



UNCLASSIFIED

<b>To:</b>	Minister for the Environment
<b>From:</b>	Director-General Deputy Director-General, Planning and Sustainability A/g Executive Director, Environment
<b>Subject:</b>	Meeting with Minister Barr - Ginninderra Drive extension through established environmental offsets

### Recommendation

That you note the following information for discussions with Minister Barr.

### Critical Date:

Meeting with Minister Barr is 3:00pm – 3:30pm on Wednesday 20 August 2014.

### Background

In order to provide access to the northern end of the West Belconnen/Riverview development, an extension of Ginninderra Drive is being sought. The proponent's preferred option bridges Ginninderra Creek and includes a 650m x 20m strip of disturbance across adjoining Macgregor West and Jarramlee Golden Sun Moth offset areas.

On 5 June 2014, you wrote to Minister Barr expressing 'strong concern about any proposal that could impact on existing offset sites' as they are required to be legally secure and enduring ([Enclosure 1](#)). You requested a joint briefing of this issue (offset of an offset) and the Riverview project.

Minister Barr replied on 10 July 2014, sharing your concern from a larger policy perspective of allowing an "offset on an offset", but stating that "while this impact is unavoidable and undesirable, it presents an opportunity to enhance Golden Sun Moth habitat in West Belconnen more broadly" ([Enclosure 2](#)). Minister Barr also agreed to a joint briefing which he would ask EDD to coordinate.

### Issues

#### Options for extending Ginninderra Drive

The alignment preferred by the proponent extends Ginninderra Drive over Ginninderra Creek by a 260m long bridge, with a width of about 12m and a span height of between 2 and 7 metres. The road and bridge and associated shading would clear or degrade about a 650m x 20m strip (1.3ha) across the northern part of the McGregor offset and a small part of the Jarramlee offset (see [Attachment A](#)).

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#### Performance Assessment

DUE DATE: ...../...../..... DATE RECEIVED:...../...../.....

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According to criteria specified in *ACT Government Policy Performance Measures*

Signature ..... / .../....

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A number of other road extension alignments have also been considered by the proponent. All but the option to utilise a powerline easement to the south, will have greater impact on Golden Sun Moth habitat and the offset areas than the proponents preferred option (see [Attachment B](#)). The powerline easement is 75m wide but currently two high powerlines would need to be placed on one set of poles to make the option viable.

The easement is associated with electrical infrastructure owned by ActewAGL. The proponents advise that in previous discussions about the potential to utilise the powerline easement for the purposes of the road construction, ActewAGL have made it clear that they would not support this approach. Discussions between the proponents and ActewAGL are continuing in this regard. This option should be thoroughly investigated.

### Golden Sun Moth

The Macgregor and Jaramlee offset areas contain one of the largest populations and highest densities of the endangered Golden Sun Moth ever recorded in Australia. In 2004, 1830 moths were counted in a single day, flying mainly in the vicinity of Ginninderra Creek. Canberra Airport is the only site in the ACT where more moths have been counted on a single day. At most of the 76 remaining Golden Sun Moth habitat sites in the ACT, only tens of moths or less have been observed on any single day. The significance of the areas explains why housing was prevented from being developed over part of Macgregor West and why they have become offsets.

The vegetation of the offsets is mainly low diversity native pasture, while the exotic Chilean needlegrass dominates the creek banks. This grass is closely related to Australian feed plants of the moths, and within the offsets, the highest densities of moth larvae and the biggest caterpillars are found under the area dominated by the exotic grass.

The approval conditions that created the Jarramlee offset include restoration of habitat between Jarramlee and Dunlop Grasslands (see [Attachment C](#)). If successful, this would create one of the largest continuous habitat areas known nationally.

The preferred option will have a significant impact on Golden Sun Moth habitat. The road and bridge will form a partial barrier to Golden Sun Moth movement. It is probable that the heavy virtually non flying female moths won't be able to pass the barrier, but that at times male moths will fly or be blown over the road or under the bridge. The proposal will have a direct impact on about 2-5% of the population but is unlikely to threaten the long term viability of moths in the area.

The proponents are proposing purchasing and managing habitat in NSW that adjoins the Jarramlee – Dunlop connection which would greatly enhance the connectivity, particularly in the vicinity of the Dunlop ponds (see [Attachment C](#)). They also propose to translocate Golden Sun Moth caterpillars from the development footprint to the restoration areas.

### Offsets Policy

Under the proposed ACT Offsets Policy, a key principle is that environmental offsets must effectively account for and manage the risks of the offset not succeeding [security of offsets]; (Principle 5).

Offsets are generally required to be put in place for the duration of the impact. For urban development, this essentially requires offsets to be delivered in-perpetuity. In the ACT there are a range of measures that can be used to secure outcomes. The primary mechanism for securing offsets on public land is to provide for management of offsets within the system of conservation reserves (wilderness, national parks and nature reserves). The Jarramlee and Macgregor West offsets were to be secured by adding the area to the nature reserve system.

Offsetting an offset is highly undesirable but possible under the *Environment Protection and Biodiversity Conservation Act 1999* and proposed ACT Offsets Policy. Offsetting an offset would require the proponent to:

- offset the original obligation (Environmental values for which the existing offsets were established); and
- offset the impact of the proposed development (compensation for direct impacts of the road construction).

The ACT policy may potentially be relevant if the proponent looks to submit a DA after the commencement of a one stop shop. However, application of the one stop shop would be confined to the Riverview development in the context of the ACT planning framework; not the existing offset sites that are the subject of existing EPBC Act Part 9 approvals. From a process perspective, it would require the proponents of the existing offsets to formally apply to the Commonwealth for a variation to the conditions of their respective approvals. There are stringent criteria involved in the consideration of such variation applications.

The most recent precedent, under the EPBC Act, was for Rocglen coal mine where part of an existing offset was approved for clearing an open cut mine in the highly contentious Whitehaven area of NSW. It should of course be noted that each project has its own unique contextual considerations and so the value of considering any so-called precedent is limited.

Ultimately, any decision made about potentially offsetting an offset in this case is a matter between the Commonwealth and the proponent of the existing offset site. The ACT would have no standing to intervene in this process. A one stop shop would not apply to existing Commonwealth approvals.

### West Belconnen Territory Plan Variation – Draft Planning Report

On 30 June 2014, the Riverview Group submitted a draft planning report to facilitate a Territory Plan variation to the Environment and Planning Directorate. The adequacy of the submitted material is currently being considered with a decision expected shortly. An extract from the draft planning report relating to Ginninderra Drive is at Attachment D.

**Financial Implications**

No financial implications at this stage, but offsetting an offset would require substantial funding.

**Internal Consultation**

Nature Conservation Policy and Planning Delivery provided input to this brief.

**External Consultation**

There was no external consultation undertaken in the preparation of this brief.

**Benefits/Sensitivities**

Approved degradation to existing offsets is likely to increase the already sceptical position that the Conservation Council and other key local environmental groups have towards the benefits of offsets, and the ability of the ACT Government to deliver them in a secure long lasting manner. This may be somewhat countered by a vision of creating a large cross-border moth conservation area.

**Media Implications**

There are no media implications related directly to this briefing on West Belconnen.

Steven Gianakis  
Strategic Planning  
Phone: 6207 1741

**Action Officers:** Bronwyn Noack (Strategic Planning)  
Jonathan Teasdale (Planning Delivery)  
Michael Mulvaney (Ecological values)

12 August 2014

**AGREED/NOT AGREED/NOTED/DISCUSS**

**Simon Corbell MLA ..... /.../....**

**From:** [Butchart, Rebecca](#)  
**To:** [Godbee, Cath](#)  
**Cc:** [Tomlinson, Heather](#); [EPD Ministerials - Policy](#)  
**Subject:** FW: Amended meeting date - 14/16100 - Ministerial-Joint briefing, Minister Corbell and Barr on West Belconnen Development - 1 August 2014  
**Date:** Tuesday, 5 August 2014 1:21:00 PM  
**Attachments:** [300pm - Meeting with Minister Barr - Joint briefing .msg](#)  
[14\\_16100 - Ministerial-Joint briefing, Minister Corbell and Barr on West Belconnen Development - 1 August 2014.obr](#)

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Hi Cath

I think environment took carriage of this brief? The Minister's meeting with Minister Barr regarding the West Belconnen Development has been rescheduled to 20 August 2014. Could this be updated in the upcoming weeks to include new developments if there are any? It will need to be returned to the MO by 15 August 2014, as such any updates will need to be with GS by **COB Monday 11 August 2014**. Could you please forward on to the action officers?

The hard copy file is coming in this afternoons bag, I will bring it to you when I receive it.

Many thanks

**Rebecca Butchart | Ministerial Liaison Officer CATH**

**Ph:** (02) 6207 5804 | **Email:** [rebecca.butchart@act.gov.au](mailto:rebecca.butchart@act.gov.au)

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**From:** Guest, Clare  
**Sent:** Tuesday, 5 August 2014 12:26 PM  
**To:** Butchart, Rebecca  
**Subject:** Amended meeting date - 14/16100 - Ministerial-Joint briefing, Minister Corbell and Barr on West Belconnen Development - 1 August 2014

Hi Rebecca

Can you please advise the line area the Minister's meeting with Minister Barr regarding the West Belconnen Development has been rescheduled to 20 August 2014. Can the line area please make sure the brief is updated to include any new developments by 15 August 2014?

Can the brief please be provided by 15 August 2014.

Thank you

Clare Guest | Directorate Liaison Officer | Office of Simon Corbell MLA | Minister for the Environment and Minister for Capital Metro | Legislative Assembly Building | GPO Box

1020 CANBERRA ACT 2601 | t: 02 6205 0493 f: 02 6205 0157 | e: [Clare.Guest@act.gov.au](mailto:Clare.Guest@act.gov.au)



**Andrew Barr MLA**

**DEPUTY CHIEF MINISTER**

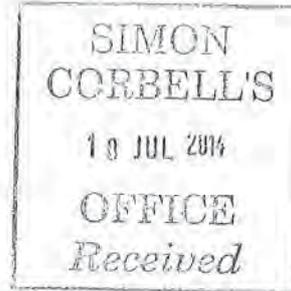
TREASURER

MINISTER FOR ECONOMIC DEVELOPMENT

MINISTER FOR COMMUNITY SERVICES

MINISTER FOR SPORT AND RECREATION

MINISTER FOR TOURISM AND EVENTS TO



MEMBER FOR MOLONGLO

- Chief of Staff
- Senior Adviser
- Media Adviser
- .....
- Adviser
- EO
- DLO

Mr Simon Corbell MLA  
 Minister for the Environment and Sustainable Development  
 GPO Box 1020  
 CANBERRA ACT 2601

PLEASE

- Reply
- Advise
- Noted
- File
- .....
- Arrange meeting
- For information
- Refer to .....
- Action

Dear Minister *Simon*

COMMENT

Thank you for your letter of 5 June 2014 about development in West Belconnen.

I share your concern regarding the possible impact of the completion of Ginninderra Drive on the West Macgregor and Jarramlee offset areas, and in particular the issue of allowing an "offset on an offset" as a matter of concern from a larger policy perspective.

*EPD - pls discuss.*

I am advised that the circumstances surrounding this particular case are such that it does nevertheless warrant further investigation and I agree a joint briefing would be appropriate. I will request the Economic Development Directorate (EDD) coordinate this and include relevant officers from both the Environment and Sustainable Development Directorate and EDD and their expert consultants.

*J 14-7.*

As I understand it, the proposed completion of Ginninderra Drive would result in a narrow corridor of impact through components of each offset area impacting on known golden sun moth habitat. While this impact is unavoidable and undesirable, it presents an opportunity to enhance management of golden sun moth habitat in the west Belconnen area more broadly. This is as a result of the strategic approach being taken not only to project planning but also for the identification, protection and management of matters of national environmental significance (MNES) under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

Due to the impact of the proposed Ginninderra Drive completion on established offset areas in addition to impacts on the values for which the offset areas were established, this is regarded as significant and as a result consideration of further offsets is appropriate.

If it proceeds, this process would adopt the current 2012 policy on the use of biodiversity offsets under the EBPC Act and will be driven by the need to demonstrate a net gain to biodiversity across the range of factors included for

ACT LEGISLATIVE ASSEMBLY



consideration in that policy. The result will be a more transparent and accountable assessment of the values being affected that will not be limited to the basic issue of habitat presence but will also consider landscape values and the functional characteristics of habitat such as connectivity at the scale of golden sun moth. This process will also consider:

- values of the established offset areas that will be affected including (but not limited to):
  - total area of habitat impacted;
  - impacts to functional aspects of the habitat such as connectivity; and
  - impacts to structural aspects such as shading and drainage of adjacent habitat.
- outcomes committed to in the establishment of the existing offset areas of Macgregor West and Jarramlee.

The strategy will also consider a holistic approach to management of the offset areas that delivers not only the values for which the Macgregor West and Jarramlee offsets were established, but also delivers offsets compensating for the direct loss of habitat as a result of the project.

This will ensure the original environmental values for which the existing offsets were established are still delivered in addition to providing compensation for direct impacts of the road construction. Within the context of the strategic assessment, this will ensure appropriate selection of offsets with full consideration of future infrastructure and development needs, balanced against the imperative to conserve biodiversity and protect the environment.

I look forward to discussing this with you further.

Yours sincerely



Andrew Barr MLA  
Minister for Economic Development

10 JUL 2011

**From:** [Gray, John](#) on behalf of [Corbell, Simon](#)  
**To:** [Guest, Clare](#); [Boogs, Monika](#); [Cameron, Lesley](#); [Hosking, Kim](#)  
**Subject:** Joint briefing, Minister Corbell and Barr on West Belconnen Development  
**Attachments:** [20140718141058200.pdf](#)

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When: Friday, 1 August 2014 11:30 AM-12:00 PM (UTC+10:00) Canberra, Melbourne, Sydney.  
Where: Minister Barr's office

Note: The GMT offset above does not reflect daylight saving time adjustments.

\*~\*~\*~\*~\*~\*~\*~\*~\*~\*

Clare – can you please arrange a brief



To:	Minister for the Environment
From:	Director-General <i>[Signature]</i> Deputy Director-General <i>NSA</i> Executive Director, Sustainability and Climate Change <i>Du 28/7</i>
Date:	
Subject:	West Macgregor and Jarramlee offset areas visit

### Background

In June 2013, the Territory (represented by the Land Development Agency [LDA]) entered into a Heads of Agreement with the Riverview Group to facilitate a partnership to develop approximately 890 hectares (ha) of land, owned mostly by the Riverview Group, immediately adjacent to the ACT/NSW border. The proposed development (known as West Belconnen) also extends into an area of approximately 600ha of contiguous freehold land in NSW. It is proposed that development will occur over a 30 – 40 year timeframe and will eventually support a population of approximately 30,000 people, comprising 6500 dwellings in the ACT and 5000 in NSW.

In order to facilitate the ultimate development scenario, the Riverview Group's preferred option is to extend Ginninderra Drive, from Dunlop to Parkwood Road, to provide a third arterial road connection to the development. Although the Ginninderra Drive Extension may not be required for twenty years or more its construction is key to the realisation of the ultimate development scenario, particularly in relation to the 5000 dwellings proposed for NSW. The Riverview Group is seeking long term certainty, and would commit to an advanced offset beginning in the near future.

### Critical Date

Site Inspection is on Thursday, 31 July 2014. Pick up from Legislative Assembly at 2.10pm.

### Issues

#### Options for extending Ginninderra Drive

The alignment preferred by the proponent extends Ginninderra Drive over Ginninderra Creek by a 260m long bridge, with a width of about 12m and a span height of between 2 and 7 metres. Including shading, the road and bridge would clear or degrade about a 650m x 20m strip (1.3ha) across the northern part of the McGregor offset and a small part of the Jarramlee offset (see Attachment A).

A number of other road extension alignments have also been considered by the proponent. All but the option to utilise a powerline easement to the south, will have greater impact on Golden Sun Moth habitat and the offset areas than the preferred option (see Attachment B). The powerline easement is 75m wide but currently two high powerlines would need to be placed on one set of poles to make the option viable.

#### Performance Assessment

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The easement is associated with electrical infrastructure owned by ActewAGL. The proponents advise that in previous discussions about the potential to utilise the powerline easement for the purposes of the road construction, ActewAGL have made it clear that they would not support this approach. Discussions between the proponents and ActewAGL are continuing in this regard.

### Golden Sun Moth

The Macgregor and Jaramalee offset areas contain one of the largest populations and highest densities of the endangered Golden Sun Moth, ever recorded in Australia. In 2004, 1830 moths were counted in a single day, flying mainly in the vicinity of Ginninderra Creek. Canberra Airport is the only site in the ACT where more moths have been counted on a single day. At most of the 76 remaining Golden Sun Moth habitat sites in the ACT, only tens of moths or less have been observed on any single day. The significance of the areas explains why housing was prevented from being developed over Macgregor and why they have become offsets.

The vegetation of the offsets is mainly low diversity native pasture, while the exotic Chilean needlegrass dominates the creek banks. This grass is closely related to Australian feed plants of the moths, and within the offsets, the highest densities of moth larvae and the biggest caterpillars are found under the area dominated by the exotic grass.

The approval conditions that created the Jarramlee offset include restoration of habitat between Jarramlee and Dunlop Grasslands (see Attachment C). If successful, this would create one of the largest continuous habitat areas known nationally.

The preferred option will have a significant impact on Golden Sun Moth habitat. The road and bridge will form a partial barrier to Golden Sun Moth movement. It is probable that the heavy virtually non flying female moths won't be able to pass the barrier, but that at times male moths will fly or be blown over the road or under the bridge. The proposal will have a direct impact on about 2 -5% of the population but is unlikely to threaten the long term viability of moths in the area.

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Offsetting an offset is highly undesirable but possible under the EPBC Act and proposed ACT Offsets Policy. Offsetting an offset would require the proponent to:

- offset the original obligation (existing offset requirement); and
- offset the impact of the proposed development.

The ACT policy may potentially be relevant if the proponent looks to submit a DA after the commencement of a one stop shop. However, application of the one stop shop would be confined to the Riverview development; not the existing offset sites that are the subject of existing EPBC Act Part 9 approvals. From a process perspective, it would require the proponents of the existing offsets to formally apply to the Commonwealth for a variation to the conditions of their respective approvals. There are stringent criteria involved in the consideration of such variation applications.

The most recent precedent, under the EPBC Act, was for Rocglen coal mine where part of an existing offset was approved for clearing an open cut mine in the highly contentious Whitehaven area of NSW. It should of course be noted that each project has its own unique contextual considerations and so the value of considering any so-called precedent is limited.

#### Pace Egg Farm

The Pace Egg Farm is located within the ACT portion of the West Belconnen project area, at Parkwood Farm. While the Ginninderra Drive Extension is not expected to be needed for 25 - 35 years, its construction could potentially be brought forward if the Pace Egg Farm relocates in the short-medium term.

Representatives from the Pace Egg Farm have a meeting with the Chief Minister on 29 July 2014 to discuss long term options for their facility. Background information on this issue is provided at Attachment D.

#### Flora and Fauna Committee

On 7 July 2014, the ACT Flora and Fauna Committee (FFC) wrote to you expressing concerns, amongst other things, about the road proposal and requesting ongoing consultation and engagement. Refer to copy of letter at Attachment E.

#### **Media Implications**

Nil

**Recommendation**

That you note the above information.

Heather Tomlinson  
Senior Manager  
Nature Conservation Policy

Action Officer Michael Mulvaney Phone X59964

AGREED/NOT AGREED/NOTED

Simon Corbell MLA ..... /.../....





To:	Minister for the Environment
From:	Director-General <i>[Signature]</i> 11/8/14 Deputy Director-General <i>[Signature]</i> 11.8.14
Subject:	West Belconnen Site Inspection – 18 August 2014

**Background**

Following your meeting on the West Belconnen project at the Riverview Group's site office in Holt on 18 June 2014, Tony Carey from The Riverview Group (TRG) extended an invitation to provide you with a guided site inspection of the West Belconnen project area.

The Riverview Group, on behalf of the Land Development Agency, is responsible for undertaking all due diligence investigations, preparing a planning report and obtaining the statutory approvals required to realise the development.

**Critical Date**

A two hour site visit will occur on 18 August 2014 from 1.30pm.

**Issues**

Ginninderra Drive Extension and Existing Environmental Offset Areas

On 31 July 2014, you visited the existing environmental offset areas proposed for the extension of Ginninderra Drive with Environment and Planning Directorate (EPD) officers. Additional information on these issues is located at Attachment A.

Pace Egg Farm (Parkwood Eggs)

The Pace Egg Farm is located at Parkwood Farm on Block 1329 Belconnen and comprises an area of 41.4ha. The land is currently zoned as Hills Ridges and Buffers under the Territory Plan.

Block 1329 is subject to a 20 year lease, which terminates in March 2033. The lease also includes a withdrawal clause allowing any portion or portions of the land that may be required for Territory purposes to be withdrawn.

The proximity of the Pace Egg Farm to the proposed West Belconnen development has implications from a strategic planning perspective, as the land is located in part of the area that was identified in the ACT Planning Strategy as a 'future investigation area'. Accordingly, it is also part of the area being investigated by TRG. It is estimated that the combined area of Pace Egg Farm and the 500m separation buffer for sensitive uses including residential imposed by the Territory Plan has the potential to accommodate between 500 and 1000 dwellings, together with commercial land uses.

**Performance Assessment**

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according to criteria specified in ACT Government Policy Performance Measures

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The timing of the termination of Pace's lease in 2033, is considered by TRG to be generally consistent with their proposed staging for when residential development would be occurring in the area.

Representatives from Pace Egg Farm met the Chief Minister on 29 July 2014 to discuss long term options for their business. It is understood that they are now seeking a 99 year lease over their current site. The outcomes of the meeting with the Chief Minister are not known at this stage.

Ultimately, an alternative site will need to be found to enable Pace to continue its operations in the long term in the ACT. Initial consideration by the Chief Minister, Treasury and Economic Development Directorate (CMTEDD) has identified that Majura Valley may be a suitable location due to compatible existing land uses and proximity to major transport connections however, further due-diligence work will be required. This will be undertaken as part of the continuing Eastern Broadacre investigations.

#### Holt Group Centre (Kippax)

Notwithstanding that a commercial centre will be provided in West Belconnen, in the short to medium term it is intended that residents will rely on the Holt Group Centre for services. As part of the West Belconnen planning study, TRG has engaged consultants to undertake preliminary studies of commercial, community, sport and recreation facility requirements, to assess existing capacity, future provision requirements and development opportunities at the Holt Group Centre. TRG are also undertaking a land use and planning review to assess the opportunities and implications for the centre, but this will not be a master planning exercise.

Subject to the agreement by the Minister for Planning, EPD is proposing to commence a master planning project for the Holt Group Centre this financial year. The information collected by TRG will be used to inform the master plan process.

#### Proposed Transgrid Switching Station and 330kV high voltage power lines

CMTEDD is currently progressing a study to determine the location for a 330kV switching station and associated high voltage power lines in the West Belconnen / adjacent NSW area. This is required in order to provide security and continuity of electricity supply to the ACT.

A joint Transgrid and inter-directorate steering committee is overseeing the study. EPD is represented by Energy Policy and Strategic Planning. Whilst this study is independent of planning for West Belconnen, the outcomes will inform the structure planning process.

Based on advice from the Defence Science and Technology Organisation in 2013, an 1100m separation distance is required between the switching station, its infrastructure and the existing Transgrid Substation in Holt.

In response, an independent review, commissioned by the Justice and Community Safety Directorate, has concluded that the proposed 1100m separation distance may be greater than

actually required, given the potential nature, level and likelihood of risk associated with the switching station. The review recommends a significant reduction in the separation distance to potentially 200m or less. Discussions are continuing in relation to this aspect. If a reduced separation distance is agreed, a number of further location options for the switching station emerge that may reduce the infrastructure's impact on the West Belconnen development.

#### Statutory Processes

In order to facilitate urban development a number of statutory processes are required at Commonwealth, State and Local Government levels.

#### *Territory Plan Variation and National Capital Plan Amendment*

On 30 June 2014, TRG submitted a draft planning report as the mechanism to facilitate a Territory Plan variation. The planning report has been circulated to agencies and EPD is currently considering the completeness of the submitted information. If supported, the planning report will then inform the preparation of a draft Variation to the Territory Plan and accompanying structure plan. It is anticipated that the draft Variation documentation will be released for public consultation in November this year, subject to the agreement of the Minister for Planning.

The proposal will also require an Amendment to the National Capital Plan, which is administered by the National Capital Authority (NCA). TRG has lodged a formal request for an Amendment, along with draft Amendment documentation, with the NCA. The NCA has advised that its Board will consider the submission in late August 2014.

#### *Yass Valley Council Local Environment Plan*

As the current zonings in the NSW portion of the study area does not allow for urban development, an amendment to the *Yass Valley Local Environment Plan 2013* (LEP) will be required. To facilitate the applicable rezoning, a submission must be made to the Yass Valley Council. It is intended by the TRG that the amendment to the Yass Valley LEP will occur concurrently with the ACT rezoning processes.

#### *Strategic Assessment*

The study area contains matters of national environmental significance (MNES), being the pink tailed worm lizard, box gum woodland and golden sun moth. The proponent has determined that the most appropriate way to address impacts on MNES for the development is through a Strategic Assessment under the *Environment Protection and Biodiversity Conservation Act 1999*.

#### *ACT Environmental Processes*

The West Belconnen development will trigger an Environmental Impact Statement (EIS) under the *Planning and Development Act 2007* (P&D Act). It is possible that TRG will utilise the package prepared to address MNES for the Commonwealth to seek an EIS exemption under section 211 of the P&D Act. This consideration will, in part, be contingent on whether the proposed Transgrid Switching Station and its associated electrical infrastructure are located within the West Belconnen project area and whether all issues have been appropriately addressed.

*Strategic Issues*

Bushfire and emergency management access, water quality management, access road requirements, and relationship with waste facility continue to be strategic issues requiring detailed consideration.

Cross Border Implications

In addition to the requirement for an amendment to the Yass Valley LEP, there are a range of cross border implications that need to be considered in light of the unique nature of the West Belconnen development. Work is well underway in this regard.

The cross border issues include:

- Inter-government arrangements to facilitate a coordinated approach to planning and ensure the ongoing viability of the new community;
- Existing and proposed land tenure and administrative arrangements – exploring issues relating to ongoing funding, servicing and governance of the land; and
- Implications arising from cross-border development and shared governance arrangements.

**Media Implications**

This event is not open to the media.

**Recommendation**

That you note the status of the West Belconnen development for your meeting with Mr Tony Carey on 18 August 2014.

Steven Gianakis  
A/g Senior Manager  
Strategic Planning  
7 August 2014

Action Officer: Bronwyn Noack  
Phone: 6205 9657

*Seen by the Minister.*

AGREED/NOT AGREED/NOTED

Simon Corbell MLA ..... /.../....

**From:** [ESDD Ministerials - Government Services](#)  
**To:** [ESDD Ministerials - Policy](#)  
**Cc:** [Godbee, Cath](#)  
**Subject:** 14/15734 - MINISTERIAL CORRESPONDENCE - Ministerial correspondence – West Belconnen Site Inspection - 18 August 2014  
**Date:** Wednesday, 16 July 2014 4:06:00 PM  
**Attachments:** [image001.png](#)  
[14\\_15734 - Ministerial-West Belconnen Site Inspection -](#) [18 August 2014.obr](#)

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Good afternoon

Please see the attached request for a function brief for Minister Corbell, due to GS COB 4 August 2014.

Kind regards

**Rebecca Butchart | Ministerial Liaison Officer**

**Ph:** (02) 6207 5804 | **Email:** [rebecca.butchart@act.gov.au](mailto:rebecca.butchart@act.gov.au)

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**Ministerial Correspondence / Brief Request Form**

**Objective Number: 14/15734**

**Date due Ministerial Services: 4 August 2014**

**Date due Deputy Director-General: 5 August 2014**

**Date due Director-General: 7 August 2014**

**Date due MINISTER'S OFFICE: 11 August 2014**

**Priority: Urgent / Normal**

**Critical Date: 18 August 2014**

**Subject: Ministerial correspondence – West Belconnen Site Inspection –**

---

**To:**

Strategic Planning

Construction and Services

Sustainability and Climate Change

Director-General

Planning Delivery

Deputy Director-General

**X Environment**

---

**Response by:**

**Minister**

Chief Minister

Director-General ESDD

Minister Chief of Staff

Adviser

Other:

---

**Action required:**

Reply to correspondence

Directorate Input

Media Release / Media Alert  
(Produced in Consultation with  
Communications)

Information brief

Dept Officer to attend

Speech / Speaking Notes  
(Produced in Consultation with  
Communications)

Information only / NFA

**Functions Brief**  
**(inc arrangements brief)**

Questions and Answers

Phone constituent

Other

---

**Meeting / Event:**

Time: 1:30 to 3:30

Date: 18 August 2014

Location:

Event Contact/Organiser:

Equipment:

---

**Further Information:**

---



To:	Minister for the Environment
From:	Director-General Deputy Director-General
Subject:	West Belconnen Site Inspection – 18 August 2014

### Background

Following your meeting on the West Belconnen project at the Riverview Group's site office in Holt on 18 June 2014, [redacted] from The Riverview Group (TRG) extended an invitation to provide you with a guided site inspection of the West Belconnen project area.

The Riverview Group, on behalf of the Land Development Agency, is responsible for undertaking all due diligence investigations, preparing a planning report and obtaining the statutory approvals required to realise the development.

### Critical Date

A two hour site visit will occur on 18 August 2014 from 1.30pm.

### Issues

#### Ginninderra Drive Extension and Existing Environmental Offset Areas

On 31 July 2014, you visited the existing environmental offset areas proposed for the extension of Ginninderra Drive with Environment and Planning Directorate (EPD) officers. Additional information on these issues is located at Attachment A.

#### Pace Egg Farm (Parkwood Eggs)

The Pace Egg Farm is located at Parkwood Farm on Block 1329 Belconnen and comprises an area of 41.4ha. The land is currently zoned as Hills Ridges and Buffers under the Territory Plan.

Block 1329 is subject to a 20 year lease, which terminates in March 2033. The lease also includes a withdrawal clause allowing any portion or portions of the land that may be required for Territory purposes to be withdrawn.

The proximity of the Pace Egg Farm to the proposed West Belconnen development has implications from a strategic planning perspective, as the land is located in part of the area that was identified in the ACT Planning Strategy as a 'future investigation area'. Accordingly, it is also part of the area being investigated by TRG. It is estimated that the combined area of Pace Egg Farm and the 500m separation buffer for sensitive uses including residential imposed by the Territory Plan has the potential to accommodate between 500 and 1000 dwellings, together with commercial land uses.

---

#### Performance Assessment

DUE DATE:...../...../..... DATE RECEIVED:...../...../.....

SATISFACTORY

UNSATISFACTORY

according to criteria specified in ACT Government Policy Performance Measures

Signature ..... /.../....

---

The timing of the termination of Pace's lease in 2033, is considered by TRG to be generally consistent with their proposed staging for when residential development would be occurring in the area.

Representatives from Pace Egg Farm met the Chief Minister on 29 July 2014 to discuss long term options for their business. It is understood that they are now seeking a 99 year lease over their current site. The outcomes of the meeting with the Chief Minister are not known at this stage.

Ultimately, an alternative site will need to be found to enable Pace to continue its operations in the long term in the ACT. Initial consideration by the Chief Minister, Treasury and Economic Development Directorate (CMTEDD) has identified that Majura Valley may be a suitable location due to compatible existing land uses and proximity to major transport connections however, further due-diligence work will be required. This will be undertaken as part of the continuing Eastern Broadacre investigations.

#### Holt Group Centre (Kippax)

Notwithstanding that a commercial centre will be provided in West Belconnen, in the short to medium term it is intended that residents will rely on the Holt Group Centre for services. As part of the West Belconnen planning study, TRG has engaged consultants to undertake preliminary studies of commercial, community, sport and recreation facility requirements, to assess existing capacity, future provision requirements and development opportunities at the Holt Group Centre. TRG are also undertaking a land use and planning review to assess the opportunities and implications for the centre, but this will not be a master planning exercise.

Subject to the agreement by the Minister for Planning, EPD is proposing to commence a master planning project for the Holt Group Centre this financial year. The information collected by TRG will be used to inform the master plan process.

#### Proposed Transgrid Switching Station and 330kV high voltage power lines

CMTEDD is currently progressing a study to determine the location for a 330Kv switching station and associated high voltage power lines in the West Belconnen / adjacent NSW area. This is required in order to provide security and continuity of electricity supply to the ACT.

A joint Transgrid and inter-directorate steering committee is overseeing the study. EPD is represented by Energy Policy and Strategic Planning. Whilst this study is independent of planning for West Belconnen, the outcomes will inform the structure planning process.

Based on advice from the Defence Science and Technology Organisation in 2013, an 1100m separation distance is required between the switching station, its infrastructure and the existing Transgrid Substation in Holt.

In response, an independent review, commissioned by the Justice and Community Safety Directorate, has concluded that the proposed 1100m separation distance may be greater than

actually required, given the potential nature, level and likelihood of risk associated with the switching station. The review recommends a significant reduction in the separation distance to potentially 200m or less. Discussions are continuing in relation to this aspect. If a reduced separation distance is agreed, a number of further location options for the switching station emerge that may reduce the infrastructure's impact on the West Belconnen development.

### Statutory Processes

In order to facilitate urban development a number of statutory processes are required at Commonwealth, State and Local Government levels.

#### *Territory Plan Variation and National Capital Plan Amendment*

On 30 June 2014, TRG submitted a draft planning report as the mechanism to facilitate a Territory Plan variation. The planning report has been circulated to agencies and EPD is currently considering the completeness of the submitted information. If supported, the planning report will then inform the preparation of a draft Variation to the Territory Plan and accompanying structure plan. It is anticipated that the draft Variation documentation will be released for public consultation in November this year, subject to the agreement of the Minister for Planning.

The proposal will also require an Amendment to the National Capital Plan, which is administered by the National Capital Authority (NCA). TRG has lodged a formal request for an Amendment, along with draft Amendment documentation, with the NCA. The NCA has advised that its Board will consider the submission in late August 2014.

#### *Yass Valley Council Local Environment Plan*

As the current zonings in the NSW portion of the study area does not allow for urban development, an amendment to the *Yass Valley Local Environment Plan 2013* (LEP) will be required. To facilitate the applicable rezoning, a submission must be made to the Yass Valley Council. It is intended by the TRG that the amendment to the Yass Valley LEP will occur concurrently with the ACT rezoning processes.

#### *Strategic Assessment*

The study area contains matters of national environmental significance (MNES), being the pink tailed worm lizard, box gum woodland and golden sun moth. The proponent has determined that the most appropriate way to address impacts on MNES for the development is through a Strategic Assessment under the *Environment Protection and Biodiversity Conservation Act 1999*.

#### *ACT Environmental Processes*

The West Belconnen development will trigger an Environmental Impact Statement (EIS) under the *Planning and Development Act 2007* (P&D Act). It is possible that TRG will utilise the package prepared to address MNES for the Commonwealth to seek an EIS exemption under section 211 of the P&D Act. This consideration will, in part, be contingent on whether the proposed Transgrid Switching Station and its associated electrical infrastructure are located within the West Belconnen project area and whether all issues have been appropriately addressed.

*Strategic Issues*

Bushfire and emergency management access, water quality management, access road requirements, and relationship with waste facility continue to be strategic issues requiring detailed consideration.

Cross Border Implications

In addition to the requirement for an amendment to the Yass Valley LEP, there are a range of cross border implications that need to be considered in light of the unique nature of the West Belconnen development. Work is well underway in this regard.

The cross border issues include:

- Inter-government arrangements to facilitate a coordinated approach to planning and ensure the ongoing viability of the new community;
- Existing and proposed land tenure and administrative arrangements – exploring issues relating to ongoing funding, servicing and governance of the land; and
- Implications arising from cross-border development and shared governance arrangements.

**Media Implications**

This event is not open to the media.

**Recommendation**

That you note the status of the West Belconnen development for your meeting with on 18 August 2014.

Steven Gianakis  
A/g Senior Manager  
Strategic Planning  
7 August 2014

Action Officer: Bronwyn Noack  
Phone: 6205 9657

AGREED/NOT AGREED/NOTED

Simon Corbell MLA ..... /.../....

# ARRANGEMENTS BRIEF FOR MINISTER CORBELL

FUNCTION:	West Belconnen Site Inspection
VENUE:	West Belconnen Project Area (meet at The Riverview Group's West Belconnen Project Office in Holt – details below)
HOST:	Director, The Riverview Group , The Riverview Group
HOST'S CONTACT NO.:	
DAY:	Monday
DATE:	18 August 2014
TIME:	1:30 PM
TIME COMMITMENT:	2 hours
DRESS:	Casual (you may be walking in parts)
YOUR ROLE:	Inspect site
TRANSPORT ARRANGEMENTS:	Private vehicle to West Belconnen Project Office in Holt. The Riverview Group representatives will provide transport to and from the West Belconnen project area
WHERE TO PARK:	West Belconnen Project Office Shop 2, Kippax Shopping Centre Hardwicke Crescent, Holt
WHO WILL MEET YOU:	
GUESTS OF NOTE:	Nil
DIRECTORATE REPRESENTATIVE:	Michael Mulvaney, Senior Environmental Planner, Conservation Planning and Research
MEDIA:	No, the event is not open to the media
ATTACHMENTS:	A map of venue and parking arrangements is included at <u>Attachment B</u>

**From:** [Butchart, Rebecca](#)  
**To:** [Guest, Clare](#)  
**Cc:** [Gianakis, Steven](#); [ESDD Ministerials - City Planning](#)  
**Subject:** FW: FOR ACTION: : 14/15734 - MINISTERIAL CORRESPONDENCE - Ministerial correspondence – West Belconnen Site Inspection - 18 August 2014  
**Date:** Friday, 18 July 2014 9:23:00 AM  
**Attachments:** [image001.png](#)  
[image002.png](#)  
[image003.png](#)

---

Good morning Clare

Strategic planning is now taking carriage of preparing this brief for Minister Corbell - and are seeking more information on how to prepare the brief, please see Steven's email below. Could you please advise?

Many thanks

**Rebecca Butchart | Ministerial Liaison Officer**

**Ph:** (02) 6207 5804 | **Email:** [rebecca.butchart@act.gov.au](mailto:rebecca.butchart@act.gov.au)

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---

**From:** Gianakis, Steven  
**Sent:** Thursday, 17 July 2014 5:49 PM  
**To:** Tomlinson, Heather; ESDD Ministerials - Policy; Butchart, Rebecca  
**Cc:** Teasdale, Jonathan; McKeown, Helen; Mulvaney, Michael; Noack, Bronwyn  
**Subject:** RE: FOR ACTION: : 14/15734 - MINISTERIAL CORRESPONDENCE - Ministerial correspondence – West Belconnen Site Inspection - 18 August 2014

Hi Rebecca

I've looked at the request. It is not clear whether there is a specific matter that the Minister is interested in, will be inspecting (eg Ginninderra Drive extension) or more generally just looking at the land. We need some further details, purpose of site visit etc? Could you please follow up.

Regards,  
Steven

PS – please keep Bronwyn in the loop as I'll be on leave from tomorrow.

---

**From:** Tomlinson, Heather  
**Sent:** Thursday, 17 July 2014 1:31 PM  
**To:** ESDD Ministerials - Policy; Butchart, Rebecca  
**Cc:** Gianakis, Steven; Teasdale, Jonathan; McKeown, Helen; Mulvaney, Michael; Noack, Bronwyn  
**Subject:** RE: FOR ACTION: : 14/15734 - MINISTERIAL CORRESPONDENCE - Ministerial correspondence – West Belconnen Site Inspection - 18 August 2014

Cath, Rebecca. I have spoken to Steven Gianakis and we agree that best if Planning Investigations has lead on the this and we provide input. Bronwyn was contact officer on recent brief to Planning Minister on West Belconnen. I have also cc'd Jonathan in as input may be required from his area.

Bronwyn – could you pls liaise through Helen McKeown for Environment input. If Michael M is available I think it would be useful if he attend the site inspection with the Minister. Further details on site inspection maybe needed from MO ie where are they meeting?

Thanks all.

Heather

---

**From:** Godbee, Cath **On Behalf Of** ESDD Ministerials - Policy  
**Sent:** Wednesday, 16 July 2014 4:32 PM  
**To:** Tomlinson, Heather  
**Subject:** FOR ACTION: : 14/15734 - MINISTERIAL CORRESPONDENCE - Ministerial correspondence – West Belconnen Site Inspection - 18 August 2014  
**Importance:** High

Heather - This request has arrived for a reply – due 4 August – marked up as a brief required by Environment - I'm wondering if this matter should be handled by Planning (Steven Gianakis) to provide a brief for Minister Corbell given they recently did the briefing on West Belconnen (Riverview) development meeting with (For Minister Gentleman(Objective 14/15151)?

What do you think?

*Cath*

Cath Godbee

Executive Assistant to Executive Director, Alan Traves

Policy

Phone: +61 62050310|Fax: +61 6207 1732|Email: [cath.godbee@act.gov.au](mailto:cath.godbee@act.gov.au)

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**From:** ESDD Ministerials - Government Services  
**Sent:** Wednesday, 16 July 2014 4:06 PM  
**To:** ESDD Ministerials - Policy  
**Cc:** Godbee, Cath  
**Subject:** 14/15734 - MINISTERIAL CORRESPONDENCE - Ministerial correspondence – West Belconnen Site Inspection - 18 August 2014

Good afternoon

Please see the attached request for a function brief for Minister Corbell, due to GS COB 4 August 2014.

Kind regards

**Rebecca Butchart | Ministerial Liaison Officer**

**Ph:** (02) 6207 5804 | **Email:** [rebecca.butchart@act.gov.au](mailto:rebecca.butchart@act.gov.au)

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**Date due MINISTER'S OFFICE: 11 August 2014**

**Priority: Urgent / Normal**

**Critical Date: 18 August 2014**

**Subject: Ministerial correspondence – West Belconnen Site Inspection – Tony Carey**

---

**To:**

- |  |  |
|--|--|
| <input type="checkbox"/> Strategic Planning                | <input type="checkbox"/> Construction and Services |
| <input type="checkbox"/> Sustainability and Climate Change | <input type="checkbox"/> Director-General          |
| <input type="checkbox"/> Planning Delivery                 | <input type="checkbox"/> Deputy Director-General   |

**X Environment**

---

**Response by:**

- |  |   |  |
|--|---|--|
| <b>X Minister</b>                                | <input type="checkbox"/> Chief Minister | <input type="checkbox"/> Director-General ESDD |
| <input type="checkbox"/> Minister Chief of Staff | <input type="checkbox"/> Adviser        | <input type="checkbox"/> Other:                |
- 

**Action required:**

- |  |   |   |
|--|---|---|
| <input type="checkbox"/> Reply to correspondence | <input type="checkbox"/> Directorate Input            | <input type="checkbox"/> Media Release / Media Alert<br>(Produced in Consultation with<br>Communications) |
| <input type="checkbox"/> Information brief       | <input type="checkbox"/> Dept Officer to attend       | <input type="checkbox"/> Speech / Speaking Notes<br>(Produced in Consultation with<br>Communications)     |
| <input type="checkbox"/> Information only / NFA  | <b>X Functions Brief<br/>(inc arrangements brief)</b> | <input type="checkbox"/> Questions and Answers  |
| <input type="checkbox"/> Phone constituent       | <input type="checkbox"/> Other                        |   |
- 

**Meeting / Event:**

Time: 1:30 to 3:30

Date: 18 August 2014

Location:

Event Contact/Organiser:

Equipment:

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**Further Information:**

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**From:** [Butchart, Rebecca](#)  
**To:** [Noack, Bronwyn](#)  
**Subject:** FW: FOR ACTION: : 14/15734 - MINISTERIAL CORRESPONDENCE - Ministerial correspondence – West Belconnen Site Inspection - 18 August 2014  
**Date:** Wednesday, 23 July 2014 5:12:00 PM  
**Attachments:** [image001.png](#)  
[image002.png](#)  
[image003.png](#)  
[14\\_15734 - Ministerial - \(CORBELL\) - West Belconnen Site Inspection - Tony Carey - 18 August 2014.obr](#)

---

Hi Bronwyn

We have received advice that The brief should cover the Ginninderra Drive extension, the offset issues and boarder issues if any. It would be good for Minister to have the most up to date information on the West Belconnen Site.

Many thanks

**Rebecca Butchart | Ministerial Liaison Officer**

**Ph:** (02) 6207 5804 | **Email:** [rebecca.butchart@act.gov.au](mailto:rebecca.butchart@act.gov.au)

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**From:** Guest, Clare  
**Sent:** Wednesday, 23 July 2014 1:59 PM  
**To:** Butchart, Rebecca  
**Cc:** Noack, Bronwyn  
**Subject:** RE: FOR ACTION: : 14/15734 - MINISTERIAL CORRESPONDENCE - Ministerial correspondence – West Belconnen Site Inspection - 18 August 2014

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Kind Regards

Clare Guest | Directorate Liaison Officer | Office of Simon Corbell MLA | Minister for the Environment and Minister for Capital Metro | Legislative Assembly Building | GPO Box 1020 CANBERRA ACT 2601 | t: 02 6205 0493 f: 02 6205 0157 | e: [Clare.Guest@act.gov.au](mailto:Clare.Guest@act.gov.au)

---

**From:** Butchart, Rebecca  
**Sent:** Wednesday, 23 July 2014 10:57 AM  
**To:** Guest, Clare  
**Cc:** Noack, Bronwyn  
**Subject:** FW: FOR ACTION: : 14/15734 - MINISTERIAL CORRESPONDENCE - Ministerial correspondence – West Belconnen Site Inspection - 18 August 2014

Hi Clare

Waiting on further advice for the attached, any word from the Minister's Office?

Many thanks

**Rebecca Butchart | Ministerial Liaison Officer**

**Ph:** (02) 6207 5804 | **Email:** [rebecca.butchart@act.gov.au](mailto:rebecca.butchart@act.gov.au)

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**From:** Noack, Bronwyn  
**Sent:** Wednesday, 23 July 2014 10:54 AM  
**To:** Butchart, Rebecca  
**Subject:** FW: FOR ACTION: : 14/15734 - MINISTERIAL CORRESPONDENCE - Ministerial correspondence – West Belconnen Site Inspection - 18 August 2014

Hi Rebecca

Further to Steven's email last week, just a quick follow up to check whether you've been able to obtain any further details to inform the content of this briefing?

Many thanks  
Bronwyn

---

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**Sent:** Thursday, 17 July 2014 5:49 PM  
**To:** Tomlinson, Heather; ESDD Ministerials - Policy; Butchart, Rebecca  
**Cc:** Teasdale, Jonathan; McKeown, Helen; Mulvaney, Michael; Noack, Bronwyn  
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Cath Godbee

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**Cc:** Godbee, Cath  
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**Ph:** (02) 6207 5804 | **Email:** [rebecca.butchart@act.gov.au](mailto:rebecca.butchart@act.gov.au)

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**Objective Number: 14/15734**

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**Date due Deputy Director-General: 5 August 2014**

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**Priority: Urgent / Normal**

**Critical Date: 18 August 2014**

**Subject: Ministerial correspondence – West Belconnen Site Inspection – Tony Carey**

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**To:**

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|--|--|
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| <input type="checkbox"/> Sustainability and Climate Change | <input type="checkbox"/> Director-General          |
| <input type="checkbox"/> Planning Delivery                 | <input type="checkbox"/> Deputy Director-General   |

**X Environment**

---

**Response by:**

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|--|---|--|
| <b><u>X Minister</u></b>                         | <input type="checkbox"/> Chief Minister | <input type="checkbox"/> Director-General ESDD |
| <input type="checkbox"/> Minister Chief of Staff | <input type="checkbox"/> Adviser        | <input type="checkbox"/> Other:                |
- 

**Action required:**

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**Meeting / Event:**

Time: 1:30 to 3:30

Date: 18 August 2014

Location:

Event Contact/Organiser:

Equipment:

---

**Further Information:**

**From:** [McEvoy, Justin](#)  
**To:** [Terrplan](#)  
**Subject:** FW: Riverview West Belconnen - Reid & Stevens: West Molonglo - HOA with ACT Government  
**Date:** Thursday, 25 July 2013 1:48:51 PM  
**Attachments:** [SKMBT\\_C65413050916430.pdf](#)

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David

Could you review and file in Objective within 4 Proposal folder a new file for Belconnen blocks 1605 and 1606.

Another sub-folder will be required for the Strategic Environmental Assessment (SEA). Please contact Steven Gianakis to arrange for an exchange of relevant alias files on Riverview within City Planning's Objective file structure.

Cheers

Justin

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**From:** Ellis, Greg  
**Sent:** Thursday, 20 June 2013 12:44 PM  
**To:** Gianakis, Steven; Ponton, Ben; Corrigan, Jim; McEvoy, Justin; Paynter, Patrick  
**Subject:** Riverview West Belconnen - Reid & Stevens: West Molonglo - HOA with ACT Government

As discussed today – a copy of the Heads of Agreement. Note the (small but legible) numbers on the Attachments showing the 3 potential location priorities for the switching station.

Greg

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AUSTRALIAN CAPITAL TERRITORY

# HEADS OF AGREEMENT

**Dated** \_\_\_\_\_ 2013

**Parties**

**AUSTRALIAN CAPITAL TERRITORY**

**CORKHILL BROS PTY. LIMITED  
ACN 008 431 043**

**REID AND STEVENS PTY. LIMITED  
ACN 008 445 994**

**AGREEMENT IN RESPECT OF THE  
DEVELOPMENT OF BLOCKS 1605 &  
1606 DIVISION OF BELCONNEN AND  
LOTS 1-3 & & 7 DP 771051, PARISH OF  
WEETANGERA, SHIRE OF YASS  
VALLEY**

**Prepared by**

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3

**Version**

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under section 10 of the Planning Act.

**Asset Protection Zone**

has the same meaning as set out in the Planning for Bushfire Risk Mitigation General Code March 2008 contained in the Territory Plan, or such code, guidelines or other documents that replaces it from time to time.

**Consequent Lease**

means a Crown lease issued following an application for such a lease by the Territory under a Holding Lease.

**Commission**

means a commission payable to Corkhill, being 4.5% of the Sales Revenue.

**CPI**

means the Consumer Price Index for Canberra (All Groups) as published by the Australian Statistician (or such person or office which fulfils the relevant function fulfilled by the Australian Statistician at the date of this Heads of Agreement). In the event that the Consumer Price Index is adjusted (for example by changing the base index number or changing the year of the base index number), or there is any suspension or discontinuance of the Consumer Price Index by the Australian Statistician, then the Consumer Price Index will mean such index figure or statistic published at the relevant dates in the Australian Statistician's summary of Australian statistics which reflects fluctuations in the cost of living in Canberra and which the parties may mutually agree upon, and if they are unable to agree, then such index figure or statistic as may be determined by the President for the time being of the Australian Property Institute or some person nominated by the President whose decision will be conclusive and binding. This definition will apply notwithstanding that there may be significant changes over time in the composition and weighting of the items by reference to which the Consumer Price Index is calculated.

**CPI Adjustment**

means an adjustment made in accordance with the following formula:

$$AA = \$3,800,000 \times \frac{NCPI}{OCPI}$$

Where:

“AA” is the amount by which the Settlement Sum will be increased.

“NCPI” is the last published Consumer Price Index prior to the date that the Settlement Sum is paid.

“OCPI” is the Consumer Price Index as published immediately prior to July 2011.

**Deeds**

means the Development Management Deed, the Facilitation Deed, the Project Management Deed and the Marketing Deed.

**Design Costs**

means costs related to the planning and design of improvements and developments on the Land, including but not limited to costs associated with:

- (a) environmental surveys and reports;
- (b) master planning;
- (c) estate planning;
- (d) Development Applications;
- (e) utilities and infrastructure planning;
- (f) engineering and geotechnical reports; and
- (g) survey reports.

**Development Application**

means a development application as defined in the Planning Act in relation to the Land;

**Development Costs**

means costs related to the construction of improvements and developments on the Land, including but not limited to costs associated with:

- (a) construction materials;
- (b) contractor and sub-contractor fees;
- (c) engineering costs; and
- (d) certification costs.

**Development Management Deed**

means an agreement between the parties for the Rezoning, management and programming of the design of improvements to enable development of the Land, consistent with this Heads of Agreement.

**Development Management Fee**

means a management fee payable to Corkhill which is 1.5% of the Design Costs and Development Costs.

**Development Surplus**

means the amount by which the Sales Revenue exceeds the sum of the Project Costs and the Rezoned Land Value in respect of any Stage.

<b>EPBC Act</b>	means the <i>Environmental Protection and Biodiversity Conservation Act 1999</i> (Cth).
<b>Estate Development Plan</b>	means an estate development plan as defined in the Planning Act in relation to the Land.
<b>Facilitation Deed</b>	means an agreement between the parties governing the surrender of the Crown Lease for the Land, grant of Holding Leases and payment of the Incentive, consistent with this Heads of Agreement.
<b>Force Majeure</b>	includes: <ul style="list-style-type: none"> <li>(a) war, acts of terrorism, civil commotion, flood, storm, tempest, lightning strikes, and earthquakes;</li> <li>(b) a Territory-wide industrial dispute not directed at or caused or contributed to by the Corkhill or a related entity;</li> <li>(c) fire and explosions not caused by Corkhill; and</li> <li>(d) those circumstances beyond the reasonable control of Corkhill.</li> </ul>
<b>Heads of Agreement</b>	means this heads of agreement including all schedules, annexures and amendments.
<b>Holding Lease</b>	means a short-term Crown lease and attached deed of agreement issued by ACTPLA for the purposes of developing the Land.
<b>Incentive</b>	means a percentage of the Development Surplus payable to Corkhill in accordance with clause 13.
<b>Land</b>	means Blocks 1605 and 1606 Division of Belconnen.
<b>Land Development Agency</b>	means the Land Development Agency established under section 31 of the Planning Act.
<b>Marketing Costs</b>	means any costs associated with marketing and sale of any part of the Land under this Heads of Agreement and includes: <ul style="list-style-type: none"> <li>(a) advertising costs;</li> <li>(b) auction fees; and</li> <li>(c) real estate commissions,</li> </ul> but does not include any fees or commissions payable to either party arising from the sale of any

part of the Land.

<b>Marketing Deed</b>	means an agreement between the parties governing the sales and marketing of improvements and developments on the Land, consistent with this Heads of Agreement.
<b>Master Plan</b>	means the plan to be prepared according to clause 6, as amended from time to time.
<b>National Capital Plan</b>	means the <i>National Capital Plan</i> prepared in accordance with the <i>Australian Capital Territory (Planning and Land Management) Act 1988</i> (Cth) as amended and varied from time to time.
<b>NSW Land</b>	means Lots 1-3 and 7 in DP 771051, Parish of Weetangera, Shire of Yass Valley.
<b>Operational Acceptance</b>	means completion of works to the stage where the relevant authority certifies that the improvements and developments in a Stage are operational to the extent that they comply with the plans, specifications and requirements of the Holding Lease for the purposes of issuing Consequent Leases.
<b>Planning Act</b>	means the <i>Planning and Development Act 2007</i> (ACT).
<b>Preliminary Costs</b>	means those costs in relation to the development of the Land incurred to the date of this Heads of Agreement by Reid & Stevens.
<b>Project Costs</b>	means: <ul style="list-style-type: none"><li>(a) in respect of the project as a whole, the Preliminary Costs, costs of Rezoning, the Design Costs, the Development Costs and the Marketing Costs together;</li><li>(b) in respect of any Stage:<ul style="list-style-type: none"><li>(i) all Design Costs, Development Costs and Marketing Costs directly attributable to that Stage; and</li><li>(ii) a proportion of the Preliminary Costs, Design Costs, Development Costs and Marketing Costs which are not directly attributable to any Stage, calculated as the proportion of the Usable Land in that Stage compared to the total Usable Land; and</li></ul></li></ul>

	(c) interest on loans financing the development.
<b>Project Management Deed</b>	means an agreement between the parties governing the construction and delivery of improvements and developments on the Land, consistent with this Heads of Agreement.
<b>Project Management Fee</b>	means a project management fee payable to Corkhill which is 2% of the Design Costs and Development Costs.
<b>Project Objectives</b>	means the statement of project objectives which is Annexure E.
<b>Rezoning</b>	means the rezoning of the Land contemplated by clause 7.
<b>Rezoned Land Value</b>	means the value of the Land following the amendments to the Territory Plan and the National Capital Plan contemplated in clause 7, prior to the construction of any improvements or developments on the Land contemplated by this Heads of Agreement.
<b>Sales Revenue</b>	means the sum of all sale prices (including GST) for the Consequent Leases in any particular Stage.
<b>Stage</b>	means a discrete portion of the Land to be developed under an Estate Development Plan as determined by the Territory consistent with this Heads of Agreement.
<b>Stage Costs</b>	means the Project Costs in respect of any Stage.
<b>Steering Committee</b>	means the committee, established consistent with this Heads of Agreement, overseeing day to day management of the project.
<b>Surrender Sum</b>	means an amount of \$3.8 million plus CPI Adjustment plus GST.
<b>Switching Station</b>	means a 330 kV/132 kV electricity substation.
<b>Tentative Staging Plan</b>	means the plan at Annexure B.
<b>Territory</b>	means: <ul style="list-style-type: none"> <li>(a) when used in a geographical sense, the Australian Capital Territory; and</li> <li>(b) when used in any other sense, the body politic established by section 7 of the <i>Australian</i></li> </ul>

*Capital Territory (Self-Government) Act 1988*  
(Cwlth) and it includes any department,  
agency or other body of that body politic;

- Territory Plan** means the *Territory Plan 2008* as amended and varied from time to time.
- Transgrid** means the corporation known as Transgrid created under the *Energy Services Corporations Act 1995 No 95 (NSW)*.
- Usable Land** means the total amount of the Land which is available for development under this Heads of Agreement, but does not include any part of the Land which is not available for development due to:
- (a) the effects of the Switching Station (including setbacks and other limitations); and
  - (b) environmental requirements.

## 1.2 General

In this Heads of Agreement, unless a contrary intention is expressed:

- (1) references to legislation or to provisions in legislation include references to amendments or re-enactments of them and to all regulations and instruments issued under the legislation;
- (2) words importing a gender include the others; words in the singular number include the plural and vice versa; and where a word or phrase is given a particular meaning, other parts of speech and grammatical forms of that word or phrase have corresponding meanings;
- (3) “include” is not to be construed as a word of limitation;
- (4) headings have no effect on the interpretation of the provisions; and
- (5) an obligation imposed by this Heads of Agreement on more than one person binds them jointly and severally.

## 2. Binding Heads of Agreement

The parties agree and acknowledge that this Heads of Agreement is binding upon all parties.

## 3. Project

- 3.1 The parties agree to develop the Land in accordance with the Project Objectives.
- 3.2 The Territory acknowledges Reid & Stevens' intention to develop the NSW Land in conjunction with the Land and the Territory must allow and facilitate the construction of service infrastructure and provide access to relevant services to enable Reid & Stevens to develop the NSW Land in a similar manner to the Land.

- 3.3 The Territory acknowledges that Corkhill will incorporate a range of special purpose vehicles for the purposes of undertaking development of the Land and agrees that Corkhill or a related entity will provide consultancy services for:
- (1) the design of infrastructure and improvements on the Land in accordance with the Project Management Deed;
  - (2) the development of the Land in accordance with the Facilitation Deed;
  - (3) management of the development of the Land in accordance with the Development Management Deed; and
  - (4) sales and marketing services in accordance with the Marketing Deed.
- 3.4 The parties agree that they are not partners, members of a joint venture or otherwise related parties beyond the terms of this Heads of Agreement, the Development Management Deed, Facilitation Deed, Project Management Deed and the Marketing Deed.

#### **4. Electricity Switching Station**

- 4.1 The parties agree and acknowledge that the Territory, for infrastructure security purposes, requires the construction of the Switching Station for the purposes of ensuring continuity of electricity supply to the Territory.
- 4.2 The parties agree that they will make reasonable efforts, consistent with the Territory's obligations to ensure adequate infrastructure in the Territory, to have the Switching Station constructed at one of the following locations in descending order of priority:
- (1) Location 1;
  - (2) Location 2;
  - (3) Location 3; and
  - (4) an alternate site suitable to the Territory, Corkhill and Transgrid should assessment of the above options demonstrate they are not suitable,
- as set out on the map in Annexure A.

#### **5. EPBC Act**

- 5.1 The parties acknowledge that the Land contains habitats for a number of protected species and that development on the Land will require the approval of the Commonwealth in accordance with the EPBC Act.
- 5.2 The parties agree that Corkhill will undertake a strategic assessment under Part 10 of the EPBC Act, with the view to seeking Ministerial adoption of a plan/program to be undertaken for the River Corridor Area and Box Gum Woodland Area identified on the plan which is Annexure A.

#### **6. Master Plan**

- 6.1 Corkhill will prepare a Master Plan for the whole of the Land which will contain:
- (1) proposed zonings for the Land;

- (2) the main service lines for water, gas, electricity and other utilities; and
- (3) the major roads and other transport routes within the land.

6.2 Corkhill will also prepare:

- (1) a preliminary estimate of the costs of undertaking all works contemplated in each Stage identified in the Master Plan in current dollars;
- (2) an estimate of the total Gross Sales Revenue from the sale of all Consequent Leases contemplated in the Master Plan; and
- (3) an indicative timeline for the staging of all works, including a tentative order for the development of each Stage.

6.3 Following preparation of the Master Plan and supporting documents the Territory will review and advise Corkhill of any changes to the Master Plan required.

## **7. Changes to the Territory Plan and National Capital Plan**

7.1 Either following the drafting and preparation of the Master Plan by Corkhill, or as a parallel process, the parties will make all reasonable efforts to seek amendment of both the Territory Plan and the National Capital Plan in a manner consistent with the Master Plan.

7.2 For the avoidance of doubt, any required changes to the Territory Plan will be made in the ordinary manner specified in the Planning Act, including all necessary consultation, environmental and other studies. Nothing in this Heads of Agreement purports to bind the Territory, as the government of the Territory, to make any changes to the Territory Plan to accord with the Master Plan.

## **8. Asset Protection**

8.1 Corkhill will grant a bushfire easement and an infrastructure protection easement over the NSW Land in favour of the Territory.

8.2 Corkhill will also grant to the Territory a positive covenant over the NSW Land that will provide an Asset Protection Zone in NSW to abut the ACT/NSW border so as to protect access to and development of the Enabling Land from bushfires. The Asset Protection Zone will be on the NSW Land, meet all relevant Territory bushfire policy requirements and enable access for bushfire management and control.

8.3 The bushfire easement and the infrastructure protection easement will allow for development on the NSW Land and the positive covenant will lapse when the NSW Land is developed. Such an adjustment will only be to the extent that continued protection from bushfires is provided to the Enabling Land.

8.4 The infrastructure easement will be located on the western and northern boundary of the NSW land within the Asset Protection Zone and riparian corridor. The purpose of this easement is to restrict extension of any Territory provided infrastructure beyond the NSW Land.

## **9. Transfer of Land**

9.1 Following the Rezoning of the Land, Corkhill will do all things necessary and convenient to surrender the Crown leases over the Land for the Surrender Sum and the

Territory will pay to Corkhill the Surrender Sum.

- 9.2 For the avoidance of doubt, the parties agree that, regardless of the outcome of the parties' applications to have the Territory Plan and National Capital Plan amended to reflect the requirements of the Master Plan, the parties will proceed with the development of the Land in accordance with the Master Plan to the extent possible and agree to negotiate in good faith with respect to any changes to the documents arising out of the Rezoning.
- 9.3 As soon as reasonably possible following the Rezoning, the parties will determine the Rezoned Land Value either by agreement or by engaging a suitably qualified valuer.
- 9.4 As soon as possible after the surrender of the Crown leases over the Land by Corkhill, the Land Development Agency will apply for one or more Holding Leases for the purposes of developing the Land in accordance with the Master Plan.
- 9.5 The terms of the Holding Leases will be agreed between the Territory and the Land Development Agency, in consultation with Corkhill, sufficient to allow works consistent with the Master Plan (subject to any constraints arising from the Rezoning) to be carried out on the Land.
- 9.6 The Territory must grant a licence to Reid & Stevens at an agreed nominal fee to graze livestock and manage the Land, including fire hazard reduction on the balance of the Land not yet required for development. The area subject to this licence will reduce over time as the development progresses, the Land required for subsequent Stages being vacated with 3 months' notice from the Territory.

## **10. Staging and Detailed Design**

- 10.1 The parties will enter into the Development Management Deed for the purpose of the Rezoning and designing and programming the development of the improvements on the Land consistent with the Master Plan.
- 10.2 The Development Management Deed will make provision for at least the following matters:
  - (1) the Rezoning;
  - (2) engaging relevant consultants;
  - (3) preparing feasibilities;
  - (4) the dividing of the Land into Stages broadly consistent with the Tentative Staging Plan unless otherwise agreed by the parties;
  - (5) the process for detailed design by Corkhill for each of the Stages including a detailed Estate Development Plan setting out:
    - (a) all proposed Consequent Leases;
    - (b) all roads;
    - (c) all infrastructure;
    - (d) detailed costings;
    - (e) a detailed timeline including clear milestones for the development of each stage;
  - (6) the process for lodging Development Applications with ACTPLA in respect of

each stage or part thereof;

- (7) the process for costing the estimated works in respect of the improvements contemplated in the Development Application for each Stage; and
  - (8) a timeline for the development of each Stage.
- 10.3 The Territory agrees that it must not permit the issue of Consequent Leases for residential purposes for any part of the Parkwood Land (as shown on the plan which is Annexure A) until such time as Consequential Leases are issued for the Enabling Land (as shown on the plan which is Annexure A). For the avoidance of doubt:
- (1) the intention of this clause 10.3 is to ensure that large-scale subdivision and residential development of the Parkwood Land does not occur until the equivalent of Operational Acceptance (in NSW) of the NSW Land has been achieved; and
  - (2) this clause 10.3 does not prevent the development of two (2) residences on Block 1329 Division of Belconnen or any block created by subdivision of that block.
- 10.4 Reid & Stevens agrees that it must not market for sale the NSW Land until Operational Acceptance for Stages F, G and H as shown in the Tentative Staging Plan has been achieved.

## **11. Project Management Deed**

- 11.1 The parties will enter into a Project Management Deed appointing Corkhill as the project manager for the delivery of the Land in accordance with the Master Plan.
- 11.2 The Project Management Deed will address the obligations of Corkhill to:
- (1) engage appropriate subcontractors and manage them to undertake the development of each Stage including any milestones and hold points;
  - (2) report back to the Territory through the Steering Committee;
  - (3) provide full cost estimates at each Stage; and
  - (4) provide timeframe estimates for each Stage.
- 11.3 Corkhill is entitled to receive the Project Management Fee under the Project Management Deed.

## **12. Project Costs**

- 12.1 From the date of this Heads of Agreement, the Territory will be responsible for all Project Costs including but not limited to costs associated with:
- (1) all Preliminary Costs;
  - (2) any environmental studies;
  - (3) legal issues including but not limited to constitutional, environmental and planning requirements;
  - (4) surveying the Land;
  - (5) master planning and design studies;

- (6) costs associated with preparation of the Master Plan, proportioned to the part of the Master Plan that relates to the Land (but not the NSW Land);
  - (7) all design costs associated with the planning and staging of the works on the Land;
  - (8) all Development Application costs including any appeals or other disputes (not including disputes between the Territory and Corkhill);
  - (9) all planning and associated costs with each Stage including costs associated with preparation of Estate Development Plans;
  - (10) all costs of infrastructure and other improvements on the Land contemplated by this Heads of Agreement;
  - (11) all sales, marketing and auction costs,
- and this will be documented in the Development Management Deed.

12.2 To the extent that the Preliminary Costs are agreed prior to the execution of this Heads of Agreement, the Territory will pay those agreed Preliminary Costs to Reid & Stevens within thirty (30) days of execution of the Heads of Agreement.

12.3 To the extent that not all the Preliminary Costs are agreed prior to the execution of this Heads of Agreement, the Territory will pay that amount of the Preliminary Costs which are agreed to Reid & Stevens within 10 Business Days of execution of this Heads of Agreement with the balance to be paid within thirty (30) days of the date those outstanding Preliminary Costs are agreed or otherwise determined by an arbiter in accordance with clause 17.

12.4 The following costs are not Project Costs and Corkhill will not be entitled to lodge a claim in relation to them:

- (1) costs directly or indirectly resulting from any works or infrastructure required for cross-border development. To the extent that any infrastructure required for the development of the Land needs to be upgraded or built to higher specifications to meet the anticipated requirements of the development of the NSW Land by Reid & Stevens, the Territory will only pay the costs of the infrastructure necessary for the development of the Land. An example is set out in Annexure C.
- (2) any costs of Corkhill arising out of disputes with the Territory or any subcontractors, save where the Territory is ordered to pay those costs either by a court or an expert in a binding arbitration;
- (3) any costs associated with the termination of any part of the services provided by Corkhill unless otherwise provided for in this Heads of Agreement;
- (4) any costs arising out of any mistake, error, miscalculation, rework, delay or other similar matter by Corkhill or any contractor, employee or other person under the control or direction of Corkhill; or
- (5) any costs arising out of any breach of any obligation by Corkhill to either the Territory or the LDA in respect of the Heads of Agreement or any of the documents contemplated by it.

12.5 Project Costs will be apportioned to each Stage as Stage Costs.

12.6 The Territory will not be required to pay any costs incurred by Corkhill, nor will such

costs be treated as Project Costs, where those costs are incurred but not approved or otherwise agreed to by the Territory through the Steering Committee or otherwise.

- 12.7 Stage Costs will be paid on a regular ongoing basis at intervals determined by the Steering Committee or as determined by an arbiter under clause 17 if the Territory and Corkhill are unable to agree on a methodology for payment.
- 12.8 Corkhill is entitled to the Development Management Fee for performing its obligations under the Development Management Deed.

### **13. Incentive**

- 13.1 Corkhill will be entitled to payment of the Incentive under the Facilitation Deed.
- 13.2 In respect of each Stage, the Incentive will be either the amount payable under subclause 13.3 or 13.4.
- 13.3 Where the Development Surplus is 25% or less of the sum of the Stage Costs and the Rezoned Land Value (in respect of the Stage), Corkhill will receive 10% of the Development Surplus.
- 13.4 To the extent that the Development Surplus exceeds 25% of the sum of the Stage Costs and the Rezoned Land Value (in respect of the Stage), Corkhill will receive the amount set out in clause 13.3 plus 90% of the remaining Development Surplus.

An example is set out in Annexure D.

### **14. Security and Financing**

- 14.1 All Project Costs which are payable by the Territory will be funded by direct payments from the Territory to Corkhill or to the party undertaking the works.
- 14.2 The parties acknowledge that the Territory, in its absolute discretion, may secure any part of the Land subject to a holding lease to obtain finance in relation to carrying out the activities contemplated under this Heads of Agreement. For the avoidance of doubt, the Territory must not use any funds secured by the Land to carry out any activities not directly or indirectly related to the development of the Land without the approval of Corkhill.

### **15. Sales and Revenue**

- 15.1 Following Operational Acceptance of any Stage or part of the Stage, the Territory and Corkhill will do all things necessary to apply for Consequent Leases for the purposes of selling or otherwise disposing of them.
- 15.2 The sales and marketing of the Consequent Leases realised from the Land will be the subject of the Marketing Deed which will contain at least the following provisions:
  - (1) the preparation of an annual business plan for sales and marketing;
  - (2) the Territory's right to determine the timing of sales;
  - (3) the Territory's right to determine the method of sale including tender, auction or direct sale;
  - (4) the types of offerings including offering multiple blocks under a single contract of sale;

- (5) the choice of sales;
- (6) Corkhill's right to receive the Commission, payable at the time of completion of the sale of the same;
- (7) the Territory's right to prepare contracts of sale and engage appropriate agents and contractors to carry out the sale,
- (8) the distribution of Sales Revenue following the sale of Consequent Leases and realising of profits in the following manner:
  - (a) aside from commissions directly payable to Corkhill and agents for the purposes of completing sales and payment of GST, all Sales Revenue should be paid to the Territory in the first instance. The Territory will use the Sales Revenue to repay any finance it has obtained in relation to the development of the Land as soon as possible;
  - (b) the remainder of the Sales Revenue will be held for distribution at regular intervals with an amount equal to 7% of the Rezoned Land Value in respect of the Stage being paid to Corkhill and the balance being paid to the Territory. Payment of distributions will occur at points agreed between the parties or, failing agreement, on quarterly basis; and
  - (c) the Territory will not be required to account to Corkhill for any interest accrued prior to the payment of any distributions.

15.3 Subject to clause 18.5, the parties agree that the Territory may refrain from distributing the proceeds or any part of the proceeds of sale and apply those funds towards future works contemplated under this Heads of Agreement.

## **16. Project Control**

16.1 The parties agree that the Development Management Deed, Facilitation Deed, Project Management Deed and Marketing Deed will set out the overall responsibility and management of aspects of the project consistent with the following agreed principles:

- (1) day to day oversight and management of the project will be controlled by the Steering Committee consisting of:
  - a. 2 members of the LDA; and
  - b. 2 members of Corkhill and/or Reid & Stevens.
- (2) the Steering Committee will meet on a regular basis, no less than once per month, and such meetings will be attended by all members of the Steering Committee and such experts and other professionals or consultants as either party believes is necessary;
- (3) the Steering Committee will be chaired by an independent Chairman appointed by the parties or, if the parties are unable to agree on a Chairman, appointed by the President of the Master Builders' Association, ACT. The term of the Chairman will be for a period of 2 years unless removed at the consensus of the parties;
- (4) the Chairman of the Steering Committee will be entitled to a fee for service on terms comparable with similar positions and such fees will be a Project Cost; and

- (5) the Steering Committee's role is advisory only and it has no power to bind either party under the Facilitation Deed, the Project Management Deed, the Development Management Deed or the Marketing Deed.
- 16.2 The following matters will be standard agenda items which the Steering Committee must consider at each monthly meeting unless specifically agreed otherwise:
- (1) the progress of the project and any particular Stages which are currently under construction;
  - (2) any variations to staging, timeframes or costs;
  - (3) any claims for costs, expenses, variations, delays etc in respect of any developments contemplated under this Heads of Agreement; and
  - (4) any disputes between the parties and any other design, construction or marketing issues.

## **17. Disputes and Arbitration**

- 17.1 To the extent that there are any deviations between the plans and/or timetables and/or cost estimates prepared by Corkhill and the actual costs/timeframes incurred in designing and/or developing any Stage, Corkhill must provide details of such deviations on a regular basis, generally at the monthly Steering Committee meetings.
- 17.2 To the extent that any cost results from deviations which do not arise as result of matters beyond the reasonable control of Corkhill, the Territory will not be required to pay such amounts as Project Costs unless it has specifically agreed to such costs prior to the costs being incurred;
- 17.3 To the extent that any disputes arise they will be dealt with in the following manner:
- (1) in the first instance the parties will attempt to resolve the issues as part of the Steering Committee discussion;
  - (2) if the parties cannot resolve the matter as part of a Steering Committee discussion, either party may refer the matter for arbitration to an arbiter either selected by the party or, if parties are unable to select or agree on an arbiter, such arbiter may be appointed by the President of the Master Builders' Association, ACT at the time the dispute arises;
  - (3) the decision of the arbiter in relation to any disputed matter shall be final and binding save for:
    - (a) errors of law;
    - (b) misfeasance, misrepresentation or other wrong doing by either party or the arbiter; or
    - (c) manifest error on the face of the decision by the arbiter; and
  - (4) the arbiter will have the power to award costs at its discretion and unless otherwise determined the costs of arbitration will be a Project Cost.

## **18. Termination**

### **18.1 Breach**

Either party may terminate the Development Management Deed, the Project Management Deed or the Marketing Deed where the other party has committed a breach:

- (1) that is incapable of remedy or where damages is not an adequate remedy; or
- (2) that is capable of remedy, but the breach has not been remedied within a reasonable time of the breaching party being notified to do so.

### **18.2 Termination for Convenience**

The Territory may terminate the Marketing Deed for convenience at any time upon giving notice. If the Marketing Deed is terminated in accordance with this clause, Corkhill will still be entitled to the Commission payable on Consequential Leases sold but not settled at that time.

