

No. 7718

CITY  
BUILDING ~~DRAINAGE~~ PLAN.

Erect premises in  
Cuba Street  
for Wm Campbell  
C. H. Dryden Builder

23. 7. 1907.

# BUILDING APPLICATION FORM.

WELLINGTON  
CITY COUNCIL  
RECEIVED  
1907  
Date

1907

To the City Engineers,

Wellington.

Sir,

I hereby apply for permission to *Erect premises*  
in *Cuba & Arthur* Street, Section  
part of Town Acre *101* for *Mr Wm Campbell*  
of *Wellington* according to Plans and Specifications  
deposited herewith at the estimated cost of £ *1898*

Yours faithfully,

*C. H. Dryden*

Postal Address

*Washington Ave  
Brooklyn*

Synopsis of Specification so far as the Wellington Building By-laws are concerned for the erection of Shops & Warehouse at the corner of Cuba & Arthur Streets in the City of Wellington, for W.W. Campbell according to plans &c prepared by Messrs Fento & Blake Architects.

Wellington 16/7/07

Water. Provide all water required for carrying out the whole of the works

Lime Mortar. The lime mortar to be composed of two measures of Hydraulic Lime, one measure of Portland Cement & six measures of clean sharp fresh water sand.

Cement Mortar. All cement mortar to be made with English Portland of an approved quality & clean sharp sand mixed in the proportions of one of the former to two of the latter.

Concrete. All concrete for wall foundations to be made as follows viz., One part (by measure) of some approved brand of Portland Cement, three parts of broken stone or clean shingle, & two parts of clean coarse sharp sand free from loam or other admixture.

The concrete for the floors, stanchion foundations, cornices, lintels, templates, piles & steps to be formed with concrete as above, save that it is to be made with four measures of aggregate to one of cement, & no stone in the former to measure more than  $1\frac{1}{2}$ " in any direction.

Embed Bolts in Piles. Embed in every other concrete pile a  $\frac{7}{8}$ " diameter wrought iron bolt 15" long for bolting the slapers to said piles.

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each to be threaded at top & fitted with nuts & washers & fix to the lower end of each a large wrought iron washer.

Bricks. The bricks to be the best hard, square & well burnt that can be obtained in the neighbourhood of Wellington. They are to be as free from limestone as possible. Nothing less in size than half a brick (other than clovers) is to be used in the work.

Watering Bricks. All bricks to be well saturated with clean water immediately previous to being set.

Bond. All brickwork to be laid on approved bond, care being taken to cross all the joints, & all the heading courses to be whole bricks.

Brickwork in Cement Mortar. All brick walls under one & a half bricks thick, also all piers or other work etched in Blue on Drawings to be built in cement mortar.

Brickwork in Lime Mortar. All brickwork other than the above to be built in lime mortar.

Arches. Turn two half brick rim Arches set in cement mortar over all external reveals of window openings as shown & like relieving arches over all internal reveals thereof.

Lintels. Fix concrete lintels as shown or as may be directed over all square headed openings in brick walls not differently described; embed in each lintel two lengths of old 56 lbs railway iron & give each end of all lintels 12" of wall hold. No lintel to be of less height than five courses of brickwork by the full thickness of the walls into which they are built.

Form the concrete lintel as above over the




external doorway opening of Cart Dock, save that two 8"x4" steel joists are to be embedded therein in lieu of old railway iron.

Concrete round Stanchion Encase the Stanchion in corner pier shown on Ground Plan in concrete as described for lintels. Said concrete to extend from baseplate to top of breastsummer & to be of the size & form shown on drawings & form in concrete projections for plinths & pilaster caps.

Ceiling of Kerosene Store. The ceiling of the Kerosene Store to be formed with old 56 lbs. railway irons placed not more than 2 feet centre to centre with a cambered sheet of 24 gauge Galv'd. corrugated iron fixed between each on to the bottom flange & upon the latter, concrete, as described for lintels, is to be spread.

