quantity : 95



PlaceMakers

Producer Statement : Page 1

Job: C0707-04

Client: GENERATION DEVMENTS 1
Phone:

Site: Hibiscus

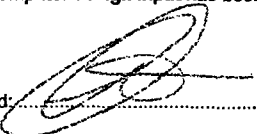
Description:
Building Consent No.:
MITek 20/20 - Engineering 4.4 Gamma1.4 (build 1597-16)

MITek New Zealand Ltd.

Phone:

Printed: 11:03:44 10 Jul 2007

The computer design input has been carried out by:

Signed: 

Date: 10/7/07

Name of Computer Operator:

Peter Beverington

Qualifications and Title:

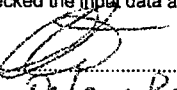
Detailer

Company:

PlaceMakers

Verification / Acceptance of Input Data:

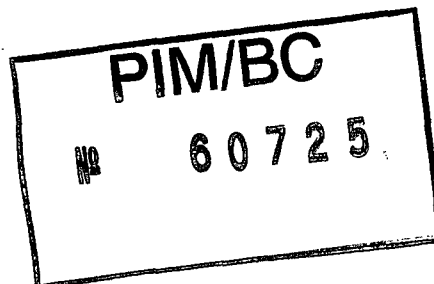
I have checked the input data against the construction drawings and specifications and verify that they are correct and suitable for this job.

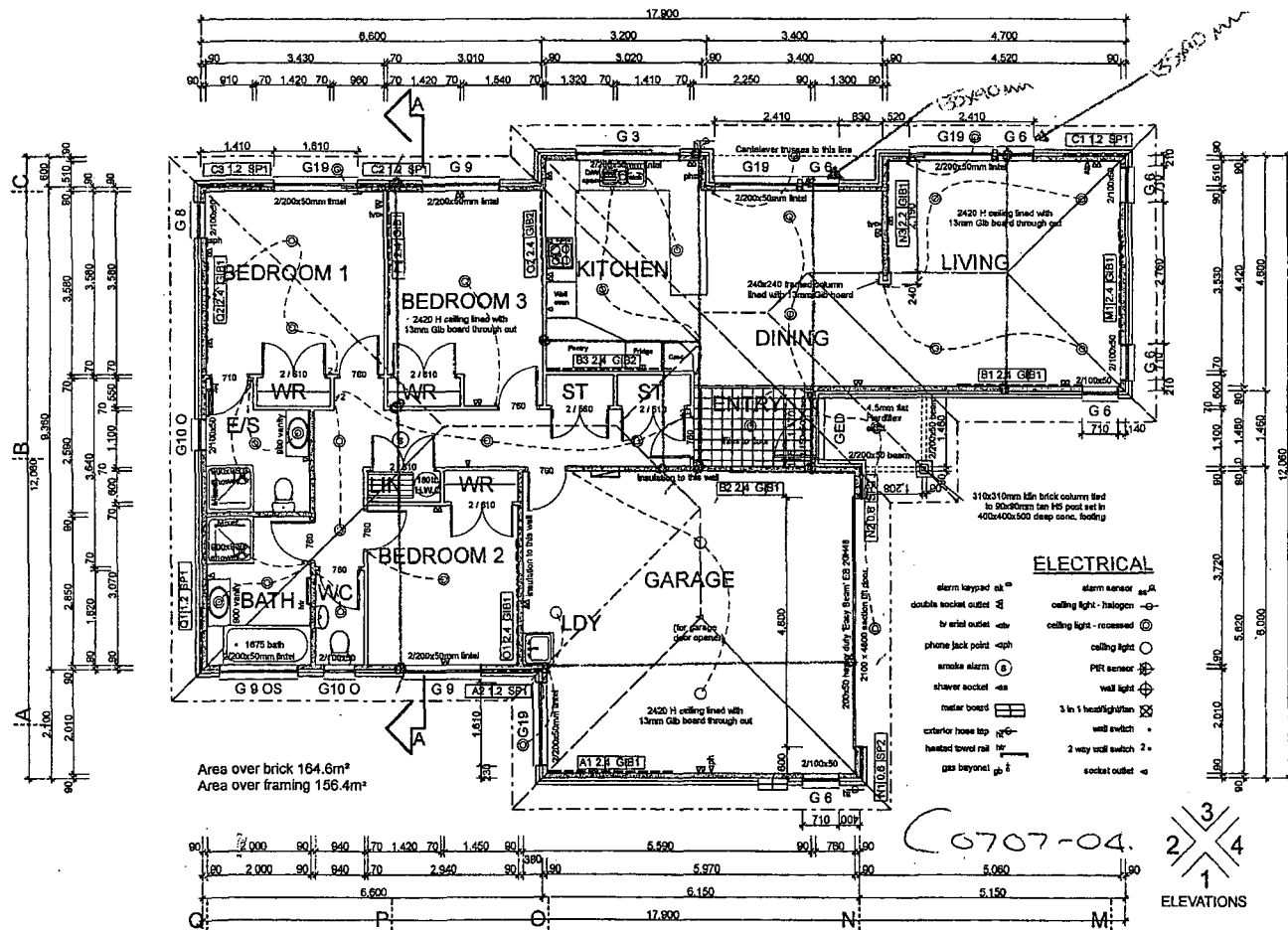
Signed: 

Date: 10/7/07

Name: Peter Beverington

Company: PlaceMakers





PIM/BC
No 60725

Peter Berington. 10/7/07

Note: All internal load bearing walls to be gcm

GIB® Wall Bracing Calculation Sheet A

single storey

V85A

GIB® EzyBrace™

GIB® Bracing Systems, 2006

Job Details

Name	Generation Developments Ltd		
Street and Number			
Lot and DP Number	lot 8 Somerly		
City/Town/District	Rotorua		
Designer and date	13 Mar. 06		
Company Name	Colin J. Davis & Associates Ltd.		

Building Specification

Location of Storey	single	▼	<i>not applicable (single storey building)</i> <i>not applicable (slab)</i> PIM/BC Nº 60725
Floor Loading	2 kPa	▼	
Foundation Type	slab	▼	
Building Height to Apex (m)	6	▼	
Roof Height above Eaves (m)	3	▼	
Stud Height (m)	2.4	▼	
Cladding Weight (top or single)	heavy	▼	
Cladding Weight (lower)	heavy	▼	
Cladding Weight (subfloor)	light	▼	
Roof Weight	heavy	▼	
Roof Pitch (degrees)	0-25	▼	
Room in Roof Space	no	▼	
Building Length (m)	18.3		
Building Width (m)	12.3		
Gross Building Plan Area (m2)	164.6		

Building Location

Wind Zone	Medium	Earthquake Zone
Region	R1 ▼	A ▼
Terrain	Inland ▼	
Exposure	Sheltered ▼	
Topography	Moderate ▼	

Bracing Units required for Wind

per m	subfloor	walls
W along	n/a	54 BUs/m
W across	n/a	54 BUs/m
Totals	subfloor	walls
W along	n/a	664 BUs
W across	n/a	988 BUs

Bracing Units required for Earthquake

per m2	subfloor	walls
E	n/a	7.9 BUs/m2
Totals	subfloor	walls
E along	n/a	1300 BUs
E across	n/a	1300 BUs

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GIB® Wall Bracing Calculation Sheet B							single storey		V85A		
GIB® EzyBrace™							GIB® Bracing Systems, 2006				
Along											
Wall or Bracing Line	Bracing Elements provided							Wind	Earthq.		
1	2	3	4	5	7	8	6	9W	10EQ		
Line Label	Minimum BUs Req/Ach	Bracing Element No.	Supplier	Bracing Type	Element Length L (m)	Element Height H (m)	Angle to Bracing line (degrees)	BUs Achieved	BUs Achieved		
A	62	1	GIB®	GS1a	2.4	2.4		180	156		
		2									
line totals		3									
W	180	4									
EQ	156	5									
B	66	1	Ply	SP1	1.2	2.4		120	120		
		2									
line totals		3									
W	120	4									
EQ	120	5									
C	125	1	GIB®	GS1a	2.4	2.4		180	156		
		2	GIB®	GS1a	2.4	2.4		180	156		
line totals		3	GIB®	BL1	1.2	2.4		150	138		
W	906	4	GIB®	GS1a	2.4	2.4		180	156		
EQ	798	5	GIB®	GS2	2.4	2.4		216	192		
D	179	1	Ply	SP1	1.2	2.4		120	120		
		2	Ply	SP1	1.2	2.4		120	120		
line totals		3	Ply	SP1	1.2	2.4		120	120		
W	360	4									
EQ	360	5									
E	enter	1									
		2									
line totals		3									
W		4									
EQ		5									
F	enter	1									
		2									
line totals		3									
W		4									
EQ		5									
G	enter	1									
		2									
line totals		3									
W		4									
EQ		5									
H	enter	1									
		2									
line totals		3									
W		4									
EQ		5									
								Wind	Earthq.		
Totals Achieved								1566	1434		
								OK	OK		
Totals Required (from Sheet A)								664	1300		

