

ROTORUA DISTRICT COUNCIL
BUILDING APPLICATION FORM

Received 9-10-86
File Number 6997/146pt
Application No 4291
Date 198

I hereby apply for permission to erect repair alter extend a building at No 11

Orchard, place
(Address)

for

Mr/Mrs J G Flynn
(Owner)

of

472 Pukehangi Rd.
(Address)

according to locality plan and detailed plans elevations cross sections and specification of building deposited herewith in DUPLICATE (see reverse side)

PARTICULARS OF LAND

Lot No 12 Zoning
Area Lynmore D.P No L13 41388

NUMBER OF SANITARY FITTINGS

Toilet Pans 4
Urinals

PARTICULARS OF USE OF BUILDINGS

Proposed purpose for which every part of building is to be used or occupied (describing separately each part intended for use or occupation for a separate purpose ie shop factory dwelling office carport etc)

2 units

Area of ground floor

Estimated value

Gross floor area

Building work

\$ 117 000

Area of accessory buildings

Plumbing & Drainage

\$ 24 00

Builder's name

J G Flynn
(Please Print)

Signature of Applicant

Total \$ 119, 400

Address

472 Pukehangi Rd

Address

Phone No

87120

Phone No

87120

FOR OFFICE USE ONLY

Application checked and approved by

Building Inspector

Date 23 10 86

Town Planning Officer

Date

Plumbing & Drainage Insp

Date

Structural Engineer

Date

Health Inspector

Date

Dangerous Goods Inspector

Date

Geothermal Inspector

Date

General Inspector

Date

Issue of Permit Approved

per W. Williams
Engineer

Date 23 10-86

SUBJECT

APPLN No

PERMIT No

DATE

VALUE

FEE

Building

0073918 460329

\$ 117 000

\$ 416 90

Plumbing

Drainage

Water Connection

Damage Deposit

Vehicle Crossing

Sewer Connection

Building Research Levy

Development Contribution

Date

24 10 86

Receipt No

ALL FEES G ST INCLUSIVE UNLESS
OTHERWISE NOTED

TOTAL \$ 923 90

NOTE GST applies to fees payable on or after 1 October 1986

FEES PAYABLE ON THE ISSUE OF ANY BUILDING PERMIT

according to the Estimated Value of Work

Estimated Value of Work	Fees	GST	Total
Not exceeding \$800	— \$15 00	\$1 50	\$16 50
Over \$800 and not exceeding \$1 600	— \$20 00	\$2 00	\$22 00
Over \$1 600 and not exceeding \$1 800	— \$25 00	\$2 50	\$27 50
Over \$1 800 and not exceeding \$2 000	— \$27 00	\$2 70	\$29 70
Over \$2 000 and not exceeding \$2 500	— \$30 00	\$3 00	\$33 00
Over \$2 500 and not exceeding \$3 000	— \$33 00	\$3 30	\$36 30
Over \$3 000 and not exceeding \$3 500	— \$36 00	\$3 60	\$39 60
Over \$3 500 and not exceeding \$4 000	— \$39 00	\$3 90	\$42 90
Over \$4 000 and not exceeding \$5 000	— \$43 00	\$4 30	\$47 30
Over \$5 000 and not exceeding \$6 000	— \$47 00	\$4 70	\$51 70
Over \$6 000 and not exceeding \$7 000	— \$52 00	\$5 20	\$57 20
Over \$7 000 and not exceeding \$8 000	— \$57 00	\$5 70	\$62 70
Over \$8 000 and not exceeding \$9 000	— \$62 00	\$6 20	\$68 20
Over \$9 000 and not exceeding \$10 000	— \$67 00	\$6 70	\$73 70
Over \$10 000 and not exceeding \$12 000	— \$72 00	\$7 20	\$79 20
Over \$12 000 and not exceeding \$14 000	— \$78 00	\$7 80	\$85 80
Over \$14 000 and not exceeding \$16 000	— \$85 00	\$8 50	\$93 50
Over \$16 000 and not exceeding \$18 000	— \$95 00	\$9 50	\$104 50
Over \$18 000 and not exceeding \$20 000	— \$104 00	\$10 40	\$114 40
Over \$20 000 and not exceeding \$25 000	— \$124 00	\$12 40	\$136 40
Over \$25 000 and not exceeding \$30 000	— \$145 00	\$14 50	\$159 50
Over \$30 000 and not exceeding \$35 000	— \$165 00	\$16 50	\$181 50
Over \$35 000 and not exceeding \$40 000	— \$186 00	\$18 60	\$204 60
Over \$40 000 and not exceeding \$50 000	— \$214 00	\$21 40	\$235 40
Over \$50 000 and not exceeding \$60 000	— \$241 00	\$24 10	\$265 10
Over \$60 000 and not exceeding \$70 000	— \$269 00	\$26 90	\$295 90
Over \$70 000 and not exceeding \$80 000	— \$296 00	\$29 60	\$325 60
Over \$80 000 and not exceeding \$90 000	— \$324 00	\$32 40	\$356 40
Over \$90 000 and not exceeding \$100 000	— \$351 00	\$35 10	\$386 10
Over \$100 000 and not exceeding \$120 000	— \$379 00	\$37 90	\$416 90
Over \$120 000 and not exceeding \$140 000	— \$406 00	\$40 60	\$446 60
Over \$140 000 and not exceeding \$160 000	— \$434 00	\$43 40	\$477 40
Over \$160 000 and not exceeding \$180 000	— \$461 00	\$46 10	\$507 10
Over \$180 000 and not exceeding \$200 000	— \$489 00	\$48 90	\$537 90
Over \$200 000 and not exceeding \$240 000	— \$544 00	\$54 40	\$598 40
Over \$240 000 and not exceeding \$280 000	— \$599 00	\$59 90	\$658 90
For every \$40 000 or part thereof in excess of \$280 000 an additional fee of	— \$28 00 plus \$2 80 GST		

