

**SYDNEY WESTERN CITY
PLANNING PANEL MEETING**

TUESDAY 27 FEBRUARY 2018

LGA – HAWKESBURY

BUSINESS PAPER COVER PAGE

SYDNEY WESTERN CITY PLANNING PANEL

Business Paper

MEETING DATE	Tuesday 27 February 2018
MEETING LOCATION	Hawkesbury Council, 366 George Street, Windsor
LGA	Hawkesbury

MATTER(S) TO BE CONSIDERED

PANEL REF#	DA No. or Matter Type	ADDRESS - DESCRIPTION
2018SWT002	Rezoning Review	<p>PGR_2017_HAWKE_001_00</p> <p>To amend Hawkesbury Local Environmental Plan 2012 by altering the minimum lot size to part 1000sqm, part 2000sqm, part 6000sqm and part 2 hectares to allow land at</p> <p>2 Inverary Drive, Kurmond to be subdivided into 41 residential lots.</p>

**SYDNEY WESTERN CITY
PLANNING PANEL MEETING**

TUESDAY 27 FEBRUARY 2018

LGA – HAWKESBURY

MEETING ITINERARY

MEETING ITINERARY

SYDNEY WESTERN CITY PLANNING PANEL

Meeting Date: Tuesday 27 February 2018
Meeting Location: Hawkesbury Council, 366 George Street, Windsor
Apology: Nicole Gurran

Secretariat: Suzie Jattan – 0467 816 701

TIME / TYPE / LOCATION	PROJECT DETAILS	PANEL MEMBERS	REPRESENTATIVES
10.30 am Site Inspection Panel to meet at 2 Inverary Drive, Kurmond	2018SWT002 – Hawkesbury Rezoning Review, PGR_2017_HAWKE_001_00 - To amend Hawkesbury Local Environmental Plan 2012 by altering the minimum lot size to part 1000sqm, part 2000sqm, part 6000sqm and part 2 hectares to allow land at 2 Inverary Drive, Kurmond to be subdivided into 41 residential lots.	Justin Doyle (Chair) Bruce McDonald Lindsay Fletcher Matt Owens Mary Lyons-Buckett	<u>Department of Planning Officers</u> Alicia Hall Terry Doran
11.30 am Briefing Venue: Hawkesbury Council, 366 George Street, Windsor	2018SWT002 – Hawkesbury Rezoning Review, PGR_2017_HAWKE_001_00 - To amend Hawkesbury Local Environmental Plan 2012 by altering the minimum lot size to part 1000sqm, part 2000sqm, part 6000sqm and part 2 hectares to allow land at 2 Inverary Drive, Kurmond to be subdivided into 41 residential lots.	Justin Doyle (Chair) Bruce McDonald Lindsay Fletcher Matt Owens Mary Lyons-Buckett	<u>The applicant representative</u> _Robert Montgomery Mobile – 0407717612 <u>Council Officers</u> Colleen Haron – Senior Town Planner Phone – 4560 4564 Andrew Kearns <u>Department of Planning Officers</u> Alicia Hall Terry Doran
1.00 pm Panel Discussion with Lunch Venue: Hawkesbury Council, 366	2018SWT002 – Hawkesbury Rezoning Review, PGR_2017_HAWKE_001_00 - To amend Hawkesbury Local Environmental Plan 2012 by altering the minimum lot size to part 1000sqm, part 2000sqm, part 6000sqm and part 2 hectares to allow land at 2 Inverary Drive, Kurmond to be subdivided into	Justin Doyle (Chair) Bruce McDonald Lindsay Fletcher Matt Owens Mary Lyons-Buckett	

SYDNEY WESTERN CITY PLANNING PANEL MEETING ITINERARY 27 FEBRUARY 2018
ISSUED 13 FEBRUARY 2018

Planning Panels Secretariat

320 Pitt Street Sydney NSW 2000 | GPO Box 39 Sydney NSW 2001 | T 02 8217 2060 | www.planningpanels.nsw.gov.au

George Street, Windsor	41 residential lots.	
---------------------------	----------------------	--

SYDNEY WESTERN CITY PLANNING PANEL MEETING ITINERARY 27 FEBRUARY 2018
ISSUED 13 FEBRUARY 2018

Planning Panels Secretariat

320 Pitt Street Sydney NSW 2000 | GPO Box 39 Sydney NSW 2001 | T 02 8217 2060 | www.planningpanels.nsw.gov.au

**SYDNEY WESTERN CITY
PLANNING PANEL MEETING**

TUESDAY 27 FEBRUARY 2018

LGA – HAWKESBURY

LETTER TO PANEL

Your ref: 17/13920

18 October 2017

Mr Sean O'Toole
Chair
Sydney West Planning Panel
GPO Box 39
Sydney NSW 2001

Dear Mr O'Toole

Re: Request for a Rezoning Review – PGR_2017_HAWKE_001_00

I am writing to you to advise that a Rezoning Review application, dated 16 October 2017, was submitted to the Department of Planning and Environment and to request that the Sydney West Planning Panel (Planning Panel) review the proposal.

