1937–38.

THE PARLIAMENT OF THE COMMONWEALTH OF AUSTRALIA.

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Senator Brand
~~Pursuant to Statute~~

Clerk of the Senate.
5 OCT 1938

PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS.

REPORT

RELATING TO THE PROPOSED ERECTION OF A

HOSPITAL

AT

DARWIN, NORTHERN TERRITORY.

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MEMBERS OF THE PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS.

(Ninth Committee.)

The Honorable JOSIAH FRANCIS, M.P., Chairman.

Senate.	House of Representatives.
Senator Charles Henry Brand.	Thomas Joseph Collins, Esq., M.P.
Senator Gordon Brown.	Charles William Frost, Esq., M.P.
Senator Walter Jackson Cooper.	The Hon. Edward James Holloway, M.P.
	Walter Maxwell Nairn, Esq., M.P.
	John Lloyd Price, Esq., M.P.

EXTRACT FROM THE VOTES AND PROCEEDINGS OF THE HOUSE OF REPRESENTATIVES.

No. 37. Dated 30th June, 1938.

4. PUBLIC WORKS COMMITTEE—REFERENCE OF WORK—ERECTION OF HOSPITAL, DARWIN, NORTHERN TERRITORY.—Mr. McEwen (Minister for the Interior) moved, pursuant to notice, That in accordance with the provision of the *Commonwealth Public Works Committee Act 1913-1936*, the following proposed work be referred to the Parliamentary Standing Committee on Public Works for investigation and report:—Darwin, Northern Territory—Erection of Hospital. Mr. McEwen having laid on the Table plans, &c., in connexion with the proposed work—

Question—put and passed.

LIST OF WITNESSES.

Ashburner, Miss I., Matron, Darwin Hospital.
Burnett, B. C. G., Resident Architect, Darwin.
Cook, Dr. C. E. A., Chief Medical Officer, and Chief Protector of Aboriginals, Darwin.
Gahan, G. A., Commissioner, Commonwealth Railways, Melbourne.
Giles, L. H. A., Government Secretary, Darwin.
Haslam, W. T., Superintending Architect, Canberra.
Stoddart, E. W. H., Works Director, Darwin.

ERECTION OF HOSPITAL AT DARWIN, NORTHERN TERRITORY.

REPORT.

THE PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS, to which the House of Representatives referred for investigation and report the question of the Erection of a Hospital at Darwin, Northern Territory, has the honour to report as follows:—

PRESENT PROPOSAL.

1. The proposal submitted by Parliament for the consideration of the Committee aimed at the provision of a building on modern lines, designed after investigations by the Superintending Architect, Canberra, in Darwin, Java and Singapore, to conform with the principles of tropical architecture. It was to comprise four ward blocks, children's ward, two isolation blocks, administrative block, X-ray block and operating theatre, medical officers', matron's, sisters' and nurses' quarters, kitchen block, ambulance station, laundry, garages and services.

2. It was proposed that the buildings should be laid out as a cruciform type at the correct angle to take advantage of the prevailing winds; construction to be of concrete and fibro cement, with fibro cement adjustable louvres on the outside walls, and with fibro cement roofing.

3. The ultimate scheme provided for 131 beds, comprising 106 in four main wards, nine in the children's ward, and sixteen in the isolation block. In emergency, this number of beds could be increased by using the verandahs. If required in the future, further accommodation to the extent of another 106 beds could be provided by adding a second storey to each of the main wards. It was stated that the present intention, however, is to provide in the first instance for approximately 100 beds.

REASONS FOR THE PROPOSAL.

4. The reasons for requiring a new hospital at present were given as follow:—

(*a*) The existing hospital buildings are situated on a site which is too restricted to permit of expansion on planned lines.

(*b*) The buildings are unsuitable and incapable of being remodelled or extended.

(*c*) There are no private wards and practically no facilities for the segregation of white and coloured patients; and the accommodation for staff and for other facilities is unsatisfactory and inadequate.

(*d*) With a daily average of 40 in-patients the hospital is overcrowded and there is no margin to deal with an epidemic, prevalence of disease, or an influx of population.

(*e*) Owing to the growth of naval, aerial and military activities, the matter of increased hospital accommodation is one of urgency.

ESTIMATE.

5. It was stated that the estimated cost of the complete scheme excluding equipment—some of which is available from the existing hospital—would be £85,000, and the time for completion, about two years from the date of commencement.

COMMITTEE'S INVESTIGATIONS.

6. The Committee visited Darwin, inspected the existing hospital accommodation, viewed the site proposed for the new structure, and took evidence from the Government Secretary, the Chief Medical Officer and Chief Protector of Aboriginals, the Matron of the Hospital and others, and by every means available endeavoured to acquaint itself with the special hospital needs of Darwin.

7. A recent investigation carried out by the Committee in regard to the necessity for a Community Hospital at Canberra involved the inspection of several hospitals, and informed the Committee fully in respect of hospital accommodation and administration generally, and so precluded the taking of evidence except in so far as related to the tropical and other particular conditions that obtain as far as Darwin is concerned.