The concrete to be 8" thick & finished off to a smooth surface on top, & to have 4½" of wall hold on the brickwork all round. Each end of the railway irons to have 9" of wall hold.

Hoop iron Bond. Build into all brick walls every 4 feet in height, two rows to the 14" walls & one row to the 9" walls, of well tarred & sanded 14 gauge Galv'd. hoop iron 1½" wide. Make all joints thus  round a brick.

Asphalte Damp course &c. Lay on all brick walls at such levels as may be directed, a completeinchatel Asphalte damp course ¾" thick. Level & well ram the ground under the ground floor of Shops Nos. 1 & 2 & Store to the extent required & cover the same with a layer 2" thick of tar asphalte of quality equal to that used by the Wellington City Council for

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~~for~~ forming the street footpaths, & roll same to approval. Said asphalt to measure the above thickness when finished.

Air Bricks. Fix where directed, fifteen 9"x6" Galv. cast iron air bricks to approval, form cranked vents behind same through the walls & render with cement.

Concrete floors. The Kerosene Store, ground floor W. closets, Ante & the yard shown on ground Plan & tinted Grey, to be formed with a layer 6" thick of concrete as previously described.

Form in floor of yard a proper channel to discharge over gully.

The foundation for all the wood blacking hereafter described to be formed with an 8" bed of concrete as described for the wall foundations which is to be rendered 1" thick to directions with good Portland cement stucco. Said foundations to be laid with a slight fall outwards.

Copings. Form with bricks set on edge in cement, proper copings on all parapet walls so requiring.

Templates. Fix under the steel joists which form the breastsummer the ends of which are supported by brick walls, bluestone templates 36" long 14" wide & five courses of brickwork in height.

Hoarding. Supply & fix the necessary close boarding hoarding along the whole length of the two street frontages with two returns, gates & fans, planked footpaths & post & rail fences etc., to the satisfaction of the City Engineer; alter & shift said hoarding

as may be necessary during the progress of the work & remove same on completion.

Scaffolding. The contractor is to provide all scaffolding that may be required to properly carry out the work. Said scaffolding is to be in accordance with any Act of Parliament relating to same & to meet the approval of any Inspector appointed under the said act.

Spacings of Timbers. No floor joist or stud shall exceed 16" C to C.

Bond Timbers. Fix on walls under all floor joists so requiring  $4\frac{1}{2}" \times 3"$  continuous plates of bond timbers & properly scarf same at the joints.

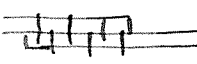
Fix  $9" \times 3"$  Totara templates each 3 ft. long under ends of all the roof principals tie beams that are supported by walls &  $4\frac{1}{2}" \times 3"$  templates each 18' long under ends of all purlins that are similarly supported.


Bearing of Timbers. The tie beams of all roof principals to have 8" bearing on all the brick walls, whilst all other timbers that are supported by walls shall have not less than  $4\frac{1}{2}"$  bearings, save joists of first floor over the brick dividing wall.

Boxing for concrete. Provide, fix, & finally remove when directed, proper & sufficient boxing for all concrete previously described requiring same.

Floor Joists. Construct the ground floor with  $6" \times 2"$  joists &  $6" \times 3"$  sleepers & the first floor with  $16" \times 2\frac{1}{2}"$  joists. All trimming joists to be 1" thicker than the ordinary joists. The ends of all joists of first floor that come

over the brick dividing wall & the two beams shown by dotted lines on Plan to be overlapped as per marginal sketch for a distance of 2 feet & to be well spiked together with 4" spikes.

 Bolt down Sleepers &c., The sleepers to be properly scarfed at all joints. Scarfs to come directly over a pile, & to be formed as per marginal sketch. Sleepers to be bolted to piles as previously described.

 Bridging. Two rows of 2" x 2" Herring-bone bridging to be put to all first floor joists of each shop.

Lintels. Fix over all window & door frames so requiring heart. Totara lintels 12" longer than openings. To be 1" in depth to every foot of span but not less than 3" deep by the necessary width.

