4

Issues

- 4.1 This chapter comments on the following issues which arose during the Inquiry:
 - operational effectiveness and efficiency;
 - cost of the project;
 - engagement of managing contractor;
 - refurbish or replace;
 - vehicle accommodation;
 - consultation with stakeholders;
 - environment; and
 - heritage.

Operational effectiveness and efficiency

4.2 The function of 3rd Brigade at Lavarack Barracks has been endorsed by the Defence White Paper *Defence 2000 – Our Future Defence Force*:

the Government plans to structure the Army to ensure that we will be able to sustain a brigade deployed on operations for extended periods, and at the same time maintain at least a battalion group available for deployment elsewhere ...

The brigades, each of around 3,000 personnel, will include, in addition to infantry battalions, a range of specialised combat units such as armour, artillery, aviation, combat engineers, and logistics and support units ...

The third Brigade, based in Townsville, will continue to provide light, air-mobile forces available for immediate deployment ...¹

- 4.3 Defence contends that the existing Lavarack Barracks facilities, which are about 35 years old, do not adequately reflect the current structure or the functionality required for the 3rd Brigade to promote its operational effectiveness and efficiency.²
- 4.4 According to Defence, the proposed Stage 3 redevelopment works will significantly enhance the overall effectiveness of the 3rd Brigade, Training Command units and some supporting functions located at Lavarack Barracks.
- 4.5 Redevelopment of the Barracks as proposed under Stage 3 will improve operational effectiveness and efficiency because it will:
 - improve communication and broader functionality by collocation of like Barracks functions;
 - improve unit effectiveness by providing facilities that reflect the work practices and functional relationship of respective organisations;
 - provide efficient storage areas and workshops to fully support units and sub-units, complete with environmental controls; and
 - improve morale by providing working accommodation to contemporary standards.
- 4.6 The redevelopment will also result in other benefits in that it will:
 - deliver efficiencies to the Dental Clinic via collocation with the existing Medical Centre, and also provide for shared use;
 - alleviate occupational health and safety problems stemming from use of cramped, unsuitable and temporary accommodation;
 - facilitate training tasks by providing facilities of an appropriate standard for the task being performed;
 - reduce consumption of Defence maintenance funds by demolishing facilities that are no longer required; and
 - provide showers and toilets and for the storage of personal equipment.
 Brigadier Kelly pointed out that:

When this barracks was built 35 years ago, those facilities were only provided – showers in particular – for those living in ... the new facilities will provide showers for all members in close

¹ Defence, Submission, p.12.

² Brigadier Garry Kelly, Evidence. p.2.

proximity to secure storage of their personal equipment. Their personal equipment normally consists of a trunk and personal webbing. In years past, that has sat on floors in offices, hung in laundries and in ad hoc circumstances ... If we follow the Robertson Barracks model, we will provide individual cages for each person's equipment.³

Cost of the project

- 4.7 The Committee was asked to consider the proposed Stage 3 redevelopment at a capped budget of \$170 million. This includes construction costs, professional design and management fees, furniture, fittings and equipment, together with an allowance for contingency and escalation, but excludes any goods and service tax liability.
- 4.8 Defence submitted that the current estimate for the scheduled work is \$230 million and that:

opportunities for some rationalisation and sharing are to be exploited with a view to maximising scope to be delivered within the cost cap.⁴

4.9 Defence stated that the scope of the remaining Lavarack Barracks redevelopment project exceeds \$400 million. However, a decision was taken to select smaller components of the overall project because it was considered that the project could be more effectively delivered in this way. Brigadier Kelly explained that Defence had:

selected a certain amount of scope and we priced that. It currently comes to \$230 million. However, for other reasons, on the basis of our capital infrastructure budget within Defence we are limited in this stage to \$170 million. So we have a scope which we know currently exceeds our estimates ... I believe that, when we get into the value management stage, we will find further savings. That is certainly the intent: to reduce the cost so that we can deliver more of the scope out of the total package than we currently can.⁵

- 4.10 The Committee is concerned that Defence did not present the Committee with a cost estimate incorporating anticipated savings which could increase the scope of work to be undertaken.
- 4.11 In response to a request for further information Defence advised that the:

- 4 Brigadier Garry Kelly, Evidence, p.2.
- 5 Brigadier Garry Kelly, Evidence, p.9.

