



WESTERN SYDNEY PARKLANDS BUNGARRIBEE PRECINCT PROJECT

Preferred Project Report

For Landcom

June 2008

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1 INTRODUCTION

1.1 OVERVIEW OF PROPOSAL

This Preferred Project Report has been prepared by Landcom following the exhibition of the State Significant Site Listing, Concept Plan, Environmental Assessment and supporting documentation for:

- The establishment of the first stage of the Western Sydney Parklands – Parklands Bungarribee Precinct; and
- A new 700 to 730 lot residential development on the Doonside Residential Parcel.

1.2 PUBLIC EXHIBITION AND SUBMISSIONS

The proposal was exhibited between 18 December 2007 and 28 February 2008. During this time the Department of Planning received 15 submissions, including submissions from Blacktown City Council, NSW Rural Fire Service, Roads and Traffic Authority, Ministry of Transport and eleven (11) submissions from residents and community groups. Key issues include:

- **Flora and fauna impacts** – particularly the proposed removal of vegetation in the north-west of the Doonside Residential Precinct and the impacts on the Cumberland Plain Land Snail;
- **Heritage significance and impacts** – significance of the Bungarribee Homestead, associated heritage views and proposed core heritage area, necessity for further archaeological investigations and the merits of site interpretation;
- **Voluntary Planning Agreement** – provision, adequacy and quality of local and regional infrastructure;
- **Traffic and pedestrian issues** – including signalisation of key intersections into the Doonside Residential Parcel and pedestrian crossings across Doonside Road;
- **Loss of Parklands** – sale of public land and its redevelopment for residential development;
- **Affordability** – provision of affordable housing; and
- **Planning matters** – issues related to future consent authority arrangements, the proposed State Significant Site listing and future zoning and development controls for the site.

Following exhibition of the proposal, all submissions were provided to Landcom for review and comment. This Report considers and responds to issues raised, including the need, or otherwise, to modify the proposal.

1.3 PREFERRED PROJECT REPORT OUTLINE

This Preferred Project Report is set out in three key sections as follows:

- **Section 2.0** describes the proposed modifications to the proposal following consideration of all issues raised in submissions.
- **Section 3.0** outlines the comments and issues raised during public exhibition and provides detailed responses as appropriate.
- **Section 4.0** sets out the final Statement of Commitments for the proposal, which is based on the draft commitments contained in the exhibited Environmental Assessment together with a suite of new commitments highlighted in bold.

This Preferred Project Report should be read in conjunction with the suite of exhibited documents, the response to submissions at **Appendix B** and technical responses/further advice appended to this Report.

2 PREFERRED PROJECT

2.1 PREFERRED PROJECT

Having reviewed the submissions from the community, Blacktown City Council and State Government agencies (Rural Fire Service, Roads and Traffic Authority and Ministry of Transport), and considered the proposal in light of those submissions, Landcom intends to develop the Doonside Residential Parcel site as described in Chapter 2 of the exhibited Environmental Assessment, with the following changes:

- signalisation of intersections and any necessary related upgrade works into the Doonside Residential Precinct at Doonside Road/Bungarribee Road and Doonside Road/Eastern Road;
- deletion of the mid-block pedestrian crossings as proposed in the exhibited Environmental Assessment on the basis that the signalised intersections will provide controlled pedestrian access;
- revisions to the Voluntary Planning Agreement (VPA) to acknowledge Landcom's commitment to contribute up to \$800,000 in works and monetary contributions towards the upgrading and provision of new facilities at Kareela Reserve and to reflect the revised traffic management works;
- revisions to the Statement of Commitments to address issues raised by government agencies and the community in submissions; and
- revisions to plans and architectural drawings to reflect the amended traffic management measures.

Future development within the Parklands Bungarribee Precinct will be the responsibility of the recently created Western Sydney Parklands Trust.

Concept Plan approval is sought in accordance with the plans at **Appendix A**. Artistic impressions of the proposal are also at **Appendix L**.

2.2 BENEFITS OF THE PROPOSAL

The Western Sydney Parklands Bungarribee Precinct Project - Concept Plan will result in the following significant public benefits:

- Creation of 300 hectares of regional parklands consistent with the NSW Government's Western Sydney Parklands Management Vision;
- \$18.3 million worth of local and regional infrastructure, including:
 - \$800,000 towards the upgrading of nearby Kareela Reserve, in line with Council's standard module for district level sporting fields;
 - \$1 million towards management of conservation offset lands in the Western Sydney Parklands;
 - Over \$1.6 million towards new and embellished local open space;
 - Over \$1 million towards the rehabilitation and enhancement of creeks and riparian corridors across the site;
 - Signalisation and upgrading of three intersections associated with the residential precinct;
- Conservation of 4.55 hectares in recognition of the heritage values of the former Bungarribee Homestead and its views and landscape;
- Creation of 27.88 hectares of high value vegetation conservation offset lands;
- Creation of habitat and implementation of a relocation program for the Cumberland Plain Land Snail;
- Creation of habitat and implementation of a relocation program for the microbat population;
- Provision of local bus stops in specified locations;

- Provision of public art throughout public areas;
- Pedestrian and cycle networks within and adjacent to the Doonside Residential Precinct and to the Regional Parklands;
- Provision and/or upgrading between existing pedestrian networks and external facilities such as the Rainbow Shopping Centre, Doonside Railway Station and specified local schools and churches; and
- Construction of a community facility in the proximity of the proposed core heritage area in consultation with Blacktown City Council.



Artistic impression – Aerial view of the proposal.



Artistic impression – Eco-median view.

3 RESPONSE TO KEY ISSUES

3.1 INTRODUCTION

Appendix B details all of the submissions that were received during the exhibition period, and how they have been addressed. Section 3 identifies the key issues arising from the submissions and discusses the corresponding response in more detail, including consultation that has been undertaken with relevant agencies and status on resolution.

3.2 FLORA AND FAUNA IMPACTS

The community and Blacktown City Council raised concern regarding the potential ecological impacts of the proposal, particularly as a result of the Doonside Residential Parcel. Key issues raised are:

- the adequacy of the Flora and Fauna Assessment Report submitted with the Environmental Assessment;
- impacts on core areas of high vegetation significance in the north west of the site;
- impacts on the Cumberland Plain Land Snail and microbats;
- the conservation offset package including the proposed offset ratios, and no consideration of alternative mitigation strategies.

These issues and Landcom's response are discussed below. Reference should also be made to the Submission Response at **Appendix B**.

It should also be noted that since the exhibition of the proposal, the Commonwealth Department of Environment, Water, Heritage and the Arts (DEWHA) has confirmed that the proposal is not a controlled action under the *Environment Protection and Biodiversity Conservation Act 1999*. As a result the proposal does not require assessment under the Bilateral Agreement signed between the Commonwealth and NSW Governments. A copy of DEWHA's advice is attached at **Appendix M**.

3.2.1 Adequacy of Documentation

The Flora and Fauna Assessment Report submitted with the exhibited Environmental Assessment was prepared by Eco Logical in accordance with relevant applicable legislation and best practice. The original report has now been supplemented with a flora and fauna species list (**Appendix C**) to respond to concerns about the level of detail provided. The species list does not affect Eco Logical's original findings on the potential impacts of the Doonside Residential Precinct, and the conclusions and recommendations of the Assessment Report have been confirmed as valid.

3.2.2 Impacts on High Conservation Value Vegetation

The impacts on high conservation value vegetation have been acknowledged and assessed. The impacts are considered acceptable having regard to the relevant legislation. This includes the *Commonwealth Environment Protection and Biodiversity Conservation Act 1999*, *NSW Threatened Species Conservation Act 1997*, *Environmental Planning and Assessment Act 1979*, *Catchment Management Act 1989*, *Sydney Regional Environmental Plan No 31 – Regional Parklands* (SREP 31) and *State Environmental Planning Policy No. 19 – Urban Bushland* (SEPP 19).

Further, the Flora and Fauna Assessment Report has concluded that the removal of vegetation, not only in the north west of the Doonside Residential Precinct, but also across the site generally, will be mitigated by the proposed conservation offset strategy and the preparation of a Site Management Plan (SMP) as required by SREP 31. The SMP will be prepared by Landcom prior to the lodgement of any development application for works within the Doonside Residential Parcel and will detail further mitigation measures to be implemented through future development application stages. The Statement of Commitments has been revised to fully articulate these processes and methodologies. These actions will be undertaken in addition to the implementation strategies outlined in Table 13 of Eco Logical's *Western Sydney Parklands Bungaribee Precinct Project Ecological Impact*

Assessment which identifies the areas available for ecological restoration beyond the identified remnant vegetation. Individual objectives for each of the identified areas (i.e.: riparian corridor, northern remnant area, western remnant area, southern remnant area, and grassland areas), includes:

- Expansion of the Endangered Ecological Communities;
- Creation and enhancement of biodiversity corridors and other habitat areas (i.e.: connection to creeks); and
- Consolidation of remnants and reduction in edge to area ratios.

The proposed implementation strategies adopted within the Parklands Bungaribee Precinct aim to establish the ecological network and enhancement of the site's ecological viability, and accordingly assists the proposal in achieving the "improve and maintain" test.

