SPECIFICATION.

of work to be done & meterial to brick & concrete THEATRE ETC, SHOPS ETC, Wellington, in accordance with drawings, details & specifications prepared by & under the supervision of JAMES BENNIE F.N.Z.I.A

ARCHITECT

WELLINGTON

DRAWINGS

The drawings consist of ground plan, sircle plan and first floor plan cross and longitudinal sections, front and side elevations.

Reference is to be made to these drawings for all dimensions, heights and arrangements of floors etc., and they are to be considered as well as the details made in accordance with them as forming part of this specification.

WORK

The contract includes the erection of the whole of the works as shown on the drawings, as well as that described or implied in this specification or described on drawings, together with all minor operations and details which are not described in the drawings or specifications, but which are necessary for the proper execution and completion of the works according to the true intent and meaning of the contract.

The contractor is to provide the whole of the laterial etc. unless otherwise specified, as well as all labour, cartage, tools, implements, scaffolding, tackle, hoisting gear and all other things necessary for the due and proper completion of the works.

The contractor is to at his own expense to apy all necessary fee's to the surveyor and council in connection with this contract, provide all necessary hoarding for the proper protection of the works and with as little obstruction as possible to the public traffic and thoroughfare.

EXCAVATOR

Excavate the whole of the site and foundations of the building as shown on the drawings and relove all surplus earth away from site, all levels to be taken from the footpath line.

Should any obstruction be met with in the trenches it is to be removed, if any obstructions are met with in the whole site, including loose or unsound ground they are to be removed, all foundations to be on a solid bottom, contractor is to find his own dumping ground for soil.

After the casings for concrete are proved, loose earth is to be well rammed round all foundations.

No foundations are to be laid until trenches have been examined by the Architect: in default of this the contractor is to be held responsible for any future settlement of this portion of the works.

DRAINS Dig trenches for drains where shown and as directed and properly fill in and ram round same at completion.

CONCRETE

Concrete for foundations, all piers, reinforced stairs, walls, bands, floors etc. shall consist of cement 1 part, sand 2 parts, and shingle or broken metal 4 parts. Shingle or broken metal not larger than will pass through a 22 ring, for foundation work, and 4 ring for other work.

Cement shall be of the best Colden Bay Brand, and shall be stored in a water tight shed previous to being used.

Sand to be sharp, washed pit sand, free from soil, clay or other impurities and to be from the finest of grit to $\frac{1}{4}$ mesh.

All concrete work shall be mixed by turning twice when dry, after which enough water to be added through a fine rose, and not thrown on in large quantities. During watering concrete to be turned twice and then thrown into boxings etc., care to be taken that the concrete is solid and to prevent honey combing in the boxing a flat spade is to be used in well working the concrete next to the sides.

Every care to be taken to protect the concrete until it has become properly set.

All concrete piers to have 3/8 bolts imbedded therein to secure sleepers, nuts and washers complete.

After the concrete is deposited into the trenshes etc., and has become sufficiently set, the boxing is to be carefully removed when and as directed.

Sufficient mixing boards are to be provided out of T & G boards well cramped up and properly nailed to 4"X 2" scantling spaced at 13" centres/ At completion of contract all chips, shavings, short end of timber, and all other rubbish to be removed from building and site.

BRICKLAYER

The contractor is to execute in a good, sound and in every respect workmanlike manner, all brickwork shown on the plans and sections and coloured red, and to perform all brickwork necessary for the completion of other trades.

The whole of the bricks in this contract are to be the best producable well burnt, and of uniform shape and solour.

No soft or chimney bricks are to be used on any account.

DELIVERY No tipping of bricks will be allowed and the contractor is to x give instructions to his workmen that bricks are not to be tipped from the drays delivering them at the works.

MORTAR The mortar is to consist of 1 part Golden Bay Cement, 1 part hydraulic lime, and 5 parts of clean, sharp, well washed pit sand.

POSITIVELY NO SALT WATER SAND TO BE USED IN THIS CONTRACT

SCAFFOLDS All walls to be sufficiently scaffolded and no overhang work will be allowed, and work to be carried up uniformly in progress, so that no part shall exceed another in height above 4ft without the written consent of the Architect.

