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THE PARLIAMENT OF THE COMMONWEALTH OF AUSTRALIA

Pursuant to Statute
By Command
In return to Order

PARLIAMENTARY STANDING COMMITTEE
ON PUBLIC WORKS.

9th Dec. 1927

REPORT

TOGETHER WITH

MINUTES OF EVIDENCE

RELATING TO THE PROPOSED ERECTION OF

POSTAL WORKSHOPS

AT

SYDENHAM, NEW SOUTH WALES.

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MEMBERS OF THE PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS.

(Fifth Committee.)

GRONOR HUON MACKAY, Esq., M.P., Chairman.

Senate.

Senator John Barnes.
 Senator Patrick Joseph Lynch.*
 Senator Herbert James Mockford Payne.†
 Senator Matthew Reid.

House of Representatives.

Malcolm Duncan Cameron, Esq., M.P.‡
 Robert Cook, Esq., M.P.
 The Honorable Henry Gregory, M.P.‡
 Andrew William Lacey, Esq., M.P.
 David Charles McGrath, Esq., M.P.
 Alfred Charles Seabrook, Esq., M.P.

* Resigned 30th June, 1926.

† Appointed 1st July, 1926.

‡ Resigned 2nd March, 1927.

§ Appointed 21th March, 1927.

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EXTRACT FROM THE MINUTES OF THE EXECUTIVE COUNCIL—No. 297, DATED 10th AUGUST, 1927.

Department of Works and Railways,
 Melbourne.

Departmental No. 297.

MINUTE PAPER FOR THE EXECUTIVE COUNCIL.

Executive Council

Subject:

No. 38 SYDENHAM, NEW SOUTH WALES.—ERECTION OF POSTAL WORKSHOPS.

Approved in Council. Recommended for the approval of His Excellency the Governor-General in Council that in accordance with the *Commonwealth Public Works Committee Act 1913* 1921 the following (Sgd.) W. C. HILL, work be referred to the Parliamentary Standing Committee on Public Works for investigation for Governor-General and report thereon to the House of Representatives, viz.:—

10th August, 1927. Sydenham, New South Wales: Erection of Postal Workshops.

Filed in the Records of the Council

(Sgd.) J. H. STARLING,
 Secretary to the
 Executive Council.

(Signed) W. C. HILL,
 Minister of State for Works and Railways.

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ERECTION OF POSTAL WORKSHOPS, SYDENHAM, N.S.W.

REPORT.

THE PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS, to which His Excellency the Governor-General in Council referred, for investigation and report thereon to the House of Representatives, the question of the erection of Postal Workshops at Sydenham, New South Wales, has the honour to report as follows:—

INTRODUCTION.

1. One section of the Postmaster-General's Department is devoted to manufacture and maintenance repair work on apparatus in that Department. It deals with such articles as letter boxes, locks, safes, telephone switchboards, switchboard accessories, telephone and telegraph apparatus, &c. This section was originally designed to deal with the maintenance of such apparatus, and incidentally to manufacture and supply, when necessary, those articles which could not be easily procured from private manufacturers. As this work has developed, it has been found necessary to establish carpentering, cabinet-making, and machine shops, switchboard assembly rooms, a telephone repair shop, &c.

2. The workshop activities of the Postmaster-General's Department in New South Wales were at one time divided into two sections—telegraphic and telephonic—and for some time occupied space in the General Post Office, Sydney. As the activities expanded, however, the telegraphic section was removed to premises in the vicinity of Circular Quay and the telephonic section to Clarence-street near the Town Hall. Subsequently, the telephonic section was removed from Clarence-street to the postal building at Central Square, and from there to rented premises on the old Hippodrome site opposite the Hotel Sydney.

3. In October, 1916, the Commonwealth leased certain premises in Pier-street, Sydney, at a rental of £1,400 per annum; and in 1917 the two sections telegraphic and telephonic were amalgamated and established therein.

EXISTING PREMISES.

4. The building at present utilized as postal workshops was designed as a warehouse and is a brick structure of six stories with timber flooring and a galvanized iron roof, and provides approximately 27,600 feet of effective working space.

PRESENT PROPOSAL.

5. The proposal now submitted aims at the erection on an area of land at Sydenham, the property of the Commonwealth, of a building sufficiently large to accommodate for some years the various sections of the telegraph and telephone workshops.

REASONS FOR THE PROPOSAL.

6. It is represented that the existing accommodation at Pier-street is unsatisfactory, and does not permit of economical working. Having been designed for a warehouse, it is said to be unsuitable for workshops; and the fact that there are six floors inconveniently laid out for their present purposes, makes supervision difficult. It is claimed that the building is now too small for the work being performed; the rental, which, since the commencement of occupation, has been increased to £2,250 per annum plus £175 per annum for rates and taxes, is unreasonably high; and the inflammable nature of the structure necessitates the employment of two watchmen to guard against a possible outbreak of fire.

DESCRIPTION OF THE PROPOSED BUILDING.

7. The building now suggested is designed to have a frontage of 124 feet 2½ inches to Unwin's Bridge-road, and a depth of 370 feet in the direction of the railway line north-east of Sydenham Railway Station. It is to be, in the main, a single story structure with the exception of two sections about 58 feet long at the front and rear respectively, which will be of two stories.

8. The building will have reinforced concrete foundations, brick walls and a galvanized-iron roof of saw-tooth construction over the single-story portion, and an ordinary pitched roof over the two-storied sections at the front and rear. The front of the building will be cemented to the height of the two-storied portion, and the remainder will be in plain brick. Window frames are to be of steel and the floors of concrete covered with flooring boards.

9. The external walls will be hollow and the floors will be supported on piers of concrete. The roof trusses will be of steel construction and the purlins supporting the iron on the roof will also be of steel—thus making the whole external construction as fireproof as possible in a building of this nature.

10. The height of the walls of the centre portion of the building will be 16 feet. On the front and rear sections the ground floor will be 16 feet high, and the first floor 10 feet.

11. It is proposed that the ground floor shall consist of a general workshop for all branches of manufacture and repair work for the Postmaster-General's Department. There will be also a machine shop in which will be power-driven drills and lathes, a wood-working shop, a tool store, a material and part store, and a lock-up paint shop. Provision is also made for a series of lockers for the use of the men, and the necessary lavatory accommodation.

12. At the front of the building accommodation on the first floor comprises a coil-winding section, general office, manager's office, a laboratory and store room, women's retiring room and the necessary lavatories for the male and female members of the staff. At the rear of the building provision is made on the first floor for the men's luncheon room, women's luncheon room, kitchen, store, library, and recreation room. Two staircases at each end of the building will provide for access to the first floor.

ESTIMATED COST.

13. The estimated cost of the work as submitted to the Committee, including the necessary ground work, water and sewerage services, and provision against fire, is set down at £43,000—and the time fixed for completion approximately twelve months from date of commencement.

COMMITTEE'S INVESTIGATIONS.

14. The Committee visited Sydenham and viewed the site suggested for the new building, inspected the existing workshops in Pier-street, Sydney, and took evidence from the Honorable the Postmaster-General, the Chief Electrical Engineer, the Manager of the Workshops, a representative of the employees, and others.

15. On the visit of the Committee it was seen that the present workshops are unduly congested, and evidence was given that the effective area available provides a bench space of only 6 feet per man in the telegraph section, and 5 feet per man in the telephone section—which is said to be totally inadequate. In addition, it was represented that inconvenience is involved in running and maintaining lifts; extra supervision is needed on account of the decentralization of the staffs: while it is estimated that the extra cost involved in the loss of time of employees going from one floor to another amounts for at least £400 per annum that would be saved in a single-story building.

16. It was stated in evidence that there are approximately 400 men employed in the present workshops, and that the lighting in many sections is bad, and the working, luncheon and lavatory accommodation is poor and restricted. More spacious premises would permit of the installation of up-to-date machinery, and lead to the greater efficiency and comfort of the men and a reduction in the cost of running the establishment.

SITE.

17. In 1914, the Commonwealth purchased, at a cost of £16,567 an area in Harbour-street, adjacent to the main postal store, having a frontage of 129 feet to Harbour-street, by a depth of 75 feet along Little Hay-street, with a view to building workshops thereon, but as all avoidable expense was postponed during the war, the matter was not then proceeded with. In 1921 the question of the provision of new workshops became more pressing, and it was felt that the

site purchased seven years before was too small for effectively and economically carrying on the work to be done in a modern workshop. Alternative accommodation was sought, and after carefully considering one or two proposals, it was decided to locate the proposed building on certain land at Sydenham, acquired for the sum of £5,923 in 1915 for use as a stores yard.

18. It is anticipated that the proposed building will occupy approximately one-quarter of this site, and space is available to provide for reasonable expansion of workshop activities for a period of 15 to 20 years. The situation is in the vicinity of the Sydenham Railway Station, and has a siding running into the area. The main line store is on the same block, which should be of assistance in reducing storage and transport charges. It is in a healthy neighbourhood, and cannot be built in; trams run close to the site, and the Sydenham Railway Station is convenient to two or three excellent artisan neighbourhoods which should eventually prove convenient to the employees of the workshops.

