

1930.



THE PARLIAMENT OF THE COMMONWEALTH OF AUSTRALIA

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~~In return to Order~~

*J.M.*

Clerk of the Senate,  
26 MAR 1930

PARLIAMENTARY STANDING COMMITTEE  
ON PUBLIC WORKS.

FIFTEENTH GENERAL REPORT.

*Presented pursuant to Statute, ordered to be printed.*

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# THE PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS.

## FIFTEENTH GENERAL REPORT.

### MEMBERS OF THE PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS.

#### Sixth Committee:

MALCOLM DUNCAN CAMERON, Esq., M.P., Chairman.

#### Senate.

Senator John Barnes  
Senator Herbert James Mockford Payne\*  
Senator Burford Sampson†

#### House of Representatives.

Percy Edmund Coleman, Esq., M.P.  
Josiah Francis, Esq., M.P.  
The Honorable Henry Gregory, M.P.  
David Sydney Jackson, Esq., M.P.  
David Charles McGrath, Esq., M.P.

\* Resigned 14th August, 1929.

† Appointed 14th August, 1929.

#### Seventh Committee:

ANDREW WILLIAM LACEY, Esq., M.P., Chairman.

#### Senate.

Senator John Braidwood Dooley  
Senator Matthew Reid  
Senator Burford Sampson

#### House of Representatives.

Malcolm Duncan Cameron, Esq., M.P.  
John Curtin, Esq., M.P.  
The Honorable Henry Gregory, M.P.  
Edward James Holloway, Esq., M.P.  
William John Long, Esq., M.P.

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To His Excellency the Right Honorable JOHN LAWRENCE, BARON STONEHAVEN, Member of His Majesty's Most Honorable Privy Council, Knight Grand Cross, of the Most Distinguished Order of Saint Michael and Saint George, Companion of the Distinguished Service Order, Governor-General and Commander-in-chief of the Commonwealth of Australia.

MAY IT PLEASE YOUR EXCELLENCY:

In accordance with the requirements of Section 11 of the *Commonwealth Public Works Committee Act 1913-1921*, the Parliamentary Standing Committee on Public Works has the honour to submit the following report of its proceedings for the year ended 31st December, 1929:—

#### CHANGES IN COMMITTEE.

- On 7th February, 1929, the following members of the House of Representatives were selected to act as members of the Sixth Committee, viz.:—Malcolm Duncan Cameron, Percy Edmund Coleman, Josiah Francis, The Honorable Henry Gregory, David Sydney Jackson, and David Charles McGrath.
- On 14th February, 1929, the following members of the Senate were selected as members of the Sixth Committee, viz.:—John Barnes, Herbert James Mockford Payne, and Matthew Reid.
- The appointment of the members above-mentioned was notified in *Commonwealth Gazette* No. 18, of 21st February, 1929.
- Prior to entering upon their duties, each member made and subscribed the declaration required by the *Commonwealth Public Works Committee Act 1913-1921*.
- The first meeting of the Sixth Committee was held on 20th February, 1929, when Malcolm Duncan Cameron was elected Chairman. At the meeting held on 23rd February, 1929, Senator Matthew Reid was elected Vice-Chairman.
- On 14th August, 1929, Senator Herbert James Mockford Payne tendered his resignation as a member of the Committee, and on the same day Senator Burford Sampson was elected in his place.
- Prior to entering upon his duties Senator Sampson made and subscribed the declaration required by the *Commonwealth Public Works Committee Act 1913-1921*.
- On 16th September, 1929, the House of Representatives was dissolved, and, in pursuance of Section 3 (4) of the *Commonwealth Public Works Committee Act 1913-1921*, all the members of the Sixth Committee ceased to hold office.
- On 22nd November, 1929, the following members of the House of Representatives were selected, as members of the Seventh Committee, viz.:—Malcolm Duncan Cameron, John Curtin, The Honorable Henry Gregory, Edward James Holloway, Andrew William Lacey, and William John Long.
- On 22nd November, 1929, the following members of the Senate were selected as members of the Seventh Committee, viz.:—John Braidwood Dooley, Matthew Reid, and Burford Sampson.
- The appointment of the members above-mentioned was notified in *Commonwealth Gazette* No. 112, of 5th December, 1929.