GIB® Wall Bracing Calculation Sheet B							single storey		V85A		
GIB® EzyBrace™							GIB® Bracing Systems, 2006				
Across											
Wall or Bracing Line		Bracing Elements provided					Wind		Earthq.		
1	2	3	4	5	7	8	6	9W	10EQ		
Line Label	Minimum BUs Req/Ach	Bracing Element No.	Supplier	Bracing Type	Element Length L (m)	Element Height H (m)	Angle to Bracing line (degrees)	BUs Achieved	BUs Achieved		
M	46	1	GIB®	GS1a	2.4	2.4		180	156		
		2									
line totals		3									
W	180	4									
EQ	156	5									
N	135	1	Ply	SP2	0.6	2.4	2.4	54	48		
		2	Ply	SP2	0.6	2.4	2.4	54	48		
line totals		3	GIB®	GS1a	2.2	2.4	2.4	143	121		
W	251	4									
EQ	217	5									
O	enter	1	GIB®	GS1a	2.4	2.4	2.4	180	156		
		2	GIB®	GS2	2.4	2.4	2.4	216	192		
line totals		3	GIB®	BL1	0.6	2.4	2.4	75	69		
W	471	4									
EQ	417	5									
P	enter	1	GIB®	GS1a	2.4	2.4	2.4	180	156		
		2	GIB®	GS1a	1.8	2.4	2.4	117	99		
line totals		3									
W	297	4									
EQ	255	5									
Q	enter	1	Ply	SP1	1.2	2.4	2.4	120	120		
		2	GIB®	GS1a	2.4	2.4	2.4	180	156		
line totals		3									
W	300	4									
EQ	276	5									
R	enter	1									
		2									
line totals		3									
W		4									
EQ		5									
S	enter	1									
		2									
line totals		3									
W		4									
EQ		5									
T	enter	1									
		2									
line totals		3									
W		4									
EQ		5									
								Wind	Earthq.		
Totals Achieved								1498	1320		
								OK	OK		
Totals Required (from Sheet A)								988	1300		

Job Number:

Job Description: g

Run by: Placemakers on 13/04/2007, at 3:00:25 p.m.

Phone: 07 572 6602

This design was carried out for domestic or secondary element design using Limit State techniques in accordance with AS/NZS1170.0-2002, and AS1720.1-1997, and using recommendations only of AS1684.1-1999

Section L3, TG Lintel Design

Use preferred section size 360x85 HYNBEAM 17C H3.1 Treated from Hyne & Son Pty Ltd

DIMENSIONAL DETAILS:

Span type is Single Span for an overall length of 4.8 metres

Supported truss spacing is 0.9 metres, with main roof load width of 3.59 metres

Lintel is supporting a TG2077 positioned 2.4 metres from the left end

The lintel design did not rely on assistance from top plate stiffness

DESIGN DETAILS:

Roofing material of Concrete Tiles (60)

Roof pitch of 25 deg

Wind Classification for this project is Medium

Temperature Factor (K6) = 1.00

Defined Snow Load Region is N1

Ground Snow Load is: Ultimate = 0.00kPa,

Ceiling material of 10mm P'Board (12)

Design ultimate wind pressure is 1.058 kPa

Design serviceability wind pressure is 0.694kPa

Altitude = 0 m; No snow load is applicable

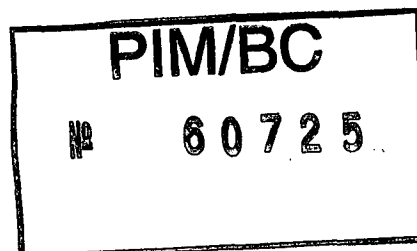
and Serviceable = 0.00kPa.

Allowable Deflections:

Load Case Type	Span Ratio	Fixed value mm
Permanent Loads	L/500	10
Floor Live Loads	L/400	10
Long Term Snow Loads	L/500	15
Short Term Snow Loads	L/400	15
Roof Live Loads	L/250	15
Wind Loads	L/200	n/a
Dynamic Floor Loads	n/a	2

Member Actions - Serviceability Properties:

Member Number	Load Combination Name	Bending Deflection	Total Deflection	Camber Value	Check Deflection
1	Dead Load Only	-5.1	-5.1	4.8	0.3
	Roof Live Load Only	-0.7	-0.7	0.0	0.7
	Wind Uplift Only	3.2	3.2	0.0	3.2
	Wind Downdrag Only	-2.0	-2.0	0.0	2.0



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TABLE 2 - BUILDING ENVELOPE RISK MATRIX									
e2/AS1 PARAGRAPH 3.1.2, FIG 1									
ELEVATION NUMBER	RISK SEVERITY								
RISK FACTOR	LOW	SCORE	MEDIUM	SCORE	HIGH	SCORE	VERY HIGH	SCORE	SUBTOTALS FOR EACH RISK FACTOR
WIND ZONE (per NZS 3604)	0		0		1		2		1
NUMBER OF STOREYS	0		1		2		4		
ROOF/WALL INTERSECTION DESIGN	0		1		3		5		1
EAVES WIDTH	0		1		2		5		1
ENVELOPE COMPLEXITY	0		1		3		6		1
DECK DESIGN	0		2		4		6		
TOTAL RISK SCORE									4

TABLE 2 - BUILDING ENVELOPE RISK MATRIX									
e2/AS1 PARAGRAPH 3.1.2, FIG 1									
ELEVATION NUMBER	RISK SEVERITY								
RISK FACTOR	LOW	SCORE	MEDIUM	SCORE	HIGH	SCORE	VERY HIGH	SCORE	SUBTOTALS FOR EACH RISK FACTOR
WIND ZONE (per NZS 3604)	0		0		1		2		1
NUMBER OF STOREYS	0		1		2		4		
ROOF/WALL INTERSECTION DESIGN	0		1		3		5		1
EAVES WIDTH	0		1		2		5		1
ENVELOPE COMPLEXITY	0		1		3		6		1
DECK DESIGN	0		2		4		6		
TOTAL RISK SCORE									4

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e2/AS1 PARAGRAPH 3.1.2, FIG 1									
ELEVATION NUMBER	RISK SEVERITY								
RISK FACTOR	LOW	SCORE	MEDIUM	SCORE	HIGH	SCORE	VERY HIGH	SCORE	SUBTOTALS FOR EACH RISK FACTOR
WIND ZONE (per NZS 3604)	0		0		1		2		1
NUMBER OF STOREYS	0		1		2		4		
ROOF/WALL INTERSECTION DESIGN	0		1		3		5		1
EAVES WIDTH	0		1		2		5		1
ENVELOPE COMPLEXITY	0		1		3		6		1
DECK DESIGN	0		2		4		6		
TOTAL RISK SCORE									4

TABLE 2 - BUILDING ENVELOPE RISK MATRIX									
e2/AS1 PARAGRAPH 3.1.2, FIG 1									
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RISK FACTOR	LOW	SCORE	MEDIUM	SCORE	HIGH	SCORE	VERY HIGH	SCORE	SUBTOTALS FOR EACH RISK FACTOR
WIND ZONE (per NZS 3604)	0		0		1		2		1
NUMBER OF STOREYS	0		1		2		4		
ROOF/WALL INTERSECTION DESIGN	0		1		3		5		1
EAVES WIDTH	0		1		2		5		1
ENVELOPE COMPLEXITY	0		1		3		6		1
DECK DESIGN	0		2		4		6		
TOTAL RISK SCORE									4

SPECIFICATION

For the work to be done and the materials to be used for the satisfactory erection and completion of the following building project:

PROPOSED NEW RESIDENCE FOR :

LOT 8

SOMERLY

NGONGATAHA

B Y : GENERATION DEVELOPMENTS LTD

DESIGN AND DOCUMENTATION BY:

COLIN J. DAVIS & Associates LTD
ADNZ NZCD (arch)
Architectural design and Draughting
PO Box 884 TAURANGA ph/fax 578 3792
email - cjdavis@xtra.co.nz



1 days notice of the covering up or closing of any:

1. Drainage & plumbing.
2. Foundation excavations & reinforcing steel.
3. Timber required to have a specified moisture content & all other work in respect of which such notice is required as a condition of the building consent.

1.8 CODE COMPLIANCE CERTIFICATE

Upon completion of the building the owner shall as soon as practicable, advise the territorial authority, on the prescribes form, that the building has been completed to the extent required by the building consent issued, in respect of that building work, for the issue of a code compliance certificate. Completed to the extent required by the building consent issued, in respect of that building work, for the issue of a code compliance certificate.

2.0 CONCRETE WORK

All concrete materials, mixing, placing, cover and reinforcing etc. shall comply with the requirements of NZSS 3109:1997.

2.2 CONCRETE

All concrete shall comply with NZSS 3104:2003 Concrete production and shall be 20 Mpa at 28 days with a 20 mm nom. maximum aggregate size and 80 mm slump. Reinforcing to comply with NZSS 3109:1997 Reinforcement shall be clean, free from mill scale, dirt, loose rust, paint, oil or any other materials. Steel that has not lost its mill scale must be exposed to the weather or otherwise treated to improve its surface adhesion. All reinforcing greater than 10.5 mm dia shall be deformed bars. Laps shall be 40 dia for plain rods and 32 dia for deformed rods. Fit stirrups snugly around bars and bind with 1.6 mm soft iron wire. All reinforcing shall be grade 300 or grade 430 as specified. Max. covers to reinforcement shall be 75 mm exposed to earth and 50 mm protected by vapour barrier

2.4 FOOTINGS

Construct concrete footings as shown on the drawings. Reinforcing to be strictly as shown on the drawings and all footing are to be inspected by the Local Authority before pouring the concrete.