### **18.3 Termination for underperformance**

The Territory may terminate the Project Management Deed for underperformance following any Stage if the actual costs or development timeframes for the Stage exceed the estimated costs or development timeframes for the Stage by 5% or more other than as a result of Force Majeure or any breach of contract or delay caused by Territory.

### **18.4 Payment of costs**

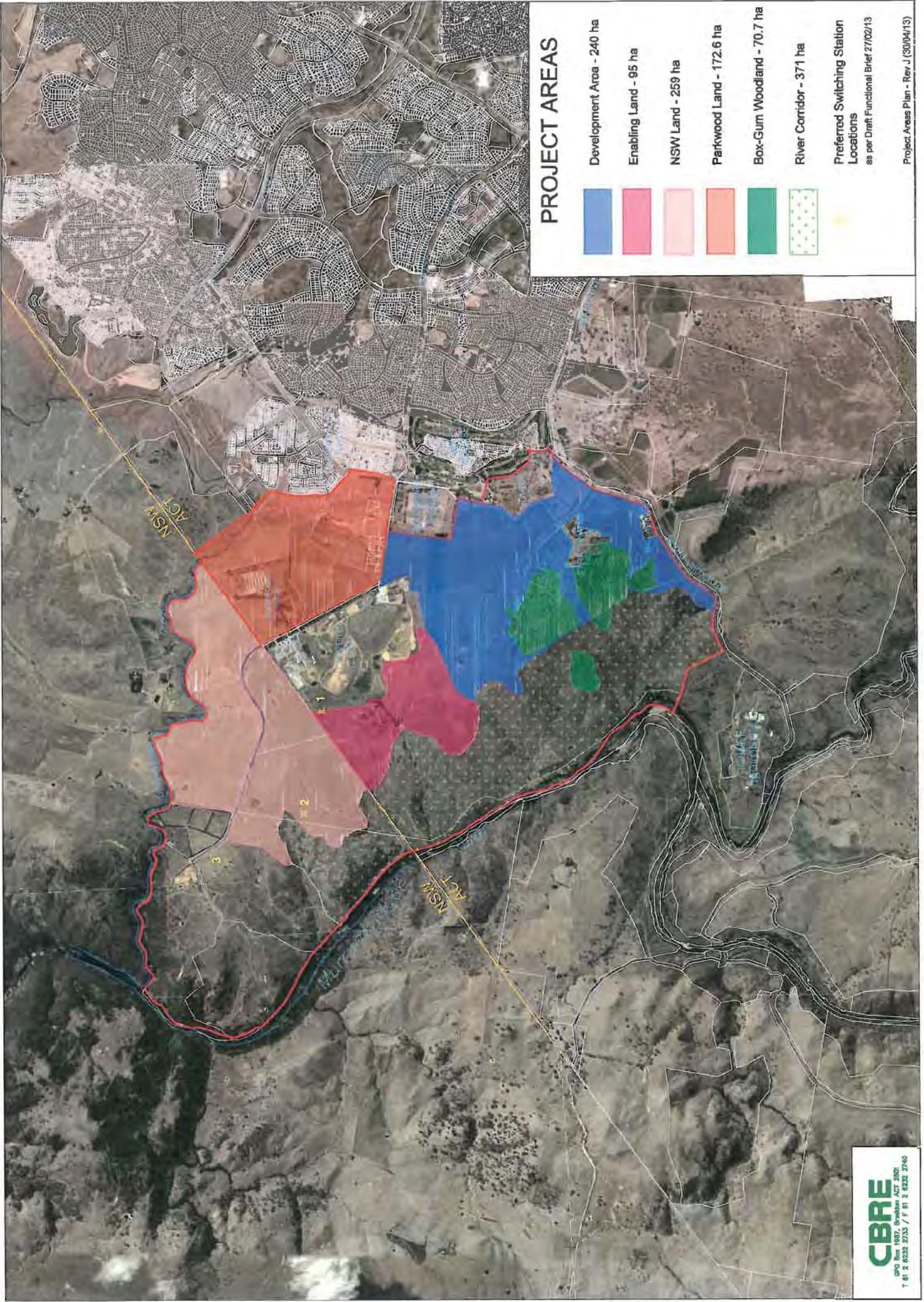
- (1) In relation to termination for convenience or underperformance in accordance with clause 18.2 or clause 18.3, the Territory will pay Corkhill's reasonable costs of disengagement from that Deed, subject to Corkhill's general duty to mitigate its costs.
- (2) Neither party will pay indirect or consequential costs arising from termination for convenience or underperformance, including but not limited to loss of expected profits and/or loss of Incentives.

### **18.5 Corkhill's Land entitlement**

Notwithstanding the termination of any or all of the Deeds, Corkhill will remain entitled to 7% of the Rezoned Land Value pursuant to the Facilitation Deed in respect of any sales of Consequent Leases from the Land, payable on and from the settlement of those sales.

## **ANNEXURE A – Plan of Development Site**

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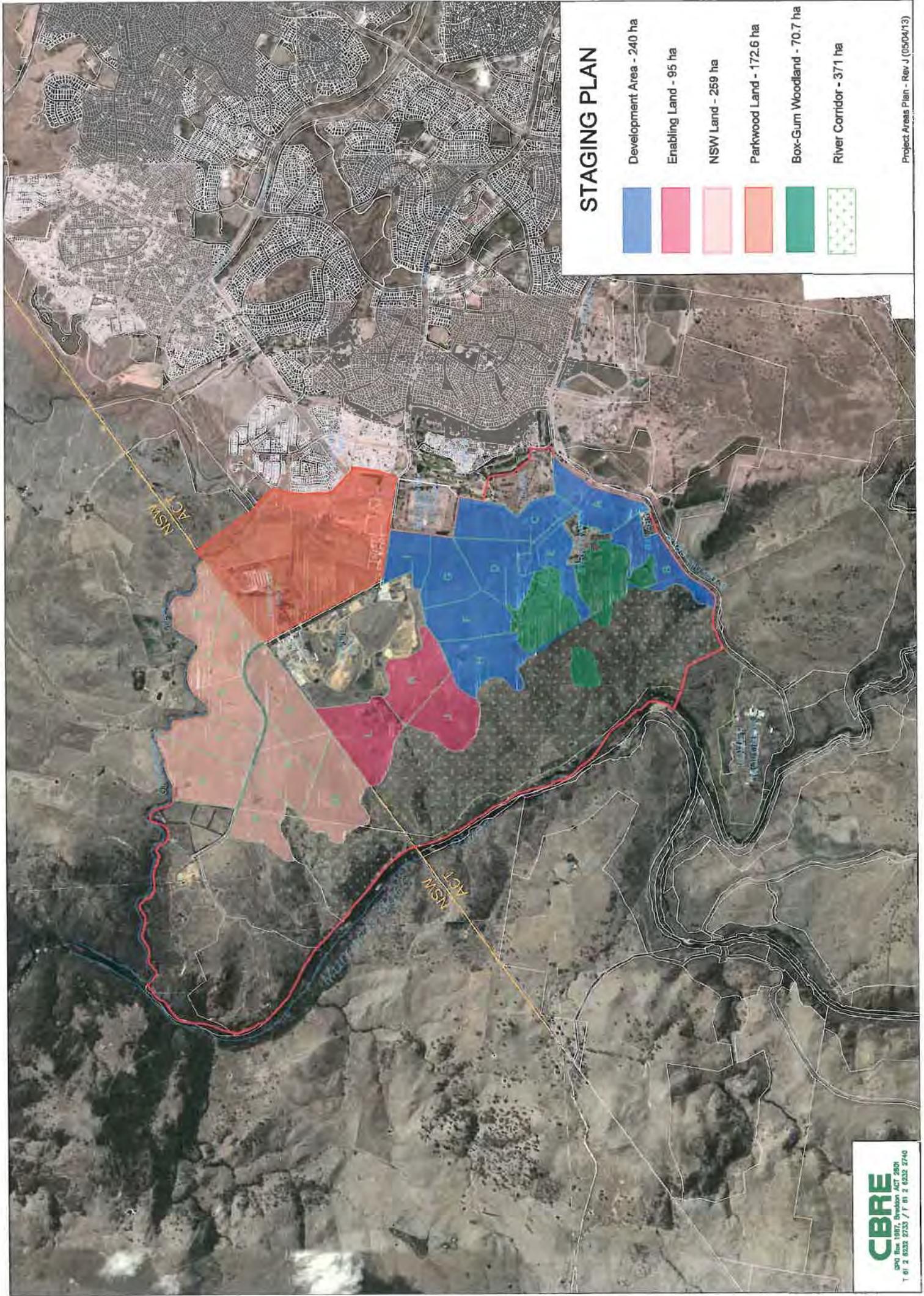
# PROJECT AREAS

- Development Area - 240 ha
- Enabling Land - 95 ha
- NSW Land - 259 ha
- Parkwood Land - 172.6 ha
- Box-Gum Woodland - 70.7 ha
- River Corridor - 371 ha
- Preferred Switching Station Locations as per Draft Functional Brief 27/02/13

Project Areas Plan - Rev. J (30/04/13)

## **ANNEXURE B – Tentative Staging Plan**

---



# STAGING PLAN

- Development Area - 240 ha
- Enabling Land - 95 ha
- NSW Land - 259 ha
- Parkwood Land - 172.6 ha
- Box-Gum Woodland - 70.7 ha
- River Corridor - 371 ha

## **ANNEXURE C – Example of cost split for cross-border development**

Example of calculating costs of cross-border development:

In order to develop the Land, the Territory requires Xmm conduits at a cost of \$6 million. However, to provide sufficient capacity for development of the NSW Land, a Ymm conduit is required at a cost of \$7 million.

Corkhill Costs = \$7 million - \$6 million = \$1 million

Corkhill bears the extra over cost of the conduit only and does not bear the additional labour, transport, trenching or other costs associated with the use of the Ymm conduit.

## ANNEXURE D– Example of incentive calculation

Below is an illustrative example of the treatment of the Development Surplus under the arrangements included within the Statement of Commercial Terms and amended to reflect no collateral fee. It should be noted that the example below is illustrative only and does not reflect actual or anticipated costs or returns of the proposed development.

Under this approach, for each superlot development (estimated 400 lot subdivision) the development surplus would be calculated. Where this development surplus is 25% or less the ACT Government will receive 90 per cent of the surplus with the remaining 10 per cent distributed to Corkhill. Where the development surplus is greater than 25% each additional dollar of surplus above the 25 % will be distributed 90 per cent to Corkhill and the remaining 10 per cent to the ACT Government.

If under the first stage of development there were a \$61.2 million total cost (comprising \$41.2 million project costs including interest charges and \$20 million land value) against a total return from lease sales of \$76.5 million, the development surplus would be \$15.3m or 25% on total cost, including land.

**Table 1. Illustrative project cost and return**

	(Smillion)
Land Value	\$20.0
Project Cost	\$41.2
<b>Total Cost</b>	<b>\$61.2</b>
<b>Total Return</b>	<b>\$76.5</b>
Development Surplus	\$15.3
Development surplus (% of total cost)	25%

# Note in the Fife Capital Statement of Commercial terms a collateral fee of \$1.2 million is proposed, (calculated as 3% of total cost). This is no longer applicable as the \$1.2 million has been added to the project costs as an interest payment to the Territory.

Of the \$15.3 million surplus (given it equates to a 25% return on total costs), 90 per cent would be attributed to the ACT Government (\$13.77 million) and 10 per cent to Corkhill (\$1.53 million).

However, if the development surplus were to exceed a development margin of 25 per cent, every additional dollar of surplus would be distributed on the basis of 90 per cent to Corkhill and 10 per cent to the ACT Government.

For example, if Total Costs were lower (or Total Returns were higher) the development surplus would be higher and the development surplus margin higher. If the surplus were higher at say \$18.6 million the surplus would be 30% of total costs (total costs unchanged). In this situation: \$13.77 million of the surplus would be distributed 90 per cent ACT Government, and \$1.53m or 10 per cent Corkhill.

The remaining surplus above the \$15.3 million would be distributed on a basis of 90 per cent to Corkhill and 10 per cent by the ACT. This is illustrated in Table 2 below.

**Table 2. Distribution of development surplus above 25 per cent development surplus margin**

	(\$ million)
Surplus (30% of Total Cost)	\$18.36
Total Return (Total + Surplus)	\$79.56
<hr/>	
<b>Surplus Distribution up to 25% margin</b>	
Amount Received by ACT Government (90%)	\$13.77
Amount Received by Riverview Group (10%)	\$1.53
<b>Surplus distribution – remaining surplus above 25% margin</b>	<b>\$3.06</b>
Amount Received by ACT Government (10%)	\$0.306
Amount Received by Riverview Group (90%)	\$2.754
<b>Total Received by ACT Government</b>	<b>\$14.076</b>
<b>Total Received by Riverview Group</b>	<b>\$4.284</b>
<b>Total Surplus Distributed</b>	<b>\$18.36</b>

---

## **ANNEXURE E – Project Objectives**

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## The Belconnen Project Sustainability Vision

“Creating a sustainable community of international significance in the Nation’s capital region.”

The Riverview Group, working with the ACT and NSW Governments, will develop the site at Belconnen to achieve a vision of inspiring sustainable living, development practice and awareness. Achieving a high quality of life for the people living at Belconnen is at the heart of our project planning and design.

We will create a community that exemplifies World’s Best Practice in its design, construction and long-term liveability. As a model of sustainable community living it will be a place and community that can be showcased throughout Australia and internationally.



### Project objectives:

To achieve our Vision we will challenge conventional industry thinking. We will employ practices, processes and systems that embody innovation and design excellence.

This project has been conceived and will be delivered on a fully integrated and audited triple bottom line basis.

Our project will:

- » Be sustainable over time, socially, economically and ecologically (with a low and reducing ecological footprint)
- » Respond to the local and global environment
- » Provide for future beneficial change to occur in design, infrastructure and regulatory mechanisms
- » Be cost effective, replicable and measurable
- » Act as a new model that others can follow.

## Guiding Principles for Sustainable Results

The principles below will direct decision-making by all project management, sub-consultants and referral agencies in the delivery and development of the Belconnen site. They reflect national priorities and Federal, State and Territory Government policies on housing affordability, climate change and environmental protection.

### PARTNERING PRINCIPLES

- Ptnr 1. Partnering is essential to this project and the scale and timeframe will allow for positive partnerships to grow and thrive
- Ptnr 2. Partnering with public agencies is a cornerstone of our approach
- Ptnr 3. Engaging the community in design and governance is fundamental to the delivery of the project.
- Ptnr 4. Designing the project for community ownership and ultimate community control
- Ptnr 5. Supporting community housing through public and private partnering arrangements
- Ptnr 6. Collaborating with research and educational institutions to drive innovation.

### EVALUATION PRINCIPLES

- Eva 1. Identifying and delivering realistic and costed initiatives
- Eva 2. Providing independent peer review of project proposals and project outcomes
- Eva 3. Using recognised international and national benchmarks for sustainability performance to publicly report and raise awareness of project outcomes
- Eva 4. Empowering resident and community monitoring and management of sustainability performance
- Eva 5. Encouraging a culture of continuous improvement.

### ECOLOGICAL PRINCIPLES

- Eco 1. Acknowledging the intrinsic value of all species and the special role and regional significance of the Murrumbidgee river corridor and Gininderra Creek
- Eco 2. Respecting and supporting the ecosystem functions of air, soil and water, recognising the importance of living and non-living environmental resources
- Eco 3. Reducing greenhouse gas emissions through innovative products and place design, material selection and service provision
- Eco 4. Recognising our natural ecological limits and minimising our resource, water and energy consumption
- Eco 5. Using existing local infrastructure to deliver efficient renewable services and reusable resources
- Eco 6. Enhancing local opportunities for food production and production of materials
- Eco 7. Fostering a deep sense of respect for and connection to the land, flora and fauna.

### SOCIAL AND CULTURAL PRINCIPLES

- Soc 1. Respecting and honouring Aboriginal and non-Aboriginal cultural, historical and spiritual values, including integrating with the existing rich, social fabric of Belconnen
- Soc 2. Designing for social equity, affordability, diversity and interdependence, honouring differences and catering for the needs of individuals through all stages of life
- Soc 3. Maximising health, safety and comfort of the built environment to provide enduring quality of life
- Soc 4. Instilling awareness and supporting education of sustainability values, technology and lifestyles
- Soc 5. Using creative and robust design solutions to create a continuing sense of place and beauty that inspires, affirms and ennobles
- Soc 6. Designing neighbourhoods that support and encourage community interactions through imaginative, functional and enjoyable public spaces

### ECONOMIC PRINCIPLES

- Econ 1. Delivering a financial return to the ACT Government recognising their sovereign interest in the land
- Econ 2. Recognising the opportunities provided by the project's scale and low capital base to achieve high-level sustainability outcomes while delivering profitability to joint venture partners
- Econ 3. Building on existing local infrastructure
- Econ 4. Ensuring long-term economic viability through design excellence and community building
- Econ 5. Minimising obsolescence through design of enduring component life cycle, allowing for disassembly and change
- Econ 6. Integrating with the Belconnen commercial, retail and employment networks
- Econ 7. Growing a formal and informal green economy that fosters local jobs and builds regional learning around green innovation and technology

DATE OF THIS AGREEMENT \_\_\_\_\_ 2013

**SIGNED** for and on behalf of the )  
**AUSTRALIAN CAPITAL TERRITORY** )  
in the presence of: )

.....  
Signature of witness

.....  
Signature of Territory delegate

.....  
Print name

.....  
Print name

**SIGNED** for and on behalf of )  
**CORKHILL BROS PTY. LIMITED** )  
**ACN 008 431 043** )  
in the presence of:

.....  
Signature of Recipient or authorised officer\*  
\*delete whichever is not applicable (see note below)

.....  
Signature of witness

.....  
Print name and position

.....  
Print name

.....  
Signature of second authorised officer\*  
\*see note below

.....  
Print name and position



**SIGNED** for and on behalf of  
**REID & STEVENS PTY. LIMITED**  
**ACN 008 445 994**  
in the presence of:

)  
) .....  
) **Signature of Recipient or authorised officer\***  
\*delete whichever is not applicable (see note below)

.....  
Signature of witness

.....  
Print name and position

.....  
Print name

.....  
**Signature of second authorised officer\***  
\*see note below

.....  
Print name and position



**Note:**

- Date:** Must be dated on the date the last party signs the Agreement or, if signed counterparts of the Agreement are exchanged, the date of exchange. Also date the cover page.
- Individual:** Must be signed by the individual Consultant and witnessed.
- Incorporated Association:** Must be signed in accordance with the Consultant's constitution, which may or may not require the common seal to be affixed. As a minimum, 2 authorised officers must sign.
- Company:** Must be signed in accordance with section 127 of the *Corporations Act 2001* (Cwlth), for example, by 2 directors or a director and a secretary. Common seal may be affixed if required under the Consultant's constitution.

**From:**  
**To:** [Terrplan](#)  
**Subject:** RE: Draft Consultation Plan - West Belconnen SEA  
**Date:** Thursday, 20 March 2014 2:36:44 PM  
**Attachments:** [140320 DRAFT West Belconnen Consultation Plan & stakeholders.pdf](#)

---

Hannes

Please see attached

I have attached a schedule of stakeholders to the consultation plan. Please contact me if you need anything further.

Regards

---

**From:** Botha, Johannes [mailto:Johannes.Botha@act.gov.au] **On Behalf Of** Terrplan  
**Sent:** Thursday, 20 March 2014 11:31 AM  
**To:**  
**Subject:** Draft Consultation Plan - West Belconnen SEA

Dear

Thank you for submitting the draft consultation plan for the West Belconnen Strategic Environmental Assessment, as prescribed by the Planning and Development Regulation 2008. We are currently assessing the engagement mechanisms described in the plan, and hope to get executive approval for it soon. However, the Planning and Development Regulation (s15(2)) also prescribes that a list of stakeholders must be provided. Could you please add the list to the draft plan?

Regards

Hannes Botha  
**Phone 02 6207 1773** |  
**Territory Plan Section** | Environment and Sustainable Development | **ACT Government**  
Dame Pattie Menzies House, Challis Street, Dickson | GPO Box 158 Canberra ACT 2601 | [www.environment.act.gov.au](http://www.environment.act.gov.au)

---

**From:** Kaucz, Alix  
**Sent:** Wednesday, 19 March 2014 10:13 AM  
**To:** Botha, Johannes  
**Subject:** FW: draft SEA scoping letter

---

**From:**  
**Sent:** Friday, 14 March 2014 6:58 AM  
**To:** Kaucz, Alix  
**Cc:** Gianakis, Steven; Noack, Bronwyn; McEvoy, Justin;  
**Subject:** RE: draft SEA scoping letter

Alix,

The draft scoping letter is generally in line with the discussions that have been held to date and the suggested amendments and additions to the PRA are all readily implementable.

I suggest that a fourth dot point be added on the first page top read as follows:

*“Ideally a single report will be prepared to serve all three processes to minimise the complexity of the process especially when it is the public realm. We understand that this has been agreed with the NCA and will be discussed with the Commonwealth.”*

I have a concern that confusion may arise with the references in the letter to a “planning report” and the inclusion of the appendix setting out content requirements for a planning report.

Part 5.6 of the Act (cl 97) says that a “planning report” should be prepared for a variation other than a major variation.

Clause 99 says that an SEA must be prepared (and I take this to mean that the SEA is prepared instead of a planning report) in the case of a major policy matter, and a major plan variation is cited in the examples as a major policy matter.

Consequently we are preparing an “SEA” (report) rather than a “planning report”.

The matters to be covered (i.e. the list of potential impacts that are to be assessed) in the SEA report are specified in the Scoping Document which, subject to the changes suggested in the draft letter from Mr Corrigan, is now agreed. In addition to this the report must include a number of background information and contextual matters, as well as a description of the actual proposal (the proposed variation). I have prepared a draft table of contents for the SEA report which I attach for your consideration. I suggest that this (as modified in light of your review) be included as Attachment A to the letter as a draft table of contents for the SEA report.

Additionally to the above, an early requirement of the SEA process is the submission of a consultation program, please see a draft attached for your review.

Regards

**Important Message:** This email message is intended only for the addressee(s) and contains information which may be confidential. If you are not the intended recipient, please advise the sender by return email, do not use or disclose the contents and delete the message and any attachments from your system. Unless specifically indicated, this email does not constitute formal advice or commitment by the sender.

---

**From:** Gianakis, Steven [<mailto:Steven.Gianakis@act.gov.au>]

**Sent:** Friday, 21 February 2014 2:38 PM

**To:**

**Subject:** draft SEA scoping letter

Hi

I have to apologise for the delay in the letter. I have been awaiting for some further EPA comments, which have just come through, in response to my presentation to our Executive 2 weeks ago.

Jim has asked that you review the draft.

Please call to discuss, if required.

---

**Steven Gianakis** | Principal Planner

Phone 02 62071741 | Fax 02 62072587

**Land & Infrastructure** | Environment and Sustainable Development | **ACT Government**

Dame Pattie Menzies House, Challis Street, Dickson | GPO Box 1908 Canberra ACT 2601 | [www.actpla.act.gov.au](http://www.actpla.act.gov.au)

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## DRAFT West Belconnen Project Community Consultation Plan

Engagement mechanism	Comment	2010 -			2013			2014			2015			May	Jun
		Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun		
General liaison	Meeting and presentations														
	Community liaison														
	People and Place Group														
	Community Shopfront at Kippax														
Digital connection	Website														
	Social media														
	Newsletters														
Master plan design process	Community Vision and Values Workshop														
	Planning & Design Forum Day 1, community feedback session; Day 2, Informal Pin Up session; Day 3, Community Open House														
	Community Information and Feedback Sessions														

# DRAFT West Belconnen Project Community Consultation Plan

## List of stakeholders

Stakeholder Group	Subgroups
Government (Elected Representative)	<p><b>Local members</b></p> <ul style="list-style-type: none"> <li>Federal Members for the ACT (Canberra and Fraser) and NSW (Hume)</li> <li>Federal Senators for the ACT</li> <li>ACT – MLAs for Ginninderra</li> <li>NSW - Member for Burrunjuck</li> <li>Yass Valley Shire Councillors</li> </ul> <p><b>Other Elected representatives</b></p> <ul style="list-style-type: none"> <li>ACT Government Ministers and Members of the Opposition</li> <li>Relevant NSW Government Ministers and members of the opposition</li> <li>Commonwealth Parliament Joint Standing Committee on the ACT</li> </ul>
Government Departments/Agencies	<p><b>ACT Government Directorates:</b></p> <ul style="list-style-type: none"> <li>Chief Minister and Treasury</li> <li>Community Services</li> <li>Economic Development</li> <li>Education and Training</li> <li>Environment and Sustainable Development</li> <li>Health</li> <li>Justice and Community Safety</li> <li>Territory and Municipal Services</li> </ul> <p><b>NSW Government Departments/Agencies</b></p> <ul style="list-style-type: none"> <li>Department of Premier and Cabinet</li> <li>Department of Planning and Infrastructure</li> <li>South East Local Land Services</li> <li>Office of the Environment and Heritage</li> <li>Department of Education and Communities</li> <li>Fire and Rescue NSW</li> <li>Rural Fire Service</li> <li>Roads and Maritime Service</li> <li>Actew Water</li> </ul> <p><b>Australian Government</b></p> <ul style="list-style-type: none"> <li>National Capital Authority</li> <li>Department of the Environment</li> </ul> <p><b>Yass Valley Shire Council</b></p>
Community Groups and Organisations	<p><b>Community Groups</b></p> <ul style="list-style-type: none"> <li>Belconnen Community Council</li> <li>ACT Equestrian Association</li> <li>Bicentennial National Trail Association</li> </ul> <p><b>Conservation Groups</b></p> <ul style="list-style-type: none"> <li>Greening Australia</li> <li>Conservation Council ACT and SE Region</li> <li>Ginninderra (Creek) Catchment Group</li> <li>Murrumbidgee Catchment Management Authority</li> <li>Friends of Grasslands</li> <li>Murrumbidgee - Ginninderra Gorges National Park Group</li> </ul> <p><b>Welfare/Peak Organisations</b></p> <ul style="list-style-type: none"> <li>ACT Shelter</li> <li>ACTCOSS</li> <li>ACT Youth Coalition</li> </ul> <p><b>Church's and religious groups</b></p> <ul style="list-style-type: none"> <li>Kippax Uniting Care</li> <li>Other</li> </ul> <p><b>Indigenous Organisations</b></p> <ul style="list-style-type: none"> <li>Buru Ngunawal Aboriginal Corporation</li> <li>King Brown's Tribal Group</li> <li>Ngarigu Currawong Clan</li> <li>Little Gudgenby River Tribal Council</li> </ul> <p><b>Universities and Schools</b></p> <ul style="list-style-type: none"> <li>University of Canberra</li> <li>Canberra Institute of Technology</li> <li>Kingsford Smith School</li> </ul> <p><b>Local Sporting Groups and Clubs</b></p> <ul style="list-style-type: none"> <li>Magpies golf club</li> <li>Kippax District playing fields user groups</li> </ul> <p><b>Local Arts Associations</b></p> <ul style="list-style-type: none"> <li>Strathnairn</li> </ul>
Services Providers	Belconnen Community Services
Local Residents	<ul style="list-style-type: none"> <li>Individual members of the public expressing an interest in the project</li> <li>Immediate neighbours</li> <li>Surrounding suburbs and neighbourhoods</li> </ul>
Local Businesses	<ul style="list-style-type: none"> <li>Kippax Group Centre</li> <li>Holt Local Centre</li> </ul>

**From:** [Seagrott, Helena](#)  
**To:** [Botha, Johannes](#)  
**Cc:** [McEvoy, Justin](#); [Azzopardi, Adam](#)  
**Subject:** RE: Input into draft consultation plan for West Belconnen SEA  
**Date:** Thursday, 20 March 2014 2:49:43 PM

---

Hi Hannes

Just to follow up from our quick chat regarding West Belconnen. The consultation approach looks sound, it is quite similar to the approach we take for our master plans. However, as we both agreed, they should be required to provide details of who they are consulting with. I.e. Who is on the People and Place Group and how were those people selected and who did they send newsletters to exactly?

Thank you for the opportunity to comment.

Cheers  
Helena

Helena Seagrott  
**Phone 02 6205 4965** | Wednesday to Friday  
**City Planning** | Environment and Sustainable Development | **ACT Government**  
Dame Pattie Menzies House, Challis Street, Dickson | GPO Box 158 Canberra ACT 2601 |  
[www.environment.act.gov.au](http://www.environment.act.gov.au)

---

**From:** Azzopardi, Adam  
**Sent:** Thursday, 20 March 2014 1:46 PM  
**To:** Terrplan  
**Cc:** McEvoy, Justin; Seagrott, Helena  
**Subject:** RE: Input into draft consultation plan for West Belconnen SEA

Thanks Hannes

Helena is reviewing now and will report back to you shortly.

Regards

Adam

---

**From:** Botha, Johannes **On Behalf Of** Terrplan  
**Sent:** Thursday, 20 March 2014 10:42 AM  
**To:** Azzopardi, Adam  
**Subject:** Input into draft consultation plan for West Belconnen SEA

Hi Adam

Justin McEvoy advised that he forwarded the draft consultation plan for the West Belconnen strategic environmental assessment to you for comment.

I would like to finalise the scoping documents, and would appreciate any input as soon as possible.

Regards

Hannes Botha

**Phone 02 6207 1773** |

**Territory Plan Section** | Environment and Sustainable Development | **ACT Government**

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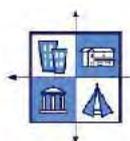
## West Belconnen Draft Variation No. 351 Planning Study

prepared for:

**Riverview Projects (ACT) Pty Ltd**

Volume 1: Report

26 June 2014



**RIVERVIEW PROJECTS (ACT)**  
ABN 165 870 539 PTY LIMITED



**ACT**  
Government  
Economic Development



Land  
Development  
Agency

CANBERRA FIRST

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# 1 EXECUTIVE SUMMARY

This planning study report is part of a process of environmental assessment and planning review at Commonwealth, Territory, State and Local Government levels. This report, together with a number of source documents set out in the bibliography, constitutes the background papers that support a proposal to amend the Territory Plan.

The amendment, if approved, will result in the rezoning of land at West Belconnen to facilitate urban development. The proposed development has the potential to accommodate approximately 6500 dwellings and associated retail and community infrastructure. It will also create a 360ha conservation corridor along the Murrumbidgee River. The Territory Plan is required, under Commonwealth legislation, to be “not inconsistent” with the National Capital Plan and an amendment to the National Capital Plan will be a pre-requisite to the Territory Plan rezoning. A proposal to amend the National Capital Plan has also been lodged with the National Capital Authority.

The development potential of the site has been confirmed in the Canberra Planning Strategy, published in September of 2012. In the Strategy the land is identified as being a “future urban investigation area”; this proposal is putting the intent of the planning strategy into effect.

The proposed development also extends into NSW, where there will be potential to accommodate a further 5000 dwellings and to add a further 220ha to the conservation corridor. The NSW development will be subject to a rezoning of the Yass Valley Local Environment Plan, which is progressing in parallel with the Draft Territory Plan Amendment

The site contains species and ecological communities that are listed under Commonwealth, State and Territory legislation. A “strategic assessment” under part 10 of the Commonwealth Environment Protection and Biodiversity Conservation (EPBC) Act will be prepared to assess impacts on endangered species and ecological communities. This will be overseen by the Commonwealth Department of the Environment.

The Strategic Assessment will run in parallel with the three rezoning processes: The National Capital Plan, The Territory Plan, and Yass Valley Local Environment Plan.

The various statutory agencies that will oversight and ultimately determine the rezonings and environmental approvals are:

- ACT Planning Authority
- National Capital Authority
- NSW Department of Planning and Infrastructure
- Yass Valley Council
- Commonwealth Department of the Environment.

Subject to the appropriate approvals being in place the first dwellings would be occupied at West Belconnen in 2016, to meet the ACT Government land release program, and that the full build out of the development would extend over a 30-40 year period.

## 2 PURPOSE OF THIS REPORT

A T Adams Consulting Pty Limited has been engaged by the Riverview Projects (ACT) Pty Ltd on behalf of the ACT Land Development Agency to prepare a planning study report for a proposed project at West Belconnen. The planning study is to provide the basis for a rezoning (and subsequent urban development) of the land at West Belconnen. The land is proposed for rezoning by way of a variation to the Territory Plan under the procedures set out in Section 57 of the *Planning and Development Act 2007 (P&D Act)* .

The decision to prepare a planning study has been made pursuant to Section 97 of the P&D Act. (Refer to Appendix D) The report is required to cover a range of matters affecting both the human and non-human biological environment, that is, it will consider social and economic impacts and impacts on the natural environment.

Prior to the commencement of this report a Preliminary Risk Assessment (PRA) was prepared to define the scope of matters that warranted assessment. The PRA was prepared initially as a draft and circulated to ACT Government agencies. Comments were received and the PRA was amended to accommodate these. This report addresses all matters identified in the PRA as being at risk of being adversely impacted by the proposed rezoning and subsequent development of the land.

The West Belconnen project land includes areas in both the ACT and neighbouring NSW. As noted above this report will specifically address the requirements for the rezoning of the land under ACT legislation; the land is also subject to additional statutory controls as follows:

The Commonwealth *ACT Planning and Land Management Act 1988* establishes and gives force to the National Capital Plan, which covers the entire ACT including the portion of the project area within the ACT. For the project to proceed it will be necessary that an amendment to the National Capital plan be approved. This report will also be provided to the National Capital Authority to assist it in its consideration of a proposal that will be put forward to amend the National Capital Plan.

The *Yass Valley Local Environmental Plan 2013* controls land use zoning and development in the NSW portion of the project area. A rezoning proposal will be prepared for submission to the Yass Valley Shire concurrently with the ACT Territory Plan rezoning process. This report will also be lodged with the NSW rezoning proposal .

The Commonwealth Environment Protection and Biodiversity Conservation Act 1999 provides statutory controls over certain matters of national environmental significance – typically species or habitats that are subject to environmental threat. The project has the potential to cause impacts on three such matters: the pink tailed worm lizard, the golden sun moth and an area of yellow box red gum grassy woodland. Consequently the Commonwealth Department of the Environment has determined that a “strategic assessment” under part 10 of the EPBC Act should be conducted to assess the potential impact of the proposal on the lizard, moth and woodland. This assessment is being conducted concurrently with the assessment of the rezoning proposal.

### **3 PROPONENT FOR THE WEST BELCONNEN PROJECT**

The West Belconnen project is being proposed jointly by the ACT Land Development Agency (LDA), on behalf of the ACT Government , and Corkhill Brothers Pty Ltd and Reid and Stevens Pty Ltd (a Corkhill company). All of these parties have interests in the land as discussed in the next section. The Corkhill interests are represented by Riverview Projects (ACT) Pty Ltd, which has also been appointed to act as project manager on behalf of the LDA. Consequently the project proponent is Riverview projects (ACT) Pty Ltd, acting on behalf of the LDA and Corkhill interests. Contact details are as follows:

Riverview Projects (ACT) Pty Ltd  
PO Box 3908  
Manuka ACT 2603

Attention:

## 4 WEST BELCONNEN PROJECT VISION



### The Belconnen Project Sustainability Vision

“Creating a sustainable community of international significance in the Nation’s capital.”

The Riverview Group, working with the ACT and NSW Governments, will develop the site at Belconnen to achieve a vision of inspiring sustainable living, development practice and awareness. Achieving a high quality of life for the people living at Belconnen is at the heart of our project planning and design.

We will create a community that exemplifies World’s Best Practice in its design, construction and long-term liveability. As a model of sustainable community living it will be a place and community that can be showcased throughout Australia and internationally.



#### Project objectives:

To achieve our Vision we will challenge conventional industry thinking. We will employ practices, processes and systems that embody innovation and design excellence.

This project has been conceived and will be delivered on a fully integrated and audited triple bottom line basis.

Our project will:

- ✦ Be sustainable over time, socially, economically and ecologically (with a low and reducing ecological footprint)
- ✦ Respond to the local and global environment
- ✦ Provide for future beneficial change to occur in design, infrastructure and regulatory mechanisms
- ✦ Be cost effective, replicable and measurable
- ✦ Act as a new model that others can follow.



## Guiding Principles for Sustainable Results

The principles below will direct decision-making by all project management, sub-consultants and referral agencies in the delivery and development of the Belconnen site. They reflect national priorities and Federal, State and Territory Government policies on housing affordability, climate change and environmental protection.

### PARTNERING PRINCIPLES

- Ptnr 1. Partnering is essential to this project and the scale and timeframe will allow for positive partnerships to grow and thrive
- Ptnr 2. Partnering with public agencies is a cornerstone of our approach
- Ptnr 3. Engaging the community in design and governance is fundamental to the delivery of the project.
- Ptnr 4. Designing the project for community ownership and ultimate community control
- Ptnr 5. Supporting community housing through public and private partnering arrangements
- Ptnr 6. Collaborating with research and educational institutions to drive innovation.

### EVALUATION PRINCIPLES

- Eva 1. Identifying and delivering realistic and costed initiatives
- Eva 2. Providing independent peer review of project proposals and project outcomes
- Eva 3. Using recognised international and national benchmarks for sustainability performance to publicly report and raise awareness of project outcomes
- Eva 4. Empowering resident and community monitoring and management of sustainability performance
- Eva 5. Encouraging a culture of continuous improvement.

### ECOLOGICAL PRINCIPLES

- Eco 1. Acknowledging the intrinsic value of all species and the special role and regional significance of the Murrumbidgee river corridor and Gininderra Creek
- Eco 2. Respecting and supporting the ecosystem functions of air, soil and water, recognising the importance of living and non-living environmental resources
- Eco 3. Reducing greenhouse gas emissions through innovative products and place design, material selection and service provision
- Eco 4. Recognising our natural ecological limits and minimising our resource, water and energy consumption
- Eco 5. Using existing local infrastructure to deliver efficient renewable services and reusable resources
- Eco 6. Enhancing local opportunities for food production and production of materials
- Eco 7. Fostering a deep sense of respect for and connection to the land, flora and fauna.

### SOCIAL AND CULTURAL PRINCIPLES

- Soc 1. Respecting and honouring Aboriginal and non-Aboriginal cultural, historical and spiritual values, including integrating with the existing rich, social fabric of Belconnen
- Soc 2. Designing for social equity, affordability, diversity and interdependence, honouring differences and catering for the needs of individuals through all stages of life
- Soc 3. Maximising health, safety and comfort of the built environment to provide enduring quality of life
- Soc 4. Instilling awareness and supporting education of sustainability values, technology and lifestyles
- Soc 5. Using creative and robust design solutions to create a continuing sense of place and beauty that inspires, affirms and ennobles
- Soc 6. Designing neighbourhoods that support and encourage community interactions through imaginative, functional and enjoyable public spaces

### ECONOMIC PRINCIPLES

- Econ 1. Delivering a financial return to the ACT Government recognising their sovereign interest in the land
- Econ 2. Recognising the opportunities provided by the project's scale and low capital base to achieve high-level sustainability outcomes while delivering profitability to joint venture partners
- Econ 3. Building on existing local infrastructure
- Econ 4. Ensuring long-term economic viability through design excellence and community building
- Econ 5. Minimising obsolescence through design of enduring component life cycle, allowing for disassembly and change
- Econ 6. Integrating with the Belconnen commercial, retail and employment networks
- Econ 7. Growing a formal and informal green economy that fosters local jobs and builds regional learning around green innovation and technology

## 4.1 THE PROPOSAL

The West Belconnen proposal is for the development of the land at West Belconnen and in adjacent NSW for residential and related purposes and for a contiguous conservation corridor along the Murrumbidgee River and Ginninderra Creek. The urban residential area will include open space, community, school and recreation facilities, wetlands and Creeks, roads, streets and an off-road movement system as well as retailing and employment uses.

The project will proceed on the basis of the vision set out above.

## 4.2 THE KEY PLANNING AND DESIGN DRIVERS

The vision statement was developed in 2009, at the early conceptualization stage of this project. It drew heavily on the experience of the project team that had been assembled at that time including national level expertise in planning, conservation, engineering, sustainable development, community engagement, social planning and project delivery. It drew heavily on the experience that had been gained at the Currumbin Eco Village, then and still the most awarded ecologically sustainable residential development in Australia. West Belconnen provides the opportunity for extending the innovative approaches taken at Currumbin across a much larger scale development, with the potential to make a real difference in terms of environmental outcomes.

The vision and the detailed principles have guided the work that has been undertaken since, which is presented in the body of this report. The detailed work has been completed in the context of 4 key planning and design drivers:

- The future
- Canberra as a competitive community
- Green star sustainability
- Energy efficiency

These are discussed below.

### 4.2.1 THE FUTURE

The West Belconnen project is different to many other recent land development projects in Canberra. The principal difference is one of scale. The project has the potential to accommodate approximately 30,000 people and will be developed over a long period, possibly up to 40 years, with full completion in the year 2056. Given this, the project design team has approached the project on the basis that change and the impacts of change over the very long term, beyond normal subdivision estate planning horizons, should be given consideration. To this end a futurist has been engaged as a member of the project team throughout the master planning design phase, and has an ongoing role. The futurist report (Delaney Foresight, 2014) opens with a quotation from Somerset Maugham (1874-1965):

*“There is only one thing about which I am certain,  
and that is that there is very little about which one can be certain.”*

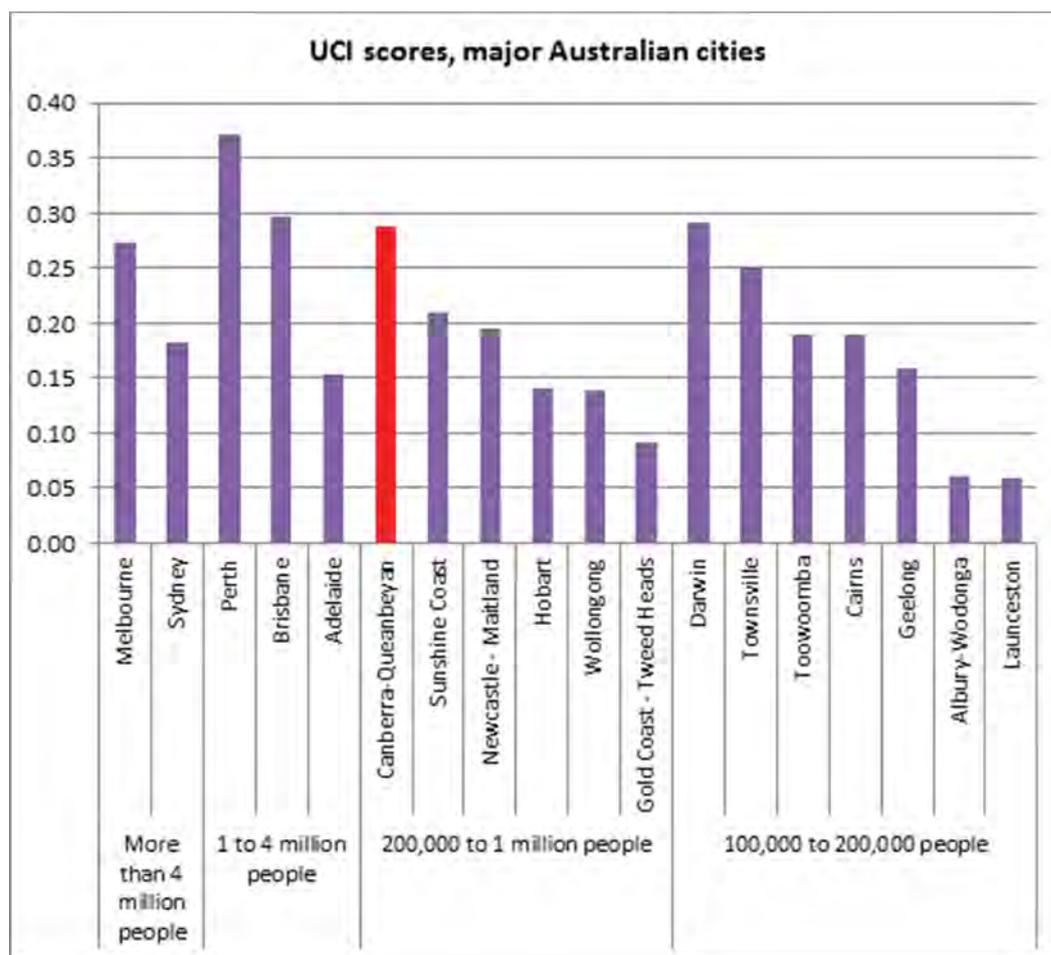
A community which takes no account of the likelihood of change is most likely to be heavily impacted, possibly to the point of breakdown, when some unforeseen major event occurs. The

report sets out a process of “scenario development” which facilitates a process whereby an engaged community is able to critically examine a range of alternative futures (for West Belconnen) against “what-if” possibilities for change. An understanding of the real possibility of substantial change occurring and the possible impacts of such change enables communities to plan responsibly for change and to avoid or mitigate impacts. This capacity is the hallmark of a “resilient” community that can be self-sustaining into the long term.

Positive steps have been and will be taken to look to the “over the horizon” needs of the community, to build resilience and a capacity to cope with the impacts of change, including unforeseen change.

#### 4.2.2 CANBERRA AS A COMPETITIVE COMMUNITY

Canberra, as an urban economy, competes with other cities in Australia. The extent to which the Canberra region is competitive with other cities will influence the rate and nature of growth that will occur and the resilience and robustness of the community will be strengthened to the extent that the region competes successfully for people, jobs and resources. The relative competitiveness of the Canberra region has been examined by the University of Canberra (UCAN) in a report prepared for the West Belconnen Project (ANZSOG, 2013). The UCAN report finds as follows:



**Figure 1: Urban Competitiveness Index**

*“The Canberra region is one of the most economically competitive and liveable urban centres in Australia. A comparison on a range of factors between the Canberra region and Australia’s 17 other cities with populations greater than 100,000 ..., provides a backdrop for the Canberra region as a desirable place to live and work. This desirability is blighted, however, by housing affordability issues. Canberra region’s competitiveness could be enhanced if affordability issues are addressed; housing affordability is an issue of strategic importance for the Canberra region’s sustainable development in economic, social and environmental dimensions.”*

The UCAN report refers to an “urban competitiveness index” which UCAN have developed to enable meaningful comparisons to be drawn between cities. The Figure below illustrates the position of Canberra relative to a number of other Australian cities. Canberra is significantly more competitive than Sydney and a similar level to Melbourne; within the 0.2 – 1.0 million population size bracket Canberra is pre-eminent.

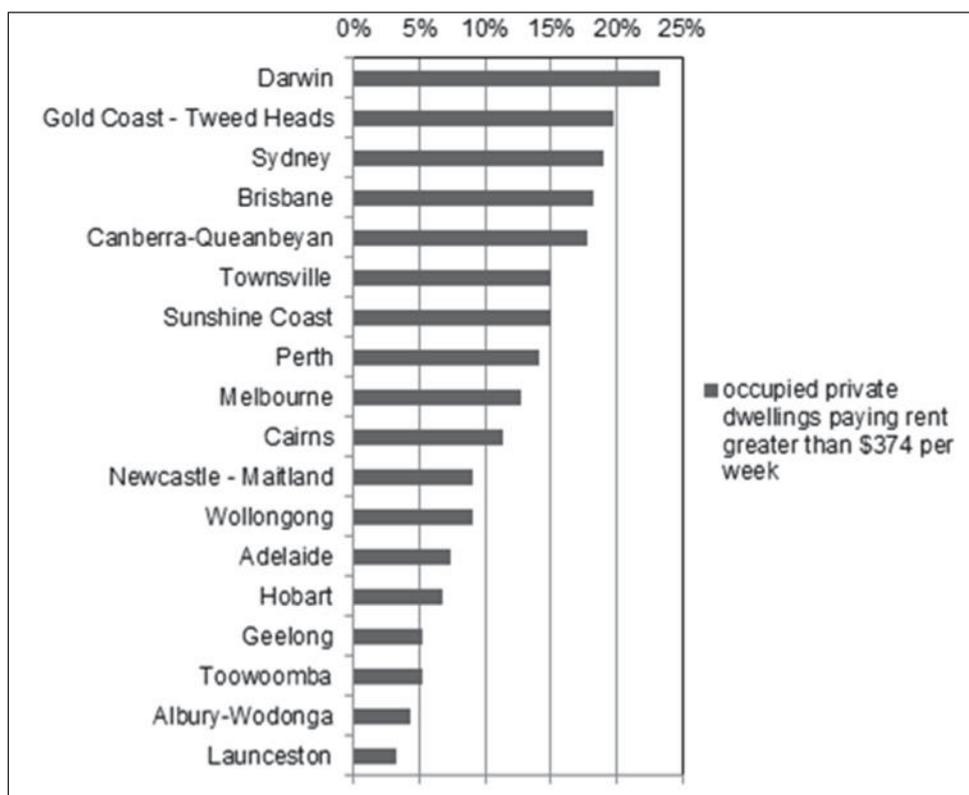
An important factor in the development of the competitiveness index is housing affordability. It is plain that cities where house prices cost more are less attractive and therefore less competitive. Canberra housing prices are high when compared nationally. “Affordability” of housing in Canberra is however sometimes reported as being good. This is because average income levels in Canberra are high and when these are matched with average house prices (even though these are high) the impression is that housing is affordable. Average levels of income are not a good basis for this type of analysis because, perhaps obviously, half the population is on less than the average income and Canberra, like other cities, includes large numbers of people on relatively low incomes. These include the group known as “key workers” – police, nurses, teachers and the like. Housing for these groups in Canberra is unaffordable.

The UCAN report includes an analysis of rental prices across cities as a measure of affordability; it says as follows:

*“High rental prices have been adopted as one of several proxies in this study to measure the cost of living in Australia’s 18 largest cities. High cost of rent for this study has been classified as the proportion of private dwellings paying more than \$374 per week in rent. Launceston (3.3%) and Albury-Wodonga (4.4%) had the lowest proportion of dwellings paying more than \$374 a week for rent. Hobart (5th, 6.8%) had the lowest proportion of high rental prices of the eight capital cities. Darwin (23.2%) had the highest proportion of dwellings paying greater than \$374 per week for rent. It was followed by Gold Coast-Tweed Heads (19.8%) and Sydney (19.1%).*

*Seventeen per cent of Canberra-Queanbeyan private dwellings are paying a high level of weekly rent. This was the 5th highest proportion of the 18 major cities, more expensive than cities such as Perth, Melbourne and Adelaide.”*

This data is illustrated in the Figure below:



**Figure 2: Comparative City Rent Costs**

Additional UCAN research (ANZSOG, 2014) further illustrates the problem and indicates that it is worsening. The levels of both median monthly mortgage payments and median weekly rentals have increased at rates significantly greater than increases in incomes in the decade 2001 – 2011. Over the ten year period, incomes increased by 75%. Mortgage and rental payments increased by 127% and 130% respectively. The rate of increase in both measures was marginally higher in the latter half of the decade compared to the earlier half – indicating that the problem is worsening and presumably will continue to do so.

There is potential for West Belconnen to address this issue; primarily this will result simply from the downward pressure that will be put on house prices because of an increase in supply. It will also flow from a range of market intervention affordability measures that will be delivered by the project. These are discussed in more detail later in this report.

#### 4.2.3 GREEN STAR COMMUNITY

West Belconnen is a Green Star Communities Pilot Project. The Green Star Communities rating tool, developed by the Green Building Council of Australia (GBCA), is Australia's first fully independent, national sustainability rating tool for communities. It is a voluntary rating tool which provides best practice benchmarks and third-party verification of the sustainability of communities and precinct wide developments.

Green Star – Communities Pilot defines 38 best practice benchmarks across five sustainability categories, plus Innovation for the planning, design and delivery of sustainable communities:

- Governance
- Design
- Liveability
- Economic Prosperity
- Environment

Within each category there are a number of criteria that are allocated points. To gain points for a credit, a project team must complete documentation requirements that demonstrate they have met the aims of the credit. The points assigned to each credit are tallied and translated into an overall single Green Star rating.

The West Belconnen Project is required to complete the assessment process within three years of becoming a Pilot Project. It is anticipated that it will complete the process by the end of 2015.

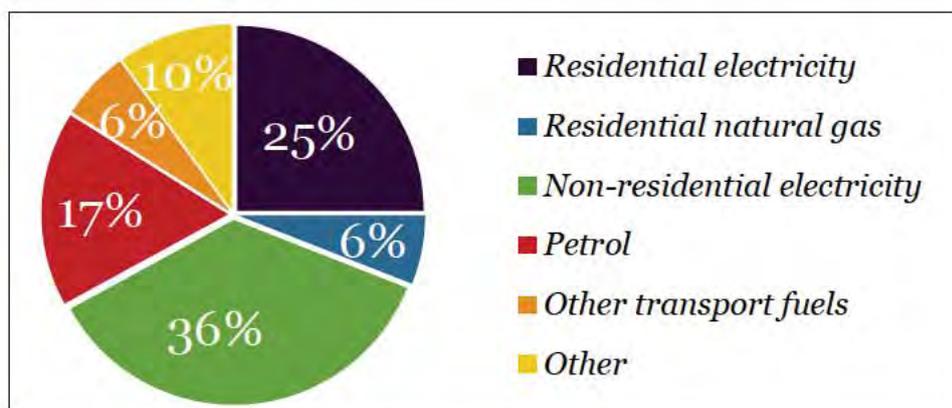
#### 4.2.4 ENERGY EFFICIENCY

There are significant energy efficiencies and greenhouse gas emission reductions achievable within the context of the West Belconnen residential sector. In recognition of this the project proponents have commissioned an investigative review (Stiebel, 2014) of options for improved energy outcomes at West Belconnen. The report is summarized as follows:

In 2009-10 the residential sector in Australia accounted for 26% of total net energy use (ABS, 2012). This includes household energy usage and petrol for transport.

More recent data for the ACT (Figure 3) shows that greenhouse gas emissions arising from energy use in the residential sector account for 31% of total emissions, with emissions from petrol contributing an additional 17% (ICRC, 2013). Heating is the dominant factor in in-house energy use (Figure 4), with appliances also being very significant, followed by hot water. Unlike in hotter parts of Australia, household cooling is not a significant factor in energy usage.

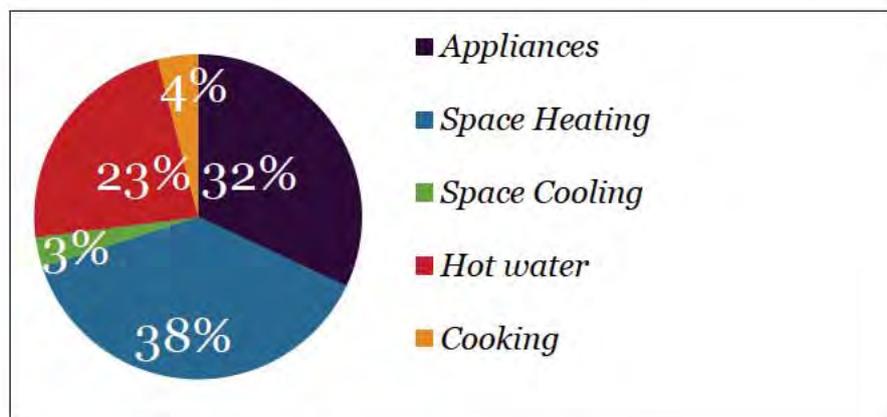
The ACT Government has set ambitious reduction targets in line with the international scientific consensus on global warming. These include an overall zero emission target by 2060 as well as a 90%



**Figure 3: ACT Household Energy Use**

renewable energy target by 2020 (ACT, 2012).

West Belconnen embraces these targets and will contribute towards them. The proponent intends to seek accreditation for the project as a 6 Star Community by the Green Building Council of Australia's Green Star Communities Pilot Scheme. It will seek to match or exceed the residential



**Figure 4: In-house Energy use**

energy production and usage criteria set by this certification scheme. The project will consider installation of a mix of distributed generation including rooftop solar photovoltaic and building integrated photovoltaic at the household level and larger scale ground-mount solar PV or 'solar farm'. Other innovations may be incorporated and /or evolve over time based on various factors including community needs, technology and economics.

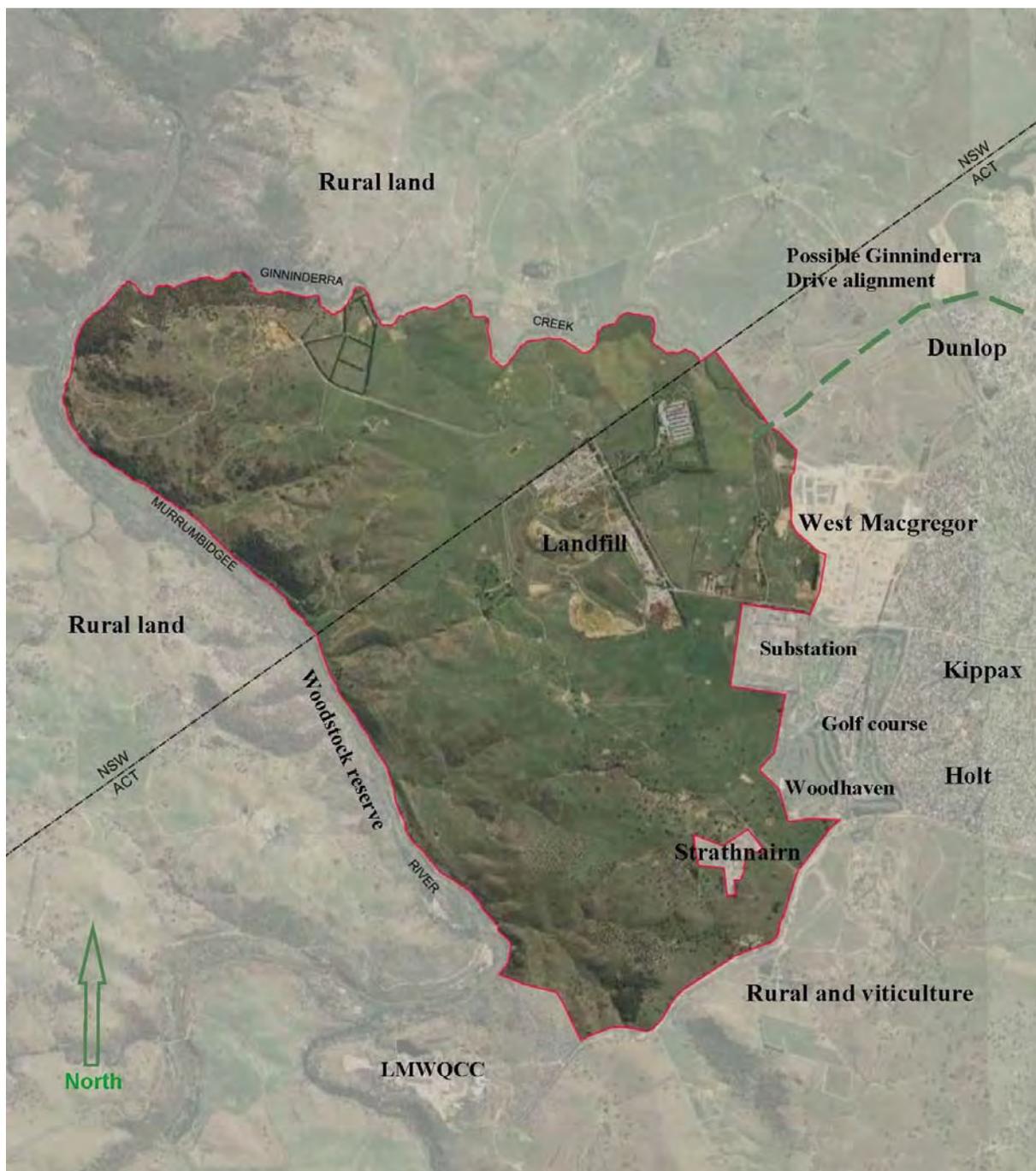
There is an extensive array of commercially viable building design and construction methods as well as energy saving and energy generating technologies and innovations that will be deployed. The Stiebel report outlines the housing construction methods which could be applied at West Belconnen which are specifically designed to reduce energy usage and deliver on-site energy generation. It also identifies end use energy efficiency measures.

## 5 LOCATION AND DESCRIPTION OF THE SITE

### 5.1 LOCATION AND LAND TENURE

The project site is at West Belconnen, generally west of the suburbs of Holt and McGregor, and extending into NSW, as shown on Figures Figure 5 (air photo) and Figure 6 (cadastral boundaries) below.

The project site is at West Belconnen, immediately beyond the existing suburbs of Holt and West



*Figure 5: West Belconnen Project study area*

Macgregor, as shown on Figure 5. The Murrumbidgee River provides the south western and western boundary and Ginninderra Creek is the northern boundary for the NSW land. The site is immediately adjacent to the Canberra Substation and the Magpies Golf Club, a portion of which has been rezoned (in 2012) for the Woodhaven residential development. Vineyard plantings and rural uses occupy the land to the east of the project site across Stockdill Drive and the lower Molonglo Water Quality Control Centre is at the end of Stockdill Drive to the south of the site. Woodstock nature reserve is located along the southern bank of the Murrumbidgee River immediately opposite the site in the ACT as well as between the project site and the LMWQCC. The Strathnairn Arts Centre is located on a separate parcel of land within Block 1605.

The balance of the neighbouring land in the ACT and all of the land in NSW is devoted to rural uses.

Blocks 1605 and 1606 are currently held by Corkhill Brothers Pty Ltd as a rural lease. The lease term is for a period of 99 years with the River Corridor component being subject to a withdrawal clause which may be activated with 3 months' notice.

Block 1607 is unleased territory land that accommodates a sewer vent pipe and the Bicentennial National Trail. It is included because, under any likely development scenario, this block would be reconfigured.

Block 1420 is occupied under lease by the Billabong Aboriginal Development Corporation. It is included because it would be poor planning practice to leave this site as an isolated small parcel zoned as "hills ridges and buffer" if the surrounding land is rezoned, and an urban zoning would be more appropriate for the current and potential future uses of this site.

Part Block 1613 is included because it is part of the river corridor immediately adjacent to the Murrumbidgee River and should be incorporated in any planning for the river corridor.

In the north of the site, across Parkwood Road, is an area of territory land which is largely unleased and undeveloped but which has possible urban potential and has been identified as such in the ACT Planning Strategy. It is currently utilized as horse agistment paddocks (the Parkwood paddock Complex) which occupy approximately 100ha. This land is bounded by Parkwood Road, West Macgregor, Ginninderra Creek and the Parkwood Egg farm adjacent to the ACT border. The Parkwood egg farm site (block 1322) and several smaller lots along Parkwood road are also included in the study area.

The land immediately further north (principally blocks 1442 & 1620), bordered on its eastern and southern sides by Ginninderra Creek is known as the Jarramlee offset area and has been identified as an environmental offset area related to the development of the suburb of Lawson. An offset area - the Macgregor offset - has also been identified on adjacent land between Dunlop and West Macgregor. There is a possibility that Ginninderra Drive may connect through these areas, subject to environmental considerations, and consequently it will be included for consideration in this report to the extent required to establish the potential impact of a road connection. The full impact of a road in this area and a determination as to whether or not it should proceed will be assessed by way of a strategic assessment in accord with the requirements of the Environment Protection and

Biodiversity Conservation Act, overseen by the Commonwealth Department of the Environment which is proceeding in parallel with this rezoning proposal.

The Belconnen land fill site is central to the project area between the block 1605 and Parkwood Road.

The Corkhill Group also owns 332ha of freehold land over 4 lots in NSW which is adjacent to the rural lease land. This land has urban development potential and has been identified in the Yass Shire Local Environment Plan as being subject to potential rezoning. This land, together with an area of neighbouring NSW land (4 lots held under 4 ownerships) is bounded by the Murrumbidgee River and Ginninderra Creek; it is a “peninsula” that is only accessible from the ACT.

The ACT Planning and Land Authority has advised that proposals for rezoning blocks 1605 & 1606 should be set with a broader structure planning context that incorporates the land fill site and the surrounding land north of Parkwood Road. This view has been echoed by NSW planning authorities who have said that consideration of the NSW land should be set within a broader context as it is closely integrated to the ACT. The larger area that is proposed to be included in the master planning exercise is depicted at Figure 5. A schedule of the land included in the study area, with tenure details is included as Appendix A.

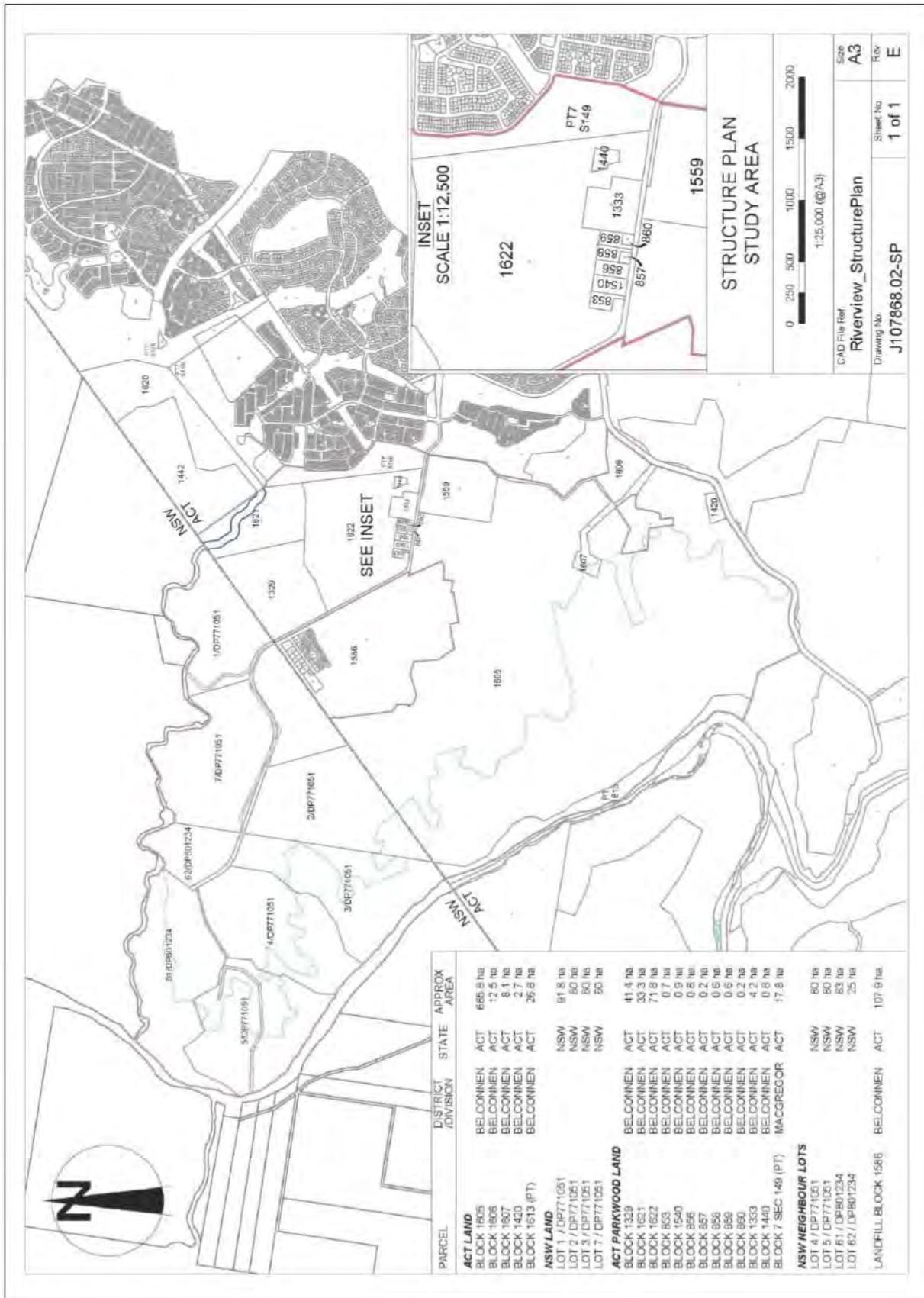


Figure 6: Cadastral Boundaries

## 5.2 EXISTING USE OF SITE AND SURROUNDING DEVELOPMENT DETAILS

The principal use of the site is for agriculture however there are a range of other activities as outlined below, with reference to the land parcels shown on Table 1:

**Table 1: Existing Land Use**

PARCEL	Area	Current Use
<i>ACT LAND</i>		
BLOCK 1605	665.8 ha	Agriculture (also includes Belconnen Farm house precinct which is heritage listed)
BLOCK 1606	12.5 ha	Agriculture
BLOCK 1607	8.1 ha	ACTEW vent & Bicentennial Trail
BLOCK 1420	2.7 ha	Billabong Aboriginal Development Corp community and education services
BLOCK 1613 (PT)	26.8 ha	River foreshore (Incorporated in Woodstock Reserve)
Block 1332	9.64 ha	Strathnairn Arts Association
BLOCK 1329	41.4 ha	Agriculture (poultry)
BLOCK 1621	33.3 ha	Unleased Territory land (horse agistment)
BLOCK 1622	71.8 ha	Unleased Territory land (horse agistment)
BLOCK 853	0.7 ha	Unleased Territory land (horse agistment)
BLOCK 1540	0.9 ha	Landscape supply business
BLOCK 856	0.8 ha	Plant nursery
BLOCK 857	0.2 ha	Unleased Territory land
BLOCK 858	0.6 ha	Kennels
BLOCK 859	0.6 ha	Veterinary surgery
BLOCK 860	0.2 ha	Unleased Territory land
BLOCK 1333	4.2 ha	Pony Club
BLOCK 1440	0.8 ha	ACTEW vent

<b>BLOCK 7 SEC 149 (PT)</b>	<b>17.8 ha</b>	<b>Unleased Territory land (horse agistment)</b>
<b>BLOCK 1586</b>	<b>108 ha</b>	<b>Old Belconnen Land Fill, includes Parkwood recycling estate (secondary industrial area), green waste recycling, asbestos disposal, hydrocarbon affected soil treatment area, emergency land fill site.</b>
<i>NSW LAND</i>		
<b>LOT 1 / DP771051</b>	<b>91.8 ha</b>	<b>Agriculture</b>
<b>LOT 2 / DP771051</b>	<b>80 ha</b>	<b>Agriculture</b>
<b>LOT 3 / DP771051</b>	<b>80 ha</b>	<b>Agriculture</b>
<b>LOT 7 / DP771051</b>	<b>80 ha</b>	<b>Agriculture</b>
<b>LOT 4 / DP771051</b>	<b>80 ha</b>	<b>Rural residential (unoccupied)</b>
<b>LOT 5 / DP771051</b>	<b>80 ha</b>	<b>Rural residential (single residence)</b>
<b>LOT 61 / DP801234</b>	<b>83 ha</b>	<b>Gravel quarry and agriculture</b>
<b>LOT 62 / DP801234</b>	<b>25 ha</b>	<b>Commercial accommodation and function centre.</b>

### 5.3 HISTORY OF THE SITE

Occupation of the southern highlands, and consequently the ACT region and the project site, site by aboriginal peoples is estimated to date from 21,000BP (EMA, 2014a). Consequently the vast majority of the human history of the site has been one of occupation by indigenous people.

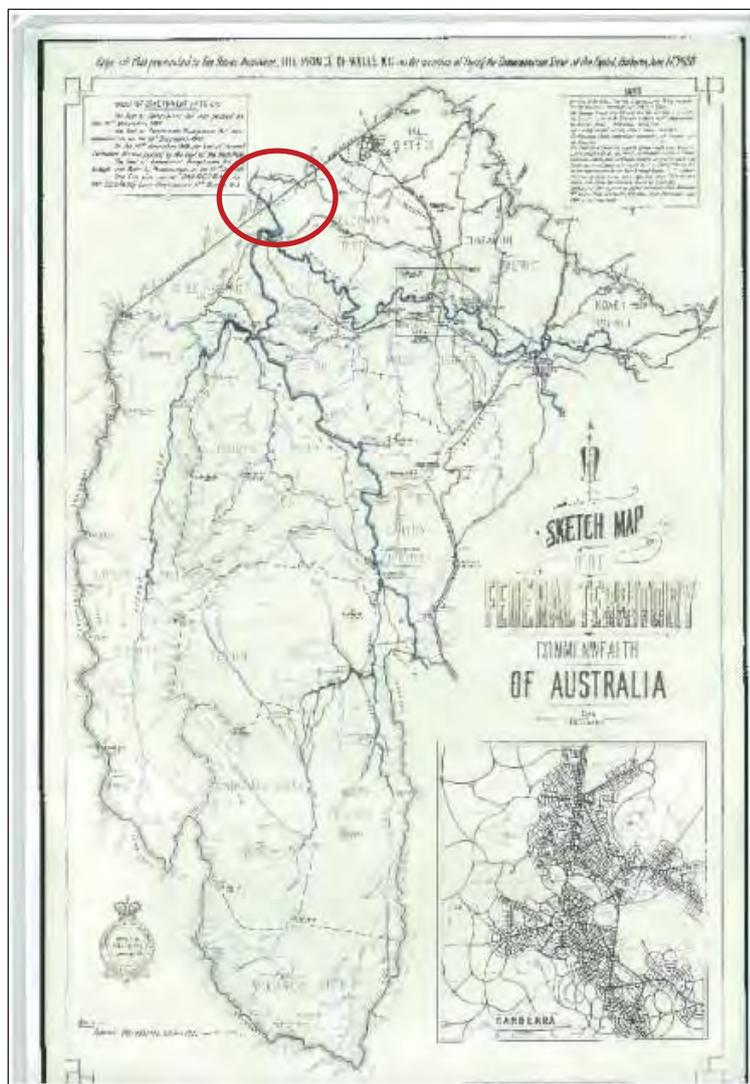
The original Belconnen farm was the result of a grant in 1835 of 5,000 acres of land to Charles Sturt, in recognition of his contribution as an explorer to the then Colony of New South Wales. The original grant included most of the project study area. Sturt held the property for about a year and then sold it to the Campbell family of Duntroon who managed it as an active rural property. During this period (in 1850 - 1860) a stone cottage was built to accommodate a farm overseer. This now forms an important component of the Belconnen Farm heritage precinct.

Early in the 20<sup>th</sup> century the border for the newly created Australian Capital Territory was created and dissected the land. This component of the ACT border is an arbitrary straight line, unlike the majority of the length of the border which is aligned to natural water catchments. Since that time, through the 20<sup>th</sup> and into the 21<sup>st</sup> centuries, the land has been used for grazing, landfill, and a number of rural and rural related uses including a commercial accommodation business (Ginninderry Homestead). The landfill site also accommodates an industrial area focused on recycling enterprises and a number of other remediation and recycling functions. Ginninderra falls was a popular

recreation venue for a period but is now closed to public access; the landowners advise that this is due to difficulties associated with obtaining public liability insurance on what is a hazardous site.

A logical boundary, from a land tenure and land planning perspective, would have included the “peninsula” land (bounded by the Murrumbidgee River and Ginninderra Creek) within the ACT. Historical research (CBRE, 2009) has shown that it is a matter of chance that all or some of this land was not in fact included in the ACT at that time. A plan prepared for the Prince of Wales in 1920 (Figure 7 below) shows the straight line boundary as well as the “peninsula” land.

This illustrates the position that has been expressed by both the ACT and NSW planning agencies that the planning of the land should take an holistic cross border approach, recognising the geographical and cultural rather than artificial boundary constraints.



**Figure 7: Prince of Wales Plan of the ACT 1920**

## 6 DESCRIPTION OF THE PROPOSAL

### 6.1 WHAT IS PROPOSED?

The West Belconnen proposal is for the development of the land at West Belconnen and in adjacent NSW for residential and related purposes and for a contiguous corridor along the Murrumbidgee River and Ginninderra Creek. The urban residential area will include open space, community, school and recreation facilities, wetlands and creeks, roads, streets and an off-road movement system as well as retailing and employment uses.

Of the total area of 889ha in the ACT approximately 371ha or 42% is proposed to be zoned for river corridor and conservation purposes – the proposed “conservation corridor”. The balance of the land is anticipated to yield up to 6,500 dwellings. In NSW approximately 206ha, or 34% of the total 600ha, is proposed for inclusion in the conservation corridor along the Murrumbidgee River and Ginninderra Creek corridors. The balance of land, 394ha is anticipated to yield up to 5,000 dwellings.

Development is intended to commence at Stockdill Drive (the eastern boundary of the site), and extend westward in stages to the ACT/NSW border. Assuming a sales rate of approximately 300 dwellings per year the project will extend over a period of approximately forty years following commencement of sales. If sales proceed at a slower or faster rate the program will be adjusted accordingly.

