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THE PARLIAMENT OF THE COMMONWEALTH OF AUSTRALIA

PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

REPORT

relating to the proposed

NEW KITCHEN

at

REPATRIATION GENERAL HOSPITAL

at

HEIDELBERG, VICTORIA

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PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

NEW KITCHEN AT REPATRIATION GENERAL HOSPITAL,
HEIDELBERG, VICTORIA

REPORT

By resolution on 17th August, 1966 the proposal to construct a new kitchen at the Repatriation General Hospital, Heidelberg, was referred to the Parliamentary Standing Committee on Public Works for investigation and report.

The Committee have the honour to report as follows:-

THE COMMITTEE'S INVESTIGATION

1. We received submissions from the Repatriation Department and the Department of Works and took evidence in Canberra at a public hearing from representatives of these departments. The Committee inspected the hospital and viewed a film on the proposed method of serving meals in the new kitchen.

THE REFERENCE

2. The reference submitted to the Committee comprises a new kitchen for the preparation of meals for patients and staff. The estimated cost is $994,000.

REPATRIATION DEPARTMENT

3. Functions The Department is responsible for the administration of benefits available to those eligible under the Repatriation Act and associated legislation. This includes hospital treatment for disabilities attributable to war service and, subject to certain conditions, treatment and care are provided for disabilities not due to war service for -

(a) eligible members receiving war pensions at or exceeding the 100% general rate;

(b) service pensioners, including those from the Boer War;

(c) widows and certain dependants of deceased ex-servicemen whose deaths are due to war service;

(d) members suffering from pulmonary tuberculosis; and

(e) nurses who served in the 1914/18 War.

4. Departmental Institutions It is the department's policy to generally provide in-patient treatment at its own institutions in each state, so that the special responsibilities embracing both investigatory and treatment functions can be made effectively and without encroaching on general community facilities. Establishments provided for this purpose include a large general hospital in each capital city and a smaller auxiliary hospital in each state, except Tasmania. Limited use only is made of outside hospitals for in-patient treatment, mainly in country areas.

5. Out-patient treatment is provided by local medical officers, by departmentally appointed specialists in the various branches of medicine, at departmental out-patients clinics and, in some cases, at general hospitals.

REPATRIATION GENERAL HOSPITAL, HEIDELBERG

6. Location and Functions This hospital has been built in the Melbourne suburb of Heidelberg about seven miles from the city on a site of 65 acres. The original buildings were built in 1941/42 as the 115th Australian General Hospital. It now comprises a 5-storey central block accommodating eight wards and specialist departments and a pavilion section of 16 wards. There are also multi-storey homes for nurses, medical officer and other staff quarters and auxiliary buildings for various service functions.

7. The hospital provides a full range of services in the fields of general medicine and surgery, treating acute as well as long term patients. It also has extensive facilities in special areas such as psychiatry, tuberculosis and geriatrics. It is a training school for student nurses and nursing aides and is recognised for post graduate training by the major specialist medical colleges.

8. The following figures relating to in-patient treatment in 1965/66 indicate the scale of activity at the hospital:

Treatment Category	In-Patients First Day of Period	Admissions During Period	Total Patients Treated	Average Days Stay Per Patient	Average Daily Beds Occupied
Medical	415	4,688	5,103	29.9	355
Surgical	277	4,936	5,213	19.7	262
Tuberculosis	25	197	222	35.9	29
Psychiatric	45	693	738	25.2	47
TOTALS	762	10,514	11,276	24.9	693

9. The hospital has a peak loading capacity of 790 beds.

10. Accommodation Needs Following a survey of needs for accommodation and services for all Repatriation hospitals in 1963/64, the Government endorsed the first year of a four year programme of priority improvements and agreed that work in subsequent years should be dealt with in the annual budgetting context. The first year's work for Heidelberg includes the present reference. The other major works in the four year programme, with the broad order of cost for each, are -

- a new building, in two stages, to house the Pathology Department and operating theatres respectively: Stage I $650,000
  Stage II $466,000
- a building for central sterilising department, dental clinic and science block, including medical students accommodation $500,000
- a central staff cafeteria (adjoining kitchen proposals in current reference) $123,000

11. In considering the four year programme, the Government recognised that the proposals submitted took account only of current priority requirements and did not allow for any major changes in medical techniques or standards or in eligibility for treatment at Repatriation hospitals.

