Date 14/4/20

To the Town Planning Officer.

Application has been made by Fletcher Const. Co.

for the erection of School on Lot D.P.

Street Hill St.

Will this proposal interfere in any way with any proposal you have for Town Planning?

H. L.
for Building Superintendent.

To the Building Superintendent.

No.

Yes.

Remarks.

Town Planning Officer.

BUILDING APPLICATION FORM

WELLINGTON,

Date 11 Nov 19 29

CITY ENGINEER'S DEPARTMENT RECEIVED 11 NOV 1929 ENGINEER ST., WELLINGTON

To the City Engineer,
Wellington.

Sir,—

I hereby apply for permission to erect School (Alterations) at Hill Street / House No. and Street for St Marys Catholic School / Owner of Wellington / Address according to plans and Specifications deposited herewith.

Particulars of Land—Lot No. ..... TOWN SECT or D.P. .....

Frontage ..... By depth of ..... Area .....

Particulars of Building—Foundations Concrete Walls Brick

Roof Slate Area of Ground Floor ..... square feet

Area of Outbuildings ..... sq. ft. Estimated Cost £ 2288 3,

Yours faithfully,

The Fletcher Construction Co Ltd

..... Builder.

Postal Address Box 947

T. M & S.

SECTION NUMBER
MUST BE GIVEN

Drainage plan
showing sanitary fittings, gd. & datum lines
Grade of draining drains with

No spec. Fill in application form
No Specification?

Cavity wall tie straps?
gables?

SPECIFICATION OF WORK required to be done in the erection of SCHOOL BUILDINGS in connection with ST.MARY'S CONVENT, GUILFORD TERRACE, WELLINGTON, in accordance with plans prepared by

CLERE F.R.I.B. & CLERE F.N.Z.I.A.

ARCHITECTS WELLINGTON.

THE SITE. is on the North side of the present schools, and can be approached from Hawkestone St. or from Guildford Terrace. The levels are given on Sheet No. 1 and the outline of the building is shewn thereon. These levels are given in good faith and have been taken by an authorised Surveyor. They are not, however, guaranteed to be absolutely correct, and should they prove to be in error to the Contractor's advantage no deduct will be claimed on that account. On the other hand should they prove be to his disadvantage no extra will be allowed on that account. shewing the important angles have been put in by an authorised Surveyor and tenderers are requested to visit the site and form their own opinion as to what difficulties will have to be overcome to carry out the Contract. In setting out the building the Contractor shall check the positions of these pegs, and should they be wrong any error shall be set right by the Contractor.

In carrying out the work the Contractor shall do as little damage as possible to the shrubs and trees on or about the site. Should any unnecessary damage be done by the Contractor or those employed by him, he shall either make it good or its value shall be paid by him to the Employer, The Architects being the sole judges in this matter.

The Contractor shall allow for making good all the approaches to the site used byhim, at the completion of the Contract, all being left in perfect order and freed from rubbish of any kind.

LEVELS OF FLOORS. The Ground Floor level will be 25' above the highest point of the asphalted plateau shewn on drawings, This will give a sub-basement 10' high to floor line of the lowest range of Classrooms.

CONTINGENCY FUND. The Contractor shall allow the sum of £150 (one hundred and fifty pounds) to be used as the architects shall direct on the building. This sum or any part thereof unexpended, shall be deducted in full from the Contract price.

BUILDING TO BE WATERTIGHT. The Contractor shall leave the building perfectly watertight, and shall provide all laps. extra laps. flushings,

weatherings, and any other items of materials or workmanship that may be necessary to attain this object whether specified or not.

MATERIALS AND WORKMANSHIP throughout shall be of the best quality of the kind specified.

PIPES ETC. Provision shall be made as the work proceeds for the insertion of all gas and water pipes, and telephone, electric light and power wires.

WORK SHALL BE SIMILAR. Where any one part is shewn on the drawings or is specified, the information so given shall refer to all similar parts throughout the building.

APPROVAL AND P.C. SUMS. Where approval is specified the approval of the Architects shall be obtained before the article referred to is used. Where goods are purchased under a sum mentioned inthe Contract, the Contractor shall submit the original invoices to the Architects when applying for his certificate for a payment in which the value of these articles is to be included. Any sums saved will be credited to the Employer in full, the said Employer being at liberty to purchase the goods wherever he may choose.

MAINTENANCE. The Contract allows the Employer to retain a certain sum to ensure maintenance for a period of 90 days. If, at the end of 90 days, the Architects are of opinion that the work may be faulty and has not been sufficiently tested by the weather or by some other means, they shall be at liberty to retain the maintenance sum, or such lesser amount that they may consider necessary for a further period to ensure the doubtful work being set right should their opinion prove correct. Faulty work disclosed during this expended period of maintenance shall be set right by the Contractor at once, or on his failing to do so, by The Employer, the cost of doing this being a charge against the Contractor in the same terms as those mentioned in the printed General Conditions of Contract.

PERSONS WORKING FOR THE EMPLOYER DIRECT. The Employer shall have the right to use the premises during the progress of the Contract for the execution of any work which he may desire to have carried out, and the Contractor shall allow all reasonable facilities for the execution of such work, but shall not be required to provide any plant or materials for it.

OLD BUILDING ON SITE & CLERK OF WORK OFFICE. The old building, now used

as a Studio, on the site, shall be removed by the Contractor. Should he so wish, part of it can be used as the Clerk of Works' Office.

The open shelter shed shall be taken down by the Contractor, and the materials shall be carefully stacked by him where directed on the site which materials shall remain the property of the Employer. The seats in this shelter and immediately outside it shall be carefully preserved and shall be re-erected by the Contractor in the new sub-basement where directed.

The two E.C's whall also be removed and shall become the property of the Contractor.

The Clerk of Works Office referred to above shall have an area of not less than 60 sq.ft. and shall have in it a desk with a drawer it it large enough to take the Contract plans unfolded. It shall have a Yale or similar latch, the keys of which shall be in the possession of the architects or Clerk of Works. This office shall have an electric light and a Post Office Telephone provided and maintained by the Contractor. It shall also have a stool for the use of the Clerk of Works.

CLERK OF WORKS. The term Clerk of Works shall mean the person approved by the Architects'and appointed by the Employer to superintend the work under the Architects' direction during their absence. The Contractor shall afford the Clerk of Works every facility for examining the works and materials and for testing same, supplying him with samples chosen by him when required. He shall also give the Clerk of Works every assistance in measuring up and in chekcing all time sheets, materials etc.

The Contractor shall give the Clerk of Works, as often as he may require it, a statement in writing of all materials coming on the works, and no materials shall be removed without the permission of the Clerk of Works excepting those that have been condemned by him and these shall be removed as soon as possible after such condemnation. Neither the Clerk of Works nor any assistant of the Architects shall have power to set out works, or to revoke, alter, enlarge, or relax any requirements of the Contract or to sanction any daywork, additions, alterations, deviations or omissions or any extra work whatever, excepting in so far as such authority may be specially conferred upon him in writing under the hand of the Architects. The Clerk of Works, or Employer, or any Assistant of the Architects shall have power to notify the Contractor or anyone employed

by the Contractor of non-approval of any workmanship or material, and such work shall be suspended or the use of such material shall be discontinued until the decision of the Architects on the matter is obtained.

EXAMINATION OF WORK NOT NECESSARILY EVIDENCE OF APPROVAL. The work will from time to time be examined by the Architects, by the Clerk of Works, or by the Architects' Assistants, but such examination shall not in any way exonerate the Contractor from his obligations to remedy any defects that may be found to exist at any subsequent stages of the work or after the same is supposed to be completed.

BILL OF QUANTITIES. Tenderers shall have reasonable use of the plans and specifications in order to make up their tender, and each bona-fide Tenderer will be supplied with a copy of the Schedule of Quantities. The successful Tenderer will be supplied with a second copy of the Schedule and he shall within one week of the acceptance of his tender place a price opposite each item and shall return the Schedule thus priced to the Architects. The total of these prices shall agree with the lump sum known in the agreement and in this specification as the Contract sum. No certificate for a pregress payment will be given till the schedule has been priced as just stated. These Quantities are issued in good faith as representing the amounts of the works to be executed and materials to be used under the Contract but the Contractor shall satisfy himself as to their accuracy before he puts in his tender as no extra will be allowed should any item prove to be inaccurate and to his disadvantage, or should be omitted altogether. Should extra work be ordered it shall be carried out by the Contractor as part of his Contract, and the prices mentioned in the Schedule of Quantities shall be taken as a basis upon which to value such extra work, and the amount so arrived at by the Architects or by some person authorised by them, shall be added to the Contract sum, and shall in all respects, including maintenance, provisions of Lien Acts etc., be treated as part of such Contract sum. Should work be omitted it shall be valued according to the Schedule prices, and the amount or amounts so arrived at shall be deducted in full from the Contract sum.

Extra work of a class not provided for in the Schedule of Quantities shall, at the written request of the Architects, be carried out by the Contractor, and if a price for such work cannot be mutually fixed before its commencement, the Contractor shall be paid for it on as basis of nett cost plus 10% on such cost, no further profit being allowed. Should

the carrying out of this work entail the erection of fresh scaffolding the time spent in such erecting shall be considered as an item arriving at the nett cost, but if scaffolding in place can be used, then no charge shall be made for its use, it being taken that the 10% covers the use of plant and materials of like nature.

In order to arrive at the nett cost referred to in this clause, the Contractor shall keep special time sheets, and shall supply them to the Clerk of Works, together with the priced invoices of materials used in the work, for which the nett cost is to be found. Failing his doing this claims for extra work not included in the Schedule will not be allowed.

Bills of Quantities shall be taken as being part of the Specification so far as they are descriptive of the work to be executed, but not as to the quantity or value of such work. Any item or items mentioned inthe Bill of Quantities shall be included in the Contract, and its cost in the Contract sum, although such item or items may not be shewn on the drawings or mentioned in the specification.

FEES FOR QUANTITY SURVEYOR. The sum of 15/- (fifteen shillings) or £¾ per centum on the total amount of the tender shall be allowed by the Contractor as payment for the Bill of Quantities. This sum shall be deducted by the Employer from the amount due under any certificate wherein it is stated that this sum is included in such certificate.

EXTRAS TO BE AUTHORISED BY ARCHITECTS ONLY. No extra will be recognised unless the form authorising such extra and signed by the Architects is produced. The Contractor shall accept no order for extra work from any person or persons other than the Architects. No drawing or writing on a drawing shall be taken as an order for an extra unless such drawing contain an explicit statement signed by the Architects that the work shewn thereon is an extra in the Contract. No mere instruction as to how the work shall be carried out will be accepted as an authority for the execution of work extra to that required by the Contract.

INTERPRETATIONSOF DRAWINGS ETC. Where there shall be any discrepancies between (1) different parts of the drawings, or (2) different parts of the specification, or (3) between the drawings and the specification, the decision of the Architects shall be obtained and followed as to which description shall be taken as to the meaning of the Contract. Where dimensions of parts are neither specified nor shewn the instructions of the Architects shall be obtained and followed. All figured dimensions shall be

taken in preference to the scale measurements and drawings to ½" scale or larger shall be taken in preference to either. Where the work "rest" work is used it shall apply to the whole/of the class referred to included in the Contract and shall have no limited interpretation put upon it unless the context clearly shews that it is only limited to parts.

DETAIL DRAWINGS. will be supplied from time to time as applied for by the Contractor in order to show how the work is to be executed. Should any of these drawings indicate more work than (in the Contractor's opinion) the Contract requires, the Contractor shall at once return them to the Architects, pointing out at the same time where he considers the extra work lies. Should the Contractor keep the details for seven days without formally making objection to the Architects, it will be taken that he considers them to be correct and any objection raised subsequently will not be upheld.

P.C. SUMS. Any special sums mentioned in the Specification as having to be provided by the Contractor, shall be entirely at the disposal of the Employer and any profit which the Contractor may desire to make on such sums shall be included in his Contract price, and shall not be taken off by way of discount. The Employer or his Architects shall have the right to spend the whole or any part of such sums, and as the articles purchased arrive on the works the Contractor shall examine them, and if found to be in good order and condition shall pay for them and take charge of them until they are required, being responsible in every way for their safe custody. In the progress payment following the arrival of goods thus purchased, and upon his production of the payment receipts he will be credited with the full amount due to him as though he had purchased the goods himself. Any portion of these P.C. sums not spent shall be deducted in full.

ITEMS IN SPECIFICATION NOT LOCALLY PROCURABLE. As soon as possible after the signing of the Contract the Contractor shall make out a list of articles that have to be procured from outside the Dominion and shall order such goods so that they arrive in time to be fixed in the building.

THE CONTRACT IS FOR A FIXED SUM and shall in no way be varied by fluctuations in rates of exchanges, market prices of goods, or by any other similar cause.

TREES ON THE SITE. There are several large trees that will have to be removed

by the Contractor. Any that are over 6" in diameter shall be cut down and prepared for fuel. The parts shall be split up into sections not exceeding 24" in sectional area, and shall be sawn into 2' lengths, and carefully stacked on the premises where directed by the Employer. All smaller trees, brushwood, and branches shall be removed off the Premises by the Contractor, every part being left clear at completion. As before stated the trees and shrubs generally shall be protected from damage by the Contractor.

WATER AND OTHER PIPES that come in the way of the Contractor's operations shall be deviated and connected up so that the occupants of the Convent and Schools shall suffer no more inconvenience than is absolutely necessary.

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EXCAVATOR.

THE LEVELS of the site have been taken by an authorised Surveyor and are shewn on the drawings. The Contractor shall have no claim for extra should they prove to be wrong and to his disadvantage, nor will any deduction be claimed should any error prove to be to his advantage.

THE TRENCHES for foundation walls and drains, and the holes for piers, shall be dug by the Contractor, and back filling (well rammed) shall be carried out by him. Some of the excavated material will be required for levelling up certain parts inside the building, and under the steps on its North side. Other excavated material shall be placed in front of the building opposite the main entrance. Here it shall be evenly spread to form a terrace as directed.

In order to form the sub-basement a certain amount of excavation has to be carried out. The material thus excavated shall also be placed in front of the building as just described.

The Contract allows for the foundations going down to the depths shewn Should, however, the Contractor find that the ground has already been cut away to or below the original subsoil, then such depth shall be decreased at the Architects' discretion, and the amount of material thus saved shall be credited to the Employer. Should, however, any soft parts be met with, and the amount of concrete shewn is not sufficient to fill them, then the attention of the Architects shall be called to such parts, and their instructions shall be taken, the Contractor being

paid an extra at schedule rates for any concrete that may be required beyond that which is included in the Contract.

THE LEVELS. Since the levels were taken some loose material has been deposited on the south part of the site and covered the legs marking off the main porch and the other adjoining parts. The Contractor shall remove as much of this material as is necessary to clear a space for his work, placing it against the present sloping bank and towards the asphalt playground, and before the end of his contract he shall level the material together with that which he will have added to it, to form the terrace before referred to. He shall, however, arrange the material so that it will have an incline to enable carts to proceed into the yard space near the Laundry.

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REINFORCED CONCRETE.

Unless specially excepted, all concrete shall be reinforced. The term Reinforced Concrete shall mean an approved concrete mixture reinforced with steel in such shape, and so combined that the steel will take up the tensional stresses and assist in compression and shear.

The foundations, piers, piles, certain beams, the corridor floors, the stairways and landing, all outside steps, wall bands, floors of sub-basement latrines, and cloister and Porch Floors, shall all be in reinforced concrete.

PROPORTIONS. Concrete shall consist of one part of approved New Zealand Portland cement to six parts of aggregate.

CEMENT. shall comply in every respect to the requirements of the British standard specifications for Portland cement.

AGGREGATE shall be of approved graded hard stones with a sufficiency of clean sharp river sand to fill up all the interstices, but no more.

MIXING shall be done by an approved batch mixing machine, any that may be mixed by hand shall have the ingredients turned over at least twice when dry and twice when wet.

DEPOSITING. All concrete shall be placed in the boxes or trenches immediately upon being mixed, and none that has stood for fifteen minutes undeposited shall be used. None shall be thrown from a greater height than six feet, and all shall be well tamped into the moulds.

JUNCTIONS OF DIFFERENT DEPOSITS. Before any additions are made to concrete already set, such set concrete shall be thoroughly cleaned and a thi

layer of cement and sand plaster (I-I) shall be spread over it.

FAASE WORK shall be of white pine or other approved materials and shall be made perfectly rigid before being filled in. No forms shall be removed until the work is strong enough to carry 25% more than the temporary load that it will be called upon to sustain.

WASHING DOWN FORMS. All forms shall be thoroughly hosed out and freed from shavings, sawdust or other rubbish immediately before the concrete is deposited= holes being left at convenient places to allow the escape of this rubbish.

FOUNDATIONS. shall be reinforced by ½" rods, steel, longitudinally at 6" centres, and at I2" centres across footings. When not specially shewn the concrete under walls shall be I0" deep where I8" wide, I2" deep where 27" wide, I5" deep where wider than 27". Detached piers shall have the foundations spreading on all sides the same extent.

PILES. Some of the sleepers rest on piles as shewn on plan. These shall be of concrete, 9" x 9", and sunk I8" into ground, measured on the lowest side of a slope. Where they are of a total length of more than 4'6", each one shall be reinforced with four ½" rods placed as directed in their entire length. In each pile there shall be embedded two No. 8 B.W.G. gald. fencing wires, long enough the embrace the sleepers to which they are to be secured.

CONCRETE FLOORS NOT INSULATED. Where concrete floors are rexting on the solid clay or earth/they shall be reinforced with Triangle mesh reinforcement No. 3614 and valued at 4d. per sq. yard. These floors shall be 4" thick and where inside the building shall be laid over a course of pure approved bitumen resting on a well rammed and even clay bottom. These floors shall be finished smooth "off the screed" and shall be kept free from defacements until handed over at the endof the Contract.
All these floors shall be so laid that all water shall drain off them. The space between the small screen wall and the outside wall of workshop shall be of 3" thick concrete laid with a decided fall to the East and left smooth. The concrete floors to Cloister and the Landing and Steps and the floors of Porches at North end, and the floor of the Porch of the Assembly Halls shall be prepared for tiles as specified under TILER. These and similar floors shall have a slight even fall to the outside.

STAIRCASES AND LANDINGS, both inside and out, with the exception of the

short flight up to Cloister which shall be of Jarrah, shall all be constructed of reinforced concrete, and shall be most carefully set out to give the risers and treads shewn, the former finishing 6" and the latter having a "going" of 11" not measuring the nosing. An expert staircase builder shall be employed to set out and superintend the erection of the boxing of the staircases, the greatest care being taken that each riser and each tread is of the same height and width respectively.

The finish of the staircases is described elsewhere. Each staircase shall be reinforced with ½" rods at 5" centres with longitudinal ⅜" rods at 18" centres. The half landing shall be reinforced with ⅜" rods at 4" centres running in both directions. These landings shall be 7" thick from wall to wall. On the underside of each flight (excepting those from sub-basement) and on the underside of each half landing, there shall be a panel sunk 1" from the face. The top and foot of each staircase shall be supported by a reinforced concrete beam.

NOTE. In some cases the surfaces of floors may have to be kept down slightly in order to allow for special coverings, When the boxing is being put in the Contractor shall ascertain what is required for this purpose, as by that time it will be decided what the coverings are to be.

The base of the building up to the line of the sub-base shall be of concrete and reinforced as for the foundation, the horizontal rods being spaced 2' apart measured vertically.

The three columns in basement workshop supporting R.S.J. shall be of concrete reinforced their entire length with four 1" bars with the necessary spreaders and binding hoops.

SOUND DEADENING IN FLOORS. The floors of the four back class rooms on the Ground floor, and the floors of the Studio and two back Classrooms on 1st. Floor, shall have false floors placed between the joists as specified under Carpenter. On these false floors there shall be placed a 2" thick layer of coke breeze concrete composed of one part of hydraulic lime to six parts of breeze thoroughly incorporated.

THE CORRIDOR FLOORS shall all be of concrete 6" thick and reinforced with ⅜" rods at 5" centres and with ⅜" rods at 18" centres at right angles to same. The slab, with its reinforcements, shall be carried 9" over the supporting walls.

THE OUTSIDE WALLS, on East, North and West sides shall be strengthened by 9" x 9" reinforced concrete piers placed where directed. Each shall contain

four I" dia. continuous rods, kept perfectly vertical with spreaders and No. 6 wire bands at 12" intervals. These columns shall be surrounded by 4½" brickwork as shewn and through them shall be carried the horizontal wire bonding as specified for brickwork. On a level with each floor wher shewn there shall be horizontal concrete bands also surrounded by brick-work with three continuous I" dia. rods in them as reinforcement. These rods shall be hooked into the vertical rods so that proper attachment is gained. In addition to this outside band of concrete there shall be an inner one on a level with each floor,(with a clear 2" cavity between it and the outer one) reinforced with two I" dia. rods. These two concrete bands shall be tied together with gald. wall ties as specified for brick-work, one above the other and not more than 27" apart.

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BRICKLAYER.

BRICKS, shall be approved, hard and well burnt, uniform in shape, but not necessarily in colour, free from defects and shall be approved. Those that are used for weatherings, base moulds, etc. shall be approved double pressed,the external angles being formed before the bricks are burnt.

CLINKER BRICKS shall be extra hard burnt and shall be of a dark mottled approved colour.

MORTAR, shall be composed of two parts of best hydraulic lime, one part of best Portland cement and nine parts of clean sharp Hutt River sand, all by even measure. Where cement mortar is required it shall consist of I part of best Portland cement to three of approved sand.

