

Submission No. 1
(Enhanced Land Force Stage 1 Facilities Project)

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ENHANCED LAND FORCE STAGE 1 FACILITIES

LAVARACK BARRACKS, TOWNSVILLE, QUEENSLAND AND OTHER DEFENCE BASES

STATEMENT OF EVIDENCE TO THE PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

**DEPARTMENT OF DEFENCE
CANBERRA, ACT
NOVEMBER 2008**

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ENHANCED LAND FORCE STAGE 1 FACILITIES AT LAVARACK BARRACKS, TOWNSVILLE, QUEENSLAND AND OTHER DEFENCE BASES

PART A – IDENTIFICATION OF THE NEED

INTRODUCTION

1. This evidence to the Parliamentary Standing Committee on Public Works presents a proposal to provide facilities and supporting infrastructure for the Enhanced Land Force Project Stage 1.
2. This project proposes to construct new, extended or refurbished facilities in the following locations:
 - a. Queensland - Lavarack Barracks, Townsville and Royal Australian Air Force (RAAF) Base Amberley, Ipswich.
 - b. New South Wales - Blamey Barracks, Kapooka; Lone Pine Barracks, Singleton; RAAF Base Richmond and Holsworthy and Steele Barracks, Sydney.
 - c. Victoria - Hopkins and Bridges Barracks, Puckapunyal.
 - d. South Australia - RAAF Base Edinburgh, Adelaide.
 - e. Western Australia - Campbell Barracks, Perth.

OBJECTIVE

3. The objective of this project is to provide facilities and supporting infrastructure for the relocation of the 3rd Battalion of the Royal Australian Regiment from Sydney to Townsville, and to provide facilities and infrastructure in five states for associated training and joint enabling elements resulting from the establishment of enhanced land force capabilities.

BACKGROUND

4. In 2005, the Government took steps to harden and network the Army and to provide greater options for deployment of land forces. A new force structure was initiated based on combined arms battle groups. In December 2005, Government approved the creation of a second mechanised infantry battalion to be based on the 3rd Battalion of the Royal Australian Regiment. On 24 August 2006, the Government amended and expanded the Hardened and Networked Army initiative and announced the Enhanced Land Force Stage 1 initiative consisting of the:
 - a. acceleration of the development of the new mechanised infantry battalion earlier than announced under the Hardened and Networked Army initiative, to be based on the 7th Battalion of the Royal Australian Regiment located initially in Darwin and subsequently relocating to Adelaide in 2011;
 - b. relocation of the 3rd Battalion as a light infantry battalion from old facilities at Holsworthy Barracks in Sydney to new facilities at Lavarack Barracks in Townsville in early 2012; and
 - c. enhancement of training and joint enabling elements in five states to support both Battalions.
5. The Government's initiative is increasing the capacity of the land forces to meet likely regional challenges.

NEED FOR THE WORK

6. The need for facilities and infrastructure is driven by the requirement to support the Enhanced Land Force initiative which will substantially increase the size of the Army. To sustain the larger Army, enabling elements including the Army's training establishments will need to increase their output. Existing facilities are not sufficient to accommodate the increase in Australian Defence Force personnel and equipment required to implement and sustain the Government's Enhanced Land Force initiative. Facilities and supporting infrastructure are required to provide effective working and living conditions for the new capabilities.

DESCRIPTION OF THE PROPOSAL

7. This proposal provides new, extended or refurbished working and living accommodation and training facilities for Australian Defence Forces, as well as common use facilities and site infrastructure upgrades at Lavarack Barracks, Townsville and ten other Defence sites across five states.

QUEENSLAND

8. **Lavarack Barracks, Townsville.** The principal works will be completed at Lavarack Barracks, Townsville to provide facilities for the 3rd Battalion which will relocate from Sydney. At Lavarack Barracks, other infrastructure enhancements include:

- a. new and extended protected mobility facilities; extended messing and medical facilities and a new close training area to support the 3rd Battalion;
- b. new workshops and armoury facilities and refurbished maintenance facilities for increased logistics support to the 3rd Battalion and its supporting elements by the Joint Logistics Unit (North Queensland); and
- c. new and refurbished elements of site wide infrastructure that are at capacity or do not meet condition requirements.

9. **RAAF Base Amberley, Ipswich.** At RAAF Base Amberley, new and extended working accommodation and training facilities will be provided for additional airfield defence guards and new facilities will be provided for the Army's 21st Construction Squadron which will relocate from Gallipoli Barracks, Brisbane.

NEW SOUTH WALES

10. **Blamey Barracks, Kapooka.** At Blamey Barracks, new recruit living-in accommodation and training facilities plus extended and refurbished support and administrative facilities and infrastructure will be provided for the increased training of recruits by the Army's Recruit Training Centre.

11. **Lone Pine Barracks, Singleton.** At Lone Pine Barracks, new training facilities plus extended and refurbished support and administrative facilities and base infrastructure will be provided for the increased initial employment training by the Army's School of Infantry.

12. **RAAF Base Richmond, Sydney.** At RAAF Base Richmond, new working accommodation plus extended and refurbished support and administrative facilities will be provided for additional Air Force personnel and equipment in No 37 Squadron, No 1 Airfield Operational Support Squadron and No1 Combat Communications Squadron.

13. **Holsworthy Barracks, Sydney.** At Holsworthy Barracks, new trainee living-in and working accommodation plus extended facilities at the 1st Health Services Battalion will be provided for increased rehabilitation of trainees by the Army's Training Rehabilitation Wing.

14. **Steele Barracks, Sydney.** At Steele Barracks, refurbished living-in and storage facilities will be provided for increased training by the School of Military Engineering.

VICTORIA

15. **Hopkins Barracks, Puckapunyal.** At Hopkins Barracks, new training and working accommodation will be provided for increased initial employment training plus extended and refurbished facilities will be provided for increased mechanised training by the Army's School of Armour.

16. **Bridges Barracks, Puckapunyal.** At Bridges Barracks, new and refurbished facilities will be provided for increased trade training on Bushmaster vehicles and related equipments by the Army's School of Artillery.

SOUTH AUSTRALIA

17. **RAAF Base Edinburgh, Adelaide.** At RAAF Base Edinburgh, new workshops and armoury facilities will be provided for increased logistics support to the 7th Battalion and its supporting elements by the Joint Logistics Unit (South).

WESTERN AUSTRALIA

18. **Campbell Barracks, Perth.** At Campbell Barracks, refurbished working accommodation will be provided to support increased special operations requirements of the Special Air Service Regiment.

OPTIONS CONSIDERED

19. In formulating the proposed scope of works, the relative merits of new construction, adaptive re-use and refurbishment of existing facilities were considered and assessed on a value for money basis. The assessment criteria considered a range of factors including master planning, functionality, costs, occupational health and safety, the environment and the availability of facilities for adaptive re-use.

20. In some cases, such as for the 3rd Battalion's facilities at Lavarack Barracks, new construction was the only option. Elsewhere, such as for the messing facilities at Lavarack Barracks, extension was the most viable option; whilst for training facilities at Bridges Barracks, a combination of new and refurbished facilities proved to be the optimal solution.

REASON FOR ADOPTING PROPOSED OPTIONS

21. The proposal consists of an optimal mix of new construction and refurbishment to provide the most cost effective solutions to meet working, training and living-in accommodation needs arising from the Enhanced Land Force initiative.

ENVIRONMENT AND HERITAGE CONSIDERATIONS

22. An Environmental Scoping Study for the various facilities project elements of Enhanced Land Force Stage 1 was completed in April 2008. It covers the design, construction, maintenance and operation of the project at all sites.

23. The Environmental Scoping Study was undertaken at an early stage of development, enabling additional project options to be assessed with the aim of achieving improved environmental outcomes and increased sustainability.

24. The design of the proposed works incorporates features to mitigate or reduce environmental impacts. Examples include the siting of buildings to minimise tree loss, choice of appropriate low water indigenous vegetation (where possible), stormwater reuse into gardens and grassed areas to reduce water consumption, and energy conservation measures such as insulation and energy efficient equipment.

25. The proposed works do not impact on any of the heritage values associated with the Commonwealth Heritage List. However the project has the potential to uncover previously unknown aboriginal sites during construction.

26. To mitigate any environmental and heritage impacts, this project will be managed in accordance within the Defence Environmental Management framework, including compliance with the relevant provisions of the site specific Environmental Management Plans/Systems. A Construction Environmental Management Plan will be prepared on each site to articulate environmental control measures and approval conditions to be implemented on the various project elements. Environmental Clearance Certificates will be sought prior to any construction activities on site.

CONSULTATION WITH RELEVANT STAKEHOLDERS

27. Stakeholders that have been, and will be, consulted including local councils and authorities are listed at Attachment 1. The State and Federal Members of Parliament in each major location have been, or will also be, consulted.

REVENUE

28. No revenue will be derived from this proposal.

PART B – TECHNICAL INFORMATION

PROJECT LOCATIONS

29. The proposed works are to be located at:
- a. Queensland - Lavarack Barracks, Townsville, and RAAF Base Amberley, Ipswich;
 - b. New South Wales - Blamey Barracks, Kapooka, Lone Pine Barracks, Singleton, RAAF Base Richmond, Holsworthy and Steele Barracks, Sydney;
 - c. Victoria - Hopkins and Bridges Barracks, Puckapunyal;
 - d. South Australia - RAAF Base Edinburgh, Adelaide; and
 - e. Western Australia - Campbell Barracks, Perth.
30. These locations are shown on the Enhanced Land Force Stage 1 Facilities Location Map at Attachment 2.

