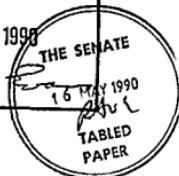


DEPARTMENT OF THE SENATE  
PAPER No. 338  
DATE  
PRESENTED

16 MAY 1990



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THE PARLIAMENT OF THE COMMONWEALTH OF AUSTRALIA  
PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

REPORT

relating to

OAKLEIGH MULTI-USER ARMY RESERVE DEPOT, VIC.

(Fourth Report of 1990)

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MEMBERS OF THE PARLIAMENTARY STANDING COMMITTEE  
ON PUBLIC WORKS

(Twenty-ninth Committee)

Mr Colin Hollis MP (Chairman)

Mr Percival Clarence Millar MP (Vice-Chairman)

Senate

House of Representatives

Senator Bryant Robert Burns

Mr George Gear MP

Senator John Robert Devereux

Mr Robert George Halverson OBE MP

Senator Dr Glenister Sheil

Mr John Graham Mountford MP

Mr William Leonard Taylor MP \*

\* Appointed on 29.9.88 following resignation of

Mr Maxwell Arthur Burr MP

Inquiry Staff:

Mr Peter Roberts (Secretary)

Mrs Denise Denahy (Assistant Secretary)

Mrs Helen Fyfe (Secretarial Support)

MEMBERS OF THE PARLIAMENTARY STANDING COMMITTEE  
ON PUBLIC WORKS

(Thirtieth Committee)

Mr Colin Hollis MP (Chairman)  
Mr William Leonard Taylor MP (Vice-Chairman)

Senate

Senator Bryant Robert Burns  
Senator John Robert Devereux  
Senator Dr Glenister Sheil

House of Representatives

Mr Ewen Colin Cameron MP  
Mr Lloyd Reginald O'Neil MP  
Mr Russell Neville Gorman MP  
Mr Bruce Craig Scott MP

Peter Roberts (Secretary)

EXTRACT FROM THE VOTES AND PROCEEDINGS OF  
THE HOUSE OF REPRESENTATIVES

NO. 157 DATED THURSDAY, 21 DECEMBER 1989

14 PUBLIC WORKS COMMITTEE - REFERENCE OF WORK - MULTI-USER ARMY  
RESERVE DEPOT AT OAKLEIGH, VICTORIA: Mr West (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: Multi-User  
Army Reserve Depot at Oakleigh, Victoria.

Mr West presented plans in connection with the proposed work.

Debate ensued.

Question - put and passed.

EXTRACT FROM THE VOTES AND PROCEEDINGS OF  
THE HOUSE OF REPRESENTATIVES

NO. 4 DATED MONDAY, 14 MAY 1990

11 PUBLIC WORKS COMMITTEE - REFERENCE OF WORK - MULTI-USER ARMY  
RESERVE DEPOT AT OAKLEIGH, VIC.: 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: Oakleigh multi-user Army Reserve Depot, Vic.

Mr Beddall presented plans in connection with the proposed work.

Debate ensued.

Question - put and passed.

PARLIAMENTARY STANDING COMMITTEE ON PUBLIC WORKS

OAKLEIGH MULTI-USER ARMY RESERVE DEPOT, VICTORIA

By resolution on 21 December 1989 the House of Representatives referred to the Parliamentary Standing Committee on Public Works for consideration and report the proposal for the construction of a multi-user Army Reserve depot at Oakleigh, Victoria. However, with the dissolution of the House of Representatives on the 19 February 1990, the reference lapsed and the previous Committee was unable to present its report, although it had completed its investigation.

Following the re-appointment of the Parliamentary Standing Committee on Public Works by the 36th Parliament, the project was again referred to it by the House of Representatives on 14 May 1990. The present Committee empowered by Section 24 of the *Public Works Committee Act 1969* agreed to consider the evidence placed before the previous Committee. The report which follows is based on the inquiry conducted by the previous Committee and the evidence considered by it. The report has been endorsed by the present Committee.

THE REFERENCE

1. This proposal is for the construction of a multi-user depot at Oakleigh, Victoria for use by various Army Reserve units. The construction of the new depot is primarily the result of a request from the Victorian State Government for the site of the existing depot in Batman Avenue, East Melbourne. This property is adjacent to the National Tennis Centre and the State plans to convert it for use as open space. The Commonwealth agreed to make the land available as part of a wider Commonwealth/State

Land Transfer Agreement involving various properties in Melbourne. In relation to the Batman Avenue depot, the Defence relocation costs were to be met and the Commonwealth was not to be financially disadvantaged overall.