19. Consideration was given by the Committee to representations made on behalf of the employees as to how they would be affected by the removal of the workshops from Pier-street to Sydenham, and although it is realized that the change may cause some inconvenience to a number of the men for a time, the department has intimated that, by suitable transfers, every effort will be made as opportunity offers to reduce this inconvenience to a minimum.

20. After inspecting the site and carefully considering all the evidence adduced, the Committee is satisfied that it is good building land, and will prove quite suitable for the purpose for which it is intended.

BUILDING.

21. After scrutinizing the plans of the proposed building, and hearing the evidence of the Commonwealth Works Director for New South Wales and the officials of the Postmaster-General's Department, the Committee is satisfied that the building has been designed with due regard for economy, and will adequately meet the requirements of the establishment.

FIRE RISK.

22. It was ascertained in evidence that fire-fighting appliances will be installed at various points in the building, and that a 9-in. water main is available along the road in front of the building. With this, added to the nature of the construction of the building, the possible risk of fire may be regarded as negligible.

FINANCIAL ASPECT.

23. Apart from the advantages claimed on account of having more spacious and modern workshops, the Committee examined the question of the relative costs of the present establishment against that proposed. It was stated in evidence that the land at Sydenham was purchased by the Commonwealth for the sum of £5,923, and that the proportionate value of the area to be set apart as workshop site may be taken at £1,500. Adding to this the estimated cost of the building—£43,000—the total capital value of land and building amounts to £44,500. As against this, the Department expects a profit of at least £8,433 on the sale of the Harbour-street property so that the total capital cost of this project may be taken at £44,500 less £8,433, or £36,067. The cost of the removal to new premises, including the loss on plant sold or scrapped, is estimated at £2,000, and the annual charges in respect of the two establishments are given as follow:

On existing shop and site:—

Interest on Harbour-street site at original cost, £16,567 at 5 per cent.	£
Rent of present workshop	828
Wages of watchmen and liftmen	2,250
General administration charges	993
Time of men wasted in going from floor to floor	298
Engineering charges, &c.	400
Rates and taxes paid by agreement of lease	200
Lighting	175
Power for lift	235
	20
	5,999
Less rental received for vacant land in Harbour-street	104
	£5,295

On new shop and site—	£
Maintenance of building, 1 per cent. on £43,000	430
Administration on labour cost of maintenance	103
Depreciation of building—2 per cent. on £43,000	800
Interest at 5 per cent. on original cost of Harbour-street site, plus balance required for new workshops, i.e., £36,007 ..	1,803
Water rates	125
Lighting	50
Annuity for five years at 5 per cent. to wipe out removal costs..	402
	<u>£3,833</u>

On these figures it is shown that the saving in annual charges for the first five years after the establishment of the new workshops would be £1,492, and after the first five years when the cost of removal was wiped out, there would be an annual saving of £1,924.

COMMITTEE'S RECOMMENDATION.

24. After considering all the evidence in the matter, the Committee is unanimously of opinion that urgent necessity exists for the provision of more ample and improved accommodation for the postal workshops, and recommends that the erection of the building at Sydenham as proposed be put in hand without delay.

G. H. Mackay
G. H. MACKAY,
Chairman.

Office of the Parliamentary Standing Committee on Public Works,
Parliament House, Canberra,
16th November, 1927.

MINUTES OF EVIDENCE.

(Taken at Sydney.)

MONDAY, 17th OCTOBER, 1927.

Present:

Mr. MACKAY, Chairman;

Senator Reid. Mr. McGrath.
Mr. Cameron. Mr. Seabrook.
Mr. Cook.

John Murray Crawford, Chief Engineer, Postmaster-General's Department, sworn and examined.

1. To the Chairman.—I understand that the committee is inquiring into the construction of new postal stores and workshops at Sydenham. I have been closely associated with the proposal, and for the information of the committee may state that it is desired to erect a building on property of the department at present used as a stores yard. The proposed building should be able to accommodate the various sections of the telegraph and telephone workshops for some years. The existing work-shops accommodation at Pier-street, Sydney, is unsatisfactory and does not permit of economical working. The building, which is rented by the department, designed as a warehouse, and is unsuitable for work-shops; its rental is unreasonably high for the purpose for which it is used; it is not fireproof, and is much too small. It has six floors, and work on large sections of each floor is difficult to supervise. The site of the proposed new work-shop is very suitable, as it is in the heart of a growing manufacturing district and is connected with the railway system by a siding. It is adjacent to the Sydenham railway station, and few, if any, better locations could be found from the view-point of the convenience of a number of mechanics and other workmen who will be engaged in the shops. With the exception of the front and rear portions of the building, which will have a second storey for offices, &c., the proposed structure will be of single storey construction, and will provide approximately 50,000 square feet of working floor space. The building is estimated to cost £43,000. There is sufficient ground accommodation to enable an extension of the work-shop to be made when required. The proposed building is designed to permit of extensions being made when necessary. In 1914 the department purchased a site in Harbour-street, adjacent to the main store, at a cost of £16,567, with the object of building work-shops. This site has a frontage of 120 feet to Harbour-street by 75 feet along Little Hay-street, making an area of 9,720 square feet. During the year in which the purchase was made all avoidable expense was postponed, owing to the outbreak of war. At that time two small shops—one telegraphic and one telephone—were being rented. In October, 1916, the department leased the Pier-street building at a rental of £1,400 per annum; but the rental is now £2,350, and the rates approximately £127. The building is of six floors, with a total space on each floor of 5,234 square feet; but the effective floor space is only 4,603 square feet, as a portion is taken up for lavatories, &c. The effective space on the six floors is, therefore, about 27,600 square feet. This provides a bench space of 6 feet per man in the telegraph section, and 5 feet per man in the telephone section, which is altogether inadequate. Additional costs are also involved in running and maintaining lifts, transferring material from floor to floor, and extra supervision, all of which interferes with economical working. After the termination of the war all available money was needed for urgent telephonic extension work. In 1921 or 1922 the question of new work-shops became

more pressing, and it was felt that the site purchased seven or eight years before was too small for effectively and economically carrying on the work to be done in a modern work-shop. Alternative accommodation was sought, and, after carefully considering one or two proposals, it was seen that the best and most economical arrangement was to remove the work-shops to Sydenham, where the Department has land, and where reasonable expansion for the next fifteen or twenty years could be met. The department, therefore, proposes to sell the Harbour-street site and build work-shops at Sydenham on land purchased in 1915 for £5,923 for use as a stores yard. It is anticipated that the building will occupy about one-fourth of the site. The following statement gives the approximate financial position of the proposal. To vacate the existing work-shops, sell the vacant site in Harbour-street purchased for work-shops purposes, and erect a new building at Sydenham:—

CAPITAL COST	
Dr.—	
Proportionate value of land at Sydenham ..	£1,500
Estimated cost of building	43,000
Total capital value of land and building ..	<u>£44,500</u>
Cr.—	
By sale of Harbour-street site (original cost, £16,567—purchased July, 1914)	£25,000
Balance required for new work-shops	19,500
	<u>£44,500</u>
Cost of shifting to new premises, including loss on plant sold or scrapped in old premises	£2,000
ANNUAL CHARGES.	
On existing Shop and Site—	
Interest on Harbour-street site at original cost, £16,567 at 5 per cent.	£825
Rent of present work-shop	2,350
Wages of two watchmen	£713
Wages of one liftman	280
	<u>993</u>
General administration, 30 per cent. on £993	298
Time of men now wasted in going from one floor to another	400
Engineering and general administration, 50 per cent. on £400	200
Rates and taxes paid by agreement of lease—	
General rates	50
Water	125
	<u>175</u>
Lighting	235
Power for lift	20
	<u>£5,390</u>
Less rental received for vacant land in Harbour- street	104
	<u>£5,285</u>
On New Shop and Site—	
Maintenance of building, 1 per cent. on £43,000	£430
Administration on labour cost of maintenance (labour included in maintenance of building:—80 per cent. of £430—£344; 20 per cent. of £344—£103)	103
Depreciation of building—2 per cent. on £43,000	800
Interest at 5 per cent. on £36,007*	1,803
Water rates	125
Lighting	50
Annuity for five years at 5 per cent. to wipe out shifting costs	402
	<u>£3,833</u>
Saving in annual charges for first five years	£1,492
After first five years	1,924
*£16,567 represents the original cost of the Harbour-street site plus the balance of £19,500 required for the new work- shops; total, £36,067.	

