

Parliamentary Standing Committee on Public Works

REPORT

relating to the

DEVELOPMENT OF READY RESERVE (49th BATTALION, ROYAL QUEENSLAND REGIMENT AND 6th BRIGADE ADMINISTRATIVE SUPPORT BATTALION) WORKING ACCOMMODATION AT ENOGGERA, QLD.

(Twenty-third Report of 1995)

**THE PARLIAMENT OF THE COMMONWEALTH OF AUSTRALIA
1995**

The Parliament of the Commonwealth of Australia
Parliamentary Standing Committee on Public Works

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**DEVELOPMENT OF READY RESERVE
(49th BATTALION, ROYAL QUEENSLAND
REGIMENT AND
6th BRIGADE ADMINISTRATIVE
SUPPORT BATTALION) WORKING
ACCOMMODATION AT ENOGGERA, QLD**

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**MEMBERS OF THE PARLIAMENTARY STANDING COMMITTEE
ON PUBLIC WORKS**

(Thirty-Seventh Committee)

Mr Colin Hollis MP (Chair)
Senator Paul Henry Calvert (Vice-Chair)

Senate

Senator Bryant Robert Burns
Senator Shayne Michael Murphy*

House of Representatives

Mr John Neil Andrew MP
Mr Raymond Allen Braithwaite MP
Mr Russell Neville Gorman MP
Mr Robert George Halverson OBE MP
Hon Benjamin Charles Humphreys MP

* replaced Senator John Devereux on 10 February 1995

**SECTIONAL COMMITTEE ON DEVELOPMENT OF READY RESERVE
(49th BATTALION, ROYAL QUEENSLAND REGIMENT AND 6th
BRIGADE ADMINISTRATIVE SUPPORT BATTALION) WORKING
ACCOMMODATION AT ENOGGERA, QLD**

Senator P Calvert (Chair)
Hon B Humphreys MP (Deputy-Chair)
Mr R Braithwaite MP
Mr R Halverson OBE MP

Committee Secretary:	Peter Roberts
Inquiry Secretary:	Denise Denahy
Secretarial Support:	Suzanne Stanfield

**EXTRACT FROM THE VOTES AND PROCEEDINGS OF
THE HOUSE OF REPRESENTATIVES**

No. 146 dated Tuesday, 20 June 1995

**4 PUBLIC WORKS — PARLIAMENTARY STANDING
COMMITTEE — REFERENCE OF WORK - DEVELOPMENT
OF READY RESERVE WORKING ACCOMMODATION AT
ENOGGERA, QLD.**

Mr Walker (Minister for Administrative Services), pursuant to notice, moved— That, in accordance with the provisions of the *Public Works Committee Act 1969*, the following proposed work be referred to the Parliamentary Standing Committee on Public Works for consideration and report: Development of Ready Reserve (49th Battalion, Royal Queensland Regiment and 6th Brigade Administrative Support Battalion) working accommodation at Enoggera, Qld.

Question - put and passed.

PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

DEVELOPMENT OF READY RESERVE WORKING ACCOMMODATION AT ENOGGERA, QLD.

By resolution on 20 June 1995 the House of Representatives referred to the Parliamentary Standing Committee on Public Works for consideration and report the development of Ready Reserve (49th Battalion, Royal Queensland Regiment and 6th Brigade Administrative Support Battalion) working accommodation at Enoggera, Qld.

THE REFERENCE

1. It is proposed to provide working accommodation for the Ready Reserve 49th Battalion Royal Queensland Regiment (49 RQR) at Gallipoli Barracks, Enoggera in Brisbane. 49 RQR, 6 Brigade Administrative Support Battalion (6 BASB) and the Enoggera area clothing store will be accommodated within the overall scope of work. Project elements will include separate facilities for a battalion headquarters, administrative and support companies, a Quartermaster's store, four rifle company areas and a centralised transport platoon.

THE COMMITTEE'S INVESTIGATION

2. On 31 August 1995 the Committee appointed a Sectional Committee comprising Senator P Calvert (Chair), Hon B Humphreys MP (Vice-Chair), Mr R Braithwaite MP and Mr R Halverson OBE MP to undertake this inquiry.
3. On 4 September 1995 the Sectional Committee inspected the existing 49 RQR and the 6 BASB facilities as well as the proposed sites for the new facilities.
4. The Committee received a written submission from the Department of Defence (Defence) and evidence was taken by the Sectional Committee from its representatives at a public hearing held at Enoggera on 4 September 1995.
5. Submissions were also received from the following organisations and are included in the Minutes of Evidence:

- Australian Heritage Commission
- Queensland Department of Environment and Heritage

- Environment Protection Agency
- Commonwealth Fire Board
- Commonwealth Department of Primary Industries and Energy
- National Trust of Queensland.

6. A list of witnesses who gave evidence at the public hearing is at Appendix A. The Committee's proceedings will be printed as Minutes of Evidence.

BACKGROUND

7. The Ready Reserve (RRes) components were formed in the Australian Defence Force (ADF) in 1992 as a means of increasing the ADF's capacity to deploy well trained personnel in shorter time scales than conventional reserves. 49 RQR was an Army Reserve (ARes) unit prior to the formation of the RRes and was located in and around Brisbane with its headquarters at Wacol. Upon regrouping with the newly formed RRes Brigade, it was relocated to Gallipoli Barracks in 1992. With the formation of the RRes Brigade, 6 BASB was also created from the logistic elements supporting the Brigade. The roles of these units are:

- 49 RQR - To seek out and close with the enemy, to kill or capture him, to seize and hold ground and to repel attack by day or night regardless of season, weather or terrain
- 6 BASB - To provide second line administrative support to 6 Brigade and allotted units.

8. 49 RQR comprises four rifle companies, a support company, administrative company and a battalion headquarters. These sub units are dispersed throughout Gallipoli Barracks in seven working locations as well as accommodation and messing areas.

THE NEED

9. The RRes implementation has increased the number of infantry battalions within Enoggera from two to three, without the provision of any new facilities. Gallipoli Barracks has been subjected to an influx of units over the past decade including 106 Field Workshop, 21 Construction Squadron, 6 BASB and 49 RQR. The last three units have moved into existing facilities that have in some cases involved dislocation of other elements or use of dysfunctional and inadequate accommodation.

10. The particular requirements of 49 RQR are exacerbated by the staged implementation of the RRes. 49 RQR moved into Gallipoli Barracks initially as a battalion headquarters with only one infantry company. As the other five companies were progressively established, they have been accommodated in a variety of buildings throughout the barracks and dispersed over a distance of two kilometres.

11. The success of the RRes implementation relies on the ability of 49 RQR to be an operationally effective unit. The disparate locations, lack of functionality and in some cases inadequate size, detract from unit effectiveness and the effective utilisation of accommodation in Gallipoli Barracks. This also impacts on the morale of unit members as they can see that other battalions are better accommodated than 49 RQR. The unit layout as it now exists leads to inefficiencies in control, administration and training. A significant factor is the difficulty in being able to achieve unit cohesion in barracks, resulting in reduced operational effectiveness. Defence advised the Sectional Committee that there are approximately 3 500 personnel on base when the RRes are concentrated in this cantonment.

12. The Sectional Committee queried the future of the RRes. Defence advised that if the RRes were to be abolished, the proposed facilities would be readily adaptable for reuse. As part of the planning considerations, building design will be as flexible as possible so that buildings can be re-adapted for use without difficulty. Defence believes that Enoggera will continue to be a base for an infantry brigade for the foreseeable future.

13. In May 1991 the Minister for Defence, Senator the Hon. Robert Ray, announced the Ready Reserve Program. At that time the Minister directed that the Program should be reviewed three years after its commencement in January 1992. In December 1994 Lieutenant General John Coates and Dr Hugh Smith were formally invited by the Parliamentary Secretary to the Minister, the Hon. Arch Bevis, to conduct a review and to report by 30 June 1995. Since the public hearing, the "Review of the Ready Reserve Scheme" by Lieutenant General John Coates and Dr Hugh Smith has concluded that the Ready Reserve Scheme is viable, with sound prospects for its continuation into the future. The Report recommends that Army should continue its development of 6 Brigade as a Ready Reserve formation.

Locations occupied by 49RQR

14. 49 RQR occupies facilities dispersed over nine separate locations (See Appendix B). With the exception of living-in accommodation and soldier

messing, the facilities currently occupied were not purpose-built and are neither functionally suitable nor efficient.