PROJECT SCOPE AND SITE DESCRIPTIONS

QUEENSLAND

Lavarack Barracks, Townsville

31. At Lavarack Barracks the project comprises new working accommodation for the 3rd Battalion on a “green field” site, enhancement of training and support facilities and an upgrade of the base infrastructure to support the additional requirements of the 3rd Battalion. The proposed location of facilities at Lavarack Barracks are at Attachment 3 and the proposed works include:

- a. new working accommodation for the 3rd Battalion;
- b. new working accommodation for an additional Protected Mobility Troop in B Squadron of the 3rd/4th Cavalry Regiment;
- c. extension and refurbishment of three messes;
- d. extension of the Medical Centre;
- e. a new close training area as well as relocated and refurbished training facilities;
- f. new vehicle maintenance workshop, armoury and weapons repair facilities and a refurbished maintenance facility for the Joint Logistic Unit (North Queensland); and
- g. upgrading of base infrastructure.

3rd Battalion Precinct

32. At the 3rd Battalion precinct the project comprises new Battalion facilities closely modelled on existing facilities provided for the 1st and 2nd Battalions. The proposed layout is at Attachment 4. The proposed works include:

- a. **Battalion Headquarters.** The Battalion Headquarters building serves as the central organisational focus of the Battalion and consists of a Headquarters/Command cell, Operations cell, Intelligence cell, Logistics cell, Regimental Signals cell, Plans cell, Administration and Common areas. An indicative floor plan is at Attachment 5.

- b. **A, B and C Company Headquarters.** The Company Headquarters buildings for A, B and C Companies will accommodate the administration functions of the Battalion's three Rifle Companies, housing various command functions as well as the Company general (Q) Stores and staff ablutions. The Company Headquarters buildings, with the Admin Company Headquarters, are grouped in pairs, with separate Company Headquarter buildings, and a combined Q Store and ablutions block situated between. This arrangement will offer functional efficiencies whilst allowing an individual address for each company. An indicative floor plan of the dual Company Headquarters building is at Attachment 6 and of the combined Company Q Stores at Attachment 7.
- c. **Administration Company Headquarters.** The Administration Company Headquarters is grouped in a pair with the C Company Headquarters building, with a combined Q Store and ablutions block situated between. As Administration Company contains additional functions to that of a standard Company Headquarters building, a small annex is proposed adjacent to the main office and north of the conference room. An indicative floor plan is at Attachment 8.
- d. **Support Company Headquarters.** The Support Company Headquarters building is to be a stand-alone facility, with a Q Store and ablutions block situated adjacent. This reflects the larger size and the increased weapons holdings of the Company. Because of site constraints, the building will be located in the platoon lines, in close proximity to the Support Platoon Buildings and the Battalion's main Q store. An indicative floor plan is at Attachment 9.
- e. **A, B and C Company Platoon Facilities.** A, B and C Company Platoon Facilities will accommodate the platoons of each of the Battalion's three Infantry Companies in a separate building each. They will be identical and provide Platoon offices, briefing rooms, ablutions and Draft Priority 1 (DP1) storage. The buildings will be located in the Platoon lines, as indicated on the Precinct Plan. It is proposed that the buildings be situated directly across the grassed marshalling area from each Company Headquarter building. An indicative floor plan is at Attachment 10.

- f. **Support Company Platoon Facilities.** Support Company Platoon Facilities will accommodate offices and stores for the Mortar, Anti-armour, Signals and Reconnaissance Platoons, as well as a briefing room, ablutions and DP1 storage for all Support Company Platoons. The buildings and a secure compound for the Assault Pioneer Platoon will be located in the Platoon lines, and adjacent to other Support Company buildings as indicated on the Precinct Plan. Indicative floor plans for the Mortar Platoon, Assault Pioneer Platoon and Signals and Reconnaissance Platoons are at Attachments 11, 12, and 13 respectively.
- g. **Regimental Aid Post.** The Regimental Aid Post will provide independent medical services for the Battalion as the first point of treatment for non life-threatening injuries and illness. The building is to be located in the Battalion lines as indicated on Precinct Plan and will consist of single offices/consulting rooms for the Regimental Medical Officer, civilian Medical Officer, civilian Registered Nurse; an open plan office for the Regimental Aid Post Warrant Officer and Sergeant; Audiometry room; an open plan treatment area with seven treatment beds; drug store; sterilisation room; orderly room and foyer/waiting area; storage area; ablutions; covered ambulance area and car parking. An indicative floor plan is at Attachment 14.
- h. **Battalion Main Q Store and Compound.** The Battalion's main Q store and compound consists of a single building within a paved compound and serves as the central storage facility. The building will accommodate administration and amenities functions as well as warehousing functions. The building and associated secure compound will be situated central to the Battalion precinct to facilitate good access within the precinct and consists of office space and storage areas for various technical and hazardous stores and equipment. The building will be located as indicated on the Precinct Plan. The proposed layout of the compound is at Attachment 15 and an indicative floor plan for the main Q store is at Attachment 16.

- i. **Combined Technical Support and Transport Platoon Facility and Workshop.** The Vehicle Workshop forms part of the 3rd Battalion Transport Platoon Compound and provides accommodation for the maintenance to the Battalion's vehicle holdings. The Workshop building will accommodate various administration functions as well as the main Workshop functions. Adjacent buildings at the perimeters of the compound include ancillary buildings and a specific vehicle shelter for the Tanker Pump Assembly. A co-located troop office building accommodating Technical Support Platoon and Transport requirements is located proximate to the workshop and transport vehicle compound. The workshop and office building is located within the industrial compound and is situated on the eastern side of the creek which divides the 3rd Battalion precinct. The proposed layout of the Technical Support compound is at Attachment 17 and an indicative floor plan of the workshops is at Attachment 18.
- j. **Transport Compound.** The 3rd Battalion transport compound is designed to accommodate all unit vehicles. The administrative area is provided in a separate facility within the compound and consists of office space, a briefing room, DP1 storage and ablutions. The compound will have a ring road on the perimeter of the compound to maximise flexibility and accessibility. The compound will be located on the eastern side of the creek which divides the 3rd Battalion precinct as shown on the Precinct Plan. The proposed layout of the Transport compound is at Attachment 19. Indicative layouts and drawings of vehicle shelters are at Attachments 20, 21 and 22 with an indicative floor plan of the transport and technical support facility at Attachment 23.
- k. **Guardroom.** The Guardroom building will accommodate a number of the security requirements of the Battalion and consists of a duty room, dormitory accommodation for the guard, ablutions, a ready room and stores. It will be situated in the Battalion Headquarter lines at the main entrance to the Battalion precinct. An indicative floor plan is at Attachment 24.

- l. **Unit Training Facility.** The Unit Training Facility will accommodate the ‘in lines’ training needs of the Battalion by providing a range of classroom and open accommodation. The building shall also house the Battalion’s Historical Collection. The building will be situated in close proximity to Battalion Headquarters as indicated on the Precinct Plan and consists of two classrooms with a seating capacity of 60 each; four syndicate rooms; a training resources room; an open plan display area for the historical collection; a curator’s office, archives room and preparation area; Regimental store and equipment store; ablutions and amenities. An indicative floor plan is at Attachment 25.
- m. **Physical Training Facility.** The Physical Training Facility will form an integral part of the 3rd Battalion precinct and provide a focus for much of the daily activity. The building will be located centrally in the Battalion lines as physical training is an integral part of the Battalion’s daily routine, and will provide additional under cover training and assembly space. The facility consists of an undercover open training area; an open plan office; gym equipment area; gym store room and ablutions. An indicative floor plan is at Attachment 26.
- n. **Infrastructure and Car Parking.** The provision of all necessary infrastructure and car parking to support the 3rd Battalion facilities, including street and compound lighting and creek crossings are shown on the Precinct Plan. The proposed layouts of infrastructure services required to support the Battalion facilities are at Attachments 27, 28, 29, 30 and 31.

B Squadron 3/4 Cavalry Regiment

33. At B Squadron 3/4 Cavalry Regiment, the project comprises new and extended facilities for an additional Protected Mobility Troop to support the 3rd Battalion. The facilities will be located within the existing B Squadron 3/4 Cavalry Regiment precinct and the proposed works include:

- a. **Vehicle Shelters.** The existing vehicle shelters will be extended for an additional troop of “Bushmaster” vehicles. An indicative layout is at Attachment 32;
- b. **Vehicle Compound.** The existing vehicle compound will be extended to enable increased vehicle movements; and

- c. **Troop Office.** New working accommodation will be provided for the additional mobility troop. An indicative floor plan is at Attachment 33.

Mess Extensions

34. Existing messes will be modified to meet the increased messing demands for all rank groups. The locations and indicative floor plans of the messes are at Attachments 34, 35 and 36. The proposed works include:

- a. **Vasey Mess Other Ranks Dining Room.** At the Vasey Mess it is proposed to increase the dining area capacity from 160 to 360 seats. Existing food equipment and benching will be relocated to a centrally accessible recess and additional hot and cold bain-maries will be provided as well as two additional refrigerators for salads and sweets;
- b. **Vasey Mess - kitchen extension.** It is proposed to provide additional food preparation and pot wash areas, a new cold room and freezer, improved access for standard trolleys and an external access; and
- c. **Daly and Chauvel Messes - kitchen extensions.** Extension to food preparation and pot wash areas at each Mess.

Lavarack Barracks Medical Centre

35. The existing Medical Centre will be expanded to satisfy increased demand for medical support. The location and indicative floor plans of the Medical Centre are at Attachments 37 and 38. The proposed works include:

- a. **In-Patient Department.** A single room, four-bed ward matching the general details and configuration of existing wards within the centre is proposed for the In-Patient Department, with separate toilet and shower facilities; and
- b. **Physiotherapy Department.** An open-plan extension to the Physiotherapy Department is proposed. The extent of this extension is one structural bay with additional area for 4 treatment beds and an expanded rehabilitation/gymnasium area.