There are at present about 400 men employed in the workshops. The working, luncheon, lavatory, and other accommodation is poor and restricted, as the building was designed for a warehouse, and not for a workshop. The lighting in many sections is poor, and the supervision costly and difficult. The shop is a manufacturing and repair establishment, and a rigorous system of costing the work is employed. Every job is costed completely and accurately. In submitting tenders the manager of the workshop has to compete with outside firms, where the rental, space, lighting, and supervision ensure more economical working. In the present shop the department is working under a heavy handicap, and is, therefore, anxious to obtain a more suitable building. The situation is adjacent to the Sydneyham railway station, which is convenient to two or three excellent artisan neighbourhoods, tram running quite close to the site. It is in a healthy neighbourhood, and cannot be built in. Additional land has been purchased for the extensions when this is necessary. There is another 2,400 square feet available of the land purchased, and if manufacturing work develops we could, if necessary, resume an additional 50,000 square feet at a small cost. The main line store is on the same block, which should be of great assistance in reducing storage and transport charges. The change may cause a little inconvenience to some of the men for a time, but by suitable transfers we shall do our best as opportunity offers to reduce this to a minimum. After a time the inconvenience will probably disappear altogether. With every development a certain amount of initial inconvenience is inevitable. I have given the proposal careful attention, and feel quite convinced that it is not only thoroughly sound from a financial viewpoint, but will be found to be justified even from the staff aspect. The different sections of work undertaken in the shops comprise switchboard manufacture and repairs, telegraph and telephone repairs, carpentry, plating, blacksmithing and bicycle repairs. Provision has been made in the present shops for a manager's office, costing section, luncheon, sifting stores, and tool rooms, and laboratories. Quite apart from being justified by a reduction in annual charges the transfer to Sydneyham will allow the department for the first time to deal with its shop work on modern lines. The proposed shops will be splendidly lighted by natural light. With the exception of a small portion at either end it will be of single storey construction, with both roof and side-lighting. It will provide additional space to the extent of from 31,000 square feet to 55,000 square feet, but the increase in the effective space will be greater. We shall be able to arrange the shop so that the materials will be able to pass easily from process to process, and in addition we shall have space in which to install further modern machinery, which is much needed. We shall have proper office accommodation, and the workmen will have adequate luncheon and washing rooms, which they have not at present. It is the policy of the department to continue the work at present being done in the shops, as it undertakes a good deal of repair work, which obviously cannot be done by private firms. We have proved that it is a profitable undertaking, because during the war we found in some instances that the prices charged by outside firms were sometimes from 300 per cent. to 400 per cent. higher than those at which we had done similar work. The number of telephone subscribers is always steadily increasing, and consequently the repair and renovation work must also increase. It is essential to have a central repair shop rather than a number of similar establishments throughout the State. When a telephone comes in for repair it has to be dismantled, and certain parts renewed and renovated. This work could not be done effectively in small centres where the necessary plant is not available. Of course, minor repair work is done

by the local mechanics in country districts, but when the state of an instrument is such that it needs general renovation it is sent to Sydney, because it is the most economical course to adopt. A similar policy is in operation in the other States. Repair work is usually sent in parcels, and when the freight and handling charges do not cost more than perhaps three or four shillings it is more economical to do the work in a central workshop. The frequency of repair work depends upon the way in which a telephone is used, but generally speaking an overhaul is required only once in three or four years. Experience shows that the work is rapidly extending. We have a system under which our costs are compared with those of outside firms, and the work is only undertaken by the department when the price quoted is lower than that at which it can be done outside. Generally speaking, the estimate which the manager submits is found to be accurate; in most cases previous estimates are available to work upon. It is only in exceptional circumstances that the estimate is exceeded, and if the excess exceeded 10 per cent. an explanation would be required. I regard the workshop as a profitable undertaking, and I think I am right in saying that the work we do is of a better class than that of similar work done outside. We have no profit to make. I am convinced that the present building in Pier-street is quite unsuitable for the purpose for which it is being used. There is considerable congestion there at present, and as it is impossible to do the work efficiently a modern and well equipped building is essential. The cost of supervision is unnecessarily high because the space on the six floors is broken up by awkward compartments. The inner portion, which is very poorly lighted, is used for storage purposes, and this interferes with the proper supervision of the workmen. Larger premises would have to be secured even if a new structure were not built. We are holding the Pier-street premises on an annual lease, which could easily be terminated. In the proposed new building we can arrange for effective supervision by a minimum number of men. The job foremen will be in the centre of the section, from which point they can see all the men under their control. The land at Sydneyham was acquired in 1915 for £5,929, and an additional area was purchased about a year ago for £2,000 for possible extensions. On the adjoining land there is, I think, a wood depot, a tank maker's plant, and two old cottages. Our purchase price included the buildings. So far as we can estimate, the space we have at present will meet our requirements for at least fifteen years, unless, of course, the department embarks upon a more extensive manufacturing policy. Even if we have to extend our buildings we shall have sufficient space to meet requirements for the next 25 years. We have plenty of room, and if necessary could utilize the area now used for storage purposes. There is no danger of fire from adjoining properties, and as the water supply is good the fire risks are negligible. When the new building is completed it would not take us more than three or four weeks to transfer the plant, which would be done section by section, so as not to interfere with the continuity of operations. The Harbour-street site was obtained for £16,567 in July, 1914, but we estimate its present value at £25,000. Land has increased very considerably in price, as our Pier-street shop as Parliamentary approval for the new building is obtained we shall sell the Harbour-street land. I think it quite within my province to include the estimated value of that land as an asset. The matter will be dealt with by the Director of Postal Services when the sale is completed, but the department will not handle the proceeds of the sale, which will be placed to consolidated revenue. It may be said

that we have no right to regard such an amount as an asset, but I think we are entitled to the increased value of the land. The Commonwealth will get the benefit; but possibly the Department will not. We shall not require watchmen or liftmen in the new building. A charge of 1 per cent. for maintenance of a new shop and site is fixed by the Department of Works and Railways, and interest at 5 per cent. is shown in both instances. We contend that for the first five years the saving in annual charges will be £1,402, and after the first five years £1,924 for the reasons I have already given, which is altogether apart from the advantages to be derived from the more efficient working to be obtained in a new building. The total cost of the proposal is approximately £44,500 from which I have deducted the estimated cost of the Harbour-street site, i.e., £25,000, which leaves a balance of £19,500 required to finance the scheme. The only communication to the upper floors of the present building is an inefficient lift and a stairway.

2. *To Mr. Seabrook.*—The purchase price of the Sydneyham site in 1915 was £9,923 and as we are using one quarter of the area the proportionate value of the land is set down at £1,500. That figure is based on the purchase price of the land, although the present price would be about £2,300. The Harbour-street site cost £16,567 and although we have not offered it for sale I have no doubt that as it is within a stone's throw of a new underground railway station it could be sold any day at the figure I have stated. Timber supplies are taken to Sydneyham where they are seasoned and then transported to Pier-street in the quantities required. Under the new proposal the saving in transport charges would amount to £50 or £100 a year; but that has not been taken into account because as an offset additional transport charges will be involved in transferring to Sydneyham apparatus which is now at Pier-street. A number of the workmen who will be employed at the new shops already live in that district. If it is considered a disadvantage to have the lockers in which food and clothing may be placed adjacent to the lavatories these two sections could be separated by a door.

3. *To Senator Reid.*—All the sections in the workshop are occupying all the space allotted to them. The department has been rapidly extending and has not any spare space available. Under the present system repairing costs are increased. It is difficult to say the actual saving likely to be effected under this proposal; but it should amount to at least £4,000 or £5,000 a year after making allowance for all charges. We also intend to install more up-to-date equipment. For most classes of work five to six feet per man is allotted but for some classes of work eight feet is required. The efficiency of the shops is of a high standard. If the cost of the work can be materially reduced, as we anticipate, we may be able to undertake work which at present we do not handle. We purchase a large number of switchboards outside, but with more efficient working conditions we may be able to manufacture them cheaper than we can buy them. That aspect has not been overlooked. It is interesting to note that of the 122,000 telephone subscribers in New South Wales 76,400 are in Sydney and the metropolitan area. The proportion of telephone subscribers to the population is much the same in all States with the exception of Tasmania, where it is lower.

4. *To Mr. McGrath.*—We charge general administration costs to the extent of 30 per cent., and engineering and general administration charges to the extent of 50 per cent. These percentages may be considered high in connexion with the particular items set out in my statement of annual charges, but that is the usual figure upon which we work. General administration charges includes such items as annual leave, sick leave, relief, which is sometimes necessary, and superannua-

tion charges in the case of permanent employees. In addition provision must be made for a proper proportion of the cost of the supervising staff and a portion of the salary of the workshops manager. If the labor costs of a particular job amount to £100 and the cost of material to say £100, we add 50 per cent. to the labour cost for administration. It is not the intention of the Department to undertake the manufacture of say telephones or any additional manufacturing work unless it is found economical to do so. There may be certain articles on which the difference between our price and that of outside manufactures is very small which we may be able to manufacture in the new shops. As there are about 300 parts in a telephone we could not, in the absence of a large demand, manufacture them economically. We propose that any extensions to the building be made at the south-eastern end, because it is assumed that the land in other directions will still be required for storage purposes. We are getting the same rent as the previous owners for the portion on the south-eastern end, and when the lease expires we shall have to take into consideration the amount we paid which was £250 for a complete cottage and £50 for another cottage and the block on which it is situated. We can only compete with private manufacturers in certain lines. We make the same charges as outside manufacturers against the job but we do not have to show a profit.

