

1929-30-31.

THE PARLIAMENT OF THE COMMONWEALTH OF AUSTRALIA.

PARLIAMENTARY STANDING COMMITTEE
ON PUBLIC WORKS.

SIXTEENTH GENERAL REPORT.

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THE PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS.

SIXTEENTH GENERAL REPORT.

To His Excellency the Right Honorable ISAAC ALFRED ISAACS, Member of His Majesty's Most Honorable Privy Council, Knight Commander of the Most Distinguished Order of Saint Michael and Saint George, Governor-General and Commander-in-Chief in and over 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, 1930 :—

NUMBER OF MEETINGS.

1. During the year the Committee held 110 meetings, and examined 102 witnesses in connexion with the proposed works submitted. In making its inquiries the Committee travelled 14,436 miles by rail, 175 miles by road, and 554 miles by water, a total distance of 15,165 miles.

QUESTIONS BEFORE THE COMMITTEE.

2. When the Committee presented its last General Report the following questions were under consideration, namely :—

- (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 an Automatic Telephone Exchange at North Sydney, New South Wales.
- (j) Establishment of an 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.

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

- (m) Construction of Steamer for Lighthouse Service.
- (n) Establishment of Telephone Communication between the Mainland (Victoria) and Tasmania.

COMPLETED INQUIRIES.

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

	Estimated Cost. £
(i) Establishment of Automatic Telephone Exchange, Brunswick, Victoria	84,320
(ii) Establishment of Automatic Telephone Exchange, Hurstville, New South Wales	58,330
(iii) Development of a site for a Civil Aerodrome at Western Junction, near Launceston, Tasmania	20,400
(iv) Development of the Civil Aerodrome at Mascot, New South Wales	94,845
(v) Construction of Public Baths, Canberra	30,300
(vi) Construction of Federal Highway within the Federal Capital Territory	50,000
(vii) Erection of Cottages, Canberra	41,960
(viii) Establishment of Automatic Telephone Exchange at Hawthorn, Victoria	172,790
(ix) Establishment of Automatic Telephone Exchange at North Sydney, New South Wales	179,500
(x) Construction of Steamer for Lighthouse Service	120,000
(xi) Establishment of Automatic Telephone Exchange at Arncliffe, New South Wales	63,210
(xii) Construction of Concrete roads within the city area, Canberra	217,946
(xiii) Establishment of Automatic Telephone Exchange at Maylands, Western Australia	41,440
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SUMMARY OF COMPLETED INQUIRIES.

(i) ESTABLISHMENT OF AUTOMATIC TELEPHONE EXCHANGE AT BRUNSWICK, VICTORIA.

5. This was a proposal to erect a building on the rear portion of the existing post office and telephone exchange site in Sydney-road, Brunswick, and install therein an automatic telephone switching system having an initial equipment for 3,600 subscribers' lines, and an ultimate capacity of approximately 7,000 subscribers' lines. It was proposed that the initial equipment should be capable of extension to the ultimate capacity named, and thus enable requirements to be met in the proposed automatic exchange area for 20 years after the proposed date of opening.

The estimated cost of the work was set down at £84,320.

After hearing the evidence adduced, the Committee approved of the exchange being established as proposed, but, in view of the fact that the exchange would front a narrow street wherein most of the buildings are roofed with galvanized iron, recommended that instead of the front portion of the building being roofed with tiles and the remainder with galvanized iron as proposed, the whole of the roof be of galvanized iron.

It was also recommended that the compressed air service proposed for blowing dust from the telephone equipment be not installed. The adoption of these recommendations would effect a saving on the proposal of £280.

(ii) ESTABLISHMENT OF AUTOMATIC TELEPHONE EXCHANGE AT HURSTVILLE, NEW SOUTH WALES.

6. The proposal submitted for the consideration of the Committee was to erect on a site which had been acquired at the corner of Bridge-street and Railway-parade, Hurstville, a modern exchange building, and install therein an automatic telephone switching system, having an initial equipment for 1,400 subscribers' lines and an ultimate capacity of approximately 5,000 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 20 years after the proposed date of opening.

The estimated cost of the proposal was set down at £58,330.