2. A suitable 3.17 hectares site has been purchased at Oakleigh, some 16 kms from the Melbourne central business district.

3. The limit of cost estimate for the project including demolition work is \$9m at November 1989 prices. The out-turn cost including provision for escalation and construction contingency is estimated to be \$10.25m.

#### THE COMMITTEE'S INVESTIGATION

4. The Committee received written submissions from the Department of Defence (Defence), the Department of Administrative Services (DAS) and the Oakleigh Council, and took evidence from these organisations at a public hearing held in Clayton on 7 February 1990.

5. Prior to the public hearing the Committee was briefed on the proposal by the representatives of Defence and DAS. The Committee also conducted an inspection of the existing depot and the proposed site at Oakleigh.

6. A list of witnesses who appeared at the hearing is at Appendix A. The Committee's proceedings will be published as Minutes of Evidence.

#### BACKGROUND

7. In 1985, the State of Victoria approached the Commonwealth seeking the transfer of the Batman Avenue/Swan Street Army Depot site to the State, as a Commonwealth contribution to the National

Tennis Centre which has since been constructed a short distance away. The Commonwealth responded that it would be prepared to institute a land transfer package with the State, provided that Defence's relocation costs were met and the Commonwealth was not financially disadvantaged.

8. Negotiations have proceeded since that time, on the basis of an expanded Commonwealth/State Land Transfer Agreement including other Defence and non-Defence properties. The terms of the Agreement have now been finalised. Under those terms, Defence is required to vacate the Batman Avenue/Swan Street property by 30 June 1991. The State plans to convert the property to open space to replace parkland lost through the construction of the National Tennis Centre. The Prime Minister has agreed to an add-on to Defence outlays to fund relocation of Army units affected by the Land Transfer Agreement.

9. The Committee was informed that the property also forms part of a wider rationalisation of Defence property holdings, particularly Army Reserve facilities, in the Melbourne metropolitan area. Some Reserve depots are old and inappropriately sited, reflecting earlier demographic distributions which no longer apply. Properties which are dysfunctional, expensive to maintain and involve uneconomic use of land are planned for disposal. Revenue from sale will be used to fund replacement facilities as part of a Defence self-funded property improvement program. Utilisation of existing, suitable properties will be maximised while new construction will aim at achieving economies of scale through concentration and consolidation.

#### THE NEED

10. The proposal is driven primarily by the requirement to vacate the Batman Avenue/Swan Street depot in accordance with the Commonwealth/State Land Transfer Agreement. However, relocation

of displaced units needs to conform with long term property development plans which are aimed at rationalising Army property holdings in Melbourne. These plans aim to optimise utilisation of facilities by collocation of like units and shared use of facilities. This proposal conforms to present property development plans.

11. Present policy is directed towards provision of multi-user Army Reserve depots shared by several units. This facilitates disposal of smaller and older depots and leads to a reduction in administrative overheads. The provision in multi-user depots of shared facilities such as classrooms, parade grounds, transport compounds and storehouses is both cost efficient and flexible. The proposed Oakleigh facility incorporates these facilities.

12. New multi-user depots need to be located in demographically suitable recruiting areas, be visible and accessible, and enhance the image of the Army Reserve. The integrity of formations (groups of units) must be maintained for operational and training purposes. The Defence Policy Information Paper, "Defence of Australia", (1987), outlines the requirement for Reserve units to contribute as part of a total Army concept to operations which might arise in the shorter term by augmenting Regular forces and undertaking vital asset protection tasks in the north of Australia. The proposed Oakleigh facility will assist in meeting this requirement.

#### **Committee's Conclusions**

13. There is a need to vacate the Batman Avenue/Swan Street Army Reserve depot in accordance with the Commonwealth/State Land Transfer Agreement. The proposal also conforms with long term property development plans which are aimed at rationalising Army

property holdings in Melbourne. The Committee believes that the concept of multi-user depots in which facilities such as classrooms, parade grounds, transport compounds and storehouses are shared will be both cost efficient and flexible.