15. **Location One - Headquarters 49 RQR.** This building is shared with the base Dental Unit and was originally built as an area administrative facility. It has sufficient area but is functionally inefficient as a battalion headquarters. It is proposed that this building will be reused by elements of the South Queensland Logistic Group.

16. **Location Two - Part of Administration Company 49 RQR.** These buildings have reached the end of their economic life and are to be demolished once vacated. They occupy an area that forms part of the environmental green belt that is detailed in the Gallipoli Barracks Master Plan. The belt forms part of the Brisbane City Council (BCC) environmental plan which Defence has agreed to support.

17. **Location Three - Technical Support Platoon of the Administration Company.** The area was part of the Brigade Transport Squadron compound. This facility is to be relocated to the adjacent workshop facility. Lack of available facilities has required that the Transport Squadron be compressed into a smaller area. This area will become part of the new 49 RQR.

18. **Location Four - Quartermaster's Store for 49 RQR.** This corrugated iron warehouse is adequate for its purpose. If vacated, however, it will provide necessary additional storage capacity for 21 Construction Squadron which is currently located in the adjacent buildings and in need of additional under-cover storage.

19. **Location Five - Working accommodation for two companies.** This building is an adequate size for one company and was originally built for a cavalry squadron. These companies have not yet reached "steady state" and will need to expand into larger facilities as the Battalion reaches "steady state". "Steady state" is the manning level which the RRes Brigade is intended to reach by December 1996. At this stage annual recruitment will reach the steady level required to replace natural attrition. This location will become part of the new 49 RQR facility.

20. **Location Six - Location of two complete companies and a support company headquarters.** The building is an instructional facility which, if vacated, will again be available as an area facility.

21. **Location Seven - currently occupied by Support Company less its Headquarters.** The building is adequate functionally for its current purpose.

Collocation with Company Headquarters would be an advantage for improved administrative efficiency. This building will be adapted for re-use as the central clothing store, as the existing clothing store will be required for the new battalion headquarters of 49 RQR.

22. **Locations Eight and Nine - Soldier living-in accommodation and messing facilities for 49 RQR.** The facilities are in good condition but unfortunately not conveniently located with respect to the present working accommodation. The messing and living accommodations will be retained in their present uses.

Committee's Conclusions

23. **Facilities presently occupied by 49 Royal Queensland Regiment are not adequate for a unit which is required to meet an operational role in the Australian Defence Force.** Most of these facilities were not purpose-built and are neither functionally suitable nor efficient. A need therefore exists to provide functional working accommodation for the Ready Reserve at Gallipoli Barracks, Enoggera, Qld.

THE PROPOSAL

Options Considered

24. Three options were considered for the provision of functional working accommodation for the RRes.:

- the first option provides minimal improvements to 49 RQR's existing accommodation and addresses only Occupational Health & Safety (OH&S) deficiencies. This is a low cost option which does not address additional requirements or the major shortfall in the existing accommodation and does not meet the Enoggera master planning requirements. Defence considers this a "band-aid option" which does not solve the existing problems. The estimated cost is \$5.6m
- the second option provides new purpose-built working accommodation for 49 RQR on a "greenfield" site within Enoggera. The estimated cost is \$19.6m. This is the current program provision for the project. This option has the advantage of collocation of 49 RQR which would be accommodated in functional, purpose-built accommodation. Facilities vacated by 49 RQR would be available for occupation by units currently in cramped facilities due to over crowding at Enoggera Barracks. Minimal disruption would be caused to other units in the barracks. Disadvantages of this option are that

the functional location of 49 RQR in relation to the other combat units of the Brigade will not be achieved and the siting would constrain any expansion of the adjacent 6 BASB facilities

- the third option would rationalise and modify existing accommodation within Enoggera for 49 RQR and provide new accommodation for the displaced RRes elements of 6 BASB. This option also involves a move of the Area Clothing Store. The proposed precincts are shown in Appendix B. The cost of this option is the same as option two while providing a better overall solution to the existing accommodation problem. The area to be occupied by the displaced units is the same "greenfield" site as for option two. Proposed unit locations for 49 RQR and 6 BASB are shown in Appendix B.

Preferred Option

25. The third option is the preferred option as it provides an economical solution to the 49 RQR accommodation requirement while rationalising the Enoggera accommodation plan.

26. All units will have functional purpose-built accommodation while collocation of 49 RQR will be achieved. Facilities vacated by 49 RQR will be available for occupation by units currently overcrowded in cramped facilities. The functional layout of the Brigade will be greatly improved. Time for implementation is minimised as it allows for staged development. The disadvantage of this option is that it involves some disruption of 6 BASB as well as 49 RQR.

27. The proposed works will allow for:

- the location of the elements of the battalion in closer proximity which will promote more effective command and control
- the locations of 49 RQR in proximity to other combat units of 6th Brigade
- functional working accommodation which will improve training effectiveness and operational readiness
- compliance with an overall strategic land use and zoning in the master plan for Enoggera Barracks.

28. As a consequence of the provision of these proposed facilities for 49 RQR, 6 BASB will be able to move into a centralised location with new and

refurbished existing facilities. This will improve 6th Brigade's overall functional layout.

Committee's Conclusion

29. The Committee agrees that the option to rationalise and modify existing accommodation within Enoggera for 49 Royal Queensland Regiment and provide new accommodation for the displaced Ready Reserve elements of 6th Brigade Administrative Support Battalion is the preferred option.

Units to be Accommodated

30. The following units will need to be accommodated within the overall scope of this project:

- 49 RQR - Headquarters, Quartermaster Store, Administration Company, Support Company, A, B, C and D Rifle Company
- 6 BASB - Headquarters, Administration Company, Transport Squadron, Medical Company, Supply Company, Quartermaster Store
- BASC Enoggera - Enoggera Area Clothing Store, Greenbank Marksmanship Training Range

31. **Headquarters 49 RQR.** The Infantry Battalion headquarters provides the administrative offices to accommodate the command, operations and administrative elements of the battalion. It incorporates conference facilities, duty room, executive offices and an administrative area with associated amenities. It is intended that an existing two storey building be refurbished.

32. **Quartermaster Store 49 RQR.** A new building will be constructed to accommodate the large volume of stores held centrally by the battalion.

33. **Administration Company 49 RQR.** The Administration Company provides functions such as logistic support, medical support, transport and maintenance. This organisation will be located in a refurbished facility. Facilities currently occupied will be demolished.

34. **Transport Platoon 49 RQR.** This platoon provides administrative control and common stores facilities for the unit and will be provided with extensions to an existing building and alterations to the current transport compound.

35. **Support Company 49 RQR.** This organisation performs a number of diverse functions and requires offices and discrete storage and working

accommodation for each function. Support Company includes the specialist combat capabilities of the battalion including machine gun platoon, mortar platoon, reconnaissance platoon and assault pioneers. The proposed facilities require the refurbishment of an existing facility and the construction of a new stores area in an existing compound.

36. **A, B, C and D Rifle Company 49 RQR.** The rifle companies each require office and storage facilities. It is intended to utilise two existing facilities which require refurbishment and to provide two new buildings. All four companies are to be collocated at opposite sides of an existing parade ground.

37. **Headquarters 6 BASB and Administration Company 6 BASB.** 6 BASB headquarters provides the administrative offices to accommodate the command, operations and administrative elements of the battalion. It incorporates conference facilities, duty room, executive offices and an open plan administrative area with associated amenities. This proposal intends to provide new accommodation for this element and the administration company under one roof. The current HQ location is within a facility purpose-built for the Brigade second line workshop. The move of the HQ will allow this facility to be returned to its designed function.

38. **Transport Squadron 6 BASB.** The Transport Squadron provides second line transport to the supported brigade. The facility includes offices, maintenance facilities and vehicle storage facilities with associated engineering services. All new facilities are required for this element which also includes the Combat Supplies Platoon.

39. **Medical Company 6 BASB.** The Medical Company provides second level medical support to the Brigade. The facilities requirement for this unit includes administrative offices, classroom style training areas, storage facilities and limited vehicle storage and maintenance facilities. It is proposed to include new facilities for this unit.

40. **Supply Company 6 BASB.** The Supply Company provides second line logistic support to the Brigade. Existing warehouse style storage facilities within 6 BASB are adequate. However, facilities required for administrative functions are proposed.

41. **Quartermaster Store 6 BASB.** A centrally located Q store will be provided in the battalion area.

Additional Items

42. Priorities for the following will be set during design development and have been included in the scope of the project. These items will be deleted if they cannot be contained within the project out-turn cost of \$21.3m:

- relocation of the Area Clothing Store to the building to be vacated by the Support Company, 49 RQR
- provision of an earth stop-butt at the Greenbank Marksmanship Training Range.

