

Parliamentary Standing Committee on Public Works

REPORT

relating to the proposal for

REPLACEMENT OF OPERATING THEATRES AND SURGICAL WARDS

at the

Repatriation General Hospital,
Hollywood,
Western Australia

(SIXTH REPORT OF 1980)

THE PARLIAMENT OF THE COMMONWEALTH OF AUSTRALIA

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Australian Government Publishing Service
Canberra 1980

MEMBERS OF THE PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS
(Twenty-fifth Committee)

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Senator Harold William Young	Albert William James, Esq., M.P. Murray Evan Sainsbury, Esq., M.P.

EXTRACT FROM

THE VOTES AND PROCEEDINGS OF THE HOUSE OF REPRESENTATIVES,

NO. 173 DATED 15 MAY 1980

11. PUBLIC WORKS COMMITTEE - REFERENCE OF WORK - REPATRIATION
GENERAL HOSPITAL, HOLLYWOOD, W.A. - REPLACEMENT OF
OPERATING THEATRES AND SURGICAL WARDS: Mr Groom
(Minister for Housing and Construction), pursuant to
notice, moved - That, in accordance with the provisions
of the Public Works Committee Act 1969, the following
proposed work be referred to the Parliamentary Standing
Committee on Public Works for consideration and report:
Replacement of operating theatres and surgical wards at
the Repatriation General Hospital, Hollywood, W.A.

Mr Groom presented plans in connection with the proposed
work.

Debate ensued.

Question - put and passed.

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WITNESSES

Armstrong, J.W., Esq., Deputy Mayor, City of
Nedlands, Post Office Box 9, Nedlands,
Western Australia

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Department of Veterans' Affairs, MLC Tower,
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The University of Western Australia,
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Hollywood Repatriation General Hospital,
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Statham, F.W., Esq., OBE, Director of Housing and
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PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

REPLACEMENT OF OPERATING THEATRES AND SURGICAL WARDS
AT REPATRIATION GENERAL HOSPITAL
HOLLYWOOD, WESTERN AUSTRALIA

R E P O R T

By resolution on 15 May 1980, the House of Representatives referred to the Parliamentary Standing Committee on Public Works for investigation and report the proposal to replace the existing operating theatres and surgical wards at the Repatriation General Hospital, Hollywood, Western Australia.

The Committee has the honour to report as follows:

THE REFERENCE

1. The proposal referred to the Committee is for replacement of four existing operating theatres and support facilities, the provision of 72 new surgical beds in two wards, access roads, car parks and landscaping. To provide space for integration of the new facilities into the existing complex, one ward and 13 timber buildings dating from 1942 are to be demolished. The estimated cost of the proposal is \$5.2 million at April 1980 prices.

THE COMMITTEE'S INVESTIGATION

2. The Committee received written submissions and drawings from the Department of Veterans' Affairs and the Department of Housing and Construction and took evidence from their representatives at a public hearing in Perth on 16 and 17 July 1980. Written submissions and evidence were received from Professor S. Nade, Professor of Orthopaedic Surgery at the University of Western Australia, Tracey, Brunstrom & Hammond Pty Ltd, Health Planning Consultants and the Nedlands City Council.

3. Prior to the public hearing, the Committee inspected the existing facilities and the site for the proposed building. The Committee also inspected equivalent facilities at the Sir Charles Gairdner Hospital, Nedlands.

4. The Committee's proceedings will be printed as Minutes of Evidence.

BACKGROUND

5. The Repatriation General Hospital, Hollywood, then known as the 110th (Perth) Military Hospital, was completed by the Army in 1941 and was used for the treatment of sick and wounded servicemen until it was taken over by the Repatriation Commission in January 1947.

6. The Department of Veterans' Affairs is responsible for the administration of benefits available to eligible persons under the Repatriation Act and associated legislation. These benefits include medical and hospital treatment for approved service related disabilities and in certain circumstances other conditions. Serving members of the Armed Forces are admitted as required and patients from the general community can be accepted on certain conditions.