NOTE—The permit fee for the installation of free standing fire places pot belly stoves or log fires is ~~\$12 00~~
\$12 00 plus GST

BUILDING RESEARCH LEVY — TO WHICH GST IS TO BE ADDED

A building research levy based upon \$1 per \$1000 or part thereof of total permit value requires to be paid Permits of a lesser value than \$10 000 are exempt from this levy

IMPORTANT

PLANS AND SPECIFICATIONS

All builders should be conversant with the Building Bylaws wherein the requirements regarding drawings are stipulated

Any applications not complying will not be accepted

It is an offence to start building work before a permit is issued

All plans must be drawn in metric to scale

SITING OF BUILDINGS

It shall be the responsibility of the Owner of the land and the Builder to ensure that siting of all buildings conforms with the requirements of the District Planning Scheme and the Building Bylaws

DAMAGE DEPOSIT

The amount of the damage deposit referred to overleaf is necessary to ensure that the value of any damage that is caused to public property during construction operations is recovered from the main contractor or applicant as the case may be The amount is to be regarded purely as a deposit and will be refunded or adjusted upon application at the completion of the work

SEWER CONNECTIONS

Applicants are reminded of their responsibility to have regard to the levels of Council's drainage services before construction of a building commences Service levels can be obtained from the District Engineer's Office Depot Street Failure to do so may result in plumbing alterations or pumping being required

DEVELOPMENT CONTRIBUTIONS

If you are contemplating a residential development which comprises 3 or more new units or 2 or more additional units or an industrial or commercial development the value of which exceeds \$100 000 you will be liable to make a development contribution to the Rotorua District Council If your proposal comes within this levy you are advised to contact the District Town Planning Department for further information

Rotorua District Council

No 4291

Inspector M

File No

Receipt No 460329

Date Permit Issued 28/10/86

OWNER

Name J G Flynn

Mailing Address 172 Pikehanga Rd
Rotorua

BUILDER

Name J G Flynn

Mailing Address As Owner

PROPERTY ON WHICH BUILDING IS TO BE ERECTED/DEMOLISHED

SITE

Street No 11

Street Name Orchard Place

Town/District Rotorua

Riding

LEGAL DESCRIPTION

Valuation Roll No 6997/146 225-533 (23-5-05)

Lot 12 DP H 41388

Section Block

Survey District

DESCRIPTION OF PROPOSED WORK AND MAIN PURPOSE OF USE

2 Units 4 WC

FLOOR AREA

Whole Sq Metres

DWELLING UNITS

Number Erected

ESTIMATED VALUES

Building	117,000	-
Plumbing	2,400	-
Drainage		
TOTAL	119,400	-

NATURE OF PERMIT (TICK BOX)

☐ NEW BUILDING
- exclude domestic garages and domestic outbuildings

☐ FOUNDATIONS ONLY

☐ ALTERED REPAIRED EXTENDED
- include conversions and resited buildings

☐ NEW CONSTRUCTION
OTHER THAN BUILDINGS - include demolitions

☐ DOMESTIC GARAGES
AND DOMESTIC OUTBUILDINGS

FEES APPLICABLE

Building Permit	\$ 379	Water Connection	\$ 250	Receipt No	460329
Street Damage Deposit	\$ 100	Vehicle Crossing Levy	\$	Date of Payment	24/10/86
Building Research Levy	\$ 120	M S Plumbing	\$ 74.10	Authorised Officer	
Plumbing	\$	CST	\$		
Drainage	\$		\$		
Sewer Connection	\$		\$ 923.90		
		TOTAL			

Special Conditions



Date Inspected REMARKS (e.g. stage reached with work)

3/11/86 Unit (1) Rear
Ground & good beams sheet in place ok
to pour

Date Inspected

201.1.57 The line w/c ok traces is under
ok to line

Unit one completed.
COMPLETED (Signature) Jackson Date 8 13 188

20 October 1986

File No 6997/146 Pt
Appln No 4291

J G Flynn
472 Pukehangī Road
Rotorua

Dear Sir,

Proposed 2 Units, Lot 12 DPS 41388, 11 Orchard Place

Receipt of your application for the above is acknowledged. Perusal of the plans and specifications has raised the following points which are hereby drawn to your attention

1 Health

Please provide details of the heating appliance *GAS HEATING WITH
ELECTRIC HEATING UNTIL AVAILABLE*

2 Building Bylaw

- a) Thickness of vapour barrier under concrete floor

As the garage is attached to the dwelling, it is recommended that the vapour barrier continue under the garage floor *total floor to have
25 polythene*

- b) Post connection and footings to comply with Fig 48 NZS 3604 *Ray straps
to 300x300x600 footings*

- c) Method of securing bottom plate to concrete floor - *dynamabols*

- d) No section of veneer wall shall be less than 390 mm *will comply with
regulations*

- e) Rafters on cross section B-B do not comply with Table 21 NZS 3604 *200x50 will comply with request*

- f) Design number and manufacturer of trusses *R41*

Receipt of your advice in respect of the above matters will enable your application to be more fully considered

Yours faithfully,

*will comply with requests
& amendments*

D J McArtney
Senior Building Inspector

23 10 86
JGF

SHEET A

(CIRCLE whichever is applicable)

NAME FLYNN

ADDRESS LYNHMORE
ROTORUA

STOREY Single or Uppermost
Lower of two or middle of three
Lower of three

ROOF TYPE Light / Heavy

ROOF PITCH 0 - 25 / 26 - 45

WIND AREA High / Medium Low

W = 16 B U s/m

EARTHQUAKE ZONE A B / C

E = 2 B U s/m²

ROOF OR BUILDING LENGTH

BL = 17 m

ROOF OR BUILDING WIDTH

BW = 8 m

GROSS ROOF OR BUILDING PLAN AREA

GPA = 120 m²

EARTHQUAKE B U s ALONG AND ACROSS

E x GPA = 2 x 120 = 240 B U s

WIND B U s ALONG

W x BW = 16 x 8 = 128 B U s

WIND B U s ACROSS

W x BL = 16 x 17 = 272 B U s

SKETCH PLAN (external and internal walls)

