

W H A K A T A N E C O U N T Y C O U N C I L

APPLICATION FOR BUILDING PERMIT

Office Use Only

File No:
 Permit No: A050437
 Issued: 10-2-64
 Received: 3-2-64

The Building Inspector,
 Whakatane County Council.

(Date) 29/Jan 1964

I HEREBY APPLY for permission to carry out the work described in the following particulars and in accordance with the plans and specifications submitted, in duplicate, herewith (plan to show position of building with regard to section).

Owner's Name: MR J PITHIE Address: Brigade St - Whakatane

Builder's Name: Smith & Mason Address: PO Box 210 Whakatane

Location of Proposed Work: OH

Purpose for which Building is to be used: Dwelling

Estimated Value: Building	£ 3.900...	Fee £ 15-0-0
Drainage and/or Plumbing	£ ..400...	Fee £ 3-0-0
Total	£ 4.300...	Fee £ 18-0-0

Section No. (See Rate Demand): PART OF LAND CTY 2B 10/10/141 D.P. D.P.S. 8517

Block No: TII Survey District: WAIMANA Roll No: 246 B2, B1

Area of Section: 32 PERCHES Width of frontage: 60'

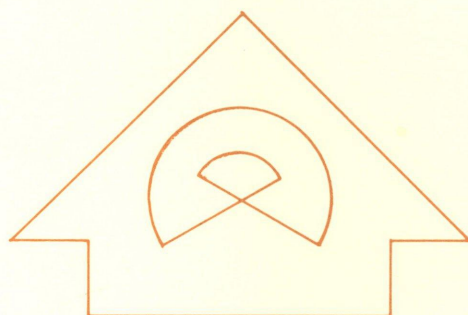
No. of persons to be Accommodated: _____ Male: _____ Female: _____

Area of Building: 960 Sq.ft. Ceiling Height: 8'

	SIZE OF TIMBER.	TYPE OF TIMBER.	SPACING.
Foundations:	<u>concrete</u>	<u>Block Reinforced</u>	<u>on concrete footing</u>
Stringers:	<u>4"x3"</u>	<u>Rail</u>	<u>7'</u>
Bottom Plates:	<u>4"x2"</u>		<u>8'</u>
Top Plates:	<u>4"x2"</u>		<u>8'</u>
Joists:	<u>6"x2" & 12"x2"</u>		<u>18"</u>
Rafters:	<u>4"x2"</u>		<u>2'6"</u>
Perkins:	<u>3"x2"</u>		<u>3'</u>
Studs:	<u>4"x2" & 3"x2"</u>		<u>18"</u>
Nogging:	<u>4"x2" & 3"x2"</u>		<u>2'3"</u>
Bracing:	<u>4"x1" & 6"x1"</u>		<u>15'</u>
Flooring:	<u>4"x1"</u>		
Exterior Sheathing:	<u>Brick</u>		
Internal Lining:	<u>Lit Board</u>		
Roofing:	<u>Iron</u>		
Piles:	<u>Drain</u>		
Chimney:			
Windows:	<u>as Plan</u>		
Sanitary Fittings:	<u>Wc Stoven & Sink & Basin</u>		

APPROVED:
 (Building Inspector)
 See back for schedule of fees.

Smith
 (Signature of Applicant)



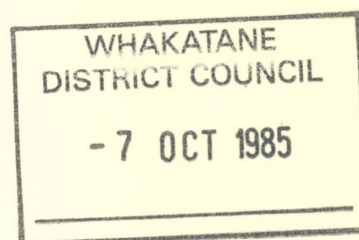
BURGESS DESIGN

SPECIFICATION

FOR: A.G. & J.M. PORTEOUS,

AT: HARBOUR ROAD, OHOE.

Plan Ref Nos



GRAEME BURGESS
ARCHITECTURAL DRAUGHTSMAN,
1 TE AKAU STREET,
OHOPE BEACH.

burgess design

DESIGN PARAMETERS ARE :-

FOR :- PORTICOUS — OHOPE

BEAM SPAN : 3050
WHERE LOCATED : External
MATERIAL : GREEN GAUGED.
SUPPORTING : DECK.
ROOF DIMENSIONS : —
ROOF TYPE : —
DESIGN SNOW LOAD : —
TOTAL JOIST SPAN : 6.800
FLOOR LIVE LOAD : 2 kpa — 6.90
FLOOR DEAD LOAD : — 1.04
INTERNAL WALLS :
EXTERNAL WALLS :

Total 7.94

Δ

∴ 300 x 100 GREEN GAUGED
TIMBER OK.

FROM TABLE 2.9 B&N 2'

PHONE 802 OHOPE

SPECIFICATION

OF WORK TO BE DONE
AND MATERIALS TO BE USED
IN THE ERECTION AND
COMPLETION OF:-

- PROPOSED

FOR

AT

BURGESS DESIGN

The designer will not be responsible for any defects or mismanagement on the part of the contractor or sub-contractor not using NEW ZEALAND STANDARDS for fabrication of any such item used in the completion of the contract.