2.5 CONCRETE FLOOR SLABS

Floor slabs to be Firth Ribraft floor slab system to be as designed and specified by Firth Industries. Lay 0.25 mm polythene D PC over 15 mm sand blinding layer over 150mm minimum compacted pumice/sand hardfill base. Seal around all penetration's and take over all footing sides to the external face. Slab to be leveled to screed, cement dusted and finished with a powered float by experienced workmen to give dense even surface free from irregularities. Form recesses for external doors.

No holes or chases other than those specified are to be made in the slab without the approval of the engineer. All concrete shall be mechanically vibrated and carefully worked around the reinforcement and into the corners of the formwork.

3.0 BRICKLAYING

3.1 MATERIALS

Brickwork to exterior walls to be selected 70 mm Monier bricks. All bricks to be delivered to site free from dirt and dust and stored in a dry position, any damaged or discoloured bricks are not to be used.

3.2 MORTAR

Mortar shall be composed of cement, lime and sand. All lime other than hydrated lime shall be slaked. Mortar shall be mixed in the following proportions: Cement 1: Sand 4: Lime 1 with compressive strength of 12.5 Mpa at 28 days.

3.3 WORKMANSHIP

The whole of the job is to be carried out by skilled tradesmen. In accordance with NZSS 4210:2001 and NZSS 3604:1999 appendix. F. All corners to be plumbed both ways and the courses are to be level and straight. All joints are to be weather struck exposed faces. Sills are to be bricks on the edge protruding 25 mm

3.4 TIES

Veneer to be secured to wall framing with 'Bricklock' Duo 85 mm Hot dipped galvanized m.s ties at horizontally and 350 mm crs vertically. Wall ties shall be faced fixed to timber framing with Tapcon self threading timber screws. Fix so that the fixing nails pierce

4.0 CARPENTRY

This section covers all timber framing, wall and ceiling linings, all finishing timbers, exterior linings, weatherboards, soffit linings, barge and fascia boards.

4.1 TIMBER

All timber shall be graded to sizes specified and be free from defects which render it unfit for its purpose. Timber shall come from seasoned stocks or kiln dried and stacked or as long possible before use. Framing timber shall have a maximum moisture content of 20%. All framing to exterior walls shall be H 3 LSOP treated timber. Internal timber to be KD un treated. Exterior exposed timber shall be tanalised in accordance with the Timber Preservation Authority recommendations. All framing to comply with all sections of NZSS 3604:1999. and its amendments. Roof trusses and tile battens to treated to H1.2, valley boards to be treated to H3.1 LSOP

4.2 FRAMING

All materials to be the best of their respective kinds and grades laid true to their various lines and levels and constructed in a proper tradesman like manner in accordance with the best trade practice and to comply with the local body bylaws.

4.3 DPC

Separate all exterior timber walls coming into contact with the concrete with one layer of 3 ply Malthoid DPC with a minimum lap of 75 mm.

4.4 TIMBER SCHEDULE

STRUCTURAL TIMBERS:

Top plates
Studs
Lintels
Rafters
Nogs
Ceiling joists / runners

FINISHING TIMBERS:

Pine -dressing A grade

EXTERIOR TIMBERS:

Beams
Pergola rafters
Sized as shown out of No 1 framing
Sized as shown out of Tan Pine.

4.5 WALL FRAMING

All wall framing to be stress graded kiln dried timber framing gauged 100 x 50 or 75 x 50 to non load bearing walls as shown on the drawings. Gauge all studs plates etc. to a uniform width. Plates to in long straight lengths and are to butt jointed with Pryda 4N1O nail plates. All holes for plumbing or wiring to be not more than 24 mm but can be increased to 35 mm where not more than 3 studs drilled.

4.6 BUILDING PAPER

Building paper shall be Framgaurd building wrap. Fix paper securely with laps not less than 75 mm at all joints and edges. Support wrap with polypropylene tape straps at 300 crs.

4.7 WALL BRACING

Wall bracing to be strictly as shown on the bracing schedule and complying with NZSS 3604:1990. Type GIB 1 and GIB 2 bracing to be Pryda Teebrace galv steel brace checked into each stud and used in conjunction with 9.5 mm gib bd fixed with 30 x 2.5 Gib clouts at 150 mm crs to perimeter of sheets and at 400 mm crs to intermediate studs. Type BR4 bracing to be 9.5 mm Braceline Gib bd fixed with 30 x 2.5 mm galv Gib clouts with 15 mm galv washers at 150 mm crs to the perimeter of sheets and double nail (no washers) to intermediate studs and nogs at 300 mm crs. plus at the bottom of each sheet to both sides, additional fixing of a 25.0 x 1.0mm x 300 mm long fixed with 6- 30 x 2.5 nails to both stud and joist / plate. Type SP 1 and SP2 bracing to be 7.5 mm Plywood tan H3 grade DD sheet brace used in conjunction with 9.5 mm Gib bd. Fix plywood to framing with 30 x 2.5 mm H.D galv. clouts at 150 mm crs. to perimeter and 300 mm crs. to intermediate studs. Additional fixing of 6Kn proprietary of stud to bottom plate at each end of brace.

4.8 INSULATION

Ceiling R 2.2 Fiberglass insulation.

Walls R 1.8 Fiberglass insulation

4.9 TRUSSES

Trusses to be specifically designed in accordance with NZS 3603 treated to H 1.2 and shall be fabricated in controlled factory conditions. Trusses shall be erected in accordance with the truss drawings and to be plumb and properly aligned at 900 CRS max. Anchor over top plates with no less than 2 /100 mm x 3.75 mm skew nails plus 2 / 4.9mm Pride Z nails.

4.10 CEILING FRAMING

Frame for ceiling lining using continuous lengths of rolled formed CB35 metal battens or 75 x 40 timber fixed to underside of the trusses. Fix with 2/75 x 3.15 nails to bottom chord of truss.

4.11 ROOF BRACING

Brace roof with a diagonally opposing pair of continuous steel strips each having a capacity of 8 KN. in tension, fix over the top of each rafter or truss top chord. Provide one pair per 35 mn/2 of roof plane area.

4.12 WALL LININGS

10 mm Gib board to all walls. 10 mm Gib 'Gib Aqualine' to all wet areas. Fix sheets horizontally and nail the sheet edges with 30 x 2.5 mm gib clouts at 300 mm CRS 12 mm from the edge and at 150 mm CRS to gib bd linings fixed over a wall brace and double nail at 300 mm CRS to all intermediate studs and nogs. All joints to be filled with Jib bedding compound, joints taped with Gib reinforcing tape and finished with finishing compound Walls lined with **Gib Aqualine** to be stopped with 1st and 2nd coat with **Gib AquaMix** for a level 4 finish to wallpapered walls and a level 5 finish for painted walls.

4.13 CEILING LININGS

13 mm Gibraltar board to all ceilings. Fix sheets by screws and adhesive. Apply daubs of adhesive at the 200 mm and 400 mm point from the sheet edges, position sheets hard up to the timber framing and double screw at the centre line of the sheet and to the sheet edges, 12 mm from the edge. Use type '8' Gypsum 32 mm x 6 gauge screws. All joints to be filled with Gib bedding compound, joints taped with Gib reinforcing tape and finished with finishing compound.

4.14 SHELIVING

All shelving to cupboards to be Clarrison pre- finished metal shelving. and wardrobes

4.15 MOULDINGS

Skirting 60 x 10 pine
Jambs ex 25 mm pine
Cornice 50 mm Gib Cove - 40 x 10 to cupboards

4.16 SOFFIT LINING

4.5 mm flat Hardies Silkline with 40 x 2.5 galvanized flat head nails at 150 mm centers to perimeter and intermediate nogs, PVC jointers to sheet edges.

5.0 JOINERY

5.1 WORKMANSHIP

Workmanship to be to best of trade practice. Exterior timber joinery shall have meeting faces and joints primed during assembly and shall be primed on all faces before installation.

5.2 INTERNAL DOORS

Internal door frames to be out of ex 150 x 30 pine finger jointed to have architraves fitted. Doors to be flush panel paint quality M.D.F. doors
Manhattan style

5.3 HARDWARE

Contractor is to fit all door hardware, latchsets and locks as required to enable operation of all doors. see addendum for specification of Hardware.

6.0 ALUMINIUM JOINERY

Provide and install aluminium joinery as specified herein and approved for use and to comply with NZSS 4211:1985 and NZSS 3504:1979.

6.1 FINISH

All aluminium to be polyester powder coated 'Cordalux' powder coating colours. To architectural aluminium association specification for stoved organic finishes to 40 microns min

6.2 DIMENSIONS

Sizes as shown on the drawing to be adhered to and are nominal only allowances to be made for clearance trim only.

6.3 SASHES

All sashes shall be awning or casement hung - see elevations. Use vinyl or neoprene seals to perimeters of all sashes and glazing.

6.4 JOINTS

All joints in sashes or frames shall be mitre cut sealed and fastened with 18/8 stainless steel screws.

6.5 REVEALS

All reveals to be out of ex 25 mm Tan H3 pine - paint finish, size for architraves.

6.6 GLAZING

All glazing to be sized as per NZS 4223:1985 parts I II NZS 4223 PART III: 1999 WC, ensuite and bathroom which is to have selected obscure glazing. Bathroom to have 3 mm Toughened safety glass grade A.

7.0 CONCRETE ROOF TILES

7.1 SCOPE

To entire roof area of house supply and fix Ross Roofing glazed concrete roof tiles with profile as specified on drawings.