SHEET B

1
Total B U s
Required

2
Wall Line

3
Minimum
B U s
Required

4
Label No

5
Type

6
Wall Bracing Elements Provided

Rating
B U s/m

Length
(m)

B U s
Provided

ALONG

A
~~EXT~~

17x
10
170

1
2
3

1
8
8

42
67
67

24
10
09

100
67
60

Sub total

227

B
INT

70

4

1

42

2.4

100

Sub total

100

C
~~EXT~~

170

5
6

8
8

67
67

11
15

73
100

Sub total

173

D

Sub total

240

TOTAL

410

TOTAL

500

ACROSS

L
~~EXT~~

65
x10
65

7

1

42

24

100

Sub total

M
INT

70

8

12

42

30

126

Sub total

N
INT

70

9
10

12
12

42
42

28
24

117
100

Sub total

O
INT

70

11

1

42

24

100

Sub total

P
~~EXT~~

65
x10
65

12

1

42

24

100

Sub total

272

TOTAL

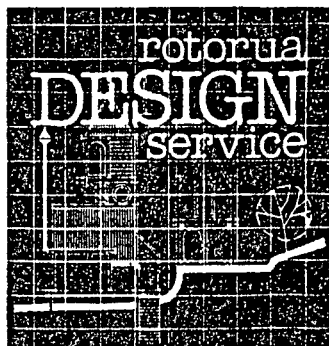
340

TOTAL

643

specification
for

TWO HOME UNITS AT
ORCHARD PL LYNNMORE
FOR MR. JIM FLYNN



1 PRELIMINARY AND GENERAL

The Contractor shall provide all labour and materials, supply and maintain the required tools, plant, scaffold, etc

All work shall be carried out in accordance with this specification, together with all relevant plans and details and comply with the Local Body By-Laws

All work shall be in accordance with NZSS 1900 model building By-Law, except where over-ruled by Local Body By-Laws or special requirements by any lending institution which is the mortgagor

1/1 PLANS AND SPECIFICATIONS

The working drawings with this specification and any special conditions attached, shall form part of the contract

Figured dimensions will take precedence over scaling from plan

1/2 INSURANCE

The Contractor will insure the building for the full contract price against fire in the name of the owner and the builder for their respective rights and interests. This cover will be kept in force until the Less Retention date has expired

1/3 PRICE INCREASES

Arbitration Court or Price Tribunal award increases to basic material cost or in wages to all trades being mentioned herein, beyond the control of the building contractor, shall be agreed upon as extras to this contract and will be met by the Owner

1/4 EXTRA WORK

No extra work may be carried out without a signed and dated Contractor's Alteration Authorization form. Alterations conveyed verbally will not be valid unless verified in writing on the appropriate form. In the event of any alteration to the basic contract, it will be necessary for the form to state the exact requirements. Extras will be charged on a cost plus 10% basis unless quoted for

1/5 COMPLETION DATE

The contract shall be completed within a reasonable period of commencement of the contract. Extensions will be allowed for the following -

- 1 Unforeseen act of God - earthquakes, hurricanes, etc
- 2 Wet weather
- 3 Special agreement with Owner about completion date stated prior to signing of contract, appertaining

to contractor's work commitments at the time of signing the contract

1/6

PERMIT AND FEES

The Contractor shall obtain all permits from, and pay all fees demanded by local authorities before commencement of work. This clause shall not apply for the arrangement and payment of the inspection and valuation by the lending institution in respect of progress payments. In the event of additional work being required by the local authority, the requisition must be made in writing by the authority concerned and when carried out by the Contractor is subject to payment by the Owner as an extra item. Where a road crossing is called for by the local authority, any fees arising shall be the responsibility of the owner and do not form part of the building contract.

1/7

MATERIAL AND SPECIFICATION

Should any of the materials specified for this contract be unprocurable at the time of purchase, negotiations shall be made for the provision of substitutes. Before any such substitutes are included in the building, the approval of the Owner must be obtained. The price difference resulting from the inclusion of any substitute shall be agreed before the respective work is commenced. Any substitute must also be accepted to the local authority. Any price variation will be credited or charged as an extra at the completion of the job.

All materials placed on site by the Contractor for the proposed building, remain the property of the Contractor in the case of not being used. All waste material and boxing remain the property of the Contractor and shall be removed by him within 14 days of completion of the said building. Any delay in procuring of materials shall be taken into consideration on the contract completion date.

1/8

MAINTENANCE

The contractor shall maintain the work carried out for a period of 31 days after completion of the contract. During that period the contractor shall make good all defects in any part of any trade to a workmanlike standard. Maintenance after the stated period is entirely at the discretion of the Contractor.

1/9

P C ITEMS

The initials 'P C' (prime Cost) are the figures charged to the Contractor.

All items in the contract referred to as P C items shall include a 10% mark-up for the handling and co-ordination of the same.