NZS 873 : 1969 Waterproof building papers.

NZS 1900 : - - Model building bylaw

Chapter 1 : 1964 Preliminary

Chapter 2 : 1964 Building Permits

Chapter 3 : 1965 General Requirements

Chapter 4 : 1964 Residential Buildings

Chapter 5 : 1963 Fire-resisting construction and means of egress

Chapter 6 : - - Construction requirements for buildings not requiring specific design -

Division 6.1: 1978 Timber

Division 6.2: 1964 Masonry

Chapter 9 : - - Design and construction -

Division 9.2: 1964 Masonry

Division 9.3: 1981 Concrete

Chapter 10: 1964 Non-structural external wallings

NZS 2295 : 1969 Building papers (breather type)

NZS 3204 : 1979 Asbestos cement sheets

NZS 3403 : 1978 Hot-dip galvanised corrugated steel sheet for building purposes

NZS 3411 : 1978 Hot-dipped zinc-coated steel coil and cut lengths

NZS 3601 : 1973 Metric dimensions for timber

NZS 3602 : 1975 Code of practice for specifying timber and wood-based products for use in building

*NZS 3603: 000 Timber design code

NZS 3604 : 1981 Light timber frame construction

NZS 3605 : 1977 Load bearing round timber piles and poles

NZS 3614 : 1971 The manufacture of construction plywood

NZS 3631 : 1978 Classification and grading of New Zealand timbers (National Timber Grading Rules)

NZS 4203 : 1976 Code of practice for general structural design and design loadings for buildings

NZS 4206 : 1973 Concrete interlocking roofing tiles

NZS 4211 : 1976 Performance of windows

NZS 4251 : 1974 Code of practice for solid plastering

NZS 4431 : 1978 Code of practice for earth fill for residential development

NZS 5902 : 1976 Building drawing practice

NZSR 22 : 1966 The classification of roofing felts and the laying of built-up roofing (asphaltic bitumen)

NZS 3606 : 1979 The manufacture of glue laminated timber

NZS 4711 : Qualification tests metal-arc welders

MP 3801 : 1972 A guide to the adoption of the model building bylaw (NZS 1900) by local authorities using the standard adoption and annual updating procedures.

PRELIMINARY AND GENERAL

This and the succeeding pages form the specification referred to in our agreement dated this ... day of19.....

EMPLOYER:

CONTRACTOR:

WITNESS:

CONTRACT:

This contract includes the supply and delivery of all materials, labour, fittings, tools, plant etc., necessary for the due and property completion of the building as shown on the drawings and herein specified, in a thorough and workmanlike manner, in strict accordance with the Local By-laws and to whatever regulations made by those loaning monies to complete this contract.

PERMITS:

Contractor to comply with the Labour and Building By-laws of the district, to apply for and obtain all the necessary permits and to pay all fees for same, unless otherwise mentioned.

PROVIDE AND FIX:

The words "provide" and "fix" shall be construed to mean "provide and fix" where mentioned separately unless otherwise mentioned.

INSURANCE:

The Contractor to have all his employees covered against accident by an Employer's Liability policy and to take out insurance against fire for a sum sufficient to cover the full amount of the Contract sum, both policies to remain in force until the building is taken over by the owner.

WORKMANSHIP:

All workmanship must be careful, thorough and in accordance with the best trade practice and all materials must be of the best of their respective kinds unless otherwise specified.

INTERPRETATION:

Work or Materials shown on the drawings or specified and not shown, must be supplied as though both shown and specified. Materials shown but not specified must be of the kinds commonly employed for the service they are intended to perform. All figured dimensions shall supercede those to a smaller scale. The Contractor shall be held responsible for the setting out of all work and he shall make good at his own expense any errors that occur through his lack of checking or faulty workmanship.

STABILITY:

The Contractor shall carefully brace and support all parts of his work against damage by wind and also protect same from damage by water. He shall also make good damage to adjoining property of every kind arising out of his works.

CLEANING:

The Contractor, at the conclusion of the Contract, shall have all ceilings, walls and woodwork carefully dusted and wiped down, windows washed and glass free from scratches, floors brushed and wiped down and the entire building left in perfectly clean condition for occupation.

MAINTENANCE:

Period to be thirty days after the Owner has taken possession. Any defects in materials, workmanship or any part or parts that require replacing or adjusting, which have been included in this Contract, shall be adjusted or replaced as specified in this Specification at the Contractor's own expense.

MATERIALS:

Any materials herein specified that are not procurable at the time they are required, thus tending to retard the progress of the Contract, may be substituted with other similar materials, providing that the substituted materials conform to the local By-laws. The Contractor is first to notify the Owner of any change proposed and at the completion of the Contract will adjust any difference in cost.