12. Prior to entering upon their duties, each member made and subscribed the declaration required by the Commonwealth Public Works Committee Act 1913-1921.

13. The first meeting of the Seventh Committee was held on 22nd November, 1929, when Andrew William Lacey was elected Chairman, and Senator John Braidwood Dooley Vice-Chairman of the Committee.

NUMBER OF MEETINGS

14. During the year the Sixth Committee held 97 meetings and examined 85 witnesses in connexion with the proposed works submitted, while the Seventh Committee held 22 meetings and examined 21 witnesses.

In making its inquiries the Sixth Committee travelled 8,877 miles by rail and 46 miles by road—a total of 8,923 miles; the Seventh Committee travelled 1,955 miles by rail, and 64 miles by road—a total of 2,019 miles.

QUESTIONS BEFORE THE COMMITTEE

15. When the Committee presented its last report the following questions were under consideration, namely:—

- (a) Erection of Australian Institute of Anatomy, Canberra.
- (b) Establishment of Automatic Telephone Exchange at Edgecliff, New South Wales.
- (c) Establishment of Automatic Telephone Exchange at Caulfield East, Victoria.

16. Since then the following matters have been submitted to the Committee for inquiry and report, namely:—

- (d) Extension of the installation of Mail-handling appliances at the General Post Office, Sydney.
- (e) Establishment of Telephone Communication between Perth and the Eastern States.
- (f) Erection of Botanical Laboratories, Canberra.
- (g) Development of Civil Aerodrome at Mascot, New South Wales.
- (h) Establishment of Automatic Telephone Exchange at Hurstville, New South Wales.
- (i) Establishment of Automatic Telephone Exchange at Brunswick, Victoria.
- (j) Establishment of Automatic Telephone Exchange at Arncliffe, New South Wales.
- (k) Construction of Federal Highway within the Federal Capital Territory.
- (l) Development of a site for a Civil Aerodrome at Western Junction, near Launceston, Tasmania.
- (m) Construction of Public Baths, Canberra.
- (n) Establishment of Automatic Telephone Exchange at Hawthorn, Victoria.
- (o) Establishment of Automatic Telephone Exchange at North Sydney, New South Wales.
- (p) Establishment of Automatic Telephone Exchange at Maylands, Western Australia.
- (q) Construction of Concrete Roads, City area, Canberra, during the financial year 1929-30.
- (r) Erection of Cottages, Canberra.

COMPLETED INQUIRIES

17. The Committee has dealt with several of these questions, and has presented reports in connexion therewith, namely:—

(i) Erection of Australian Institute of Anatomy, Canberra	96,306
(ii) Extension of the installation of Mail-handling appliances, General Post Office, Sydney	32,500
(iii) Establishment of Automatic Telephone Exchange at Edgecliff, New South Wales	120,516
(iv) Establishment of Automatic Telephone Exchange at Caulfield East, Victoria	59,537
(v) Establishment of Telephone Communication between Perth and the Eastern States	99,800
(vi) Erection of Botanical Laboratories, Canberra	52,024
Total	411,283

SUMMARY OF COMPLETED INQUIRIES.

(i) ERECTION OF AUSTRALIAN INSTITUTE OF ANATOMY, CANBERRA.

18. This was a proposal to erect at Canberra, a building to house a unique collection of specimens of organs, muscles, skeletons, microscopic slides, &c., relating to Australian fauna which had been presented to the Commonwealth by Dr. (now Sir Colin) MacKenzie in 1923.

It was suggested that the building should consist of a central administrative block, to be devoted to administration and research, and extend backwards from each end of such building for 2 museum blocks, intended for the display of specimens. The plans for the building prepared by the Federal Capital Commission, and subject to review by the Canberra Architectural Advisory Committee, consisting of five outstanding architects of Sydney and Melbourne, aimed at the erection of a structure having a frontage of about 183 ft. 6 in. by a depth of 134 ft., with a height to the top of the parapet of 35 ft. 6 in.

The type of construction proposed was reinforced concrete footings, with external brick walls solid to ground level, and from the ground level to the parapet to be faced with light coloured sandstone, with a 7-in. base course of granite.