HOLLOW WALLS. All outside walls shall be built hollow with a 2" cavity be-tween the shells. These shells shall be tied together with approved gald wrought iron ties $\frac{5}{8}$" x 3/16" and 10" long, having a twist to throw off water and fishtailed ends. These ties shall be spaced 27" apart in every eighth course. Wherever these cavities come over an opening, or the lower part of the wall becomes an inside wall the heads of the openings shall be flashed with 26 gauge copper so as to throw the water away from the inner shells and into the cavities. Where cavities come over the inside walls the same gauge copper shall be used above the roof junction in a continuous line, but vertical holes in the brickwork shall be left for the escape of water at intervals of five stretchers. All

cavities shall be kept clear from dropping; this is most important. Generally the outside shells are 4½" thick, but in the sub-basement it is 9" thick, the extra 4½" being put on the outside. There will not be room for the 2'0" wide windows unless this is done.

DAMP COURSE ¾" thickness of one part of pure cement to one part of sand shall be laid in the brickwork 6" above the ground level, and vertical joints immediately above this shall be left open at approximately five stretcher intervals.

WALLS THAT ARE AGAINST EARTH. Where walls of rooms or other occupied parts are against the outside earth, a 4½" retaining walls shall first be built and waterproofed on the side next the main wall with a good coat of "Protex" supplied by Messrs. Redpath & Co. at 9/- per gallon, a gallon covering approximately 130 sq. ft. This applied chiefly to the Workshop and Cookery room walls and certain interior walls, the one side of which is in the Changing room or Passage ways, may be below the ground surfaces. In this case the earth or clay shall be cut back, at an angle which will ensure their standing, so as not to actually touch the walls and the walls shall be built hollow and any other reasonable precautions shall be taken as directed to make these parts dry.

INTERNAL WALLS are all of brickwork.

SETTING WINDOW & DOOR FRAMES. These shall be securely fixed in the brickwork in an approved manner so as to be absolutely secure and watertight. "Plasterleke" (or other approved similar material) shall be used in bedding these frames. Plasterleke can be obtained from Messrs. Redpath at 7½d. per lb.

WIRE BONDING. No. 8 gald. steel wire shall be placed continuously through all brick walls in every eighth course. There shall be one wire used in every 4½" of thickness. Where walls are at right angles to each other the wires of one shall be carried 6" into the other.

JOINTS SHALL BE TIGHT. All joints shall be perfectly filled with mortar and in the exposed faces the pointing shall be done with a neatly weathered cut and struck joint.

WORK TO BE CLEANED DOWN. All exposed work shall be cleaned down with some approved re-agent, all mortar and other stains being entirely removed.

BLOCKS FOR JOINERY. H. Totara blocks, or strips, or breeze blocks, shall be built in wherever necessary to take joinery or dados.

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VENTILATING GRATINGS. The Contractor shall build in where directed six specially made copper ventilators as mentioned under Plumber, They shall be 18" x 6".

ORNAMENTAL WORK. The building is of very simple design, but the workmanship shall be of the best. Weatherings and other parts are of chamfered double pressed bricks. The chamfer shall be a simple bevel to approval. The flat arches outside shall be radiating, but inside, when flat, they may be "soldier" arches. The radiating bricks shall be cut before being burnt and shall be approved.

The outside sills of all windows shall be of clinker bricks laid in cement mortar, and set at an angle of about 45° and carried under the wooden sills. The course immediately under these sill bricks shall be chamfered so that the combination forms a V as shewn on ½" detail.

VISIBLE INSIDE BRICKWORK. The corridors and staircases and all walls elsewhere above the dados, (except in the Class rooms) shall be of best brickwork, coloured (red) to approval, and pointed with a sharp ruled flush cut joint, but not "tuck" pointed. Where both sides of 9" brickwork are visible, stretcher bond shall be used, but the two shells shall be ties together with iron ties as though the walls were cavity walls. In other parts the 9" work shall be in "Colonial" bond.

Where the concrete bands, required by bylaws, are visible they shall be coloured red, and pointed to match the rest of the work. All salient angles inside the building, when within 8' of floor, shall be chanfered, the chamfer being carried round the opening.

CLINKER BRICKWORK IN STUDIOS & ELSEWHERE. Instead of the ordinary red brick being used, the exposed walls of Studios and of Main Porch, shall be of approved clinker brickwork, and the mortar used shall be of some approved tint. The Contractor shall be preapred to make three samples, (4½ sq. ft. of each) of this pointing before the final choice is made.

The dado in Porch and in all corridors, staircases and landings, and the dados in Latrines, shall all be in similar clinker brickwork. The break between the clinker brickwork and the ordinary brickwork shall be covered by wood as specified under Carpenter. The height of dados shall be approximately 5'6".

FIREPLACE, shall be as shewn, only the best clinker bricks being used for it and for that partof the chimney that shews in the Assembly Hall. The first rim of the arch and the fender kerb, shall be formed of approved

blue stone cubes. The inside surfaces shall be of clinker bricks set in fireproof cement (to be obtained from W.A. Chote & Co.). The pointing of the exposed part of fireplace etc. shall be in approved mortar, each joint in the stonework being slightly recessed from the face of the work.

The back and front hearths of each fireplace shall be in clinker bricks set on edge arranged in "basket" pattern as shewn. In lieu of a grate the Contractor shall allow the P.C. sum of £I2 to be spent on a dog grate by the Employer or Architects.

THE CHIMNEY TOP shall be as shewn, the three top courses being laid in cement mortar. This visible part of the chimney shall be approximately 2' wide. An ordinary 9" dia. flue liner shall be used.

COVERED PLAY AREA WALLS shall have all their exposed parts left in brickwork, pointed as for outside walls. All salient angles shall be finished in chamfered bricks for height of 6'

COPINGS TO GABLES shall all be carried out in brickwork set in cement mortat, chamfered bricks being used.

NICHES. A niche is shewn over the fireplace in the Assembly Hall, the Contractor shall allow foe forming twelve (I2) similar niches where directed in the Class rooms. When these are in 9" walls, to allow the depth required, corbelling out on the opposite side $4\frac{1}{2}$" will be necessary. This shall be done as directed in I" offsets, and above the niche I" insets.

OPEN BALUSTRADING TO STEPS on East side shall be 9" thick with open panels approximately $4\frac{1}{2}$" wide as shewn and $4\frac{1}{2}$" apart. Coping shall be of two chamfered bricks as shewn, with a $4\frac{1}{2}$" brick on top.

VENTILATION. Holes shall be left in walls for the I2" x I0" ventilators mentioned elsewhere.

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blue stone cubes. The inside surfaces shall be of clinker bricks set in fireproof cement (to be obtained from W.A. Chote & Co.). The pointing of the exposed part of fireplace etc. shall be in approved mortar, each joint in the stonework being slightly recessed from the face of the work.

The back and front hearths of each fireplace shall be in clinker bricks set on edge arranged in "basket" pattern as shewn. In lieu of a grate the Contractor shall allow the P.C. sum of £12 to be spent on a dog grate by the Employer or Architects.

THE CHIMNEY TOP shall be as shewn, the three top courses being laid in cement mortar. This visible part of the chimney shall be approximately 2' wide. An ordinary 9" dia. flue liner shall be used.

COVERED PLAY AREA WALLS shall have all their exposed parts left in brickwork, pointed as for outside walls. All salient angles shall be finished in chamfered bricks for height of 6'

COPINGS TO GABLES shall all be carried out in brickwork set in cement mortar, chamfered bricks being used.

NICHES. A niche is shewn over the fireplace in the Assembly Hall, the Contractor shall allow for forming twelve (12) similar niches where directed in the Class rooms. When these are in 9" walls, to allow the depth required, corbelling out on the opposite side 4½" will be necessary. This shall be done as directed in 1" offsets, and above the niche 1" insets.

OPEN BALUSTRADING TO STEPS on East side shall be 9" thick with open panels approximately 4½" wide as shewn and 4½" apart. Coping shall be of two chamfered bricks as shewn, with a 4½" brick on top.

VENTILATION. Holes shall be left in walls for the 12" x 12" ventilators mentioned elsewhere.

PLASTERER.

All weatherings and other work required to be done by the Plasterer to make the building watertight, shall be executed under this Contract and the work shall be repaired and made perfect before the building is handed over by the Contractor.

ANGLES. Where there is any possible danger of their being damaged, all salient angles shall be rounded off as directed.

PLASTER for outside work shall be composed of one part of Portland cement to three of approved river sand.

FLOORS. (NOTE: The concrete floors of Cookery Room is covered with wood). Concrete floors, or landings and the surfaces of steps where not specified to be otherwise, throughout, shall be brought to a smooth and even surface, either by screeding them while the concrete is fresh, or by an applied coat of plaster. When this latter course is adopted it shall in no place beless than ¼" thick. In the Latrines and Changing rooms in sub-basement the plaster shall be stained an approved red. In parts where tiles are to be laid the plaster shall be of such thickness as to be entirely effective.

RISERS OF STEPS. where not specified to be otherwise, shall be stuccoed in coloured stucco matching the treads, and where they join the treads the angle shall be rounded with ½" radius.

DADOES. The lower part of the dados in Class rooms shall be of wood, but the space above them (3'6" wide) shall be rendered perfectly even in a coat of cement compo (3 to I) and shall then receive a perfectly smooth hard and even surface of Keene's cement, left perfectly clean at completion. Above this dado, and on a similar rendering coat as specified for dado, the walls in all Class Rooms (but not in the Changing Rooms) shall be set in an approved coat of putty and plaster.

CONCRETE CEILINGS ETC. The undersides of concrete floors, landings and staircases shall receive a "slush" coat of cement and sand and shall then be plastered with an approved rendering coat, and shall finally be finished with a coat of approved hardwall plaster left perfectly white at completion. The soffits of staircases and half-landings (excepting those from Sub-basement) shall be panelled with 1" sunk panels, left plain without mouldings. This plastering shall be done so that perfect adhesion is obtained to the concrete.

Parts of the heads of the narrow windows in gables on top floor

shall be plastered in tinted stucco as shewn on detail drawings, and where the ends of the steel joists come within 1" of the brick surface they shall be masked with stucco tinted to match the adjoining work.

CROSSES ON SMALL GABLES shall be cast in cement (2½ to 4) and the upright and each arm shall be reinforced with ⅜" dia. rod. The base of the cross and a small part of the coping as shewn, shall also be in cast cement so as to make the whole perfectly secure.

CONCRETE BASE. On the North and West side the walls below the Sub-basement floor line are of concrete. These shall be plastered with portland cement compo brought to a perfectly even face and finished with an approved "stippled" surface.

TREADS OF STEPS. Where not specified to be otherwise the treads of outside steps shall be plastered with Portland cement plaster (2½ to 1) stained to match the red silicon nosings.

CEILINGS. All ceilings that are not of concrete, except those of the play area in Basement, (which are left unlined) and except those of Assembly Hall and Studio, which are of fibrous plaster boards, shall be lathed with "Steeltex" as supplied by W.A. Chote & Co. for interior plaster. All joists shall be lapped at least ½" (one half inch) wire to wire, no backing between. The material shall be toe-nailed at corners of mesh in order to stretch it taut. The reinforcing shall be nailed every two inches on to timbers with special "Steeltex" lath nails which are furnished with every bundle of the material. The steeltex shall then be plastered in two coats, the first being one of "Acme or other approved pulp sufficient depth to completely cover the Steeltex wires. This shall be scratched to receive a finishing coat of "Acme" or other approved similar finish mixed in equal proportions with approved hydrated lime. The Partition between the Studio and the rooms adjoining shall be finished on the Studio side in the same manner, excepting that the finishing coat shall be in some approved "hard-wall" plaster.

PLASTER SKIRTINGS. Where the brickwork is carried down to the floor line as in corridors, stairways etc. there shall be formed a portland cement (2½ to 1) ¼" thick skirting with bevelled edge on top. Where the floors are horizontal this skirting shall be two courses of bricks in height. On the sloping parts of stairs it shall be 4" wide measured from the point of the nosing at right angles to the slope. The junct-

ions of these skirtings with the floor shall be rounded off with a ¾" radius.

FLOOR TILES. The floor of the Cloister, that of the Main Entrance Vestibule, the landing to the steps at East end of the building, and the floors of the two porches at the East end, shall all be laid in the best manner with hard, red, dull surfaced approved tiles. The "filling" shall be 6" x 6" tiles laid diagonally, and the borders shall be of 2" wide tiles in three rows, two of which shall be of black or other approved colour. The treads of the wide flight of steps at the main Entrance between the silicon treads and risers shall be of red tiles.

There is no wall tiling in this Contract.

SILICON NOSINGS. The nosings across entrance to Cloister, the nosings of the broad flight up to Main Entrance and the nosings of all outside doorways and steps, and the nosings of all the steps and landings on East side of the building, shall be red silicon firmly fixed in their places. The salient angles shall be of silicon moulded for the purpose.

FAMA. The floors of all Latrines, except those in sub-basement, shall be covered with red Fama. It shall have coved angles, and shall be carried 6" up walls, and up to a hardwood strip in doorways. Each of these floors shall have a fall to a lead outlet with a brass grating.
All shall be laid in the best possible manner the whole surface being polished and treated with Fama oil, and shall be handed over without any defacements of any kind.

CARPENTER & JOINER.

ALL MATERIALS & WORKMANSHIP shall be of the best of their respective kinds.

TIMBER TO BE STACKED. The whole of the timber required on the work shall be stacked in an approved manner on the site within 42 days of the date of acceptance of tender, on failure whereof the Contractor shall forfeit and pay to the Employer as and by way of liquidated and agreed damages the sum of £1 (one pound) for every day that the timber or any portion thereof remains unstacked as aforesaid.

TIMBERS TO BE DRY. All flooring, lining and joinery shall be perfectly dry. Other timbers shall be partially seasoned, and it shall be distinctly understood that the Architects or Clerk of Works shall be at liberty to reject any timber that they or he may consider unsuitable for that part of the work in which it is intended to be used.

HEART WOOD. All timber shall be real heart wood, no strip of sap, or doubtful heart being used.

NAILINGS. Each nail shall be two and a half times in length the thickness of the piece it is securing, and all that are in visible work shall be punched in below flush.

BOLTING TO BRICKWORK. All timbers touching walls (rafters in gables and joists etc.) shall be bolted to brickwork with ½" bolts spaced not more than 4' apart.

DRESSED TIMBERS. All visible woodwork, except in those parts that are left unlined, (such as the ceiling of workshop and the sub-basement) shall be dressed. All joinery and linings, panellings, skirtings, picture rails, and battens on ceilings and walls, shall be hand dressed and scraped perfectly smooth and clean. Where machine dressed material, flooring, shelving etc.) is used, it shall be so treated that no plan marks or stains are visible. All exposed flooring shall be made perfectly smooth and clean by an electrically worked floor surfacing machine.

SIZES OF TIMBERS. Should the size of any timber not be recorded on the drawings or elsewhere, the Architects' directions concerning them shall be obtained and followed.

SPACING OF TIMBERS. In a general way all structural timbers shall be spaced so as not to exceed 18" between centres.

KINDS OF TIMBERS. Unless specially specified to be otherwise, the following timbers shall be used.

H. TOTARA, for all door and window frames and their sills, for all timbers bedded in walls or having three of their sides touching brick or concrete, for all sashes and other timbers that are exposed to wet weather unless specified to be otherwise.

H. JARRAH, for all exposed timber used in the Assembly Hall and Studio, except flooring of Assembly Hall which shall be of H. Matai. The steps to the stage and the nosing round the Stage in the Assembly Hall shall be H. Jarrah. The doors between the Hall and its Porch shall be H. Jarrah and the door between Hall and Class room shall be made in two thicknesses, that towards the Hall being of H. Jarrah and that towards the Class room being H. Red Pine. H. Jarrah shall be used for all the visible timbers in Cloister and in Porch at West end of building.

H. MATAI for all flooring, except that of Studio, which shall be of Jarrah.

H. OREGON OR BUILDING H. RIMU for all joists and structural timbers that are out of sight.

SELECTED H. RIMU for all joinery including dados and other parts not mentioned to be otherwise.

FLOOR IN COOKERY ROOMS. Over the concrete of this floor there shall be laid on bricks 3" x 3" H.Totara joists at 18" centres, the bricks being in rows 18" apart and to these joists there shall be nailed flooring as specified elsewhere, excepting that it shall be laid folding and not tongued and grooved. At the doorway the riser shall be of wood pierced with $\frac{1}{4}$" holes, 1" apart in every direction.

SLEEPERS AND STRINGERS shall be of sizes shewn and shall be firmly secured to walls by $\frac{1}{2}$" bolts not more than 4' apart and to the piles by wires already specified.

FLOOR JOISTS shall be of the sizes shewn, or if not shewn, as directed and shall be spaced so as not to exceed 18" between centres, those under half the Assembly Hall being firmly nailed to sleepers and stringers. Where timbers are surrounded by Brickwork, there shall be a clear space of at least $\frac{1}{2}$" all round them, and in no case shall the ends extend into the cavities of the outside walls. All trimmers and joists taking same shall be 3" thick. Where joists are supported by R.S.J's they shall be fixed as shewn on drawings, with 2" x 2" pieces fixing the parts together above the rolled steel joist.

ANCHOR BOLTS. Every fifth joist of Ist. Floor and in the floors of the back room on ground floor, shall be anchored with the walls at the

outside end as shewn and when joined up with 9" walls with $\frac{5}{8}$" bolts with straps 12" x 2" x $\frac{1}{2}$", with $\frac{1}{2}$" cross bolts carried into centre of wall, and having 6" x 6" half inch plates as washers.

HERRING BONE OR SOLID BRIDGING. All joists over 8' in span and 8" in depth shall be stiffened wither by 3" x 2" herring bone bridging or by $1\frac{1}{2}$" thick solid bridging. The joists under Science room floor shall be 2" deeper than the others to allow for wastes passing through them.

ROOFS shall be formed as shewn, the different parts in the Class room and Latrine roofs being firmly nailed together and the whole left perfectly rigid. Unless otherwise specified or shewn these rafters and collar ties shall be 8" x 2". The wall plates in all cases shall be bolted to the walls with $\frac{5}{8}$" bolts spaced not more than 3'6" apart. The RIDGE Blades shall be 10" x 2" and at ends shall be well secured to gable walls with $\frac{3}{4}$" strap bolts, with 2" x $\frac{1}{2}$" straps bolted to ridge with $\frac{1}{2}$" bolts. The end Rafters butting against brickwork shall be secured to same by $\frac{1}{2}$" gald. bolts spaced at 3' centres. All roofs unless otherwise shewn shall have a pitch of 45°. In all Class Rooms on top floor the collar ties shall be trimmed for the ventilating openings. In each of the Class Room roofs the Contractor shall provide and fix two 1" tie rods with $\frac{3}{4}$" Kind rod. These shall be fixed as directed with large washers, nuts etc., the rods being perfectly horizontal.

The Studio and Assembly Hall have open timber roofs with framed principals. These principals shall be most carefully framed and bolted together, the "sweeps" being scarfed at their heading and having glued flush joinrs where they are required to bring the timbers to widths wanted. The intermediate principals shall each have 1" dia. steel tie rods and $\frac{3}{4}$" Kind rods as shewn. The tie rods shall be perfectly horizontal, neither chambered nor sagging, and the kind rods shall be fixed so as to keep them in this position. Each shall have an approved turnbuckle for tightening them up. The PURLINS shall be let in 1" into each principal rafter, and shall be flush with them on the top. The Purlins shall be shewnailed, and on top of each there shall be a piece of hoop steel $1\frac{1}{2}$" wide, 16 gauge and 2' long, each being nailed to each purlin with three 4" nails and one nail to each rafter. In the case of the Assembly Hall roof, ON these purlins shall be nailed 3" x $3\frac{1}{2}$ dressed common rafters, spaced as shewn, 11 to each bay, those on each side of the principal overlapping it $\frac{1}{4}$".

In the case of the Studio roof the common rafters shall be 4" x 2" spaced at 18" centres. In the Assembly Hall roof ON on the 3" x 3" rafters there shall be laid ¼" thick approved fibrous plaster boards, and over this 1" thick closely laid and double nailed sarking taking the felt and slates as specified elsewhere. In the case of the STUDIO ROOF, to the UNDERSIDE of the 4" x 2" common rafters there shall be secured ¼" approved fibrous plaster boards, the junction with the purlins and principals being covered with 1½" x 1½" scotia mitred at angles. At the junction of the roofs with walls there shall be the cornice shewn formed of the projecting wall plate and a 1" thick board running between this plate and the lowest purlin, the junction with which shall be covered with a small moulding as shewn.

The BOLTS used throughout the framing of the principal rafters shall have neatly cut hexagonal heads and washers and shall be visible. Where not shewn to be otherwise they shall be ¾". In the roof of the Assembly Hall there shall be formed a large dormer on the North side, in which shall be the windows shewn, while on the South side there shall be the four dormer gables formed with valleys etc. as shewn. The ceiling of the dormer shall be finished with plaster boards and battens, these latter spaced to correspond with the visible rafters in the main roof.

HOWE TRUSS. As a means of strengthening the ridge over the Studio where it takes the Fleche, a Howe Truss shall be formed as shewn, the lower chords being bolted to collar ties of principal. The two chords shall be 10" x 4" and into them shall be framed and bolted the 6" x 4" strutts shewn. The vertical rods shall be 1" round and shall have the necessary heads, nuts and washers. All shall be left rigid and so secured as to serve the purpose for which it is intended in the best manner possible.

ROOF OF OVERHANGING GALLERY, shall be formed as a flat in the manner shewn while that of the EAST PORCH shall be a leanto with 4" x 3" dressed rafters at 18" centres, covered with 4" x 1" V jointed closely laid boarding dressed on the underside and taking the slates. The larger Porch on the SOUTH SIDE shallbe formed as shewn. The CLOISTER ROOF shall be formed as shewn. Each pair of rafters shall be framed together and shall have scissor ties, the timbers used being 4" x 3" H. Jarrah. There will be no ridge blade. These rafters shall be at 18" centres and shall be at 18" centres and shall be well secured to plates at bottom.