7.2 LAYING

Fix 50 x 50 H1.2 tile battens at centers to suit the tiles. Secure all perimeter tiles and not less than 50% of the main roof tiles with mechanical fixing by either 2.15 mm galv. nails or by screws.

7.3 VALLEYS

All valleys shall be 0.55 mm coloursteel 'Endura' over ex 25 mm H 3.1 valley bd in a straight and continuous line. Tiles shall be fixed either side of the valley and neatly cut with a tile cutter. Any gaps that occur through the cutting shall be made bird proof with galv. ms mesh.

7.4 HIPS AND RIDGES

The hips and ridges shall be covered with concrete ridge tiles and shall be bedded and pointed with weep holes provided at the pan of each tile. The end ridge and hip tiles shall be secured. Bedding mortar shall be coloured struck off to give a smooth face.

7.5 GUARANTEE

A written guarantee shall be provided at the completion of the job covering workmanship and materials to a term as specified by manufacturer.

8.0 PLUMBING

8.1 GENERAL

The whole of the work shall be carried out in strict accordance with the drawings. The work is to be carried out by registered plumber. Plumbing to be to AS1 / G13 of the approved documents to the NZ building code.

8.2 WATER SUPPLY

Lay on cold water supply from existing main in 19 mm Dia PVC tubing. Provide and fix stop cock in suitable position. Take 19 mm Dia copper tube branches to HWC and 12 mm Dia copper branches to each new shower, basin, bath, WC, tub and washing machine. All sanitary fittings shall be installed to prevent backflow into the water supply by providing an air gap of 25 mm min. between every potable water supply outlet and the overflow pipe or flood level of the fixture to which it discharges.

8.3 HOT WATER SUPPLY

All piping in connection with the hot water supply shall be copper to NZS 3501:1976 with all jointing to BS 1723. Provide and fix 1 Rheem 180 Litre mains pressure hot water cylinder thermostatically controlled manufactured to AG 102 1989 and fitted with a pressure and temperature relief valve. The cylinder shall be restrained from damage by earthquakes. Take 15 mm Dia copper.

branches to all fittings. The thermostat is to be set to not less than 60oC and is to deliver hot water at a maximum of 55oC to fittings, a tempering valve is to be fitted to achieve this. All hot water supply pipes to be insulated with lagging. All hot and cold water copper pipes to be in wall and ceiling framing, no pipes to be laid under concrete floor. See materials specification addendum for all fittings.

8.5 WASTE PIPES

All waste pipes to as sized on the drawings and to out of UPVC, to be as per NZS 7643:1979. Pipes to be supported at 500 mm crs. At supports and at floor and wall penetrations fit pipe sleeves or flexible lagging. All fittings to have a water trap to prevent foul air from entering the building, the depth of the trap shall be not less than 40 mm and located as close as possible to the fitting. All fittings to discharge directly over a gully trap.

8.6 GUTTERS & DOWNPIPES

Continuous spouting - Colorsteel fascia / gutter system to be used, discharge into 100 x 50 UPVC M.S. downpipes in positions shown on drawings.

9.0 DRAINLAYING

9.1 GENERAL

The Drainage contractor is to provide and supply, and do everything necessary to complete the drainage in accordance with the drawings. The Drainage contractor must execute all work that is shown on the drainage plan and as required to comply with the NZ building code.

9.2 EXCAVATION

Excavate for trenches, gully traps, drains etc. to depth required for laying of sanitary and stormwater drains.

Soil drains to be 100 min dia UPVC.

Stormwater drains to be 100 mm dia UPVC.

All UPVC pipes to be to NZS 7649

9.3 LAYING

Start from the outfall and as work proceeds lay and solidly bed all drains to sizes and gradients required. The trench width shall be no less than 300 mm and the width of the trench at the top of the pipe shall be no more than 600 mm unless covered in concrete. Bedding materials shall be a minimum of 100 mm of clean granular non-cohesive material with a maximum particle size of 20 mm. Backfilling shall be granular bedding and selected fill placed in layers of 100 mm loose thickness and compacted. All joints shall be flexible and to comply with pipe manufacturers specifications with the invert perfectly true and concentric with the proceeding pipe. The layout is to be laid only in straight lines between bends and all junctions shall be no greater than 60°.

Soil drains connection to connect into territorial authority sewer connection

Stormwater drains to discharge into soakholes as per engineers design.

9.4 GULLY TRAPS

Gully traps to be positioned so that the top of the gully dish is no less than 50 mm below the overflow level of the lowest sanitary fixture. The construction shall be to prevent the ingress of surface water and shall the top of the gully dish 100 mm above the ground or if there is paving 25mm, and it shall have a grating, a minimum pipe size of 80 mm and a water seal depth of 65 mm. Waste pipes discharging over the gully shall be arranged to permit easy cleaning and located at least 20 mm over the water seal. The top of the water seal is to be no more than 600mm below the top of the gully trap.

9.5 VENTILATION

80mm terminal vent to be used for ventilation.

9.6 MAINTENANCE

Drains shall be provided with access points as shown on plans.

10.0 ELECTRICAL

The electrician shall supply and install all items necessary for the electrical wiring system complete. The whole of the work shall be carried out in accordance with the Electricity regulations 1993 and the New Zealand electrical code of practice for electrical wiring work in domestic premises NZEC 51: 1993 and the electrical contractor is to obtain all permits and pay all fees required from the supply authority, and arrange for all inspections required.

10.1 MAIN SUPPLY

The electrician is to arrange for the mains building, check conditions before tendering.

10.2 METERBOARD

Provide and set up where directed a meterboard and case with necessary equipment therein neatly labeled

10.3 WIRING

All cables shall be 250 volts complying with the BSS 7 rubber insulated and PVC cable and flexible cords for the electric power and lighting. All plastic material for switches, flush plates, light sockets and socket outlets shall be white or as directed by the owners. All wiring is to be concealed in the wall framing or in plastic conduits.

10.4 FITTINGS

Provide all socket outlets and wall switches in positions as shown on the drawings, the fittings shall PDL Clipsal 2000 series in white. Socket outlets to be 201SVs with extra switch. The electrician is not to start placing any socket outlets, wall switches or lights without consulting with the owners the exact location of each fitting.

Allow to wire and install for the following fittings:

Electric hot water cylinders.

Wall oven / hob

Range hood

Dishwasher

Waste disposer

All light fittings

Heated towel rails

Ceiling fans

11.0 PAINTER

11.1 MATERIALS

The materials shall be premium quality delivered in unopened complete containers with makers name bearing brand name. Materials shall be applied strictly in accordance manufacturers specifications.

11.2 WORKMANSHIP

All work to be of the highest standard performed by skilled tradesmen only and finished to the satisfaction of the owner and designer. No paint containing oil to be applied to damp surfaces and no external painting is to be done during frost or unsuitable weather. Between each coat rough patches etc. shall be sanded down to obtain a smooth surface. Any work damaged by dust or other cause is to be rubbed down and recoated. Each coat of paint is to be finished with one coat over all surfaces and allowed to dry thoroughly before a further coat is applied.

11.3 TINTS

The designer will supply the painting contractor with a colour schedule and colours are to be strictly adhered to. Any variations made from the instructions given are to be rectified at the expense of the painting contractor.

11.4 PROTECTION OF WORK

The painting contractor is to take adequate precautions during and after painting both inside and out to protect his work from dust, dirt or any other disfigurement whatsoever. He shall provide and carry out all necessary protection to the floor and walls.

11.5 HARDWARE

The locks and fasteners must be removed while painting work is in progress and refixed on completion.

11.6 PAINTING SCHEDULE

11.6:1 CEILINGS

1st coat Sealer/ Undercoat

2nd coat Acrylic latex matt finish
3rd coat Acrylic latex matt finish

11.6:2 WALLS

1st coat Sealer/ Undercoat
2nd coat Acrylic satin finish
3rd coat Acrylic satin finish

11.6:4 SKIRTINGS / ARCHITRAVES / DOORS & JAMBS

1st coat Interior wood primer
2nd coat Alkyd undercoat
3rd coat Alkyd satin finish enamel

10.6.3 SOFFIT

PRE FINISHED

11.6:4 SKIRTINGS / ARCHITRAVES / DOORS & JAMBS

1st coat Interior wood primer
2nd coat Alkyd undercoat
3rd coat Alkyd satin finish enamel

GLULAM LINTEL DESIGN TABLES FOR KANUKA DEVELOPMENT

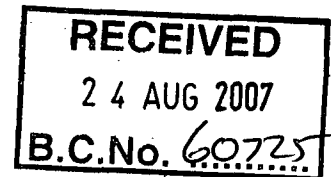


Table 1 - Lintel Supporting Roof Only

Ref: NZS3604 Table 8.9

	Loaded Dimension of Lintel * (m)	Maximum Span (m)			
		135x90	180x90	225x90	270x90
Light Roof	3	2.18	2.91	3.64	4.37
	4	2.01	2.69	3.36	4.03
	5	1.88	2.51	3.14	3.77
	6	1.78	2.38	2.98	3.57
Heavy Roof	3	1.73	2.31	2.89	3.47
	4	1.60	2.13	2.66	3.20
	5	1.49	1.99	2.49	2.99
	6	1.41	1.89	2.36	2.83