The evidence obtained by the Committee showed the exchange to be necessary in order to meet the rapid development in the populous areas of Hurstville, Blakehurst, Penshurst, Mortdale and Oatley, which it was claimed could not be catered for economically in the existing Kogarah 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 as early as possible.

In the course of the Committee's investigations it was ascertained that the exchange building is designed to face the angle formed by Railway-parade and Bridge-street, and that on completion of the building a small triangular portion of the site having a maximum depth of eleven feet between the building and the pathway would not be required for the purpose of the exchange. The Committee recommended that such portion be transferred to the Municipality of Hurstville free of charge on condition that it be properly maintained by the Council.

In respect of the air conditioning plant proposed, the Committee ascertained that the compressed air system for blowing dust from certain parts of the equipment had in the past not proved effective; it was accordingly recommended that this portion of the equipment be not installed, thus effecting a saving of £220.

(iii) DEVELOPMENT OF A SITE FOR A CIVIL AERODROME AT WESTERN JUNCTION, NEAR LAUNCESTON, TASMANIA.

7. In pursuance of its policy of providing an aerodrome in every capital city, and in centres where the provision of an aerodrome is likely to increase the use of aviation—the Commonwealth, on 26th September, 1929, acquired an area of about 200 acres situated on a good road about nine miles from Launceston, and within about half a mile of the Western Junction Railway Station.

On 5th December, 1929, the House of Representatives referred for investigation by this Committee the question of the development of such site. The estimated cost of the proposal as submitted to the Committee was set down at £20,400. This sum included provision for the construction of four runways, each 500 yards by 50 yards, to be covered with six inches of gravel, at an estimated cost of £10,000.

The evidence obtained by the Committee indicated that it was unlikely that the aerodrome would be used by the heaviest type of aeroplane to any great extent, so that the provision of the runways suggested was regarded as unnecessary.

The Committee accordingly recommended that the aerodrome be developed on less ambitious lines by a general treatment of about 98 acres of the area acquired, and the ploughing, grading, rolling and grassing of one runway.

The total cost of this work, including the amount paid for the site, was estimated at £13,000, representing a saving on the original estimate of £7,400.

(iv) DEVELOPMENT OF THE CIVIL AERODROME AT MASCOT, NEW SOUTH WALES.

8. In October, 1921, the Commonwealth acquired at Mascot a site to be used as a civil aerodrome to serve the city of Sydney. A certain amount of levelling, grading, and minor drainage work was carried out to permit of the area being used for the purpose for which it was acquired, and several inexpensive buildings were erected to house aircraft and facilitate the development of civil aviation.

With the increase of aviation activities at Mascot it was represented that greater facilities were necessary, and a proposal was submitted for investigation by the Committee for the systematic development over a period of years of the aerodrome to a stage when the aerial activities shall have increased to several times their present volume. Such proposal covered the following:—

- (a) Provision of roads, footpaths, water, sewerage and similar services.
- (b) Drainage and improvement of the present landing areas.
- (c) Provision of suitable building area, including the necessary drainage and facilities for the proper housing of aircraft.
- (d) Erection of additional buildings.
- (e) Provision of facilities for the public (parking areas, &c.).
- (f) Increasing the size of the aerodrome by the acquisition of certain adjacent lands.

The total estimated cost of the work, spread over a period of years, was set down at £94,845.

After hearing a large amount of evidence, the Committee was satisfied that the area at Mascot is suitably situated for the purpose for which it was acquired, and considered that steps should be taken to develop it to its full capacity. After carefully considering the whole question, it was recommended—

- (a) That immediate steps be taken to acquire the privately-owned areas of $21\frac{1}{2}$ acres and 41 acres respectively, lying to the East and to the North of the existing aerodrome.
- (b) That arrangements be entered into with the State Government for the transfer to the Commonwealth for a nominal consideration of the $159\frac{1}{2}$ acres of State land lying to the South and West of the aerodrome.
- (c) That if the State be unwilling to make available its land at a nominal rate that the Commonwealth should immediately acquire certain privately-owned land lying to the North-East and South-East.
- (d) That the necessary work of draining and surfacing the land, at an estimated cost of £6,540, be undertaken as early as possible.
- (e) That the construction of roads and footpaths at an estimated cost of £4,025 be proceeded with.
- (f) That the proposal for the first stage of the preparation of the building area, with water, sewerage and fire protection be undertaken.
- (g) That the erection of caretaker's quarters and lavatory accommodation at an estimated cost of £2,880 be proceeded with.
- (h) That chemical extinguishers be provided for hangars.
- (i) That the preparation and fencing of the area reserved for the public be carried out at an estimated cost of £4,905.
- (j) That the Commonwealth Meteorologist be invited to prepare a scheme for the most effective dissemination possible of meteorological information likely to be of use to fliers.
- (k) That an effort be made to have landing grounds on air routes provided and maintained by municipalities.
- (l) That a suitable officer be appointed to control the aerodrome.