The scaffold platforms and ladders necessary to be provided are to be of the best description so as to ensure safety of the workmen and for the due performance of all the various trades etc.

Each scaffold next to the streets to have a scaffolding board fixed between the poles so as to prevent bricks etc., from sliding over. The scaffold is to be kept in thorough repair during the progress of the works and bot to be struck until directed by the Architect.

BOND The whole of the brickwork to be laid in English bond with close struck joints well flushed up with mortar.

No bedding joint to exceed to in thickness and no four courses when laid to exceed 13" in height.

All square openings to have concrete heads at least 13" deep and to have R.S.J., or 56 lb railway irons imbedded therein as required and all to have at least 9" bearing.

All splays and all other outtings to be carefully performed where required and as directed.

BONDING Provide and build in walls at every ten courses in height and where else required H.P. bonding two strands to 9" and 14" work, well jointed at ends and lapped 6", joints to be well broken.

BREEZE BRICKS FTC Provide and fix round all openings and where required breeze bricks, or totars wedged blocks to fix finishings and grounds to.

AIR GRATINGS Provide and fix round base of building to ventilate under floors etc., one doz 9"x 6" cast/ galvd. iron gratings, with shafts to suit, also make and fix flues for 12"x 10" louvre ventilators on sides of walls where shown and as directed.

Supply and fix two doz 12"x 10" louvre ventilators for openings inside of building all with regulating cords, exterior of openings to have galvd. cast iron gratings.

DAMP COURSE Provide and lay a damp course of well boiled asphalte 3 th thick, through full width and length of concrete foundations and piers, under plates, and up walls under ground. Concrete floor and walls of Orchestra Well to have interior covered with malthoid 5 ply cemented down.

BEd all wall plates in * well boiled asphalte set true and level.

TEMPLATES Build in all templates composed of concrete as before specified where and as directed.

All cornices and projections etc., to be built of concrete as before specified and to be well boxed.

concrete bands to run round walls as shown on sections etc., and to have four 2" steel bars imbedded therein, joints to be well lapped and broken.

Contractor to do any corbelling that any be required and as directed. Form all flues for fresh air inlets as directed, and rake out all joints of brickwork that are to be plastered.

Contractor to arrange with council to complete footpath paving on both streets.

Entrance to shops, theatre and office entrances, floor and walls of orchestra well, floor of engine room, urinals and W.C's, and areas to be laid in 6" deep of concrete then screeds and float off level in sement and sand 1 to 1 while still wet. All entrances to have red oxide colouring 5" finish, deep red effect, and well trowelled smooth surface or tiled as directed.

Build concrete staircases where shown up to foyer etc., resting on brick walls and on concrete string from wall to steel joist, 5° slab and landing, all to be reinforced with 2° steel bars as shown on placely to be finished in red oxide as specified for entrances, edges of steps to be rounded off. All steel beams except Circle beams to be covered in concrete with No 8 galvd iron wire wound round at 3° centres.

IRONMONGER

All steel work to be Dorman Long & so or other manufactur approved of by the Architect.

ROLLED STEEL JOISTS Provide, fix and hoist, rolled steel joists of the various sections shown and figured on drawings, with all necessary angles, fish plates, holes, rivets and bolts and connections etc. all to detail.

COLUMNS To be steel of sizes figured on plan and to have steel caps and bases, bolted to steel joists with 2" bolts, and base to be xxx secured to concrete foundations with 1" rag bolts.

STEEL PRINCIPADS Provide, fix and hoist, steep principals of the various sections as figured on plan, bed plates to have expansion joints, all to detail hereafter given.

Heads of all square openings to have R.S.J.'s, or two 56 lb railway irons imbedded therein and to have at least 9" bearing, this applies to all openings not other wise specified.

Provide and fix 3/8" bolts with nuts and washers complete, imbedded in concrete piers to take sleepers.

Supply and fix steel bars for reinforced concrete staircases, floors and walls etc. as shown on plan.