Close Training Area

36. A new Close Training Area will be established to the south east of the proposed 3rd Battalion precinct. The Close Training Area is approximately 2.3 km from Headquarters 3rd Brigade and will be accessed via a new road to be constructed as part of this project. The proposed layout of the Close Training Area is at Attachment 39. The proposed works include:

- a. **Zero Template Range.** A 10 lane 25m Zero Template Range incorporating a secure perimeter and also include a target storage shed, covered firing mound, waiting shelter, all associated pathways, roads and fencing;
- b. **Munitions Store.** A store for small arms ammunition to support the 25m range, consisting of eight bays, with external access;
- c. **Method of Entry Building.** A new Method of Entry building will replace the existing facility which is to be demolished to make way for the 3rd Battalion facilities. The new facility will consist of two separate two-level buildings, linked by a below ground tunnel. It contains access hatches and moveable partition locations along with rappelling points such that a variety of training activities are possible;
- d. **Fire Training Facility.** The Fire Training Facility will replace an existing facility which is to be demolished to make way for the 3rd Battalion facilities. The new facility will meet current environmental codes. The location of the facility takes into account the impact of potential smoke plumes from training activities. The facility will consist of a concrete slab surrounded on three sides by a masonry block wall to contain potential over spray of fire fighting chemicals;
- e. **Provision for a future Urban Operations Training Facility.** Spatial provision will allow for a future Urban Operations Training facility;
- f. **Access Road and Car Parking.** The new road will connect Hammett Road to the Close Training Area. The 6 metre sealed road will allow two-way traffic movement. The centrally located car park will be designed in accordance with relevant codes and legislation, and will cater for up to 12 cars and four group transport vehicles; and

- g. **Infrastructure.** Water, sewage and electrical services will be provided to the Close Training Area site.
37. **Other Training Facilities.** In addition to the training facilities to be located in the new Close Training Area, proposed works include:
- a. **24 lane Weapon Training Simulation System.** A new 24 lane Weapon Training Simulation System will be constructed to supplement the existing 12 lane facility on the Barracks to cater for 3rd Battalion, in close proximity to Headquarters 3rd Brigade. The proposed location of the facility is at Attachment 3.
 - b. **Relocation of the Existing Obstacle Course.** It is proposed to relocate the existing obstacle course to the western Close Training Area, and to expand it from 2 to 3 lanes. The course will be replicated, with some parts relocated and others replaced.
 - c. **Emplane/Deplane and Roping Tower Facility.** The existing Emplane/Deplane mock up facilities are to be demolished and replaced with four separate training platforms (C130, MRH90, S70 and CH47). The existing roping / rappelling tower will be dismantled and relocated. Both facilities will be relocated immediately to the south of the Battalion Precinct adjacent to the new road leading to the new Close Training Area.
 - d. **Marksmanship Training Range.** A 10 lane Type “A” Marksmanship Training Range will be constructed at Townsville Field Training Area that will include an associated access road and services. The proposed range facility includes a covered firing mound, a waiting shelter, target storage and ammunition shelter, a range control building and all associated pathways, roads, car parking, services and ablutions.

Joint Logistics Unit (North Queensland)

38. **Workshop.** A new workshop facility will be constructed on the site of the existing loan pool vehicle park for the Joint Logistics Unit (North Queensland). The proposed location and indicative floor plan are at Attachments 40 and 41. The proposed works include:

- a. twelve vehicle maintenance bays, two general engineering workshop bays and one welding bay;
- b. a repair parts store and office;
- c. a repair bulk store;
- d. an Electronic Instrument Repair workshop and office;
- e. a technical electrical workshop and office;
- f. a 5 tonne and a 15 tonne gantry crane to the main workshop area;
- g. a small engine run up area;
- h. hazardous goods storage facilities including battery store, Petrol Oil and Lubricant and gas store; and
- i. ablutions and lunch/briefing room.

39. **Armoury and Weapons Repair Facility.** A new facility is to be constructed to provide loan pool storage for weapons and high value equipment for the Joint Logistics Unit (North Queensland). The new armoury is to be located within the Unit's existing compound adjacent to the existing secure store building which is no longer compliant with requirements and will be demolished and removed. The proposed location and floor plan of the facility are shown at Attachment 42. The proposed works include:

- a. a secure store;
- b. a receipt and despatch bay with storage space for six pallets;
- c. an air-conditioned workshop for two armourers; and
- d. an open plan office.

40. **Service Station.** The existing workshops at the Joint Logistics Unit (North Queensland) will be refurbished to provide servicing facilities for Australian Defence Force elements that do not possess servicing facilities at unit level in Lavarack Barracks. The proposed works include minor refurbishments to meet occupational health and safety requirements for vehicle servicing.

Base Wide Infrastructure

41. A range of in-ground civil engineering trunk services are needed to support the facilities being provided as a result of the relocation of the 3rd Battalion to Lavarack Barracks. The proposed works include:

- a. **Water Supply/Fire Mains.** The 3rd Battalion precinct will require a new water supply / fire mains and this may include a new booster pump station to ensure sufficient pressure is maintained throughout the Barracks. The Close Training Area will be served from this system. The water reticulation plan is at Attachment 43.
- b. **Sewer.** The 3rd Battalion will require a new sewer connection into the Townsville City Council Sewer system. Hybrid type toilets will be provided for the Close Training Area because of its remote location. The sewer layout is at Attachment 44.
- c. **High Voltage Reticulation.** A high voltage reticulation system upgrade is required to support the new works being delivered for the 3rd Battalion. The works will cater for the proposed power demand and will include an allowance for future growth. The electrical services layout is at Attachment 45.
- d. **Lighting.** Street lighting is required along new and upgraded roadway infrastructure, as well as pathway lighting leading up to the 3rd Battalion precinct.
- e. **Communications/data Infrastructure.** The existing site wide communications systems will be modified and augmented to provide Defence Restricted Network, Defence Secret Network, Engineering Network, voice intercommunication and miscellaneous connectivity.
- f. **Roadworks.** A road extension will be provided as a heavy vehicle route from near the southern edge of B Squadron 3/4 Cavalry Regiment, through to the rear (southern edge adjacent to the transport compound) of the new 3rd Battalion site, connecting to Timor Street and from the rear of the 3rd Battalion through to the Close Training Area. The entry point into Lavarack Barracks at the intersection of Cluden Drive and University Road, will be upgraded, and will include the provision of a new guard house, boom gate, ablutions, signage,

waiting/inspection lanes, parking and landscape works. The proposed layout is at Attachment 46.

- g. **Storm water and drainage.** Storm water and drainage works will extend existing infrastructure. This element also includes the stabilisation of creek banks for the proposed 3rd Battalion precinct.

Base Amberley, Ipswich

42. At RAAF Base Amberley the project comprises new working accommodation for the Air Force's No 1 and No 2 Air Field Defence Squadrons and for the Army's 21st Construction Squadron. The proposed locations of these facilities are at Attachment 47.

No 1 and No 2 Air Field Defence Squadrons

43. New, extended and refurbished working accommodation, logistics, training and armoury facilities and ablutions are required for three additional rifle flights. An indicative precinct layout is at Attachment 48. The proposed works include:

- a. **Headquarters.** A new combined Headquarters building will be provided for both Squadrons comprising offices, briefing/conference rooms, storage and utility areas and car parking. Indicative floor plans are at Attachments 49 and 50.
- b. **Rifle Flights.** Extension of the existing building plus two new rifle flight facilities will accommodate the four existing Rifle Flights, the two existing Reserve Flights and three new Rifle Flights. Each new facility comprises offices/troop areas, open plan/multipurpose work areas, storage and utility areas and car parking. An indicative floor plan is at Attachment 51.
- c. **Training Facilities.** This element comprises a central, multi-purpose indoor training space for group briefings, short courses and computer-based training. The facilities will include teaching spaces capable of reconfiguration for different class sizes/briefing requirements; computer teaching space; flexible briefing/teaching spaces; historical memorabilia display area, storage and utility areas. Covered external training, deployment and inspection areas;

storage, shower and laundry facilities will be shared between the two squadrons. An indicative floor plan is at Attachment 52.

- d. **Support Flight.** The proposed new Support Flight facilities incorporate the Surveillance, Reconnaissance and Recovery Sections, Permanent Air Force (PAF) Cadre, Military Working Dog Section, Ready Deployment Store, Assault Pioneers Section, Communications Section, and Armoury for each of the squadrons. The facilities requirement for the Support Flights comprises offices, briefing/conference rooms, storage and utility areas, outdoor covered storage areas, vehicle manoeuvring area and car parking. An Indicative floor plan for the Surveillance, Reconnaissance, Recovery and Military Working Dog Sections and the PAF Cadre is at Attachment 53. Indicative floor plans for the Communications Section with Armoury, the Ready Deployment Store and Assault Pioneers Section are at Attachments 54, 55 and 56 respectively.
- e. **Vehicle Shelters.** New covered parking will be provided for the two Squadrons' vehicles, with secure storage for vehicle stores. An indicative plan of the vehicle shelters is at Attachment 57.
- f. **Infrastructure.** Infrastructure improvements within the Air Field Defence Guards precinct will be required to support the proposed facilities developments and link into base wide infrastructure enhancements completed as part of other recent infrastructure projects at the base. These improvements will include upgrading to the electrical, communications, water, sewer, stormwater, and fire services to meet the increased demand with an allowance for future growth.

21st Construction Squadron.