The total amount involved in the above recommendations, excluding acquisition of land, is approximately £40,000, by the expenditure of which sum the Committee considered that the Mascot aerodrome could be made quite suitable for the next five or six years. Having then the requisite area for a first-class aerodrome, it could, by progressive steps, be developed to the ultimate limit of its capacity as an airport worthy of the city of Sydney.

(v) CONSTRUCTION OF PUBLIC BATHS, CANBERRA.

9. This was a proposal to provide a first-class swimming pool, designed to conform with the requirements laid down by the American Association for promoting Hygiene in Public Baths, and suggested after consultation with Australian swimming and filtration experts.

It was suggested that the pool should be rectangular in shape, 164 feet long by 40 feet wide. The minimum depth of water was to be 3 feet and the maximum 9 feet, and a spring board and slide chute were to be provided. It was also suggested that the baths should be enclosed and covered with tiled roof, that the water should be heated, and that there should be a system of submarine lighting. Provision was also included for circulating, filtering and chlorinating the water to be obtained from the city mains. It was suggested by the Federal Capital Commission that the baths should be located on an area in front of old Acton House, and the total estimated cost of the proposal was £30,300.

All the evidence obtained by the Committee indicated a keen desire on the part of the residents that a swimming pool should be provided, and stressed the fact that most of them, coming from near the coast felt the loss of such recreation. A private effort had been made to construct a swimming pool in the Molonglo River, near the Power House, and a swimming club was formed and some sports held, but, owing to the muddy state of the river after heavy rain, and the impurity of the water when the river was low, the scheme was abandoned. It was ascertained that there were numbers of school children in Canberra of whom but a small proportion had any knowledge of swimming, and it was urged that these children should have the same facilities afforded of learning to swim as existed in the cities and larger country towns.

After giving the matter careful consideration and having in mind particularly the children, the Committee unanimously agreed to recommend that, when practicable, swimming baths should be made available.

After inspecting various sites the Committee could not agree that the site suggested by the Federal Capital Commission was the most suitable, and recommended that the swimming pool be located in the vicinity of the Telopea Park School area.

The Committee was of opinion that the original scheme suggested was too elaborate and expensive and recommended the provision of a pool 100 feet long by 40 feet wide, with white tiles on sides and bottom, and swimming lines indicated on the bottom with black tiles. The water would vary in depth from 3 feet to 9 feet, the slope in the shallow portion being so graded as to give a maximum area of water up to 3 ft. 6 ins. in depth. Provision would be made, as in the original scheme, for the filtration and chlorination of water, but no provision would be made for submarine lighting, or for heating or roofing the baths. The estimate obtained of the work recommended by the Committee placed it at £10,000, which was a saving of £20,300 on the original proposal.

(vi) CONSTRUCTION OF FEDERAL HIGHWAY WITHIN THE FEDERAL CAPITAL TERRITORY.

10. Canberra, until recently, was approached by two main roads—one from Sydney via Goulburn and Queanbeyan, and the other from Melbourne via Albury and Yass.

The road from Goulburn to Canberra was about 68 miles in length, and that from Yass about 44 miles. These were sufficient for the needs of Canberra until 1924 when the growing importance of the Federal Capital, and the development of motor traffic rendered improved communication necessary.

Under the Federal Aids Road scheme a comprehensive view was taken of the matter, so that all expenditure would form part of a definite plan which would embody in its main features access from Canberra to Sydney, to Melbourne via Albury, and to Melbourne via Cooma, Bombala and Prince's Highway. When the State of New South Wales in 1927 decided to take advantage of the Federal Road grant this scheme of development was drawn up, the whole to be completed in ten years.

