

Growth Centres Biodiversity Certification

Assessment of Consistency between the Relevant Biodiversity Measures of the Biodiversity Certification Order and Riverstone East Precinct Stages 1 and 2

July 2016

Update post-exhibition

1. Introduction

In December 2007 an order conferring biodiversity certification on *State Environmental Planning Policy (Sydney Region Growth Centres) 2006* was made by the Minister for the Environment under section 126G of the *Threatened Species Conservation Act 1995* (TSC Act).

In July 2008, the Minister's certification was validated by the *Threatened Species Conservation Amendment (Special Provisions) Act 2008* which was subsequently incorporated into Part 7 of Schedule 7 of the TSC Act. The amendment gives the Minister for the Environment the power to suspend or revoke the certification if any of its conditions, termed Relevant Biodiversity Measures (RBMs), are not complied with.

The RBMs applying to the certification have remained unaltered since gazettal of the original order and require (among other things) the permanent protection of 2000 hectares of high quality vegetation within the Growth Centres.

This report has been prepared to fulfil the requirement of RBM 35 for an assessment of the consistency of proposed precinct plans with the biodiversity certification and the RBMs.

This report has been prepared in a table format and addresses all RBMs that are relevant to precinct planning. It is noted that many of the RBMs are not specific to precinct planning and have therefore not been included in the report.

A complete copy of the relevant biodiversity measures can be found on the Office of Environment and Heritage's website at <http://www.environment.nsw.gov.au/biocertification/notcert.htm>

Where the report indicates that precinct planning is inconsistent with the biodiversity certification, full justification for the inconsistency is provided as part of the ecological assessment for the precinct.

The rezoning of this precinct will be divided into three stages. As such this report outlines the fulfilment of the requirements for Stages 1 and 2. The specific numbers for Stage 3 will be provided when that stage is rezoned.

Definitions

Terms defined below appear in **bold** in the table. Where the terms are also defined in the Biodiversity Certification Order, the definitions provided are consistent with those in the Order.

- **Additional High Conservation Value Vegetation (AHCVV)** means areas of vegetation which were found during groundtruthing which would otherwise meet the definition of Existing Native Vegetation but was not originally identified as “vegetation” on maps 4 and 5 of the draft Growth Centres Conservation Plan.
- **Biodiversity Certification Maps** means the maps marked “North West Growth Centre – Biodiversity Certification” and “South West Growth Centre – Biodiversity Certification” dated November 2007 and included in Schedule 2 of the Biodiversity Certification Order.
- **Certified Area** means an area marked as a certified area on a biodiversity certification map.
- **Clearing** of existing native vegetation means any one or more of the following:
 - a) cutting down, felling, thinning, logging or removing existing native vegetation in whole or in part,
 - b) killing, destroying, poisoning, ringbarking, uprooting or burning existing native vegetation in whole or in part.
- **Existing Native Vegetation (ENV)** means areas of indigenous trees (including any sapling) that:
 - a) had 10% or greater over storey canopy cover present,
 - b) were equal to or greater than 0.5 Ha in area, and
 - c) were identified as “vegetation” on maps 4 and 5 of the draft Growth Centres Conservation Plan.
- **DECC** means the Department of Environment and Climate Change (which is now the Office of Environment and Heritage).
- **GCC** means the Growth Centres Commission constituted under the *Growth Centres (Development Corporations) Act 1974* (which is now the Department of Planning and Infrastructure).
- **Minister** means the Minister administering the TSC Act.
- **Non-certified Area** means an area marked as a non-certified area on a biodiversity certification map.
- **Protection or Protected** in relation to land means land that is protected by a land use zoning under an environmental planning instrument or public ownership arrangements that provide for the protection of biodiversity values as a priority, or another arrangement that provides in perpetuity security for biodiversity on the subject land.
- **Relevant Biodiversity Measures** means the conditions in Schedule 1 of the Biodiversity Certification Order.
- **TSC Act** means the *Threatened Species Conservation Act 1995*.

2. Assessment

Table 1: Assessment of consistency between the relevant biodiversity measures of the Biodiversity Certification Order and the Riverstone East Precinct Stages 1 and 2

	Relevant Biodiversity Measure	Riverstone East Precinct - Comment	Consistent with RBMs and Part 7 of Schedule 7 of the TSC Act	Stages 1 and 2 Justification
General				
4	Copies of all final reports, maps, reviews, plans and monitoring data referred to in the conditions of biodiversity certification must be held by the GCC and made publicly available, either on request and/or by a mechanism that is broadly publicly accessible. This does not apply to material that is commercially sensitive or contains sensitive information regarding the location of threatened species, populations or ecological communities or their habitat.	All information required by the RBMs for the Riverstone East Precinct will be publicly exhibited.	Yes	All information required by the RBMs for Stages 1 and 2 Riverstone East Precinct have been publicly exhibited.
Native vegetation to be retained within the Growth Centres				
6	A minimum of 2,000 hectares of existing native vegetation must be retained and protected within the Growth Centres, either within the certified areas and/or the non-certified areas , subject to conditions 7 to 13 below.	The draft Conservation Plan identifies 14.33 ha of ENV to be retained within the entire Precinct to maintain parity with the 2000 ha requirement, 7.5 ha of which is to come from within Stages 1 and 2 area.	Yes	<p>Within Stages 1 and 2, 7.5 ha of ENV would need to be retained under the draft Growth Centre Conservation Plan.</p> <p>Within Stages 1 and 2 a total of 8.1 ha of field validated ENV as defined under the order is to be protected and retained under the Stages 1 and 2 Riverstone East Precinct Plan (Annex B and C). This includes 4.6 ha of field validated ENV which currently lies within in non-certified lands and 3.7 ha of field validated ENV in currently certified lands. 0.2 ha of validated non-certified ENV is to be cleared for drainage infrastructure purposes.</p> <p>The protection of ENV in the Precinct Plan will be achieved using zoning (i.e. SP2 and RE1) and the following clauses in the SEPP:</p> <ul style="list-style-type: none"> - Development Controls – Existing Native Vegetation – this clause will prohibit the clearing of ENV as mapped on the Native Vegetation Protection map (Annex C)