43. The Sectional Committee was advised that the automated rifle range has been built without a bullet catcher. However, Defence believes that this is not a safety issue as the safety templates can be contained within the Commonwealth property. The Sectional Committee was advised that there is a perception that some soldiers find it difficult firing on this type of range without the bullet catcher, which forms a backdrop and makes sighting small arms easier. There is also the added advantage of containing the projectile lead which can be collected from time to time and removed.

Benefits

44. The proposed facilities will redress the significant shortfalls existing in the accommodation of 49 RQR at Enoggera. Sub-units will be functionally located with their headquarters; soldiers will be accommodated near their administrative and messing facilities and the RRes Brigade will be accommodated on a functional basis.

45. Relocation of 49 RQR into the proposed facilities will enable 6 BASB to rationalise and consolidate its working accommodation. This will lead to improved command and control and operating efficiencies. The proposed new working accommodation for 6 BASB will include facilities for the battalion headquarters, administration company, transport squadron, medical company and supply company.

Committee's Conclusion

46. Construction of the proposed facilities will redress significant shortfalls existing in accommodation of 49 Royal Queensland Regiment at Enoggera. Should there be a change in policy in relation to the retention or the role of the Ready Reserve, the facilities would be adaptable for use by other units.

Savings

47. There are benefits as a consequence of increased operational and administrative efficiency and more appropriate working and storage facilities as a result of this proposal. Realisable savings to the Defence Portfolio are minimal and this proposal is being progressed as an operational requirement not being offset by tangible savings. Intangible savings as a result of this project can be anticipated from:

- improved operational capability through collocation of 49 RQR
- increased efficiency and effectiveness as a result of the improved work environment
- improved OH&S
- more efficient and secure storage of equipment
- the preservation of equipment as a result of enhanced storage facilities
- the anticipated increase in morale of personnel with the increased amenity and improved working conditions afforded by completion of the works in this proposal. The RRes relies on the high morale of its soldiers to provide favourable feedback to prospective recruits to ensure an intake of quality candidates to maintain the numbers for operationally ready units.

The Sites

48. The sites for all of the new facilities are within Gallipoli Barracks at Enoggera. The property is Commonwealth-owned and Army-controlled. There are no property issues that affect this proposal. The terrain rises from east to west across the site. The facilities will run parallel to Cherry Street and Bugden Street with the Headquarters Building adjacent to Sadlier Street.

49. The siting of the existing facilities and the proposed locations of the new buildings and compounds will ensure minimal disturbance to established landscaping. The buildings will be situated so as to comply with the environmental constraints in the Environmental Certificate of Compliance and Australian Heritage Commission (AHC) requirements.

50. The National Trust of Queensland expressed concern over the siting of the access road in the vicinity of the old magazine complex. Defence advised that the environmental and heritage related effects resulting from the siting of new

roads and buildings will be constrained by the provisions in the Environmental Certificate of Compliance. These constraints have been prepared in consultation with the heritage architect and the Defence environmental officer at Enoggera and have been included as one of the source documents that architectural consultants for this proposal must adhere to.

51. The Sectional Committee queried whether there was the possibility of previous contamination of the site. Defence advised that this is a degraded site which has been used for the dumping of mainly domestic type material. There is no serious contamination evident.

Committee's Conclusion

52. The sites at Gallipoli Barracks, Enoggera are suitable for the proposed facilities.

Fire Protection

53. All construction and fire protection requirements will, as a minimum, be in accordance with the provisions of the Building Code of Australia (BCA) which is the Defence construction standard, the Defence Manual of Fire Protection Engineering (FACMAN 2) and all other applicable Codes and Standards.

54. Defence will require certification from a suitably qualified certifier that the design and construction meet the requirements of the BCA, FACMAN 2, relevant Codes and Standards and any additional State, Local Government and Defence requirements.

55. The Army no longer has its own fire station at Enoggera and therefore relies on the civil fire brigade. Defence advised that the Queensland Fire Brigade (QFB) is located just outside Gallipoli Barracks. The QFB will be invited to comment on the project, visit the site and offer comment throughout the construction phase to ensure operational requirements are met. The Sectional Committee was advised that the QFB is invited to Gallipoli Barracks at the request of the Army's Inspector of Fire Services (IFS). The last formal visit was in July 1995. Client advice on the fire systems is provided primarily by the IFS using the Defence Facilities Manual FACMAN 2 which relates to fire services. The QFB is consulted where appropriate. The RRes project team will consult with the QFB via the IFS when documentation is sufficient to allow fire services input.

56. Any recommended departures from BCA requirements in relation to the project will be technically assessed by Defence specialist fire protection staff.

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

Security

58. Appropriate security systems will be installed and connected to the base security monitoring point. Electronic Intruder Detection Security (EIDS) will be provided in armouries and similar installations.

Master Plan

59. The facilities for the RRes are being planned to meet the guidelines of the Gallipoli Barracks Master Plan which includes a comprehensive development framework with the strategic aims of sustainable use, good relations with adjoining owners, spatial integrity for major units and an efficient use of existing facilities.

60. The latest version of the Enoggera Master Plan reflects the unit zones as detailed in this proposal. The proposal involving relocation of 6 BASB elements, has been selected partly because it supports an accommodation plan which is compliant with the functional zones in the Enoggera Master Plan 1994. The current land use zoning of the proposed accommodation sites at Enoggera is "Defence use" and hence there is no requirement to update the zoning.

Advance Works

61. On 17 September 1991 the Committee gave approval to advance urgent works for the RRes at Enoggera and Greenbank. This was in response to Army's identified requirement for additional living-in accommodation due to the accelerated implementation of the RRes program. There was also an urgent need to upgrade facilities at Greenbank Range, including the installation of a 10 lane Marksmanship Training Range. These two advanced elements were approved and completed in 1993/94 within the cost cap of \$5.4m. This left a balance of \$19.6m, remaining from the original \$25.0m for the works covered by this proposal.

Landscaping

62. Landscaping is recognised as an important element in the design process. In order to minimise the impact of the new developments, areas will be landscaped and planted with appropriate local species requiring low

maintenance. Buffer areas will be selectively planted to reduce the impact on neighbouring units.

63. The Sectional Committee queried the number of trees which would be required to be felled for the proposed buildings. Defence advised that 6 BASB occupies a degraded area. There are a number of mature trees as well as secondary growth. There are approximately 150 trees which will require removal under the proposal as it is presently developed to date. The possibility exists of reducing this number if the two storehouses could be demolished.

PLANNING AND DESIGN CONCEPTS

64. Details may be found at Appendix C

ENVIRONMENTAL CONSIDERATIONS

Heritage and Environment

65. Heritage implications associated with this proposal have been considered in relation to the heritage-listed ammunition storage sheds to the south-east of the site. The new facilities will not be visible from the old ammunitions storage sheds and a 75m radius clear zone will be maintained for each structure. Defence advised the Sectional Committee that this project will not result in any known adverse environmental effects. Selective clearing will be carried out and no major environmental concerns are foreseen. The environmental boundaries have been set for the site and master planning has been in accordance with these constraints.

66. Defence has issued an Environmental Certificate of Compliance (No. 9/95) with appropriate environmental and heritage related constraints.

67. The AHC expressed concern that some of the buildings of heritage importance at Enoggera have not been researched. The AHC believes that a more expansive study of Enoggera is required before it can be confident that all heritage aspects are covered. However, AHC advised that the proposed works do not affect any national estate listed buildings. Defence advised that it has commissioned a Conservation Plan for the Gallipoli Barracks Magazine Complex prepared by a heritage architect from the Department of Administrative Services - Interiors Australia.

68. The 1994 Gallipoli Barracks Master Plan has also incorporated the need to preserve the heritage precinct and any heritage structures. To ensure that this proposal would not impact detrimentally on the heritage precinct, the Interiors Australia heritage architect has been engaged to further report specifically on the

proposed works in the vicinity of the heritage precinct. Preliminary recommendations from the architect have been considered and adopted. Defence intends to extend the consultancy to cover a brief heritage survey to assess the heritage importance of the buildings being vacated, removed or renovated as recommended by the AHC. The final report, when completed, will be made available to the National Trust, the Queensland Department of Environment and Heritage and the AHC. Since the public hearing, Defence has advised the Committee that it is likely that the report will not recommend the retention of the disused ammunition storehouses as these are not unique and sufficient architectural examples have been preserved elsewhere.