In considering the 68 miles of road from Goulburn via Bungendore and Queanbeyan to Canberra, it was recognized that a section of 37 miles between Queanbeyan and Tarago was badly located, with sharp curves and steep grades; some of it was partly paved, and other portions were not paved at all. Another section of 21 miles between Goulburn and Collector was already in existence, and was portion of a through road to be carried out with Federal aid over a period of ten years. After a conference between the then Treasurer (Dr. Earle Page) and the New South Wales authorities it was decided that it would be better to construct the Goulburn-Collector road rather than to improve the old road, and an agreement was reached to proceed with the work as a special measure, rather than allow the usual development to take place over a period of ten years. Under this arrangement the State undertook to construct 22 miles of road from a point $5\frac{1}{2}$ miles from Collector to the boundary of the Federal Territory, at an estimated cost of £200,000—two-thirds of the money to be found by the Federal Government, and one-third by the State—over a period of two years.

The Commonwealth undertook also to continue the road over a distance of approximately six miles from the boundary of the Federal Territory to the boundary of the City of Canberra. Under this proposal the total distance from Goulburn to Parliament House, Canberra, via Collector, would be $59\frac{1}{2}$ miles, as against 68 miles via Queanbeyan and Bungendore.

The proposal submitted for the consideration of the Committee involved the continuation of the road above described from the boundary of the Federal Capital Territory to the city boundary of Canberra, a distance of 5 miles 3,438 feet.

The paved width would be 20 feet, the shoulders 4 feet wide, and the formations 28 feet wide. The clear width of bridges and culverts would be 20 feet between kerbs, excepting that pipe and box culverts would be made sufficiently wide to carry the full 28 feet of formation. One bridge opening of 30 feet span was provided for, so designed that it could be enlarged if later found necessary. The reservation for the road would be 200 feet wide within the limits of the city plan and 100 feet wide elsewhere. Provision was also included for an avenue of trees alongside the road. The estimated cost of the proposal was given as £50,000.

The Committee traversed the country through which the road would pass; inspected various types of roads; took extensive evidence from road construction experts in Canberra, Sydney, Melbourne and Adelaide. With the growing importance of the Federal Capital City it was generally recognized that direct road access should be available to the State capitals, and the increase of motor transport demanded that such roads should be of a class capable of providing for fast motor traffic. The development of the road via Collector and Goulburn rather than the existing road through Queanbeyan and Bungendore commended itself to the Committee which unanimously agreed with the location of the highway as proposed.

After hearing the opinions of various experts in the matter the Committee also was satisfied that the system of construction proposed was on the latest approved principles.

(vii) ERECTION OF COTTAGES, CANBERRA.

11. This proposal, submitted for the consideration of the Committee, aimed at the erection of 36 dwellings at Manuka to provide for the housing requirements of those public servants of Departments shortly to be transferred to Canberra, as well as for tradesmen, employees of the Federal Capital Commission, and lower paid public servants occupying unsuitable or expensive houses in Canberra.

The designs placed before the Committee provided for 32 two-story semi-detached brick houses and four two-story detached units, each containing three small flats. Each of the semi-detached houses comprised, on the ground floor, a living room 15 feet by 11 feet, a kitchen 12 feet by 10 feet, laundry 8 ft. 6 in. by 6 ft 6 in., a front verandah 12 feet by 8 ft. 6 in., and a back porch approximately 8 feet by 7 feet. On the upper floor were to be three bedrooms, 15 feet by 11 feet, 12 ft. 9 in. by 9 ft. 9 in., and 12 ft. 9 in. by 10ft. 6 in. respectively. Bath and lavatory accommodation were to be provided off the landing between the ground and first floors.

The flats were to comprise a living room approximately 14 ft. 3 in. by 13 ft. 6 in., one bedroom about 13 feet by 10 feet, together with kitchen, bathroom and lavatory accommodation.

The total estimated cost of the project was given as £41,960. It was ascertained in evidence that the Federal Capital Commission owned in Canberra 1,067 dwellings which were rented to public servants and Commission employees. Of this number 746 were permanent dwellings and 321 temporary structures. Of the 746 dwellings mentioned four were said to be unallotted. It was stated that some employees were occupying houses for which they were paying a rental of 50s. per week, which was considered too expensive for them; whilst other employees were occupying temporary dwellings but were willing to pay higher rental for more comfortable accommodation.