Assessment of consistency between Relevant Biodiversity Measures of the Biodiversity Certification Order and Riverstone East Precinct Stages 1 and 2

	Relevant Biodiversity Measure	Riverstone East Precinct - Comment	Consistent with RBMs and Part 7 of Schedule 7 of the TSC Act	Stages 1 and 2 Justification
				<p>(Refer to Annex D which highlights areas of ENV in non-certified areas which will not be retained and location of proposed offsets, including ENV in certified areas).</p> <p>The 3.7 ha of ENV to be protected in currently certified areas will become non-certified land in an amended Biodiversity certification map under Schedule 7, Part 7 of the TSC Act 1995.</p> <p>One area of ENV zoned as E2 and E3 has been conserved, and is protected, through a separate conservation covenant under the Nature Conservation Trust Act 2001. This area is 1.6 ha in area. The vegetation here will be conserved independently and the land will remain certified. This area has not been included in the offset areas.</p>
Retention of existing native vegetation during precinct planning				
7	During the precinct planning process, the GCC may determine to make areas of existing native vegetation within the non-certified areas available for development if the clearance of such vegetation is considered necessary for either the provision of essential infrastructure and/or to meet the required Development Parameters specified in the Growth Centres Development Code.	0.2 Ha of ENV will be lost for essential infrastructure.	Yes	0.2 Ha of validated Non-Certified ENV will be cleared within Stages 1 and 2 for the purposes of drainage infrastructure. This loss is offset by the retention of an additional 3.7 ha of field validated certified ENV within the RE1 zone.
8	<p>In making a determination under condition 7, the GCC must demonstrate by way of information provided during the public exhibition of the precinct plan (where that exhibition occurs after this order takes effect) that the clearing of any existing native vegetation in the non-certified areas will be offset by:</p> <p>(a) the protection of an equal or greater area of existing native vegetation elsewhere in the Growth Centres; and/or</p>	<p>As 0.2 Ha of mapped non-certified ENV will be lost for essential infrastructure, this must be offset.</p> <p>Measures consistent with RBM 8(a)/(b) have been implemented to offset impacts of clearing of ENV as</p>	Yes	Within Stages 1 and 2, 8.1 ha of field validated ENV as defined under the order is to be protected and retained under the Stages 1 and 2 Riverstone East Precinct Plan, exceeding the required 7.5 ha under the draft Growth Centre Conservation Plan. The impact of the essential infrastructure has therefore been adequately offset in accordance with RBM 8 (a).

Assessment of consistency between Relevant Biodiversity Measures of the Biodiversity Certification Order and Riverstone East Precinct Stages 1 and 2

	Relevant Biodiversity Measure	Riverstone East Precinct - Comment	Consistent with RBMs and Part 7 of Schedule 7 of the TSC Act	Stages 1 and 2 Justification
	<p>(b) the revegetation and/or restoration of an area of land elsewhere in the Growth Centres, subject to satisfying the following,</p> <ul style="list-style-type: none"> (i) that the clearance of existing native vegetation in the non-certified areas will not affect the capacity to achieve overall improvement or maintenance of biodiversity values for threatened species, populations and ecological communities and their habitats, (ii) the revegetated and/or restored areas will be protected, (iii) the extent of revegetation and/or restoration compared to clearing of existing native vegetation must be undertaken at a ratio of at least 3:1 (to reflect the greater ecological risks relative to retaining existing native vegetation), (iv) areas subject to revegetation and/or restoration must be of a suitable boundary configuration and design to support long-term management, (v) revegetation and/or restoration of the proposed areas would not be undertaken under another scheme or regulatory requirement already in operation at the time that the clearing is approved (this includes but is not limited to any approvals, and associated conditions of such approvals, that may be required under the <i>Rivers and Foreshores Improvement Act 1948</i> and <i>Water Management Act 2000</i>), (vi) revegetation and/or restoration will be undertaken by suitably qualified and experienced persons using indigenous plant stock, and (vii) sufficient resources will be made available to undertake the revegetation and/or restoration and any necessary follow-up maintenance and 	<p>described in relation to RBM 7.</p>		

Assessment of consistency between Relevant Biodiversity Measures of the Biodiversity Certification Order and Riverstone East Precinct Stages 1 and 2

	Relevant Biodiversity Measure	Riverstone East Precinct - Comment	Consistent with RBMs and Part 7 of Schedule 7 of the TSC Act	Stages 1 and 2 Justification
	monitoring for a minimum period of 5 years following the commencement of the revegetation and/or restoration.			
9	Revegetation and/or restoration may be partly counted towards meeting the overall requirement to protect 2,000 hectares of existing vegetation required in condition 6. The amount that may be counted shall be calculated by dividing the total area of revegetation and/or restoration required under condition 8b (iii) by 3. Note: for example, if 9 hectares of revegetation is undertaken then 3 hectares may be counted.		Not Applicable	
Retention of existing native vegetation shown in areas marked with red hatching				
12	Notwithstanding any other conditions of biodiversity certification, in the lands marked by a red hatching on the biodiversity certification maps existing native vegetation must not be cleared unless it is in accordance with a plan of management or unless such clearance has been agreed to by the DECC .		Yes	Not applicable
Ground-truthing of existing native vegetation				
13	If new information becomes available after the biodiversity certification order took effect that demonstrates that the vegetation within an area does not otherwise meet the definition of existing native vegetation , then for the purposes of conditions 7 to 8 and condition 11 to 12 only the area of confirmed existing native vegetation shall be considered.	Eco Logical Australia conducted ground truthing of ENV within the Precinct. The calculations of loss are based on the originally mapped ENV (to maintain comparison with the Precinct target) whilst protection is calculated on field validated ENV (for	Yes	Within Stages 1 and 2 the draft conservation plan maps 69.8 ha of ENV within Stages 1 and 2 Riverstone East Precinct, 7.5 ha of which falls within non-certified land areas. Field survey validated 56.4 ha of ENV currently existing throughout the Precinct of which 4.6 ha is located in non-certified areas. Field survey also recorded a total of 31.2 ha of additional high conservation value vegetation (AHCVV) throughout the precinct, of which 1.5 ha is to be protected.