69. The Queensland Department of Environment and Heritage advised that the proposed buffer of 10m either side of major watercourses is unlikely to protect the environmental values of the watercourse. A buffer of 50m measured from the top of the bank of the outer stream channel should be adopted wherever possible. Defence advised the Sectional Committee that while it may be desirable to extend the development limit to 50m, such a limitation would preclude any development or force an encroachment on the heritage precinct. The 10m limitation is consistent with or better than the existing development along Sandy Creek and consistent with the Enoggera Master Plan. In some parts of the watercourse the water is channelled through a piped drainage system, while in other areas it is a stone pitched open drain. Defence advised that it has allowed for a considerable amount of landscaping. The design will also incorporate the maximum retention of an undeveloped or reconstituted water course corridor along Sandy Creek.

70. The Sectional Committee queried whether the Enoggera area was prone to flooding. Defence advised that records indicate that floodwaters from the Brisbane River network during the 1974 floods did not reach Gallipoli Barracks. While there are no records of general or localised flooding in the area in 1974, limited flooding of local creeks and streams in the Ashgrove, Enoggera and Gaythorne areas is experienced from time to time but not of a significant duration. The Sectional Committee also queried what would happen to the extra run-off which would occur as a result of the new buildings. Defence advised that the environmental officer at Enoggera has completed a detailed environmental assessment that considered run-off, both during and after the construction stage. Some of those requirements will be detailed in the tender documents, but generally there are a number of principles identified in the environmental assessment which cover erosion control, soil conservation, site drainage and water pollution.

Fauna and Flora

71. The Sectional Committee queried the presence of fauna and flora on the sites. Defence advised that a survey of the fauna undertaken in 1994 by Nature Search 2000 of the Queensland Department of Environment and Heritage indicated the presence of 13 mammals, 79 birds and four amphibian species. The four amphibian species were the Striped Marsh Frog (*Limnodynastes peronii*), the Red Backed Pseudophryne (*Pseudophryne coriacea*), the Eastern Dwarf Tree Frog (*Litoria fallax*) and the Cane Toad (*Bufo Marinus*). The first three species are native to Australia but are not considered rare or endangered. The Cane Toad is introduced, considered a pest and is often prevalent near human habitation or disturbance.

72. Defence considers that, given the urbanised and disturbed nature of the sites, the most likely species affected by the redevelopment would be the Cane Toad. Native species are more likely to be found close to or within natural water bodies or streams. The Sectional Committee was advised that specifications for the proposal require protection of adjacent water courses and the retention of a vegetated buffer zone, which will protect the habitat of any native amphibians in the vicinity. However, the area of land involved in the proposal is quite small compared to the remaining 450 hectares of predominantly native vegetation and natural water courses which constitute the Enoggera Close Training Area.

Energy Conservation

73. The buildings are designed to operate in an energy efficient manner by minimising the effects of the summer sun. North facing areas will have verandahs as appropriate, while the roofs will be of a light reflective colour and incorporate flow-through ventilation to reduce the heat build up in the summer. The walls and roofs will also have insulation. All of the buildings will be linked to the energy management system currently installed in Enoggera to enable progressive load shedding to take place.

74. Defence advised that Enoggera is one of the few Army bases where an energy management system is installed. However, the audits have not yet produced detailed reports on the savings achieved by the energy management system.

75. The Sectional Committee was advised that although the Queensland State Government has recently offered a \$600 initiative to householders to install solar hot water systems, this concession does not apply to industrial or commercial situations. Defence advised that on the current life cycle costings, it is not cost effective in south-east Queensland to install solar hot water systems in installations such as Enoggera. The Sectional Committee was assured by

Defence that once the project moves into the design development stage, it will require its consultants to investigate fully all the energy consumption costs and other whole-of-life costs so that the best result is obtained. This will include the installation of solar hot water if appropriate.

Committee's Recommendation

76. The Committee requires the Department of Defence to undertake, as soon as possible, an energy audit to assess the efficiency of the existing energy management system at Enoggera Barracks. The Committee further requires the Department of Defence to make available to the Committee, the consultants' examination of energy consumption costs for this project.

Local Impact - Economic and Social Effects

77. The proposed facilities will be completely within the Enoggera - Commonwealth Property Boundary. Land use will remain unchanged from its current military use zoning.

78. Defence believes that there will be no measurable negative community social impact from this project. During the construction period opportunities will exist for local suppliers and contractors to benefit.

79. There will be no additional traffic as a consequence of the proposal.

Project Delivery System

80. The complexity associated with this project is in the diverse range of buildings and the mix of new and refurbished facilities and may lead to Defence recommending the project be delivered using a managing contractor. Defence will prepare a detailed Facilities Acquisition Strategy prior to calling of tenders.

81. The Sectional Committee queried whether quality assurance, as far as potential contractors are concerned, is a part of the tender document. Defence advised the Sectional Committee that under the managing contractor form of delivery system, the managing contractor engages the subcontractors and all payments to those subcontractors are made from a trust account. This trust account is controlled by Defence.

CONSULTATIONS

82. A wide range of consultation has occurred with government and non-government authorities, with favourable attitudes being shown regarding the

proposal. The following authorities have been consulted and/or advised during the planning stage:

- Australian Property Group
- Australian Heritage Commission
- Defence Housing Authority
- Asset Services
- Queensland Department of Environment and Heritage
- Queensland Department of Housing, Local Government and Planning
- Queensland Electricity Commission
- Development and Planning Committee, Brisbane City Council
- Telecom Australia
- Australian Public Sector and Broadcasting Union
- Gas Corporation of Queensland
- ACROD Access and Mobility Committee
- Australian Surveying and Land Information Group.

83. During development of this proposal and formulation of the preferred options, a wide range of interested parties was consulted, namely:

- Commander 6th Brigade
- Commanding Officer 49 RQR
- Commanding Officer 6 BASB
- Commanding Officer Base Administrative Support Centre - Enoggera (BASC-E)
- BASC-E Environmental Officer
- Mr A. Bevis MP Federal Division of Brisbane
- Mr J Fouras MLA State Seat of Ashgrove
- Alderman A. Bennison - Enoggera Ward, Brisbane City Council

- Alderman B. Hallinan - Enoggera Ward, Brisbane City Council.

84. The Sectional Committee queried whether consultations had taken place with the officers, non-commissioned officers and the junior ranks. Defence advised that most consultation had taken place through the project team in liaison with the commanding officers. Personnel from functional areas such as quartermasters, company commanders, company sergeant-majors, transport officers and general staff have been consulted. The Sectional Committee was advised that Defence is happy with the level of consultation.

FINANCIAL ASPECTS

85. The estimated project cost is \$19.6m (December 1994 prices). This includes consultant's fees and furniture and fittings. The project out-turn cost is \$21.3m.

86. The proposed rate of expenditure is:

1995/96	1996/97	1997/98	TOTAL
\$5.0m	\$13.0m	\$3.3m	\$21.3m

CONSTRUCTION PROGRAM

87. It is proposed to complete the project by late 1997 with construction commencing in early 1996. This will allow the project to be delivered in a timely manner, save maintenance costs on unsuitable existing facilities and lead to improved morale and operational effectiveness within the units.

88. Defence advised that it is highly desirable that 49 RQR's accommodation be available by late 1997 to ensure that the unit's operational capability is not impaired. This project will also resolve existing OH&S problems that impact on both 49 RQR and other units in Enoggera.

Committee's Recommendation

89. The Committee recommends the development of Ready Reserve (49th Battalion, Royal Queensland Regiment and 6th Brigade Administrative Support Battalion) working accommodation at Enoggera, Qld at an estimated outturn cost of \$21.3m.