³ Brigadier Garry Kelly, Evidence, p.5.

outturn budget is based on funding available within the Defence Capital Facilities Budget, acknowledging that the cost of briefed scope exceeds this budget and that a further stage will be required for scope not yet briefed. The intent in briefing additional scope is to provide flexibility should savings be achieved or additional funding be made available from the Defence budget.⁶

- 4.12 Defence advised that, subject to parliamentary approval, the works are planned to be committed in late 2001, with construction commencing in 2002. Project completion is planned for 2005.
- 4.13 Over the envisaged construction period of about three years, approximately 300 personnel will be directly employed on construction activities. Defence anticipates that construction will generate further job activities off-site in the prefabrication, manufacture and distribution of materials.⁷

Engagement of Managing Contractor

- 4.14 The project will be delivered using the Defence Managing Contract form which, according to Defence, provides the benefit of a large construction firm managing design and construction while ensuring benefits to local small and medium enterprises through sub-contracting of design and trade construction packages.⁸
- 4.15 Brigadier Kelly stated that the process is in accordance with Commonwealth policy. The managing contractor is expected to do the sub-contracting but, on behalf of Defence, a project consultant has to agree to the strategy, the approach to tendering and the short list in the first stage and then approves the recommended winner of the sub-contracting process.
- 4.16 The process had been favourable to local contractors. The experience of the Stage 2 redevelopment and other Defence projects has shown that local contractors secure about 75 per cent of the sub-contract work.⁹
- 4.17 Mr Murray Frame, Project Manager, Thiess Pty Ltd explained that the adopted strategy is one of competitive tendering in a manner that enables local business to participate, with packages of an appropriate size which are within the capabilities of the local businesses in Townsville:

- 8 Defence, Submission, p.32.
- 9 Brigadier Garry Kelly, Evidence, p.15.

⁶ Defence, Submission, p.73.

⁷ Brigadier Garry Kelly, Evidence, p.2.

We understand the capabilities of the local businesses here and we package accordingly. In stage 2 we had 199 work packages, both for design consultants and trade sub-contractors. We would expect to have a similar number of those, of varying sizes, to match off against the capabilities.¹⁰

- 4.18 Brigadier Kelly pointed out that another advantage of the managing contractor approach was that over a long building project, such as the projected three to four years of the third phase redevelopment, a close relationship develops between the contractor and the Brigade. This allows for minimisation of risks and costs of making changes, particularly when there is an element of decanting personnel to other areas while construction is underway.¹¹
- 4.19 The Committee was advised that Thiess, the managing contractor for the Stage 2 redevelopment, has not been appointed as the managing contractor for Stage 3. However, where the stages of a project are likely to overlap, in accordance with the conditions of tendering competitively for Stage 2, Defence has the right to re-appoint the same managing contractor for Stage 3 for a number of reasons. It would:
 - retain the corporate knowledge and the liaison that Thiess has built up in the Brigade over the last three years;
 - maintain an orderly flow of delivery; and
 - bring about efficiencies in engaging the organisation that is already established on-site.¹²
- 4.20 Brigadier Kelly advised that, subject to receiving a favourable bid from Thiess and subject to satisfactory performance by Theiss in Stage 2, it is Defence's intention to re-appoint Theiss as managing contractor for Stage 3.¹³

Refurbish or replace?

4.21 In its submission Defence stated that a comprehensive redevelopment of the existing facilities is not as cost effective as constructing new facilities, given the location and nature of the existing facilities.¹⁴

¹⁰ Mr Murray Frame, Evidence, p.15.