Assessment of consistency between Relevant Biodiversity Measures of the Biodiversity Certification Order and Riverstone East Precinct Stages 1 and 2

	Relevant Biodiversity Measure	Riverstone East Precinct - Comment	Consistent with RBMs and Part 7 of Schedule 7 of the TSC Act	Stages 1 and 2 Justification				
		conditions 7 to 8 and 11 to 12) reflect the updated vegetation mapping.						
Additional conservation actions within the Growth Centres – native vegetation								
14	During or before the preparation of the relevant precinct plan(s) under the Growth Centres Development Code, a further detailed assessment must be undertaken of the areas adjoining or proximate to the Shanes Park Air Services Australia site marked in blue hatching on the biodiversity certification maps .		Not Applicable					
15	The assessment referred to in condition 14 must examine whether the areas meet the criteria specified in Schedule 3.		Not Applicable					
16	Based on the outcomes of the assessment the DECC shall provide advice to the Minister on whether the areas should be included within the certified areas or the non-certified areas shown on the biodiversity certification maps .		Not Applicable					
Additional conservation actions within the Growth Centres – plants								
17	During or before the preparation of the relevant precinct plan(s) under the Growth Centres Development Code relating to the areas referred to in the table below, the following actions must be undertaken: <table border="1" data-bbox="241 1236 896 1423"> <thead> <tr> <th>Species</th> <th>Required action</th> </tr> </thead> <tbody> <tr> <td><i>Acacia pubescens</i></td> <td>Potential populations at Cross Street, Kemps Creek and Thirty-second Avenue, Austral – as shown in black hatching on the biodiversity certification maps:</td> </tr> </tbody> </table>	Species	Required action	<i>Acacia pubescens</i>	Potential populations at Cross Street, Kemps Creek and Thirty-second Avenue, Austral – as shown in black hatching on the biodiversity certification maps :		Not Applicable	
Species	Required action							
<i>Acacia pubescens</i>	Potential populations at Cross Street, Kemps Creek and Thirty-second Avenue, Austral – as shown in black hatching on the biodiversity certification maps :							

Assessment of consistency between Relevant Biodiversity Measures of the Biodiversity Certification Order and Riverstone East Precinct Stages 1 and 2

	Relevant Biodiversity Measure	Riverstone East Precinct - Comment	Consistent with RBMs and Part 7 of Schedule 7 of the TSC Act	Stages 1 and 2 Justification	
	<ul style="list-style-type: none"> survey to confirm the presence of the species, and if the species is present, provide for the protection of the area of suitable habitat for the species to the satisfaction of the DECC. 				
<i>Pimelea spicata</i>	Potential populations at Denham Court Road - as shown in black hatching on the biodiversity certification maps : <ul style="list-style-type: none"> survey to confirm the presence of species, and if the species is present, provide for the protection of the area of suitable habitat for the species to the satisfaction of the DECC. 				
<i>Persoonia hirsuta</i>	Potential populations at North Kellyville – as shown in black hatching on the biodiversity certification maps : <ul style="list-style-type: none"> survey to confirm the presence of the species, and if the species is present, provide for the protection of the area of suitable habitat for the species to the satisfaction of the DECC. 				

Assessment of consistency between Relevant Biodiversity Measures of the Biodiversity Certification Order and Riverstone East Precinct Stages 1 and 2

	Relevant Biodiversity Measure	Riverstone East Precinct - Comment	Consistent with RBMs and Part 7 of Schedule 7 of the TSC Act	Stages 1 and 2 Justification	
	<p><i>Leucopogon fletcheri</i></p> <p>Known population at North Kellyville - as shown in black hatching on the biodiversity certification maps:</p> <ul style="list-style-type: none"> • survey to confirm the extent of the population, and • provide for the protection of the population to the satisfaction of the DECC. <p><i>Darwinia biflora</i> <i>Hibbertia superans</i> <i>Epacris purpurascens</i> var <i>purpurascens</i> <i>Eucalyptus</i> sp "Cattai"</p> <p>Known populations at North Kellyville - as shown in black hatching on the biodiversity certification maps:</p> <ul style="list-style-type: none"> • survey to confirm the extent of the populations, and • provide for the protection of the population to the satisfaction of the DECC. 				
	<p>Note: On completion of the above actions the Minister may decide that it is appropriate to amend the boundaries of the area subject to biodiversity certification, in accordance with condition 3.</p>				

Assessment of consistency between Relevant Biodiversity Measures of the Biodiversity Certification Order and Riverstone East Precinct Stages 1 and 2