5. *To Mr. Cook.*—It is considered desirable to do the work we are handling rather than give it to private enterprise especially when we can do it cheaper and in many cases better. It is necessary to construct a building of the size suggested because we know that we can already effectively occupy more space than we have at present. It would be a mistake to erect a building capable of meeting only our immediate requirements. Our workmen are efficient in all branches. We let out contract undertake courses owing to the absence of the necessary plant, and to the fact that at times it can be done cheaper. We never give out work which we can do at a lower rate. Our workshops are conducted on a competitive basis. When making a trunk line switchboard it does not pay us to manufacture plugs, cords, some classes of indicators, listening keys, &c. We purchase these and do the assembling at the shops. Probably with better equipment we could increase our manufacturing work, but that is problematical because we might be able to produce an article at say 20s. which would be lower than the price of an outside manufacturer but he might then reduce his rate to say 18s. All the copper wire we use is obtained from Port Kembla, as it is the policy of the Government to give preference to local manufacturers. If a local manufacturer submits a price above that of the British or foreign manufacturer, he does not get the order. The local manufacturer obtains the advantage of preference and protective duties as well as the freight and other charges.

6. *To the Chairman.*—In practically all cases we use locally manufactured wire and cables.

7. *To Mr. Cook.*—I could not say if the Commonwealth has lost £400,000 during the last few years by purchasing Australian-made copper wire. The tender board deals with all prices, after making allowance for customs duty and other charges. The system under which we are working in our present premises is such that it is only reasonable to assume that the factory inspectors may ask us to make drastic alterations in order better to protect our workmen.

8. *To Mr. Cameron.*—It is very difficult to carry out our work efficiently, particularly during rush periods. Our mechanics enter the workshops as cadets between the ages of fourteen and sixteen years. If

possible we endeavour to obtain the services of boys who have been through a technical school. During their five years' training they pass through every section of the work, and are then qualified mechanics. Most of them remain with us. The land to be sold will be placed in the hands of the Lands and Survey Branch, which will handle the whole transaction. The water supply at Sydenham is good.

9. *To the Chairman.*—In connection with the administration charges of 30 per cent. and 50 per cent. I may explain that we use the term "administration" where firms undertaking similar work would use the term "general overhead charges." The overhead charges imposed by some firms on certain items would vary from 60 per cent. to 110 per cent. The charge includes a proportion of the rent and rates, leave and sick leave and other items which I have mentioned. The engineering and general administration charges applies only to mechanical work over which more supervision is necessary than in the case with unskilled labour, such as watchmen and liftmen. If a mechanic is idle, the machines are also idle, and in the case I mentioned where a charge of 110 per cent. was imposed large and costly machines were in use for only a portion of the time. If the Postmaster-General were asked what the general administration charges were in his Department he would probably say 30 per cent. In the mail branch the percentage would not be so high as in the engineering branch because there is no machinery lying idle.

10. *To Mr. Seabrook.*—There are firms in Sydney doing the same class of work that we are handling; but generally speaking there are not many because they do not have the equipment that we have. Some firms are doing work which it would not pay us to handle because of the small amount which we require to be done. We call tenders for trunk line switch boards which comprise a "carcase" plus certain necessary apparatus. The workshop manufactures the whole of the "carcase" but a portion of the equipment is obtained from outside. We can manufacture cabinets which are made outside at a cheaper rate than private firms.

11. *To Mr. McGrath.*—Our workshops are not equipped in such a way as to enable us to make the mechanical mail handling appliance now being erected for the Department.

(Taken at Sydney.)

TUESDAY, 18th OCTOBER, 1927.

Present:

Mr. MACKAY, Chairman;
Senator Reid. Mr. McGrath.
Mr. Cameron. Mr. Seabrook.
Mr. Cook.

Charles Henry Dumbarton, Engineer in Charge, Postal Department's workshops, Sydney, sworn and examined:

12. *To the Chairman.*—I have been associated with the Post and Telegraph Department for 39 years, but I have held my present position only since August of last year. I was not in charge of the workshops when the present proposal was first mentioned; but I understand it was brought about owing to the extreme congestion in the shops. For the information of the committee I may explain that the workshops were once divided into two sections—telegraphic and telephonic when I was in charge of the telephonic section, not as engineer, but as mechanic. Mr. Thompson was in charge of the telegraphic section. Both branches were occupying premises in the post office, but when the

activities became extensive the telegraphic section was removed to Circular Quay, and the telephonic section to Clarence-street, near the Town Hall. After that time the works were moved from Clarence-street to the postal building in Central-square, and from there to rented premises on the old Hippodrome site opposite the Hotel Sydney. The telegraphic workshop remained near Circular Quay until 1917, when the two sections were amalgamated and accommodated at the present premises at Pier-street. So far as I know the present premises have always been unsuitable, and I understand the rent has increased considerably since the Commonwealth has been a tenant. The building at present in use is quite unsuitable for the work undertaken there, as it is a multi-floored building inadequately lighted, with inferior lift accommodation, and unsuitable sanitary conveniences. The building was originally designed as a wool store, and is particularly unsuitable as a workshop, as supervision is most difficult. There is a fire escape at the rear of the building which would be quite inadequate in the event of fire. The risk in this respect is so great that we have to employ two watchmen between 5 p.m. and 7.30 a.m. every day in the year. Telegraphic mechanics, telegraph mechanics, carpenters, signwriters, metal polishers, french-polishers, bicycle mechanics, locksmiths and blacksmiths are employed in the building. The total number of men under my control is 404, and the area of effective floor space is 28,000 square feet. This area is used for carpenters and machine shops, switchboard assembling rooms, and telephone repair shops. As the space is inadequate in every section, we cannot get the best results from our operations. The establishment is carrying out the manufacture and maintenance repair work on apparatus used in the Postmaster-General's Department throughout New South Wales. The articles we handle include letter-boxes, locks, safes, telephone and telegraph equipment, and other items of that character. The State Engineer's electrical apparatus consists of telephones and telephone accessories, and telegraph apparatus and switch boards. The workshops were designed in the first place to deal with the maintenance of such apparatus, and incidentally to manufacture and supply when necessary articles which cannot be easily procured from private manufacturers. We are not in a position to compete successfully in all directions with outside firms, particularly those who specialize in the manufacture of certain articles. Some of these firms buy their raw material when the market is favourable, and store it until it is required, whereas we have sometimes to purchase when the market is unfavourable in order to comply with an order. We might also have to improvise machinery to manufacture certain articles. When an article is required a requisition is sent to the stores branch, and a copy retained by the requisitioning officer. The Superintendent of Stores sends an officer to obtain quotations, and he also sends a quotation form, on which I quote in accordance with the specification. In the case of, say, an order for battery tanks, I might inform the Superintendent of Stores that pitch pine was not obtainable; but that I could quote for yellow pine, which was the next best available. A wood working firm who might have more modern appliances and stocks of suitable timber in hand could possibly submit a better quotation than mine. It is considered desirable to have a quotation from our workshops, as it acts as a check upon outside firms who may enter into collusion. If the Superintendent of Stores asked me to quote for, say, 2,000 screws, and also asked others to quote, it is possible that mine would be the only tender, because the outside firms will not handle small orders. We receive thousands of small orders, and make screws of other than standard threads and sizes. I should say that the work-

shops were justified as regards both quality of the work and the price at which it is done. I cannot say that the plant is right up to date; but since I have been in charge I have introduced several new processes. When more space is available some of the obsolete machines will be scrapped and replaced by modern appliances. It is very seldom that we do any work for people outside the department. Last week, however, we received a communication from Amalgamated Wireless (Australia) Ltd., asking if we could repair a Creed Transmitter used in connexion with beam wireless, as we were informed it was difficult to get this class of apparatus intelligently repaired in Sydney. The work is now in hand. We manufacture different classes of switch boards; but, speaking from memory, I think our prices are somewhat higher than those of outside contractors. I should say, however, that those we produce are superior to the switch boards supplied by others. A particular type of switch board had to be designed for some of the administrative offices at Canberra, as they were not placed in somewhat unusual situations. For the information of the committee I may say that we were to have done outside only work which we cannot economically undertake. Last year our output was valued at £251,231. We costed \$44,490 man hours, and paid £90,954 in wages and salaries. Our workshops must develop in close relationship to the telephonic and telegraphic expansion that is occurring. The effort made during the last few years to overtake arrears of work is responsible to a slight extent for the activity in our workshop; but the general progress of the department and the extensions being made throughout the whole State in telephonic and telegraphic work are such that we are always likely to be busy. Mechanics are stationed at various country centres in order to maintain apparatus and carry out minor repairs; but one main workshop equipped with modern plant is more economical than a number of smaller shops. If an inspector wishes certain work to be done, it is his duty to determine whether it is of a minor character and should be done locally, or whether it would be more economical to send it to Sydney. The actual distance from the city to the proposed new store is about 4 miles; but as it is at Sydenham Junction, where there is room for expansion, it can be regarded as a suitable site. I have inspected the plans of the proposed building, and consider them in every way suitable. I was consulted when the plans were being prepared. The recreation room, which measures 24 ft. by 52 ft., is for the use of the employees, and the luncheon room is considered to be of a suitable size. The portion of the building shown on the plan as a kitchen is for the use of the Postal Institute, of which I am the president. As the members of the committee are doubtless aware, the Postal Institute has been established for educational, recreation, and general welfare purposes. It has its own staff, and pays the wages of the attendants. The Postal Department provides the accommodation, and also the furniture. Lavatory accommodation is provided on the ground floor for the men in the workshops, and similar accommodation for male and female members of the staff is in another portion of the building. In order to meet the convenience of the men, fewer lavatory basins have been provided, and washing troughs provided. Under this system the men will be able to wash more rapidly than would be the case if basins were used. At present the men take their luncheon bags into the shops, but in the new building lockers will be provided away from the workshops, so that the men can go to their duties without encumbrance. It is also desirable for other reasons that bags should not be taken into the workshop. As the building will be properly

