
The Parliament of the Commonwealth of Australia

Redevelopment of Kokoda Barracks, Canungra, Queensland

Parliamentary Standing Committee on Public Works

August 2005
Canberra

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Membership of the Committee

Chair Hon Judi Moylan MP

Deputy Chair Mr Brendan O'Connor MP

Members Mr John Forrest MP

Senator Alan Ferguson

Mr Harry Jenkins MP

Senator the Hon Judith Troeth

Mr Bernie Ripoll MP

Senator Dana Wortley

Mr Barry Wakelin MP

Committee Secretariat

Secretary Mrs Margaret Swieringa

Inquiry Secretaries Mr Raymond Knight


Ms Vivienne Courto

Administrative Officer Mr Peter Ratas



List of Abbreviations

ADF	Australian Defence Force
Defence	Department of Defence
ESD	Ecologically Sustainable Development
FIC	Fundamental Inputs to Capability
LEAP	Living Environment Accommodation Precinct
LIA	Living In Accommodation
RMA	Revolution in Military Affairs
RTC	Regional Training Centre



Extract from the Votes and Proceedings of the House of Representatives

No. 28 dated Wednesday, 11 May 2005

**27 PUBLIC WORKS – PARLIAMENTARY STANDING COMMITTEE –
REFERENCE OF WORK – REDEVELOPMENT OF KOKODA BARRACKS,
CANUNGRA, QLD**

Dr Stone (Parliamentary Secretary to the Minister for Finance and Administration), 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: Redevelopment of Kokoda Barracks, Canungra, Qld.

Question – put and passed.



List of Recommendations

3 Issues and Conclusions

Recommendation 1

The Committee recommends that Defence continue consultation with the Department of Environment and Heritage regarding any heritage issues that may arise from the redevelopment of Kokoda Barracks.

Recommendation 2

The Committee recommends that the proposed redevelopment of Kokoda Barracks, Canungra, Queensland, proceed at the estimated cost of \$86.7 million.

Introduction

Referral of Work

- 1.1 On 11 May 2005 the proposal for the Redevelopment of Kokoda Barracks, Canungra, Queensland, was referred to the Public Works Committee for consideration and report to the Parliament in accordance with the provisions of the *Public Works Committee Act 1969* (the Act).¹ The proponent agency for this work is the Department of Defence (Defence).
- 1.2 The Hon Dr Sharman Stone MP, Parliamentary Secretary to the Minister for Finance and Administration, advised the House that the estimated cost of the proposed works was \$86.7 million. Subject to parliamentary approval, works are planned to commence late this year, and be completed by December 2007.

Background

Kokoda Barracks

- 1.3 A Land Headquarters Training Centre (Jungle Warfare) was first established at Canungra in 1942 to provide training for Australian troops before their departure for combat in World War II. Canungra was chosen as it best replicated the environment of the Pacific Region and was accessible by an existing railway facilitating the easy movement of troops

¹ Extract from the *Votes and Proceedings of the House of Representatives*, No. 28, Wednesday 11 May 2005

between Brisbane and Canungra. The Jungle Training Centre closed shortly after the end of the war, to reopen in 1954 in response to perceived threats emerging in South-East Asia.

- 1.4 The former School of Tactics and War Administration relocated to Canungra in 1960 and became the Command, Staff, and Operations Wing in 1997. A Warrant Officer Wing, established in 1976, became the Warrant Officer and Non-Commissioned Officer Wing in 1978. In 1998 the two wings amalgamated to become to become the Army Promotion Training Centre. The Army Promotion Training Centre became Headquarters Regional Training Centres in December 2000.
- 1.5 The former School of Military Intelligence relocated to a purpose-built facility at Canungra in 1984. In 1994 the intelligence training resources of the Defence Intelligence Organisation, Royal Australian Air Force, and the Royal Australian Navy amalgamated as the Defence Intelligence Training Wing at Canungra. In 1997 the School of Military Intelligence and the Defence Intelligence Training Wing amalgamated as the current Defence Intelligence Training Centre and relocated to its new facility in 2003.