	Relevant Biodiversity Measure	Riverstone East Precinct - Comment	Consistent with RBMs and Part 7 of Schedule 7 of the TSC Act	Stages 1 and 2 Justification				
Additional conservation actions within the Growth Centres – animals								
18	<p>During or before the preparation of the relevant precinct plan(s) under the Growth Centres Development Code relating to the area referred to in the table below, the following actions must be undertaken:</p> <table border="1"> <thead> <tr> <th>Species</th> <th>Required action</th> </tr> </thead> <tbody> <tr> <td>Green and Golden Bell Frog</td> <td> <p>Potential population at Riverstone – as shown in black hatching on the biodiversity certification maps:</p> <p><i>Option 1</i></p> <ul style="list-style-type: none"> survey to confirm the presence of the species, and if the species is present, provide protection of the area of suitable habitat for the species to the satisfaction of the DECC. <p><i>Option 2</i></p> <ul style="list-style-type: none"> if the species is present at Riverstone but cannot be adequately protected to the satisfaction of the DECC, then: <ol style="list-style-type: none"> undertake targeted survey to confirm the presence of the species elsewhere in the Growth Centres, and if the species is present elsewhere in the Growth Centres, provide for the protection of an area(s) of suitable habitat for the species to the satisfaction of the DECC. </td> </tr> </tbody> </table>	Species	Required action	Green and Golden Bell Frog	<p>Potential population at Riverstone – as shown in black hatching on the biodiversity certification maps:</p> <p><i>Option 1</i></p> <ul style="list-style-type: none"> survey to confirm the presence of the species, and if the species is present, provide protection of the area of suitable habitat for the species to the satisfaction of the DECC. <p><i>Option 2</i></p> <ul style="list-style-type: none"> if the species is present at Riverstone but cannot be adequately protected to the satisfaction of the DECC, then: <ol style="list-style-type: none"> undertake targeted survey to confirm the presence of the species elsewhere in the Growth Centres, and if the species is present elsewhere in the Growth Centres, provide for the protection of an area(s) of suitable habitat for the species to the satisfaction of the DECC. 		Yes	The area covered by condition 18 lies mainly within the adjoining Riverstone precinct, with a small area extending into Riverstone East. During the Precinct Planning stage for Riverstone Precinct work was undertaken in consultation with DECC to confirm the presence of the GGBF and provided recommendations on how the species and its habitat should be protected and enhanced. As a result of this, no further work needs to be undertaken to satisfy condition 18 for Riverstone East precinct. This is consistent with the recommendations for GGBF.
Species	Required action							
Green and Golden Bell Frog	<p>Potential population at Riverstone – as shown in black hatching on the biodiversity certification maps:</p> <p><i>Option 1</i></p> <ul style="list-style-type: none"> survey to confirm the presence of the species, and if the species is present, provide protection of the area of suitable habitat for the species to the satisfaction of the DECC. <p><i>Option 2</i></p> <ul style="list-style-type: none"> if the species is present at Riverstone but cannot be adequately protected to the satisfaction of the DECC, then: <ol style="list-style-type: none"> undertake targeted survey to confirm the presence of the species elsewhere in the Growth Centres, and if the species is present elsewhere in the Growth Centres, provide for the protection of an area(s) of suitable habitat for the species to the satisfaction of the DECC. 							

Assessment of consistency between Relevant Biodiversity Measures of the Biodiversity Certification Order and Riverstone East Precinct Stages 1 and 2

	Relevant Biodiversity Measure	Riverstone East Precinct - Comment	Consistent with RBMs and Part 7 of Schedule 7 of the TSC Act	Stages 1 and 2 Justification
	Note: On completion of the above actions the Minister may decide that it is appropriate to amend the boundaries of the area subject to biodiversity certification, in accordance with condition 3.			
Additional conservation actions within the Growth Centres – development sites				
19	<p>Within twelve months of the biodiversity certification order taking effect, the DoP (in consultation with the DECC) must put in place procedures so that all future precinct plans (excluding any plans that were publicly exhibited before the biodiversity certification order took effect), where practicable, provide for the appropriate re-use of:</p> <p>(a) native plants (including but not limited to seed collection) and the re-location of native animals from development sites, prior to development commencing; and</p> <p>(b) top soil from development sites that contain known or potential native seed bank.</p> <p>For the purposes of condition 19a and 19b appropriate uses may include, but are not limited to, application in revegetation or restoration works and landscaping in the Growth Centres.</p>	These provisions will be incorporated into the Blacktown City Council Growth Centre Precincts Development Control Plan 2014.	Yes	Refer to Clause 2.3.4 in Blacktown City Council Growth Centre Precincts Development Control Plan 2014.
Future precinct plans				
35	During the preparation of future precinct plans (excluding any precinct plans already publicly exhibited before this order took effect) the GCC must undertake and make publicly available an assessment of the consistency of the proposed precinct plan with the conditions of biodiversity certification. This may occur during or before any public exhibition of future draft precinct plans.	This assessment of consistency has been prepared to satisfy this RBM. This report will be publicly exhibited with the full Precinct Planning package.	Yes	This assessment addresses all RBMs applicable to the planning for Stages 1 and 2 Riverstone East Precinct.

Assessment of consistency between Relevant Biodiversity Measures of the Biodiversity Certification Order and Riverstone East Precinct Stages 1 and 2