Necessity for a New Building.

8. The existing hospital building at Darwin is situated on the water front at a distance of about a mile and a half from the centre of the town. It is a single storeyed structure, the main portion of stone construction erected before the Commonwealth took over the administration of the Northern Territory, with sundry additions, from time to time, of less durable material.

9. Since that time, there has been considerable development in hospital technique and in medical treatment, and the requirements of Darwin which involve the care of aboriginals, other coloured, as well as white patients, have increased, and are likely to increase still further. In a climate like Darwin also, with the development of aerial traffic, and because it is a port of entrance from the crowded East precautions must be taken against the possibility of the introduction of tropical diseases new to Australia.

10. From its inspection and inquiries, the Committee is satisfied that the existing buildings do not lend themselves to economical extension or remodelling, and recommends that to provide hospital accommodation suitable and adequate to meet present and prospective requirements, a new building is absolutely essential.

Site.

11. The site proposed for the new hospital, bounded by McKay-street, Lambell-terrace, and Kahlin Beach, is situated approximately two miles from the centre of Darwin and comprises an area of about 11 acres. It was formerly used as an Aboriginal Compound, but the aboriginals have recently been transferred to another locality at a greater distance from the town.

The area selected is in a high open position with a fine view of the Harbour; medical authorities assured the Committee that no danger of infection from the ground need be feared from the fact that the area had long been used as an Aboriginal Compound; it is stated to be good building land, and in the opinion of the Committee is suitable for the purpose for which it is intended.

Building.

12. When the resolution was submitted in Parliament by the Minister for the Interior and evidence was taken from the Superintending Architect, Canberra, it was stated that the building proposed would consist of four single-storey pavilions estimated to cost £85,000. On evidence being taken in Darwin, the Committee was astonished to have submitted to it fresh plans in which the main block was to consist of two two-storeyed structures providing 132 beds, and the cost of the whole proposal was set down at £120,000 including two Isolation Blocks in course of erection, the cost of which was approximately £8,000.

13. The Committee discussed at a conference with the Administrator and officials the whole question of hospital accommodation in all its aspects, and had a further conference with the Commanding Officers of the Naval and Military units to ascertain their present and prospective requirements. As a result of these conferences the Committee was able to make substantial reductions in the proposal as later indicated without impairing the efficiency of the institution.

14. While agreeing that provision be made which would permit, if at any future time increased accommodation should be necessary, of the completed institution assuming a cruciform plan, as proposed, the Committee recommends that for the present the accommodation to be provided be contained in two one-storey pavilions in lieu of the four single-storey pavilions originally contemplated, or the two two-storey structures subsequently suggested.

A plan of this nature evolved after examination of hospital buildings in other tropical countries, has, for this particular locality, advantages over a more compact structure, and the various technical witnesses examined are satisfied that it would prove satisfactory.

Amount of Accommodation to be Provided.

15. The Committee made careful inquiries to ascertain what amount of hospital accommodation is warranted to meet existing and prospective requirements. The present hospital is capable of accommodating 50 persons. Information was obtained that the daily average of the patients was—

In	1932	21.6
	1933	23
	1934	24.2
	1935	23.1
	1936	27.2
	1937	31

and the average bed-stay 21.5 days.

16. The present population of Darwin comprises about 2,000 Europeans, 1,000 coloured persons, and 600 aboriginals within a radius of 20 miles of Darwin; but owing to the rapid growth of air services the establishment of Defence units, and the increasing importance of this northern port, it is estimated that the population may possibly increase to 6,000 by 1950. The Committee is aware that the number of beds asked for is in excess of the average which hospital practice in other parts of the world has shown to be necessary.

17. All witnesses examined expressed the opinion that Darwin is a normally healthy town with no outstanding endemic diseases, and that the anticipated early provision of an adequate reticulated water supply for the town will permit of amenities which will still further safeguard the health of the community.

18. Evidence obtained in connexion with the inquiry into the Canberra Community Hospital from eminent hospital authorities showed that a study of world conditions indicated that hospital accommodation for a maximum of 6.5 per 1,000 inhabitants should meet all normal requirements. Dr. H. H. Schlink, Chairman of the Board of Directors of the Royal Prince Alfred Hospital, Sydney, in evidence before the Committee stated :—

> There are definite rules governing the amount of accommodation necessary for hospitals which are uniformly accepted in the United States of America and in Europe . . . . . For hospitals catering for all cases you should have 6.5 beds for every 1,000 of the population. That would cover every class of work . . . . . Those are the laws that govern accommodation of all hospitals throughout the world . . . . . You do not want to worry about peak loads. It has been found that emergency peak loads occur on only 17.4 days in the year. Extra beds can be accommodated on verandahs, if necessary."

Mr. A. G. Stephenson, Hospital Architect, Melbourne, when questioned on the same subject stated :—

> If we studied general statistics for the whole of America or certain parts of England or the Continent, we would know that 6.5 patients for each 1,000 of the population is as many as we would need to provide for.