### 6.2 MASTER PLAN

An important part of the planning process that has led to the development of the proposed draft plan variation has been the preparation of a master plan. The master plan provides an illustration of the potential for the development of the site, based on the technical studies and public consultation. The master plan was developed by a multi-disciplinary team including the various specialists responsible for the preparation of the range of technical studies that are referred to in this report. Importantly, the master planning work was underpinned by a planning and design forum, held over a three day period and involving the multi-disciplinary team, government agencies and stakeholder groups. The master plan is a non-statutory document; its purpose is to:

- Provide a readily understandable picture of the likely development outcomes as the structure plan is implemented over time, and
- As it was being developed, the master plan provided a mechanism for evaluating options, opportunities and constraints presented by the technical studies and community input, to test these, and confirm the practicality and veracity of the content of the structure plan.

Determination of the site design, numbers and sizes of blocks, provisions for schools, other community facilities, open space and the like has been subject to the outcomes of the master planning process; Detailed design for each stage will proceed following the rezoning of the land and will be in accord with the framework established by the structure plan as well as the more general requirements of the territory Plan.

The master plan is described in full in a separate report by Roberts Day (Roberts Day, 2014). The illustrative plan is at Figure 8.

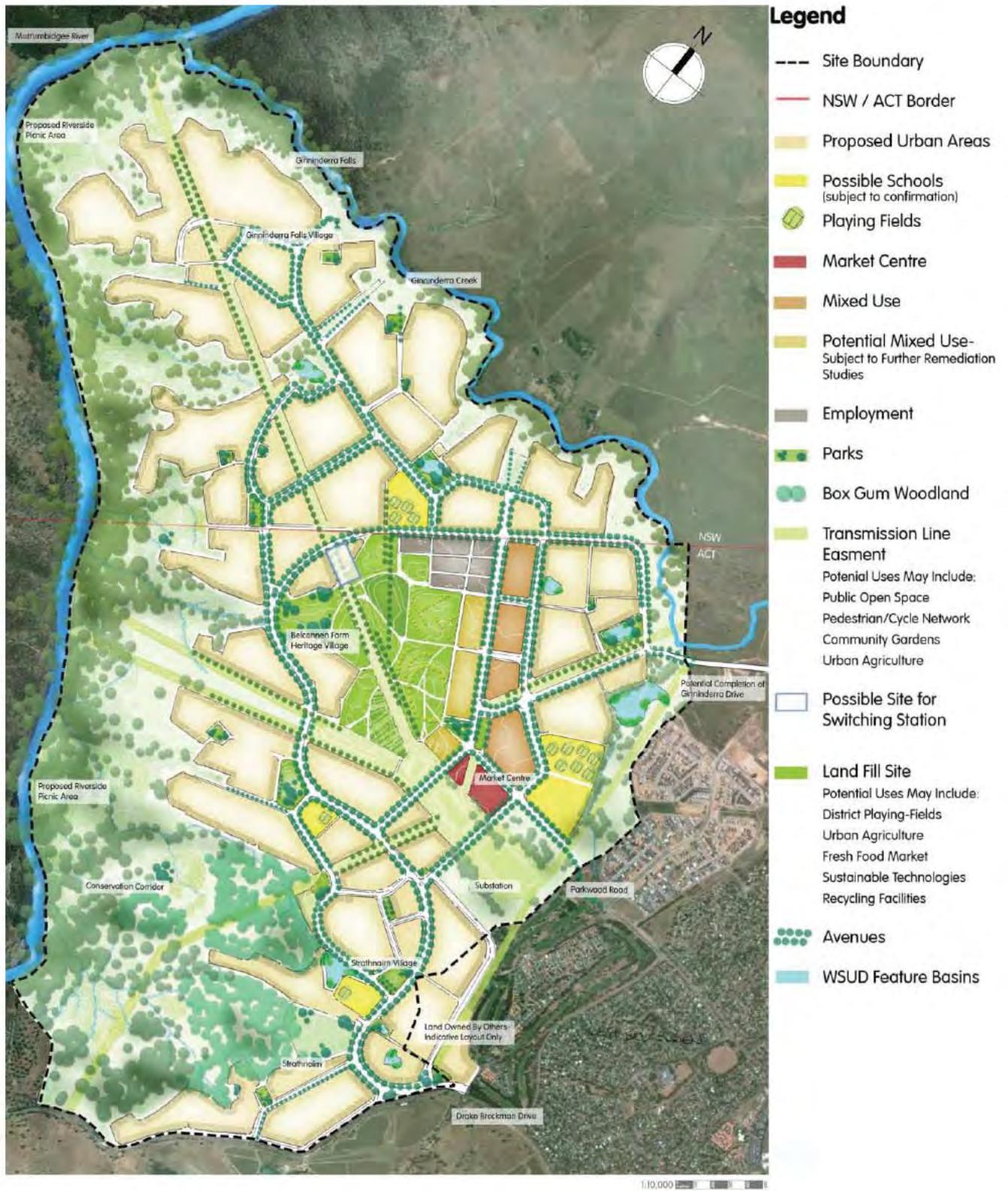


Figure 8: Illustrative master plan

### 6.3 TERRITORY PLAN VARIATION

The proposed development at West Development will be contingent on the approval by the Minister for Planning of a variation to the Territory Plan as well as a number of other administrative processes discussed in more detail in Section 7. The Plan variation will bring into effect two key instruments that will control the use and development of the site into the long term future. These are the “structure plan” and the “precinct code”. The structure plan is a written statement that sets out explicit principles and policies for the development of the site. The precinct code includes ceded development controls as well as a plan specifying all key spatial requirements for the site.

Proposed principles and policies that will constitute the Structure Plan are included in Appendix A;

A draft precinct code is included at Appendix B; it has been drafted based on the approach that has been taken to the project which has been to develop the master plan in response to:

- The physical form of the site
- The landscape setting, particularly the dramatic visual relationship of the site to the Brindabella ranges and to the hills to the north and north west
- The need to protect the local and global environment and to achieve a 6 star new community rating
- The extensive urban edge between residential development and the Conservation corridor
- The need for a full spectrum variety of housing types across all affordability levels
- The need, recognising that Canberra land prices are amongst the highest in Australia, to achieve land development economies wherever practical
- The need to focus density along transport routes and near centres
- The need to create a sense of place for West Belconnen as a whole and for neighbourhood scale precincts within it; this is an essential element if resilient and robust communities are to form, and grow over time

Rather than adopt a “one size fits all” approach to development control on the site the project will develop a precinct code, to be incorporated in the Territory Plan, that imposes controls in order to achieve design outcomes that are specifically suited to the site and directly responsive to the objectives for the project. This site specific approach ensures that triple bottom line sustainability outcomes are maximised. Development of the site specific controls has commenced with the preparation of detailed site analysis work, integrated with the development of suitable housing typologies. A draft precinct code to give effect to this design approach is included at Appendix B.

## 6.4 PROPOSED LAND TENURE AND ADMINISTRATIVE RESPONSIBILITIES

### 6.4.1 DEVELOPMENT AREA

The proposed land tenure and administrative responsibilities for the various land parcels on the site is set out in Table 2.

**Table 2: Proposed Land Use**

PARCEL	AREA (ha)	CURRENT TENURE	FUTURE TENURE & USE
<i>ACT LAND</i>			
BLOCK 1605	665.8	Leasehold (Riverview)	Unleased territory land (note 1): <ul style="list-style-type: none"> <li>• Approx. 50% to conservation corridor</li> <li>• Approx. 50% urban development</li> </ul>
BLOCK 1606	12.5	Leasehold (Riverview)	Unleased territory land (note 1) for urban development
BLOCK 1607	8.1	Territory land (ACTEW Vent and Bicentennial Trail)	Urban development (appropriate buffer to vent, trail to be realigned)
BLOCK 1420	2.7	Leasehold (Billabong Aboriginal Development Corp)	Urban development subject to arrangement with current lessee
BLOCK 1613 (PT)	26.8	Territory land	Conservation corridor
Block 1332	9.64	Licensed to Strathnairn Arts Association	Unchanged
BLOCK 1329	41.4	Leasehold (Pace Parkwood poultry))	Unchanged for term of current lease (to 2033).
BLOCK 1621	33.3	Unleased Territory land	Urban development, deferred subject to buffer requirements to Parkwood Poultry
BLOCK 1622	71.8	Unleased Territory land	Urban development, deferred subject to buffer requirements to Parkwood Poultry
BLOCK 853	0.7	Unleased Territory land	Urban development
BLOCK 1540	0.9	Leasehold (ACT Government)	Urban development
BLOCK 856	0.8	Leasehold (Debra/Hawkesbury/Nectaria)	Urban development subject to arrangement with current lessee
BLOCK 857	0.2	Unleased Territory land	Urban development

BLOCK 858	0.6	Leasehold (Henderson)	Urban development subject to arrangement with current lessee
BLOCK 859	0.6	Leasehold (Stuart)	Urban development subject to arrangement with current lessee
BLOCK 860	0.2	Unleased Territory land	Urban development
BLOCK 1333	4.2	Licence to Belconnen Pony Club	Urban development, subject to relocation of Pony Club
BLOCK 1440	0.8	Leased (ACTEW)	Unchanged
PT. BL. 7 SEC 149, Southern portion	17.8	Unleased Territory land	Alternate site for relocated pony club, open space, district playing fields.
PT. BL. 7 SEC 149, Northern portion	10.5	Unleased Territory land	Ginninderra Drive Completion alignment, otherwise unchanged.
BLOCK 1442	50.8	Unleased Territory land	Unchanged
BLOCK 1620	42.8	Unleased Territory land	Ginninderra Drive Completion alignment, otherwise unchanged.
PT. BL. 2 SEC 186	14	Unleased Territory land	Ginninderra Drive Completion alignment, otherwise unchanged.
BLOCK 1586	108 ha	Unleased Territory land	Subject to masterplan
<i>NSW LAND</i>			
LOT 1 / DP771051	91.8	Freehold (Reid & Stevens)	<ul style="list-style-type: none"> <li>• Approx. 95% urban development</li> <li>• Approx. 5% conservation corridor</li> </ul>
LOT 2 / DP771051	80	Freehold (Reid & Stevens)	<ul style="list-style-type: none"> <li>• Approx. 88% urban development</li> <li>• Approx. 12% conservation corridor</li> </ul>
LOT 3 / DP771051	80	Freehold (Reid & Stevens)	<ul style="list-style-type: none"> <li>• Approx. 33% urban development</li> <li>• Approx. 67% conservation corridor</li> </ul>
LOT 7 / DP771051	80	Freehold (Reid & Stevens)	<ul style="list-style-type: none"> <li>• Approx. 95% urban development</li> <li>• Approx. 5% conservation corridor</li> </ul>
LOT 4 / DP771051	80	Freehold	<ul style="list-style-type: none"> <li>• Approx. 64% urban development</li> <li>• Approx. 36% conservation corridor</li> </ul>
LOT 5 / DP771051	80	Freehold	<ul style="list-style-type: none"> <li>• Approx. 32% urban development</li> <li>• Approx. 68% conservation corridor</li> </ul>

LOT 61 / DP801234	83	Freehold	<ul style="list-style-type: none"> <li>• Approx. 40% urban development</li> <li>• Approx. 60% conservation corridor</li> </ul>
LOT 62 / DP801234	25 ha	freehold	<ul style="list-style-type: none"> <li>• Approx. 96% urban development</li> <li>• Approx. 4% conservation corridor</li> </ul>
<p><b>Note 1: The Riverview leasehold land (blocks 1605 &amp; 1606) will be surrendered to the Territory at rural value when the land is rezoned.</b></p>			

#### 6.4.2 CONSERVATION CORRIDOR TRUST

The new community will exist amongst several significant environmental features, including the Murrumbidgee River, iconic views to the Brindabella Ranges, Ginninderra Falls, and habitats and species of nationally and regionally significant conservation interest. In recognition of this environmental significance, a substantial corridor of land adjacent to the Murrumbidgee River and Ginninderra Creek will not be developed. Rather, it will be set aside as a “conservation corridor” for conservation, bushfire fuel management, recreation, education, and other community benefit. It will provide access to the Murrumbidgee River for all the north side of Canberra, which is currently unavailable.

Given the cross-border nature of this project, Riverview proposes setting up an environmental trust (the Trust) to manage the corridor and ensure its integration with the new community and beyond in perpetuity. Elton (Elton, 2014g) have prepared a report setting out a structure for the organisation.

Similar trust arrangements have emerged in Australia and overseas where commercial opportunities are married with land management priorities to support long-term conservation gains and cover reserve running costs.

The pre-eminent objectives of the Trust would be conservation of natural values and bushfire fuel management. Other objectives pertaining to education, research, recreation, and community involvement would also inform Trust operations. The Trust would be administered by a company (the Company) with a skills-based board comprising government, community, and other relevant stakeholder representatives. A Land Management Committee, a Social Sustainability Committee, and a Public Fund Committee would be set up to ensure objectives pertaining to land management, community engagement, and funds management are achieved, respectively.

The Land Management Committee would be responsible for upholding and reviewing a plan of management that meets legislative obligations and provides for conservation of natural values and bushfire fuel management. It would provide technical advice as necessary, manage recreational uses of the land, and facilitate tertiary-level research opportunities in the corridor.

The Social Sustainability Committee would be responsible for ensuring participatory process through liaising with residents regarding community aspirations and priorities, informing the community about activities, facilitating community participation in events, and managing volunteers interested in contributing to management of the corridor.

The Public Fund Committee would assist with the financial sustainability of the Trust by recommending to the board how budgets are allocated and spent and by investigating fundraising opportunities. Such opportunities may be through government grants, various types of private contributions, or through other forms of social enterprise within West Belconnen.

The Project would deliver the initial capital works within the corridor and absorb any related costs until such assets are handed over to the Trust. The Trust would earn annual income for its operations through the contribution of a percentage of sale proceeds from NSW lots and an annual contribution from the ACT Government equal to the expected cost of managing the ACT portion of the corridor.

## 7 TERRITORY STRATEGIC PLANNING POLICY CONTEXT

### 7.1 REZONING CONTEXT

The proposed rezoning of the West Belconnen site will involve changes to the planning controls that currently apply over the site, on both sides of the border. This means a change to the types of development permissible with urban development proposed in suitable areas in contrast to the current uses which are largely agricultural.

This report is part of a thorough process of environmental assessment and planning review at Commonwealth, Territory, State and Local Government levels. Building on the substantial amount of work that has already been undertaken a “strategic assessment” under part 10 of the Commonwealth Environment Protection and Biodiversity Conservation (EPBC) Act will be prepared. This will be overseen by the Commonwealth Department of the Environment.

The Strategic Assessment will run in parallel with the three rezoning processes: The National Capital Plan, The Territory Plan, and Yass Valley Shire Local Environment Plan will require amendment if the project is to proceed.

The EPBC assessment is concerned particularly with endangered and vulnerable species and ecological communities listed as such under the EPBC legislation. At West Belconnen these include the Pink Tailed Worm Lizard, Yellow Box Red Gum Grassy Woodland and the Golden Sun Moth. These are also listed under the ACT legislation.

The Strategic Assessment and subsequent EPBC approval (if granted) will satisfy both the requirements of the ACT legislation and the Commonwealth regarding threatened species and communities. The environmental approvals will also inform the National Capital Plan amendment and the Yass Shire rezoning.

Other matters that are also important elements of the total environment such as social and economic impacts, traffic, noise and odour, are required to be assessed under ACT and NSW legislation. These are included in this report that will accompany the ACT rezoning proposal and the Local Environment Study documentation that will be prepared as part of the NSW rezoning process.

The various statutory agencies that will oversight, and ultimately determine, the rezonings and environmental approval are:

- ACT Planning Authority
- National Capital Authority
- Yass Valley Council
- NSW Department of Planning and Infrastructure
- Commonwealth Department of the Environment.

The planning approval processes administered by these agencies all involve substantial periods of formal community consultation.

The specific rezoning proposal is set out in section 6.3. The rezoning process is set out at Figure 9.



*Figure 9: Rezoning process*

## 7.2 PLANNING AND DEVELOPMENT ACT 2007

The object of the Planning and Development Act is to provide a planning and land system that contributes to the orderly and sustainable development of the ACT. The Act establishes and gives force to the Territory Plan and provides for the plan to be administered by the ACT Planning Authority. The Plan sets out objectives, rules and criteria governing the use and development of land all areas of the ACT other than areas defined as “designated land” which are administered by the

National Capital Authority under the provisions of the National Capital Plan (there is no “designated land” at West Belconnen). The current Territory Plan land use zones covering the West Belconnen project area do not permit the development of the site for urban purposes; the Act provides a process by which a proposal to change the zoning may be assessed and decided upon. The decision is ultimately made by the Minister for planning, with referral to the Legislative Assembly for ratification.

The Act also prescribes procedures for undertaking an environmental assessment of a proposal, where such an assessment is warranted. The site includes species and habitats that trigger the requirement for an environmental assessment and which also trigger a requirement for assessment under Commonwealth legislation. A single comprehensive assessment - a Strategic Assessment - is being prepared and processed in accordance with the requirements of the Commonwealth Environment Protection and Biodiversity Conservation Act.

### **7.3 NATURE CONSERVATION ACT 1980**

The Nature Conservation Act establishes the Conservator of Flora and Fauna as a statutory position and empowers the Conservator to make declarations regarding species, ecological communities or processes that are of environmental concern. Species and communities may be declared to be vulnerable or endangered in which case special provisions will apply to any development that may impact on the species or community. At West Belconnen there are known to be three such species or communities as follows:

- Pink tailed Worm Lizard (*Aprasia parapulchella*)
- Golden Sun moth (*Synemon Plana*)
- Yellow Box red gum grassy woodland

This SEA is addressing these three matters in accord with the requirements of the Nature Conservation Act and the Planning and Development Act.

### **7.4 ENVIRONMENT PROTECTION ACT**

The *Environment Protection Act 1997* includes a number of detailed objectives designed to protect the environment; it also recognises that environmental decision-making must have appropriate regard for economic and social considerations. It aims to achieve this by, for example, requiring all people to accept a shared responsibility for the environment.

The Act, when made in 1997, embodied principles endorsed by the Intergovernmental Agreement on the Environment, to which the ACT was and is a signatory. These principles are:

- the precautionary principle;
- intergenerational equity;
- conservation of biological diversity and ecological integrity; and
- improved valuation, pricing and incentive mechanisms.

The plan variation process is designed to give effect to these principles.

## 7.5 TREE PROTECTION ACT

The *Tree Protection Act 2005* replaced the *Tree Protection (Interim Scheme) Act* and set out provisions for the protection of trees in the urban area. This Act contains provisions for:

- establishment of a register of trees of high importance with appropriate levels of protection;
- establishment of comprehensive tree protection measures to be applied in areas where urban forest values are at risk of degradation;
- approval of tree damaging activities;
- approval of groundwork activities within the tree protection zone of a protected tree;
- approval of tree management plans;
- offence and enforcement provisions;
- ability for the Conservator of Flora and Fauna (the Conservator) to make directions with regard to tree protection matters; and
- establishment of a Tree Advisory Panel. (The Conservator is established under the Nature Conservation Act 1980).

The Act is principally concerned with trees within urban areas; the West Belconnen proposal is for the conversion of what is a substantially rural area to urban uses and consequently the provisions of the Tree Protection Act will have effect as the project area is developed. Considerable attention will be paid to the existing treescape on the site, including a detailed assessment of all trees, as part of the master planning process.

## 7.6 STATEMENT OF STRATEGIC DIRECTIONS IN THE TERRITORY PLAN

The Statement of Strategic Directions in the Territory Plan recognises that the ACT must be planned as both the setting for the National Capital and as a self-governing community in its own right. Accordingly, it complements and applies concurrently with the principles and policies set out in the National Capital Plan, while emphasising the particular needs of the Territory. The Statement also recognises that the Territory is set within a regional context and must have regard for its regional role and impacts including its responsibilities under any intergovernmental agreements, such as memorandums of understanding between the ACT and NSW Governments. A proposal such as the West Belconnen project, which involves substantial policy change in the Territory Plan (by way of a rezoning) must be reviewed in light of, and adhere to, the strategic principles.

The Statement includes the principles for sustainable development as well as the spatial planning and urban design principles that are intended to guide the more specific policy content of the Territory Plan. A review of the proposal against the strategic direction has found that the proposed West Belconnen project is in accord with the principles prescribed in the plan and consequently is in accord with the strategic direction of the plan.

The Statement comprises two sets of principles:

- Sustainable development;
- Spatial planning and urban design.

The ordering of the principles does not reflect the priority of any one or set of principles. Each needs to be equally considered where relevant.

Table 3 below provides a discussion of this proposal in the context of the Strategic Directions.

**Table 3: Territory Plan Statement of Strategic Direction**

<b>1. Principles for Sustainable Development</b>	
<b>General Principles</b>	<b>Discussion</b>
<p><b>1.1 Planning processes and decisions will be focused on the combined achievement of economic vitality, community wellbeing, and environmental quality. Broad community involvement will be a key element in the pursuit of sustainable development, as will complementary regional strategies and agreements.</b></p>	<p>The project objective is to create a sustainable development of international significance in the nations' capital. A range of mechanisms are proposed to achieve this including meeting a six star community sustainability rating in accord with Green Building Council of Australia Guidelines.</p> <p>The project will, due to its proximity to existing community and services infrastructure in Belconnen (including for example the Lower Molonglo Water Quality Control Centre and the Kingsford Smith K-10 school which whilst at capacity now will have significant spare capacity during the life of this project) enable maximum efficiencies to be achieved with regards to Infrastructure provision; infrastructure costs will be less than at Gungahlin and significantly less than at east Molonglo.</p> <p>The scale of the project, the design approach that has been adopted, the terrain and the low infrastructure costs will enable to provide significant opportunities for the delivery of affordable housing.</p> <p>The project has evolved and continues to be managed in a context of pro-active engagement with the local and broader community. A review of consultation input so far is provided in Section 18.</p>
<p><b>1.2 Matters of broader National Capital, metropolitan and regional significance will be carefully considered when formulating Territory Plan policies and when making decisions about development proposals and sequencing</b></p>	<p>The proposal has been referred to the National Capital Authority, a variation to the National Capital plan to facilitate the proposal has been proposed.</p> <p>Extensive and positive discussions have also been held with NSW Government and Yass Valley Council on the concept of a cross border project.</p>
<p><b>1.3 Economic, social and environmental objectives will be pursued in a balanced and integrated way, having regard to both short-term and long-term factors, such that present needs can be met without prejudicing the welfare of future generations, and without serious or irreversible loss of life-supporting natural resources or damage to the environment.</b></p>	<p>The proposal will facilitate the achievement of a more sustainable urban form by providing increased opportunities for greenfield residential development in a range of price ranges including a substantial affordable component not available elsewhere in the ACT. Environmental impacts have been fully considered and the project will not impose any unacceptable impacts on natural resources or the environment. The economic, social and environmental aspects of the proposal are fully canvassed throughout this report.</p>

<p>1.4 Wherever appropriate, the broader global and regional context and potential cumulative impacts of decisions will be taken into account. Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for failing to prevent environmental degradation.</p>	<p>The proposal is consistent with this objective. In particular the proposed establishment of a conservation corridor that will be managed with a principal objective of protecting and enhancing the habitats of endangered species and ecological communities.</p>
Environmental Sustainability	Discussion
<p>1.5 Planning policies will seek to ensure the efficient use of all resources and to reduce consumption of non-renewable resources. Waste minimisation, reuse and recycling will be encouraged, whilst energy-rating and conservation measures will be applied wherever appropriate, particularly in transport, subdivision planning, and building design and construction.</p>	<p>The proposal will ensure that efficient use of land is promoted which leads to energy conservation in transport planning and subdivision planning.</p> <p>Additionally, West Belconnen is, unlike many greenfield areas, very well positioned to optimize the use of existing infrastructure and extend the life of other resources such as schools and community facilities. The project has already been the catalyst for a planning review of the Kippax centre which will lead to the upgrade of the facilities, amenity and retail services available at the centre.</p>
<p>1.6 The pattern of development is to reflect land capability constraints resulting from topography, soils, geotechnical factors, drainage, natural hazards, microclimate and the sensitivity of ecosystems. Particular attention will be given to the need to conserve soil, water and vegetation; maintain biological diversity; safeguard important ecosystems and ecological processes; and provide and protect wildlife corridors.</p>	<p>The proposal is consistent with this objective. Refer to section 11.1.1.</p>
<p>1.7 Land and water resources will be planned in accordance with the principles of integrated catchment management and water sensitive urban design. Policies will seek to protect identified environmental values, whilst focusing on opportunities for multi-purpose use of resources. Special attention is to be given to protecting sources of the Territory's water supply and to maintaining environmental flows in rivers and streams.</p>	<p>The proposal is consistent with this objective. The Territory Plan includes stringent requirements for water sensitive urban design which will be adhered to and exceeded. Refer to section 14.4.</p>
<p>1.8 Planning policies will provide for the sustainable management of rural areas, ensuring that rural lands nominated for future urban development or other purposes can be retained in productive use and properly managed for the time being. Appropriate activities to reduce net greenhouse gas emissions will be encouraged.</p>	<p>The proposal involves the conversion of rural lands to urban use. The proposal includes an "urban agriculture" component which is likely to result in at least replacement and possibly exceedance of current agricultural productivity.</p>
<p>1.9 Urban expansion will be contained in order to minimise impacts on valuable natural and rural areas.</p>	<p>The proposal is within the area nominated for urban investigation in the Canberra Planning Strategy.</p>
<p>1.10 Integrated land use and transport planning will seek to maximise accessibility and transport efficiency, reduce energy consumption, support the preferred pattern of development, promote safety, safeguard environmental quality, and minimise greenhouse gas emissions.</p>	<p>The proposal is consistent with this objective, multi modal transport planning has been an integral element in the development of the structure plan.(refer to section 12.3)</p>

<p>1.11 Policies for environmental planning and management will ensure amenity, minimise pollution, and protect public health and safety.</p>	<p>The proposal is consistent with this objective. These matters are rigorously controlled by the Territory Plan.</p>
<p><b>Economic Sustainability</b></p>	<p><b>Discussion</b></p>
<p>1.12 Planning policies will facilitate the widest possible range of commercial, retail, industrial, rural, tourism, and other forms of economic activity in order to promote new investment and a more diversified economy, to underpin employment growth, and to respond to changing economic opportunities.</p>	<p>The proposal is consistent with the objectives to facilitate economic activity and investment opportunities in Canberra. In particular it will facilitate the retention of first home buyers within the ACT market, currently being lost to competing NSW developments. This is significant because these home buyers tend to be in the “key worker” category – nurses, firemen, teachers and the like – who are essential to the maintenance of a viable economy and society.</p> <p>Economic benefits will also flow from the fact that the residents in the NSW component of the West Belconnen project will be located much closer to the facilities and services that they will utilise in the ACT than residents in the majority of existing NSW developments in the ACT region.</p>
<p>1.13 The characteristics of the city that contribute to economic growth: Canberra's role as the national capital and the seat of Federal Parliament; the ease of getting around the city; the safe and clean environment; and the vibrancy of centres as places of social, cultural and business exchange, will be enhanced.</p>	<p>The proposal is consistent with this objective.</p>
<p>1.14 An adequate and diverse supply of industrial land will be maintained to facilitate both conventional and new forms of industry.</p>	<p>Current industrial activity (the Parkwood recycling estate) at the Belconnen Landfill site is proposed to be retained, where compatible with nearby residential development, with upgraded infrastructure to ensure that environmental impacts and uses are compatible with the surrounding residential use.</p>
<p>1.15 Tourism will be fostered by permitting a variety of entertainment, leisure and accommodation facilities, including opportunities for ecotourism, in appropriate locations throughout the Territory.</p>	<p>The proposal will open up substantial ecotourism opportunities along the Murrumbidgee and Ginninderra Creek corridors that are not currently publicly accessible. This corridor is likely to include the Ginninderra falls, a spectacular natural feature, and reaches of the Murrumbidgee river extending over approximately 6 kilometres.</p>
<p>1.16 Sufficient land will be set aside for major communications, educational, scientific, or other activities requiring broadacre sites in appropriate locations outside urban areas.</p>	<p>The proposal involves the conversion of an area of broadacre land to urban use. This land was identified as “peri-urban” when it was rezoned in 2008, following its earlier identification as residential land in the ACT Spatial Plan in 2004. Its use for urban, principally residential, use is considered to be appropriate. The West Belconnen proposal includes substantial areas of employment land, particularly within the Belconnen Landfill site and in areas to be zoned for mixed use. Taken together these will serve to largely replace the employment potential currently presented by the broadacre land. Refer also to section 17.3.</p>

<p>1.17 In planning future development and redevelopment, particular emphasis will be placed on cost-effective provision and management of existing and new infrastructure and services, taking into account whole-of-life and whole-of-system costs, including the ecological footprint of proposed developments and activities.</p>	<p>The proposed development is substantially more efficient in terms of infrastructure costs than the previously proposed alternative development at Kowen, and is more efficient than currently developing areas at Gungahlin and East Molonglo.</p>
Social Sustainability	Discussion
<p>1.18 Provision will be made for a comprehensive range of readily accessible community, cultural, sporting and recreational facilities, distributed according to the varying needs of different localities and population groups. In major centres and developing areas, sites will be safeguarded where necessary for particular community needs.</p>	<p>The proposed new residents at West Belconnen will utilize existing facilities and services in Belconnen, maximizing their efficiency over the long term; additionally, a substantial range of facilities and services will be provided within the project to meet the needs of residents. Refer to section (Elton, 2014e).</p>
<p>1.19 A variety of open space types will be provided in each district or local area to meet the diverse recreational needs of residents and visitors, and to contribute to community health.</p>	<p>A network of open space corridors and spaces, including access to the river corridor, is an integral element of the proposed structure plan. (Refer to section 15.1.5).</p>
<p>1.20 Planning policies for community facilities and open space will encourage multiple use and flexible design to allow for changing needs.</p>	<p>The structure plan design reflects this objective. Refer to the community plan at section 15.</p>
<p>1.21 Provision of affordable, adaptable and special-needs housing will be promoted throughout the city, as well as modification or redevelopment of existing stock to meet emerging social needs.</p>	<p>A broad range of housing types are proposed to be provided including affordable, adaptable and special needs housing.</p>
<p>1.22 Urban development will be planned in a manner that promotes community vitality and safety, applying principles of crime prevention through environmental design. Provision will also be made for emergency services infrastructure necessary to ensure a high standard of safety for residents and visitors.</p>	<p>The proposal is consistent with the objective. Design safety assessments will be completed as part of the EDP/DA processes post rezoning.</p>
<p>1.23 The needs of people with disabilities will be recognised in all facets of urban planning, particularly including the design and operation of transport and access systems and the assessment of development proposals.</p>	<p>The assessment of disability requirements would be dealt with at Development Application stage.</p>
<p>1.24 New suburban areas will be planned with a legible and permeable hierarchy of roads; conveniently located commercial and community facilities; a network of open spaces; an off-road system for pedestrians and cyclists; and provision for accessible public transport.</p>	<p>The structure plan has been prepared to reflect these principles. Refer to the design discussion at section 11.2.</p>
<p>1.25 Heritage and cultural values will be safeguarded, including in particular those of the Territory's Aboriginal peoples and those derived from both its rural history and urban development as the National Capital. The distinctive qualities of residential areas and other places, as well as elements of community heritage, will also be recognised and their conservation promoted.</p>	<p>The Belconnen farm heritage precinct has been recorded and listed on the heritage register as a precursor to the project; comprehensive investigations regarding both European and indigenous heritage have been conducted and taken into account in the preparation of the structure plan. Refer to section 15.2.</p>

<p>1.26 Identified places of heritage significance will be protected in accordance with requirements for their conservation contained in the Heritage Register and any relevant heritage guidelines under the Heritage Act 2004. Special provisions are included in the Heritage Act for the recognition, registration and conservation of Aboriginal heritage.</p>	<p>The Belconnen Farm site has been listed as a precursor to the project, other heritage matters identified as part of the indigenous and european heritage studies have been taken into account in the preparation of the structure plan and will be treated appropriately as the project proceeds.</p>
<p><i>2. Spatial Planning And Urban Design Principles</i></p>	
<p><b>Urban Areas</b></p>	
<p>2.1 Canberra will continue to develop as a series of discrete urban areas within a landscape setting of hills, ridges and other open spaces. Each town will offer a diversity of housing types; the broadest possible range of employment opportunities; and convenient, linked access to retail centres, community facilities and open space.</p>	<p>The West Belconnen project is an additional component of, and closely integrated with, the town of Belconnen.</p>
<p>2.2 Future residential settlement will be accommodated through development of Greenfields areas, subject to detailed feasibility and suitability studies; some expansion of existing towns; and appropriate use of suitable vacant or underdeveloped sites.</p>	<p>The West Belconnen project meets this objective.</p>
<p>2.3 Commercial and retail activity will be concentrated in centres and other planned nodes of intensive activity that are well served by public transport to ensure an efficient pattern of development. Primary emphasis will be placed on strengthening and enhancing existing and new centres and nodes, including improved urban design and encouragement of more mixed-use development</p>	<p>The West Belconnen project will focus on the existing Kippax centre as the group centre for the West Belconnen area. The role of Kippax will be strengthened by the additional population. A smaller centre will be established within the project area, in accordance with the structure plan.</p>
<p>2.4 Planning policies will support revitalisation of the City Centre as the preeminent centre of governance, commerce and entertainment for the ACT and its region, while keeping the City Centre in appropriate balance with other Town Centres. Within the City Centre, provision will also be made for a range of major community facilities and opportunities for high-density residential development.</p>	<p>Not applicable to the proposal. Not in city centre.</p>
<p>2.5 A wide range of housing types will be permitted in identified residential areas close to commercial centres and some major transport routes to increase choice; maximise opportunities for affordable housing; and secure some intensification of development consistent with maintaining residential amenity. Outside of these areas, planning policies will protect the typically low density, garden city character of Canberra's suburban areas.</p>	<p>Housing densities are proposed to be varied across the site with increased densities close to the proposed retail centre and along transit routes.</p>

<p>2.6 Higher density development will be encouraged within and near major centres, and in other suitable locations that are well served by public transport.</p>	<p>The proposal is not in or near an existing major centre. The project master plan provides for higher density housing adjacent to the proposed retail centre and along transit routes.</p>
<p>2.7 Development will be planned to encourage use of public transport, walking and cycling, including commuter cycling. Routes will be reserved for an enhanced inter-town public transport system. Requirements for vehicle parking will be related to commercial needs and transport policy objectives.</p>	<p>Multi modal transport planning has been an integral element in the development of the structure plan, an inter town rapid transit alignment has been incorporated into the structure plan along Parkwood Road. (refer to section 12.3).</p>
<p>2.8 Industrial areas will be in locations accessible to suitable freight services, and where industrial activity is unlikely to have a significant adverse effect on the environment or the amenity of residential areas.</p>	<p>Not applicable to the proposal.</p>
<p>2.9 A planned hierarchy of roads will be maintained in order to promote road safety, protect the amenity of residential and commercial areas, and facilitate the efficient movement of major traffic flows and heavy vehicles.</p>	<p>A detailed road hierarchy is proposed. Refer to section 11.2.</p>
<p>2.10 Adequate provision of open space throughout the Territory will remain a high priority. Open space will be planned and carefully maintained as an integrated, hierarchical system that provides for a diversity of sport and recreation activities, contributes to the legibility and character of urban development, is cost-effective to maintain, and assists in the effective management of stormwater.</p>	<p>The proposal includes substantial provision for open space, additionally it proposes the use of approximately 100ha of land under power line easements for active open space use, the creation of an urban park on the land fill site and the creation of a river and woodland conservation park totalling 576ha. .</p>
<p><b>Non-Urban Areas</b></p>	
<p>2.11 Planning policies will protect the landscape and environmental qualities of the hills and ridges surrounding urban areas, the Murrumbidgee and other river corridors, the mountains and forests west of the Murrumbidgee River, and productive rural landscapes.</p>	<p>The proposal includes the creation of a river and woodland corridor reserve extending into NSW and with a total area of 576ha. The proposed development area is contained by the river corridor and a ridge of hills. Refer to section 5 and 6.3.</p>
<p>2.12 Planning for non-urban and natural areas will also recognise the values of land for research, education, recreation and tourism purposes.</p>	<p>The proposed river and woodland reserve will provide extensive opportunities for ongoing scientific research, education and recreation.</p>
<p>2.13 Clearance zones will be established where necessary around major facilities to protect the operational efficiency of those facilities and to minimise adverse environmental impacts</p>	<p>The current clearance zone around the Lower Molonglo Water Quality Control Centre (1km radius) will not be affected by the proposed development as all proposed urban uses are outside this buffer.</p> <p>Buffers around the Parkwood egg facility and the Belconnen land fill have been re-assessed and are now proposed to meet current circumstances and activities on these two sites. (refer to section 11.1.5).</p>

Urban Design	
<p>2.14 Policies and procedures to promote high quality, creative design of development, urban spaces and landscape settings will be applied throughout the Territory, and innovation encouraged, in keeping with the spirit of the National Capital as an exemplar of best practice. Particular care will be taken to ensure high-amenity, quality design outcomes within residential areas, heritage areas, major centres and activity nodes, and along principal approach routes. The relationship between the public and private realms will also be emphasised in terms of the design quality of precincts and shared spaces, including spaces around buildings, as well as that of individual developments.</p>	<p>The proposal includes a proposed revision of the relevant planning codes which have been reconfigured to specifically respond to the characteristics of the site and the need to provide for a broad range of housing typologies to meet a range of needs, specifically including affordability.</p> <p>A range of road and street typologies have been developed to specifically address issues of design quality related to the public realm and the relationship between public and private spaces; the concept of “people streets” has been a central focus.</p>
<p>2.15 Policies will acknowledge Canberra as the national capital and the symbolic heart of Australia and will seek to preserve the landscape features that give the national capital its character and setting; respect and reinforce the key elements of Walter Burley Griffin’s formally adopted plan for Canberra within the proposed urban settlement pattern; enhance and strengthen approaches and backdrops to the city and its national institutions; conserve open space between urban areas as visual separation buffers consistent with the landscape setting; retain areas that are identified as the rural setting surrounding the city; and retain key vistas created by the landscape network within new settlement areas.</p>	<p>The proposal is consistent with this objective. The objective of the project is to create “ a sustainable community of international significance in the nations’ capital”. It is consistent with and strengthens the landscape setting of Belconnen (refer to section 5 and 6.3). The Structure plan is based on a series of key vistas along axes that link the development to central Canberra, Belconnen and the mountain backdrop to the west. (refer to section 8).</p>
<p>2.16 Retention of Canberra’s unique landscape setting, including the integration of natural and cultural elements that create its ‘garden city’ and ‘bush capital’ qualities, will be accorded the highest priority. Special attention will be given to safeguarding visual amenity, protecting vegetation and other important features within the established urban landscape, and ensuring the high quality of environmental design in new developments or redevelopment.</p>	<p>The proposal consistent with the objectives. The design process that has been followed leading to the preparation of the structure plan has been a best practice urban master planning approach, ensuring that the outcomes achieve a high standard of urban design.</p>
<p>2.17 Advertisements and signs will be carefully controlled to maintain environmental amenity.</p>	<p>The objective is noted.</p>

## 7.7 TERRITORY PLAN ZONES

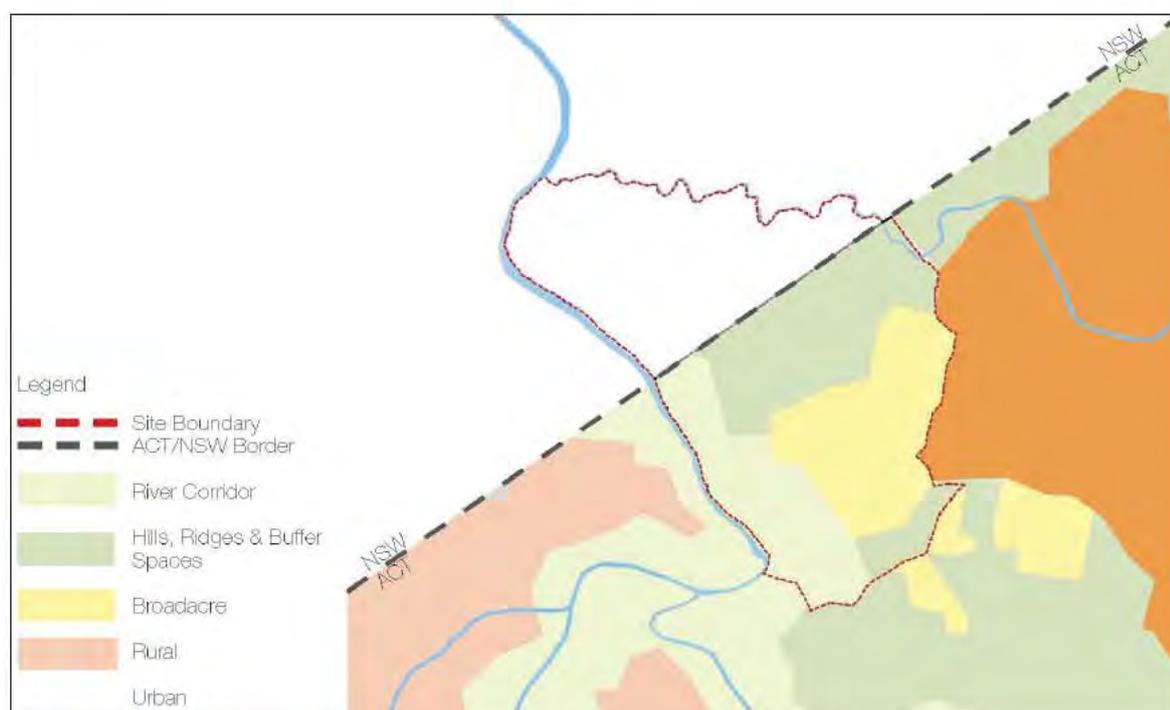
Land in the West Belconnen project area falls within three Territory Plan land use zones, as shown on Figure 10:

River Corridor  
Hills Ridges and Buffers, and  
Broadacre

These are the equivalent zones and cover the same areas as in the National Capital Plan. The discussion at sections 8.3 below applies equally to the Territory Plan Zones.

The proposed West Belconnen development will require the amendment of these zones as discussed in section 6.3. The River corridor zone will remain although over an enlarged area. The broadacre and Hills ridges and buffer zones will be replaced with various zones to permit urban development. The river corridor is currently defined as “public land”, the public land boundary will be amended to accord with the revised River Corridor zone boundary.

Amendments to the National Capital Plan provisions for the site will be a pre-requisite to the Territory Plan amendments as, under the Commonwealth *ACT Planning and Land Management Act 1988*, the Territory Plan is required to be “not incompatible” with the National Capital plan. The National Capital Plan amendments are discussed in section 8.

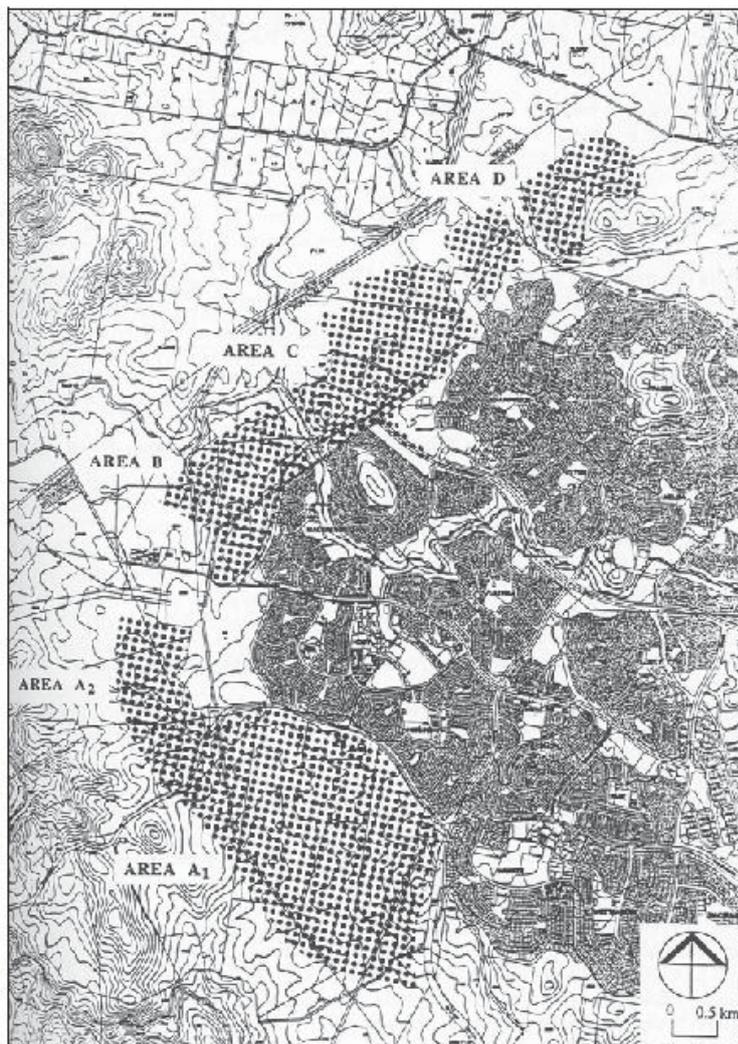


**Figure 10" Current Territory Plan zoning**

## 7.8 WEST BELCONNEN ENVIRONMENTAL IMPACT ASSESSMENT 1992

An assessment of the development potential of land at West Belconnen was conducted on behalf of the ACT Planning Authority in 1992. The assessment was over two stages, under the terms of the (now repealed) *Land (Planning and Environment) Act 1991*. The first stage, a “preliminary assessment” reviewed five separate areas labelled A1, A2, B, C & D. these are shown in Figure Figure 11 below. The preliminary assessment resulted in the decision to not proceed at that time with further consideration of areas A1, A2 and D. The second stage involved a detailed environmental assessment of areas B and C. Both of these areas have subsequently been developed as the suburbs of West Macgregor and Dunlop.

The development of West Belconnen was considered against other possible development fronts including west Murrumbidgee, the Jerrabomberra valley, the Majura valley, Lawson and Gungahlin. Gungahlin was to supply most of the land needed to meet short to mid-term growth demands of Canberra (and has since done this) whilst West Belconnen was preferred over all the other options as a second development front. The EIS report said as follows:



**Figure 11: West Belconnen EIS 1992**

*“Facilities in Belconnen were designed to accommodate a population of 120,000 (NCDC 1970). The Australian Bureau of Statistics (ABS) estimated the 1990 population to be 89,240 (ABS 1991). As a consequence, the West Belconnen area provides ready access to existing urban infrastructure and community facilities and can sustain short-term development. Should West Belconnen not proceed, the current ageing and decline in the population of Belconnen will lead to the under-utilisation of existing education, retail, community and health facilities.”*

Taken together, areas B and C were to accommodate approximately 3000 dwellings, equivalent to about 8000 people. This was well below the apparent capacity of about 30,000 identified above, leaving scope for further development in the future. The West Belconnen project that is the subject of this report covers the area identified as A2 in the figure above and extends further towards Parkwood Road to the north and to the south of the landfill site, and also includes the area to the west of Area B up to and beyond the ACT/NSW border. An important consideration at that time was the need for a substantial buffer around the Belconnen land fill site which was then fully operational. As discussed elsewhere in this report (refer to section 11.1.5) this constraint is now much reduced and will, in time, be ultimately removed altogether. The Parkwood egg farm also posed a constraint to development at that time as it does now. The land within its buffer area appears to be eminently suitable for residential use in the future should the farm be relocated, and over time and within the context of the long term (circa 30 – 40 year) development timeframe of this project this will become an economically feasible prospect.

Given that area A1 has recently (as a consequence of the investigative studies for the Molonglo Valley) been withdrawn from development for a twenty year moratorium period (pending resolution of environmental issues) and area D has not proceeded due to environmental constraints it is logical to explore development options extending beyond areas A2 and B.

## **7.9 SPATIAL PLAN AND ACT PLANNING STRATEGY**

### **7.9.1 IMPLEMENTING THE ACT PLANNING STRATEGY**

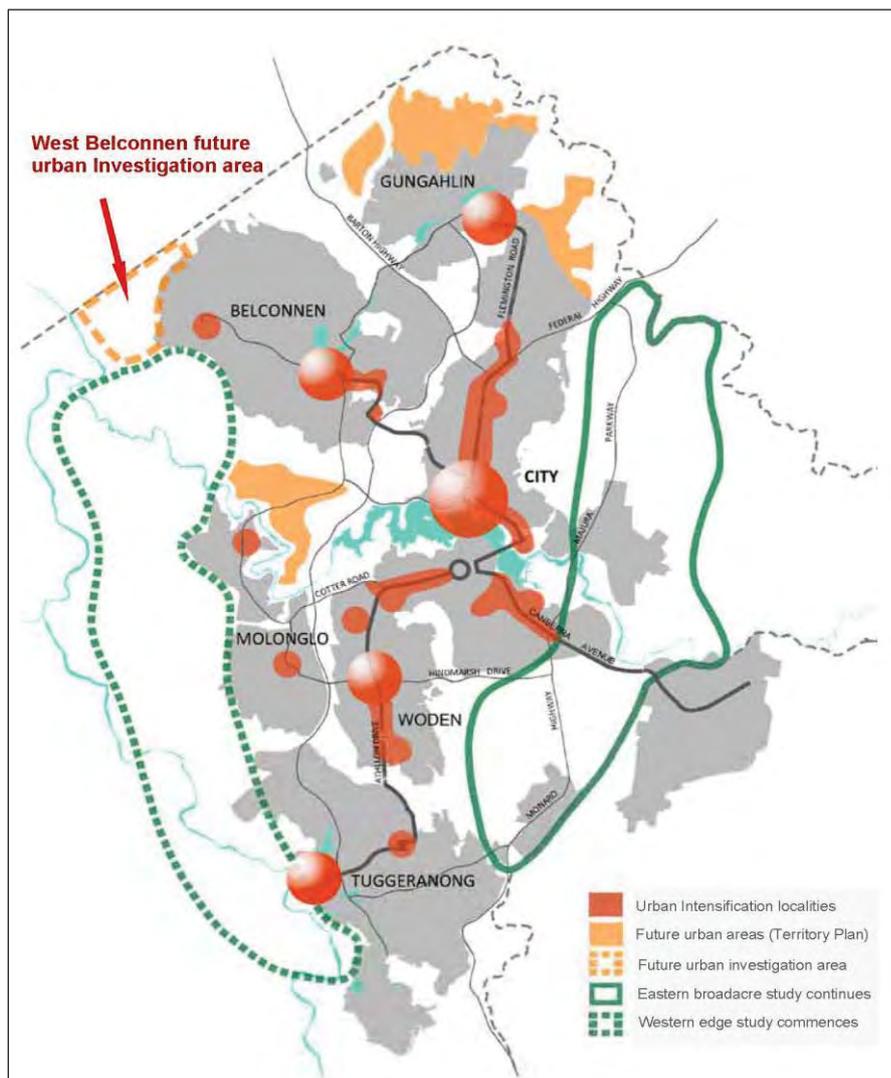
The proposal to rezone land at West Belconnen for urban development is in line with the strategic planning intentions for the growth and development of Canberra. A portion of the West Belconnen site was identified for future residential development in the Canberra Spatial Plan, published in 2004 and the development potential has been confirmed in the Canberra Planning Strategy, published in September of 2012. In the Strategy the land is identified as being a “future urban investigation area” (ACTPLA, 2012), p. 40 fig 1.)

### **7.9.2 AN APPROPRIATE NEW DEVELOPMENT FRONT**

The West Belconnen project is an extension of the existing urban area of Belconnen. It provides a third development front within the ACT (in addition to Gungahlin and Molonglo). The site is well located and topographically well suited to development. It offers:

- The opportunity to create “A sustainable community of international significance in the nation’s capital”.
- The opportunity to incorporate best practice sustainability design, building and urban management techniques, matching the exemplar level of performance of world class developments such as the Currumbin Eco Village (in South east Queensland), and implement them over a broad suburban scale and in an economically sustainable framework.

- Significant project and ongoing revenue to the ACT Government from land sales and community facilities and services.
- Capacity to offer a variety of housing products and ensure price competition.
- Competition for NSW estates that have recently entered the market, competing for ACT residents and land sales. Without this competition the NSW estates will attract revenue that could otherwise flow to the ACT. (If the NSW portion of the proposal proceeds then development in NSW will be “cost neutral” to the ACT and the development in NSW will be more efficiently located close to ACT services when compared to competing NSW developments.)
- The location of the land and the low infrastructure costs relative to competing sites at east Molonglo and Gungahlin, means the estate will be readily capable of meeting the Governments’ 20% affordability target with a variety of housing types and in an economically viable fashion.
- Infrastructure costs are lower than East Molonglo and much lower than Kowen (the third development front previously proposed in the 2004 Spatial plan), including engineering and social infrastructure.
- The site is eminently suitable for urban development with appropriate topography and manageable environmental constraints.



**Figure 12: ACT Planning Strategy 2012**

## 7.10 TRANSPORT FOR CANBERRA

“Transport for Canberra” will be the foundation for transport planning for the next 20 years. It updates and replaces the 2004 Sustainable Transport Plan and sits alongside an updated and refreshed Canberra Spatial Plan, now known as the ACT Planning Strategy.

Transport for Canberra establishes important relationships between land use and transport and is intended to support a shift to more sustainable transport and a more sustainable Canberra.

It establishes six principles for transport planning which are set out in the table below with commentary on the position of the West Belconnen project in regard to these principles.

**Table 4: Transport for Canberra Key Principles**

Key principle	Response by West Belconnen project
1. Is integrated with land use planning	The West Belconnen project has been developed with the assistance of specialist transportation planning consultants, including specialist expertise in traffic engineering, traffic modelling, public transport, bicycle and pedestrian planning, as well as alternative modes. This expertise has been integral to the development of the structure plan ensuring the integration of land use and transport planning. Refer to section 11.2.
2. Makes active travel like walking and cycling the easy way to get around	The input from specialist active travel planners in the preparation of the structure plan has served to maximise the potential for active travel.
3. Provides sustainable travel options and reduces transport emissions	The maximization of public transport and active travel options will achieve this.
4. Is safe for moving people however they get around	The proposal includes a proposed road hierarchy and off-road movement network that has been designed to maximise safety.
5. Is accessible for everybody whatever their level of mobility at any time or place	Transport facilities will meet all current accessibility requirements.
6. Is efficient and cost effective, providing value for money for the government, business and the community by managing travel demand across the whole transport system.	Maximisation of public transport usage by maximizing the accessibility and convenience of usage will result in improved patronage and reduced costs. Additionally the integration of public transport planning in the structure plan design will ensure the most efficient routing and associated management arrangements for public transport systems, minimizing costs.

## **7.11 TRANSGRID SWITCHING STATION SITE LOCATION STUDY**

TransGrid is the owner, operator and manager of the NSW high voltage transmission network. It is TransGrid's job to ensure the safe and reliable delivery of high voltage electricity around NSW and also to the ACT.

The ACT, until recently, had one bulk power supply point: Canberra Substation at Belconnen. From this substation, ActewAGL distributed electricity to homes and businesses around the ACT and surrounding areas. To ensure the security and reliability of electricity supply, a second independent bulk supply has been constructed at Williamsdale ACT and connected to the ActewAGL distribution system serving Canberra. In order to achieve effective security of supply a switching station is required to enable the power supply to be switched between Williamsdale and Belconnen in the event of a problem occurring at either facility.

Under the direction of the ACT Government, TransGrid is working with ActewAGL to provide the ACT with a switching station and connecting lines. TransGrid is planning to construct a 330 kV switching station and associated transmission lines west of the existing Canberra (Belconnen) 330 kV substation as part of the second secure supply program of works for the ACT. This project has been endorsed by the ACT Government and a direction given to investigate and select an appropriate site for the switching station and transmission line. A number of technical, environmental, social and economic factors are involved in the selection of sites and routes for this infrastructure. The location of the investigation area is west of the existing Canberra substation encompassing both ACT and NSW land.

Expert consultants have been commissioned to undertake the study, which is being managed by Economic Development Directorate (EDD) on behalf of Justice and Community Safety (JACS) who are the responsible implementation agency. The outcomes of this study will form the basis for a policy paper and recommendation to Government on the project. Provision for the switching station has been made in the structure plan for the West Belconnen project; whilst a specific site location has been nominated, the plan provides for flexibility and an alternate site could be selected if warranted.

## **7.12 EXISTING PLANS OF MANAGEMENT OR ACTION PLANS RELATING TO PUBLIC LAND**

The river corridor portion of Block 1605 Belconnen is included in the 99 year rural lease that incorporates all of blocks 1605 and 1606. The river corridor land is however zoned differently from the balance of the lease land (it is zoned as "river corridor", and it is denominated in the Territory Plan as "public land"). The public land status means that a management plan for this land must be prepared to the satisfaction of the Conservator.

A management plan is currently in place; it largely reflects the current agricultural use of the land. It is intended that at the time that (and if) the rezoning of the West Belconnen land is completed the rural lease will be surrendered to the ACT Government to facilitate the development process. The planning proposal includes the delineation of an enlarged river corridor zone, including the adjoining woodland; the zoning for this would be fixed at that time also. Management arrangements for the river corridor and woodland reserve will be put in place at that time. These are discussed in section 16.6).

### **7.13 EXISTING HERITAGE REQUIREMENTS**

A portion of the site (7.4ha) has been entered on the ACT Heritage Register to ensure the conservation of buildings and related infrastructure at the Belconnen Farm precinct. The boundary of this precinct has been determined and a conservation management plan has been prepared. The precinct has been integrated into the structure plan design.

A number of other matters of heritage interest have been identified as a consequence of research into the European and Indigenous history of the site (refer to Section 15.2). None of these have warranted the reservation of land for heritage purposes within the portion of the site proposed for development. A number require various actions (related to recovery of artefacts and the like) to be taken prior to development proceeding in the vicinity of the relevant sites.

### **7.14 BICENTENNIAL NATIONAL TRAIL**

The Bicentennial National Trail is Australia's premier long distance trekking route for the self-reliant trekker, it stretches 5330 kilometres from Cooktown in Queensland to Healesville in Victoria. The trail passes through the ACT and through the eastern section of the West Belconnen site, from Stockdill Drive, past Strathnairn and then northwards along the golf course boundary, across Parkwood road and via the horse paddocks to Ginninderra Creek.

As part of the proposed development the trail will be realigned to follow the edge of the conservation corridor to the Belconnen Farm heritage precinct and thence northward to ultimately rejoining the current trail at Ginninderra Creek. The proposed new route is potentially more attractive than the current route as it follows the river corridor and includes a potential overnight camp spot at the Farm. The proposal is discussed fully in the landscape and open space report (McGC, 2014).

### **7.15 HORSE AGISTMENT PADDOCKS**

The land north and east of Parkwood Road currently accommodates approximately 100ha of horse agistment paddocks, known as the Parkwood Paddock Complex. These currently provide agistment for 68 horses, equating to about 43 owners.

It is important to note that, due to the buffer requirements of the Parkwood Egg farm, as well as the overall scale of the West Belconnen project which will evolve over a long timeframe, that most of this land would not be programmed for development within a twenty-year period. However, when this occurs the paddocks will be displaced.

On an ACT-wide basis there are a total of approximately 1500ha of government horse agistment paddocks, providing for about 300 horses held by about 200 owners. The paddocks are managed by a private company under a contract with TaMS. Future planning for the paddocks across the metropolitan scale is intended to be defined through a strategic review process that has been agreed between the ACT Government and equestrian stakeholder groups. The long-term future of horse agistment in the ACT and at Belconnen will be resolved through this strategic review.

## 8 NATIONAL CAPITAL PLAN PROVISIONS

### 8.1 STATUTORY EFFECT

The National Capital Plan controls the development potential of the site through two possible mechanisms.

The first relates to “National Land” which is not relevant at West Belconnen as no parts of West Belconnen were gazette as National Land when the initial gazettals were made in 1989, and none has been gazetted since.

Secondly, the National Capital Plan exerts influence through its own provisions including the Metropolitan Policy Plan and Other Areas Plan, which in turn influence the provisions of the Territory Plan because, under the provisions of the (Commonwealth) *Australian Capital Territory Planning and Land Management Act 1988*, the Territory Plan is required to be “not inconsistent” with the National Capital Plan. These provisions have effect irrespective of the status of the land. The current National Capital Plan zonings are discussed at Section 8.3.

Additionally, The National Capital Plan identifies any parcels of land that have the special characteristics of the National Capital as ‘Designated Areas’. The National Capital Plan sets out detailed planning controls and the National Capital Authority maintains planning jurisdiction over Designated Areas.

There are no “designated areas” within the West Belconnen project area.

### 8.2 KEY OBJECTIVES OF THE NATIONAL CAPITAL PLAN

The National Capital Plan is the strategic plan for Canberra and the Territory. It ensures that “Canberra and the Territory are planned and developed in accordance with their national significance”. The proposed urban area at West Belconnen site is not “designated land” or subject to any “special requirements” (as noted below) under the National Capital Plan. Special requirements do apply to the Murrumbidgee River Corridor. The key objectives of the National Capital Plan are included in Table 2.

The proposal to vary the Territory Plan and the National Capital Plan to provide for the development of the West Belconnen project is not inconsistent with the key objectives of the National Capital Plan.

**Table 5: National Capital Plan Objectives**

<b>National Capital Plan Key Objectives</b>	<b>Significance to Proposal</b>
Recognise the pre-eminence of the role of Canberra and the Territory as Australia's National Capital	The proposal is not inconsistent with the objective. It will provide for the continued growth of the city in an orderly and managed fashion consistent with the high levels of planning standards that have been applied to date.
Further develop and enhance a Central National Area which includes the Parliamentary Zone and its setting and the main diplomatic sites and national institutions, as the heart of the National Capital	The proposal is not in the Central National Area.
Emphasise the national significance of the main approach routes and avenues	The proposal is not located on or near a main avenue or approach route.
Respect the geometry and intent of Walter Burley Griffin's formally adopted plan for Canberra.	The proposal will not alter the formally adopted plan. The Griffin plan was limited to inner north and south Canberra, it did not include Belconnen.
Maintain and enhance the landscape character of Canberra and the Territory as the setting for the National Capital.	The proposal will maintain and enhance the landscape character of the city. It provides for the western edge of Belconnen to be contained by strong landscape features – the Murrumbidgee River and nearby hills rather than by the artificial border line which has no reference to landscape. (The straight line segment of the border was drawn across that part of the border where it was not relevant for the border to contain the catchments of the Cotter and Gudgenby rivers which were to be wholly contained within the ACT for water supply security purposes.)
Protect the undeveloped hill tops and the open spaces which divide and give form to Canberra's urban areas.	The proposal is not located on or near a hill top. The proposal will respect the open spaces. The highest point within the proposed development area is the Belconnen land fill site which will be retained as a "central park" element in the design.

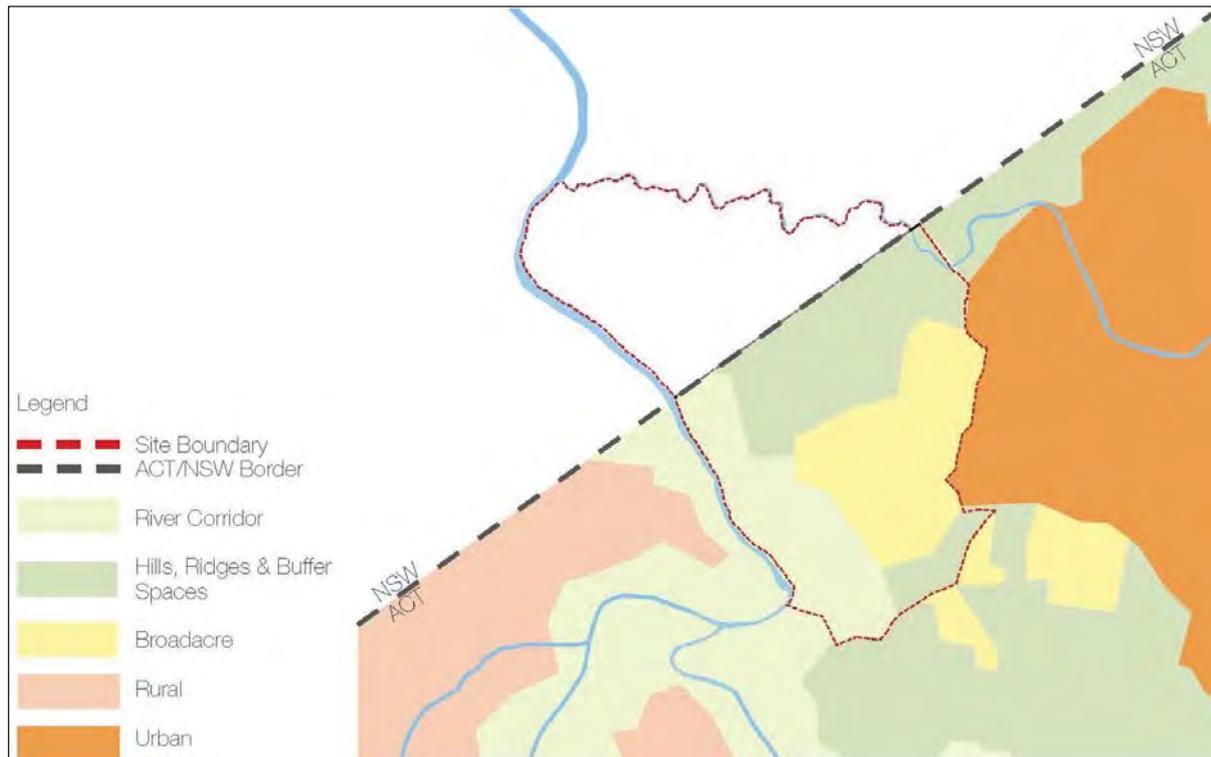
<p>Provide a plan offering flexibility and choice to enable the Territory Government properly to fulfil its functions.</p>	<p>The proposal is not inconsistent with the objective. The provision of quality affordable housing accommodation is a key function of the ACT Government. Housing costs in the ACT are at historically high levels; in recent years Canberra house prices have been the second highest in Australia after Sydney; median house prices have risen from under \$200,000 in the year 2000 to over \$500,000 in 2011 (ACTPLA, 2012).</p> <p>The high prices are largely due, as in other cities, to constraints on land supply. There are currently only two development “fronts” in the ACT, East Molonglo and Gungahlin. West Belconnen will introduce a third choice, at more affordable price levels. Affordability is particularly significant and flows firstly from the economic effect of an increase in supply and secondly from the fact that development costs at West Belconnen will be lower than at Gungahlin and substantially lower than at East Molonglo because of topography and the proximity of existing services.</p>
<p>Support and promote environmentally responsible urban development practices.</p>	<p>The proposal will meet this objective to an exemplary standard. West Belconnen has been registered as a Green Star Communities Pilot project with the Green Building Council of Australia. It will seek to achieve a six star rating which equates to worlds best practice.</p> <p>The West Belconnen proposal represents an expansion of the overall Canberra urban footprint and the application of the green star communities standards will ensure that this is done in the most sustainable way. At the larger scale the ACT Government, as an outcome of the ACT Planning Strategy 2012, has committed to a policy intention of achieving at least 50% of housing development as urban infill to maximise the efficiency of future growth, whilst continuing to provide appropriate accommodation to meet community needs.</p>

### 8.3 LAND USE ZONES

The National Capital Plan, in the introductory section of the Plan, sets out broad land use policies; the policies that apply at West Belconnen are detailed in the Metropolitan Policy Plan. Land in the West Belconnen project area falls within three Metropolitan Policy Plan land use zones, as shown on Figure 14:

- River Corridor
- Hills Ridges and Buffers, and
- Broadacre

The background and intent that the Plan prescribes for each of these zones is discussed below in the West Belconnen context.



**Figure 14: National Capital Plan zoning**

The plan also includes a number of broader policies, also discussed below. They are:

- The National Capital Open Space System
- Employment Location
- Urban Areas
- Transport, and
- Requirements for the Murrumbidgee River Corridor

#### **8.4 NATIONAL CAPITAL OPEN SPACE SYSTEM**

The importance of the natural setting of the National Capital has been recognised by the creation and formal adoption of the concept of the National Capital Open Space System (NCOSS) as a component of the National Capital Plan. This system essentially comprises the inner hills and ridges which surround and frame the urban areas, the major lakes and river corridors, and the distant mountains and bushland to the west of the Murrumbidgee River.

The policies for the NCOSS generally seek to protect the “nationally significant open space framework, visual backdrop and landscape setting for the National Capital”. Relevant policies include:-

*8.3(a) NCOSS will be planned as an integrated system so as to protect its environmental qualities, to promote a continuum of natural and park like settings for the National Capital, and to frame and enhance existing and future urban areas.*

**Figure 13: Current National Capital Plan Zoning**

*8.3(b) The natural and cultural resources of NCOSS shall be protected in order to provide educational, cultural and recreational opportunities.*

Both the “river corridor” and “hills ridges and buffer” zones at the West Belconnen project site currently form part of the NCOSS. The National Capital Open Space system has been the subject of a review conducted by the National Capital Authority. The NCOSS review report (NCA, 2014) provides a series of recommendations describing ways to establish a framework for future reviews, greater promotion of the NCOSS, and better engagement with stakeholders in managing the values of the NCOSS.

The report reiterated the four different types of open space provided for in the National Capital Plan:

- Symbolic spaces provide the unique and monumental landscapes integral to a National Capital.
- Conservation spaces protect the natural and cultural heritage of the ACT and consist generally of national park, heritage and wilderness areas and nature parks and reserves.
- Living space consists of the network of regional and metropolitan parks which are generally accessible for a broad variety of recreation and tourist uses.
- Linking spaces consist of fingers of urban land and open space that physically join and visually unite the city and the countryside (NCA, 2010).

It also reported on the extensive community consultation that had been conducted during the preparation of the report. The consultation process found that the community recognised the importance of four functions of the NCOSS (to varying degrees):

- the visual and symbolic importance of the NCOSS to the overall look and feel of Canberra
- the contribution of the NCOSS to a sustainable environment that provides many social and health benefits
- the biodiversity values of the NCOSS which help provide resilient spaces for plants and animals
- the NCOSS as a place for recreation (such as walking, riding and running).

The West Belconnen expansion proposal impacts on two “buffer” areas of NCOSS adjoining Stockdill Drive and the ACT/NSW border. They do not readily match any of the four types of open space provided for in the NCOSS review; they are not symbolic spaces as they are remote from the central national area and do not contribute to the monumental landscape backdrop of the city. They do not have conservation value. They do not form part of the metropolitan parks system (they are private property) and do not provide any linking or recreational function.

Nor do they fulfill any of the four functions identified by the community as being of importance; they do not contribute in any significant way to the overall look and feel of Canberra, they do not make any specific contribution to the NCOSS as a sustainable environment, and do not provide any recreation opportunities. Detailed analysis of the biodiversity values of the West Belconnen project area has concluded that the biodiversity values of the area are best preserved and enhanced by the expansion of the existing river corridor zone to encompass areas of pink tailed worm lizard habitat and yellow box grassy woodland (ref section 16). Preservation of the hills ridges and buffer zones would not contribute to biodiversity values.

The report makes a number of recommendations in response to the terms of reference set for the review. The recommendations include provision for periodic review of the NCOSS, at intervals no greater than seven years. Inter alia, the intent is that periodic reviews should recommend boundary changes and improvements as required. The West Belconnen project as set out in this report is proposed on the premise that two areas of NCOSS land currently zoned as “hills ridges and buffer” should be removed from the NCOSS. The rationale for this is discussed further below.

## 8.5 HILLS RIDGES AND BUFFER SPACES

The National Capital Plan specifies that Hills, Ridges and Buffer Spaces (Hills Ridges and Buffers) are to remain substantially undeveloped in order to protect the symbolic role and Australian landscape character of the Capital, to maintain visual definition and physical containment of the surrounding towns, and to ensure that their landscape, environmental and recreational values become an integral part of the National Capital.

There are two Hills Ridges and Buffer zone areas identified on the site: adjacent to Stockdill Drive in the east and adjacent to the ACT/NSW border in the west. Neither of these areas is a hill or ridge that could provide a landscape containment effect to nearby developed areas as is the case with the majority of Hills Ridges and Buffers zoned areas elsewhere in the ACT. Their function is that of a buffer only, in the one case between the urban area of the ACT and NSW, and in the second case along Stockdill Drive which is currently a rural road. The continuing need for this, in the context of the West Belconnen project proposal, is discussed below.

The Stockdill Drive Hills Ridges and Buffers zone originally formed part of a buffer between Central and West Molonglo. All of the land to the south of Stockdill Drive extending to Weston Creek was identified in the 2004 Canberra Spatial Plan as “future greenfield residential”. It was intended to be developed as “Central Molonglo”, complementing the East Molonglo development (now under construction) and “west Molonglo” which is within the West Belconnen project area.

Following more detailed environmental investigations the great bulk of central Molonglo was removed, subject to a 20 year moratorium, from the proposed development area. This was reflected in the subsequent finalisation of variations to both the National Capital and Territory plans. Central Molonglo is currently devoted to agriculture and conservation uses, providing a substantial buffer between East Molonglo and the West Molonglo/West Belconnen development. When and if the central Molonglo development proceeds, a buffer, if warranted, can be provided within the central Molonglo area between it and west Molonglo, as was originally proposed. The consequence of this is that the Stockdill Drive buffer function is no longer required. The proximity of this land to substantial facilities and services at Holt (for example the Kingsford Smith School, Kippax centre, Drake Brockman Drive) means that its development for urban purposes would incur minimal public infrastructure expenditure and would rate highly on efficiency measures.

The function of the Hills Ridges and Buffers land along the ACT/NSW border is referred to in National Capital Plan Policy 8.5.3(f); it says as follows:-

*“The rural landscape in the areas adjacent to the ACT border between Hall and the Murrumbidgee River ..... will be retained as an intrinsic part of the National Capital Character*

*and with additional landscape treatment provide physical containment to this part of Belconnen  
.....”*

As discussed above (section 5.3) the buffer is along the only “straight line” segment of the ACT border and consequently it is unrelated to the surrounding landform. The “buffer” is also interrupted by the Belconnen landfill site and the Parkwood industrial estate, which together total approximately 107ha, abutting the border.

The preamble statement regarding the Hills Ridges and Buffer zone in the National Capital Plan (P 111) says as follows:

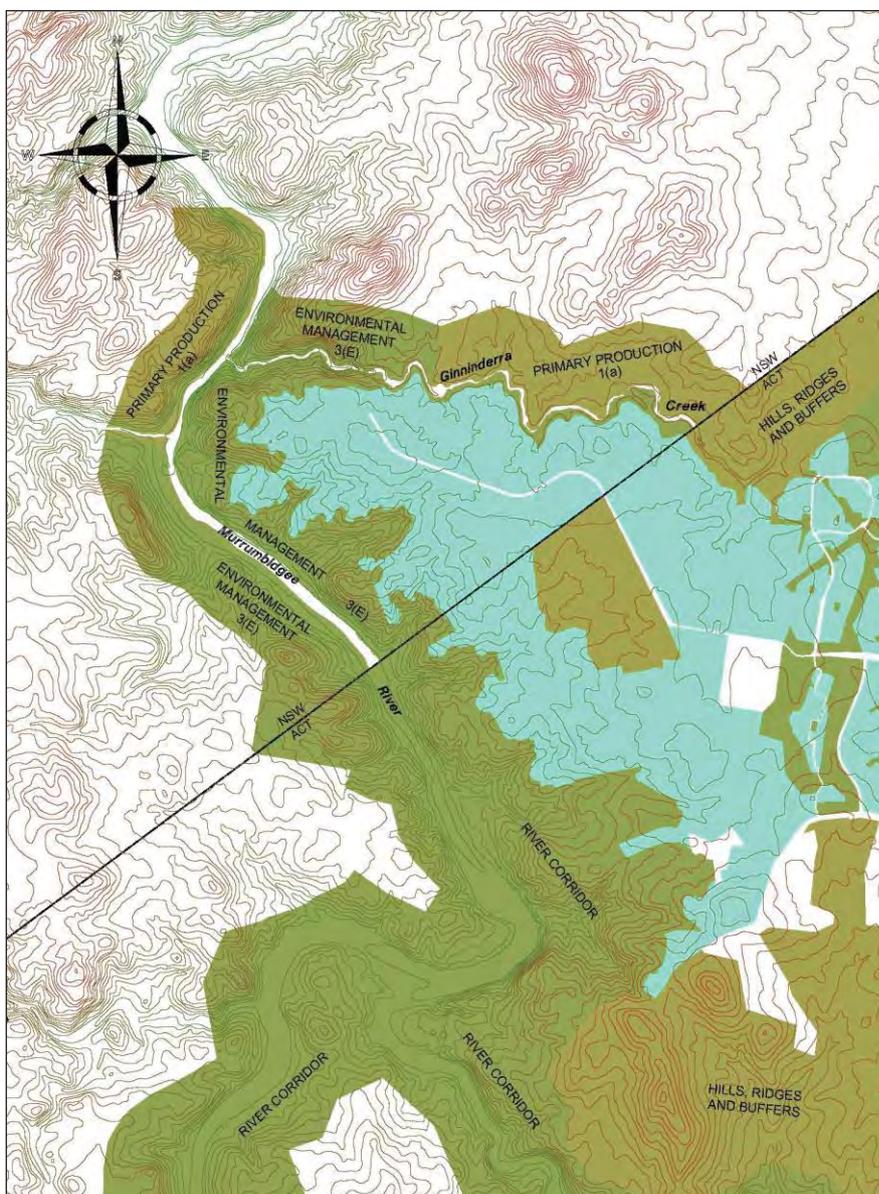
*“Hills, ridges and buffer spaces are to remain substantially undeveloped in order to protect the symbolic role and Australian landscape character of the hills and ridges as the scenic backdrop to the Parliamentary Zone, Civic and other National Capital precincts, to maintain the visual definition and physical containment of the surrounding towns and to ensure that their landscape, environmental and recreation values become an integral part of the National Capital.”*

In the case of West Belconnen this objective is met by the presence of a range of hills immediately to the west of the Murrumbidgee river, and beyond that the Brindabella Range, and a group of hills to the north of Ginninderra Creek.