	Relevant Biodiversity Measure	Riverstone East Precinct - Comment	Consistent with RBMs and Part 7 of Schedule 7 of the TSC Act	Stages 1 and 2 Justification
Future threatened species listings or discoveries				
36	<p>Where a preliminary determination is made under the Act to list a species, population or ecological community, and that species, population or ecological community may or is known to occur within the Growth Centres, then the Growth Centres Commission must (as soon as practicable) provide advice to the DECC on whether:</p> <p>(a) the species, population or ecological community is known or likely to be present in the Growth Centres;</p> <p>(b) it was considered during the preparation of the draft Growth Centres Conservation Plan by the GCC; and</p> <p>(c) whether the SEPP, and related measures, provides adequate protection for the species, population or ecological community.</p>	<p>The TSC Act listed <i>Eucalyptus</i> sp. Cattai (currently endangered) has been listed with a distribution including Riverstone East. ELA survey did not identify any suitable habitat for this species within the Riverstone East Precinct (see Appendix D of the Riverstone East Precinct Biodiversity and Riparian Corridors Assessment (ELA 2014).</p>	Yes	<p><i>Eucalyptus</i> sp. Cattai currently has a preliminary determination to uplist it from Endangered to Critically Endangered. The Riverstone East Precinct Biodiversity and Riparian Corridors Assessment (ELA 2014) has assessed it as an Endangered species, and determined that there is no suitable habitat on site. As such no further assessment is required.</p>
37	<p>Based on the information provided in accordance with condition 36, and any other relevant matters, the DECC shall advise the Minister on whether to formally review, maintain, modify, suspend or revoke the biodiversity certification of the SEPP if the species, population or ecological community is listed under the Act.</p>		Yes	

3. Conclusion

This report has undertaken an assessment of the consistency of the Riverstone East precinct planning, in relation to Stages 1 and 2, with the biodiversity certification and the applicable relevant biodiversity measures.

It is concluded that the Riverstone East precinct Stages 1 and 2 planning is consistent with the biodiversity certification of the Growth Centres SEPP, as follows:

- The staged Precinct Plan will protect 8.1 ha of field validated ENV and will count towards the 2000 ha target, in accordance with RBM6. This is 0.6 ha more than the 7.5 ha target identified for Stages 1 and 2 of the Precinct in the Draft Conservation Plan.
- The loss of 0.2 ha of validated non-certified ENV is due to the future need to provide drainage infrastructure. This loss has been offset by the retention of an additional 3.7 ha of field validated certified ENV within the RE1 zone.
- The 8.1 ha of ENV will be protected via the SP2 and RE1 Zones as described below (**Annex B and C**).
- The SEPP amendment will provide a clause that prevents the **clearing** of ENV (and areas of AHCVV) in certain areas (principally in the non-certified land) as shown on the Native Vegetation Protection Map (**Annex C**).

Land use zones have been selected based on land use planning factors, including the future ownership, acquisition and use of land in accordance with the Precinct Plan and the EP&A Act. Land use zones have been applied to ENV that is proposed to be protected as follows:

- All ENV to be protected will be located on land to be zoned SP2 or RE1. This land is proposed to be acquired by a public authority and will become non-certified land. A further area 1.6 Ha ENV has been conserved through a separate conservation covenant. This area will be zoned as E2 and E3 and conserved independently. The land will remain certified. This area has not been included in the offset areas.