In view of these circumstances, and the intimation given that it was intended to transfer further Commonwealth Departments to Canberra, the Committee had no hesitation in recommending that additional housing accommodation be provided at the earliest possible opportunity.

It was stated in evidence that the type of two-story semi-detached dwelling suggested was put forward as a means of endeavouring to overcome the high costs of building at Canberra, with a view to giving comfortable living accommodation at a lower rental. Some members were not in favour of two-story dwellings, but representations were made that it was feared that dwellings at lower rentals would not be possible in detached brick cottages. The Committee consequently turned its attention to consideration of other materials which might achieve that object, and inspected houses constructed with light reinforced hollow concrete walls, others with walls of Fibrolite, and others with walls of Lionite.

After giving the matter careful consideration the Committee recommended that with a view to exploiting the possibilities in this direction, alternative tenders be called to give builders an opportunity of tendering for the construction of single-story detached houses in brick, Lionite or reinforced hollow concrete walls. On the receipt of the tenders it was recommended that the Minister should decide, having due regard to the appearance of Canberra and the comfort and economic conditions of the occupants, which class of building should be adopted.

It was stated in evidence that, on the estimated cost of the buildings proposed, it was intended to charge a weekly rental of 32s. 6d. for the dwellings and 25s. a week for the flats. The Committee considered that a rental of 32s. 6d. a week was likely to prove an excessive drain on the resources of the lower paid employees, and made certain suggestions as to reduction in costs and methods of arriving at the rental charges which it was hoped would enable the rental to be reduced to 27s. 6d. a week.

(viii) ESTABLISHMENT OF AUTOMATIC TELEPHONE EXCHANGE AT HAWTHORN, VICTORIA.

12. This was a proposal to erect on a site, which had been acquired in Burwood-road, almost opposite the Post Office, a modern exchange building, and install therein an automatic telephone switching system having an initial equipment for 6,900 subscribers' lines, and an ultimate capacity of approximately 11,000 subscribers' lines. It was proposed that the initial equipment should be capable of extension to the ultimate capacity named, and thus enable requirements to be met in the proposed automatic exchange area for a period of approximately twenty years from the date of opening.

The estimated cost of the work was set down at £172,790. It was stated in evidence that the total annual charges for the proposed automatic telephone system as at date of cut over were estimated at £55,240, and five years later at £65,810. The estimated annual revenue as at date of cut over was set down at £69,790, and five years later at £86,400.

In view of the representations made that the existing exchange was rapidly approaching the limit of its capacity, and of the favorable financial aspect of the new proposal, the Committee recommended that the proposed installation be put in hand as early as possible.

(ix) ESTABLISHMENT OF AUTOMATIC TELEPHONE EXCHANGE AT NORTH SYDNEY, NEW SOUTH WALES.

13. This proposal aimed at the erection, on a site which had been acquired in West-street, almost opposite Ridge-street, North Sydney, of a modern exchange building, and the installation therein of an automatic telephone switching system having an initial equipment for 5,800 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 to be met in the proposed automatic exchange area for a period of approximately twenty years from the date of opening.

The estimated cost of the work was set down at £179,500. It was stated in evidence that the total annual charges for the proposed automatic telephone system as at the date of cut over were estimated at £47,620, and five years later at £58,960. The estimated revenue as at date of cut over was set down at £59,060, and five years later at £77,230.

In view of the representations made that the existing exchange was rapidly approaching the limit of its capacity, and the favorable financial aspect of the new proposal, the Committee recommended that, provided normal rate of increase of business be maintained, the proposed installation be put in hand when practicable.

The Committee ascertained that at the back and on each side of the exchange it was intended to construct a concrete road for the convenience of vehicles entering the exchange area. The Committee was not convinced of the necessity for these roads, and recommended that they be omitted. This would result in a saving on the project of approximately £250.

(x) CONSTRUCTION OF STEAMER FOR LIGHTHOUSE SERVICE.

14. When the Commonwealth assumed control of Australian coastal lights in June, 1915, it was found necessary to make provision immediately for steamer attendance to the lighthouses. Amongst other vessels the *Kyogle* was purchased for £12,750; an amount of £3,477 was spent in repairs, and this vessel was assigned to take care of the lights on the Western Australian coast.