Supply and fix to orchestra well, stairs and passages where shown 2" heavy brass rail and standards with all necessary screwed joints and elbows, base tee's etc., and secured to floors with bolts. Supply and fix 1" x i" wrot iron supports to flag pole and nored securely to wall.

PLASTERE

The whole of the exterior brisk and concrete work including the two street elevations, back wall, side walls where exposed to view all copings, behind all parapets, all weathering of sills, and the jambs and soffits of all window and door openings etc., to be keep rendered and floated off in secent and sand stusse, 3 to 1 first soc and 3 to 1 second coat, sand and cement.

All moulds, caps, enrichments, string courses, bases etc., as shown and to detail.

SAND All sand to be of the very best quality of pit sand and no inferious material will be allowed on site on any account.

Fronts facing streets to be finished in white sand to approval.

CEMENT Cement to be the best brand Golden Bay.

All round urinals and W C's to the height of 4 ft to be finished in general and sand 1 to 1 well trowelled, shannels and sloping floor as directed. For other plasterers work see page 5.

All interior brick and concrete walls and ceilings, excepting walls of shop, interior walls of stage, behind all dade's, to be plastered first coat white cement stuced to approval, 2 of white sand to 1 of cement & thick, then finish all work in white plaster for second coat which must be obtained from R.S. Wardrop, Manor Street, Dunedin.

LATHING

Lath ceiling of auditoring on sirele and all wooden walls and ceilings, under staircases, with best oregon laths to approval, all to be well secured and nailed. All walls and ceilings specified to be lathed to be covered with Ivory cement plaster and white sand I to 2, then finishing coat to be as specified for brick and concrewalls.

Allow the sum of £300, three hundred pounds, p.s. value, for all interior cornices, centre flowers, caps, strings, moulds and prospentum front, bases and other carrara work, and contractor to supply and fix all grounds and scaffolding extra.

CARPENTER AND JOINER

STACKING TIMBER The whole of the flooring, lining and sarking to be stacked and stripped on some site handy to the job within two week of signing sontract.

No timbers to have excess of true sap, to be free from bark, dead knots, shakes or boher defects.

The Architect to have power to prohibit the use of any timber that may in his opinion not be thoroughly well seasoned or sound, and i any defects should appear in the woodwork from shrinkage, inferior wockmanship, or other defects within three months of completion of contract, the contractor shall immediately upon receiving written notice from the Architect make such defects good at his own expens. The whole of the carpenters and joiners work to be put together in the most substantial manner and no material or workmanship whateve to be omitted that is either specified, implied, or necessarily connected with the due and proper completion of all the works.

NOTICE BOARD Provide and fix in a suitable position a wood notice board 7ftx 5ft, with black letters on white ground as directed.

IRONMONGERY All ironmongery to be the best description of their respective kinds, to be fixed with all necessary bolts, screws, etc., and to be submitted to the Architect previous to being used.

All nails to be punched in and all bye wood to be cleaned off at completion of contract, and all windows cleand and all floors scrubbed.

All joinery to be hand dressed, scraped and sand papered, no defects, planing, arms or machine marks to be seen.

SCHEDULED OF TIMBERS

HEART OF TOTARA

Sleepers 5"x 3"

Ground plates 5"x 2"

All exterior doors and frames, window frames, sashes and all finishings. All timbers of street verandah, frames and louvres of roof ventilators, all barges, drops, moulds and bases etc.

RIMU O.B.T. (picked)

Ground floor joists	5" x	3"
Gutter bearers, gratings and covers 2"x 2" &	3" x	2*
Floor joists f dress circle	12" x	2"
Ploor joists of stage	8 " x	2 n
Ploor joists of operators box	7 * x	ON.
All wooden partiti ns, framing of circle, rafters of		
operators box.	4" x	2 "
Top and bottom plates	4" x	3 *
Purlins of auditorium, including cailing joists		
of same 7"x 2" &	5" x	္က
Sarking of all roofs	3" x	1"
Rafters of roof ventilators, well framing and all brad	38 3 4	x S
Herring boning at every oft centres of joists	3" ×	(2ª
•		

HEART RIMU

All interior doors, architraves, skirlings and all interior joinery all linings and dado's fixed vertically and to be

T & G & V, V every 3"

Framing of proscenium

 $6^{\text{u}} \times 5/3^{\text{u}}$

 $6^n \times 2^n$

HEART MATAI

Flooring of all compartments, snage and circle T & G 4"x 1"

All other timbers as figured on plans etc.