44. Army's 21st Construction Squadron is relocating from Gallipoli Barracks, Enoggera to RAAF Base Amberley. The site is to the immediate north of the recently completed 9th Force Support Battalion. An indicative precinct layout is at Attachment 58. New facilities are proposed for Headquarters 21st Construction Squadron including the Squadron Aid Post, Operations Support Troop working accommodation, Resource Troop working accommodation, Resources Troop Q Store, Construction Troop working accommodation, Construction Troop Q Store, Plant Troop working accommodation, New Workshops, Vehicle and equipment Shelters, Training facilities

and associated parking and deployment area, including loading ramps will be provided. The proposed works include:

- a. **Squadron Headquarters.** The headquarters facility comprises two single storey wings linked with a covered walkway. It accommodates the Squadron's executive, command and administrative functions, Squadron Aid Post, ablutions, DP1 equipment storage and radio/crypto store. An indicative floor plan is at Attachment 59.
- b. **Operations Support Troop.** The new facility will combine the working accommodation and stores area in a single building. The Operations Support Troop headquarters area will have office accommodation for the troop commander and administrative staff, a briefing area and ablutions and DP1 storage for the troop. The stores area includes battery, tyre, ration, bulk equipment, expense, camp and Q stores, armoury, tools bay and receipt and dispatch areas. An undercover loading bay will be constructed adjacent to the stores area. Vehicle shelters and project and reclaim stores areas will be constructed to the immediate south of the Operations Support Troop. An indicative floor plan is at Attachment 60.
- c. **Workshop.** An indicative floor plan of the proposed Workshop Troop facility is at Attachment 61. It is a multi-purpose building comprising:
 - (1) eight service bays, one dedicated to lubricant requirements, with the remaining service bays used for general servicing needs;
 - (2) a repair parts store/tools office;
 - (3) open plan general engineering, welding and electrical bays; and
 - (4) hazardous storage facilities for the battery store, petrol oil lubricants store and gas store, designed as covered, well ventilated lockable enclosures.
- d. **Construction and Resources Troops.** The new facilities for the Construction and Resources Troops will provide working accommodation, storage and workshop facilities. The facilities will include vehicle shelters and storage for the Mobile Dimensional Saw. Indicative floor plans are at Attachments 62 and 63.

- e. **Plant Troop.** The new Plant Troop facilities will be two single storey buildings which will accommodate administrative and amenities functions for Troop personnel. A number of heavy vehicle and plant shelters will also be constructed along with an open sealed area for trailer parking and heavy plant loading and deployment preparations. A soil-testing laboratory will also be constructed adjacent to the new buildings. An indicative floor plan is at Attachment 64.
- f. **Vehicle Parking.** New covered parking and compounds will be provided for the Squadron's vehicles, with secure storage for vehicle stores.
- g. **Infrastructure.** Infrastructure improvements within the squadron precinct will be required to support the proposed facilities developments and link into base wide infrastructure enhancements completed as part of other recent infrastructure projects at the base. These improvements will include upgrading to the electrical, communications, water, sewer, civil, and fire services to meet the increased demand with an allowance for future growth.

NEW SOUTH WALES

Blamey Barracks, Kapooka

45. At Blamey Barracks, the project comprises new living-in and working accommodation for the Army's Recruit Training Centre. The proposed location of facilities is at Attachment 65.

Army Recruit Training Centre

46. New, refurbished and extended facilities and upgraded infrastructure are required for an additional recruit training company (Echo Company) at Kapooka. The proposed works include:

- a. **Echo Company Headquarters.** A new Company Headquarters will be established consisting of office space, Q store and amenities area. An indicative floor plan is at Attachment 66.
- b. **Echo Company Accommodation.** New recruit living-in accommodation will be based on the existing multistory accommodation building with dormitory

style accommodation for recruits, housing one platoon per floor including staff working accommodation, with armouries for each platoon. Separate laundry rooms, storage rooms and a covered outdoor area will be provided for each platoon/company. Indicative floor plans for the living-in accommodation are at Attachments 67 and 68. The Echo Company precinct including Company Headquarters and accommodation will be served by a parade ground, services and a road network linked to the existing company precinct. The proposed layout of these facilities is at Attachment 69.

- c. **Rehabilitation Platoon.** The existing facility will be extended to provide additional dormitory style accommodation, common room, laundry, staff recreation room and ablutions. An indicative floor plan is at Attachment 70.
- d. **1st Recruit Training Battalion Headquarters.** The existing Headquarters building will be refurbished to provide offices for additional staff. An indicative floor plan is at Attachment 71.
- e. **Physical Training Facilities.** Existing physical training facilities will be improved by providing a cover over the outdoor gymnasium court; a new Run, Dodge, Jump course; and by extending the gymnasium to provide an additional basketball court and staff amenities. The proposed extension of the existing swimming pool complex will provide a new indoor 30 metre swimming pool for physical training and the conduct of the Army Swim Test. Additional change room and ablutions will be integrated into the existing pool complex. Indicative floor plans are at Attachments 72, 73 and 74.
- f. **Instructional Facilities.** The instructional facilities include three 60 person lecture theatres, and modification of an existing classroom to a 70 person computer based training facility. An indicative floor plan is at Attachment 75.
- g. **Weapon Training Simulation System Facility.** A new 24 lane Weapons Training Simulation System building will be constructed adjacent to the existing 24 lane facility. An indicative floor plan is at Attachment 76.
- h. **Health Facilities.** A new Regimental Aid Post will include a reception/entry waiting area, twelve bed treatment area, pharmacy store, two medical officer consulting rooms, staff office and recreation and ablutions. A dental facility will be collocated with the proposed Regimental Aid Post, and will include

four dental surgery rooms, X-Ray facility, laboratory and staff office space. An indicative floor plan is at Attachment 77. The existing Kapooka Health Centre will also be extended to provide a new ward of twenty beds, physiotherapy refurbishment and expansion for nine treatment beds, small gymnasium and hydrotherapy pool. An indicative floor plan of the proposed extension is at Attachment 78.

- i. **Mess and Kitchen.** A new dining hall and kitchen is proposed to support the increased training throughput. The dining hall will cater for a 1,200 single seat capacity and the kitchen will cater for two sittings of 900. Indicative floor plans are at Attachments 79 and 80.
- j. **Logistics.** The existing clothing store will be extended to enable staff to prepare clothing and equipment for each recruit course. The proposed layout is at Attachment 81.
- k. **Infrastructure.** Infrastructure improvements will be required to support the proposed facilities developments. These improvements will include upgrading to the sewage treatment plant to meet increased requirements and water quality standards and to make use of recycled rainwater and reclaimed sewage treatment water; and upgrading of the high voltage feed into the barracks. In addition to the base wide services, upgrades to electrical, communications, civil, and fire services are proposed to meet the increased demand with an allowance for future growth.

Lone Pine Barracks, Singleton

47. At Lone Pine Barracks, the project comprises new and refurbished facilities for the Army's School of Infantry. The proposed location of facilities is at Attachment 82. The proposed works include:

- a. **Wet Weather Training Shelters.** New Wet Weather Training Shelters providing cover to trainees undergoing instruction in field training will be provided at Lone Pine Barracks and located close to the main instructional areas. The proposed locations of these facilities are at Attachment 82.

- b. **Alpha Company Headquarters.** A new single storey building providing office space, a conference room, staff breakout area and toilets. An indicative floor plan is at Attachment 83.
- c. **Transition/Rehabilitation Company Headquarters.** A new single storey Headquarters building comprising a central core of office space, ablutions, conference room and staff breakout area is flanked by office working accommodation for Transition and Rehabilitation Platoon. The building is located in Rifleman Wing Precinct, and will be served by separate vehicle and pedestrian access and parking. An indicative floor plan is at Attachment 84.
- d. **Training Support Company Facilities.** New facilities will be provided for headquarters elements of Training Support Company, Marksmanship Training Detachment and the Training Support Platoon. The buildings comprise office space for headquarters staff and the Marksmanship Training Detachment, Q store, armoury, staff equipment store, ablutions, conference room, and an open plan working area/briefing room. An indicative floor plan is at Attachment 85.
- e. **Instructional Facilities.** Two new 50 person computer based lecture theatres three syndicate rooms, supporting ablutions, small store and office to support Rifleman Wing. An indicative floor plan is at Attachment 86.
- f. **Weapon Training Simulation System.** The existing 24 lane Weapons Training Simulation System will be expanded by a further 24 lanes collocated with the existing facility. An indicative floor plan is at Attachment 87.
- g. **Gymnasium Extension.** The existing gymnasium will be extended and additional office area, store, out-of hours pool access and supervisors' station will be provided. An indicative floor plan is at Attachment 88.
- h. **Weapons Cleaning Facility.** A covered outdoor area will be provided for cleaning of weapons. The facility will include work benches, laundry style wash basins and dryers. An indicative floor plan is at Attachment 89.
- i. **Q Store.** The existing Q Store will be extended to cater for the increased general store holding provisions. It will be functionally organised into three platoon sized bays for control of issue and receipt of equipment. An indicative floor plan is at Attachment 90.

- j. **Integrated Health Facility.** The new health facility will include treatment, dental, physiotherapy/rehabilitation, psychology, field medics and support facilities. The support facilities include waiting/reception area, shared administration office, shared nurse administration office, pharmacy dispensing and store, audio testing room, staff ablutions and breakout area, stores, and ambulance bays. An indicative floor plan is at Attachment 91.
- k. **Infrastructure.** Infrastructure improvements will be required to support the proposed facilities developments. These improvements will include upgrading high voltage feed and communications services into the barracks and provision for new carparking within the Barracks. In addition to the base wide services, upgrades to civil and fire services are proposed to meet the increased demand with an allowance for future growth. Existing buildings that are replaced by these works will be demolished and removed.