It is noted that the Department of Environment and Climate Change (DECC) has specifically identified *Grevillia juniperina* as warranting further investigation to determine the feasibility of transplanting any suitable specimens. DECC has also requested any proposed restoration program restore the population of this species to predevelopment levels. Landcom submits that translocation of the *Grevillia juniperina* is not considered necessary, as the only occurrence of the species on the site is located in an area that will be located outside the proposed residential footprint (refer Figures 4 and 10 of Eco Logical's *Western Sydney Parklands Bungaribee Precinct Project Ecological Impact Assessment*), hence it is not impacted by development. The proposed State significant site listing of the site will further ensure protection of the species through the proposed RE1 Public Recreation and SREP 31 (Parkland) zoning controls. Restoration to predevelopment levels is not supported on the basis that *Grevillia juniperina* generally appears to thrive along road sides and areas of high disturbance. Coincidentally, the only occurrence of *Grevillia juniperina* on the site is any area that has previously been subject to disturbance. Translocation and intensification of the species is therefore unlikely to be successful, particularly as Landcom and the Western Sydney Parkland Trust will actively be undertaking rehabilitation and enhancement of vegetation across the site.

Landcom accepts DECC's recommendation that the proposed translocation of native grasslands be done in accordance with Chapters 5, 6 and 7 of the *"Guidelines for Translocation of Threatened Plants in Australia"* (Australian Network for Plant Conservation 2004) which detail the methodology required pre-, during, and post-translocation including monitoring, evaluation, documentation and ongoing management. The Statement of Commitments has been revised accordingly.

3.2.3 Impacts on Cumberland Plain Land Snail

Additional surveys have been undertaken to determine the impact of the Doonside Residential Precinct on the Cumberland Plain Land Snail (**Appendix D**). The surveys concluded that approximately 10 percent of the Snail population will require relocation. However, the large majority of the population is located outside the development footprint (i.e. within the open space network) and accordingly will not be impacted by the proposed development.

The Statement of Commitments at Section 4.0 has been revised to incorporate all recommendations made by Eco Logical. The revised Commitments collectively require the preparation of a Cumberland Plain Land Snail Plan of Management outlining a detailed set of actions to improve habitat in areas adjacent to the proposed development.

Issues to be addressed in the Plan of Management include:

- weed management (i.e. the removal of Africa Olive);
- fire management prescriptions and hazard reduction guidelines;
- predation management;
- reduction of human interference through interpretation and signage;
- ecological restoration to provide habitat linkages within the Bungaribee Precinct;
- potential translocation of affected individuals;

- a staged plan of works that will need to be carried out before, during and post development; and
- monitoring.

3.2.4 *Impacts on Microchiropteran and Megachiropteran Bats*

Additional surveys have also been undertaken to identify the size and location of the microbat population on the site (**Appendix E**). The findings reinforce previous survey results with no evidence found of new or additional threatened species or roosts located within the site. Notwithstanding, the Statement of Commitments has been revised to ensure the implementation of the project does not impact on any microbat population (see Section 4.0 of this Report). Specific methodologies will include:

- Staging of offsets prior to construction to ensure there is no sudden loss of available foraging habitat for microchiropteran and megachiropteran bats;
- Formulation of a Tree Clearance Protocol for larger habitat trees to reduce direct impacts to any bats that may be dwelling in the remnant vegetation or in isolated paddock trees during the construction phase; and
- Use of down-lighting for buildings, and public access areas adjacent to the Bungarribee Parklands Precinct.

3.2.5 *Conservation Offset Strategy*

As outlined in the exhibited Environmental Assessment and supporting appendices, the proposed Conservation Offset Strategy has been negotiated with, and endorsed by, the Department of Planning and DECC. The Offset Strategy, including proposed ratios, is consistent with the Western Sydney Parklands Management Vision for restoration along habitat corridors which seeks to enhance existing corridors to link other core habitat within the Parklands.

A total of 5,500 hectares of land is proposed to be developed as Regional Parklands for Western Sydney's population. Consistent with the Western Sydney Parklands Management Vision, the concept plan contributes to the Parklands Vision by providing 300 hectares of land located predominantly east and south of the Doonside Residential Precinct as well as associated riparian corridors (see **Figure 1**). The ecological attributes of these areas have been assessed as part of the exhibited Environmental Assessment and in the analysis undertaken in developing the Vision. The proposed amendment to the Major Projects SEPP retains the existing SREP 31 (Parklands) zoning for these areas.

It should be noted that the endangered ecological communities that are found within the proposed development areas of the Doonside Residential Parcel occur in riparian areas including Eastern Creek and associated tributaries. These areas are proposed to be retained and conserved as part of the open space network (zoned RE1 – Public Recreation) and therefore losses of these communities are expected to be minimal.

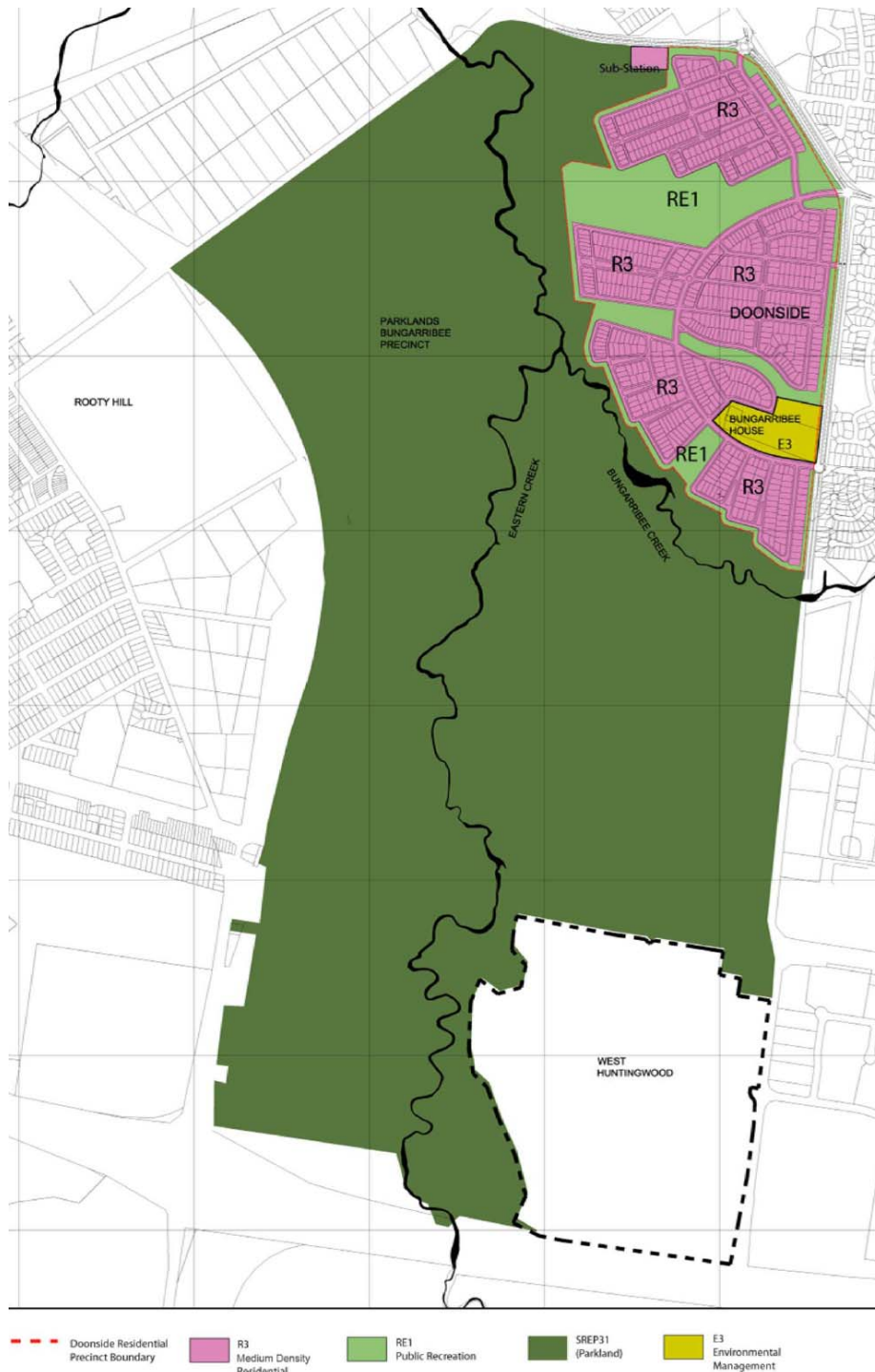


Figure 1 – Regional Parklands

The conservation strategy for critically endangered species will be implemented as part of the development. In addition to the dedication of land and rehabilitation / enhancement of vegetation, a sum of approximately \$1 million will be contributed to the Western Sydney Parklands Trust by Landcom to support conservation initiatives and further research.

3.3 HERITAGE SIGNIFICANCE AND IMPACTS

The proposed heritage response to Bungarribee House was raised as a significant concern of Blacktown City Council, NSW Heritage Office and local community groups such as Prospect Heritage Trust, Blacktown and District Historical Society, Blacktown Greens, and Blacktown and District Environment Group. These concerns are based on the perception that the proposal does not give due recognition to the State heritage listed Bungarribee Homestead site. In particular, submissions raised concerns that the proposal seeks to locate residential development in close proximity to the Homestead thereby providing an inadequate curtilage, and giving little consideration to the potential for further archaeological remnants to be present on the site.