¹¹ Brigadier Garry Kelly, Evidence, p.9.

¹² Brigadier Garry Kelly, Evidence, p.17

¹³ Brigadier Garry Kelly, Evidence, p. 17.

¹⁴ Defence, Submission, p.16.

4.22	Defence based this view on the findings of a consultant engaged to develop the capability proposal. The consultant, Connell Wagner, estimated the cost of a refurbished building to be 75 per cent of the cost of a new building. ¹⁵
4.23	The cost of refurbishment would include the removal and replacement of all finishes, fitments, windows and services. It was assumed that only the roof, structure and some in-ground services would be fully retained with walls subject to partial replacement.
4.24	Defence advised that on the basis of refurbishment costs being 75 per cent of new construction costs, new construction would generally be preferred.
4.25	Brigadier Kelly pointed out that studies addressing various options, including refurbishment, had indicated that because of the state of the facilities and the fact that they were so dysfunctional, in almost every case it was 'economically smart' to construct new facilities rather than refurbish. ¹⁶
4.26	The benefits of new construction would be longer life, more functional layout, better organisational alignment and improved opportunities for current building and environmental techniques. Defence added that because all buildings are of like construction and age, the model could be applied with confidence across the barracks.
Vehicle accommodation	
4.27	In the course of its inspections of Lavarack Barracks the Committee noted

- 4.27 In the course of its inspections of Lavarack Barracks the Committee noted that a significant proportion of the Brigade's vehicles could not be stored under cover. In response to the Committee's questions about whether the proposed facilities would provide adequate cover, Brigadier Kelly explained that the user requirement was based on interviews conducted with each unit and an examination of their establishment, that is, the list of vehicles that the unit owns. The costings are based on providing shelters for all vehicles that can appropriately be put under a shelter.¹⁷
- 4.28 The Committee noted that not only was there potential vehicle deterioration as a result of exposure to the elements, but that the exposed conditions were also inadequate for personnel working on the vehicles.

¹⁵ Defence, Submission, p.73.

¹⁶ Brigadier Garry Kelly, Evidence, p.6.

¹⁷ Brigadier Garry Kelly, Evidence, p.7.

- 4.29 Defence proposes to tailor the vehicle accommodation to the dimensions of the vehicles with a 25 per cent expansion capability, as occurred at Robertson Barracks.¹⁸
- 4.30 Robertson Barracks will also serve as a model for the construction of facilities such as pits and hoists, and for environmentally acceptable and appropriate oil recovery procedures.¹⁹

Consultation with stakeholders

4.31 The Committee found that at this stage the consultation process with user groups had not commenced as the plans were at the indicative phase.Brigadier Kelly described the process of consultation which would be implemented:

The common way we do this is ... to talk to ... the people who have an understanding of how their organisation works and a broad picture of how they want it to work ... Once we agree commonality and some broad themes we then go to the user group meetings at a very detailed level. That means getting the mechanic from the workshop floor to work with us and tell us how he or she works ... So that happens during the value management stage.²⁰

- 4.32 Defence advised that the following organisations will be consulted during development of the project:
 - Federal and State Government representatives for the area;
 - Environment Australia;
 - Townsville City and Thuringowa Councils;
 - Queensland Fire Brigade;
 - Townsville and Thuringowa Chambers of Commerce;
 - State Development Centre;
 - Australian Greenhouse Office;
 - Royal Institute of Architects; and

¹⁸ Brigadier Garry Kelly, Evidence, p.8.

¹⁹ Brigadier Garry Kelly, Evidence, p.8.

²⁰ Brigadier Garry Kelly, Evidence, p.16.

