

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

Report Relating
to the
Redevelopment of Borneo Barracks,
Cabarlah, Queensland

(First Report of 1991)

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MEMBERS OF THE PARLIAMENTARY STANDING COMMITTEE

PUBLIC WORKS

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Sectional Committee

Mr Colin Hollis MP (Chairman)
Mr William Leonard Taylor MP
Mr Russell Neville Gorman MP

Acting Secretary: Mr Patrick Regan

Inquiry Staff: Mr Patrick Regan (Secretary)
Mrs Di Singleton (Secretarial Support)

EXTRACT FROM THE VOTES AND PROCEEDINGS OF
THE HOUSE OF REPRESENTATIVES

No. 27 dated Tuesday, 6 November 1990

- 14 PUBLIC WORKS - PARLIAMENTARY STANDING COMMITTEE -
REFERENCE OF WORK - REDEVELOPMENT OF BORNEO BARRACKS,
CABARLAH, QLD: Mr Beddall (Minister representing the
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: Redevelopment of Borneo
Barracks, Cabarlah, Qld.

Mr Beddall presented plans in connection with the proposed
work.

Debate ensued.

Question - put and passed.

PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

**REDEVELOPMENT OF BORNEO BARRACKS,
CABARLAH, QLD**

By resolution on 6 November 1990, the House of Representatives referred to the Parliamentary Standing Committee on Public Works for consideration and report the proposal for the redevelopment of Borneo Barracks, Cabarlah, Queensland.

THE REFERENCE

1. The works referred to the Committee combine into a single project for the construction of additional facilities for the Joint Telecommunications School (JTS) and support facilities to enable 7 Signal Regiment (Electronic Warfare) (7 Sig Regt (EW)) to provide the necessary support to the School.

2. The scope of the proposed works is:

- . construction of permanent training accommodation for JTS
- . upgrading the 7 Sig Regt (EW) Workshop administrative area and extend the area medical facility
- . provision of new sleeping accommodation
- . extension of canteen, dining room and kitchen facilities
- . provision of sporting facilities
- . extensions to existing engineering services
- . furniture and fittings.

3. The limit-of-cost estimate for the proposed works when referred to the Committee was \$12.71m at August 1990 prices. The out-turn cost, including provision for construction contingency and design and construction fees, is estimated to be \$17.26m (August 1990 prices).

THE COMMITTEE'S INVESTIGATION

4. The Committee received written submissions and plans from the Department of Defence (Defence) and Australian Construction Services (ACS). A Sectional Committee took evidence from Defence and ACS at a public hearing held at Cabarlah on 19 December 1990.

5. Submissions were also received, and the Sectional Committee took evidence, from:

- . Crow's Nest Shire Council
- . Australian Anti-Bases Campaign Coalition.

6. Prior to the public hearing, the Sectional Committee inspected existing facilities and the sites for the proposed works at Cabarlah.

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

BACKGROUND

8. Borneo Barracks was established as a military area during the Second World War and was first occupied by the 11th Light Horse. Various military schools and depots, including the Headquarters Queensland Lines of Communications Area Signals Regiment, occupied the Barracks during the War. In 1944, the Staff School (Aust) was located at Cabarlah and remained there until 1946 when it was relocated to Queenscliff, Victoria.

9. 101 Wireless Regiment was relocated from Mornington Peninsula to Cabarlah in 1947. The unit was redesignated 7 Signal Regiment in 1964. 7 Sig Regt (EW) is now the major unit occupying the Barracks. A troop of 140 Signal Squadron, Army Reserve, is also located at Cabarlah. The Regiment also administers 19 Regular Army staff of 25th Battalion, Royal Queensland Regiment, Army Reserve.

10. In 1985, the Services examined specialist signal training common to two or more Services with a view to conducting joint training under single Service management and to recommend the most appropriate location for a training school.

11. Following this study, JTS was raised at Borneo Barracks, Cabarlah on 1 September 1986. Navy relocated its staff and students from HMAS Harman and commenced training at Cabarlah that year. The RAAF has relocated its training from RAAF Bases Laverton and Pearce to Cabarlah over the last two years.