Anchor ties Fix to joists & purlins as may be directed with proper bolts, say 80 wrot. iron Palm bolts to approval, each weighing 7 lbs & provide a 9" diam. cast iron patera weighing 12 lbs for each bolt.

Partitions. Form the partitions between Ante & W.C. on ground floor & Lavatory & W.C. on first floor 7'6" high with 3" x 2" studs & like top & bottom plates. Form all partitions coloured a dark brown on Plans with 4" x 2" studs, 4" x 3" bottom plates & 4" x 2" top plates. Plates to be checked out 1/2" for studs & all studs to be well nailed to plates with wire nails. Partitions to be well braced with 4" x 2" solid bracing.

Roofs. Construct the roof over W.C. in yard as shewn with the necessary 4 x 2" rafters



+ 1" sarking. Construct the small lean-to roof abutting onto South wall of Warehouse with the necessary 4"x2" rafters 9"x2" hip & valley rafters & 1" sarking.

Construct the roof over warehouse as explained by Drawings with five framed roof trusses of timbers as figured on Section A.A. Ridge to be 9"x1½" & provide two 12"x2" hip rafters where shown properly secured to King post with wrot. iron straps & screw bolts, & cover the whole of roof with 1" sarking. All purlins to be in long lengths, to be properly scarfed over the rafters & bolted thereto with proper ½" bolts.

Provide & fix to each principal the following ironwork: 2½"x½" wrot. iron straps with gibs & cottars at intersection of King posts & tie beams. 2½"x½" wrot. iron straps secured with ⅞" coach screws at heads of rafters & at each foot of rafters a ¾" wrot iron screw bolt fitted with heads, nuts & washers. The rods to be of wrot. iron ¾" diameter, each threaded & fitted with heads, nuts & washers.

Block Paving. The floor of Bart Dock, together with the crossing adjoining same to be formed with 6"x3"x5" paving blocks, which are to be dipped in boiling pitch & forthwith placed in position on a thin bed of sand. Said paving when complete to be well coated all over with hot pitch, & a thin layer of clean dry sand to be spread over same while pitch is hot. All joints in blocking to be as thin as possible.

Bridge. Form to the approval of the Wellington

City Engineer over the channel in Arthur Street, of length equal to the block paved crossing, a Totara wood bridge.

Ceiling Joists. Fix over the Lavatory & W.C. on first floor 4"x2" ceiling joists 18" centres.

Steel Joists. Provide & fix the following Dorman Long & Co's steel joists complete as shown or as may be directed, viz:-

Number required	Section	Length	Weight lb. per foot	
2	14" x 6"	37 ft.	57 lbs	Over Shop windows
2	14" x 6"	10' 6"	57 lbs	" " "
1	10" x 6"	11' 6"	42 "	Between Shop No 1 & Store
1	10" x 6"	6' 6"	42 "	Between Cart Dock & Gate
2	8" x 4"	12' 0"	25 "	Over Cart dock doorway.

Stanchion. Fix in angle pier of Shop No 1 a 10" x 6" rolled steel stanchion 13' 6" long weighing 42 lbs. per lineal foot & fix to web & flanges such plates, angles &c., complete. Said stanchion to be bolted to the concrete with 1" proper rag bolts with nuts &c., & to the breastsummer of shop window with two 1" proper bolts.

Breastsummers. The breastsummers over shop windows to be formed with rolled steel joists as shown & specified bolted together with proper distance pieces every 5 feet apart & 3/4" wrot. iron bolt, two to each distance piece. To be connected together over stanchion as shown by detail with angles & 3/4" wrot. iron proper bolts.

Iron Gutters. Put to the Lean to roof, 4", & to all other ditto so requiring, 6" V.G. cast iron gutters & fix same with strong Galvd. iron brackets placed not exceeding 36" apart. Put to

said gutters all needful stopped end, socket outlets &c., complete.