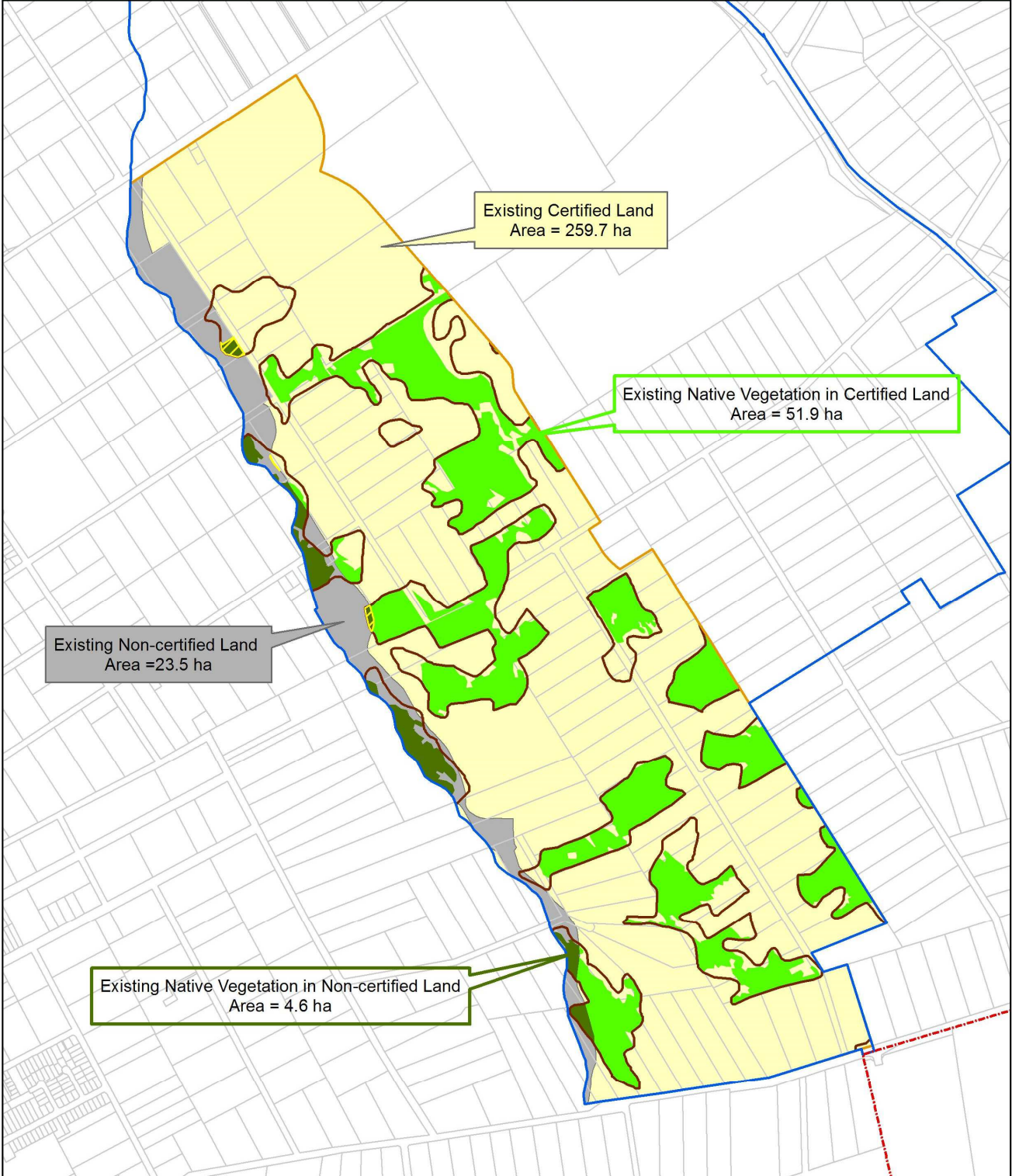
Proposed biodiversity certification map

To reflect the outcomes of the Precinct Plan and ensure the protection of ENV, amendments are proposed to the boundaries of certified and non-certified land as shown on the biodiversity certification map (referred to as the subject lands map) (**see Annex D**). The new boundaries of the non-certified lands are proposed to reflect the boundaries of the protected ENV (as mapped as 'Existing Native Vegetation' on the Native Vegetation Protection Map – see **Annex C**) and Native Vegetation Retention areas on the NVP Map, excluding the area of ENV conserved under a separate conservation covenant.

Annex A

**Biodiversity Certification Map for Riverstone East Precinct Stages 1 and 2
(including field validation results)**

Biodiversity Certification Boundaries and Existing Native Vegetation

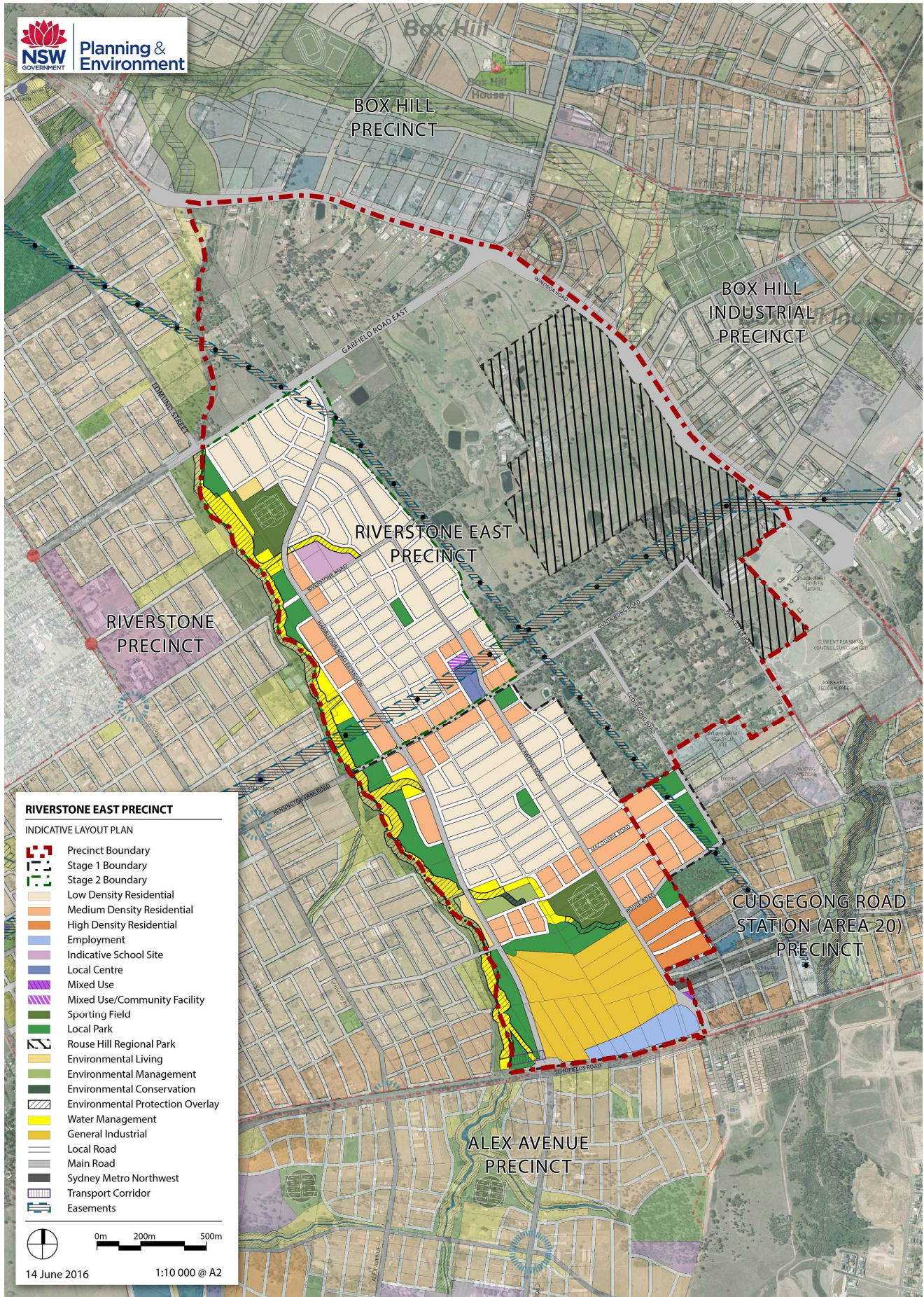


Legend		0 125 250 500
Precinct Boundary	Biodiversity Certification	Metres
North West Growth Centre Boundary	Existing Non-Certified Land (Non Subject Lands)	GDA 1994 MGA Zone 56
Ground truthed Existing Native Vegetation	Existing Certified Land (Subject Lands)	eco logical AUSTRALIA www.ecoaus.com.au Prepared by: BH Date: 14/07/2016
ENV in Existing Certified Land	ENV to become less than 0.5 ha. Not counted as non-certified ENV	
ENV in Existing Non-Certified Land	GCCP Existing Native Vegetation	