The P C items allowed in this contract are as follows

Cooker	P C	_____
Heating or Visor fire	P C	_____

Drainlaying	P C	_____
Wall paper	P C	_____

1/10 CLEARING UP

The Contractor is responsible for leaving the house broom clean

The site is to be relieved of all building components and general rubbish acquired during the contract period

1/11 SUB-CONTRACTORS

All sub-contractors shall be engaged and supervised by the building contractor

Every sub-contractor jointly and separately shall collaborate, wait on, assist and render all necessary assistance to complementary trades

Additional work or adjustments must be made with the building contractor

Alterations made by the client with the sub-contractor will not be the responsibility of the building contractor (Refer to Extra Work)

The individual sub-contracts as itemised in the specification are respectively the responsibility of the sub-contractor under which they are listed

Any sub-contractor working on the contract without the relevant set of plans and specifications does so at his own risk, and errors must be rectified at his expense

2 EARTHWORKS AND SITE PREPARATION

2/1 SETTING OUT

The Owner shall be responsible for the locating and clear flagging of all survey pegs before the setting out of the building on the site

The Contractor will be responsible for the accurate setting out of all work to the dimensions shown on the drawings

The Contractor will be required to make good at his own expense any errors which may occur in the setting out of all work

2/2 LEVELS

Foundation heights shown on plan are approximate only

2/3 TEMPORARY SERVICES

Water A Toby box should be on every section
In the event of water not being supplied any additional arrangements made by the Contractor will be charged as an extra

Electric Power The Contractor is responsible for the supply of electric power to the building site

2/4 SITE PREPARATION

Excavation of the building site, if required, shall be arranged by the Contractor but if the cost is not included in the contract, an extra charge will be made

The Contractor is responsible for the supervision of the excavation and the progress of levels to establish the required platform In the event of excess excavation the Contractor will make good any damage at his cost For the purpose of this contract, soil conditions are taken to be solid ground approved by local authority

2/5 CLEARING OF SITE

The Contractor shall arrange and pay charges for the clearing of the building site of vegetation, scrub, trees, etc which encroach on the building platform

2/6 SITE ACCESS

All building sites should have access suitable for heavy vehicles If this is not the case, the responsibility of providing access rests with the Owner and access should be supplied at their cost prior to commencement of building

2/7 FOOTPATH DAMAGE

The Contractor will be responsible for any damage to footpaths and/or road crossings, resulting from any

vehicle used by him or his sub-trades, or delivery vehicles of materials ordered by him, providing such crossings are constructed to an acceptable standard

CONCRFTOR

PILE FOUNDATION

3A/1 MATERIALS

Aggregate shall be sharp, clean sand and crushed hard metal or river shingle, free from decomposable matter and of a size to pass through a 25mm grid

3A/2 MIX

Mix concrete thoroughly in a mechanical mixer for not less than 2 minutes, add sufficient water to give a stiff workable mixture

Concrete throughout shall be composed of 1 part cement to 4 parts of crushed metal and 2 parts of sand, or builders mix

3A/3 FOOTINGS

All pipe footings shall be not less than 300 x 300 x 150mm of concrete

3A/4 FILES

All piles to be 200 x 200mm set not less than 300mm in the ground in concrete footings

6/1

TIMBER GENERALLY

All timber must be the best of its class, free from large, loose or dead knots and wancy edges, suitable for its purpose and in as long lengths as possible, in keeping with NZSS 169 Classification and Grading of New Zealand Building Timbers

6/2

SEASONING

All timber must be as well seasoned as procurable. All joinery and dressing timbers shall be thoroughly air-seasoned or kiln dried (provided it is not air-dried) and all machined stuff shall be dry run. Flooring must be stacked on the site in a manner to allow a maximum circulation of air and shedding of water as soon as possible after the signing of the Contract and must be suitably protected from the weather. See NZSS 632, Kiln Drying of Timber

6/3

DIMENSIONS

All timbers must be true and square to full dimensions shown on the drawings, or as specified

6/4

WORKMANSHIP

The whole of the Carpenter and Joiner's work must be framed, trussed, braced and assembled in a workman-like manner and in accordance with the best trade practice. See NZSS 1900, Chapter 6.1 Construction requirements for buildings not requiring specific design. Timber. This section of the Model Building By-law sets out the main requirements of timber construction in New Zealand. All joinery must be constructed according to best joinery practice, by mortice and tenon, dovetail, tongue-and-groove, mitres, etc. All exposed nailing must be well punched. The cutting or checking of framing timbers must be reduced to a minimum.

6/5

BUILDERS' IRONMONGERY

The Contractor shall provide all nails, brads, screws, bolts and other ironmongery required. Nails for weatherboarding shall be 75 mm and those for flooring shall be 60mm floor brads. Galvanised nails must be used externally and in redwood, cedar or totara timbers. All interior and exterior finishing work shall be punch nailed.

6/6

SCHEDULE OF TIMBERS

The following is the list of available timbers in Radiata Pine in grades to meet the requirements of the Housing Corporation and other lending institutions

<u>Designation</u>	<u>Size</u>	<u>Grade</u>
Jack studs & sleeper plates	100 x 75mm	
Foundation bracing	100 x 50mm	
Floor joists generally	150 x 50mm	
Top and bottom plates	100 x 50mm	
Studs, externally, generally	100 x 50mm	
Studs, internally, generally	100 x 50mm	
Or in non-load-bearing partitions	75 x 50mm	
Studs to openings over 940mm	100 x 75mm	
Beams to openings (Sizes as previous schedule, Beams of 125mm or more depth may be formed with 50mm members well spiked)		Treated No 1 framing grade of Radiata Pine (Note 1 certain amount of treated No 2 framing grade may be included This shall be regarded at the site by cutting shorter lengths free of imperfections within the grade, for use as noggings, etc
Ceiling joists generally	100 x 50mm	
Runners where joists span up to 3660mm -		
Runners spanning up to 2440mm	100 x 50mm	
Runners spanning up to 3660mm	125 x 50mm	
Runners spanning over 3660mm	150 x 50mm	
Diagonal braces (cut flush)	150 x 25mm	
Or diagonal braces (solid)	100 x 50mm	
And on minor partitions	75 x 50mm	
Noggings, wall (load bearing)	100 x 50mm	
Noggings, wall, minor	75 x 50mm	
Noggings, ceiling	75 x 50mm	
Rafters	100 x 50mm	
Ridges and hips	200 x 25mm	
Valley Boards	150 x 25mm	
Tiling battens	50 x 25mm	
Rafter stringers	100 x 75mm	
Trimmers & trimmer joists to be same depth but 25mm thicker		
Roof struts	100 x 50mm	
Collar ties	150 x 25mm	
Hangers	100 x 25mm	
Dragon ties	125 x 50mm	
Eaves framing generally	75 x 50mm	
Sarking close - t & g ex	150 x 25mm	Treated merchantable grade