RAAF Base Richmond, Sydney

48. At RAAF Base Richmond the project comprises refurbished facilities for 37 Squadron, No 1 Airfield Operations Support Squadron and No 1 Combat Communications Squadron. The proposed locations of these facilities is at Attachment 92. The proposed works include:

- a. **No 37 Squadron.** Refurbishment and reconfiguration of Building 213 to provide dedicated working accommodation for the Life Support Section and refurbishment of Hanger 320 to accommodate the additional workforce of the maintenance flight. An indicative floor plan is at Attachment 93.
- b. **No 1 Airfield Operations Support Squadron.** The existing Headquarters building will be refurbished and additional hangars provided for vehicles and storage space. An indicative precinct plan is at Attachment 94.
- c. **No 1 Combat Communications Squadron.** A new radio maintenance and office area and female ablutions will be provided together with some refurbishment and reconfiguration of existing office and training areas. An indicative precinct plan is at Attachment 95.

Holsworthy Barracks, Sydney

49. At Holsworthy Barracks, the project comprises new and extended facilities for the Army's Trainee Rehabilitation Wing. The proposed location of facilities is at Attachment 96. The proposed works include:

- a. **Trainee Rehabilitation Wing Headquarters.** A new Headquarters Building and associated facilities will provide office accommodation and administrative support for up to 80 trainees. An indicative floor plan is included in the indicative layout of facilities at Attachment 97.
- b. **Trainee Rehabilitation Wing Living In Accommodation.** New trainee living in accommodation is proposed for up to 80 trainees housing two trainees per room, with a recreational room plus ablutions, toilets and laundry facilities. An indicative floor plan is included in the indicative layout of facilities at Attachment 97.
- c. **1st Health Support Battalion Rehabilitation Area.** A new covered steel portal frame Physical Training Facility will be constructed comprising weight training and exercise floor to double the size of the current gymnasium to support the rehabilitation of the larger number of trainees. The location of this extension is at Attachment 97.
- d. **Messing.** The existing 1st Health Support Battalion kitchen and dining facilities will be extended to cater for the additional trainees. The location of this extension is at Attachment 97.
- e. **1st Health Support Battalion Physiotherapy Department.** An extension to the existing 1st Health Support Battalion facility is proposed to provide eight additional treatment bays and office accommodation for increased physiotherapists and allied health professionals. An indicative floor plan is at Attachment 98.
- f. **Armoury and Q Store Facility.** A new combined armoury and Q Store will be constructed to support the Training Rehabilitation Wing.
- g. **Infrastructure.** Infrastructure improvements will be required to support the proposed facilities developments and link into base wide infrastructure enhancements completed as part of other recent infrastructure projects at the

base. These improvements will include upgrading electrical, water, sewer, civil, fire and communications in the 1st Health Support Battalion precinct to meet the increased demand with an allowance for future growth.

Steele Barracks, Sydney

50. At Steele Barracks, the project comprises new and refurbished facilities for the Army's School of Military Engineering. An indicative layout of the facilities is at Attachment 99. The proposed works include:

- a. **Troop Store.** A new troop store in the existing Troop Station and minor adjustments to compound fencing; and
- b. **Transit Living In Accommodation.** Minor refurbishment of the top floor of Building 55 to return it to transit living accommodation.

VICTORIA

Hopkins Barracks, Puckapunyal

51. At Hopkins Barracks, the project comprises extended and refurbished facilities for the Army's School of Armour. The proposed location of facilities is at Attachment 100. The proposed works include:

- a. **Gunnery Wing Building.** It is proposed to refurbish and extend the existing building to provide three training rooms; two computer based training rooms; working accommodation for Gunnery Wing staff including office space and conference room; increased armoury space; and amenities including breakout space for students, instructor conference facility and ablutions. An indicative floor plan is at Attachment 101.
- b. **Gunnery Wing Armoured Fighting Vehicle Bays.** Four new Armoured Fighting Vehicles bays will be constructed to provide instructional training space, fume extraction, weapons visual capacity to the range and access and egress for the additional vehicles. An indicative floor plan is at Attachment 102.
- c. **Gunnery Wing Simulation shelters.** Two new simulation shelters will be constructed, with environmental protection and power within functional

proximity to other Gunnery Wing instructional facilities. An indicative floor plan is at Attachment 103.

- d. **Driving and Servicing Wing Working accommodation.** The existing facility will be refurbished and extended to provide office and open plan area for staff of the Driver and Servicing Wing. An indicative floor plan is at Attachment 104.
- e. **Driver and Servicing Bays.** A new building will be provided to accommodate twelve additional vehicle bays. Each bay will be constructed to provide instructional training space, fume extraction and access and egress for the additional vehicles. A new link road will be provided onto the tank road. The proposed layout of facilities are at Attachments 105 and 106 and an indicative floor plan is at Attachment 107.
- f. **Tactics and Communications Wings.** Building 21 will be extended and refurbished across two floors to provide a simulation room and six syndicate rooms on the first floor and two computer based training rooms, storeroom and ablutions on the ground floor for tactics wing students. The remainder of Building 21 will be refurbished to provide additional instructor office space with offices and as an open plan office area, an additional conference room, ablutions, breakout space simulation room and a lecture theatre for both Tactics and Communications Wing instructors. Indicative floor plans are at Attachments 108, 109, 110 and 111.
- g. **Dismounted Initial Employment Training Facility.** A new single storey building to provide working accommodation and instructional facilities for the dismantled troop will comprise two computer based training rooms, offices, an open plan area for instructors, ablutions, staff and student breakout areas and a storeroom. Four external covered training shelters will also be constructed in the vicinity of the training facility. An indicative precinct plan is at Attachment 112 and an indicative floor plan is at Attachment 113.
- h. **Infrastructure.** Infrastructure improvements will be required to support the proposed facilities developments and link into base wide infrastructure enhancements completed as part of other recent infrastructure projects at the base. These improvements will include upgrading electrical, water, sewer, civil,

fire and communications at Hopkins Barracks to meet the increased demand with an allowance for future growth. Demolition of the existing Dismounted Troop facility is included in the infrastructure works.

Bridges Barracks, Puckapunyal

52. At Bridges Barracks, the project comprises new and refurbished facilities for the Motorised Combat Training Wing of the Army's School of Artillery. The proposed location of these facilities is at Attachment 114. The proposed works include:

- a. **Protected Mobility Vehicle hangar.** A new vehicle hanger will be constructed to provide covered and secure compound space to accommodate up to 35 Bushmaster vehicles. The hanger will have integrated storage space for vehicle's Complete Equipment Schedule and have the performance requirements to manage fume extraction for instructional purposes and maintenance in the hanger space. It will also provide two new classrooms. An indicative floor plan of the facility is at Attachment 115.
- b. **Instructional Facilities.** The works involve refurbishment of Building 340 to provide an additional classroom and storage space and of the Protected Mobility Headquarters Building to convert the existing classroom into additional instructor office space. These works provide working accommodation and instructional facilities in support of training drivers and commanders on the Protected Mobility Vehicle.

SOUTH AUSTRALIA

RAAF Base Edinburgh, Adelaide

53. At RAAF Base Edinburgh the project comprises a new workshop facility and armoury for the Joint Logistics Unit (South) to support the 7th Battalion and its supporting 1st Brigade elements.

54. **Workshop.** A new workshop facility will be constructed on a Greenfield site adjacent to new 7th Battalion facilities at RAAF Base Edinburgh for the Joint Logistics Unit (South). The proposed location is at Attachment 116 and an indicative floor plan is at Attachment 117. The proposed works include:

- a. twelve vehicle maintenance bays, two general engineering workshop bays and one welding bay;
- b. a repair parts store and office;
- c. a repair bulk store;
- d. a Electronic Instrument Repair workshop and office;
- e. a technical electrical workshop and office;
- f. a 5 tonne and one 15 tonne gantry crane to the main workshop area;
- g. a small engine run up area;
- h. hazardous goods storage facilities including battery store, Petrol Oil and Lubricant and gas store; and
- i. ablutions and lunch/briefing room.

55. **Armoury and Weapons Repair Facility.** A new facility is to be constructed to provide loan pool storage for weapons and high value equipment for the Joint Logistics Unit (South) at RAAF Base Edinburgh. The new armoury is to be located adjacent to the new workshop. The proposed location of the new armoury is at Attachment 116 and an indicative floor plan is at Attachment 118. The proposed works include:

- a. a secure store;
- b. a receipt and despatch bay with storage space for six pallets;
- c. an air-conditioned workshop for two armourers; and
- d. an open plan office.

WESTERN AUSTRALIA

Campbell Barracks, Perth

56. At Campbell Barracks, the project comprises extensions and refurbishment of the existing Headquarters Building. The location of the facility is at Attachment 119. The proposed works include extending the Headquarters building on the ground floor to provide additional secure vehicle parking, equipment fitout area, and increased staff equipment storage including an armoury. The existing staff ablutions and

equipment storage area will be refurbished to cater for the increased staff numbers and link to the extension. Areas on the first floor of the Headquarters building will also be refurbished to create a new mezzanine floor. Two additional training rooms and increased working accommodation will be provided for signals and logistics staff.

SITE SELECTION

57. Various sites were considered for each element of new construction. Siting options were addressed in Value Management Workshops involving key stakeholders to determine the most appropriate site for each element of new construction. The sites were then confirmed in Site Selection Boards convened for each facility to ensure proposed sites conformed to master planning guidelines.

ZONING AND APPROVALS

58. All of the proposed on-base facilities will be located within the boundaries of existing Defence establishments and do not require any State or Local Government planning approvals. The proposed developments are consistent with Defence zone and precinct plans for each base.