CONTINGENCIES:

Provision is to be made by the Builder and Owner to meet any contingencies that may arise due to the fluctuations in the prices of various materials or labour. Should there be either a rise or fall in the price of labour or materials, from the date of the tender is submitted until final payment, an adjustment to the contract price is to be made accordingly provided that the Contract price has been affected by such rise or fall in prices. The sum of \$ is allowed in the Contract price as a contingency Fund.

VISIT SITE:

Tenderers shall visit the site and ascertain the nature and extent of the work and the rights and interests that may be interfered with and any other matter that may influence the making up of a tender or the carrying out of the Contract in its entirety. The levels shown on the drawings are approximately correct but tenderers shall verify these as no claims for extras will be allowed on the basis of incorrect levels shown.

WORKMANSHIP:

All work shall be carried out in accordance with the best trade practice, in strict conformity with the drawings and specifications and to the satisfaction of the Owners.

All defective or damaged work shall be made good to the satisfaction of the Owner.

EXCAVATOR:

P & G

Read the P & G and note all clauses of the specification where they apply to this trade.

LEVELS

Levels shown are approximately correct, but in all cases the foundation shall be taken to a solid bottom, check all levels and make allowances accordingly.

CLEARING BUILDING AREA AND BULK EXCAVATION:

Clean off all vegetation and 150mm top soil over building area and deposit on site as directed.

Excavated material to be deposited as directed on site or if directed off site an extra will be allowed by the Contractor.

BUILDING EXCAVATION:

Excavate for all foundations to be minimum depth shown and deeper where required due to the nature of the country.

Excavate for basement field tile drains if required, stormwater and soil drains etc., to give the required depths and falls. Fill and well ram on completion.

HARDFILL:

Under all concrete floors provide a minimum thickness of 150mm of 75mm graded down clean river shingle well compacted and binded with sand to a corrected level.

FIELD TILE TRENCHES:

Provide for 100mm diameter tile trench bedded in river shingle to correct level.

REVET AND MAINTAIN:

Secure and maintain the sides of all excavations and keep them clear of water and fallen materials.

CONCRETOR

PRELIMINARY AND GENERAL:

Read and note all claims under Preliminary and General of this specification where they apply to this trade.

CEMENT:

All cement used shall be N.Z. Portland Cement conforming in every respect to the requirements relevant N.Z.S.S. for this grade. Cement shall be stored, handled and protected against moisture, contamination caking etc. Any such cement shall be removed immediately from the site.

AGGREGATES:

Aggregates shall consist of natural sand, gravel and/or crushed stone, hard strong and durable, and shall be clean and free from vegetable clay or other matter. Fine aggregate shall be of such size that it will pass through a 4.5mm B.S.S. Coarse aggregate shall be of such size that it will be retained on a 4.5mm B.S.S. Maximum size shall be 19mm 5% or less being retained.

BUILDERS MIX:

May be used if by mutual agreement of Contractor and Owner.

PROPORTIONS:

Water content, cement content and minimum content shall be controlled to comply with relevant N.Z.S.S. Minimum crushing strength 2,000 lb. per sq. inch. If concrete from an approved Pre Mix Plant is used, concrete will be 2,000lb per sq. inch (17.5 M.P.A. at 28 days).

FORMWORK:

Formwork shall be so designed and constructed from minimum 1" thick timber, that it can be removed without damage or straining. All formwork shall be fixed true and level and securely braced and trued up before concrete is deposited.

REMOVAL OF FORMWORK:

	<u>Cold Weather</u>	<u>Temperate Weather</u>
Bank sides and walls and suspended slabs	6 days	2 days
Terraces	10 days	5 days

Provide in the boxing for the building in of all wiring used in setting up bolts for fixing, metal work, i.e. sleeves, pipes, lugs etc.

FOOTINGS:

Refer to drawing for size and reinforcing.

CONCRETE FLOOR:

To be 100mm thick slab reinforced with 6:6:8 H.R.C. mesh on .250 micron polythene. Tape all joints with 50mm tape. Allow polythene to tack up exterior framing 300mm.

TERRACE:

To be 100mm thick slab reinforced with 6:6:8 H.R.C. mesh. Allow for fall of 25mm-3000m.

REINFORCEMENT:

All reinforcement shall comply with the conditions and tests laid down in the N.Z. Standard Specification for Steel. Reinforcement shall be carefully formed in a thoroughly workmanlike manner. Immediately before the concrete is deposited, all reinforcement shall be clean and free from all loose mill scale dust and loose rust, and coatings such as paint, oil or anything which will prevent a perfect bond.

HOCKS AND LAPS:

Shall be standard, 4 diameters internal diameter with straight and equal to 4 diameters, or as shown on the drawings.

PLACING:

Reinforcement shall be accurately placed and shall be accurately held in position in approved manner. Reinforcement is to be tightly tied together at sufficient intersections with soft iron wire of not less than 18 guage, so that there shall be no displacement when the concrete is deposited and compacted.