3.3.1 *State Heritage Significance*

Godden MacKay Logan's Conservation Management Plan (CMP) submitted and exhibited with the Environmental Assessment clearly acknowledges that the "Bungarribee House Site" is listed on the State Heritage Register. The CMP provides a comprehensive background of the historical development of the site including the 1957 demolition of the Bungarribee Homestead by the Federal Government and the 1977 demolition of the barns and other structures associated with the former Overseas Telecommunications Commission (OTC).

The State Heritage Register's Summary Statement of Significance for the site is included in the CMP and is augmented having regard to the archaeological investigations undertaken in 2006 and further research carried out during preparation of the CMP. In particular, the CMP revises and focuses the Statement of Significance to better articulate the definition of the Bungarribee Core Heritage Area (see 3.3.4 below) upon which the Concept Plan proposal is based. As such, it is Landcom's view that the proposal considers the site's heritage significance appropriately.

3.3.2 *Bungarribee Homestead*

The CMP identified a "Core Heritage Area" which captures Bungarribee Homestead, garden and outbuildings and several buildings associated with the former occupation of the site by the Overseas Telecommunications Commission (OTC). The CMP also identifies a "view and landscape corridor" in recognition of important views and vistas southwest from the Homestead towards Bungarribee Creek. The corridor provides a visual and landscape connection between the former lands within the Bungarribee Homestead Estate and the Core Heritage Area and ensures a remnant of landscape associated with the house is protected for interpretation purposes. The Core Heritage Area has been identified in consultation with the NSW Heritage Office and is considered appropriate for the nature of the footings that remain on the site. The extent of the Core Heritage Area and visual catchment is approximately 4.55 hectares in area and is shown in **Figure 2**.

The CMP acknowledges limited and sympathetic development is appropriate in the vicinity of the Core Heritage Area, so long as the values of the Bungarribee Homestead and its setting are not compromised. The CMP also provides guidance for a new community/interpretation centre close to the Core Heritage Area (as shown in **Figure 3** below), future landscaping within the Core Area and identified view corridors, and paths and walking tracks.

The Development Design Code that supports the Concept Plan has adopted the CMP's recommendations for residential development immediately adjacent to the Core Heritage Area, including:

- Provision of adequate setbacks, particularly south west of the Core Heritage Area;
- Compliance with specific height and siting requirements;
- Construction of free standing (rather than attached) dwellings; and
- Use of sympathetic facing materials.

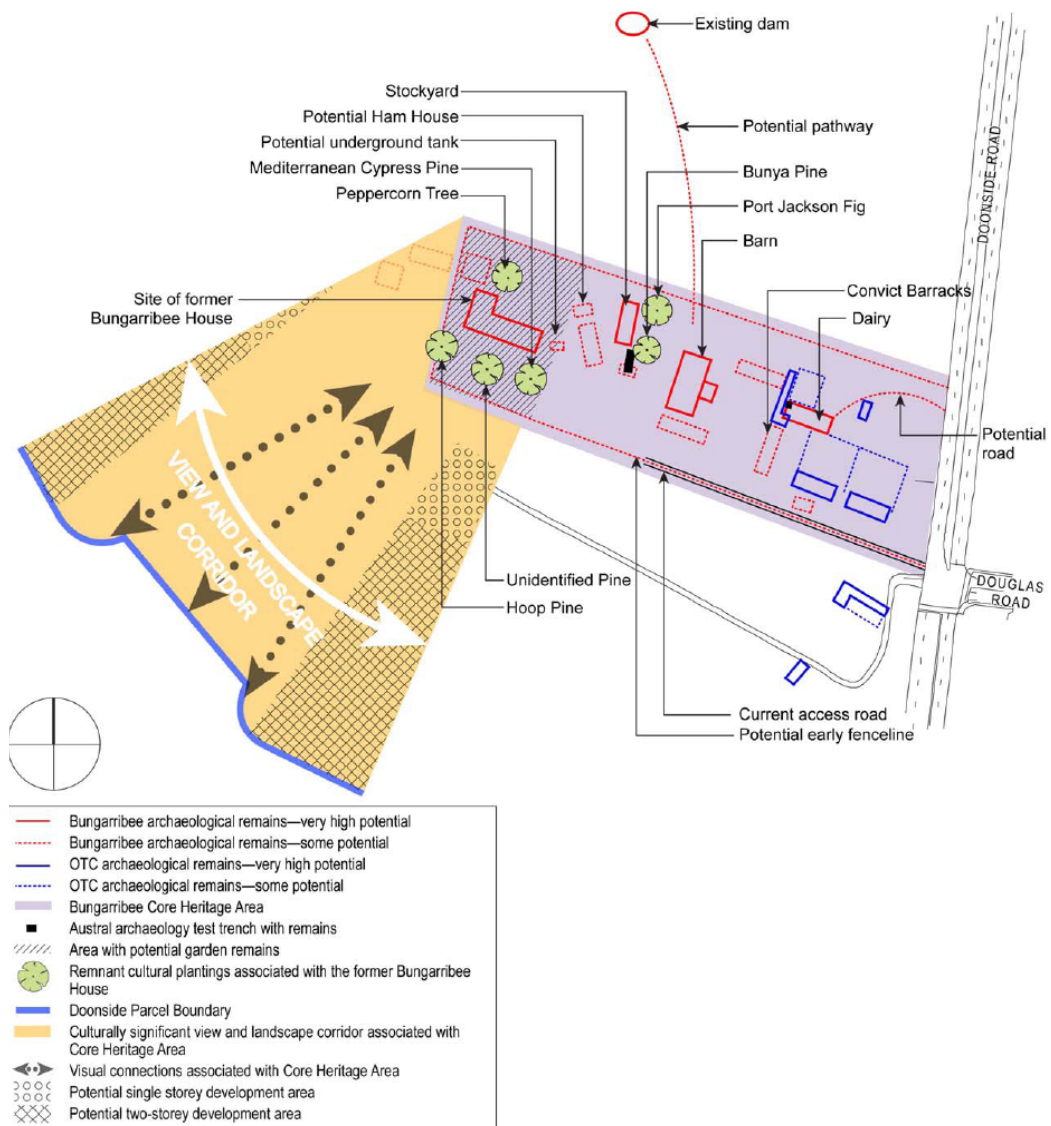


Figure 2 – Core Heritage Area

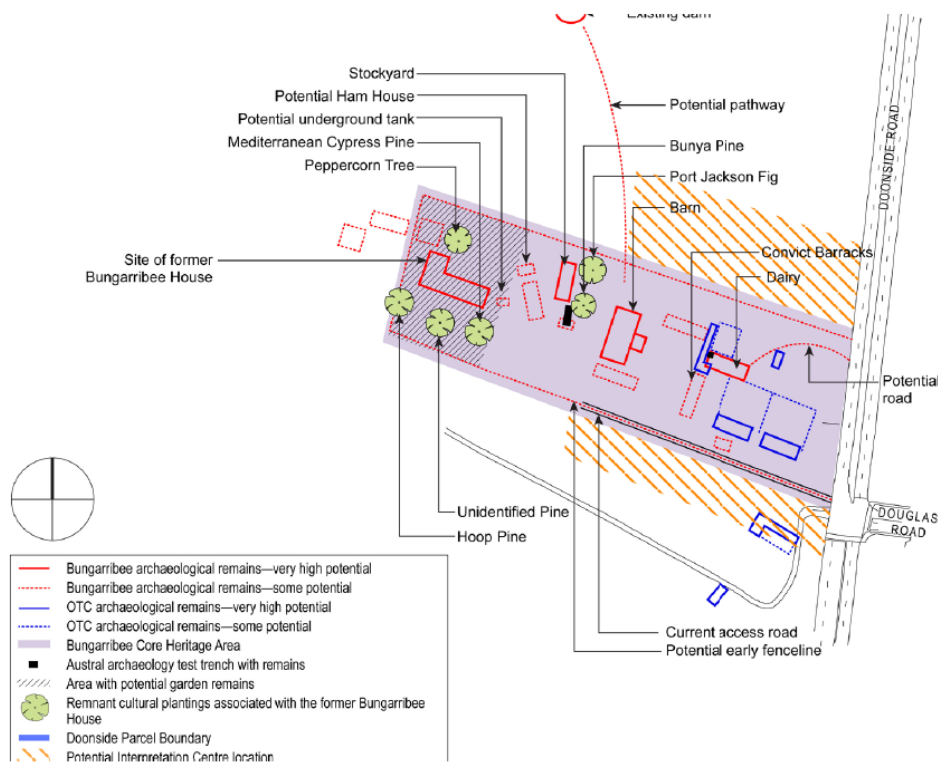


Figure 3 – Potential indicative location of community interpretation centre

The Development Design Code also includes design principles for the “Heritage Park” (i.e.: the Core Heritage Area), a public art strategy, public domain and circulation, and pedestrian and cycle network which are informed by the sensitivities associated with the Bungarribee Homestead remnants and other potential archaeological relics.