INTERIOR FINISHING TIMBERS -

Flooring - t & g ex	100 x 25mm	Kiln dried treated dressing grade of Rad Pine Exclude spike knots and other knots more than $\frac{1}{3}$ width of board
Architraves ex	75 x 25mm	Kiln dried, dressing grade
Skirtings ex	75 x 25mm	of Rad Pine interior fin-
Shelving ex	225 x 25mm	ishing purposes Rad Pine
and 305 x 25mm		or Pinex Pine is suited to all natural lustre of the wood lends itself to clear finishes

FRAMING

(a) Generally Unless otherwise mentioned all framing timbers shall be spaced 450mm centres. The whole of the framework is to be well and properly braced, and securely spiked together. All plates and sleepers shall be halved together at all joints and angles, and dove-tailed halved at all partition intersections.

(b) Floor-framing Frame for flooring shall be 100 x 75mm sleepers set on edge spaced at not more than 1370mm for span of sleepers and 1980mm between sleepers for span of joists. Floor joists shall be gauged over sleepers to a uniform level, and with laps not less than 150mm securely spiked together.

(c) Wall-framing All wall-framing shall be braced with flush braces cut in at 45° or as near as possible and with not less than one brace to each bay. Where this is not practicable cut-in dog-leg bracing as required. All external angles shall be framed with 3 studs, and all angles and intersections shall be blocked and spiked together with 50mm packing blocks at not more than 450mm. Three rows of noggings shall be provided to all height sections of wall.

(d) Foundation Framing shall have jack studs in rows not more than 1980mm between rows of sleepers and 1350mm alongside sleepers braced where directed with 100 x 50mm. Foundation blocks under each stud (see Concretor) shall be covered with three-ply malthoid and stapled securely to timber with wire ties.

(e) Baseboards Fix 100 x 25mm sawn baseboards with a 15mm gap to concrete piles keeping boards true and level. Step to suit ground line as required. Provide space for trapdoor as detailed below.

(f) Trapdoor A trapdoor 760mm wide shall be provided in a convenient position to allow access to the foundation.

The door will be hung on two galvanised 'T' hinges with galvanised screws.

A galvanised padbolt will be the locking device.

(g) Alternatively, if on drawings fix 50 x 25mm battens to concrete piles and fix 4 75mm asbestos to same neatly jointed with PVC profiles ensuring that the lower edge of all asbestos is buried 50mm into the ground.

Conventional Roof

(hA) Ceiling Framing Ceiling joists shall be spaced 508mm centres well spiked to wall plates and to foot of rafters. Joists spanning more than 2286mm shall be secured to 150 x 40mm stiffeners, well spiked to 100 x 25mm hangers on the alternate side of stiffeners. Between ceiling joists 50 x 50mm noggings shall be cut in as required for cornices, etc., and at all edges of ceiling sheets. In no case shall noggings be more than 1030mm apart.

6/8A

Fibrous or Weatherside Planking

Where shown on the elevations fix an approved brand of planking over a good quality building paper laid horizontally with a lap of 50mm. Use either a mitred or a PVC profiled joint taking care to stagger all joints in a workmanlike manner.

Fix galv iron corner profiles over all external corners ensuring a neat fit.

Install internal corner clashing where required after priming same with a suitable metal primer.

Flat asbestos sheeting where shown, to be fixed similar to above using PVC or aluminium extrusions to all joints unless otherwise detailed.

6/8B

Rusticated Weatherboard

Where shown on the elevations fix 150 x 25mm sawn face rusticated weatherboards with 60mm galv nails.

All external corners shall be clashed by means of a square metal section extending 25mm behind the boarding. The clashing shall be primed with an approved metal primer and will receive a coat of paint closely matched to the weatherboard colour.

All joints shall be mitred and primed or sealed before fixing over breathing type building paper. Lap all ~~paper~~ horizontally at least for 50mm to ensure weatherproofing.

6/9

FLOORING

Unless otherwise shown on the drawings the flooring shall be particle board of approved manufacture, laid in large sheets with all edges supported by noggs or joists.

Seal all edges before nailing, with a coat of polyurethane sealer or varnish. Use galv brads at 100mm centres, nails to be punched away lightly before sanding.

6/10

INTERNAL WALL LININGS

Gibraltar Board

Line all walls except where otherwise shown on the drawings with 6mm thick gibraltar board sheets, well nailed to studs with 30mm galv flatheads at approximately 100mm centres. Stop all joints with approved plaster or point to a smooth and even finish. Where possible use full length sheets to avoid horizontal joints.

Plastic veneer type wallboard

Where shown on the drawings install plastic veneered wallboards using white PVC jointing strips. Ensure that all backs of sheets are primed before installation where damp conditions are encountered.

Avoid horizontal joints as far as possible and ensure that all studs are sufficiently dried out to receive wall adhesive.

Feature panels

If allowed for in the contract and if specified in a position on the drawings install feature panelling, further described or detailed under 'special remarks'.