On 27th March, 1930, this Committee was requested to investigate and report on a proposal that a new vessel be constructed for attendance on the lights on the coast line of Western Australia to replace the *Kyogle* which was represented to be incapable of carrying out the work with economy and efficiency.

The *Kyogle* was a coal-burning twin screw vessel of approximately 1,200 tons displacement. She was built on the Clyde in 1902, and being designed for the Northern Rivers trade of New South Wales, was of light construction. She was capable of a speed of ten knots, but her economical speed was seven knots. The cruising radius was 1,080 knots at ten knots speed, and 1,480 knots at seven knots speed. It was represented that these cruising radii were insufficient for requirements, as the length of the coast line to be attended to was 5,390 miles, so that a large amount of cargo space had to be utilized for carrying extra coal; and, in addition, large quantities of coal had to be shipped to Darwin at a total cost of approximately £6 10s. per ton.

The new vessel proposed was to be a single screw oil-burning steel steamer of about 1,400 tons, designed to have a cruising radius of 3,000 miles. It was to be 195 feet in length, 34 feet in breadth, with a depth of 17 feet. The cargo capacity was set down at 300 tons, the loaded draft 13 feet, with a sea speed of ten knots. It was proposed to have accommodation for twenty passengers and to carry a crew of 28.

The estimated cost of the ship was set down at £120,000. After carefully inquiring into all aspects of the question the Committee recommended—

- (a) That a new oil-burning steamer for lighthouse service on the Western and North Australian coasts be provided as early as possible.
- (b) That tenders be called in Australia for the construction of the vessel ;
- (c) That economy be effected by utilizing auxiliary machinery and wireless equipment from other Commonwealth ships out of commission ;
- (d) That consideration be given to the advisability of providing a twin-screw vessel and Bauer-Wach engine ;
- (e) That before arriving at a decision to dispose of the *Kyogle* a special investigation be made to ascertain whether she could be utilized elsewhere for lighthouse purposes ;
- (f) That consideration be given to the whole of the lighthouse service being under one control ;
- (g) That consideration be given to the engagement of a consulting naval architect as liaison officer during the construction of the vessel.

(xi) ESTABLISHMENT OF AUTOMATIC TELEPHONE EXCHANGE AT ARNCLIFFE, NEW SOUTH WALES.

15. The proposal submitted for the consideration of the Committee was to erect, on a site which had been acquired at the corner of Bayview-street and Forest-road, Arncliffe, a modern exchange building, and install therein an automatic telephone switching system having an initial equipment for 1,700 subscribers' lines, and an ultimate capacity of approximately 4,200 subscribers' lines. It was proposed that the initial equipment should be capable of extension to the ultimate capacity named, and thus enable requirements to be met in the proposed automatic exchange area for a period of approximately twenty years from the date of opening.

The estimated cost of the work was set down at £63,210. In the course of its investigations the Committee ascertained that during the previous few months a number of telephone subscribers had cancelled their telephones, and that there had been a general reduction in the number of applications received for new telephones, especially in the metropolitan areas. In the Kogarah and Petersham exchange areas, portion of which would be served by the proposed new Arncliffe Exchange, cancellations during the six months ended 30th June, 1930, exceeded applications for telephones by 41. In the event of this state of affairs continuing, the necessity for a new exchange might not become urgent for some time. The Committee therefore, while approving in principle of the establishment of the automatic telephone exchange at Arncliffe when the volume of business should demand it, recommended that the actual installation of new plant be postponed until the normal rate of telephone development in the area was resumed and was likely to be maintained.

The site for the exchange was not rectangular, and the plan submitted to the Committee showed the front of the building as placed not parallel to the building line, but with one corner on the street alignment and the other some 12 feet back from the street. The Committee recommended that arrangements be entered into with the local Municipal Council to utilize portion of the area for the purpose of rounding off the sharp corner at the intersection of Bayview-street and Forest-road, thus improving the appearance of the building and avoiding a possible traffic danger.

In regard to the cleaning of the proposed exchange, the Committee recommended that instead of installing a vacuum cleaning plant at a cost of £400, portable vacuum cleaners be utilized, thus effecting a saving of approximately £300.

(xii) CONSTRUCTION OF CONCRETE ROADS WITHIN THE CITY AREA, CANBERRA.