12. JTS uses the facilities originally constructed for Training Squadron, 7 Sig Regt (EW), which was absorbed into JTS. All the administrative, medical, technical workshop and living and messing support required by JTS is provided by 7 Sig Regt (EW).

THE NEED

13. Existing facilities at Cabarlah were constructed in the 1960s to support 7 Signal Regiment which had a total strength, including trainees, of 212 personnel. Some facilities remain from the 1940s. Some new facilities including Rank and File (R & F) accommodation were provided after the raising of 72 EW Squadron in 1976 with an initial strength of 77 all ranks (increasing to 180). However, area and recreational facilities were not upgraded. The shortfall of facilities has been exacerbated by the establishment of JTS with its large number of living-in trainees.

14. JTS uses those training facilities which were constructed for Training Squadron, 7 Signal Regt. These were designed to accommodate 19 staff and 90 students. JTS will have 62 staff and up to 230 full-time students at any one time by 1995. There are insufficient offices and classrooms for the current number of staff and students. JTS cannot train the numbers of personnel required by the Australian Defence Force (ADF) in its current facilities.

15. JTS occupies part of 7 Sig Regt (EW) operational building to the detriment of that unit. The Regiment has had to reduce the amount of space it occupies to accommodate JTS. Students and staff must pass through the Regiment's operational area to get to their classrooms. In addition, JTS staff occupy offices in that building and in a temporary demountable building due to insufficient space in the existing JTS facilities.

Personnel Numbers

16. The current establishment at Borneo Barracks is 420 Service personnel and 15 civilian staff. At present, on average, there are 160 students at JTS. The number of Service personnel at the Barracks will increase to 718 by 1995, including 230 students at any one time. Civilian staff will increase to 25 by 1995.

Committee's Conclusion

17. The Committee agrees that a need exists to redevelop Borneo Barracks at Cabarlah.

THE PROPOSAL

Objective

18. The objective of this proposal is to provide sufficient working and living accommodation to enable JTS to provide trained specialist manpower for the ADF, by providing:

- . permanent, purpose-designed training facilities for JTS
- . upgraded working facilities for the supporting administration, medical and technical maintenance functions
- . additional living accommodation for all ranks
- . R & F dining and recreational amenities to scale.

Options Considered

19. Defence considered a number of other locations for JTS in 1985. The study was reassessed earlier in 1990 and confirmed that Cabarlah was the most suitable location.

20. The advantages of locating JTS at Cabarlah were seen to be:

- . a large proportion of the training and support facilities required for JTS and living accommodation were already in place
- . an operational unit was already established to support the training
- . the cost of establishing a similar school at another location was almost double that of the Cabarlah option.

Facilities for JTS

21. While a new classroom building, originally for Training Squadron, was built in 1988 and has been used by JTS, additional facilities are still required. A headquarters building is

required to accommodate the increased number of staff (to 62 by 1995) and to relocate instructors from the 7 Sig Regt (EW) building.

Facilities for 7 Sig Regt (EW)

22. As well as its communications-related tasks, including post-JTS (Army) training, 7 Sig Regt (EW) is responsible for local administration and security in Borneo Barracks. It provides some administrative support, all health care, accommodation and rationing, as well as all technical support, including repair, maintenance and computer software support, to JTS.

23. The Officers and Sergeants Messes were constructed as one building in 1963 to cater for 8 officers and 19 senior non-commissioned officers (SNCOs). The building provided sleeping accommodation for 3 officers and 7 SNCOs only. The Mess has since been extended to provide additional living-in accommodation for 5 more officers and 13 SNCOs. By 1995 it is predicted that there will be a total of 43 officers and 136 SNCOs (including 20 students) posted to the area. This project proposes to construct an additional 24 bedrooms and two common rooms.