Over the rafters shall be 4" x ¾" V-jointed boarding (not T. & G.), closely laid and double nailed, and on this best quality red edged roofing felt and then slater's battens. Over the plate and in between the ties and the rafters there shall be placed a 1" thick board to prevent birds from nesting.

BEARERS TO TAKE TANKS IN ROOF. The Contractor shall fix five 10" x 4" H.Rimu beams crossing the Latrine wing on West end of building in order to take tanks. These beams shall be floored with 1½" rough material upon which the tray to take the tanks will stand. The flooring and tray shall extend the full width of space (approximately 12'6") and the tanks will be placed at each end leaving approximately 4' between them.

THE FLECHE holding the ventilator over Studio shall be constructed as shewn on the drawings. It shall be put together in the strongest manner possible, and shall be bolted and tied down to the roof so as to withstand the strongest gales. The base and slopes of this Fleche shall be covered with 1" boarding closely laid and well nailed, and on this shall be laid 24 gauge copper. (see Plumber.)

HOOP STEEL BRACING. All pitched roofs shall be braced with 1¼" 16 gauge gald. hoop steel bracing, well nailed with 2½" nails at every intersection with rafters. This bracing shall be in all roofs and fixed as nearly as possible at an angle of 45° with rafters. They shall start at the foot of the rafter nearest each gable wall, and shall be continuous up to the ridge as directed.

TIMBER FOR PLUMBER & SLATER. The Contractor shall provide battens and other timber required for the roofing Contractor. The battens shall all be H. Oregon. No nails in any case shall shew inside the roof of Assembly Hall. The Contractor shall provide boxing etc. for all gutters etc. the materials being 1" thick. Bearers for gutters shall be 2" thick of varying depths as may be necessary to give falls etc.

HANGING SLATES. The front of the overhanging gallery behind Studio on 1st floor and small triangular spaces at east and west ends of Assembly Hall roof, shall be covered with hanging slates as specified under Slater. These shall be nailed to 1" thick boarding, which boarding shall be nailed to 5" x 2" studs at 18" centres. In the case of the Assembly Hall these studs and their necessary plates shall be placed against the 4½" brickwork of the wall (which shall be reduced to this thickness for this purpose). The feet of these slates where reaching the brickwork below shall rest on

24 gauge copper weathering as specified in PLUMBER.

FRAMING OF CLOISTER. The Cloister framing shall all be of H. Jarrah. The posts shall be 5" x 5" of the number shewn, secured at bottom by I" gald. pipe dowels, and at top stub-tenoned into 6" x 5" plate. Under this plate shall be firmly secured the sweeps which shall be 3" thick and cut to detail, ½" coach screws being used. The rail shall have 4" x 3" top rail bevelled on upper face, and grooved for boarding and the bottom rail shall be 4" x 3" rebatted for boarding. The space between rails shall be filled in with 4" x I" Jarrah T.G. & V. Jointed, both sides and well nailed to plates. The bottom plate shall be I" from floor. The steps up to Cloister shall be of Jarrah with I2" x I½" treads and I" risers let into 2" thick stringers. The rail shall have 4" newels and shall match the handrail of Cloister.

DIVISION BETWEEN W.C'S. The framing of these divisions shall consist of 3" x 3" posts and three rails. The total height shall be 6' from floor, and the bottom rail shall be 6" from floor. There shall be an intermediate 3" x 3" upright between the top and bottom rails but not reaching the floor. All parts shall be mortised and tenoned together. The panels shall be formed of Pollte asbestos sheets held in place by I" quarter rounds. As the doors are only 2'3" wide x I½", 3" x 3" rebatted upright will be required. The small panel thus formed at the side of each door shall be made to match the divisions.

THE SCREEN WALL between the Modelling and Casting rooms shall be finished in a similar manner except that is shall rest on the floor, and the panelling shall be of wood. They shall be 7' high to the underside of the top plate, which top plate shall be 4" x 3". The screen between these rooms and the Studio shall be framed as indicated on ¼" scale section.

FLOORING. Except where specified to be otherwise it shall be of 4" x I" T.& G. dressed H. Matai, secret nailed and having the heading joints scattered and as few as possible. This flooring (except where specified to be otherwise) shall be dressed down and electrically machined smooth all over where visible and shall be left perfectly clean and free from defacements at the completion of the work. The flooring in Studio shall be 4" x I" H. Jarrah treated in the same manner.

SOUND DEADENING CERTAIN FLOORS. The floors of the four back Class Rooms on Ground floor and of the Studio and two back class rooms on Ist.Floor

shall have a 2" wide strip of cowhair felt of medium weight placed along each joist under the flooring boards, and 6" down a 1½" x 1" strip of wood shall be nailed to each joist and a rough 1" false floor shall rest on these strips. The space thus formed shall be filled in to a depth of 2" with coke breeze concrete formed of 6 parts of breeze to one of hydraulic lime thoroughly incorporated together. This concrete is mentioned under Concrete work.

STAIRCASES Are of concrete.

HANDRAILS TO STAIRS. Against the wall side of every stair (including those outside) there shall be fixed on very strong wrought iron brackets 2" dia. handrails. The brackets for those outside the building shall be of gald. iron. These brackets shall not be more than 4'6" apart. To the outside edges of each internal staircase there shall be a continuous moulded handrail out of 4" x 4" material starting at the bottom with a 6" x 4" piece turned to suit handrail. The balusters shall be of iron ⅝" sq. and spaced at about 5½" centres (two to each tread.). There shall be three in a group at the bottom supporting the start of the handrail. Each shall be firmly bedded in the concrete at the lower end and at the upper shall bent over and secured byscrews to the underside of the wooden rail.

PICTURE RAILS. Round Class rooms and the two large Cloak rooms at a height directed there shall be strongly fixed 4" x 1" picture rails bevelled on inside top edge so as to take picture hangers and on the outside on the lower edge.

ARCHITRAVES. Where the brick finish extends from floor to ceiling, ordinary architraves are not required. Elsewhere they shall be 4" x 1" cut square at junctions, not mitred.

DADOS. The Class rooms shall have dados round them as shewn on drawings the brick walls being plugged to receive them. The lower part shall have a 6" x 1" skirting bevelled on top edge. Above this there shall be vertical 4" x ¼" T.G. & V. boarding closely laid and secret nailed. This shall be finished at the height shewn with a 4" x 1" capping piece rebatted along the lower edge to take the vertical boarding. On this there shall be a 3" x 1" ledge. At the height of 7' from floor there shall be a second 4" x 1" piece. There shall be a similar dado fixed round the two Cloak Rooms, but in this case the total height shall be 6' and the middle rail and plaster shall be omitted, the boarding filling the whole

space between the skirting and the rail.

On one wall in each Class room and on one wall in each Class Room, where the windows are close together, the plaster part of the dado and the I" ledge shall be omitted, the middle rail forming a "finish".

BOXING IN R.S.J'S. The steel joists, with the exception of that in Workshop and those in sub-basement, shall be boxed in with I" thick selected Red Pine as shewn on drawings.

ALL ANGLES, between breaks in ceilings and between ceilings and the walls shall be formed with 4" x I" and 3" x I" battens. The 3" x I" battens shall also be placed on ceilings at all junctions with beams and ceilings.

"CHAIR RAIL". In those places where the lower parts are of clinker bricks and the upper part of red bricks, the junction shall be covered with a I" thick chamfered chair rail 3" wide where the lines are horizontal. On the raking parts of staircase this width shall be increased so as to mask the change in colour of the bricks.

SKIRTINGS. Many walls have dados, and those in corridors have the brickwork carried down to floor and are there finished with a hard plaster skirting. A wooden skirting 8" x I" bevelled on top edge, will be required in the Studio and the Modelling and Casting rooms. These shall be scribed to floors and nailings shall not be more than 2' apart.

SHOE LOCKERS. There shall be provided eight ranges of shoe lockers formed as shewn and placed in the four changing rooms. They shall be of H. Rimu strongly put together. The ends and tops shall be of I" thick material, the latter overhanging the former on all sides. The intermediate uprights shall be ¾" thick. Along the fronts and backs there shall be 3" x I" horizontal pieces as shewn with a 2" x I" immediately under the top. The different parts shall be put together with screws and the holes plugged with wood. The bottoms of the compartments shall be formed of ¼" dia. gald. iron rods spaced at 1¼" centres passing through carefully drilled holes in the uprights. The holes in the ends shall not pass through the timber, or if it be necessary that this shall be done at one end, the holes shall be carefully plugged.

HAT AND COAT STANDS. There shall be eight of these formed as shewn, each taking 30 pegs. The parts shall be carefully framed together, H. Rimu being used. The pegs shall be approved and of the value of 5/- per doz. At the two ends of each stand there shall be a seat 2'2" long and I" thick with clamped ends and supported as shewn.

FITTINGS IN STUDIO, MODELLING ROOM & CASTING ROOM. Under the windows in Studio there shall be formed a row of cupboards as shewn. The tops shall be 1" thick overhanging the framework below $\frac{3}{4}$" and having rounded edges. The doors shall be 1" framed and panelled, hung on 3" butts and one fold secured by bolts, 1/- each, and the other fold by a neatly cut wooden button 3" long and $1\frac{1}{4}$" wide, fixed with small coach screw and washer. There are six cupboards, three of them shall be filled with upright divisions about 6" wide formed of upright slats as shewn on $\frac{1}{4}$" scale Section. These are to take canvasses. The other three shall each have two shelves formed of 1" dressed H. Oregon and the full size of cupboard. Each of these shelves will require a support in the middle. Over these cupboards and as a continuance of the window "stool" there shall be fixed a 12" x 1" H. Jarrah shelf supported by cut brackets 1" thick, spaced not more than 3' apart. All visible work in these cupboards shall be H. Jarrh. In the MODELLING ROOM there shall be a bench 8' long and 2' wide formed of H. Oregon and of a height of 3'6". The side of this bench and the doors under it shall be of H. Rimu. The doors shall be 1" framed and panelled, and made in three parts, each one sliding easily on ball bearings to approval. Between the doors and the top there shall be four drawers, 4" deep, properly made to slide easily and each provided and fixed complete two cement washing tubs of the value of £4 amd in the casting Room a similar pair, also valued at £4. These are mentioned under Plumber.

BOXES TO TAKE ELECTRIC LIGHT CONDUIT. In all the Class Rooms the Contractor shall provide boxes to take E.L. Conduits. They shall be of picked Rimu with covers screwed on with round headed brass screws. They shall be as small as possible the sizes being obtained from the Electrician. These boxes shall be perfectly vertical when on the walls and when horizontal shall be secured to the underside of the boxing of the R.S.J'S.

LOUVRE FRAMES, in the gables shall be made of H. Totara as shewn, grooved for the slats which shall be of H. Jarrah set at a very steel angle. Each slat shall be built up of 4" x 1" H. Jarrah in two thicknesses, the lower corners of each being cut off as shewn, and finished along the top and bottom with a 1" x 1" fillet as shewn, so as to form a drift check.

STAGE. In the Assembly Hall there shall be formed the stage shewn, all the visible parts being H. Jarrah. It shall rest on six framed supports, form-

ed of 5" x 2" sleepers supported by 4" x 2" uprights at 4'6" centres, these uprights being stiffened where necessary with 4" x 2" struts. On these sleepers shall be fixed 5" x 2" joists at 18" centres as in a floor. The flooring shall match the Hall and in front and North side there shall be 3" x 1½" nosing H. Jarrah. The North side shall be filled in with 4" x ¾" T.G. & V. upright H. Jarrah boarding having a 6" skirting and 5" x 1" piece immediately under the nosing. This piece shall continue round the front, projecting ½" beyond the line of the muntins which shall be 6" x 1". The panels shall be filled in with ledged doors, the ledges being 6" x 1" very slightly chamfered and the sheathing 4" x ¾" T.G. & V. The hinges used shall be approved and of the P.C. value of 6/- per pair. The flying style of one of the doors in each pair shall be attached and each pair shall be provided with two bolts value 1/- each and an approved lock valued at 2/6 each. Each door shall be braced on its inner surface with 6" x 1" thoroughly dry piece of H. Oregon to give it rigidity.

PLATFORMS. In 12 of the Class rooms there shall be formed platforms of the sizes shewn. They shall be 6" high and of flooring matching the rest of the flooring, but having rounded nosings along the exposed edges. The risers shall be faced with 5" x 1" H. Kauri. The pieces supporting the floor shall be 5" x 1" H. Oregon. Each platform shall be in two parts to make their moving comparatively easy. They shall not be fixtures.

DOORS. The frames generally shall be 2" thick solid rebatted, tightly fitted between the brick openings and well secured. The junction with the brickwork shall be covered with a quarter round moulding placed on each side of the frame. The front door framework shall be as shewn. Thecdoor itself being 2¼" thick and the panelling flush on the inside. Each fold of the outside door shall open outwards and shall be hung on 6" butts and for the bolts, locks and handles the Contractor shall allow the P.C. sum of £2.10.0. (Two pounds ten shillings) for each pair. The inner main doors in the Assembly Hall shall be 2" thick, and framed as shewn upon drawing. The two large panels shall be glazed with ¼" BRitish polished plate glass fixed between beads. Each fold shall be hung on approved Avon spring hinges and shall be provided with H. Jarrah wooden pull. This inner door and its frame shall be H. Jarrah.

The Corridor doors on the Eastern front shall be as shewn upon drawings, the upper parts being glazed with 28 oz. best seconds English glass and the side and fanlights with 21 oz. best seconds English glass. Each

fold of the outside doors shall have three 4" butts and the inner doors (which shall be in other respects similar to the outside) shall be hung on approved Avon spring hinges and shall have wooden pulls as designed.

The doorway into small class room at end of basement corridor shall be as shewn, with its side and fanlights filled in with 21 oz. seconds English glass.

The screen and door cutting off Janitor's room shall be as shewn, all the panels being of wood.

The door at end of Cloister is shewn on longitudinal section and shall in a general way be the same as the other outside doors except that there are no side lights and the fanlight is less in height.

The W.C. doors shall be 5'6" in height, 2'3" wide and 1½" thick, four-panelled and hung on 4" butts. For the fasteners of each of these W.C. doors the Contractor shall allow the P.C. sum of 5/-

The door from workshop into the space under West end of Assembly Hall shall be 1" ledged and braced, hung on 4" butts and secured by bolt of the P.C. value of 2/6.

The door from Corridor into empty space under Changing room shall be fourpanelled 2", 6'6" x 2'6" and shall have fastener of the P.C. value of 5/-.

The door between Class room and Assembly Hall shall be made in two thicknewses screwed together with sunk serews, the head holes being plugged with wood matching the rest of the door. The side towards the Assembly Hall shall be of picked Jarrah and the other side of picked Rimu. The panels shall be in two thicknesses. This door shall be hung on three 4" A.B. hinges and secured with fasteners of the value of £1.

The doors into Studio shall be 2" thick of Jarrah as shewn upon drawings, and shall be hung on three 4" acorn A.B. hinges and shall have approved fasteners of the value of £1 each set.

All other doors throughout the building shall be hung in 2" rebatted frames on three 4" A.B. hinges, and shall be four-panelled as shewn on drawings, the two upper panels being glazed with 28 oz. seconds English sheet glass. For the fastenings of each door not mentioned lesewhere, the Contractor shall provide the P.C. sum of £1. All doors not mentioned or shewn to be otherwise shall be 7' high and 3'2" wide.

WINDOWS. The windows generally are as shewn upon drawings, The frames, sills and sashes being of H. Totara. The traceried windows in Assembly Hall and

its Porch shall be most carefully put together and made of absolutely dry material.. Twenty four of the total 54 squares shall be made to open as pivots "Revolux" hinges being used, and each of the 24 being provided with approved regulating stay and cords, for which the Contractor shall provide a P.C. sum of 10/-. The other parts of these traceried windows shall be fixtures. The sashes shall be 2½" wide and 2" through.

Inside windows (borrowed lights) shall be fixtures except where shewn to be otherwise, the sashes being 2" x 2" divided as shewn upon drawings. The sashes shall be fixed between beads. Where shewn to open they shall be pivot hung, "Revolux" hinges being used and stays provided as specified for other windows. This does not refer to the four fanlights over the Changing room doors which shall be made to open, "Revolux" hinges being used with 10/- approved stay.

The rest of the windows shall be as shewn. There shall be no balance weights. The styles of all outside windows (fanlights included) shall be cut in half longitudinally as directed, and then fitted with revolux hinges so as to revolve. Each part that opens shall be provided with an approved fastener with cords complete and for each of these the Contractor shall provide the P.C. sum of 10/-.

BLINDS. The Contractor shall provide the P.C. sum of Sixty-five Pounds (£65) for the purchase and fixing of blinds. The blinds shall be made and fixed by anyone whom the Employer may choose.

THE TABLES AND DESKES, in Class rooms, shewn on plans, are not in the Contract.

CEILING VENTILATORS. In all ceilings of Ist. Floor (excepting that of the Studio) there shall be provided and fixed ceiling vwntilators. They shall be octagonal 2'6" internal diameter, the margin consisting of 4" x 1" material to the back of which shall be secured perforated zinc with ¼" dia. perforations. Thses margins shall be fixed to ceilings with large round headed screws so as to be easily removeable. Each of these ventilators shall have a ledged and hinged flap made of ¾" material. These flaps shall be operated by gald. wire clothes line passing over gald. iron approved ship's pulley blocks through ceilings and down walls where directed and secured at bottom by proper approved brass cleats. Where the cords pasx through the ceiling & block to form a"thimble" shall be fixed so that the plaster does not become chafed. The sheaves used to guide the cords shall be approved and shall be of the value of 2/- each and all shall be left in perfect working order.

WIRE NETTING OVER WINDOWS IN PLAYGROUND. All the windows in the covered playground shall be protected by ½" mesh galv. wire netting, tightly stretched over each separate sash and secured to woodwork in an approved manner. To cover the edges of this netting small strips of wood shall be screwed on neatly mitred at angles. The screws used shall be galv. round headed screws.

WOODEN TERMINATION TO GABLES. All the larger gables shall be wooden framed where shewn. This framing shall be most strongly put together to withstand earthquakes, and shall be bolted to the brickwork below and to the roof rafters that are brought up against them. Their construction is clearly indicated in the drawings. It will be observed that the two front large gables are treated in a different manner to the others. The wooden part of these shall be started on a heavy 4" thick H. Jarrah sill wide enough to cover the wall below, to which it shall be well bolted with ¾" bolts at 30" centres. All outside bolts shall be galvanized.

RE COOKERY & SCIENCE ROOMS. Drawings shewn the furnishings of these rooms and the carrying our of this work is in this Contract.

As before stated the floor of the Kitchen is raised 6" abovec the concrete. As will be seen from the drawing, there will be a waste pipe crossing the floor. The boards immediately above this waste shall be screwed down with brass screws so as to be easily lifted. In the Science Room the joists are made 2" deeper than they are elsewhere to allow for the waste pipes from sinks. Where these pipes run at right angles to the joists the boarding covering them shall be fixed with brass screws, and over the junction of the pipes, trap doors of an approved size shall be formed and fixed down with brass screws. The Carpenter shall cut notches for the Plumber's wastes and in doing so shall be careful not to weaken the joists more than is absolutely necessary.

FITTINGS IN SCIENCE ROOM. Where shewn some of thepresent fittings are reused. They shall be placed in their positions by the Contractor.

All the new work shall be made of picked Rimu where visible, but shelving and other parts not exposed shall be of clean H. Oregon. The four benches in Science room shall be formed as shewn, made as for cabinet work, the different parts being screwed together. The shelves shall be the full size of cupboards and of the number shewn. The doors shall be 1¼" framed, hung on 3" brass hinges and secured with approved catches valued at 2/- each. Excepting at the back of each sink (where there shall

be a door matching the others) the backs and ends shall be of 4" x ¾" T.G. & V. secret nailed and stiffened where necessary with battens on inside, let flush into rebatted rails at top and bottom. The divisions and shelves shall be 1" thick. The tops shall be cut out and "dished" for the sinks.

FUME CLOSET shall be made as shewn, the parts being tightly fitted together and made as airtight as possible, and scribed tightly to wall. The front shall be balanced as shewn, the sheaves having ball bearing and a lift of the value of 1/6 being provided. The three sides and the top shall be glazed with 21 oz. English seconds glass without blemish. The closet shall be supported by the framed brackets shewn, firmly bolted to walls.

The long cupboard against the inner wall shall be made in two parts, the lower one being that taken from the present building with the top and sinks removed, and a new 1" top provided and fixed above this shall be formed a cupboard 12" deep (inside measurements) divided into eight compartments, and having in them three shelves formed of 1" H. Rimu, resting on but not fixed to cleats. The total height of this upper cupboard shall be 3'9", the top being of 1" material, overhanging 1" and being bevelled on the under edge. The back of this cupboard shall be formed of ¼" thick material nailed to the upright. The exposed end shall be 1¼" thick square panelled. The whole front shall be enclosed with 1¼" framed sliding doors, glazed with 21 oz. English seconds glass, running on steel tracks and having approved rollers, all as effective and noiseless as possible. Each door shall be provided with an approved flush pull.

The two cupboards in Kitchen shall be similar to those just described excepting that both lower and upper parts shall be new, the lower one 2' wide instead of 2'6" and the doors shall be hung on 3" hinges and provided with cupboard catches of the value of 1/6 each and bolts valued at 1/3 each. Instead of glass the upper doors shall have wood panels.

The vegetable, sugar & flour bins shall be as shewn, the first blocked up from floor 2" and the second firmly secured to walls.

In the Cookery room there shall be provided three forms, one 7'6" land and two 6' long each. They shall have 12" x 1" tops, 1" thick supports 3" x 1" rails, and shall be braced so as to be rigid.

The two longest tables shall be those taken from the present Science room and the three smaller tables shall be made to match these in all

particulars excepting length.