CONCLUSIONS AND RECOMMENDATIONS

90. The conclusions and recommendations of the Committee and the paragraph in the report to which each refers to are set out below:

- | | Paragraph |
|--|------------------|
| 1. Facilities presently occupied by 49 Royal Queensland Regiment are not adequate for a unit which is required to meet an operational role in the Australian Defence Force. Most of these facilities were not purpose-built and are neither functionally suitable nor efficient. A need therefore exists to provide functional working accommodation for the Ready Reserve at Gallipoli Barracks, Enoggera, Qld. | 23 |
| 2. The Committee agrees that the option to rationalise and modify existing accommodation within Enoggera for 49 Royal Queensland Regiment and provide new accommodation for the displaced Ready Reserve elements of 6th Brigade Administrative Support Battalion is the preferred option. | 29 |
| 3. Construction of the proposed facilities will redress significant shortfalls existing in accommodation of 49 Royal Queensland Regiment at Enoggera. Should there be a change in policy in relation to the retention or the role of the Ready Reserve, the facilities would be adaptable for use by other units. | 46 |
| 4. The sites at Gallipoli Barracks, Enoggera are suitable for the proposed facilities. | 52 |

Paragraph

5. **The Committee requires the Department of Defence to undertake, as soon as possible, an energy audit to assess the efficiency of the existing energy management system at Enoggera Barracks. The Committee further requires the Department of Defence to make available to the Committee, the consultants' examination of energy consumption costs for this project.**

76

6. **The Committee recommends the development of Ready Reserve (49th Battalion, Royal Queensland Regiment and 6th Brigade Administrative Support Battalion) working accommodation at Enoggera, Qld at an estimated outturn cost of \$21.3m.**

89



Colin Hollis MP

Chair

19 October 1995

APPENDIX A

WITNESSES

CHAMLEY, Lieutenant Colonel David Craig, Commanding Officer, 6th Brigade Administrative Support Battalion, Gallipoli Barracks, Enoggera MILPO, Queensland 4052

CHISHOLM, Lieutenant Colonel Roderick Mark, Commanding Officer (BASC Enoggera), South Queensland Logistics Group, Gallipoli Barracks, Enoggera MILPO, Queensland 4052

CORNISH, Mr Bernard Harold, Senior Consultant, Sinclair Knight Merz Pty Ltd (Brisbane), 62 Astor Terrace, Brisbane, Queensland 4000

McCANN, Brigadier Raymond Leslie, Director General, Accommodation and Works—Army, Department of Defence, Queen Victoria Terrace, Campbell Park Offices (3-2-17), Canberra, Australian Capital Territory 2600

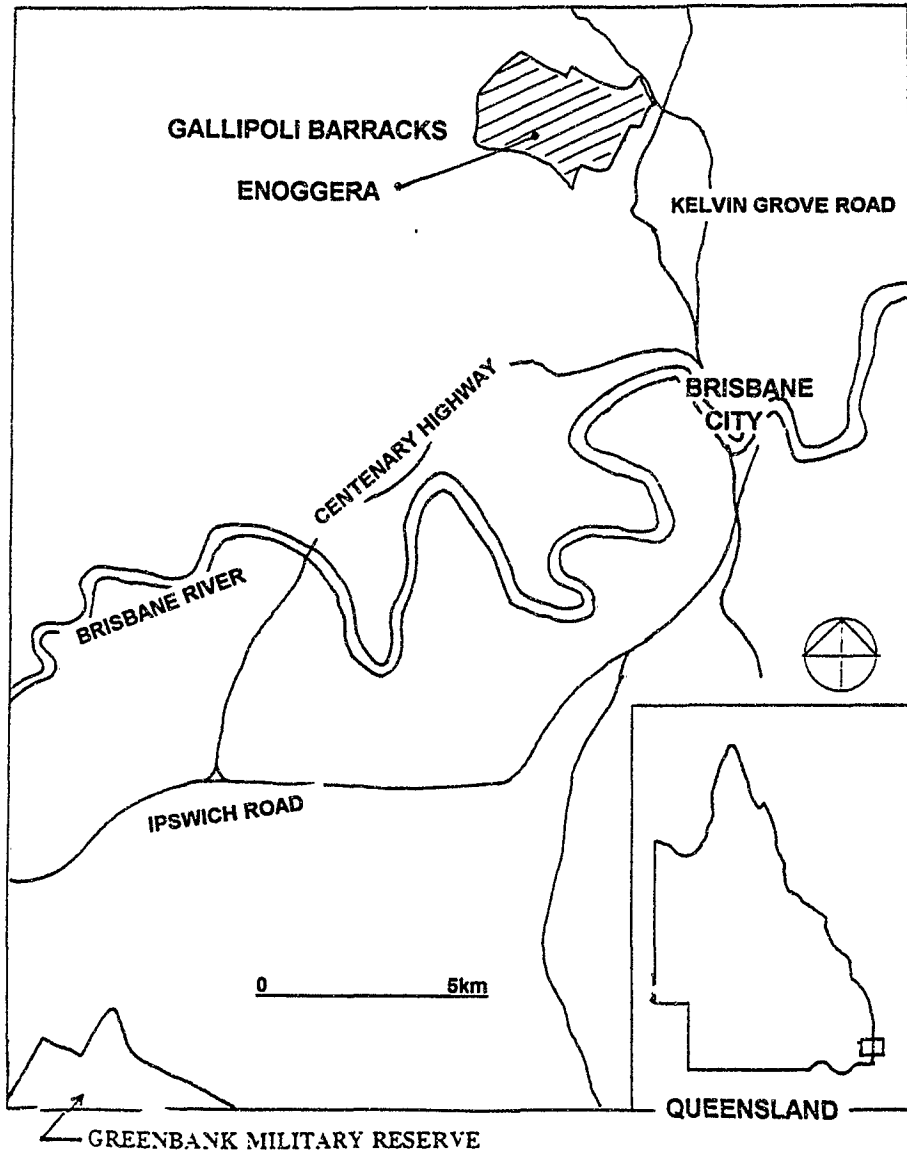
SAMPSON, Lieutenant Colonel Mark Peter, Commanding Officer, 49th Battalion, Royal Queensland Regiment, Gallipoli Barracks, Enoggera MILPO, Queensland 4052

SMITH, Lieutenant Colonel William Kimberley, Project Director, Director General Accommodation and Works—Army, Department of Defence, Queen Victoria Terrace, Campbell Park Offices (3-2-17), Canberra, Australian Capital Territory 2600