24. There are presently 257 R & F bedspaces at Cabarlah. The R & F population is predicted to increase to 538 personnel by 1995. The project proposes the construction of an additional 96 bedrooms. The R & F dining room and kitchen was constructed for 150 personnel. These facilities need to be extended to cater for 333 living-in personnel. The canteen (Gordon Club) was also constructed in 1949 to cater for only 150 personnel. It is significantly below Services Scales and Standards of Accommodation (SSSA) and needs to be upgraded.

25. The Regiment's workshop was originally constructed in 1963 and is in need of refurbishment. The Computer Software Support Section is currently occupying an area, which is required for stores, and requires dedicated office space. The current medical

and dental facility is insufficient to support the projected number of personnel on base and requires extension. It is also intended to replace the gymnasium, a timber building originally constructed for offices in 1940, with a combined gymnasium/assembly hall and to provide an additional tennis court and squash court. There is no large under-cover area existing on base for physical training/sports competition or for a unit or large group to congregate for briefings or ceremonies. There is also insufficient car parking on base for private vehicles.

Advantages of the Proposed Works

26. The advantages of the proposed works were seen to be:

- . concentrate all elements of JTS in a purpose-built training complex and remove training staff and students from the 7 Sig Regt (EW) operational area
- . provide adequate working accommodation for 7 Sig Regt (EW) administrative, medical and technical maintenance elements to enable them properly to support JTS
- . provide all R & F living-in personnel with living-in, dining and recreational facilities to scale.

MASTER PLAN

27. Siting of the proposed works has been carried out in accordance with the draft Master Plan for the Barracks, completed in December 1989. Extending and upgrading facilities will not alter existing site planning relationships.

28. The size of the gymnasium/assembly hall as proposed would not allow it to be located in the designated area of the draft Master Plan. As it had also to be collocated with the existing sporting facilities, it has been re-sited in a new location with these facilities without any impact on the overall Master Plan.

SCOPE OF WORK

29. The proposed work consists of:

- . construction of 96 new R & F bedrooms
- . extension and upgrading of R & F dining room and kitchen
- . construction of a new Headquarters building for JTS together with a grassed parade ground
- . construction of a new training facility for the Advance Training Wing and the Training Development Wing of JTS
- . construction of a new ablutions building for JTS
- . construction of a new facility for 7 Sig Regt (EW) Engineering Software
- . extension to the 7 Sig Regt (EW) Headquarters building
- . alterations and refurbishment of the 7 Sig Regt (EW) Workshop
- . construction of 12 new junior officer and 12 SNCO bedrooms
- . extension to R & F Canteen
- . construction of R & F drop-in centre
- . extension of the medical/dental centre
- . construction of a multi-function gymnasium/assembly hall including provision of a new squash court

- . construction of a new Ration Store
- . construction of a new tennis court
- . associated site works and engineering services.

ENERGY AUDIT

30. Evidence was given that a contract has been let with the Commonwealth Scientific and Industrial Research Organisation to carry out an energy audit and to put forward proposals for energy conservation measures at Cabarlah.

31. The Committee noted this information and believes that all the projects referred to it should be subjected to rigorous analysis to ensure the most efficient use of energy in the completed buildings.

Committee's Recommendation

32. The Committee recommends all projects referred to it should be analysed to ensure the most efficient use of energy in the completed buildings, and that it receive copies of the results of these analyses.

GRASS PARADE GROUND

33. A grass parade ground is included in the proposal but is not for intensive use or for large ceremonial occasions. Mowing at suitable intervals will be the only maintenance required.

WATER SUPPLY

34. Cabarlah draws its water supply from the rising main which runs from the reservoir, some distance to the north of the base. There is a treatment plant for Toowoomba at Mount Kynoch but the base is upstream of that plant. The water is chlorinated by the

local council before it is pumped through the mains, so there are no health hazards. However, up to about 15 per cent of the time, there are problems with the colour of the water because it does not receive secondary treatment. ACS examined the possibility of providing on-base filtration, but recommended that it not be done.

35. The Crow's Nest Shire Council gave evidence that it was examining the possibility of providing an adequate filtration system, either at various points where water was taken off or collectively at certain spots. The Council also stated that water supply is a critical factor in the subdivision of land.