LAND ACQUISITIONS

59. This proposal does not require the acquisition of additional land.

CODES AND STANDARDS

60. Where appropriate, the design and construction of the proposed works and services will conform to the relevant sections of the applicable Building Codes and Standards including:

- a. Building Code of Australia;
- b. current Australian Standards and Codes;
- c. Commonwealth and State legislation;

- d. Defence Manual of Fire Protection Engineering;
 - e. Defence Facilities Communications Cabling Standard;
 - f. relevant Defence Security Publications; and
 - g. occupational health, safety and welfare legislation and the Defence Occupational Health and Safety Manual.
61. Qualified and practising building certifiers will be required to certify that the design and finished construction of the proposed facilities meet the requirements of the Building Code of Australia, relevant Australian Standards and codes, the Defence Manual of Fire Protection Engineering and any additional State, Local Government and Defence requirements.
62. The successful construction Contractors will be required to produce Project Quality Plans. These plans will clearly show how the building codes, Australian Standards and any additional Defence requirements in relation to security, fire protection and fire safety will be met and how the required standards for construction and installation are to be maintained.

PLANNING AND DESIGN CONCEPTS

63. The general philosophy adopted for the design of the proposed facilities incorporates the following considerations:
- a. the provision of cost effective and utilitarian facilities of energy efficient design suitable for the climate of each site (including cyclonic conditions) and of a style compatible with the relevant base aesthetics;
 - b. adoption where possible of conventional construction techniques and materials, in particular those commonly used by the construction industry in each location;
 - c. the maximum use of existing infrastructure and facilities to minimise capital costs;
 - d. utilisation of readily available and durable materials that combine long life while minimising maintenance;
 - e. recognition of site constraints, security requirements, functional relationships to existing facilities and operational determinants; and
 - f. planning, services and structure designed to accommodate flexibility.

64. The designs provide a safe, efficient and pleasant workplace and also represent value for money. The designs offer good economy in relation to floor area, construction techniques, buildability and finishes, whilst achieving the necessary functional requirements, work flow patterns and work environment required to fulfill the function of the space.

65. Designers have been required to consider, during the preliminary design stage, the implications and estimates of costs for designs, materials, construction techniques, finishes, equipment and energy systems which will deliver economy on a whole of life costing basis.

66. In the final selection of services and associated equipment, the capital cost is balanced against operational and maintenance costs. Operating costs comparisons will be included in a life cycle costing analysis during detailed design and prior to selection. Particular consideration has been given to energy efficient design solutions employing passive solar and breezeways and water re-use initiatives.

67. The design, structure, servicing, and siting of buildings has been determined to maximise the opportunity for future expansion where possible. This is of particular importance in siting, sizing and terminating in-ground services. New mechanical plants that are installed in new facilities will be modular to ensure flexibility.

68. Maximum flexibility is required for most internal office accommodation facilities. Except where the need for security or noise reduction dictates otherwise, minimum use is to be made of structural internal walls or columns. In general terms, internal walls in office areas will be of demountable partition or workstation type to facilitate economic rearrangement. Building services will be compatible with this requirement.

69. The building works and services will be fully fitted out, with all communications and office equipment, light fittings, partitions, floor treatments and furniture. New facilities will incorporate building management systems, metering and other provisions to measure and monitor energy use and to allow regular energy audits.

BUILDING DESIGN PRINCIPLES

Context and Objectives

70. There is an established character and typology of construction at each Defence Base. Buildings proposed in this project are designed to be effective in their functionality and sympathetic to the established principles of design in the locality.

Design for Climate

71. In all aspects of the design, consideration has been given to climatic issues with a view to providing climatically responsive solutions for the specific site. The following design principles have been applied during the design of all new construction and refurbishments:

- a. orientate according to avoid long façade facing east or west;
- b. protection to facades for sun shading and weatherproofing; and
- c. wall and roof materials selected to suit climate.

MATERIALS AND FINISHES

72. Materials chosen in this project are integral in forming the character of the new built elements, providing the link between them and the existing building context. Key considerations to the selection of building materials on the project include:

- a. durability and whole-of-life cost considerations;
- b. where possible pre- or self-finished building elements are used externally, e.g. external cladding systems;
- c. replacement potential and access;
- d. ecologically sustainable development considerations with regard to toxicity, ozone depletion, manufacturing and construction waste minimisation, off-gassing, recyclability, site working, componentization;
- e. fitness for purpose;
- f. lightweight construction with consideration of a durable material at ground level;

- g. techniques of assembly and build ability;
- h. consideration of materials used in existing buildings; and
- i. accessibility to local suppliers and labour force.

MECHANICAL SERVICES

73. The mechanical services works involve a number of systems. Air-conditioning will be provided to areas where climate and usage dictates a need. The selection of building services and associated equipment to new air-conditioned facilities will be required to achieve an economic balance between capital cost and operation and maintenance costs. Selection will be based on a life cycle costing analysis and particular consideration will be given to energy efficient design solutions employing passive solar and natural ventilation. New facilities will incorporate building management systems, metering and other provisions to measure and monitor energy use and to allow regular energy audits where practicable.

HYDRAULIC SERVICES

74. Hydraulic services for water supply, sewerage, and storm water within each precinct involve extension of infrastructure and building services to suit.

ELECTRICAL SERVICES

75. Lighting, power and lightning protection will be provided in accordance with Australian Standards and Defence requirements. Electrical infrastructure and switchboards will have modest spare capacity to allow for any future growth or demand. Fire detection systems, indication panels, emergency and exit lighting will be provided to suit the existing site systems.

CIVIL WORKS

76. None of the proposed sites for the new facilities present any particular civil engineering problems, but each will be the subject of further survey and geotechnical investigation during the design phase. The geotechnical surveys and inspections have been completed and foundation designs take into account local soil structures and weather conditions.

ACOUSTICS

77. Noise assessments have been, and will continue to be, conducted for the proposed facilities. These assessments found that noise impacts could be managed within acceptable limits and should not adversely affect the surrounding environments. Externally located mechanical plant will be appropriately selected and treated to minimise noise impact on the environment within a suitable internal and external noise range.

78. Acoustic performance in new facilities will comply with the following:
- a. the Building Code of Australia;
 - b. the Security Manual, Defence Occupational Health and Safety Manual and the Safety Manual;
 - c. Defence policy “Management of Fixed Plant and Equipment Requiring Special Licenses within Infrastructure Division”;
 - d. Worksafe National Standard for Occupational Noise (NOHSC:1007(2000));
 - e. National Code of Practice for Noise Management and Protection of Hearing at Work (NOHSc:2009 (2000));
 - f. Environment Protection Policy (Noise) 1997;
 - g. Environmental Protection Authority; and
 - h. Australian Standard AS2021; Australian Standard AS2107.

WATER AND ENERGY CONSERVATION MEASURES

79. The Commonwealth is committed to Ecologically Sustainable Development and the reduction of greenhouse gas emissions. Defence reports annually to Parliament on its energy management performance and on its progress in meeting the energy efficiency targets established by the government as part of its commitment to improve ecologically sustainable development. Defence also implements policies and strategies in energy, water and waste to improve natural resource efficiency and to support its commitment in the reduction of energy consumption, potable water consumption and waste diversion to landfill. This project has addressed these

requirements by adopting cost effective ecologically sustainable development, as a key objective in the design development and delivery of new facilities and major refurbishments.

80. The ecologically sustainable development targets and measures for the project have been balanced with other requirements for Defence buildings (e.g. security, heritage considerations, Occupation Health and Safety) to ensure that, first and foremost, Defence's operational capability is not compromised.

81. All buildings included in this project will be designed, constructed, operated and maintained to ensure that they use energy efficiently. To achieve this, as a minimum, the buildings will comply with:

- a. Part I2 and Section J of Volume One of the Building Code of Australia;
- b. Part 3.12 of Volume Two of the Building Code of Australia;
- c. the Energy Efficiency in Government Operations policy; and
- d. Defence Green Building Requirements, as applicable to the classification of each building.

82. All buildings will comply with the relevant energy efficiency provisions in the Building Code of Australia, except where there are energy efficiency requirements imposed by Defence Green Building Requirements that are of a higher standard. In this project, all buildings have an energy target of 20% below that of a design reference building complying with section J of the Building Code of Australia.

83. Defence has adopted the principles of the Energy Efficiency in Government Operations policy in relation to office accommodation. For those new office buildings that have a floor area of greater than 2000 m², the whole building will target 4.5 stars Australian Building Greenhouse rating using the National Australian Built Environment Rating System (NABERS) as required by Defence Green Building policy.

84. For all other mixed-use buildings that have office floor area of less than 2000m², separate digital on market status metering will be installed and office lighting will not exceed 10 W/m². Separate digital on market status metering will be installed in new buildings. An energy management plan will be developed for implementation

by Defence. Where available, fit for purpose and cost-effective appliances will be United States Environmental Protection Agency 'Energy Star' compliant with power management features enabled at the time of supply.