sewered, there is no objection to the lockers being in close proximity to the urinals. In the central post office building the urinals and lavatory accommodation are quite close to the restaurant, and no inconvenience is caused. I consider the layout of the building suitably caused. It will provide us with approximately 85 per cent. additional space. The department has resumed certain land to make room for workshops extension, which will give us another 24,000 square feet. This should be ample to meet requirements for at least the next 25 years. At the end of that time it is possible that the value of the land may have increased to such an extent that it may not be economical to stay there, and we may have to go still further afield. I should be responsible for the removal of the plant to the new premises. The cost of this removal will be from £1,250 to £1,700, exclusive of cost, of course, of any additional machinery. This work can be undertaken without any dislocation, as I propose to purchase new shafting, and when the machines are disconnected from the shafting in the present shop they will be installed without delay on the new shafting in the new building. I cannot say if any reduction in the number of employees is likely to be made in the future; but for the time we will carry on with the same staff until we are finally established. The change in the telephonic system is giving us a good deal of work, but the pressure may not be so great in the future. It is fair to assume that £400 a year is lost owing to time involved in going from floor to floor in the present building. Under the proposed new arrangement the men should be able to do more work in consequence of the introduction of more modern processes of manufacture. The supervision and grading of labour will also be better.

13. *To Senator Reid.*—I have no doubt as to the desirability of removing the workshops. We hope to be able to extend our operations particularly in the carpentry section. We also hope to introduce automatic machines for screw making, a better class of power press and to change some of our old type lathes for more efficient lathes. We shall not have to discard all of our present plant, although we shall have to dispose of some of our machines which have been in use for twenty or 30 years and which are worn out and obsolete in design. In the new factory we hope to be able to do work which we have not previously undertaken, but I do not suggest that we shall be able to compete successfully in the manufacture of certain lines in which others specialize. Outside firms are able to obtain certain parts in larger quantities and therefore at cheaper rates than we are. Moreover, we would not obtain sufficient departmental orders for that class of work. We would not have continuity of employment for all our machinery in making certain articles. Any member of our staff who is also a member of the Postal Institute will be able to use the accommodation provided for the use of members of the institute. The whole of the building will be occupied when a transfer is made, and as the activities and number of the staff increase the space per man will be slightly reduced; but I think it may be seven to ten years before that may be necessary.

14. *To Mr. McGrath.*—The motor garage is in a separate building and it is not proposed to move it from its present site at Clippendale. My department is responsible only for the maintenance of 150 motor vehicles, and any major and minor repairs carried out are done at the garage and work undertaken last year was £251,231, and although I cannot give at the present the value of the work undertaken the previous year I may say that the man hours were 717,464 as against 844,420 for last year. It is true that outside manufacturers can anticipate their require-

ments and store, say, timber to meet their needs. We could do the same but it would not be economical to adopt such a course in connexion with work which is not frequently undertaken. There is likely to be very little demand for switchboards other than from the telephone department. Switchboard condensers are manufactured in England and America. I do not know of any local manufacturers of this equipment.

15. *To Mr. Cook.*—We could not carry on effectively if we had to depend upon outside manufacturers for the articles we are making and repairing from time to time. At the rate we are progressing the accommodation will be adequate for at least seven or ten years, and at the end of that time we can if necessary reduce the space per man. At present we have seven or eight branches operating; but others may be established should the necessity arise. On several occasions I have informed the authorities that the space in the present building is inadequate. When I took up my present duties the Chief Electrical Engineer said that the activities under my control should be accommodated in a new workshop in order to obtain better results. It would be impossible for me to estimate from a monetary viewpoint the loss we have incurred owing to insufficient space. The men have frequently complained of the way they work. We have a system under which we can check the output of each man. When a job comes to the workshop it is accompanied by a manufacturing order and I then issue a job order. All labour, material, and incidental expenses associated with the manufacturing or repairing of the article are then charged to the particular job order, which is then sent to the works foreman who takes out a time card which he attaches to the job order. The time card bears the name of the workmen together with particulars of the material and a description of the work. On the completion of the job the time card is returned to the costing clerk, who enters the particulars contained on the card on his copy of the original job order. The costs of material and labour are made up by the costing clerk and these constitute a record of the job which enables the comparison to be made with the cost of similar jobs. The time of a temporary employee is recorded on a red printed card, and that of a permanent hand on a black printed card. If the cost of the article has increased an investigation is made to ascertain the cause. Some of our men have been in our employment for 40 years and the quality of the work performed in our shop will more than favourably compare with that of similar work done elsewhere.

16. *To Mr. Cameron.*—When we are properly established in a new building it should be possible to reduce costs. If a departmental bicycle at Bourke needed repairing the mechanic there would obtain two quotations to ascertain the local cost and then obtain advice from Sydney as to what should be done. If it were more economical the work would be done at Bourke. Female employees will be engaged in coil winding at the new workshop. I have not heard of any complaints from the employees concerning the proposed transfer. There is no delay in connexion with the execution of orders. Our apprenticeship system has been investigated by the Public Service Board and is considered satisfactory. A central doorway leading to the lockers instead of one at each end as is shown on the plan would be unsatisfactory as it would necessitate passing through the paint shop.

17. *To Mr. Searbrook.*—It is expected that economies will be effected in several directions particularly as we shall have at least 85 per cent. more working space. The men will be able to do better work, because of the improved lighting and ventilation provided and the supervision will be more effective. The cost of overhead administration is determined by the Accountant in the

Postmaster-General's Department and checked every quarter in order to guard against any sudden fluctuation. We usually charge 50 per cent. to cover ordinary overhead charges, but when we are established in the new building I am hoping that that charge may be reduced to 40 per cent. I am always endeavouring to reduce overhead expenses.

18. *To the Chairman.*—The fire risk in the new building would be almost negligible as the only inflammable stuff in the building would be petrol used for cleaning purposes. We have a paint spraying plant and a special preparation for producing high polishes, but we have special fire fighting appliances installed wherever necessary. The watchman at the stores depot could keep an oversight over the new building. The proposed new building will be of brick and concrete with I hope a wooden flooring on top of concrete supports which will give a solid foundation for machines. In the circumstances the lighting provided may be considered satisfactory although no light can be admitted through one half of the southern wall owing to the fact that it is a boundary wall on private property.

19. *To Mr. Cameron.*—We use Australian material whenever possible. Most of the timber we use is Queensland maple.

The witness withdrew.

Charles Herbert Uttley Todd, Commonwealth Works Director for New South Wales, sworn and examined.

20. *To the Chairman.*—I am conversant with the proposal to erect postal work-shops at Sydneyham. The authorities in Sydney and Melbourne have been in consultation over the proposal, and the plans of the new building, which I am sure will meet the requirements of the department, have been prepared by the Department of Works and Railways. The building is to have a frontage of 124 feet 2 inches to Unwin's-bridge road, Sydneyham, and a depth of 370 feet in the direction of the railway north-east of the Sydneyham railway station. The ground floor is to consist of general workshops for all branches of manufactures and repair work for the Postmaster-General's Department, including telephones and their contingent parts, switchboards, &c., and also for repairs to telegraphic instruments. There will also be a machine shop, in which there will be power-driven drills and lathes for manufacturing new parts or for repair work. There will also be a wood-working shop, in which machine power can be installed. Room is also provided for the protection of tools used on the various machines and for the parts required in connexion with the manufacture of telephonic and telegraphic instruments. There is also a lock-up paint shop, a room where complete switchboards and telephone bureaux may be looked over. On the ground floor there are two entrances from Unwin's-bridge road on the eastern end of the building, one of which is for ingress and the other for egress, in order to provide one-way traffic. There is a receiving and despatching room in the front of the building, which is connected with the loading stage. There are two stair-ways up to the first floor, which extends over the eastern and western ends of the building. The accommodation provided on the first floor on the eastern end comprises a general office, manager's office, laboratory and stores, together with the necessary laboratories for the male and female members of the staff. There is also a coil winding section, which, I believe, you will be informed is to be utilized exclusively by female employees, for whom a retiring room and lavatory have been provided. Provision on the western end is also made for two staircases to serve the men's luncheon room and women's luncheon room, as well as the kitchen store, library and recreation room. The walls and piers are to be built on reinforced concrete foundations. The roof is to be carried on steel