Corrugated Iron &c. Cover the roofs with Red edged roofing felt & 24 gauge Galv. corrugated iron (Orb. brand) laid with a side lap of two corrugations & an end ditto of 4" & secure each sheet to the sarking previously described with three rows of 2½" lead-headed nails placed not exceeding 6" apart. Felt to be omitted on Verandah roof.

Cesspools. Line the two cesspools in roof gutters with 6 lb. lead & convey the water from thence into the downspouts hereafter described with either proper 4" bore lead or cast iron bends.

Lead cappings. Fix proper 5 lbs. lead cappings at all junctions of hips & ridges.

Ridging. Fix 18" girth 24 gauge lead edged Galv. iron ridging to all hips & ridges so requiring & dress said edging well down into the corrugations of roof iron.

Valley Gutter. Lay the valley gutter with 12 gauge zinc, 20" wide.

Downspouts. Fix one stack of 4" bore cast iron socket jointed downspout in light area (where marked D. P. on ground Plan) from eaves of main roof & one 2½" bore like ditto from eaves of lean-to roof, & fix to the former a proper moulded cast iron downspout head & to put to the lower end of each a proper shoe. Form the stacks of downspout which convey the water from the cesspools with square 4" x 4" pipes but in other respects as above omitting the moulded heads & shoes,

4  
+ connect one of the stacks with the drain  
+ the other with the street channel.

Overflows. Put to the cesspools previously referred to,  
4" bore 6 lbs. lead overflows fixed through  
the parapet walls so as to discharge on to  
the street footpaths.

W. C. Apparatuses. Fix in the three W. C.'s shewn on  
the Drawings, cane + white washdown  
pedestal W. C. basins to approval, + the  
regulation 20" long iron syphon cisterns fixed  
on neat shelves which are in turn to be  
supported on japanned iron shelf brackets  
to approval. Fix to said cisterns, all necessary  
overflows, ball cocks, regulation taps, valves,  
+ brass chains with white porcelain pulls to  
approval, + connect same to the W. C.  
basins with  $1\frac{1}{4}$ " heavy lead flush pipes complete.

W. C. Soil Pipes, &c. Connect the W. C. basin on first  
floor with the drains with 4" bore socketted  
cast iron pipes; make all joints therein  
perfectly airtight with oakum + iron cement;  
continue said pipes up to top of building  
in conformity with the Sanitary By-laws  
+ fix the necessary proper air pump  
ventilators on ditto complete.

Vent Pipes. Put proper vent pipes to the traps of  
all W. C. basins described herein in strict  
conformity with Clause 171 of The Sanitary  
By-laws or as may be required by the Sanitary  
Inspector.

Fix one main ventilating shaft complete  
where marked V.P. on ground Plan in strict  
conformity with Clause 161 of the Wellington  
Sanitary By-laws.

Waste Pipes. Put to the tubs in Ante 2" + to the toilet



basins  $1\frac{1}{2}$ " screwed Galv. iron wastes fixed so as to discharge over the gully in yard.

Traps.

Put to the above wastes proper lead traps fitted with screw caps for cleanings fixed so as to be easily accessible

Lay on Water.

Lay on water with heavy  $\frac{3}{4}$ " screwed Galv. iron piping from the corporation main in Arthur & Cuba Streets on to all taps & cisterns & fix on each supply a  $\frac{3}{4}$ " private stop with cast iron box & hinged lid complete.

Grid.

Form under the tap in Lavatory a proper brass grid & put from thence to the open air a proper  $1\frac{1}{2}$ " heavy lead or screwed Galv. iron overflow with a proper brass flap to the outer end.

Drains.

All drains shown in Red & Blue lines on Ground Plan to be formed with 4" socketted stoneware pipes which are to be truly laid, jointed with strong cement stucco, & in every other respect laid in strict conformity with Clause No 154 of the City of Wellington By-laws & to the Drain Inspector's approval.

That portion of the sewage drain that is under the building to be embedded in cement concrete in strict conformity with Sanitary By-laws.

Traps.

Fix a 4" Buchan trap on the sewage drain, connect same to the V.P. with 4" pipes, & fix a cast iron grating to approval to the fresh air inlet.