PANELLING IN ASSEMBLY HALL. Round the four walls of Assembly Hall there shall be H. Jarrah panelling formed with 8" x 1" base, 6" x 1" top rail, 6" x 1" outside styles with 4" x 1" muntins and inner rail. The outside edges of top rail and off outside styles shall be slightly chamfered, also top of bottom rail. The whole shall be rebatted for panels which shall be $\frac{3}{8}$" thick, the whole put together in a perfect manner. The whole shall be fixed to walls with a layer of saturated felt between the brickwork and the woodwork.

BOXING IN R.W.P., leading water from Assembly Hall roof through the Changing room, shall be done with 1" material. The bottom shall be horizontal and the front shall be fixed with screws.

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DRAINLAYER.

In order to make room for the foundations etc. of the new building a large part of the present drainage will have to be lifted, Before this is done a new drain intercepting the present drain and properly connected therewith shall be laid as indicated on plan. This drain can be connected with an existing one which will run for a certain distance clear of the new buildings, on their East side. Approximately 60 feet North of this junction the existing drain shall be taken up for the distence shewn and a new one laid joining with the existing drain approximately 96' distant. The new drains with gully traps, vents, cleaning eyes and everything necessary to comply with the City Regulations shall be carried out in the best manner and best materials by the Contractor. Ventilating and other pipes that are normally made of metal shall either be in cast iron or 24 gauge copper. No galvanized sheet iron shall be used.

NOTE;- The diagram shewing the present drain is not guaranteed to be correct. It has been complied from the City Engineer's plan. For the purpose of the tender the diagram will be used, but the Contractor shall trace out the existing drains on the site and should more or less piping be required, an adjustment at schedule rates will be made.

STORMWATER DRAINS. These are shewn as being new throughout, but should any existing drains that are suitable be met with, the deduction made for the use of such drains will be adjusted at schedule rates. One inspection pit with concrete cover shall be provided.

Cleaning eyes shall be provided for each change of direction.

In a general way the City Engineer's requirements shall be met without any extra charge to the Employer.

NOTE;-- See special note re loose material on site on Page 8.

PLUMBER.

ALL WORK shall be done by a licensed tradesman and in strict accordance with the City By-laws and regulations whether specially mentioned in this specification or not.

MATERIALS shall be of the best quality of their respective kinds and proofs shall be given if required that they are as specified with reference to weight and quality.

ALL WASTES shall be provided with lead traps and brass caps for cleaning, and shall be either of 6 lb. lead or gald. drawn iron and all shall deliver over gully traps.

FOR SINKS ETC. IN SCIENCE & COOKERY ROOMS see special descriptions of these parts on Pages 30, 31 and 37.

WIPED JOINTS. All joints in lead work shall be "wiped".

FLASHING shall be done wherever necessary to prevent moisture penetrating the walls or building. It shall be 24 gauge copper.

WATER SUPPLY. In roof over Latrine block on W. side shall be fixed on beams specified under Carpenter, two 400 gald. wrought iron tanks, standing in a 24/gauge gald. iron tray (with outlet) resting on the rough flooring provided. These tanks shall be approximately 4' apart and shall be coupled together with ¾" copper pipe in which shall be two ¾" stopcocks. Between these stopcocks shall be drawn the water supply for the building through ¾" copper main with ½" copper branches to each of the W.C. cisterns, to each lavatory basin, to each sink or wash tub, and to 6 standpipes placed at approximately equal distances round the building. To each of the two roof tanks water shall be conveyed through ¾" drawn gald. iron pipe, having a ball and stopcock in each case. Each tank shall have an overflow pipe leading to the outside. Each W.C. cistern shall have a ball and stopcock, and each standpipe a brass tap with screw connection. All the other points shall be supplied with then best quality nickel plated streamline taps of the size of pipes leading to them.

W.C'S. In each W.C. there shall be provided and fixed a "Vale" or similar make white ware pedestal provided with an S or P trap as may be necessar and ventilated according to by-laws. Each shall have a white Tyford's or similar lowdown flushing cistern with a three gallon flush, seat to be 1⅛" with cover and brass hinges and left complete and in perfect working order. With the exception of two, (one in each of the separate latrines in the sub-basement) the pedestals shall be

of the ordinary size. The two exceptions are to be a small size suitable for very small children.

BASINS. Where shewn there shall be fixed complete lavatory basins in white "vitromant" ware or similar make. Each shall be 24" x 16" with combined overflor, nickleplated rubber plug, waste fitting and painted wall brackets, all as described as No. 593/I in Twyford's Catalogue on Page 14. A similar basin shall be fixed complete in Modelling rm.off Studio.

WASHTUBS & SINK IN MODELLING AND CASTING ROOMS. The formed shall be Hudson's cement tubs for which the Contractor shall allow a P.C. sum of £8 (this will include supports) and from them and from the sink the Plumber shall take the wastes into gully trap outside. The sink shewn in Modelling room shall be 2'6" long and wide and deep in proportion and shall be of enamelled steel. Before being fixed it shall be approved by Sister Mary Lawrence. The Sink in Janitor's room shall be similar, and shall be fixed on approved brackets.

JUNCTIONS OF ROOFS WITH WALLS shall be flashed with 24 gauge copper, soakers and step flashing (well sucked into brickwork and plugged and pointed) being used where required.

VALLEYS shall be formed of 24 gauge copper so as to be perfectly watertight.

FLATS. The N. Dormer in Assembly Hall roof and the overhanging passage behind Studio, shall have flat roofs covered with malleable sheet copper No. 24 gauge, 16 oz. per sup.ft. laid with a fall to the outside and supplied with all ties, copper nails, seams, clips, flashings, aprons and roll caps. The roll caps shall be welted on both sides to 1¾" x 1¾" twice splayed H. Oregon rolls spaced at 2'9½" centres. The stopped ends of roll shall be welted all round and the saddle ends welted to the sheets above.

FLECHE. The whole of the Fleche shall be covered with 24 gauge copper(laid over the best Irish roofing felt), the angles being covered with a verandah capping as sketched;- The Cross shall be of copper piping as shewn, the ends being formed of small copper balls firmly inserted in the pipes. The cross shall be most carefully set, (and flashed) so as to be perfectly upright and watertight. In the Fleche just mentioned there shall be fixed a BOYLE'S EXHAUST AIR PUMP or ventilator, made on the latest designs and of the size shewn on drawings. The material used shall be 24 gauge copper and each baffle plate or other part where there may be an edge to vibrate, shall be welted along the edges so as to be

perfectly rigid. The throat of this vent shall be neatly finished in an approved manner where it comes inside the room.

SPOUTING & R.W.P'S. To all eaves there shall be fixed cast iron eaves guttering, Mc.Farlane's No. 46 5" x 3" (ordinary thickness of metal) being used. This guttering shall have stopped ends and cast angles and the parts shall be properly bolted together in red lead cement, and over each outlet there shall be fixed an approved copper wire rose.

The R.W.P'S shall be 4" x 3" of cast iron, secured to walls either with ears cast on the pipes, or with approved specially made cast iron supports. At every intersection with drain there shall be fixed on of Mc.Farlane's Pedestals with doors, marked no. 4 Page 15 in 7th Edition of their catalogue. A similar cast iron door shall be fixed with bolts at all changes of direction in R.W.P'S for the purpose of clearing obstructions.

Where heads are necessary they shall be of cast iron, Mc.Farlane's No. 8 made to suit the 4" x 3" R.W.P'S without reducing the area of outlet, angles ones being provided where necessary. Any bends that cannot be made in cast iron shall be of 24 gauge copper. Heads shall be used wherever valleys meet at the eaves level as in the front of the building, or wherever one R.W.P. delivers over another. The heads shall be protected from the nesting of birds by approved copper wire guards.

GUTTERS. Between the roof of the Assembly Hall and the wall adjoining it there shall be formed on timbers fixed by Carpenter, a box gutter of 24 gauge copper, with falls towards each end. The wall flashing covering this gutter shall pass through the outside shell of the wall and across the cavity so that no water shall pass into it the lower part of the wall. This gutter shall deliver at each end into a 4" dia. galv. drawn iron pipe with screwed joints, which shall lead the water to the outside of the building and into rainwater heads and down pipes on the East side, and on to the cloister roof on the West side. The junctions between the gutter and the horizontal R.W.P. shall be most carefully formed, and guarded with a copper wire grating.

The gutter between the roof of the Cloister and the wall shall partake of the nature of a flat. It shall start level with the ridge at the highest point, and finish 6" wide at the outlet. It shall be formed of 24 gauge copper. Each gutter shall have an apron of 24 gauge copper let well into walls and plugged and pointed.

COPPER GRATINGS FOR BRICKLAYER. The Plumber shall provide six ventilating gratings for Bricklayer. They shall each be 18" x 6" with a stiff frame made of 24 gauge copper, filled in with copper rods 3/16" dia. crossing each other diagonally ½" apart. Where crossing the rods shall be brazed together. The flanges of these frames shall be 3" wide and so made that they will get a good grip of the mortar used to set them.

SPECIAL FLASHING TO ASSEMBLY HALL ROOF. Where the hanging slates meet the brickwork in the east and west walls of Assembly Hall there shall be a special flashing of 24 gauge copper, passing under the slates and well dressed on to the brickwork and properly pointed.

SPECIAL PLUMBING IN SCIENCE & COOKERY ROOMS. In the Science room there shall be fixed 8 new sinks let into the ends of the benches as shewn. (The present Demonstrator's sink can be reused in the Demonstrator's bench). These sinks shall be ordered as soon as the Contract is let, and shall be Twyford's or similar make, 19" x 14" x 7", white inside and buff outside (No. 314 in Catalogue), with flanged rims and wier overflows. They shall each have a 1½" nickel plated streamline approved tap standing well up above sink, the exposed piping being nickel plated. The wastes shall be 2" lead leading to the gully trap outside. The sinks in Kitchen shall be ordinary white and cane fireclay sinks 30" x 20" x 10" with plugs, wastes etc. complete, and to them shall be laid on water as specified for Science room.

FLOOR OF FUME CLOSET, shall be lined with 5 lb. lead carried up side 2" and well secured thereto with copper tacks. In the front it shall be carried over a small strip of wood. From this lead floor there shall be a 2" lead trapped waste with plug etc. complete. Then vent from the fume closet shall pass through the window, a sheet of copper being placed for the purpose. The Plumber shall arrange for this with the Glazier. This vent shall be of 24 gauge copper and shall have a copper cowl on it.

SKYLIGHTS shall be of the sizes shewn and shall be "Wade's" or similar pattern, all formed of 24 gauge copper and glazed as mentioned under "GLAZIER".

ELECTRICIAN.

ALL ELECTRICAL WORK shall be carried out in accordance with the N.Z. Government (P.W.D.) regulations and to the satisfaction of Inspectors appointed to see that these regulations are carried out. In no cases shall joists be cut deeper than is absolutely necessary, and the cuts shall never be further than 2' from the bearing wall.

MATERIALS & WORKMANSHIP shall be of the highest quality, the makers of all materials being of approved standing.

POWER & LIGHT shall be conveyed to the points shewn, the Contractor providing for all extra mains, fuses, and everything else that may be necessary to make the work complete and shall leave the whole in perfect working order. The POWER MAINS in all cases shall be sufficient to efficiently maintain heat for the fittings shewn in this Contract. The position of lights is shewn by a cross within a circle.

SWITCHES (The price of these is NOT included inthe P.C. sum for fittings) shall be brass faced and of the best Tumbler type. All shall be placed where directed, (generally near the light each controls) but for each room one shall be placed near the door and on the lock side thereof.

WOODBLOCKS shall be of R. Rimu except in those rooms where the woodwork is of Jarrah, in which cases the blocks shall also be of Jarrah. They shall have slightly chamfered edges. The ordinary stock blocks shall not be used. In the Studio and Assembly Hall the conduits shall be as inconspicuous as possible.

ELECTRIC LIGHT FITTINGS. The Contractor shall provide in his contract for fixing the ordinary cord, holder, opal shade and 60 watt lamp for every lighting point shewn, and he shall also provide a P.C. sum of £25 to be expended by the Employer in special fittings, which shall be fixed by the Contractor. Any portion of this £25 unexpended shall be deducted in full from the Contract price.

The Contractor shall provide the sum of £85 (Eighty-five-pounds) to be expended by the Employer in the purchase of radiators.

In each of the Class rooms the wiring shall be in a box secured to the underside of each of the R.S.J'S and in a similar box passing down the wall to within 4' of floor. From the horizontal box shall be suspended three lights each capable of taking a 100 watt lamp. Two of these shall be operated from switches at the base of the vertical box and the other (the one of the table) by a switch on the lock side of the doorway.

The conduits taking the wire for these switches shall pass along the picture mould till immediately above the switch and then down the wall in a perfectly straight line.

LIGHTENING CONDUCTOR.

A lightning Conductor shall be fixed to the Fleche and conveyed to the Ground.

The terminal rod shall be 5' long terminating in four points, and shall be carried just above the cross. It shall be of stout copper. The conductor itself shall be of copper tape ¾" x ⅛" of 100% conductivity (Mattheissen's Standard). All joints shall be rivetted and soldered connections being made to roof metals as required.

The conductor shall be fixed by means of copper of gunmetal fastenings, not more than 4' apart. All bends shall be well rounded no right angles being used.

EARTH CONNECTION. A copper plate not less than 3' x 3' and 1/16" thick shall be connected to the lower end of the copper tape and laid horizontally 5' underground, and not less than 10' distant from the building.

TESTS. The Conductor shall be tested, and a satisfactory certificate obtained and given to the Employer before it will be passed.

GAS FITTER.

GAS shall be laid on from Company's service and in accordance with their regulations, through a main as directed by the Gas Company and through ½" branches to the 24 points on benches, to the Demonstrators table, and to two points inside the Fume closet, and shall in each case be fitted with approved tap and nipple. In the Cookery room gas shall be laid on to the cooker placed where shewn. For this Cooker and for gas rings etc. the Contractor shall provide a P.C. sum of £30 to be spent as the Employer chooses. They shall be fixed by the Contractor.

Gas shall be laid on through 2" pipe to a point in the Modelling room on first floor, and shall be finished with a cock and nipple for a gas ring. Thses fittings shall be painted and varnished as other work.

SMITH & IRONFOUNDER.

All steel used shall be of mild steel of Dorman Long or other approved British manufacture and shall meet all the requirements of the British Standard specification. The name of the Manufacturer shall be legibly visible on all material.

All steel shall be well painted before being placed in position in one coat, and in two more coats after being in place, all removeable rust or dirt being first scraped off.

ROLLED STEEL JOISTS supporting the floors shall be as shewn on drawings those under Class rooms 20" x 6½" x 65 lbs., that under Eastern half of Assembly Hall 12" x 5" x 30 lbs., and each shall have a bearing of at least 8" on the walls supporting them, and the end of each shall rest on an 8" x ¾" plate 27" long.

To each side of the web of each of these R.S.J's shall be bolted with ½" bolts 2' apart a 6" x 3" piece inthe case of the one over the workshop and 4" x 3" elsewhere, to take the wooden joists, and this shall be so placed that 2" of each wooden joist shall be above the top flange of the R.S.J.

FIRE ESCAPE LADDER. There shall be an iron ladder, 3" x ½" staves, ¾" rungs carried up the back slope of the roof over Assembly Hall, to give access to the ridge and placed where directed.

Across one of the windows in the top floor Latrines there shall be fixed a 5" x 2½" x 9 lbs. R.S.J. This is to take water tanks.

TIE RODS. In addition to the tie rods for roofs mentioned elsewhere the Contractor shall provide and fix in position 1" sq. tie rods in the four pointed arches at east end of the building. These shall be continuous through the three front arches, and shall be carried at least 13½" into walls and there secured by being fish-tailed.

These rods shall be well painted in three coats before being fixed.

SLATER.

The flats and the roof of Fleche are of copper as already specified. All other roofs and those parts marked "Hanging Slates" shall be covered with best quality "Portmadoc" Welsh Countess slates. Each slate shall be secured near its head by two 1½" copper slating nails. The vertical joints shall be kept true and double course put to all eaves.

All parts required to make the work perfectly watertight and free from vibration, shall be pointed with or bedded in cement mortar.

The ridges and hips shall be covered with approved dark coloured terra cotta ridging set in cement mortar. Under the slates the roof of the Assembly Hall shall be covered with best quality Irish roofing felt, well lapped and tacked.

A written guarantee shall be given by the Roofing Contractor to the Employer (through the Contractor in chief) who shall obtain this guarantee and hand it to the Employer) that he will keep the roofs watertight as far as his work is concerned for a period of two years from the date upon which the General Contractor's maintenance begins.

HANGING SLATES. The North wall of the overhanging Gallery behind Studio and two triangular spaces at the east and West end of Assembly Hall shall be covered with best Irish roofing felt, and then with slates matching thosecon roofs. These parts shall have double courses at bottom and shall shew half a slate at the top.

HANGING TILES. The apex of each of the larger gables is of wood framing. In each of these there are four spandrels which shall be covered with approved hanging shingle tiles, well secured to the wodden backing, shewing approximately 4½" to 5" weather and bedded in cement compo.

PAINTER & GLAZIER.

NOTE: Every precaution shall be taken to prevent walls and flooring from being stained or dirtied and no mixing shall be done in the building itself. Should any stains appear on the floors the Contractor will be required to dressed those affected all over.

STOPPING. All work shall be properly stopped with the best putty (tinted for oiled or varnished work) after the first coat is on. The painter shall call the Contractor's attention to any nails that are not properly punched in and shall not proceed with his work till they are satisfactory.

MATERIALS, shall be of the best of the kind specified, and if required by the Architects or Clerk of Works, the tins or drums containing them shall be first opened on the works and in their or his presence. All paints shall be of Genuine white lead and best linseed oil, except the priming coat where the lead shall be of the best red lead.

OUTSIDE WORK. The whole of the Jarrah exposed to sight shall be treated with two coats of boiled linseed oil and shall then receive a coat of Jones & Nicholson's best carriage varnish.

The rest of the outside woodwork shall be painted in three coats, finishing an approved tint.

All iron work shall be painted in two coats, the interior of the spouting being treated with two coats of some approved bituminous paint. The copper shall be left untouched.

The exposed rough floor timbers of the basement shewing in the sub-basement shall receive two good coats of an approved "fixed" limewash. With the exception of this rough timber just mentioned, all woodwork not actually cut off from the open air shall be treated as outside work.

INSIDE WORK. Thw woodwork in Workshop shall be left untouched.

The wooden floors, except those of Cloak Rooms, shall all be machine surfaced, and shall then be oiled and wax polished to approval, and left spotless and perfectly smooth at completion.

The rest of the woodwork shall be slightly stained to approval with darkened oil, and shall then be stopped, knotted, and afterwards varnished with Ingram Clark's eggshell flat varnish to approval. Samples shall be prepared and approved before this is done.

The side, tops and fronts of the shoe lockers shall be varnished and the rest left clean. The inside surfaces of cupboard doors shall be

varnished in this manner, but the woodwork actually in cupboards shall be left untouched.

Asbestos sheets used in the panels between W.C's shall be painted in two coats and shall then have two coats of some approved hard enamel, finishing ivory white.

METAL WORK. All exposed inside metal work shall be painted in two coats of approved colour in addition to any covering it may have when sent out by the Makers. This included the 32 ventilating wall gratings mentioned elsewhere.

DISTEMPERING. All plastered work shall be distempered in white or some approved simple tints and left perfectly clean. The greatest care shall be taken that no oil or varnish spread on to the plaster work and that no distemper soils the woodwork.

The dado in Studio shall have special treatment. It shall first receive a coat of petrifying liquid and then two coats of some approved water colour in mixed tints merging into each other so as to produce a subdued mottled appearance. The greatest skill must be used in doing this. Finally it shall receive a light dusting of bronze powder.

GLAZING. All windows and inside fixed lights except where specified to be otherwise shall be glazed in the best manner with approved best quality 21 oz. English seconds glass without waves or noticeable defects. The windows of W.C.'s and the panels and side lights of glazed doors (except front doors) shall be glazed with approved obscured glass of ordinary stock pattern.

The skylights shall be glazed with wired rough plate glass. All the windows of the Assembly Hall and in the front Porch, and the fanlight in the Front Porch, shall be glazed with leaded lights of the design shewn, the cames being 2" wide and the glazed of approved mixed obscured glass of ordinary type. All these windows shall be secured by strong gald. steel saddle bars to which the glass shall be fixed by copper wire.

VENTILATION.

The ventilation generally is by open windows, and on the top floor by vents into the roof space as specified elsewhere. In addition to this six Class rooms in the basement and ground floor, shall have, where directed and fixed in the internal walls, sixteen approved wrought steel louvre ventilators with cords and knobs complete. The box of each shall be 12" x 10" , the overall measurement being approximately 13½" x 11½" . On the opposite side of the wall there shall be fixed to each vent, and approximately the same size, approved ornamental steel gratings.

FLOOR OF COVERED PLAYGROUND.

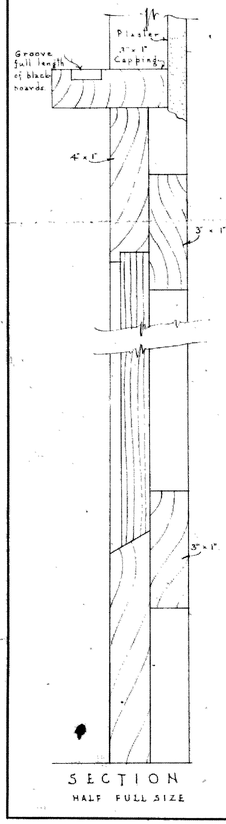
The covered playgrounds in the sub-basement shall be levelled so as to have a slight fall to the outside (two inches in twenty feet) and the ground rolled and consolidated. It shall then be covered with a layer of metal chips rolled into the ground and then covered with three courses, the first being of a mixture of clean ½" hard stone chips and Colfix bitumen one and half inches thick, and then screeded off.