6/11

EXTERIOR JOINERY

Exterior joinery will be generally aluminium, bronze finished, unless otherwise shown on the plans

6/12

INTERIOR JOINERY

Interior doors shall be stock flush hollow core veneer finished of an approved make, hung with $1\frac{1}{2}$ pair of 90mm loose pins B S Butts on ex 40mm solid jambs

All door furniture will be fitted 940mm from the floor

Rebated cappings may be used throughout the house in the case of sliding doors, linen cupboard doors, wardrobe doors and any other appertures

6/13

SPECIAL REMARKS

6/14

HARDWARE

In general the hardware will be as supplied

6/15

HOT WATER CUPBOARD

The storage area in the hot water cupboard is to be provided with 5 evenly spaced shelves using slats ex 100 x 25mm with 12mm spacings

6/16

WARDROBES, COAT CUPBOARDS, etc

Frame wardrobe, linen, coats, etc , as shown with linings and doors as previously specified

Fix 19mm galv pipe at 1500mm from the floor

Install a 300 x 25mm shelf at 1700mm from floor

6/17

GLAZIER

All glass shall be of approved manufacture, and shall be cut with allowance for expansion, embedded, sprigged and back puttied

All service rooms such as Bath and W C will be glazed in obscure glass

6/18

FITTINGS

<u>Kitchen units</u>	<u>Carcasses</u>	<u>Doors</u>
	<u>Drawer fronts</u>	
	<u>Drawer handles</u>	

	<u>Door handles</u>	
	<u>Door hinges</u>	
	<u>Door catches</u>	
<u>Sink Bench</u>	<u>Type</u>	<u>Colour</u>
	<u>Size</u>	<u>No of Bowls</u>
<u>Dresser Tops</u>		<u>Colour</u>
<u>Laundry Tub</u>	<u>Type</u>	<u>Fixing</u>
<u>Vanity Unit</u>	<u>Top</u>	<u>Colour</u>
	<u>Basin</u>	
<u>Shaving Cabinet</u>	<u>Type</u>	

Special Joinery Requirements

6/19

STEPS, DECKS AND HANDRAILS

Where shown on floor plans install steps, decks or posts and rails in tanilised treated timber of an adequate size and retention to the function Use bolts in all cases where structural strength is required Use galv metal supports where posts meet concrete pads in accordance with best trade practices
 Apply one coat of oilstain of a colour choosen by the designer

Roof Framing Frame roof with 100 x 50mm rafters at 508mm maximum centres, in single lengths and set at 30° pitch, for concrete or clay tiles, and 22½° for corrugated asbestos roofing, birds mouthed over and securely fixed to wall plates. Extend rafters to give eaves projection of 530mm beyond brick veneer walls. Frame for flat soffitt to eaves with 75 x 50mm bearers and 150 x 30mm fascia. Strut the roof well up directly from partitions to 100 x 75mm stringers at mid points of rafters. Fix fascia board 70mm above top of rafter to give the necessary tilt to lower course of tiles. Accurately mitre all fascia boards, bed moulds and line soffitt of eaves with flat asbestos. Lining of soffitt shall be finished at edges with mould. Fix 50 x 25 mm tiling battens as required for the setting out of the tiled roofing and securely nail with 50mm galv nails. Cut in valley boards as required to form valleys between roofs. Trim out for chimney stack with a minimum clearance of 40mm to the stack and trim out as required for any other vents, etc, passing through the roof.

Exposed rafters and beams

(hB) Place exposed rafters as dimensioned on drawings and check into main ridge beam.

Machine dress rafters only. Apply one coat of stain to all exposed work before placing ceiling lining. Fix to top plate with metal type fasteners to manufacturers specification.

Ceilings Install sheet material as shown on drawings between rafters at fix centres only to purlins above. Support edges with prestained angle beams after completion of painting sheets.

Roof battens or purlins over Fix purlins (dimensioned on drawings) to rafters at centres specified by roofing manufacturer.

(hC) Sloping Ceilings

Frame up sloping ceilings with 150 x 50mm rafters, at 600mm centres or as otherwise shown on drawings. Nogg between rafters with 50 x 50mm battens at no more than 750mm centres.

Fix purlins (dimensioned on drawings) to rafters at centres specified by the roofing manufacturer.

Install ceiling sheets to underside of rafters using a PVC jointing strip. Nail to noggs using 2 40mm galv brads with dovetailing position. Punch away head slightly to allow for stopping.

Complete all ceiling with 25 x 20mm scotia neatly scribed at corners.

(hD) Flat Ceilings

Where shown on drawings install approved trusses to manufacturers specifications.

Fix purlins (dimensioned on drawings) to trusses at centres specified by the roofing manufacturer.

Fix 50 x 25mm battens to underside of trusses and install ceiling linings.

Complete ceilings at wall junctions with a 25 x 20mm angle scotia neatly scribed at corners.

7 ELECTRICIAN

7/1 MATERIALS AND GENERAL

Give all necessary notices to Electric Supply Authority and obtain any necessary permits. Materials must conform to the regulations of the Supply Authority and Local Authority.

7/2 WIRING

Wire the electric system with tough plastic sheathed and insulated cables (rubber insulated cables to NZSS 1950 and PVC insulated cables to NZSS 1908). Conceal as much as possible. Flush plates, etc., shall be Ivory coloured plastic.

7/3 SWITCHBOARD

Provide and install in position to be approved an external flush switchboard with cover. Fit meters and drill as required. Provide and wire all necessary equipment. Include at least two fuses for the lighting circuit. Label each item of equipment.

7/4 SWITCHES, PLUGS, SOCKETS AND CEILING ROSES

All plug sockets shall be standard 10 amp 3-pin flush type switches, fixed above the skirting or where otherwise required by the owner. Ceiling roses shall comply with NZSS 354. Schedule of points will be supplied by the Employer, but allow for _____ lighting points, _____ power points and range point.

General Specification All power points in lounge, dining room, bedrooms, passage and basement to be wired in 3/036 cable to require compliance with NZSS 2205 Part I (BS 3871), Miniature and moulded case circuit breakers. Any connection boxes which may be used should conform with the requirements of the electrical wiring regulations and be mounted in readily accessible positions (reg 87 1961).