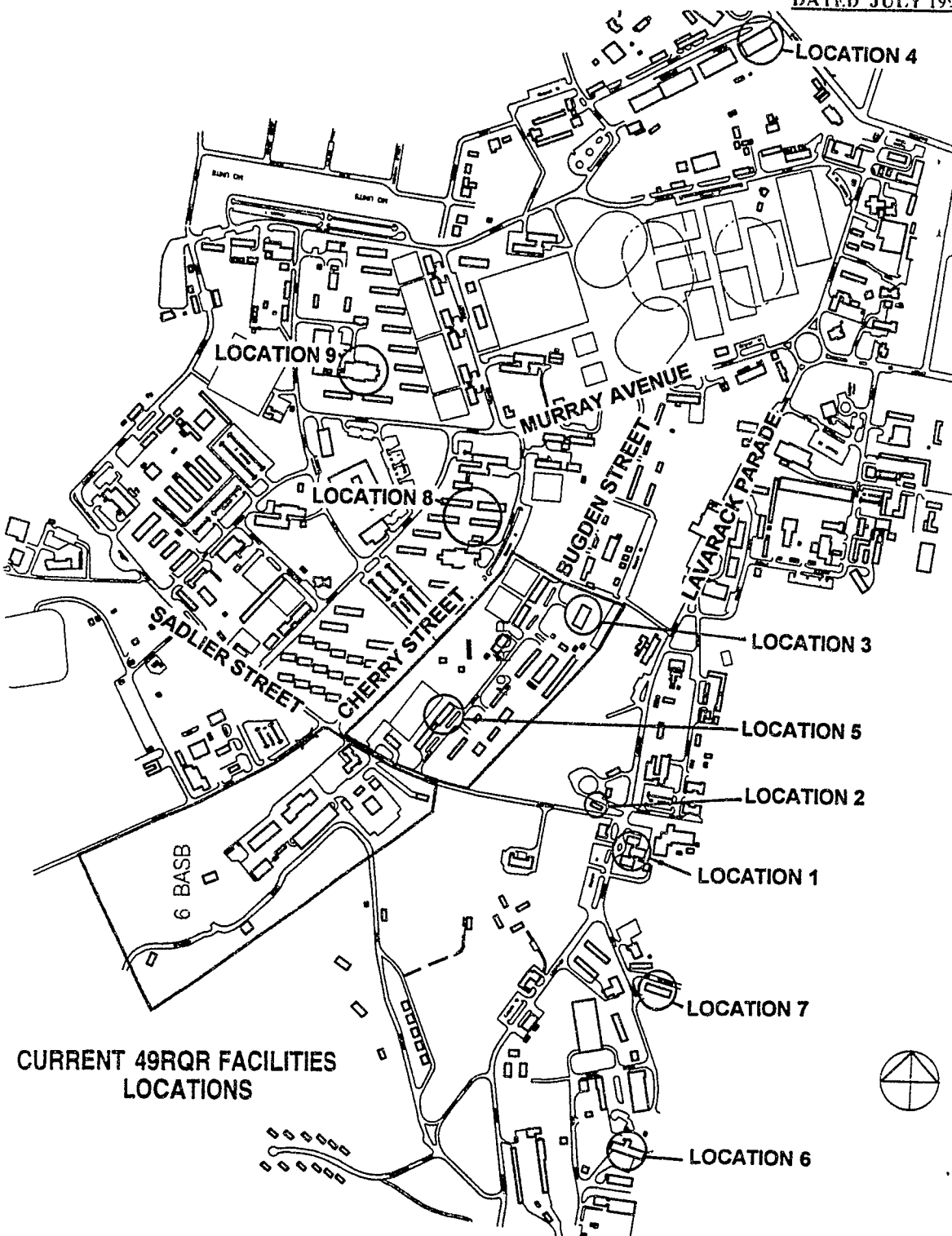
APPENDIX B

PROJECT DRAWINGS

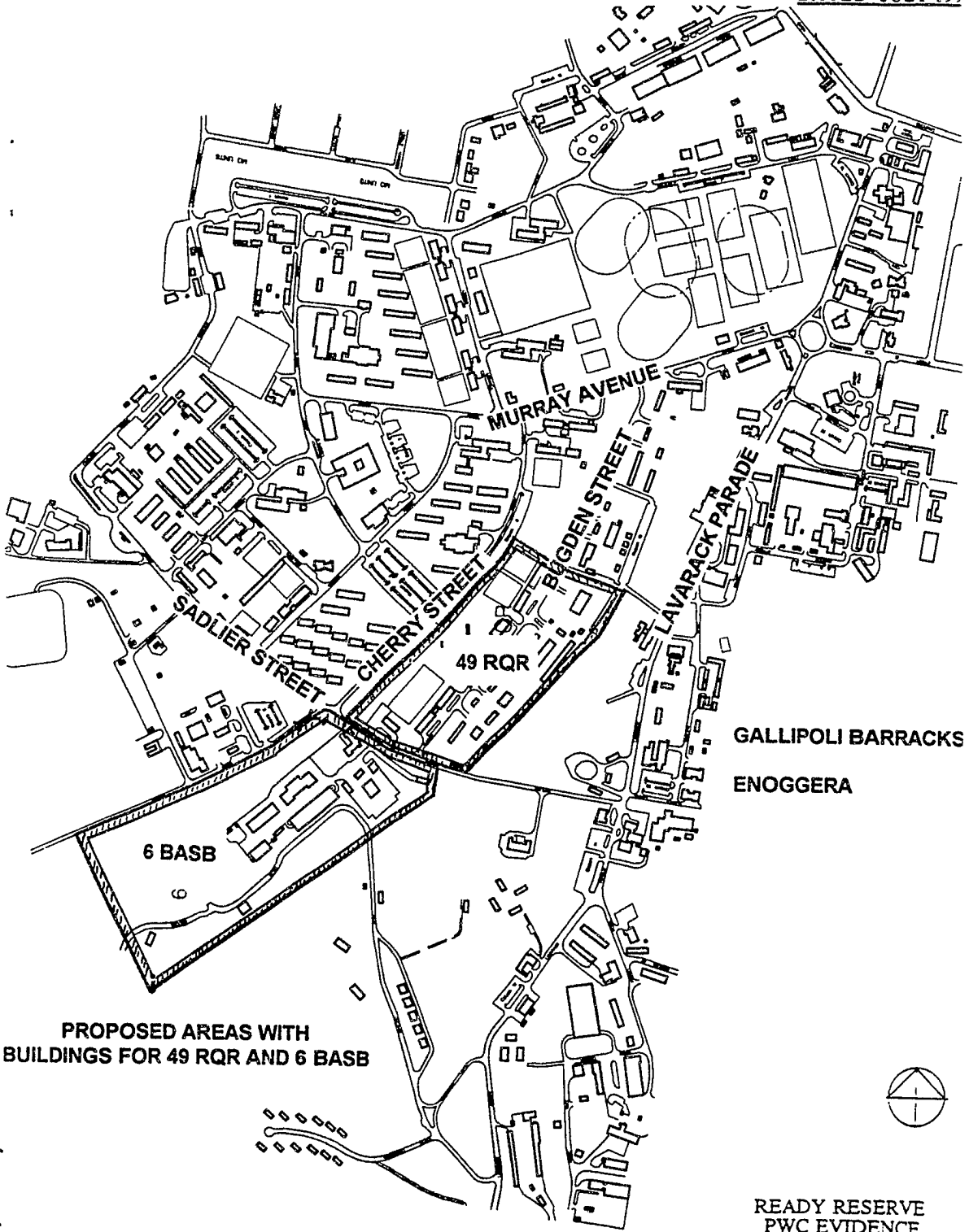
Gallipoli Barracks Locality Plan	B-1
Current Location of 49 RQR and 6 BASB Buildings	B-2
Proposed Precincts for 49 RQR and 6 BASB	B-3
Master Plan 49 RQR	B-4
Master Plan 6 BASB	B-5
Environmental Constraints	B-6