stanchions. There are to be buttressed brick walls of varying thickness according to requirements, and a galvanized iron roof partly of saw-tooth and partly of ordinary pitch construction. The front of the building will be cemented to the height of the two-storey portion, and the remainder will be in plain brick. The external walls will be hollow and the floors will be supported on piers of concrete. The roof trusses will be of steel construction, and the window frames will also be of steel. The purlins supporting the iron of the roof will be of steel, thus making the wholly external construction as fire-proof as it is possible to make a building of this nature. Internally there are very few partitions. The lines on the plan denoting various sections are in reality standards 2 feet high, to which chains will be attached in order to segregate the different classes of work. The only partitions are those around the paint shop. The chains on the standards can be detached if required. The height of the walls will be 16 feet to the underside of the girders across the stanchions. This provides sufficient height for overhead spindles and pulleys. A small portion of the southern wall is slightly thinner than the other portions, because it is proposed to acquire the strip of land on which this wall abuts. This temporary wall will be demolished when the building is extended. The estimated cost of the building, including the necessary ground work, water and sewerage services, and provision against fire, is £45,000. Without any untoward interruptions the building should be completed within ten months from the date on which a commencement is made. In the event of industrial trouble in any of the industries upon which we are depending for supplies the time would be longer. A wet winter would also interfere with construction work; but the time in which the building would be completed should not be longer than twelve months from the date on which a start is made. At present all our work is being carried out by contract, in accordance with Cabinet instructions. The building trade in Sydney is busy at present, and there is considerable difficulty in getting suitable workmen for some classes of work; but on a job of this magnitude probably contractors who are not confronted with labour difficulties would tender for the work. The natural lighting could not be improved, as the saw-tooth construction of the roof gives light over every bay. The length of flat roof on either side is merely to give proper access to the saw-tooth portion. The drain on one side of the building will not be a menace to the health of the employees, or likely to cause a flooding of the work-shop, as it merely carries off surface water. Probably the fitting up of the new building will be the work of the Postal Department. That is a matter to which we have not yet given consideration. We may assist to the extent of putting in concrete foundations. The department will, doubtless, install its own machinery; but if it wishes us to do so possibly no objection will be raised. Satisfactory arrangements can be made for effectively handling drainage and sewerage. There is a 6-in. water main along the road in front of the building, to which we can make a connexion both for domestic and fire services. Careful consideration has been given to the prevention of fire, and we are now awaiting a decision of the Commonwealth Fire Board as to how we shall deal with the matter. The system which will probably be recommended will be a special fire main with hydrants, as well as the provision of chemical fire extinguishers throughout the building. The lavatories and lockers are placed in the position indicated on the plan, because it is thought that we would not get the drainage away if we went right up to the edge of the boundary. The floor level of the building will be slightly above that of the ground outside. A ramp is provided from the eastern front and rises on an easy grade. The store-room on the first floor would be used for protecting anything that has to be placed

under lock and key, such as special testing instruments or beam scales for weighing valuable chemicals. Store accommodation is provided on the ground floor. The plans have been amended, and those which I now submit to the committee have been adopted by the Postal Department. The lease of the Pier street premises was originally for three years from October, 1922. In 1925 it was renewed for another year with the option that should the department vacate the building before the expiration of that period, it should have the right to sub-let the premises. In 1926 the lease was renewed for another year; but that lease expired on the 12th October. The department is now holding the premises on a six-monthly tenancy, with the right to sub-let. The present rental is £2,250 per annum; but, in addition, the department pays the equivalent of rates and £119 per annum to the City Council. The Postmaster-General's Department pays water and sewerage rates, which are approximately £200 a year.

21. *To Mr. Cook.*—It may be said that an equally suitable block of land could have been obtained at a lower price; but it is of primary importance that the site should be on a railway line. The land was acquired on reasonable terms and money has been spent on putting it in order. If another site were acquired we would not derive any benefit. The bulk store and cross-arms store are situated on the Sydneyham site. I have been informed by officers of the Postal Department that the proposed accommodation will be ample for some years to come. I do not think the installation of sprinklers necessary; but that will be a matter for the Commonwealth Fire Board, which will investigate and report upon the matter. Before we call for tenders for such work a departmental estimate is submitted, and a comparison made. We do not obtain tenders merely to price day labour. That would not be fair to the contractors and the department would not favour it. The postal authorities have given very careful consideration to the whole question, which may have delayed the project; but it is now felt that the proposed building will meet all requirements.

22. *To Mr. Cameron.*—The Director General, Mr. Murdoch, favours a thin layer of 2 in. to 3 in. of fine breeze concrete on top of the ordinary concrete to which the flooring boards are to be attached. An alternative proposal is to attach hardwood boards with bevelled edges to the ordinary concrete. The layout of the building is of such a nature that the foremen will be able to see all the men at work. The bins will be situated in the centre of the building from which point they will be easily accessible.

23. *To Mr. Searbrook.*—The walls vary in thickness from 11 in. to 20 in. The walls fronting Unwin's Bridge Road will be 20 in. under the two-storey portions and above that 15 in. The piers to take the beams which are either "I" or "R.S.L." will be 9 in.

24. *To Senator Reid.*—Consideration has not been given to the necessity of covering the storm water drain. It is dangerous to cover an open drain before careful investigation has been made. The floor of the work-shop has been fixed at such a level that the shop cannot be flooded even if the drain should overflow. If any extension of the shop is carried out it will be on the southern side and not on the side on which the drain is made. The permission of the municipal authorities would have to be obtained before the drain could be covered. I do not think there would be any objection on the part of the authorities concerned to covering the drain provided it is large enough to carry off the storm waters. As we are not pushed for room there is no urgency in the matter. The span of the girders is about 25 ft. The pillars will rest on concrete foundations. The galvanized iron will be affixed to the iron purlins. There will be practically nothing in the roof of an inflammable nature. In a job of this

magnitude we would probably have a clerk of works on the spot practically all the time or at least for most of the time when the concrete work was being done.

25. *To Mr. McGrath.*—Under the labour system we would run a greater risk of exceeding our estimate. If bad weather should be encountered under the day labour system the department would have to bear the expense, but under the present system the contractor has to take the risk.

The witness withdrew.

Arthur Phillip Wearhouse, Accountant, Postmaster-General's Department, Sydney, sworn and examined.

26. *To the Chairman.*—I understand that when Mr. Crawford, the Chief Engineer in the Postmaster-General's Department, was giving evidence concerning the proposed new postal work-shops at Sydneyham he submitted a statement in which he included in these "annual charges" on the existing shop and site these "general administration, 30 per cent. on £393, items "general administration and general administration, 50 per cent. on £400." I understand the first mentioned amount represented the wages of two watchmen, £115, and the wages of one liftman, £280, making a total of £395. The second item comprised the time of men now wasted in going from one floor to another, £400. It appears to me that that which is subject to an overall charge carried on in the shops are certain expenses which cannot be charged to a particular work. For the information of the committee I may explain that we are guided in this matter by the instructions contained in "Works procedure and costs accounts instructions 1926" from which I quote the following:

Workshop overhead expenses, i.e., work-shop establishment, should include all expenses incurred in connection with the upkeep and working of the particular work-shop concerned, and must embrace expenses under the following headings: which must be separately recorded:—

1. Rent of rented building used as a work-shop.
2. Interest on capital value of departmental building and site used as a work-shop.
3. Repairs and maintenance of work-shop building and site.
4. Interest on capital value of workshop furniture fittings, and office equipment.
5. Repairs and maintenance of work-shop furniture, fittings and office equipment.
6. Sanitation and water supply of work-shop.
7. Interest on capital value of work-shop machinery, plant, and tools.
8. Work-shops power and light.
9. Work-shops fuel.
10. Upkeep and running of work-shops machinery, plant, and tools.
11. Supervision of work-shop. Cost of time of officers whilst engaged in supervising only.
12. Work-shops burden. Cost of time and other expenditures of storemen and employees spent on clearing out work-shop and in carrying out process work not chargeable to specific jobs, including other expenses, and costing.
13. Pay of junior mechanics in training and other junior artisans in training for time other than that spent on productive work in the work-shops.
14. Pay of work-shops employees for time absent from duty on paid leave, e.g., furlough, sick leave, annual leave, &c.
15. Cost of small stores used in work-shop, e.g., glue, paint, saws, &c., other than those chargeable to specific jobs.

The total cost of these overhead expenses is distributed over the work carried out in the shops. When arriving at the cost of a job we add 30 per cent. to the cost of labour—not materials—as the overhead or workshop expense. The reason for the varying percentage rates may be due to the fact that the direct and indirect overhead expenses may have been treated separately. The actual expense incurred in the workshop for, say, power, light, &c., is a direct workshop charge; but the office expenses is an additional shop charge;

overhead charge. Provision is also made for work-shops administration charges, which must include the proportion of all engineers' administration expenses incurred in connection with works carried out in the work-shop and embraces only the work-shop proportion of administration expenses. It is the practice of the department to review these charges periodically. The costs are charged to a sectional classification account for work-shops. The sectional classification account for work-shops overhead expenses is ten bar 221. The 221 is the account for engineer's administrative expenses, and account for engineer's administrative proportion of these items bar 221 is the work-shops' proportion of these administrative expenses. Every year we keep a record of all the expenses chargeable to a particular sectional account, and every half-year we ascertain whether the 55 per cent. we are adding to the cost of the work is sufficient to distribute the overhead expenses. If it is too much it is reduced, and if insufficient it is increased. I have had experience apart from the Commonwealth Public Service, and am familiar with the methods adopted by private firms. The system adopted by business firms is not exactly the same as adopted by manufacturing firms; we do not go as far as that. We keep exact costs in the same way as do manufacturers; but we cannot say what any particular process actually costs. We could not say, for instance, the cost of electroplating or any other process in a completed article. Having arrived at the direct cost, we add the overhead charges, and get the total cost of the work. I would not like to institute a comparison between our charges and those of outside firms, as a great deal of latitude is usually allowed to the responsible accountant. Some accounts may treat certain costs as direct costs and others as overhead or burden charges. A lot depends upon the article and the system adopted. I consider the system we have found from an accounting point of view is quite sufficient for our purpose. If we were manufacturing in competition with others we might have to go further; but for departmental purposes we make against the work is a fair one, and one which could not be legitimately disregarded.