BUILD-IN BOLTS ETC:

Build-in all bolts for fixing of wood plates at a maximum spacing of 1.4m c.c. Alternatively "Ramset" fixings may be used, on interior walls and 10D dowels set in 75mm with 7S base angle and clinched over plate minimum of 75mm.

GROUNDING:

Build-in seasoned Heart Totara dovetailed grounds for all screws and nail fixings where bolts or "Ramset" fixings are not suitable.

WATER BARS:

Set into concrete galvanised w.i. water bars.

CARPENTER AND JOINER

PRELIMINARY AND GENERAL:

Read and note all clauses under Preliminary and General of this specification where they apply to this trade.

MATERIALS AND WORKMANSHIP:

All materials used shall be the best of their class and type specified. Any materials which in the opinion of the Owner Loan Body, or Local Council are not up to the standard to be removed immediately from the site. All work shall comply with N.Z.S.S. 3604 1981 Specification. All work shall be carried out in a workmanlike manner in accordance with best trade practice and, as or where especially specified. Any work that is intended or implied but not specifically shown or detailed and/or where necessary for the proper completion of the building shall be included.

ATTENDANCE AND PROTECTION:

Attend upon all other sub-trades providing blockings, fixing, trim, nogging as necessary for the full completion of their respective works and making good after all trades.

TIMBER:

All timber used shall be best of its kind conforming to N.Z.S.S. Classification Grading of N.Z. Building timber (national grading rule) and N.Z.S.S. CP2. (Use in building of Pinus Radiata and other Pinus species). Pinus Radiata shall be No. 1 Framing grade pressure treated Boric.

SCHEDULE OF TIMBERS:

Bearers

100 x 75	B.R.G. No. 1	Span of Bearer 1.300	Span of Joist 1.850
100 x 100	" " " " " "	1.3m	" " " 2.500

Floor Joists - As per Table 8 NZS 3604 1981

100 x 50	Boric Rad. Gauged No. 1	Span 1.750 @ 450cc.
125 x 50	" " " " " "	2.200 @ 450cc.
150 x 50	" " " " " "	2.700 @ 450cc.
200 x 50	" " " " " "	3.600 @ 450cc.
225 x 50	" " " " " "	4.100 @ 450cc.
250 x 50	" " " " " "	4.600 @ 450cc.
300 x 50	" " " " " "	5.500 @ 450cc.

Flooring:

20mm Fina Floor 3600 x 1800 or 2400 x 1200 Sheet

Plates: 100 x 50 B.R.G. No. 1

Studs: 100 x 50 " " " @ 600cc.

Nogs: 100 x 50 " " " @ 800cc.

Rafters: As per Drawings. Taken from Table 20 NZS 3604 1981.

Trusses: As per Drawings.

Posts: 100 x 100 Tan. Rad. D.4S.

Facia and Barge: 150 x 25 Huttlock Tan. Rad. or 200 x 40. See drawings for direction.

Schedule of Timbers cont..

Lintels: From Table 16 NZS 3604 1981 - Light Roof Max. Span 8m

<u>Span</u>	<u>Roof Only</u>	<u>Roof & Walls</u>	<u>Other Areas</u>
.900	100 x 100	100 x 100	100 x 100
1.200	100 x 100	100 x 100	125 x 100
1.500	100 x 100	100 x 100	150 x 100
1.800	125 x 100	125 x 100	200 x 100
2.100	150 x 100	150 x 100	250 x 100
2.400	150 x 100	200 x 100	250 x 100
2.700	200 x 100	200 x 100	300 x 100
3.000	200 x 100	200 x 100	
3.600	250 x 100	250 x 100	

Lintels: - Heavy Roof Max. Span 8m

.900	100 x 100	100 x 100	100 x 100 - .9
1.200	100 x 100	125 x 100	150 x 100 - 1.2
1.500	125 x 100	125 x 100	200 x 100 - 1.5
1.800	125 x 100	150 x 100	200 x 100 - 1.8
2.100	200 x 100	200 x 100	250 x 100 - 2.1
2.400	200 x 100	200 x 100	300 x 100 - 2.4
2.700	250 x 100	250 x 100	300 x 100 - 2.7
3.000	250 x 100	250 x 100	
3.300	250 x 100	300 x 100	
3.600	300 x 100	300 x 100	

Interior Door Jambs: Ex. 150 x 40 Rad. D.4S. Grooved

Architraves: No. 18 40mm 2 bevels Rad. D.4S.

Skirting: No. 20 60mm 1 bevel Rad. D.4S.

Scotia: No. 28 50 x 25 D.4S. Rad.

EXTERIOR JOINERY:

All exterior joinery shall be as detailed on the plan to sizes shown and shall be constructed to best trade practice. First grade Cedar and clean pine timber shall be oiled before leaving manufacturers' premises.

HARDWARE:

The Contractor to supply all the Rough Hardware for this stage of work, i.e. nails, bolts, screws etc.