The next course shall consist of a mixture of coarse sand and Colfix well rolled so as to fill voids, and the third coat shall be of Colfix brushed over the surface and thickly dusted with fine sand so as to leave a perfectly even surface.

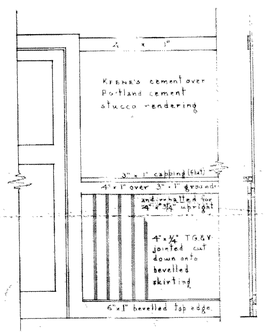
SCHOOL OF
ST. MARY
HILL ST. WELLINGTON

MEREE & MEREE
F.R.I.B.A. F.N.Z.I.A.
WELLINGTON

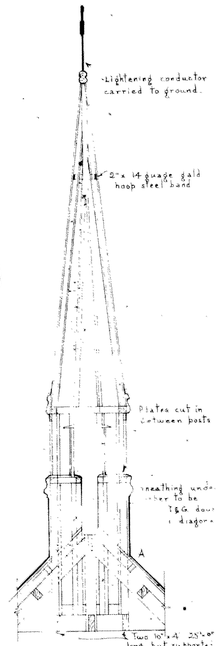
SHEET NO. 1c
SET OF 16
SCALES AS SHOWN
AUGUST 1929.



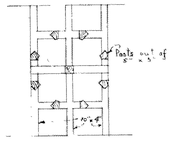
SECTION
HALF FULL SIZE



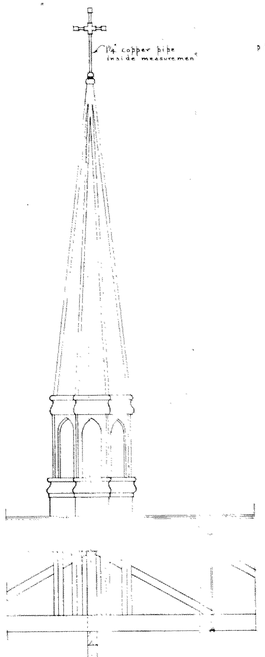
DETAILS of CLASS ROOM DADOS
SCALE: ½" To 1"

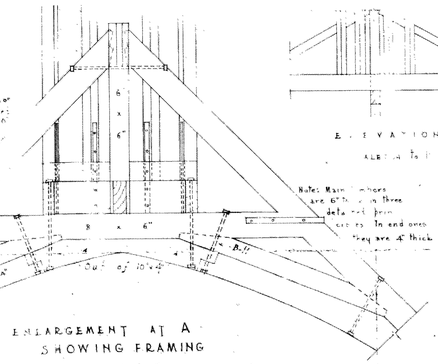


SECTION
SCALE: ¾" To 1"

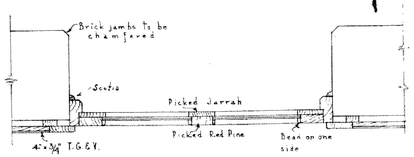


DETAILS of FLECHE

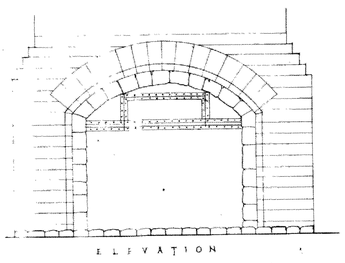


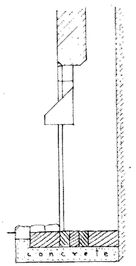


ENLARGEMENT AT A
SHOWING FRAMING
SCALE: ½" To 1"

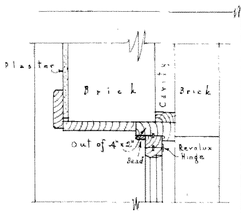


PLAN of DOORWAY BETWEEN
ASSEMBLY HALL and CLASS
ROOM
SCALE: 1" To 1"

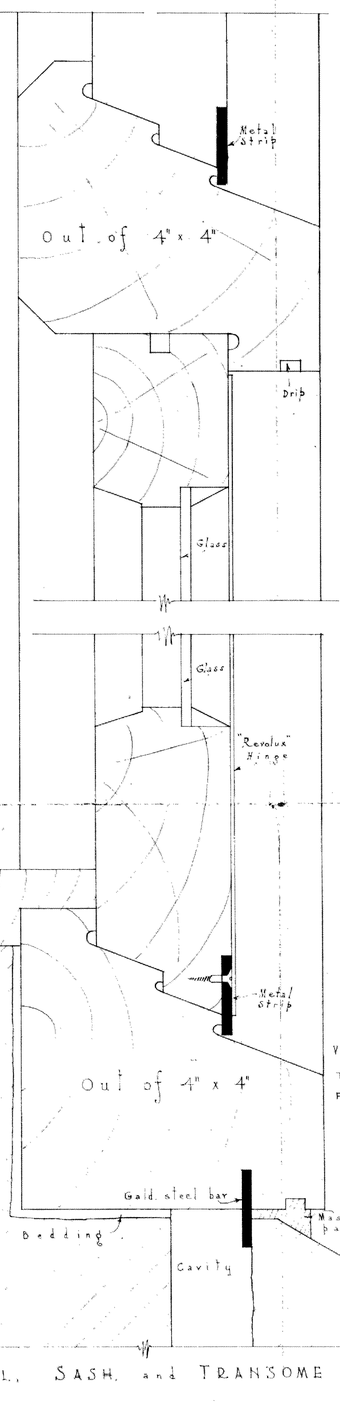




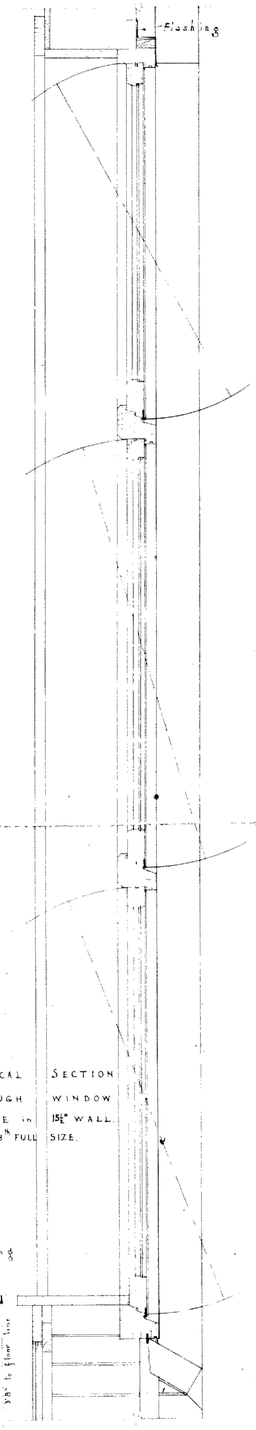
DETAIL of
FIREPLACE
SCALE: ½" to 1"



PLAN of WINDOW FRAME
in 15" WALL
⅛" Full Size



VERTICAL SECTION
THROUGH WINDOW
FRAME in 15" WALL
⅛" FULL SIZE.

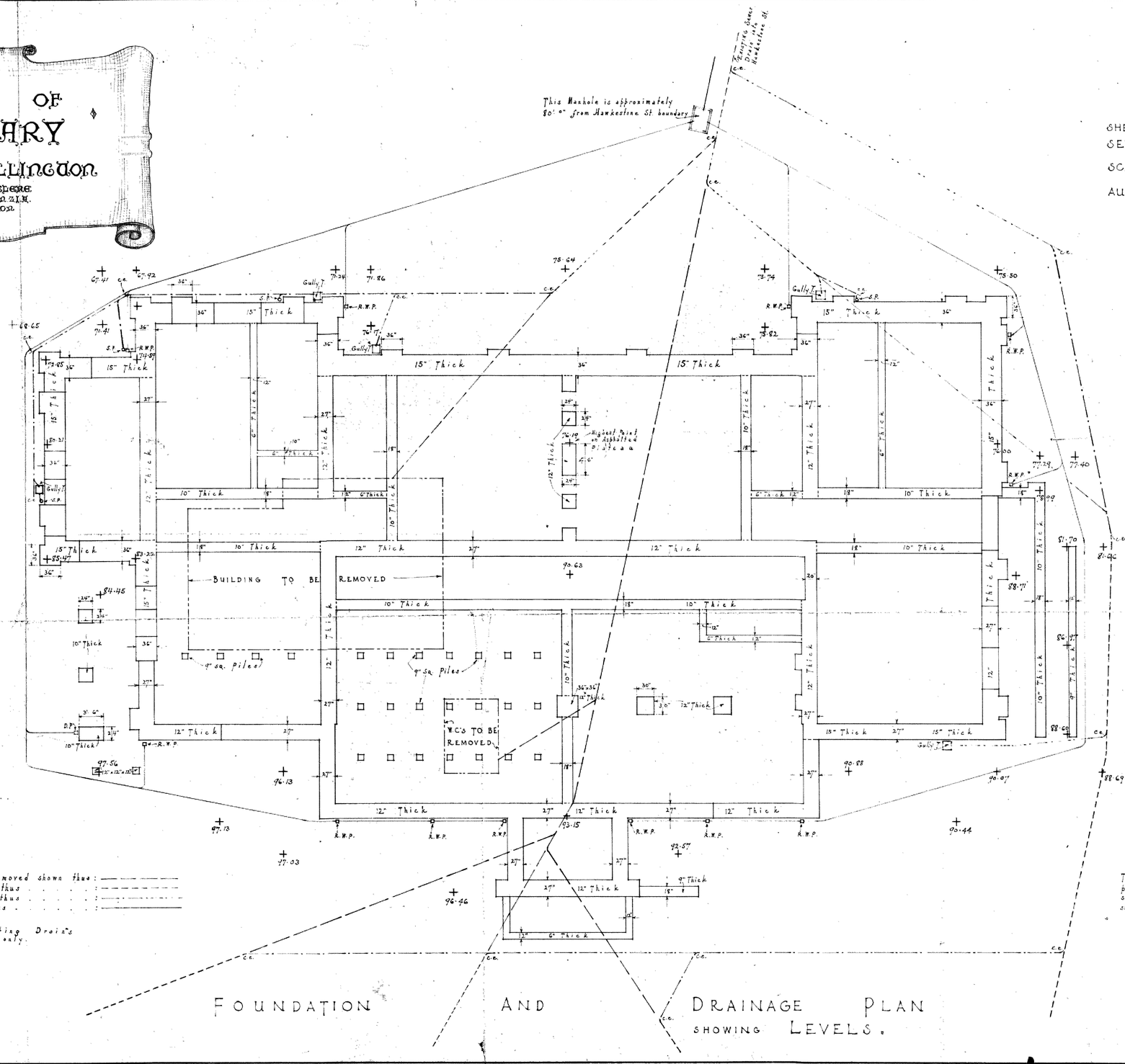


FULL SIZE DETAIL of SILL, SASH, and TRANSOME

SCHOOL OF
ST. MARY
HILL ST. WELLINGTON

CHERE & CHERE
FRIBA. FNZIA.
WELLINGTON

SHEET NO. 1
SET OF 16
SCALE: 1/8" to 1 FT.
AUGUST 1929.



KEY TO DRAINS :

Existing Sewer Drains to be removed shown thus : ——— ——— ———
Existing Sewer Drains shown thus . . . . . : — — — — — —
New Sewer Drains shown thus . . . . . : —·—·—·—·—
Stormwater Drains shown thus . . . . . : ———

Positions of Existing Drains are approximate only.

Though meant to be correct for estimating purposes, this plan shall not be used for setting out purposes. All dimensions etc. shall be taken from Ground Floor Plan.

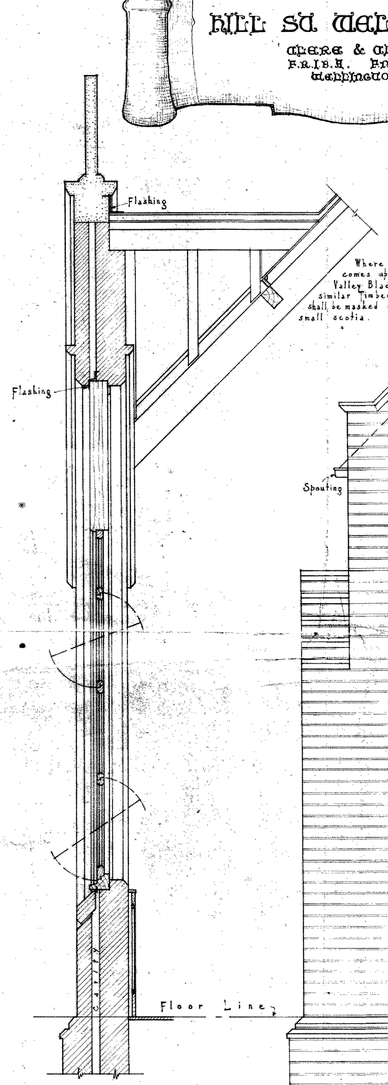
FOUNDATION AND DRAINAGE PLAN SHOWING LEVELS.

SCHOOL OF
ST MARY
HILL ST. WELLINGTON

SPARE & SPARE
F.R.I.B.A. F.N.Z.I.A.
WELLINGTON.

SHEET NO. 12
SET OF 16
SCALE: ½" TO 1 FT.
AUGUST 1929.

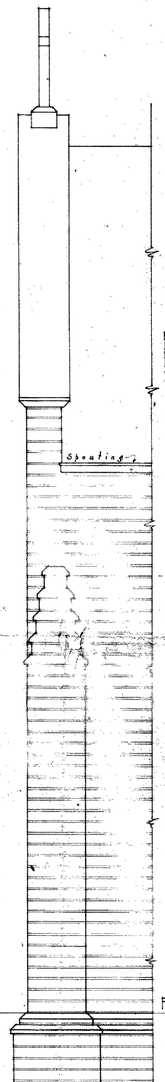
PLAN THRO' NICHE



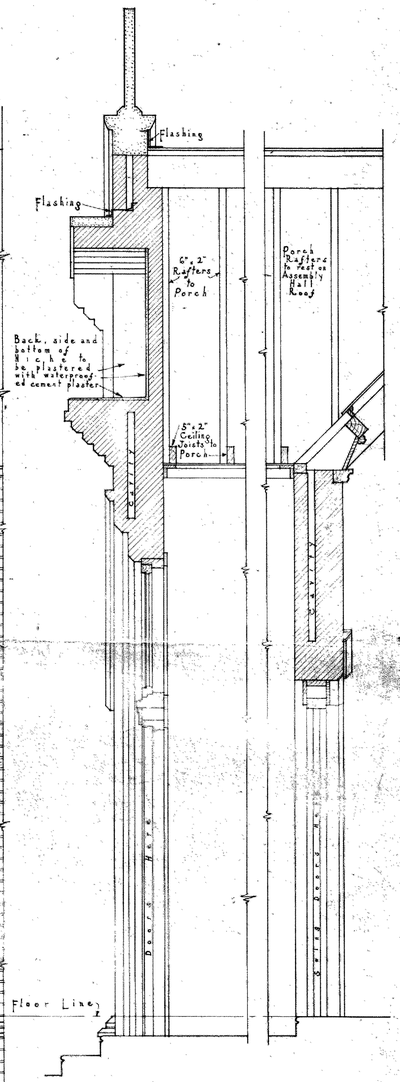
SECTION THRO' TRACERIED WINDOW.

PLAN THRO' DOORWAY.

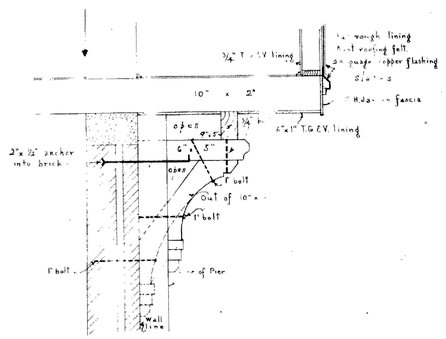
DETAIL OF MAIN ENTRANCE. ½ INCH SCALE.

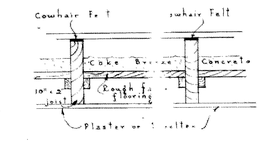


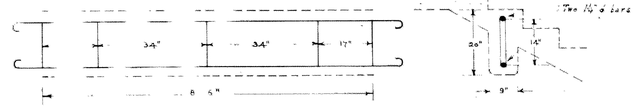
SIDE ELEVATION OF BUTTRESS.

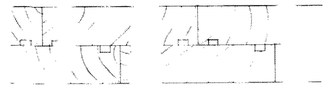


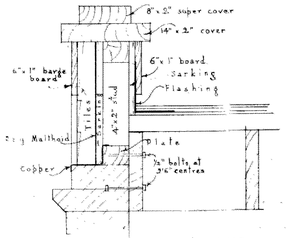
SECTION THRO' MAIN ENTRANCE.

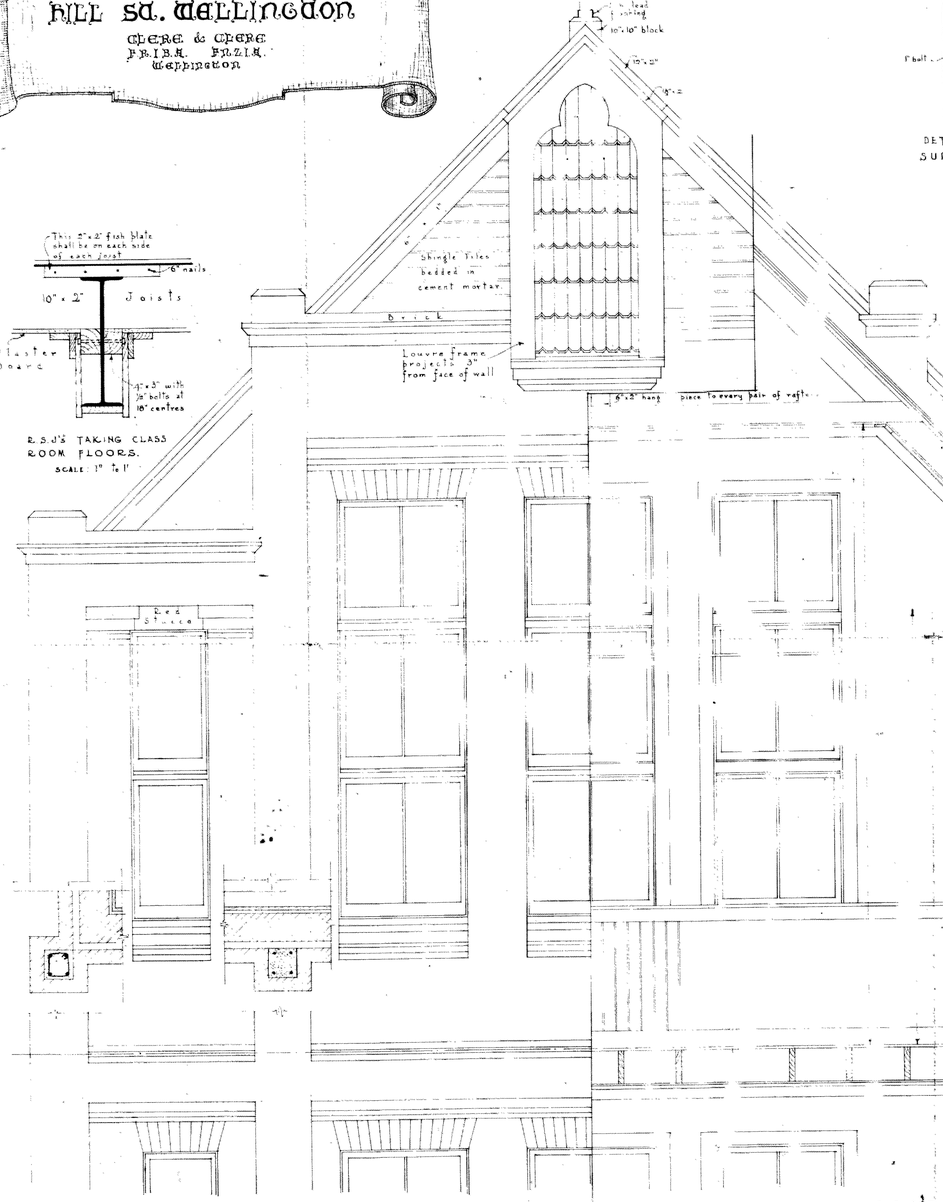


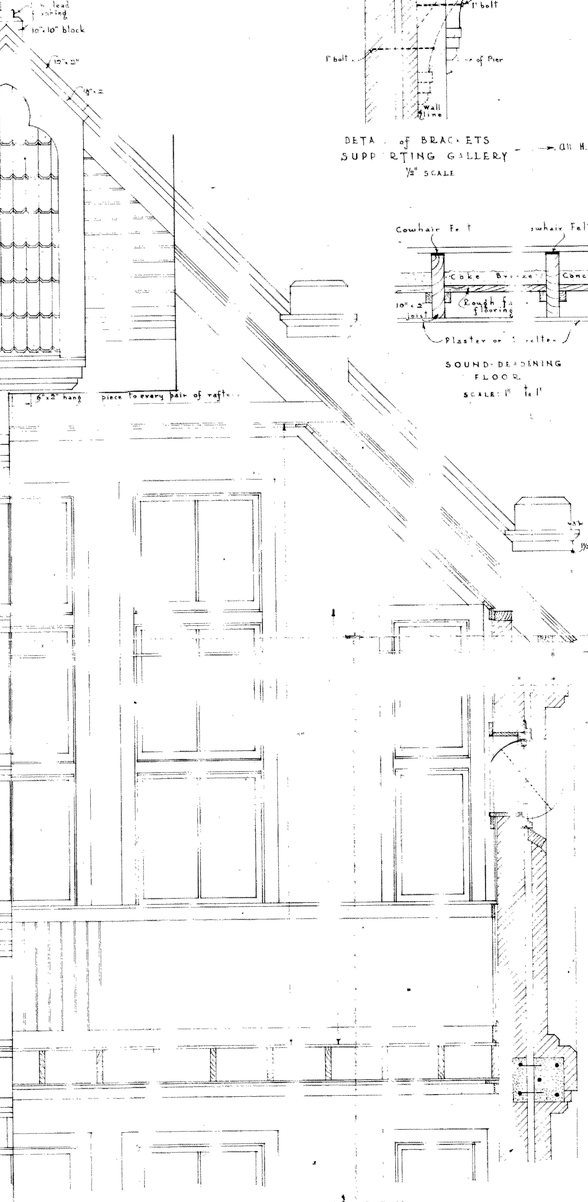


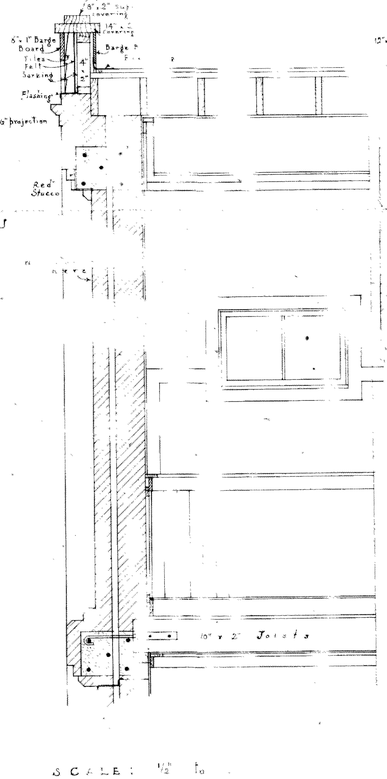


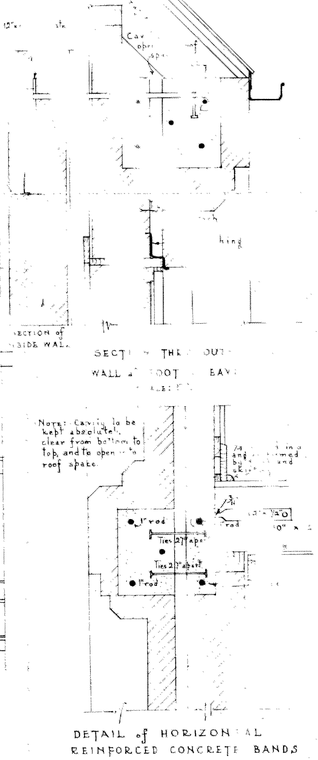












SCHOOL OF
ST. MARY
HILL ST. WELLINGTON

CLERE & CLERE
F.R.I.B.A. F.N.Z.I.A.
WELLINGTON

SHEET NO. 13
SET OF 16
SCALES AS SHOWN
AUGUST 1929.

