Defence Housing
AUTHORITY

SUBMISSION TO THE
PARLIAMENTARY STANDING COMMITTEE ON
PUBLIC WORKS

DEVELOPMENT OF ON-BASE HOUSING FOR DEFENCE AT PUCKAPUNYAL, VICTORIA

February 2005

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IDENTIFICATION OF THE NEED

1 OBJECTIVES

1.1 In this submission, the Defence Housing Authority (DHA) seeks approval from the Parliamentary Standing Committee on Public Works (PWC) to proceed with a major residential development at Puckapunyal Army Base, Victoria.

1.2 The project objective is to provide (80) modern on-base houses to meet the operational needs of the Australian Defence Force (ADF) and the requirements of the Department of Defence.

2 THE NEED

2.1 The Puckapunyal Military Area (PMA) is a large Defence base and training area located in rural Victoria well away from any major city. Its future as a Defence base is assured.

2.2 Of the 361 on-base houses presently managed by DHA, 119 were built in the 1960's and another 100+ in the 1980s. The need to replace these aged assets has been recognized for some time. The 1960s residences are small, with the majority having no family area, no en suite bathroom, no garage and limited outdoor covered area. They are the cause of considerable discontent. Houses built in the early 1980s are also small and similarly lacking in amenity.

2.3 According to the latest available Defence Housing Forecast (DHF), Puckapunyal has a steady requirement to house 412 Australian Defence Force (ADF) families (80% on base) over the next 5 years, but if firm decisions are taken on the relocation of the School of Military Engineering (by 2008) and the School of Infantry (by 2011) the net on-base requirement could increase by some 120 – 180. Off-base housing opportunities are very limited. The closest country town is Seymour (population some 7,000). Bendigo (population around 85,000) is around 90 km to the west and the nearest metropolis, Melbourne, is some 100 km to the South.

2.4 In short, Puckapunyal is a location where the sourcing of additional suitable properties at short notice (either through Rental Allowance [RA] or other means) is problematic, and where it may be appropriate to retain properties that are currently in excess of the advised DHF to allow for future 'normal' variations in the actual Defence requirement

2.5 DHA's Capital Program covering FY 2004/05 to 2007/08 notes that taking into account the Defence housing requirement, the Authority's Corporate Plan, the national and regional marketing analyses, the stock situation, and the broad consideration of provisioning options, a significant construction program should be undertaken at Puckapunyal.

	04-05	05-06	06-07	07-08
TOTAL DEFENCE REQUIREMENT	412	412	412	412
DHA-MANAGED STOCK ON-BASE	361	349	349	367
DHA-MANAGED STOCK OFF-BASE (SEYMOUR)	64	63	63	45

Table 1: DHA Residential Construction Requirements for Puckapunyal

2.6 As an indication of general commitment to rejuvenation, DHA completed 21 new on-base residences at Puckapunyal in mid-2002. A further 20 houses were completed by December 2004 at a cost of approximately $5.4 million for housing and subdivision works.

3 OPTIONS CONSIDERED

3.1 Across Australia, DHA satisfies Defence accommodation requirements by a mixture of delivery methods:

(a) construction off-base with a view to retaining the properties or selling them with a lease attached;

(b) construction on-base to accord with Defence operational or policy requirements and/or if such construction is the most cost-effective for all concerned;

(c) direct purchase with a view to retaining the properties or selling them with a lease attached; and

(d) direct leases from the private rental market.

3.2 Of these options, only on-base construction is feasible at Puckapunyal. In the nearest town, Seymour, land availability is very limited, the housing market would be too readily distorted by Defence requirements, and Seymour provides few amenities beyond what is available on-base.

3.3 Within the obvious choice of on-base construction, it is proposed to split the construction requirement into two distinct phases (each requiring separate PWC approval), with the first phase involving construction of residences only on land where houses have previously stood, and the second phase involving construction of the remainder of the Army requirement after further consultation with Defence on any emergent infrastructure requirements.