GENERAL DESCRIPTION

. All sleepers to be even and in long lengths, bolted to piers with 3/3" bolts, set into concrete, fised with nuts and washers.

All joisting to be spaced at 18" centres well spicked to sleepers and wall plates, and laid true and level on top.

All scantling including stude, ceiling and floor joists, roof timbers, circle framing etc., to be at 13" centres. out square at ends, true length, and notshed 2 into top and botto Horizontal bracing of 4"x 2" fixed at plates and well nailed. 3 ft centres to run round all wooden partitions.

Fix grounds for all moulds, lining and dado's, and where required f all trades.

Cover the whole of the roofs with 3"x 1" sarking well dramped SARKING together and joints well broken.

> All gutters of roofs to be boxedlined with I" stuff on 3"x 2" bx bearers at 18" centres, gutters to have falls and drips etc as directed.

Where timbers rest on brick or concrete walls they are to be dipped in boiling tar.

Every fourth joist of forst floor, joists or circle, purlins of auditorium to/ be anchored to walls each end with 3th iron bolts and large washers complete, and screwed to timbers.

Construct proscenium walls with 6"x 2" stude at 13" centres PROSCENIUM and well braced with 4"x 2" zig-zag horizontal bracing at 3 ft centres, arch portion to be framed with 4"x 2" timbers at 18" cent arch ribs to be 6"x 3" stuff, all to be well framed together read; for plasterer.

Construct all roofs as shown on drawings and as before specified. ROOFS Roof ventilators to be built of 4"x 4" totars frames, 3" well splayed sills, l' louvres set into grooves with weather fillets on inner top side, all to be set splayed and perfectly water Vents to rest on 3"x 4" beams bolted to speel principals Main vent well to have four compartments and octagonal in shape

4"x 2" framing 13" centres resting on 8"x 4" beams bolted to principals, all as per detail hereafer given.

WINDOWS All windows to be made and framed as shown on drawings.

Shop windows to be $6^n \times 3^n$ rebated and grooved frames and sills, 2^n rounded corners, and $5^n \times 5^n$ door frames, all to be firmly secured to suitable grounds. All shop sashes to be glazed with $\frac{1}{2^n}$ polished British plate and secured with screwed battens and moulds, the whole to rest on 9^n brick and concrete foundations. Cover the front of window foundations with $6^n \times 3^n$ glazed tiles $6^n \times 6^n$ per doz set splayed in sement as directed.

STALL BOARDS Make and fix raised floor for show window, 4"x 2", joists at 18" centres, 4"x 1" flooring, and T & G upright fronts, nosing and scotia complete, eight doors in fronts, hinged and fasteners etc.

Flooring of shops to run under stall boards.

All other window frames to have 6"x 3" rebated and grooved styles et set well splayed and to have weathering grooves and drift galvd iron guards in under side of sills, which are to be 3" thick.

All sashes to be 21 finished, evolo moulded, beads 2 nosings and scotia complete. All sashes to be divided up as shown with 12 x 1 moulded bars, this applies to all fanlights. Gentre panels of square windows in auditorium, and 2ft deep by the width of all other windows, and all fanlights to be hinged with at least two 4 steel butts and fastened with quadrant stays and cord complete, all to be antique copper.

DOORS

All outside doors to be heart totars $2\frac{1}{4}$ thick finished, splayed and stop chamfered panels as directed, panels to be 1" thick and well secured to frames which are to be 6"x 3" rebated and well fixed to grounds. All these doors to be hung to frames with three 4" steel pin hinges.

Interior doors of auditorium to be as above and made of heart rimu.