EXISTING FACILITIES

7. The hospital has four operating theatres, two being constructed in 1942 and 1966 respectively. Major new buildings recently constructed are the multi-storey paramedical building (1972), the out-patients' clinic (1976) and a bulk store and orderlies amenities complex (1979).

8. The hospital currently has 379 beds comprising:

- a Coronary Care and Intensive Care Service of 8 beds;
- a General Acute Ward Service of 337 beds (154 medical and 183 surgical);
- a Psychiatric Ward Service of 34 beds.

FUTURE REQUIREMENTS

9. Projections of surviving ex-service personnel and maintenance of current rates of treatment eligibility have generated an estimated peak daily bed demand at RGH Hollywood of 280 in 1984 and 230 in 1989. To meet these requirements a maximum capacity of 350 beds should be established by 1984 which could be reduced to around 300 beds by 1990. To meet these needs, the current proposal has been formulated.

10. Planning for future development of like facilities has been co-ordinated into a strategy plan utilising zoned areas. The current proposal conforms to the principles laid down in the strategy plan.

11. By provision of 72 new beds and four operating theatres, RGH Hollywood will be provided with a standard of surgical facilities comparable to modern hospitals in the general community. The additional bedspace gained will be countered by closure of three wards with a total of 90 beds thus stabilising bedspace at the optimum 350 level by 1984.

THE NEED

12. Under existing co-ordination arrangements with the State authorities RGH Hollywood accepts virtually all elective orthopaedic veteran and civilian patients from the Perth northern corridor while all traumatic orthopaedic veteran and civilian patients are treated at the Sir Charles Gairdner Hospital. These arrangements commenced in 1976 but no formal agreement has been made with the State Government.

13. The hospital was designed for a younger age group of patients suffering from different disabilities from the older age group now eligible for treatment. The ward buildings, although of brick construction, have remained basically unchanged since 1947. Present ward accommodation is substandard for surgical patients and its design is unsatisfactory in terms of

nursing care as it is not possible, within individual wards, to separate different types and sexes of patients in accordance with their treatment needs.

14. The majority of wards are located in pavilion-style buildings, some of which have been progressively upgraded and air conditioned in recent years. Most services in the fields of general medicine and surgery are provided. Under existing arrangements RGH Hollywood co-operates with the State authorities in the provision of medical services to the general community.

15. The operating theatres are considered substandard due to their small size, general condition and poor layout which, with changes in medical technology, now create overcrowding, maintenance and traffic problems. No vast increase in surgery performed at RGH Hollywood is foreseen in the immediate future and replacement of the four existing theatres is proposed to alleviate problems outlined above and take account of medical and technological advances since they were originally constructed.

16. The Committee notes that to some extent the workload justification for the proposed works depends on their use by non-veterans under arrangements made with the West Australian Government. The Committee is of the opinion that the Government should clearly define the future role of Repatriation General Hospitals and their co-ordination with the State Hospital systems.

17. Committee's Conclusion The Government should clearly define the use of Repatriation General Hospitals by non-veterans and examine the future role of Repatriation General Hospitals. The existing operating theatres and surgical wards are in need of upgrading.

THE PROPOSED WORKS

18. Planning and Design The proposal is for construction of a new four storey building containing two 36-bed wards, four operating theatres and associated support facilities and services. Each 36-bed ward will be divided into small configurations composed of one eight-bed, six four-bed and four one-bed units. Planning has taken account of the need to avoid interruption to normal functioning of the hospital during construction. The Department of Veterans' Affairs was clearly uncertain of the long-term future of RGH Hollywood, although it was put to the Committee that it could eventually become part of the State Government Hospital system. The proposed upgrading would permit, if required, any future handover of Hollywood RGH to the State Hospital system on an equal footing with modern facilities elsewhere in the community. It would also cater for any extension in the range of veterans eligible for treatment.

19. The proposed building has been developed from a series of building options, will be compatible with the present appearance of the hospital and possible future developments and conforms to the relevant building codes and principles of design. The building will be four storeys, having its long axis east-west to control sun exposure and give most wards a desirable northerly aspect. Due to the sloping site, provision for a lower ground floor lobby has been made to facilitate an access link to future development north of the present site.