3.3.3 Archaeological Investigations

The Concept Plan proposal has been designed with reference to the CMP’s findings and recommendations, and promotes sensitive development around the significant areas of the site.

As outlined in Section 3.2 of the CMP, three main areas are identified as potentially valuable archaeological areas – the site of the former Bungarribee Homestead, garden and outbuildings within the Core Heritage Area; the site of the former OTC which was located south of Bungarribee Creek and is accordingly outside the development site; and the former northern house site, located along Doonside Road (circa 1880-1890).

The proposal is a direct response to the CMP and its recommendations. Nonetheless, further archaeological investigations have been commissioned since lodgement of the Environmental Assessment for exhibition to confirm any additional significant relics related to the former Homestead kitchen gardens (*Appendix F*). Alpha Geoscience has undertaken a Total Field Magnetism (TFM) survey over 1.15 hectares of the site to determine the location of the kitchen gardens, which are understood to have been located north of the Bungarribee Homestead. The use of a TFM survey is a valid methodology as variations in soil types, altered drainage channels and rocks/bricks associated with potential garden walls and edges all have individual magnetic characteristics, which are registered by a TFM survey (if they were located on the site).

Analysis of the TFM survey results concludes there are enough delineating features in the soil profile to suggest approximate placement of the former kitchen gardens.

Godden Mackay Logan has reviewed Alpha Geoscience's results and noted that 'the site has low to moderate potential to contain archaeological relics belonging to the former kitchen gardens of Bungarribee Homestead'. They go on to note that the potential archaeological resource is likely to have a high research value. As a result, Godden Mackay Logan has prepared Archaeological Research Design Guidelines (**Appendix F**) which provide a detailed methodology for excavation. The guidelines require test trenches to be dug by qualified professionals, soil sampling for micro and macrofossils, site recording of the excavation/investigation process, appropriate storage, reporting and publication. The recommended methodology will allow for appropriate investigation without a requirement for in situ conservation. That is with appropriate investigation and interpretation within the development it is considered acceptable to destroy the garden remains.

Whilst Landcom recognises there is a strong likelihood of the former kitchen gardens located north of the Bungarribee Homestead footings, deletion of the proposed residential lots in this area, as recommended by NSW Heritage Office, Blacktown City Council and the community, is not supported on the following heritage and economic grounds:

- The remains of the gardens are underground and not visible;
- The implementation of the proposed Archaeological Research Design Guidelines will result in an appropriate management of the site's archaeological significance and inform the interpretation strategy without a requirement for in situ conservation;
- The spatial and functional relationship between the likely location of the former gardens and the Bungarribee Homestead footings is also unlikely to be understood by the community, given that the subject heritage relics/items are below ground, and far apart;
- Replacement of the housing lots with additional passive open space is also not warranted on the grounds that the proposal more than adequately will provide for local and regional open space;
- The proposal already adequately conserves other cultural and natural heritage attributes of the site, through the provision of the Core Heritage Area and view corridor associated with the Bungarribee Homestead;
- The recommendations within the Conservation Management Plan, will also result in the protection and enhancement of the Cumberland Plain Woodland, and implementation of the Statement of Commitments.



Artistic impression of the Core Heritage Area in the context of the Doonside Residential Precinct

3.4 TRAFFIC AND PEDESTRIAN ISSUES

3.4.1 Intersection Treatments

Submissions by the RTA, Ministry of Transport and Blacktown City Council raised concerns regarding the proposed intersection treatments along Doonside Road, particularly with respect to existing capacity and the ability of nearby intersections to accommodate future traffic generation. Pedestrian safety to and from the Doonside Residential Precinct to existing urban development to the north and east was also questioned. The proposal was also considered at the RTA's Sydney Regional Development Advisory Committee (SRDAC) on 19 December 2007, at which the RTA's concerns were reiterated.

The Department of Planning, Landcom and Maunsell (Landcom's traffic consultant) attended the SRDAC meeting. Maunsell has subsequently considered, and responded to the issues raised (Appendix G).

Maunsell simulated nine scenarios which explored various intersection treatments to manage both traffic flow and pedestrian activity. In all scenarios, the key objective was to determine the implications of replacing the mid block pedestrian crossings across Doonside Road as exhibited. In doing so, Maunsell also modelled the impacts of retaining signals at the Doonside Road/Douglas Road intersection to better facilitate pedestrian movements to existing urban development to the east.

The preferred option comprises signalisation and a new arm to the Doonside Road/Eastern Road and Doonside Road/Bungarribee Road intersections, providing a total of three signalised accesses into the site overall (i.e. including the existing signalised Doonside Road/Douglas Road intersection). The introduction of signals at these three locations reduces vehicle delays, improves connectivity and improves pedestrian safety. The preferred scenario also complements pedestrian desire lines and provides an opportunity to create attractive urban design entry statements at each of the accesses into the Doonside Residential Parcel. In summary, the three access points will ensure good connectivity for both vehicles and pedestrians, and will encourage people to walk, thereby reducing the reliance on vehicles throughout the Precinct.

On this basis, Landcom has committed to the signalisation of the Doonside Road/Eastern Road, Doonside Road/Bungarribee Road, and Doonside Road/Douglas Road intersections (see revised Statement of Commitments at Section 4.0). The VPA has also been revised to reflect Landcom's commitment to the provision of these significant traffic management works.

3.4.2 Road Hierarchy and Cross Road Intersections

Blacktown City Council raised concerns with the proposed eco medians and resulting one-way system, the construction of laneways, and proposed narrow local streets.

To address the concerns regarding the eco-medians, the Design Development Code has been amended to restrict the houses subject to a one way system to eight dwellings. This will ensure compliance with Council's *Engineering Guide for Development 2005* requirements for single loaded access streets.

The design of the laneways and rear access streets has been the subject of on-going discussions with Council staff. As a result of these discussions Landcom has agreed to construct any such roads to a maximum length of 60m, and to provide access from either end.

Table 1 provides a comparison between the proposed road, carriageway and verge widths within the Doonside Residential Precinct (DRP) and Council's *Engineering Guide for Development 2005* (BCC) (Table 1).

Table 1 – A comparison of required and proposed road dimensions

	Road Reserve (m)		Carriageway (m)		Verge (m)	
	BCC	DRP	BCC	DRP	BCC	DRP
Collector Road	18	20	11	11.6	3.5	3.7-4.7
Local Road	16	16	9	8	3.5	4
Park Edge Street	-	13.6	-	8	-	4
Eco Median Street		17.4*	-	5.1	-	3.6
Minor Road	14.5	14.8	7.5	7.6	3.5	3.6
Cul-de-Sac	14.5	14.8	7.5	7.6	3.5	3.6
Rear Access Street**	10	10	5.5	6	3.5 / 1	3.5 / 1

*= Design Development Code provides for varying median widths for Eco Median Streets.

**= Rear access street verges are not proposed to be same width on both sides of the street (Figure 22 of the Design Development Code).

Non-compliances with Council's minimum requirements are identified in red bold text. As can be seen in Table 1, all streets other than local streets will comply with Blacktown City Council's minimum road reserve requirements. A narrower local street carriageway width of one metre is justified for the following reasons:

- Less demand is likely for on street parking in single loaded local streets;
- Reduced widths will encourage slower traffic speeds;
- An improved pedestrian environment can be provided; and
- Landscaped treatments can be enhanced to provide a quality public domain outcome.

It is worth noting that the proposed park edge arrangements exceed Council's Engineering Guidelines which require a 7.5m carriageway to serve up to 30 houses in culs-de-sac. These streets serve fewer than 30 houses and have been designed to be single loaded, some with rear access to off-street parking ensuring less traffic and less on-street parking demand. On balance, the benefits resulting from the proposed design and dimensions of the road network in the Design Development Code are considered to be satisfactory and accordingly should be endorsed.



Artistic impression of a park edge street

3.5 LOCAL AND REGIONAL INFRASTRUCTURE

Whilst generally supportive of the proposal, Blacktown City Council has sought assurances that Landcom will make adequate provision for local and regional infrastructure required to meet the demand of the new population. Local open space and recreation facilities, pedestrian and cycle facilities and new or improved social infrastructure (schools, hospitals, libraries, community halls, etc) have been raised as key matters.

The exhibited VPA provides for land dedication, physical works and a monetary contribution at a cost of approximately \$18.5 million. Notably, the VPA is intended to be an umbrella document between Landcom and the Minister for Planning to provide the initial framework for local and regional infrastructure provision. Subsequent arrangements will be made with Council to detail the implementation, timing and provision of the VPA through future development applications, pursuant to Clause 4 of the VPA.

The VPA has been revised and additional items included in the Schedule of Works to reflect recent discussions with Blacktown City Council. The revised Schedule of Works also incorporates works proposed to resolve issues raised by State agencies during the public exhibition of the Concept Plan proposal, such as the signalisation of the three intersections. The revised VPA is attached at **Appendix H** of this Report.

Council's concerns regarding infrastructure provision have also been considered. Elton Consulting, which prepared the Social Sustainability Study for the proposal (Appendix F of the exhibited Environmental Assessment) has reviewed the submissions and recommend a number of proposed actions to address Council's concerns. These have been incorporated into the revised Statement of Commitments (see Section 4.0).