R.S.J.'s TAKING CLASS ROOM FLOORS.
SCALE: 1" to 1'

DETAIL of BRACKETS SUPPORTING GALLERY
½" SCALE

SOUND-DEADENING FLOOR
SCALE: 1" to 1'

BEAMS at TOPS of STAIRCASES
SCALE: ½" to 1'

DETAIL of LOUVRES
SCALE: Full Size

DETAIL of WOODEN FRAMED GABLE PARAPET.
SCALE: 1" to 1'

SECTION of INSIDE WALL

SECTION THRO' OUTSIDE WALL at FOOT of EAVES

DETAIL of HORIZONTAL REINFORCED CONCRETE BANDS
SCALE: 1" to 1'

SECTION THRO' LOUVRE FRAME
SCALE: ½" to 1'

ELEVATION DETAIL of MAIN GABLE SECTION

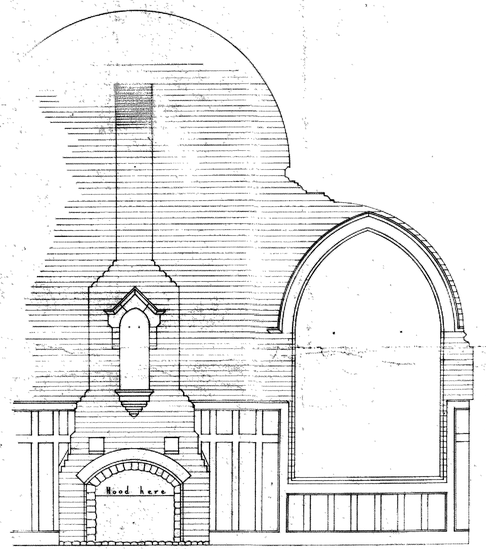
SCALE: ½" to 1'

SHEET NO. 8
SET OF 16
SCALES AS SHOWN
AUGUST 1929.

SCHOOL OF ST. MARY

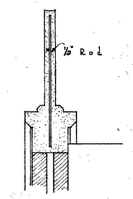
HILL ST. WELLINGTON

CLERE & CLERE
F.R.I.B.A. F.N.Z.I.
WELLINGTON.

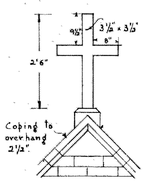


FIREPLACE ETC. in ASSEMBLY HALL

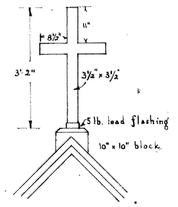
SCALE: 1/4" to 1'



SECTION



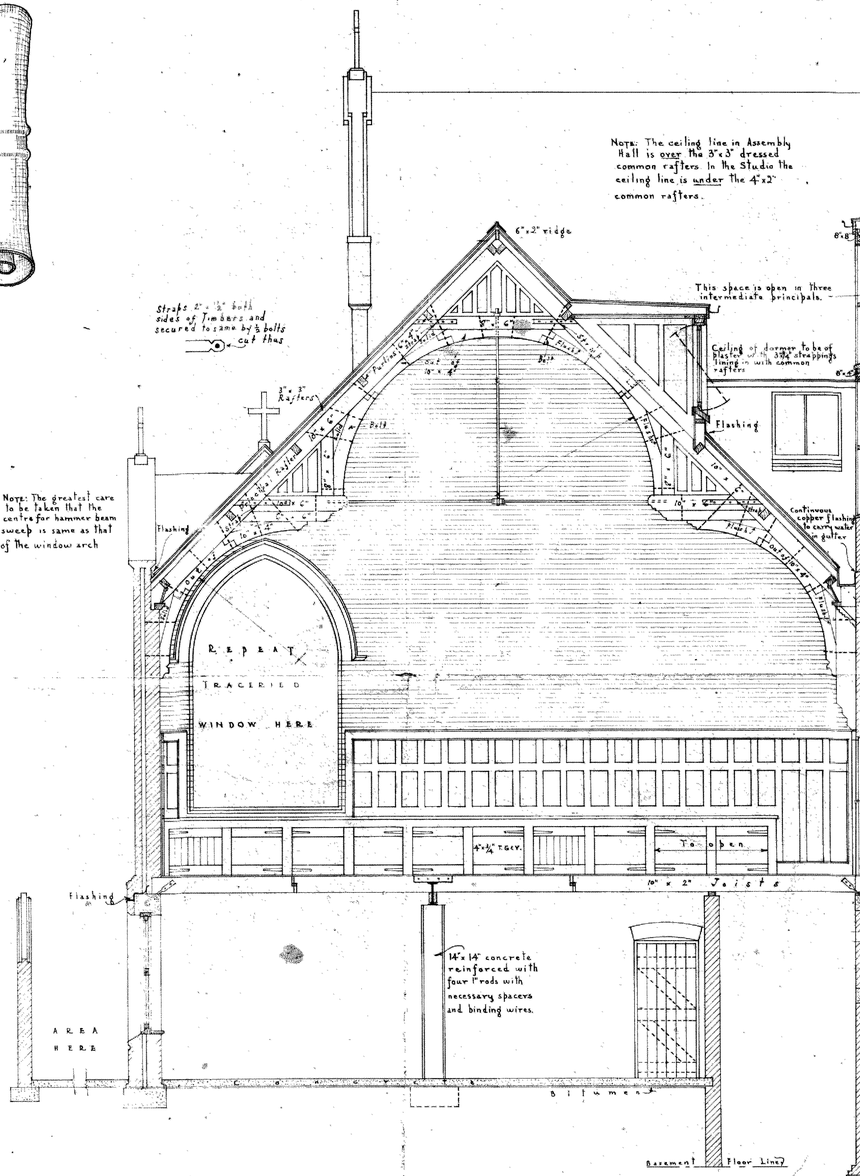
CAST CEMENT CROSS for SMALL GABLES.

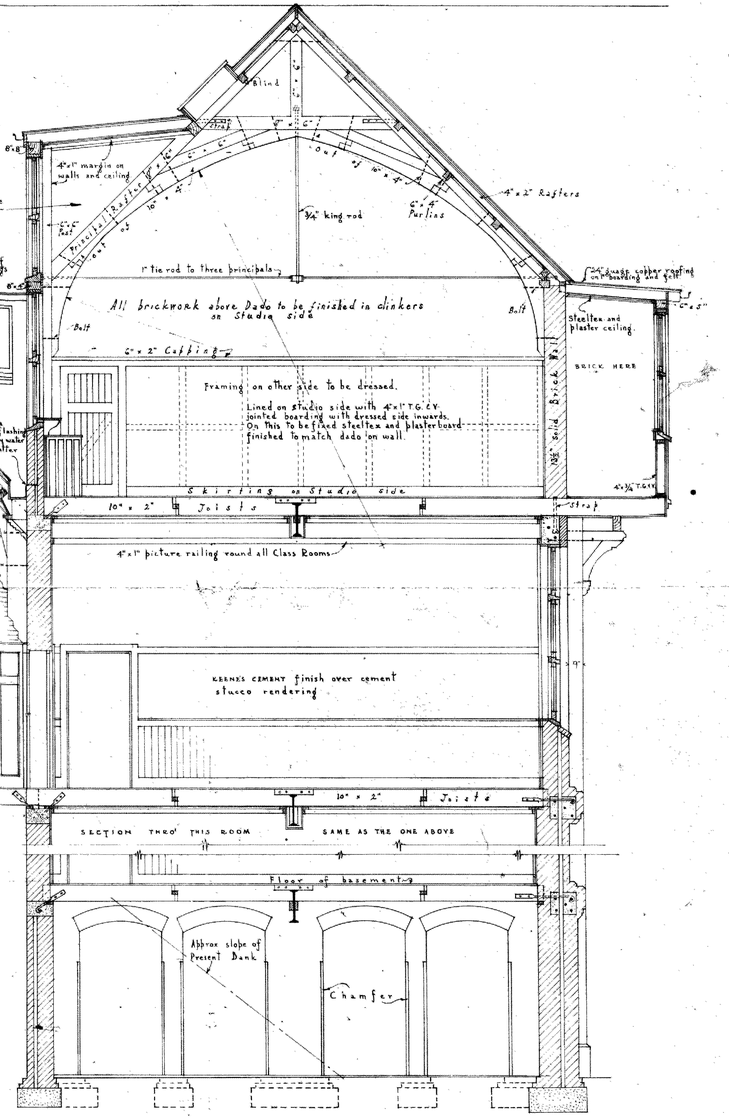


WOODEN CROSS for LARGE GABLES.

SCALE: 1/2" to 1'

Note: The greatest care to be taken that the centre for hammer beam sweep is same as that of the window arch





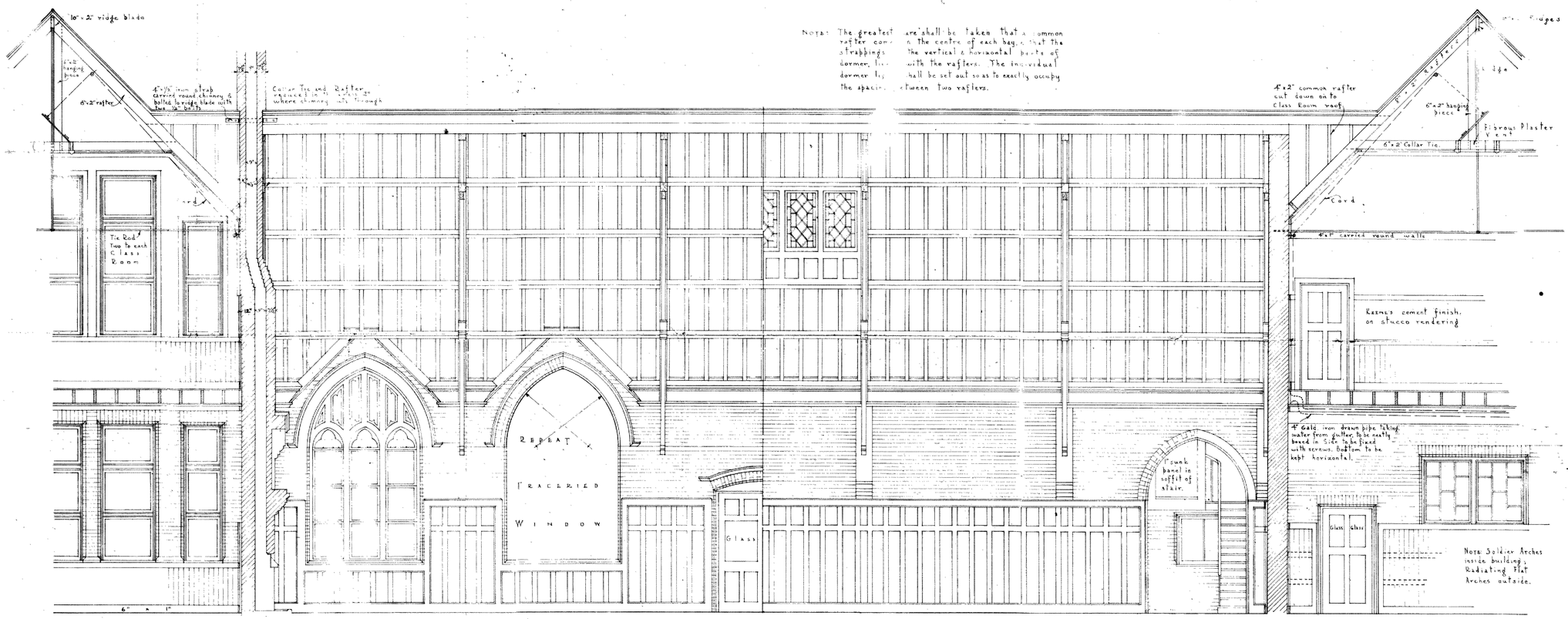
CROSS SECTION

SCALE: 1/4" to 1'

SCHOOL OF
ST. MARY
HILL ST. WELLINGTON

CLERE & CLERE
F.R.I.B.A. F.R.Z.I.A.
WELLINGTON

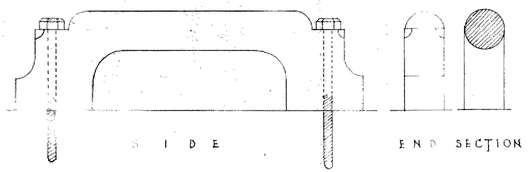
SHEET NO. 7
SET OF 16
SCALE: ¼" TO 1 FT.
AUGUST 1929.



LOOKING SOUTH — LONGITUDINAL SECTION — LOOKING NORTH

SCHOOL OF SCIENCE ST. MARY HILL ST. WELLINGTON

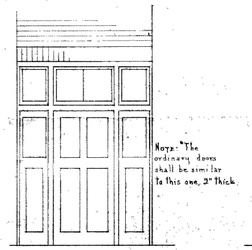
CLERE & CLERE
F.R.I.B.A. F.R.I.A.
WELLINGTON



SWING DOOR PULLS

NOTE: These are to be Japan in Assembly Hall, Red Pine elsewhere.

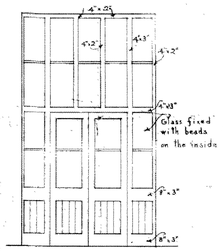
SCALE: ½ Full Size.



Note: The ordinary doors shall be similar to this one, 2" thick.

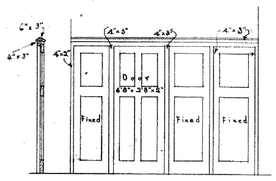
DOORWAY INTO SMALL CLASS ROOM W. END of BASEMENT

SCALE: ¼" to 1'



DOORWAYS to EASTERN ENTRANCE

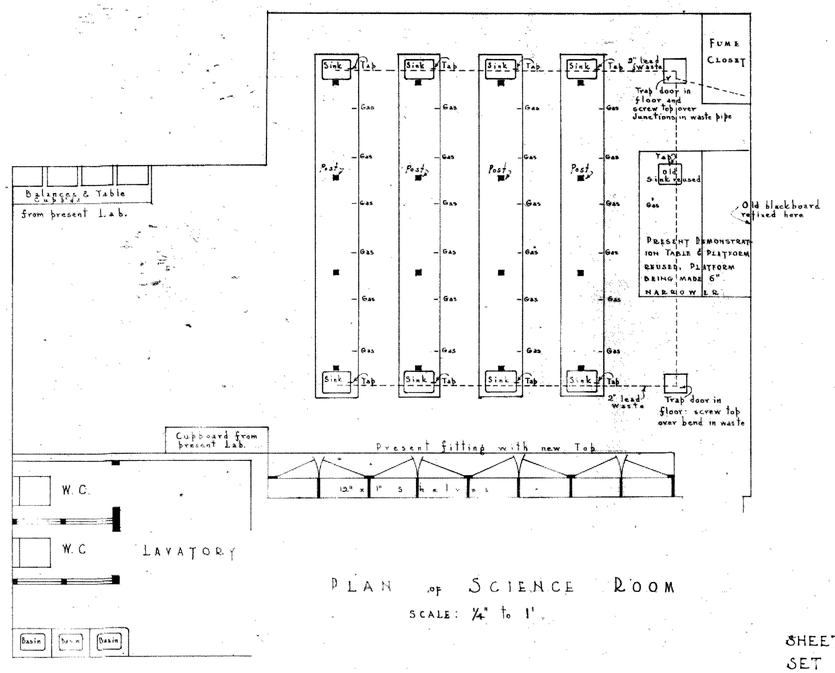
SCALE: ¼" to 1'



SECTION ELEVATION

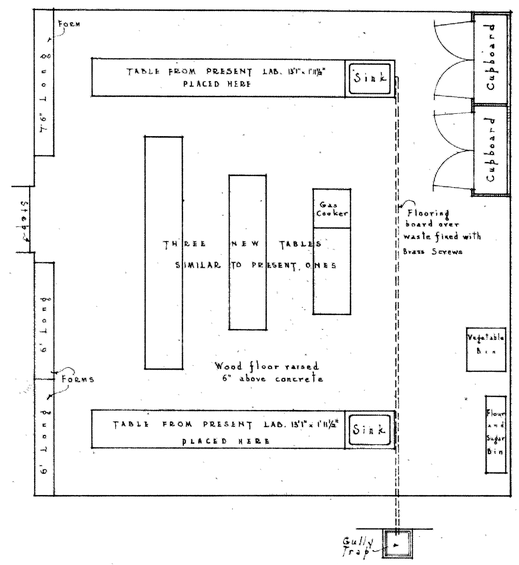
SCREEN BETWEEN JANITOR'S ROOM and CORRIDOR

SCALE: ¼" to 1'



PLAN of SCIENCE ROOM

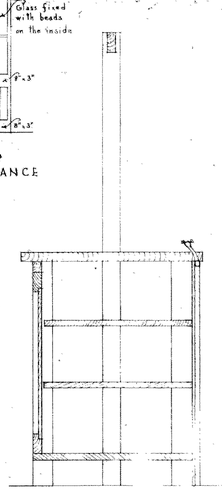
SCALE: ¼" to 1'



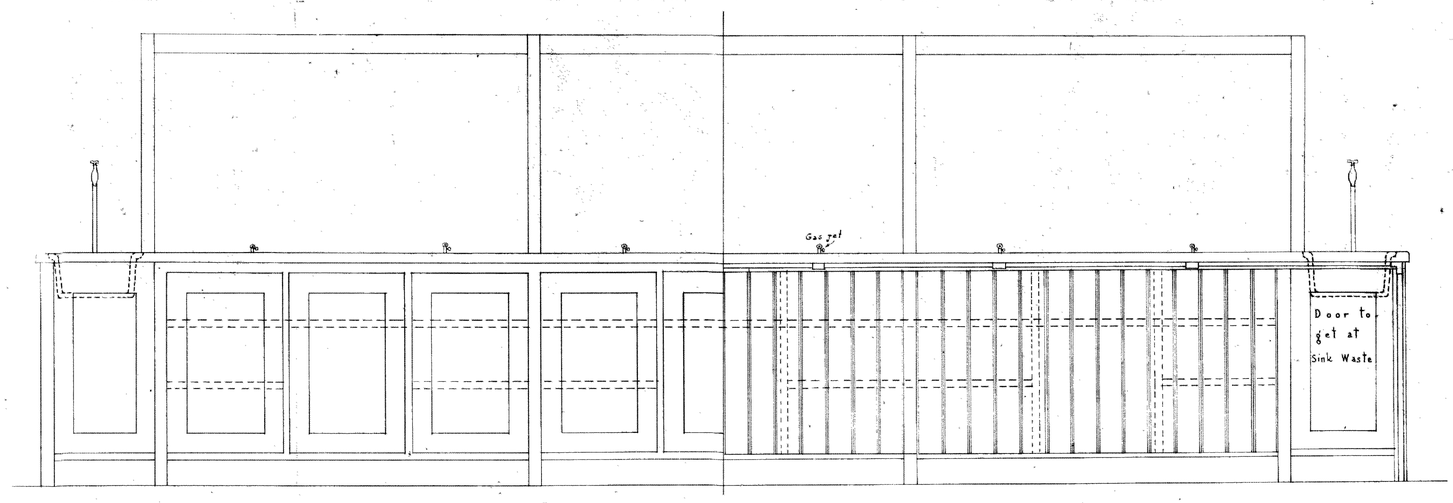
PLAN of COOKERY ROOM

SCALE: ¼" to 1'

SHEET NO. 14
SET OF 16
SCALE: AS SHOWN
AUGUST 1929.