20. Accommodation for the operating theatres and associated facilities will be provided on the ground floor with mechanical and electrical plant and a building services zone being located on the first floor. The second and third floors will have one 36-bed ward each plus associated facilities. Lift motor and mechanical plant rooms will be located on the roof while access for building and engineering services will be provided under the ground floor slab.

21. The building will be integrated with the external appearance of existing structures by use of red bricks and white lightweight panels and will be linked to the main service and pedestrian spine of the hospital by a covered way. Construction details are set out in Appendix A.

22. The Committee notes that some discussions have taken place on sharing of facilities, such as steam reticulation and steriliser services, between Hollywood RGH and the Sir Charles Gairdner Hospital. The Committee is of the opinion that the Department of Housing and Construction should continue to liaise with the appropriate West Australian State authorities on the sharing of steam reticulation facilities. Further consultations should also take place between the Department of Veterans' Affairs and the State authorities on the possibility of increasing the sharing of steriliser services above the planned level of twenty-five percent of the Hollywood RGH needs which will be supplied by the Sir Charles Gairdner Hospital's new central sterile supply department when it is commissioned in July 1981.

23. Committee's Conclusion The design of the proposed building is satisfactory.

SITE

24. The hospital is situated on approximately 12 hectares of land about 8 km west of Perth and the site for the proposed building is wholly contained within its existing boundaries. The main entrance, on the southern frontage, is from Monash Avenue with a rear entrance on the northern boundary from Verdun Street. As indicated elsewhere the land has been owned by the Commonwealth since construction of the hospital began in 1941.

25. The building site is currently occupied by a brick ward and thirteen timber framed buildings constructed around 1942 which have no historical or architectural significance. These will be demolished to allow construction to proceed on a 'clean' site basis.

26. Committee's Conclusion The site selected is suitable.

6.

ESTIMATE OF COST

27. The estimated cost of the work when referred to the Committee is \$5.2 million at April 1980 prices. The estimate of cost is made up as follows:

	\$
Building Works	2 611 000
Mechanical/Electrical Services	1 968 000
Lifts and Fire Protection	317 000
Site Works and External Services	304 000
	<hr/>
	5 200 000
	<hr/>

PROGRAM

28. Following approval for the work to proceed, it is estimated that documentation, calling for and analysis of tenders will take twelve months. Construction time from the acceptance of a contract will be 22 months.

29. Committee's Conclusion The Committee recommends the construction of the work in this reference.

RECOMMENDATIONS AND CONCLUSIONS

30. The summary of recommendations and conclusions of the Committee is set out below. Alongside each is shown the paragraph in the report to which it refers,

7.

Paragraph

Appendix A

1. THE GOVERNMENT SHOULD CLEARLY DEFINE THE USE OF REPATRIATION GENERAL HOSPITALS BY NON VETERANS AND EXAMINE THE FUTURE ROLE OF REPATRIATION GENERAL HOSPITALS. 17
2. THE EXISTING OPERATING THEATRES AND SURGICAL WARDS ARE IN NEED OF UPGRADING. 17
3. THE DESIGN OF THE PROPOSED BUILDING IS SATISFACTORY. 23
4. THE SITE SELECTED IS SUITABLE. 26
5. THE ESTIMATED COST OF THE WORK WHEN REFERRED TO THE COMMITTEE IS \$5.2 MILLION AT APRIL 1980 PRICES. 27
6. THE COMMITTEE RECOMMENDS THE CONSTRUCTION OF THE WORK IN THIS REFERENCE.

Heath Khan
Arvind Bhatnagar
(M.H. BUNGEY)
Chairman

Parliamentary Standing Committee on Public Works,
Parliament House,
CANBERRA, A.C.T.