85. Each new building will be modelled to determine the predicted energy consumption, and design targets will be determined for each building, depending on the building classification. Energy management is a key aspect in the design of the new facilities and the initiatives which will be included are:

- a. orientating the buildings to minimise east and west solar gain;
- b. installing a Building Management System in each building, linked to the site wide Regional Utilities Management System;
- c. natural ventilation and mixed mode systems wherever possible;
- d. installation of ceiling fans in selected areas to enhance comfort without the use of air conditioning;
- e. separate digital energy metering for tenanted areas and building services; and
- f. energy efficient lighting (T5 fluorescent light fittings in office areas) supplemented by energy efficiency techniques such as occupancy sensing and after-hours automatic shut-off controls; and energy efficient appliances

86. Efficient water use is a key aspect of the design. In this project, all buildings have an water efficiency target of 30% below that of a design reference building complying with section J of the Building Code of Australia. Key water saving measures may include:

- a. all tapware and fittings compliant with the Water Efficiency Labelling Standards scheme to provide a minimum of a 3 Star water conservation rating;
- b. pressure limiting valves to limit pressure at all appliances;
- c. provision for separate internal and external reticulation of cold water to all toilets and urinal flushing for future connection to non-potable water supply infrastructure; and
- d. sub-metering of all major water supplies to each new building; and rainwater harvesting from the new construction roof areas complete with storage tanks

and pressure pumping to supply localised landscaping, wash down areas and toilet flushing.

MASTER PLANNING AND FUTURE DEVELOPMENT

87. The proposal complies with Master Planning requirements at each location. There are a number of projects at the Enhanced Land Force sites at various planning stages, which are all working towards construction within the next decade.

Coordination Groups have been established by Defence to ensure consistency in siting, works definition and programming. They are also responsible to ensure that industry engagement and facilities-related public communications are timely and comprehensively implemented.

88. In October 2007, Government announced a second stage of the Enhanced Land Force initiative. The Enhanced Land Force Stage 2 Facilities project is being developed by the Department for consideration by this Committee in early 2010. This project involves the development of a new motorised infantry battalion in the 7th Brigade by raising the 8th/9th Battalion of the Royal Australian Regiment and further enhancing training and joint enabling elements primarily in South East Queensland. The project will propose a range of new, extended and refurbished facilities to complete the infrastructure support for the Government's Enhanced Land Force initiative.

89. All related projects have been considered during the development of the Enhanced Land Force facilities and infrastructure designs to ensure planned equipment can be accommodated.

PROVISIONS FOR PEOPLE WITH DISABILITIES

90. Access and facilities for the disabled will be provided where necessary in accordance with the Building Code of Australia, Australian Standard AS1428 and Defence's policy "Disabled Access and Other Facilities for Disabled Persons". Where possible the use of existing facilities and access has been identified and incorporated in the design.

91. Dispensations will only be sought where operational requirements are inconsistent with Building Code of Australia requirements. In particular, access for people with disabilities will be limited to a small number of buildings on the basis that the majority of facilities will be occupied by military personnel, the nature of whose occupation often precludes any disabilities.

HERITAGE ISSUES

92. There are five Defence bases where works are proposed that are on the Commonwealth Heritage list; RAAF Base Amberley, Holsworthy, Hopkins and Bridges Barracks, and RAAF Base Richmond for indigenous, natural or historic values. Lavarack Barracks has an indicative Commonwealth heritage listing.

93. The proposed works do not impact on any of the heritage values associated with the Commonwealth Heritage List. However the project has the potential to uncover previously unknown aboriginal sites during construction especially at Greenfield sites.

94. There are Heritage Management Plans for all Commonwealth heritage listed bases and the proposed works will conform to the advice contained within the relevant base Heritage Management Plans. Appropriate management measures will be incorporated into the Construction Environmental Management Plan for each work site.

CHILD CARE PROVISIONS

95. No changes to existing childcare provisions are proposed. Contractual arrangements with Childcare providers will be adhered to at all bases impacted by the project.

FIRE PROTECTION AND SECURITY MEASURES

96. All construction and fire protection requirements will, as a minimum, be in accordance with the provisions of the Building Code of Australia, the Defence Manual of Fire Protection Engineering and all other applicable Codes and Standards.

The Manual of Fire Protection Engineering details Defence fire protection policy for asset protection and building function protection. The levels of fire protection specified are above Building Code of Australia requirements and have been determined by a risk assessment and risk management approach to fire protection.

97. The relevant State Fire Brigade will be invited to comment on the project, visit the site and offer comment throughout the construction phase to ensure that the Brigade's operational requirements are met.

98. Any recommended departures from Building Code of Australia requirements in relation to the project will be technically assessed by Defence specialist fire protection staff and where warranted by the scope of the departure, a suitably qualified and experienced fire engineer. Agreed departures (ensuring an equivalent or higher level of protection than Building Code of Australia requirements) will require written approval from Assistant Secretary level.

99. Successful tenderers will be required to produce a Quality Assurance Plan to clearly show how Building Code of Australia, Australian Standards and any additional Defence requirements in relation to fire protection/fire safety, will be met and the required standards for construction/installation maintained.

100. In accordance with Government initiatives to improve physical security arrangements across Government Departments, advice from designated security authorities has and will continue to be incorporated in the design solutions for the proposed facilities as appropriate. A Security Threat Assessment and a Security Risk Assessment have been completed, and appropriate security protection will be provided in accordance with the Defence Security Manual and specific project requirements. The security threat assessment will be reviewed during the detailed design phase and the facilities would be secured as appropriate to the classification level required for activities conducted.

OCCUPATIONAL, HEALTH AND SAFETY MEASURES

101. The proposed facilities will comply with the requirements of the Occupational Health and Safety Act 1991, the Department of Defence Occupational Health and Safety Manual and relevant State Government occupational health and safety

102. The Australian Government is committed to improving occupational health and safety outcomes in the building and construction industry. In accordance with Section 35(4) of the Building and Construction Industry Improvement Act 2005 (Cth), contractors will hold full occupational health and safety accreditation from the Office of the Federal Safety Commissioner under the Australian Government Building and Construction Occupational Health and Safety Accreditation Scheme.

103. All construction sites will be appropriately secured to prevent public access during the construction period. No special or unusual public safety risks have been identified.

LANDSCAPING

104. Landscaping works would be directed toward the restoration of areas disturbed during construction and general improvement of the built environment. Precautions would be taken to avoid compromising existing environmental sensitivities by adopting landscaping practices in keeping with local environmental conditions. Landscaping design will have regard to minimising potable water usage.

CONSULTATION WITH RELEVANT AUTHORITIES

105. A wide range of authorities have been engaged at each location, including local Councils, relevant water and energy companies. Authorities that have been, or will be, consulted are listed at Attachment 1.

IMPACT ON THE LOCAL COMMUNITY

106. The proposal will have a positive economic impact on local communities. The project will generate a significant amount of employment during the construction phase through on-site labour and construction materials fabrication and supply. Works will be delivered by a number of Head Contracts. Defence anticipates that local building sub-contractors would be employed on a large proportion of the construction

works. More broadly, the move of close to 800 Army personnel plus their dependents to Townsville will generate significant long term economic benefits to the community by increasing local spending on goods and services. Another positive economic impact is expected from additional local staff hired to provide increased garrison support and comprehensive maintenance services during the facilities' operation. There will be minimal disruption of local community activities either during or post construction.

PROJECT COSTS

107. The estimated outturn cost of the proposed works is \$793.1m (excluding GST). The cost estimates include all construction costs, professional fees, escalation provision, furniture and fittings, information communication technology and a contingency sum.

108. An increase in net personnel and operating cost is expected due to the construction of new facilities and the associated increases in facilities maintenance, cleaning and utilities expenses.

PROJECT DELIVERY SYSTEM

109. The proposed works are to be delivered as separate head contracts, based on the work elements identified at each location.

PROJECT SCHEDULE

110. Subject to Parliamentary clearance of the project, construction is expected to commence in mid 2009 and be completed in late 2011.

LIST OF ATTACHMENTS

1. Key Stakeholder Consultations
2. Enhanced Land Force Stage 1 Facilities Location Map

Lavarack Barracks, Townsville

3. Lavarack Barracks Site Map
4. 3rd Battalion Precinct Plan
5. 3rd Battalion Headquarters Floor Plan
6. 3rd Battalion Company Headquarters Floor Plan
7. 3rd Battalion Company Q Store Floor Plan
8. 3rd Battalion Administration Company Floor Plan
9. 3rd Battalion Support Company Floor Plan
10. 3rd Battalion Platoon Facility Floor Plan
11. 3rd Battalion Support Platoon Facility Floor Plan
12. 3rd Battalion Assault Pioneer Platoon Floor Plan
13. 3rd Battalion Signals & Reconnaissance Platoon Facility Floor Plan
14. 3rd Battalion Regimental Aid Post Floor Plan
15. 3rd Battalion Q Store Compound Layout
16. 3rd Battalion Main Q Store Floor Plan
17. 3rd Battalion Technical Support & Transport Facility Floor Plan
18. 3rd Battalion Technical Workshop Floor Plan
19. 3rd Battalion Transport Compound Layout
20. 3rd Battalion Vehicle Shelters –Transport Compound Layout
21. 3rd Battalion Vehicle Shelters – Floor Plan
22. 3rd Battalion Vehicle Shelters - Section
23. 3rd Battalion Transport & Technical Support Compound layout
24. 3rd Battalion Guard Room Floor Plan
25. 3rd Battalion Unit Training Facility Floor Plan
26. 3rd Battalion Physical Training Facility Floor Plan
27. 3rd Battalion Pavement Plan
28. 3rd Battalion Earth Works Plan
29. 3rd Battalion Water Reticulation Plan
30. 3rd Battalion Sewer Plan
31. 3rd Battalion Combined Services Plan
32. B Squadron 3rd/4th Cavalry Regiment Vehicle Hanger Plan
33. Additional Mobility Troop Facility Floor Plan
34. Vasey Mess Floor Plan
35. Daley Mess Floor Plan
36. Chauvel Mess Floor Plan
37. Lavarack Barracks Medical Centre Precinct Plan
38. Lavarack Barracks Medical Centre Floor Plan
39. Lavarack Barracks New Close Training Area Layout
40. Joint Logistics Unit (North Queensland) Precinct Plan
41. Joint Logistics Unit (North Queensland) Workshop Floor Plan
42. Joint Logistics Unit (North Queensland) Armoury Floor Plan
43. Lavarack Barracks Water Reticulation Plan
44. Lavarack Barracks Sewer Layout
45. Lavarack Barracks Electrical Services Layout
46. Layout of Cluden Drive Entrance