The geographic character of the study area resulted in the West Belconnen site being considered holistically. The landform and development potential is contiguous across the border. This is reinforced by detailed consideration of the NSW component of the site (the “peninsula”), which is only accessible and able to be serviced from the ACT, there are no public road connections from the peninsula to other parts of NSW, and none are planned.

Taken together these factors have led to a review being undertaken of an appropriate location for a buffer to provide, in the long term, a geographic containment line between Belconnen and the natural environment to the west.

Appropriate natural containment lines are provided by the Murrumbidgee River and hills to the west, and a prominent ridge of hills immediately to the north of Ginninderra Creek. This is illustrated on Figure 15 which shows the West Belconnen site as an extension of greater Belconnen and within



**Figure 15: Proposed landscape buffer zones**

physical containment lines similar to other areas of metropolitan Canberra. The geographical features that provide the sense of containment are in NSW, rather than along the “straight line” border which has been drawn without reference to topography and which has, at the West Belconnen site, been rendered ineffective by the intrusion of the land fill site and Parkwood industrial estate.

For these reasons it is proposed that the Hills Ridges and Buffers zone within the West Belconnen project site may be dispensed with; the necessary protection for the landscape buffer will be afforded by the existing and proposed zoning controls in NSW.

## 8.6 RIVER CORRIDOR

The National Capital Plan identifies the Murrumbidgee River corridor portion of the site as forming part of the NCOSS. Currently the land zoned as “river corridor” (in both the National Capital and Territory Plans) totals approximately 287.9ha<sup>1</sup>. Substantial and detailed environmental research (refer to section 16) has resulted in a proposal to reconfigure the boundary of this zone to better reflect the actual habitat areas of the pink tailed worm lizard as well as to incorporate an area of yellow box red gum grassy woodland as part of the larger reserve. Both of these are matters of national environmental significance. With these changes in place the total area of the zone will expand by the addition of 83ha to total 371ha, an increase of 29%.

The intent of the river corridor zone is set out in the National Capital Plan as follows (p 119):

*“The corridors of the Murrumbidgee and Molonglo Rivers define zones for which the primary aim is to reinforce and preserve their landscape and heritage values and their ecological continuity, while providing for a balanced range of recreational and tourist related uses.”*

The proposed expansion of the zone area to accommodate nationally important environmental outcomes is in accord with this intent and consequently would align well with overall planning policy.

Appendix F of the National Capital Plan sets out requirements for the planning and development of the Murrumbidgee River Corridor. Under the West Belconnen proposal the areal extent of the corridor at West Belconnen is proposed to be expanded, as compared to the area currently shown in the Plan. This expansion is to accommodate areas of Pink tailed Worm Lizard habitat and Yellow Box Red Gum Grassy Woodland, both of which are listed as matters of national environmental significance under the Environment Protection and Biodiversity Conservation Act.

The West Belconnen proposal does not include any alterations to the river corridor zone other than an expansion of the area.

It is proposed that the corridor area be incorporated in a larger “conservation corridor” extending along the river into New South Wales to the confluence with Ginninderra Creek and then along the Creek corridor including the Ginninderra Falls. The total area of this conservation corridor will be

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<sup>1</sup> Comprising 261.1ha, part of block 1605 plus 26.8ha foreshore reserve, part of block 1613.

approximately 576 ha, of which 371ha will be in the ACT. This compares to the current ACT River Corridor area of 291ha, the ACT component of the corridor will be enlarged by 80ha.

A master plan will be prepared for the conservation corridor and will include recreational access and the development of a riverside recreation focal point. This will be a substantial benefit as the river is currently virtually inaccessible to the general public.

## 8.7 BROADACRE

A portion of the project site, refer to Figure 10 above, is zoned “broadacre” in the Territory Plan and the National Capital Plan. The Plan says (section 5.1) the following in relation to broadacre land:

*“Broadacre Areas may act as buffers between towns, provide sites for uses which require large land areas or may benefit from or be best located within a non-urban setting, and in some cases provide a land bank for future urban areas.”*

The West Belconnen broadacre land (then known as west Molonglo) was reconfigured in 2008 as an outcome of Amendment 63 to the National Capital Plan, part of a planning process for the Molonglo Valley conducted jointly by the National Capital Authority and the ACT Planning and Land Authority following completion of the Canberra Spatial Plan in 2004. Planning investigative and design studies were brought together in the Molonglo Valley Structure Plan prepared for the ACT Planning Authority (Annand Alcock, 2006).

The NCA draft amendment 63 report (September 2007) says as follows:

*“The Structure Plan identifies three distinct areas for development, namely east, central and west Molonglo. It is anticipated that east and central Molonglo (including North Weston) could ultimately cater for up to 73,000 people. The west Molonglo area has been found suitable for Broadacre rather than residential development.”*

It is now proposed that, as part of the West Belconnen project, the broadacre land at west Molonglo be rezoned for urban (substantially residential) use. The reasons for this proposed change are as follows:

- West Molonglo was a relatively small area (compared to central and east Molonglo) and separated from central and east Molonglo, relating to the Murrumbidgee River valley rather than to the Molonglo valley which was the focus of the Molonglo planning process. These issues fall away with the new proposal; west Molonglo, as part of the greater West Belconnen project, is a larger size, certainly achieving the critical mass for a logical development front, and it is intentionally related to the Murrumbidgee valley.
- The actual suitability of west Molonglo for residential development was originally confirmed by the Spatial Plan in 2004. It was not nominated for residential use as part of the Molonglo planning process because it was considered to be not needed, it was zoned as “broadacre” and intended for “peri urban” use.
- The Molonglo Structure Plan did identify the potential for housing development at West Molonglo (1945 dwellings) but suggested that it would be “in the very long term dependent of further study and housing need”. The extent of housing need in the Canberra region has been researched for the West Belconnen project ( ANZSOG, 2013)) and found to be pressing. This is exacerbated by the fact that the central Molonglo development area proposed by the

Structure plan to accommodate 9776 dwellings has ultimately not been zoned for development due to environmental constraints.

- Whilst this strategic planning has been taking place, since the year 2000, median house prices in the ACT have more than doubled, largely due to constraints on land supply.
- Recognising the need for the provision of additional more affordable housing land the ACT Planning Strategy (2012) identifies West Belconnen as a “future urban investigation area”.
- The deferral of potential housing land at central Molonglo, albeit for sound environmental reasons, will in the long term impact on housing availability and affordability across the region. This can be ameliorated by the creation of potential housing land at West Belconnen.

An additional important consideration, as background to the rezoning process, is the loss of the potential for landuses that are available under the current zoning, if the zoning changes. There are four points relevant to this question:

- The ACT Government has commissioned a major investigative study into the eastern broadacre area of metropolitan Canberra– the “Eastern Broadacre Study” which included the Majura – Symonston corridor (Macroplan, 2009). The purpose of the study was to identify likely future demand for employment land in the ACT and assess opportunities for employment uses in the eastern broadacre area. The study found that the eastern broadacre area contains a total of some 2,876ha of developable land; 612ha of this land was subject to further investigation, 2,264 ha was classified as “developable”. Against this the study also found that, to the year 2051 and based on a moderate growth scenario, there would be a demand for up to 1,240ha of new employment land across the ACT. It is apparent that there is sufficient capacity in the Majura – Symonston corridor to accommodate this demand.
- The old Belconnen land fill site has a total area of 107ha. This site already accommodates a number of employment generating activities and has the potential for substantially more if it is, in the future, located as the central element in a new urban population area. It is being progressively rehabilitated and will be made available for new uses but is unable to be used for residential. It will have the capacity to accommodate the types of activity that are currently possible in the broadacre land. The broadacre land, unlike the land fill site, is well suited to residential use and, especially given the availability of the landfill site for broadacre uses, would be better used for this purpose.
- The location of the broadacre land is not well suited to employment generating activities. It is not near any of the national highways that serve Canberra, nor rail or Airport facilities.
- Very extensive tracts of undeveloped broadacre land are available on the eastern side of the metropolitan area at Majura and Jerrabomberra. Those sites are well located along the Federal Highway/Monaro Highway corridor and are co-located with rail and air infrastructure.

In summary, the West Belconnen Broadacre land:

- Is suitable for residential development
- Has the potential, as part of the greater West Belconnen project, to partially replace the loss of potential residential land due to the deferral of central Molonglo and the removal of Kowen due to infrastructure costs.
- Has the potential to meet a strong regional demand for housing
- Is identified in the ACT Planning Strategy as potential urban rather than broadacre land
- Will not, if it is removed, cause any deleterious economic impact because the uses that it may have accommodated will either be able to be located on the land fill site or are better located at Majura or Jerrabomberra.

## 8.8 EMPLOYMENT LOCATION

Part 3 of the National Capital Plan sets out principles and policies for employment location. The principles and policies focus on office employment and nominate specific areas where such employment should be concentrated. Two employment nodes are nominated in Belconnen – the Town Centre and Bruce; as no substantial office employment is proposed at West Belconnen the proposed development will not counter or work against the policies and principles.

The planning philosophy that underpins the employment location policies is also discussed in Section 3 of the Plan. (NCA, 2013, p. 52) The logic for the development of Canberra with discrete Town Centres supported by suburban development was confirmed as an outcome of the 1984 Metropolitan Canberra Policy Plan Review which nominated the Town Centres as major employment centres; this was reconfirmed in a 1987 review of Canberra metropolitan development by the Commonwealth Government Joint Parliamentary Committee on the ACT and is reflected in both the National Capital Plan and the Territory Plan.

The proposed West Belconnen development has ready access to both the Belconnen Town Centre and Bruce employment nodes. The project site is approximately 8.5km from the Town Centre - a 10 minute car drive or a 23 minute bicycle ride. A bus trip in the future will take 15 – 20 minutes. The West Belconnen development will strengthen the population base and economic support for the Belconnen Town Centre and Bruce employment nodes.

## 8.9 URBAN AREAS

The West Belconnen proposal is for the expansion of the urban area of Belconnen to encompass land that is currently assigned to broadacre and non-urban uses. Part 4 of the National Capital Plan sets out principles and policies for urban areas (NCA, 2013, p. 58). There are three principles of which the first two are relevant to West Belconnen (the third relates to industrial land) as follows:

*“1. Canberra’s future growth is to be accommodated by continuing the development of distinct and relatively self-contained towns.*

*2. A hierarchy of centres will be maintained, with each town having a centre acting as a focal point for higher order retail functions, commercial services, offices and community facilities.”*

The West Belconnen proposal represents a logical extension of the Belconnen town; it will reinforce the function of the town and the Town Centre and its position within the metropolitan hierarchy of centres. It is in accord with these principles.

The Plan sets out 12 policies applicable to urban areas; these are discussed with reference to West Belconnen in Table 6 below. The West Belconnen proposal is in accord with the relevant policies.

**Table 6: Policies for Urban Areas**

<b>The National Capital Plan Policies for Urban Areas</b>	<b>Commentary re West Belconnen</b>
<p>a. The urban area of Canberra will comprise:</p> <ul style="list-style-type: none"> <li>• the towns of Canberra Central, Woden/Weston Creek, Belconnen and Tuggeranong</li> <li>• the villages of Hall, Oaks Estate and Tharwa</li> <li>• the new town of Gungahlin</li> <li>• Molonglo and North Weston</li> <li>• land at Hume and Mitchell.</li> </ul>	<p>The proposed development is an expansion of the Belconnen town area.</p>
<p>b. The planning of urban areas should seek to introduce measures through which urban consolidation may occur.</p>	<p>Not relevant to a greenfields development, however detailed planning is intended to facilitate redevelopment over the long term.</p>
<p>c. The hills, ridges and other major open space will form the separation between towns and will be kept largely free of urban development, to act as a backdrop and setting for the City.</p>	<p>The overall intent of this policy is being retained. The current western boundary of Belconnen is defined by the ACT/NSW border. The West Belconnen development will extend the urban area to a logical enclosure boundary defined by geographic features – the Murrumbidgee River and fringing hills.</p>
<p>d. Except where the boundaries are aligned with an existing leasehold, the detailed planning of urban development by the Territory planning authority will determine the boundary between Urban Areas and other land use categories. Before detailed plans are approved, certification shall be obtained from the National Capital Authority that the proposals are not inconsistent with the National Capital Plan.</p>	<p>Not relevant at this time.</p>
<p>e. Industrial development shall be located in the main industrial areas of Fyshwick, Mitchell and Hume and in the Fern Hill Technology Park at Bruce and the Advanced Technology Park at Symonston.</p>	<p>Industrial development is not proposed.</p>
<p>f. The Authority will co-operate with the Territory Planning Authority to investigate and define appropriate areas for new industrial development.</p>	<p>Industrial development is not proposed.</p>
<p>g. Within 5km of Mount Stromlo, development or installations which may, through night time illumination or significant vibration, adversely affect the operation of the Mount Stromlo Observatory or the associated seismological vault at Mount Stromlo, shall be referred to the Australian National University for examination and comment and reasonable steps shall be taken to mitigate adverse impacts.</p>	<p>West Belconnen is approximately 10km from Mount Stromlo.</p>
<p>h. Development proposals for National Land, including subdivision, and proposals to lease National Land, shall be referred to the National Capital Planning Authority. The Authority will assess proposals to ensure they are not inconsistent with the provisions of the National Capital Plan.</p>	<p>West Belconnen does not contain any national land.</p>

<p><b>i. The range and nature of uses permitted in Urban Areas includes those uses generally compatible with residential, commercial, community, cultural, recreational and industrial activity, other than uses not permitted in the Territory Plan. In particular, however, the range of permitted uses includes:</b></p> <ul style="list-style-type: none"> <li>• <b>Parliamentary Use, National Capital Use and Diplomatic Missions, within Designated Areas</b></li> <li>• <b>other Commonwealth purposes, on National Land.</b></li> </ul>	<p><b>The proposed uses are residential and compatible uses.</b></p>
<p><b>j. Symonston Section 1 Block 4: The range of uses permitted in respect of Symonston Section 1 Block 4 shall be:</b></p> <ul style="list-style-type: none"> <li>• <b>Advanced Technology Park</b></li> <li>• <b>Public Utility</b></li> <li>• <b>Open Space.</b></li> <li>• <b>Land Use definitions are at Appendix A.</b></li> </ul>	<p><b>Not applicable.</b></p>
<p><b>k. Any areas potentially affected by Scrivener Dam flood inundation may only be developed where it is demonstrated that Scrivener Dam meets flood safety and operational requirements, based on the applicable Australian National Committee on Large Dams (ANCOLD) guidelines.</b></p>	<p><b>Not applicable.</b></p>
<p><b>l. Planning of urban areas in Molonglo should make provision for a distinct, accessible and legible link, of a minimum width of seventy (70) metres between Stromlo Forest Park and Canberra International Arboretum and Gardens.</b></p>	<p><b>Not applicable.</b></p>

## 8.10 TRANSPORT POLICIES

The National Capital Plan is required to set out general principles and policies to be implemented throughout the Territory, for planning national and arterial road systems and for public transport. There are no national roads affected by the West Belconnen proposal; the metropolitan arterial road network will be required to provide access to the site and will require upgrading, and augmentation in some instances, as the project is developed. This will occur over a long period of up to 40 years. Part 6 of the National Capital Plan sets out principles and policies for the provision of transport infrastructure in the Territory.

The Plan prescribes two principles for transport planning as follows:

*“Transport planning and provision will:*

- *reserve a route for the development of a public transport service to link major employment nodes. As far as practicable the service will be segregated from other transport systems and will operate with priority of right-of-way*

- *incorporate nationally recognised practices and standards consistent with the role and function of each road, or additional standards set out for the Designated Areas of this Plan.”*

The intertown public transport route from Civic identified in the National Capital Plan terminates at the Belconnen Town Centre; A public transport spine, currently a high frequency bus service and potentially in the future a light rail service, continues to the Kippax centre. Planning for the West Belconnen project will incorporate a public transport spine continuing from Kippax through the centre of the proposed urban area. Nationally recognised standards, administered by ACT Government agencies will apply to all road upgrades and augmentation. These are proposed to include works to provide capacity improvements on Drake Brockman Drive, Southern Cross Drive, Ginninderra Drive and various intersections, and the completion of Ginninderra Drive to service the proposed urban area.

The National Capital Plan also prescribes four “policies and standards for transport”. These are discussed in the table below:

**Table 7: National Capital Plan Transport Policies**

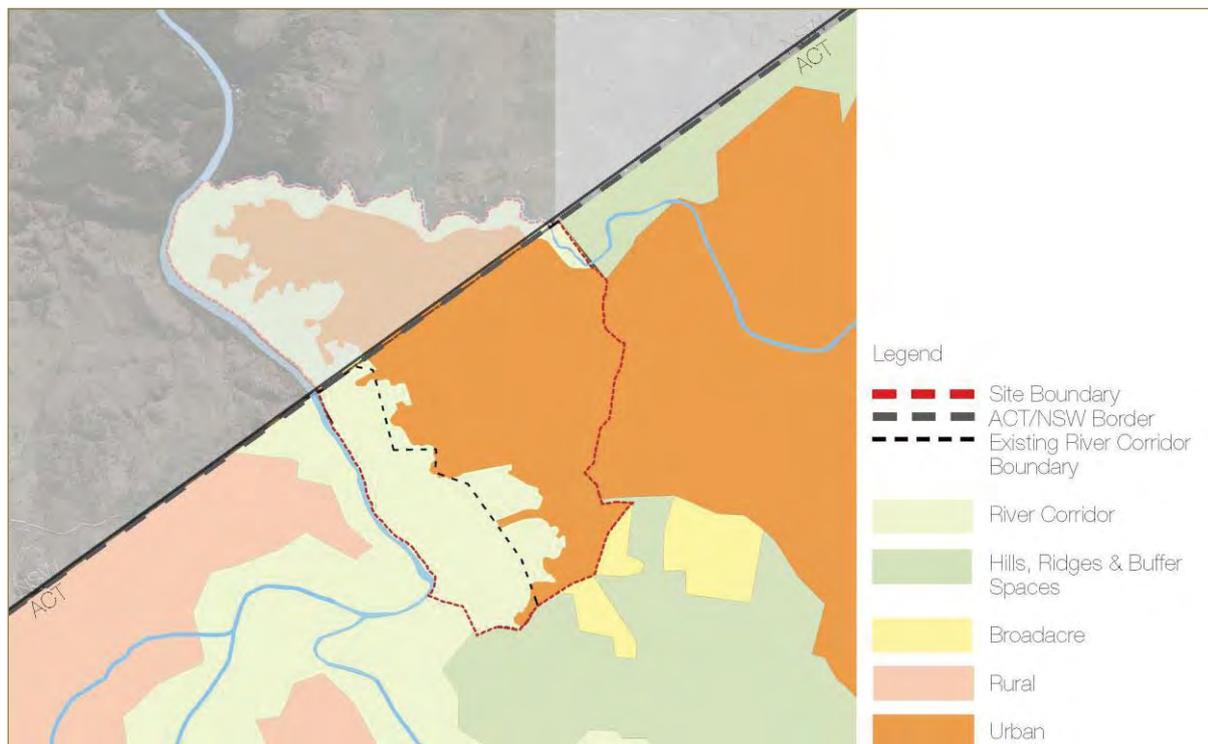
<b>The National Capital Plan Policies and Standards for Transport</b>	<b>Commentary re West Belconnen</b>
<p>a. The National and Arterial Roads System will:</p> <ul style="list-style-type: none"> <li>• generally not provide frontage access to development except where such access will meet appropriate design standards and road safety needs</li> <li>• generally intersect with the local road network through distributor roads.</li> </ul>	<p>There will be no frontage access to arterial roads, in accord with Territory road design standards; road hierarchy design will accord with territory design standards with distributor roads incorporated as appropriate.</p>
<p>b. A corridor between Civic, the Town Centres and major employment nodes, suitable for priority or segregated right-of-way for use by public transport services will be reserved against a possible future need to develop a system of inter town and express routes suitable for buses or other technologies as appropriate.</p>	<p>The proposal does not include a Town Centre or major employment node.</p>
<p>c. Transport strategies should promote the convenience and efficiency of public transport use.</p>	<p>West Belconnen will be developed to accord with the “Transport for Canberra, Transport for a Sustainable City 2012 – 2031”, published by the ACT Government. This is a pro-active policy statement that places heavy emphasis on the promotion of public transport as a significant element in future transport provision in Canberra.</p>
<p>d. The final alignment of proposed arterial roads shall be subject to consultation with the Authority and to a determination by the Authority that proposals are not inconsistent with the Plan.</p>	<p>The final alignment of the proposed extension of Ginninderra Drive will be subject to consultation with the Authority. No other new alignments are proposed.</p>

## 8.11 PROPOSED NATIONAL CAPITAL PLAN AMENDMENT

The proposed amendment to the national Capital Plan would:

- Extend the Urban Areas land use policy over West Belconnen into those areas identified as suitable for urban development.
- Adjustment of the Murrumbidgee River Corridor boundary, expanding the size of the corridor.
- Delete two areas identified as Hills, Ridges & Buffer Spaces.
- Delete one Broadacre area and creation of a new Broadacre Area

The National Capital plan map would be as shown in Figure 16



**Figure 16: Proposed National Capital Plan Zones**

## 9 CROSS BORDER CONSIDERATIONS

### 9.1 RELEVANT PROVISIONS OF CURRENT NSW LEGISLATION, PLANNING AND POLICIES

The land use planning controls in NSW are governed by the NSW Environmental Planning and Assessment Act (EP & A Act). In accordance with the EP & A Act, the Yass Valley Local Environmental Plan 2013 (YLEP) is the principal LEP for the entire local government area (LGA). Under the YLEP the land along Parkwood Road bounded by the Murrumbidgee River and Ginninderra Creek is zoned both RU1 Primary Production and E3 Environmental Management. The current zoning does not provide for the proposed urban development nor does the E3 zone accurately map the extent of the land with conservation value.

In addition to the local planning controls contained within the YLEP, there is also the regional strategy, known as the Sydney to Canberra Corridor Regional Strategy. The purpose of the Regional Strategy is to guide decisions on future development by way of generally rezonings.

Amending the YLEP to both rezone and facilitate the urban development of the land together with the refining of the boundary of the current E3 zoning requires a Planning Proposal. The procedures for a Planning Proposal are set out by the EP & A Act and supporting guidelines issued by the Department of Planning and Environment. A Planning Proposal must demonstrate that the LEP amendment has both strategic and site specific merit. In demonstrating the merit of the LEP amendment the Planning Proposal must take into account:

- The relevant Outcomes of the Sydney to Canberra Corridor Regional Strategy. For the purposes of West Belconnen (NSW lands) this requires an assessment and justification of the proposed LEP amendment against the Threshold Sustainability Criteria. This has been done.
- The relevant Ministerial (s117) Directions
- The relevant State Environmental Planning Policies.

The Planning Proposal process requires the submission of the requested LEP amendment seeking the initial support to proceed from the Relevant Planning Authority (RPA) assumed to be Yass Valley Council in this instance.

The submission to Council is required to set out the reasons and expected outcomes of the LEP amendment together with in this instance, an assessment of key aspects including:

- Site features and constraints
- Ecological features
- Urban capability
- Proposed servicing and infrastructure arrangements
- Traffic and access arrangements
- Heritage

Once supported by Council, the Planning Proposal is subject to the issue of a Gateway Determination by the Department of Planning and Environment. A Gateway Determination will prescribe:

- What if any additional studies are required

- Which Government agencies are to be consulted including both the ACT Government and the National Capital Authority.
- The time frame for completion of the Planning Proposal and:
- The length of the public exhibition process

Following exhibition and subject to any submissions received, the Planning Proposal will be considered by Yass Valley Council in its original form or amended prior then to forwarding to the Minister for Planning for making.

The resulting LEP will then prescribe new zones to the land that set out the range of permissible uses with consent and any provisions specific to an urban release. We expect that this will include provisions relating to the satisfactory provision of services and the requirement to have in place a Development Control Plan before urban development can be approved. The Development Control Plan is likely to include the following:

- A requirement for a staging plan that makes provision for necessary infrastructure and servicing
- Overall transport/movement plan
- Overall landscaping strategy
- Stormwater and water quality controls
- Detailed urban design controls
- Proposed changes to policies

The existing 'planning policies' applying to the land are as described above being the land use zoning and related development controls prescribed by the Yass Valley Local Environmental Plan 2013. The proposed changes are also described above and in summary are:

- The rezoning of the current rural zoning to urban
- The refining of the current environmental zone to more accurately reflect the conservation values of the land.
- The including of urban release specific clauses including the requirement for a Development Control Plan

## 9.2 INTER-GOVERNMENT ARRANGEMENTS

Whilst the West Belconnen NSW lands will be a border adjacent community, its unique location will require specific inter-government arrangements to ensure a coordinated approach to planning and its ongoing functioning as a viable community. To this end, there are a number of inter-government arrangements in place and proposed. They are:

- Senior planning officials cross border working group. The working group comprises of senior planning officials from the ACT and NSW Governments, and Yass Valley Council including representatives of the ACT Chief Ministers Department, ESDD, NSW Premier and Cabinet, NSW Department of Planning and Environment.
- Expected formal consultations with ACT Government and the National Capital Authority during the rezoning process
- The existing cross border Memorandum of Understanding between the NSW and ACT Governments on services
- Potential servicing and funding coordination arrangements have been identified

- Ongoing agreements between ACT and the NSW Governments on a range of state/territory service delivery areas

### **9.3 EXISTING AND PROPOSED LAND TENURE AND ADMINISTRATIVE ARRANGEMENTS**

As a border adjacent community in NSW, the land will remain freehold. The administrative arrangements in terms of the ongoing funding, servicing and governance of the land have been explored in the service delivery paper prepared by Elton Consulting. In summary, it is possible under the NSW Local Government Act to have a governance and administrative model that enables the land to be managed by Yass Valley Council with local electorate representation. At 5,000 dwellings the proposed scale of the NSW lands development is expected in many ways to be a critical mass for the provision of a number of local services by Council.

### **9.4 IMPLICATIONS FOR THE ACT FROM DEVELOPMENT ACROSS THE BORDER.**

As a border adjacent community, there will be a close practical relationship between future residents in NSW and the ACT. The service delivery work undertaken by Elton Consulting together with the economic analysis by Deloitte Access Economics and Urbis and a funding mechanisms review by Lindsay Taylor Lawyers all confirm that it is possible to have a viable border adjacent community that does not burden the ACT.

The service delivery paper as already considered by the cross border senior planning officials working group has identified a series of principles to guide service delivery being:

- Ensure that West Belconnen looks and feels like a cohesive borderless community
- Prepare and implement a consistent master plan and associated development controls for the West Belconnen community on both sides of the border
- Recognise residents of West Belconnen will be separately represented in local governance processes in both the ACT and NSW
- Provide appropriate community governance arrangements to enable West Belconnen residents to be engaged in and able to advocate for the needs and interests of their community
- Provide local service delivery through the ACT Government, Yass Valley Council and other service providers as appropriate
- Continue to explore ownership options for local infrastructure including the ACT Government or associated authorities, NSW Government or associated authorities and Yass Valley Council
- Ensure that West Belconnen residents and particularly those living in Yass Valley Council clearly understand the roles and responsibilities of all infrastructure and service providers
- Incorporate long term maintenance, renewal and replacement of infrastructure in planning for the development, including in the preparation of funding and service agreements.

More generally, the planning and service delivery arrangements being considered by West Belconnen are likely to assist Governments both ACT and the NSW in the setting of a useful model and benchmark more broadly for regional settlement.

## 10 ENVIRONMENT PROTECTION & BIODIVERSITY CONSERVATION ACT

### 10.1 STRATEGIC ASSESSMENT

The *Environment Protection & Biodiversity Conservation Act 1999* (the EPBC Act) is Commonwealth Government environmental legislation. The Commonwealth Department of the Environment (DOE) administers the strategic assessment provisions of the EPBC Act and provides advice to the relevant Commonwealth Minister. The Act is concerned with environmental assessment of proposals that may affect matters of national environmental significance (MNES) on any land, these may include:

- World heritage sites;
- National heritage places;
- Wetlands of international importance;
- Nationally threatened species and ecological communities;
- Migratory species;
- Commonwealth marine areas;
- Nuclear actions; and
- The Great Barrier Reef Marine Park.

At West Belconnen there are known to be three MNES as follows:

- Pink tailed worm lizard (*Aprasia parapulchella*)
- Golden sun moth (*Synemon Plana*)
- Yellow box red gum grassy woodland

Consequently the provisions of the EPBC Act apply. The Act provides mechanisms for the assessment of impacts of proposed development on MNES. The appropriate mechanism in the case of West Belconnen has been determined by DOE to be a “strategic assessment”, under part 10 of the Act.

Strategic assessments provide a mechanism to move away from project-by-project impact assessment and examine proposed developments at a broader landscape scale in relation to the requirements of the EPBC Act.

A strategic assessment to meet the requirements of the EPBC Act with regard to the three MNES listed above is being conducted concurrently with the rezoning proposal that is the subject of this report.

### 10.2 MOLONGLO NES PLAN

A substantial area of the West Belconnen ACT land (approximately 167ha within block 1605) was identified as “West Molonglo”, intended for future residential use, in the 2004 ACT Strategic Plan. This land was subsequently rezoned to “broadacre” (a peri urban use) as part of the Molonglo rezoning process (Territory Plan Variation 281 & National Capital Plan Amendment 63 in 2008, see Figure 14 above). It was consequently included in environmental investigations as part of the greater Molonglo project which included both “East” and “West” Molonglo. West Molonglo is now part of the West Belconnen project.

The Molonglo studies concluded with the approval (on 7.10.2011) by Minister Burke of the “Molonglo Valley Plan for the Protection of Matters of National Environmental Significance” (the NES plan). At West Belconnen the NES plan identified about 60ha of woodland within the 167ha that was to be preserved, subject to further work to refine the boundary of the woodland area. The balance of the 167ha was found to have no environmental constraints.

Scientific investigations (refer to section16) have been undertaken during the spring of 2012 to comply with the NES plan requirements and refine and finalise the boundary of the woodland area. With this work being concluded the option is now available to refer to the Commonwealth for final endorsement of the NES Plan as it relates to West Belconnen. An alternative approach, given that the “West Molonglo” parcel constitutes only a portion (albeit a large portion) of the total West Belconnen project, is to include this land in the strategic assessment that is being prepared for the total project (section 10.1). In the interests of efficiency and clarity of process the proponent has opted for the latter of these two alternatives.

### 10.3 GINNINDERRA DRIVE COMPLETION

The West Belconnen proposal includes the completion of a connection between Ginninderra Drive and the proposed development area. Ginninderra Drive is currently constructed to the western extremity of the suburb of Dunlop at which point it is currently a single carriageway pavement. The road reserve is very wide (80 metres), having been planned with the intention of the road being extended westward, ultimately to service development to the west and provide an intertown transit corridor and road link to the proposed “Gooramoon” development area in NSW. This design proposal was included in the “Y” plan prepared by the National Capital Development Commission in 1967 which, together with the metropolitan Policy Plan in 1984, remained as the key strategic planning documents until the release of the Canberra Spatial Plan in 2004. The road reserve and adjacent



**Figure 17: Ginninderra Drive Road Reserve**

suburbs is shown in Figure 17. The existing road operates below capacity and, in turn, the road is constructed to a standard that is well below that for which the reserve was intended. As only minimal future development is likely to occur at Dunlop, Ginninderra Drive represents an under-utilisation of a significant infrastructure item if it is not completed to service future development to the west.

A number of options for a possible alignment for the road have been explored and assessed on the basis of their relative impacts on moth habitat, engineering feasibility and cost. As a result of this research the proposed Ginninderra Drive connection link passes to the west of Macgregor to ultimately join Parkwood Road. This alignment traverses two parcels of land that provide habitat for the Golden Sun Moth, listed as an endangered species under ACT and Commonwealth legislation. The blocks containing the habitat areas, known as Jarramlee and Macgregor (**Error! Reference source not found.**), have been set aside by the ACT Government as “offset areas” in place of habitat areas lost as a consequence of urban development at, respectively, Lawson and Macgregor

The road alignment options and impacts have been discussed and evaluated at two workshops involving representatives from:

- Commonwealth Department of the Environment,
- ACT Conservation agencies,
- West Belconnen project consultant engineers,
- Scientific experts with knowledge and experience in the Golden Sun Moth, including experience with recent successful experiments in the relocation of moths subject to a road construction project,
- Experts with experience in the processes for the selection of environmental offset areas, and
- The Friends of grasslands conservation group.

The outcome of these deliberations to date is that the West Belconnen project is recommending an alignment as shown on Figure 18.

The proposed road alignment passes through the Macgregor and, to a lesser extent, the Jarramlee



**Figure 18: Ginninderra Drive possible alignment**

offset areas. This is a matter for assessment under the provisions of the EPBC Act and has been referred to the Commonwealth Department of the Environment.

It is anticipated that approval for the alignment will be granted on the basis that an appropriate additional environmental offset arrangement is made to compensate for the impact on the Macgregor and Jarramlee areas.

The Macgregor West offset area was established in response to the impacts resulting from the Macgregor West 2 Estate development. The offset was comprised of establishing a protected tenure with accompanying management obligations over a part of the total development area that was avoided as a result of likely impacts to golden sun moth (*Synemon plana*). The location of this offset was determined opportunistically by the presence of golden sun moth on the development site as opposed to it having been selected through a process of strategic evaluation. Other environmental values within this offset area are limited.

The Jarramlee offset was established to compensate for the unavoidable impacts of the development of Lawson South as a result of impacts to golden sun moth principally, but also natural temperate grassland. This offset was selected on the basis of proximity to the Macgregor West offset and availability of land that met the general requirements of the then draft policy on the use of offsets under the EPBC Act. This land was under a Hills Ridges and Buffers zone under the Territory Plan and was unlikely to be considered for urban development. Accordingly the value of the Jarramlee offset was the result of increasing the total area of co-located offset sites and increasing the protection status of the subject land to also include a management plan to maintain the values for which it was established.

Both offset areas continue to be managed under the conditions of separate agreements with the Commonwealth and while sharing a common boundary, are not managed together. Additionally, both offsets were assessed and approved under the 2007 draft policy on the use of biodiversity offsets under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act).

The proposed extension to Ginninderra Drive would result in a narrow corridor of impact through components of each offset area impacting on known golden sun moth habitat. While this impact is unavoidable and undesirable, it presents an opportunity to enhance management of golden sun moth habitat in the west Belconnen area more broadly. This is as a result of the strategic approach that is being taken not only to project planning but also for the identification, protection and management of matters of national environmental significance (MNES) under the EPBC Act. Due to the impact of the proposed Ginninderra Drive extension on established offset areas in addition to impacts on the values for which the offset areas were established, this is regarded as significant and as a result consideration of further offsets is appropriate.

In the event that approval for this connection is not forthcoming then the two alternate roads servicing the West Belconnen proposal, Southern Cross Drive and Drake Brockman Drive will, with appropriate augmentation, cater for expected traffic volumes, albeit with longer travel times for some road users. The completion of Ginninderra Drive remains the preferred outcome.

## 11 SITE CONSTRAINTS AND OPPORTUNITIES

### 11.1 EXISTING SITE ENVIRONMENT

#### 11.1.1 LAND CAPABILITY

Three reports have been prepared to assess the urban capability of the West Belconnen site. The reports by Douglas Partners covered the ACT, and the majority of the NSW land. (Douglas Partners, 2014a) (Douglas Partners, 2013b) (Douglas Partners, 2014c) In all cases the principal finding has been that the majority of the area assessed is considered to be suitable for residential development from a geotechnical perspective. Comments and recommendations are made relating to various geotechnical aspects and remedial measures to alleviate possible constraints on development. These will be taken into account at EDP/DA stages post rezoning.

#### 11.1.2 BUSHFIRE

A bushfire risk assessment has been conducted of the proposed re-zoning for The West Belconnen Project. It specifically addresses:

- Whether the statutory and policy requirements for bushfire protection in ACT and NSW are met by the proposal; and
- The extent to which best practice approaches to bushfire planning are able to be achieved.

The existing and potential bushfire hazard and associated risk (post development) was assessed using the respective State and Territory bushfire planning provisions. This has included consideration of both the ACT and NSW jurisdictions; under the ACT Planning for Bushfire Risk Mitigation General Code (2008) and Planning for Bushfire Protection Guidelines (NSW RFS, 2006).

The strategies used to reduce the bushfire risk associated with the re-zoning, include:

- Setbacks from bushfire prone vegetation (APZs)
- Fuel management within the IAPZ that is appropriate for the management of Pink Tailed Worm Lizard habitat and the Yellow Box – Blakely's Red Gum Woodland
- Integration of non-combustible infrastructure within APZs such as roads, easements and parking areas
- Access and egress from the site through a well-designed road system
- Underground electricity and gas services
- Compliant water supplies
- Emergency response planning
- Interim APZs and perimeter roads provided for each stage of development
- SFPP and more vulnerable development types are located further from the hazard.

More detailed bushfire assessment to accurately prescribe setbacks, roading and landscaping is required for each stage of subdivision, however the re-zoning application has provisions that allow this more detailed designed to occur smoothly and achieve the deemed to satisfy standards for subdivisions within the ACT and NSW. Details of the proposals are set out in a report prepared by Ecological Pty Ltd ( Ecological, 2014))

### **11.1.3 FLOODING**

The West Belconnen site is bordered on its southern side by the Murrumbidgee River and on its northern side by Ginninderra Creek. The Murrumbidgee River is within a deeply incised river valley up to 100m below the area proposed for development. Consequently there is no flood risk to residential development from the Murrumbidgee River. Recreation activity along the river is likely to increase substantially and any recreation facilities or activities should be implemented with regard to possible flood risk, which should be assessed on a case by case basis.

Ginninderra Creek, upstream of Ginninderra falls, runs at a similar elevation to the surrounding land. Below the falls it is in a deep gorge. There is a potential flooding risk from Ginninderra Creek upstream of the falls, affecting parts of the site. Separately to this project, SKM has been commissioned by the Territory and Municipal Services Directorate to undertake flood risk analysis for the length of Ginninderra Creek below Lake Ginninderra within the ACT. Their commission has been extended on behalf of the West Belconnen project to include the length of Ginninderra Creek in NSW as far as Ginninderra Falls. Interim advice has been sought from SKM as to flood impact at West Belconnen. The standard approach to flood risk in urban development in the ACT and elsewhere in Australia is to establish the "100 year" (or "1%") flood line, with urban development being permissible above the line but not below it.

Whilst their work is currently incomplete SKM has been asked to provide preliminary advice as to the likely location of the 100 year flood line along Ginninderra Creek, and as a precautionary measure because their work is not yet complete, to add a 1 metre elevation to this line. SKM has provided a plan (SKM, 2014) showing the 1% plus 1 metre flood line which has been adopted as a constraint on development for the purposes of master planning at West Belconnen. This line will be subject to adjustment when the SKM project is complete (expected mid 2014) but it is anticipated that such adjustment will be minor.

### **11.1.4 CONTAMINATION**

A consultant research project, including a Phase 1 Environmental Site Assessment, has been commissioned to examine blocks 1605 and 1606 which will comprise the early stages of development. The purpose of this assessment was to determine the extent, if any, of any contamination that may be present (GHD, 2009). Isolated contaminated sites and areas of possible contamination have been identified; typically these are disused sheep dips areas in the vicinity of machinery sheds and the like. All identified sites will be investigated in further detail and remediated as part of the land development process.

A continuing program of site investigation will be conducted as the development proceeds, noting the long timeframe over which the development will occur.

### **11.1.5 ODOUR**

#### **PARKWOOD EGG FARM**

The Parkwood Egg Farm is located off Parkwood road, close to the NSW border in the ACT. The farm is a "barn" egg farm consisting of 7 enclosed sheds with capacity for 3 more. The total chicken population is up to 300,000 birds at full capacity. It is understood that the crown lease for the farm has recently been renewed (on a reduced site area) for a further term of 20 years and that, in order to convert the facility from a "battery" to a "barn" operation substantial capital investment has been

made. In light of this it is unlikely that the site will be redeveloped for some time. Nevertheless the farm site itself and the land within its buffer zone has substantial potential for residential and related uses and it is unlikely that this land will be permanently assigned to poultry farm uses. It would also be very inefficient from an urban infrastructure point of view to permanently sterilize land that will eventually be central to an extensive urban development. It is anticipated that at the end of the lease term, this land will be available for development. This timing sits within the overall timeframe for the West Belconnen project which is anticipated to be developed over a 30-40 year period. For these reasons the Parkwood site has been included in the West Belconnen master planning process and in the overall rezoning proposal.

Poultry farms are known to emit odours which are a constraint on residential and similar development. The poultry farm currently sits within a 500m radius clearance zone that is incorporated in the Territory Plan. Within this buffer residential or community use is not permitted. CEE (Consulting Environmental Engineers) was commissioned (CEE, 2014a) to review the buffer in light of the proposed West Belconnen development, given that the proposed development includes land within the buffer and the Parkwood farm site itself, and noting the operational change from “battery” to “barn” and reduction in the site area which may allow a reduction in the extent of the buffer. CEE have recommended a 500m buffer, extending to 600m down-slope from the sheds (the path of night drainage breezes) to the north-east, north and west of the sheds.

These parameters have been adopted in the rezoning proposals and will constrain residential and community facility development as long as the farm is operational. It is proposed that the future long term use of the land as urban be recognised formally in the Territory Plan Variation but with a deferral of urban use potential pending cessation of operations or relocation of the egg farm.

It is noted that the possibility exists that the egg farm, at the expiration of the lease, could be relocated. An appropriate relocation site could be the eastern broadacre area (for example at Majura) which has been identified as being suitable for this type of use as well as having large tracts of land potentially available for development (refer to Section 8.7).

#### **GINNINDERRA TRUNK SEWER VENTS**

The Ginninderra Trunk Sewer runs under the West Belconnen site from north (near Dunlop) to the lower Molonglo treatment plant. The sewer is a tunnel and relatively deep underground. There are three vents associated with the sewer as follows:

- Immediately north of Parkwood Road near the Belconnen Pony Club (3GIN)
- Immediately west of Strathnairn (4GIN)
- In the conservation corridor (5GIN)

The first of these (3GIN) is close to the recently developed area of West Macgregor. Because of this proximity odour emissions from the facility have been mitigated to levels compatible with residential development by the installation of a taller vent stack and odour scrubbing technology. This facility is therefore unlikely to impose a constraint to urban development other than the need for it to be retained on its current site.

A research project to define the technology requirements for the two remaining vents has been commissioned jointly by the Economic Development Directorate and ACTEWAGL. Preliminary results (ACTEW, 2014a) indicate that there are no odour issues associated with the 4GIN stack which is located within the proposed development area near Strathnairn. A 130m radius clearance zone is recommended for the 5GIN stack; this would be wholly within the proposed conservation corridor.

#### **LOWER MOLONGLO WATER QUALITY CONTROL CENTRE**

The Lower Molonglo Water Quality Control Centre (LMWQCC) is protected by a statutory 1km radius clearance zone incorporated into the Territory Plan. Within this zone residential and other sensitive uses are prohibited. The buffer is largely coincident with the proposed conservation corridor and the nearest area of proposed residential development is approximately 200 metres outside the clearance zone.

The clearance zone was determined some time ago and it is understood that since the operational characteristics of the plant may have evolved. CEE was commissioned to review the buffer against interstate practice and also to undertake odour modelling. The CEE report (CEE, 2014b) finds as follows:

*“.....the existing 1 km radius buffer zone around LMWQCC is consistent with the buffer zones provided in other States for comparable treatment plants.*

*A preliminary modelling assessment of odour dispersion around LMWQCC shows that the plant should be able to operate under normal circumstances without causing odour nuisance outside the 1 km buffer.”*

#### **OLD BELCONNEN LAND FILL**

There are also odour matters associated with the old Belconnen land fill site, these are discussed in section 11.2 below together with broader matters associated with the land fill site.

##### **11.1.6 ZONOSIS**

Zoonosis is the process whereby disease is transferred from one species to another. At West Belconnen the Parkwood Egg Farm is a facility where zoonosis presents an operational risk that warrants attention; the risk being the potential for a bird disease to be transmitted from wild bird populations to the farm chicken population and vice versa. CEE was commissioned to examine the potential risk (CEE, 2014a) and consider that precautionary measures are advisable. The risk that has been identified is that wild birds (particularly ducks which are known to transmit diseases) may be attracted to wetlands that are to be constructed as part of the development project. To minimise this risk CEE has recommended as follows:

*“There should be a buffer of 800 m from the sheds to any constructed wetland, to provide adequate biosecurity against transmission of disease from wild water birds to the farm.”*

This constraint has been adopted and will be applied by way of an overlay provision in the Territory Plan which will prohibit wetlands within this clearance zone while ever the Parkwood egg facility is operational.

### 11.1.7 NOISE

A small number of existing activities on the site, which will continue after urban development occurs, have the potential to generate noise at levels that may be incompatible with residential development. These are:

- The Canberra Substation and transmission lines
- The land fill site
- The Lower Molonglo Water Quality Control Centre (LMWQCC)

Each of these has been assessed by a consultant expert in this field. (SLR, 2014a). Traffic noise impacts have also been assessed these are discussed in section 12.4. The findings with respect to industrial noise sources were as follows:

The substation has the potential to emit noise that is inappropriate for nearby residential development. This warrants further detailed assessment during more detailed design stages to determine amelioration measures which are likely to include some form of noise barrier at the substation boundary.

Various current activities on the land fill site have the potential to emit noise that would be incompatible with residential development. These activities will be subject to review as part of a master planning process for the land fill site that will commence shortly. The purpose of the master planning process will be to reconfigure the mix and location of land fill site activities to ensure that they are compatible with residential development on nearby and adjacent land.

LMWQCC noise levels are expected to comply with the residential Zone Noise Criteria at the boundary of the project development area.

### 11.1.8 AIR QUALITY

An assessment of air quality matters (AQR) related to West Belconnen (Aecom, 2014b) reviewed the climate and geographic setting of the development area and identified existing air quality issues in the Australian Capital Territory (ACT) region that might affect the West Belconnen development and potential changes to air quality that the development may cause. Additionally, mitigation measures were recommended to minimise any potential adverse effects.

The key finding of the AQR was that the primary potential pollution sources likely to affect air quality in the development area are bushfires (including back-burning/hazard reduction activities), wood heaters and vehicles. The AQR identified several sources of knowledge and options for the control and mitigation of wood smoke emissions, with the control measures pertinent to the West Belconnen planning process being summarised as follows:

- Continuation of the ACT Government education and information programs such as the 'Don't Burn Tonight' campaign;
- Wood heater efficiency standard of 60% or better ;
- Wood heater emissions standard of 3 g/kg or better;
- Education on the use of wood heaters;
- Controls on installation and 2nd-hand heaters;
- Encouragement for the use of pellet heaters over standard wood heaters; and

- Continual review of relevant legislation, industry standards and guidelines and documents prepared such as the impending delivery of the National Plan for clean Air and COAGs response to the Regulation Impact Statement.

### 11.1.9 TRANSMISSION LINES

The site is traversed by a number of 330kV transmission lines feeding to the Canberra Sub Station located on Parkwood Road. The line alignments can be seen on Figure 22, the Landscape masterplan which shows the potential for the areas under the power lines to be utilized for a range of activities, including urban agriculture and off road movement systems.

Transgrid have advised of their requirement for a 60m easement for each powerline, within which residential and other uses that may be sensitive to electro-magnetic radiation are not permitted. The proposed territory plan amendment will include these easement restrictions.

### 11.2 BELCONNEN LAND FILL CLEARANCE ZONES

The Belconnen Land Fill site is currently protected in the Territory Plan with a 500m buffer zone, within which residential and community use developments are prohibited. The buffer zone is included in the Plan in the Belconnen District Precinct Code; its purpose is set out in the “criteria” section of the code as follows:

*“..... to prevent the environmental impacts of existing land uses, such as the spread of odours and wind-blown particulates, conflicting with more sensitive land uses. “*

The buffer was incorporated in the plan when the land fill was operational as a public waste disposal facility. Since that time (2002) it has been closed to the public; it is being utilized for a number of activities that are either associated with the past landfill use or are compatible with it. In addition an industrial estate that focuses on recycling activities is established in the northern portion of the land fill site. This estate is serviced by two unsealed roads and the land tenure is based on short term licenses. The environmental management and aesthetic standards of the industrial estate are very poor. Other activities are as follows:

- Industrial recycling estate
- Green waste recycling
- Asbestos disposal
- Hydrocarbon soil remediation
- Methane gas extraction
- Reservation of a site for an emergency land fill.

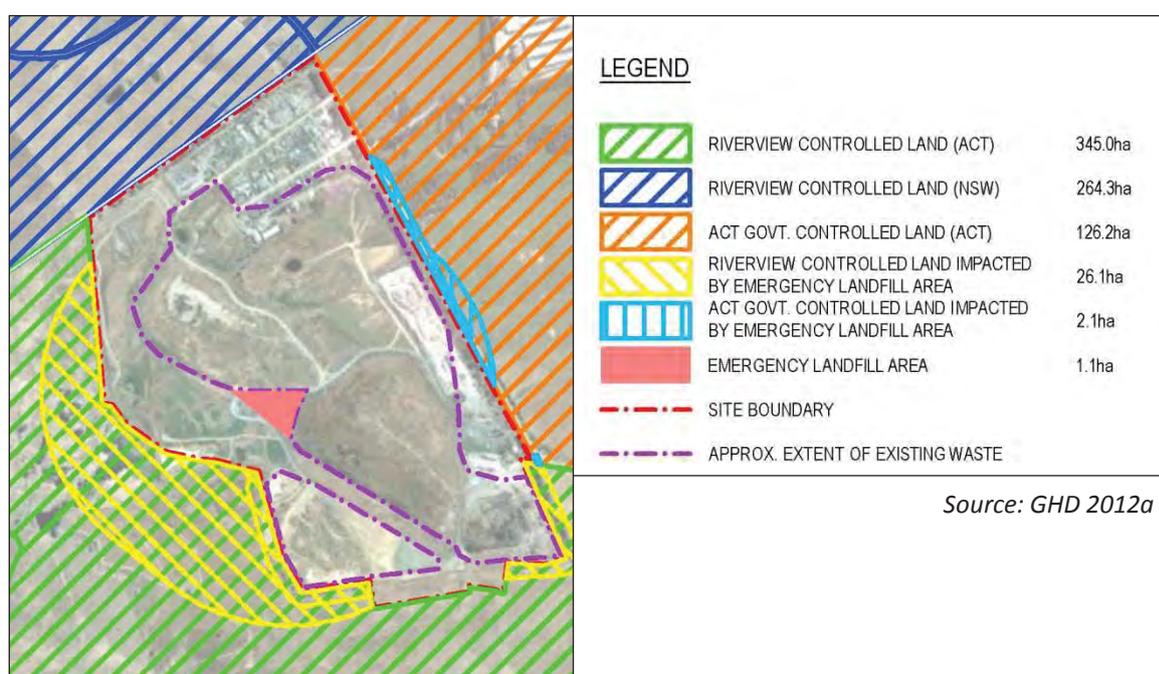
Each of the above presents opportunities and or constraints as follows:

The industrial estate provides local employment as well as opportunities for locally based recycling activities. Both of these features would be desirable in the context of the West Belconnen development proposal. This could be readily achievable on the basis of a substantial upgrading of the environmental and management standards applicable to the site; taking into consideration the long term urban focus of West Belconnen these businesses could obtain longer term more commercially sound land tenure arrangements with suitable controls in crown leases to ensure that environmental outcomes are achieved.

The green waste recycling facility creates odour and requires a buffer between it and sensitive uses. Its current location on the southern edge of the site is likely to prove to be incompatible with development on adjacent land. Following lodgement of this report investigations will commence into the possibility of moving the facility to a new location internal to the landfill, thus providing a greater buffer distance. It would be desirable to retain this facility for use by the incoming population as well as existing Belconnen residents into the long term.

The asbestos disposal operation is scheduled for completion within a period of several years, the land will be capped with soil and available for alternate uses.

The hydrocarbon soil remediation process is an ongoing requirement will need to be accommodated on a suitable alternative site prior to residential development occurring in the vicinity. The activity is relatively benign with minimal off-site impacts and the possibility of locating a suitable site, at for



Source: GHD 2012a

**Figure 19: Emergency land fill site and buffer zone**

example Majura, is considered to be good.

Methane gas extraction will continue on the site, with diminishing yields over time. The plant is a small facility that would be compatible with other activities that may take place on the site.

An area of the site is reserved by ACT Nowaste as an emergency land fill site, for use in the event of the need to close the Mugga landfill due to a catastrophic event. This function must remain available into the long term at Belconnen unless an alternative site is selected and confirmed. The emergency fill site occupies only a small area centrally located in the site and because of this its buffer requirements are minimal and do not extend far beyond the site boundary (refer to Figure 19).

Nevertheless it is a constraint on development and alternative sites have been investigated. These have been investigated in two reports prepared by GHD (GHD, 2012a) (GHD, 2014a), which find that

there are several viable alternative locations at Kowen Forest which could be developed to replace the West Belconnen site as well as possibly to facilitate future uses by the ACT Government. This is subject to ongoing investigation with the relevant Government agencies.

### **11.3 VISUAL ANALYSIS**

An assessment of the visual impact of the proposed development has been prepared by Roberts Day (Roberts Day, 2014b). The visual impact was assessed from a number of vantage points:

- Hollows Circuit in West Macgregor
- The Golf Course residential estate
- Dunlop
- Rural properties adjoining Ginninderra creek and Murrumbidgee River
- Shepherds lookout
- Belconnen Farm
- Parliamentary Triangle

The key findings of the assessment are:

- The significant amount of land set aside for conservation and recreation purposes reduces the visual impact of the proposed development resulting in the overall visual impact of the draft Master Plan being predominantly low
- The retention of topography on the site preserves and enhances the visual amenity and reduces the visibility of sections of the draft Master Plan
- No development will be visible from the Parliamentary Triangle or the Stirling Ridge Yacht Club
- The draft Master Plan protects the views the heritage listed West Belconnen Farmhouse and therefore the visual impact from this viewing location is rated as nil
- The visual impact from most of the viewing locations at all three development phases were generally ranked as low, with some as nil
- The greatest visual impacts were found to be from the existing adjacent urban areas with the Hollows Circuit, West Macgregor revealing a 'Medium' visual impact by 2031 and at full development

## 12 TRANSPORT

### 12.1 DISTANCES FROM CANBERRA CENTRES

The West Belconnen project will provide a substantial component of future housing development in Canberra over the next 30-40 years; it is a greenfields site and consequently is part of the “greenfields” half of the ACT Government 50/50 policy whereby 50% of future housing growth is to be in infill areas and 50% on greenfield sites. Whilst it is a fringe area it does in fact have good levels of connectivity to areas of Canberra beyond Belconnen and compares well with other outer areas in this regard. Figure 20 below illustrates the distances to Belconnen Town Centre and to central Canberra.

West Belconnen is about the same distance as Wanniasa and substantially closer than much of

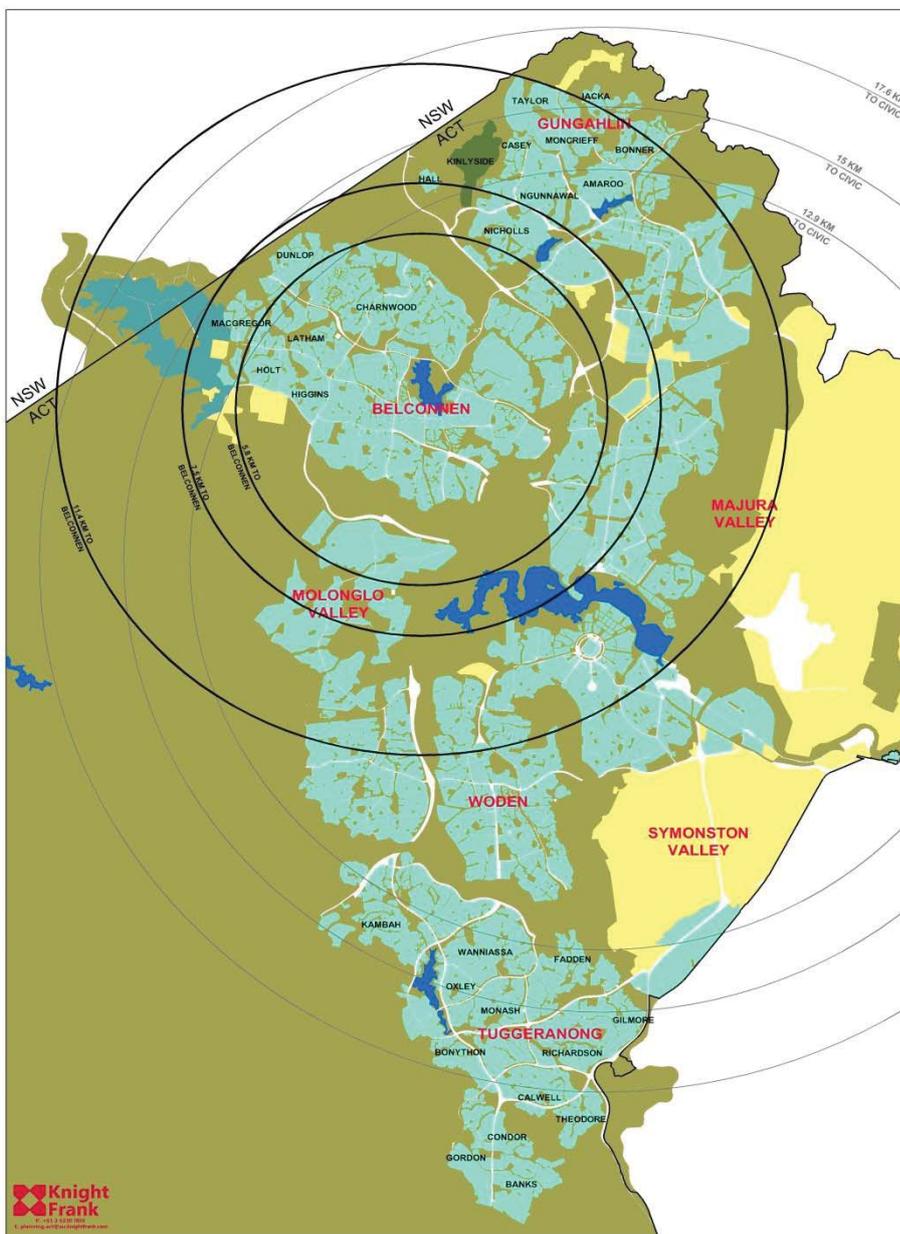


Figure 20: Radial distances

Tuggeranong; it is closer than the newer suburbs of Gungahlin and a similar distance (although with much better road connectivity) to the Kowen plateau which has previously been proposed for residential development.

West Belconnen will form part of the town of Belconnen, adding to the current population of approximately 90,000 people. Belconnen Town centre is a substantial retail commercial and office employment hub, supplemented by several group centres with Kippax and Charnwood being located at West Belconnen. Accessibility to Belconnen, as well as to central Canberra is very good.

The results of a travel time survey conducted in 2012 are illustrated in the table below. Travel times to Kippax by car are less than 5 minutes, bicycle about 10 minutes. Belconnen Town Centre is only about 10 minutes by car, Civic is only 15 minutes. A bike trip to the Belconnen Town centre (Westfield) takes less than 25 minutes.

**Table 8: West Belconnen travel time data**

<b>WEST BELCONNEN TRAVEL TIME DATA</b>				
<b>MODE</b>	<b>ORIGIN</b>	<b>DESTINATION</b>	<b>DISTANCE (KM)</b>	<b>TIME (MIN:SEC)</b>
Car	City	Project site	15	25:45
Car	Project site	Holt Shops	2.3	3:00
Car	Project site	Kingsford Smith School	3.3	3:20
Car	Project site	Kippax	4.4	4:40
Car	Project site	Hawker Group Centre	5.6	6:00
Car	Project site	Belconnen TC	8.2	10:00
Car	Project site	Civic	17	14:45
Bicycle	Project site	Kippax	3.5	9:05
Bicycle	Kippax	Project site	3.5	10:25
Bicycle	Project site	Belconnen TC	8.5	23:35
Action Bus	City	Kippax		37:00
Action Bus	Kippax	City Interchange		35:00
Note: Source:	All trips mid-morning weekdays July/August 2012 Riverview Pty Ltd, 2009.			

## 12.2 ROADS AND TRAFFIC CONDITIONS

Traffic analysis and modelling, based on the proposed yield of approximately 11,500 dwellings and 30,000 people has been conducted by Aecom, specialist traffic consultants. (Aecom, 2014a). The modelling reflects the ACT Government policy position on sustainable transport as set out in “Transport for Canberra”, which is discussed in more detail in Section 7.10.

The key roads that will serve the proposed development are Southern Cross Drive, Drake Brockman Drive and Ginninderra Drive. William Hovell Drive and Florey Drive are also important. Currently, these roads are operating satisfactorily during peak periods.

It is anticipated that a connection to Ginninderra Drive will be provided to West Belconnen. This will ensure better access to Charnwood and Gungahlin. One of the key advantages of good access to Charnwood is reduced travel times from the Emergency Services Centre in Charnwood to new housing and services in West Belconnen.

Outside of this project, there has been ongoing consultation with the local residents of Holt concerning the implementation of traffic management treatments (LATM) in the suburb. In the past, there has also been consultation for implementation of LATM in the nearby suburbs of Macgregor, Dunlop and Charnwood. There are concerns that the West Belconnen development could cause increased traffic in these suburbs. This is the subject of ongoing investigations.

The key outcomes of the traffic research are as follows:

- The analyses presented in the Aecom report highlight the future need to duplicate Stockdill Drive and Drake Brockman Drive. Ultimately parts of William Hovell Drive, Southern Cross Drive and Ginninderra Drive will also need to be widened or duplicated. This is based on a relatively significant shift to public transport in future, although the modelling indicates that this will be at lower levels than targeted in Transport for Canberra. The model predicts that by 2031 about 22% of non-walk trips will be made by public transport, bicycle and park and ride modes, which is 6% less than the Transport for Canberra target for 2031.
- The modelling showed that the highest public transport movements generated by West Belconnen will occur in the Stockdill Drive, Drake Brockman Drive and William Hovell Drive corridors. The traffic volumes and congestion will also be highest in these corridors and this presents conditions for implementing transit lanes in these corridors.
- The major passenger flow remains on Southern Cross Drive east of Kippax, where trips generated from West Belconnen will be added to existing volumes, justifying additional bus priority in this section of road.
- A key point is that about 40% of the demand on Drake Brockman Drive from West Belconnen is destined for Kippax and 60% to William Hovell Drive and onto City. The relative passenger demands on Parkwood Road and Stockdill Street may change if the Kippax bus interchange is located closer to Southern Cross Drive.
- It is likely that transit lanes would be justified on Southern Cross Drive by 2031 and on Drake Brockman Drive when West Belconnen is nearing full development. A new link to Moyes Crescent east of Kippax Centre would assist future public transport movements from Kippax and reduce peak period delays between Moyes Crescent and Starke Street West.
- William Hovell Drive is busy during the AM peak and it has had a high number of crashes between Drake Brockman Drive and Coulter Drive in recent years. This points to the pressing need for a review of safety and the identification of potential improvements, independently of

the West Belconnen project. One possible measure is to reduce the speed limit to 80 km/h (currently 90 km/h) and introduce speed cameras. Other measures include lighting and median barriers. The latter would involve some minor widening.

- Traffic growth on William Hovell Drive is predicted to be slow, due to capacity constraints in this corridor and a shift to public transport. The constraint is the Bindubi Drive intersection, planned to be upgraded post 2031. Coppins Crossing is likely to be signalised by 2021 and the timing of any upgrades here will influence decisions on widening William Hovell west of Coppins Crossing. It is likely that this would involve an additional eastbound lane between Deep Creek and Coulter Drive.
- The implementation of transit lanes on William Hovell Drive is likely to be necessary post-2031. It is dependent on actual bus numbers and patronage that are achieved in this corridor in future.
- In the short-term (to 2021), Stockdill Drive will need to be upgraded to a suitable urban standard early in the development process. This will include the creation of a new intersection at the access to the development and realignment of Stockdill Drive to its final alignment.
- On Drake Brockman Drive a service road and a new road carriageway would need to be built between Spofforth Street and Macnaughton Street. East of Macnaughton Street improvements to intersections via linemarking are likely to suffice. Safety improvements are likely to be justified along William Hovell Drive.
- Drake Brockman Drive should be duplicated by 2031 and the intersection of Drake Brockman Drive with William Hovell Drive would need to be signalised by then.
- Duplication of William Hovell Drive may be justified by 2041, to provide extra capacity to enable improved bus operations, which is likely to be in the form of a transit lane.
- Parkwood Road will need to be upgraded to a suitable urban standard by 2031, including realignment of the bend on Parkwood Road located just west of its intersection with Macfarlane Burnet Avenue.
- Ultimately, Stockdill Drive, Drake Brockman Drive and William Hovell Drive will need to be widened or duplicated. The additional capacity should be by means of transit lanes, to foster public transport movements in this corridor.
- There will be small increases in traffic using Southern Cross Drive following commencement of development along Parkwood Road. By 2031 there will be a need for some improvements along Southern Cross Drive. Ultimately, consideration should be given to creating a service road on the southern side of Southern Cross Drive between Spofforth Street and Beaurepaire Crescent, requiring reconstruction of the existing road.
- The section of Southern Cross Drive between Starke Street West and Moyes Crescent will be busiest and most congested, due to its two-lane two-way cross-section and proximity to the Kippax Centre. LATM measures may be necessary to ensure that this traffic is not attracted to Starke Street to use it as a rat-run towards Drake Brockman Drive and avoid proposed traffic management works on Beaurepaire Crescent. It is likely that Southern Cross Drive will need to be duplicated from east of the Holt Oval underpass to the existing dual lane section at Moyes Crescent, assuming that the rat-running issue on Starke Street will be addressed and more traffic will use Southern Cross Drive.
- There will be a large increase in public transport trips via Kippax, using this section of road. Consideration should be given to an alternative access to Kippax via Moyes Crescent and a potential new road connection east of Kippax.
- The implementation of a new link road immediately to the west of Spofforth St (linking Southern Cross and Drake Brockman) to relieve rat-running pressure on Spofforth St and internal Holt residential streets warrants consideration.
- Bus passenger flows will be very high east of Kippax by 2031, with about 2,700 passengers per hour being carried by buses towards Belconnen by then, representing about 30 buses per hour

in the peak direction. This is likely to be sufficient to justify consideration of a bus lane or light rail between Kippax and Belconnen Town Centre.

- A connection to Ginninderra Drive from West Belconnen is expected to be provided post 2031. This will result in the need to duplicate Ginninderra Drive between Florey Drive and Tillyard Drive, but the section west of Florey Drive could continue to operate as a two lane two-way road.

### 12.3 OTHER MODES OF TRANSPORT

A comprehensive examination of requirements for public transport and active transport modes for the proposed development has been conducted by MR Cagney, specialist transportation consultants. (MRC, 2014). The approach has been based on the premise that successful sustainable transport planning in the context of urban communities can be defined as the provision of an integrated suite of initiatives that minimises the dependence of residents and businesses on the use of the private motor vehicle.

The report recommends that at least peak hour bus services be provided from the start of stage one of the project to ensure that patterns of public transport use are established early. At this early stage a full size Action bus would not be feasible and it is recommended that the engagement of an alternative transport service provider be considered for the first one to two years. The number of organisations ranging from commercial operators including ACTION through to not-for-profit entities would be able to provide the service using smaller vehicles.

In the third year of development, the population of West Belconnen will exceed 2,000 people. At this point, it becomes appropriate for bus services to start being provided by ACTION as part of their regular operations, and funded by the ACT Government. ACTION would also elect to use a small bus, although it is likely to be more operationally efficient for them to use their regular fleet.

Beyond the third year the service will continue to expand to provide services with 15 minute peak and 30 minute off peak frequency servicing all of the development area. The proposed road layout is intended to facilitate simple and efficient bus route planning. Careful siting of bus stop locations, bike and ride and park and ride facilities are also proposed.

Active transport (walking, cycling and other non-motorised forms of transport) is the most sustainable and has a significant role to play in the transport system. The provision of a well-considered active transport network will encourage social interaction, community cohesion and increase liveability of areas. A draft active transport plan has been prepared to provide a basis for future detailed planning. The proposed active transport movement network is a combination of shared off-road and segregated on-road cycling lanes, combined with a permeable pedestrian network. Secondary routes will be based on a street by street design. The network will be designed with regard to the following principles:

- Maintain grid network pattern with a high density of connections to maximise network legibility and connectivity.
- Casual surveillance improves real and perceived safety on paths. Consider the following:
  - Location of off-road paths.
  - Lighting.
  - Minimise visual barriers.

- Provide rest stops in suitable locations.
- Shade and shelter.
- Provision of cycle parking at key destinations such as PT stops, rest stops, key attractors etc. is crucial in order to foster an environment conducive to active transport use.
- Adequate wayfinding signage must be provided.
- Footpaths typically should be provided on both sides of all streets.
- Walking and cycling routes must be maintained to a high standard to ensure continuous, accessible paths of travel.
- High quality lighting along routes where night use is expected must be provided, consistent with Crime Prevention Through Environmental Design Principles;
- Walking and cycling routes should be linked to local destination and activity centres, such as major work and retail centres, schools, parks, residential areas, and public transport stops via the most direct and convenient routes possible to encourage commuting by active forms of transport.
- Route continuity through local streets is essential, linking footpaths with shared paths and providing safe access through road closures and cul-de-sacs.
- Clear, legible and safe connections may be achieved through the use of signage, landscaping, lighting and active edge treatments.
- Expanses of ground level blank walls along street frontages, and large driveways and entrances to car parks are to be avoided.
- Footpaths have ramps at all kerb corners and tactile ground indicator tiles.
- Street furniture is attractive but does not obstruct footpaths. Blind spots are avoided and footpaths are of adequate width and grade.
- Creation of stimulating and attractive routes will encourage active transport use.
- Walking and cycling routes may be designed around local landmarks and points of interest to encourage active transport use.
- Reduce vehicle speeds in residential areas, shopping streets and around schools.

## 12.4 TRAFFIC NOISE

The introduction of development to the west of Belconnen will result in increased traffic on the three arterial roads that serve the area. In some instances these roads have residential development along them and it is therefore important to consider the possible impacts of increased traffic noise on residents. In concert with the traffic modelling (discussed above) the noise impacts on all residential dwellings in the vicinity of the arterial roads has been assessed ( (SLR, 2014b)). In the cases of Ginninderra Drive and Drake Brockman Drive the research has found that the predicted noise levels are either within current ACT Government planning criteria or that appropriate mitigation to achieve this is readily possible and recommended for implementation. On one section of Southern Cross Drive predicted noise levels are expected to exceed planning criteria. The consultant has advised that on this section of road noise levels are already high and that the expected increase is only 2dB, which is considered to be marginal only. Because these properties have driveway access to the road mitigation with the use of mounds or barriers is not possible, alternative measures, such as the installation of double glazing will be explored.

The timescale of the development, which will extend over a period of up to 40 years, means that traffic volume growth, and consequent noise impacts, will occur over a long period.

## 12.5 SUPPLY CHAIN SOLUTIONS

The West Belconnen project will potentially involve the construction of 11,500 dwellings at a reasonably steady rate over a 30 to 40 year period. This will involve the importation to the site of a massive volume of products with a very high level of commonality – in simple terms, the same products will be used in many houses. This provides the potential for the application of supply chain management techniques to improve the efficiency of the importation and distribution process.

A good example of this concept is the London Construction Consolidation Centre which acts as a distribution centre and delivery service area for construction materials to four major building projects in Central London.

A report (UK DoT, 2007) prepared by the UK Department of transport says that in its first 18 months of operation the LCCC has achieved the following environmental and economic benefits:

- Reduced CO<sup>2</sup> - an estimated reduction of 73% CO<sup>2</sup> emissions from 43,317kgs to 11,895kgs across the four sites
- Congestion - a 70% decrease in the number of delivery vehicles travelling to the construction sites including the removal of deliveries by articulated lorries
- Improved service levels - fewer failed and late deliveries as the LCCC manages the final delivery stage
- Greater delivery flexibility - companies can order smaller quantities for each site while suppliers can send full loads to the LCCC
- Fewer unnecessarily early deliveries – without a consolidation centre, deliveries from further afield would generally arrive early to avoid late delivery penalties. This leads to certain logistical problems including:
  - Trucks waiting to be unloaded at site, causing local congestion issues
  - Deliveries being tipped and product sitting around on site before required
  - Deliveries being turned away altogether

Similar beneficial impacts can potentially be achieved at West Belconnen and it is proposed that a 1 – 2 ha site within the landfill area be allocated to a supply chain solution depot and management centre.

## 13 ROAD AND STREET HIERARCHY

### 13.1 INTRODUCTION

Consistent with the overarching vision of West Belconnen (WB) as a sustainable community of international significance in the nation's capital, the project will evolve as a series of distinct neighbourhoods / precincts providing housing choice, land use diversity and broad ranging affordability in housing and living.

Streets, and the public domain more generally, will play a very significant role in urban character of West Belconnen.

The discussion below focuses on two themes as follows:

- General Principles for West Belconnen Streets;
- A description of the character precincts envisaged, detailing the elements, precinct specific street principles, and proposed variations to standards.

### 13.2 GENERAL PRINCIPLES FOR WEST BELCONNEN STREETS

- Streets are public spaces - for people first and vehicles second. Well-designed streets assist with economic activity (in commercial areas), and land value and quality of life (in living areas):
- Streets must be safe.
- Streets should be attractive and shaded.
- Street landscaping should employ best construction practice and should, where possible, be passively watered.
- Streets should serve WSUD and ecological functions (where practical and affordable)
- Streets should be attractive, shaded and affordable

### 13.3 GENERAL STANDARDS

The ACT Estate Development Code provides minimum requirements of land-take for functions carried out in the road reserve, as generally proposed by TAMS and ACTEW.

While many of those requirements are consistent with the Principles noted above, they do not necessarily address them in the most contemporary manner.

Accordingly, and for the purposes of the West Belconnen Master Plan and rezoning, Riverview Projects (ACT) Pty Limited (Riverview) proposes to work within the structure of the Estate Development Code on the basis that discretionary variation will be sought to standards to provide enhanced consistency with the general principles noted above, and generally a more contemporary approach to street design.

Discussions are ongoing with TAMS and other agencies and over the next 12 months agreements will be sought to variations to be applied at West Belconnen. It is proposed that over time, as variations are agreed to and tested, the outcomes be included in the WB Precinct Code and may be applied throughout WB.

TAMS may require prototype testing of some variations.