These statements convinced the Committee that the request for 132 beds for Darwin, was *greatly in excess of requirements, as on the figures above quoted that number should be sufficient* for a population of 20,000 inhabitants.

19. Careful inquiry was made by the Committee as to the probable increase in the population of Darwin, but all its investigations failed to convince members that it would reach any imposing figure within a calculable time. There are not now, or likely to be, any extensive primary or secondary industries in the vicinity of Darwin; and although the establishment of Naval, Aerial and Military units with a proportion of dependants may possibly double the present population within ten years, there is, in the opinion of the Committee, no reason to warrant the assumption that the figure is likely to exceed the figure of 6,000 within a reasonable period. Moreover, the personnel of the Defence Forces located in Darwin will be picked men unlikely to require extensive hospitalization, and minor ailments probably will be treated in the usual sick bay of the unit.

20. In this locality, however, distant but a few days by boat, and a few hours by plane from crowded coloured populations, the possibility of the outbreak of an epidemic at some time must not be overlooked, and to that extent a certain margin of hospital accommodation has been allowed. The Committee has also taken cognizance of the fact that while the Northern Territory is also served by hospitals at Pine Creek, Katherine, Tennant Creek and Alice Springs, patients from those hospitals are on occasions sent to Darwin.

21. After mature consideration of all the evidence received, *the Committee is satisfied* that all legitimate hospital needs of Darwin for the next ten years will be met by providing approximately 60 beds in the new hospital, exclusive of about 16 that will be provided in the Isolation Blocks, which is allowing 12.6 per thousand for the anticipated population of 6,000. It was adduced in evidence that the design of the building is such that an additional 30 patients could be accommodated on the verandahs, while with but little crowding the Isolation Blocks could take 32, so that in an emergency the hospital recommended could care for 122 patients, which is 10 per 1,000 of a population of 12,000.

REDUCTION IN COST.

22. The decision to restrict the hospital to 60 beds for the present, and to erect two single-storey pavilions, allowed of a substantial reduction in the estimated cost. On details being obtained, the original estimate of £120,000 was reduced to £101,760 excluding Isolation Blocks.

23. As a result of the Conferences previously mentioned, and subsequent discussions with the Resident Architect, the Committee considers that all present requirements can be met by the expenditure of £67,000.

24. The reductions recommended are as under :—

DETAILS OF ESTIMATED COST.

Original Estimate £120,000.

—	Later details obtained.	Subsequent figures decided upon.
	£	£
Out-Patients	7,520	6,230
Central Block	12,680	5,590
X-Ray Unit	2,570	2,570
Operating Unit	2,080	2,080
Kitchen and Stores	3,560	1,720
Ward—Two-storeyed	20,040	12,270*
Ward—Two storeyed	19,690	12,070*
Garage and Store	960	960
Laundry	6,380	2,130
Refractory Ward	510	510
Incinerator	580	250
Mortuary	770	770
Disinfecting Section	510	510
Covered Ways	3,710	3,240
H.C. Nurses Quarters	1,250	1,250
Male Staff	1,220	1,220
Nurses' Quarters	3,860	3,860
Matron and Sisters' Quarters	4,530	4,530
Children's Ward	3,250	..
Medical Officers' Quarters	3,860	..
Garages	230	..
Covered Ways	1,400	..
Hot Water System, Boiler House, &c. ..	..	3,000
Sewerage, Contingencies, &c.	..	1,660
	101,760	67,000

* Single storeyed.

25. The elimination of special wards for children was made possible because of the low percentage of children accommodated and the fact that space could be made available for them in other wards and on the verandahs. Medical Officers' quarters were not considered necessary because all medical officers in Darwin are already catered for. The electrical power supply in Darwin is limited, and the provision of hot water by means of electric current is uneconomical ; the Committee, therefore, considered it desirable to include an amount of £3,000 to provide for a boiler house and hot water system to cater for the care and comfort of patients and staff.

EVENTIDE HOME.

26. In the course of its investigation, the Committee ascertained that a number of cases are admitted to the Darwin Hospital which in other communities probably would have been treated in a different class of institution. At the Conference previously referred to, the Administrator stated that when the new hospital is built it will be possible to make available an existing building as a convalescent or eventide home, thus reserving the new hospital for acute cases, and enabling the hospital staff to concentrate its energies and give better attention to the hospital cases.

SUMMARY OF COMMITTEE'S RECOMMENDATIONS.

27. Briefly summarized the recommendations of the Committee are as follow :—

(*a*) That a new hospital is essential. (Paragraph 10).
(*b*) That the site selected is suitable. (Paragraph 11.)
(*c*) That the building consist of two single-storey pavilions. (Paragraph 14.)
(*d*) That accommodation be provided for 60 beds in the main hospital. (Paragraph 21.)
(*e*) That the requirements considered necessary can be met by an expenditure of £67,000. (Paragraph 23).
(*f*) That an eventide home be provided for convalescent or chronic cases not requiring hospital treatment. (Paragraph 26).

JOS. FRANCIS,
Chairman.

Office of the Parliamentary Standing Committee on Public Works,
Darwin, 9th September, 1938.

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