*Loaded dimension as defined in NZS3604

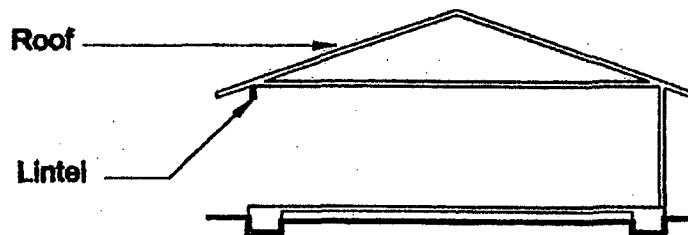


Figure 1: Lintel supporting roof only (refer table 1 above)



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: Alan Thompson JOB: 10658
(Suitably qualified Design Professional)

TO: Kanuka Developments
(Owner)

TO BE SUPPLIED TO:
(Territorial Authority)

IN RESPECT OF: The following Glulam Lintels are interchangeable with the Solid Timber Lintels sized from NZS3604 Tables 8.9, 8.10, 8.11, 8.12, 8.13

- Kanuka Developments 135 x 90 GL8 = 140 x 90 VSG8
 - Kanuka Developments 180 x 90 GL8 = 190 x 90 VSG8
 - Kanuka Developments 225 x 90 GL8 = 240 x 90 VSG8
 - Kanuka Developments 270 x 90 GL8 = 290 x 90 VSG8
- (Description of Building Work)

AT:

LOT DP SO
(Address)

..... LHTDesign has been engaged by Kanuka Development
(Design Firm) (Owner/Developer/Contractor)

to provide Structural Engineering services in respect of the
(Extent of Engagement)

requirements of Clause(s) B1 of the Building Regulations 1992 for

☐ All

☒ Part only as specified Glulam Lintels

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

..... drawings titled ..
(Design Firm)

and numbered 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.....

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)

Date 12/02/07

..... BE, MIPENZ (Business and structural) CPEng IntPE(NZ)
(Professional Qualifications)

CPEng # 51649

LHT Ltd

Member

ACENZ



..... P O Box 537 Hastings.....
(Address)

IPENZ



NZIA

This form to accompany Form 3 of the Building Regulations 1992 for the application of a Building Consent.

May 2005



GIB® Bracing Systems Changes

GIB® Bracing Systems have undergone a thorough review as part of Winstone Wallboards ongoing programme to make GIB® systems simpler, easier and faster for customers to use. Users of the previous systems will notice some significant changes. Please review this technical literature in detail to make yourself aware of these changes. The key differences are as follows:

- The new EzyBrace™ Specification Numbering System is designed to make specification, installation and identification of GIB® Bracing Systems easier.
- A rationalised number of bracing element types and a more consistent construction method.
- Fasteners must not be placed closer than 18mm to a sheet end or a cut edge or no closer than 12mm to the tapered (paper bound) machine edge of the GIB® plasterboard sheets.
- Some hold down details and corner fastening details have changed.
- A new 35mm GIB Braceline® Nail replaces the 32mm GIB Braceline® Nail in GIB Braceline® bracing elements.
- GIB® plasterboard sheets used in GIB® Bracing Systems March 2006 must have a manufacturing date after 16 January 2006.
- No additional framing is required for narrow panels.
- Introduction of a shorter 0.4m bracing element.
- Ability to substitute GIB Aqualine® for GIB Braceline® with modified fastener patterns.

Note: The bracing systems in the GIB® Bracing Systems 1999-2003 technical literature will remain valid, however, transfer to the systems contained in this publication is recommended for new designs for the benefits these systems offer.

Framing

General framing requirements such as grade, spacings and installation shall comply with the provisions of NZS 3604:1999. Winstone Wallboards Ltd recommends the use of kiln-dried machine stress graded framing (KD MSG). To achieve the published bracing performance the minimum actual framing dimensions are 90 x 35mm for external walls and 70 x 35mm for internal walls. Wall bracing tests on GIB® Bracing Systems were undertaken without nogs. Nogs are not considered to add to the bracing performance of the wall.

Fastening GIB® plasterboard Linings

GIB® Standard Plasterboard bracing systems must be fastened using minimum length 32mm x 6g GIB® Grabber® Drywall Screws or 30 x 2.8mm GIB® Nails. GIB Braceline® bracing systems must be fastened with 32mm x 7g GIB Braceline® screws, or 35mm GIB Braceline® nails.

GIB® plasterboard linings for designated bracing elements are fastened at 150mm centres around the perimeter of the bracing element. For GIB® Standard bracing elements fasteners are placed at 50 and 150mm from the sheet corner (see page 30). For GIB Braceline® bracing elements fasteners start at 50, 100 and 150mm from the sheet corner (see page 31). Fasteners must be placed 12mm from the tapered edge (paper bound) and 18mm from the cut edge.

Fastening in the field of the bracing element is conventional and the screw and glue method is recommended as outlined in the "GIB® Site Guide".

When fixing part sheets of GIB® plasterboard, a minimum width of 300mm applies for bracing elements.

Horizontal fixing is recommended. If fixing vertically, full height sheets shall be used where possible. Where sheet end butt joints are unavoidable they must be formed over nogs or over the studs and fastened at 200mm centres. Alternatively, the sheet end butt joints may be back-blocked.

Plywood

'Plywood' specified in BLP is grade D-D 7mm construction plywood manufactured to AS/NZS 2269:2004, fixed with 30 x 2.8mm flat head nails at 150mm centres around the perimeter of the bracing element and at 300mm centres to intermediate framing.

Fire Resistance and Noise Ratings

10mm GIB Braceline®, 10mm GIB Aqualine®, 10mm GIB Noiseline®, 10mm and 13mm GIB Ultraline® and 10mm GIB Toughline® may be substituted for 10mm GIB Fyrelite® in fire rated constructions. 10mm GIB Braceline® and 10mm GIB Toughline® may be substituted for 10mm GIB Noiseline® in GIB® Noise Control Systems. The fastener length for the fire rated system applies. The field of the braced element must also be fastened in accordance with the fire rated specification (adhesive not permitted).

Jointing and Stopping

All sheet joints must be paper tape reinforced and stopped in accordance with the publication entitled "GIB® Site Guide".

Fastening the Bracing Element to Timber Floors

Fastening the bottom plate of a GIB® wall bracing element to a timber framed floor must be in accordance with NZS3604:1999 with pairs of 100 x 3.75mm hand driven nails or three 90 x 3.15mm power driven nails at 600mm centres. In addition panel hold-downs, as detailed on page 29, must be installed when specified for the particular bracing element type (BL1, BL1a, BLG and BLP).

Fastening the Bracing Element to Concrete Slabs

Fastening the bottom plate of an external wall for bracing element GS1a is in accordance with NZS 3604:1999. On internal bracing lines, the bottom plate of wall bracing elements GS1a and GS2 may be fixed using minimum 65mm x 3.8mm shot fired fasteners fitted with 16mm discs, spaced at 150mm and 300mm from the end studs and thereafter at 600mm centres. Wall bracing elements BL1, BL1a, BLG and BLP installed on both external and internal walls require a panel hold-down connection at each end of the bracing element (see page 29). Within the length of the bracing element bottom plates are fixed in accordance with NZS 3604:1999.

In order for GIB® systems to perform as tested, all components must be installed exactly as prescribed. Substituting components produces an entirely different system and may seriously compromise performance. Follow system specifications.

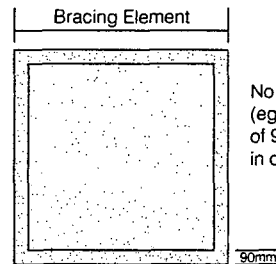
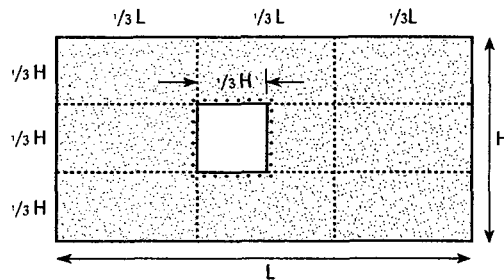


Panel Hold-Down Details

GIB® Standard Bracing Systems GS1a and GS2 do not require specific connections at the bracing element ends. GIB Braceline® Bracing Systems BL1, BL1a, BLP and BLG all have panel hold-down connections at each end of the bracing element. Refer to page 29 for construction details.

Openings in Bracing Elements

Openings are allowed within the middle third of a wall bracing element's length and height. Neither opening dimension shall be more than one third of the element height. Wall linings are fixed to opening trimmers at 150mm centres. Small openings (e.g. power outlets) of 90 x 90mm or less may be placed no closer than 90mm to the edge of the braced element.

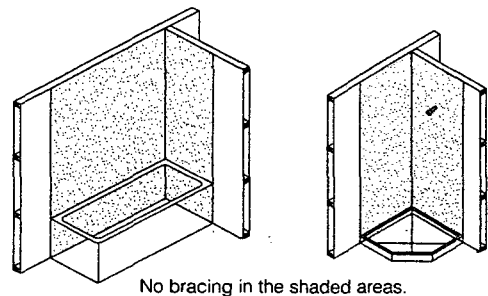


GIB® Bracing in Water-Splash Areas

Bracing elements are required to have a durability of 50 years. Winstone Wallboards recommends that bracing elements are not located in shower cubicles or behind baths because of durability requirements, the likelihood of renovation, and practical issues associated with fixing bracing elements to perimeter framing members.

Otherwise GIB® Bracing Systems can be used in water-splash areas as defined by NZBC Clause E3, provided these are maintained impervious for the life of the building.

