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THE PARLIAMENT OF THE COMMONWEALTH OF AUSTRALIA

PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

R E P O R T

relating to the proposed development at

R.A.N. ARMAMENT DEPOT

at

KINGSWOOD, NEW SOUTH WALES

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PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

R.A.N. ARMAMENT DEPOT, KINGSWOOD, N.S.W.

R E P O R T

On 11th August, 1966 His Excellency the Governor-General in Council referred to the Parliamentary Standing Committee on Public Works for investigation and report to the House of Representatives, the proposal to further develop the Royal Australian Navy's Armament Depot at Kingswood, New South Wales.

The Committee have the honour to report as follows:

THE COMMITTEE'S INVESTIGATION

1. The Committee received statements from the Departments of the Navy and Works and heard evidence at a public hearing from representatives of these departments. We visited Kingswood to inspect the existing facilities and the sites of the proposed additional buildings.

THE PROPOSAL

2. The proposal submitted to the Committee is for the construction, in two stages, of additional stores and other facilities at Kingswood, comprising:

Extension of existing mess room)	
Foreman's office)	
Mechanical workshop)	Stage I
Three Category 'Z' stores)	
Non-explosive store)	
Appliance shed)	
Extension of change room)	
Extension of general office)	
Empty package store)	
Two Category 'Z' stores)	Stage II
Laboratory area store)	
New mess room)	
Five houses for married staff)	

KINGSWOOD ARMAMENT DEPOT

3. History The Kingswood Armament Depot was initially used by the United States Army during World War II and in 1945 was taken over by the Royal Australian Navy. In 1946 part of the depot was transferred to the Royal Australian Air Force. The depot was used initially for holding ammunition under dump storage conditions in fibro cement igloo huts and in an assortment of other temporary buildings.
4. The land, which was originally occupied under National Security Regulations, was acquired by the Commonwealth in 1953.
5. Approval was obtained in 1954 to the progressive development of the joint R.A.N./R.A.A.F. Armament Depot to replace the emergency stowage hitherto available and to allow removal from the Navy's Armament Depot at Newington on the Parramatta River of Category 'Z' ammunition. This was necessary as safety distances at Newington could no longer be observed due to the encroachment of nearby civilian development. The concept of a joint R.A.N./R.A.A.F. depot was adopted to effect economies in the area of land required and in the provision of engineering services. As Kingswood is a joint depot, operating and maintenance charges are shared, where appropriate, between the two Services concerned. This arrangement covers such items as engineering services, security and fire fighting.
6. Since 1954 all new buildings at Kingswood have been in permanent construction. Instead of being dispersed in the manner of the initial development, new buildings have been concentrated towards the centre of the joint area and comply with requirements for explosives storage in construction detail and safety distances. Counting the buildings at present under construction, some 30 new buildings have been erected including 13 large ammunition storehouses, laboratory buildings, workshops and offices.

7. Function of R.A.N. Depot It is necessary to hold adequate supplies of ammunition in the Sydney area which is the Navy's main base. These supplies are required to meet the Fleet's peacetime requirements for practice and other ammunition, outfits for ships undergoing refit and for ships not in commission which would need to be supplied in the event of mobilisation and for the approved reserves for war.

8. The types of ammunition and explosives used in the Navy are:-

- (a) Category 'X' which has either a fire or a slight explosive risk, or both, but whose effect would be localised;
- (b) Category 'Y' which has a mass fire risk or a moderate explosive risk but without a risk of mass explosion;
- (c) Category 'Z' which has a mass explosive risk combined with a serious missile effect.

9. In addition to storage facilities for ammunition, it is also necessary to have facilities where Fleet ammunition and that held in store can be examined, tested, assembled and repaired. This is a continuous process to keep ammunition serviceable and requires laboratories located close to the storage facilities.

10. The facilities of the Kingswood Depot are used to store:-

- (a) Category 'X' components of guided missiles such as flares and fuses;
- (b) Category 'Y' components of guided missiles such as rocket motors;
- (c) Category 'Z' ammunition and explosives.

11. Other Category 'X' and 'Y' ammunition and explosives are stored at the Newington Depot.

12. Layout The facilities at Kingswood are zoned as follows:

(a) Non-explosive Zones:

- (i) Administration
- (ii) Workshops and non-explosives storage
- (iii) Housing (combined R.A.N./R.A.A.F. area)

(b) Explosive Zones:

- (i) Categories 'X' and 'Y' storage
- (ii) Category 'Z' storage
- (iii) Laboratories for conventional ammunition
(i.e. explosives workrooms)
- (iv) Assembly and test facilities for guided missiles
- (v) Demolition Area for destruction of unserviceable
ammunition and explosives (a joint R.A.N./
R.A.A.F. facility)

13. Staff The Depot is at present manned by a non-uniformed staff of 111 personnel. This number is expected to grow to over 160 next year.