Site of Proposed Works

- 1.6 Kokoda Barracks is located two kilometres east of the township of Canungra, approximately ninety kilometres south of Brisbane and thirty-five kilometres west of the Gold Coast.² The military area at Canungra comprises about 6,000 hectares and consists of the Cantonment, where Kokoda Barracks is situated on about 100 hectares, and the Close Training Area where field-training activities are carried out.³
- 1.7 All of the proposed works are within Kokoda Barracks. The property is Commonwealth owned and Defence controlled, and is designated for "Defence Special Purposes". The redevelopment does not require the acquisition of additional land.⁴

2 Appendix C, Submission No. 1, paragraph 37

3 *ibid*, paragraph 5

4 *ibid*, paragraph 57

Inquiry Process

1.8 The Committee is required by the Act to consider public works over \$6 million⁵ and report to Parliament on:

- the purpose of the work and its suitability for that purpose;
- the need for, or the advisability of, carrying out the work;
- whether the money to be expended on the work is being spent in the most cost effective manner;
- the amount of revenue the work will generate for the Commonwealth, if that is its purpose; and
- the present and prospective public value of the work.⁶

1.9 The Committee called for submissions by advertising the inquiry in *The Courier Mail* on Saturday, 29 May 2005. The Committee also sought submissions from relevant government agencies, local government, private organisations and individuals, who may be materially affected by or have an interest in the proposed work. The Committee subsequently placed submissions and other information relating to the inquiry on its web site in order to encourage further public participation.

Inspection and Public Hearing

1.10 On 20 July 2005 the Committee visited the Kokoda Barracks, Canungra, Qld, and inspected the site and environs of the proposed works. A confidential briefing from Defence and a public hearing were held within the Kokoda Barracks later that day.⁷

5 *Public Works Committee Act 1969*, Part III, Section 18 (8)

6 *ibid*, Section 17

7 See Appendix D for the official Hansard transcript of the evidence taken by the Committee at the public hearing on Wednesday, 20 July 2005 Kokoda Barracks, Canungra, Qld

The Proposed Works

Purpose

2.1 The proposed development will provide working and domestic accommodation and engineering services infrastructure required for the ongoing delivery of effective training at the Canungra Military Training Area.¹ Redevelopment involves:

- correction of working and training accommodation deficiencies;
- rationalisation of messing facilities;
- improvements to living-in accommodation for trainees;
- upgrading of the engineering services infrastructure; and
- disposal of redundant, high maintenance facilities.²

Need

2.2 Buildings, facilities and infrastructure at Kokoda Barracks are ageing, do not meet current codes and standards and require redevelopment and upgrading. Training requirements, mentioned in the Defence White Paper *Defence 2000* and considered a part of the Fundamental Inputs to

1 Appendix C, Submission No. 1, paragraph 11

2 *ibid*, paragraph 10

Capability (FIC), reinforce the need to maintain intelligence training and associated facilities at Kokoda Barracks.³

- 2.3 Over 70 per cent of the buildings at Kokoda Barracks were constructed before 1975. Most of the pre-1975 buildings are timber-framed construction, clad with either timber or metal sheeting which require higher maintenance costs for structural repairs and repainting and are susceptible to termite damage. Most of the facilities, particularly those used for training delivery are equipped with outdated technology, do not meet Occupational Health & Safety (OH&S) standards, and require high levels of maintenance.⁴
- 2.4 While the existing services infrastructure remains operational, it is ageing and some services such as water reticulation and sewer works require replacement or significant upgrade.
- 2.5 The efficient use of many buildings is no longer possible because of:
- an increase in personnel numbers;
 - changes in functional requirements; and
 - advances in training methodology.⁵

Scope

- 2.6 The proposed redevelopment of Kokoda Barracks involves:
- construction of six new assets;
 - extensions to four existing assets;
 - upgrading of thirteen existing assets;
 - OH&S rectification of six assets;
 - new and upgraded infrastructure services; and
 - the removal of and disposal of about twenty-six redundant facilities.⁶

3 Appendix C, Submission No. 1, paragraph 17

4 *ibid*, paragraph 9

5 *ibid*

6 *ibid*, paragraph 54

Project Delivery

- 2.7 Subject to parliamentary approval, the redevelopment of Kokoda Barracks could commence in the latter half of 2005 with completion by January 2008.⁷
- 2.8 The delivery system proposed for this project is “Managing Contractor”. A Project Manager/Contract Administrator would also be appointed. The Managing Contractor arrangement would provide the benefit of a large construction firm managing design and construction, while promoting access for local small to medium enterprises through sub-contract design and construction trade packages. This arrangement would permit closer coordination of a number of individual works to ensure that Kokoda Barracks remains operational.⁸

Cost

- 2.9 The estimated outrun cost of the proposed redevelopment of Kokoda Barracks is \$86.7 million, excluding GST. This figure includes:
- construction costs with fit out;
 - professional fees;
 - furniture and fittings; and
 - a contingency sum.⁹