3.4 The staging is both feasible and desirable. The Puckapunyal housing area has space previously occupied by some 105 old houses demolished progressively over the years. Development of this space is an economical way for DHA to assist Defence in improving the quality of life on the base while further defining any infrastructure requirements (which are the responsibility of Defence). Assuming PWC and final Board approval is achieved by mid-2005, construction could commence in August 2005 and houses would be progressively delivered up to October 2006. Puckapunyal residents - present

and prospective - would see action in train and there could well be an immediate Defence payoff in terms of retention and morale.

3.5 DHA has also investigated the potential for refurbishment of houses built in the 1960s and 1980s - but decided that the risks are too great. Accommodation standards are constantly changing as the Australian standard of living rises. Compared with the 1960s, an average modern house has more bedrooms, additional family/rumpus/entertainment areas, en suite, study, and garaging as a norm. Taking a 1960s house to the present community standard requires a space increase of around 45%. Considerable new building work is involved plus kitchen replacement, bathroom refurbishment, climate control inclusions, electrical upgrade and at times window/door replacement. Stock from the 1980s (a further 100+ houses) requires similar renovation and improvement to bring it up to modern standards (according to ABS statistics, the average Australian house size has increased by around 30% since the mid-1980s).

3.6 Further, buildings of the same age will often differ in quality of construction. Deterioration will vary depending upon location, site condition, care of use and quality of material and appliances. Some problems will inevitably remain hidden until restoration has commenced. There is no sure scope of work and each upgrade would need to be considered as an individual mini-project. Costs would be inherently uncertain and contract variations many.

4 DESCRIPTION OF THE PROPOSAL

4.1 The initial project for which approval is sought involves re-developing vacant land previously occupied by residences that have been demolished, and building 80 new houses.

4.2 DHA surveys undertaken with Defence personnel based at Puckapunyal have shown a clear preference for detached dwellings on-base. Taking these preferences into account, and combining them with Defence policy requirements, planning is based on construction of three-bedroom detached houses.

4.3 The Defence Corporate Services Infrastructure Group of the Department of Defence (CSIG) is responsible for PMA infrastructure, and DHA's involvement is limited to infrastructure within the development area and the necessary interfaces. Local CSIG advice has been to the effect that the existing PMA infrastructure is adequate. Some minor infrastructure works are required for roads. Storm water disposal and sewerage will need to be renewed within the subdivision to suit the orientation and layout of the new housing and to meet the life cycle of the new housing proposed for the area. Should unanticipated infrastructure requirements arise as the development progresses, costs would be met by DHA initially and recouped through the annuity rent charged to Defence by DHA for on-base constructions.

5 ENVIRONMENTAL CONSIDERATIONS

5.1 Defence is responsible for the overall environmental management of the Puckapunyal Training Area.

5.2 An important Defence environmental policy objective is to establish an innovative environmental management system that supports ADF capability, promotes environmental sustainability and achieves the Government's broader environmental objectives. The policy recognizes that, in addition to their core purpose of maintaining ADF capability and readiness, training areas such as Puckapunyal are often rich in the biodiversity they contain and that natural environmental values should be conserved as much as possible.

5.3 Defence strives for environmental best practice in the management of training areas. Each ADF training area publishes standing orders that, amongst other things, describe how activities are to be performed to limit possible impacts on the environment. The details of mitigation strategies to limit environmental impacts are developed through internal environmental impact assessment processes carried out by experienced and qualified environment staff and consultants throughout Australia.

5.4 At Puckapunyal DHA will be looking to ensure that all of its development and construction activities are consistent with the needs of the ADF environmental policy.

5.5 Water supply in terms of quantity is an issue at the Puckapunyal base. Environmentally Sensitive Development (ESD) principles and water saving devices will be incorporated for the houses such as dual flush toilets, AAA rated shower heads, native gardens, and use of rainwater retention on site including tanks for toilet cistern supply.

TECHNICAL INFORMATION

6 LOCATION

6.1 Puckapunyal is approximately 100 km North of Melbourne. A location map is attached (Supplementary Information, Item 1), together with a Puckapunyal Military Area Site Plan (Supplementary Information, Item 2).

6.2 An aerial view of the subdivision is attached (Supplementary Information, Item 3) together with a subdivision layout for the Alamein Road/Malaya Road precinct (Supplementary Information, Item 4) and Markham Road precinct (Supplementary Information, Item 5)

6.3 The Puckapunyal residential area contains retail, food and community facilities including schools, churches, swimming pool, medical center and a recently completed multi-function child care centre to provide long-day childcare facilities for 60 children, an out-of-school-hours care centre, a kindergarten facility and a playgroup.