### 13.3.1 BASIS FOR VARIATIONS

The following references (and others) will be used for guidance in deciding the most appropriate elements of the West Belconnen Streets. These relatively standard documents provide TAMS with a level of comfort that these street design options are well researched and that many examples of similar streets have been built, are operational and have been successfully maintained for long periods of time in other places.

- Complete Streets - <http://www.engicom.com.au/products/complete-streets/>
- Human Transit - <http://www.humantransit.org/>
- Great Streets, Alan B Jacobs - <http://www.amazon.com/Great-Streets-Allan-B-Jacobs/dp/0262600234>
- Liveable Neighbourhoods - <http://www.planning.wa.gov.au/650.asp>
- Landcom Design Guidelines - <http://www.landcom.com/downloads/file/forpartners/StreetDesignGuidelines.pdf>
- Link and Place - <http://www.thinkingtransport.org.au/news/2010/01/link-place-planning-study-now-available-online>
- ULDA Res 30 - [http://www.ulda.qld.gov.au/01\\_cms/details.asp?ID=157](http://www.ulda.qld.gov.au/01_cms/details.asp?ID=157)

### 13.4 CHARACTER PRECINCTS

The West Belconnen Master Plan Figure 8 provides an illustrative overview of the proposed urban development of the site. In preparing the master Plan the Riverview team has identified a need for a wide diversity of housing types to meet to practical, social and economic needs of the current and future population (demographic) profile of the ACT.

Research of best practice in urban development has led us to the conclusion that a transect based approach ( Figure 21) to land use and density would be ideally suited to West Belconnen. Consistent with that practice, Riverview proposes the creation of five distinct character precincts across the project, reflecting the planned mix and intensity of land use, in the context of the known physical and environmental features of the land.

These are discussed in more detail in the context of the proposed precinct code at Appendix A.



Figure 21: Urban design transect

## 14 ENGINEERING INFRASTRUCTURE

### 14.1 SEWERAGE

A main ridge line runs east-west through the site dividing the development into a northern and southern catchment. The northern catchment falls towards Ginninderra Creek and the southern catchment falls towards the Murrumbidgee River.

ACTEW Water has confirmed that the southern catchment can discharge to the existing overflow structure on the Ginninderra Sewer Tunnel (GST) and the northern catchment can discharge at the existing vortex drop structure. Two options have been investigated to service the Ginninderra Creek Catchment and five options have been investigated to service the Murrumbidgee River Catchment. These options are significantly different in methodology. Therefore, the associated costs for these options are expected to vary significantly. Options G1 and M2 are expected to be the most expensive options in terms of the initial capital costs due to the extent of microtunneling involved. These options will however have minimal ongoing operation and maintenance costs compared with other options and results in significantly less impact on the existing sensitive environmental habitat.

The options are discussed fully in a report prepared by Brown Consulting (Brown, 2014).

Several of the options, including the most economical in the Murrumbidgee catchment, involve traversing the conservation corridor with impacts on woodland and pink tailed worm lizard habitat. The options which substantially mitigate these impacts, particularly those involving microtunneling, are feasible but substantially more costly with the difference between the least and most cost options being approximately \$25m. All of these options will be evaluated by the project team in the context of a referral to the Commonwealth Department of the Environment under the provisions of the Environment Protection and Biodiversity Conservation Act as the woodland and worm lizard are listed under that Act. A strategic assessment process, to be conducted in accord with the requirements of the Act has commenced and will determine the most appropriate solution.

ACTEW has advised that the provision of sewerage services to the site to meet the anticipated demand is feasible.

### 14.2 WATER

ACTEW has advised that the supply of water to the site to meet the anticipated demand is feasible. A water concept plan based on the ACTEW Corporation- Water Supply and Sewerage Standard (AWSSS) has been prepared (Brown, 2014). Subject to finalisation of the preferred Water Sensitive Urban Design (WSUD) and water recycling strategy, this report and concept plans for water are based on meeting the current AWSSS to provide a base case workable concept for servicing the site.

ACTEW Water is continuing to investigate the Water Supply Strategy and proposed bulk water supply infrastructure for servicing the proposed West Belconnen development.

### 14.3 ELECTRICITY, GAS, TELECOMMUNICATIONS

The provision of energy and telecommunications services to the site has been examined in discussion with the relevant agencies. All services are able to be made available to the site and, with appropriate upgrades, will be able to service the development to full completion.

### 14.4 WATER SENSITIVE URBAN DESIGN

Consideration of factors such as the proximity of the Murrumbidgee River and Ginninderra Creek, an appreciation of the need for conservation of potable water as a scarce resource, the topography of the site and the need to prevent scouring runoff and altered soil water regimes in environmentally sensitive areas, have influenced the approach that has been taken to on-site water management.

The sustainability vision adopted for the West Belconnen development has been characterised as “creating a sustainable community of international significance in the nation’s capital.” To determine how this vision could be applied to the management of the urban water cycle, a review was carried out of the site context (including the hydrology and topography, environmental water needs, opportunities for water recycling, etc.), international practices and innovations in integrated urban water cycle management, and the relevant local planning and design codes (in particular the ACT’s Water Sensitive Urban Design [WSUD] Code). The Green Building Council of Australia’s Green Star Communities Rating Tool has been adopted to guide and evaluate the delivery of sustainable design measures at the site –the rating tool contains objectives and scoring criteria that relate to potable water demands, stormwater quality and flow management, water recycling, and climate management. The tool has been formulated for Australia wide use and testing through a “pilot projects” process. West Belconnen is a pilot project and, Canberra is an inland city and thereby unusual in the broader context of urban Australia which is largely located on the coast. Consequently some acknowledgement of the fact that water utilized in Canberra is ultimately likely to be reused at some point lower in the Murray Darling catchment will be warranted.

The master plan of a water sensitive community at West Belconnen has been founded on the following principles:

- Working toward a ‘Water Neutral Community’ - Minimising potable water demand and wastewater discharges into the adjacent Murrumbidgee River , and mimicking predevelopment hydrology of the site to protect the ephemeral creek lines
- Understanding that ‘The City is your Catchment’ – Explore harvesting and using the stormwater as an alternative water source (e.g. as a ‘third pipe’ for irrigation and non-potable domestic uses), how deploying sensible onsite rainwater capture and use on blocks can reduce potable water demands, and whether the capture and reuse can prevent loads of contaminants entering waterways
- ‘Make the Landscape Work’ - Using functional landscapes for stormwater treatment and maintaining soil and vegetation health and contribute to more liveable urban environments
- ‘Produce the Food you Consume’ – Explore opportunities to use stormwater and/or wastewater to support urban planting and food production, noting that local food production is a component of a sustainable community and one of the beneficial uses of harvested stormwater

- ‘Make the Cities Work for Waterways’ – Develop a new model for urbanism, reduce and manage pollution to waterways and repair riparian corridors. Creating new communities does not need to come at the cost of our environment

Consultants Aecom (Aecom, 2014c) have considered the water sensitive urban design principles for the project, and have examined options ranging from base case (i.e. compliance with the ACT WSUD Code) all the way through to stretch targets towards water neutrality. Options for implementation at West Belconnen will be assessed against sustainable triple bottom line considerations to determine the most appropriate stormwater treatment system, in consultation with the relevant ACT and NSW agencies.

## **14.5 WASTE MANAGEMENT**

The re-use or disposal of waste generated from urban areas has substantial impacts and with a project the size of West Belconnen this warrants careful consideration. For this reason for this reason two reports have been commissioned as follows:

- Strategic Construction Waste Management Plan (GHD, 2014b)
- Strategic Waste Management Plan (GHD, 2014c)
- Background Report (GHD, 2014d)

The first of these examines options for the management of waste from construction activities on the site. A centralized recycling facility located on the land fill site is proposed to enable 100% of building waste to be re-processed on site. The second examines options for the collection and re-use or disposal of municipal waste from households and other developments on the site. It proposes a centralized transfer station which would be co-located with a recycling facility, on the land fill site. This enables the use of smaller collection vehicles and overall saving in energy use as well as improved options for recycling.

## 15 COMMUNITY AND SOCIAL PLANNING

### 15.1 SOCIAL INFRASTRUCTURE

#### 15.1.1 COMMUNITY FACILITIES AND SERVICES

A review of community and social planning requirements for West Belconnen has been conducted by Elton Consultants, and is presented in four reports (Elton, 2014c) (Elton, 2014d) (Elton, 2014e) (Elton, 2014f). The reports assess the needs for a range of social infrastructure and identify social infrastructure requirements necessary to meet the needs of future residents.

At the local level, residents of West Belconnen will require access to the following:

- Retail and commercial services
- Spaces for informal meeting and gathering, such as cafes
- Indoor spaces for community activities, programs and services
- Medical services such as GP's
- Childcare and some family support services
- Pre-schools and primary schools
- Local leisure and entertainment facilities, such as restaurants
- Places of worship.

From a West Belconnen district perspective, residents will require access to the following:

- Multipurpose spaces for a range of community activities, programs and events
- A high school and other learning facilities
- Civic and cultural space including a library
- Sporting and recreation facilities
- Larger areas of open space for active and passive recreation
- Individual and family support services, and services addressing particular issues such as welfare, legal aid, employment, housing
- Facilities and services for particular sections of the population, such as young people, older people, people with a disability, people from culturally and linguistically diverse communities
- Larger places of worship
- Emergency and safety services.

Provision has been made for school and community facility sites in the structure plan and will be made on an ongoing basis for all the facilities and services identified as being necessary or desirable as planning proceeds into the future in close consultation with Government and non-government service providers.

#### 15.1.2 SHOPPING

There are currently no retail facilities at the West Belconnen site apart from a garden centre and landscape supply business located on Parkwood Road, serving the existing Belconnen community. There are substantial retail facilities within Belconnen that will be affected by the proposed development. These particularly include the Kippax centre and Holt local shopping centre.

**KIPPAX CENTRE**

The Kippax group centre is the major retail service centre for this area of Belconnen that adjoins the West Belconnen project area. Charnwood centre is also significant. It is disconnected from the project area but would have greater connectivity if Ginninderra Drive is extended as is proposed.

Community concern with the possible impact of the West Belconnen development on what was seen as an already congested Kippax centre was expressed early in the consultation process. A separate project has been commenced to undertake a strategic review of the Kippax centre and this is now underway. The strategic review has included a retail analysis (Urbis, 2014) to assess the requirements of the potential effect of the proposed development on the Kippax centre. The review also includes detailed parking and traffic analysis, research into engineering infrastructure and a review of the recreation facilities that are a major feature of the area. The review is proceeding within a structured consultation process that includes community information sessions, web and social media engagement and a series of newsletters.

With respect to current retail provision Urbis say as follows:

*“Given the extensive retail offer at Belconnen Town Centre and Canberra CBD, it is anticipated that a sizable proportion of future discretionary spend from West Belconnen will be directed to these higher order centres. Belconnen Town Centre will continue to be the major discretionary shopping destination for the Belconnen subregion as it contains a mix of strong anchor tenants (Myer, Kmart, Harris Scarfe) and an extensive mix of specialty retail.*

*As Kippax group centre is located off Southern Cross Drive (which will form the main east-west link road between West Belconnen and Belconnen Town Centre) it may also benefit from additional passing trade generated by West Belconnen residents, as well as attracting some spend from Macgregor West and golf course residents. As West Belconnen expands westwards, Kippax will become less peripheral within Canberra.*

*In the first years of residential development at West Belconnen, until such time as new retail facilities are operational, Kippax is also likely to benefit from food and grocery spending by new residents at West Belconnen.”*

**HOLT LOCAL CENTRE**

The existing Holt local centre is typical of many Canberra suburban local centres and is trading at a poor level. Local centres have been impacted heavily over the last twenty years by changes in retail patterns, especially the introduction of much larger supermarkets, 24 hour trading at larger centres and changing travel and work patterns. The influx of greater population in the area is likely to lead to some improvements in trade although these would be limited as the centre is not located on any main access routes. Reconfiguration of the centre to provide some form of specialist retail or restaurant offering taking advantage of the increased catchment population is likely to provide greater opportunity for improvement.

**PROPOSED WEST BELCONNEN MARKET CENTRE**

Urbis have reviewed the success factors that are applicable to current retail centres in Canberra, noting that a major factor over the last twenty year period has been the steady decline of local suburban centres. The decline of local centres has resulted, for many suburbs, in the creation of a

blighted zone in the centre of each suburb and the loss of local facilities. Urbis have identified the key drivers of successful centres, which are as follows:

- Accessibility
- Car parking
- Exposure and visibility
- Quality of design and management
- Tenant mix
- Complementary uses

Following from this they have specified design and location criteria that should be applied to the design of new retail facilities at West Belconnen as follows:

- Location on or close to a main road
- Maximum accessibility to residents
- Strong anchor tenant(s)
- A sufficient critical mass of offer – with fewer larger centres preferred to many small centres
- A retail mix that meets the daily and weekly needs of shoppers
- Good exposure, visibility and signage
- High quality design to make centre(s) exciting and welcoming places to visit

These principles have directed the master planning approach to the provision of retail facilities at West Belconnen. A single robust market centre is proposed, to be located on Parkwood Road. The Urbis assessment of demand for supermarket floorspace, based on what they consider to be achievable market shares indicates that by 2054 the trade area (including full development of West Belconnen to a population of approximately 30,000 people) could support, in addition to existing and proposed growth of the Kippax centre, around 5,000 sq.m supermarket floorspace at competitive turnover per sq.m rates. In order to provide a broad retail offer at the centre this could include the development of a full line supermarket of around 3,500 sq.m and a second smaller supermarket of around 1,500 sq.m.

Based on comparison with national benchmarks for double supermarket based centres, we estimate that a new centre at West Belconnen with 5,000 sq.m of supermarket floorspace could support around 650 sq.m mini major floorspace and around 2,700 sq.m specialty floorspace at capacity.

Specialty floorspace would comprise a mix of:

- Food retail (e.g. delicatessen, butcher, bakery)
- Food catering (e.g. café / takeaway)
- General retail (e.g. pharmacy, florist)
- Retail services( e.g. optometrist)

Urbis also recommend the inclusion at the centre of a range of non retail specialty uses such as banks, insurance and real estate offices, post office, TAB, bar/hotel, and small office suites. These uses support the overall vibrancy of the centre; they can be highly 'destinational' in the sense that they attract specific visits from customers who may not otherwise need to visit the shopping centre. Once these customers are at the centre they are then more likely to make a broader shopping purchase. Whilst a conventional pub or club is likely to work at the centre Urbis have suggested that consideration be given to the introduction of a "destination" food and beverage use. They cite the

“Grounds of Alexandria” in Sydney as an example of a highly successful venture of this nature. Urbis say that this type of use, integrated within a centre, could create a high quality community destination for West Belconnen and could also assist in drawing weekend custom from beyond the trade area. It could provide a counterpoint, albeit on smaller scale, to the role of the Old Bus Depot Markets at Kingston Foreshore.

### **15.1.3 EMPLOYMENT**

#### **JOBS AND JOB CREATION**

A report on the employment aspects of the West Belconnen project has been prepared by Urbis (Urbis, 2014b). The report reviews existing and potential future employment patterns in the project area and in nearby areas. A zone within a 5 km radius of the centre of the project area was selected for analysis, aligning with the guidelines for assessing employment under the green communities pilot rating system. This zone includes the existing western suburbs of Belconnen, including the Kippax and Charnwood group centres.

The Urbis report shows that, in 2011, the population of this area was 33,100 and of these 18,200 were in the labour force; key findings from the Urbis report are:

- Local jobs (i.e. jobs available within this area) totalled 3,800. This gives a “job containment” figure of 22%. That is, there is approximately 1 job for every 5 workers within the local area. Whilst this is low it is not unusual for an outer suburban area.
- The types of jobs available locally are also typical of an outer urban area with an emphasis of education services, retail and public administration. The workers employed in local jobs tend to also live locally or nearby with the majority living in Belconnen.
- In contrast to the jobs available in the local area, the majority (28%) of the workers who work outside the local area are employed in public administration and safety. This outcome is consistent with the employment profile of the broader ACT labour force. Large proportions of local workers are also employed in education and training; professional, scientific and technical services; healthcare and social services, construction; and retail trade.
- There is a high concentration of local workers who are employed in Belconnen, and around the Canberra CBD with lesser numbers in Woden and fewer still further afield.
- Most of the current jobs in the local area are concentrated in and around the Kippax and Charnwood Group Centres. The current employment provision in the local area is a very small fraction of the jobs available in and around the Belconnen Town Centre and the Canberra CBD.

From this data it seems apparent that local jobs, if created, are likely to be filled by local residents; this would lead to higher levels of job containment, and consequent reduced travel times and energy costs. It is also apparent that, whilst a large proportion of local workers will travel out of the local area for work, many of these trips go only as far as Belconnen Town Centre which is very close, or the Canberra CBD which is relatively close. Both of these centres will be easily accessible by public transport.

Urbis have forecast likely future employment levels and made recommendations regarding possible strategies to stimulate local employment. From an analysis of the land uses that may be incorporated in the proposed development Urbis have determined that a total of 3,530 jobs will be created within the West Belconnen project area when it is fully developed.

The rapid pace of technological change is also likely to affect employment patterns. The opportunities that are now available for home based work are rapidly expanding and will increase further as broadband high speed internet services become standard, as is proposed at West Belconnen. The University of Canberra ( (ANZSOG, 2014)) has explored the concept of West Belconnen as a “creative community” with employee connectivity being available via “digital work hubs”(DWH) . The DWH provides a local centre where office infrastructure such as printers and meeting rooms, and high level technology based connectivity, is available. This concept allows people to work at home and, when they need, collaborate with a global community of colleagues via a digital hub.

Statistics cited by UCAN suggest that the incentives for teleworking are very strong and that if the facilities are provided the take up rate will be high. For example:

- 42% of businesses surveyed have employees who telework
- 8 out of 10 Australians already have a computer in their home
- 7 out of 10 people are more productive when working remotely
- If 10% of Australians worked from home for 50% of the year this would save:
  - 41 million commuting hours, this would translate directly to family or leisure time, or increased work productivity.
  - 1.3 billion car kilometres
  - 120 million litres of fuel
  - 320,000 tons of carbon dioxide

The nature of the Canberra workforce, with high levels of employment in public administration and the knowledge intensive professional services sector is particularly well suited to tele-working

The UCAN research has shown the potential for substantial increases in home based employment facilitated by the introduction of one or more technology hubs to the development area. It is anticipated that these could be located in the market centre as well as in one or more of the three proposed village centres; the actual impact of this technology on employment levels is difficult to project however it is anticipated that it could at least double the level of home based employment. This would amount to a total of 820 workers. This is equivalent to 5% of the total workforce of West Belconnen, that is, the technology will cause the level of home based employment to rise from 5% to 10% of total employment.

This data is shown in the table below:

**Table 9: West Belconnen Future Employment**

<b>Employment Sector</b>	<b>Projected jobs</b>	<b>Location</b>
Retail	500	Market centre
Commercial office	460	Market centre and mixed use area
Education	810	School sites
Health	150	Market centre

<b>Community Services</b>	<b>40</b>	<b>Market centre</b>
<b>Home based Business</b>	<b>820</b>	<b>Distributed through residential areas</b>
<b>Existing employment to continue (Recycling, agriculture)</b>	<b>80</b>	<b>Land fill site</b>
<b>Regional employment at West Belconnen including Eco tourism/biosphere, business park, Upgraded recycling facility, premium food and beverage,</b>	<b>670</b>	<b>Land fill site and mixed use areas</b>
<b>Additional home base employment generated by introduction of digital work hubs.</b>	<b>820</b>	<b>Distributed through residential areas</b>
<b>Total employment</b>	<b>4,350</b>	
<b>Note: Assumes full development and that Parkwood eggs will have ceased operation or relocated.</b>		

#### **TRAINING AND EMPLOYMENT INITIATIVE**

One of the most important factors that underpins social sustainability is employment. The existing West Belconnen suburbs currently experience some of the highest rates of unemployment in the ACT and a major construction and development project such as West Belconnen provides a potential opportunity to address this issue, as it will create a large number of jobs. Targeting specific sectors within the unemployed population – people whose employment prospects are exacerbated by factors such as social disadvantage, language, cultural issues and the like – is also important to ensure that job availability can be used to leverage overall social improvement. This can only occur if pro-active action is taken to assist the less employable into employment, with particular focus on local employment as part of contracts for works and close cooperation with vocational training and employment service providers. A program that has been achieving this at Playford in Adelaide has been examined and provides a model for action at West Belconnen. A similar program is proposed for West Belconnen, which will require dedicated resourcing if the South Australian success is to be replicated (SDA, 2014).

#### **15.1.4 URBAN AGRICULTURE**

Urban agriculture has been a part of cities since the earliest civilisations. In recent decades advances in industrial farming, rising land values and sprawling cities have led to a decline in the amount of food grown within our city boundaries. Recently however, local food movements have started championing the need to grow food closer to consumers as issues regarding food security, food miles and the increasing environmental costs of land clearing and degradation gain momentum.

Local food production is now, to some degree at least, an important part of the community response to a range of environmental issues. It is certain that local food production, to whatever extent it can be achieved, can be highly beneficial to local communities. At West Belconnen several factors have come together so that food production is likely to be viable and widespread through the development. These are as follows:

- Local food production, community gardens and city farm concepts have been and continue to be regularly raised during community engagement forums, indicating a very high level of support for these concepts.
- The soil and climate of the site is amenable to agriculture
- The landfill site has a total area of 107ha, some of which could readily be devoted to community gardens or similar ventures
- The power line easements traverse the site, these are all 60 m wide and in total add up to 86 ha. They would be available and suitable for community farms or gardens.

Consequently the opportunity exists and will be actively pursued, to establish community gardens and urban farming at a scale that is unprecedented in any other similar urban area in Australia (McGC, 2014).

The urban agriculture network will become integrated into Industrial Ecology systems, particularly through the conversion of organic/green waste into soil improving components including compost and soil conditioners. Urban agriculture offers the opportunity to develop a 'closed loop' system that diverts waste from landfill by utilising green wastes, creating a sustainable local green waste network that produces food for the community.

#### **15.1.5 RECREATION AND OPEN SPACE**

Developing an open space system that is integrated with the surrounding open space systems and adjacent communities of West Macgregor, Holt and Dunlop will be of vital importance to the success of West Belconnen; this has been addressed with the preparation of a "landscape and Open Space System" report by landscape architects McGregor Coxall (McGC, 2014). Equally important will be the integration of the varying open space typologies within the development. The Landscape and Open Space Strategy [LOSS] will connect the open space system with the primary features of the development, including schools and retail centres, while also enabling connection between local villages and neighbourhoods. The landscape and open space master plan is at Figure 22.

The open space system is comprised of two primary parts;

- Conservation Corridor and Ginninderra Creek riparian zone; 640ha of open space to the periphery of the development area which will protect a number of ecological communities, provide a vast recreational resource and contribute to the NCOSS.
- Open space within the developable area; consisting of parks and recreation spaces, streets, transmission easement corridors, Belconnen Farm heritage precinct and the Belconnen Landfill site.

The integration and connection of these two parts, and all of the elements they contain, will be achieved through a comprehensive movement network catering for all forms of transport. The final element of the system will be the management trust, which is described further in section 6.4.2, that will oversee the Conservation Corridor and engage the community to become custodians of the open space system.

A number of key elements will be integrated into the open space system to create a diverse and vibrant asset for the community of West Belconnen, these are outlined below and are discussed in greater detail in the McGregor Coxall report.



**CONSERVATION**

The ongoing protection, restoration and regeneration of the Conservation Corridor will be a major measure of the success of the West Belconnen development. The conservation programs will develop management plans for the individual species and communities to ensure their long term survival. These specific management plans will sit within a broader management plan to be developed as the basis for ongoing management of the corridor into the long term future. The development of the management plans will be a first step to be commenced immediately following the rezoning.

**RECREATION**

Recreation will be a key use of the entire open space system and its integration with the other uses will be of primary importance.

**INDUSTRIAL ECOLOGY**

The opportunity to embed Industrial Ecology systems within West Belconnen, particularly within the open space system, will play a major role in the future sustainability of the community. Industrial Ecology uses the functioning of ecological systems as a model for developing industrial systems. The primary goal of Industrial Ecology systems is identifying waste products from one system that can be used as an input for another. These 'closed loop' systems reduce waste and also reduce the need for the input of virgin materials.

**PARKS**

The open spaces within the developable areas, which provide the day to day experiences for the community, will be important notwithstanding the extensive amounts of open space available in the conservation corridor and potentially also on the land fill site. The urban parks will be especially important for local children, providing safe places for social interactions and play.

**INTERPRETATION**

A number of opportunities exist to provide interpretive elements within the open space system. Indigenous and Non-Indigenous cultural elements are found as well as opportunities for ecological and environmental interpretation.

**MANAGEMENT**

It is proposed that the management and governance of the Conservation Corridor will be undertaken by a Trust set up by the Project Manager to ensure the ongoing conservation, restoration and management of the corridor. A report setting out a proposed management structure and the functions of the trust has been prepared by Elton Consulting (Elton, 2014g).

**15.1.6 THE BELCONNEN LAND FILL SITE**

The Belconnen Land Fill site is no longer utilized as a public land fill – all ACT municipal waste goes to the Mugga facility. There are a number of uses remaining in operation on the land fill site that would be incompatible with residential development and in addition these past activities may have left a legacy of contaminants. Consultants have been commissioned (GHD, 2014e) to review the land fill site in light of potential nearby urban development (refer section 11.2).

The old Belconnen land fill site comprises a 107ha site in the centre of the West Belconnen project area. The site is highly problematic because of its prior use as a landfill facility and because of its past and ongoing use for a range of activities that are incompatible with many forms of development. The site is in large part unable to accommodate buildings and unsuitable for residential use. As it stands the long term management and maintenance of the site represents a liability for the people of the ACT. The West Belconnen project provides the opportunity to reverse this position and utilize the site as a community asset. Potential uses that are being investigated include:

- Resource recovery
- Green waste recycling
- Solar farm
- Light industry
- Commercial plant nursery
- Community gardens
- Mountain bike trails
- Equestrian activity
- Passive recreation
- Forestry/tree planting
- Administrative/education facilities (related to on-site activities)

The GHD report has confirmed that all of the above activities are potentially, subject to appropriate investigations and controls, able to utilize the site. Certain activities currently underway on the site are incompatible with residential development. Most or all of these are either of a temporary nature, or can be relocated to more suitable locations within the site, or have their impacts ameliorated by other means, for example by being enclosed within buildings. The development “front” will not reach the landfill site for several years; in the interim it is proposed that the Territory Plan retain the current clearance zone that will preclude residential and community development pending relocation or appropriate amelioration of the impacts of the relevant activities.

It is proposed that the landfill site should be incorporated in the West Belconnen project area and that it ultimately be developed on the basis of a masterplan that incorporates whichever of the above uses are deemed to be appropriate and that it become and remain a community owned and managed resource. The Centre for Education and Research in Environmental Strategies, (CERES, <http://www.ceres.org.au/home.html>) is an award winning, not-for-profit, sustainability centre located on 4.5 hectares on the Merri Creek in East Brunswick, Melbourne, on what was the Brunswick landfill site. This provides a model for the development of the Belconnen landfill, albeit on a larger scale and with consequently increased potential.

## 15.2 CULTURE & HERITAGE

### 15.2.1 INDIGENOUS HERITAGE

An understanding of indigenous cultural heritage is an important pre-requisite in the land development process to ensure that heritage values, where they exist, are identified and protected and managed appropriately. Bosis, who have appropriate expertise in cultural archaeology was commissioned to undertake the necessary consultation with local indigenous groups and, in company with these groups, conduct extensive field research. The findings of the Bosis work are set out in two reports covering the ACT and NSW components of the site. The relevant legislation provides that material relating to indigenous archaeology should remain confidential to ensure that any such material is secure and protected from vandalism, theft or damage. The reports are consequently not available for public review but will be available as appropriate throughout the planning and development process to ensure that the recommendations are fully implemented.

In summary, within the ACT, the field survey identified 11 previously unrecorded Aboriginal archaeological sites within the Development Area and 39 unrecorded Aboriginal archaeological sites within the Conservation Corridor. In addition 32 previously recorded sites are located within the Development Area and 7 within the Conservation Corridor.

The majority of the sites consisted of small artefact scatters with less than 10 artefacts or isolated finds. These sites have been assessed as holding low cultural and scientific significance. Scarred trees and larger open sites (n=16) also occur within the Project Area. These sites are ranked as holding moderate significance as the majority of the previously recorded sites have been subject to a program of collection and/or subsurface testing. One rock shelter site holding high significance was relocated within the Conservation Corridor.

In NSW the field survey identified 18 previously unrecorded Aboriginal archaeological sites within the Development Area. No previously recorded sites are located within the Development Area.

Ten registered sites are located within the NSW component of the Conservation Area. The majority of the sites consisted of small artefact scatters with less than 10 artefacts or isolated finds. These sites have been assessed as holding low cultural and scientific significance. Site 57-1-0140 is a large scatter and has been assessed as holding moderate significance.

Eleven previously unrecorded Aboriginal Archaeological sites were identified within the Conservation Area. The majority of these sites are of low significance with one site being of high significance.

Three areas of (archaeological) sensitivity were identified – all associated with surface sites.

The scarred trees and rock shelter site will be preserved. In all cases except for one scarred tree these are located within the conservation corridor. In the remaining case the tree will be located within parkland within the future urban environment. Artefact scatter sites that are likely to be disturbed by urban development are recommended for salvage and appropriate storage. Sites identified as potential archaeological deposits (PADs) will be investigated, including by excavation, prior to development.

### 15.2.2 EUROPEAN HERITAGE

The West Belconnen project area was occupied at an early stage in the history of European settlement in Australia, and has significant connections to early European history through a linkage with Charles Sturt. Investigations into the European history and heritage of the site have been conducted by Eric Martin and Associates (EMA) and recorded in a series of reports. A preliminary advice report was prepared in 2011 (EMA, 2011). A significant finding of this report was that the Belconnen Farm precinct was of heritage significance and subject to an assessment by ACT Heritage. Subsequently the farm precinct (an area of approximately 7.4ha) has been listed on the ACT heritage register. The next step has been the preparation of a heritage conservation management plan (CMP) for the precinct and this has been commissioned by the West Belconnen project proponent. The CMP has now been completed by EMA (EMA, 2014a). It has been prepared in close consultation with the ACT Heritage Unit and has their final approval.

Detailed heritage assessments have also been conducted over the whole site and are reported on in a series of four reports by EMA. (EMA, 2014b; EMA, 2014c; EMA, 2014d; EMA, 2014e) Matters of European heritage that have been found to be significant as reported by EMA are as follows:

In the ACT:

- The Belconnen Farm precinct
- Parkwood Road
  - The southern section being part of the boundary of Sturt and Campbell's land.
  - Previously the road/right of way to the Southwell/Kilby property, Parkwood.
- ACT border alignment.
- The short section of fence line marking the historic boundary of Charles Sturt's 1837 grant and Charles Campbell's eastern estate boundary (within part of Block 7 Section 149 adjoining housing along Eccles Circuit in Macgregor).
- Road to Belconnen Farm
- Ref EMA report Fig 35. The road ran along the ridge to the existing land fill (WBRMC) and then down to Belconnen Farm. The historical alignment should be recognised in the planning of any new developments if possible and any future interpretation of the area.
- House
  - There is a house indicated on Figure 36 but there is no obvious evidence of it today. A watching brief should be established when work is proposed for this area so any evidence of it may be recorded.
- Stock Yards
  - These are shown on the Figure 37. There is no obvious evidence of the stockyards today but a watching brief should be established when work is proposed for this area so any evidence of it may be recorded.

In NSW:

- The western boundary of Sturt/Campbell land.
- The alignment of the original access road to Parkwood/Kilby Park.
- Some tree planting along Ginninderra Creek to protect views from Parkwood/Kilby Park
- Retention of vistas/views to distant ranges and the Murrumbidgee River valley.
- The ACT border alignment.

- The alignment of the access road to Cusack's Crossing.
- Retention of vistas/views to distant hills and mountain ranges, the Murrumbidgee River valley and Ginninderra Creek.
- Cusack's Crossing site.

The Belconnen Farm heritage precinct has been included on the ACT heritage register and steps are now being taken to create the site as a separate land parcel. Ultimately it will be an integral component of the urban development with potential to provide for a range of community based activities in keeping with its overarching heritage significance.

Other heritage items identified above will be incorporated where feasible in the design of the project site. Parkwood Road will become the principal "main street" of the development. The Sturt property boundary is recognised with road and open space alignments in the master Plan as is the alignment of the road to Parkwood farm. The house and stock yard sites will be further investigated.

## 16 THE NATURAL ENVIRONMENT

### 16.1 APPROACH TAKEN TO BIOLOGICAL RESEARCH

A series of scientific field research studies have been undertaken across the project area between 2009 and 2013, as follows:

A preliminary “overview” research study was conducted by Kevin Mills & Associates (KMA) in January 2009 (KMA, 2009a). The intent of this study was to identify the likely significant flora and fauna issues present in the study area and undertake a survey program to address these issues; particular note was to be taken of the likelihood of the presence of threatened and other significant species and communities, as listed in New South Wales and/or the Australian Capital Territory. The overview study led to the commissioning of a series of targeted investigations:

- Supplementary research (KMA, 2009b) by KMA in July 2009 to add to the findings of the January 2009 report and investigate in more detail matters such as pink tailed worm lizard habitat.
- KMA conducted field research and a review of other studies in relation to the NSW land in 2013 (KMA, 2013a).
- In September 2013 KMA investigated the land in the far north-eastern part of the West Belconnen Project Area which had not been investigated in detail previously as it had not previously been included in the project land area. This report (KMA, 2013b) addresses this omission by providing an ecological description and assessment of the land and its biota.
- The earlier KMA research indicated the need for a targeted bird survey across both the NSW and ACT land which was conducted by KMA in September 2013 (KMA, 2013c).
- The KMA research identified the need for further research into listed species including the Golden Sun Moth. An expert in this field, Alison Rowell, was commissioned to undertake research and report on findings (Rowell, 2013)
- The KMA research identified the need for further research into listed species including the Pink Tailed Worm Lizard. Experts in this field, Will Osborne and David Wong of the Institute of Applied Ecology at the University of Canberra, were commissioned to undertake research and report on findings (Osborne & Wong, 2013).
- The KMA research identified the need for further research into area of yellow box red gum grassy woodland, and endangered ecological community. Experts in this field, Kris Nash and David Hogg, were commissioned to undertake research and report on findings (Nash & Hogg, 2013).
- Following identification of a little eagle presence on the site in late December 2013 and following subsequent consultation with ACT Conservation a report was prepared by ACT Conservation specifying measures to ensure the protection of the eagle nest site, including protection of the foraging area and a 200m clearance zone around the nest site itself.
- A final report was then prepared by KMA; this report (KMA, 2014) collates the findings of the earlier reports and sets out the rationale for the definition of the conservation corridor boundary.

The key findings of this research program are set out in the next section.

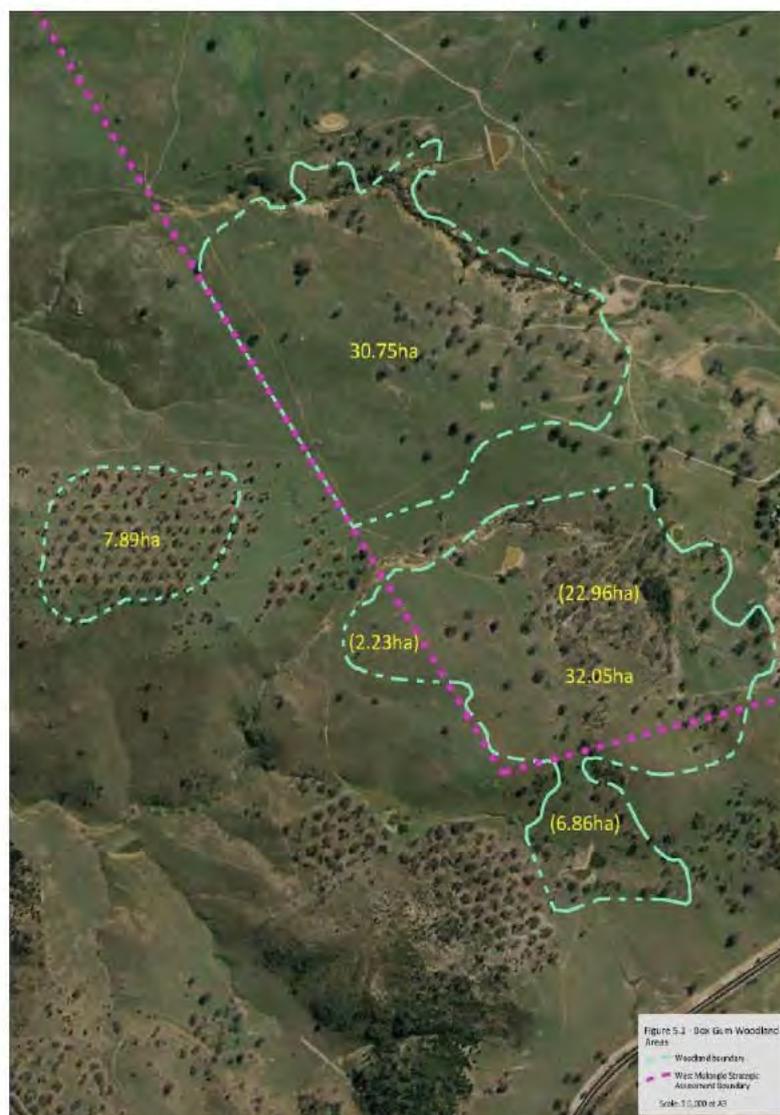
## 16.2 NATIONALLY SIGNIFICANT SPECIES AND COMMUNITIES

The material in this section is largely extracted and summarised from the final report by KMA cited above. The KMA report in turn draws on the extensive material contained in the full series of research reports cited above. The reader should refer to these reports for a full understanding of this subject area.

### 16.2.1 YELLOW BOX RED GUM GRASSY WOODLAND

Yellow Box Red Gum Grassy Woodland is listed as an endangered ecological community under both the Environment Protection and Biodiversity Conservation Act 1999 (C'th) and the Nature Conservation Act 1980 (ACT).

The presence of Box-Gum Woodland was initially identified within the Project Area by KMA (KMA, 2009a) and EcoLogical Australia (2010). More detailed work undertaken in spring 2012 is described in the report by Nash and Hogg (2013). That study carried out a robust investigation of the southern portion of the project area previously identified as contained areas of woodland. The 2012 woodland surveys were carried out in spring and followed the guidelines and criteria set out by the Australian



**Figure 23: Woodland Habitat Areas**

and ACT Government environment agencies for identifying and assessing Box-Gum Woodland and Derived Grasslands.

Woodland patches that are regarded as the endangered ecological community Yellow Box-Blakely's Red Gum Grassy Woodland are those where:

- *E. melliodora* and/or *E. blakelyi* contribute 40% or more of the crown cover;
- There is a species-rich understorey of native tussock grasses, herbs and scattered shrubs. The understorey is not exotic pasture or degraded beyond recovery.
- A species-rich native understorey of native tussock grasses, herbaceous species and scattered shrubs remains but the Yellow Box and/or Red Gum trees have been removed or reduced (ACT Government 2004 page 30).

The extent of the Box-Gum Woodland as identified in this study is shown on the accompanying map; see Figure 23. The area of this community that meets the minimum criteria under both jurisdictions is 70.7 hectares; this includes the 11.7 hectares of woodland inside and 59 hectares outside the pre-existing definition of the river corridor. The woodland is almost completely contiguous with the river corridor and the habitat of the Pink-tailed Worm Lizard, which it adjoins to the west. The woodland area is divided into two approximately equal halves by a strip of exotic grassland about 200 metres wide that does not meet the required criteria for the endangered ecological community.

All of the area identified as woodland (with minor boundary adjustments to facilitate land management) is proposed for inclusion in a new conservation corridor. The woodland is relatively degraded and the conservation corridor management plan will include provisions for rehabilitation.

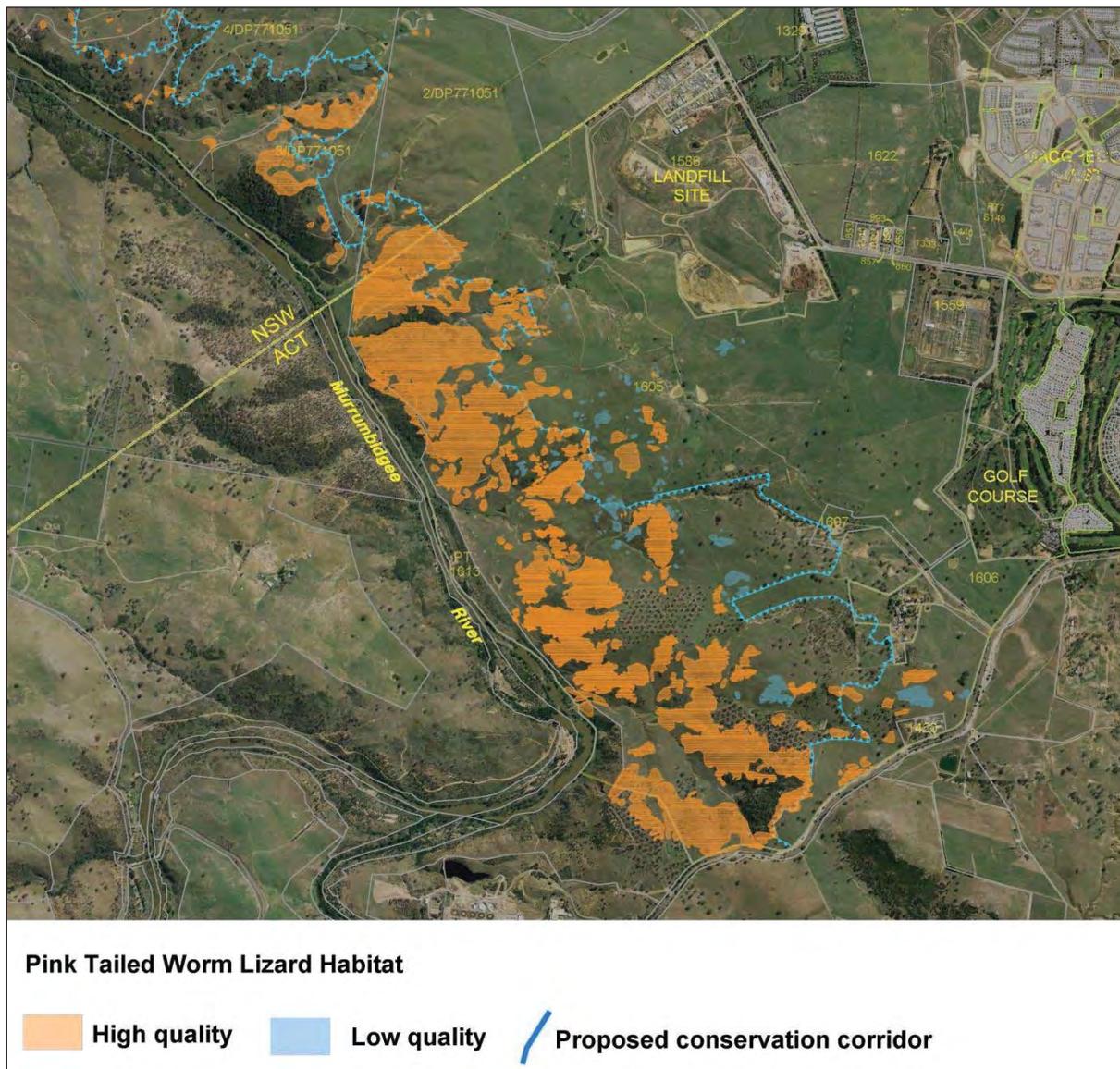
### **16.2.2 PINK TAILED WORM LIZARD**

The Pink-tailed Worm Lizard *Aprasia parapulchella* is listed as vulnerable to extinction under both the Environment Protection and Biodiversity Conservation Act 1999 (C'th) and the Nature Conservation Act 1980 (ACT).

The presence of the Pink-tailed Worm Lizard and general extent of suitable habitat in the Project Area was first established in the study by KMA (KMA, 2009a). More recently, Osborne and Wong (Osborne & Wong, 2013) carried out further field investigations using methodology adopted for previous surveys of this species in the ACT.

They digitally mapped the extent and quality of habitat, according to two classes based on suitability of habitat for the lizard, (i) potential habitat for the lizard, incorporating known occurrences, and (ii) low quality potential habitat, where rocky habitat occurs but the lizard was not encountered in the field surveys (Osborne & Wong 2013).

Most of the larger rock outcrop habitats in the western section of the Project Area, and within the pre-existing river corridor, contain the Pink-tailed Worm Lizard, while small isolated rock outcrop habitat located in pasture improved paddocks do not support the lizard. The grassland in the latter sites is also largely exotic and suitable rocks are not as extensive (KMA 2009b; Osborne & Wong 2013).



**Figure 24: Pink Tailed Worm Lizard habitat**

No GSM were recorded in the Project Area, despite repeated surveys of potential habitat under suitable weather conditions during the period when there were many records of GSM activity in the north of the ACT and adjacent parts of NSW. No pupal cases were found in ground searches of the better quality potential habitat in December and January.

Due to poor habitat condition and the negative survey results, Rowell considered it unlikely that GSM occur in the Project Area. GSM do occur on sites at West Macgregor, and may extend down the Ginninderra Creek valley, at least in some seasons, but these areas are not within the current Project Area.

It is important however to note that the GSM does occur immediately to the north of the project area at Jarramlee and West Macgregor, and that the West Belconnen development includes the

proposed extension of Ginninderra Drive through these areas. This would impact on known moth habitat. These areas have been researched in the past and areas of moth habitat and the quality of the habitat is established. The road alignment is discussed at Section 10.3. The offset areas are shown, together with the proposed road alignment, on the Figure **Error! Reference source not found.**

Both the West Macgregor and Jarramlee sites have been reserved as moth habitat areas under an offset agreement arrangement between the Village Building Company (which developed West Macgregor), the ACT Government and the Commonwealth Government. Under current Commonwealth policies related to the Environment Conservation and Biodiversity Conservation Act, the disturbance of a habitat area triggers a requirement for an offsetting area to be identified and preserved refer to section 10.3.

### **16.3 TERRITORY SIGNIFICANT SPECIES AND COMMUNITIES**

#### **16.3.1 YELLOW BOX RED GUM GRASSY WOODLAND**

Yellow Box Red Gum Grassy Woodland is listed as an endangered ecological community under the ACT Nature Conservation Act 1980. It is also listed under national legislation and consequently is discussed above at section 16.2.1.

#### **16.3.2 PINK TAILED WORM LIZARD**

The Pink-tailed Worm Lizard is listed as vulnerable to extinction under the ACT Nature Conservation Act 1980 (ACT). It is also listed under national legislation and consequently is discussed above at section 16.2.2.

#### **16.3.3 GOLDEN SUN MOTH**

The Golden Sun Moth is listed as vulnerable to extinction under the ACT Nature Conservation Act 1980 (ACT). It is also listed under national legislation and consequently is discussed above at section 16.2.3.

#### **16.3.4 LITTLE EAGLE**

The Little Eagle is listed as Vulnerable under the ACT Conservation Act 1980. In late December 2013 evidence was provided to the project team of a pair of little eagles nesting on the project site (in the vicinity of Strathnairn). The little eagle is listed as a “vulnerable” species in the ACT and also in NSW; it had not been recorded in any of the earlier surveys although was known on nearby sites at Molonglo. Consultation with ACT Conservation led to the preparation of a report by ACT Conservation specifying measures to ensure the protection of the eagle nest site, including protection of the foraging area and a 200m clearance zone around the nest site itself. Appropriate provisions will be incorporated in the Territory Plan. (refer to (KMA, 2014)

### **16.4 NSW SIGNIFICANT SPECIES AND COMMUNITIES**

Similarly to the ACT, under NSW legislation the Pink Tailed Worm Lizard, Golden Sun Moth and Yellow Box Grassy Woodland are listed as endangered, and the Little Eagle is listed as vulnerable.

## **16.5 OTHER SPECIES AND COMMUNITIES**

### **16.5.1 SUPERB PARROT**

The Superb Parrot is listed as vulnerable under both the Environment Protection and Biodiversity Conservation Act 1999 (C'th) and the Nature Conservation Act 1980 (ACT).

The Superb Parrot is a summer breeding visitor to the ACT, primarily in the northern third of the Territory, where increasing numbers of birds have been observed in recent years.

The Superb Parrot was seen several times in the Project Area between 2008 and 2013, two of which were incidental observations outside the formal bird surveys. Out of a total of 28 bird surveys up to mid-2013, this species was observed four times (14%). No evidence of breeding in the Project Area was found during the bird surveys or the tree hollow surveys.

Birds were observed flying south, towards the 2011/2012 breeding area in central Molonglo to the south of Holt. The mature trees in the south of the Project Area near Stockdill Drive and those within the well treed golf course seem to be favoured by some Superb Parrots when moving across this part of West Belconnen.

### **16.5.2 SWIFT PARROT**

The Swift Parrot *Lathamus discolor* is listed as an endangered species under the Environment Protection and Biodiversity Conservation Act 1999 (C'th) and as a vulnerable species under the Nature Conservation Act 1980 (ACT). The Swift Parrot is a winter visitor to the ACT region, it is not resident and does not breed in the region; at most, it is an occasional and itinerant migrant.

### **16.5.3 DIURNAL BIRDS OF PREY**

Surveys for birds specifically included diurnal birds of prey; the observations for 2008 to 2013 identified 11 species. The only breeding species found during the surveys is the Australian Kestrel, which is by far the most common bird of prey in the area. The little eagle was not recorded in any of the field surveys but a breeding pair has since been found. This is discussed separately in section 16.3.4. Apart from the little eagle the kestrel is probably the only resident species within the upper, eastern part of the Project Area, although some species may be resident within the river valley. For example there is a Peregrine Falcon nesting site on cliffs in the river gorge, just outside the main Project Area. In total, 11 species of diurnal birds of prey were recorded in the Project Area; however, only the Nankeen Kestrel appears to be a common and breeding species.

## **16.6 CONSERVATION CORRIDOR**

### **16.6.1 PROPOSED CORRIDOR**

A conservation corridor encompassing areas of habitat for the endangered Pink Tailed Worm Lizard and Yellow Box Red Gum Grassy woodland is proposed. The corridor adjoins both the Murrumbidgee River and Ginninderra Creek and includes a total area in the ACT of approximately 371 ha and an additional 206 ha in NSW, a combined area of 577 ha. The creation of this reserve will mean that the Ginninderra Creek corridor, which commences at Mulligans Flat in Gungahlin and extends through Gungahlin and Belconnen, will be linked to the Murrumbidgee River which it then connects to the Molonglo and upstream Murrumbidgee corridors, respectively into Canberra City and to Namadgi National Park.

It is proposed that the West Belconnen Conservation Corridor be managed as a single unit (ACT & NSW components) which is logical given that it is essentially a single landscape unit, and that the management be by way of an independently funded community trust; the community trust Board would include community and relevant Government agency representatives. Conservation, fire management and recreation and cultural objectives would be equally represented (Elton, 2014g).

### 16.6.2 CONSERVATION STATUS

The component of the conservation corridor that falls within the ACT will continue to be part of the National Capital open Space System (under the National Capital plan) and will be defined under the Territory Plan as “public land” (as is the existing corridor). The effect of this will be that the land will be reserved in perpetuity for uses defined in a plan of management which will focus on conservation, bushfire management and recreation.

In NSW the situation has been less certain. The proposed corridor includes reaches of both the Murrumbidgee River and Ginninderra creek; importantly it also includes Ginninderra Falls. The Falls are an outstanding natural feature that has attracted high levels of public interest. The Falls, or at least access to them, are on private land and were open to the public until 2004 when the access was closed due to public liability issues. Whilst they are in NSW the vast majority of visitors were from the ACT reflecting the fact that the falls, and all of the “peninsula”, are only accessible from the ACT. They still engender high levels of interest from Belconnen residents as a potentially highly valuable recreation resource. This interest has led to the formation of a “Ginninderra Falls Association”, the intent of which is to have the Falls and a large tract of surrounding land incorporated into a new national park and thence being made publicly accessible. The creation of a national park would be a decision of the NSW Government who have advised that this proposal is not a priority. In light of this and cognizant of the objective of the West Belconnen project to create a conservation corridor that would incorporate the Falls, TRC consultants were commissioned to review options for establishment and management of the conservation corridor, including a review of the potential of the area as a national park.

The TRC report (TRC, 2014a) assessed the proposed West Belconnen Conservation Area for its suitability as a best-practice protected area in accordance with the International Union for Conservation of Nature (IUCN) Guidelines and Australia’s National Reserve System standards. It was concluded that the Conservation Area has the potential to:

- contribute to biodiversity conservation, the protection of other natural and cultural values, public appreciation those of values and sustainable public recreation
- be classified as an IUCN Category IV protected area (Habitat/species management area). This category covers small, semi-natural or modified ecosystems close to urban areas that require active conservation intervention for restoration and management
- be accepted as part of the National Reserve System

provided that

- the Conservation Area is set aside by a secure method enabling long-term protection
- protection of natural and cultural values, biodiversity and ecosystems is central to management aims and practice
- public use is compatible with protection of natural and cultural values.

The report noted that the cross-border location of the West Belconnen Conservation Corridor poses challenges for its establishment as a secure, legally-recognised private sector conservation reserve. A possible establishment model utilising existing mechanisms for private sector conservation management in NSW and the ACT is recommended for consideration:

- a Conservation Agreement under sections 69A to 69KA of the National Parks and Wildlife Act 1974 for the NSW portion. This might be done through a conservation land title covenant / voluntary agreement with the Nature Conservation Trust of NSW (which performs this role in accordance with the Nature Conservation Trust Act 2001) and the West Belconnen Environmental Trust
- a plan of management under section 318 of the Planning and Development Act 2007 for the ACT portion which would be held as leasehold over designated 'public land' by way of an overlay provision in the Territory Plan.

The TRC report highlights the need for a comprehensive management approach noting that the management "...will encompass biodiversity protection, habitat and vegetation restoration, weed and pest control and bushfire management (especially significant as the reserve will adjoin urban areas) and cultural heritage management. Best-practice conservation management will also require planning, research, monitoring and review of management effectiveness, sustainable visitor use practices, public education and awareness-raising, and opportunities for community engagement and involvement in management." It endorses the proposal for a management Trust (ref section 6.4.2) to be established as the best way of achieving the desired outcomes.

### **16.6.3 EDUCATION, TOURISM AND RECREATION OPPORTUNITIES**

The capacity for public access and use of the conservation corridor has been regularly raised by the public and stakeholder groups since the inception of the West Belconnen project. The proposed corridor will include approximately 577ha of land, about six kilometres of Murrumbidgee River frontage and the length of Ginninderra creek from the suburb of West Macgregor to its confluence with the Murrumbidgee including the Ginninderra Falls and Gorge. Opportunities for recreation, and for revenue raising to assist in the funding of the management of the corridor have been explored.

The landscape and Open Space Strategy (ref Section 15.1.5) proposes access and trail facilities that will allow general recreation access to the corridor for picnicking, walking, bike riding and the like. In addition to this three more specific potentials have been explored as follows:

Commercial tourism opportunities have been investigated and reported on by consultants Talkforce Media (Talkforce, 2014). The consultants have advised that the Falls offer considerable potential for visitor access and associated facilities including a conference and function venue; these would require considerable capital expenditure on safe accessways and lookout infrastructure as well as on the commercial facilities. Subject to more detailed financial testing investment at this scale is considered to be viable. The report also recommends that the possibility of "eco-lodge" style accommodation be investigated at a riverside location on the Murrumbidgee. Following consultation with the Ginninderra Catchment Management Group, the possibility of a "river discovery centre" as a tourism/education facility highlighting the natural and cultural history of the river, in its context as part of the Murray-Darling system, is also recommended.

Indigenous cultural tourism prospects have been investigated and reported on by TRC (TRC, 2014b) following the identification of a number of items of indigenous archaeological interest in the corridor. TRC report that currently, Indigenous tourism is a minor part of the ACT's tourism offer. However, there is an Indigenous experience profile in the ACT delivered through Indigenous displays and interpretation at national attractions, educational experiences at Birrigai, and a small number of Indigenous guided tours at Tidbinbilla Nature Reserve, Namadgi National Park and the Ginninderra area. Following a review of the likely market and of product types that are most likely to be successful TRC have recommended that, subject to the development of a more detailed business case, an indigenous-guided Murrumbidgee River Canoe Tour. This would involve a guided canoe or kayak tour from Uriarra Crossing on the Murrumbidgee River downstream to near the Ginninderra Creek confluence. Indigenous interpretation and story-telling would occur en route with potential for a stop on the river bank for hand-on experiences of tools, food and culture.

The potential of the Murrumbidgee River as a fishing venue is often suggested and to explore the possibilities TRC, who have personnel with expertise in fishing as a tourist activity, were commissioned to investigate. A report is under preparation.

## **16.7 TREES**

The site contains a large number of trees, largely remnant eucalypts, that may be affected by development. The location, crown spread, aesthetic quality and health condition of each tree in areas likely to be developed has been recorded and mapped to survey accuracy. Trees that provide hollows which may be utilized by birds and other fauna have also been recorded. The ACT Conservator of Wildlife has special responsibilities with regard to trees and, under the terms of the *Planning and Land Management Act 2007*, activities that may affect trees must be referred to the Conservator for advice. Where appropriate existing trees will be preserved and integrated into the urban development.

## 17 ALTERNATIVE DEVELOPMENT OPTIONS

### 17.1 DEMOGRAPHY

An overarching question that is triggered by a substantial urban rezoning process such as at West Belconnen is “why is it needed?”. In large part this has been answered by strategic metropolitan wide planning processes, most recently the ACT Planning Strategy in 2012 (ACTPLA, 2012), which have confirmed firstly that substantial growth is expected and secondly that West Belconnen is a suitable area for more detailed investigation to accommodate the growth. Nevertheless it is instructive to re-confirm the findings of the strategic planning processes. To this end the University of Canberra (UCAN) has been commissioned to provide demographic advice for the West Belconnen project. The UCAN report (ANZSOG, 2013) has confirmed that population growth is most likely to continue and in fact has predicted stronger growth levels than contemplated in the 2011 ACT Strategy.

The ACT Strategy predicted that the ACT’s population would grow from an estimated 365,000 in 2011 to 457,300 by 2030. The total regional population, including the six local government areas adjacent to the ACT is predicted to be 606,000 people by 2030.

UCAN analysed population growth using a range of methodologies and then compared their findings with those of the Australian Bureau of Statistics and the Act Government. They found that the average prediction for the ACT was for a population of 490,387 in the year 2031. For the region the UCAN figure was 637,487. By 2041 the total regional population is expected to grow to 724,805 people by 2041.

Significantly, from a land development perspective, the UCAN report finds that this translates to a total regional demand for some 131,554 new dwellings between 2011 and 2041 or an average of 4385 new dwellings per year. Approximately 100,000 of these, or 3,300 per annum, will be in the ACT. The ACT Government has promoted a 50/50 housing development policy whereby 50% of new housing is to be provided in inner areas with the balance 50% being in greenfield estates. Available greenfields development fronts in the ACT are Gungahlin, East Molonglo and (potentially) West Belconnen; between them these estates will need to accommodate 50% of the demand, i.e. 50% of 3,300: 1,650 dwellings per year. The existing two development fronts (Gungahlin and East Molonglo) are unlikely to be able to cater for this level of demand as the logistics involved in delivering infrastructure works at the pace necessary to accommodate 8-900 new blocks per year are intractable. West Belconnen will be needed to share some of this load and ensure that adequate supplies of housing are available to meet demand.

### 17.2 EXISTING USE

The zoning of the land within the project area, under the National Capital Plan and the Territory Plan in the ACT and the Yass Valley Local Environment Plan in NSW has been instrumental in controlling the use of the land, generally to limiting it to uses of an agricultural or quasi agricultural nature. If the land is rezoned to allow urban uses, as is proposed, then the current uses are likely to become unviable economically (if they are currently viable) and be supplanted by urban development. The loss of the existing uses will therefore be an impact of the West Belconnen proposal. The extent of

this impact is not considered to be great and will be far outweighed by the benefits that will arise from the new development, particularly in terms of the housing accommodation that will be provided to meet a portion of the needs of Canberra as it grows. The existing uses that are likely to be displaced and the potential measures that may be taken to mitigate impacts are set out in Table 10.

**Table 10: Current Uses and Impacts of Development**

PARCEL	Approx. area	Current Use	Future Use & Impact
<b>ACT LAND</b>			
<b>BLOCK 1605</b>	665.8ha	Agriculture (also includes Belconnen Farm house precinct which is heritage listed)	Current farm use for cattle grazing (200-300 head), will continue to a limited extent in the proposed conservation corridor. Reduction in the scale of this activity will have a negligible negative impact on overall ACT rural production. Total food productivity likely to increase with the introduction of urban agriculture and community and private garden activities.  Heritage farm precinct will be developed as a community facility and pass to community ownership. It will become publicly accessible which is not currently the case.
<b>BLOCK 1606</b>	12.5 ha	Agriculture	Block 1606 is a small agricultural block currently used for cattle grazing. Its conversion to urban use will result in a negligible reduction in farm area.
<b>BLOCK 1607</b>	8.1 ha	ACTEW vent & bicentennial trail	The vent will either have additional infrastructure installed to prevent odour escape or it will be removed.  The Bicentennial trail is proposed to be relocated to a more attractive alignment along the top of the conservation corridor and via the Belconnen farm heritage precinct which provides an overnight camping opportunity. This is considered to be an overall benefit.
<b>BLOCK 1420</b>	2.7 ha	Billabong Aboriginal Development Corp community and education services	It is understood that the provision of services from this facility has been wound down over recent years and that it is not envisaged as a community facility resource in the long term. Redevelopment of the site would not displace any existing services.
<b>BLOCK 1613 (PT)</b>	26.8 ha	River foreshore (Incorporated in Woodstock Reserve)	Proposed to be incorporated into the conservation corridor; effectively no change from existing status although public accessibility likely to increase.
<b>Block 1332</b>	9.64 ha	Strathnairn Arts Association	No change proposed
<b>NSW LAND</b>			

LOT 1 / DP771051	91.8 ha	Agriculture	Currently used for cattle grazing, economically viable when combined with nearby properties. Higher order uses such as residential would provide superior social and economic returns.
LOT 2 / DP771051	80 ha	Agriculture	See above
LOT 3 / DP771051	80 ha	Agriculture	See above
LOT 7 / DP771051	80 ha	Agriculture	See above
<b>ACT PARKWOOD LAND</b>			
BLOCK 1329	41.4 ha	Agriculture (poultry)	The Parkwood Egg facility is currently operating under a crown lease with a 20 year term (commencing in 2013). This is within the overall timeframe for urban development at West Belconnen and it is likely that the farm will be redeveloped following the end of the lease term.
BLOCK 1621	33.3 ha	Unleased Territory land (horse agistment)	The planning of Canberra to date has been favourable from the viewpoint of facilitating opportunities for horse holding. In at least some paddocks horse holding is regarded by the ACT Government as a temporary use, pending requirement of the land for higher order uses. The horse agistment paddocks at West Belconnen fall into this category since the area has been identified for urban investigation in the Planning Strategy in 2012. The master plan provides for the retention of some of the holding paddock areas adjacent to West Macgregor and opportunities will be explored for the use of parts of the land fill site as holding paddocks.
BLOCK 1622	71.8 ha	Unleased Territory land (horse agistment)	See above
BLOCK 853	0.7 ha	Unleased Territory land (horse agistment)	See above
BLOCK 1540	0.9 ha	Landscape supply business	Proposed to be redeveloped as a mixed use area, the possibility of relocating this business to the Belconnen Land Fill will be explored.
BLOCK 856	0.8 ha	Plant nursery	See above
BLOCK 857	0.2 ha	Unleased Territory land	Available for development
BLOCK 858	0.6 ha	Kennels	Proposed to be redeveloped as a mixed use area, the possibility of relocating this business to the

			Belconnen Land Fill will be explored.
BLOCK 859	0.6 ha	Veterinary surgery	Proposed to be redeveloped as a mixed use area, the possibility of relocating this business to the Belconnen Land Fill will be explored.
BLOCK 860	0.2 ha	Unleased Territory land	Available for development
BLOCK 1333	4.2 ha	Pony Club	Proposed to be redeveloped as a mixed use area, the relocation of the pony club is proposed.
BLOCK 1440	0.8 ha	ACTEW vent	Will remain in place.
BLOCK 7 SEC 149 (PT)	17.8 ha	Unleased Territory land (horse agistment)	As for block 1621 above
<b>NSW NEIGHBOUR LOTS</b>			
LOT 4 / DP771051	80 ha	Rural residential (unoccupied)	Proposed for development. The NSW land has been assessed (Edge, 2014) for its suitability for agriculture and found to be not suitable as a viable agricultural operation. The nature of the area is such that a minimum of 200ha would be required for viable farming. Its redevelopment for urban uses is therefore recommended.
LOT 5 / DP771051	80 ha	Rural residential (single residence)	See above
LOT 61 / DP801234	83 ha	Gravel quarry and agriculture	See above, the quarry is likely to continue operation until the resource is exhausted. It will be a source of raw materials for the West Belconnen project.
LOT 62 / DP801234	25 ha	Commercial accommodation and function centre.	See above, the commercial accommodation facility is likely to continue in operation and may ultimately be redeveloped depending on market forces.
<b>BELCONNEN LAND FILL &amp; CANBERRA SUBSTATION</b>			
BLOCK 1586	108 ha	Old Belconnen Land Fill, includes Parkwood recycling estate (secondary industrial area), green waste recycling, asbestos disposal, hydrocarbon affected soil treatment area, emergency land fill site.	A master plan will be prepared for the land fill site; preparatory investigations into current site conditions are and its suitability or otherwise for a range of uses are under way.

### **17.3 ALTERNATIVE DEVELOPMENT OPTIONS**

As discussed above the West Belconnen project will be a key factor in the delivery of land for housing as Canberra continues to grow over the next 30 – 40 years. The principal alternative site that may have served this purpose was the Kowen Plateau which was identified for possible urban development in the Canberra Spatial Plan in 2004, but subsequently discounted in favour of West Belconnen. The 2012 Strategy (refer to section 7.9) has also recommended that a “western edge” study be commenced to examine potential development opportunities along the western fringe of the metropolitan area. These include for example the West Murrumbidgee land at Tuggeranong. This work has not commenced to date and, given the very long lead times involved in planning proposals at this strategic level in the ACT, it is not feasible that land could be delivered within the timeframes necessary to address the needs identified in the UCAN work cited above.

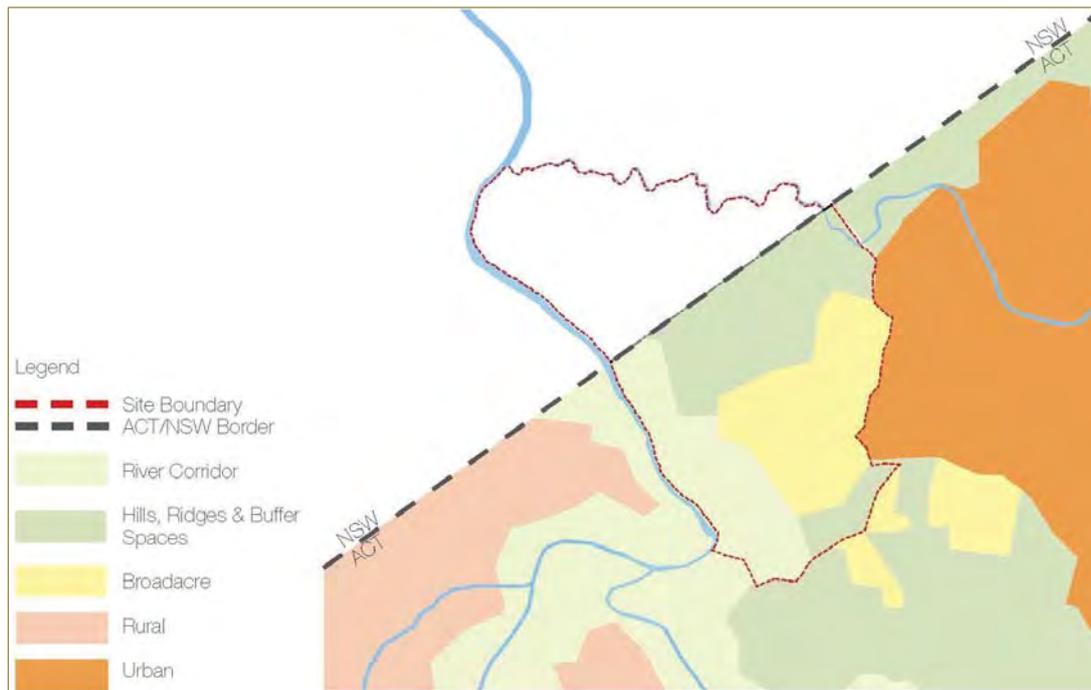
### **17.4 EXISTING ZONING NEEDS ASSESSMENT**

#### **17.4.1 NATIONAL CAPITAL PLAN & TERRITORY PLAN**

The existing land use zoning of the ACT component of the West Belconnen project area under both the National Capital Plan and the Territory Plan includes three land use types:

- River Corridor
- Hills Ridges and Buffers, and
- Broadacre

The implications of the proposed development on each of these is discussed below.



**Figure 25: National Capital Plan Zoning**

#### 17.4.2 HILLS RIDGES AND BUFFER SPACES

The National Capital Plan specifies that Hills, Ridges and Buffer Spaces (Hills Ridges and Buffers) are to remain substantially undeveloped in order to protect the symbolic role and Australian landscape character of the Capital, to maintain visual definition and physical containment of the surrounding towns, and to ensure that their landscape, environmental and recreational values become an integral part of the National Capital. The territory plan echoes this requirement.

There are two Hills Ridges and Buffer zone areas identified on the site: adjacent to Stockdill Drive in the east and adjacent to the ACT/NSW border in the west. Neither of these areas is a hill or ridge that could provide a landscape containment effect to nearby developed areas as is the case with the majority of Hills Ridges and Buffers zoned areas elsewhere in the ACT. Their function is that of a buffer only, in the one case between the urban area of the ACT and NSW, and in the second case along Stockdill Drive which is currently a rural road. The continuing need for this, in the context of the West Belconnen project proposal, is discussed below.

The Stockdill Drive Hills Ridges and Buffers zone originally provided a buffer between Central and West Molonglo. All of the land to the south of Stockdill Drive extending to Weston Creek was identified in the 2004 Canberra Spatial Plan as “future greenfield residential”. It was intended to be developed as “Central Molonglo”, complementing the East Molonglo development (now under construction) and “west Molonglo” which is within the West Belconnen project area.

Following more detailed environmental investigations the great bulk of central Molonglo was excised from the proposed development area. This was reflected in the subsequent finalisation of variations to both the National Capital and Territory plans. Vestigial portions of Central Molonglo

immediately south of Stockdill Drive were found to have no ecological value and were rezoned as broadacre. Central Molonglo is now devoted to agriculture and conservation uses, providing a substantial buffer between East Molonglo and the West Molonglo/West Belconnen development. The consequence of this is that the Stockdill Drive buffer function has been taken over by the Central Molonglo buffer and so is no longer required. The proximity of this land to substantial facilities and services at Holt (for example the Kingsford Smith School, Kippax centre, Drake Brockman Drive) means that its development for urban purposes would incur minimal public infrastructure expenditure and would rate highly on efficiency measures.

As a consequence of the above the Stockdill Drive Hills Ridges and Buffer zone now lies between land zoned as “broadacre” (a zone in which non residential development is already permissible) both within the West Belconnen project area and immediately across Stockdill Drive.

The function of the Hills Ridges and Buffers land along the ACT/NSW border is referred to in National Capital Plan Policy 8.5.3(f); it says as follows:-

*“The rural landscape in the areas adjacent to the ACT border between Hall and the Murrumbidgee River ..... will be retained as an intrinsic part of the National Capital Character and with additional landscape treatment provide physical containment to this part of Belconnen .....”*

As discussed above the buffer is along the only “straight line” segment of the ACT border and consequently it is unrelated to the surrounding landform. The preamble statement regarding the Hills Ridges and Buffer zone in the National Capital Plan (P 111) says as follows:

*“Hills, ridges and buffer spaces are to remain substantially undeveloped in order to protect the symbolic role and Australian landscape character of the hills and ridges as the scenic backdrop to the Parliamentary Zone, Civic and other National Capital precincts, to maintain the visual definition and physical containment of the surrounding towns and to ensure that their landscape, environmental and recreation values become an integral part of the National Capital.”*

In the case of West Belconnen this objective is met by the presence of a range of hills immediately to the west of the Murrumbidgee river, and beyond that the Brindabella Range, and a group of hills to the north of Ginninderra creek.

The geographic character of the study area resulted in the West Belconnen site being considered holistically. The landform and development potential is contiguous across the border. This is reinforced by detailed consideration of the NSW component of the site (the “peninsula”), which is only accessible and able to be serviced from the ACT, there are no public road connections from the peninsula to other parts of NSW, and none are planned.

Taken together these factors have led to a review being undertaken of an appropriate location for a buffer to provide, in the long term, an appropriate geographic containment line between Belconnen and the natural environment to the west.

Appropriate natural containment lines are provided by the Murrumbidgee River and hills to the west, and a prominent ridge of hills immediately to the north of Ginninderra creek. The geography

that provides the containment line is in NSW, this is a function of the “straight line” border which has been drawn without reference to topography.

For these reasons it is proposed that the Hills Ridges and Buffers zone within the West Belconnen project site does not reflect the context where development is contiguous across the border, as is proposed.

### 17.4.3 RIVER CORRIDOR

The National Capital Plan identifies the Murrumbidgee River corridor portion of the site as forming part of the NCOSS. Currently the land zoned as “river corridor” (in both the National Capital and Territory Plans) totals approximately 287.9ha<sup>2</sup>. Substantial and detailed environmental research (refer to section 16) has resulted in a proposal to reconfigure the boundary of this zone to better reflect the actual habitat areas of the pink tailed worm lizard as well as to incorporate an area of yellow box red gum grassy woodland as part of the larger reserve. Both of these are matters of national environmental significance. With these changes in place the total area of the zone will expand by the addition of 76ha to total 364ha, an increase of 26%.

The intent of the river corridor zone is set out in the National Capital Plan as follows (p 119):

*“The corridors of the Murrumbidgee and Molonglo Rivers define zones for which the primary aim is to reinforce and preserve their landscape and heritage values and their ecological continuity, while providing for a balanced range of recreational and tourist related uses.”*

The proposed expansion of the zone area to accommodate nationally important environmental outcomes is in accord with this intent and consequently would align well with overall planning policy.

Appendix F of the National Capital Plan sets out requirements for the planning and development of the Murrumbidgee River Corridor. Under the West Belconnen proposal the areal extent of the corridor at West Belconnen is proposed to be expanded, as compared to the area currently shown in the Plan at Figure 1 in Appendix F. This expansion is to accommodate areas of Pink tailed Worm Lizard habitat and Yellow Box Red Gum Grassy Woodland, both of which are listed as matters of national environmental significance under the Environment Protection and Biodiversity Conservation Act.

The West Belconnen proposal does not include any alterations to the river corridor zone other than an expansion of the area.

It is proposed that the corridor area be incorporated in a larger “conservation corridor” extending along the river into New South Wales to the confluence with Ginninderra Creek and then along the creek corridor including the Ginninderra Falls. The total area of this conservation corridor will be approximately 576 ha, of which 371ha will be in the ACT. This compares to the current ACT River Corridor area of 291ha, the ACT component of the corridor will be enlarged by 80ha.

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<sup>2</sup> Comprising 261.1ha, part of block 1605 plus 26.8ha foreshore reserve, part of block 1613.

A master plan will be prepared for the conservation corridor and is likely to include recreational access and the development of a riverside recreation focal point. This will be a substantial benefit as the river is currently virtually inaccessible to the general public.

#### **17.4.4 BROADACRE**

A portion of the project site is zoned “broadacre” in the Territory Plan and the National Capital Plan. The National Capital Plan says (section 5.1) the following in relation to broadacre land:

*“Broadacre Areas may act as buffers between towns, provide sites for uses which require large land areas or may benefit from or be best located within a non-urban setting, and in some cases provide a land bank for future urban areas.”*

The West Belconnen broadacre land (then known as west Molonglo) was reconfigured in 2008 as an outcome of Amendment 63 to the National Capital Plan, part of a planning process for the Molonglo Valley conducted jointly by the National Capital Authority and the ACT Planning and Land Authority following completion of the Canberra Spatial Plan in 2004. Planning investigative and design studies were brought together in the Molonglo Valley Structure Plan prepared for the ACT Planning Authority (Annand Alcock, 2006).