12. Bed Requirements The Committee were told that a number of studies of bed requirements at Repatriation General Hospitals have been carried out since 1959 and although the first forecast indicated that there would be some increase in demand to about 1975, experience and later investigations have demonstrated that the present in-patient level should be maintained to about 1970. From that time on it is expected that there will be an upward trend as the World War II ex-servicemen population ages and becomes eligible for service pensions and in-patient treatment. It is therefore expected that the existing ward accommodation will be adequate at least until about 1970.

HOSPITAL FOOD SERVICE

13. Present Facilities The food service at Heidelberg was originally provided from two kitchens. The first, of 9950 sq.ft., in a single storey building in the pavilion area, serviced the pavilion wards and non-professional staff dining rooms. The other, of 9240 sq.ft., in the multi-storey block catered for the multi-storey wards and professional staff dining rooms.

14. In 1960 it was decided that the service should be provided from the multi-block kitchen only. This arrangement was found to have a number of drawbacks including -

- lack of storage for the food trolleys used to transport bulk cooked food to wards and dining rooms.
- need to operate special diet facilities in the older pavilion kitchen and transport cooked food between the two areas.
- inability to cope with any significant increase in demand.

In 1961/62 it was decided to close the multi-block kitchen and feed the whole hospital from the slightly larger pavilion kitchen.

15. Since the pavilion kitchen was seriously damaged by fire in November 1964, service has been from the multi-block kitchen with special diets being prepared in the pavilion kitchen. All food is

now cooked in the multi-block kitchen. It is then taken in heated bulk food trolleys to the ward pantries, to staff dining rooms and to the diet preparation area in the pavilion kitchen. Meals in wards and staff dining rooms are plated there from the trolleys by ward or dining room staff and thence distributed. Plates, cutlery and trolleys are washed up in the wards or dining rooms.

16. Inadequacies of the Present Facilities The basic deficiency is that the food preparation for a hospital with a peak loading of 790 beds and an expected expanding work load and a commitment for staff of 600 meals in one sitting, must be carried out in a kitchen designed over 20 years ago to serve only 600 beds and a correspondingly smaller staff. The existing kitchen facilities are inadequate and below standard for current and expected needs, and this seriously increases management problems in an area which is vitally important in terms of patient care and staff morale.

17. There are unsatisfactory features in the present method of bulk food handling, particularly in relation to the serving of food in the wards. These include demands on the time of nursing and other ward staff, the noise created in handling catering equipment, the difficulties in ensuring that food is served hot and the problems associated with washing up in the wards.

18. We noted that major recent changes in the concept of hospital catering have underlined the shortcomings of the existing facilities. Particularly relevant are the increasing recognition in the medical profession of the contribution to patient welfare made by a co-ordinated and responsive food service, the increasing use of specialist dietetic catering and the need to control costs in the face of rising costs and standards.

19. The Committee agree that there is a need for a new food service at the Repatriation General Hospital, Heidelberg.

20. Centralised Food Services The Committee were told that as a result of pilot studies carried out by the Repatriation Department and of experience gained with new systems introduced in Repatriation General Hospitals in Brisbane and Hobart, it has been concluded that a centralised food service with centralised dish washing facilities has significant advantages, both for management and in service to patients. Brisbane has a pre-plating service in the kitchen but, because of local factors, food is taken in a pre-plated condition to wards in heated trolleys and washing up is carried out in the wards. The Hobart installation uses a heated pellet system with a centralised dish washing service. A similar system is planned for the multi-storey block and some pavilion wards at the Repatriation General Hospital, Concord.

21. It has been found that with centralisation, the service can be selective, presentation is better and the food reaches the patient quickly in a hot and palatable condition. Ward staff can thus devote more time to medical duties and noise levels are reduced. Benefits also flow from a reduction in waste and from more efficient dietetic control of food portions to patients.

22. Alternative Methods The types of service used in Brisbane and Hobart were considered for Heidelberg as well as the microwave system. The latter was rejected on the grounds that at this stage of its development it did not seem to be suitable for general use in a large hospital.

23. For a variety of reasons explained to the Committee, it has been decided to employ at Heidelberg a centralised food service using the pre-plated heated pellet method and a centralised washing up service. This system avoids the use of heavy insulated pre-heated trolleys and facilitates the use of a complete trays system set up in the kitchen thus reducing work in the wards. Furthermore, control of the temperature of the food is more reliable and the heat is better retained while the meal is being eaten.