Annex B

Proposed Indicative Layout Plan for Riverstone East Precinct Stages 1 and 2

Assessment of consistency between Relevant Biodiversity Measures of the Biodiversity Certification Order and Riverstone East Precinct Stages 1 and 2



Annex C

**Proposed Protection Measures for Riverstone East Precinct Stages 1 and 2
(including Native Vegetation Protection Map and Zoning Plan)**

Calculations of ENV within the Riverstone East Precinct Stages 1 and 2

Results of field validation for Existing Native Vegetation & AHCVV

Reference	Item	Area (ha)
A	Area of mapped ENV in non-certified areas (as per Conservation Plan)	7.5
B	Area of validated ENV in non-certified areas	4.6
C	Area of validated ENV in certified areas	51.9
D	Total area of validated ENV	56.4
E	Total area of validated AHCVV	31.2

Summary of impacts, offsets and areas of ENV to be protected

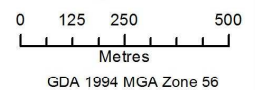
Reference	Item	Area (ha)
A	Area of mapped ENV in non-certified areas (as per Conservation Plan)	7.5
B	Area of validated ENV in non-certified areas	4.6
C	Impacts: Validated non-certified ENV to be cleared (area to become certified)	0.2
D	Offsets: Validated certified ENV to be used as offset (area to become non-certified)	3.7
E	Total area of ENV to be protected in non-certified areas (E = B-C+D)	8.1
F	Area of additional high conservation value vegetation (AHCVV) to be protected	1.5
H	Total area of ENV/AHCVV to be protected (H = F+E)	9.6

Native Vegetation Protection



Legend

- Precinct Boundary
- North West Growth Centre Boundary
- Protected Vegetation**
- Existing Native Vegetation Area
- Existing Native Vegetation Retention Area

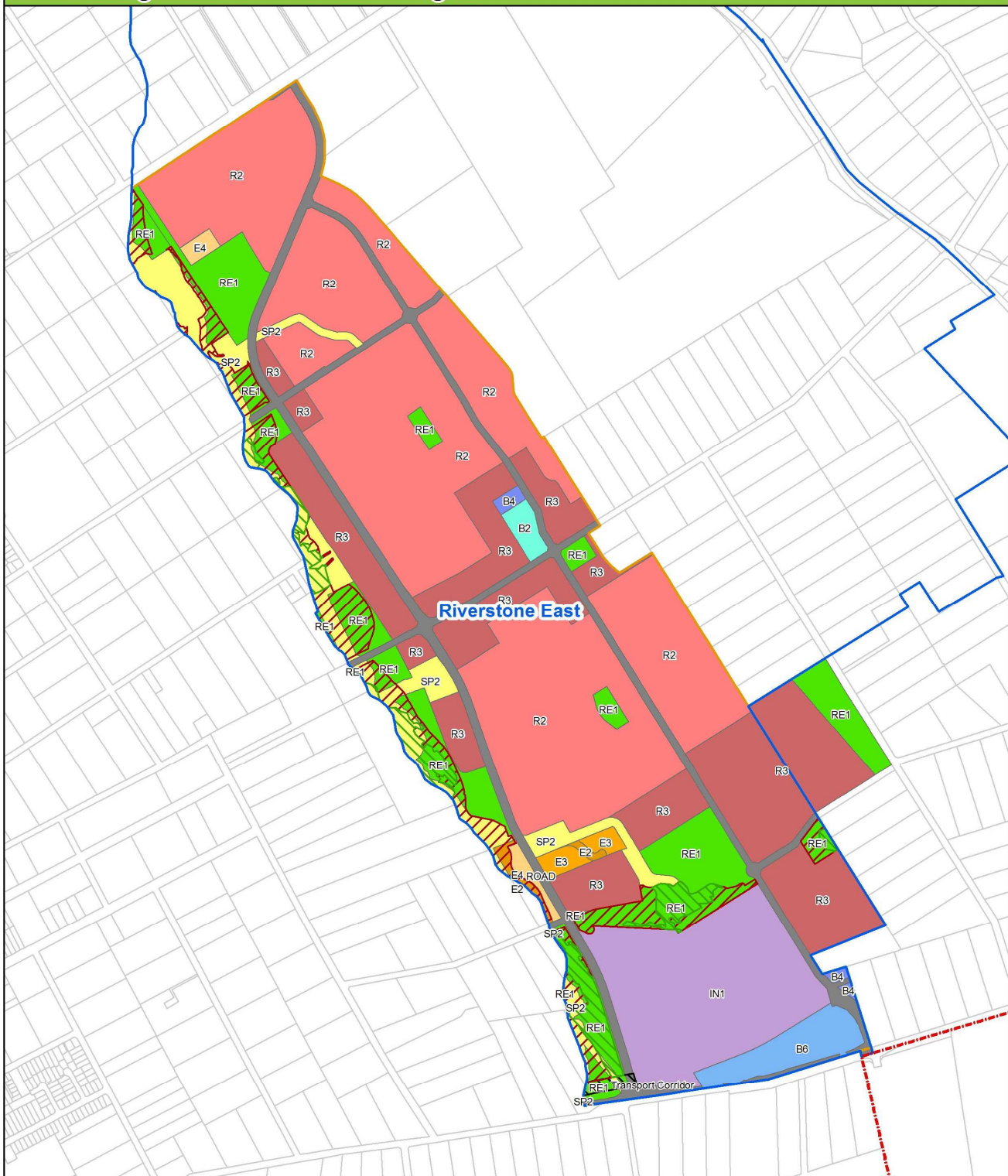


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Assessment of consistency between Relevant Biodiversity Measures of the Biodiversity Certification Order and Riverstone East Precinct Stages 1 and 2