Institution of Engineers, Australia.²¹

Environment

- 4.33 Environment Australia advised that the proposal had not been referred under the *Environment Protection and Biodiversity Conservation Act 1999* for assessment of environmental significance.²²
- 4.34 Defence, however, maintained that it had considered the project in relation to the *Environment Protection and Biodiversity Act 1999* with reference to the impacts of National Environmental Significance as defined under the Act.
- 4.35 According to Defence, there are no issues relating to the defined impacts which include:
 - world heritage;
 - specific wetland types;
 - listed threatened or endangered species;
 - nuclear activities;
 - activities affecting Commonwealth marine areas;
 - significant impacts on Commonwealth land; and
 - external impacts affecting Commonwealth land.²³
- 4.36 Defence has undertaken to inform Environment Australia of the project.²⁴
- 4.37 Brigadier Kelly advised that an internal Defence environmental certificate of compliance for the proposed works has been issued in accordance with Defence environmental management policy.²⁵ An Environment Management Plan was prepared for the Barracks in 1999. All design, construction and commissioning activities associated with redevelopment Stage 3 will be required to comply with that Plan.
- 4.38 Defence assured the Committee that during construction of the proposed works, safeguards will be taken to minimise noise and dust emanating from construction sites and to prevent run-off contamination. An

²¹ Defence, Submission, p.32.

²² Environment Australia, Submission, p.69.

²³ Defence, Submission, p.31.

²⁴ Defence, Submission, p.31.

²⁵ Brigadier Garry Kelly, Evidence, p.3.

environmental construction management plan is to be developed by the Managing Contractor and approved before construction commences.

Heritage

- 4.39 The Australian Heritage Commission stated that there are no places entered in the Register of the National Estate likely to be affected by the proposed redevelopment.
- 4.40 The Commission advised however that the Register of the National Estate is not a comprehensive list of places with heritage value. A report prepared in 1997 by Peter Bell for the Department of Defence found that Lavarack Barracks had a level of heritage significance likely to satisfy Criterion A.a4 (importance for association with events, developments or cultural phases which have had a significant role in the human occupation and evolution of the nation, State, region or community), Criterion F.1 (importance for its technical, creative) and Criterion G.1 (importance as a place highly valued by a community for religious, spiritual, symbolic, cultural, educational or social associations).²⁶
- 4.41 The report recommended that further study be done on the most appropriate way to recognise the cultural heritage significance of the place as a whole. The report noted that it would be appropriate to have a management plan in place to deal with heritage decisions affecting the future of some of the early buildings.
- 4.42 The Heritage Commission also advised that, in relation to the Stage 2 redevelopment, it had advised the Committee that Lavarack Barracks be the subject of a heritage survey and that an evaluation be made of the impact of the proposals on any identified heritage values.
- 4.43 With respect to Stage 3 the Commission advised that, although:

Lavarack Barracks is not entered in the Register of the National Estate, ... it would be appropriate to undertake more detailed investigations to assess the nature and significance of the base and any important elements it may contain. The proposed Lavarack Barracks Redevelopment Stage 3 could then be evaluated on the basis of any identified heritage values.²⁷

4.44 Defence advised that the Stage 2 redevelopment of Lavarack Barracks included an Environmental Impact Assessment Report (February 1999)

²⁶ Australian Heritage Commission, Submission, p.67.

²⁷ Australian Heritage Commission, Submission, p.68.

which included a review of heritage aspects. While no aboriginal sites were identified the potential for such sites was noted. Stage 2 contractors have been required to report and protect any such sites that are uncovered during construction. Defence further advised that the same requirements will apply to Stage 3 contractors.

- 4.45 A few European heritage sites of minor importance were identified. These sites have been disturbed in the decades prior to their identification and they are outside the area planned for the Stage 3 works.
- 4.46 Defence advised that while the Stage 2 redevelopment project was predominantly on green field sites and had minor impact on the existing infrastructure of the base as a whole, the Stage 3 project will have a greater impact. Consequently:

a development of a management plan to recognise cultural heritage significance will be one of the first consultancies to be arranged in planning the project.²⁸

4.47 Defence advised the Committee that a copy of the plan will be made available to the Australian Heritage Commission when completed.²⁹

29 Defence, Submission, p.71.

²⁸ Defence, Submission, p.71.