The NCA draft amendment 63 report (September 2007) says as follows:

*“The Structure Plan identifies three distinct areas for development, namely east, central and west Molonglo. It is anticipated that east and central Molonglo (including North Weston) could ultimately cater for up to 73,000 people. The west Molonglo area has been found suitable for Broadacre rather than residential development.”*

It is now proposed that, as part of the West Belconnen project, the broadacre land at west Molonglo be rezoned for urban (substantially residential) use. The reasons for this proposed change are as follows:

- West Molonglo was a relatively small area (compared to central and east Molonglo) and separated from central and east Molonglo, relating to the Murrumbidgee River valley rather than to the Molonglo valley which was the focus of the Molonglo planning process. These issues fall away with the new proposal; west Molonglo, as part of the greater West Belconnen project, is a larger size, certainly achieving the critical mass for a logical development front, and it is intentionally related to the Murrumbidgee valley.
- The actual suitability of west Molonglo for residential development was originally confirmed by the Spatial Plan in 2004. It was not nominated for residential use as part of the Molonglo planning process because it was considered to be not needed, it was zoned as “broadacre” and intended for “peri urban” use.
- The Molonglo Structure Plan did identify the potential for housing development at West Molonglo (1945 dwellings) but suggested that it would be “in the very long term dependent of further study and housing need”. The extent of housing need in the Canberra region has been researched for the West Belconnen project ( ANZSOG, 2013)) and found to be pressing. This is exacerbated by the fact that the central Molonglo development area proposed by the Structure Plan to accommodate 9776 dwellings has been deferred for at least twenty years due to environmental constraints.

- During the period that this strategic planning has been taking place, since the year 2000, median house prices in the ACT have more than doubled, largely due to constraints on land supply.
- Recognising the need for the provision of additional more affordable housing land the ACT Planning Strategy (2012) identifies West Belconnen as a “future urban investigation area” .

An additional important consideration, as background to the rezoning process, is the loss of the potential for landuses that are available under the current zoning, if the zoning changes. There are three points relevant to this question:

- The old Belconnen land fill site totals 107ha. This site already accommodates a number of employment generating activities and has the potential for substantially more if it is, in the future, located as the central element in a new urban population area. It is being progressively rehabilitated and will be made available for new uses but is unable to be used for residential. It will have the capacity to accommodate the types of activity that are currently possible in the broadacre land. The broadacre land, unlike the land fill site, is well suited to residential use and, especially given the availability of the landfill site for broadacre uses, would be better used for this purpose.
- The location of the broadacre land is not well suited to employment generating activities. It is not near any of the national highways that serve Canberra, nor is it near the rail or Airport facilities.
- Very extensive tracts of undeveloped broadacre land are available on the eastern side of the metropolitan area at Majura and Jerrabomberra. Those sites are well located along the Federal Highway/Monaro Highway corridor and are co-located with rail and air infrastructure.

In summary, the West Belconnen Broadacre land:

- Is suitable for residential development
- Has the potential, as part of the greater West Belconnen project to replace the loss of potential residential development at central Molonglo and Kowen
- Has the potential to meet an identified demand for housing
- Is identified in the ACT planning Strategy as potential urban rather than broadacre land
- Will not, if it is removed, cause any deleterious economic impact because the uses that it may have accommodated will either be able to be located on the land fill site or are better located at Majura or Jerrabomberra.

## 18 CONSULTATION

### 18.1 DETAILS OF CONSULTATION UNDERTAKEN

A comprehensive program of public consultation has been and continues to be a dominant feature of the approach that has been taken to the West Belconnen project. Informal consultation commenced in 2007 with government agencies. In July 2011 the project gained broader public knowledge and was reported in the Canberra Times. This triggered a pro-active program of one to one meetings with neighbours and affected stakeholder groups. Project records indicate that between June 2010 and July 2013 (when the ACT Government announced the formal commencement of the project) 165 meetings were held with stakeholders - an average of 4.5 meetings per month.

This ensured an extraordinarily high level of public knowledge and stakeholder engagement with the project prior to its formal commencement. It has led to a generally high level of public and stakeholder acceptance of the project and endorsement of its vision and objectives. The vision has been consistently articulated to stakeholders with the presentation of the project vision, as set out in the vision statement, included as Appendix D.

A summary of the consultation program is set out at Appendix C. Engagement strategies have included, and include on an ongoing basis the following:

- Meetings and presentations with individuals and groups
- Local Community liaison
- A People and Places group
- A community shopfront and project office at Kippax
- A project web site
- A range of social media connections
- Newsletters
- A community vision and values workshop
- A 3 day planning and design forum
- Community information and feedback sessions
- A community office at Kippax with staff available to respond to general public enquiries was opened February 2014, open business hours and to 7:00pm on Tuesday evenings.

The detailed outcomes of the process to date are recorded in three reports prepared by Elton Consulting covering the consultation program to December 2013 (Elton, 2014a), the program from January 2014 to the lodgement date (Elton, 2014b) and a report on the outcomes of the planning and design Forum held in November of 2013 (Elton, 2013).

### 18.2 MATTERS RAISED AND PROJECT RESPONSES

The Elton reports cited above include a comprehensive review of the range of matters raised during the consultation processes and the responses to them. Key areas of concern and the responses to them are discussed below:

### **18.2.1 TRAFFIC**

The West Belconnen project will generate additional traffic on the three proposed exit roads, being Drake Brockman Drive, Southern Cross Drive and Ginninderra Drive which is proposed to be extended to Parkwood Road. Relatively low levels of concern have been expressed about increased traffic volumes on these roads due to the time scale of the delivery of the project. Their role in catering for arterial traffic is well accepted. The additional access that will be provided by the Ginninderra Drive completion has been generally welcomed although some reservations have been expressed concerning the possible impact on Golden Sun Moth habitat. This matter has been dealt with in detail and is the subject of a referral to the Commonwealth Department of the Environment under the Environment Protection and Biodiversity Conservation Act. These processes will ensure an appropriate outcome is reached and include specific consultative processes.

A matter of concern to many existing West Belconnen residents is the problem of through traffic within local residential streets, particularly in Holt. This issue has been examined as part of the overall traffic research (Aecom, 2014a) and in consultation with the local area traffic management personnel at TaMS.

The West Belconnen project has the potential to impose further pressure on the local streets of Holt as larger volumes of traffic move through the area. In order to avoid this the proposed road layout for West Belconnen could include a link that will allow traffic to divert to Drake Brockman Drive before it gets to Holt. This would involve the construction of a new carriageway along the western side of Spofforth St, with residents access being provided via a service road. This link could relieve the pressure on Spofforth St and Holt residential streets. This would be subject to detailed discussion with affected residents.

The early stages of the West Belconnen project are currently proposed to be accessed via Stockdill Drive and so this link road is not likely to be required for several years.

### **18.2.2 GINNINDERRA FALLS**

Ginninderra falls is a spectacular natural feature located on Ginninderra Creek in NSW; although located within private property the falls were open to the public until 2004 and the area was a major outdoor recreation venue for Belconnen residents to that time. Access was closed due to public liability issues and associated insurance costs.

An organisation has been established recently – The Ginninderra Falls Association – with the objective of re-opening the falls to public access, specifically by creating a national park to encompass the falls and surrounding area. The overall objective of reopening the falls to public access, whether by way of a national park or some other means, has also been broadly expressed by the general public. A national park would be a NSW Government responsibility and the NSW Government has advised the falls Association that establishment of a national park at this site would not be a priority.

The West Belconnen planning proposals include the creation of a conservation corridor extending along the Murrumbidgee River in both the ACT and NSW and also along the Ginninderra Creek corridor; this would include the Falls as a significant feature and enable public access. Whilst this is

subject to NSW planning processes, the owners of the land have indicated a willingness to discuss the concept in the context of a more comprehensive rezoning of theirs and surrounding land.

### **18.2.3 HOUSING STYLE**

Some respondents have expressed concern that the style of housing will be typified by large tracts of small block budget housing. This will not be the case. A pro-active approach will be taken to design control to ensure that housing styles are varied, as will be block sizes whilst also ensuring that affordability targets are met.

### **18.2.4 INFRASTRUCTURE PROVISION**

Concern was expressed by some that infrastructure available to the site (water supply and sewer) was inadequate. This is not the case, all infrastructure services have the capacity (with appropriate augmentation) to cater for the proposed development. This is discussed in more detail in section 14.

### **18.2.5 CROSS BORDER DEVELOPMENT**

The possibility of cross border housing development being occupied by residents who utilized ACT services without “paying their way” was raised. This matter has been addressed in the context of a cross border committee established jointly by the ACT and NSW governments and the Shire of Yass. This will ensure that all cross border arrangements, including regarding financial matters, are appropriately dealt with. This is discussed in more detail in section 9.

### **18.2.6 CAPACITY OF EXISTING SCHOOLS**

The ACT Education Directorate has advised that the existing schools in the suburbs adjoining west Belconnen are largely at or near capacity at present. Provision has been made for additional school site in the project area and new schools will be constructed in consultation with the Education Directorate.

### **18.2.7 INTEGRATION WITH EXISTING WEST BELCONNEN COMMUNITY**

A key aspect of the project will be its potential to “open up” important parts of the site for use by existing Belconnen residents, including a substantial (6 km) reach of the Murrumbidgee river, Ginninderra Falls and the community development opportunities offered by the proposed renewal of the Belconnen land fill site.

At the same time the new residents of West Belconnen will rely on existing Belconnen suburbs to provide many of their services including retailing, health and the like. It is also likely that a large portion of the new West Belconnen residents will in fact move from existing Belconnen suburbs, with strong local social ties remaining in place.

Taken together these factors suggest that there will be a high degree of integration of the “new” community with the existing one.

### **18.2.8 BUSHFIRE RISK**

A comprehensive bushfire management strategy has been developed in consultation with the relevant agencies, meeting best practice requirements. This is discussed in more detail in Section 11.1.2

**18.2.9 ENDANGERED SPECIES AND COMMUNITIES**

The creation of the Conservation Corridor, totaling some 576 hectares, and the implementation of a regime to ensure that management is appropriate to the objectives set for the corridor – conservation, bushfire management and recreation – is the principal means by which the project has responded to the need to conserve the several key species and ecological communities found on the site. This is discussed in detail in section 16.

## **19 IMPACT ASSESSMENT AND PROPOSED MITIGATION**

### **19.1 RISK ASSESSMENT PROCESS**

A preliminary risk analysis (PRA) of the West Belconnen project was conducted as a first step in the assessment process. The risk analysis was submitted to the ACT Environment and Sustainable Development Directorate for review and then circulated in draft form to relevant ACT government agencies and to the National Capital Authority. A copy was also provided to the Conservation Council (ACT region). The finalised PRA is listed in the bibliography (ATA, 2014). The preliminary risk analysis process enabled the identification of the full suite of matters that warranted consideration by decision making authorities when assessing the West Belconnen project.

Each of the risks identified in the PRA that warranted examination as part of this assessment study are set out below, together with a summary of the measures that have been or will be taken to mitigate them. References are listed to direct the reader to the relevant sections of this report where the matters are discussed in detail. .

## 19.2 IMPACTS & MITIGATION ON IDENTIFIED RISKS

**Table 11: Environmental Impacts and Mitigation**

	<b>Impact</b>	<b>Specific risk</b>	<b>Potential effects</b>	<b>Proposed mitigation</b>	<b>Ref. in this report</b>
1	<b>Biodiversity and nature conservation</b>	Pink Tailed Worm Lizard	Known to exist on project site. Potential for habitat destruction.	91% of habitat areas (within ACT) to be protected within conservation corridor. Remaining 9% considered to be not necessary for preservation of the species, conservation corridor to be managed for the protection of the species and for rehabilitation to increase habitat areas.	16.2.2
2		Golden Sun Moth	Known to exist in or near project site. Potential for habitat destruction.	Ginninderra Drive extension to traverse math habitat via a bridge structure designed to ensure continuity of habitat.	16.2.3
3		Superb Parrot	Known to exist near project site. Potential for nest hollow destruction.	No action required research has shown parrots do not nest on site.	16.5.1.
4		Swift Parrot	Known to exist near project site. Potential for forage plant destruction	No action required research has shown parrots do not nest on site.	16.5.2.
5		Little Eagle	Known to exist on project site. Potential for disturbance.	Foraging zone is coincident with conservation corridor and will be preserved, a buffer has been established around the current nest site within which development will not occur as long as the nest is utilised. A research program to improve the level of scientific knowledge of the species has been commenced.	16.3.4
6		Yellow Box Red Gum Grassy Woodland	Known to exist on project site. Potential for habitat destruction	All identified areas of woodland to be incorporated in conservation corridor	16.3.1

	Impact	Specific risk	Potential effects	Proposed mitigation	Ref. in this report
7		Other endangered or vulnerable species or ecological communities	None known to exist following extensive field investigations.	No action required, research has shown no other rare or endangered species or communities are present on site.	16.5
8		River Corridor	Requires preservation as public land and part of National Capital open space system. Potential for degradation of river corridor values due to proximate urban development.	River corridor is to be incorporated as part of the larger conservation corridor.	16.6
9		Woodland birds	Woodland and river corridor presumed to provide living and dispersal habitat - may be impacted by development.	Preservation of woodland and river corridor as above will also preserve bird habitat.	16.5
10		Habitat fragmentation	Potential fragmentation and connectivity of habitat, impacts on bioregional planning	Locally, the conservation corridor will allow for the cohesive management of currently fragmented patches of pink tailed worm lizard habitat in the ACT and NSW, and for connectivity between this population and habitat areas upstream on the Molonglo valley. The conservation corridor is intended to become part of the Great Eastern Ranges initiative which will protect and improve habitats on a regional and national scale.	16.6

	Impact	Specific risk	Potential effects	Proposed mitigation	Ref. in this report
11			West Belconnen area not specifically identified as an urban use investigation area, currently contravenes the National Capital Plan in this respect.	The proposed rezoning under the National Capital Plan in in accord with the key objectives of the national Capital plan	8
12	Metropolitan planning context	National Capital Plan	Portion of West Belconnen site identified as buffer to possible future development in NSW, proposed development would overtake buffer.	The proposed development will be enclosed by a geographic buffer zone formed by the Murrumbidgee River and surrounding hills, this is a more appropriate buffer in keeping with the landscape principles that underpin metropolitan planning than the current buffer which is along a straight line section of the border.	8
13			National Capital Open Space System objectives may be compromised by river corridor proposals.	The national Capital Authority has recently completed a review of the national Capital Open Space System; the proposal is in accord with the findings of that review.	8.4
14			Broadacre area in National Capital Plan proposed for development as residential, extinguishes the last remaining broadacre area (in NCP) on west side of city. Implications for employment creation activity on west of city.	The land fill site will provide opportunities for the types of development that may have occurred on the broadacre land; the broad acre land is not well located for employment type uses when compared to large tracts of broadacre land at Majura and Jerrabomberra.	8.7

	<b>Impact</b>	<b>Specific risk</b>	<b>Potential effects</b>	<b>Proposed mitigation</b>	<b>Ref. in this report</b>
15		Proposal accords with strategic direction of Territory Plan	If proposal in conflict with strategic direction it is unlikely to be ultimately approved.	A review against the Territory Plan has found the proposal to be in accord with the strategic direction of the Territory Plan.	7.6
16		Proposal accords with the ACT Planning Strategy.	If proposal in conflict with planning strategy it is unlikely to be ultimately approved.	The ACT planning Strategy identifies the West Belconnen Site as being an "urban investigation area". This proposal has confirmed the suitability of the site for urban development in accord with the intent of the Strategy.	7.9
17		Yass valley Shire plan and Sydney-Canberra Corridor Strategy	If proposal in conflict with Sydney/Canberra corridor strategy the NSW component is unlikely to be ultimately approved.	The proposal has been reviewed against the Sydney/Canberra corridor Strategy and found to be in accord with it.	9.
18	Land release strategy	The quantum and timing of the development in the context of metropolitan and regional housing supply.	Potential over or under supply of residential land.	The project will make an important contribution to the availability of land in the ACT region. The first releases from West Belconnen are listed in the ACT Government land release program for 2015/16.	4.2.2
19	Cross border	Economic & fiscal	Negative impact on territory finances	Research and consultation with ACT and NSW governments and Yass Council has demonstrated that all cross border matters are able to be resolved satisfactorily. ACT Government agreement to proceed with the project is based on this premise.	9
20		Social and Community services	Possible overloading of territory services.	See above	

	Impact	Specific risk	Potential effects	Proposed mitigation	Ref. in this report
21		Emergency services	Potential inability to provide cross border emergency services.	See above	
22		Infrastructure services	Possible overloading of territory infrastructure.	See above	
23	Economic	Impact on existing retail activities, esp Kippax	Potential deleterious impact on economic viability of retail and business activities by establishment of competing activities in new urban area.	Kippax centre will come under pressure and is likely to grow in response the West Belconnen development. A separate master planning exercise has been initiated to ensure that planning arrangements are in place at Kippax to adequately cater for growth.	15.1.2
24	Infrastructure	Utilities (electricity, water, sewer, gas, telecoms)	Potential for new urban area to put unmanageable strain on existing trunk services.	A review of infrastructure requirements has found that, with appropriate augmentation, the delivery of all infrastructure services is readily feasible.	14.
25		330kv Power Lines	Electromagnetic impact on residential use	All 330kv lines will be contained within 60m easements as specified by Transgrid. No residential development will occur within these easements.	11
26	Transgrid facilities	Canberra substation	Electromagnetic & noise impact on residential use	The substation site includes a 100m buffer zone which is considered to be adequate with respect to electromagnetic radiation. Noise impacts have been assessed and found to be acceptable subject to the installation of noise barriers, noting the existence of the 100m buffer zone.	11.1.7

	<b>Impact</b>	<b>Specific risk</b>	<b>Potential effects</b>	<b>Proposed mitigation</b>	<b>Ref. in this report</b>
27		Switching station	Electromagnetic impact on residential use	The proposed structure plan makes provision for the allocation of a suitable site for the switching station following completion of studies that are currently under way to determine the best site option.	7.11.
28		On site contamination from past activities	Potential for contaminated sites to affect future residents.	A small number of isolated contaminated sites have been identified and will be dealt with in accord with expert recommendations and EPA requirements as the project proceeds.	11.1.4
29	Contamination	Effect of Belconnen Land Fill	Potential for runoff and leachate from landfill site to pollute water and groundwater on site and consequently impact on future residents. Include consideration of aggressivity of groundwater.	Current territory Plan clearance zone to remain in place subject to further more detailed investigations.	11.2
30	Belconnen land fill	Various site activities	Potential for site activities to impact on nearby residential use.	A number of existing and potential Belconnen landfill site activities have the potential to impact on residential and other sensitive use. The structure plan incorporates appropriate buffers to ensure that residential and other sensitive uses are not implemented whilst such activities are operational.	11.2
31	Heritage	Belconnen Farm heritage precinct	Belconnen farm included on ACT heritage register, potential for development to impact on heritage values.	A Conservation Management Plan for the Belconnen Farm Precinct has been completed and approved by heritage ACT. The plan will be implemented.	15.2.2

	<b>Impact</b>	<b>Specific risk</b>	<b>Potential effects</b>	<b>Proposed mitigation</b>	<b>Ref. in this report</b>
32		Indigenous heritage	Potential for disturbance of indigenous archaeological sites. Potential for disturbance of indigenous cultural values associated with site topographical features.	Detailed field research has revealed a range of indigenous heritage items. None of these would preclude the development., all will be dealt with in accordance with expert recommendations, the requirements of the legislation and the ACT heritage Unit.	15.2.1
33		European heritage (excl. Belconnen farm)	Potential for disturbance of European cultural values associated with the site.	Detailed field and historical research has revealed a range of European heritage matters of interest. None (other than the Belconnen Farm) warrant listing on the ACT heritage register. All will be dealt with in accordance with expert recommendations.	15.2.2.
34		Belconnen road network	Potential for increased traffic on Belconnen road network to exceed capacities.	Detailed traffic analysis has shown a need for upgrades to Drake Brockman Drive, Southern Cross drive, the extension of Ginninderra Drive, the construction of a Spofforth St alternate link and other works. These are specified in detailed reports and will be implemented in accordance with the expert recommendations.	12.2
35	Transportation	Public transport	No current services	Public transport services will be provided to meet standard levels of service and in addition will be provided "up front" to coincide with the first dwelling occupations in the project area.	12.3
36		Active transport	No current provision	A comprehensive active transport strategy has been developed as part of the master plan.	12.3
37	Geotechnical	Site conditions: suitability for urban development	Potential for site conditions to exist that are unsuitable for urban development.	Land capability analysis has shown that the site is generally suitable for urban development.	11.1.1
38	Catchment management	Murrumbidgee River	Potential for impact on Murrumbidgee River water quality and quantity.	A water sensitive urban design strategy has been developed to ensure protection of Murrumbidgee water quality. Implementation of the strategy is a requirement of the structure plan.	14.4

	<b>Impact</b>	<b>Specific risk</b>	<b>Potential effects</b>	<b>Proposed mitigation</b>	<b>Ref. in this report</b>
39		Ginninderra Creek	Potential for impact on Ginninderra Creek water quality and quantity.	A water sensitive urban design strategy has been developed to ensure protection of Ginninderra Creek water quality. Implementation of the strategy is a requirement of the structure plan.	14.4
41		Surface water	Surface runoff across site	A water sensitive urban design strategy has been developed to manage quality and quantity of runoff water. Implementation of the strategy is a requirement of the structure plan.	14.4
42		Ground water & water extraction	Potential depletion of groundwater resource.	No groundwater is proposed to be used.	8.4
43		Demographics - potential for social disruption to Belconnen community	Potential for social dislocation to be caused by introduction of a "new" community to West Belconnen not integrated sufficiently with existing community.	Community engagement strategies have focused on the integration of the West Belconnen project into the existing Belconnen social fabric, including the siting of the project office at Kippax	18
44	Social and community	Social and community facilities and services	Potential for demands on existing social and community facilities and services in Belconnen to increase beyond capacities.	A comprehensive assessment of community facilities requirements has been conducted including an assessment of the capacity of existing facilities in neighbouring suburbs. The structure plan requires the implementation of a community facilities strategy that will ensure that key facilities are appropriately available.	15.1.1
45		Education facilities	Potential for demands on existing education facilities and services in Belconnen to increase beyond capacities.	The community facility assessment conducted in consultation with Education ACT has indicated the need for up to 5 school site. Provision has been made for these in the structure plan.	15.1.1
46		Recreation facilities	Potential for demands on existing recreation facilities and services in Belconnen to increase	Key recreation facilities including a district sports facility and local ovals have been identified in the structure plan and will be implemented.	15.1.5

	<b>Impact</b>	<b>Specific risk</b>	<b>Potential effects</b>	<b>Proposed mitigation</b>	<b>Ref. in this report</b>
			beyond capacities.		
47	Landscape & visual	Views from existing residential areas	Potential for view quality to be diminished by introduction of urban development in place of existing farmland.	A view analysis has shown that whilst the proposed development will be visible from some limited existing urban areas the views will be relatively distant and not obtrusive.	11.3
48		Views from greater metropolitan area	Potential for view quality to be diminished by introduction of urban development in place of existing farmland.	The view analysis has demonstrated that the proposed development is not visible from the general urban area or from the parliamentary triangle.	11.3
49	Bushfire	Impact of bushfire management strategies on other values especially biodiversity	Damage to biodiversity values	A Bushfire management strategy has been developed in consultation with conservation agencies and is compatible with biodiversity maintenance. Implementation of the proposed strategy is a mandatory requirement of the structure plan.	11.1.2
50		Potential risk for new urban areas	Potential bushfire hazard for new urban development.	A bushfire management strategy has been developed in consultation with emergency services agencies. Implementation of the proposed strategy is a mandatory requirement of the structure plan.	11.1.2
51		Effect on existing urban areas	Potential for levels of bushfire hazard for existing Belconnen urban development to be altered.	The introduction of urban development to the west of existing development will reduce the level of bushfire hazard in existing areas	11.1.2

	<b>Impact</b>	<b>Specific risk</b>	<b>Potential effects</b>	<b>Proposed mitigation</b>	<b>Ref. in this report</b>
52	Trees	Ecological and aesthetic value	Potential for existing trees to be destroyed.	A detailed survey and assessment of all trees with in the component of the site that is likely to be developed has been conducted. This information will provide a basis for all future planning work and an information base for the assessment of all regulated trees by the Conservator of Wildlife.	16.7.
53	Air quality	Air pollution due to urban activity	Potential for effects on health	Research has found that air quality impacts would not pose any constraint to urban development.	11.1.8
54	Zoonosis	Effect of Parkwood Poultry facility	Potential effect of Parkwood Poultry facility, e.g. bird flu	Research has found that a possible zoonosis hazard exists if water bodies that attract birds are located close to the Parkwood egg facility. The structure plan requires that no wetlands be constructed within an 800m buffer of the facility whilst it remains in operation.	11.1.6
55	Odour	Effect of Belconnen landfill	Potential for landfill odour to impact on future residents.	A number of existing and potential Belconnen landfill site activities have the potential to impact on residential and other sensitive use. The structure plan incorporates appropriate buffers to ensure that residential and other sensitive uses are not implemented whilst such activities are operational.	11.1.5
56		Effect of Parkwood Poultry facility	Effect of Parkwood Poultry facility	Research, taking into account the changed operations and boundaries, has confirmed the need for an odour buffer around the Parkwood poultry facility; The structure plan incorporates an appropriate buffer to ensure that residential and other sensitive uses are not implemented whilst such activities are operational.	11.1.5

	<b>Impact</b>	<b>Specific risk</b>	<b>Potential effects</b>	<b>Proposed mitigation</b>	<b>Ref. in this report</b>
57		Potential impact of Belconnen trunk sewer vents and LMWQCC	Potential for odour impacts on potential residential development.	<p>All proposed residential development is outside the existing 1km radius LMWQCC buffer zone.</p> <p>A review of the potential odour impacts of the three sewer vents located on the site is being undertaken and the Structure plan requires that the findings of this review will be implemented.</p>	11.1.5

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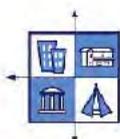
## West Belconnen Draft Variation No. 351 Planning Study

prepared for:

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Volume 2: Appendices

26 June 2014



**RIVERVIEW PROJECTS (ACT)**  
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**ACT**  
Government  
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CANBERRA FIRST

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## APPENDIX A: DRAFT WEST BELCONNEN STRUCTURE PLAN

### **Preamble**

*This preamble is not part of the Structure plan and is included for information purposes only.*

*The structure plan has been prepared for inclusion in the Territory Plan to provide for control over the development of the West Belconnen project area. It consists of principles and policies for the development of West Belconnen. This development will occur over a long period, possibly 40 years.*

*The structure plan has effect within the area nominated on the Territory Plan map as “future urban area” (FUA) at West Belconnen. The FUA overlay will be progressively removed as development proceeds and land is occupied. This structure plan will cease to have effect on areas of the site where the FUA overlay is removed. Ultimately, when all of the land is developed it will be extinguished.*

*A number of technical investigations and planning studies have been conducted prior to and in parallel with the preparation of this structure plan, including environmental, economic, social and engineering research. These, together with the information gained from consultation with relevant Government agencies, stakeholder groups and the general public have provided the background information on which the structure plan is based.*

*In some cases the technical work has identified the need for specific actions to be taken as part of the development, or for limitations to be imposed on the development. Where appropriate the specific recommendations made in technical reports are referenced in the Structure Plan.*

*An important part of the planning process that has led to the development of this Structure Plan has been the preparation of a master plan. The master plan provides an illustration of the potential for the development of the site, based on the technical studies and public consultation, and in accord with the structure plan. The master plan was developed by a multi-disciplinary team including specialists responsible for the preparation of the technical studies. The master planning work was underpinned by a planning and design forum, held over a three day period and involving the multi-disciplinary team, government agencies and stakeholder groups. The master plan is a non-statutory document; its purpose is to:*

- 1. Provide a readily understandable picture of the likely development outcomes as the structure plan is implemented over time, and*
- 2. As it was being developed, the master plan provided a mechanism for evaluating options, opportunities and constraints presented by the technical studies and community input, to test these, and confirm the practicality and veracity of the content of the structure plan.*

## A1. INTRODUCTION

This structure plan sets out the principles and policies that apply to the west Belconnen future urban area in accordance with section 91 of the *Planning and Development Act 2007*.

A concept plan for West Belconnen, which is deemed to be a precinct code under the *Planning and Development Act 2007*, has been prepared for the area subject to this structure plan.

## A2. APPLICATION

This structure plan applies to the future urban area in Figure 1. Land that ceases to be part of the future urban area through the application of s96 of the *Planning and Development Act 2007* ceases to be affected by this structure plan.

## A3. PROHIBITED DEVELOPMENT

For the purposes of s136(2) of the *Planning and Development Act 2007*, development by an entity is not prohibited, provided that the land on which the development is proposed was transferred to the entity by a Territory authority for the purpose of land development.

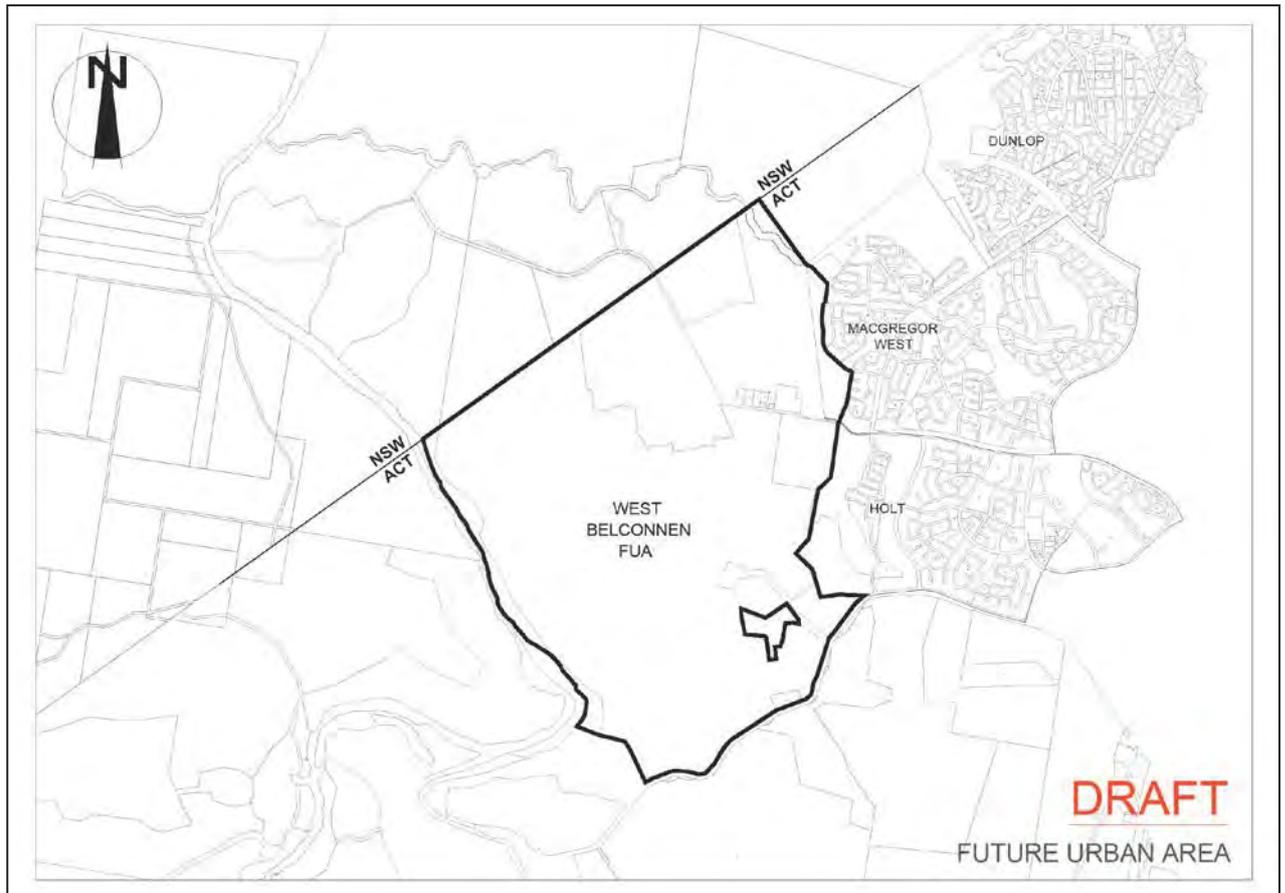
For the purposes of s136(2) of the *Planning and Development Act 2007*, development is not prohibited on the land described in table 1.

**Table 1 Development not prohibited**

PARCEL		Area	Current Use
BLOCK 1605	Belconnen	665.8 ha	Agriculture (also includes Belconnen Farm house precinct which is heritage listed)
BLOCK 1606	Belconnen	12.5 ha	Agriculture
BLOCK 1607	Belconnen	8.1 ha	ACTEW vent & Bicentennial Trail
BLOCK 1420	Belconnen	2.7 ha	Billabong Aboriginal Development Corp community and education services
BLOCK 1329	Belconnen	41.4 ha	Agriculture (poultry)
BLOCK 1621	Belconnen	33.3 ha	Unleased Territory land (horse agistment)
BLOCK 1622	Belconnen	71.8 ha	Unleased Territory land (horse agistment)
BLOCK 853	Belconnen	0.7 ha	Unleased Territory land (horse agistment)
BLOCK 1540	Belconnen	0.9 ha	Landscape supply business

BLOCK 856	Belconnen	0.8 ha	Plant nursery
BLOCK 858	Belconnen	0.6 ha	Kennels
BLOCK 859	Belconnen	0.6 ha	Veterinary surgery
BLOCK 1333	Belconnen	4.2 ha	Pony Club
BLOCK 1440	Belconnen	0.8 ha	ACTEW vent
BLOCK 7 SEC 149 (PT)	Belconnen	17.8 ha	Unleased Territory land (horse agistment)
BLOCK 1586	Belconnen	108 ha	Old Belconnen Land Fill, includes Parkwood recycling estate (secondary industrial area), green waste recycling, asbestos disposal, hydrocarbon affected soil treatment area, emergency land fill site.

**Figure 1: Future urban area at commencement of West Belconnen Structure Plan**



## A4. PRINCIPLES FOR THE DEVELOPMENT OF WEST BELCONNEN FUTURE URBAN AREA

The development will accord with the principles contained in the Statement of Strategic Directions. In some cases the principles set out in the statement of strategic direction warrant a particular emphasis or interpretation when they are applied at West Belconnen. The way in which the principles are to be applied at West Belconnen is set out in the table below

<b>1. Principles for Sustainable Development</b>	
<b>General Principles</b>	<b>Application at West Belconnen</b>
1.1 Planning processes and decisions will be focused on the combined achievement of economic vitality, community wellbeing, and environmental quality. Broad community involvement will be a key element in the pursuit of sustainable development, as will complementary regional strategies and agreements.	Applicable. Note that the cross border nature of the West Belconnen project warrants reference to regional strategies and agreements.
1.2 Matters of broader National Capital, metropolitan and regional significance will be carefully considered when formulating Territory Plan policies and when making decisions about development proposals and sequencing	Applicable.
1.3 Economic, social and environmental objectives will be pursued in a balanced and integrated way, having regard to both short-term and long-term factors, such that present needs can be met without prejudicing the welfare of future generations, and without serious or irreversible loss of life-supporting natural resources or damage to the environment.	Applicable.
1.4 Wherever appropriate, the broader global and regional context and potential cumulative impacts of decisions will be taken into account. Where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for failing to prevent environmental degradation.	Not applicable.
<b>Environmental Sustainability</b>	<b>Application at West Belconnen</b>
1.5 Planning policies will seek to ensure the efficient use of all resources and to reduce consumption of non-renewable resources. Waste minimisation, reuse and recycling will be encouraged, whilst energy-rating and conservation measures will be applied wherever appropriate, particularly in transport, subdivision planning, and building design and construction.	Applicable.

<p>1.6 The pattern of development is to reflect land capability constraints resulting from topography, soils, geotechnical factors, drainage, natural hazards, microclimate and the sensitivity of ecosystems. Particular attention will be given to the need to conserve soil, water and vegetation; maintain biological diversity; safeguard important ecosystems and ecological processes; and provide and protect wildlife corridors.</p>	<p>Applicable; note in particular the need for the creation of a conservation corridor to ensure the protection of certain vulnerable species and ecological communities.</p>
<p>1.7 Land and water resources will be planned in accordance with the principles of integrated catchment management and water sensitive urban design. Policies will seek to protect identified environmental values, whilst focusing on opportunities for multi-purpose use of resources. Special attention is to be given to protecting sources of the Territory's water supply and to maintaining environmental flows in rivers and streams.</p>	<p>Applicable with respect to the requirement for water sensitive urban design. Not applicable with respect to the Territory water supply.</p>
<p>1.8 Planning policies will provide for the sustainable management of rural areas, ensuring that rural lands nominated for future urban development or other purposes can be retained in productive use and properly managed for the time being. Appropriate activities to reduce net greenhouse gas emissions will be encouraged.</p>	<p>Not applicable except to the extent that a staged development is to provide for the continued agricultural use of the land prior to development.</p>
<p>1.9 Urban expansion will be contained in order to minimise impacts on valuable natural and rural areas.</p>	<p>Not applicable.</p>
<p>1.10 Integrated land use and transport planning will seek to maximise accessibility and transport efficiency, reduce energy consumption, support the preferred pattern of development, promote safety, safeguard environmental quality, and minimise greenhouse gas emissions.</p>	<p>Applicable</p>
<p>1.11 Policies for environmental planning and management will ensure amenity, minimise pollution, and protect public health and safety.</p>	<p>Applicable.</p>
<p><b>Economic Sustainability</b></p>	<p><b>Application at West Belconnen</b></p>
<p>1.12 Planning policies will facilitate the widest possible range of commercial, retail, industrial, rural, tourism, and other forms of economic activity in order to promote new investment and a more diversified economy, to underpin employment growth, and to respond to changing economic opportunities.</p>	<p>Not applicable; planning for the west Belconnen site has determined the most appropriate land uses.</p>
<p>1.13 The characteristics of the city that contribute to economic growth: Canberra's role as the national capital and the seat of Federal Parliament; the ease of getting around the city; the safe and clean environment; and the vibrancy of centres as places of social, cultural and business exchange, will be enhanced.</p>	<p>Applicable</p>

1.14 An adequate and diverse supply of industrial land will be maintained to facilitate both conventional and new forms of industry.	Not applicable.
1.15 Tourism will be fostered by permitting a variety of entertainment, leisure and accommodation facilities, including opportunities for ecotourism, in appropriate locations throughout the Territory.	Applicable with respect particularly to the potential for tourism activities including indigenous cultural tourism in the conservation corridor, opportunities at the Belconnen farm heritage precinct.
1.16 Sufficient land will be set aside for major communications, educational, scientific, or other activities requiring broadacre sites in appropriate locations outside urban areas.	Not applicable.
1.17 In planning future development and redevelopment, particular emphasis will be placed on cost-effective provision and management of existing and new infrastructure and services, taking into account whole-of-life and whole-of system costs, including the ecological footprint of proposed developments and activities.	Applicable.
<b>Social Sustainability</b>	<b>Application at West Belconnen</b>
1.18 Provision will be made for a comprehensive range of readily accessible community, cultural, sporting and recreational facilities, distributed according to the varying needs of different localities and population groups. In major centres and developing areas, sites will be safeguarded where necessary for particular community needs.	Applicable.
1.19 A variety of open space types will be provided in each district or local area to meet the diverse recreational needs of residents and visitors, and to contribute to community health.	Applicable.
1.20 Planning policies for community facilities and open space will encourage multiple use and flexible design to allow for changing needs.	Applicable.
1.21 Provision of affordable, adaptable and special-needs housing will be promoted throughout the city, as well as modification or redevelopment of existing stock to meet emerging social needs.	Applicable.
1.22 Urban development will be planned in a manner that promotes community vitality and safety, applying principles of crime prevention through environmental design. Provision will also be made for emergency services infrastructure necessary to ensure a high standard of safety for residents and visitors.	Applicable.
1.23 The needs of people with disabilities will be recognised in all facets of urban planning, particularly including the design and operation of transport and access systems and the assessment of development proposals.	Applicable.

<p>1.24 New suburban areas will be planned with a legible and permeable hierarchy of roads; conveniently located commercial and community facilities; a network of open spaces; an off-road system for pedestrians and cyclists; and provision for accessible public transport.</p>	<p>Applicable.</p>
<p>1.25 Heritage and cultural values will be safeguarded, including in particular those of the Territory's Aboriginal peoples and those derived from both its rural history and urban development as the National Capital. The distinctive qualities of residential areas and other places, as well as elements of community heritage, will also be recognised and their conservation promoted.</p>	<p>Applicable.</p>
<p>1.26 Identified places of heritage significance will be protected in accordance with requirements for their conservation contained in the Heritage Register and any relevant heritage guidelines under the Heritage Act 2004. Special provisions are included in the Heritage Act for the recognition, registration and conservation of Aboriginal heritage.</p>	<p>Applicable especially with reference to the Belconnen Farm Heritage precinct.</p>
<p><b>2. Spatial Planning And Urban Design Principles</b></p>	
<p><b>Urban Areas</b></p>	<p><b>Application at West Belconnen</b></p>
<p>2.1 Canberra will continue to develop as a series of discrete urban areas within a landscape setting of hills, ridges and other open spaces. Each town will offer a diversity of housing types; the broadest possible range of employment opportunities; and convenient, linked access to retail centres, community facilities and open space.</p>	<p>Not applicable.</p>
<p>2.2 Future residential settlement will be accommodated through development of Greenfields areas, subject to detailed feasibility and suitability studies; some expansion of existing towns; and appropriate use of suitable vacant or underdeveloped sites.</p>	<p>Not applicable.</p>
<p>2.3 Commercial and retail activity will be concentrated in centres and other planned nodes of intensive activity that are well served by public transport to ensure an efficient pattern of development. Primary emphasis will be placed on strengthening and enhancing existing and new centres and nodes, including improved urban design and encouragement of more mixed-use development</p>	<p>Applicable</p>
<p>2.4 Planning policies will support revitalisation of the City Centre as the preeminent centre of governance, commerce and entertainment for the ACT and its region, while keeping the City Centre in appropriate balance with other town centres. Within the City Centre, provision will also be made for a range of major community facilities and opportunities for high-density residential development.</p>	<p>Not applicable.</p>

2.5 A wide range of housing types will be permitted in identified residential areas close to commercial centres and some major transport routes to increase choice; maximise opportunities for affordable housing; and secure some intensification of development consistent with maintaining residential amenity. Outside of these areas, planning policies will protect the typically low density, garden city character of Canberra's suburban areas.	Applicable.
2.6 Higher density development will be encouraged within and near major centres, and in other suitable locations that are well served by public transport.	Not applicable.
2.7 Development will be planned to encourage use of public transport, walking and cycling, including commuter cycling. Routes will be reserved for an enhanced inter-town public transport system. Requirements for vehicle parking will be related to commercial needs and transport policy objectives.	Applicable.
2.8 Industrial areas will be in locations accessible to suitable freight services, and where industrial activity is unlikely to have a significant adverse effect on the environment or the amenity of residential areas.	Not applicable.
2.9 A planned hierarchy of roads will be maintained in order to promote road safety, protect the amenity of residential and commercial areas, and facilitate the efficient movement of major traffic flows and heavy vehicles.	Applicable.
2.10 Adequate provision of open space throughout the Territory will remain a high priority. Open space will be planned and carefully maintained as an integrated, hierarchical system that provides for a diversity of sport and recreation activities, contributes to the legibility and character of urban development, is cost-effective to maintain, and assists in the effective management of stormwater.	Applicable.
<b>Non-Urban Areas</b>	<b>Application at West Belconnen</b>
2.11 Planning policies will protect the landscape and environmental qualities of the hills and ridges surrounding urban areas, the Murrumbidgee and other river corridors, the mountains and forests west of the Murrumbidgee River, and productive rural landscapes.	Applicable.
2.12 Planning for non-urban and natural areas will also recognise the values of land for research, education, recreation and tourism purposes.	Applicable.
2.13 Clearance zones will be established where necessary around major facilities to protect the operational efficiency of those facilities and to minimise adverse environmental impacts	Applicable.

Urban Design	Application at West Belconnen
<p>2.14 Policies and procedures to promote high quality, creative design of development, urban spaces and landscape settings will be applied throughout the Territory, and innovation encouraged, in keeping with the spirit of the National Capital as an exemplar of best practice. Particular care will be taken to ensure high-amenity, quality design outcomes within residential areas, heritage areas, major centres and activity nodes, and along principal approach routes. The relationship between the public and private realms will also be emphasised in terms of the design quality of precincts and shared spaces, including spaces around buildings, as well as that of individual developments.</p>	<p>Applicable.</p>
<p>2.15 Policies will acknowledge Canberra as the national capital and the symbolic heart of Australia and will seek to preserve the landscape features that give the national capital its character and setting; respect and reinforce the key elements of Walter Burley Griffin's formally adopted plan for Canberra within the proposed urban settlement pattern; enhance and strengthen approaches and backdrops to the city and its national institutions; conserve open space between urban areas as visual separation buffers consistent with the landscape setting; retain areas that are identified as the rural setting surrounding the city; and retain key vistas created by the landscape network within new settlement areas.</p>	<p>Applicable.</p>
<p>2.16 Retention of Canberra's unique landscape setting, including the integration of natural and cultural elements that create its 'garden city' and 'bush capital' qualities, will be accorded the highest priority. Special attention will be given to safeguarding visual amenity, protecting vegetation and other important features within the established urban landscape, and ensuring the high quality of environmental design in new developments or redevelopment.</p>	<p>Applicable.</p>
<p>2.17 Advertisements and signs will be carefully controlled to maintain environmental amenity.</p>	<p>Applicable.</p>

## A5. POLICIES FOR THE DEVELOPMENT OF WEST BELCONNEN FUTURE URBAN AREA

### GENERAL

1. Urban development will be generally in accordance with the zones applying to the Future Urban Area shown on the Territory Plan map.

Notes:

1. The future urban area will diminish as development proceeds. Land that ceases to be part of the future urban area through the application of s96 of the Planning and Development Act 2007 ceases to be affected by this structure plan.
2. The nature and extent of zones under the Territory Plan are confirmed after land ceases to be part of the future urban area.

### CONCEPT PLAN

2. The Concept Plan, which is deemed to be a precinct code under the *Planning and Development Act 2007*, may be amended. Any amendment will accord with the provisions of this Structure Plan.
3. The maximum number of residential dwellings at West Belconnen will be prescribed in the concept plan.

### CROSS BORDER

4. Provision will be made in the Concept Plan for potential development in adjacent areas of New South Wales.
5. The maximum number of residential dwellings to be provided for in adjacent NSW will be 6000.
6. The general intent and objectives expressed in the "Australian Capital Territory Memorandum of Understanding for Regional Collaboration", December 2011 and any successor documents will be recognised in the development of cross border planning and infrastructure arrangements.

### CONSERVATION CORRIDOR

7. A conservation corridor will be created and managed in accord with the recommendations of the report "*West Belconnen Consolidated Environmental Report, Kevin Mills and Associates, May 2014*" and in accord with any amendments to those recommendations that may be endorsed from time to time by the ACT Planning Authority.
8. The conservation corridor is recognised as an important natural asset to the ACT and region. It will be planned as an integral part of the National Capital Open Space System by providing for continuity of recreation use with surrounding open space and the Murrumbidgee River corridor.
9. Provision will be made in the conservation corridor for recreational activities appropriate to the characteristics of the river and adjacent land, and in a manner that provides bushfire protection and reinforces and protects the natural and cultural values of the river corridor.
10. Provision will be made for open space links to the Molonglo River corridor and to the existing off road path network in Belconnen suitable for cycling and pedestrian use.
11. A plan that prescribes management arrangements for the corridor shall be prepared by the entity responsible for the management of the corridor. The management plan will include comprehensive provisions giving weight to each of:
  12. Bushfire protection
  - Conservation of threatened species and ecological communities
  - Recreation use
13. The management plan will prescribe management arrangements and controls that may be

applied to infrastructure to be installed in the corridor.

14. The management plan shall be prepared in consultation with all relevant agencies and stakeholder groups and will be periodically updated.

## **NATURE CONSERVATION**

15. Any requirements imposed following the application of the (C'wealth) Environment Protection and Biodiversity Conservation Act or the (ACT) Nature Conservation Act regarding threatened species or ecological communities will be implemented in concept and estate development planning as appropriate.
16. The recommendations of the report "*West Belconnen Consolidated Environmental Report, Kevin Mills and Associates, May 2014*" and any amendments to those recommendations that may be endorsed from time to time by the ACT Planning Authority are to be adhered to.

## **ENVIRONMENT PROTECTION**

17. The recommendations of the report "*West Belconnen Bushfire Strategy, Ecological Pty Ltd, May 2014*" and any amendments to those recommendations that may be endorsed from time to time by the ACT Planning Authority are to be adhered to.
18. The recommendations of the report "*West Belconnen Contamination Study, GHD, April 2014*" and any amendments to those recommendations that may be endorsed from time to time by the ACT Environment Protection Agency are to be adhered to.
19. Appropriate buffer areas will be imposed as overlay controls that preclude sensitive uses in areas situated in the vicinity of existing uses with odour or noise impacts. Where appropriate buffers may apply temporarily, pending removal or appropriate amelioration of the noise or odour impact.

## **URBAN DESIGN**

20. Development will be planned to respond to the landscape setting and topography of the area by minimising cut and fill, responding to key features (eg: views, especially to the Brindabella ranges, ridges and drainage lines) and minimising the visual impacts of development.
21. Local neighbourhoods are to be generally based on a walkable radius of around 400 metres from an activity node such as a park, bus stop, shops, community facility or school.

## **RESIDENTIAL**

22. Development is to meet the requirements of relevant Government affordable housing policies or strategies.
23. Subdivision design will facilitate energy efficient housing consistent with West Belconnen site conditions, amenity and cost.
24. Small-scale community, retail and commercial uses may be allowed within residential areas, outside of local centres, in order to meet local needs (eg. child care centres, health facility, community activity centre, general store, cafe).
25. Medium density housing, which may include a higher built form is to be located on land near major transport routes, commercial centres, at activity nodes, and in locations with higher amenity
26. Residential mixed use (ie. residential and commercial or residential and community facilities) to be located near centres, and in areas with high amenity.
27. Opportunities for special dwellings and supportive housing are to be provided.

## **COMMERCIAL AND RETAIL USES**

28. A group centre is to be located on Parkwood Road. The group centre will be a major focus for

commercial and community activity, accommodating supermarkets, discount department retailing, and a range of other retail, commercial, business services and community facilities. Opportunities for higher density housing will be provided adjacent to, and within, the group centre.

29. Development up to 6 storeys is permitted at commercial centres.
30. The group centre may include employment generating development such as office or health centre development.
31. Commercial uses, generally of a non-retail nature, may be located within the CZ5 zone to the north west and east of the group centre, along Parkwood Road and within the Belconnen Land Fill Site. These uses may be associated with residential development.
32. Minor commercial and retail uses may be located throughout West Belconnen in response to market and community needs.

## HERITAGE

33. Aboriginal and European heritage sites listed on the ACT heritage register will be dealt with in accord with the requirements of the relevant heritage citation. Matters of heritage interest not listed on the register will be recognised where practicable in concept and estate development planning; specific reference should be made to the recommendations of the reports by Eric Martin and Associates, February 2014:

*West Belconnen European Cultural Heritage Report*

*ACT Parkwood Land:*

*Blocks 853, 856, 857, 858, 859, 860, 1329, 1333, 1440, 1540, 1621, 1622 and Part Macgregor Block 7 Section 149*

*West Belconnen European Cultural Heritage Report*

*ACT Land: Blocks 1605 and 1606*

And to any amendments to the recommendations that may be endorsed from time to time by the ACT Heritage Unit or other relevant authority.

## OPEN SPACE AND RECREATION

34. Land with suitable topographic characteristics is to be reserved for 1 district level playing field complex unless adequate provision is made off-site.
35. Land with suitable topographic characteristics adjacent to nominated school sites is to be reserved for neighbourhood playing fields, except where district playing fields are already identified adjacent to the school sites or adequate provision is made off-site.

## OLD BELCONNEN LAND FILL SITE

36. Development of the Belconnen Land Fill site will be subject to a master plan to be prepared to the satisfaction of the Authority.
37. The master plan shall be prepared in consultation with relevant agencies and stakeholder groups.

## COMMUNITY FACILITIES

38. Key community facilities are to be co-located at the group centre in a community focal point along Parkwood road with opportunities to accommodate uses such as childcare facilities, medical centre, and multi-purpose community hall.
39. The design of open space and community facilities will retain opportunities for community gardens.
40. Sites will be allocated for three schools. They will be sited on land with suitable topography, in locations that minimise the length of trips to and from school.

41. Other community facilities sites, including sites for non-government schools, community centres and the like may be allocated within or adjacent to residential land.

### **STORMWATER MANAGEMENT**

42. A stormwater management strategy will be adopted to control stormwater runoff from the West Belconnen urban development. The strategy will be in accord with the recommendations of the report "*West Belconnen Water Sensitive urban design Strategy, Aecom, May 2014*" and to any amendments to those recommendations that may be endorsed from time to time by the ACT Planning Authority.

### **TRANSPORT AND TRAFFIC MANAGEMENT**

43. Current and projected traffic flows in adjacent arterial roads will be considered in the design of the road network for West Belconnen.
44. Access to West Belconnen is to be via Drake Brockman Drive, Southern Cross Drive and Ginninderra Drive; each of these to be augmented in accord with the recommendations of "*West Belconnen Traffic Report, Aecom, May 2014*" and to any amendments to those recommendations that may be endorsed from time to time by the ACT Planning Authority.
45. The road layout is to be designed to facilitate the expansion of the inter-town bus network and potentially a light rail line.

### **INFRASTRUCTURE**

46. Easements within which development will be restricted in accordance with utility agency requirements will be provided as follows:

330kv overhead power lines:	60m
132kv overhead power lines:	40m

47. A site will be provided for a 330kV Switching Station and associated infrastructure to the satisfaction of the Territory.

### **CLEARANCE ZONES**

48. Certain land uses are prohibited in prescribed circumstances within clearance zones shown on Plan A.

### **BUSHFIRE ASSET PROTECTION ZONE**

49. Development within the bushfire asset protection zone will have regard to the requirements to protect environmental conservation values on adjacent land as prescribed on Plan B.

## APPENDIX B: DRAFT PRECINCT CODE ELEMENTS

### B1. DESIRED CHARACTER

#### INTRODUCTION

Consistent with the overarching vision of West Belconnen (WB) as *a sustainable community of international significance in the nations capital*, the project will evolve as a series of distinct neighbourhoods, characterised by unique character precincts providing housing choice, land use diversity and broad ranging affordability.

The structure of this section is as follows:

1. *Desired Character for the West Belconnen Project*
2. *Desired Character Statements for precincts within West Belconnen*

#### DESIRED CHARACTER (WHOLE OF SITE)

The Desired Character for West Belconnen, is to provide for a wide diversity of housing and supporting non-residential land uses to meet the practical, social and economic needs of the current and future demographic profile of the ACT.

WB may include significant areas for urban agriculture, community gardens and other non-residential uses that underpin the sustainability of WB as a diverse community.

WB will underpin the progressive redevelopment of the former landfill site, as the hub of this community. The former landfill site and the adjoin Parkwood Resource Recovery site will progressively evolve to offer unique opportunities for recreation, recycling, resource management, city farming, tourism, scientific and other non-residential uses.

A transect based approach to land use and density has been applied. Consistent with that practice, WB will comprise five distinct character precincts across the site area, reflecting the planned mix and intensity of land use, in the context of the known physical and environmental features of the land.

The Desired Character Plan defines the indicative location and extent of the Precincts. These will be refined over time via the EDP process.

To inform the Precinct Code, each Precinct type has been named and described, with its own unique Desired Character statement.

## **MARKET CENTRE DESIRED CHARACTER**

Market Centre is the hub of economic and social activity. It will be generally highly engineered with a strong urban feel. It will be also the interface between retail, commercial, community, educational and residential activity.

At WB Market Centre will also take in a large area constrained by existing high voltage overhead power lines. That land provides an opportunity to add to the Market Centre other large area land uses that may not traditionally locate in a centre due to land value. Such uses may include plant nurseries, plant and equipment hire establishments, park and ride zones, a bus terminus, urban agriculture and other non-residential uses that add life and interest to the Market Centre.

### Precinct character elements:

- One to 6 storey buildings
- Nil to minimal building setbacks
- Extensive paving
- Wide verges with summer shade from trees and awnings and other structures
- Active frontages – compulsory human scale awnings to retail precincts
- Market place for pop up stalls etc
- Verandas / balconies over verges
- Sheltered, safe and visible places to wait for buses
- On street car parking
- Diversity of land use
- Shared lanes and alleys, incorporating people places
- Town Square and multi-functional spaces and places

## **URBAN VILLAGE DESIRED CHARACTER**

Urban Village adjoins and is otherwise near to the Market Centre and bus routes, and supports and is supported by the Market Centre.

It is typically high density, and will include mixed non-residential uses that are compatible with residential and supported by or supportive of residential (eg cafes, restaurants, medical and allied health services, personal services, professional offices, local shops, education, etc).

### Precinct character elements

- Primarily residential land use but compatible mixed non-residential uses
- Building types to include apartments, terrace homes, mews, single dwellings
- One to 6 storey
- Nil to minimal building setbacks to all boundaries
- Extensive paving
- Moderate width verges with summer shade – trees and awnings
- Pocket parks and playgrounds
- Front verandas and balconies
- Verandas / balconies over verges

- Active frontages to non-residential uses
- Sheltered, safe and visible places to wait for buses
- On street car parking
- Front fences / courtyard walls
- Community meeting places

## **VILLAGE EDGE DESIRED CHARACTER**

Village Edge generally adjoins or is near to Urban Village precincts and/or bus routes, and provides urban living opportunities but usually at a lower density than the Urban Village. It will provide opportunities for modest detached homes on compact lots, as well as townhouses, and sections of semi-detached and attached housing commonly referred to as “semis” or “terraces”.

The higher density housing in this precinct will usually be adjacent to an area of parkland or other high value urban amenity.

### Precinct character elements

- Primarily residential land use
- Building types to include cottages, terrace homes, semi-detached dwellings, mews and townhouses
- Single to 4 storey
- Reduced setbacks - when compared to traditional suburban areas
- Traditional verge treatments adjacent to cottage areas, but “Urban Village” precinct verge treatments adjacent to terrace housing permitted.
- Pocket parks and playgrounds
- Moderate and narrower verge widths with shared path and canopy trees
- On street car parking
- Some front fencing / walling permitted
- Front verandas encouraged
- Opportunities for private front courtyards as principal open space where north facing

## **GARDEN SUBURBS DESIRED CHARACTER**

Garden Suburbs adjoin Village Edge precincts, and will be often on land further from the Market Centre.

Garden Suburb precincts provide a more traditional suburban lifestyle, characterised by detached one and two storey homes (with potential for 3<sup>rd</sup> storey elements) on larger blocks, generally on more undulating land.

Distinct small sub precincts of Village Edge type dwellings may be located in this precinct, but only where the land is reasonably flat and where such dwellings are immediately adjacent to open space or another urban amenity.

### Precinct character elements

- Primarily residential land use
- One and 2 storey detached single dwelling homes only, with 3<sup>rd</sup> storey elements permissible
- Moderate setbacks for detached dwellings
- Village Edge setbacks and conditions apply to approved Village Edge sub precincts.
- Moderate verge widths with shared paths and canopy trees
- On street car parking –parallel only
- Rear lanes permitted but only to service Village Edge sub precincts
- Front verandas encouraged

### **ECO LIVING DESIRED CHARACTER**

Eco Living is the term applied to any part of the WB site where there is a direct or indirect interface with the Conservation Corridor adjacent to the Murrumbidgee River and Ginninderra Creek Conservation Corridor.

Eco Living is an additional “layer” of character on top of the Precinct Character identified for the subject land, to ensure that the benefits of the Corridor interface are optimised for landowners in a manner that protects and enhances the values underpinning the Conservation Corridor itself.

Accordingly, the principles and details in this part are in addition to those applied in the other Desired Character Statements.

Where there is any inconsistency between the Principles and Details in this part and the Principles and Details in a Precinct part, the Eco Living Principles will prevail.

### Character elements

- More informal streets
- One sided roads fronting the Corridor – flush kerbs / castellated kerbs permissible to enable run-off to bio swales
- Frontage roads integrated with pedestrian, cycle, fire management and (potentially) equestrian trails
- APZs and bushfire sensitive urban, building and landscape design
- Building materials and colour palettes to complement the natural elements of the Corridor
- Extensive use of passive watering and bio swales in open space / verges
- Frontage to ponds / wetlands

## B2. ASSESSMENT TRACKS

The following tables identify the additional prohibited development and additional merit track development for zones. Development that is exempt from requiring development approval, other prohibited development and the minimum assessment track applicable to each development proposal is set out in the relevant zone development table.

The following table constitutes part of the relevant zone development table.

### *Additional merit track development*

<b>Zone</b>	<b><i>Additional merit track development that may be approved subject to assessment.</i></b>
RZ1 Suburban residential	Community use craft workshop cultural facility educational establishment motel Outdoor recreation pedestrian plaza playing field religious associated use serviced apartment SHOP less than 200m2 Urban Agriculture*
RZ3 Urban residential	Community use craft workshop cultural facility educational establishment motel outdoor recreation pedestrian plaza playing field religious associated use serviced apartment SHOP less than 200m2 Urban agriculture*
RZ4 Medium density residential	Community activity centre Community use craft workshop cultural facility

	<p>educational establishment</p> <p>motel</p> <p>outdoor recreation</p> <p>pedestrian plaza</p> <p>playing field</p> <p>religious associated use</p> <p>serviced apartment</p> <p>SHOP less than 200m2</p> <p>Urban agriculture*</p>
<p>RZ5</p> <p>High density residential</p>	<p>aquatic recreation facility</p> <p>business agency</p> <p>car park</p> <p>caretakers residence</p> <p>civic administration</p> <p>community theatre</p> <p>Community use</p> <p>craft workshop</p> <p>cultural facility</p> <p>drink establishment</p> <p>educational establishment</p> <p>indoor entertainment facility</p> <p>indoor recreation facility</p> <p>motel</p> <p>Non retail commercial</p> <p>office</p> <p>outdoor recreation</p> <p>pedestrian plaza</p> <p>place of assembly</p> <p>place of worship</p> <p>produce market</p> <p>public agency</p> <p>restaurant</p> <p>scientific research establishment</p> <p>serviced apartment</p> <p>SHOP less than 500m2</p> <p>Urban Agriculture*</p>
<p>CZ1</p> <p>Core zone</p>	<p>Bulk landscape supplies</p> <p>Hospital</p> <p>Major Road</p>

	<p>Minor Road  Parkland  Playing field  Subdivision  Veterinary surgery</p>
<p>CZ3  Services zone</p>	<p>Hospital  Major Road  Minor Road  Parkland  Playing field  Subdivision  Veterinary surgery</p>
<p>CZ5  Mixed use zone</p>	<p>Major Road  Minor Road  Parkland  Playing field  Subdivision  Veterinary surgery</p>
<p>NUZ1 Broadacre</p>	<p>bulk landscape supplies  car park  caravan park/camping ground  communications facility  Community activity centre  craft workshop  cultural facility  emergency services facility  farm tourism  incineration facility  industrial trades  light industry  municipal depot  outdoor education establishment  pedestrian plaza  place of worship  playing field  produce market  recyclable materials collection  recycling facility  service station</p>

	SHOP stock/sale yard tourist facility transport depot Varying a lease (where not code track or impact track assessable) veterinary hospital waste transfer station urban agriculture*
CFZ1 Community Facility	Produce Market
NUZ3 Hills ridges and buffers	Playing field Minor road
*Urban agriculture means animal farming, crop, tree and pasture production, and horticulture within or associated with an urban area.	

## B3. CODE RULES AND CRITERIA

### *Estate Development*

2.3 Pedestrian and cyclist facilities	
2.3.1 On-road cycling	
<p>R8</p> <p>Transit routes and dedicated cycle routes are provided with a 1.5m wide segregated on-road cycle lane on each side (for 60 km/hr streets) or a 2.0m wide segregated on- road cycle lane on each side (for 80 km/hr streets).</p>	<p>C8</p> <p>On road cycling lanes achieve all of the following:</p> <ul style="list-style-type: none"> <li>a) A connected network that facilitates ridership for varying degrees of experience and purpose along key desire lines and linking destinations.</li> <li>b) safe, protected and convenient use by cyclists.</li> <li>c) opportunities for high speed commuter cycling</li> <li>d) divert commuter paths around major collectors with local connection to major collectors.</li> </ul>
<p>R9</p> <p>Designated on-road cycle lanes connect with the existing or proposed shared path network.</p>	<p>C9</p> <p>On road cycling lanes are integrated with the existing or proposed shared path network.</p>

3.3 Culs-de-sac	
<p>R18</p> <p>No more than 25 per cent of blocks in an <i>estate</i> have vehicular access to a culs-de-sac.</p>	<p>C18</p> <p>Culs-de-sac achieve all of the following:</p> <ul style="list-style-type: none"> <li>a) legibility</li> <li>b) reasonable neighbourhood connectivity</li> <li>c) access to blocks where alternate access is not feasible.</li> </ul>
<p>R19</p> <p>This rule applies to culs-de-sac that are greater than 50m in length.</p> <p>A shared path at least 2m wide is provided within an access way from the head of the cul-de-sac to one or more of the following:</p> <ul style="list-style-type: none"> <li>a) another local street</li> <li>b) existing or proposed shared path network.</li> </ul>	<p>C19</p> <p>Culs-de-sac are provided with convenient and legible pedestrian and cyclist access with connections to a local street or the shared path network.</p>

3.5 Design of streets in bushfire prone areas	
<p>R21</p> <p>A combination of edge streets, fire trails and pedestrian paths are provided within or adjacent to a <i>bushfire prone area</i> on the long-term urban edge or conservation area adequate for Emergency Services access requirements.</p>	<p>C21</p> <p>Edge treatments on the long term urban edge provide all of the following:</p> <ul style="list-style-type: none"> <li>a) reasonable protection to people and property from bush fire</li> <li>b) reasonable access for emergency vehicles.</li> </ul>

4.2 Street trees	
<p>R24</p> <p>Street trees are provided in the street types identified in the following:</p> <ul style="list-style-type: none"> <li>a) for <i>estates</i> in other than industrial zones – table 2A</li> <li>b) for <i>estates</i> in industrial zones – table 2B.</li> </ul>	<p>C24</p> <p>Street tree plantings achieve an attractive <i>streetscape</i>.</p>
<p>R25</p> <p>Street trees will, at maturity, shade not less than 30% of footpaths and shared paths in the estate at noon on the summer solstice.</p> <p>Note: Maturity is the estimated canopy size at 20 years of age.</p>	<p>C25</p> <p>Street trees at maturity achieve reasonable summer shade to foot paths and shared paths with regard to heat gain and user comfort.</p>

<p>R27</p> <p>This rule applies to all public realm spaces except for the following:</p> <ul style="list-style-type: none"> <li>i) street verges</li> <li>ii) street medians</li> <li>iii) access ways (as defined in table 4)</li> <li>iv) pedestrian lanes (as defined in table 4)</li> <li>v) service corridors.</li> </ul> <p>A minimum of 75% of the perimeter of public realm spaces is bordered by one or more of the following:</p> <ul style="list-style-type: none"> <li>a) edge roads with kerbside or parallel parking</li> <li>b) public car parking areas</li> <li>c) trunk shared paths</li> <li>d) blocks with a commercial or community facility zoning.</li> </ul>	<p>C27</p> <p>Public realm spaces (excluding street verges and medians, access ways, pedestrian lanes and service corridors) are bounded by uses that provide all of the following:</p> <ul style="list-style-type: none"> <li>a) reasonable levels of surveillance, through the use of such measures as edge roads, address frontages and lighting</li> <li>b) reasonable public access including links from footpaths to the existing or proposed shared path network and the provision of public car parking in convenient locations.</li> </ul>
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<p>R44</p> <p>Utility services are located within road verges, road pavements or other territory land.</p> <p>Service connection points either in ground or incorporated into building design</p>	<p>C44</p> <p>Utility services may be located within leased blocks where all of the following are achieved:</p> <ul style="list-style-type: none"> <li>a) located within service easements and accessed by means of emergency or maintenance access routes in accordance with the requirements of utility service providers</li> <li>b) located on blocks that are of sufficient size to accommodate the required service easements and access routes whilst providing comparable building footprint area to that of unencumbered blocks.</li> </ul>
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### Element 1: Element 8: Block layout and orientation

Rules	Criteria
<b>8.1 Block size, slope and orientation</b>	
<p>R47 This rule applies to <i>single dwelling blocks</i>. <i>Single dwelling blocks</i> comply with all of the following:</p> <ul style="list-style-type: none"> <li>a) block compliance tables in appendix A.</li> <li>b) minimum block depth – <ul style="list-style-type: none"> <li>i) for <i>compact blocks</i> – 15m</li> <li>ii) for <i>mid-sized blocks</i> – 20m</li> <li>iii) for <i>large blocks</i> – 25m</li> </ul> </li> <li>c) minimum block width – <ul style="list-style-type: none"> <li>i) for <i>compact blocks</i> with mandatory zero side setbacks - 3.5m</li> <li>ii) for <i>compact blocks</i> other than the above- 6m</li> <li>iii) for <i>mid-sized blocks</i>– 8m</li> <li>iv) for <i>large blocks</i> - 14m.</li> </ul> </li> </ul> <p>This rule does not apply to <i>single dwelling blocks</i> within an <i>integrated housing development parcel</i>.</p> <p><b>Note 1:</b> Block width and block depth are defined in appendix A.  <b>Note 2:</b> The process for determining compliance is set out in appendix A.</p>	<p><b>C47</b></p> <p><i>Single dwelling blocks</i> are sized and oriented to allow all of the following:</p> <ul style="list-style-type: none"> <li>a) the erection of a house that complies with the rules of the Single Dwelling Housing Development Code</li> <li>b) the erection of a house with a reasonable <i>gross floor area</i></li> <li>c) the erection of a house with a reasonable access to sunlight.</li> </ul> <p><b>Note:</b> Compliance with this criterion will be established through an assessment of development intentions plans submitted with the estate development plan.</p>
<b>8.2 Compact blocks – slope</b>	

<p>R53</p> <p>This rule applies to <i>compact blocks</i> with mandatory zero side setbacks.</p> <p><i>Slope</i> is no greater than 10%.</p> <p>For this rule -</p> <p><b>Slope</b> means the slope of land, expressed as a percentage, calculated using the difference in <i>datum ground level</i> from the highest to lowest points on the proposed block boundary and the horizontal distance between those points.</p>	<p><b>C53</b></p> <p>Block size and dimensions take into account the slope of the land and minimise the need for earthworks and retaining walls associated with dwelling construction.</p>
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<p>R56</p> <p>Multi-unit blocks enable all dwellings to front a public road, public open space, communal open space or pedestrian path with a minimum width of 6m.</p> <p><b>Note:</b> Compliance with this rule is demonstrated by reference to a development intentions plan lodged with an estate development plan.</p>	<p>C56</p> <p>The size and shape of multi unit blocks will enable those dwellings in a multi unit housing development that cannot front a public road or public open space, to front an internal road.</p> <p><b>Note:</b> Compliance with this criterion is demonstrated by reference to a development intentions plan lodged with an estate development plan.</p>
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<b>9.1 Street network</b>	
<p>R58</p> <p>Maximum driving distance between any dwelling and specified roads complies with the following:</p> <p>a) minor or major collector street or higher order road – 700m</p>	<p>C58</p> <p>The street layout achieves convenient movement of vehicles between dwellings and collector streets and <i>arterial roads</i>.</p>

<p>R59</p> <p>No more than three turning movements at intersections are required in order to travel from any dwelling to the nearest collector street or <i>arterial road</i>.</p>	<p>C59</p> <p>The street layout achieves convenient movement of vehicles between dwellings and collector streets and <i>arterial roads</i>.</p>
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<b>9.2 Street verge</b>	
<p>R60</p> <p>For all <i>blocks</i> in RZ1 and RZ3:</p> <p>No more than 50% of the finished street verge surface is impervious.</p> <p>For all <i>blocks</i> in RZ5.</p> <p>No less than 60% of the finished street verge surface is impervious.</p>	<p>C60</p> <p>The finished surface treatment of street verges achieves all of the following:</p> <p>a) Achieve <i>desired street character</i></p> <p>b) Promote intended use and complement adjoining land uses.</p> <p>c) reasonable opportunities for stormwater infiltration and landscaping, including the use of such measures as overland flow paths, castellated kerbing, and infiltration</p>

<p>For all <i>blocks</i> in commercial zones: Primarily impervious surface with street tree planting in tree wells.</p>	<p>pits around street trees</p> <p>d) reasonable maintenance access to utility services in accordance with the standards of the relevant utility provider</p> <p>e) suitability for uses generating high levels of pedestrian traffic such as retail centres, schools and community facilities</p> <p>f) enables street trees to mature fully without suffering undue compaction of the root system.</p>
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### Element 10: Public realm

Rules	Criteria
<b>10.1 Size and location</b>	
<p>R66</p> <p>Pocket parks have a minimum dimension of 10m.</p> <p>Local neighbourhood parks have an area not less than 0.5ha.</p> <p>Central neighbourhood parks have an area of between 1ha and 2ha.</p>	<p>Parks are sized and distributed to provide a frequency and range of passive and active recreation opportunities for all ages and lifestyles</p>
<p>R67</p> <p>Blocks for <i>residential use</i> comply with at least one of the following:</p> <p>a) not more than 200m from at least one of the following:</p> <ul style="list-style-type: none"> <li>i) a pocket park</li> <li>ii) a local neighbourhood park</li> <li>iii) town park or a pedestrian parkland containing recreational facilities such as picnic and barbeque areas and playgrounds</li> </ul> <p>b) not more than 500m from at least one of the following:</p> <ul style="list-style-type: none"> <li>i) a central neighbourhood park</li> <li>ii) the West Belconnen Conservation Corridor</li> </ul> <p>c) not more than 400m from a bus route that stops at all of the following within the West Belconnen study area:</p> <ul style="list-style-type: none"> <li>ii) neighbourhood oval</li> <li>iii) district sportsgrounds</li> </ul>	<p>C67</p> <p>Public realm spaces containing recreational facilities or passive open space are provided at accessible walking distances from all blocks for <i>residential use</i>.</p> <p>Playing fields are well distributed and placed on public transit routes and/ or co located with schools.</p> <p>Public realm spaces are incorporated into the development and do not sever or create barriers to residential neighbourhoods.</p>

<p><b>R90</b></p> <p>Any four-way intersections are to be endorsed by TAMS.</p> <p><b>Note:</b></p> <p>TAMS will endorse four-way intersections where they are controlled by traffic signals or a roundabout.</p> <p>TAMS may consider departures, except in the circumstances listed below. In making its assessment TAMS will consider whether</p> <ul style="list-style-type: none"> <li>a) the intersection design and forecast traffic volumes meet the recommended limits as specified in <i>AUSTROADS Guidelines</i></li> <li>b) whether physical measures are correctly designed to define priorities and enhance safety.</li> <li>c) TAMS <i>Design Standards for Urban Infrastructure DS03-Road Design</i> or its successor</li> </ul> <p>TAMS will not consider departures in the case of the following intersections:</p> <ul style="list-style-type: none"> <li>i) minor collector with minor collector</li> <li>ii) major collector with major collector.</li> </ul>	<p>Four way intersections are designed to:</p> <ul style="list-style-type: none"> <li>a) provide natural traffic calming measures , or</li> <li>b) facilitate pedestrian and cycle connectivity along key desire lines where traffic volumes do not require traffic signals or a roundabout.</li> </ul>
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<p><b>R99</b></p> <p>Kerb radii are to be endorsed by TAMS.</p> <p><b>Note:</b></p> <p>TAMS will endorse kerb radii where they comply with the following:</p> <ul style="list-style-type: none"> <li>a) for residential zones and CZ5 – minimum 3.5m</li> <li>b) for commercial zones (excluding CZ5) – minimum 10m</li> <li>c) for industrial zones – minimum 10m.</li> </ul> <p>TAMS may consider departures. In making its assessment TAMS will consider:</p> <ul style="list-style-type: none"> <li>i) <i>AUSTROADS Guidelines</i></li> <li>ii) TAMS <i>Design Standards for Urban Infrastructure DS03-Road Design</i> or its successor.</li> </ul>	<p>Kerb geometry with a turning radius of less than 4m, are required to achieve:</p> <ul style="list-style-type: none"> <li>a) Desired character</li> <li>b) an effective turning radius of not less than 10m</li> <li>c) traffic calming for vehicles approaching an intersection</li> <li>d) minimise pedestrian crossing distances</li> <li>e) sightlines and visibility distance in accordance with AS2890.1</li> </ul>
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Table 1A: Street hierarchy for estates in residential zones and CZ5		
Street type and function	Design speed (km/h)	Traffic volume (vehicles per day) <sup>(1)</sup>
<b>REAR LANE</b>	20	0- 200
Rear lanes are narrow and short streets which have the primary function of providing rear vehicular access to blocks.		
<b>ACCESS STREETS</b>		
Access Street A	40	0–500
Access Street B	40	0–1000
Access streets are used where the residential environment is dominant, traffic is subservient, speed and traffic volumes are low and pedestrian and cycle movements are facilitated. Access streets are categorised as Access Street A or Access Street B according to traffic volumes. Access Street A generally collects traffic from rear lanes and connects to collector roads; they do not normally accommodate traffic from other streets.		
<b>COLLECTOR ROADS</b>		
Minor collector	60	1001–3000
A minor collector road collects and distributes traffic from access streets to major collector roads or direct to the external arterial road network. A reasonable level of residential amenity and safety is maintained by restricting vehicle speeds by means of street alignment, intersection design or by speed-control measures. Direct property access is <b>allowed</b> .		
Major collector	60	3001–6000
<p><b>Major Collector Roads collect and distribute traffic within residential, industrial and commercial areas. They form the link between the primary network and the roads within local areas and should carry only traffic originating or terminating in the area.</b></p> <p>The volume of traffic carried is constrained by environmental objectives – safety and traffic noise – and reflects the limited area that they serve. Direct property access is still permissible but the access and egress arrangements should be such that vehicles can exit properties in a forward direction.</p>		



Table 2A: Street network requirements – all estates except in industrial zones

Facility Type	Rear lane <sup>(2)</sup>	Shared use access street 'Woonerf' style	Access street A	Access street B	Minor collector	Major collector
Traffic volume range (vpd) <sup>(1)</sup>						
Design speed (km/h)						
Minimum carriageway width (m) <sup>(2)</sup>	5.5 minimum where lane length > 60m	3	5.5 (3.0m for single lanes)	7	7	7.4
Verge width (m)	1.25	3.6	5.6 including path, 3.55 other side	5.6 on 2m path side, 5.1 on 1.5m path side	5.6 minimum in residential zones, 8.5 minimum in retail/mixed use areas	5.6 minimum in residential areas, 10.3 minimum in mixed use areas, 11.3 minimum in retail areas
Minimum horizontal radius (to accommodate)						
On-street car parking	Permitted only as indented spaces	Permitted only as indented spaces	Assumed on one side of the carriageway only	Assumed staggered on both sides of the carriageway	Assumed staggered on both sides of the carriageway unless indent parking provided	Assumed staggered on both sides of the carriageway unless indent parking provided
Kerb type	Flush  Upright or castellated kerb adjacent street lighting and trees	Flush, layback or upright	Flush, layback or upright	Layback or upright	Upright	Upright

Maximum street longitudinal gradient						
Minimum shared path requirement	No shared path required	No shared path required	2m shared path on one side only	2m shared path on one side, 1.5m shared path on other	2m wide shared path on both sides	2m wide shared path on both sides
Bus route requirement	Not to be used as bus route	Not to be used as bus route	Not to be used as bus route	Not to be used as bus route	Bus route	Bus route
Street tree requirement	Street trees to be provided on blocks adjoining road reserve boundary	Street trees to be provided	Street trees to be provided	Street trees to be provided	Street trees to be provided	Street trees to be provided
Intermittent street lighting						

**Table 3: Bus route requirements**

<p>Street carriageway widths<sup>(1)</sup>          One-way: 3.7 m          Two-way: 7.4 m</p>
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**TABLE 4 ADDITION**

PUBLIC REALM TYPE	PRIMARY FUNCTIONS	MANAGEMENT INTENTIONS	STAGE IDENTIFIED
<b>Pocket Park</b>	<p><i>Multiple located in neighbourhoods.</i></p> <p>Easily accessible and user friendly for those less able and with limited mobility or lifestyle. An intimate, local meeting place or park, informal or formal in character for reflection. With minimal maintenance requirements..</p>	Low maintenance	Estate Development Plans

## Block compliance tables

### *Using the block compliance tables*

The block compliance tables schedule a range of block sizes, slope and orientation to ensure adequate solar access. Only one *test block* is applicable to each proposed block. For each proposed block the same *test block* is to be used to determine block width, block depth, bearing of street address, slope and compliance with the block compliance tables below.