14. The Need for Additional Facilities There is a need for the works proposals which comprise this reference. This is created partly by the requirement to handle increased supplies of the hitherto conventional items of ammunition and explosives for a growing fleet, and also by the use of more sophisticated weapons systems in newly acquired ships such as the Charles F. Adams class destroyers and Type 12 anti-submarine frigates. The introduction of new weapons which include the Tartar and Seacat sea-to-air missiles and the Ikara weapon system, has extended the range of items used, necessitating additional appropriate storehouses and examining, testing, assembling and repair facilities.

15. The wider range of armaments handled at Kingswood is causing the growth in the staff required to man the Depot with the result that additional administrative and amenities facilities are needed.

THE BUILDING PROPOSALS16. Stage I Proposals The Stage I proposals comprise:

Extension of Existing Mess Room:

The extension is to provide lunch facilities for another 50 men. The lunch room and locker room are to be enlarged and canteen facilities installed.

Foreman's Office:

This is a small office with verandah for the foreman of stores and his staff which will release accommodation now used by the foreman for new staff. The building will be 34 ft. by 24 ft.

Mechanical Workshop:

The immediate requirement is one bay, measuring 50 ft. by 25 ft., of a building with a sawtooth roof to accommodate staff carrying out general maintenance and repairing non-explosive stores. Future expansion at either end will be possible. Removable benches and an air compressor are to be provided.

Three Category 'Z' Stores:

These buildings, each 75 ft. by 50 ft., will provide storage for ammunition and explosives with a mass explosive risk. They are to be surrounded by traverses. They will be ceiled, without windows, and fitted with three roller shutter doors and two personnel doors. One, which is to be fitted with mechanical plant to control air temperature below 70°F., will accommodate Category 'Z' ammunition returned from ships and awaiting laboratory examination.

Non-explosive Store:

This building will house non-explosive components and will have four roller shutter doors and one personnel door. It will be 80 ft. by 40 ft.

Appliances Shed:

Material handling equipment, including fork lift trucks, side loaders and tow tractors, will be parked in this shed. It will be 50 ft. by 25 ft. and comprise four bays with a concrete apron and vehicle washing area. Parking bays will be fitted with work benches, a compressor and a sink.

17. Stage II Proposals The Stage II proposals comprise:-

Extensions to Change Room:

The present building is to be extended to provide locker and change facilities for 100 men. The existing toilets will also be extended. The lunch room facilities at present in this building will be relocated in the new mess room referred to below.

Extension of Office Accommodation:

The existing office accommodation is to be extended to provide individual offices, a general office, a small public space, a typistes' room, conference room, toilets and a tea room.

Empty Package Store:

The existing building will be extended for the storage of non-explosive components by an area of 43 ft. by 41 ft.

Two Category 'Z' Stores:

The first Category 'Z' store will be similar to those to be built in Stage I. The second, whilst similar in construction and finishes, will be 41 ft. by 22 ft. and fitted with six roller shutter doors. It will be specifically for the storage of high capacity and high explosive ammunition containing its own means of ignition.

Laboratory Area Store:

This building will provide additional storage and workshop facilities for ready-use non-explosive components and the storage of articles in the laboratory area. It will be 50 ft. by 25 ft., have windows and a roller shutter door.

New Mess Room:

This will replace the lunch room facilities in the existing mess room which is to be converted for changing facilities. It will have a lunch room and canteen for an increasing industrial and clerical staff. The building will measure 60 ft. by 20 ft.

Married Quarters:

Five 3-bedroom houses are to be erected in the R.A.A.F. married quarters area. They will be built to the Approved Scales and Standards of Accommodation for the Services in Peace.

18. Construction and Finishes Apart from the married quarters and the appliances shed, all buildings will have load bearing brick walls, corrugated asbestos cement roofs, steel roof trusses, concrete floors and concrete aprons similar to existing buildings. Internally, floors will be non-slip granolithic, walls will be rendered and painted and ceilings will be painted fibrous plaster.

19. The appliances shed will be framed with steel pipe columns, the roof will be supported on open web joists and the walls and roof will be sheeted with corrugated galvanised iron. The floor and apron will be concrete.