FLOOR JOISTS:

As shown on plans. Gauged to even flush finish. Securely spike to bearers. Provide double joists under all main bearing walls. Use joist hangers for all butt and fixing.

PLATES:

All to be straight and true and in long lengths. Butted at all joints, 6 kn connections on all joints being 2nh pryde nail plates.

STUDS:

Stud height to be 2.450 and as shown at approx. 600 C.C. Double studs to all openings over 1.200. Check trimmers into studs 12mm where no double stud is used.

BUILDING PAPER:

Cover the whole of the exterior walls with approved building paper stapled to frame, if required.

BRACING:

Brace all interior bearing walls with Pryde angle or 6mm sheet ply cut flush in stud. Brace exterior corners where possible - see bracing schedule.

ROOF:

Roof to be framed up to pitch indicated on plans, and to detail. Properly checked, birds mouthed, and well spiked. Wire down rafters with No. 8 wire and fix with minimum of 6 staples.

TILE BATTENS:

Tile battens 50 x 40 spaced to suit tiles. (i.e. metal coated tiles).
Tile battens 50 x 50 spaced to suit tiles (i.e. concrete tiles).

EAVES:

Allow to overhang as shown on plan and line as directed.

SHEATHING:

See plan for direction.

FLOORING:

All floors to be 20mm high density particle board fixed to joists to manufacturers' instructions. Clean off all by-wood and sand off.

STAIRWAY:

To be constructed in timber with treads housed into ex 200 x 80 String. Treads to be ex 250 x 50. Refer detail.

DECK:

To be 100 x 40 Tan. Rad. timber fixed to joists. Provide timber balustrade with top ex 100 x 50, balusters ex 50 x 50 in tan. or heart timber.

NOGGING:

To be 100 x 50 at approx. 800 C.C. or 2 rows to each wall.

WALL LININGS:

Generally shall be 9.5 gibboard fixed as per N.Z.S. 3604 1981.

WARDROBES:

To be lined full height. Provide inside each with 300 x 25 full width shelf at 1700 from floor and 19mm G.I. pipe coat rail at 75mm below shelf. Provide cupboards over wardrobes where required.

LINEN CUPBOARD:

To be lined full height inside and to have 25mm shelving. Full depth for linen at approx. 375 C.C.

SINK TOPS:

Provide for standard sink top. Unit to have standard 400 x 350 S.S. Sink. Fix on unit either indicated on plan or to Owner's final approval. Units to be generally 900mm high and 500mm in depth. 90mm toe space. Provide flush cupboard doors to front and shelving to approval. Timber used in doors to be Owner's approval.

KITCHEN CUPBOARDS:

Construct cupboards and dresser units to sizes shown on plans, with doors and shelves to Owner's approval.

HOT WATER CUPBOARD:

To be constructed where shown and fitted with slat shelving above cylinder spaced at 300mm C.C. Provide suitable flush door with thermostat boxed in.

FINISHING:

Provide to windows, doors, floors and ceilings, respective sillboards, aprons, architraves, skirting, cornices as scheduled.

BATHROOM:

Provide and fix in bathroom 1 toilet cabinet 600 x 400 recessed into wall with mirrored door. Provide for S.S. Shower Tray and wall linings to Owner's approval.

METER RECESS:

Provide recess for Electric Meter Board where directed.

HARDWARE:

Allow the P.C. sum of \$ for the supply of all hardware required. Door handles, locks, window fittings, door and drawer pulls, stops, vents, angles, towel rails etc. Allow to take delivery and fix.

FLOOR COVERINGS:

Extent to be as shown on the drawings or as per Owner's instructions.

INSULATION:

In all ceiling areas place 2.2 glass fibre insulation.

In all exterior walls place 1.6 glass fibre insulation.

In ceilings 100mm loose fill insulations, which is approved by local Council, may be used in lieu of glass fibre batts.

In the event of exposed beams covered by t, v & g sarking, lay building paper over sarking and lapp 200mm. Tape all joints of building paper to minimise glass fibre filtration.

For under floor insulation on single storey buildings and two storey where there is no insulation in the basement walls, use 421 perforated sisalation dished 100mm. between joists. Lap joints 100mm. and seal with approved adhesive tape.

ROOFER

PRELIMINARY AND GENERAL:

Read and note all clauses under P & G of this specification where they apply to this trade.

TILE ROOF:

Roof to be covered with approved tiles and ridging fixed by an approved firm of roofing contractors in accordance with best trade practices.

Tiles to be fixed to purpose run battens and to carry a two year guarantee.

The colour is to be selected by the Owner.

Make of tile to be as shown on the drawings.

Roofing underlay shall be breather type building paper complying with NZS 2295 lapped not less than 75mm. at joints with the upper sheet lapped over the lower sheet and supported at no more than 300mm. centres by galvanised wire netting or other suitable corrosion-resistant material.

IRON ROOF:

Fix 26g. corrugated iron at the pitch shown on the plan.

Prime laps before fixing.