Block compliance is subject to the West Belconnen specific PPOS and solar access requirements being met.

<b>Table A1.1</b>  <b>Block compliance</b> mid sized blocks block width <sup>^</sup> <16m minimum block width <sup>^</sup> 14m			slope (s)						
			fall to south			flat	fall to north		
			> -15%	-15% to < -10%	-10% to < -5%	-5% to < +5%	+5% to < +10%	+10% to < 15%	> +15%
bearing of address street boundary ^^^	street to north	70° - <90°	✓	✓	✓	✓	✓	✓	✓
		90° - <120°	✓	✓	✓	✓	✓	✓	✓
		120° - <160°	✓	✓	✓	✓	✓	✓	✓
	street to east	160° - <180°	✓	✓	✓	✓	✓	✓	✓
		180° - <210°	✓	✓	✓	✓	✓	✓	✓
		210° - <250°	✓	✓	✓	✓	✓	✓	✓
	street to south	250° - <270°	✓	✓	✓	✓	✓	✓	✓
		270° - <300°	✓	✓	✓	✓	✓	✓	✓
		300° - <340°	✓	✓	✓	✓	✓	✓	✓
	street to west	340° - <360°	✓	✓	✓	✓	✓	✓	✓
		0° - <30°	✓	✓	✓	✓	✓	✓	✓
		30° - <70°	✓	✓	✓	✓	✓	✓	✓

<b>Table A1.2</b> <b>Block compliance</b> large blocks (>500m <sup>2</sup> ) block width $\wedge$ > or = 25m			slope (s)						
			fall to south			flat	fall to north		
			> -15%	-15% to < -10%	-10% to < -5%	-5% to < +5%	+5% to < +10%	+10% to < 15%	> +15%
bearing of address street boundary $\wedge\wedge$	street to north	70° - <90°	✓	✓	✓	✓	✓	✓	✓
		90° - <120°	✓	✓	✓	✓	✓	✓	✓
		120° - <160°	✓	✓	✓	✓	✓	✓	✓
	street to east	160° - <180°	✓	✓	✓	✓	✓	✓	✓
		180° - <210°	✓	✓	✓	✓	✓	✓	✓
		210° - <250°	✓	✓	✓	✓	✓	✓	✓
	street to south	250° - <270°	✓	✓	✓	✓	✓	✓	✓
		270° - <300°	✓	✓	✓	✓	✓	✓	✓
		300° - <340°	✓	✓	✓	✓	✓	✓	✓
	street to west	340° - <360°	✓	✓	✓	✓	✓	✓	✓
		0° - <30°	✓	✓	✓	✓	✓	✓	✓
		30° - <70°	✓	✓	✓	✓	✓	✓	✓

Table A1.3  Block compliance mid sized blocks (>500m <sup>2</sup> ) block width <sup>^</sup> ≥18m minimum block depth <sup>^^</sup> 30m			slope (s)						
			fall to south			flat	fall to north		
			> -15%	-15% to < -10%	-10% to < -5%	-5% to < +5%	+5% to < +10%	+10% to < 15%	> +15%
bearing of address street boundary <sup>^^</sup>	street to north	70° - <90°	✓	✓	✓	✓	✓	✓	✓
		90° - <120°	✓	✓	✓	✓	✓	✓	✓
		120° - <160°	✓	✓	✓	✓	✓	✓	✓
	street to east	160° - <180°	✓	✓	✓	✓	✓	✓	✓
		180° - <210°	✓	✓	✓	✓	✓	✓	✓
		210° - <250°	✓	✓	✓	✓	✓	✓	✓
	street to south	250° - <270°	✓	✓	✓	✓	✓	✓	✓
		270° - <300°	✓	✓	✓	✓	✓	✓	✓
		300° - <340°	✓	✓	✓	✓	✓	✓	✓
	street to west	340° - <360°	✓	✓	✓	✓	✓	✓	✓
		0° - <30°	✓	✓	✓	✓	✓	✓	✓
		30° - <70°	✓	✓	✓	✓	✓	✓	✓

<b>Table A2.1</b> Block compliance mid sized blocks (<360m <sup>2</sup> ) block width ^ < 12m minimum block width^ 9m			slope (s)						
			fall to south			flat	fall to north		
			> -15%	-15% to < -10%	-10% to < -5%	-5% to < +5%	+5% to < +10%	+10% to < 15%	> +15%
bearing of address street boundary ^^^	street to north	70° - <90°	✓	✓	✓	✓	✓	✓	✓
		90° - <120°	✓	✓	✓	✓	✓	✓	✓
		120° - <160°	✗	✗	✓	✓	✓	✓	✗
	street to east	160° - <180°	✗	✗	✓	✓	✓	✓	✗
		180° - <210°	✗	✗	✓	✓	✓	✗	✗
		210° - <250°	✗	✗	✓	✓	✓	✓	✓
	street to south	250° - <270°	✓	✓	✓	✓	✓	✓	✓
		270° - <300°	✓	✓	✓	✓	✓	✓	✓
		300° - <340°	✗	✗	✓	✓	✓	✓	✗
	street to west	340° - <360°	✗	✗	✓	✓	✓	✓	✗
		0° - <30°	✗	✗	✓	✓	✓	✗	✗

<b>Table A2.2</b>  <b>Block compliance</b> mid sized blocks (<250 - ≤ 500m <sup>2</sup> ) block width ^ 12m - < 14m			slope (s)						
			fall to south			flat	fall to north		
			> -15%	-15% to < -10%	-10% to < -5%	-5% to < +5%	+5% to < +10%	+10% to < 15%	> +15%
bearing of address street boundary ^^^	street to north	70° - <90°	✓	✓	✓	✓	✓	✓	✓
		90° - <120°	✓	✓	✓	✓	✓	✓	✓
		120° - <160°	✗	✗	✓	✓	✓	✓	✓
	street to east	160° - <180°	✗	✓	✓	✓	✓	✓	✓
		180° - <210°	✗	✓	✓	✓	✓	✓	✓
		210° - <250°	✗	✗	✓	✓	✓	✗	✗
	street to south	250° - <270°	✓	✓	✓	✓	✓	✓	✓
		270° - <300°	✓	✓	✓	✓	✓	✓	✓
		300° - <340°	✗	✗	✓	✓	✓	✓	✓
	street to west	340° - <360°	✗	✓	✓	✓	✓	✓	✓
		0° - <30°	✗	✓	✓	✓	✓	✓	✓
		30° - <70°	✗	✗	✓	✓	✓	✗	✓

<b>Table A2.3</b>  <b>Block compliance</b> mid sized blocks (<250 - ≤ 500m <sup>2</sup> ) block width ^ 14m - < 16m			slope (s)						
			fall to south			flat	fall to north		
			> -15%	-15% to < -10%	-10% to < -5%	-5% to < +5%	+5% to < +10%	+10% to < 15%	> +15%
bearing of address street boundary ^^^	street to north	70° - <90°	✓	✓	✓	✓	✓	✓	✓
		90° - <120°	✓	✓	✓	✓	✓	✓	✓
		120° - <160°	✗	✓	✓	✓	✓	✓	✓
	street to east	160° - <180°	✓	✓	✓	✓	✓	✓	✓
		180° - <210°	✓	✓	✓	✓	✓	✓	✓
		210° - <250°	✗	✓	✓	✓	✓	✓	✓
	street to south	250° - <270°	✓	✓	✓	✓	✓	✓	✓
		270° - <300°	✓	✓	✓	✓	✓	✓	✓
		300° - <340°	✗	✓	✓	✓	✓	✓	✓
	street to west	340° - <360°	✓	✓	✓	✓	✓	✓	✓
		0° - <30°	✓	✓	✓	✓	✓	✓	✓
		30° - <70°	✗	✓	✓	✓	✓	✓	✓

<b>Table A2.4</b>  <b>Block compliance</b> mid sized blocks block width ^ <b>16m- 18m</b> minimum block depth^^ <b>30m</b>			slope (s)						
			fall to south			flat	fall to north		
			> -15%	-15% to < -10%	-10% to < -5%	-5% to < +5%	+5% to < +10%	+10% to < 15%	> +15%
bearing of address street boundary ^^	street to north	70° - <90°	✓	✓	✓	✓	✓	✓	✓
		90° - <120°	✓	✓	✓	✓	✓	✓	✓
		120° - <160°	✓	✓	✓	✓	✓	✓	✓
	street to east	160° - <180°	✓	✓	✓	✓	✓	✓	✓
		180° - <210°	✓	✓	✓	✓	✓	✓	✓
		210° - <250°	✓	✓	✓	✓	✓	✓	✓
	street to south	250° - <270°	✓	✓	✓	✓	✓	✓	✓
		270° - <300°	✓	✓	✓	✓	✓	✓	✓
		300° - <340°	✓	✓	✓	✓	✓	✓	✓
	street to west	340° - <360°	✓	✓	✓	✓	✓	✓	✓
		0° - <30°	✓	✓	✓	✓	✓	✓	✓
		30° - <70°	✓	✓	✓	✓	✓	✓	✓

<b>Table A3.1</b> This table becomes redundant and is NA to West Belconnen.			slope (s)						
			fall to south			flat	fall to north		
			> -15%	-15% to < -10%	-10% to < -5%	-5% to < +5%	+5% to < +10%	+10% to < 15%	> +15%
bearing of address street boundary ^^^	street to north	70° - <90°	✓	✓	✓	✓	✓	✓	✓
		90° - <120°	✓	✓	✓	✓	✓	✓	✓
		120° - <160°	✗	✗	✗	✗	✗	✗	✗
	street to east	160° - <180°	✗	✗	✗	✗	✗	✗	✗
		180° - <210°	✗	✗	✗	✗	✗	✗	✗
		210° - <250°	✗	✗	✗	✗	✗	✗	✗
	street to south	250° - <270°	✓	✓	✓	✓	✓	✓	✓
		270° - <300°	✓	✓	✓	✓	✓	✓	✓
		300° - <340°	✗	✗	✗	✗	✗	✗	✗
	street to west	340° - <360°	✗	✗	✗	✗	✗	✗	✗
		0° - <30°	✗	✗	✗	✗	✗	✗	✗
		30° - <70°	✗	✗	✗	✗	✗	✗	✗

<b>Table A3.2</b> <b>Block compliance</b> compact blocks (attached only) ( $\leq 250m^2$ )  block width <sup>^</sup> $\geq 9m$ minimum block depth <sup>^^</sup> 28m			slope (s)						
			fall to south			flat	fall to north		
			> -15%	-15% to < -10%	-10% to < -5%	-5% to < +5%	+5% to < +10%	+10% to < 15%	> +15%
bearing of address street boundary <sup>^^^</sup>	street to north	70° - <90°	✓	✓	✓	✓	✓	✓	✓
		90° - <120°	✓	✓	✓	✓	✓	✓	✓
		120° - <160°	✗	✗	✓	✓	✓	✓	✓
	street to east	160° - <180°	✗	✗	✓	✓	✓	✓	✓
		180° - <210°	✗	✗	✗	✗	✗	✓	✓
		210° - <250°	✗	✗	✓	✓	✓	✗	✗
	street to south	250° - <270°	✓	✓	✓	✓	✓	✓	✓
		270° - <300°	✓	✓	✓	✓	✓	✓	✓
		300° - <340°	✗	✗	✓	✓	✓	✓	✓
	street to west	340° - <360°	✗	✗	✓	✓	✓	✓	✓
		0° - <30°	✗	✗	✗	✗	✗	✓	✓
		30° - <70°	✗	✗	✓	✓	✓	✗	✗

## Multi-Unit Housing

Rules	Criteria
<b>1.1 Dual occupancy housing – single dwelling blocks – RZ1</b>	
R2 R1 No <i>dual occupancy housing</i> is permitted in RZ1	This is a mandatory requirement. There is no applicable criterion.
<b>3.5 Plot ratio – other than single dwelling blocks – RZ1, RZ2, RZ3 and RZ4</b>	
R3 R9 R4 This rule applies to blocks other than <i>single dwelling blocks</i> in RZ1 and RZ3. R5 There is no applicable plot ratio in RZ1 and RZ3. R6 The maximum permitted <i>Gross Floor Area</i> for any development is determined by rule compliancy for all matters relating to height, setbacks and private and communal open space provisions as set out in this code. R7 R8	Buildings achieve all of the following: <ul style="list-style-type: none"> <li>a) Consistency with the <i>desired character</i></li> <li>b) Activate primary street and other public frontages</li> <li>c) Demonstrate high levels of passive surveillance to all adjacent public areas</li> <li>d) Reasonable provision for car parking (residents and visitors) is provided through a combination of on block and on- street car parking (as previously approved in an estate development plan).</li> <li>e) Articulation to adjacent public realm</li> <li>f) Limit disruption of continuous pedestrian footpaths by vehicle access and driveway crossover provision</li> <li>g) Promote parking access and building servicing via laneways</li> <li>h) Promote a range of affordable housing opportunities</li> <li>i) Demonstrate that earthwork and excavation impacts have been minimised</li> </ul>
R9 R17 R10 This rule applies to a <i>detached house</i> with all of the following characteristics: <ul style="list-style-type: none"> <li>R11 i) located on a <i>single dwelling block</i></li> <li>R12 ii) located in RZ1</li> <li>R13 iii) is part of a <i>dual occupancy housing</i></li> </ul>	This is a mandatory requirement. There is no applicable criterion.

<p>R14 iv) does not directly front a public road, public open space or pedestrian path</p> <p>R15 Despite rule16, the building complies with all of the following:</p> <p>R16 a) contains no more 3 storey</p> <p>R17 b) has no <i>basement</i> car parking.</p>	
<b>3.13 Number of storeys – other than single dwelling blocks – RZ1</b>	
<p>R18 R18</p> <p>R19 In RZ1 on <i>blocks</i> other than <i>single dwelling blocks</i>, the maximum number of <i>storeys</i> is 2 with '3<sup>rd</sup> storey element' permitted.</p> <p>R20</p> <p>Any '3<sup>rd</sup> storey element' must achieve all of the following:</p> <ul style="list-style-type: none"> <li>a) meets the requirements of R57 to R61 of this code</li> <li>b) does not exceed a Gross Floor Area of more than 50% of the second storey</li> </ul> <p>R21 does not exceed a maximum dimension of 50% of the building façade fronting the primary street (as previously approved in an estate development plan)</p> <p>R22</p> <p>R23 Rooftop plant that is set back from the building's facade and screened from the street is not included in the number of storeys.</p> <p>R24</p> <p>R25 A '3<sup>rd</sup> storey element' is not permitted on blocks with slope greater than 10%.</p> <p>R26</p> <p>R27 For this rule -</p> <p>R28 <b>Slope</b> means the slope of land, expressed as a percentage, calculated using the difference in <i>datum ground level</i> from the highest to lowest points on the proposed block boundary and the horizontal distance between those points.</p>	<p>This is a mandatory requirement. There is no applicable criterion.</p>
<b>3.15 Number of storeys – RZ3</b>	
<p>R29 R20</p> <p>R30 In RZ3 the maximum number of <i>storeys</i> is 2 with '3<sup>rd</sup> storey element'.</p> <p>R31</p> <p>Any '3<sup>rd</sup> storey element' must achieve all of the following:</p> <ul style="list-style-type: none"> <li>c) meets the requirements of R57 to R61</li> </ul>	<p>C20</p> <p>Buildings achieve all of the following:</p> <ul style="list-style-type: none"> <li>a) consistency with the <i>desired character</i></li> <li>b) the appearance from the street of not more than two storeys for that part of the building facing the street</li> <li>c) reasonable solar access to <i>dwellings</i> on</li> </ul>

<p>of this code</p> <p>d) does not exceed a Gross Floor Area of more than 50% of the second storey</p> <p>R32 does not exceed a maximum dimension of 50% of the building façade fronting the primary street (as previously approved in an estate development plan)</p> <p>R33 Rooftop plant that is set back from the building's facade and screened from the street is not included in the number of storeys.</p> <p>R34</p> <p>R35 A '3<sup>rd</sup> storey element' is not permitted on blocks with slope greater than 10%.</p> <p>R36</p> <p>R37 For this rule -</p> <p><b>Slope</b> means the slope of land, expressed as a percentage, calculated using the difference in <i>datum ground level</i> from the highest to lowest points on the proposed block boundary and the horizontal distance between those points.</p>	<p>adjoining <i>residential blocks</i> and their associated <i>private open space</i>.</p>
<b>3.17 Number of storeys – RZ5</b>	
<p>R38 R22</p> <p>R39 In RZ5, the maximum number of <i>storeys</i> is:</p> <p>R40 a) for that part of the building within 30m of the boundaries of <i>blocks</i> in RZ1 - 3</p> <p>R41 b) in all other cases – 6.</p> <p>Roof top plant that is set back and screened from the street is not included in the number of storeys.</p>	<p>C22</p> <p>Buildings achieve all of the following:</p> <ul style="list-style-type: none"> <li>a) consistency with the <i>desired character</i></li> <li>b) reasonable solar access to <i>dwellings</i> on adjoining <i>residential blocks</i> and their associated <i>private open space</i>.</li> <li>c) reasonable levels of privacy for <i>dwellings</i> on adjoining residential blocks and their associated private open space</li> <li>d) include a reasonable transition in height and/or continuity between zones consistent with <i>desired character</i></li> <li>e) provide additional height (prominence) where the approved Estate Development Plan communicates the intent for a gateway, feature, wayfinding and/ or view termination or framing component in the context of the broader estate design</li> </ul> <p>enclose open space and community/public areas with buildings proportionate to the size of the open space in a manner that facilitate the use of the spaces</p>

<b>3.18 Height of buildings – RZ1 and RZ2</b>	
R42 R23 R43 Maximum <i>height of building</i> is: R44 a) in RZ1– 10m R45 .	C23 Buildings achieve all of the following: a) consistency with the <i>desired character</i> b) reasonable solar access to <i>dwellings</i> on adjoining <i>residential blocks</i> and their associated <i>private open space</i> . c) reasonable levels of privacy for <i>dwellings</i> on adjoining residential blocks and their associated private open space
<b>3.19 Height of buildings – RZ3, RZ4 and RZ5</b>	
R46 R24 R47 Maximum <i>height of building</i> is: a) in RZ3 - 12m b) in RZ5- 20m R48 R49	C23 Buildings achieve all of the following: a) consistency with the <i>desired character</i> b) reasonable solar access to <i>dwellings</i> on adjoining <i>residential blocks</i> and their associated <i>private open space</i> . c) reasonable levels of privacy for <i>dwellings</i> on adjoining residential blocks and their associated private open space
<b>3.20 Building envelope – all blocks except buildings over 3 storeys in RZ5 and commercial zones</b>	
There is no applicable rule.  This rule replaces Rule 25.	C25 Buildings achieve all of the following: a) consistency with the <i>desired character</i> b) reasonable levels of privacy for <i>dwellings</i> on adjoining <i>residential blocks</i> and their associated <i>private open space</i> .
There is no applicable rule.  This rule replaces Rule 26.	C26 Buildings achieve all of the following: a) consistency with the <i>desired character</i> b) reasonable levels of privacy for <i>dwellings</i> on adjoining <i>residential blocks</i> and their associated <i>private open space</i> . c) reasonable solar access to <i>dwellings</i> on adjoining <i>residential blocks</i> and their associated <i>private open space</i> .

Rules	Criteria
<b>3.22 Front boundary setbacks</b>	
<p>R50 R29</p> <p>R51 Front boundary setbacks comply with the following:</p> <p>R52 a) in RZ1 and RZ3 - Table A5(1)</p> <p>R53 b) in RZ5 and commercial zones - Table A5(2)</p> <p>R54 c) in all other zones – the relevant zone development code</p> <p>R55 Minimum boundary setbacks for corner <i>blocks</i> apply only to the street frontage nominated as a <i>secondary street frontage</i> in the approved Estate Development Plan. If street frontages on corner <i>blocks</i> are of equal length, the minimum setbacks apply only to one <i>secondary street frontage</i>. Chamfers may be included in the <i>secondary street frontage</i>.</p>	<p>C29</p> <p>Front boundary setbacks achieve all of the following:</p> <ul style="list-style-type: none"> <li>a) consistency with the <i>desired character</i></li> <li>b) reasonable amenity for residents</li> <li>c) sufficient space for street trees to grow to maturity.</li> </ul>
<b>3.23 Side and rear boundary setbacks</b>	
<p>R56 R30</p> <p>R57 Side and rear boundary setbacks comply with the following:</p> <p>R58 a) in RZ1 and RZ3 - Table A5(1)</p> <p>R59 b) in RZ5 and commercial zones - Table A5(2)</p> <p>R60 c) in all other zones – the relevant zone development code</p> <p>R61</p>	<p>C30</p> <p>Buildings and other structures are sited to achieve all of the following:</p> <ul style="list-style-type: none"> <li>a) consistency with the <i>desired character</i></li> <li>b) reasonable separation between adjoining developments</li> <li>c) reasonable privacy for <i>dwellings</i> on adjoining <i>residential blocks</i></li> <li>d) reasonable privacy for <i>principal private open space</i> on adjoining <i>residential blocks</i></li> <li>e) reasonable solar access to <i>dwellings</i> on adjoining <i>residential blocks</i> and their associated <i>principal private open space</i>.</li> </ul>

Table A5 (1): RZ1 and RZ3 - Front Boundary Setbacks –

Minimum front boundary setbacks					
floor level	blocks in subdivisions approved on or after 18 October 1993	blocks in subdivisions approved before 18 October 1993	exceptions		
			corner blocks		public open space or pedestrian paths wider than 6m
			secondary street frontage - mid-sized blocks	secondary street frontage- large blocks	
lower floor level	4m	6m	2m	4m	2m
upper floor levels	4m	6m	2m	4m	2m
garage	Minimum of 1.5 m behind the front building line				

Table A5 (2): RZ5 and Commercial Zones- Front Boundary Setbacks –

Minimum front boundary setbacks					
floor level	blocks in subdivisions approved on or after 18 October 1993	blocks in subdivisions approved before 18 October 1993	exceptions		
			corner blocks		public open space or pedestrian paths wider than 6m
			secondary street frontage - mid-sized blocks	secondary street frontage- large blocks	
lower floor level	0m	6m	1.5m	1.5m	0m
upper floor levels	0m	6m	1.5m	1.5m	0m
garage	Minimum of 0.5m behind the front building line				

Table A6: RZ1 and RZ3 - Side and Rear Boundary Setbacks

	Minimum side boundary setback within the <i>primary building zone</i>	Minimum side boundary setback within the <i>rear zone</i>	Minimum rear boundary setback
Lower floor level – external wall, unscreened element and basement	3m	3m	3m
Upper floor level – external wall	3m	3m	3m
Upper floor level – unscreened element	6m	6m	6m

Table A7(a): RZ4, RZ5 with ground floor residential - Side and Rear Boundary Setbacks (non single dwelling blocks?) (explanatory diagram in Appendix 1)

	Minimum side boundary setback within the <i>primary building zone</i>	Minimum side boundary setback within the <i>rear zone</i>	Minimum rear boundary setback
lower floor level – external wall	3m <sup>^</sup>	3m <sup>^</sup>	3m
lower floor level – unscreened element	6m <sup>^^</sup>	6m <sup>^^</sup>	3m
first upper floor level – external wall	3m <sup>^</sup>	3m <sup>^</sup>	3m
first upper floor level – unscreened element	6m <sup>^^</sup>	6m <sup>^^</sup>	3m
second upper floor level – external wall	3m <sup>^</sup>	3m <sup>^</sup>	3m
second upper floor level – unscreened element	6m <sup>^^</sup>	6m <sup>^^</sup>	3m

<sup>^</sup> 1m where non- habitable rooms exist opposite.

<sup>^^</sup> 4.5m where non- habitable rooms exist opposite.

Table A7(b): RZ5 with ground floor retail or commercial- Side and Rear Boundary Setbacks

	Minimum side boundary setback within the <i>primary building zone</i>	Minimum side boundary setback within the <i>rear zone</i>	Minimum rear boundary setback
lower floor level – external wall	Nil <sup>*^^</sup>	Nil <sup>*^^</sup>	3m
lower floor level – unscreened element	Nil <sup>*^^</sup>	Nil <sup>*^^</sup>	3m
first upper floor level – external wall	3m <sup>^</sup>	3m <sup>^</sup>	3m
first upper floor level – unscreened element	6m <sup>^^</sup>	6m <sup>^^</sup>	3m
second upper floor level – external wall	3m <sup>^</sup>	3m <sup>^</sup>	3m
second upper floor level – unscreened element	6m <sup>^^</sup>	6m <sup>^^</sup>	3m

\* does not apply to that part of a wall with a window of any sort.

^^ 4.5m where non- habitable rooms exist opposite.

Rules	Criteria
<b>3.24 Allowable encroachments - setbacks</b>	
<p>R62 R31</p> <p>Encroachments are permitted into one or more of the following setbacks:</p> <ul style="list-style-type: none"> <li>i) minimum side setback</li> <li>ii) minimum rear setback</li> <li>iii) secondary street frontage (as previously approved in an estate development plan)</li> <li>iv) rear setback from a rear laneway with studio above a garage</li> </ul> <p>for one or more of the following building elements:</p> <p>In RZ1, RZ3 &amp; RZ5:</p> <ul style="list-style-type: none"> <li>a) an eave or roof overhang with a horizontal width of not more than 600mm</li> <li>b) fascias, gutters, downpipes, rainwater</li> </ul>	<p>C31</p> <p>Buildings and other structures achieve all of the following:</p> <ul style="list-style-type: none"> <li>a) consistency with the <i>desired character</i></li> <li>b) reasonable levels of privacy on adjoining <i>residential blocks</i> for <i>dwellings</i> and their associated <i>private open space</i></li> <li>c) reasonable solar access to <i>dwellings</i> on adjoining <i>residential blocks</i> and their associated <i>private open space</i>.</li> </ul>

Rules	Criteria
<p>tanks, chimneys, flues, domestic fuel tanks, cooling or heating appliances, light fittings, electricity and gas meters, aerials, antennae, pergolas, sun blinds</p> <p>c) un-roofed terraces, landings, steps or ramps, none of which are more than 1m above finished ground level.</p> <p>d) Verandah, posted verandah, balcony, Juliette balcony to an extent of 1m into the setback.</p> <p>e) Raised deck for the purpose of principal private open space for extent of 1m into the setback.</p> <p>R63 R64</p>	
<p>R65 R33.1 Encroachments into Unleased Territory Land immediately adjoining the Block Boundary is permitted where:</p> <p>In RZ3, RZ5 &amp; Commercial zones:</p> <p>a) an eave or roof overhang with a horizontal width of not more than 600mm</p> <p>b) fascias, gutters, downpipes, chimneys, flues, cooling or heating appliances, light fittings, electricity and gas meters, aerials, antennae, pergolas, sun blinds</p> <p>c) *unroofed terraces, landings, steps or ramps to an extent of 1m</p> <p>d) Balcony or Juliette balcony above ground may cantilever into road reserve or rear laneway up to 0.5m</p> <p>e) Where ground floor retail use applies an associated awning, verandah or posted verandah may cantilever to encroach into road reserve up to 0.3m from kerb</p> <p>R66 (*where not more than 1m above finished ground level immediately underneath or adjacent to the adjacent encroachment.) R67</p>	<p>R68 C31.1) Buildings and other structures achieve all of the following:</p> <p>a) consistency with the <i>desired character</i></p> <p>b) reasonable levels of privacy on adjoining <i>residential blocks</i> for <i>dwellings</i> and their associated <i>private open space</i></p> <p>c) reasonable solar access to <i>dwellings</i> on adjoining <i>residential blocks</i> and their associated <i>private open space</i>.</p> <p>d) modulation to the streetscape</p>
<p>R69 R32 Encroachments into the front setback are permitted for one or more of the following building</p>	<p>C32 Buildings and other structures achieve all of the following:</p>

Rules	Criteria
<p>elements: RZ1, RZ3 &amp; RZ5:</p> <ul style="list-style-type: none"> <li>a) an eave or roof overhang with a horizontal width of not more than 600mm</li> <li>b) fascias, gutters, downpipes, light fittings, sun blinds</li> <li>c) landings, steps or ramps, none of which are more than 1m above finished ground level.</li> <li>d) Verandah, posted verandah, balcony, Juliette balcony extending no more than 1 metre into the setback</li> <li>e) Raised deck for the purpose of principal private open space for extent of 1m into the setback.</li> </ul>	<ul style="list-style-type: none"> <li>a) consistency with the <i>desired character</i></li> <li>b) reasonable levels of privacy on adjoining <i>residential blocks</i> for <i>dwellings</i> and their associated <i>private open space</i></li> <li>c) reasonable solar access to <i>dwellings</i> on adjoining <i>residential blocks</i> and their associated private open space.</li> <li>d) ground floor residential separation and surveillance</li> <li>e) ground floor retail activation and accessibility achieved through minimal height separation from footpath to retail entrance/</li> </ul>
<b>3.25 Allowable encroachments – building envelopes</b>	
<p>R70 R33 R71 Encroachments outside the building envelope specified in this element are permitted for one or more of the following: R72 a) flues R73 b) chimneys R74 c) antennae R75 d) aerials R76 e) cooling appliances R77 f) heating appliances. R78 g) lift overrun/shaft providing access to roof terrace R79 h) pv and hotwater systems R80 i) satellite dishes</p>	<p>C33 Buildings and other structures achieve all of the following:</p> <ul style="list-style-type: none"> <li>a) consistency with the <i>desired character</i></li> <li>b) reasonable levels of privacy on adjoining <i>residential blocks</i> for <i>dwellings</i> and their associated <i>private open space</i></li> <li>c) reasonable solar access to <i>dwellings</i> on adjoining <i>residential blocks</i> and their associated <i>private open space</i>.</li> <li>d) reasonable access to communal open space</li> </ul>

<b>4.2 Site open space – RZ1</b>	
<p>R81 R38</p> <p>R82 This rule applies to RZ1.</p> <p>R83 Not less than 40% of the total site area is allocated to one or more of the following:</p> <p>R84 a) <i>communal open space</i> with a minimum dimension of 2.5m located on ground level, podium level and/ or on a roof</p> <p>R85 b) <i>private open space</i> that complies with all of the following -</p> <p style="padding-left: 20px;">R86 i) a minimum dimension of 2.5m</p> <p style="padding-left: 20px;">R87 ii) is associated with dwellings at the <i>lower floor level</i>.</p> <p>R88 Not less than 20% of the total site area is <i>planting area</i>.</p> <p>R89</p>	<p>C38</p> <p>Open space on the site achieves all of the following:</p> <ol style="list-style-type: none"> <li>a) sufficient space for the recreation and relaxation of residents</li> <li>b) sufficient space for planting, particularly trees with deep root systems</li> <li>c) provision for on-site infiltration of stormwater run-off</li> <li>d) provision of outdoor areas that are readily accessible by residents for a range of uses and activities.</li> </ol> <p>One or more of the following matters may be considered when determining compliance with this criterion:</p> <ol style="list-style-type: none"> <li>i) whether the total area of <i>upper floor level private open space</i> contributes to the function of other open space on the site</li> <li>ii) whether any adjoining or adjacent public open space is readily available for the use of residents.</li> </ol>
<b>4.3 Site open space – RZ3, RZ5 and commercial zones</b>	
<p>R90 R39</p> <p>R91 This rule applies to RZ3, RZ5 and commercial zones.</p> <p>R92 Not less than 20% of the total site area is allocated to the following:</p> <p>R93 a) for developments with fewer than 20 <i>dwellings</i>, none of which are <i>apartments</i>, one or more of the following -</p> <p>R94 i) <i>communal open space</i> that complies with all of the following</p> <p style="padding-left: 20px;">R95 a) a minimum dimension of 2.5m</p> <p style="padding-left: 20px;">R96 b) is directly accessible from common entries and pathways</p> <p>R97 ii) <i>private open space</i> that complies with all of the following</p> <p style="padding-left: 20px;">R98 a) a minimum dimension of 2.5m</p> <p style="padding-left: 20px;">R99 b) is associated with <i>dwellings at the lower floor level</i></p> <p>R100 b) in all other cases, <i>communal</i></p>	<p>C39</p> <p>Open space on the site achieves all of the following:</p> <ol style="list-style-type: none"> <li>a) sufficient space for a range of recreational activities for residents</li> <li>b) sufficient space for planting, particularly trees with deep root systems</li> <li>c) a contribution to on-site infiltration of stormwater run-off</li> <li>d) reasonable accessibility to all residents.</li> </ol> <p>One or more of the following matters may be considered when determining compliance with this criterion:</p> <ol style="list-style-type: none"> <li>i) whether the total area of <i>upper floor level private open space</i> contributes to the function of other open space on the site</li> <li>ii) whether any adjoining or adjacent public open space is readily available for the use of residents.</li> <li>iii) in urban areas where there is no capacity for water infiltration</li> </ol>

<p><i>open space</i> that complies with all of the following -</p> <p>R101 i) a minimum dimension of 2.5m</p> <p>R102 ii) is directly accessible from common entries, pathways, stairs and lifts to podiums and roof top terrace access.</p> <p>R103 Not less than 10% of the total site area is <i>planting area</i>.</p>	<p>stormwater treatment measures must be integrated with the design of the <del>residential flat</del> building.</p>
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4.6 Courtyard walls	
<p>R104 R42</p> <p>R105 Courtyard walls are permitted forward of the <i>building line</i> where they comply with all of the following:</p> <p>R106 a) maximum height of 1.8m above <i>datum ground level</i></p> <p>R107 b) a minimum setback to the front boundary complying with the following:</p> <p>R108 i) where the wall encloses the <i>principal private open space</i> of a ground floor <i>dwelling</i> that is located to the west, north-west, north, north-east or east of the <i>dwelling</i> – 0.5m</p> <p>R109 ii) in all other cases - half the front boundary setback nominated elsewhere in this code</p> <p>R110 c) trees and/or shrubs between the wall and the front boundary, in accordance with an approved landscape plan</p> <p>R111 d) a variety of materials or indentations not less than 15m apart where the indents are not less than 1m in depth and 4m in length</p> <p>R112 e) constructed of brick, block or stonework, any of which may be combined with timber or metal panels that include openings not less than 25% of the surface area of the panel</p> <p>R113 f) maintain clear sightlines between vehicles on driveways and pedestrians on public paths in accordance with A2890.1- <i>The Australian Standard for Off-Street Parking</i>.</p>	<p>C42</p> <p>Courtyard walls achieve all of the following:</p> <p>a) consistency with the <i>desired character</i></p> <p>b) visual softening through associated planting</p> <p>c) reduced traffic noise, where necessary</p> <p>d) reasonable privacy to <i>lower floor level</i> windows</p> <p>e) opportunities for natural surveillance of public areas and the street</p> <p>f) the articulation of elements</p> <p>g) a variety of</p> <p>h) reasonable solar access to <i>principal private open space</i>.</p>

4.9 Block Frontage	
<p>R114 R46.1</p> <p>R115 Frontage of blocks to any public road, public open space and/ or pedestrian path excluding rear laneways, shall have residential and/ or retail address at the ground floor level such that the total cumulative length of blank walls sections does not exceed 25% of the total façade length.</p> <p>R116</p>	<p>C46.1</p> <p>Buildings achieve all of the following:</p> <ul style="list-style-type: none"> <li>a) Consistency with the <i>desired character</i></li> <li>b) Reasonable activated primary street and other public frontages based on the function of the dwelling relative to its form</li> <li>c) Facilitate surveillance of public areas</li> <li>d) Facilitate direct pedestrian access from public frontages</li> <li>e) Articulation</li> </ul> <p>Maximise parking access and building service via laneways</p>

5.7 Minimum dwelling size	
<p>R117 R55</p> <p>R118 Minimum <i>dwelling</i> floor areas are as follows:</p> <p>R119 a) studio <i>dwelling</i>s - 36 m<sup>2</sup></p> <p>R120 b) one-bedroom <i>dwelling</i>s - 50 m<sup>2</sup></p> <p>R121 c) 2-bedroom <i>dwelling</i>s - 70 m<sup>2</sup></p> <p>R122 d) <i>dwelling</i>s with 3 or more bedrooms - 95 m<sup>2</sup></p> <p>R123 The minimum <i>dwelling</i> floor area excludes balconies and car parking facilities. Storage within <i>dwelling</i>s is included in the area calculations.</p>	<p>C55</p> <p><i>Dwelling</i> sizes and layouts provide functional living spaces, flexibility in furniture layout, and adequate storage and service areas.</p> <p>The provision of shared facilities (eg. open space, laundry, lounge and storage) may be considered when determining compliance with the criterion.</p>
5.8 Housing diversity	
<p>R124 R56</p> <p>R125 For developments containing 40 or more <i>dwelling</i>s, a combination of dwelling types that include at least two of the following are provided:</p> <ul style="list-style-type: none"> <li>a) studios</li> <li>b) 1-bedroom <i>dwelling</i>s</li> <li>c) 2-bedroom <i>dwelling</i>s</li> <li>d) 3 or more bedroom <i>dwelling</i>s</li> </ul>	<p>C56</p> <p>Housing developments comprising multiple <i>dwelling</i>s are required to achieve all of the following:</p> <ul style="list-style-type: none"> <li>a) a range of housing types</li> <li>b) increased diversity of <i>dwelling</i> types within a neighbourhood.</li> </ul>

**Element 6: Amenity**

Rules	Criteria
<b>6.1 Solar access –other than apartments</b>	
<p>R126 R57</p> <p>R127 This rule applies to multi unit housing other than <i>apartments</i>.</p> <p>R128</p> <p>R129 The floor or internal wall of a daytime living area of a dwelling is exposed to not less than 3 hours of sunlight on the winter solstice (21 June).</p> <p>R130</p> <p>R131 OR</p> <p>R132</p> <p><del>R133</del> The design include outdoor walls adjoining daytime living areas that are reflective white or light colored masonry and reflect light into adjoining daytime living areas for not less than 3 hours on the winter solstice (21 June).</p> <p>R134 <b>Note:</b> Where a development comprises a mixture of <i>apartments</i> and other multi unit housing, this rule will apply to the multi unit housing.</p>	<p>C57</p> <p>The level of internal exposure to solar access directly relates to and is consistent with the intent for:</p> <ul style="list-style-type: none"> <li>a) Is consistent with the <i>desired character</i></li> <li>b) Demonstrably responds to housing typology</li> <li>c) Demonstrably responds to a range of lifestyle choices and amenity expectations for future residents.</li> </ul> <p>Solar acces is required to provide amenity by achieving all of the following:</p> <ul style="list-style-type: none"> <li>a. reasonable level of passive heating</li> <li>b. reasonable passive lighting</li> <li>c. reasonable solar access at varying times of the day to accommodate a range of lifestyles</li> </ul> <p>Note: In meeting these criteria the proposal must consider the objective for the precinct to provide a range of housing types and character areas that accommodate various residents. Specific consideration may be given to the applicable timing when future residents may enjoy the created solar amenity</p>
<b>6.2 Solar access - apartments</b>	
<p>R135 R58</p> <p>R136 This rule applies to <i>apartments</i>.</p> <p>R137 The floor or internal wall of a daytime living area of not fewer than 70% of <i>apartments</i> on a site is exposed to not less than 3 hours of sunlight on the winter solstice (21 June).</p> <p>R138</p> <p>R139 Where outdoor walls adjoining the daytime living areas are reflective white or light colored masonry and capture and bounce reflective light into the daytime living areas this rule is met.</p> <p>R140</p> <p>R141 <b>Note:</b> Where a development comprises a mixture of <i>apartments</i> and other multi unit housing, this rule will apply to</p>	<p>C58</p> <p>The level of internal exposure to solar access directly relates to and is consistent with the intent for:</p> <ul style="list-style-type: none"> <li>a) Is consistent with the <i>desired character</i></li> <li>b) Demonstrably responds to housing typology</li> <li>c) Demonstrably responds to a range of lifestyle choices and amenity expectations for future residents.</li> </ul> <p>Solar acces is required to provide amenity by achieving all of the following:</p>

Rules	Criteria
<p>the <i>apartments</i>.</p>	<ul style="list-style-type: none"> <li>a. reasonable level of passive heating</li> <li>b. reasonable passive lighting</li> <li>c. reasonable solar access at varying times of the day to accommodate a range of lifestyles</li> </ul> <p>Note: In meeting these criteria the proposal must consider the objective for the precinct to provide a range of housing types and character areas that accommodate various residents. Specific consideration may be given to the applicable timing when future residents may enjoy the created solar amenity</p>
<b>6.4 Principal private open space</b>	
<p>R142 R61</p> <p>R143 Each <i>dwelling</i> has at least one area of <i>principal private open space</i> that complies with all of the following:</p> <p>R144 a) located on the site</p> <p>R145 b) has minimum area and dimensions specified in table A9</p> <p>R146 c) are located at ground level or on a space (such as a deck) at the height of the adjoining <i>habitable room</i>, balcony or roof terrace and screened from adjoining public streets and public open space</p> <p>R147 d) is directly accessible from, and adjacent to, a <i>habitable room</i> other than a bedroom</p> <p>R148 e) is not located to the south, south-east or south-west of the <i>dwelling</i>, unless it achieves one or more of the following -</p> <p>R149 i) not less than 3 hours of sunlight onto 50% of the minimum required area on the winter solstice (21 June)*</p> <p>R150 ii) located at an <i>upper floor level</i> and overlooks a public street or public open space.</p> <p>R151 iii) located adjacent to or at an <i>upper floor level</i> and overlooks communal open space and including roof terraces</p> <p>R152</p> <p>R153 *Note: Where the design include outdoor walls adjoining daytime living areas that are reflective white or light colored masonry and reflect light into adjoining daytime living areas for not less than 3 hours on the winter solstice (21 June this rule is met.</p>	<p>C61</p> <p><i>Principal private open space</i> for each <i>dwelling</i> achieves all of the following:</p> <ul style="list-style-type: none"> <li>a) an area proportionate to the size of the <i>dwelling</i></li> <li>b) an extension of the function of the <i>dwelling</i> for relaxation, dining, entertainment, recreation</li> <li>c) directly accessible from the <i>dwelling</i></li> <li>d) service functions such as clothes drying and mechanical services</li> <li>e) reasonable privacy</li> <li>f) reasonable solar access.</li> </ul>

Table A9 - Principal Private Open Space

		<i> dwellings wholly or partially at lower floor level</i>		<i> dwellings located entirely on an upper floor level</i>	
<b>zone</b>	<b>dwelling size</b>	<b>minimum area</b>	<b>minimum dimension</b>	<b>minimum area</b>	<b>minimum dimension</b>
<b>RZ1 RZ3</b>	1 bedroom	18m <sup>2*</sup>	5m	6m <sup>2</sup> plus 2m <sup>2</sup> for service functions**	2.5m
	2 or 3 bedrooms	24m <sup>2*</sup>	6m	6m <sup>2</sup> plus 2m <sup>2</sup> for service functions**	2.5m
	4 or more bedrooms	24m <sup>2*</sup>	6m	8m <sup>2</sup> plus 2m <sup>2</sup> for service functions**	2.5m
<b>RZ4</b>	1 or 2 bedrooms	18m <sup>2*</sup>	3m	6m <sup>2</sup> plus 2m <sup>2</sup> for service functions**	2.5m
	3 or more bedrooms	24m <sup>2*</sup>	3m	8m <sup>2</sup> plus 2m <sup>2</sup> for service functions**	2.5m
<b>RZ5 and commercial zones</b>		18m <sup>2*</sup>	3m	6m <sup>2</sup> plus 2m <sup>2</sup> for service functions**	2.5m

\* Includes allowance of 2m<sup>2</sup> area for service functions such as clothes drying and air conditioners and require screening from public areas as described under Rule R61.

\*\* Service functions include clothes drying and air conditioners and require screening from public areas. Service functions may be provided on a separate balcony to the *principal private open space*.

<b>7.4 Residents' car parking</b>	
<p>R154 R77</p> <p>R155 Car-parking spaces on the site for residents comply with all of the following:</p> <p>R156 a) located behind the <i>front zone</i> (except for <i>apartment</i> car parking)</p> <p>R157 b) can be in tandem where they belong to the same <i>dwelling</i></p> <p>R158 c) do not encroach any property boundaries</p> <p>R159 d) are separated by not less than 1.5m from windows or doors to <i>habitable rooms</i> of <i>dwellings</i> that are not associated with the parking space.</p>	<p>C77</p> <p>Car parking for residents achieves all of the following:</p> <ul style="list-style-type: none"> <li>a) reasonable residential amenity</li> <li>b) consistency with the <i>desired character</i></li> <li>c) public safety</li> <li>d) reasonable opportunities for surveillance</li> <li>e) the reasonable requirements of residents for car parking</li> <li>f) reasonable privacy.</li> </ul>
<p>R160 R79</p> <p>R161 The maximum total width of garage door openings and external width of <i>carports</i> facing a street complies with the following:</p> <p>R162 a) for up to 3 <i>dwellings</i>, the lesser of the following</p> <ul style="list-style-type: none"> <li>R163 i) 6m</li> <li>R164 ii) 50% of the total length of the building façade facing that street</li> </ul> <p>R165 b) for more than 3 <i>dwellings</i>, 40% of the total length of the building façade facing that street and no more than two garages adjoining one another.</p>	<p>C79</p> <p>Garages and car parking structures are consistent with the <i>desired character</i>.</p>

## Single Dwelling Housing

1.1 Plot ratio – single dwelling blocks	
<p>R1</p> <p>This rule applies to <i>single dwelling blocks</i>.</p> <p>a) There is no applicable plot ratio for large blocks. The maximum permitted Gross Floor Area is determined by:</p> <ol style="list-style-type: none"> <li>i. a maximum <i>site coverage</i> of no more than 50%, and</li> <li>ii. rule compliancy for all matters relating to height, setbacks and private open space provisions as set out in this code.</li> </ol> <p>b) in all other cases – not applicable.</p>	<p>Buildings achieve all of the following:</p> <ol style="list-style-type: none"> <li>a) consistency with the <i>desired character</i>,</li> <li>b) does not impact on any regulated tree without consent by the Conservator of Flora and Fauna,</li> <li>c) demonstrate that localised earthworks are minimised.</li> </ol>
1.2 Number of storeys	
<p>R2</p> <p>The number of <i>storeys</i> does not exceed:</p> <ol style="list-style-type: none"> <li>a) RZ1 and RZ3 – 2 with '3<sup>rd</sup> storey element' as described below</li> <li>b) RZ5 - 4</li> <li>c) Commercial Zones – no limit</li> </ol> <p>Any '3<sup>rd</sup> storey element' in RZ1 and in <del>RZ1???, and RZ3</del> achieve all of the following:</p> <ol style="list-style-type: none"> <li>e) meets the requirements of R6, R7, R37 and R38 of this code</li> <li>f) does not exceed a Gross Floor Area of more than 50% of the second storey</li> <li>g) does not exceed a maximum dimension of 50% of the building façade fronting the primary street ((as previously approved in an estate development plan),</li> </ol> <p>For blocks with a primary and secondary street frontage (as previously approved in an estate development plan), the total number of storeys protruding above <i>datum ground level</i> are counted along the primary street frontage. Storeys below datum ground level are not included in this calculation.</p> <p>Any rooftop plant and roof garden , set back and screened from the street, are not included in the maximum number of storeys.</p>	<p>Buildings achieve all of the following:</p> <ol style="list-style-type: none"> <li>a) consistency with the <i>desired character</i>,</li> <li>b) demonstrate the efficient use of land and achieving a compact urban environment,</li> <li>c) modulation to the streetscape.</li> </ol>

1.3 Attics and basement car parking – single dwelling blocks - RZ1 and RZ2	
R3 In RZ1, on <i>single dwelling blocks</i> , <i>attics</i> are not permitted where they are located directly above any 3 storey element of a <i>single dwelling house</i> .	This is a mandatory requirement. There is no applicable criterion.
R4 In RZ1, on <i>single dwelling blocks</i> , <i>basement car parking</i> is not permitted where located directly below any 2 storey element of a <i>single dwelling house</i> .	This is a mandatory requirement. There is no applicable criterion.

1.4 Height of buildings	
R5 Maximum <i>height of building</i> is: b) in RZ1 – 10m c) in RZ3 - 12m d) RZ5 – 20m	C5 Buildings are consistent with the <i>desired character</i> .

1.5 <del>Building envelope – all large blocks, mid sized blocks approved after 5 July 2013 and integrated housing development parcels</del>	
1.6 Sun angle building envelope - all large blocks, mid sized blocks approved after 5 July 2013, compact blocks approved after 5 July 2013 and integrated housing development parcels	
R6 and R7 This rule only applies to: a) <i>large blocks</i> or b) <i>mid sized blocks</i> approved under an estate development plan after 5 July 2013 where a) the block has a slope greater than 10% b) a low side of the block faces predominantly south, southwest or southeast with a bearing of between 135-225 degrees c) the boundary facing predominantly south, southwest or southeast is a shared boundary with an adjoining block  Then the following applies a) 3 <sup>rd</sup> storey elements are not permitted b) Side setbacks (both) must be cumulatively applied to the southern side	C6 and C7 Buildings achieve all of the following: a) consistency with the <i>desired character</i> b) reasonable solar access to <i>dwelling</i> s on adjoining <i>residential blocks</i> and their associated <i>private open space</i> c) reasonable levels of privacy for <i>dwelling</i> s on adjoining <i>residential blocks</i> and their associated <i>private open space</i> . c) do not shadow the windows of <i>habitable rooms</i> (other than bedrooms) of any approved and constructed <i>dwelling</i> on an adjoining <i>residential block</i> at 12pm on the winter solstice (21 June) d) do not overshadow the <i>principal private open space</i> of any approved and constructed <i>dwelling</i> on an adjoining <i>residential block</i> to a greater extent than a 2.4m fence on the boundary at noon on the winter solstice.

<p>setback</p> <p>c) Minimum rear setback shall be doubled to create a continuous band of non-development where PPOS shall be accommodated</p> <p>For this rule -</p> <p><b>Slope</b> means the slope of land, expressed as a percentage, calculated using the difference in <i>datum ground level</i> from the highest to lowest points on the proposed block boundary and the horizontal distance between those points.</p> <p>Figure 1 in the SDHDC does not apply to West Belconnen where this rule is met.</p>	
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1.9 Front boundary setbacks – all blocks	
<p>R11</p> <p>Front boundary setbacks comply with the following:</p> <p>a) <i>large blocks</i> - table 2C</p> <p>b) <i>mid-sized blocks</i> – table 3C</p> <p>c) <i>compact blocks</i> - table 4.</p> <p>The minimum boundary setbacks for corner <i>blocks</i> apply only to one street frontage nominated by the applicant or nominated in a precinct code as a <i>secondary street frontage</i>. Nomination by a precinct code takes precedence.</p> <p>Chamfers may be included in the <i>secondary street frontage</i>, but only if the length of the chamfer is less than the length of the front boundary.</p> <p><b>Note:</b> Chamfers are ordinarily found at the corner of a <i>block</i> at the junction of streets.</p>	<p>C11</p> <p>Front boundary setbacks achieve all of the following:</p> <p>a) consistency with the <i>desired character</i></p> <p>b) the efficient use of the site</p> <p>c) reasonable amenity for residents</p> <p>d) pedestrian scale at street level</p> <p>e) space for street trees to grow to maturity.</p>

Table 2C: Front boundary setbacks – large blocks in subdivisions approved on or after 31 March 2008 (refer appendix 1 diagram 3)

	<b>front boundary setback</b>	<b>exceptions</b>		
		<b>front boundary setback to secondary street frontage</b>	<b>front boundary setback to open space or pedestrian paths wider than 6m</b>	<b>front boundary setback to pedestrian paths less than 6m wide</b>
<b>lower floor level</b>	Min. 4m & max. 6m	Min 3m & max 4m	Min 3m & max 4m	6m
<b>articulation elements* – all floor levels</b>	2m	2m	2m	2m
<b>upper floor level</b>	4m	3m	4m	6m
<b>garage</b>	Minimum of 1.5m behind the front <i>building line</i>			

\*Articulation elements may include architectural element, awning, balcony (inc. juliette balcony), pergolas, porches, shade devices, shopfront, verandahs (inc posted verandah) and the like. A carport is not an articulation element).

Table 3C: Front boundary setbacks – mid sized blocks in subdivisions approved on or after 31 March 2008 (refer appendix 1 diagrams 6, 7 and 8)

	<b>minimum setback to front boundary</b>	<b>exceptions</b>		
		<b>minimum setback to secondary street frontage</b>	<b>minimum setback to open space or pedestrian paths wider than 6m</b>	<b>minimum front boundary setback to pedestrian paths less than 6m wide</b>
<b>all floor levels</b>	Min 4m & max 6m	Min 2m & max 3m	Min. 2m & Max. 3m	2m
<b>articulation elements* – all floor levels</b>	2m	1m	1m	not applicable
<b>garage</b>	Minimum of 1.5m behind the front <i>building line</i>			
<b>Studio off rear lane</b>	1.0m max			

\*Articulation elements may include architectural element, awning, balcony (inc. juliette balcony), pergolas, porches, shade devices, shopfront, verandahs (inc posted verandah) and the like. A carport is not an articulation element).

**Table 4: Front boundary setbacks – compact blocks in subdivisions approved on or after 31 March 2008 (refer appendix 1 diagrams 11)**

	minimum setback to front boundary	exceptions		
		minimum setback to secondary street frontage	minimum setback to open space or pedestrian paths wider than 6m	minimum front boundary setback to pedestrian paths less than 6m wide
<b>all floor levels</b>	Min Nil & Max 4m	Min 1m and Max 2m	Min 1m and Max 2m	Min 1m and Max 2m
<b>articulation elements* – all floor levels</b>	Min Nil & Max 2m	Nil	Nil	not applicable
<b>garage</b>	Minimum of 5.5m from front boundary.			
<b>Studio off rear lane</b>	max 1.0m 50% of the laneway frontages must have studios above garages.			
<b>articulation elements* – studio above garage</b>	1.0m			

\*Articulation elements may include architectural element, awning, balcony (inc. juliette balcony), pergolas, porches, shade devices, shopfront, verandahs (inc posted verandah) and the like. A carport is not an articulation element).

\*\* Reference to rear lane front boundary is removed. No dwellings except studios above garages shall front rear lanes.

Setbacks relating to studios above garages are addressed in this table as a separate item.

**Table 5: Side and rear setbacks – large blocks (refer appendix 1 diagrams 1, 2 and 3)**

	minimum side boundary setback		minimum rear boundary setback
	side boundary 1	side boundary 2	
lower floor level and upper floor level screened or offset windows/ balconies of habitable rooms– external wall	1.5m	1.5m	20% of block depth
upper floor level – unscreened element	3m	3m	20% of block depth
garage or carport	1.5m	1.5m	3m

Table 6B: Side and rear setbacks – mid sized blocks in subdivisions approved on or after 2 October 2009 (refer appendix 1 diagram 7)

	minimum side boundary setback		minimum rear boundary setback
	side boundary 1	side boundary 2	
lower floor level and upper floor level screened or offset windows/ balconies of habitable rooms– external wall	1.0m	1.0m	20% of block depth
upper floor level – unscreened element	3m	3m	20% of block depth

Table 7: Side and rear setbacks – compact blocks (refer appendix 1 diagrams 9,10 and 11)

	minimum side boundary setback		Minimum rear boundary setback
	side boundary 1	side boundary 2	
lower floor level and upper floor level screened or offset windows/ balconies of habitable rooms– external wall	Nil	Nil	Nil
upper floor level – unscreened element	Nil	Nil	20% of block depth
garage or carport*	Nil	Nil	Nil **

\* Blocks less than 5m wide shall have access to garage or carport via rear laneway or secondary street.

\*\* Where garage access is from primary or secondary street frontage.

Rules	Criteria
<b>1.14 Allowable encroachments – setbacks</b>	
<p>R16</p> <p>Encroachments are permitted into one or more of the following setbacks:</p> <ul style="list-style-type: none"> <li>i) minimum side setback</li> <li>ii) minimum rear setback</li> <li>iii) secondary street frontage (as previously approved in an estate development plan)</li> <li>iv) rear setback from a rear laneway with studio above a garage</li> </ul> <p>for one or more of the following building elements:</p> <p>In RZ1, RZ3 &amp; RZ5:</p> <ul style="list-style-type: none"> <li>f) an eave or roof overhang with a horizontal width of not more than 600mm</li> <li>g) fascias, gutters, downpipes, rainwater tanks, chimneys, flues, domestic fuel tanks, cooling or heating appliances, light fittings, electricity and gas meters, aerials, antennae, pergolas, sun blinds</li> <li>h) un-roofed terraces, landings, steps or ramps, none of which are more than 1m above finished ground level.</li> <li>i) Verandah, posted verandah, balcony, Juliette balcony to an extent of 1m into the setback.</li> <li>j) Raised deck for the purpose of principal private open space for extent of 1m into the setback.</li> </ul>	<p>C16</p> <p>Buildings and other structures achieve all of the following:</p> <ul style="list-style-type: none"> <li>a) consistency with the <i>desired character</i></li> <li>b) reasonable levels of privacy on adjoining <i>residential blocks</i> for <i>dwellings</i> and their associated <i>private open space</i></li> <li>c) reasonable solar access to <i>dwellings</i> on adjoining <i>residential blocks</i> and their associated <i>private open space</i></li> <li>d) modulation to the streetscape</li> </ul>
<b>1.14 Allowable encroachments – Unleased Territory Land</b>	
<p>R16a</p> <p>Encroachments into Unleased Territory Land immediately adjoining the Block Boundary is permitted where:</p> <p>In RZ3, RZ5 &amp; Commercial zones:</p> <ul style="list-style-type: none"> <li>f) an eave or roof overhang with a horizontal width of not more than 600mm</li> <li>g) fascias, gutters, downpipes, chimneys, flues, cooling or heating appliances, light</li> </ul>	<p>C16a</p> <p>Buildings and other structures achieve all of the following:</p> <ul style="list-style-type: none"> <li>a) consistency with the <i>desired character</i></li> <li>b) reasonable levels of privacy on adjoining <i>residential blocks</i> for <i>dwellings</i> and their associated <i>private open space</i></li> <li>c) reasonable solar access to <i>dwellings</i> on adjoining <i>residential blocks</i> and their associated <i>private open space</i>.</li> </ul>

Rules	Criteria
<p>fittings, electricity and gas meters, aerials, antennae, pergolas, sun blinds</p> <p>h) *unroofed terraces, landings, steps or ramps to an extent of 1m</p> <p>i) Balcony or Juliette balcony above ground may cantilever into road reserve or rear laneway up to 0.5m</p> <p>j) Where ground floor retail use applies an associated awning, verandah or posted verandah may cantilever to encroach into road reserve up to 0.3m from kerb</p> <p>(*where not more than 1m above finished ground level immediately underneath or adjacent to the encroachment).</p>	<p>d) modulation to the streetscape</p>
<p>R17</p> <p>Encroachments into the front setback are permitted for one or more of the following building elements:</p> <p>RZ1, RZ3 &amp; RZ5:</p> <p>f) an eave or roof overhang with a horizontal width of not more than 600mm</p> <p>g) fascias, gutters, downpipes, light fittings, sun blinds</p> <p>landings, steps or ramps, none of which are more than 1m above finished ground level.</p>	<p>C17</p> <p>Buildings and other structures achieve all of the following:</p> <p>a) consistency with the <i>desired character</i></p> <p>b) reasonable levels of privacy on adjoining <i>residential blocks</i> for <i>dwellings</i> and their associated <i>private open space</i></p> <p>c) reasonable solar access to <i>dwellings</i> on adjoining <i>residential blocks</i> and their associated <i>private open space</i>.</p>

3.2 Fencing – large blocks, mid-sized blocks and compact blocks	
<p>R24</p> <p>For <i>large blocks</i> and <i>mid-sized blocks</i>.</p> <p>Fences are permitted forward of the <i>building line</i> located on or inside the <i>front boundary</i> up to a maximum height of 1.2m or comply with one or more of the following:</p> <p>a) a previously approved estate development plan</p> <p>b) a relevant precinct code</p> <p>c) form a gate to a maximum height of up to 1.8m in an established, vigorous hedge</p> <p>d) otherwise complies with this code (eg courtyard wall provisions)</p> <p>e) is exempt under the <i>Planning and</i></p>	<p>C24</p> <p>Fences comply with the Residential Boundaries Fences General Code.</p> <p>Front and side fences achieve all of the following:</p> <p>a) consistency with the <i>desired character</i></p> <p>b) appropriate proportions and character with respect to -</p> <p>i) height</p> <p>ii) relationship to verge footpath</p> <p>iii) total proportion relative to the building width</p> <p>iv) colour and design features</p> <p>v) transparency and articulation</p>

<p><i>Development Act 2007.</i></p> <p>For <i>compact blocks</i>, fences forward of the building line comply with all of the following:</p> <ul style="list-style-type: none"> <li>a) Define the perimeter of the block with one or more of the following components: fence, gate and/ or hedge</li> <li>b) Are located on or inside the <i>front boundary</i></li> <li>c) Have a maximum height of - <ul style="list-style-type: none"> <li>i) where the courtyard encloses <i>principal private open space</i> – 1.8m</li> <li>ii) in all other cases – 1.2m</li> </ul> </li> <li>d) Meet the requirements of A2890.1-<i>The Australian Standard for Off-Street Parking</i> in relation to site lines for vehicles and pedestrians on public paths or driveways.</li> </ul> <p>Colorbond fences are not permitted forward of the building line under any circumstances for all blocks.</p> <p>This rule specifically supersedes all existing Requirements in the SDHDC relating to fencing (whether or not those rules are specifically included in this code).</p>	<ul style="list-style-type: none"> <li>vi) protection of existing desirable landscape features</li> <li>c) do not obstruct sight lines for vehicles and pedestrians on public paths or driveways in accordance with Australian Standard AS2890.1- <i>Parking facilities, part 1 off-street parking.</i></li> </ul>
<b>3.3 Courtyard walls – large blocks, mid sized blocks and compact blocks</b>	
<p>R25</p> <p>For <i>large blocks and mid sized blocks</i>:</p> <p>Courtyard walls forward of the <i>building line</i> comply with all of the following:</p> <ul style="list-style-type: none"> <li>a) total length of the wall is: <ul style="list-style-type: none"> <li>i) not more than 50% of the width of the <i>block</i>, or</li> <li>ii) not more than 70% where the width of the <i>block</i> at the line of the wall is less than 12m</li> <li>iii) is <i>setback</i> not less than 0.5m from the <i>front boundary</i></li> <li>iv) incorporate shrub planting between the wall/ fence and the front boundary</li> </ul> </li> </ul>	<p>C25</p> <p>Courtyard walls achieve all of the following:</p> <ul style="list-style-type: none"> <li>a) consistent with the <i>desired character</i></li> <li>b) the dominance of the building's facade in the <i>streetscape</i> taking all of the following aspects of the proposed courtyard wall into account <ul style="list-style-type: none"> <li>i) height</li> <li>ii) relationship to verge footpath</li> <li>iii) total proportion relative to the building width</li> <li>iv) colour and design features</li> <li>v) transparency</li> <li>vi) articulation</li> <li>vii) protection of existing desirable landscape features</li> </ul> </li> </ul>

<ul style="list-style-type: none"> <li>v) height does not exceed 1.5m</li> <li>vi) constructed only of brick, block or stonework, any of which may be combined with feature panels</li> <li>vii) constructed and finished to match or complement the dwelling house</li> <li>viii) Meet the requirements of A2890.1-The Australian Standard for Off-Street Parking in relation to site lines for vehicles and pedestrians on public paths or driveways.</li> </ul> <p>For <i>compact blocks</i>: Courtyard walls forward of the <i>building line</i> comply with all of the following:</p> <ul style="list-style-type: none"> <li>a) have a minimum <i>setback</i> from the <i>front boundary</i> of not more than 0m</li> <li>b) have a maximum height of - <ul style="list-style-type: none"> <li>i) where the courtyard encloses <i>principal private open space</i> – 1.8m</li> <li>ii) in all other cases – 1.5m</li> </ul> </li> <li>c) comply with one or more of the following - <ul style="list-style-type: none"> <li>i) constructed of brick, block or stonework, any of which may be combined with feature panels</li> <li>ii) constructed and finished to match or complement the <i>single dwelling house</i></li> </ul> </li> <li>d) Meet the requirements of A2890.1-The Australian Standard for Off-Street Parking in relation to site lines for vehicles and pedestrians on public paths or driveways..</li> </ul> <p>This rule specifically supersedes all existing Requirements in the SDHDC relating to courtyard walls (whether or not those rules are specifically included in this code).</p>	<ul style="list-style-type: none"> <li>viii) tree and shrub planting forward of the wall</li> <li>c) do not obstruct sight lines for vehicles and pedestrians on public paths or driveways in accordance with Australian Standard <i>AS2890.1- Off-Street Parking</i>.</li> </ul>
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<b>4.3 Parking</b>	
<p>R31</p> <p>This Rule applies unless a specific parking arrangement was previously approved in an estate development plan)</p>	<p>C31</p> <p>Car parking arrangements achieve all of the following:</p> <ul style="list-style-type: none"> <li>a) Car parking provided on the <i>block</i> is adequate for residents and visitors.</li> </ul>

<p>In RZ1 and RZ3 the minimum number of car parking spaces provided on the <i>block</i> complies with the following:</p> <ul style="list-style-type: none"> <li>a) for a <i>single dwelling house on compact blocks</i> containing not more than one bedroom – 1</li> <li>b) in all other cases - 2.</li> </ul> <p>For all other zones (including RZ5) there is no applicable rule.</p>	<ul style="list-style-type: none"> <li>b) Reasonable provision for car parking (residents and visitors) is provided through a combination of on block and on- street car parking (as previously approved in an estate development plan).</li> <li>c) Use of public transport, car share, cycling and walking is encouraged to reduce the need for private vehicle ownership.</li> </ul> <p>Parking can be decoupled from dwellings in accordance with the EDP.</p> <p>Sufficient housing is provided without parking to deliver affordable housing and meet differing lifestyle requirements.</p> <p>Opportunities for car- free precincts are facilitated.</p> <p>Note: Parking provisions are to be assessed during the assessment of an estate development plan in relation to the Estate Development objectives and <i>the desired character</i> only.</p>
<p>R32</p> <p>Dimensions of car parking spaces are not less than the following:</p> <ul style="list-style-type: none"> <li>i. single roofed space - 6m x 3m</li> <li>ii. double roofed space - 6m x 5.5m</li> <li>iii. single unroofed space - 5.5m x 3m</li> <li>iv. multiple unroofed spaces side by side - 5.5m x 2.6m</li> <li>v. parallel parking spaces - 6.7m x 2.3m</li> <li>vi. 2.1m minimum clearance to any overhead structure.</li> <li>vii. tandem – 12m x 3m</li> </ul> <p>For this rule dimensions for roofed spaces are internal dimensions.</p>	<p>C32</p> <p>Car parking spaces are sized to allow for all of the following:</p> <ul style="list-style-type: none"> <li>a) convenient access to the vehicle by the driver and passengers</li> <li>b) reasonable side and overhead clearance to vehicles</li> <li>c) reasonable access by vehicles (ie minimal turning movements).</li> </ul>
<p>R36</p> <p>This rule applies to street frontages except frontages to laneways.</p> <p>The maximum total width of garage doors and external width of carports the lesser of the following:</p> <ul style="list-style-type: none"> <li>a) 6m</li> <li>b) 50% of a building façade facing a front boundary.</li> </ul>	<p>C36</p> <p>Garages or carports achieve all of the following:</p> <ul style="list-style-type: none"> <li>a) consistency with the <i>streetscape</i></li> <li>b) consistency with the <i>desired character</i></li> <li>c) compatibility with the façade of the associated <i>dwelling</i>.</li> </ul>

## Element 5: Amenity

Rules	Criteria
<b>5.1 Solar access</b>	
<p>R37</p> <p>For <i>large blocks</i> and <i>mid sized blocks</i>:</p> <p>b) The floor or internal wall of a daytime living area of a dwelling is exposed to not less than 3 hours of direct sunlight <del>between the hours of 9am and 3pm</del> on the winter solstice (21 June)</p> <p>For buildings on <i>Compact blocks</i> in RZ1 and <i>compact blocks</i> in RZ3 where the frontage is greater than 6m at least one of the following apply:</p> <p>c) The floor or internal wall of a daytime living area of a dwelling is exposed to not less than 2 hours of direct sunlight <del>between the hours of 9am and 3pm</del> on the winter solstice (21 June)</p> <p>d) Outdoor walls adjoining the daytime living areas must be reflective white or light coloured masonry to capture and reflect light into adjoining daytime living areas for not less than 3 hours on the winter solstice (21 June).</p> <p>For buildings on <i>compact blocks</i> in RZ3 where frontage is less than 6m and <i>compact blocks</i> in RZ5 there is no applicable rule.</p>	<p>Reasonable solar access to habitable rooms of buildings are provided that:</p> <p>d) Is consistent with the <i>desired character</i></p> <p>e) Demonstrably responds to housing typology</p> <p>f) Demonstrably responds to a range of lifestyle choices and amenity expectations for future residents.</p> <p>Solar access are required to provide amenity by achieving all of the following:</p> <p>a. reasonable level of passive heating</p> <p>b. reasonable passive lighting</p> <p>c. reasonable solar access at varying times of the day to accommodate a range of lifestyles</p> <p>Note: In meeting these criteria the proposal must consider the objective for the precinct to provide a range of housing types and character areas that accommodate various residents. Specific consideration may be given to the applicable timing when future residents may enjoy the created solar amenity.</p>
<b>5.2 Private open space</b>	
<p>R38</p> <p>For <i>large blocks</i>, <i>private open space</i> complies with all of the following:</p> <p>a) has a minimum area equal to 50% of the block area, less 50m<sup>2</sup></p> <p>b) has a minimum dimension of 6m for an area not less than 10% of the block</p> <p>c) at least 50% of the minimum area in a) is <i>planting area</i>.</p> <p><b>Note:</b> Private open space includes principal private open space, as required elsewhere in this element.</p>	<p>C38</p> <p><i>Private open space</i> provides residential amenity on the subject site and protects the residential amenity of adjoining sites by achieving all of the following:</p> <p>a) limits site coverage of buildings and vehicle parking and manoeuvring areas</p> <p>b) provides space for planting</p> <p>c) facilitates on-site infiltration of stormwater run-off</p> <p>d) provides outdoor areas that are readily accessible by residents for a range of uses and activities</p> <p>e) provides space for service functions such as clothes drying and domestic storage.</p>