The estimated cost, including all services and charges, was set down at £96,306, exclusive of an amount of £7,000 mentioned in a previous report as required for the residence of the Director, curator, and staff, and £14,080 to be spent on a zoological reservation.

After carefully considering all the evidence obtained in the matter, the Committee recommended:—

- (i) that in order to honour the terms of the agreement entered into with Dr. MacKenzie, it is incumbent on the Commonwealth to proceed with the erection of the Institute of Anatomy at Canberra as early as possible;
- (ii) that the original plan be varied by providing two museum chambers instead of one, with greater accommodation and provision for extension, as suggested;
- (iii) that the building be faced with a light coloured sandstone, but that tenders be called for the highest quality material, in such a manner as to preclude the possibility of supply being restricted to one particular quarry;
- (iv) that steps be taken to eliminate or modify the unaesthetic structures over the stairway and lift machinery on the roof;
- (v) that the most effective method of ensuring that the flat roof shall be weather-proof is by treatment with bituminous felt and gravel;
- (vi) that the residence of the Director should be ready for occupation on completion of the Institute;
- (vii) that the Director's residence should be located within the area reserved for the Institute.

(ii) EXTENSION OF INSTALLATION OF MAIL-HANDLING APPLIANCES, GENERAL POST OFFICE, SYDNEY.

19. In 1921 the Parliamentary Standing Committee on Public Works approved of a proposal for the re-modelling of the Sydney General Post Office, the intention being that the main activities undertaken at Central Square should be transferred to the new premises as soon as possible.

In August, 1926, the Postmaster-General's Department submitted a proposal for the expenditure of £41,000 on the installation in the re-modelled building of mechanical aids to expedite the transaction of business, to ensure a more economical handling of mail matter, and to eliminate as far as practicable, what was regarded as a serious waste of human energy.

The Committee reported favorably on this scheme in October, 1926.

As the design developed, it was realized by the Department that the estimate of £41,000 would be exceeded, and in October, 1927, a scheme was submitted for the re-consideration of the Committee, at a revised estimate of £71,000.

It was explained that, as a result of the preparation of detailed drawings, and the invitation of tenders for the various parts of the equipment, it was found that the apparatus would be much more costly than was anticipated; furthermore, that a more intensive study of the statistics and careful observations of the volume of mail matter handled at peak periods pointed to the necessity for increasing the capacity of the plant.

In November, 1927, the Committee again recommended that the scheme be proceeded with at the revised estimate of £71,000.

In the proposal now under review it was represented that, in view of a change in the system of sorting and as a result of information obtained abroad, a re-arrangement and extension of equipment was considered essential which would have the effect of increasing the cost of the installation by an additional £32,500. Even at this additional cost it was shown that the net saving on the project as opposed to manual handling of mails would be £2,234 per annum.

After reviewing all the evidence received, therefore, and taking into account the important service which the installation of mechanical appliances for the handling of mails would entitle the public to expect; having regard also to the great importance of original work being done in Australia with the object of finding the best means of dealing mechanically and expeditiously with large quantities of mail matter; and giving full consideration to the financial aspect of the scheme as submitted, the Committee recommended that steps be taken to complete the installation at the total estimated cost of £103,500 as early as possible.

(III) ESTABLISHMENT OF AUTOMATIC TELEPHONE EXCHANGE, EDGECLIFF, NEW SOUTH WALES.

20. This was a proposal to erect, on Commonwealth property at the corner of Kiaorane and Anderson-street, Edgecliff, a modern fire-resisting building, and install therein an automatic telephone switching system having an initial capacity for 4,500 subscribers' lines, and an ultimate capacity of approximately 6,500 subscribers' lines. It was proposed that the initial equipment should be capable of extension to the ultimate capacity named, and thus enable requirements in the proposed automatic exchange area to be met for 20 years after the proposed date of opening.

The estimated cost of the work was set down at £120,516. After hearing all the evidence in the matter, and ascertaining that the project was estimated to result in a net annual return on the expenditure of £12,360, the Committee recommended that the work be put in hand as early as possible.

(IV) ESTABLISHMENT OF AUTOMATIC TELEPHONE EXCHANGE, CAULFIELD EAST, VICTORIA.