7 LAND OWNERSHIP

7.1 The land is part of the Puckapunyal Military Area and is owned by the Department of Defence.

8 SITE DESCRIPTION

8.1 The residential area at Puckapunyal has an irregular linear form defined by a low ridge to the south and a major drainage line to the north. It is approximately 1900 metres long and varies in width from 250 to 400 metres. Being under Commonwealth ownership, the site is not subject to zoning in the normal sense but has been previously used as residential land and will continue to be so designated.

9 SCOPE OF WORK

9.1 **Roads.** The development is planned to use existing sealed roads which are in reasonable condition.

9.2 **Services.** Storm water drainage, communications, sewerage reticulation, gas and electrical services are discussed in paragraph 13 below.

9.3 **Amenity provision.** Existing amenities within walking distance of all residences at Puckapunyal include considerable open space, a 9-hole golf course, schools, shops, churches, a fitness centre and a child care centre. No amenities upgrades or replacements are included in the project.

9.4 **Housing types.** The new residences will provide a range of floor plans and amenities that will be fully compliant with the current Defence requirements and standards.

10 HERITAGE CONSIDERATIONS

10.1 There are no specific heritage considerations attached to the re-use of vacant land previously occupied by housing.

10.2 The following extract from the Register of the National Estate Database maintained by the Australian Heritage Commission indicates that Defence management of heritage aspects of the PMA has been exemplary:

> "**Condition and Integrity**: Puckapunyal Military Area (PMA) has been extensively rehabilitated since Defence acquisition and areas of native vegetation are now generally in good condition. Land use prior to Defence acquisition included mining, timber getting/forestry and extensive grazing. Sheep have been removed from the area and cattle grazing is used to control grass growth as the Range East district contains extensive areas of improved pastures (approx. 47% of the training area). A range of feral pests (foxes, cats, rabbits, rats, etc) and weed species occur within PMA…….

Defence has an active environmental management program for Puckapunyal Military Area which addresses fire management, erosion, weeds and feral animals, air and water quality, and provides long term monitoring of the ecological status of the training area. Rehabilitation, 'no go', and 'no impact' areas have been identified within PMA and are monitored by Defence. An assessment has not been undertaken of chemical, heavy metal and unexploded ordinance (UXO) contamination. Defence has a current Environmental Management Plan (1998) for the PMA, has developed an Environmental Awareness and Management Handbook for distribution to users of the base, and has produced a State of the Environment Report (2000) for the base."

11 ZONING AND APPROVALS

11.1 As Commonwealth land, the site carries no zoning constraints apart from consistency with Defence Master Planning for the Puckapunyal Military Area as a whole.

12 SITE DEVELOPMENT CONSIDERATIONS

12.1 All proposed residences are planned for construction on vacant land that has previously held residences. Roads and services are essentially controlled by Defence either directly or through contracted suppliers. The main site development consideration is that the project should contribute to full achievement of the overall aim of providing a high level of residential amenity for the Puckapunyal community.

12.2 *Access*

Access into and out of the PMA is controlled and limited to what is essentially local traffic. Traffic could generally be described as "light". All roads are two lane two way roads with kerbs and channel. The residential streets are most likely to be subjected only to passenger vehicles and normal commercial traffic such as rubbish trucks, food delivery vehicles and removals vans.

All intersections are controlled by the use of stop signs and line marking, and are subject to speed restrictions that are enforced by military police. The maximum posted speed limit is 60 km/hr.

13 SERVICES

13.1 *Water*

The supply of all potable water to the base, including the residential quarters, is fully managed by the Department of Defence. The water supply network was constructed in the late 1940s to service the military personnel housed in the cantonment, and has been progressively extended as the need arose.

The water supply network generally follows the road pattern and is located behind the kerbs. New service ties to the existing water mains are required to

suit the new lot layout and changed house locations, but no full replacement is necessary.

The network also provides fire protection through the fire hydrants located on the water mains. The location and number of hydrants will need to be updated for compliance with current Australian Standards.