Fix to the Stormwater Drain a proper 4" syphon trap.

Inspection Chamber.

Construct where shown on Site Plan with concrete bottom & brick sides all rendered in cement stucco & built in strict conformity with the City Engineer's

requirements an Inspection chamber with wood  
block cover & iron frame complete.

## Specification of Verandah.

Verandah. Form the Verandah as shewn on Plans with Luke & Co's No 12 cast iron Verandah posts properly bolted to piles on kerb & to top plate of Verandah. Provision to be made in three of them for the stormwater to pass into channel. Top plate to be 8"x3" Totara wrot. & stop chamfered with 1½" scotia mould nailed on under guttering. Guttering to be 5" O.G. cast iron fixed on brackets & connected at three points to posts with 2" piping. Fix to each post Luke & Co's No 33 Ornamental cast iron brackets. Form the roof with 4"x2" wrot rafters 20" centres, 2" x 1½" wrot. purlins, 1½" thick ridging & the necessary 2" valley rafters.

Form the balustrade in Totara with 3"x2" scanthugs, 18" centres 1" T & G. close boarding with 4"x1" battens nailed thereon, proper moulded capping & 4"x4" turned & moulded terminals. To be properly stayed to roof with wrot. iron stays to approval. The top plate, guttering & balustrade to be returned across each end of Verandah.

Prints supplied to Percy

11. 8. 27

See letter to Revallin

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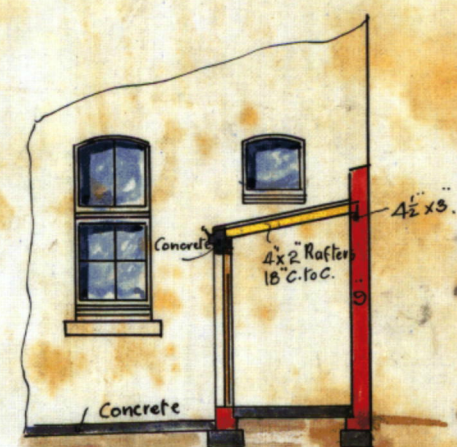