Committee's Recommendation

36. The Committee recommends that the Department of Defence and Australian Construction Services continue discussions with the Crow's Nest Shire Council with a view to providing better quality water to Borneo Barracks.

URBAN ENCROACHMENT

37. The submission from the Crow's Nest Shire Council referred to an understanding about the type and concentration of development the Council will permit within a one kilometre radius of the aerial farm. It also referred to the high population growth within the Shire, stating that if this growth continues, there will be pressure for residential development within this zone. While this pressure is not expected for at least five to ten years, the Council believes it is likely to occur.

38. Evidence was given that urban development causes problems for the ADF's receivers and transmitters around Australia. It is not possible to buy all the necessary land around bases to form the necessary buffer zones, so the ADF comes to arrangements with local government bodies about restrictions which can be placed on the uses to which properties in buffer zones can be put. The

Crow's Nest Shire Council discourages applications which could cause electromagnetic radiation and affect the operation of Borneo Barracks.

39. At present, land surrounding Borneo Barracks is zoned "Rural A" and most of the allotments would be about four hectares in area. A "Rural B" zone would allow two hectare blocks and there is some possibility the area could be rezoned to this classification in the future. If this happened, operations at the base could be affected. The Council does not anticipate there will be a demand for more intense subdivision than the two hectare limit before its current strategic plan expires in the year 2000. At the same time, it is aware that there is some development in an area close to the buffer zone.

40. Any developments which might have an impact on the operations of Borneo Barracks, or any other signals establishment, are matters for concern. In this case, both the Shire Council and Defence are aware of pressures for development in the buffer zone area. The Committee commends both bodies for their sensible and cooperative attitudes, and hopes their ongoing discussions will continue.

ENVIRONMENTAL AND HERITAGE CONSIDERATIONS

41. A Certificate of Compliance for the proposed works has been issued under the *Environment Protection (Impact of Proposals) Act 1974*.

42. The environmental impact of the buildings and civil works has been determined to be minimal. With the exception of the JTS building and the new accommodation, the project involves extensions to or conversions of existing facilities. The new works will be in sympathy with the existing buildings.

43. The National Trust of Queensland had no comments to make on the proposal.

VIEWS OF THE AUSTRALIAN ANTI-BASES CAMPAIGN COALITION

44. In its submission, and in evidence to the Sectional Committee, representatives of the Australian Anti-Bases Campaign Coalition made the following major points:

- . Borneo Barracks is part of the Defence Signals Directorate (DSD) network and resulting intelligence gained from telecommunications is the property of the USA, a foreign government
- . electronic warfare is spying which is unfriendly and bullying to our neighbours
- . electronic warfare skills have an internal security role not fully in accord with our democratic values
- . in peacetime and at the end of the Cold War, how can an increase of staff and students be justified
- . there were no objections to renovation of "faulty buildings" at Cabarlah
- . courses designed to help the defence of Australia are acceptable.

45. On the day of the inspection/public hearing, a representative of the Anti-Bases Coalition issued a statement to the local newspaper alleging:

- . students at Cabarlah would intercept the private phone calls of Australian citizens
- . increased student numbers at Cabarlah would bring pressure on the community and attendant social problems.

46. Representatives of the Anti-Bases Coalition and Defence witnesses were questioned on these matters. The Anti-Bases Coalition's allegations were denied by the Defence witnesses and the Committee believes that the Anti-Bases Coalition was unable to substantiate its views.

CONSULTATION

47. Defence consulted with the Crow's Nest Shire Council and the Toowoomba City Council during the development of this proposal. Both organisations expressed their support.

48. In addition, the Committee consulted with or received material from:

- . the Australian Council of National Trusts
- . ACCESS (Queensland Sub-Committee)
- . the Department of the Premier, Economic and Trade Development, Queensland
- . Hodgen Hall and Brammer Pty Ltd, Toowoomba.

49. No objections were received to the proposal proceeding.

CONSTRUCTION DETAILS

50. Construction details are at Appendix B.

FINANCE AND PROGRAMMING

51. The project was referred to the Committee at a limit-of-cost estimate of \$12.71m at August 1990 prices, with the works planned to go to tender in February 1992 for completion in 1995.