21 August 1980.

CONSTRUCTION

1. Structure The proposed building will be reinforced concrete with pad footings founded on sandy soil, columns and flat plate floors. Concrete shear walls will bear horizontal loads in selected locations.
2. Materials These will be selected for their local availability, durability and enhancement of the appearance of the building in keeping with the existing structures within the hospital grounds.
3. Exterior The ground floor will form a podium constructed in face brickwork to harmonise with existing adjacent buildings. Walls on the upper floors will be lightweight panels in matching colours to other nearby buildings. Window frames will be anodised aluminium and roofs of metal decking colour-coated for corrosion protection.
4. Internal Walls will generally be of lightweight steel framed partitions lined with plasterboard, with brickwork and concrete construction in a few locations. In theatre areas the plasterboard will be faced with vinyl sheeting, in wet areas ceramic tiles or laminated plastic, while all other walls will be painted.
5. Floors will be of anti-static vinyl in theatres, ceramic tiles in wet areas and elsewhere sheet vinyl or carpet as appropriate. Ceilings will be plasterboard in theatre suites, wet areas and stores, with acoustic tiles being used for wards, recreation areas and corridors to reduce noise transfer.
6. Mechanical Engineering Services These will comprise steam generation, air conditioning, mechanical ventilation, special services and equipment. It is planned to utilise the

existing steam raising plant, which has the additional capacity and is located in the hospital's central engineering services complex, to meet the needs of the proposed building.

7. Air conditioning is more difficult as the current chilled water plant in the central engineering services complex has insufficient capacity to meet any of the demands of the proposed building. Provision of an additional unit to provide the 910kW of refrigeration for the proposed building will be the subject of a separate works program by the Department of Veterans' Affairs.

8. The service provided by air conditioning in the operating theatres will maintain the integrity of "clean" and "dirty" areas with three theatres having an air curtain supply system and one a laminar flow system. All air will be subject to high efficiency particulate air filtration levels. On the ward floors a medium velocity medium pressure supply air system will be used with exhaust systems to service and ablution areas.

9. Special services envisaged will be oxygen, nitreous oxide, compressed air, medical vacuum reticulated to all areas as well as wet and dry vacuum systems to permit cleaning of all areas. The following special equipment will also be provided:

- steriliser in the dirty utility rooms on ward floors;
- pan sanitiser in dirty utility rooms on ward floors and in the clean-up room on the theatre floor;
- two pre-vac autoclaves and a dry heat steriliser in the sterilising area of the theatre floor;
- a steam hose reel recessed in the waste disposal room on the theatre floor.

10. Electrical Services As the existing main switchboard has reached the limit of its capacity, a major change will have to be made in power supply arrangements within the hospital. At present a separate proposal is before the Department of Veterans' Affairs to change from low voltage to high voltage supply, metering and distribution with sections of the hospital being fed from separate transformers.

11. To supplement the State Energy Commission supply, a 250kW emergency generating set will be provided in the proposed building to provide power for essential loads in the event of failure.

12. Lifts Two lifts each capable of carrying an attended bed will serve all medical floors with one having access to the first floor level plant rooms. Provision will be made for the lift service to be extended to a future lower ground floor level entrance lobby.

13. Hydraulic Services Existing sewerage and storm water drainage mains are adequate for the proposed building but a section of an existing sewer line will be diverted to make way for the new facility.

14. Civil Engineering The estimate allows for deviation of the western service road as a result of siting of the proposed building. Vehicular access to service entrances will be provided from the new road.

15. Fire Protection These systems are being designed in consultation with the Western Australian Fire Brigades Board. Sprinklers operating on both wet and dry systems will be provided as appropriate throughout the building, together with portable extinguishers, internal hydrants and fire hose reels.