24. Apart from the very significant savings in the time of skilled medical staff which the new system will make possible, the new service will be more flexible in terms of capacity of the system and use of kitchen staff and facilities.

25. The Committee agreed, after consideration, that a centralised food service using the pre-plated heated pellet method and a central washing up service, will be the most suitable system for Heidelberg.

26. The facilities in both of the present kitchens have functional deficiencies which cannot be readily overcome without major renovation. These include inadequate ventilation, unsatisfactory drainage, sub-standard refrigeration and insufficient staff amenities. These factors weigh heavily against reconditioning the existing facilities. The indications were that this would have been more costly and less satisfactory than a new kitchen. There would also be the practical difficulty of providing the hospital food service from the facilities which are being reconstructed.

27. The Committee concurs with the conclusion that the most practicable and economic method of providing the new service is to build a new kitchen.

THE PROPOSAL

28. The Site The site chosen for the proposed kitchen is an area north-west of the main multi-storey block near the pavilion kitchen and pavilion wards 1 and 2. The area is readily accessible and is convenient to both the pavilion and multi-storey sections of the hospital. The site is at present occupied by a vehicle parking area and several old timber stores buildings. The stores activities in these buildings will later be transferred to the pavilion kitchen.

29. Space is available nearby for the construction of the new central staff cafeteria when funds are available for this project.

30. Outline The kitchen building is to be a single storey structure with a part lower ground floor which will house the mechanical plant room and the bulk grocery store. A gross area of 24,400 square feet is proposed, the principal areas being -

Kitchen, including day storage, food preparation, cooking, plating, distribution and dish washing areas and diet kitchen -	12,520 sq.ft.
Goods reception, including loading, bulk storage and cool rooms -	4,640 sq.ft.
Staff change rooms, lunch room, toilets, etc. -	2,600 sq.ft.
Plant room -	2,500 sq.ft.

31. This area will be adequate for a full meal service for up to 1200 in-patients and to service the central staff cafeteria to be built subsequently. Initially, however, it is proposed to equip the kitchen to serve 900 in-patients plus the associated staff. Further equipment will be installed when the demand arises. The design submitted to the Committee will provide a balanced layout and flow for supply, meal preparation, assembly, distribution, cleaning and disposal functions.

32. Construction Foundations will be simple strip footings under the infill brick walls and spread footings under the columns. The structure will be of reinforced concrete to the ground floor and of steel framed construction above this level. The ground floor will generally have a suspended floor of reinforced concrete beam and slab construction. The transverse column spacing on the main floor will provide a 60 foot wide column free area with a raised ceiling and top lights over the general cooking and tray service areas. The steel columns are to be concrete encased and will support a steel roof frame of trusses over the central span and beams over the shorter external spans. Timber purlins and ceiling joists will carry the insulated low pitch steel roof decking and ceiling. The covered way joining the kitchen with the multi-storey building and the pavilion wards will

be of similar construction to the existing covered ways with concrete floors, timber frames and glazed areas as required.

33. External walls between the columns will be of face brick and aluminium framing with fixed windows above sill height and plastic coated metal panels below. The exposed concrete encased structural steel frame will be finished off form.

34. Internal walls will be of brick construction generally, finished with hard plaster. The walls in the preparation, cooking and washing up areas and toilets will be finished with ceramic tiles extending from floor to seven feet and polyurathene coated above this height. Walls in the plant room and bulk grocery stores will be face brick work.

35. The floor in the main kitchen area will be finished with impervious non-slip ceramic tiles graded to stainless steel gutters below removable aluminium gratings set flush with the floor. Staff change rooms, toilets, the lunch room and office areas will have floors finished with vinyl tiles. Other areas on the ground floor will have granolithic floor finishes except the loading platform which will be finished with steel tiles. Floor surfaces on the lower ground floor will be granolithic except the loading bay where steel tiles will be used.

36. Ceilings in the preparation, washing up and tray service areas will be insulated, enamelled metal tiles. Remaining areas, except the loading platform, cool rooms and the deep freeze, will have ceilings sheeted with laminated board. The walls, floors and ceilings of the cool rooms and the deep freeze will be insulated for thermal protection.