52. At the public hearing on 19 December 1990, the Sectional Committee was advised that, subject to the Committee's approval of the project, it was intended to call for tenders early in the 1991/92 Financial Year, with completion of the project in 1993.

53. The Committee noted advice from Defence that redevelopment of Borneo Barracks has been staged because of funding constraints, and that the works in the reference were a first stage to provide for essential training and its support. The second stage, beyond the current Five Year Defence Program, will upgrade the remainder of the base to relieve cramped and inefficient working conditions and provide scaled amenities.

54. The scope of the proposed works is:

Training facilities	\$ 3.2m
Support facilities	\$ 1.18m
Living accommodation and amenities	\$ 3.92m
. bedrooms	
. extension of canteen, dining room & kitchen.	
Sporting facilities	\$ 3.47m
Engineering services	\$ 0.82m
Furniture and fittings	<u>\$ 0.12m</u>
TOTAL	<u>\$12.71m</u>

Committee's Recommendation

55. The Committee recommends the redevelopment of Borneo Barracks, Cabarlah, Queensland at a limit-of-cost estimate of \$12.71m at August 1990 prices.

CONCLUSIONS AND RECOMMENDATIONS

56. The Committee's conclusions and recommendations, and the paragraph in the report to which each refers, are set out below:

Paragraph

1. THE COMMITTEE AGREES THAT A NEED EXISTS TO REDEVELOP BORNEO BARRACKS AT CABARLAH. 17
2. THE COMMITTEE RECOMMENDS ALL PROJECTS REFERRED TO IT SHOULD BE ANALYSED TO ENSURE THE MOST EFFICIENT USE OF ENERGY IN THE COMPLETED BUILDINGS, AND THAT IT RECEIVE COPIES OF THE RESULTS OF THESE ANALYSES. 32
3. THE COMMITTEE RECOMMENDS THAT THE DEPARTMENT OF DEFENCE AND AUSTRALIAN CONSTRUCTION SERVICES CONTINUE DISCUSSIONS WITH THE CROW'S NEST SHIRE COUNCIL WITH A VIEW TO PROVIDING BETTER QUALITY WATER TO BORNEO BARRACKS. 36
4. THE COMMITTEE RECOMMENDS THE REDEVELOPMENT OF BORNEO BARRACKS, CABARLAH, QUEENSLAND AT A LIMIT-OF-COST ESTIMATE OF \$12.71M AT AUGUST 1990 PRICES. 55

Colin Hollis
Chairman
14 February 1991

LIST OF WITNESSES

BUTLER, Mr Kenneth Robert, Assistant General Manager, Defence Projects, Australian Construction Services, Department of Administrative Services, 470 Northbourne Avenue, Dickson, ACT, 2602

CORNISH, Mr Bernard Harold, Project Manager, Defence, Australian Construction Services, Queensland Region, Department of Administrative Services, GPO Box 1381, Brisbane, QLD, 4001

DOHERTY, Mr Denis William, Co-ordinator, Australian Anti-Bases Campaign Coalition, 4th Floor, 56 Foster Street, Surry Hills, NSW, 2010

GREENHILL, Mr Brendan, Convenor, Queensland Anti-Bases Campaign Coalition, PO Box 1365, Fortitude Valley, QLD, 4006

HELLYER, Brigadier Grahame Leslie Alwynne, Director-General, Accommodation and Works - Army, K-2-43, Department of Defence, Russell Offices, Canberra, ACT, 2600

O'DONNELL, Mr Ian Alan, Shire Clerk, Crows Nest Shire Council, PO Box 35, Crows Nest, QLD, 4355

POTTER, Lieutenant-Colonel Thomas Warwick, Project Manager, Directorate-General of Accommodation and Works - Army, K-2-09, Department of Defence, Russell Offices, Canberra, ACT, 2600

SPENCER, Lieutenant-Colonel William Philip, Commanding Officer, 7 Signal Regiment - Electronic Warfare, and Area Commander, Borneo Barracks, Cabarlah, QLD, 4352

VONHOFF, Mr Ivan Albert, Shire Chairman, Crows Nest Shire Council, PO Box 35, Crows Nest, QLD, 4355

CONSTRUCTION DETAILS

Planning Concepts

The requirements of the brief and analysis of the site resulted in planning the proposed facilities so that existing operational and functional relationships are maintained and master planning requirements satisfied.