BRISBANE
READY RESERVE IN ENOGGERA
GALLIPOLI BARRACKS
LOCALITY PLAN



CURRENT 49RQR FACILITIES
LOCATIONS





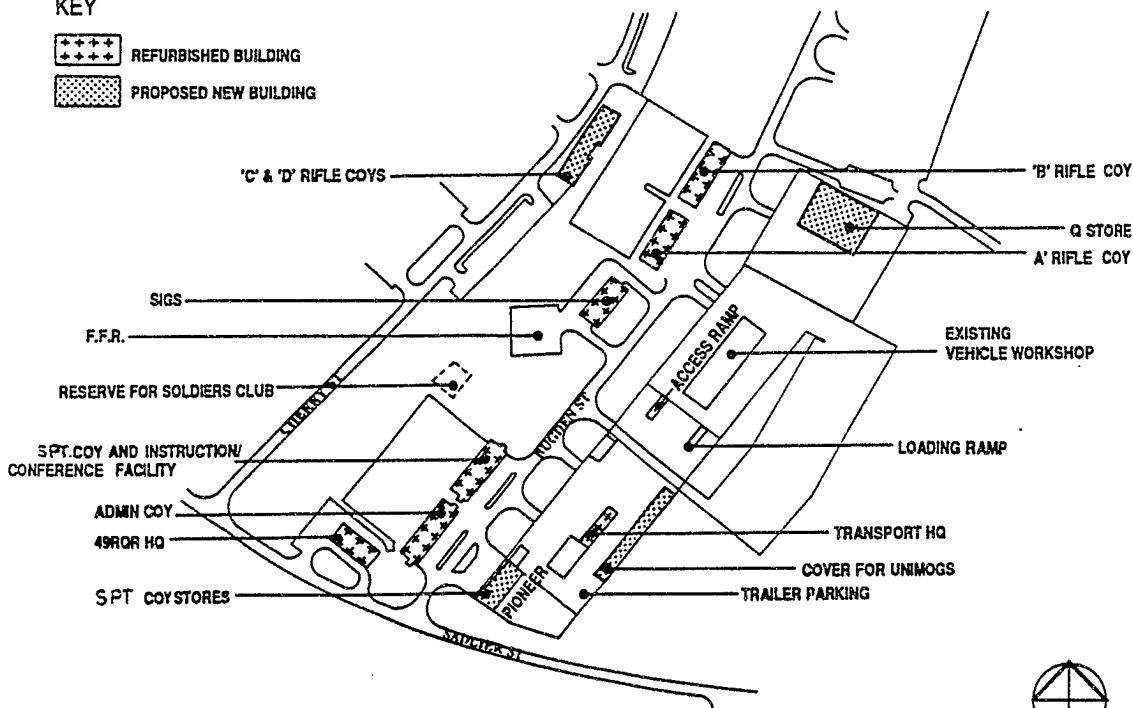
GALLIPOLI BARRACKS
ENOGERA

PROPOSED AREAS WITH
BUILDINGS FOR 49 RQR AND 6 BASB

**ANNEX D TO
 READY RESERVE (49 ROR & 6 BASB)
 PWC EVIDENC
 DATED JULY 199**

KEY

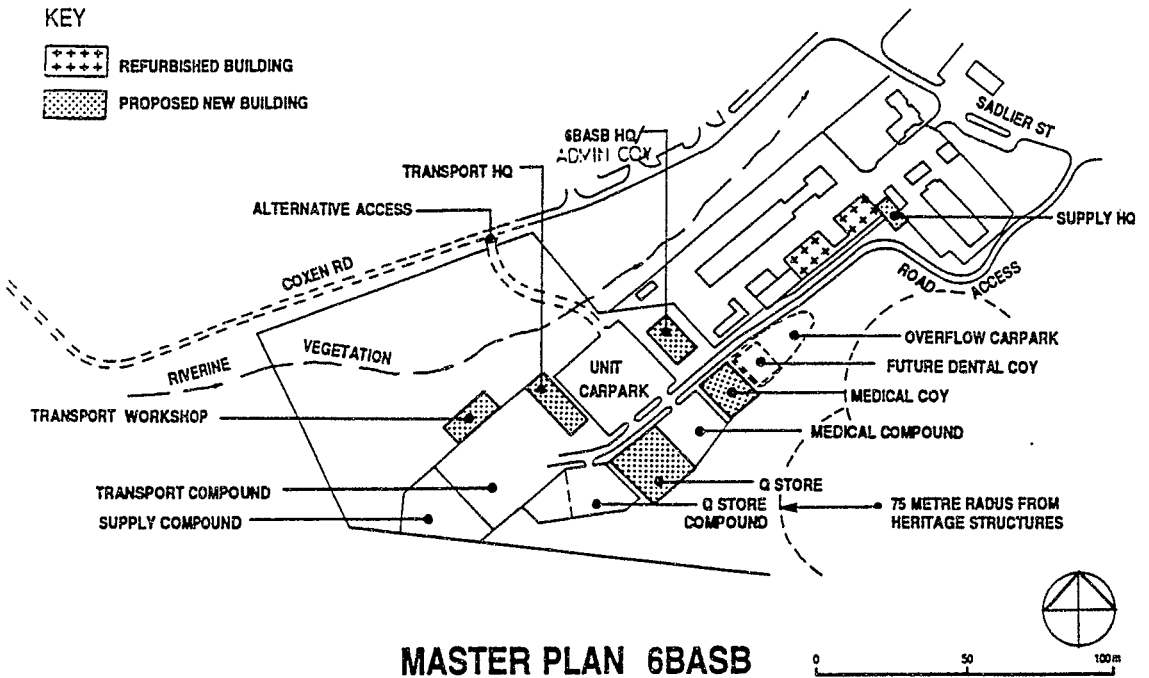
-  REFURBISHED BUILDING
-  PROPOSED NEW BUILDING



MASTER PLAN 49RQR

**READY RESERVE
 PWC EVIDENCE**



**ANNEX E TO
 READY RESERVE (49 ROR & 6 BASB)
 PWC EVIDENCE
 DATED JULY 1995**

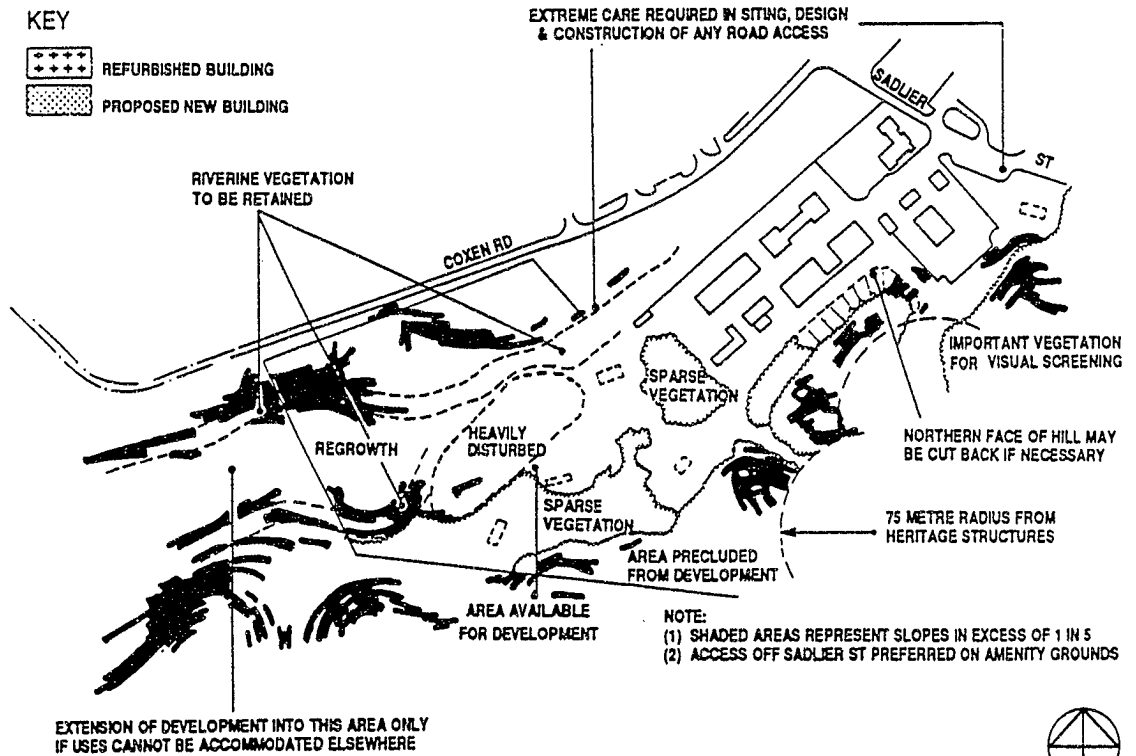


**READY RESERVE
 PWC EVIDENCE**

**ANNEX F TO
READY RESERVE (49 ROR & 6 BASB)
PWC EVIDENCE
DATED JULY 1995**

KEY

-  REFURBISHED BUILDING
-  PROPOSED NEW BUILDING



**ENVIRONMENTAL CONSTRAINTS
6BASB**



**READY RESERVE
PWC EVIDENCE**

PLANNING & DESIGN CONCEPTS

The functional relationships required to meet the operational requirements of 49 RQR and 6 BASB were examined in a series of meetings involving Defence personnel. Factors considered included:

- Existing facilities - suitability for purpose and economical conversion to new use
- Site Area and Configuration - suitability for purpose overall, economic redevelopment and minimum disruption
- Access - pedestrian, vehicular, staff, stores and service vehicles, heavy workshop vehicles and plant, parking areas, security and existing major - access routes
- Availability of Services - electricity, gas, communications, water, sewerage and surface water drainage
- Topography - suitable grade access, minimisation of earthworks, hardstanding and overland water flows -
 - environmental environment
 - minimisation of impact on environment in siting the facilities
 - protection of adjoining units
 - impact of development on traffic flows
 - waste containment control systems
 - use of non - CFC gases in air conditioning plants.

Structures

In the design development stage, various options will be examined to select the most cost effective structural system for the particular application. Issues which will be considered include:

- Flexibility - allowing for future expansion and economic internal alterations
- Standardisation - use of modular design where possible and selection of readily available materials and sizes

- Services - adoption of a structural system that allows for easy integration of services both during construction and maintenance.

Materials and Finishes

The selection of materials and finishes will be given careful consideration during the design development phase. In each instance, the issues considered will include fitness for purpose, value for money, function and environmental performance, Australian sourced products and proven performance.

Mechanical Services

In keeping with community standards, major administrative areas will be air conditioned. Ventilation will be provided to Q Stores, plant rooms, toilets and service areas in accordance with OH&S requirements.

In the larger facilities such as the Headquarters buildings, air conditioning will be from a central chilled water plant. Air handling will generally be by variable volume or multi-zone type plants.

Individual Room Air Conditioners (RACs) will be provided where they are shown to be the most cost effective solution.

All RAC units will be of the reverse cycle type and major plants will incorporate heating elements for use in the cooler months

Major plant and buildings will be linked to the base energy management system which will enable controlled load shedding to take place when necessary to reduce the overall base demand for power.

Hydraulic Services

Water reticulation will be taken from the existing mains serving each site. Fire mains will be tested and upgraded where necessary to meet fire fighting services requirements.

Existing sewerage systems will be extended or modified where necessary to cater for the new facilities.

Stormwater drainage will connect into the existing services.

Electrical Services

Gallipoli Barracks is supplied with high voltage power from the South East Queensland Electricity Board (SEQEB) network. Connection of the new facilities will be through underground cabling to the appropriate substation.

Generally, all facilities will be supplied from a ring main system which will allow power to be restored promptly in the event of damage to a cable or failure of a substation.

Lighting will be installed to provide illumination in accordance with the recommendations of AS1680 Parts 1 and 2 to meet the needs of the various functional requirements both internally and externally.

To reduce energy consumption, lighting will be of the low energy, high efficiency fluorescent, compact fluorescent or discharge type. Control gear will be low loss high power factor type with electronic starters to enhance lamp life.