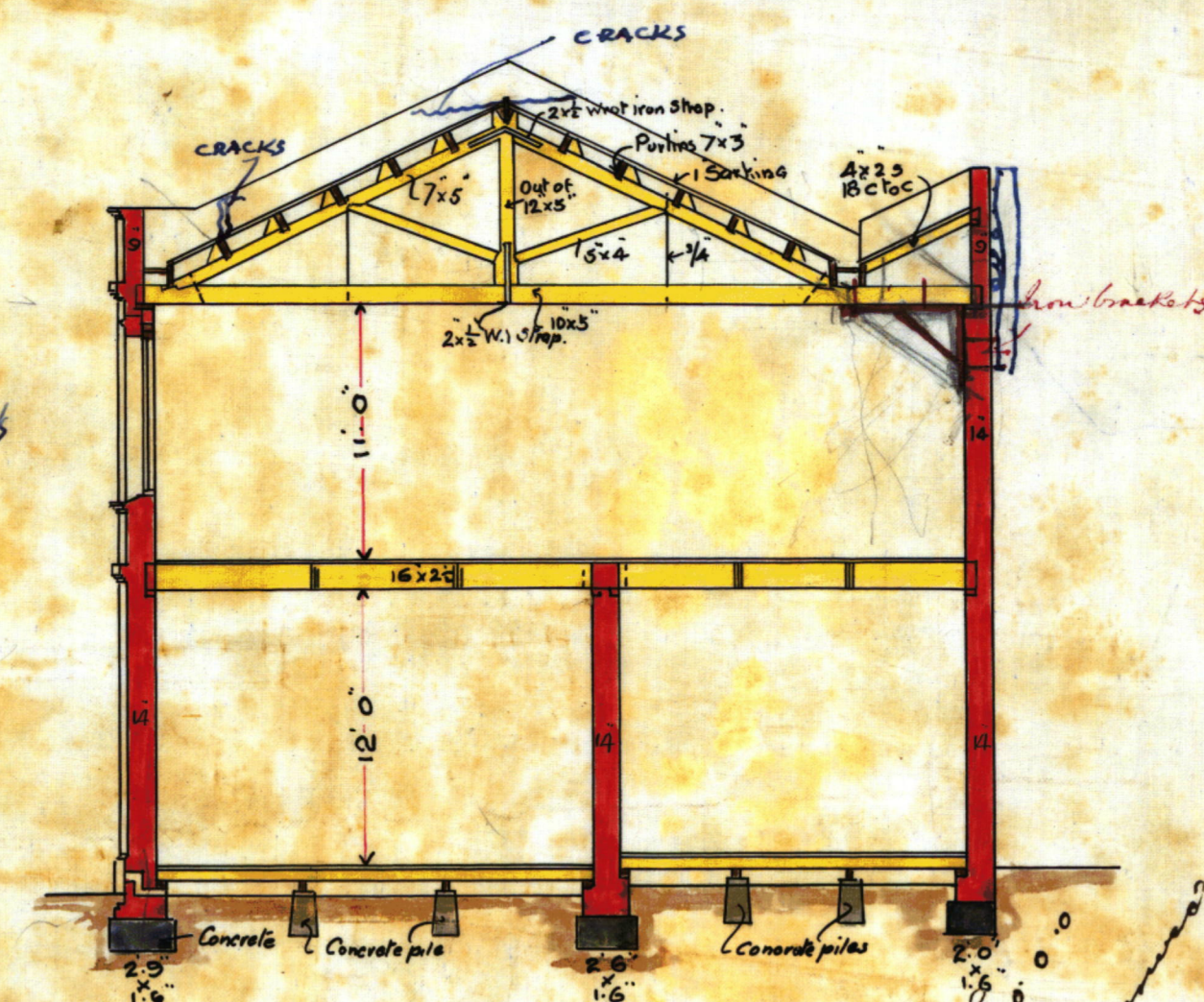
• PREMISES • AT • THE • CORNER • OF • CUBA • AND • ARTHUR • STS. •  
 • FOR • MR W<sup>M</sup> CAMPBELL •  
 • 1/8" SCALE •