Rules	Criteria
<p>R39</p> <p>For <i>mid-sized blocks</i>, <i>private open space</i> complies with all of the following:</p> <ul style="list-style-type: none"> <li>a) a minimum area equal to 40% of the block area, less 50m<sup>2</sup></li> <li>b) a minimum dimension as follows - <ul style="list-style-type: none"> <li>i) blocks that are identified in a precinct code as an alternative boundary setback block – 4m for an area not less than 20% of the block area</li> <li>ii) in all other cases - 6m for an area not less than 10% of the block area</li> </ul> </li> <li>c) at least 50% of the minimum area specified in a) is <i>planting area</i>.</li> </ul> <p><b>Note:</b> Private open space includes principal private open space, as required elsewhere in this element.</p>	<p>C39</p> <p><i>Private open space</i> provides residential amenity on the subject site and protects the residential amenity of adjoining sites by achieving all of the following:</p> <ul style="list-style-type: none"> <li>a) limits site coverage of buildings and vehicle parking and manoeuvring areas</li> <li>b) provides space for planting</li> <li>c) facilitates on-site infiltration of stormwater run-off</li> <li>d) provides outdoor areas that are readily accessible by residents for a range of uses and activities</li> <li>e) provides space for service functions such as clothes drying and domestic storage.</li> </ul>
<p>R40</p> <p>For <i>compact blocks</i>, <i>private open space</i> complies with all of the following:</p> <ul style="list-style-type: none"> <li>a) a minimum dimension not less than 3m if provided at ground level</li> </ul> <p><b>Note:</b> Private open space includes principal private open space, as required elsewhere in this element.</p>	<p>C40</p> <p><i>Private open space</i> provides residential amenity on the subject site and protects the residential amenity of adjoining sites by achieving all of the following:</p> <ul style="list-style-type: none"> <li>d) provides outdoor areas that are accessible to residents for a range of uses and activities</li> <li>e) provides space for service functions such as clothes drying and domestic storage.</li> </ul>
<b>5.3 Principal private open space</b>	
<p>R41</p> <p>At least one area of <i>principal private open space</i> on mid and large size blocks complies with all of the following:</p> <ul style="list-style-type: none"> <li>a) minimum area and dimensions specified in table 8 of this code.</li> <li>b) are located at ground level or on a space (such as a deck) at the height of the adjoining habitable room, balcony or roof terrace</li> <li>c) directly accessible from, and adjacent to, a <i>habitable room</i> other than a bedroom</li> <li>d) screened from adjoining public streets and public open space</li> <li>e) located behind the building line, except where enclosed by a courtyard wall</li> </ul>	<p>C41</p> <p><i>Principal private open space</i> achieves all of the following:</p> <ul style="list-style-type: none"> <li>d. is proportionate to the nature of use</li> <li>e. does not detract from the affordability or efficiency of the dwelling</li> </ul> <p>e) reasonable access to sunlight to enable year round use</p>

Rules	Criteria
<p>f) is not located to the south, south-east or south-west of the dwelling, unless it achieves not less than 3 hours of direct sunlight onto 50% of the minimum principal private open space area <del>between the hours of 9am and 3pm</del> on the winter solstice (21 June).</p> <p>At least one area of <i>principal private open space</i> on <i>compact blocks</i> in RZ1 &amp; RZ3 where frontage is greater than 6m (unless the <i>dwelling block</i> is located within 200m of a park or public open space) complies with the all of the following:</p> <ul style="list-style-type: none"> <li>a) is located at ground level, or on a space (such as a deck) at the height of the adjoining habitable room, balcony or roof terrace</li> <li>b) minimum area and dimensions specified in table 8</li> </ul> <p>and additionally must comply with at least one of the following:</p> <ul style="list-style-type: none"> <li>a) achieves not less than 2 hours of direct sunlight <del>between the hours of 9am and 3pm</del> on the winter solstice (21 June)</li> <li>b) outdoor walls adjoining the <i>principal private open space</i> shall be reflective white or light colored masonry to capture to capture and reflect light into adjoining the <i>principal private open space</i> area for not less than 3 hours on the winter solstice (21 June).</li> </ul> <p>For <i>compact blocks</i> in RZ5 there is no applicable rule.</p>	

5.5 Privacy	
<p>R42.1</p> <p>This rule applies to the relationship between <i>unscreened elements</i> of a <i>dwelling</i> and primary windows of <i>dwelling</i>s on adjoining blocks.</p> <p>The relationship between <i>unscreened elements</i> of one <i>dwelling</i> and the <i>primary windows</i> of another <i>dwelling</i> complies with one of the following:</p> <ul style="list-style-type: none"> <li>a) a person (with an eye height of 1.5m) standing at any and every point on the</li> </ul>	<p>C42.1</p> <p><i>Reasonably privacy between dwellings on adjoining blocks is achieved.</i></p>

<p>extremity of an <i>unscreened element</i> of one <i>dwelling</i> shall not have a direct line of sight into the <i>primary window</i> of any adjoining <i>dwelling</i></p> <p>b) the direct line of sight referred to in item a) is a more than 6m.</p>	
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**Table 8: Principal Private Open Space**

<b>Zone</b>	<b>Block type</b>	<b>Dwelling Size*</b>	<b>Minimum Area</b>	<b>Minimum Dimension</b>
<b>RZ4 and RZ5</b>	Compact	all	16m <sup>2</sup>	3m
			10m <sup>2</sup> if provided as a balcony or rooftop	2.5m
<b>all</b>	Compact	all	16m <sup>2</sup>	3m
	Mid sized	all	24m <sup>2</sup>	4m
	Large	all	36m <sup>2</sup>	6m

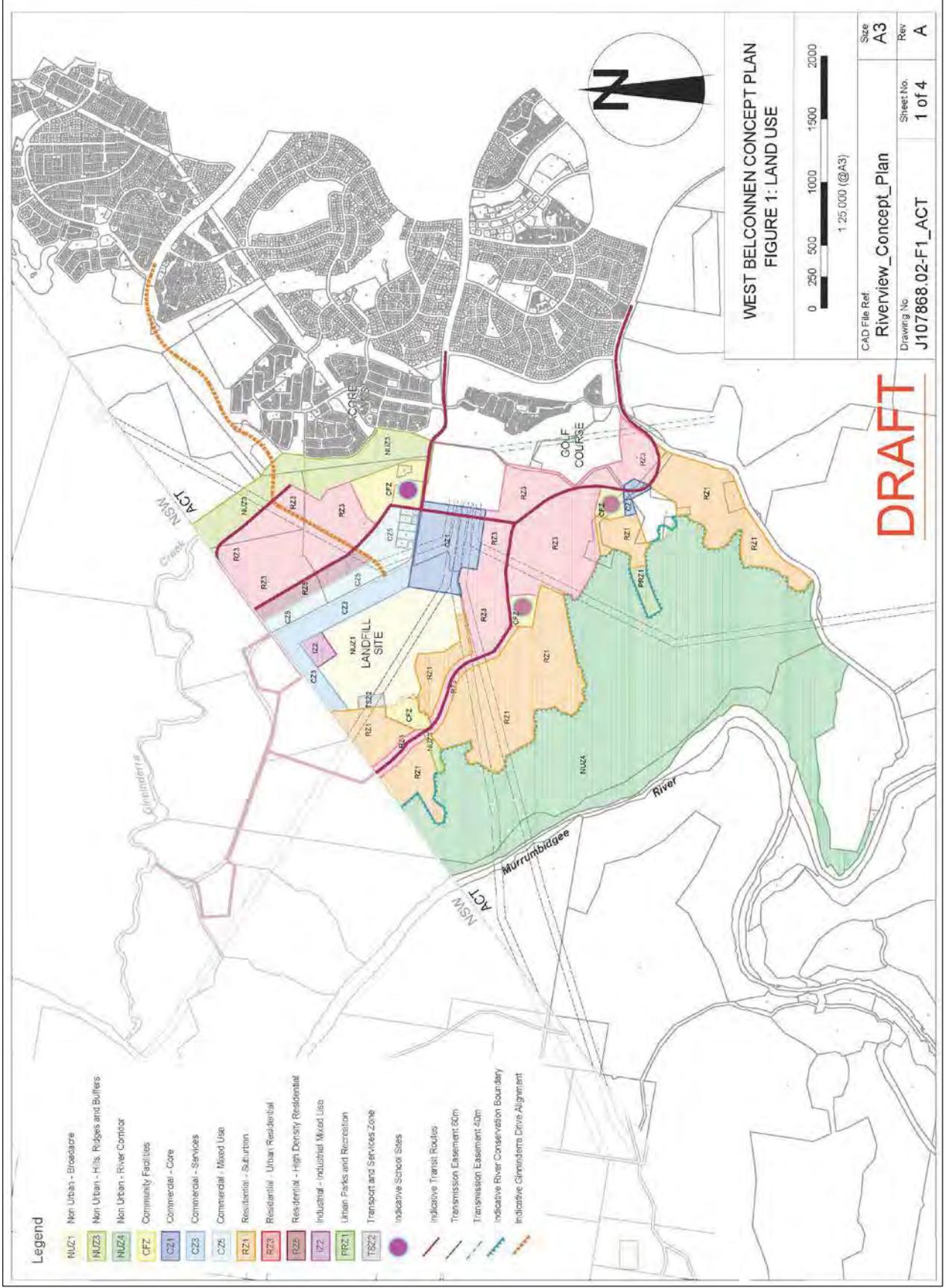
**PLANS**

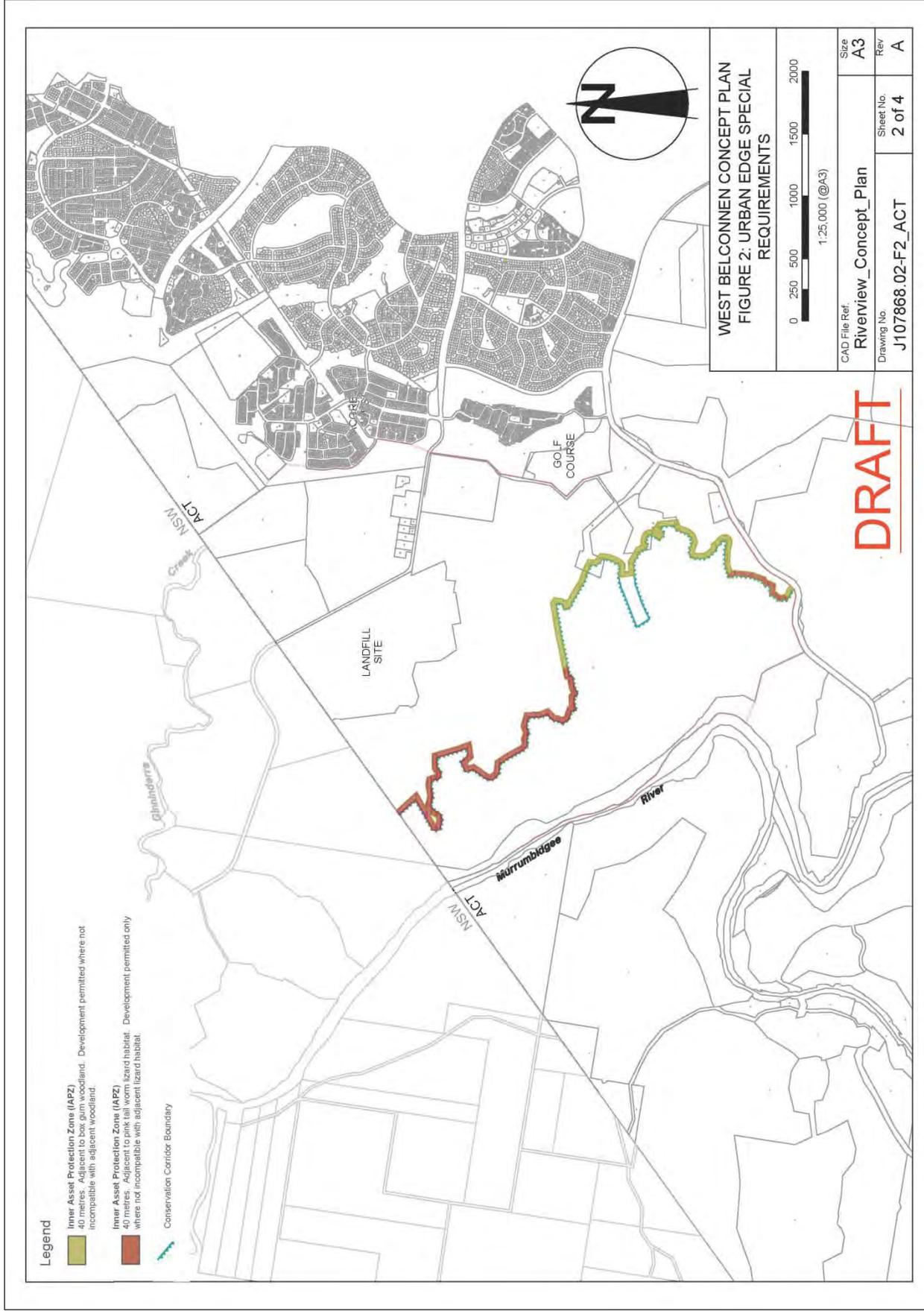
Figure 1: Land use

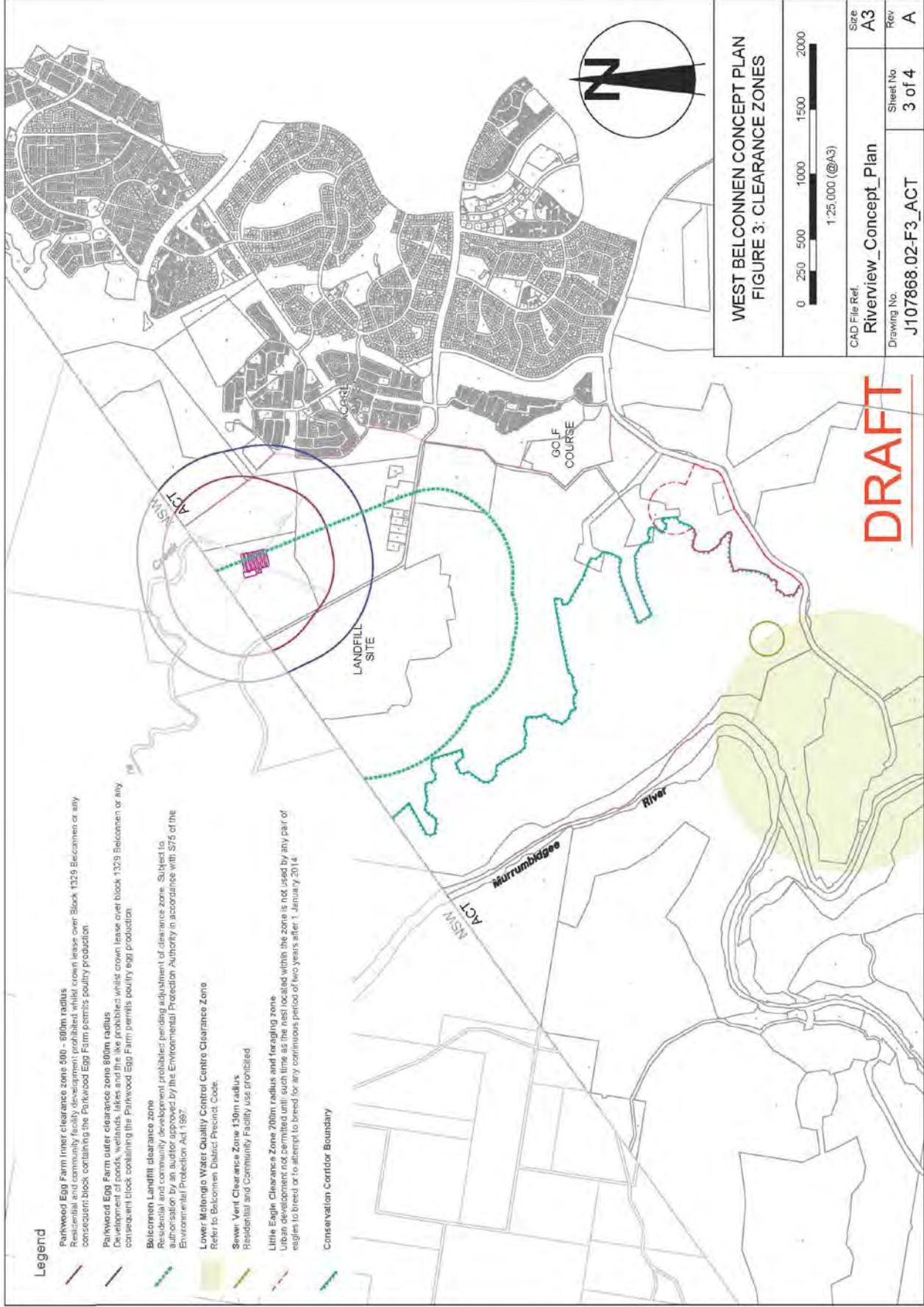
Figure 2: Urban edge special requirements

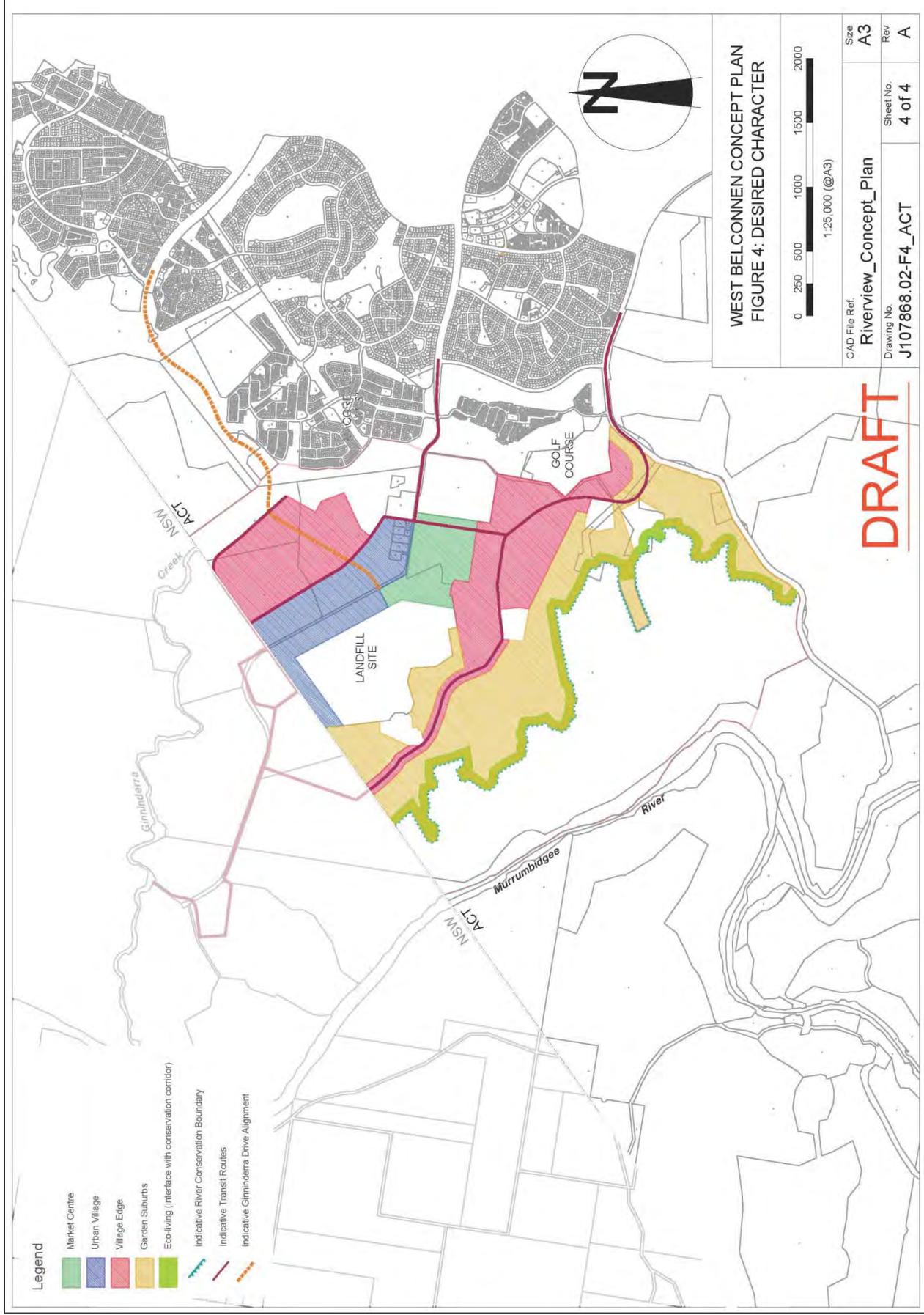
Figure 3: Clearance zones

Figure 4: Desired Character









# APPENDIX C: CONSULTATION PROGRAM

West Belconnen Project Community Consultation Plan			2010 - 2015														
Engagement mechanism	Comment	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
General liaison	Meeting and presentations	Meetings and presentations to a wide variety of stakeholders (total of 165 engagements) during the conceptual stages of project development 2010 - June 2013	■														
	Community liaison	A community liaison officer (CLO) was appointed as the main point of contact between stakeholders and the community and the LDA and the Riverview Group. The CLO's role was to build relationships with key stakeholders.		■	■	■	■	■	■	■	■	■	■	■	■	■	■
	People and Place Group	The establishment of a People and Place Group (PPG) is an effective way to test and refine ideas and incorporate feedback on proposals for the duration of the planning phase. The PPG is guided by a terms of reference and comprised of members who are broadly representative of stakeholder interests. Meetings held at Kippax office.				■	■	■	■	■	■						
	Community Shopfront at Kippax	The project office was relocated to a Kippax shopfront (previously the Commonwealth Bank) location and prominently advertised. Members of the public are invited to "drop in" (9:00 - 5:00 weekdays and to 7:00pm on Tuesdays) and discuss the project with a member of the project team.					■	■	■	■	■	■	■	■	■	■	■
Digital connection	Website	The project website www.talkwestbelconnen.com.au has been used to provide up-to-date and accurate information about the project. The website also provides links to past newsletters, story boards and Frequently Asked Questions. The project website can be used by stakeholders and the community to access the latest information about the project and help to answer or clarify questions they may have.					■	■	■	■	■	■	■	■	■	■	■
	Social media	Social media is an effective way of disseminating information quickly to a large number of people. It can also provide opportunities for engagement and build community relationships. The West Belconnen social media sites were established on the following platforms: Facebook www.facebook.com/westbelconnen, Twitter @westbelconnen, Instagram http://instagram.com/westbelconnen. Project videos were produced and loaded onto YouTube and the project website.					■	■	■	■	■	■	■	■	■	■	■
Newsletters	Newsletter 1 - 6	Newsletters have proved an effective mechanism to reach community members, particularly those who do not usually participate in engagement.					■	■	■	■	■	■	■	■	■	■	■
Master plan design process	Community Vision and Values Workshop	Immediately prior to the Planning and Design Forum a community and stakeholder vision and values workshop was held. Almost 100 people to hear about what is planned at West Belconnen. The community also took the opportunity to provide feedback on important things we need to keep in mind as we plan and design the new community.					■										
	Planning & Design Forum Day 1 community feedback session; Day 2 Informal Pin Up Session; Day 3 Community Open House	The PDF was an interactive series of workshops which combined the skills and experience of decision makers, technical experts and key community representatives to jointly explore project challenges and design options. Bringing together all the main stakeholders in one place at one time allowed for open and constructive discussion, a shared project understanding and culminated in the preliminary draft West Belconnen Master Plan.					■										
	Community Information and Feedback Sessions												■				

## West Belconnen Project Community Consultation Plan

### List of stakeholders

Stakeholder Group	Subgroups
Government (Elected Representative)	<p><b>Local members</b></p> <ul style="list-style-type: none"> <li>Federal Members for the ACT (Canberra and Fraser) and NSW (Hume)</li> <li>Federal Senators for the ACT</li> <li>ACT – MLAs for Ginninderra</li> <li>NSW - Member for Burrinjuck</li> <li>Yass Valley Shire Councillors</li> </ul> <p><b>Other Elected representatives</b></p> <ul style="list-style-type: none"> <li>ACT Government Ministers and Members of the Opposition</li> <li>Relevant NSW Government Ministers and members of the opposition</li> <li>Commonwealth Parliament Joint Standing Committee on the ACT</li> </ul>
Government Departments/Agencies	<p><b>ACT Government Directorates:</b></p> <ul style="list-style-type: none"> <li>Chief Minister and Treasury</li> <li>Community Services</li> <li>Economic Development</li> <li>Education and Training</li> <li>Environment and Sustainable Development</li> <li>Health</li> <li>Justice and Community Safety</li> <li>Territory and Municipal Services</li> </ul> <p><b>NSW Government Departments/Agencies</b></p> <ul style="list-style-type: none"> <li>Department of Premier and Cabinet</li> <li>Department of Planning and Infrastructure</li> <li>South East Local Land Services</li> <li>Office of the Environment and Heritage</li> <li>Department of Education and Communities</li> <li>Fire and Rescue NSW</li> <li>Rural Fire Service</li> <li>Roads and Maritime Service</li> <li>ACTEW Water</li> </ul> <p><b>Australian Government</b></p> <ul style="list-style-type: none"> <li>National Capital Authority</li> <li>Department of the Environment</li> </ul> <p><b>Yass Valley Shire Council</b></p>
Community Groups and Organisations	<p><b>Community Groups</b></p> <ul style="list-style-type: none"> <li>Belconnen Community Council</li> <li>ACT Equestrian Association</li> <li>Bicentennial National Trail Association</li> </ul>

## West Belconnen Project Community Consultation Plan

### List of stakeholders

Stakeholder Group	Subgroups
	<b>Conservation Groups</b> Greening Australia Conservation Council ACT and SE Region Ginninderra (Creek) Catchment Group Murrumbidgee Catchment Management Authority Friends of Grasslands Murrumbidgee - Ginninderra Gorges National Park Group
	<b>Welfare/Peak Organisations</b> ACT Shelter ACTCOSS ACT Youth Coalition
	<b>Church's and religious groups</b> Kippax Uniting Care Other
	<b>Indigenous Organisations</b> Buru Ngunawal Aboriginal Corporation King Brown's Tribal Group Ngarigu Currawong Clan Little Gudgenby River Tribal Council
	<b>Universities and Schools</b> University of Canberra Canberra Institute of Technology Kingsford Smith School
	<b>Local Sporting Groups and Clubs</b> Magpies golf club Kippax District playing fields user groups
	<b>Local Arts Associations</b> Strathnairn
Services Providers	Belconnen Community Services
Local Residents	Individual members of the public expressing an interest in the project Immediate neighbours Surrounding suburbs and neighbourhoods
Local Businesses	Kippax Group Centre Holt Local Centre

## APPENDIX D: ADVICE FROM ESDD



**ACT**  
Government  
Environment and  
Sustainable Development

Our Ref: 14/09940

Mr Tony Adams  
Director  
AT Adams Consulting  
3/28 Bougainville Street  
MANUKA ACT 2603

Dear Mr Adams

### West Belconnen rezoning proposal

I refer to your email of 6 January 2014 on finalising the preliminary risk assessment (PRA) and the scope for a planning report on the West Belconnen development ('the proposal'). The matters raised in your letter of 1 April 2014 to Mr McEvoy from Strategic Planning Division in the Environment and Sustainable Development Directorate (ESDD) about a single housing code for cross-border development are also addressed in this reply. I apologise for the delay in responding.

I am advised you met with ESDD staff on 7 February 2014 and discussed:

- the requirements of a Strategic Environmental Assessment (SEA) in the *Planning and Development Act 2007* (P&D Act) and a Strategic Assessment (SA) in the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act);
- the possibility of concurrent statutory public consultation periods including Amendment to the National Capital Plan and Amendment of the Yass Local Environment Plan by relevant authorities and government agencies; and
- the intention to prepare a single report covering the requirements of each statutory process.

Discussions with ESDD staff to date on the form of a planning report which will inform the decision on whether to prepare a Territory Plan variation has focussed upon the requirements of a SEA outlined in part 5.6 of the P&D Act. As you are aware the process and minimum requirements for a SEA are established under the *Planning and Development Regulations 2008*. Since those discussions took place, The Riverview Group (TRG) has confirmed it will progress both a Strategic Assessment under the EPBC Act and seek an EIS exemption under the P&D Act.

The environmental assessment component of a SEA would duplicate the Commonwealth environmental approval process TRG has indicated that it intends to

progress. ESDD acknowledges the extensive environmental studies undertaken for the project and noted in the PRA.

On this basis together with the proposed Amendment to the National Capital Plan and revised PRA of 14 March 2014 that responds to agency comments, I believe that it is now more appropriate to progress the Variation to the Territory Plan through a planning report, as opposed to a SEA.

A scope for a planning report is enclosed. The scope draws fully upon the revised PRA and it provides sufficient scope to cover matters required by the key statutory processes, including consideration for the preparation of a Territory Plan variation.

ESDD supports the submission of a single planning report for statutory processes.

ESDD has consulted the National Capital Authority (NCA) on the PRA. Notwithstanding this, it is recommended that you request confirmation directly from the NCA, the Federal Department of the Environment and any other relevant government agency of the suitability of a single report for each statutory process.

In addition to the PRA, the following matters are also required to be addressed in the planning report:

- due to the development site being near steep valley sides in close proximity to major waterways and the practicality of providing significant / adequate water quality infrastructure, the use of standard ACT water sensitive urban design guidelines for the development may not be adequate to prevent significant adverse environmental impact. Extra planning and modelling is required to demonstrate how the proposed measures put in place will achieve the appropriate level of protection to the waterways; and
- information from the 1992 West Belconnen Environmental Impact Assessment as part of the planning report's history of the site.

An assessment of issues in the planning report will be undertaken, in consultation with agencies, before a decision is taken about the preparation of a Territory Plan variation. At that time, ESDD will be able to confirm the statutory public consultation timeline. ESDD will work towards concurrent public consultation on all statutory processes where it is practicable.

Based on the information provided to date, ESDD does not support the proposal in your letter of 1 April 2014 to establish new zones and a stand-alone housing code for West Belconnen. As part of the proposal, you are welcome to review the relevant codes in the Territory Plan and prepare advice for the consideration of ESDD regarding the content of a precinct code that would, to the extent of any inconsistency, preside over controls in development and general codes. ESDD technical officers can be contacted to arrange pre-lodgement discussions should you wish to discuss draft precinct code controls.

The primary ESDD contact for the West Belconnen project continues to be Justin McEvoy who can be contacted on (02) 6205 3466. Any specific queries on the Territory Plan variation process can be directed to Alix Kaucz of the Territory Plan section on (02) 6205 0864.

Yours sincerely

Jim Corrigan  
Executive Director Planning Delivery  
/ 4 May 2014

## SCOPE FOR PLANNING REPORT – WEST BELCONNEN

A planning report is to be prepared for the planning and land authority, within the Environment and Sustainable Development Directorate, to inform the authority's consideration a Territory Plan variation (Part 5.6 of the *Planning and Development Act 2007*).

**Refer to the Planning Report information sheet for lodgement requirements, including administration fees and number of copies.**

The report is to respond to each of the following parts:

**A. A non-technical executive summary, including a summary of the recommendations**

**B. The aims and objectives of the**

- *an outline of the content of the proposal;*
- *the main aims and objectives of the proposal; and*
- *the proposal's relationship with any relevant plans or planning policies (for example, the Territory Plan).*

**C. Description of the proposal**

- *a comprehensive description of the site and the proposal;*
- *current planning policy;*
- *the intended development and use;*
- *all proposed changes to the Territory Plan;*
- *existing and proposed land tenure arrangements and administrative responsibilities.*

**D. Description of the site**

- *a description, including a description of the environmental, social and economic characteristics of*
  - *the area covered by the proposal; and*
  - *the region around the area covered by the proposal*

**E. Territory strategic planning policy context**

- *a discussion of proposed planning policy change and proposed use/development in the context of the ACT's planning framework and strategic planning policy;*
- *consistency with the Statement of Strategic Directions Statement in the Territory Plan including, but not limited to, Territory and regional policies regarding settlement patterns, rural lands and waste management;*
- *identification of any associated changes, e.g. an amendment to the National Capital Plan or public land register; and*  
*assessment against Transport for Canberra policy document.*

**F. National Capital Plan**

- *an assessment of relevant principles and policies of urban development in the National Capital Plan including, but not limited to, the National Capital Open Space Network and the impact on stock of broadacre zoned land in West Belconnen;*
- *a master plan that addresses lands that have a special characteristics of the National Capital and the factors relevant to the determining the extent of designated areas.*

**G. New South Wales / Cross Border Issues**

- *A discussion and assessment of the issues including of the proposal against relevant provisions of current NSW legislation, planning and development policies;*
- *proposed changes to these policies;*
- *inter-government arrangements;*
- *existing and proposed land tenure arrangements and administrative responsibilities;*
- *implications on the ACT from development across the border; and*
- *an assessment of the relevant provisions in the National Capital Plan, including metropolitan context.*

**H. Justification for the planning policy changes**

- *an assessment of the opportunity cost of the proposed change, and discussion of changes in the economic, social, natural and physical environment that necessitate the change;*
- *a discussion of the advantages and disadvantages of all alternative development options including the following: development demands/trends; demographic change/ trends; employment distribution/ opportunities;*
- *viability of existing use, including an assessment of the value of agricultural land;*
- *other potential uses of the site;*
- *alternative sites considered and reasons why they were discounted.*

**I. Description of the environmental characteristics of any area likely to be significantly affected by the proposal**

- *any existing environmental issues that are relevant to the proposal, including those relating to any areas of particular environmental importance; and*
- *any plans to improve environmental management objectives relating to territory and national legislation and relevant policies, for example Climate Change Action Plan 2.*

**J. Impact assessment**

- *an assessment of the likely environmental effects of the proposal, including the results and findings of the matters identified in this scoping document including, but not limited to, the uses retained within and adjacent to the study area;*
- *discussion of both the suitability and capability of the land for the proposed use/development with a clear conclusion; and*
- *discussion of potential (positive and negative) impacts on the social, physical and natural environment if the land is developed to its full capacity as proposed.*

**K. Alternative development options**

- *outline the reasons for selection (non selection) of alternatives;*
- *description of how the alternatives were assessed; and*
- *details of any difficulties in assessing the alternatives*

**L. Mitigation**

- *the measures proposed to avoid or manage any significant adverse environmental effects of implementing the proposal, including a description of any measures required for monitoring*

**M. Consultation**

- *Consultation undertaken;*
- *Issues raised; and*
- *Consideration of the issues in the proposal*

**N. Findings and recommendations**

The following documents are to be included in attachments to the report

- the scoping document;
- the consultation plan; and
- the consultation report.



## **SUBJECT West Belconnen - acknowledgment of request for Territory Plan Variation**

EXECUTIVE DIRECTOR

### **PURPOSE**

To obtain your signature on a letter of acknowledgement for the request from Riverview Projects (ACT) for a territory plan variation for West Belconnen.

### **BACKGROUND**

After finalisation of the West Belconnen Preliminary Risk Assessment (PRA), it was agreed that a Territory Plan rezoning will be progressed, and a scoping letter for a planning report was prepared by Planning Investigations Branch, with input from Territory Plan Section. The proponent lodged the planning report and a formal request for a Territory Plan Variation on 26 June 2014.

### **ISSUES**

The planning report and associated documents will be circulated to agencies for comment over the coming weeks, and any request for changes will be forwarded to the proponent, before the planning report will be accepted as finalised. A brief to the Minister will subsequently be prepared to ask for direction on a proposed TPV.

### **POTENTIAL MEDIA IMPLICATIONS**

There are no potential media implications at this stage.

### **BUDGET IMPLICATIONS**

Base budget applies.

### **CONSULTATION STRATEGY**

Input on the scoping was received from TAMSD, the EPA, and others within ESDD.

**CRITICAL DATE**

The proponent submitted the request for a TPV letter on 26 June 2014. In the normal course of business an acknowledgment letter is sent to the proponent soon after the proposal letter is submitted.

**RECOMMENDATIONS**

That you sign the acknowledgment letter to the proponent, at Attachment A.

Alix Kaucz  
Territory Plan Section

Date: 1 July 2014

Thanks!

AGREED/~~NOT AGREED~~/~~NOTED~~/~~PLEASE DISCUSS~~

EXECUTIVE DIRECTOR

Date: 2 July 2014

Contact Officer: Hannes Botha  
Position: Senior Planner (a/g)  
Team: Territory Plan  
Phone: 71773

Date: 1 July 2014



**ACT**  
Government

Environment and  
Sustainable Development

Director  
Riverview Projects (ACT)  
PO Box 3980  
MANUKA ACT 2603

Dear

Thank you for your letter of 26 June 2014 requesting a Territory Plan variation for West Belconnen, and for your submission of a planning report and associated background documents.

The planning report and background documents will be circulated to relevant agencies for comment. The Environment and Sustainable Development Directorate will advise you of the outcome of the review, and any changes required to these documents as a result of agency input.

Yours sincerely

Jim Corrigan  
Executive Director  
Z July 2014

## Territory Plan Section assessment of West Belconnen Planning Report

SCOPE	REVIEW COMMENTS
<p>A. A non-technical executive summary, including a summary of the recommendations</p>	<p>Mostly complies with scope.</p>
<p>B. The aims and objectives</p> <ul style="list-style-type: none"> <li>• an outline of the content of the proposal;</li> <li>• the main aims and objectives of the proposal; and</li> <li>• the proposal's relationship with any relevant plans or planning policies (for example, the Territory Plan).</li> </ul>	<p>Mostly complies.</p>
<p>C. Description of the proposal</p> <ul style="list-style-type: none"> <li>• a comprehensive description of the site and the proposal;</li> <li>• current planning policy;</li> <li>• the intended development and use;</li> <li>• all proposed changes to the Territory Plan;</li> <li>• existing and proposed land tenure arrangements and administrative responsibilities.</li> </ul>	<p>Mostly complies.</p> <p style="color: red;">Need to add description of current permissible uses in each existing zone (from zone development tables), including development codes applicable.</p> <p style="color: red;">Need to add description of current precinct map and code provisions (eg clearance areas) in current planning policy discussion, including current precinct map(s).</p>
<p>D. Description of the site</p> <ul style="list-style-type: none"> <li>• a description, including a description of the environmental, social and economic characteristics of the area covered by the proposal; and the region around the area covered by the proposal</li> </ul>	<p>Complies.</p>
<p>E. Territory strategic planning policy context</p> <ul style="list-style-type: none"> <li>• a discussion of proposed planning policy change and proposed use/development in the context of the ACT's planning framework and</li> </ul>	<p>Complies.</p>

<p>strategic planning policy;</p> <ul style="list-style-type: none"> <li>• consistency with the Statement of Strategic Directions Statement in the Territory Plan including, but not limited to, Territory and regional policies regarding settlement patterns, rural lands and waste management;</li> <li>• identification of any associated changes, e.g. an amendment to the National Capital Plan or public land register; and assessment against Transport for Canberra policy document.</li> </ul>	
<p>F. National Capital Plan</p> <ul style="list-style-type: none"> <li>• an assessment of relevant principles and policies of urban development in the National Capital Plan including, but not limited to, the National Capital Open Space Network and the impact on stock of broadacre zoned land in West Belconnen;</li> <li>• a master plan that addresses lands that have a special characteristics of the National Capital and the factors relevant to the determining the extent of designated areas.</li> </ul>	<p>Complies.</p>
<p>G. New South Wales/ Cross Border Issues</p> <ul style="list-style-type: none"> <li>• A discussion and assessment of the issues including of the proposal against relevant provisions of current NSW legislation, planning and development policies;</li> <li>• proposed changes to these policies;</li> <li>• inter-government arrangements;</li> <li>• existing and proposed land tenure arrangements and administrative responsibilities;</li> <li>• implications on the ACT from development across the border; and</li> <li>• an assessment of the relevant provisions in the National Capital Plan, including metropolitan context.</li> </ul>	<p>Complies.</p>

<p>H. Justification for the planning policy changes</p> <ul style="list-style-type: none"> <li>• an assessment of the opportunity cost of the proposed change, and discussion of changes in the economic, social, natural and physical environment that necessitate the change;</li> <li>• a discussion of the advantages and disadvantages of all alternative development options including the following: development demands/trends; demographic change/ trends; employment distribution/ opportunities;</li> <li>• viability of existing use, including an assessment of the value of agricultural land;</li> <li>• other potential uses of the site;</li> <li>• alternative sites considered and reasons why they were discounted.</li> </ul>	<p>Partly complies.</p> <p>4<sup>th</sup> dot point (alternative sites) not addressed.</p>
<p>I. Description of the environmental characteristics of any area likely to be significantly affected by the proposal</p> <ul style="list-style-type: none"> <li>• any existing environmental issues that are relevant to the proposal, including those relating to any areas of particular environmental importance; and</li> <li>• any plans to improve environmental management objectives relating to territory and national legislation and relevant policies, for example Climate Change Action Plan 2.</li> </ul>	<p>Partly complies.</p> <p>Second dot point (improving environmental management objectives) not adequately addressed, eg how proposal relates to ACT climate change policy.</p>
<p>J. Impact assessment</p> <ul style="list-style-type: none"> <li>• an assessment of the likely environmental effects of the proposal, including the results and findings of the matters identified in this scoping document including, but not limited to, the uses retained within and adjacent to the study area;</li> <li>• discussion of both the suitability and capability of the land for the proposed use/development with a clear conclusion; and</li> <li>• discussion of potential (positive and negative) impacts on the social,</li> </ul>	<p>Complies.</p>

<p>physical and natural environment if the land is developed to its full capacity as proposed.</p>	
<p>K. Alternative development options</p> <ul style="list-style-type: none"> <li>• outline the reasons for selection (non selection) of alternatives;</li> <li>• description of how the alternatives were assessed; and</li> <li>• details of any difficulties in assessing the alternatives</li> </ul>	<p>Partly complies.</p> <p>Dot points two and three were not adequately addressed.</p>
<p>L. Mitigation</p> <ul style="list-style-type: none"> <li>• the measures proposed to avoid or manage any significant adverse environmental effects of implementing the proposal, including a description of any measures required for monitoring</li> </ul>	<p>Complies (via PRA).</p>
<p>M. Consultation</p> <ul style="list-style-type: none"> <li>• Consultation undertaken;</li> <li>• Issues raised; and</li> <li>• Consideration of the issues in the proposal</li> </ul>	<p>Complies.</p>
<p>N. Findings and recommendations</p>	<p>Complies/not applicable.</p>
<p>The following documents are to be included in attachments to the report</p> <ul style="list-style-type: none"> <li>• the scoping document;</li> <li>• the consultation plan; and</li> <li>• the consultation report.</li> </ul>	<p>Partly complies.</p> <p>Consultation reports (e.g. Elton 2013)-West Belconnen PDF outcomes reportv2-Elton-131220-v1 and (Elton 2014a) Consultation Report 50514a-Elton-140505-v1) need to be consolidated and attached to main report.</p>

**From:** [Radice, David](#)  
**To:** [Botha, Johannes](#)  
**Subject:** FW: West Belconnen draft Planning Report agency circulation  
**Date:** Monday, 14 July 2014 8:33:20 AM

---

Hi Hannes,

The below arrived in the Terrplan inbox last week.

Regards,

**TerrPlan** | General Enquiries Inbox | [~@terrplan@act.gov.au](mailto:~@terrplan@act.gov.au)  
**Territory Plan Section** | Environment and Planning | **ACT Government**  
Dame Pattie Menzies House, Challis Street, Dickson | GPO Box 158 Canberra ACT 2601  
[www.environment.act.gov.au](http://www.environment.act.gov.au) | [www.actpla.act.gov.au](http://www.actpla.act.gov.au)

 Please consider the environment before printing this e-mail

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**From:** Kendall, Dylan  
**Sent:** Tuesday, 8 July 2014 10:51 AM  
**To:** Terrplan  
**Subject:** RE: West Belconnen draft Planning Report agency circulation

Territory Plan Section,

Table 1 of the bushfire assessment report indicates that no Outer Asset Protection Zone (OAPZ) is required in the ACT section of the development – this is not correct. However, there are enough treatment options to ensure that ACT bushfire fuel management standards can be met in the required OAPZ and hence there is no objection to the rezoning application from the bushfire management perspective.

Thanks,

DK

---

**From:** Botha, Johannes **On Behalf Of** Terrplan  
**Sent:** Friday, 4 July 2014 2:22 PM  
**To:** Kugathas, Kuga; Coffey, Gerard; Keirnan, Catherine; Quirk, Mike; Mulvaney, Michael; Chester, Heath; Tennent, Simon; Jeffrey, David; Paynter, Patrick; Lewis, Robyn; Jeffress, Stuart; Kendall, Dylan; Joseph, Gabriel; Hill, Diana; Roberts, David; Gill, Tony; Allen, Richard; Styles, Clive; Lhuede, Nick; [enworks@actewagl.com.au](mailto:enworks@actewagl.com.au);  
EPAPanningLiaison; OConnell, Jennifer; Teasdale, Jonathan; Traves, Alan; [andrew.smith@natcap.gov.au](mailto:andrew.smith@natcap.gov.au); Oshyer, Aaron; Billing, Dale; Chapman, Maggie; ESDD Strategic Planning Referrals  
**Cc:** Noack, Bronwyn; McEvoy, Justin; McKeown, Helen; Brown, Robin; Hubert, Pamela; Rebecca Sorensen; Uddin, Kamal; Radice, David  
**Subject:** West Belconnen draft Planning Report agency circulation

Dear all

The Environment and Sustainable Development Directorate has received a draft planning report for the proposed West Belconnen development. This follows the preparation of a Preliminary Risk Assessment (PRA) which formed the basis for a scoping document guiding the preparation of the planning report.

The project will require a Variation to the Territory Plan, Amendment to the National Capital Plan and environmental clearances under both ACT and Commonwealth legislation.

The proposed development is subject to an agreement between the ACT Government and the Riverview Group. The Riverview Group is managing the project on behalf of the Land Development Agency.

ESDD is now referring the draft planning report to the agencies who provided input into the PRA and/or scoping document. This gives the agencies the opportunity to review the report and provide advice on any changes that are required to the documents submitted (i.e. amendments to the contents, additional information to be included etc). During this time the Territory Plan Section does an assessment of the draft planning report as well. This information is then provided to the proponent and any required changes made to the documents.

The draft planning report and a selection of supporting or background documents can be accessed via the following link and associated instructions:

Username: XXXXXXXXXX

Password: [REDACTED]

Link: [http://www.actpla.act.gov.au/e-circulations/territory\\_plan\\_matters\\_currently\\_on\\_agency\\_circulation/draft\\_variations/draft\\_variation\\_351\\_open\\_for\\_comment](http://www.actpla.act.gov.au/e-circulations/territory_plan_matters_currently_on_agency_circulation/draft_variations/draft_variation_351_open_for_comment)

**Reminder: The username and password are case sensitive.**

A comprehensive list of background documents and reports is attached to this e-mail. If you require access to a specific document not on the website, please contact David Radice from ESDD's Territory Plan Section on 6205 4070 or [Terrplan@act.gov.au](mailto:Terrplan@act.gov.au).

Your comments (including nil comment) can be sent by email to the Territory Plan Section at [Terrplan@act.gov.au](mailto:Terrplan@act.gov.au) **by COB Friday 18 July 2014.**

All comments received will be reviewed and forwarded to the Riverview Group to finalise the planning report.

**Please also note the attached letter from the Director-General of Economic Development Directorate.**

Territory Plan Section  
Planning Delivery  
Environment and Sustainable Development Directorate

**From:** Rebecca Sorensen  
**To:** [Terrplan](#)  
**Subject:** RE: West Belconnen draft Planning Report agency circulation [SEC=UNOFFICIAL]  
**Date:** Tuesday, 15 July 2014 9:35:50 AM

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## Security: Unofficial

Good morning

Please note that the NCA has received a similar report from the West Belconnen project proponent to support an amendment to the National Capital Plan. The NCA understands that the reports contain similar content (at least similar themes) however the report to the NCA contains a greater focus on matters of 'National Capital' and Commonwealth interest. The Authority will be considering the proposal at their meeting in August 2014. The NCA will continue liaising with ACT Government representatives as the project progresses, including advising relevant people of the outcomes of the Authority's consideration of the proposal next month.

Please feel free to contact me should you have any questions at this stage regarding the NCA's involvement in the West Belconnen project.

Kind regards

**Rebecca Sorensen** | Acting Director Strategic Planning  
National Capital Authority

 (02) 6271 2851 |  6273 4427

**National Capital Authority** | Treasury Building, King Edward Terrace, PARKES ACT 2600  
GPO Box 373, CANBERRA ACT 2601 |  [www.nationalcapital.gov.au](http://www.nationalcapital.gov.au) | Twitter: @NCA\_Media

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**From:** Botha, Johannes [mailto:Johannes.Botha@act.gov.au] **On Behalf Of** Terrplan

**Sent:** Friday, 4 July 2014 2:22 PM

**To:** Kugathas, Kuga; Coffey, Gerard; Keirnan, Catherine; Quirk, Mike; Mulvaney, Michael; Heath Chester; Tennent, Simon; Jeffrey, David; Patrick Paynter; Lewis, Robyn; Jeffress, Stuart; Kendall, Dylan; Joseph, Gabriel; Hill, Diana; Roberts, David; Gill, Tony; Allen, Richard; Styles, Clive; Lhuede, Nick; [enworks@actewagl.com.au](mailto:enworks@actewagl.com.au);

EPAPanningLiaison; OConnell,

Jennifer; Teasdale, Jonathan; Traves, Alan; Andrew Smith; Oshyer, Aaron; Billing, Dale; Chapman, Maggie; ESDD Strategic Planning Referrals

**Cc:** Noack, Bronwyn; McEvoy, Justin; McKeown, Helen; Brown, Robin; Hubert, Pamela; Rebecca Sorensen; Uddin, Kamal; Radice, David

**Subject:** West Belconnen draft Planning Report agency circulation

Dear all

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The project will require a Variation to the Territory Plan, Amendment to the National Capital Plan and environmental clearances under both ACT and Commonwealth legislation.

The proposed development is subject to an agreement between the ACT Government and the Riverview Group. The Riverview Group is managing the project on behalf of the Land Development Agency.

ESDD is now referring the draft planning report to the agencies who provided input into the PRA and/or scoping document. This gives the agencies the opportunity to review the report and provide advice on any changes that are required to the documents submitted (i.e. amendments to the contents, additional information to be included etc). During this time the Territory Plan Section does an assessment of the draft planning report as well. This information is then provided to the proponent and any required changes made to the documents.

The draft planning report and a selection of supporting or background documents can be accessed via the following link and associated instructions:

Username: 

Password: 

Link: [http://www.actpla.act.gov.au/e-circulations/territory\\_plan\\_matters\\_currently\\_on\\_agency\\_circulation/draft\\_variations/draft\\_variation\\_351\\_open\\_for\\_comment](http://www.actpla.act.gov.au/e-circulations/territory_plan_matters_currently_on_agency_circulation/draft_variations/draft_variation_351_open_for_comment)

**Reminder: The username and password are case sensitive.**

A comprehensive list of background documents and reports is attached to this e-mail. If you require access to a specific document not on the website, please contact David Radice from ESDD's Territory Plan Section on 6205 4070 or [Terrplan@act.gov.au](mailto:Terrplan@act.gov.au).

Your comments (including nil comment) can be sent by email to the Territory Plan Section at [Terrplan@act.gov.au](mailto:Terrplan@act.gov.au) **by COB Friday 18 July 2014.**

All comments received will be reviewed and forwarded to the Riverview Group to finalise the planning report.

**Please also note the attached letter from the Director-General of Economic Development Directorate.**

Territory Plan Section  
Planning Delivery  
Environment and Sustainable Development Directorate

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This email, and any attachments, may be confidential and also privileged. If you are not the intended recipient, please notify the sender and delete all copies of this transmission along with any attachments immediately. You should not copy or use it for any purpose, nor disclose its contents to any other person.  
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**From:** [Chaston, Daisy](#)  
**To:** [Terrplan](#)  
**Subject:** West Belconnen Planning Report  
**Date:** Wednesday, 16 July 2014 3:34:18 PM  
**Attachments:** [20140716 - Advice - West Belconnen Planning Report.pdf](#)  
[image001.png](#)

---

Hello,

Heritage advice attached.

Daisy.

**Daisy Chaston | Heritage Archaeologist**

Phone: 6207 7379 | Email: [daisy.chaston@act.gov.au](mailto:daisy.chaston@act.gov.au)

**ACT Heritage** | Environment and Planning | **ACT Government**

Dame Pattie Menzies House 16 Challis Street Dickson | GPO Box 158 Canberra ACT 2601

[www.environment.act.gov.au](http://www.environment.act.gov.au)

[ACTGov\\_EaSD\\_inline](#)





**ACT**  
Government

Environment and Planning

Phone: 6207 7379

File ref: West Belconnen General

Contact Officer: Daisy Chaston

Johannes Botha  
Territory Plan Section  
Environment and Planning  
GPO Box 158  
Canberra ACT 2601

Dear Mr Botha

### **Draft Planning Report for West Belconnen**

Thank you for referring the Draft Planning Report for West Belconnen (the Report), for ACT Heritage (Heritage) comment.

The Report is a planning study to provide the basis for a rezoning (and subsequent urban development) of the land at West Belconnen. The land is proposed for rezoning by way of a variation to the Territory Plan under the procedures set out in Section 57 of the *Planning and Development Act 2007*.

The Report's Schedule of Documents includes a Conservation Management Plan for Belconnen Farm by Eric Martin and Associates, which was approved by the ACT Heritage Council in March 2014.

A draft cultural heritage assessment (CHA), aimed at identifying Aboriginal, European, and natural heritage values within the West Belconnen study area was completed by Biosis in January 2014. However, this CHA was not submitted to Heritage for approval soon after its completion as would normally be expected, and was not included in the Schedule of Documents for the Report. Heritage sought this document independently, and received it via email from Biosis, on 9 July 2014.

Under section 51 of the *Heritage Act 2004*, an offence is committed if a person fails to take reasonable steps to report the discovery of an Aboriginal place or object as soon as practicable (i.e. within 5 days). Heritage is concerned that the CHA was not referred shortly after completion in January 2014, and not included in the Schedule of Documents.

An initial review of the CHA reveals that additional clarification and information will be required before Heritage can facilitate approval of the document by the Heritage Council. However, this process will require more time than is allowable within the schedule permitted for comments on the Report.

Substantial additional work on the CHA, and further, targeted and detailed heritage studies will be required before Heritage can facilitate approvals or offer any in-principle agreement with the proposed development of West Belconnen. In addition, Heritage is concerned that illustrative master plans are already being considered for West Belconnen prior to approvals of the CHA being issued. The approved CHA should inform the master plans for West Belconnen rather than be submitted after the preparation of master plans.

The CHA recommends additional archaeological investigations in areas of archaeological potential. Such investigations frequently result in significant discoveries of heritage places and objects that require long term, in-situ conservation. Constraints such as these should be considered, in consultation with relevant regulatory authorities (i.e. Heritage, and the ACT Heritage Council), prior drafting of estate development plans and master plans.

Please contact Daisy Chaston (phone 6207 7379) if you wish to discuss this further.

Yours sincerely

Anna Gurnhill  
**Acting Manager**  
**ACT HERITAGE**

 July, 2014

**From:** Parsons, Brett  
**To:** [Terrplan](#)  
**Cc:** [Botha, Johannes](#)  
**Subject:** ACTEW comments on Draft Variation 351 - West Belconnen Development  
**Date:** Friday, 18 July 2014 12:45:27 PM

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ACTEW has reviewed the draft planning report for the proposed West Belconnen development and makes the following comments:

- **LMWQCC odour emissions**

The proposed future urban development is in close proximity to the Lower Molonglo Water Quality Control Centre. The clearance zone plan attached to the Draft West Belconnen Structure Plan identifies the current LMWQCC clearance zone under the Belconnen District Precinct Code. The draft planning report acknowledges that this zone was determined some time ago and that operational characteristics of the plant may have evolved since that time.

It is noted that a statement is made on page 75 of the Planning Report;

*“ A preliminary modelling assessment of odour dispersion around LMWQCC shows that the plant should be able to operate under normal circumstances without causing odour nuisance outside the 1 km buffer” .*

ACTEW cannot accept a vague statement by a third party that the plant *“should be able to operate..... without causing impact”* . Such assessment must be based on data that reflects current plant operation and capability. Any capital or even operational changes are required to achieve this , these may take some years to implement. ACTEW cannot take the risk that proposed community in the West Belconnen Area will be impacted, prior to such measures being fully implemented.

The report noted as CEE2014b was not included in the documents available on the website. This is to be supplied formally to ACTEW. ACTEW seeks supporting studies, that include models that demonstrate of the fact that under current operation no impact is likely. ACTEW will seek for these documents to be Peer Reviewed by an industry expert. ACTEW expects the land will not be released for denser residential development in areas where potential odour impact from LMWQCC exceeds limits specified by the Environment Regulator’s Interim Odour Control Guidelines. If modifications to the plant are required ACTEW is of expects sufficient time will be provided to achieve these and that the costs associated with such changes are accounted for in the decision making process surrounding the feasibility and timing of the proposed West Belconnen land release.

- **Water services**

ACTEW has confirmed that there is adequate capacity in the bulk water network to meet the long term requirements for both the ACT land and NSW land nominated within the development area. An additional service reservoir is likely to be required to service the NSW land which due to the topography, will need to be located in the vicinity of the landfill site. See our comments below in relation to other relevant considerations for servicing the NSW land.

There is a section of elevated land fronting Stockdill Road that is currently zoned as ‘Hills, Ridges and Buffer’ under the National Capital Plan. This area is approximately the same as the area

shown as 'little eagle clearance zone' on the clearance zone plan in the Draft West Belconnen Structure Plan. Due to its elevation, this section will need to be "intermediate Zone" pressure that would require additional servicing via a dedicated supply system. This will potentially require extensive capital expenditure and additional long term operational costs for ACTEW Water to service this relatively small area. These additional servicing costs should be taken into account in deciding whether this area is appropriate for future urban development.

- **Sewer services**

ACTEW has reviewed the West Belconnen Sewer and Water Concept Plan prepared by Browns and

is generally happy with the options looked at and presented - it seems like they've identified most of the main issues. However, there are a few things that we believe need to be looked at and considered in the final decision making process:

- Triple Bottom Line analysis of options? We are under the impression that there was a requirement from the ACT government for TBL analysis to be done for all options?
- Longsections? We would like longsection drawings of all of the options so we can have a look at the proposals.
- Minimum grades? We still need to have a closer look at the loading points to see if these are acceptable.

With regards to the individual options:

#### Ginninderra Catchment

- ACTEW believes there is still an option for the tunnel option to cross the creek line to save building such a long tunnel? This may involve a tunnel shaft in the potential Golden Sun Moth territory but we are not sure if it was fully looked at? If possible, it could result in a cost saving.
- Ventilation costs? The vortex drop in option G1 and the pump station option G2 (at the pump station) will require some ventilation. Has this been looked at and costed?
- Connection to the GST. This is a very deep structure, the connection will need to be looked at closely in design.

#### Murrumbidgee Catchment

- There is potential for a number of sub options to be included in the servicing of this catchment. There is potential for construction of pipe bridges and tunnels across creek lines and/or ridges. We could then service some of these areas by local sewers draining to the tunnels. The extra cost of these sub options would need to be weighed against savings from a lower total length of trunk sewer and less of the catchment needing to be pumped. We are not sure if that was looked at in the options.
- Ventilation costs at the pump stations? Same as above.

Looking at the preliminary costings and the issues facing all options, ACTEW's preferred servicing

strategy would be options G1 for the Ginninderra catchment and M2 (perhaps slightly modified) for the Murrumbidgee catchment.

- **Cross-border considerations**

Before ACTEW is able to supply water or sewerage services to the NSW section of the development, arrangements will need to be put in place between the governments, Yass Valley Council and ACTEW to ensure that ACTEW is able to meet all necessary regulatory requirements and identifies cost apportionment for:

- capital infrastructure - both the capital infrastructure physically located in NSW and part of the ACT infrastructure (to take into account the larger capacity of this infrastructure to service both the ACT and NSW portions); and
- ongoing operational expenditure; and
- asset renewals.

Regards,

[www.actew.com.au](http://www.actew.com.au)

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**From:** [McKeown Helen](#)  
**To:** [Terrplan](#)  
**Cc:** [Mulvaney Michael](#)  
**Subject:** FW: West Belconnen draft Planning Report agency circulation - extension of time for submissions  
**Date:** Thursday, 24 July 2014 8:37:40 AM  
**Attachments:** [Comments on West Belconnen Planning Study doc](#)

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Comments on the West Belconnen Planning Study attached

Helen McKeown | Conservator Liaison

**Phone 02 6207 2247** |

**Nature Conservation Policy** | Environment and Planning | **ACT Government**

Dame Pattie Menzies House, Challis Street, Dickson | GPO Box 158 Canberra ACT 2601 | [www.environment.act.gov.au](http://www.environment.act.gov.au)

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**From:** Mulvaney, Michael  
**Sent:** Wednesday, 23 July 2014 12:44 PM  
**To:** McKeown, Helen  
**Subject:** FW: West Belconnen draft Planning Report agency circulation - extension of time for submissions

Helen attached are my comments – which are about correcting details within the planning report rather than being comments of major consequence to proposed planning. Can you send me back your reply for filing

Thanks Michael

**Phone 02 62059964** |

**Conservation Planning and Research, Natural Policy Branch** | Environment and Sustainable Development | **ACT Government**

GPO Box 158 Canberra ACT 2601 | [www.environment.act.gov.au](http://www.environment.act.gov.au)

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**From:** Botha, Johannes **On Behalf Of** Terrplan  
**Sent:** Friday, 18 July 2014 4:27 PM  
**To:** Kugathas, Kuga; Coffey, Gerard; Keirnan, Catherine; Quirk, Mike; Mulvaney, Michael; Chester, Heath; Tennent, Simon; Jeffrey, David; Paynter, Patrick; Lewis, Robyn; Jeffress, Stuart; Kendall, Dylan; Joseph, Gabriel; Hill, Diana; Roberts, David; Gill, Tony; Allen, Richard; Styles, Clive; Lhuede, Nick; 'enworks@actewagl.com.au';  
EPAPanningLiaison; Teasdale, Jonathan; Traves, Alan; 'andrew.smith@natcap.gov.au'; Oshyer, Aaron; Billing, Dale; Chapman, Maggie; ESDD Strategic Planning Referrals; Parsons, Brett; Gurnhill, Anna; Cloos, Karl  
**Cc:** Noack, Bronwyn; McKeown, Helen; Brown, Robin; Hubert, Pamela; Uddin, Kamal; Radice, David  
**Subject:** West Belconnen draft Planning Report agency circulation - extension of time for submissions

Dear All

Due to the magnitude of the background material supplied with the draft planning report, many agencies have requested an extension of time for submitting their comments.

We are therefore extending the due date for comments to **COB Friday 25 July 2014**.

Please note that this is a non-statutory circulation, that gives agencies the opportunity to review the draft report prior to its finalisation by the proponent. There will be a further chance for formal comments once the draft territory plan variation process starts.

Kind regards

Territory Plan Section

Planning Delivery

Environment and Sustainable Development Directorate

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**From:** Botha, Johannes **On Behalf Of** Terrplan  
**Sent:** Friday, 4 July 2014 2:22 PM  
**To:** Kugathas, Kuga; Coffey, Gerard; Keirnan, Catherine; Quirk, Mike; Mulvaney, Michael; Chester, Heath; Tennent, Simon; Jeffrey, David; Paynter, Patrick; Lewis, Robyn; Jeffress, Stuart; Kendall, Dylan; Joseph, Gabriel; Hill, Diana; Roberts, David; Gill, Tony; Allen, Richard; Styles, Clive; Lhuede, Nick; [enworks@actewagl.com.au](mailto:enworks@actewagl.com.au);  
EPAPanningLiaison; OConnell, Jennifer; Teasdale, Jonathan; Traves, Alan; [andrew.smith@natcap.gov.au](mailto:andrew.smith@natcap.gov.au); Oshyer, Aaron; Billing, Dale; Chapman, Maggie; ESDD Strategic Planning Referrals  
**Cc:** Noack, Bronwyn; McEvoy, Justin; McKeown, Helen; Brown, Robin; Hubert, Pamela; Rebecca Sorensen; Uddin, Kamal; Radice, David

**Subject:** West Belconnen draft Planning Report agency circulation

Dear all

The Environment and Sustainable Development Directorate has received a draft planning report for the proposed West Belconnen development. This follows the preparation of a Preliminary Risk Assessment (PRA) which formed the basis for a scoping document guiding the preparation of the planning report.

The project will require a Variation to the Territory Plan, Amendment to the National Capital Plan and environmental clearances under both ACT and Commonwealth legislation.

The proposed development is subject to an agreement between the ACT Government and the Riverview Group. The Riverview Group is managing the project on behalf of the Land Development Agency.

ESDD is now referring the draft planning report to the agencies who provided input into the PRA and/or scoping document. This gives the agencies the opportunity to review the report and provide advice on any changes that are required to the documents submitted (i.e. amendments to the contents, additional information to be included etc). During this time the Territory Plan Section does an assessment of the draft planning report as well. This information is then provided to the proponent and any required changes made to the documents.

The draft planning report and a selection of supporting or background documents can be accessed via the following link and associated instructions:

Username [REDACTED]

Password: [REDACTED]

Link: [http://www.actpla.act.gov.au/e-circulations/territory\\_plan\\_matters\\_currently\\_on\\_agency\\_circulation/draft\\_variations/draft\\_variation\\_351\\_open\\_for\\_comment](http://www.actpla.act.gov.au/e-circulations/territory_plan_matters_currently_on_agency_circulation/draft_variations/draft_variation_351_open_for_comment)

**Reminder: The username and password are case sensitive.**

A comprehensive list of background documents and reports is attached to this e-mail. If you require access to a specific document not on the website, please contact David Radice from ESDD's Territory Plan Section on 6205 4070 or [Terrplan@act.gov.au](mailto:Terrplan@act.gov.au).

Your comments (including nil comment) can be sent by email to the Territory Plan Section at [Terrplan@act.gov.au](mailto:Terrplan@act.gov.au) **by COB Friday 18 July 2014.**

All comments received will be reviewed and forwarded to the Riverview Group to finalise the planning report.

**Please also note the attached letter from the Director-General of Economic Development Directorate.**

Territory Plan Section  
Planning Delivery  
Environment and Sustainable Development Directorate

## Comments on West Belconnen Draft Variation 351 - Planning Study

In the following, suggested additions are shown in red, suggested deletions are shown as ~~strikethrough~~.

### Section 7.1

The EPBC assessment is concerned particularly with endangered and vulnerable species and ecological communities listed as such under the EPBC legislation. At West Belconnen ~~these~~ **there are important occurrences of** ~~include the~~ Pink Tailed Worm Lizard, Yellow Box Red Gum Grassy Woodland and the Golden Sun Moth. These are also listed under the ACT legislation.

**The Murrumbidgee corridor is also likely to be occasionally used by nomadic threatened birds moving across the landscape such as the Swift Parrot and Regent Honeyeater, while under the EPBC Act there are some protections for birds of prey, like the White-breasted Sea-eagle and wetland and migratory species which also utilise the corridor.**

**The vulnerable Superb Parrot breeds nearby in Central Molonglo and overflies and may occasionally forage within the Planning study area.**

**The threatened Murray cod, Macquarie perch, Trout Cod and Silver Perch are also known from, or could potentially occur, in the waters of the Murrumbidgee in the vicinity of the study area.**

The Strategic Assessment and subsequent EPBC approval (if granted) will satisfy both the requirements of the ACT legislation and the Commonwealth regarding threatened species and communities. **This would also involve consideration of woodland birds listed as threatened in the ACT, which are known to either breed or forage within the woodlands and riparian vegetation of the study area. In addition impacts on the Murray River Crayfish, listed as vulnerable in the ACT would also be considered**

### 7.3 NATURE CONSERVATION ACT 1980

The Nature Conservation Act establishes the Conservator of Flora and Fauna as a statutory position and empowers the Conservator to make declarations regarding species, ecological communities or processes that are of environmental concern. Species and communities may be declared to be vulnerable or endangered in which case special provisions will apply to any development that may impact on the species or community. At West Belconnen there **twelve** such species or communities as follows:

- Pink tailed Worm Lizard (*Aprasia parapulchella*)
- Golden Sun moth (*Synemon Plana*)
- Little Eagle
- Varied Sitella
- White-winged Triller
- Superb Parrot
- Painted Honeyeater
- Murray River Crayfish
- Macquarie Perch
- Silver Perch
- Trout Cod
- Yellow Box red gum grassy woodland

This SEA is addressing these three matters in accord with the requirements of the Nature Conservation Act and the Planning and Development Act.

### Section 8.5

Following more detailed environmental investigations the great bulk of central Molonglo was removed ~~subject to a 20 year moratorium~~ from the proposed development area. This was reflected in the subsequent finalisation of variations to both the National Capital and Territory plans. Central Molonglo is currently devoted to agriculture and conservation uses, providing a substantial buffer between East Molonglo and the West Molonglo/West Belconnen development. ~~When and if the central Molonglo development proceeds, a buffer, if warranted, can be provided within the central Molonglo area between it and west Molonglo, as was originally proposed.~~ The consequence of this is that the Stockdill Drive buffer function is no longer required. ~~The proximity of this land to substantial facilities and services at Holt (for example the Kingsford Smith School, Kippax centre, Drake Brockman Drive) means that its development for urban purposes would incur minimal public infrastructure expenditure and would rate highly on efficiency measures.~~

**Commented [MM1]:** The Minister for Planning (Barr) announced to the Legislative Assembly that Central Molonglo would not be developed at all

### Section 10.1

At West Belconnen there are known to be three MNES **that occupy the area at all times** as follows:

- Pink tailed worm lizard (*Aprasia parapulchella*)
- Golden sun moth (*Synemon Plana*)
- Yellow box red gum grassy woodland

**As well as several species of birds that may occasionally move through and forage in the area, such as the Superb Parrot, Swift Parrot and Regent Honeyeater and migratory species.**

**The listed Murray Cod, Macquarie Perch, Silver Perch and Trout Cod may occur within the Murrumbidgee River, just outside of the development area**

Consequently the provisions of the EPBC Act apply. The Act provides mechanisms for the assessment of impacts of proposed development on MNES. The appropriate mechanism in the case of West Belconnen has been determined by DOE to be a "strategic assessment", under part 10 of the Act. Strategic assessments provide a mechanism to move away from project-by-project impact assessment and examine proposed developments at a broader landscape scale in relation to the requirements of the EPBC Act.

A strategic assessment to meet the requirements of the EPBC Act with regard to the ~~three~~ **three MNES matters described listed** above is being conducted concurrently with the rezoning proposal that is the subject of this report

### Section 10.3

The outcome of these deliberations to date is that the West Belconnen project is recommending an alignment as shown on Figure 18. **The advice from the Planning and Environment Directorate has been that options that avoid the offset areas should be vigorously pursued.**

....offset areas. This is a matter for assessment under the provisions of the EPBC Act and has been referred to the Commonwealth Department of the Environment.

~~It is anticipated that approval for the alignment will be granted on the basis that an appropriate additional environmental offset arrangement is made to compensate for the impact on the Macgregor and Jarramlee areas.~~

The Macgregor West offset area was established in response to the impacts resulting from the Macgregor West 2 Estate development. The offset was comprised of establishing a protected tenure

with accompanying management obligations over a part of the total development area that was avoided as a result of likely impacts to golden sun moth (*Synemon plana*). The location of this offset was determined opportunistically by the presence of golden sun moth on the development site as opposed to it having been selected through a process of strategic evaluation. **Nevertheless the offset contains one of the largest populations of the moth in the ACT.** Other environmental values within this offset area are limited.

The Jarramlee offset was established to compensate for the unavoidable impacts of the development of Lawson South as a result of impacts to golden sun moth principally, but also natural temperate grassland. This offset was selected on the basis of proximity to the Macgregor West offset and availability of land that met the general requirements of the then draft policy on the use of offsets under the EPBC Act. This land was under a Hills Ridges and Buffers zone under the Territory Plan and was unlikely to be considered for urban development. Accordingly the value of the Jarramlee offset was the result of increasing the total area of co-located offset sites and increasing the protection status of the subject land to also include a management plan to maintain the values for which it was established.

**Together the Jaramalee and MacGregor offsets constitute the fourth largest habitat area of the moth remaining in the ACT.**

Both offset areas continue to be managed under the conditions of separate agreements with the Commonwealth and while sharing a common boundary, are not managed together. Additionally, both offsets were assessed and approved under the 2007 draft policy on the use of biodiversity offsets under the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act).

The proposed extension to Ginninderra Drive would result in a narrow corridor of impact through components of each offset area impacting on known golden sun moth habitat. While this impact is unavoidable and undesirable, it **may** present an opportunity to enhance management of golden sun moth habitat in the west Belconnen area more broadly. This is as a result of the strategic approach that is being taken not only to project planning but also for the identification, protection and management of matters of national environmental significance (MNES) under the EPBC Act. Due to the impact of the proposed Ginninderra Drive extension on established offset areas in addition to impacts on the values for which the offset areas were established, this is regarded as significant and as a result consideration of further offsets **may be** appropriate.

**Offsets are only an option when all feasible and prudent measures to avoid and mitigate impact have been undertaken. As offsets are design to be enduring and legally secure, offsetting an offset is problematic.**

#### **Section 11.1.2 Bushfires**

The strategies used to reduce the bushfire risk associated with the re-zoning, include:

- Setbacks from bushfire prone vegetation (APZs)
- **Location of IAPZ outside of the conservation area**
- Fuel management within the **IAPZ OAPZ** that is appropriate for the management of Pink Tailed Worm Lizard habitat and the Yellow Box – Blakely's Red Gum Woodland

#### **Section 16.5.1 SUPERB PARROT**

The Superb Parrot is listed as vulnerable under both the Environment Protection and Biodiversity Conservation Act 1999 (C'th) and the Nature Conservation Act 1980 (ACT).

The Superb Parrot is a **mainly** a summer breeding visitor to the ACT, primarily in the northern third of the Territory, where increasing numbers of birds have been observed in recent years.

**Needs to include a Section 16.5.4 Woodland Birds**

The Murrumbidgee corridor is an important corridor for bird movement both regionally and in a national context. It is utilised by a large number of migratory honeyeaters and other birds moving in a north south direction. In addition the corridor in the vicinity of the planning area is habitat of several threatened species of woodland birds, including the White-winged Triller and Varied Sitella.

**Needs to include a Section 16.5.5 Perunga Grasshopper**

The Perunga Grasshopper is a cryptic species that is very hard to survey for. It restricted to the ACT and surrounding areas of NSW and is listed as a vulnerable species in the ACT. It has only been recorded from 21 locations in the ACT and several of these have been from native grassland in rocky riparian areas, in which the Pink-tailed Worm Lizard has also been recorded. It is possible that this grasshopper also occurs within the habitat area of this lizard within the study area.

**Needs to include a Section 16.5.6 Aquatic Species**

The Murrumbidgee River directly below the planning study area is habitat of the threatened Murray Cod, Macquarie Perch and Murray Crayfish and may be habitat of the Trout Cod and Silver Perch. Care will need to be taken that unsustainable recreational fishing and adverse changes in water quality do not result from the development.

Fishing and other recreation pressure can also directly impact on non-target species such as the platypus or degrade riparian habitat. Protection of riparian habitat will be an important consideration of management planning within the Conservation Area.

**Section 19.2 Impacts and mitigation of risks**

Specific risk	Potential effects	Proposed mitigation	Ref. in this report
1	Biodiversity and nature conservation Pink Tailed Worm Lizard	Known to exist on project site. Potential for habitat destruction.	91% of habitat areas (within ACT), <b>including core habitat area is to be protected within conservation corridor.</b>  Remaining 9% of <b>isolated usually poor quality habitat</b> considered to be not necessary for preservation of the species, conservation corridor to be managed for the protection of the species and for rehabilitation to increase habitat areas.
2	Golden Sun Moth	Known to exist in or near project site. Potential for habitat destruction.	Ginninderra Drive extension to traverse <b>small part of moth habitat via a bridge structure designed to ensure continuity of habitat.</b>
Little Eagle	Known to exist on project site. Potential for disturbance.	Foraging zone is coincident with conservation corridor and will be preserved, a buffer has been established around the current nest site within which development will not occur as long as the nest is	

Other endangered or vulnerable species or ecological communities

**None known to exist following extensive field investigations.**  
Threatened woodland birds and the Perunga grasshopper may be present within or will move through the Conservation area

Several threatened fish and the Murray Crayfish may utilise that section of the Murrumbidgee that adjoins the development

**utilised. A research program to improve the level of scientific knowledge of the species has been commenced.** A breeding pair of Little Eagles occupies the Lower Molonglo Valley and may forage over the southern end of the study area. They have used about six nest trees within the Lower Molonglo, including a tree near Straithnairn. A research project is currently underway to determine where the pair of little eagles is mainly foraging, while an exclusion area has been established around the nest tree, and southern development area awaiting the findings of this research.

**No action required, research has shown no other rare or endangered species or communities are present on-site.** The Conservation Area will be managed in a way that enhances woodland bird habitat and increases the percentage of native grass cover which will be advantageous to both the Pink-tailed Worm Lizard and Perunga Grasshopper

Care will be taken that unsustainable recreational fishing and adverse changes in water quality do not result from the development