All exit doors to be made of three thicknesses of 6 % x 1 T & G

and then covered with timed steel as per insurance regulations.

All other interior doors to be 13 thick finished, three panelled
and stop chamfered edges both sides, hung to 2 solid repated frames

with three 4° antique pin hinges. Large stage doors to be made to slide, rails and rollers, and brackets complete as directed. Alow the sum of 13/6 p.c. value for locks and furniture to each door in building.

Supply and fix Dawsons collapsable gates with all rails and fittings 8ft high, to main entrance, @ o/- per sq ft.

ARCHITRAVES All door and window openings to have 5" xli" plain splayed architraves, those in auditorium and foyer to be 7"x 11".

SKIRTING Walls of all compartments, including walls of sircle to have 10"x 1" finished plain splayed skirting fixed to grounds, and mitred on external angles and scribed on internal angles and to floors.

LININGS Line the whole of the walls of shops, fronts of cirdle tiers, behind balustrading of same, walls of orchestra well, front of stage all dado's etc., with 5" x 5/8" T & G & V, and V every 3", all to b fixed on suitable grounds and 2"x 1" battens at 18" centres and well nailed.

Make and fix dado's round all walls of main entrance to theatre, up walls of staircase, round walls of foyer and walls of same, all round walls of auditorium and dress circle, entrance and up both walls of office staircase, landing and passage of offices, all to be 4 ft 6" high, skirting round and 3"x 3" moulded cap all round dados.

FLOGRING Cover the whole of the floor including sirele, orchestra well, stage, landings, shops, entrances, auditorium, and all the first fit floor etc. with 4"x 1" T & G boards, well cramped up and double nailed, joints to be well broken, cut square at ends and close to walls all to be made level and of even surface. The guard round sirele tiers to be 6"x 1" well secured.

Circle balustrading to have 4"x 2" uprights at 13" crs, upright line inside, and bracket grounds for plaster and carrara work, 2" thick and 18" crs. Provide and fix a handrail round circle front, to be 3"x 2" rounded edges, well dressed, jointed, and 3" moulding under, handrail to be well polished and french polished. Supply and fix s steps to circle tiers as shown out of 15" stuff with 15" stiffeners spaced at 18" ers inside. and rounded nosings.

STAIRS Make and fix two wooden staircases to stage, strings, risers and treads 12 stuff.

FLAG POLE Make and fix with W.I. straps a flag pole 20ft long, out of 6"x 6" oregon pine rounded, with caps, pulley, truck and cords complete.

VERANDAH Construct strext verandah as shown 6"x 3" steel joists, 14" rods, 4"x 2" joists, 1" sarking, and then cover with iron roofing, under side to be sovered with stamped steel as directed, galvd gutters and downpupes complete.

OLD BUILDINGS The whole of the old buildings, fencing etc., to be removed from site.

Allow the sum of £300, eight hundred pounds p.c. value for all seats. Allow the sum of £250, two hundred and fifty pounds p.c. value for artistic painting.

Allow the sum of £450, four numbered and fifty pounds for all electric work, gas and electric lighting, engine and motor and all picture plant.

PLUMBER

The whole of the plumbers work to be done by thoroughly competent tradesmen and in a thoroughly workmanlike manner to the entire satisfaction of the Architect and council authorities.

All work to be tested at completion of contract as directed and any defects discovered to be remedied at the sole cost of the contractor. Everything connected with the plumbing work is so far as it implys applies to be in strict accordance with the council authorities.

All lead to be milled and of the weight specified. All pipes and connections for water service to be of the best approved screwed galvd iron and jointed in red lead and every care to be taken to prevent leakage.

Lay on water for contractors use during the erection of the works.

Lay on water from street main in 1" pipes, and lead off in 2"

branches to connect to urinal cisterns, & W.C. cisterns, supply tank

and & basins. W.C. and urinal cisterns to be the Edina flushing

silent cistern, fitted with ball cock, chain and pull, and 2" lead

flushing pipe to connect to pans erc.

BASINS Provide and fix 6 basins, p.c. value 30/- each, cast iron frames chain, plug and washers extra, all to have nicol plated bib cocks.