GIB Aqualine® can be used in place of GIB® Standard in bracing elements. GIB Aqualine® can be used in place of GIB Braceline® in bracing elements 900mm or longer, provided the perimeter of the element is fixed with GIB Braceline® nails or screws at 100mm centres generally, using the GIB Braceline® corner fixing pattern.



Renovation

When relining walls during the process of renovation, ensure that bracing elements are reinstated (check the building plans).

Angle Braces

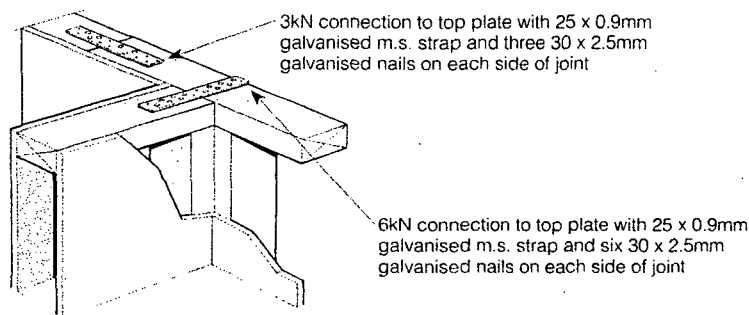
Angle braces serve to keep frames square during transport and construction. They also act as part of the temporary bracing of a building under construction.

Where specified, metal angle braces must be placed at an angle no steeper than 55 degrees, and within the designated length of the bracing element. For elements longer than 3.6 metres, pairs of angle braces (in opposite directions) are required. Fixing of angle braces is with three 30 x 2.8mm galvanised flat head nails to top and bottom plates, and two 30 x 2.8mm nails to intermediate framing.

Top Plate Connections

The top plate of a wall that contains one or more wall bracing elements shall be jointed according to the rating of the highest-rated individual wall bracing element as follows:

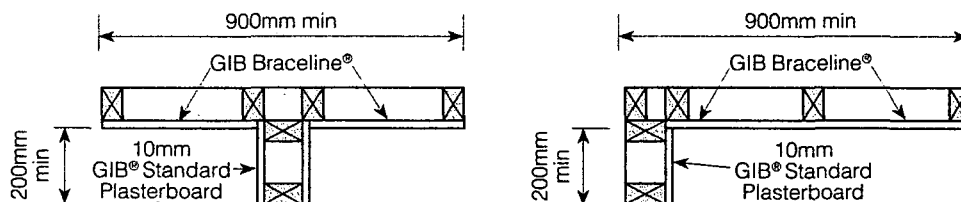
- Rating not exceeding 100 bracing units: A 3kN connection as shown or by an alternative fixing of 3kN capacity in tension or compression along the plate;
- Rating exceeding 100 bracing units: A 6kN connection as shown or by an alternative fixing of 6kN capacity tension or compression along the plate.





Guidelines for Intersecting Walls

GIB® Bracing Elements may have intersecting walls with a minimum length of 200mm. Bracing element sheets shall be fixed and jointed as given on pages 30 and 31. Fasteners are required around the perimeter of the bracing element. Vertical joints at T-junctions (illustrated below) shall be fixed and jointed as specified for intermediate sheet joints. **The bracing element length must be no less than 900mm.**



Where a Wall Bracing Element is interrupted by a T or L junction the element is deemed to be continuous for the whole length (900mm in the example illustrated above).

Fixing the Perimeter of a Bracing Element

A bracing element can consist of a part sheet (such as in a 600 mm long BL1 element), or multiple sheets (such as in a 2.4 metre or longer GS1a element). The critical fasteners are located around the perimeter of a bracing element as outlined on the fastener layout pages. The perimeter of a bracing element must be connected to a continuous member such as studs or plates. Connection to a row of nogs is not acceptable.

Fixing in the Field of the Bracing Element

Fixing in the field of a bracing element is conventional and for GIB® wall bracing elements this means that adhesive fixing is recommended, eliminating the need for mechanical fasteners in the body of the sheets.

For GIB® ceiling diaphragms the screw and glue method is recommended resulting in a minimum number of mechanical fasteners along the centre line in the body of the sheets.

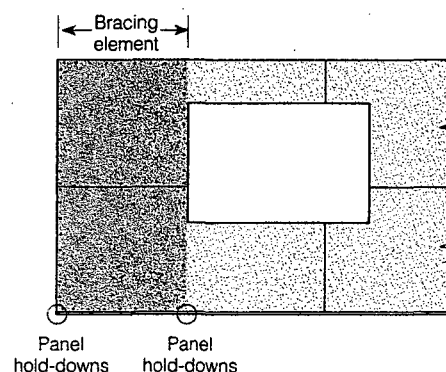
When applied correctly, paper-tape and stopped joints within the bracing element are strong enough to transfer loads within the element and conventional fixing of intermediate sheet joints to framing is sufficient.

Any sheet end butt joints within the field of the bracing element must be back-blocked in accordance with the "GIB® Site Guide".

Consult the "GIB® Site Guide" for further details on recommended fixing details.

Horizontal Fixing

GIB Braceline® linings may be fixed horizontally when linings extend under/over door or window openings. GIB Braceline® fasteners are provided around the perimeter of the bracing element.



GIB® Bracing Systems – EzyBrace™ Specification Numbering System

The EzyBrace™ Specification Numbering System is designed to make specification of GIB® Bracing Systems by designers and identification on site by builders and building officials more transparent. Note: the EzyBrace™ Specification Numbering System (and sub-components thereof) are protected by copyright.

GS = GIB® Standard Plasterboard
BL = GIB Braceline®
BLP = GIB Braceline® / Plywood
BLG = GIB Braceline® / GIB® Standard Plasterboard

1 = lined one side
2 = lined both sides
a = angle brace

Therefore,

GS1a = GIB® Standard Plasterboard one side with an angle brace
GS2 = GIB® Standard Plasterboard both sides
BL1 = GIB Braceline® one side
BL1a = GIB Braceline® one side with an angle brace
BLP = GIB Braceline® one side, Plywood on the other
BLG = GIB Braceline® one side, GIB® Standard Plasterboard on the other

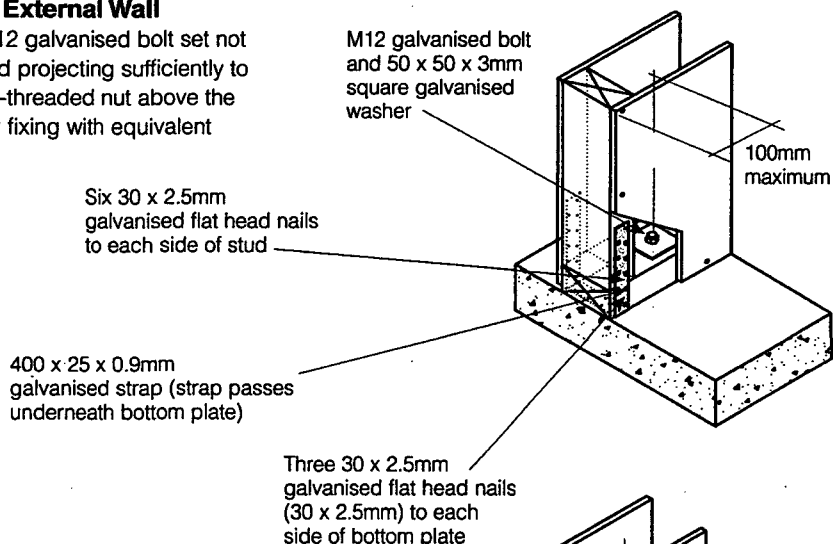
In order for GIB® systems to perform as tested, all components must be installed exactly as prescribed. Substituting components produces an entirely different system and may seriously compromise performance. Follow system specifications.

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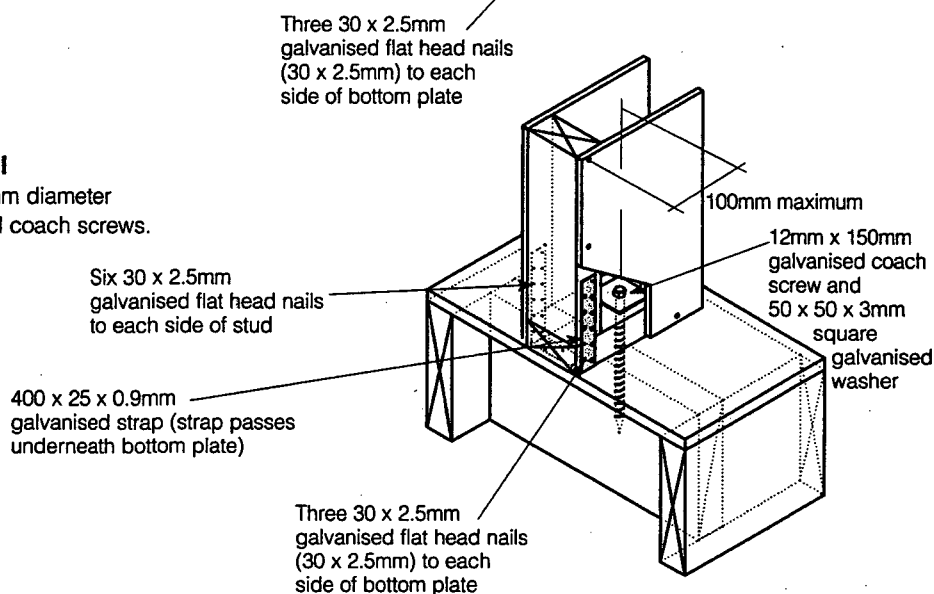
Concrete Floor – Internal / External Wall

Bottom plate is fixed using an M12 galvanised bolt set not less than 75mm into concrete and projecting sufficiently to allow for a 3mm washer and fully-threaded nut above the timber. Alternatively a proprietary fixing with equivalent capacity may be used.