16. With the growth of vehicular traffic in Canberra, and the employment of heavy omnibuses on certain routes, it was represented that the maintenance of lightly constructed roads was becoming increasingly costly, and it was suggested that consideration be given to the adoption of a progressive programme of road development having for its ultimate aim the surfacing of the more important city streets with reinforced concrete.

The programme of the Federal Capital Commission as outlined to the Committee provided for the construction, during the financial year 1929-30, of 3.46 miles of road at an estimated cost of £45,533

As a second stage it was proposed to construct during the following two years 9.28 miles at an estimated cost of 111,000

And subsequently, as the existing improved surfaces required renewal, or as permanent conditions in regard to locations or levels were realized, a further 5.15 miles at an estimated cost of 61,413

Total £217,946

In regard to the first stage of the programme, the inquiry of the Committee was deprived of most of its value by reason of the fact that the construction of approximately $3\frac{1}{2}$ miles of concrete road in various sections as set out in that stage was commenced before reference was made to the Committee, and completed at a cost of £41,280 before the Committee had completed its investigations. This action was deprecated by the Committee, as it was satisfied that it would have been able to make certain recommendations which would have resulted in a saving to the Commonwealth.

Attention was then concentrated on the future programme outlined in the second and third stages, and after careful consideration and hearing of evidence from various road construction experts, the Committee reported—

- (a) That the volume of traffic did not justify at the time a high expenditure on the construction of any more concrete roads in Canberra;
- (b) That for many years all reasonable road requirements of Canberra could be met by providing—
 - (i) Bituminous concrete roads for omnibus routes (where no cement road already exists) and other roads which it is reasonably certain will be called upon to carry specially heavy traffic;
 - (ii) Bituminous penetration roads for secondary traffic and suburban inter-communication roads;
 - (iii) Bitumen spray treatment for other domestic suburban roads,

and recommended that such progressive improvement be aimed at to be effected as and when funds could be made available. This would effect a saving on the complete programme of approximately £100,000.

(xiii) ESTABLISHMENT OF AUTOMATIC TELEPHONE EXCHANGE AT MAYLANDS, WESTERN AUSTRALIA.

17. The proposal submitted for the consideration of the Committee was to erect on a site which had been acquired at the corner of Carrington-street and Central-avenue, Maylands, a modern exchange building, and install therein an automatic telephone switching system having an initial equipment for 1,100 subscribers' lines and an ultimate capacity of approximately 2,300 subscribers' lines. It was proposed that the initial equipment should be capable of extension to the ultimate capacity named, and thus enable requirements to be met in the proposed automatic exchange area for a period of approximately twenty years from the date of opening.

The estimated cost of the work was set down at £41,440. In the course of its investigations the Committee ascertained that the rate of progress operating when the project was inaugurated had not been maintained, and that in recent months there had been a rapid decline in the number of telephone subscribers. Under these circumstances the Committee was unanimously of opinion that the installation of the automatic telephone exchange at Maylands was unnecessary.

INQUIRY INCOMPLETE.

18. Inquiry in respect of the undermentioned work is incomplete :—

Establishment of Telephone Communication between the Mainland (Victoria) and Tasmania.

RECORD OF INQUIRIES.

19. Appended herewith is a return containing a record of the inquiries of the Committee from 1st January to 31st December, 1930.

SAVINGS EFFECTED BY THE COMMITTEE.

20. From an examination of the "record of inquiries" it will be seen that the total value of the proposed works reported upon by the Committee during 1930 reached the figure of £1,175,041, and that the savings recommended by the Committee amounted to £180,245.

It was formerly the practice of previous Committees to print as an appendix to the General Report a table showing the whole of the works reported upon by the Committee since its inception, but as a matter of economy this has been discontinued. That table, however, showed that up to the end of 1929 the value of the works reported upon by the Committee reached £25,410,971, and the savings effected amounted to £4,823,759. Adding those figures to the amounts given above it will be seen that the total value of the works reported upon by the Committee since its inception in 1915 to 31st December, 1930, amounted to £26,586,012, and the savings effected to date have been £5,004,004.

CONCLUSION.