21. This was a proposal to erect, on a site acquired for the purpose in Waverley-road, near Burke-road, a modern fire-resisting building, and install therein an automatic telephone switching system having an initial capacity for 2,000 subscribers' lines and an ultimate capacity of approximately 10,000 subscribers' lines. It was proposed that the initial equipment should be capable of extension to the ultimate capacity named, and thus enable requirements in the proposed automatic exchange area to be met for a period of 20 years after the proposed date of the opening.

The estimated cost of the proposal was set down at £59,537. The evidence obtained by the Committee showed the exchange to be necessary in order to meet the rapid development in the populous areas of East Malvern, Caulfield East, and Glenhuntingly, the subscribers in which districts could not be catered for in the existing Malvern automatic exchange.

As it was shown that the installation of the proposed exchange would obviate unnecessarily high expenditure on external line plant, and would enable the department to provide cheaper and more efficient service to subscribers in the extreme limits of the areas mentioned, the Committee unanimously agreed to recommend that the work be put in hand.

(V) ESTABLISHMENT OF TELEPHONE COMMUNICATION BETWEEN PERTH AND THE EASTERN STATES.

22. With increased use of the telegraph, it was represented that further facilities were required to cope with the business offering, and, as the time was considered ripe for the provision of telephone communication between Perth and the Eastern States, a dual scheme was submitted which aimed at meeting both these requirements.

The proposal was to establish telephone communication between Perth and the Eastern States by utilizing the two existing 300 lb. copper telegraph lines for the provision of a voice frequency circuit. The telegraph traffic would then be carried on high frequency carrier channels upon the present physical lines. This would provide the following facilities:—1 voice frequency telephone channel; 8 duplex telegraph channels; allowing of 16 messages being sent simultaneously; and one reserve wire between Port Augusta and Kalgoorlie.

With the increase of telegraph traffic it would be possible to add two additional duplex telegraph channels to the installation without incurring further capital expenditure at any point intermediate between the two terminals Adelaide and Perth. With the increase of telephone traffic two additional telephone channels could be made available without incurring any further capital expenditure in buildings, power plant, or transmission maintenance apparatus. All that would be required would be to run another wire on the existing poles.

The estimated cost of the proposal was set down at £69,800. It was shown in evidence that the estimated annual charges of the proposed dual system would amount to £49,300, and the estimated annual revenue to £55,000.

Under these circumstances the Committee was unanimously of opinion that the proposal should be approved.

(VI) ERECTION OF BOTANICAL LABORATORIES, CANBERRA.

23. During the Great War the disorganization of British industries caused by the comparative lack of attention paid to scientific methods and scientific research, brought into great prominence the need for this work in the various parts of the Empire. After the war there was an almost universal move throughout the world for the greater application of science to industry; and this move in all countries has now spread from secondary industries to agriculture.

By the *Science and Industry Research Act 1920-26*, the Commonwealth established a Council for Scientific and Industrial Research, and subsequently arranged for the headquarters of the Council to be established at Canberra.

The proposal submitted aimed at the erection, on a site in the area allotted for scientific purposes on the lower slopes of Black Mountain, of laboratories for the division of Economic Botany, together with an administrative block to be used conjointly by the division of Economic Botany and the division of Economic Entomology.

It was suggested that the administrative block should be of two stories with a frontage of approximately 72 feet, by a depth of 80 feet. The adjoining laboratory block, also of two stories, was to have a frontage of 132 feet by a depth of 44 feet.

The construction proposed was such as to render the building generally fire-resisting, and comprised reinforced concrete footings, external walls of brick finished cement rendered, and with flat roof and floors of reinforced concrete.

The total estimated cost, including services, was set down at £52,624.

After full inquiry into the scope of the proposed laboratories, the Committee realized the importance of the work devolving upon the Council for Scientific and Industrial Research, and the further great good to Australia that might be expected to result from the successful carrying out of the various problems of research undertaken. The Committee was therefore unanimously of opinion that the establishment of the proposed laboratories was fully warranted, and recommended that the necessary buildings should be proceeded with as early as possible.