#### THE PROPOSAL

14. The proposal comprises the following works:

- demolition of existing structures, buildings and underground services
- construction of the new multi-user Army Reserve depot to provide facilities for 6th Engineer Group, 22nd Construction Regiment, 91st Forestry Squadron, 105th Field Workshop, 4th Field Supply Company and 1st Petroleum Company
- construction of off-street car parking and security fencing
- provision of associated engineering services, roads and landscaping.

15. It is proposed that the depot will accommodate the following Army Reserve headquarters and units:

- Headquarters 6th Engineer Group (HQ 6 Engr Gp), Royal Australian Engineers (RAE)
- 22nd Construction Regiment, RAE (22 Const Regt)
- 91st Forestry Squadron RAE (91 Forestry Sqn)
- 105th Field Workshop (105 Fd Wksp), Royal Australian Electrical and Mechanical Engineers

- 4th Field Supply Company (4 FD Sup Coy), Royal Australian Army Ordnance Corps
- 1st Petroleum Company (1 Petrl Coy), Royal Australian Army Ordnance Corps

16. The RAE elements listed above presently share the Batman Avenue/Swan Street depot with elements of the Army Reserve's 2nd/15th Field Regiment, Royal Australian Artillery and the Regular Army's 3rd Military District Band. It is planned that the RAE elements relocate to the proposed new depot at Oakleigh, the Artillery to an existing depot at Chapel Street, St Kilda, and the Band to another existing depot at Albert Road, South Melbourne.

17. The 105th Field Workshop is presently based at the Chapel Street depot. It will relocate to the new facility at Oakleigh and its present accommodation will be taken over by the artillery elements from Batman Avenue/Swan Street.

18. The 4th Field Supply Company presently occupies a depot at Sandringham. Following the unit's relocation to Oakleigh, the Sandringham depot will be taken over by a Reserve infantry company presently based at Preston. The Preston depot will be sold.

19. The 1st Petroleum Company is presently accommodated under temporary arrangements at an Army depot in Caulfield. This unit has only recently been formed and is presently expanding to its authorised establishment. Insufficient space exists at Caulfield to house the expanded unit and it will be relocated to Oakleigh together with other Reserve logistic units.

20. The following facilities are proposed:

- office, administrative and storage facilities
- lecture and syndicate rooms
- indoor training facility
- model room
- trade training facilities for 105th Field Workshop
- vehicle compound and wash point for 51 military vehicles
- recreational and limited food preparation facilities
- parade ground
- off-street car parking for 93 civilian vehicles
- security fencing; and
- landscaping, engineering services and environmental measures appropriate to the site.

#### THE SITE

##### Site Selection and Description

21. On 20 July 1989, Defence acquired the disused Oakleigh abattoir site for the purpose of constructing a multi-user Army Reserve depot to meet the requirements of this proposal.

22. For demographic and operational reasons, a site of about four hectares was required in the south-eastern growth corridor not more than 20 km from the city. Within these parameters, the Australian Property Group (APG) undertook a search for a suitable site. A possible site was identified at East Burwood but had to be rejected because of cost and difficulties associated with representations from the surrounding neighbourhood regarding the development. In light of the very tight timetable to vacate Batman Avenue, another site was looked for which met the Army's requirements. The Committee was informed that the Oakleigh site was the only site identified which met operational, budget and planning requirements.

23. The 3.17 hectare Oakleigh site is located 16 km south east of the central business district of Melbourne on the southern side of North Road, immediately east of Huntingdale Road. The southern boundary of the site adjoins the Dandenong/Gippsland railway line. (See location map and site plan at Appendix C).

24. The Oakleigh Municipal abattoir was formerly located on the site and the disused and derelict abattoir buildings remained on it when purchased. The Committee was informed that the buildings have no heritage value and there was no possibility that the buildings could be incorporated into the new proposal. Approval was given by the Committee on 3 November 1989 to proceed with demolition of the disused and derelict abattoir buildings in advance of the Committee's consideration of this proposal. During the demolition works animal waste was discovered and removed. The Committee was informed that should any further such material be discovered it will also be removed. Existing underground fuel tanks will be removed and any petroleum contaminated soil will be disposed of.