Collectively, the revised VPA and revised Statement of Commitments obligate Landcom to:

- Dedicate land to Blacktown City Council for public open space and roads in accordance with the VPA;
- Make a contribution of \$800,000 towards the upgrading of nearby Kareela Reserve, in line with Council's standard module for district level sporting fields;
- Provide public roads including the signalisation of intersections and associated pedestrian safety measures at Doonside Road/Eastern Road, Doonside Road/Bungarribee Road and Doonside Road/Douglas Road;
- Provide local bus stops in specified locations;
- Undertake necessary acoustic treatments along Doonside Road;
- Embellish passive local open space within the Doonside Residential Precinct including preparation of detailed landscape and open space strategies in conjunction with Council to detail quantum, function and management of open space;
- Provide public art throughout public areas;
- Construct pedestrian and cycle networks within and adjacent to the Doonside Residential Precinct and to the Regional Parklands;
- Provide and upgrade existing pedestrian networks from the site to external facilities such as the Rainbow Shopping Centre, Doonside Railway Station and specified local schools and churches;
- Provide for the conservation of known archaeological remains;
- Construct a new community facility in consultation with Blacktown City Council;
- Rehabilitate, revegetate and enhance the Northern Creek and Southern Creek;
- Provide detention basins along Bungarribee Creek and Eastern Creek;
- Implement a water sensitive urban design strategy;

- Bring together the proposed social integration and community engagement framework with Council's input, including investigating potential initiatives to support Doonside Public School; and
- Transfer a monetary contribution to the Western Sydney Parklands Trust to fund the provision of a vegetation offset in the Western Sydney Parklands to compensate for the removal of Cumberland Plain Woodland.

Finalisation of the VPA is an ongoing process. The VPA is expected to be refined in consultation with the affected stakeholders with a view to executing the VPA at the time the Concept Plan is approved.

3.6 LOSS OF PARKLANDS

Community submissions have raised concerns about the appropriateness of selling publicly owned Parklands for residential development, and the resulting loss of open space. The NSW Government has been acquiring open space corridors in western Sydney (including the subject site) for recreation and the environment over the last 30 years. The NSW Government's Western Sydney Parklands Management Vision broadly outlines the framework for delivery and management of the acquired lands to the public as Regional Parklands. This framework includes:

- Creation of Precincts through Government, commercial and community funding and partnerships including:
 - **Conservation Parklands** to recognise opportunities for the indigenous, cultural and environmental heritage of the place to be enhanced, enjoyed and studied;
 - **Destination Parklands** offering a range of commercial and free activities including sport, recreation and amusement facilities; and
 - **Community Parklands** where diverse communities can meet and socialise with their friends and families in picnic and play parks, at major events, markets and civic gatherings.
- Contributing to the creation of better places to live and work;
- Restoring biodiversity; and
- Helping to reduce urban sprawl.

With respect to the Bungarribee Precinct specifically, the Western Sydney Parklands Management Vision states:

"The Precinct will form the main community recreation hub for both active and passive recreation in the northern part of the Parklands. Bushland would be restored through the broad floodplain and current rural landscapes will be retained on the valley slopes to allow open areas for intensive community use including active sports fields".

The Concept Plan for the Regional Parklands has adopted the above vision and will result in the creation of 300 hectares of open space for regional parklands purposes.

The area proposed as the Doonside Residential Parcel in the Concept Plan is not captured by the Western Sydney Parklands Management Vision. This is on the basis that this portion of the site has been identified by the Government as "interface lands", and consequently is no longer required to be incorporated into the Parklands (i.e. it is surplus land). The residential development has been proposed to generate revenue and investment for the creation of the Parklands consistent with the Vision. Notwithstanding this, the Doonside Residential Parcel will provide 22.73 hectares of embellished local open space for passive recreational purposes.

Accordingly, the combined Concept Plan and State Significant Site proposals are consistent with the Vision and have recently been vested in the newly established (January 2008) Western Sydney

Parklands Trust. The Concept Plan will also provide a framework for the provision of local open space to be implemented through detailed design.

3.7 FLOODING

The Concept Plan's consideration of flooding behaviour and impacts was questioned in the submission made by Blacktown City Council. Council raised concerns about the potential impacts within, and arising from, the proposed Sports Zone within the Regional Parklands. This includes:

- The need for an appropriate freeboard (500mm recommended) and maximum flow depth over parking areas (200mm nominated as absolute maximum);
- Impacts of constructing the Sports Zone and associated flow-on effects to the Doonside Residential Precinct; and
- Construction of the playing fields to accommodate compensatory storage of floods within the floodplain.

Bewsher Consulting has reviewed Council's comments and responded by re-running flood modelling for the 100 year ARI event (**Appendix I**). The results (presented in Figure 4) indicate that:

- The Eastern Creek flood level between Eastern Road and the convergence with Bungarribee Creek increases by up to 130mm in places;
- The Eastern Creek flood level between the convergence with Bungarribee Creek and the Great Western Highway increases by 90 mm at its peak;
- Upstream of the Great Western Highway, there is no change expected to the flood levels; and
- Flood levels are expected to increase between 100mm and 270mm along Bungarribee Creek and the confluence with Eastern Creek and Doonside Road.

New Probable Maximum Flood levels were also determined by Bewsher Consulting (Figure 5), with predicted increases in the PMF expected between Eastern Road and the confluence with Bungarribee Creek (10mm – 170mm) and along Bungarribee Creek from the confluence to Doonside Road (60mm-160 mm). No increase is expected between the confluence and Great Western Highway and between the Great Western Highway and the M4 Motorway. In summary, the revised project's flood modelling has shown that there is no major change likely in the local area flood regime between the 100 year flood event and the Probable Maximum Flood (PMF) event.

The flood model has not directly focussed on the impacts of changed rainfall intensities. However, Bewsher Consulting has advised that a 10 percent increase in rainfalls would result in an increase in the 100 year flood level adjacent to the Doonside Residential Parcel of approximately 200mm. This increase can still be accommodated under the proposed 500mm freeboard requirement. Further, the detailed design stage will need to confirm freeboard requirements, and if necessary, habitable floor levels can be revisited.

Although the Concept Plan has not included provisional flood hazard work, the flood modelling and mapping of the PMF event (refer Figures 4 and 5 below) indicates that the maximum possible flood event at the Doonside Residential Parcel is limited in its extent. A limited number of residential allotments (12) may be inundated, however those properties are large enough to have dwellings sited outside the PMF extent, and are exposed to higher land allowing ready evacuation.

The flood related matters associated with the Sports Zone are proposed to be addressed through detailed modelling when developed. The Statement of Commitments has been revised to provide assurance to the Minister for Planning that flood impacts will be considered in due course.



Figure 4 – Western Sydney Parklands 100 year ARI Flood Line



Figure 5 – Western Sydney Parklands PMF Flood Line

3.8 AFFORDABILITY

Submissions from Blacktown City Council and the community raised the need for the Concept Plan to address and make provision for affordable housing.

Housing affordability takes into account:

- Dwelling size and quality having regard to household demographics;
- Purchasing versus renting the same product; and
- Ease and cost of access to social networks, community amenities and employment opportunities.

Affordability depends on individual circumstances, with smaller families, couples with no children or individuals typically choosing to live in smaller dwellings. ABS Census Data for 2006 shows that lone person households make up almost 16 percent of all households in the Blacktown LGA. Households accommodating one parent families (19.8 percent) and couples with no children (25.4 percent) similarly make up a significant proportion of the demographic.

On this basis, there are clear grounds for providing a range of dwelling types to cater for various family units. Housing affordability will be delivered by Landcom by providing a diverse range of land and house products, including some smaller sized and lower priced dwellings. For example, smaller lots are expected to go on the market as house and land packages from approximately \$350,000. Maximising the use of small lots, minimising construction costs and promoting a range of housing styles (eg: garage-top houses) will also help achieve affordability objectives and satisfy the lifecycle needs of the population. It is also anticipated that the larger lots within the development will be affordable housing options relative to average house prices in the Greater Metropolitan Region (\$450,000).

Affordability also needs to be benchmarked against the market established by landowners and developers, and to consider both housing prices and rentals. The current median house price in the Blacktown LGA is approximately \$338,000 while average rental prices range from \$160 - \$280/per week (depending on the number of bedrooms)¹. Landcom is committed to providing 7.5 percent of its housing and / or land product at moderate price points, where commercially feasible. The diversity of innovative housing types envisaged by the Concept Plan and Development Design Code will mean that certain land (with and without a constructed dwelling) will be priced at levels that are affordable to those on moderate incomes. Almost 25 percent of all proposed lots will accommodate smaller dwellings which by their very nature will be relatively affordable.

The Doonside Residential Parcel has good access to public transport (Doonside Railway Station) and other local services (Doonside Public School, Mountain View Adventist College, Blacktown Hospital, Blacktown CBD). Significant employment opportunities are also within reasonable proximity to the site, including Blacktown and Parramatta CBDs, Norwest Business Park and the Western Sydney Employment Hub. New development at the Doonside Residential Parcel is therefore not significantly burdened by the cost of providing excessive and new infrastructure, but rather existing physical and social infrastructure is being augmented to cater for the new population. This translates as a direct benefit to consumers with land and house prices being affordable.