Site works, services and road works have been designed as an integral part of the redevelopment, and have been located best to service future works at the Barracks.

Design Concepts

The proposed works will satisfy the briefed requirements of the Department of Defence, conform with the Scales and Standards of Service Accommodation and comply with relevant statutes, codes and ordinances.

Internal planning and the structural and cladding systems proposed will provide efficient and cost effective solutions to the functional requirements.

Upgrading and extensions to existing facilities will match existing buildings and new facilities will be designed so that their scale, materials and finishes will be compatible with the existing surroundings.

Site Conditions

The proposed work includes pavement and footing designs appropriate to the soil conditions present on site. The building designs will be appropriate to the local environmental conditions.

Building Construction

The building works generally will be compatible with existing structural systems, construction techniques and finishes.

Load bearing masonry, structural steel frame, timber framing and reinforced concrete construction will be utilised appropriately to the size and function of the various facilities. No unique construction methods will be required. Finishes will be low maintenance.

The majority of the buildings in the development will be on strip and pad footings. The Training Building of JTS will be on deep beams and raft foundations owing to the size and configuration of the building. The multi-functional gymnasium/assembly hall will be constructed with bored piers and beam foundations due to its size.

Mechanical Services

Air conditioning will be provided to JTS' Training Wings, the Conference Room and Classroom of 7 Sig Regt (EW)'s Headquarters, the Computer Room of Engineering Software, the Electronic and Radio Repair Workshops and the Surgery, Consulting and Treatment Rooms of the Medical/Dental Centre. All areas being air conditioned are required to have a controlled environment.

The other proposed buildings will be heated and naturally ventilated with exhaust ventilation provided to toilet and ablution areas.

New food preparation and cooking equipment will be provided to the Rank and File kitchen.

Electrical Services

Light, power, telephones and thermal fire alarms will be provided.

Power conditioners will be provided for the computer installations in the JTS Training Building.

External electrical services will be upgraded and extended to service the new buildings and provision will be made for future works.

Fire Protection

Fire protection including thermal and smoke detection will be installed as necessary.

Civil and Hydraulic Works

New footpaths, vehicle parking areas and hard stand areas will be constructed as necessary and as briefed.