Land Zoning and Protected Native Vegetation



Legend

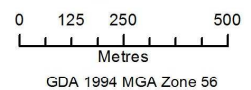
- Precinct Boundary
- North West Growth Centre Boundary

Protected Vegetation

- Existing Native Vegetation Area
- Existing Native Vegetation Retention Area

Land Zoning

- B2: Local Centre
- B4: Mixed Use
- B6: Enterprise Corridor
- E2: Environmental Conservation
- E3: Environmental Management
- E4: Environmental Living
- IN1: General Industrial
- R2: Low Density Residential
- R3: Medium Density Residential
- RE1: Public Recreation
- ROAD
- SP2: Infrastructure
- Transport Corridor



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Annex D

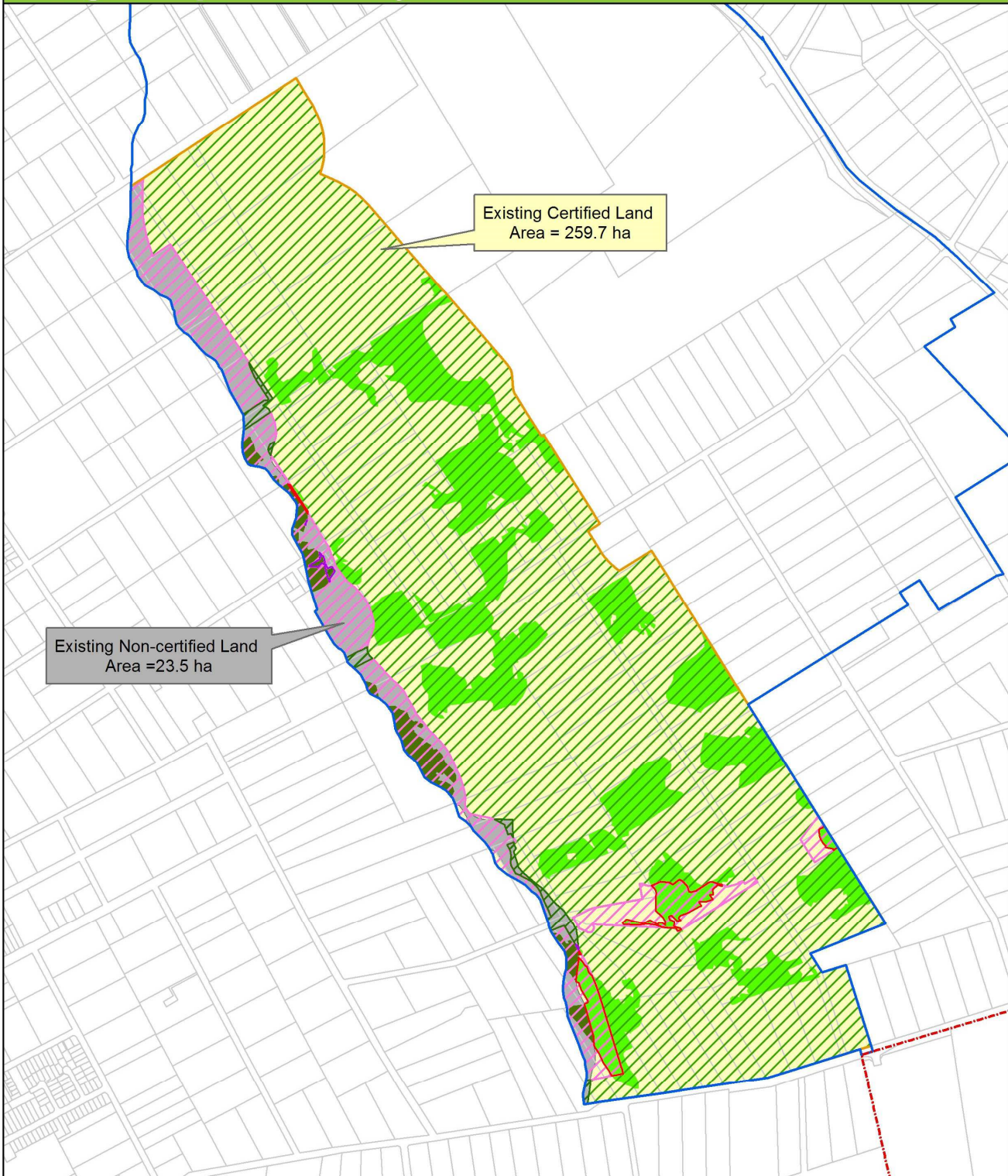
Proposed Amendments to Biodiversity Certification Map

Comparison of existing and proposed certified/non-certified land

The following table outlines the current and proposed certified and non-certified areas.

Land Type	Current Area (Ha)	Proposed Area (Ha)
Certified Land	259.7	253.8
Non Certified Land	23.5	29.4

Existing and Proposed Biodiversity Certification Area



Legend

- Precinct Boundary
- North West Growth Centre Boundary

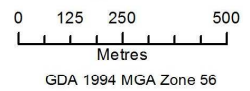
Ground truthed Existing Native Vegetation

- ENV in Existing Certified Land
- ENV in Existing Non-Certified Land

Biodiversity Certification

- Existing Non-Certified Land (Non Subject Lands)
- Existing Certified Land (Subject Lands)
- Proposed Certified Land
- Proposed Non Certified Land

- Offsets: Validated Certified ENV proposed to be Non-Certified (3.7 ha)
- Impacts: Validated Non-Certified ENV proposed to be Certified (0.2 ha)



Prepared by: BH Date: 14/07/2016