21. Impressed with the state of the public finances, the Committee, in addition to closely scrutinising all projects submitted to it, has exercised the utmost economy in its own affairs. Expenditure in all directions has been reduced to an absolute minimum, only those reports expected to have public interest are moved to be printed, and wherever much travelling was involved, the evidence has been taken as far as possible by means of a Sectional Committee of three to reduce expense. By this means it is expected that the Committee will have an unexpended balance of its £2,000 Special Appropriation at the end of the year of £600.

On 22nd November, 1929, when this Committee took up its duties, the amount available under Special Appropriation for members' fees and travelling expenses was £1,563 10s. Owing to the number of references received from the House of Representatives this amount was found to be insufficient to cover the operations of the Committee until the end of the financial year; accordingly the Committee held fifteen meetings for which members received no attendance fees.

It may be interesting to note that the total expenditure incurred by the Committee since its appointment in 1915 to 31st December, 1930, including members' fees and travelling expenses, salaries of staff, furniture, office rent, telephones, postage, office requisites, &c., amounted to £67,790.

In other words the total expenditure on account of the Committee represents 5s. 1d. per cent. of the value of the works reported upon, and 27s. 1d. per cent. of the savings effected.

A. W. LACEY,
Chairman.

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

25th March, 1931.

PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS.

RECORD OF INQUIRIES, 1930.

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.
28th Nov., 1929, to 8th Jan., 1930	Establishment of Automatic Telephone Exchange at Brunswick, Victoria	£ 84,320	£ 84,040	£ ..	£ 280	Committee recommended alteration in roofing proposed and elimination of compressed air service
3rd Dec., 1929, to 11th Jan., 1930	Establishment of Automatic Telephone Exchange at Hurstville, New South Wales	58,330	58,110	..	220	Committee recommended elimination of compressed air service
17th Dec., 1929, to 22nd Mar., 1930	Development of site for Civil Aerodrome at Western Junction, near Launceston, Tasmania	20,400	13,000	..	7,400	Committee recommended general treatment of 98 acres of area and elimination of gravel runways
2nd May, 1929, to 1st Apr., 1930	Development of Civil Aerodrome at Mascot, New South Wales	94,845	89,490	..	5,355	Committee recommended that if adjoining State land be not transferred at a nominal figure certain private land lying to the north and south-east be acquired
11th Dec., 1929, to 3rd Apr., 1930	Construction of Public Baths, Canberra	30,300	10,000	..	20,300	Committee recommended reduction in size of baths, elimination of roofing, heating and submarine lighting
5th Dec., 1929, to 11th Apr., 1930	Construction of Federal Highway within the Federal Capital Territory	50,000	50,000	..	..	Recommended as proposed
18th Mar., 1930, to 30th Apr., 1930	Erection of Cottages, Canberra	41,960	41,960	..	..	Committee recommended calling for alternative tenders for construction of detached cottages in cheaper material, and alteration of basis of calculation of rentals to permit of lower charges being made
14th May, 1930, to 23rd May, 1930	Establishment of Automatic Telephone Exchange at Hawthorn, Victoria	172,790	172,790	..	..	Recommended as proposed
14th May, 1930, to 12th June, 1930	Establishment of Automatic Telephone Exchange at N'th Sydney, New South Wales	179,500	179,250	..	250	Committee recommended elimination of concrete roads at back and sides of exchange
5th May, 1930, to 18th June, 1930	Construction of Steamer for light house service	120,000	115,000	..	5,000	Committee recommended that tenders be called in Australia for construction of the vessel and that economy be effected by utilizing auxiliary machinery and wireless equipment from other Commonwealth ships out of commission
14th May, 1930, to 24th July, 1930	Establishment of Automatic Telephone Exchange at Arncliffe, New South Wales	63,210	63,210	..	..	Recommended as proposed but Committee recommended that installation be delayed until it is reasonably certain that normal rate of telephone development in the area is resumed and likely to be maintained
5th Mar., 1930, to 31st July, 1930	Construction of Concrete Roads within the City area, Canberra	217,946	117,946	..	100,000	Committee recommended less expensive surfacing
7th Aug., 1930, to 7th Nov., 1930	Establishment of Automatic Telephone Exchange at Maylands, Western Australia	41,440	Nil	..	41,440	Committee recommended that establishment of the proposed exchange at the present time is unnecessary
		1,175,041	994,796	..	180,245	