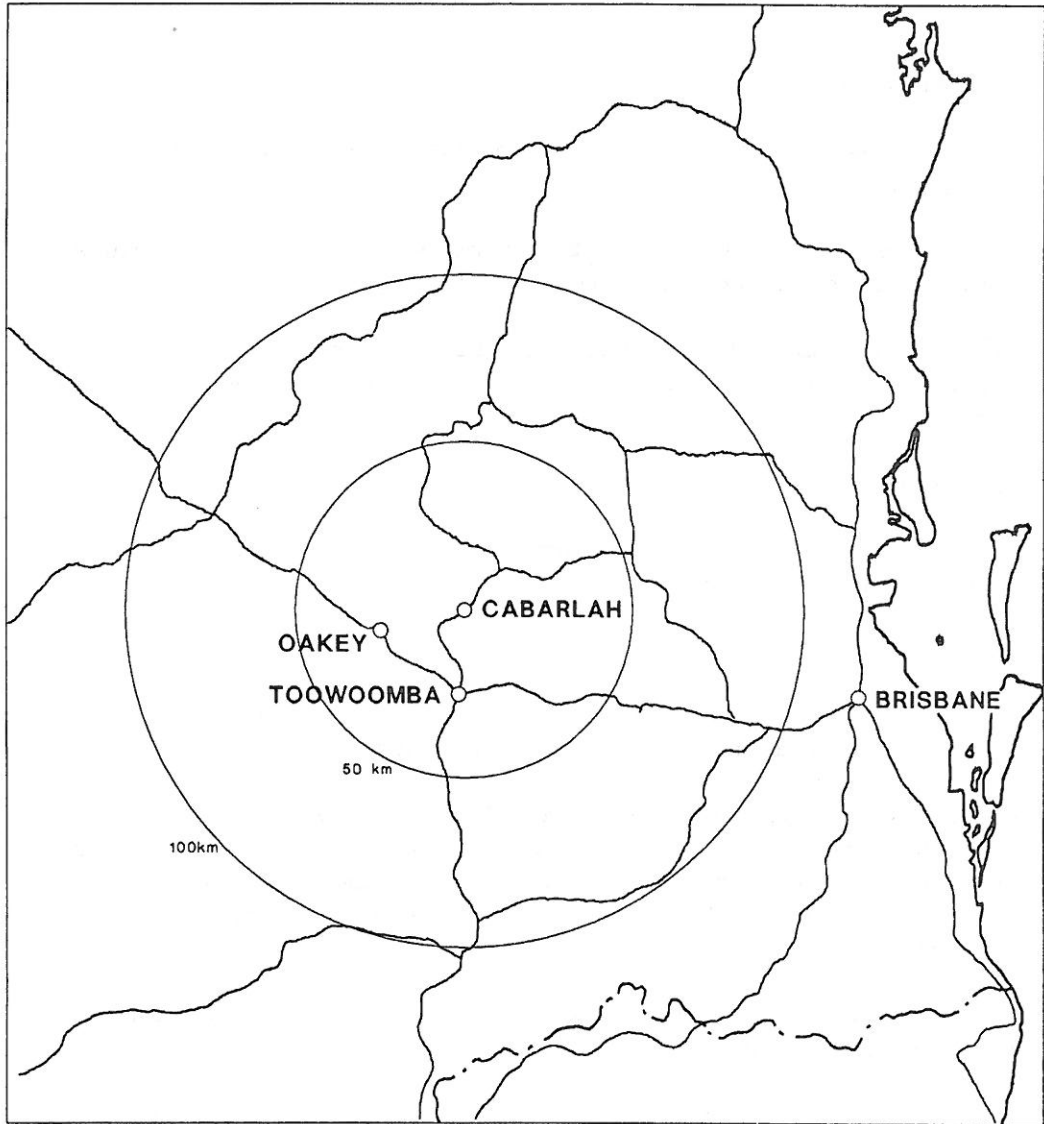
Where necessary, external hydraulic services and the trunk sewerage main will be extended and upgraded to service the proposed facilities. The sewerage treatment works will be upgraded to cope with the increase in population from this redevelopment.

Landscaping will be included with the facilities and will enhance local environmental conditions.

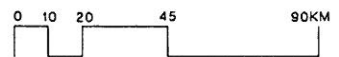
The proposed facilities will be provided with hot water units in keeping with their size.

Security

Intruder detection systems and external security lighting will be installed to specified areas.