25. The site is zoned "general industrial" under the Melbourne metropolitan planning scheme. The adjacent properties to the east and those immediately south of the railway line are also zoned "general industrial" and are occupied by conforming users. Opposite the site on the northern side of North Road, land is zoned "light industrial" and "general industrial" and is occupied by conforming users. South and west but separated from the former abattoirs by the railway line and Huntingdale Road are small areas zoned "Residential C".

26. The Committee was informed that the site is located within the south-east growth corridor of the Melbourne metropolitan area and is therefore suitable in terms of demography and recruiting potential.

27. The site is also well served by public transport which is an important consideration in site selection for Reserve depots. It is adjacent to the Huntingdale railway station and major bus routes along North Road and Huntingdale Road.

#### **Committee's Conclusion**

28. The Oakleigh site is suitable for the construction of a multi-user Army Reserve depot as it is within an appropriately zoned area, is located within the south-east growth corridor and is well serviced by public transport.

#### **Proposed New Buildings**

29. The new depot will consist of four main elements:

- administration/training building
- Q store

- trade training facility
- vehicle compound including the transport office and covered vehicle bays

30. All vehicle parking is proposed on the eastern boundary of the site to provide a buffer from the neighbouring properties.

31. The site is divided into two zones - the northern zone comprising the administration/training building and private vehicle parking, and the southern zone containing logistics-type functions i.e. Q store, trade training facility and transport compound.

32. In the administration/training building, the administration section has been located in a two-storey building facing North Road. It is oriented on the site to take maximum advantage of the northerly aspect, to present a prestige military image whilst limiting the need for visitor access to the site. The training section is screened by and physically linked to the administration section via the main entry and recruitment office.

33. Users of the training section will have direct access from the carpark via an entry on the east side adjacent to the change rooms, eliminating the need to transit the administrative areas. The parade ground is located immediately adjacent to the indoor training area on the most level portion of the existing site.

34. The Q store is located adjacent to and south of the training facility, and is orientated to gain maximum control of sun penetration to offices. Loading areas are proposed at the eastern and western ends of the Q store. The trade training facility and vehicle compound are located to minimise the penetration of heavy vehicular traffic within the site. The trade training building is orientated to prevent penetration of cooling south-westerly and warming northerly winds through the

large access doors. Grass will be sown and trees planted in the remaining areas along the southern boundary adjacent to the railway easement. This will screen the depot from passing trains whilst providing an open training area.

#### Design

35. The buildings are formal and axial in composition, establishing a discipline which acknowledges both architectural precedent and the instructional and personal discipline of Army life.

36. The character, form and materials of the buildings, together with appropriately landscaped grounds, will enable this facility to be a positive contribution to the industrial streetscape of North Road. All of the buildings are one or two storeys in response to functional needs and the scale of neighbouring developments.

37. The buildings have been designed to provide a flexible layout to meet both current and future training and operational needs. Buildings and site planning allow for expansion of the facilities in the future. While the building does not incorporate access for persons with physical disabilities' the Committee notes that two civilian typists will be employed. ACS advised that modifications could be made to the design to provide for persons with physical disabilities, although access to the first floor, in the absence of a lift, would be difficult for a person in a wheelchair.

#### Committee's Conclusion

38. There is a need for the Department of Defence to review its policy regarding the provision of access for civilian staff with physical disabilities at its establishments.

#### **Committee's Recommendation**

39. Modifications should be made to the design of the proposed Oakleigh multi-user Army Reserve depot to provide access for staff with physical disabilities.

#### **Materials**

40. The materials proposed for the new buildings have been selected for their economy, function, low maintenance, and compatibility with neighbouring structures. These materials are face brick externally, plasterboard and face brick wall internally, carpet and ceramic tile flooring generally, corrugated and metal tray deck roofing, plasterboard and acoustic tile ceilings and aluminium window frames.

#### **Structure**

41. The two-storey component of the administration/training building will be constructed of a reinforced concrete frame. Elsewhere buildings are generally steel portal or braced frames with concrete floor slabs.

#### **Energy Conservation**

42. Buildings are designed for thermal efficiency by employing passive solar design principles of orientation, sun shading and insulation. Careful attention to architectural and engineering detail will optimise energy usage.

43. Energy efficient heat pump air conditioning systems will be used in the administration/training building and conditioned areas will be zoned to operate independently so that unoccupied areas can be turned off.