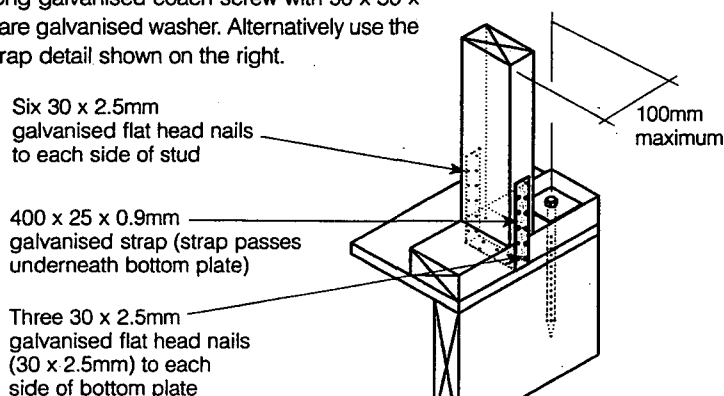
Timber Floor – Internal Wall

Bottom plate is fixed using a 12mm diameter minimum 150mm long galvanised coach screws.

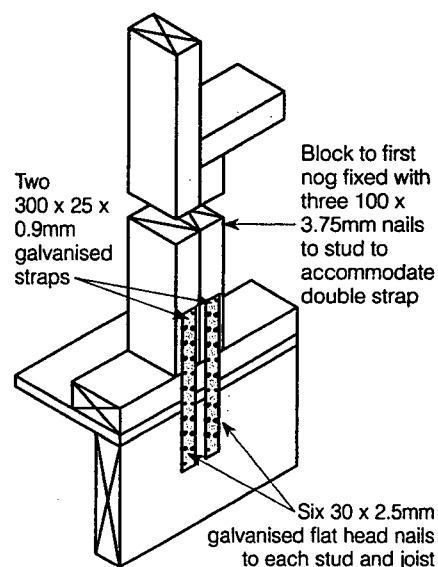


Timber Floor – External Wall Alternatives

Bottom plate is fixed using a 12mm diameter minimum 150mm long galvanised coach screw with 50 x 50 x 3mm square galvanised washer. Alternatively use the double strap detail shown on the right.



Option 1



Option 2

Notes:

Additional thickness and/or corrosion protection is required in exposed and sheltered applications. (Consult NZS 3604:1999). To maintain a flush surface for the wall linings, it is recommended that hold down straps are checked into the framing.

In order for GIB® systems to perform as tested, all components must be installed exactly as prescribed. Substituting components produces an entirely different system and may seriously compromise performance. Follow system specifications.

GIB® BRACING SYSTEMS – CONSTRUCTION



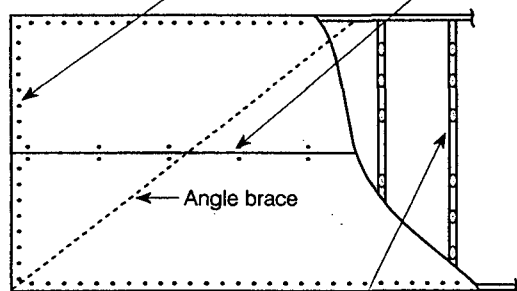
Fastener Layouts – GIB® Standard Bracing Elements

MARCH 2006

For 10mm GIB® Standard Plasterboard and any other 10mm and 13mm GIB® plasterboard

32mm x 6g GIB® Grabber® Drywall Screws or 30mm GIB® Nails at 150mm centres to perimeter of bracing element

Single 32mm x 6g GIB® Grabber® Drywall Screws or 30mm GIB® Nails where sheets cross studs

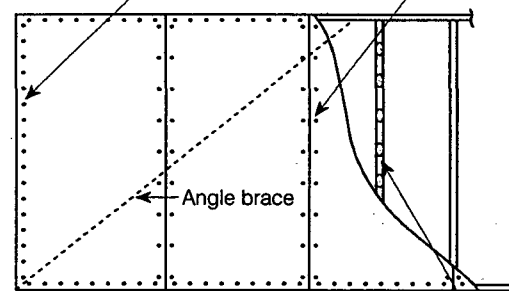


**GS1a (lined one side)
(Horizontal Fixing)**

Daub of GIBFix® adhesive at 300mm centres to intermediate studs

32mm x 6g GIB® Grabber® Drywall Screws or 30mm GIB® Nails at 150mm centres to perimeter of bracing element

Single 32mm x 6g GIB® Grabber® Drywall Screws or 30mm GIB® Nails at 300mm centres

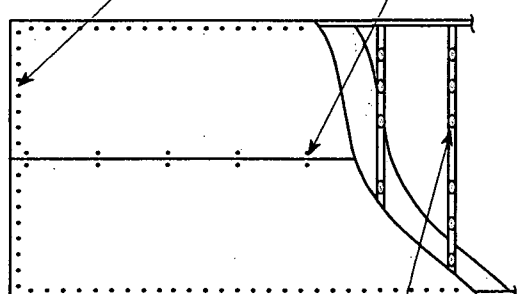


**GS1a (lined one side)
(Vertical Fixing)**

Daub of GIBFix® adhesive at 300mm centres to intermediate studs and nogs

32mm x 6g GIB® Grabber® Drywall Screws or 30mm GIB® Nails at 150mm centres to perimeter of bracing element

Single 32mm x 6g GIB® Grabber® Drywall Screws or 30mm GIB® Nails where sheets cross studs

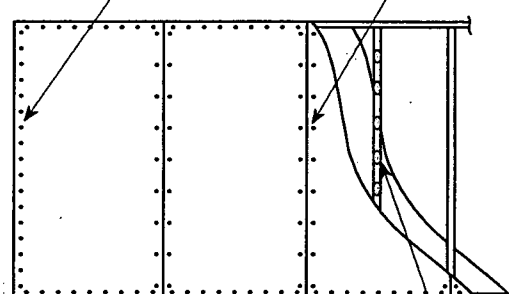


**GS2 (lined both sides)
(Horizontal Fixing)**

Daub of GIBFix® adhesive at 300mm centres to intermediate studs

32mm x 6g GIB® Grabber® Drywall Screws or 30mm GIB® Nails at 150mm centres to perimeter of bracing element

Single 32mm x 6g GIB® Grabber® Drywall Screws or 30mm GIB® Nails at 300mm centres



**GS2 (lined both sides)
(Vertical Fixing)**

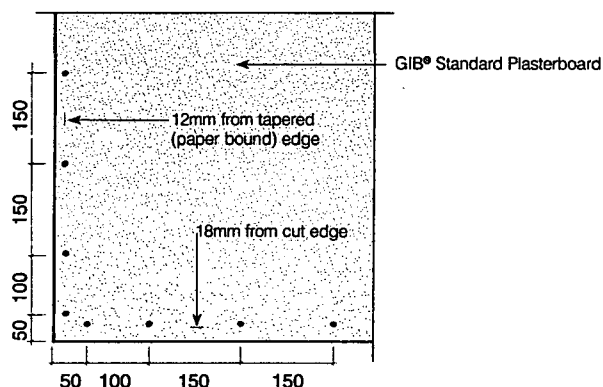
Daub of GIBFix® adhesive at 300mm centres to intermediate studs and nogs

Fixing the perimeter of a GIB® Standard Plasterboard bracing element

Fasteners are placed no closer than 12mm to the tapered (paper bound) machine edge of the GIB® plasterboard sheets. Fasteners are placed no closer than 18mm to a sheet end or a cut sheet edge.

For GIB® Standard bracing elements fasteners are placed at 150mm centres around the bracing element perimeter, starting at 50 and 150mm from the sheet corners.

Fastening pattern for GIB® Standard bracing elements



In order for GIB® systems to perform as tested, all components must be installed exactly as prescribed. Substituting components produces an entirely different system and may seriously compromise performance. Follow system specifications.