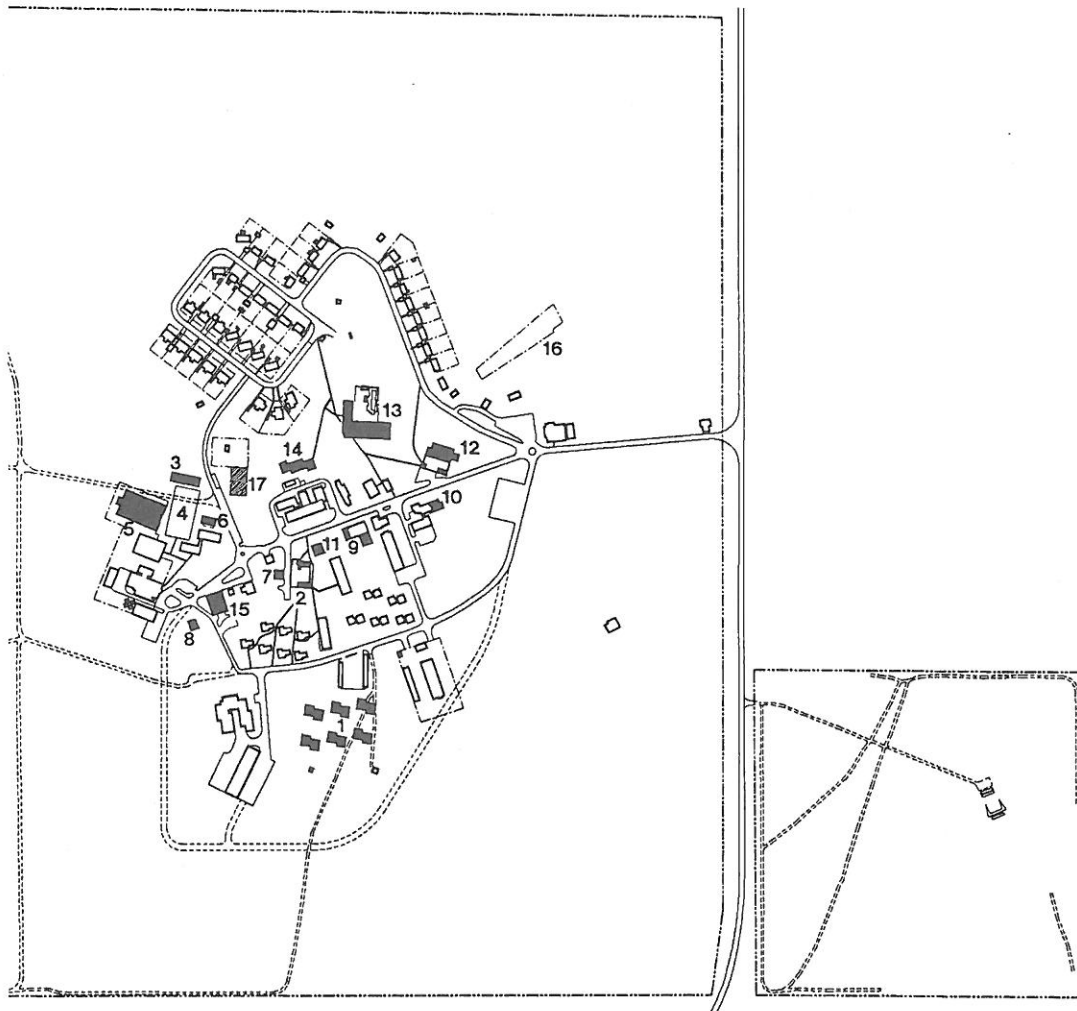


REGIONAL PLAN



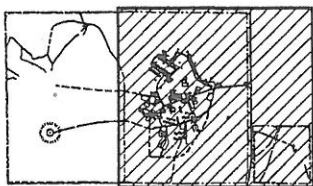
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**ARMY - BORNEO BARRACKS
CABARLAH - REDEVELOPMENT**

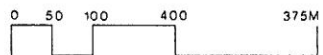


LEGEND

- 1 Rank and File Accommodation
New Bedrooms
- 2 Rank and File Dining Room and
Kitchen
- 3 Joint Telecommunications School
Headquarters
- 4 Joint Telecommunications School
Parade Ground
- 5 Joint Telecommunications School
Advance Training Wing and
Training Development Wing
- 6 Joint Telecommunications School
External Toilets and Showers
- 7 Ration Store
- 8 7 Signal Engineering/Software
- 9 Medical Dental Centre
- 10 7 Signal Headquarters
- 11 Drop-in Centre
- 12 Rank and File Canteen
- 13 Multi-Functional Gymnasium/
Assembly Hall
- 14 Junior Officer's and Sergeant's
Accommodation
- 15 7 Signal Workshop
Upgrade
- 16 Sewerage Treatment Works
Upgrade
- 17 New Tennis Court



**OVERALL
SITE PLAN**



2

**ARMY - BORNEO BARRACKS
CABARLAH - REDEVELOPMENT**