### **Investigations and Surveys**

44. Preliminary investigations of the site have been carried out to determine existing soils conditions for foundation design. The natural soil profile consists of sand over very stiff to hard sandy clay or sometimes cemented sand/ironstone with weathered rock properties. Detailed level surveys and geotechnical surveys will be carried out immediately following the completion of the demolition works. Investigations as to potential difficulties related to the former use of the site have been initiated with the Ministry for Planning and Environment. No known problems exist on the site. (Construction details can be found at Appendix B)

### **Environmental Impact**

45. The site is zoned under the Melbourne Metropolitan Planning Scheme as "general industrial". The proposal is consistent with this zoning. The environmental impact of the project has been assessed in accordance with the procedures of Australian Construction Services and with respect to the *Environment Protection (Impact of Proposals) Act 1974*. Its impact has been determined as minimal. All wastes can be satisfactorily discharged into the sewerage system.

### **Concerns of Oakleigh Council**

46. In a submission to the Committee the Oakleigh Council detailed a number of concerns regarding the project while at the same time giving its qualified support indicating that the proposed development offers a number of benefits in terms of land utilisation.

47. The concerns which Council wishes to be adequately addressed are:

- an appropriate ingress/egress design for the North Road entrance including the satisfactory location of the gatehouse, to ensure minimal traffic disruption, together with a commitment that the necessary works will be undertaken prior to the occupation of the site at the cost of the developers
- limited use of Manton Road entry
- landscaping of the site in general and specifically at the North Road frontage (having a minimum depth of 9 metres) and the east and south west boundaries
- fencing of the site with plastic coated link mesh to be coloured green
- confirmation that all external lighting will be so designed and located so as to preclude any overspill
- details of building materials, and particularly brick and tile colours
- investigations to determine the feasibility of the use of the facilities proposed by the wider local community.

48. Defence and DAS indicated to the Committee that there will be further consultation with Council during the development of the proposal and that in particular the situation regarding traffic to the site will be carefully monitored.

## **CONSULTATION**

49. The design of the new facility will comply with the relevant standards codes, regulations and by-laws. The proposed development has been discussed with following local, state and federal authorities.

Local	City of Oakleigh
State	Gas and Fuel Corporation of Victoria State Electricity Commission of Victoria Melbourne and Metropolitan Board of Works Metropolitan Transit Authority/Victoria Roads Corporation Ministry for Planning and Environment (EPA)
Federal	Telecom Australia Department of Administrative Services.

50. The Committee was informed that the requirements of these authorities have been taken into consideration in the development of the proposal. The Committee was also informed that staff at Headquarters Land Command, Headquarters 3rd Military District, and affected units were involved in project definition and development.

## **PROGRAM**

51. Tenders were called in November 1989 for demolition of the existing buildings and services on the site, with completion by the end of February 1990. Subject to the necessary approvals the proposed timing is for tenders to be called for the remainder of the works by mid 1990, with completion in late 1991.

**Limit of Cost**

52. The limit of cost estimate for the proposal is \$9.0 million at November 1989 prices. The estimate includes the following components:

building works and services	\$7.0 m
external works and services	\$2.0 m
<b>TOTAL</b>	<b>\$9.0 m</b>

**Committee's Recommendation**

53. The Committee recommends the construction of a multi-user Army Reserve depot at Oakleigh, Victoria at a limit of cost of \$9m at November 1989 prices.

## **Conclusions and Recommendations**

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

	Paragraph
1.	There is a need to vacate the Batman Avenue/Swan Street Army Reserve depot in accordance with the Commonwealth/State Land Transfer Agreement. 13
2.	The proposal also conforms with long term property development plans which are aimed at rationalising Army property holdings in Melbourne. 13
3.	The Committee believes that the concept of multi-user depots in which facilities such as classrooms, parade grounds, transport compounds and storehouses are shared will be both cost efficient and flexible. 13
4.	The Oakleigh site is suitable for the construction of a multi-user Army Reserve Depot as it is within an appropriately zoned area, is located within the south-east growth corridor and is well serviced by public transport. 28

5. There is a need for the Department of Defence to review its policy regarding the provision of access for civilian staff at its establishments. 38

6. Modifications should be made to the design of the proposed Oakleigh multi-user Army Reserve depot to provide access for persons with disabilities. 39

7. The Committee recommends the construction of a multi-user Army Reserve depot at Oakleigh, Victoria at a limit of cost of \$9m at November 1989 prices. 53