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GIB® BRACING SYSTEMS – CONSTRUCTION



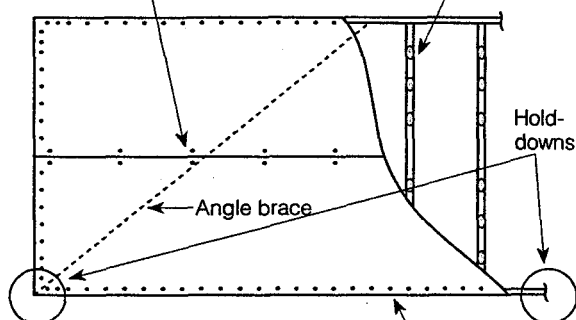
Fastener Layouts – GIB Braceline® Bracing Elements

MARCH 2006

For 10mm GIB Braceline®, 10mm GIB Noiseline® and 10mm GIB Toughline®

32mm x 6g GIB® Grabber® Drywall Screws or 30mm GIB® Nails where sheets cross studs

Daub of GIBFix® adhesive at 300mm centres to intermediate studs

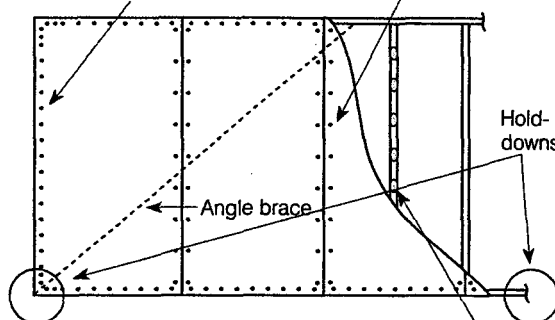


**BL1a (lined one side)
(Horizontal Fixing)**

32mm GIB Braceline® screws or 35mm GIB Braceline® nails at 150mm centres to perimeter of braced element

32mm GIB Braceline® Screws or 35mm GIB Braceline® Nails at 150mm centres to perimeter of braced element

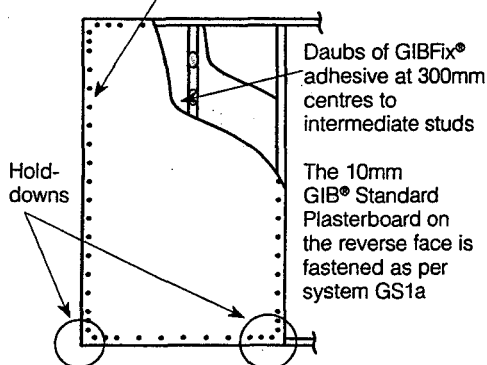
32mm x 6g GIB® Grabber® Drywall Screws or 30mm GIB® Nails at 300mm centres



**BL1a (lined one side)
(Vertical Fixing)**

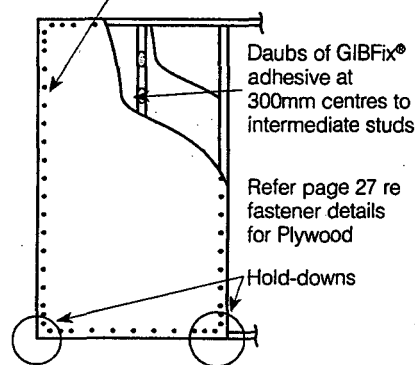
Daub of GIBFix® adhesive at 300mm centres to intermediate studs and nogs

32mm GIB Braceline® Screws or 35mm GIB Braceline® Nails at 150mm centres to perimeter of braced element



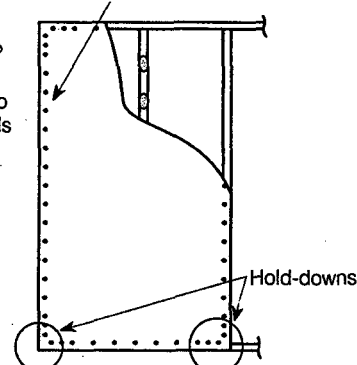
BLG (lined both sides)

32mm GIB Braceline® Screws or 35mm GIB Braceline® Nails at 150mm centres to perimeter of braced element



BLP (lined both sides)

32mm GIB Braceline® Screws or 35mm GIB Braceline® Nails at 150mm centres to perimeter of braced element



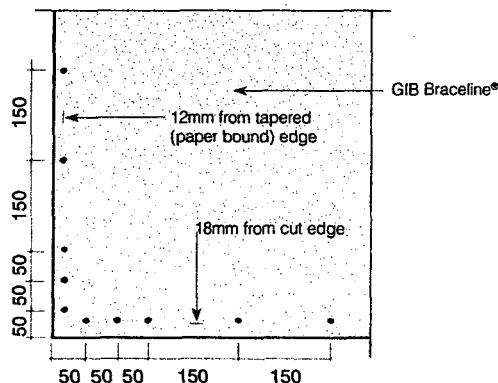
BL1 (lined one side)

Fixing the perimeter of a GIB Braceline® bracing element

Fasteners are placed no closer than 12mm to the tapered (paper bound) machine edge of the GIB® plasterboard sheets. Fasteners are placed no closer than 18mm to a sheet end or a cut sheet edge.

For GIB Braceline® systems, fasteners are placed at 150mm centres around the bracing element perimeter, starting at 50, 100 and 150mm from the sheet corners.

Fastening pattern for GIB Braceline® bracing elements



In order for GIB® systems to perform as tested, all components must be installed exactly as prescribed. Substituting components produces an entirely different system and may seriously compromise performance. Follow system specifications.

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FOR FURTHER INFORMATION VISIT WWW.GIB.CO.NZ

Figure 7: Type 2 strap fixings to end studs of plywood sheet braces for concrete floors

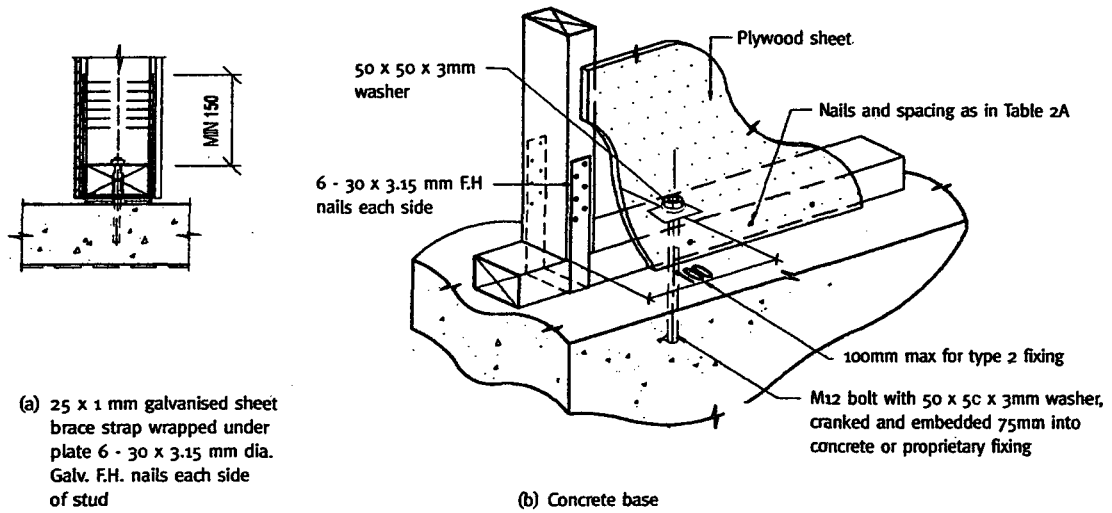
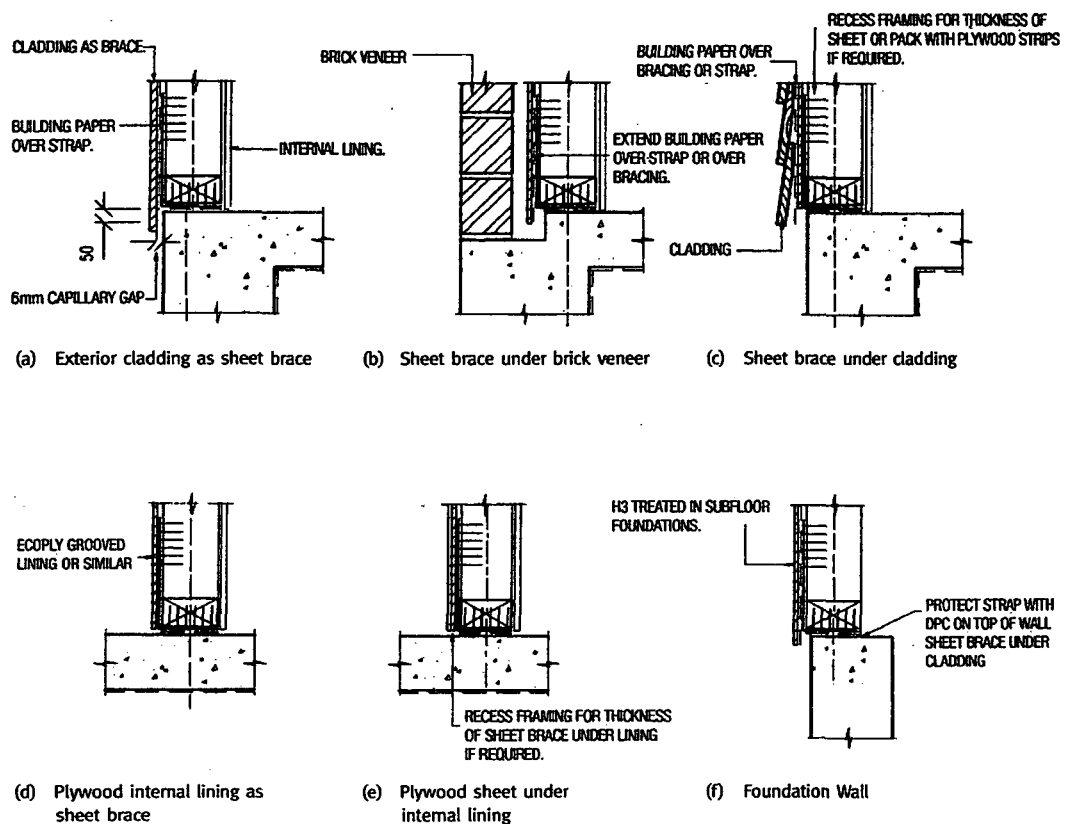


Figure 8: Typical detailing for wall and subfloor framing on concrete floor and foundations



Note: Modify these details for either Type 1 or Type 2 fixings according to Figure 2 or Figure 7.

Building Consent File – End Cover

END OF BUILDING CONSENT FILE

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No	60725