7 Appendix C, Submission No. 1, paragraph 18

8 *ibid*, paragraph 81

9 *ibid*, paragraph 39

Issues and Conclusions

Barracks Services

Living In Accommodation (LIA)

- 3.1 Defence's main submission stated that forty percent of the total project budget estimate would be allocated to works associated with living-in accommodation and messing.¹ The Committee requested further detail on the breakdown of number of rooms, both new and refurbished, for LIA.
- 3.2 Defence informed the Committee that there are currently 460 LIA rooms and 58 day rooms at Canungra. After redevelopment there would be a total of 421 rooms: 415 LIA rooms for trainees and 6 for permanent Other Ranks staff. Of the 421 rooms, 106 would be new and 315 would be refurbished. The area of personal living space of the rooms would range from 14 square metres to 18 square metres.²

Medical Centre

- 3.3 Defence proposed the Base Medical Centre would receive minor repairs and upgrades, but would not provide in-patient care.³ The Committee

1 Appendix C, Submission No. 1, paragraph 55

2 Letter from Brigadier Peter Hutchinson, Director General, Infrastructure Asset Development, 26 July 2005

3 Appendix C, Submission No. 1, paragraph 30

sought further detail on the medical facilities at Kokoda Barracks, and what would happen in the case of medical emergency.

- 3.4 Defence explained that the Base Medical Centre at Kokoda Barracks is for daytime hours, with a medical officer on duty, and is the first port of call for most instances. In case of medical emergency where the Base Medical Centre cannot adequately treat the injury/ailment (or if it is after hours), local/military ambulance transfer the patient to Allamanda hospital. If the particular case is not a medical emergency, the patient is transferred to the military hospital at Enoggera 2nd Health Support Battalion.⁴

Childcare Facilities

- 3.5 In its main submission Defence stated that the existing childcare centre at Kokoda Barracks has sufficient capacity to accommodate the requirements of the staff at the barracks.⁵ At the public hearing the Committee sought further detail in respect of the childcare facility. Defence informed the Committee that there are two components to the childcare facility:

- a two day kindergarten (or pre-school in Queensland), for three to four year olds; and
- three day (Wednesday to Friday) limited hours care for barracks staff.

Some families, who live off-base, also make use of the on-base childcare centre.⁶

Sewage Treatment

- 3.6 As stated in Defence's main submission, part of services infrastructure work for the project includes construction of a new sewage treatment plant.⁷ The Committee was interested as to the specific reasons Defence had opted not to integrate sewage works with the Beaudesert Shire Council's plant, as well as the issue of reuse of water.
- 3.7 Defence explained to the Committee that the existing on-base sewage treatment plant does not meet current standards and building a new on-base sewage treatment plant would satisfy Defence ESD principles and be more cost-effective. Connecting to the Beaudesert Shire Council sewage treatment system would incur a significant increase in cost, and effluent

4 Appendix D, Official Transcript of Evidence, page 4

5 Appendix C, Submission No. 1, paragraph 64

6 Appendix D, Official Transcript of Evidence, page 10

7 Appendix C, Submission No. 1, paragraph 24a

from the barracks would be required to be treated off-base, eliminating future on-site recycling opportunities. The new sewage treatment plant would upgrade the quality of treatment to a contemporary tertiary discharge standard and discharge the effluent into the Coomera River (the same discharge point as the existing plant).⁸

3.8 Subsequent to the public hearing Defence informed the Committee that ESD principles have been applied to the reuse of water at the base as follows:

- Water is taken from the established dam on the Coomera River and treated in the Defence water treatment plant (which provides total water use requirements for the Cantonment).
- Stormwater is diverted into the dam via overground channels, thus can be harvested or added to the environmental flow in the river.
- All sewage is treated at the Defence sewage treatment plant and discharged below the dam, into the river.

Other proposals for reuse of water such as, the reusing of sewage effluent to irrigate sports fields, is not planned due to high estimated capital costs.⁹

Power Supply

3.9 At the public hearing, Defence stated that the project was aiming for a 30 year design life allowing for a mid-life upgrade after 15 years.¹⁰ The Committee sought confirmation that the power supply to the barracks would be sufficient for the 30 year design life. Defence responded that through continued consultation and correspondence between the Defence regional office and the power supplier, they are confident power requirements of the barracks will be met.¹¹