13.2 *Electricity*

The electrical power system within the PMA is owned by the Department of Defence and was transferred from State to Federal control in September 1989. The network was brought up to AS3000 standard by TXU prior to its handover to the PMA.

Tenex Alliance currently supplies power under contract to the base and residential area. The network servicing the residential quarters is maintained by TXU, and all residences are individually metered.

The current electrical reticulation is via overhead cables. The layout reflects the current road network and can be re-used and adapted to suit a new layout of residences.

The electrical connections to housing will need to be positioned underground to improve visual amenity. Electrical cabling in the public open spaces will be installed underground for reasons of public safety.

As the number of new dwellings is similar to the number of dwellings demolished the capacity of the electrical network feeding the new subdivision area should be adequate. This will be confirmed during the engineering design and documentation phases of the project.

13.3 *Gas*

TXU supplies natural gas to the PMA. The distribution network, constructed in 1993-94, comprises a 200 mm diameter steel high pressure main which, after entering the PMA is reduced in pressure at a regulator and reticulated at a lower pressure in the base and residential areas. Gas supply to the residential area is metered at the individual houses. There have been very few instances of problems with the distribution network apart from accidental puncture.

13.4 *Sewerage*

The system is under Defence control. As the number of dwellings being constructed equates to previous residences removed, the downstream network is expected to cater for the new residencies.

13.5 *Storm water drainage*

The storm water drainage network is also a Defence responsibility.

The developed area within the PMA, including the residential area, is served by a combination of open channels and an underground drainage network discharging either into the retarding basin or directly into an open channel.

13.6 *Telecommunications*

For telecommunications, the PMA is serviced externally by a single geographical run of optical fibre and copper landline cables fed from two separate Commercial Public Carrier telephone exchanges. Internally, the PMA is serviced by two parallel, site wide cabling infrastructures:

(e) the first is an optical fibre backbone, installed in 1999, owned and managed by Defence as a Commonwealth asset and is referred to as the PMA Base Area Network (PMA-BAN);

(f) the second is a legacy copper backbone and distribution network owned by Defence but managed by Telstra.

Married Accommodation precincts are not connected to the optical fibre backbone, but the associated new plant was designed to strategically align with the Married/Family Accommodation precincts to allow future optical fibre backbone interconnections or potential Defence / Telstra services demarcation options.

The PMA residential area is serviced by Telstra using the legacy copper infrastructure. When legal ownership of the Telstra copper plant was formally handed to Defence in 1994, the management of records, moves, adds and changes was contracted back to Telstra, and the legacy copper infrastructure in the residential area is physically and contractually partitioned from the PMA Base Area Network. Telstra is able to direct bill occupants and charge for any premise or street connection cabling at commercial carrier rates direct to the telephone service owner.

14 CODES AND STANDARDS

14.1 Works carried out as part of this project will be carried out in accordance with all statutory rules and regulations including the current Building Code of Australia (BCA).

15 ENERGY CONSERVATION

15.1 Energy conservation will be a prime design consideration. All houses will be required to provide optimal passive solar performance and achieve a minimum of 4-star energy rating in accordance with Commonwealth Government policy and a 5 star energy rating under the Victorian Government 5 Star House Policy. The DHA appreciates the advice of the Australian Greenhouse Office that, besides improved building shell thermal performance, one of the most effective ways of producing more energy efficient housing is through improved orientation and glazing placement to produce summer shading and winter solar access.

16 LANDSCAPING

16.1 Retention of significant sized trees will be encouraged and the subdivision layout and orientation of housing will acknowledge the opportunity for retention. Landscaping will also be provided to public open areas and to walkways connecting to community facilities. Each home will include gardens to front and rear to enhance the streetscape and provide private open space.

17 CONSTRUCTION PROGRAM

17.1 Subject to PWC and DHA Board approval, the construction program is planned to commence in August 2005. Delivery of all completed dwellings is expected to occur by October 2006.

17.2 The proposed delivery methodology is to employ project home builders on a "design and construct" basis to provide homes which will satisfy the functional requirements stipulated by DHA to meet the policy requirements and standards of the Department of Defence.