Elevation to Cuba Street •



Section B-B •



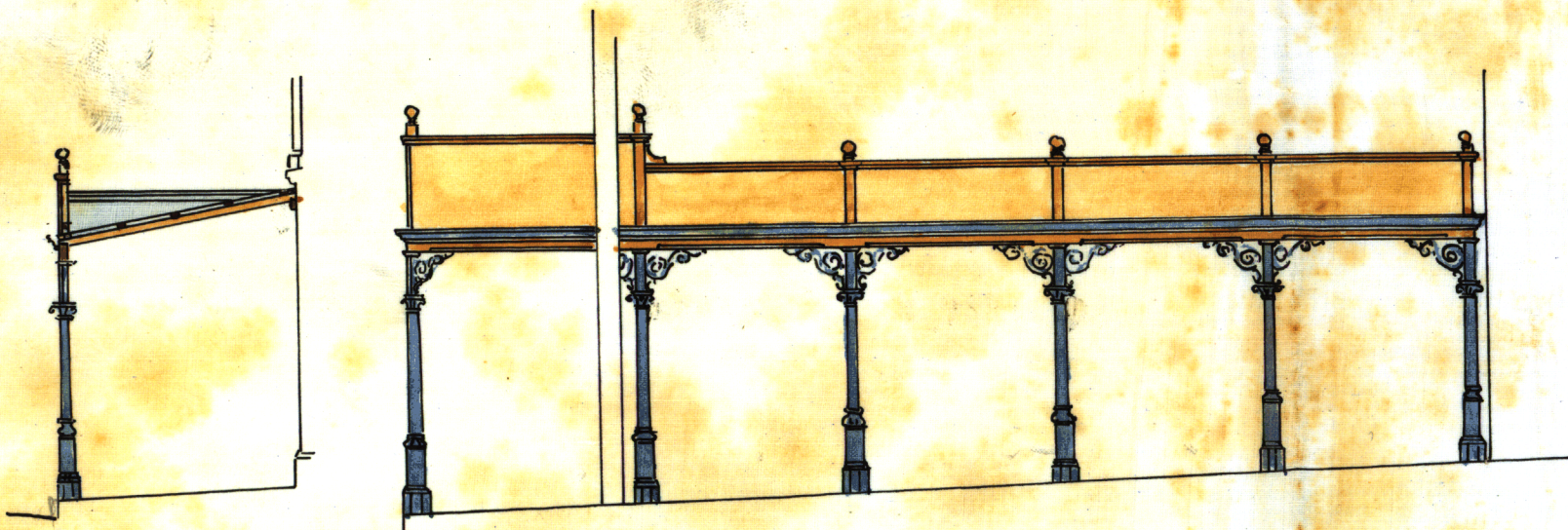
Section A-A •

*Report of 10.0.00  
 from Mr. Campbell  
 B.T. to  
 2.5.2.07*

Penty & Blake  
 Architects.

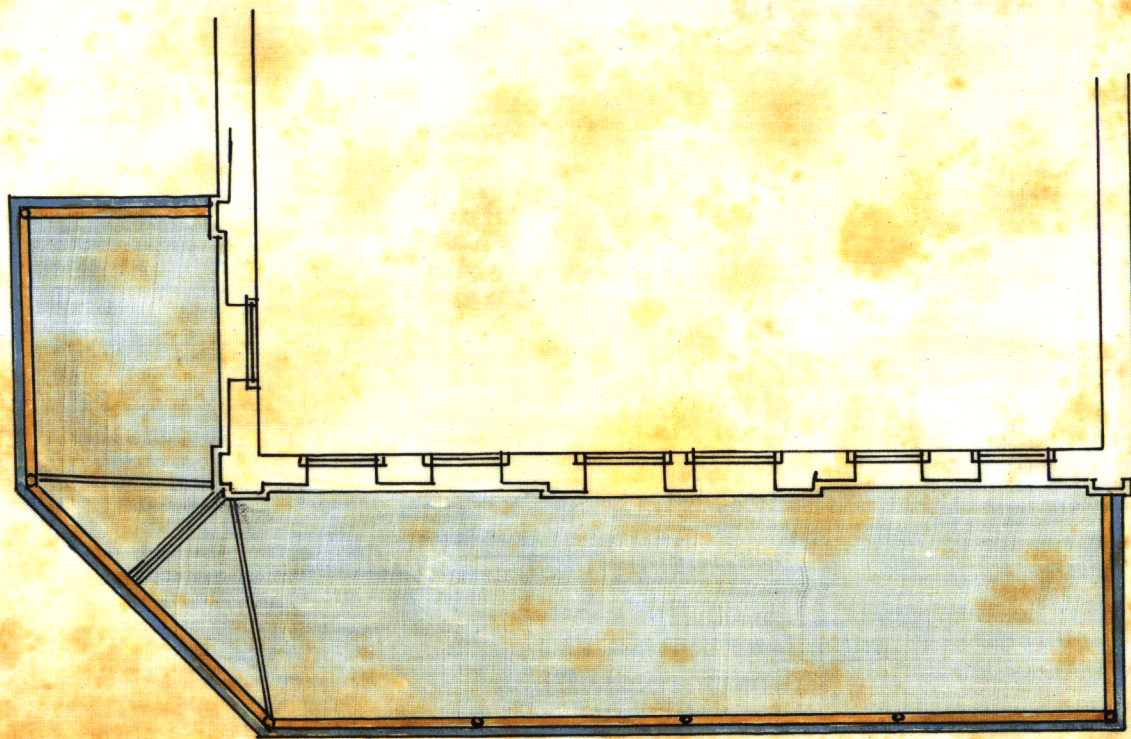


• PREMISES • AT • THE • CORNER • OF • CUBA • AND • ARTHUR • ST<sup>RS</sup> •  
• FOR • MR • W<sup>M</sup> CAMPBELL •  
• 1/8" SCALE •