In summary, housing affordability will be provided at Doonside Residential Parcel by:

- Optimising the use of land by achieving a high overall density;
- Providing a diverse housing choice;
- Promoting a population mix that responds to demographic trends; and
- Allowing a substantial proportion of the stock to be inherently affordable to moderate-income households.

¹ Department of Housing Sales and rentals Report – March 2008



Figure 6 – Indicative subdivision layout

3.9 ESD PRINCIPLES

Since public exhibition of the proposal, the Department of Planning has requested further details as to how the State Significant Site listing and the Concept Plan development will achieve the principles of environmentally sustainable development.

The proposed rezoning and Concept Plan proposal's consideration of environmentally, socially and economically sustainable development is outlined below, having specific regard to the following objectives of the Environmental Planning and Assessment Act:

- effective and efficient use of land;
- co-ordination of the orderly and economic use and development of land;
- provision of land for public purposes;
- provision and co-ordination of community services and facilities; and
- ecologically sustainable development.

3.9.1 State Significant Site Listing

The draft SEPP amendment (*Appendix J*) identifies the zoning and statutory development controls proposed to be applied to the site. The proposed zoning controls will facilitate a mix and intensity of uses that will provide a development that respects the historic context of the site, and which the site can sustain from an environmental perspective. Rezoning the site for residential, public open space and environmental conservation purposes, satisfies ESD principles by:

- providing for a range of housing needs and types within the Doonside Residential Parcel which optimises the land available for development at an affordable price;
- providing a range of recreational settings and compatible land uses within proximity to each other achieving integrated land use and transport and "jobs closer to home" principles; and
- considering future generations by:
 - protecting and enhancing the natural environment for recreational purposes;
 - managing and restoring areas with special ecological, scientific, cultural and aesthetic values.

The proposed R3 Medium Density Residential zone will enable a mix and density of residential development that will encourage a vibrant and economically sustainable precinct, close to existing physical and social infrastructure. Provision of new residential land close to existing public transport, employment lands, schools and services / facilities such as the Rainbow Shopping Centre, means the Doonside Residential Parcel will not need to be fully self sufficient and the reliance on private vehicles can be reduced.

The revenue generated from the Doonside Residential Parcel will be reinvested into the Parklands whilst maximising the development potential of the site (i.e.: R3 Medium Density Residential Development zone). The rezoning of the site will also facilitate the protection and conservation of the site's recognised heritage and environmental attributes.

Furthermore, Clause 15 Design of the draft SEPP amendment specifically requires future development to consider ESD by requiring the consent authority to be satisfied (amongst other things) that:

- ESD principles are integrated into the development;
- water sensitive urban design principles are integrated into the built and landscape elements of the development;
- on site collection and re-use of stormwater is promoted.

In summary, the State Significant Site listing fully complies with the objectives of the *Environmental Planning and Assessment Act, 1979* particularly relating to social and economic sustainability. It is our view that the economic and flow-on (social) public benefits specifically would generate better

planning outcomes and additional revenue to be reinvested in the redevelopment of the site (and particularly the Parklands), thereby also realising an environmentally superior outcome and satisfying the objectives of the Act which call up environmental sustainability.

3.9.2 Concept Plan

In accordance with the requirements of the Director General, Sections 5, 7 and 8 of the Environmental Assessment address:

- the suitability of the site for the land uses proposed;
- potential environmental, social and economic considerations associated with the Concept Plan;
- implications of the proposed land use for local and regional land use infrastructure, service delivery and natural resource planning;
- proposed development design controls related to subdivision requirements and layout; accessibility to existing infrastructure;
- provision of affordable housing;
- preparation of a TMAP which seeks to provide an integrated, efficient and equitable transport network and considers Blacktown City Council's Priority Actions in relation to minimisation of private car usage; greenhouse gas reduction; ecologically sustainable development; and promotion of public transport usage;
- provision of 27.88 hectares of high value vegetation conservation lands, habitat for the Cumberland Plain Land Snail and Microbats, and rehabilitation and enhancement of Northern and Bungarabee Creeks;
- Protection and interpretation of cultural heritage; and
- Implementation of water sensitive urban design, including potable water conservation, pollution control and flow management measure.

The Design Development Code attached at **Appendix K** and the Statement of Commitments at Section 4 of this report reinforces Landcom's commitment to the delivery of ESD principles at Doonside.

3.10 PLANNING & DOCUMENTATION ISSUES

3.10.1 Future Consent Role Arrangements

In recognition of the ongoing collaborative relationship with Blacktown City Council, Landcom requests that the Minister, when approving the Concept Plan, use his powers under Section 75P(1)(b) of the *Environmental Planning and Assessment Act, 1979* (the Act) to determine subsequent detailed stages will require consent under Part 4 of the Act (i.e.: local development). In doing so, it is noted that future development would not be integrated development for the purposes of Part 4 of the Act pursuant to Section 75P(2)(c).

Landcom is of the view that the gazetted State Significant Site listing and approved Concept Plan will provide Blacktown City Council with enough direction to be able to comfortably assess and determine future development applications. However, from a risk minimisation perspective, and to provide Landcom with greater certainty, it is further requested that the Minister determine that any future applications lodged under Part 4 are to be undertaken in accordance with the Development Design Code (pursuant to Section 75P(2)(c) of the Act). The Development Design Code provides enough detail to act as a site specific development control plan and accordingly will provide Landcom, Blacktown City Council and the community with reasonable and transparent expectations.

3.10.2 State Significant Site Listing

Whilst the proposed State Significant Site listing is supported in principle, Blacktown City Council objects to the proposed R1 General Residential zoning on the basis that it permits residential flat buildings. Council is concerned that if permitted, residential flat buildings would be inconsistent with

the predominant low scale residential character of surrounding urban development. Council recommends an R3 Medium Density Residential zone in place of the R1 General Residential zone.

Council also recommends that Landcom consider:

- W1 Natural Waterways zoning for creek corridors in place of the RE1 Public Recreation zone;
- E2 Environment Conservation zoning for corridors linking the Doonside Residential Precinct to the Regional Parklands;
- Replacing the SP2 Infrastructure zoning proposed for the substation to a zone consistent with adjoining land uses.

Landcom has agreed to Council's suggestion to apply an R3 Medium Density Residential zone to the site in place of the exhibited R1 General Residential Zone to alleviate Council's concerns about the potential for residential flat buildings. However, it is noted that the R1 General Residential Zone mandates four permissible uses – dwelling houses, semi-detached dwellings, hostels, and shop-top housing – which are not mandated in the R3 Medium Density Residential zone. Dwelling houses and semi-detached dwellings are core housing products proposed for the Doonside Residential Parcel and accordingly should be permissible in any new zone. Shop-top housing is proposed to be a permissible use to promote flexibility and allow for emerging home/office and consulting arrangements (eg: acupuncturists, accountants, architects). Hostels are not considered appropriate and are accordingly not pursued. The SEPP amendment (**Appendix J**) therefore seeks to rezone the site to R3 Medium Density Residential and permit the following range of uses with consent:

- Attached dwellings;
- Boarding houses;
- Child care centres;
- Community facilities;
- Dwelling houses;
- Group homes;
- Multi dwelling housing;
- Neighbourhood shops;
- Places of public worship;
- Semi-detached dwellings;
- Seniors housing; and
- Shop top housing.

The Council's suggested changes to the corridors are not supported on the basis that one of the development's key outcomes is the integration and permeability of the residential precinct with the Parklands. Council's suggested zones are more restrictive than the proposed RE1 Public Recreation Zone and will therefore prohibit embellishment of the subject corridors for passive recreational uses and access paths into the Regional Parklands.

Replacement of the SP2 Infrastructure zoning for the substation with the R3 Medium Density Residential zone is supported and has been effected (refer to **Figure 1**).

The draft SEPP Amendment and draft zoning map at **Appendix J** have been amended to reflect the proposed changes.

3.10.3 General Documentation Issues

Several plans within the exhibited Environmental Assessment and Design Development Code have been updated to incorporate Landcom's commitment to signalling the three intersections alongside Doonside Road. Development shall therefore be undertaken generally in accordance with the Design Development Code prepared by Architectus and dated May 2008 (**Appendix K**) and the plans in Table 2:

Table 2– Plans for Approval

Plan Name	Reference Number	Date
Concept Plan	LSK 07539-001 Revision C	21 April 2008
Precinct Plan	LSK 07539-002 Revision A	21 April 2008
Indicative Subdivision Layout	Revision 4	21 April 2008
Master Plan	SK27G – Low Impact B Heritage Corridor	21 April 2008
Open Space Diagram	SK39F	21 April 2008
Collector Road	SK33D	
Eco-Park Roads	SK34C	
Parklands Edge	SK36D	
Local Streets	SK35C	
Minor Local Streets	SK32C	
Laneways	SK37B	
Site Entry	SK28B	
Eco-Parks	SK30B	
Southern Creek Line	SK29C	
Heritage View Park	SK31C	

Furthermore, as discussed in Sections 3.2.5 and 3.9.3, the draft zoning map associated with the proposed rezoning has been amended and accordingly Landcom also seeks endorsement of that plan.