PROJECT PLANNING

18 PROJECT FEASIBILITY

18.1 The estimate of cost for the proposed 80 houses is $19.6 million (GST included). This includes an allowance for sewer, stormwater and water system upgrading or replacement within the boundaries of the development area but includes no allowance for wider infrastructure works which remain under Defence control.

18.2 The DHA Board has agreed to refer the Project to the PWC within the above cost parameters. Subject to Parliamentary approval the project will be submitted to the DHA Board for its final approval.

19 COMMUNITY CONSULTATION

19.1 In 2002, before embarking on construction of the first 20 replacement houses, DHA undertook a 100% survey of Puckapunyal residents to ascertain their concerns and, if possible, ameliorate them through the planning process. Survey results confirmed earlier assessments that some 80% of PMA personnel would prefer to live on base and indicated that their major housing concerns were size, lack of a weatherproof outdoor living area, and lack of storage. All of these concerns were met in the recently completed projects and will continue to be met in the proposed 80 house redevelopment

19.2 During the planning of this project DHA has maintained a close relationship with the groups, who have a keen interest in the development of housing at Puckapunyal, e.g.:

(a) Base Commander's Office;

(b) Defence Corporate Services Infrastructure Group (CSIG) Base Management; and

(c) The Tenancy Consultative Group (TCG)

19.3 The consultations have covered the full range of project development issues. As all of the proposed housing is on-base at Puckapunyal, the people above cover the usual local council and community interests in planning and approvals, neighborhood worries, and the concerns and of special interest groups.

20 OTHER ORGANISATIONS /AUTHORITIES CONSULTED

20.1 **Origin Energy** will be consulted on provision of gas to the development.

20.2 **Telstra** will be consulted on the supply of telecommunications to the proposed development.

20.3 **Tenex Alliance** will be consulted on the provision of electrical power to the new development.

20.7 **The Australian Greenhouse Office** requirements regarding energy rating compliance for housing design are incorporated in the planning of the development.

21 PROJECT PLAN

21.1 Significant project milestones needing to be achieved are shown below. No circumstances are anticipated at this time that would make the nominated target dates unachievable.

(a) February 2005 - obtain PWC referral;

(b) May/July 2005 – obtain PWC & Parliamentary approval;

(c) July 2005 – obtain final DHA Board approval;

(d) August 2005 – award construction contract and begin construction;

(e) October 2006 – completion, acceptance and allocation of final stage residences.

22 PROJECT ESTIMATES

22.1 An 80 house construction project at Puckapunyal would cost in the order of $19.6 million. This does not include any allowance for the upgrading of infrastructure services outside the subdivision area.

22.2 There is no market risk in a limited market area, and annuity payments by Defence would be based on the formula contained in the Defence/DHA Services Agreement, which provides a reasonable return to the Authority.

23 FINANCING ISSUES

23.1 Funding for the project can be sourced by DHA from the sale of surplus housing stock, the public sale of development houses, funds realised from the sale and leaseback scheme, application of surplus operating capital, or debt financing.

24 PROJECT MANAGEMENT

24.1 The project will be managed by the DHA.

LOCAL IMPACTS

25 ECONOMIC EFFECTS

25.1 Australian manufactured building products will receive preferential treatment in the selection of construction materials and finishes.

25.2 The proposed project will have a positive effect on the local economy during the construction period, not only through persons working directly on the site but also through the many others off-site who will be supplying material, plant and equipment[1].

26 COMMUNITY EFFECTS

26.1 The site has been used for residential purposes previously, and is located within an established residential area of the PMA. The Defence community at Puckapunyal welcomes the prospect of more and better residential choices.