Provide 26g. galvanised iron lead edge ridging and square barge where required.

Lay roofing iron on building paper and netting.

Fix 24g. galvanised iron spouting 125 quarter round, with one down pipe per 55 square metres of roof area.

Nail every corrugation at bottom purlin to make bird proof.

GLAZIER

PRELIMINARY AND GENERAL:

Each sub-contractor must refer to all clauses of 'Preliminary and General' and consider them as being relevant to each trade.

GLASS:

All glass shall conform to the following table:-

AREA m²

Up to .325 m ²	18 oz	Clear Sheet
.3 - .8 m ²	24 oz	Clear Sheet
.8 - 1.2 m ²	32 oz	Clear Sheet
Over 1.2 m ²	6.5mm	Polished Plate
Mirrors - all sizes	6.5mm	Polished Plate
Glass sliding doors to cupboards	6.5mm if required	Polished plate
Glass	6.5mm	

Sliding doors to be

MIRRORS:

Provide and fix mirrors to bathroom cabinet door as required.

PUTTY:

All glazing to sashes and exterior doors shall be back-puttied sprigged and puttied up neatly to approval.

Fixed glazing to exterior joinery frames shall be back-puttied sprigged and finished with timber beads bedded in putty.

Putty to be used shall be of approved brand.

WORKMANSHIP:

Do all glazing in accordance with highest standard of trade practice.

PROTECTION:

Protect all the work of this and other trades. All scratched, cracked or otherwise defective glass shall be replaced at contractor's expense.

CLEANING:

Clean and polish all exposed surfaces of glass and mirrors at completion of job.

DRAINLAYER

EXTENT OF THE WORK:

Work in this section of the Contract comprises all surface and foul water drainage up to above ground level to connect to plumbers work. Include all pipes and specials, fittings, construction of manholes, all gully traps and connections for terminal vents, coil and waste pipes. The drainlayer shall confer with the Plumber and shall arrange with the Contractor before the foundations are laid to fix the exact position of all connections of wastes and drains.

STANDARD OF WORK:

The whole of this work shall be carried out by experienced tradesmen to the satisfaction of the Owner and the Local Council Drainage Inspector. Shall conform to the requirements of the Drainage and Plumbing Regulations and the Local Council specification. Obtain all permits, serve all notices and pay all fees required and arrange for all tests.

MATERIALS:

All materials shall be the best of their respective kinds. All cast iron pipes shall be free of rust and be of first quality and of even wall thickness and shall be hot dipped. Those for use in foul drains shall have a wall thickness of not less than 4.5mm. Cast iron fittings shall be of similar quality and have inspection plates as required.

DRAIN TRENCHES:

The excavation of trenches for drains shall be accurately made with base clean and true to grade so that no unnecessary filling is required. Adequate width shall be allowed in accordance with the depth of the drain to enable laying and jointing to be properly carried out. Trenches shall be kept firm and dry and shall be opened up only in lengths than can be protected, utilised and refilled within a reasonable time.

LAYING OF DRAINS:

All drains are to be laid on and surrounded to mid-point with 100mm concrete composed of 6 parts of shingle to 1 part of Portland Cement. Any cast iron drains that have been laid on any type of filling are to be set on a continuous bed of concrete 225 wide x 150 deep reinforced with three continuous 10mm p/rods. The pipes are to be laid to dead straight lines and even grades with socket and against fall in all cases.

FITTINGS:

The plans show the layout of the system. Additional fittings that are normally required such as inspection points and inspection bends etc., that may be required but are not specifically shown, must be allowed for by the Drainlayer to comply with normal practice under the Regulations or special requirements of the Local Council.

JOINTING AND BEDDING OF PIPES:

The pipes are to be jointed and caulked with lead in a proper manner and each and every junction or change of direction is to have removable cover plate for maintenance.

Drainlayer cont...

FALL IN DRAINS:

The whole of the foul drains are to be laid to a regular and even minimum fall.

GULLY TRAPS:

Supply all gully traps and securely bed and build up with 5 : 1 concrete surround 150mm above finished ground levels. Form large and deep dishings and finish the surfaces with blue metal, dust and cement, one to one and steel trowel smoothe. All gully traps are to be fitted with large cast iron gratings and also a grating or perforated plate above the wastes discharging into it.

SEWER CONNECTION:

Arrange for the Council to connect drain to sewer and pay all charges in connection therewith.

ELECTRICIAN

PRELIMINARY AND GENERAL:

Read and note all clauses under "Preliminary and General" of this specification as where necessary they apply to this trade.

FEES:

Pay all fees and charges and obtain all necessary permits for this trade.

SCOPE OF WORK:

Carry out the whole of the electrical installations in strict accordance with the latest Electrical Wiring Regulations and Local Authority's By-law.

Nothing in this specification shall be interpreted to permit or demand work above Regulations or By-laws. Allow for the most costly requirement should a conflict exist.