RAAF Base Amberley, Ipswich

47. RAAF Base Amberley Site Map
48. No 1 and No 2 Air Field Defence Squadrons Precinct Plan
49. No 1 and No 2 Air Field Defence Squadrons Headquarters Ground Floor Plan
50. No 1 and No 2 Air Field Defence Squadrons Headquarters First Floor Plan
51. No 1 and No 2 Air Field Defence Squadrons Rifle Flights Floor Plan
52. No 1 and No 2 Air Field Defence Squadrons Rifle Flights Training Facility Floor Plan
53. No 1 and No 2 Air Field Defence Squadrons Support Flight – Surveillance, Reconnaissance and Recovery Sections, PAF Cadre and Military Working Dog Section Floor Plan
54. No 1 and No 2 Air Field Defence Squadrons Support Flight – Communications Section and Armoury Floor Plan
55. No 1 and No 2 Air Field Defence Squadrons Support Flight – Ready Deployment Stores and Assault Pioneers Floor Plan (East)
56. No 1 and No 2 Air Field Defence Squadrons Support Flight – Ready Deployment Stores and Assault Pioneers Floor Plan (West)
57. No 1 and No 2 Air Field Defence Squadrons Vehicle Shelters Plan
58. 21st Construction Squadron Precinct Plan
59. 21st Construction Squadron Headquarters Floor Plan
60. 21st Construction Squadron Operational Support Troop Facility Floor Plan
61. 21st Construction Squadron Workshop Floor Plan
62. 21st Construction Squadron Construction Troop Facility Floor Plan
63. 21st Construction Squadron Resources Troop Facility Floor Plan
64. 21st Construction Squadron Plant Troop Facility Floor Plan

Blamey Barracks, Kapooka

65. Blamey Barracks Site Map
66. Echo Company Headquarters Building Floor Plan
67. Echo Company Living In Accommodation Building Ground and First Floor Plan
68. Echo Company Living In Accommodation Building Second Floor Plan
69. Echo Company Precinct Plan
70. Rehabilitation Platoon Living In Accommodation Building Floor Plan
71. 1st Recruit Training Battalion Headquarter Building Ground Floor Plan
72. Fitness Facility (Covered Outdoor Area) Site Map
73. Fitness Facility (Gymnasium) Ground Floor Plan
74. Fitness Facility (Swimming Pool) Ground Floor Plan
75. 1st Recruit Training Battalion Instructional Facility Building Floor Plan
76. Weapons Training Simulation System Building Floor Plan
77. Regimental Aid Post and Dental Facility Building Floor Plan
78. Kapooka Health Centre Building Floor Plan
79. 1st Recruit Training Battalion Mess Building Ground Floor Plan
80. 1st Recruit Training Battalion Mess Building First Floor Plan
81. Army Recruit Training Centre Q Store Precinct Plan

Lone Pine Barracks, Singleton

82. Lone Pine Barracks Site Map
83. Alpha Company Headquarters Building Floor Plan
84. Transition Rehabilitation Headquarters Building Floor Plan
85. Training Support Company Building Floor Plan
86. Rifleman Wing Lecture Room Building Floor Plan
87. Weapons Training Simulation System Building Floor Plan
88. Fitness Facility (Gymnasium) Ground Floor Plan
89. Weapons Cleaning Facility Floor Plan
90. Q Store Building Floor Plan
91. Integrated Health Facility Building Ground Floor Plan

RAAF Base Richmond, Sydney

92. RAAF Base Richmond Site Map
93. No 37 Squadron Hangar Building Floor Plan
94. No 1 Airfield Operations Support Squadron Precinct Plan
95. No 1 Combat Communications Squadron Precinct Plan

Holsworthy Barracks, Sydney

96. Holsworthy Barracks Site Map
97. 1st Health Support Battalion Precinct Plan
98. 1st Health Support Battalion Treatment Area Floor Plan

Steele Barracks, Sydney

99. Steele Barracks Site Map

Hopkins Barracks, Puckapunyal

100. Hopkins Barracks Site Map
101. Gunnery Wing Building First Floor Plan
102. Gunnery Wing Vehicle Bay Floor Plan
103. Gunnery Wing Simulation Shelters Floor Plan
104. Driver and Servicing Wing Offices Floor Plan
105. Driver and Servicing Wing Precinct Plan (Bays 1-6)
106. Driver and Servicing Wing Precinct Plan (Bays 7-12)
107. Driver and Servicing Wing Vehicle Bays 1-6 Floor Plan
108. Tactics Wing Ground Floor Plan
109. Tactics Wing First Floor Plan
110. Communications Wing Ground Floor Plan
111. Communications Wing First Floor Plan
112. Dismounted Troop Precinct Plan
113. Dismounted Troop Floor Plan

Bridges Barracks, Puckapunyal

114. Bridges Barracks Site Map
115. Protected Mobility Vehicle Hangar and Instructional Facility Floor Plan

RAAF Base Edinburgh, Adelaide

116. Joint Logistics Unit (South) Precinct Plan
117. Joint Logistics Unit (South) Workshop Floor Plan
118. Joint Logistics Unit (South) Armoury Floor Plan

Campbell Barracks, Perth

119. Campbell Barracks Site Map

ATTACHMENT 1

Enhanced Land Force Stage 1 Facilities Project - Key Stakeholder Consultations

Base/Location	Position/Role	Organisation
Lavarack Barracks, Townsville	Federal Member for Herbert	Parliament House of Australia
	State Member for Mundingburra	Parliament House of Queensland
	State Member for Thuringowa	Parliament House of Queensland
	State Speaker of the House	Parliament House of Queensland
	State Member for Burdekin	Parliament House of Queensland
	Mayor of Townsville	Independent
	Regional Executive Director	Queensland Education Department
	Regional Director	Defence Housing Authority
	President	Townsville Chamber of Commerce
	CEO	Townsville Enterprise Limited
	CEO	Townsville City Council
	Principal Engineer, Corridor Planning and Development	Queensland Department of Main Roads
	Manager, Infrastructure Planning, Water and Wastewater Business Unit	Townsville City Council
	Senior Technical Officer, Infrastructure Planning, Water and Wastewater Business Unit	Townsville City Council
	Manager, Network Connection	Ergon Energy
RAAF Base Amberley, Ipswich	Federal Member for Blair	Parliament House of Australia
	State member for Ipswich West	Parliament House of Queensland
	Deputy Mayor	Ipswich City Council
	A/District Director (Ipswich)	Dept of Main Roads Queensland
	Project Manager	Energex
	Manager Project Services	Ipswich Water
	Director	Australian Koala Foundation
Blamey Barracks, Kapooka	Federal Member for Riverina	Parliament House of Australia
	State Member for Wagga Wagga	Parliament House of NSW
	Mayor	City of Wagga Wagga
	Strategic Planner Public Health	City of Wagga Wagga
	Operations Engineer	Riverina Water County Council
	Manager Planning and Customer Connection	Country Energy
	Regional Manager	NSW Fire Brigade
	Senior Engineer	Department of Environment and Climate Change
	Chair	Industry Capability Network
	President	Wagga Wagga Chamber of Commerce
	Regional Manager	Defence Housing Authority

Base/Location	Position/Role	Organisation
Lone Pine Barracks, Singleton	Federal Member for Hunter	Parliament House of Australia
	State Member for Upper Hunter	Parliament House of NSW
	Mayor	Singleton Shire Council
	General Manager (Acting)	Singleton Shire Council
	President	Hunter Business Chamber
	Chairman Defence Industry Committee	Hunter Business Chamber
	Utilities Coordinator (Water and Sewer Services)	Singleton Shire Council
	Senior Site Inspector/Surveyor	Singleton Shire Council
	Manager for Planning and Negotiation – Upper Hunter	Energy Australia
	Network Designer	Telstra Corporation Limited
	Zone Commander, Western Zone	NSW Fire Brigade
	Regional Manager	Defence Housing Authority
RAAF Base Richmond, Sydney	Federal Member for Greenway	Parliament House of Australia
	State Member for Londonderry	NSW Parliament
	Mayor	Hawkesbury City Council
Holsworthy and Steele Barracks, Sydney	Federal Member for Hughes	Parliament House of Australia
	State Member for Menai	Parliament House of NSW
	Mayor	Liverpool City Council
Hopkins and Bridges Barracks, Puckapunyal	Federal Member for McEwan	Parliament House of Australia
	State Member for Seymour	Parliament House of Victoria
	Mayor	City of Seymour
	Planning and Development Manager	Mitchell Shire Council
	Regional Fire Chief	The Country Fire Authority, Victoria
	Manager	SP Ausnet Limited (Powercor)
	Regional Manager	Defence Housing Authority
RAAF Base Edinburgh, Adelaide	Federal Member for Wakefield	Parliament House of Australia
	State Member for Taylor	Parliament House of South Australia
	Mayor	City of Salisbury
	Mayor	City of Playford
	Director Strategic Planning	City of Salisbury
	Business Development Manager	Network Group, ETSA Utilities
	Head of Planning and Infrastructure	SA Water
Campbell Barracks, Perth	Federal Member for Curtin	Parliament House of Australia
	State Member for Cottesloe	Parliament House of Western Australia
	Coordinator Statutory Planning	City of Nedlands