8 Appendix D, Official Transcript of Evidence, page 5

9 Letter from Brigadier Peter Hutchinson, Director General, Infrastructure Asset Development, 26 July 2005

10 Appendix D, Official Transcript of Evidence, page 6

11 *ibid*, page 11

Building Design

Climatic Considerations

- 3.10 Defence's main submission stated that structural design would take account of the highly reactive soils and high level of rainfall of the Canungra area.¹² Conscious of the challenges that arise from such climatic conditions, such as the cracking and deteriorating of buildings (as observed on the site inspection), the Committee enquired what measures Defence were undertaking to deal with these issues.
- 3.11 Defence assured the Committee that there are measures incorporated into building design to exclude water from getting into soil under buildings which can cause cracking and movement. Some specific measures include keeping garden beds away from the edge of buildings and, ensuring the foundation system is stiff enough to manage any unpreventable movement. The design principle would be:
- ...to have the building move as a whole on effectively a stiff foundation rather than let it articulate and cause differential movement through the building.¹³

Roofing

- 3.12 Metal roofing appropriate to the environment was another design feature mentioned in Defence's main submission.¹⁴ The Committee sought more detail on the specific type of roofing material to be used, and the benefits of the particular roofing type. Defence explained that corrugated iron roofing would be used with this project as it is consistent with the heritage of the base, and is widely used with sound results in the Canungra area. The sheeting profile of flatter pitch would be incorporated to allow water to run off whilst minimising chances of leaking through the roof. The expected life of the metal roofing is 30 years, consistent with the overall life 30 year design life of the redevelopment.¹⁵

12 Appendix C, Submission No. 1, paragraph 72

13 Appendix D, Official Transcript of Evidence, page 6

14 Appendix C, Submission No.1, paragraph 72

15 Appendix D, Official Transcript of Evidence, page 6

Air-conditioning

- 3.13 Whilst acknowledging Defence's awareness of Legionella Bacillus, as outlined in main submission,¹⁶ the Committee sought further information on the benefits of the air-conditioning systems to be used in the project. Defence informed the Committee that air-conditioning systems had been chosen specifically for the type of use of the building, citing hours of use and levels of personnel occupation as examples of factors that had been considered.¹⁷
- 3.14 Defence listed examples of types of air-conditioning systems to be used in buildings as follows:
- Trainee accommodation: bar heaters, fans and natural ventilation.
 - Staff accommodation: chilled air-conditioning (split-units).
 - Office buildings and training facilities: ducted central air-conditioning and external air-cooled cooling plants.

Through the air-conditioning systems chosen, Defence aim to reduce energy use and greenhouse emissions.¹⁸

- 3.15 Defence further explained that Building A1 (a training building) would utilise a system where, during particular climatic conditions, the building would be heated or cooled by breathing as opposed to chilling or heating the air.

Workstation Size

- 3.16 Plans for Building B2, included in Defence's main submission,¹⁹ outline configuration for workstations. The Committee wished to know whether personnel had been allocated sufficient work space. Subsequent to the hearing, Defence informed the Committee that:

Individual offices are provided at entitlement, nominally 12m²...Every staff position identified will be provided with either a desk or workstation in an open-plan environment, using a basic area entitlement of 6.5m² per person.²⁰

16 Appendix C, Submission No. 1, paragraph 67

17 Appendix D, Official Transcript of Evidence, page 6

18 *ibid*, page 7

19 Appendix C, Submission No. 1, Attachments 2 and 3

20 Letter from Brigadier Peter Hutchinson, Director General, Infrastructure Asset Development, 26 July 2005

Personnel who share a position or attend work on a temporary basis, would share the workstation provided for that position.

Removal of Asbestos

- 3.17 Defence's main submission explained that the project includes the removal and disposal of about 45 redundant facilities, with all removals/demolition complying with cultural heritage requirements and ESD criteria.²¹ The Committee sought further detail on the materials that would require removal, and confirmation that any removal would be executed in accordance with relevant codes, standards and Queensland State legislation.
- 3.18 Defence informed the Committee that 22 of the 45 redundant buildings to be demolished contain asbestos. Buildings to be refurbished would be surveyed prior to construction to ensure asbestos is identified and removed.²²
- 3.19 Defence responded that asbestos, mostly in the form of sheeting in roofs and walls, had been identified as the hazardous material in buildings. Furthermore, Defence assured the Committee that the asbestos would be removed by qualified, licensed and experienced sub-contractors, taking precaution to avoid potentially hazardous situations such as where the asbestos may become airborne. Any removal of asbestos would be arranged to occur within a confined building site, separated from other operations of the base.²³

Heritage Considerations

- 3.20 The high heritage value of Kokoda Barracks was identified in Defence's main submission.²⁴ The Committee sought further detail on how Defence intended to manage heritage considerations arising from the project.
- 3.21 A number of informal meetings between Defence and the Australian Heritage Commission (AHC) were held in 2003, with the AHC writing to