27. *To Mr. Cameron.*—The percentage fixed does not remain in force for more than six months without being reviewed. It fluctuates to the extent of about 10 per cent.; but chiefly upwards, because the tendency nowadays is for costs to increase owing to higher wages and shorter hours. Furlough, annual and sick leave and superannuation and other expenses help to make the expenses of government departments higher than those of private firms. Necessary adjustments can be made by the department.

28. *To Mr. Scabrook.*—If the manager submits a quotation for manufacturing switchboards, it is compared with a quotation furnished by an outside firm. That is always done in a case of any article that can be obtained in the open market. It must be remembered that the 50 per cent. is based only on the bare cost. The actual costing is done in the work-shop; the accountant always sees that the proper procedure is followed. We have not any detailed check on the manager's figures other than seeing that they agree with the manufacturing account. If we did not do that we would be entirely dependent upon the manager's figures to know what an article was costing. The conditions in the work-shops may alter, in which case our percentage of overhead charges would also have to be amended. Having once ascertained the cost, it would not be safe to assume that that figure should remain in force indefinitely. A charge could be made to a suspense account, and then to the work, which, perhaps, would involve much more time than charging it direct. Each State decides upon the percentage charge.

29. *To Senator Reid.*—It does not follow that all switchboards, for instance, can be made at the same cost, as the time taken by different workmen may vary. I do not think process costing, such as is undertaken by private firms, would be of any benefit to the department. Our supervision in the work-shop is sufficient to prevent any waste of time or material.

30. *To Mr. McGrath.*—Very few men are engaged in costing in my department, and I do not think there are more than three clerks in the work-shop wholly employed on this work. The costing system is employed so that the department will know exactly what an article costs.

31. *To Mr. Scabrook.*—A few years ago I coached a clerk employed in my office in costing work. Later he started in business as a builder, and when I met him some years afterwards, he informed me that the training he had in my department had been invaluable to him in business, as he had been able to obtain better results at his work than he could have otherwise. I think that is an indication of the fact that our costing system is effective.

32. *To Mr. Cameron.*—Even if such a costing system were in operation a certain amount of work of a similar nature would have to be done. A workman's slight overtime must be taken from day to day; his overtime, loath-time and Sunday pay, as well as meal allowances and child endowment payments have to be recorded.

The witness withdrew.

Walter Settle, foreman mechanic, Chatswood telephone exchange, and secretary of the Postal Electricians' Union, Sydney, sworn and examined.

33. *To the Chairman.*—The only evidence I wish to tender to the committee is in regard to the site of the proposed postal work-shops at Sydneyham, in so far as it affects the staff. Unfortunately, I have not with me the papers upon which a petition was based showing the effect of the proposed change upon the staff. These papers were sent to the Postmaster-General some months ago. As I returned from Canberra only this morning, I have been unable to obtain copies of the documents in order to support the figures I proposed to submit. The situation of the work-shops at Sydneyham would adversely affect 156 men to the extent of about 35 minutes each a day, and an additional cost about 2s. 3d. each a week. There are 188 members of the Postal Electricians' Union engaged in the present work-shops, 92 of whom would be unfavourably affected to the extent I have mentioned. The proposed site cannot be regarded as being in a central position, as it is on a line where only a small number of telephone exchanges are situated, with the result that only a comparatively few men live in the vicinity. For that reason we submit that a more central position should be selected. We realize that the cost of a suitable site at Chippendale or Pyrmont, or somewhere adjacent, would perhaps be much higher; but we think that consideration should be given to the employees. It is true that whatever site is selected will be involved by time and expenses which will be added to the cost of the work. It is, however, a reasonably central position that inconvenience will be considerably minimized. If Chippendale or Pyrmont, or some other point where manufacturing is being conducted adjacent to the railway, were selected, it would be a great convenience to the men. Does it would be a great convenience to the men. Does it would be a great convenience to the men. Does it would be a great convenience to the men. Does it would be a great convenience to the men. Does it would be a great convenience to the men.

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work-shops could be established in that locality without adding greatly to the cost, the staff would not be affected to the extent they will be if the present proposal is adopted. At least 150 men will have to travel to the railway, and then transfer to another train. The employees in the work-shop welcome the proposed changes to new premises; but do not wish to incur the loss of time and money that will be involved.

34. *To Senator Reid.*—I do not think many of the employees own their own houses, although some may be purchasing the dwellings they are occupying. New employees would, of course, know the conditions under which they were accepting work; but many of our men have been in the employ of this branch of the department's activities for 25 years, and do not wish to be penalized in this way. The telephone work-shops have been situated within a quarter of a mile of the post office for at least 25 years. Speaking as a foreman mechanic, and as secretary of a union, I have no hesitation in saying that, if the work-shops are established at Sydneyham, great inconvenience will be caused to the staff. It is true that the site is adjacent to the railway; but fully 50 per cent. of the material which goes to the work shops from the different exchanges is carried by motor vehicles.

35. *To Mr. McGrath.* I could not give the approximate price of land at Chippendale or Pyrmont, but if the department had to bear the cost of time and fares, it would compensate for the added cost of the land. It would also be remembered that, as many of the apprentices are living with their parents, they would not incur the expense of travelling a long distance to work. The staff is built up from apprentices to the mechanical branch and so on to the contrary, notwithstanding what may be said to the contrary, I contend that considerable inconvenience and expense will be incurred by a large number of employees if the department's proposal is adopted. Of course, the men have not said that they will refuse to make the transfer; but I submit their case for careful consideration, feeling sure the committee will give their representations the most careful consideration.

36. *To Mr. Cameron.*—I believe that most of the men are married, and that the prospect of obtaining suitable houses near Sydneyham is somewhat remote.

(Taken at Canberra.)

FRIDAY, 28th OCTOBER, 1927.

Present:

Mr. Mackay, Chairman.
 Mr. Laeey.
 Senator Payne.
 Senator Reid.
 Mr. McGrath.
 Mr. M. Cameron.
 Mr. Cook.
 Mr. Scabrook.

William Gerrard Gibson, Postmaster-General, sworn and examined.

37. *To the Chairman.*—I am aware of the proposal to erect new postal work-shops at Sydneyham, New South Wales. In a general way I am acquainted with the work performed there, but I am not familiar with the details. The work performed in the work-shops is entirely satisfactory; but I am unable to say whether in every case the price compares favourably with that which would be obtained by contract wherever possible. It is to be done by contract wherever possible. Tenders are invited for the manufacture of the work-shops. For instance, the telephone sets used in the Parliament House building at Canberra were manufactured by the department. All the automatic tele- phone equipment is tendered for in units. The units are being erected, it is thought that, if the

themselves are imported, but the framework is manufactured in the department's work-shops. My policy, as Minister, is to invite tenders for all material. In a immense organization like the Postal Department repair work is a big item. There are about 400,000 telephones now in use in Australia, and the number is increasing daily. No Australian manufacturer could manufacture telephones to compete with manufacturers abroad. Some of the big firms in England or America could, in two or three weeks, manufacture Australia's telephone requirements for a year. We install about 40,000 telephones per annum. New work-shops are necessary from the point of view of repairs alone. With the development of the telephone system, the functions of the work-shops are likely to extend. Telephonic development in Australia is much greater than it is in Great Britain. Our expenditure for telephones is about £4,000,000 per annum, compared with £12,000,000 per annum in Great Britain. During my tour abroad, I did not have the opportunity to study the postal work-shops of other countries; but I know that the general practice throughout the world is similar to that adopted in Australia, and that they all have their own huge work-shops for repair work. The policy of the department is to meet, so far as possible, the development fifteen years ahead. During the next fifteen years our telephone system must increase enormously, with the consequently increasing amount of work to be done in the work-shops. The work-shops of the department were established to carry out renovation and repair work in connexion with the various activities of the post office, and cover a very wide range of work. A certain amount of their time is occupied in furniture repairs and in making and repairing fittings for postal work; but the major portion of their work is connected with the construction, maintenance and repair of telegraph and telephone plant. While reconducting and repair is their principal concern, this work involves a considerable amount of work in the manufacture of parts, because the quantities required of any one of the items used are usually too small to secure satisfactory prices from outside firms. This manufacture, other than wood work, is carried out in the machine shop, and in many of the jobs a high degree of skill is required. The shops also undertake the manufacture and/or assembly of a very large number of non-standard items, such as switchboards, exchange frames and runways, telegraph instrument tables, test boards, &c. It is the general policy of the department to obtain by tender such of these items as are required in quantity; but even when standard equipment is required, it is frequently found desirable to split the job, so that we can obtain by contract the items in which we cannot compete, and manufacture the others in which our prices are lower. For example, contracts for automatic exchanges at one time included the whole of the installation, whereas now we purchase the switches and switch wiring by contract, and make up the rest of the internal racks and assembly. The number of non-standard requirements met with in the operation of the department still involves quite a considerable amount of work. One of the non-standard jobs recently carried out in the shops was the manufacture of all the small switchboards furnished to the various offices in Canberra. Repair and renovation work, while entirely confined to those jobs where it is economical to perform it, occupies a large staff. The number of changes of apparatus and the general movement in telephone equipment due to renewals, alterations of subscribers' requirements, alteration of operating methods, ordinary wear and tear, &c., bring a constant flow of material through the sifting room to the repair shops. In the sifting room an examination of all returned apparatus is made by a foreman mechanic, under the direction of the work-shops manager, to determine which items are worth repairing or should be scrapped. During the