7/6 RANGE

Allow the P C sum of _____ for the purchase of an electric range of approved manufacture as per NZSS 1303, Domestic electric ranges and rangettes. Provide switch as required by the Supply Authority and do not allow the flexible connection to touch the floor or be visible from the front.

7/7 WATER HEATER

Provide and connect an approved heating element of at least 1200-1500W. The heating element should comply with NZSS 918, Immersion Heaters for thermal storage electric water heaters and the thermostat should comply with NZSS 2149. Immersion type thermostats for thermal storage electric water heaters. Immersion type thermostat for thermal storage electric water-

heaters and approved thermostat, both to be fitted to the hot water cylinder and carry a guarantee of at least two years

7/8

WIRELESS AERIAL

Install wireless aerial of 7/0 029 bare stranded copper wire, supported and strained in roof, at least 8 29 metres long and fixed on insulators in an approved manner, and to which shall be sweated a lead of 7/0 029 V I R cable connected to a 2-pin aerial plug with bakelite flush plate neatly engraved "Aerial" and "Earth" and located as directed Run and couple similar earth wire to nearest cold water pipe with approved earthing clip

7/9

COMPLETION

Test electrical installation on completion and leave in perfect working order

8 ROOFER

Install roofing material of the type indicated on the drawings following the specifications of the roofing manufacturer as to installation and fixing

For this contract the roofing shall be

Insulation

All roofs shall be insulated with an approved type of single foil insulated paper on 50mm hole wire netting tautly stretched and fixed to purlins All paper shall be lapped at least 50mm horizontally

9/1 GENERAL

Provide all materials, labour, and plant necessary to complete the work as set out in this specification and shown on the drawings

All work shall be left in a thoroughly sound and water-tight condition and in perfect working order as the case may be

All sanitary connections etc, shall be in accordance with the requirements of the local authorities

The work shall be carried out by a competent tradesman possessing the qualifications as laid down in specification 15 and 16 of NZSS 671, and in accordance with this specification, using materials consistent with sound trade practice, and in no case inferior to any requirements of the Section 1 and Sections 26 - 91 inclusive of NZSS 671

The plumber shall give all the necessary notices to the local authority and shall ensure the plumbing permit is granted before starting work

Waterpipes and tubes shall be set out in straight runs of even gradients, avoiding all places where airlocks are likely to occur

Use easy bends and avoid elbow fittings

Copper tubing is to be secured in position by copper straps

All piping to be concealed

In the event of any piping being exposed, such piping is to be of 12mm diameter chrome plate on copper pipe with chrome fittings where visible

9/2 FLASHINGS

Flash as necessary to render building watertight

All flashings shall be accurately fitted to work and shall be machine bent and cut in lengths as long as possible

All joints shall be well lapped and fixed with 19mm flat head galv nails at 450mm centres

9/3 VALLEYS

Valleys shall be formed out of 24 gauge galvanised iron to form a 100 x 50mm trough at intersections of angle roofs

9/4 SPOUTING AND DOWNPIPES

Fit spouting and downpipes to manufacturer's specifications, and/or in compliance with regulations set down by the local specifying authority

All spouting shall be fixed straight and level

Downpipes positioned where marked on plan

9/5 VENTS AND OIL STACK

Vent pipes shall be 75mm diameter PVC pipe in one length
Suitable fixing and flashings will be the responsibility of
the plumber Fix wire cage at top

9/6 WASTES

Join W C pans to drain above the level of the floor with
a rubber ring sealed with mastic or other approved material
which will provide a non rigid gas tight joint

Fix basin with 30mm PVC traps and waste pipes to floor
level with an approved floor flange

Bath, shower and wash tub wastes shall be 40mm diameter

Sink wastes shall not be less than 40mm diameter

All waste pipes throughout job will be PVC piping or/as
approved by local authority

9/7 HOSE TAP

Supply and fit two brass cocks per dwelling in the
position shown on plan

9/8 COLD WATER SUPPLY

Lay cold water supply from supply point in 12mm diameter
PVC pipe buried not less than 600mm

Take 12mm copper branches to bath, basin, sink, vanity,
each compartment of wash tubs, W C flushing cistern and to
exterior hose taps

Connect to storage tank and to Hot water cylinder with
12mm copper pipe

9/9 HOT WATER SUPPLY

Supply and install above floor level a general purpose
hot water cylinder complete with pressure control valve

Run a 19mm over-flow from cylinder to outside

Supply and fit maximum allowance element and thermostat to
cylinder

From cylinder, connect in 12mm to laundry tub, shower,
bath, sink bench Run pipes in copper as for cold water and
wrap in felt

9/10 SANITARY FITTINGS

As shown on floor plan and schedule

Fix PVC white cistern

W C pan shall be white glazed earthenware fitted with
white PVC seat

9/11 FIXING

The sinktop, tub, and all vanity units will be supplied
by the joiner and the plumber is responsible for connecting
only

9/12

THE FOLLOWING ITEMS ARE INCLUDED IN THE CONTRACT

<u>SINK TOP</u>	<u>TYPE</u> <u>(Supplied by Joiner)</u>	
	<u>Bowl type</u>	<u>No. of bowls</u>
<u>SINK TAPS</u>	<u>Type</u>	<u>Faucet</u>
<u>HOT WATER CYLINDER</u>	<u>Type</u>	<u>Capacity</u>
<u>LAUNDRY TUB</u>	<u>Type</u>	<u>Fixing</u>
<u>OWNER'S WASHING MACHINE</u>	<u>Type</u>	<u>Taps & Waste</u>
<u>BATH</u>	<u>Make</u>	<u>Size</u>
<u>HANDBASIN</u>	<u>Make</u>	<u>Size</u>
	<u>Basin Fixing</u>	
<u>VANITY UNIT</u>	<u>Top</u> <u>(Supplied by Joiner)</u>	<u>Basin</u>
<u>SHOWER BASE</u>	<u>Type</u>	<u>Size</u>
<u>SHOWER MIXER</u>	<u>Type</u>	<u>Rose</u>
<u>SPOUTTING AND DRAIN PIPES</u>		