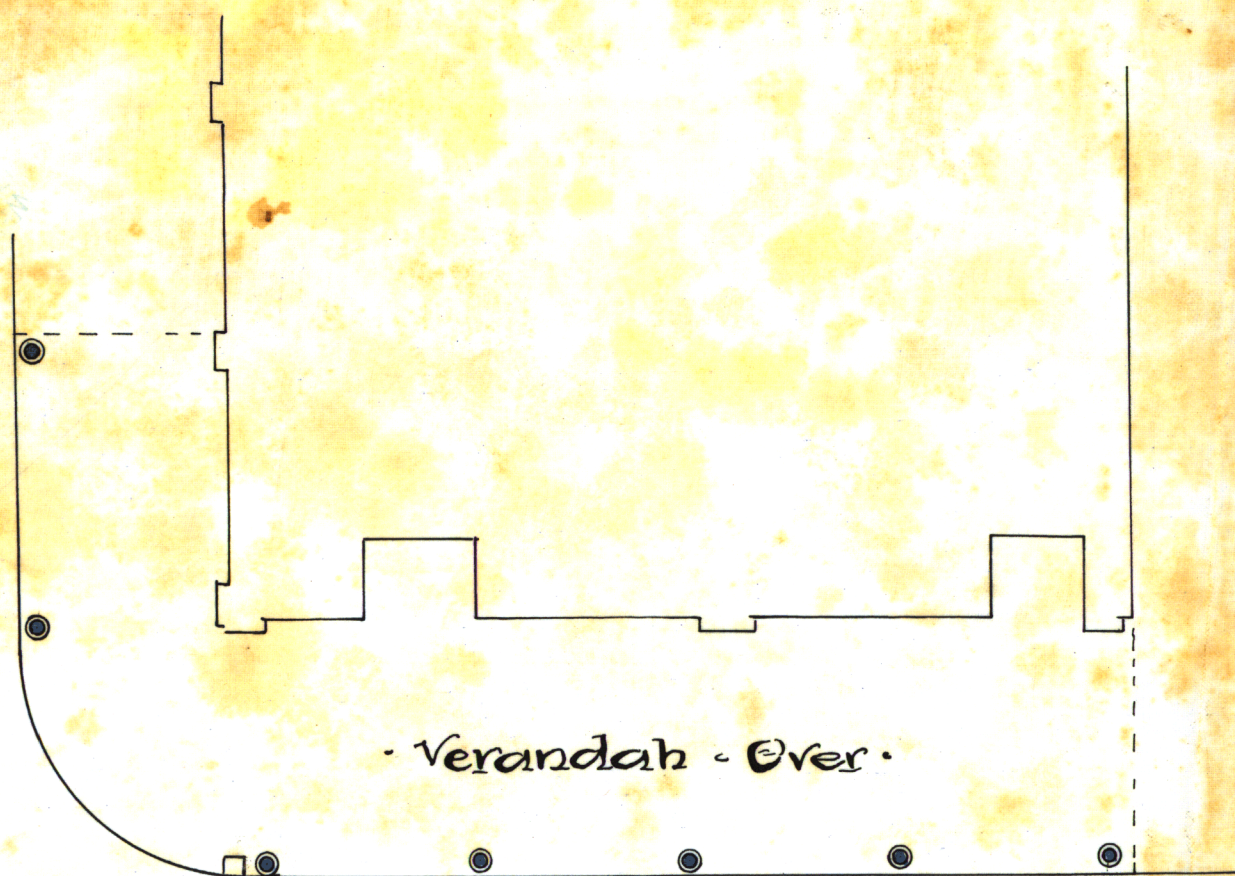


Section of  
Verandah •

• Elevation of Verandah facing Cuba Street •



Roof Plan •  
of Verandah



• Verandah • Over •

• Ground Plan •