4 REVISED STATEMENT OF COMMITMENTS

The Statement of Commitments for the Western Sydney Parklands proposal outlines how the project will be managed to minimise potential environmental impacts during the detailed design, construction and operation phases. These have been revised from those that were submitted with the Environmental Assessment to incorporate the proposed changes to the Concept Plan proposal, and are presented below:

4.1 DOCUMENTATION

1. The development will be undertaken generally in accordance with the Environmental Assessment Report dated September 2007, Preferred Project Report dated May 2008, revised Statement of Commitments, and any recommendations set out within those documents.
2. In particular the development will be undertaken in accordance with the following plans:

Plan Name	Reference Number	Date
Concept Plan	LSK 07539-001 Revision C	21 April 2008
Precinct Plan	LSK 07539-002 Revision A	21 April 2008
Indicative Subdivision Layout	Revision 4	21 April 2008
Master Plan	SK27G	21 April 2008
Open Space Diagram	SK39F	21 April 2008
Collector Road	SK33D	
Eco-Park Roads	SK34C	
Parklands Edge	SK36D	
Local Streets	SK35C	
Minor Local Streets	SK32C	
Laneways	SK37B	
Site Entry	SK28B	
Eco-Parks	SK30B	
Southern Creek Line	SK29C	
Heritage View Park	SK31C	

3. In the event of an inconsistency between the plans and documentation, this Preferred Project Report and the revised Statement of Commitments herewith prevail.

4.2 GENERAL COMMITMENTS

4. The development will comply with all relevant and applicable Australian Standards.
5. Landcom is committed to ESD principles as defined in the Environmental Planning and Assessment Act (1979). Landcom will construct an ecologically sustainable residential development that integrates with, and builds biodiversity values of the adjoining Western Sydney Parklands.
6. All necessary approvals required by State and Commonwealth legislation (including but not limited to the Roads Act, 1993, Rural Fires Act, 1997, Local Government Act, 1993) will be obtained prior to undertaking the relevant stage of the project.
7. Landcom will continue liaising with Blacktown City Council, Department of Planning and relevant State Government agencies during the development process.
8. The proponent will continue to liaise with the local community during the development process.

9. In addition to all relevant statutory requirements, future development applications will be supported by:
- project specific traffic assessment – see Section 4.7;
 - infrastructure delivery plan – see Section 4.4;
 - detailed bushfire assessment – see Section 4.8;
 - contamination assessment in accordance with State Environmental Planning Policy No. 55 – Remediation of Land; and
 - detailed flood modelling and assessment – see Section 4.11.

4.3 PUBLIC CONSULTATION

4.3.1 A Public Consultation Process

This Concept Plan commits to:

10. An ongoing public consultation throughout the process as considered relevant and that builds upon the results of the Western Sydney Parklands Ideas Competition; and
11. Prove a publicly accessible website, www.westernsydneparklands.com.au, to keep the community informed with the planning process for the Parklands and Doonside Residential Parcel.

4.3.2 Design Review Panel

This Concept Plan commits to:

12. Establish a Design Review Panel to assess future development proposals to ensure they are consistent with the proposed Development Design Controls. Panel invitees will include representatives from the Department of Planning, Blacktown City Council and Landcom.

4.4 SOCIAL AND COMMUNITY INFRASTRUCTURE

This Concept Plan commits to:

13. Execute the Voluntary Planning Agreement (*Appendix H*) between Landcom and the Minister for Planning to provide for the timely delivery of local and regional infrastructure;
14. Execute the Voluntary Planning Agreement at the time the Concept Plan is approved; and
15. Prepare individual development applications, which will be supported by a staged Infrastructure Delivery Plan which identifies the infrastructure, community, cultural and recreational facilities requirements for the Doonside Residential Precinct. The Plan will include associated costing, apportionment of funds and delivery timeframes.

The Infrastructure Delivery Plan will also describe the provision and timing of infrastructure such as:

- water supply;
- sewerage;
- wastewater re-use;
- telecommunications;
- energy;
- social facilities (for example: community halls / centres); and
- education – initiatives associated with local School(s).

4.5 ECOLOGICAL & ENVIRONMENTAL MANAGEMENT

4.5.1 *Biodiversity Values*

This Concept Plan commits to:

16. Establish a biodiversity corridor along Eastern Creek in accordance with the Western Sydney Parklands Management Vision (2004);
17. Prepare a Site Management Plan by a qualified specialist on behalf of Landcom in accordance with clause 31 of Sydney Regional Environmental Plan No. 31 – Regional Parklands to guide vegetation management within the Parklands. The Site Management Plan will be finalised prior to the commencement of physical works within the Parklands;
18. Promote the biodiversity values within the Parklands through the enhancement and rehabilitation of Cumberland Woodland consistent with the Conservation Offset Strategy; and
19. Translocating the native *Thermida* grasslands in accordance with Chapters 5, 6 and 7 of the "*Guidelines for Translocation of Threatened Plants in Australia*" (Australian Network for Plant Conservation 2004).

4.5.2 *Vegetation Offset Strategy*

This Concept Plan commits to:

20. Identify approximately 27.88 hectares of land within the Parklands that are suitable for offsetting the removal of 12.54 hectares of Cumberland Plain Woodland within Doonside Residential Parcel; and
21. An offset ratio of between 1:1 to 3:1, with an average offset ratio of 2:1, will be applied to the identified offset lands in the Parklands. A monetary contribution of approximately \$1 million will be made to the Western Sydney Parklands Trust for vegetation conservation, enhancement and creation and research initiatives related to the Doonside offset.

4.5.3 *Ecological Impacts – Microchiropteran and Megachiropteran (Microbats)*

This Concept Plan commits to:

22. Implement the recommendations in the Microchiropteran and Megachiropteran Bat Survey prepared by Eco Logical and dated March 2008 which collectively require:
 - Staged offset implementation prior to commencement of construction works to ensure no sudden loss of available foraging habitat for microchiropteran and megachiropteran bats
 - Formulation of a tree clearing protocol for larger habitat trees (>60cms diameter breast height or any trees with hollows) to reduce direct impacts to any tree dwelling fauna species, particularly bats that may be dwelling in the remnant vegetation or in isolated paddock trees during the construction phase; and
 - use of down-lighting for buildings, and public access areas adjacent to the Bungarribee Parklands Precinct.

4.5.4 *Ecological Impacts – Cumberland Plain Land Snail*

This Concept Plan commits to:

23. Prepare a Cumberland Plain Land Snail Plan of Management as recommended by the Western Sydney Parklands Bungarribee Precinct Project Cumberland Land Snail Survey prepared by Eco Logical and dated December 2007 outlining a detailed set of actions to improve habitat in areas adjacent to the proposed development.

The Plan of Management shall be prepared in consultation with the Department of Environment and Climate Change and will address the following issues:

- weed management (i.e.: the removal of Africa Olive);
- fire management prescriptions and hazard reduction guidelines;
- predation management;
- reduction of human interference through interpretation and signage;
- ecological restoration to provide habitat linkages within the Bungarribee Precinct;
- potential translocation of affected individuals;
- a staged plan of works that will need to be carried out before, during and post development; and
- monitoring

Note: Section 91 of the Threatened Species Conservation Act, 1997 requires DECC approval for threatened species translocation even under Part 3A, however this section does not apply to invertebrates.

4.5.5 Environmental Management

This Concept Plan commits to:

24. Prepare an Environmental Management Plan that addresses environmental mitigation measures including: contamination, groundwater, salinity, soil erosion and sediment control, archaeological investigations, air and water quality, noise attenuation and safety;
25. Establish condition targets and biodiversity values including offset areas will be monitored, in consultation with the Department of Environment and Climate Change, and Western Sydney Parklands Trust; and
26. Maintain the proposed offsetting ratio in the event that the trial of Themeda grassland relocation is unsuccessful.

4.6 HERITAGE

This Concept Plan commits to:

27. Recognise and protect the heritage values identified within the Parklands.
28. Conserve and enhance the heritage values of the Bungarribee House curtilage in accordance with the recommendations of Godden MacKay Logan's Doonside Conservation Management Plan (May 2007);
29. Prepare an Interpretation Strategy that adopts the recommendations of the Conservation Management Plan prepared By Godden MacKay Logan (dated May 2007);
30. Preserve the proposed Non-Indigenous Heritage Conservation Areas;
31. Investigate the most appropriate landscaping treatment and proposed tree species within and adjacent to the Bungarribee Homestead core heritage area, particularly along the spine road, prior to lodgement of a subdivision application for lands within the Doonside Residential Parcel.

Any proposed landscaping in this area will be minimal and seek to:

- Protect and reinforce views and vista to and from the Bungarribee Homestead;
- Be sympathetic to the heritage sensitivities and significance of the Bungarribee Homestead; and
- Create a sense of place and alert the community to the curtilage area.

32. Undertake archaeological investigations within the area identified as the former kitchen gardens of Bungarribee Homestead. The archaeological investigations will be undertaken:
 - in order to inform future interpretation measures;
 - in accordance with the Archaeological Research Design Guidelines prepared by Godden Mackay Logan and dated May, 2008; and
 - in a manner that ensures that the research potential of the site is realised prior to its future disturbance or destruction as part of the development process.
33. Within the context of a 'whole of development approach', undertake salvage in areas of high indigenous heritage archaeological potential at the locations identified in the Indigenous Heritage Impact Statement prepared by Jo MacDonald Cultural Heritage Management report (dated August 2007) which have been impacted by the proposed development.