Colin Hollis  
Chairman

14 May 1990

LIST OF WITNESSES

**BARNES, Mr Michael Wayne, Assistant State Manager, Estate Services, Australian Property Group, Department of Administrative Services, 525 Collins Street, Melbourne, Victoria.**

**CHEAH, Mrs Christina Lay-See, Deputy State Manager, Australian Construction Services, Department of Administrative Services, 239-241 Bourke Street, Melbourne, Victoria.**

**HELLYER, Brigadier Grahame Leslie Alwynne, Director General, Accommodation and Works Branch (Army), Department of Defence, Russell Offices K-2-43, Canberra, Australian Capital Territory.**

**JAMES, Colonel John Richard, Chief of Staff, Headquarters 3rd Division, Department of Defence, 'Grosvenor', 55 Queens Road, Melbourne, Victoria.**

**MCCANN, Colonel Raymond Leslie, Project Manager, Accommodation and Works Branch (Army), Department of Defence, Russell Offices K-2-40, Canberra, Australian Capital Territory.**

**O'DONNELL, Mr Brian, Director, Technical Services, City of Oakleigh, Victoria.**

**PULLAR, Mr Gary Edward, Project Manager, Australian Construction Services, Department of Administrative Services, 239-241 Bourke Street, Melbourne, Victoria.**

## APPENDIX B

### CONSTRUCTION DETAILS

#### BUILDING SERVICES

##### Air Conditioning

The Administration/Training Building generally, will be air-conditioned to provide comfort conditions, and to reduce noise penetration from North Road into the administration areas.

##### Evaporative Cooling

Evaporative cooling will be provided to the Food Preparation Area.

##### Heating

Offices not air-conditioned as above will be electrically heated. Gas fired heating is proposed to the Indoor Training Area, Vehicle Mechanical Bays and General Engineering Bays within the Trade Training Building.

##### Ventilation

Mechanical ventilation in accordance with applicable standards will be provided for toilets, change rooms, tea rooms and cleaners areas.

##### Hot and Cold Water

Hot and cold water will be reticulated throughout all buildings to showers, basins and sinks. Electric boiling water units will serve tea making facilities.

##### Light and Power

Internal light and power will be provided in accordance with the relevant codes and standards.

Multi-channel cable skirting duct for reticulation of power, telephone and computer cables will be provided to the Administration/Training Building as briefed.

Emergency lighting will be provided throughout all buildings from light fittings with an independent battery supply.

The existing electrical substation on-site is adequate for all foreseen requirements. The substation enclosure will be upgraded.

#### **Compressed Air**

Compressed air will be provided to the Trade Training Building and Vehicle Servicing Ramp.

#### **EXTERNAL WORKS AND SERVICES**

##### **Vehicle Movement Areas**

A total of ninety-three off-street carparking spaces will be provided for the new Army Reserve multi-user depot at Oakleigh.

Truckparking for a total of 19 light vehicles (including 10 undercover), 30 medium vehicles and two heavy vehicles will be provided.

These pavements, including the parade ground of approximately 1750m<sup>2</sup> and the road network within the site will be asphaltic concrete.

The plant hardstanding in the south-east corner of the site will be compacted gravel. The pavement adjoining the trade training building and vehicle washpoint/vehicle ramp will be concrete.

##### **Water Supply**

The water supply by the Melbourne and Metropolitan Board of Works will be obtained from the main along North Road. There is sufficient capacity and pressure to provide water for domestic and fire fighting purposes for the new facility.

##### **Stormwater Collection**

Stormwater from the buildings and surrounding surfaces on the north of the site is proposed to be connected to the existing main stormwater drain in North Road. The south portion of the site is proposed to be drained to the MMBW open drain to the south of the railway line.

These drainage systems have adequate capacity for the proposed facility.

##### **Sewerage System**

Sewage from the buildings will be discharged into the Melbourne and Metropolitan Board of Works sewers on North Road and Manton Road. These drains have adequate capacity for the proposed facilities.

The vehicle washpoint and vehicle servicing ramp are proposed to drain to silt pits and then to a petrol and oil interceptor before connecting to the sewer.

### **Power Supply**

Power is supplied by the State Electricity Commission of Victoria to the existing electrical sub-station on-site, and is adequate for all foreseen requirements.