SPECIAL PLUMBING REQUIREMENTS

10/1 PRELIMINARY

The whole of the drainage work shall be carried out in accordance with the by-laws of the local authority, and to the satisfaction of the local authority inspector

10/2 GENERAL

Provide all fittings necessary to complete the work and lay all drains to an even and consistent fall not less than 1 in 40

10/3 SANITARY FITTINGS

Fit W C pan to sewer connections
Connect up vent pipes fixed by the plumber

10/4 SLWER

Drains shall be laid in a straight line and to even gradients, properly cleaned out as the work proceeds
Fit 100mm GEW gulley traps to take wastes and 100mm bends to take soil pipe, terminal vent, etc
Gulley traps shall have concrete curbs and C I gratings
All work to be done to the local authorities standards

10/5 MATERIALS

Pipes shall be supplied to the local authority requirements
Bends and gulley traps to be haunched on a 100mm concrete pad
Provide minimum of 300mm of cover over highest point of drains, or alternatively provide 75mm concrete cover over top of drains

10/6 SEPTIC TANK

Build a rectangular septic tank in concrete to the requirements of the NZSS 758 of 1951

10/7 EFFLUENT DRAIN

From the outlets of the septic tank lay field tile drain to an even grade
Lay drain on 150mm bed of 75mm to 40mm clean shingle, discharging into a soak pit

10/8 STORMWATER

From all downpipes, take stormwater drains to 900mm diameter soak holes

10/9 SEWERAGE AND STORMWATER

Generally allowed for in contract unless specifically shown under P C sums

11 PAINTER & PAPERHANGER

11/1 MATERIALS

All materials used in this trade must be the best of their respective kinds See NZSS 2239 Recommendations for the painting of buildings

11/2 WORKMANSHIP

Workmanship must be of the highest standard carried out by skilled tradesmen and finished to the Architect's satisfaction or approval No painting must be done on damp surfaces or unseasoned timbers, and no exterior painting must be done in damp, frosty or unsuitable weather

11/3 HARDWARE

All locks and fastenings must be removed while painting work is in progress, and refixed on completion of same

11/4 TINTS

All colours and tints shall be selected, and undercoats must vary slightly in shade to indicate the number of coats and must be suited to the particular finishing coat to be used

11/5 PROTECTION OF WORK

The Contractor must take adequate precaution during and after painting operations, to protect his work from dust, dirt or any disfiguration whatsoever, and provision must also be made against paints or stains marking floors or other work

11/6 EXTERNAL WORK

Wooden window and exterior door frames shall have all joints primed with genuine red lead and pure boiled oil priming before assembling, and must be similarly primed all over before fixing into the building All vertical boarding close to front entrance must be similarly treated

All Exterior Woodwork usually painted, whether particularly mentioned or not, shall be painted as follows -

First coat Prime with genuine red lead and boiled oil priming Stop all joints, nail holes, etc , with best linseed oil putty

Second coat Shall be genuine white lead and oil paint of approved manufacture in tints as selected Paint all glazing putties

Third coat Finish with an approved manufactured prepared paint in colours as selected Any tinting pigments required shall be of the highest grade Note Tops, bottoms and edges of all sashes and exterior doors shall be included in the above Specification

Front Entrance Door Prime as specified above, then apply one coat of approved enamel undercoating reduced as directed and finish with one coat of approved high gloss enamel

Cast Iron Vent where exposed shall be painted one coat aluminium paint and finished as for second and third coats on woodwork

Valleys and Flashings Paint all valleys and flashings including undersides and laps with one good coat of 3 1 white and red lead priming, and finish all exposed surfaces of same with second and third coats as specified for exterior woodwork

11/7 PICKING OUT

Allow for all cutting in against other work to be carefully and neatly done, and provide for picking out of entrance doors, window sashes and their frames in various colours as selected

11/8 INTERNAL WOODWORK KITCHEN, LAUNDRY, BATHROOM

Prime all woodwork with one coat of approved priming, stop with best linseed oil putty, and paint with two coats approved undercoating. Finish over the whole of the work with one good coat of approved high gloss enamel tinted to approval. The backs and edges of all cupboard doors and the front edges of all shelving in these rooms and the whole interior of the medicine cabinet including its shelves shall be included in the above specification. The backs of all other cupboards and the undersides of shelving in same shall be painted as above, but omitting final coat of enamel. All interior metal work (not finishing hardware) shall be treated similarly to surrounding work in which it occurs

11/9 SASHES AND FRAMES

Sashes and frames as well as other work generally in wood shall be painted one coat priming as specified for exterior work. Stop all nail holes, etc, with the best linseed oil putty and finish with two coats approved undercoating and one good finishing coat of approved semi-gloss enamel tinted to approval. All other cupboards, etc, shall be finished internally with one good coat boiled linseed oil. W R and bookshelves as for sashes inside. Window sill boards, mantel shelf shall be as specified for sashes and frames, etc, but shall be finished with a further coat of approved weatherproof varnish

11/10 GLAZIER

Sashes generally shall be glazed by an experienced glazier firm with 18 to 24 oz glass depending on size of glass

Paperhanging All walls except those specified above (or any other which the Owner may specify) shall be prepared with one coat of glue size ready for papering. The paperhanger must ensure that all walls are free from blemish of any sort, that will show on the finished work. Allow the sum of _____ average per roll for the purchase of wallpapers as selected. All papers

shall be fully jointed and hung true and plumb and neatly cut to all architraves, skirtings, fittings, etc , Cold water paste, with an approved fungicide mixed with it, only shall be used