20. The married quarters will be in brick veneer with tiled roofs, timber floors and approved domestic finishes.

21. Engineering Services Hot water will be supplied as necessary to sinks, wash basins and showers from electric water heaters. Air compressors will be installed in the mechanical workshop and appliances shed. One Category 'Z' store will have mechanical plant in the roof space to control air temperature below 70°F.

22. The electricity supply will be by underground cable from the existing sub-station. Power outlets will be provided as required and where artificial lighting is necessary fluorescent fittings will be installed generally to the requirements of the appropriate Australian Standard Lighting Code. Special fittings will be supplied as necessary for safety against explosion.

23. Fire hydrants will be provided near buildings, and at buildings other than explosives stores internal hydrants will be installed. Portable fire extinguishers will also be provided. The placing of hydrants, hoses and extinguishers will be in accordance with the Commonwealth standards for explosives areas.

24. Buildings containing explosives will be provided with lightning protection consisting of finials connected to earth and external and internal metal parts of buildings will be bonded and earthed in accordance with R.A.N. safety requirements.

25. Roads generally will be gravel with a bitumen seal 20 ft. wide and 4 ft. shoulders. Operational parking and hardstanding areas will be 6 inch concrete. Minor parking areas will be of bitumen sealed gravel.

26. Traverses around explosives stores will comprise earth mounds with a batter of $1\frac{1}{2}$ to 1, with a 3 ft. wide crown, level with the store ceiling. Retaining walls at the front of the traverses will be in reinforced concrete with the reinforcement electrically bonded and earthed. Traverses will be grassed to prevent erosion.

27. The Committee recommend the construction of the works in this reference.

ESTIMATES OF COST

28. The estimated cost of the proposals when referred to the Committee was \$790,000 as follows -

Stage I:			
Extension of existing mess room		\$15,000	
Foreman's office		\$25,000	
Mechanical workshop		\$27,000	
Category 'Z' stores		{ \$88,000	
		{ \$84,000	
		{ \$91,000	
Non-explosive store		\$40,000	
Appliances shed		<u>\$20,000</u>	\$390,000

Stage II:

Extension of change room	\$2,000	
Extension of office	\$30,000	
Empty package store	\$24,000	
Category 'Z' stores	{ \$88,000	
	{ \$55,000	
Laboratory area store	\$30,000	
New mess room	\$25,000	
Five married quarters	\$66,000	
Road works	<u>\$80,000</u>	<u>\$400,000</u>
		<u>\$790,000</u>

29. The estimate for each building includes the services and roads directly associated with the building.

30. We noted that the estimates do not include additional costs arising from the recent increase in the basic wage.

PROGRAMME

31. It is expected that after an approval to proceed is given, about six months will be required for the completion of working drawings and tender documents, the invitation of tenders and letting of a contract in respect of Stage I. The plan is thus to commence this part of the work in the present financial year. Building work is scheduled to be completed 12 months after a contract is let.

32. A final programme has not been determined for Stage II, but it is expected that construction will commence concurrently with the completion of Stage I.

VIEWS OF NEW SOUTH WALES GOVERNMENT ON PROPOSED DEVELOPMENT

33. An aspect of the proposed development at the Kingswood Armament Depot which the Committee closely investigated related to the possible implications of increased traffic in naval explosives between Kingswood and Newington.

34. We found that the handling and movement of all naval explosives is controlled by the Commonwealth Explosives Act 1964 and the Explosives Regulations. The legislation specifies procedures to be followed and stipulates that relevant State laws can operate, notwithstanding the provisions of the Commonwealth Act and Regulations.

35. We sought and received an assurance from the Premier of New South Wales that his Government is satisfied that the safeguards provided and the strict supervision exercised over transport operations by the Commonwealth, are sufficient to ensure the safety of the general public. In these circumstances the State Government has no objection to the proposed development at Kingswood.

RECOMMENDATIONS AND CONCLUSIONS

36. 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.

	<u>Paragraph</u>
1. THERE IS A NEED FOR THE WORKS PROPOSALS WHICH COMPRISE THIS REFERENCE.	14
2. THE COMMITTEE RECOMMEND THE CONSTRUCTION OF THE WORKS IN THIS REFERENCE.	27
3. THE ESTIMATED COST OF THE PROPOSALS WHEN REFERRED TO THE COMMITTEE WAS \$790,000.	28
4. THE NEW SOUTH WALES GOVERNMENT HAS NO OBJECTION TO THE PROPOSED DEVELOPMENT AT KINGSWOOD.	35

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Chairman

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20th September, 1966.