37. The preparation and washing up areas will be fitted with stainless steel benches as required. At the walls these will be supported on cantilivered frames. Free standing benches and bases supporting cooking equipment will stand on independently framed central ducts carrying service piping. Ducts will be fully enclosed

and finished with ceramic tiles to match the walls of the surrounding areas. Stainless steel panels will be installed to provide access to service piping. Cool rooms will be fitted with adjustable demountable stainless steel racks.

38. Opening windows and external doors, other than the main entrance, will be fly screened. Air jet curtains will be provided at the east and west entrances and at the external doors of the garbage rooms and the ground floor bulk grocery store. Kitchen exhaust hoods of wired glass hung from the roof structure will be installed over cooking equipment in the main cooking area.

39. Engineering Services The mechanical services installation will include kitchen equipment which will be gas, electrically or steam heated as required, hot water supply, cold room refrigeration and miscellaneous equipment such as can washing, manual fire extinguishers, automatic doors and air curtains. Equipment for the centralised tray service is also included.

40. Filtered and tempered air will be delivered to the kitchen and dish washing areas and to the change rooms. Air from these areas will be exhausted to the atmosphere. Filtered and heated air will be supplied to the lunch room and this air will be released into the kitchen. Toilets will be provided with mechanical exhaust ventilation. Domestic hot water will be supplied at all sinks, basins and showers from steam heated calorifiers. The six cold rooms will be served from a central automatic refrigeration plant.

41. Electricity will be taken to the kitchen by underground cable from the existing overhead reticulation which will be augmented to provide additional capacity. Illumination will generally be from fluorescent fittings complying with the appropriate Australian Standard Lighting Code. General purpose electrical outlets will be provided as required and fixed electrical equipment will be direct wired. The thermal fire alarm system to be installed will be

connected to the Metropolitan Fire Brigade through the hospital's central fire alarm indicator board.

42. A small dumb waiter type trolley lift with a load capacity of 560 lbs. and operating at a speed of 45 feet per minute will move foodstuffs from the bulk grocery store on the lower floor to the preparation and cooking level. Vertical transportation of food trolleys in the multi-storey block will be by a new goods/passenger lift to be installed in the western end of this building in the space now occupied by three small dumb waiter service lifts, which because of their limited size and capacity, require replacement. The new lift will carry up to 2,500 lbs. at a speed of 300 ft. per minute.

43. The existing water supply reticulation will be extended to the new kitchen. The sewer main near the proposed building will be extended to drain toilet and non-greasy wastes and the discharge from the grease interceptor traps. Stormwater from the new building will be drained by an extension of the existing service.

44. Committee's Conclusion The Committee recommend the construction of the works in this reference.

ESTIMATES OF COST

45. The estimated cost of the works referred to the Committee is $994,000 as follows:

Building work	$388,000
Mechanical services	$515,000
Electrical services (including lifts)	$74,000
Hydraulic services	$6,000
Roads	$11,000

PROGRAMME

46. After an approval to proceed is given, it is expected that 30 weeks will be required for the completion of working drawings and tender documents, the invitation and analysis of tenders and the letting of a contract. The construction period is expected to occupy 80 weeks.

RECOMMENDATIONS AND CONCLUSIONS

47. 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.

		Paragraph
1.	THE EXISTING KITCHEN FACILITIES ARE INADEQUATE AND BELOW STANDARD FOR CURRENT AND EXPECTED NEEDS.	16
2.	THERE ARE UNSATISFACTORY FEATURES IN THE PRESENT METHOD OF BULK FOOD HANDLING, PARTICULARLY IN RELATION TO THE SERVING OF FOOD IN THE WARDS.	17
3.	THERE IS A NEED FOR A NEW FOOD SERVICE AT THE REPATRIATION GENERAL HOSPITAL, HEIDELBERG.	19
4.	A CENTRALISED FOOD SERVICE USING THE PRE-PLATED HEATED PELLET METHOD AND A CENTRAL WASHING UP SERVICE WILL BE THE MOST SUITABLE SYSTEM.	25
5.	THE MOST PRACTICAL AND ECONOMIC METHOD OF PROVIDING THE NEW SERVICE IS TO BUILD A NEW KITCHEN.	27
6.	THE COMMITTEE RECOMMEND THE CONSTRUCTION OF THE WORKS IN THIS REFERENCE.	44
7.	THE ESTIMATED COST OF THE WORKS REFERRED TO THE COMMITTEE IS $994,000.	45

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