21 Appendix C, Submission No. 1, paragraph 35

22 Letter from Brigadier Peter Hutchinson, Director General, Infrastructure Asset Development, 26 July 2005

23 Appendix D, Official Transcript of Evidence, page 8

24 Appendix C, Submission No. 1, paragraph 47-48

Defence in September 2003 supporting the draft heritage assessment and concept plans for museum and visitors centre. As concept plans had been revised, a June 2005 heritage impact statement prepared by Environment Resource Management (ERM) addressed the changes and ensured that heritage values were not compromised.²⁵

3.22 Defence reported that an ERM heritage consultant had been contracted to provide a methodology for the identification, recording and rating of buildings which may present heritage concerns. Of the buildings to be demolished:

- nine have been identified to have moderate heritage value;
- three are identified to have little heritage value; and
- the remaining buildings are below the 'little heritage value' assessment.²⁶

Subsequent to the public hearing, Defence informed the Committee that the Managing Contractor would source a specialist consultant from the Defence Heritage Panel to conduct the heritage recording prior to demolition in accordance with the Directorate of Heritage Management instruction. In line with changes to Commonwealth heritage legislation, consultation regarding heritage issues is now undertaken with the Department of the Environment and Heritage.²⁷

Recommendation 1

The Committee recommends that Defence continue consultation with the Department of Environment and Heritage regarding any heritage issues that may arise from the redevelopment of Kokoda Barracks.

Traffic Management

3.23 The Committee enquired as to what consultation had taken place in respect of the proposed changes to the main entry road to the base, and the benefits of changing the entry/exit point to the base. Subsequent to

25 Appendix D, Official Transcript of Evidence, page 10

26 *ibid*

27 Letter from Brigadier Peter Hutchinson, Director General, Infrastructure Asset Development, 26 July 2005

the hearing, Defence responded that the Beaudesert Shire had no objections to the submitted design, including changes to the Canungra Beachmont Road.

3.24 Defence continued that:

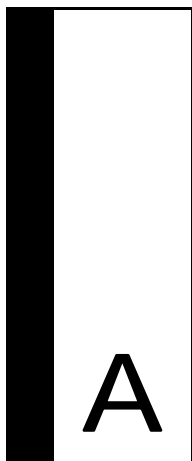
The proposed entry/exit and fencing scheme will provide a safe entry/exit point to the base, circumventing the problems of the past, caused by traffic queuing on the main road to enter the base. This design also improves visitors' access to the proposed visitors' centre and museum building and the nearby memorials.²⁸

Recommendation 2

The Committee recommends that the proposed redevelopment of Kokoda Barracks, Canungra, Queensland, proceed at the estimated cost of \$86.7 million.

Hon Judi Moylan MP
Chair
17 August 2005

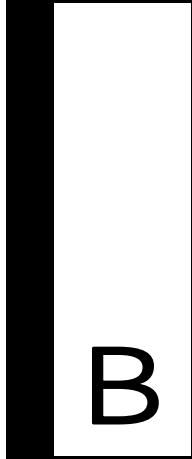
28 Letter from Brigadier Peter Hutchinson, Director General, Infrastructure Asset Development, 26 July 2005



Appendix A – List of Submissions

Submissions

1. Department of Defence



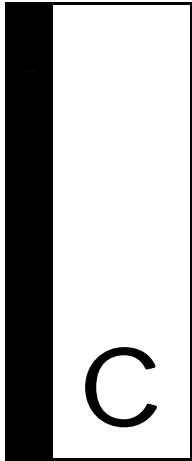
Appendix B – List of Witnesses

Lieutenant Colonel Mark Cooper, Chief of Staff, Headquarters of the Regional Training Centres, Kokoda Barracks Canungra, Australian Army, Department of Defence

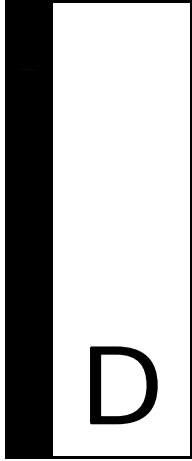
Brigadier Peter Hutchinson, Director General Infrastructure Asset Development Branch, Department of Defence

Mr Bob Sheppard, Project Director South Queensland, Infrastructure Asset Development Branch, Department of Defence

Mr Chris Stanley, Business Development Manager, Special Projects, John Holland Pty Ltd



Appendix C – Submission No. 1 from the
Department of Defence



Appendix D – Official Transcript of
Evidence