SECTION



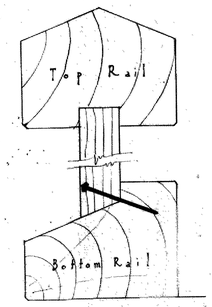
TYPICAL BENCH in SCIENCE ROOM

SCALE: 1" to 1'

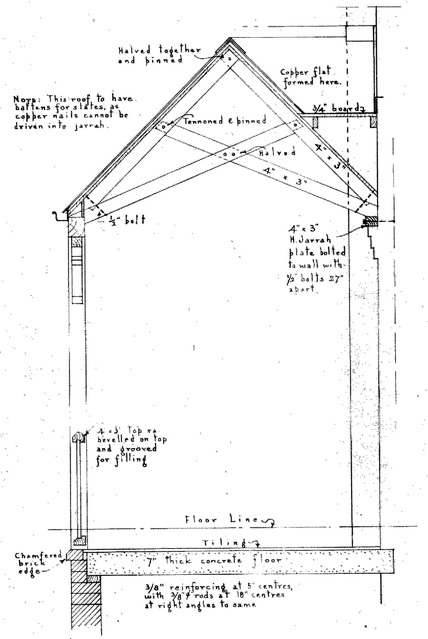
SCHOOL OF
ST. MARY
HILL ST. WELLINGTON

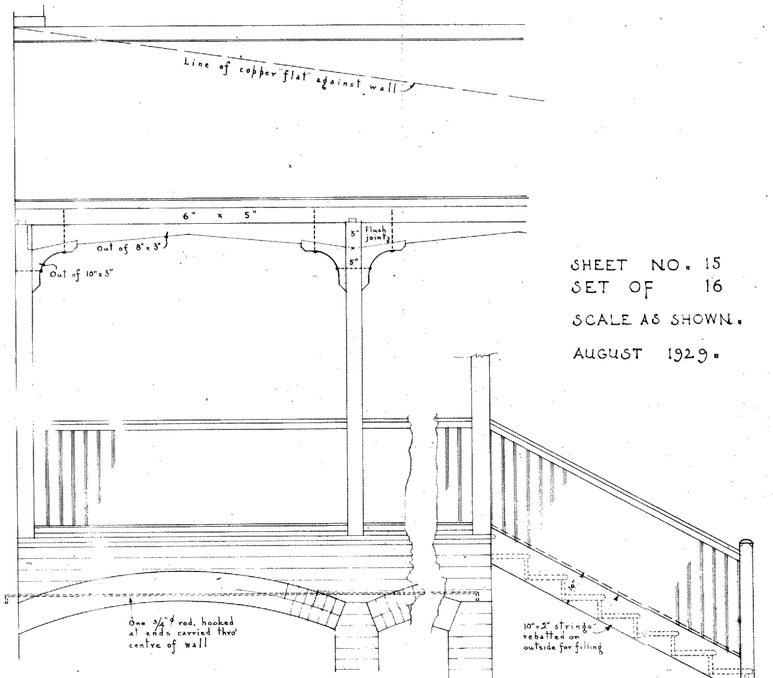
CHERE & CHERE
F.R.I.B.A. F.R.Z.I.
WELLINGTON

SHEET NO. 15
SET OF 16
SCALE AS SHOWN.
AUGUST 1929.

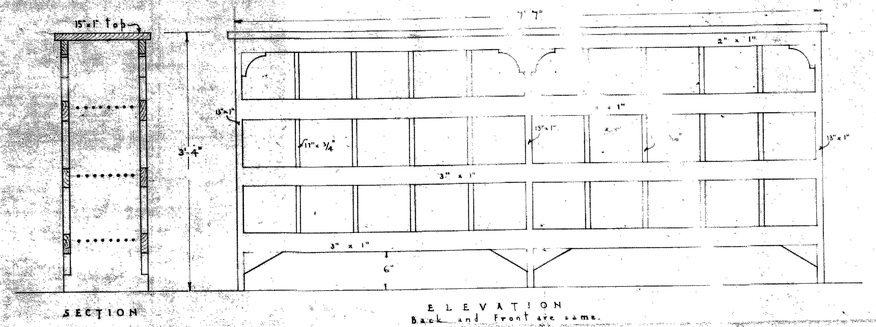


DETAIL of RAIL to CLOISTER
SCALE: ½ Full Size.



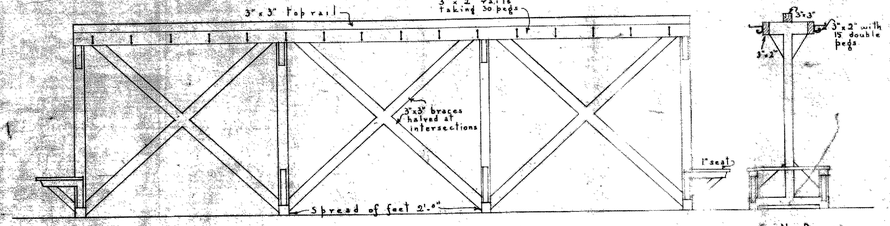


DETAIL of SECTION and SIDE ELEVATION of CLOISTER
SCALE: ½" to 1'



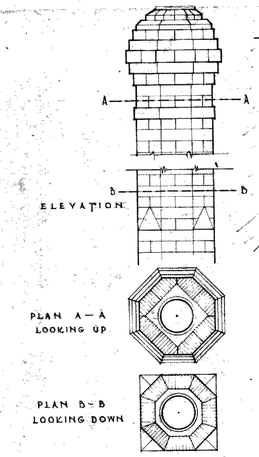
SECTION
ELEVATION
Back and front are same.

SHOE LOCKERS (EIGHT REQUIRED)
SCALE: 1" to 1'

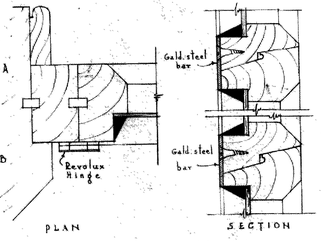


FRONT ELEVATION
END

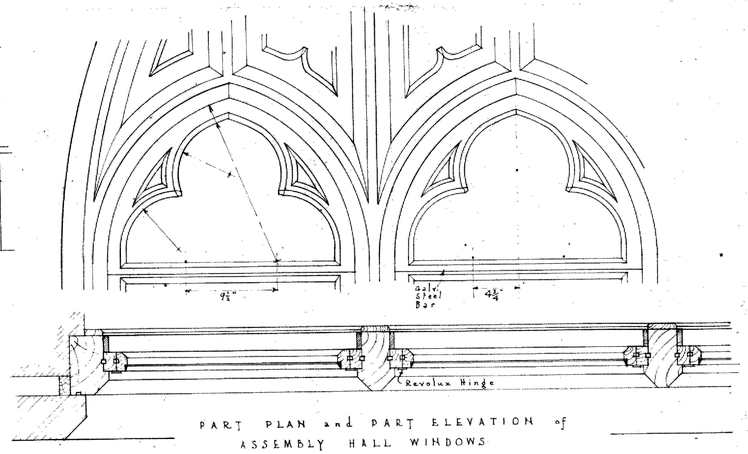
DETAIL of HAT and COAT STANDS
SCALE: ½" to 1'
FOUR WANTED LIKE THIS. 6 FOUR SIMILAR BUT 6" LOWER.



DETAIL of CHIMNEY
SCALE: ½" to 1'



DETAIL of PART of WINDOW that OPENS
SCALE: ½ Full Size



PART PLAN and PART ELEVATION of ASSEMBLY HALL WINDOWS
SCALE: 1½" Full Size

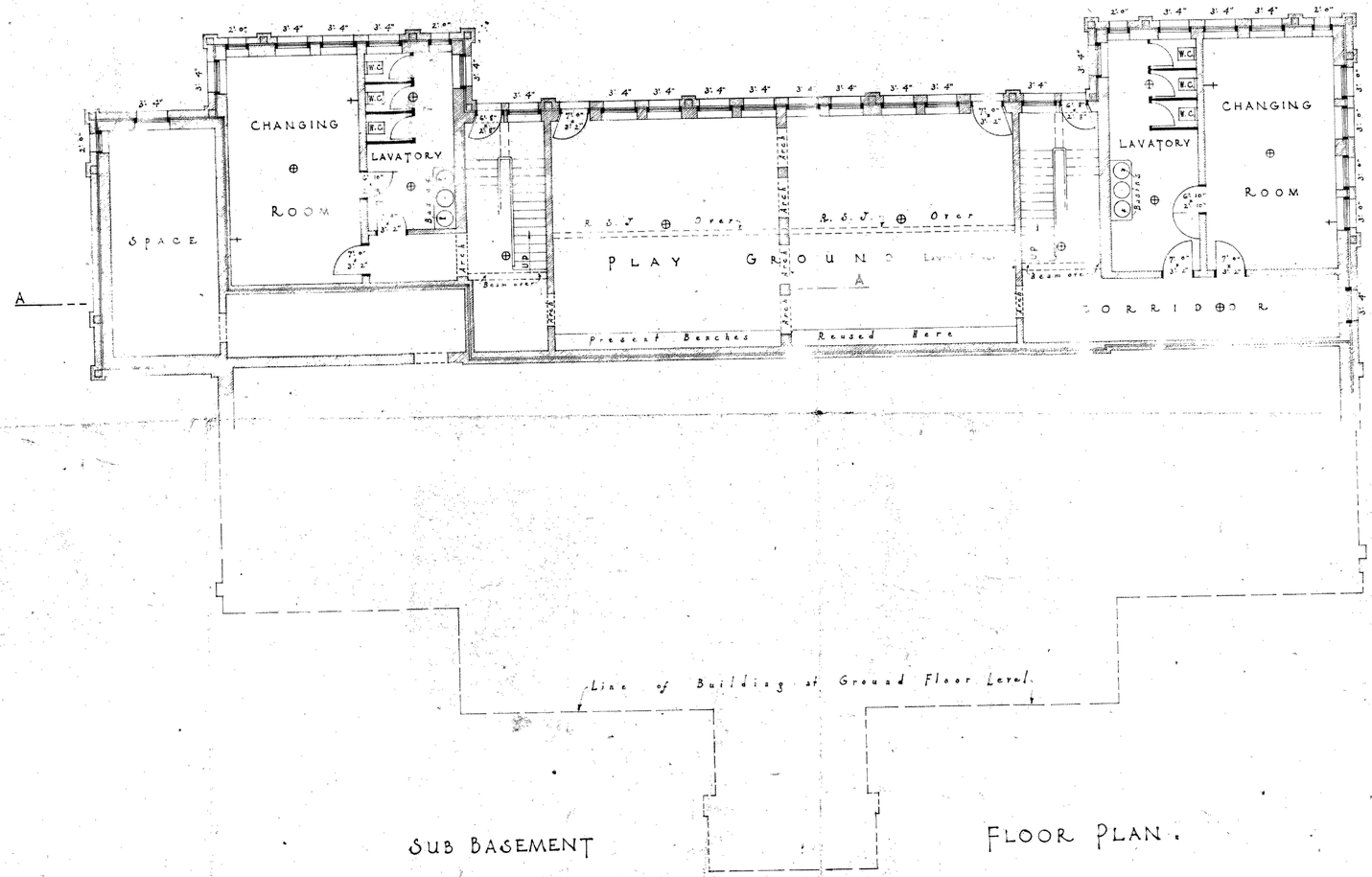
SCHOOL OF
ST. MARY
HILL ST. WELLINGTON

CLERE & CLERE
F.R.I.B.A. F.N.Z.I.A.
WELLINGTON

KEY TO ELECTRICAL WORK
Power Points indicated thus: ⊢⊣
Pendants indicated thus: ⊕

NOTE:
The widths of the windows are shown. The heights shall be taken from elevations and sections, the Exact sizes being made to suit the brick courses.

SHEET NO. 2
SET OF 16
SCALE: 1/8" TO 1 FT.
AUGUST 1929.



SUB BASEMENT

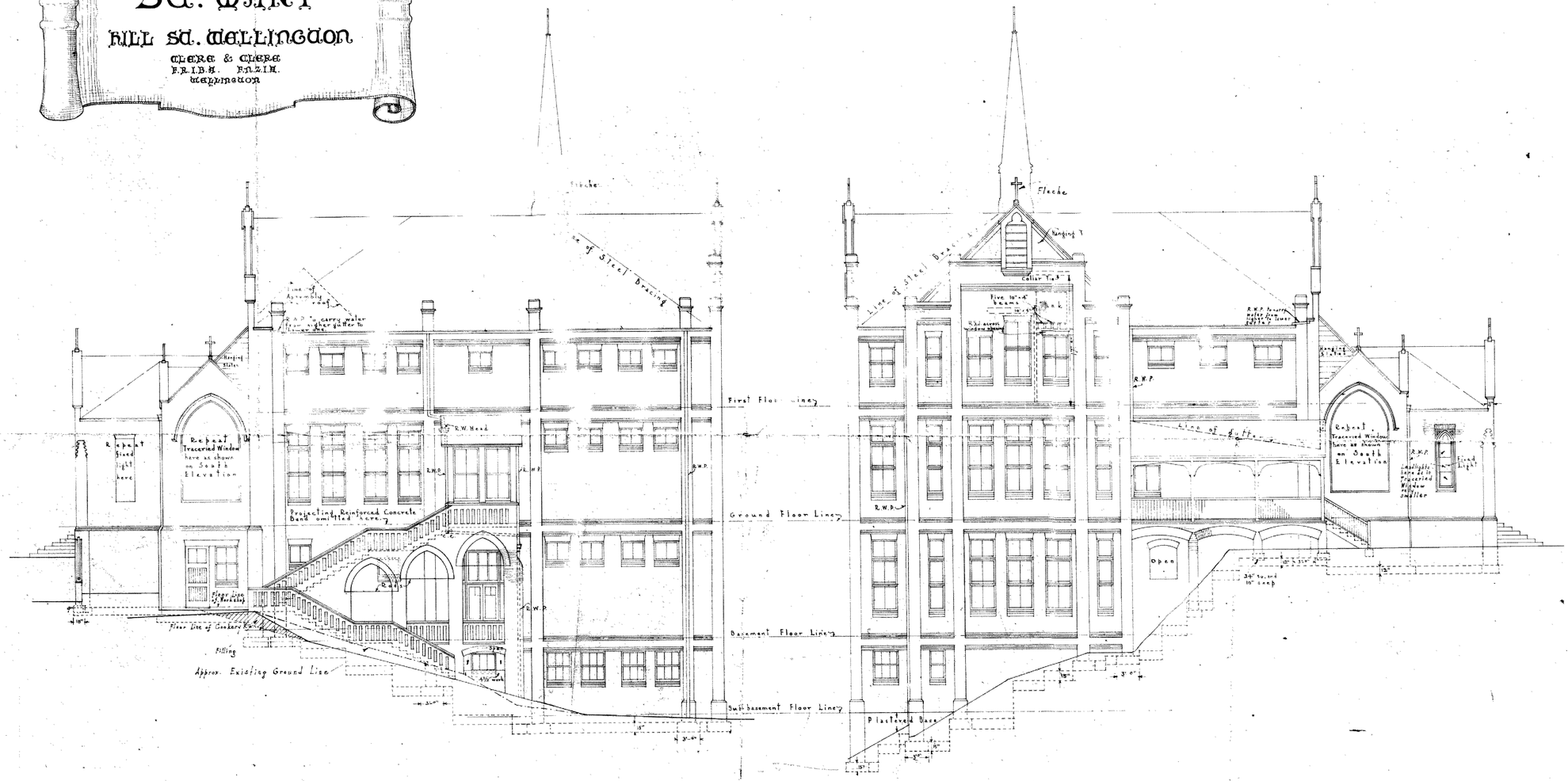
FLOOR PLAN.


SCHOOL OF
ST. MARY
HILL ST. WELLINGTON
CLERE & CLERE
F.R.I.B.A. F.N.Z.I.A.
WELLINGTON
AMENDMENTS.
SHEET NO. 17
SCALE: 1/8" to 1 FT.
NOV. 4TH. 1920.
WEST ELEVATION
FINISH OF GABLES TO SOUTH ELEVATION.
CLASS ROOM
PASSAGE
CLASS ROOM
CLASS ROOM
LAVATORY
Basins
W.C.
Cupbd.
Obscured Glass
Door blocked up and Dado made good.
ASSEMBLY HALL
CHANGING ROOM
GROUND FLOOR PLAN
The arrangement on floor above to be similar excepting that the entrance to Latrines is from the corridor, the cupboard being pushed to one side.
Obscured Glass
NEW W.C. IN EASTERN CHANGING RM.
FOUNDATION AND DRAINAGE PLAN.
12" Thick
CHANGING ROOM
SPACE
SUB-BASEMENT PLAN
CLASS ROOM
CORRIDOR
BASEMENT PLAN
SPACE

SCHOOL OF
ST. MARY
HILL ST. WELLINGTON

CLERE & CLERE
F.R.I.B.S. F.N.Z.I.A.
WELLINGTON

SHEET NO. 11
SET OF 16
SCALE: 1/8 TO 1 FT.
AUGUST 1929.



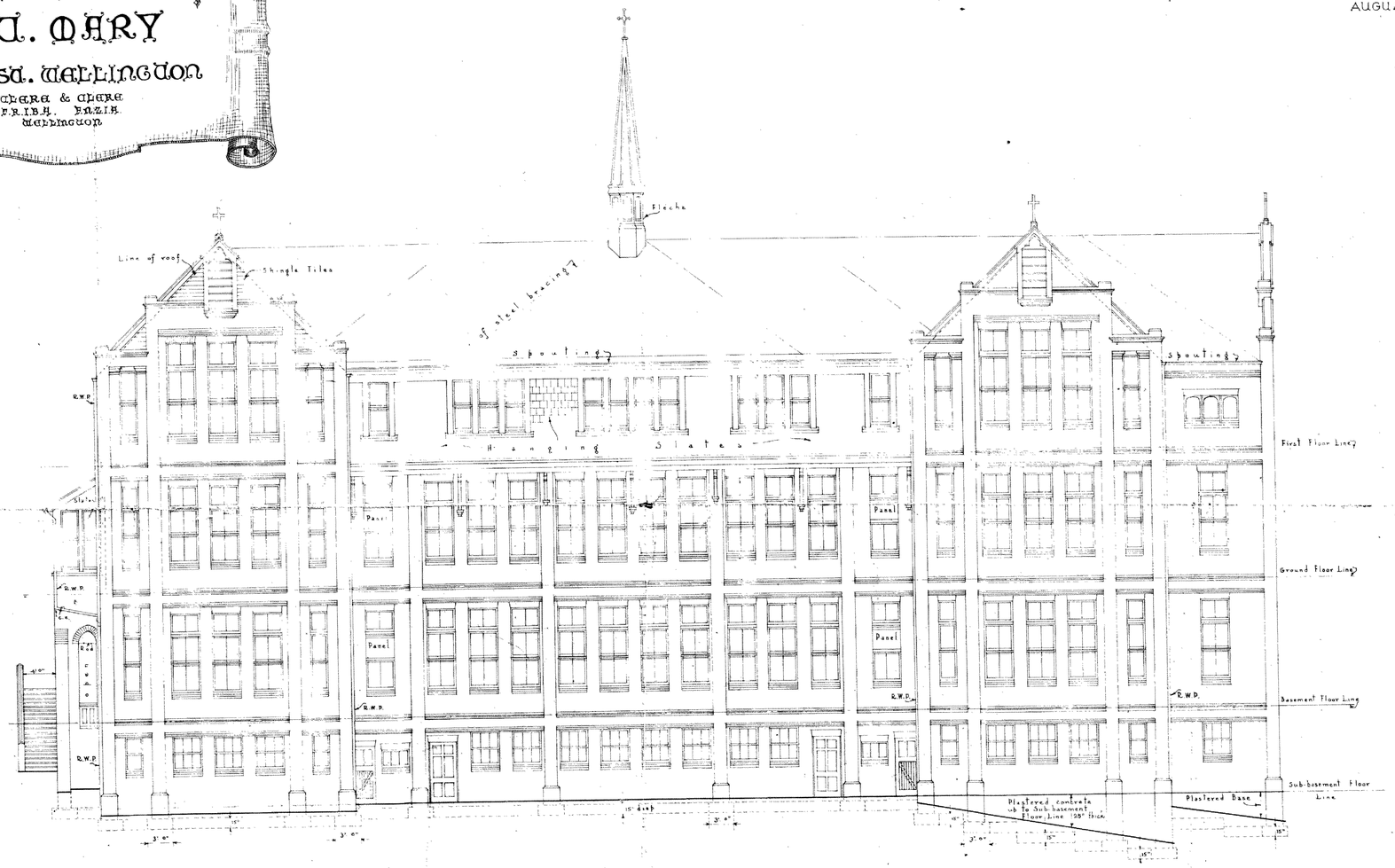
EAST ELEVATION

WEST ELEVATION

SCHOOL OF
ST. MARY
HILL ST. WELLINGTON

CHAPE & CHAPE
F.R.I.B.A. BAZIR
WELLINGTON

SHEET NO. 10
SET OF 16
SCALE: ⅛" TO 1 FT.
AUGUST 1929.