### **External Lighting**

External security lighting will be provided at the entrances of buildings, to the Q store compound and vehicle parking areas. Illumination of roads and pathways will be provided commensurate with normal safety standards. Lighting will be provided to the parade ground to enable extended use of the area for training purposes.

### **Natural Gas**

Gas supplied by the Gas and Fuel Corporation of Victoria will be provided from the main in North Road.

### **Telephones**

Telephone supply by Telecom Australia will be provided from the main in North Road.

### **Security**

The Army Reserve multi-user depot at Oakleigh will be contained within continuous security perimeter fencing with vehicle access from North Road and Manton Road only.

The requirement for a high level of security has been identified to the vehicle compound and Q store compound and these areas will be further fenced off to control pedestrian and vehicular access.

An electronic intruder detection system will be provided to the armouries within the Q store.

### **FIRE PROTECTION SYSTEMS**

An automatic fire detection system of thermal detectors and manual break glass alarm points will be generally installed throughout the buildings. These systems will be connected to the Melbourne Metropolitan Fire Brigade.

The existing water supply system is adequate in quantity and pressure to meet the fire fighting requirements. Hydrants will be provided around the site.

Portable fire extinguishers and fire hose reels will be installed throughout the building in accordance with the relevant building regulations and the recommendations of the Commonwealth Fire Board.

**LANDSCAPING**

The site will be graded, grassed and planted with trees and shrubs.

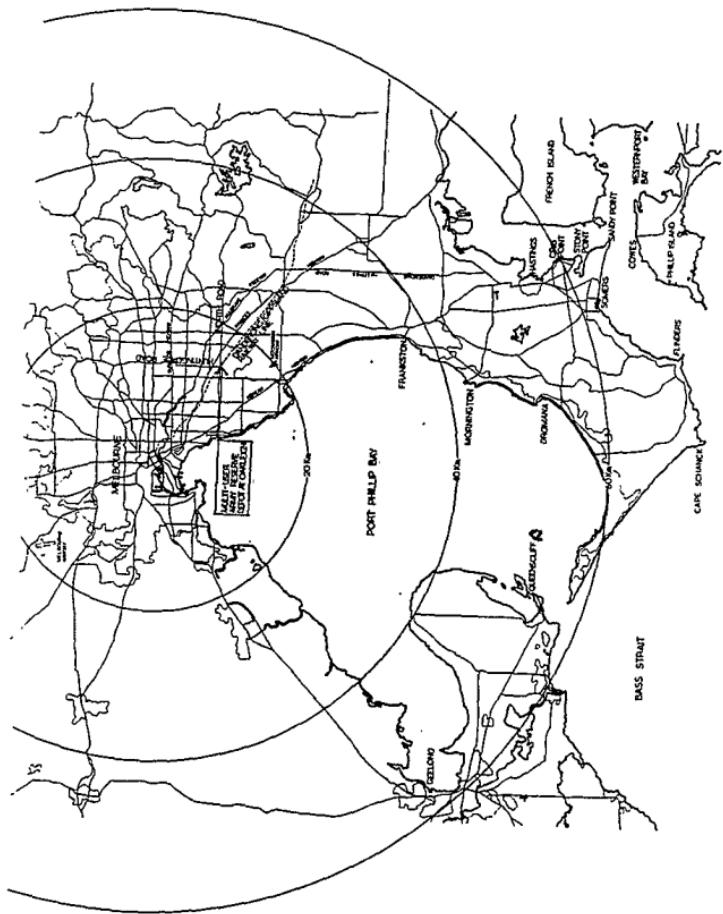
**APPENDIX C**

**PROJECT DRAWINGS**

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Elevations	C4



# LOCALITY PLAN



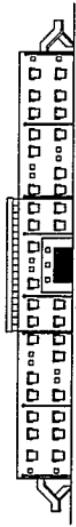


ADMINISTRATION/TRAINING BUILDING  
ELEVATIONS

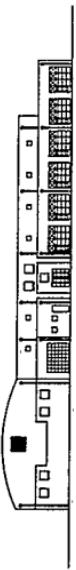
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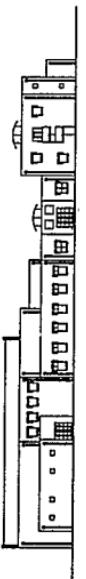
NORTH



SOUTH



EAST



WEST