MATERIALS AND WORKMANSHIP:

All materials used under this contract shall be of approved British or N.Z. Standard Specifications. Allow for all materials necessary to complete the contract whether specified or not.

All work shall be carried out by Registered Electrician in accordance with regulations and best trade practice and in a manner which shall cause minimum inconvenience to other workmen and the work as a whole. Do all cutting away, drilling etc. and with timber cut the minimum only away from the bare entry of the cable.

CO-OPERATION:

Co-operate with the building contractor and other sub-contractors in all phases of work. Give ample notice to enable the contractor to arrange the necessary void, chase etc.

COMPLETION AND CONNECTION OF POWER:

Leave the work complete, pay all charges and arrange for all inspection and tests and for the connection of the power to the works. It is the responsibility of the Electrical Contractor to ensure that no delay is occasioned to the job once the contract is complete.

POWER BOARD SUPPLY:

Arrange with the Power Board, allow for and pay all fees for the connection of an underground supply to the residence.

METER BOX:

Provide and instal recessed meter box near rear door. Confer with carpenter for trimming of wall for same.

MAIN SWITCH BOARD:

Provide and install in recess a Main switch board, complete with all necessary control and auxilliary equipment.

ELECTRIC STOVE:

Provide and fix a 30 amp flush switch for stove and sufficient flexible conduit and connection. Allow P.C. sum of \$..... for the purchase of a stove. Allow for installation of same.

Electrician cont....

POWER POINT:

All wall plugs shall be 230v 10 amp 3 pin flush type generally instal plugs 300 above floor or 225 above bench top. Points to washer space and refrigerator 1.2m from floor. The exact position of all power points shall be determined on the job.

CEILING ROSE AND BATTEN HOLDER:

They shall be first quality plastic. Batten holder shall be reinforced. All roses or holders not covered by fittings shall be white.

LIGHT SWITCHES:

Light switches generally shall be 5 amp all insulated P.D.L. micro-gap type or equal. Where indicated, fit flush type with plain bakelite flush plate. Fix switches generally 1.200 above floor. (If switches not indicated on plans, position to be decided by Contractor and Owner).

PLUMBER

PRELIMINARY AND GENERAL:

Each sub-contractor must refer to all clauses of "Preliminary and General" and consider them as being relevant to each trade.

GENERAL:

The whole of the work shall be carried out, completed and tested in the best trade manner by licensed plumbers only in accordance with the requirements of the Local Authority and the Drainage and Plumbing Regulations.

Materials shall be of their best respective kinds, lead, wrought iron and tin shall be best commercial quality, copper shall conform to B.S.S.N. 61 and brass shall be of approved composition and manufacture. All copper pipes shall be smooth full bore free from defects, seamless and of suitable gauge for high pressure fittings. Joints in copper and other pipes shall be made in accordance with the specified regulations and shall be air and water tight.

SHEET METAL:

Except where otherwise specified, sheet metal shall be of the following gauges:

Galvanised rainwater pipes	24 gauge
Galvanised pipes and overflow	24 gauge
Copper flashings, gutters and sumps	24 gauge
Lead flashing	

FLASHINGS:

Flash wherever needed to keep watertight and weathertight, extreme care being taken to keep dissimilar metals from making contact. Also, as much as possible, use flashings of same metal in adjacent areas, particularly where water run-off may occur.

COLD WATER SUPPLY:

Take off main a copper 3/4" branch and provide a 3/4" x 1/2" Tee in a suitable position. From the Tee provide 1/2" copper branches with stopcocks and continue to all fittings in the house including the hot water cylinder and washing machine. In addition allow for and provide and fix two standpipes to front and rear of house as indicated. Conceal all cold water piping.

HOT WATER SUPPLY:

Supply and instal a 40 gallon hot water cylinder. Allow to instal and provide and fix 1/2" copper expansion pipe taken out through roof and flashed by roofer. From expansion pipe take off 1/2" copper branches to all fittings including washing machine. Hot water piping shall be well lagged with hair felt wired on and concealed.

WASTE PIPES AND TRAPS:

Provide and fix drawn copper traps with cleaning eyes to all fittings. Provide back vents as required. Waste pipes shall be drawn copper with proper fittings and shall discharge into gully traps. Provide cleaning eyes to all types of waste pipes at junctions and bends and provide all fittings and fixings complete. All exposed pipes and traps shall be C.P.

TERMINAL VENTS:

Provide Y junction in soil pipe and fit 3" diameter drawn copper terminal vent carried up in duct, with screw fixed front. Continue through roof to required height and terminate with a copper wire ballon. Roof penetration flashed by roofer.

FITTINGS:

W.C. Pan complete with double-flap seat.

W.D. cistern complete with C.P. Flush pipes.

Free standing basin.

Stainless steel shower tray (standard size).

Sink - Stainless steel 400 x 350 x 175.

Hot water cylinder 40 gallon complete with electric element and thermostat, all taps, stopcocks, shower roses, faucets etc.