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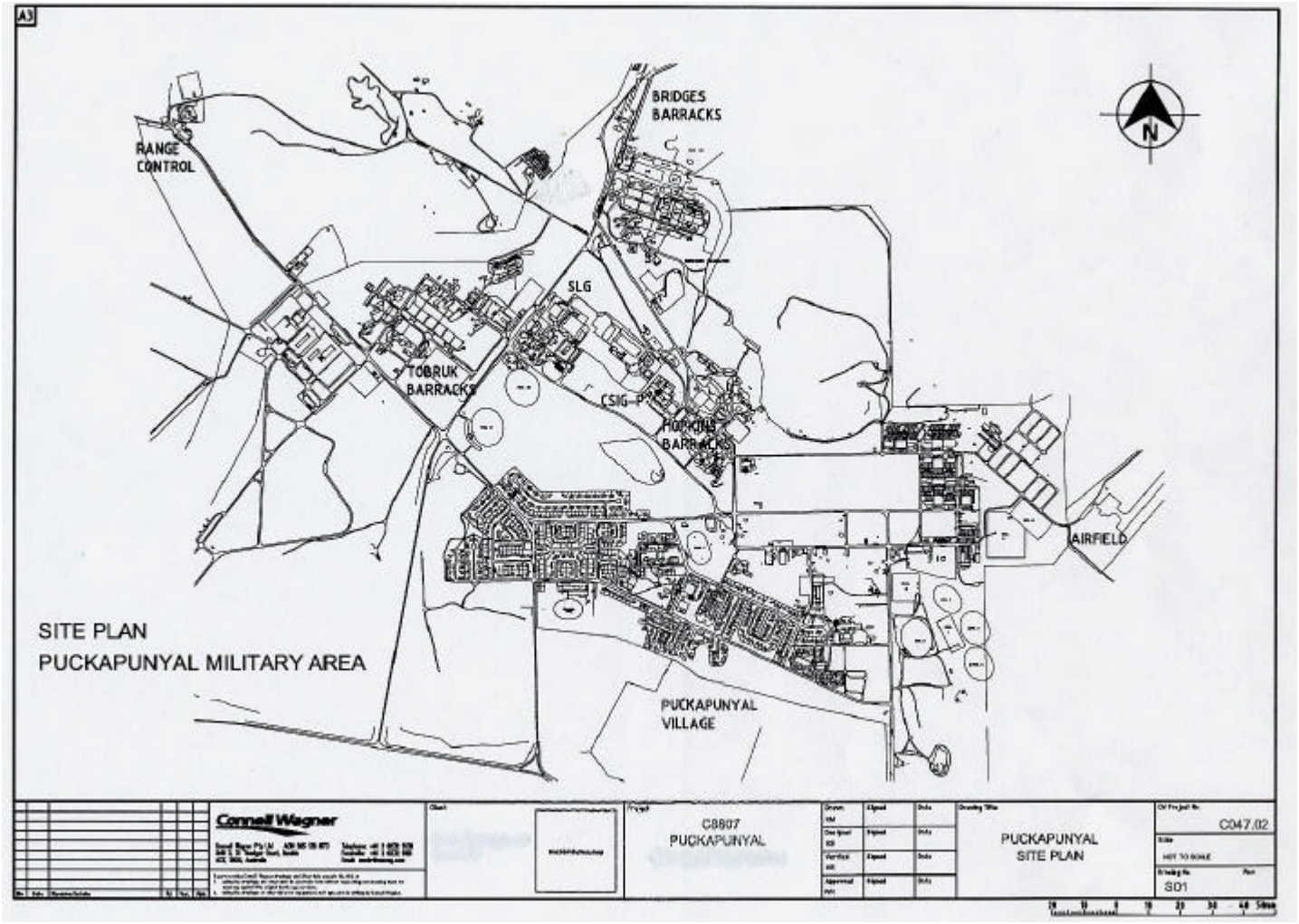
[1] Economic effects cannot be precisely estimated. However, an article contributed to the ABS' *Year Book Australia 2002* by the Department of Industry, Science and Resources uses 1996-97 data (the latest available) to illustrate the possible size of the multipliers for output and employment in the construction industry and concludes that every $1m spent on construction output in 1996-97 would have generated in the economy some 9 jobs in the construction industry directly (the initial employment effect) and a total of 37 jobs in the economy as a whole from all production and consumption effects.

27 HOUSING MARKET EFFECTS

27.1 Construction of new dwellings on-base is not expected to affect either the sale or rental markets for residential accommodation in neighboring townships.