W.C's Provide and fix 6 W.C's, earthenware pans, p.c. value 30/- each, seats for same 10/- each.

WASTES Provide and fix to basins and first floor uninals, "" lead traped wastes, with brass inspection caps, chain grating and plugs etc complete, all wastes to deliver over gullies in 2" screwed pipes.

FIRE SERVICE & METRE Lay on extraordinary supply of water from main in street and run minside with 3" galvd iron pipes and connect to two hydrants in auditorium.

Supply and fix to hydrants, 25" brass wheel valves with hose camerate connections, and fitted with 30 ft of 25" standard hosing, provided copper handpipes and brass jets, all to be built into recess in walls, and provide with standard quadrant cradles as directed and painted red, all to be connected to metre.

DRAINS Connect W.C's etc., to drains direct in 4" earthenware spigot and

socketted glazed pipes, well comented at joints. W.C's upstairs to have 4° cast iron soil pipes well caulked with molten lead at joints, finished with vents.

All drains to be 4" xixxx earthenware as above and connected to xxx street mains, all to have gully traps, buchan traps, main vents, terminals, cleaning eyes, vents and traps as directed, all drains under building to be cased in concrete.

Supply and fix all storm water drains in 3" glazed earthenware pipes cents joints and with all necessary traps etc as directed.

Cover the whole of the roofs with red edged sarking felt, 3" laps and well secured. Cover the whole of the roofs with 24 guage galvd corrugated iron, two cor ugations side lap, and 9" end laps, well secured with lead headed nails on every second corrugation.

BOX GUITERS Line the whole of the gutters which are to be boxed, including all valleys, with 24 guage galvd iron, double soldered and rivetted, and running up sides at least 6" above top of box, and to have apron piece let into walls.

FLASHING Flash and step flash the ends of iron with gables on roof, junctions of all roofs with walls, all skylights and ventilators on roofs, verandah, and where everelse required so as to make the building thoroughly water tight.

All flashing to be 32 guage galvd iron lead edged.

Supply and fix 6 stacks of cast iron down pipes to main roofs with cast box heads and make good in to drains, joints to be in lead.

All other downpipes to be 3° 24 guage galvd iron led into drains.

Verandah downpipes to be cast iron, fixed down walls and into street channel.

Supply and fix W.C. and urinal disterns etc., with dast if on brackets shelves, and furnished with ball cock connections and connected to pand with 2" lead flushing pipe. Urinals to have 3" piping round walls with weep holes complete. All disterns to be the Edina C.I. pattern.

Cover all ridges with 24 guage galvd iron lead edged ridging to be neatly dressed into corrugations etc. Spouting ro all eaves to be 6° C.I. well secured and rivetted at joints, and secured with iron brackets ar 3 ft centres.

SKYLIGHTS Supply and Cix where shown, ventilating skylights, all with stays and cords complete, and all to be well flashed.

Make and fix a 24 guage galvd iron footlight shade as directed on

stage.

Line underside all flooring xx of tiers and landing of nircle with light sheets of galvd iron as directed.

PAINTING

In addition to the sum of £250, allowed for artistic descritions, contractor to prime, stop and then paint with two good scats the whole of the outside wood and iron work with best linseed oil and genuine white lead picked out as directed.

All roofs to be painted with two good soats of sttelit paint, and underside of vernadah to be painted as other outside work.

Lining of shops to be painted three good coats of best linseed oil and white lead picked out as directed.

Lime wash the interior walls and ceilings of engine room, urinals and areas, then tar the walls of all urinals as directed.

All interior joinery, dado's etc., to be oiled, spirited and then eggshell varnished, or painted three coats of white lead as directed Risers of circle to be varnished or painted as above.

GLASS

4 6 F

The whole of the glass in this contrast to be best British manufacture to approval and to be well sprigged and puttied.

All shop windows to be * polished plate, including fanlights of same.

Glass partitions to have icofloe, and all other glass to be 26 02 sheet, well sprigged and puttied.

At completion to contract, contractor to clean all glass and scrub all floors.