last five or six months, for example, over 300 telephones sets per month have been renovated in the shops. The department's move to transfer the shops to Sydneyham is in accord with the action of all other factory owners whose premises need extension, and who find the cost of land in the city too great for their purpose. The example of the railways can be cited. They are moving their main work-shops to Chullara—much further out than Sydneyham—because congestion and land costs forbid their extension at Eveleigh. The shops are excellently located, adjacent to the department's bulk stores, which will reduce transportation and handling costs. The department's site at Sydneyham adjoins the railway platform and is conveniently situated near two lines of railway serving the best new working-class suburbs—the Illawarra and Bankstown lines. Bus services also give convenient access from other suburbs on the western side of Sydney. The location will be permanent, and, in the case of those men whose present residence is inconvenient to the shops, there are plenty of good houses or good building sites in localities convenient to the new shops. The men employed at the shops live in the localities shown—

Locality.	Number of Men.	
	Permanent.	Temporary.
Illawarra and Bankstown lines	61	37
Suburbs on tram routes (Lidcombe, Rozelle, Annandale)	24	31
Main suburban line—Strathfield to Hornsby	77	24
Northern suburbs	35	24
Eastern suburbs	42	24
	240	124

The men living on the Illawarra and Bankstown lines will have their present travelling costs reduced; those on the tram routes will probably be unchanged; those on the main suburban lines may be slightly higher; and those living in the northern and eastern suburbs will have the full increase of travelling costs. The weekly ticket Sydney-Sydneyham is 2s. 6d., and the travelling time, Central to Sydneyham stations, is nine minutes. These are the maximum increased costs. Some time ago a deputation representing the employees in the work-shops waited upon me with regard to the site chosen for the new work-shop. They contended that the removal of the works from the city would involve them in heavier travelling expenses. In this connexion I desire to hand in a statement prepared by the Chief Engineer—

Further to my note of the 21st. In respect of the telephone work-shops, Sydney, the following information on travelling time and costs will probably interest you:—

Weekly train ticket, Sydney to Sydneyham	s. 4
Train fares—	d. 3
Second single	0 4
Second return	0 7
Tram fare	0 3
Time of journey by train, including stops at all intermediate stations—	
Sydney to Sydneyham	9 minutes
Time by tram	30 minutes
7.40 a.m. train from Sydney arrives Sydneyham	7.49 a.m.
7.50 a.m. train from Sydney arrives Sydneyham	7.59 a.m.
8 a.m. train from Sydney arrives Sydneyham	8.09 a.m. and 8.14 a.m.
Trains from Bankstown arrive Sydneyham	7.54 a.m. and 8.04 a.m.
Trains from Rozelle and Hurstville arrive Sydneyham	7.50 a.m.
Trains leave Sydneyham for Sydney	5.17 a.m.
Trains leave Sydneyham for Bankstown	5.27 a.m.
Trains leave Sydneyham for Hurstville	5.4 a.m.
	5.5 a.m.
	5.15 a.m.
	5.22 a.m.

The statement shows that, while some of the workmen will have to pay increased fares, others will pay less. On the whole the travelling expenses should not be greater than they are now. In other respects the site

selected is excellent. The number of permanent employees in the work-shop is 240, and, in addition, 134 men are temporarily employed there. I am not aware of the proportion of married men to the total number. The representations of the men were taken into consideration before the site was finally decided upon.

38. To Mr. McGrath.—When tenders are invited the work-shops sometimes submit prices. If their tender is less than that of other contractors, they are given the contract. A lot of new work is also done in the work-shops. For instance, there has been a considerable amount of research work in connexion with rural automatic exchanges. This work, which is of a highly technical nature, has been carried out satisfactorily by the department. Already three rural automatic telephone exchanges have been installed. The success of the undertaking was so great that a big English firm made an attractive offer to our best engineers, which he accepted. Although about 40,000 telephones are installed annually in Australia, the equipment could not be made here on an economic basis. The cost to the department of each instrument is about £3. At that price no Australian manufacturer could hope to compete successfully with manufacturers overseas. I have no idea of the cost of a plant necessary to manufacture the telephones that we require. Our monthly installations now number about 5,000.

39. To Mr. Lacey.—During my term of office as Minister, the question of manufacturing our own telephones has not been considered. The work could not be done at a price which would compete with the imported instruments. Three or four rural automatic telephony exchanges have been working for some months unattended in relation to automatic exchanges an engineer was sent to America to obtain further information in relation to automatic exchanges an engineer was sent to America to obtain further information in relation to automatic exchanges in country districts next year. The loss of the engineer who was taken over by the undertaking. The department has a number of capable young engineers ready to take on the work of their superiors. The department will have no claim on the services of the officer sent to America when he returns to Australia. It is possible that he may be offered a higher salary to return to America, or to go to England, and that he will accept it. Notwithstanding that tenders are called for most of the material required, the whole of the work is not given to outside contractors. Where the department's tender is the lowest, keeping pace with other contractors and is expanding with the growth of the telephone system.

40. To Mr. M. Cameron.—The salaries of our engineers are not fixed by the Postal Department, but by the Public Service Board. Naturally, if an outside firm offers a man of outstanding ability a salary three times as great as that which he can hope to receive in the department, he is tempted to accept the offer. To competitors who are free agents.

41. To Mr. Seabrook.—The more general use of automatic telephones, while probably not increasing the number of subscribers, will make the service more efficient. That, in turn, many, of course, induce other persons to become subscribers. The telephone service throughout Australia compares favorably with that in any other part of the world. The installation of rural automatic services will increase the number of subscribers in country districts very considerably, for the between certain hours, they will give a continuous service to groups of say, ten or twenty people. The site chosen for the work-shop will not inconvenience the majority

of the men employed there. Moreover, as it is situated close to car stores bench, and near a railway siding, it will facilitate transport. I do not think a better site could be obtained. The men's unions did not attempt to dictate to the Government as to the site for the work-shop; they made representations regarding it. Those representations were given careful consideration. The unions have at no time attempted to dictate to the department. While I am not always satisfied with the prices which have to be paid by the department for work and material, everything is done to keep them as low as possible, evening many thousands of pounds. The work is practically confined to three firms. I do not know whether any arrangement is arrived at by the competing firms in order to maintain high prices. Automatic telephones could not be manufactured in Australia unless the manufacturer paid royalties to the holders of the patent rights. It would be economically sound to have the telephone repair work done in different centres in New South Wales. The work is of a technical nature, requiring skilled mechanics, and it is best that the staff should be under one control.

42. To Senator Reid.—The department has a complete costing system in operation, and it knows what various articles should cost. Where prices received from tenders exceed the department's estimates, the work is done departmentally. There is so little competition in the manufacture of telephone materials that a check of that kind is necessary. When the department undertakes such work, additional men are employed. The permanent staff is comparatively small, whereas the temporary staff at times is fairly large. Whether the work should be done by contract or day labour is a matter for determination by the Government, as a question of policy. My policy is to have as much work done as possible by contract. My predecessors held entirely different views. The department does not consider the advisability of doing all its work departmentally, for the reason that the Government's policy is to invite tenders for all work. There is nothing to prevent the department from requiring an officer who is sent abroad for experience to enter into an agreement to remain with it for a definite period after his return to Australia. It would be unfortunate if the department had only one man capable of carrying out certain classes of work. At any time an employee may be lost by death or otherwise. For the proper conduct of the work other men must be in training to accept responsibility, should the occasion arise. It would be unfair to insist that a man should remain with the department for £300 a year, when he could obtain £1,500 a year outside. The difficulty might be met, to some extent, by paying our best men higher salaries. In my opinion, the departmental engineers, in many cases, should receive much higher salaries, so that they would not be tempted by attractive offers from outside. The engineer recently sent to America is over 40 years of age, and would make a considerable sacrifice of his superannuation rights if he left the Service. At the same time, it would be reasonable to expect men sent abroad by the department to agree to remain for a definite period after their return. Some of these matters, however, are not in the hands of the Minister, but are under the control of the Public Service Board.

43. To Mr. McGrath.—For the most part, we receive a fair deal from contractors. We always see that the work is carried out to the department's specifications. I am aware of no collusion between tenders. The department watches prices very carefully. I am not aware of the great difference between the tenders submitted for the supply of a number of private letter boxes, and could not say that they were arranged so that the lowest tender would still be excessive.