SUPPLEMENTARY INFORMATION: ITEM 1 – Location Map

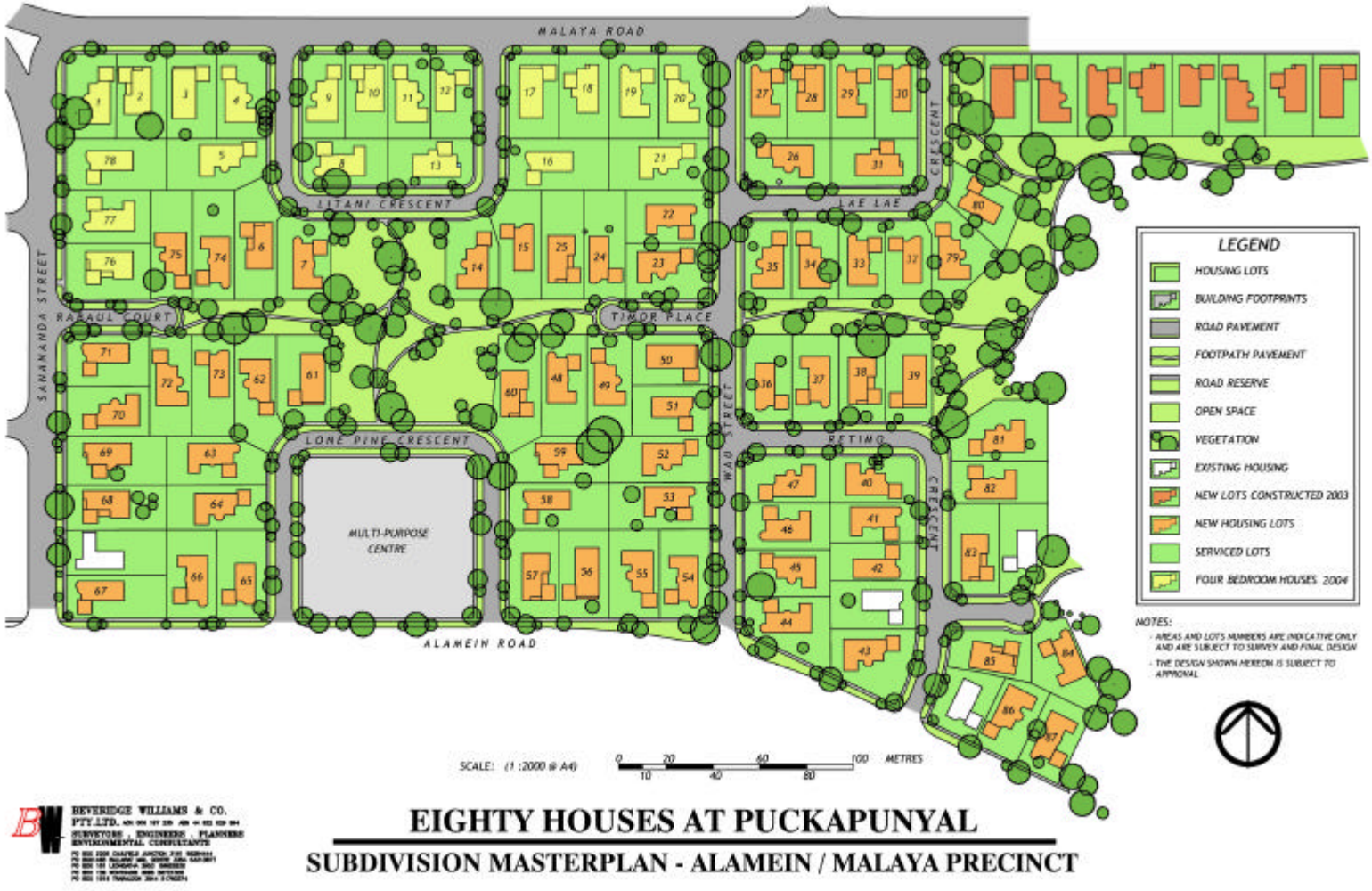
SUPPLEMENTARY INFORMATION: ITEM 2 – Puckapunyal Military Area Site Plan



SUPPLEMENTARY INFORMATION: ITEM 3 – Aerial View of Subdivision Site

Puckapunyal—Former houses shown over the site

SUPPLEMENTARY INFORMATION: ITEM 4– Subdivision Layout Alamein Road/Malaya Road Precinct



SUPPLEMENTARY INFORMATION: ITEM 5 – Subdivision Layout Markham Road Precinct