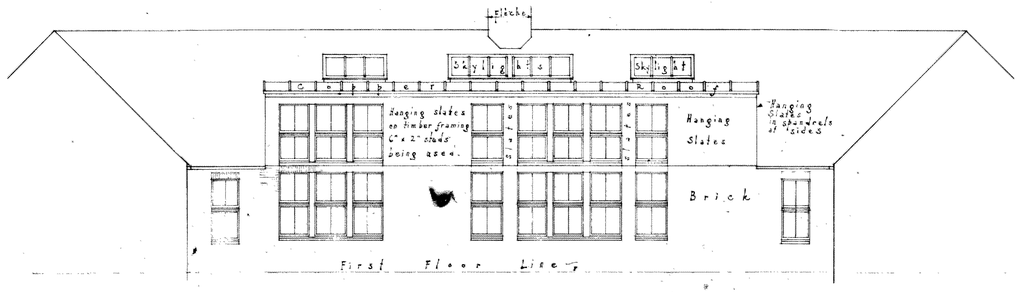


NORTH ELEVATION

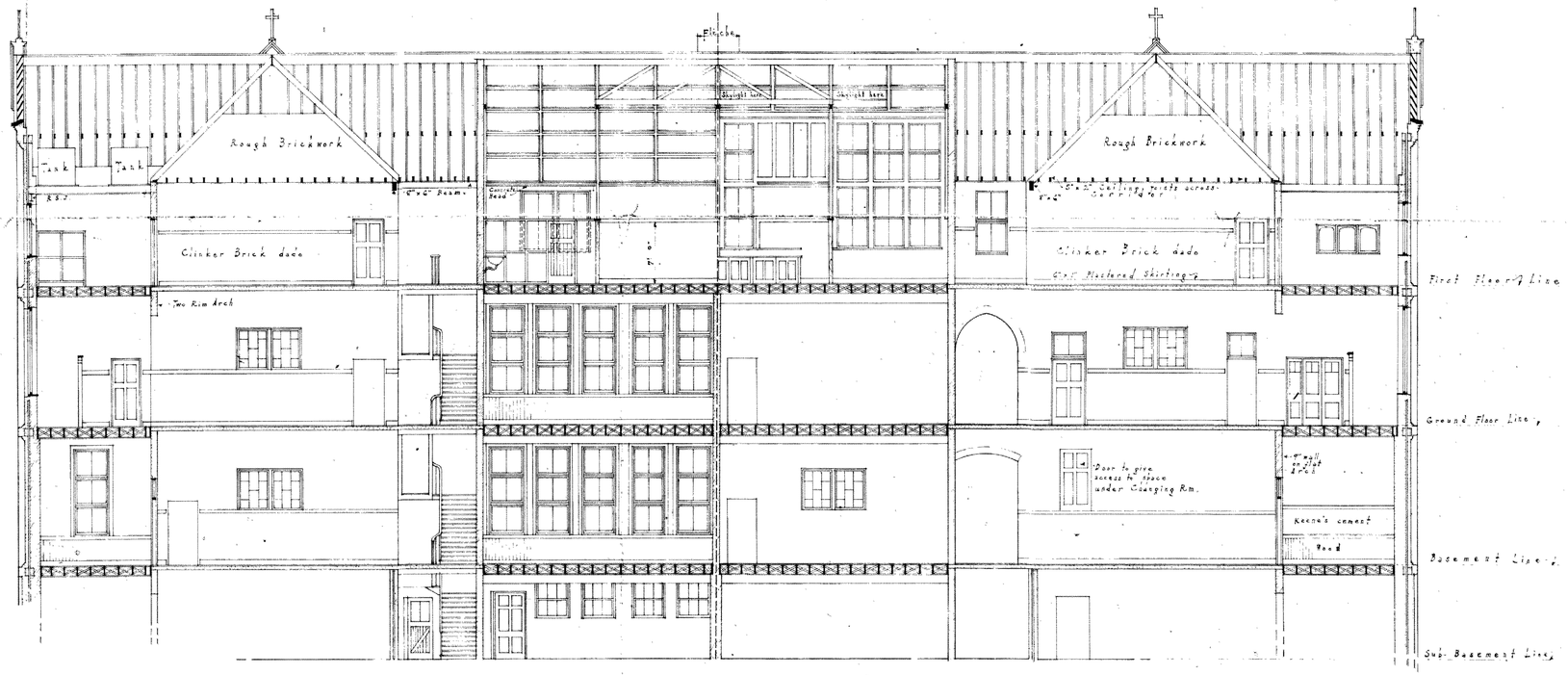
SCHOOL OF
ST. MARY
HILL ST. WELLINGTON

CHERE & CHERE
F.R.I.B.A. F.N.Z.I.A.
WELLINGTON

SHEET NO. 6
SET OF 16
SCALE: 1/8" TO 1 FT.
AUGUST 1929.



SOUTH ELEVATION OF STUDIO ETC..



LOOKING NORTH — SECTION A A — LOOKING SOUTH

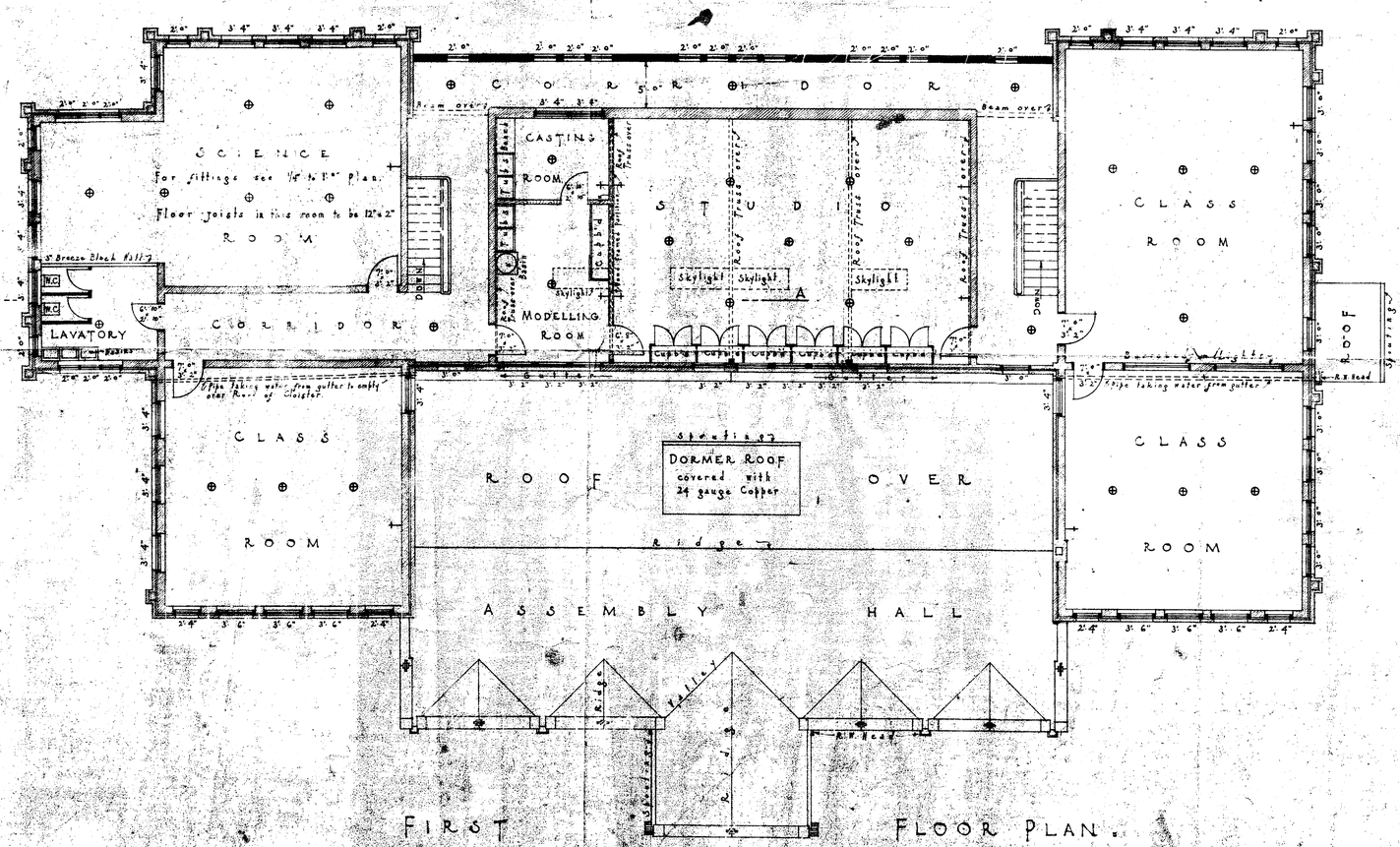
SCHOOL OF
ST. MARY
HILL ST. WELLINGTON

CLERE & CLERE
F.R.I.B.A. F.N.Z.I.A.
WELLINGTON

KEY TO ELECTRICAL WORK.
Power Poi[illegible] indicated thus: ⊢+
Pendants [illegible]dicated thus: ⊕

SHEET. NO. 5
SET OF 16
SCALE: 1/8" TO 1 FT.
AUGUST 1929.

NOTE:
The widths of the windows are shown. The heights shall be taken from elevations and sections, the Exact sizes being made to suit the brick courses.



FIRST FLOOR PLAN.

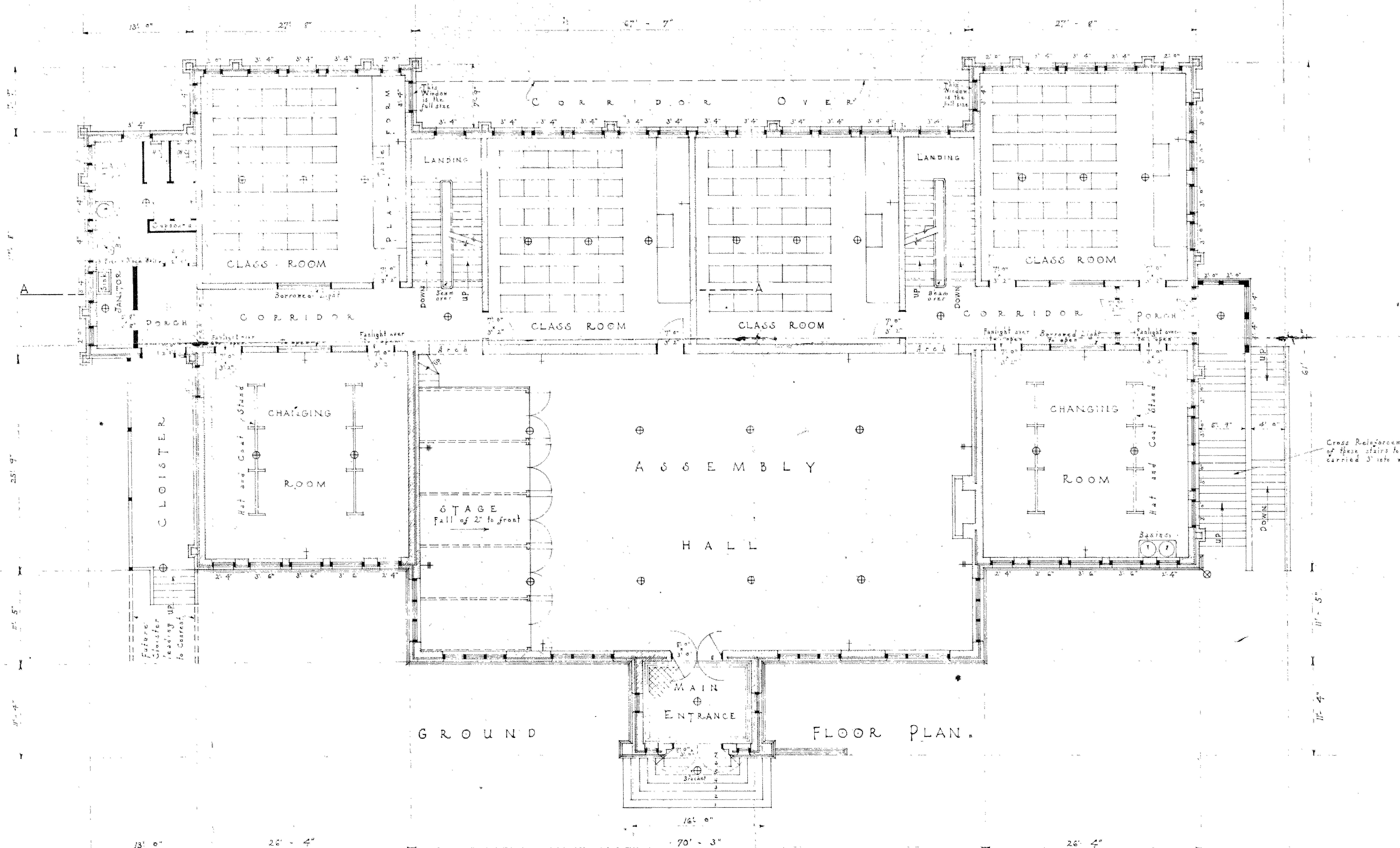
SCHOOL OF ST MARY
HILL ST WELLINGTON

CLERE & CLERE
F.R.I.B.A. F.N.Z.I.A.
WELLINGTON

KEY TO ELECTRICAL WORK
Power Points indicated thus: ⊢+
Lighting Points indicated thus: ⊢#
Pendant indicated thus: ⊕
Bracket indicated thus: ⊢⊕

SHEET NO. 4
SET OF 16
SCALE: 1/8" TO 1 FT.
AUGUST 1929.

NOTE:
The Widths of the windows are shown. The heights shall be taken from elevations and sections, the Exact sizes being made to suit the brick courses.



GROUND FLOOR PLAN.

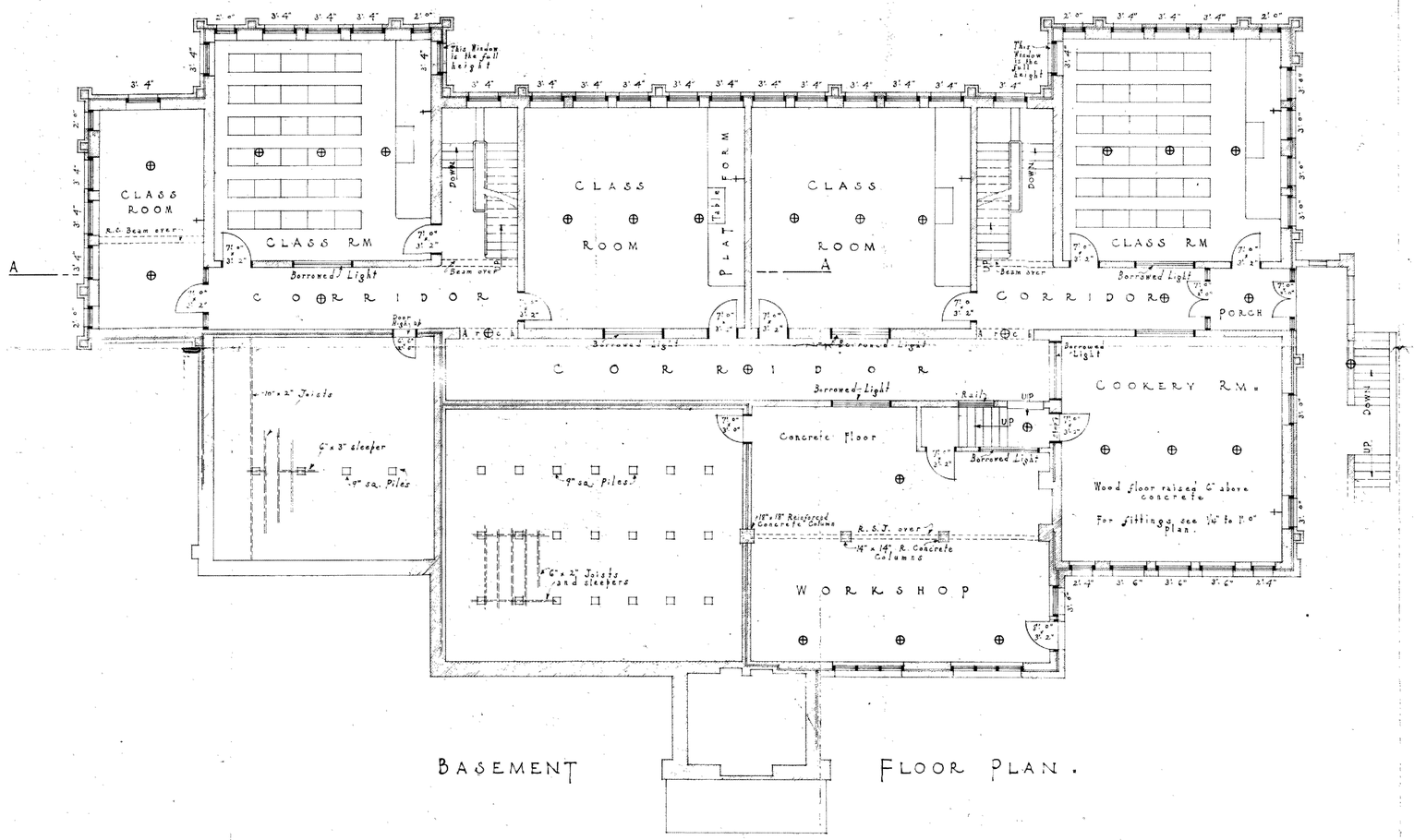
SCHOOL OF
ST. MARY
HILL ST. WELLINGTON

CHARE & CHARE
F.R.I.B.A. F.N.Z.I.A.
WELLINGTON

NOTE:
The widths of the windows are shown. The heights shall be taken from elevations and sections the EXACT sizes being made to suit the brick courses.

KEY TO ELECTRICAL WORK
Power Points indicated thus: ⊢⊣
Pendants indicated thus: ⊕

SHEET NO. 3
SET OF 16
SCALE: 1/8" to 1 FT.
AUGUST 1929.

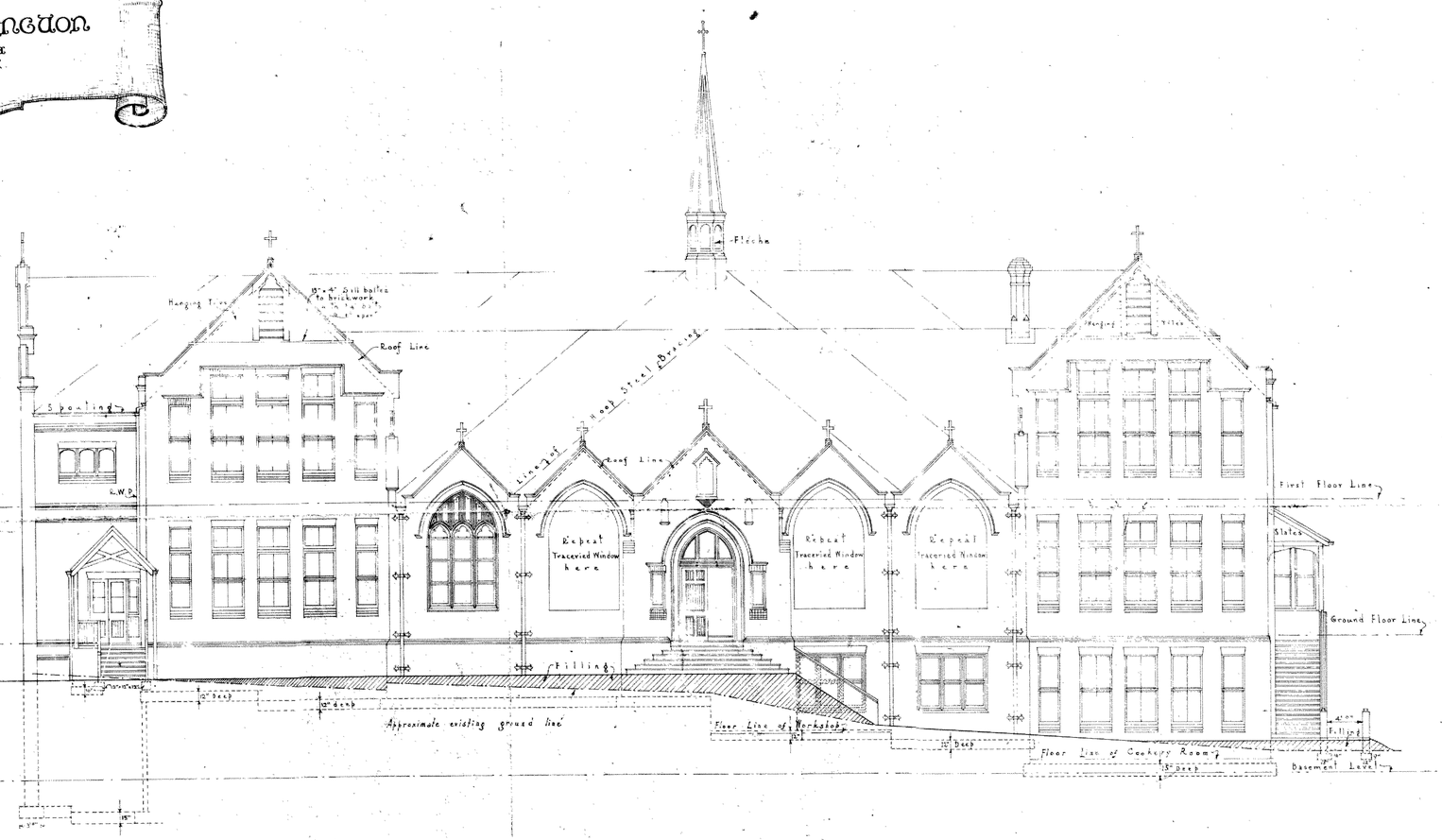


BASEMENT FLOOR PLAN.

SCHOOL OF
ST. MARY
HILL ST. WELLINGTON

CHAPE & CHAPE
F.R.I.B.A. F.N.Z.I.A.
WELLINGTON

SHEET NO. 9
SET OF 16
SCALE: ⅛" TO 1'FT.
AUGUST 1929.



SOUTH ELEVATION