The Plumber shall provide and fix all other fittings and fixings necessary to complete the Contract.

Make complete connections, providing traps, vents, etc., in accordance with the regulations.

PAINTER AND PAPERHANGER

PRELIMINARY AND GENERAL:

Read and note all clauses under Preliminary and General of this specification, where they apply to this trade.

WEATHERBOARD & OTHER EXTERIOR TIMBER:

After fixing stop all nail holes with linseed oil putty. Stain with selected Gold-X N.F.11.

JOINERY:

Prime with Dulux Wunderprime.

Undercoat with Dulux Undercoat.

Finish with Dulux Hi-Gloss

NOTE: On difficult timbers such as Heart Totara and Matai Dulux Totara Primer will sometimes dry faster than Wunderprime.

GIBRALTER BOARD WALLS (if required)

Apply two coats Dulux Spring Flat.

OR Seal with Dulux Super Seal and apply two coats Dulux Super Satin (semi-gloss)

OR Apply one coat Dulux Wundercoat followed by one coat Dulux Super Enamel for Service rooms.

INTERIOR WOODWORK (Painted)

(a) Apply two coats of Dulux Interior Primer-Undercoat then finish with two coats of Dulux Super Enamel.

(b) OR Apply one coat Dulux Interior Primer Undercoat and finish with two coats Super Satin.

INTERIOR WOODWORK: (Clear)

Apply two coats Dulux Satin Clear.

AND Apply one coat Dulux Clear (full gloss)

OR Three coats Dulux Satin Clear

OR Two coats Dulux Timberglow.

WALLPAPER:

Allow the P.C. Sum of \$..... per roll for selected wallpaper to walls not enamelled. Papers to be hung plumb and joints butted.

Walls to first have coat of sealer.

SEALERS:

Sealers and flour paste will not be allowed unless mixed with 3oz of Sodium Pontachlorophonate to every gallon.

CLEANING:

All glass, fittings, etc. to be left clean and free from paint marks on completion.

SCHEDULE OF FINISHES

KITCHEN DINING LOUNGE PASSAGE BEDROOMS BATHR'M W.C. LAUNDRY

Walls

Ceilings

Floors

Doors

Skirt&Scotia

BRICKLAYER

PRELIMINARY AND GENERAL:

Read and note all clauses under Preliminary and General of this specification as where they apply to this trade.

CEMENT:

All cement used shall be N.Z. Portland Cement conforming in every respect to requirements relevant to NZS 1900. Cement shall be stored, handled and protected against moisture, contamination, caking etc. Any such cement shall be moved from the site.

SAND:

Sand shall comply with the provisions of NZS and shall be graded as follows:

<u>B.S. SIEVE</u>	<u>PERCENTAGE PASSING BY WEIGHT</u>
3/16	100
No 7	90-100
No 14	70-100
No 25	40-100

WATER:

Water shall be potable.

MORTAR:

Mortar shall consist of 4 parts sand and 1 part Cement. Driplex, Mortalox or Mortaflex may be used to make pliable. Mortar for Damp-proof Courses shall consist of sand and water-proof cement in the proportion of 1:2 by volume.

TIES:

Wall Ties shall be Superior Galvanised, spaced at not more than 600mm horizontally and not more than 350mm vertically, or not more than 450mm horizontally and not more than 400mm vertically.

CAVITIES:

The cavity between the Masonry Veneer and the Exterior Face of the timber stud wall shall not be less than 40mm nor more than 75mm wide.

Pipes and services shall not be placed in the cavity.

The cavity shall be ventilated to the outside air with top and bottom openings. The bottom openings shall serve as weep holes.

OPENINGS:

Openings with Masonry Veneer above shall be spanned by Hot Dipped Galvanised Mild Steel angles and shall have a minimum bearing of 200mm on their supporting masonry.

Wall Ties shall be fixed within 300mm of the edges of the openings.

Lintels shall be of the dimensions given below:

<u>Span of Lintel</u>	<u>Lintel Size</u>
1500	64 x 64 x 6.5
2000	102 x 76 x 6.5
2400	127 x 76 x 8
3000	152 x 76 x 8
3600	178 x 76 x 8

Bricklayer cont..

VERMIN PROOFING:

Vermin Proofing shall be 100mm wide x 12 mm mesh x 19 gauge galvanised netting tacked to the bottom plate and bedded at an angle to the lower mortar line of bricks.

BRICKS:

The Brick-laying and materials supplied shall be in accordance with NZS 1900 6.2.

The Masonry Units shall have an actual width of not less than 87mm.

Carry the brickwork up evenly nowhere more than 900mm higher than any other part, maintain the bond, and keep piers vertical and courses level.

Flush the mortar on the backs of the walls as the work proceeds, and regularly clean droppings from Ties, Vermin Proofing, and Framing Timbers.

CLEANING:

During construction and at completion clean down all exposed face-brickwork with Dilute Acid to approval.

Protect the work from injury at all times.