The Committee recommended further, that, in lieu of a system of hollow block construction contemplated for the flooring, concrete slabs should be used, which would have the effect of saving £450 in the cost of construction, and reported against the suggestion that the Federal Capital Commission should supply for the building concrete mixed at a central depot, as evidence obtained indicated that there was an element of danger should any considerable time elapse between the mixing and the placing of the concrete in position.

Further, although agreeing in this instance, the Committee expressed its disapproval of the continuance of the system inaugurated of compelling contractors to purchase from the Federal Capital Commission certain items required in the construction of the building.

INQUIRIES INCOMPLETE.

24. Inquiries in respect of the under-mentioned public works are incomplete:—

- (a) Development of Civil Aerodrome at Mascot, New South Wales.
- (b) Establishment of Automatic Telephone Exchange at Hurstville, New South Wales.
- (c) Establishment of Automatic Telephone Exchange at Brunswick, Victoria.
- (d) Establishment of Automatic Telephone Exchange at Arncliffe, New South Wales.
- (e) Construction of Federal Highway within the Federal Capital Territory.
- (f) Development of a site for a Civil Aerodrome at Western Junction, near Launceston, Tasmania.
- (g) Construction of Public Baths, Canberra.
- (h) Establishment of Automatic Telephone Exchange at Hawthorn, Victoria.
- (i) Establishment of Automatic Telephone Exchange at North Sydney, New South Wales.
- (j) Establishment of Automatic Telephone Exchange at Maylands, Western Australia.
- (k) Construction of Concrete Roads, City area, Canberra, during the financial year 1929-30.
- (l) Erection of Cottages, Canberra.

## COMPLETION REPORTS.

25. The attention of the Committee has been drawn to instances where the completed cost of works reported upon by the Committee has greatly exceeded the estimate submitted to the Committee during the course of its investigations and conveyed by it to Parliament.

The Committee is strongly of opinion that where, after a project has been reported upon it is found that circumstances have arisen which will make the completed cost substantially higher than the sum at which Parliament has been informed the work could be carried out, the matter should be submitted for further review by the Committee.

Furthermore, the Committee is unanimously of opinion that an amendment should be made of the *Commonwealth Public Works Committee Act 1913-1921*, making it mandatory that within three months of the completion of every work reported upon by the Committee, the Department concerned should furnish to the Committee full details of the total completed cost of such work; and where the estimate furnished to the Committee during its investigations has been exceeded, a statement should be appended showing the reasons which led to such increased cost. It should then be made competent for the Committee to take additional evidence and furnish a further report to Parliament in the matter if considered necessary.

## RECORD OF INQUIRIES.

26. Appended hereto is a return containing a record of the inquiries of the Committee from the 1st January to 31st December, 1929.

A. W. LACEY,  
Chairman.

Office of the Parliamentary Standing Committee on Public Works,  
Parliament House, Canberra.

9th January, 1930.

## PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS.

## RECORD OF INQUIRIES.

The following is a list of proposed public works inquired into by the Committee from the 1st January to 31st December, 1929, with the result of its inquiries:—

Date of Inquiry.	Proposed Work.	Expenditure proposed by the Government.	Expenditure recommended by the Committee.	Amount in Excess of that proposed.	Amount in Reduction of that proposed.	Remarks.
		£	£	£	£	
5th Sep., 1928, to 12th Mar., 1929	Erection of Australian Institute of Anatomy, Canberra	96,306	96,306	..	..	Recommended as proposed
15th Mar., 1929, to 27th Apr., 1929	Extension of Mail-Handling Appliances, General Post Office, Sydney	32,500	32,500	..	..	Retain recommended as proposed.
6th Mar., 1929, to 4th June, 1929	Establishment of Automatic Telephone Exchange, Edgecliff, New South Wales	120,510	120,510	..	..	Recommended as proposed
18th Apr., 1929, to 12th June, 1929	Establishment of Automatic Telephone Exchange, Camfield East, Victoria.	59,537	59,537	..	..	Recommended as proposed.
31st May, 1929, to 16th Aug., 1929	Establishment of Telephone communication between Perth and the Eastern States.	69,800	69,800	..	..	Recommended as proposed.
14th Mar., 1929, to 28th Aug., 1929	Erection of Botanical Laboratories, Canberra	52,624	52,174	..	450	Committee recommended concrete slabs instead of hollow block construction for flooring.