4.6.1 Traffic and Transport

This Concept Plan commits to:

34. Provide two new signalised access points and any necessary upgrade works required to deal with the additional loads will be provided prior to lodgement of any application for subdivision of the Doonside Residential Parcel at the following intersections;
 - Doonside Road/Bungarribee Road (new);
 - Doonside Road/Eastern Road (new); and
 - Doonside Road/Douglas Road.

Note: The Doonside Road/Douglas Road intersection is already signalised and as such works will predominantly relate to pedestrian related works.
35. Prepare a project specific assessment for detailed road design and layouts for future applications for subdivision and infrastructure works to address project specific traffic and car parking requirements in the context of the concept plan assessment and the existing traffic environment at that time. This will include consideration of the status of the proposed intersection signalisations at that time and any associated infrastructure requirements;
36. Provide a choice of travel mode will be provided by developing a comprehensively accessible transport network;
37. The construction of an internal road network for the Doonside Residential Parcel in accordance with the Development Design Code and current Blacktown City Council requirements;
38. The provision of safe access points will be provided into the Parklands;
39. The construction of an internal road network through the Parklands in such a manner that it conveniently links to the existing road network;
40. Provide appropriate parking within the Parklands to service the different uses within the site. Parking rates will be determined at future development application stages for specific uses within the Parklands and will be supported by a project specific car parking assessment; and
41. The design and construction of necessary creek crossing points with minimal impact to the waterway ecosystem.

4.6.2 Pedestrian Movement and Connectivity

This Concept Plan commits to:

42. The provision of an internal open space system and path network encouraging pedestrian movement, and connections between residential areas and the Parklands;
43. The provision of a pedestrian and cycle paths along the site's edge to Doonside Road; and
44. A seamless transitions through ecological, visual and access linkages will be provided between the Parklands and the residential development.

4.7 BUSHFIRE MANAGEMENT

This Concept Plan commits to:

45. Submit a detailed bushfire assessment with future relevant applications for subdivision within the Doonside Residential Parcel that considers the Rural Fires Act, 1997 and NSW's Rural Fire Services' Planning for Bushfire Protection Guidelines; and
46. Implement the bushfire mitigation measures recommended by the Ecological Impact Assessment prepared by Eco Logical (dated August 2007), including provision of all necessary asset protection zones, appropriate construction methods, etc as required by the Planning for Bushfire Protection Guidelines.

4.8 URBAN DESIGN

4.8.1 Development Design Controls

This Concept Plan commits to:

47. Develop the Doonside Residential Parcel in accordance with the Concept Plan's Development Design Controls, which are based on a rigorous and thorough analysis of the site and its context, the Western Sydney Parklands Ideas Competition, and a review of high quality residential designs elsewhere.

In particular, future development within the Doonside Residential Parcel will adopt the following urban design principles:

- Provision of high quality public domain with generous landscaping and well designed buildings addressing the streets and integrating with the Parklands;
- Provision of landscaped building setbacks that allow for view corridors into and out of the Parklands via landscaped 'fingers' many of which contain Water Sensitive Urban Design features;
- Creation of a subdivision layout that is conducive to the natural environment, maximises solar efficiency and maintains existing natural vegetation; and
- Incorporation of innovative Water Sensitive Urban Design principles.

4.8.2 Open Space, Public Domain and Landscaping

This Concept Plan commits to:

48. Prepare a Landscape and Public Domain Strategy for the urban areas prior to lodgement of an application for subdivision within the Doonside Residential Parcel. The strategy will address:
 - recreational needs;
 - open space functions and linkage;
 - landscaping;

- public domain furniture;
 - habitat corridors;
 - the interface with conservation areas;
 - appropriate plant species
 - pedestrian and cycle movement; and
 - site interpretation;
49. Add to the Public Domain Strategy specific Landscape and Public Domain design details for each subsequent stage with the application for subdivision and works for that stage;
 50. Provide an open space network which connects the Doonside Residential Parcel to the Parklands through the incorporation of verges, eco-medians, and landscape treatments;
 51. Provide a generously landscaped public domain linking the Doonside Residential Parcel and Parklands in accordance with the Landscape Master Plan and specifications in the Development Design Code;
 52. Ensure landscape treatments are consistent with and complement the Water Sensitive Urban Design principles;
 53. Retain/preserve existing mature trees and landscape features where practical;
 54. Provide shading along pedestrian access ways and streets through appropriate street plantings.
 55. Provide and design public open space ensuring it is safe and wherever possible overlooked by active building frontages;
 56. Ensure that plant selection focuses on hardy, drought tolerant, native species to minimise water usage and maintenance; and
 57. Incorporate stormwater treatments through landscape techniques such as the wetland, eco-medians, bio-retention systems and landscaped swales.

4.9 STORMWATER MANAGEMENT

This Concept Plan commits to:

58. The provision of stormwater management controls in both the Doonside Residential Parcel and the Parklands to ensure that development does not have any net impact on water quality or quantity of any creek system traversing the site.
59. Ensuring stormwater management across the entire site is facilitated by best practice Water Sensitive Urban Design measures, which complies with Blacktown City Council's relevant requirements.
60. The provision of Eco-medians within the Doonside Residential Parcel to manage stormwater and improve water quality.
61. The provision of shallow ephemeral areas within the floodplain to reduce erosion from upstream sections of the Southern and Northern Waterways during period of flows with significant erosive potential.
62. The provision of a network of water retention and filtration systems to protect Parklands waterways.

4.10 FLOODING

This Concept Plan commits to:

63. Prepare a flood impact assessment with any future development application for subdivision or construction within the Regional Parklands and particularly the proposed Sports Zone. The flood

impact assessment shall model flood behaviour for the 100 year ARI and PMF events and consider impacts on existing development within the Regional Parklands and the Doonside Residential Parcel.

4.11 UTILITIES INFRASTRUCTURE

This Concept Plan commits to:

- 64. The provision and funding of all onsite infrastructure necessary to service the site;
- 65. Ensure that sufficient land is provided within road reserves for utilities (with such land proposed to be dedicated to Council done so at no additional cost to Council).

The Concept Plan identifies the location of land for the future provision of an electrical substation by Integral Energy.

5 CONCLUSION

The amendments proposed in this Preferred Project Report to the State Significant Site Study and Environmental Assessment Report (EAR) for the Concept Plan for the Western Sydney Parklands Bungarribee Precinct project have occurred following the consideration of submissions from State agencies, Blacktown City Council and the local community.

Given the findings in the previous sections of this report, the proposed Concept Plan and State Significant Site listing for the Doonside Residential Parcel and Parklands Bungarribee Precinct are justified for the reasons given below.

Section 1.0 of this report outlines the process undertaken to date including public exhibition of the Concept Plan, review and consideration of all Government and community submissions, and an update on the project's status.

Section 2.0 summarises the key amendments to the proposal being traffic management works and revisions to the VPA. Section 2.0 also lists the key benefits of the revised proposal.

Section 3.0 provides a summary of the key issues raised in the submissions and a general response to those issues. Detailed responses to each of the issues raised in the submissions are presented in table format in Appendix B. Section 3.0 demonstrates that Concept Plan approval should not be delayed any longer on the basis that:

- The proposal specifically implements the NSW Government's Western Sydney Parklands Management Vision through the creation of 300 hectares of Regional Parklands as envisaged by Sydney Regional Environmental Plan No. 31 – Regional Parklands (SREP 31);
- The Concept Plan and Draft SEPP amendment are consistent with relevant strategic and statutory plans, including the Metropolitan Strategy, and SREP 31;
- The VPA Schedule of Works and Contributions commits Landcom to providing \$18.3 million worth of local and regional infrastructure, including traffic works, open space, vegetation conservation initiatives, community facilities and heritage conservation works amongst other matters;
- The ecological attributes of the proposal have been well documented and will be protected and enhanced through dedication of the conservation offset lands. The Concept Plan will deliver significant conservation offsets including 27.88 hectares of high value vegetation conservation lands, habitat for the Cumberland Plain Land Snail and Microbats, and rehabilitation and enhancement of Northern and Bungarribee Creeks;
- The heritage values of the site have been clearly acknowledged with the Doonside Residential Parcel providing 4.55 hectares for conservation in recognition of the former Bungarribee Homestead, its views and landscape;
- Flexibility has been built into the Concept Plan to ensure an appropriate range of uses are established within the Regional Parklands that provide sustainable, economic and efficient activities for the people of Western Sydney; and
- The Environmental Assessment and this Preferred Project Report comprehensively analyse the potential environmental impacts of the Concept Plan Development and provide a detailed justification for the development including land use, urban design principles and responses to the site's sensitive ecological and heritage values.

The measures outlined in the comprehensive revised Statement of Commitments (Section 4.0) describe the range of strategies, guidelines and plans that will be prepared to inform the detailed design of each stage of the development and manage construction and on-going environmental impacts. The positioning of Western Sydney Parklands Bungarribee Precinct as a site of significance to the State and region is therefore easily justified on economic, environmental and state planning grounds, and Concept Plan approval is therefore clearly warranted.