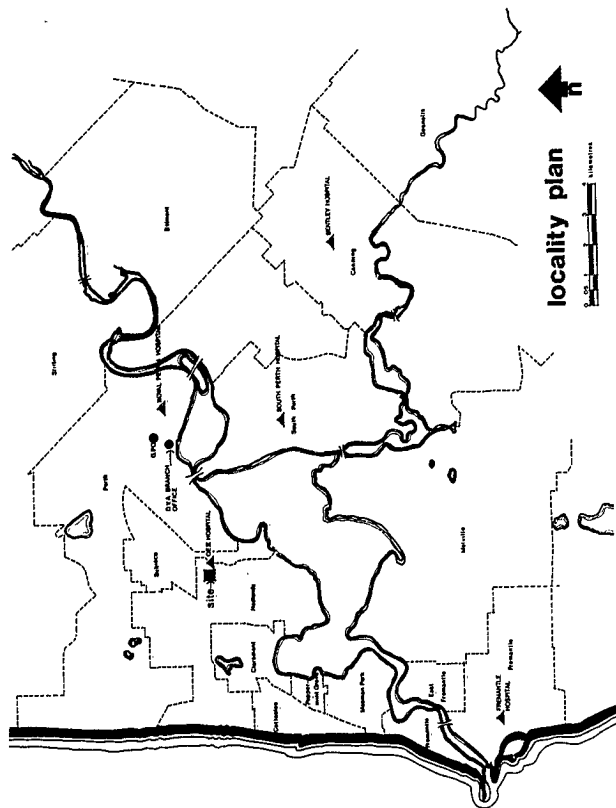
16. Each floor will be divided into separate compartments by smoke-stop divisions and fire rated walls with each compartment having two fire escape routes. Stairs and landings are designed to permit evacuation of non-ambulatory patients by hand carried stretchers.

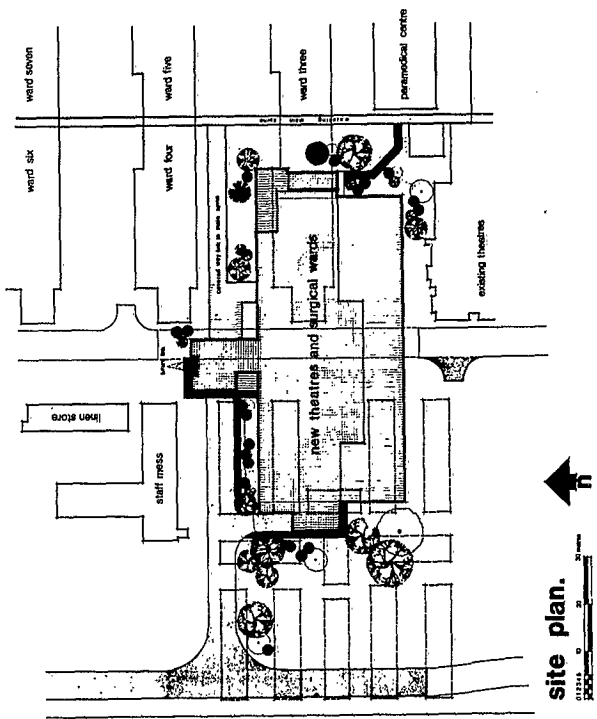
17. Furniture and Fittings All built-in furniture and fittings are included in the estimated cost of the project.

18. Car Parking Current parking within the hospital grounds is adequate to meet the requirements of the proposed building.

19. Landscaping Areas in the immediate vicinity of the new building will be landscaped in keeping with the existing hospital grounds.

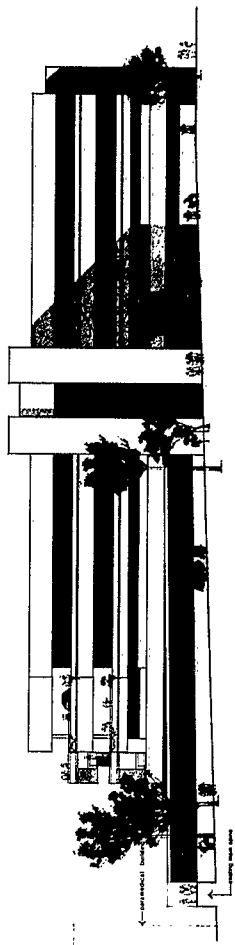
20. Liaison with Authorities The proposed building has been developed in close consultation with the Western Australian Fire Brigades Board, the Nedlands City Council, the State Energy Commission of Western Australia, the Metropolitan Water Supply, Sewerage and Drainage Board, the Western Australian State Department of Health and Medical Services, the Department of Housing and Construction and the Department of Veterans' Affairs.





site plan.

B.



north elevation



C.