Lightning protection will be provided in accordance with AS1768 as appropriate.

Manpower and Equipment

There are no manpower issues associated with this proposal.

There are no Capital Equipment implications associated with this project directly, but full recognition has been given to the requirements for the motorisation of 6 Brigade during the planning of this proposal.

Codes and Standards

The facilities will be constructed in accordance with the requirements of the Building Code of Australia (BCA) and Brisbane City Council (BCC) regulations. The BCA references Australian and international standards and these will be adhered to. In addition the following documents have been consulted:

- Defence Manual of Fire Protection Engineering FACMAN 2
- Defence Security Manual SECMAN
- Army Facilities Cabling Manual
- Queensland Urban Drainage Manual
- BCC Interim Guidelines for Subdivision
- BCC Water and Sewerage Guidelines
- Civil Engineering

The civil engineering aspects of the proposed facility will comprise:

- bulk and detail earthworks for buildings, roads and detention basin(s)
- trenching for all utilities and services (stormwater, water supply, fire water, power, telecom, gas)

- pavement and hardstand construction for roads, car parks, truck parking, container storage, and heliport
- grassed open earth drains for stormwater runoff.

Options for these systems will be evaluated during design. However, the generally proposed approach to each area is summarised in the following paragraphs. A strategy for environmental protection for water contamination etc during construction will be incorporated into any tender documentation. Such systems would include truck wash bays, retention pits, oil/water separators and the use of temporary hay barriers and the like.

Earthworks Earthworks in balanced cut to fill are required to establish building platforms as well as providing gentle slopes away from the buildings to prevent localised flooding or ponding of surface runoff.

Roads All roads will be designed to accommodate large military vehicles in accordance with the road hierarchy plan in the Gallipoli Barracks Master Plan.

Stormwater Drainage Formal piped drainage systems will be minimised, and will be generally used only in the immediate environs of the main buildings. Elsewhere extensive use of open grassed swales will be made to assist in silt and erosion control and to reduce costs. Surface flow velocities and erosion will be minimised by fanning of swale outlets before entry to natural streams.

Pavements Road pavements generally will be flexible except where there will be a high degree of manoeuvring of large vehicles. For these areas, segmental or rigid pavement will be considered.

Engineering Investigations

The Australian Surveying and Land Information Group (AUSLIG) have advised that a comparison of the proposed RRes facilities location with the Site Protection Study for Gallipoli Barracks, prepared by them in 1993, reveals no conflict with the recommended landholding rationalisation plan for the barracks.

Geotechnical Investigation A geotechnical investigation has been commissioned and will examine the following:

- Earthworks
- Foundations
- Construction Recommendations
- Pavement Recommendation

- Site Management Recommendations including soil protection.

Telecommunications Services

Voice and data services will be connected through the base fibre optic cabling network to the base control building where the PABX is located. Communications infrastructure and internal building cabling requirements will be designed to meet the requirements of Army Facilities' Cabling Manual.

Provision for the Disabled

Provision for disabled access to public buildings and medical facilities will be provided in accordance with relevant Australian Standards.

Energy conservation measures

Energy consumption will be minimised through optimum building design and siting. Major facilities will be connected to the Enoggera energy management system to minimise the effect of the new facilities on the base maximum demand tariff. Where new facilities are being provided, the main aspects of buildings design relevant to energy conservation will include:

- building orientation to minimise heat gain during summer months,
- incorporation of external shading,
- consideration of thermally efficient glazing and internal window shading,
- use of insulation and heat reflective surfaces,
- cross flow ventilation in workshop areas,
- consideration of solar hot water systems where cost effectiveness can be demonstrated,
- air conditioning systems which incorporate use of external air for cooling of indoor space when the ambient conditions are suitable and maximum recirculation of conditioned air, and
- maximum use of natural lighting together with selective switching and low energy artificial lighting with low loss control gear.

Environmental Management During the Planning Phase

49 RQR Precinct. The precinct within which the 49 RQR elements are proposed to be consolidated is already substantially developed. New structures are, in most cases, to be constructed on sites currently occupied by existing buildings which will be demolished or relocated. The new building proposed where no current buildings exist (ie. new building for C and D rifle Coy) is

proposed to be constructed on a previously disturbed site (existing car park). No areas of environmental sensitivity are affected.

6 BASB Precinct. The precinct within which the 6 BASB elements are proposed to be consolidated is a relatively "greenfield" site albeit with some evidence of previous disturbance. The approach to planning of this area entailed identification of environmental constraints and integration of environmental criteria/features in the conceptual layout.

Environmental Constraints. A plan delineating salient constraints is at Annex F. The following constraints have been identified:

- **Heritage Structures.** A buffer of 75 metres radius is required to protect the visual integrity of the heritage-listed magazine stores to the southeast of the site.
- **Riparian Vegetation.** A buffer in the order of ten metres to either side of the major watercourses has been identified as generally precluding development.
- **Steep Wooded Slopes.** Slopes in excess of 20% are identified as being generally precluded from development. Except for the steep wooded scarp to the south and slopes associated with the water courses, the main part of the site is relatively gentle terrain.
- **Hill.** A pronounced hill above Inwood Road near the existing development is characterised by substantial vegetation on the south eastern side, forming a significant background to views from that side. While modest cutting into the hill from the north western side would not detract from its value, the crest and balance of the feature will be preserved.
- **Regrowth.** An area between the two major watercourses was previously cleared but has since experienced significant regrowth, primarily of eucalypt species. This area may be available for development but only if uses cannot be adequately accommodated in less constrained areas.
- **Unconstrained Areas.** Areas which are already cleared, subject to heavy disturbance (filling, etc) or are only sparsely vegetated are considered to be generally available for development. Such areas are sufficiently extensive to accommodate the additional facility requirements of 6 BASB.

- **Road Access.** Potential road access to this part of the site either via Sadlier Street or Coxen Road would skirt environmentally constrained features. Care will be exercised in the siting and design of any access in either location.

Environmental Design Criteria/Features. The conceptual Master Plan for this project was developed in response to the constraints described above. Salient features include:

- **Development Limits.** The required facilities including buildings, parking areas and compounds were limited to the relatively unconstrained parts of the site and excluded from constrained areas.
- **Visual Treatment.** The buildings are generally limited to single storey to ensure they remain below the view line and do not visually encroach into views from the heritage-listed magazines.
- **Design Guidelines.** Detailed design will conform with guidelines which ensure the environmental constraints are respected and the desired environmental features are achieved.

Environmental Management During the Construction Phase

Specifications will be designed to make sure contractors comply with the following principles and environmental protection provisions and with the requirements of any statute, by-law, standard and the like related to environmental protection.

Environmental Control. Measures are required to be undertaken to minimise the area and duration of soil exposed to erosion, to convey runoff in a non-erosive manner and provide for the collection and containment of sediment.

Principles. To achieve the aims of erosion and sediment control the following principles will be observed prior to and during the construction phase of the project:

- marking and fencing or otherwise protecting vegetation features to be retained
- diversion of runoff from above construction sites to a stable disposal area
- establishment of stable drainage system through the site

- construction and stabilisation of sediment retention ponds, sediment traps and other necessary erosion control works
- restriction of surface disturbance to retain the maximum area of natural vegetative cover
- stripping and stockpiling of topsoil from disturbed areas for reuse prior to revegetation
- establishment of vegetation as soon as practical on all areas where soil has been exposed
- regular maintenance of erosion and sediment control structures.

Proposals. Proposals will be required for traffic movement, temporary structures, (including lamps), cleaning up (including burning off), erosion control, demolition and the like. Contractors will be required to observe the agreed proposals.

Approvals. The contractor will not form new tracks, alter existing tracks, erect camps, remove trees or shrubs, cut fences, water, sewerage, or power lines or any other such things without approval.

Soil Conservation Principle. To prevent erosion of soil from any lands used or occupied in the execution of the work, the contractor will take adequate precautions to prevent deposition of excavated or eroded materials into any stream, drain or water course and will install, maintain and protect all temporary and permanent drainage, erosion control, soil stabilisation or works in watercourses. Materials, or other works which may cause an erosion hazard, shall be removed, protected or otherwise treated to minimise the hazard potential.

Site Drainage Principle. The contractor will be required to provide for the effective disposal of water from any source whatsoever during the construction of the Works in a manner that will not cause injury to persons or property or to the surface of existing roadways, or cause any interference with their use by the Army. The contractor will install and maintain all temporary and permanent site drainage works and water disposal provisions and will divert any water interfering with progress of the works, keep the trenches free from water while the works are in progress, and prevent any injury to the works by water.