The proposal seeks to amend *Hawkesbury Local Environmental Plan 2012*, by altering the minimum lot size to part 1000sqm, part 2000sqm, part 6000sqm and part 2 hectares to allow land at 2 Inverary Drive, Kurmond, to be subdivided into 41 residential lots.

The proponent is seeking a Rezoning Review because the Council has failed to submit a planning proposal for a Gateway determination, within a reasonable time after the Council has indicated its support.

The Planning Panel is now requested to review and determine its suitability for being referred to the Department for a Gateway determination under section 56 of the *Environmental Planning and Assessment Act 1979* (the Act).

A copy of the proponent's request and all supporting information is provided on the Department's Tracking System, at <http://pgrtracking.planning.nsw.gov.au/>.

Council has been requested to provide comments over its decision not to proceed with the proposal and to confirm that the current proposal is the same as considered by Council.

Council's comments will form part of the Department's Briefing Report, which will be provided to you within 28 days from the date of this letter.

The Planning Panel is encouraged to meet with the Department, Council, the proponent, and any relevant agency previously involved in the matter to clarify any issues before making its determination.

Should you have any further enquiries about this matter, I have arranged for Ms Alicia Hall to assist you. Ms Hall can be contacted on (02) 9860 1587.

Yours sincerely

A handwritten signature in black ink, appearing to read "Terry Doran".

**Terry Doran
Team Leader
Sydney Region West
Planning Services**

**SYDNEY WESTERN CITY
PLANNING PANEL MEETING**

TUESDAY 27 FEBRUARY 2018

LGA – HAWKESBURY

**ATTACHMENT A
REZONING REVIEW BRIEFING
REPORT**

REZONING REVIEW – Briefing Report

Date of Referral:	16 October 2017	
Department Ref. No:	PGR_2017_HAWKE_002_00	
LGA:	Hawkesbury	
LEP to be Amended	Hawkesbury Local Environmental Plan 2012	
Address:	2 Inverary Drive, Kurmond	
Reason for review:	<input type="checkbox"/> Council notified the proponent that it will not support proposed amendment	<input checked="" type="checkbox"/> Council failed to indicate support for proposal within 90 days, or failed to submit the proposal after indicating its support
Is a disclosure statement relating to reportable political donations under s147 of the Act required and provided?	<input type="checkbox"/> Provided <input checked="" type="checkbox"/> Not required Comment: The application form states that there are no reportable political donations or gifts to disclose.	

SUMMARY OF THE PROPOSAL

Background

- The rezoning review request was submitted by Montgomery Planning Solutions (**Attachment E**) on 13 October 2017.
- The request has been submitted as Hawkesbury City Council failed to indicate its support 90 days after the proponent submitted a request (**Attachment F**).
- The submitted planning proposal is at **Attachment B** and an addendum submitted on behalf of the applicant addressing strategic merit is at **Attachment C**.
- The proposal seeks to facilitate the subdivision of the site into approximately 41 residential lots by:
 - amending Hawkesbury Local Environmental Plan (HLEP) 2012 minimum lot size map (Map Sheet LSZ_008AA) from 10ha to part 1,000m², part 2,000m², part 6,000m² and part 2ha; and
 - identifying part of the land as being included within Area A and subject to clause 4.1D(1) of HLEP 2012.
- Council confirmed in writing on 1 December 2017 (**Attachment D**) that the proposal submitted to the Department of Planning and Environment for review was the same proposal submitted to Council (except in relation to the addendum that has since been submitted).

Locality and context

- The subject site is in the suburb of Kurmond within the Hawkesbury local government area (LGA).
- It is zoned RU1 Primary Production and the broader area is predominantly zoned rural residential development (Figures 1 and 2, next page).

- Agricultural activity in the vicinity comprises animal grazing. A commercial flower grower adjoins the site on the eastern boundary.
- Adjoining land to the south-west of the site comprises several residential lots of approximately 2,000m².
- Land to the north-west along Bells Line of Road comprises residential lots ranging in size from 1,500m² to 8,200m².
- The area is undergoing change and several allotments in the vicinity have been subject to recent lot size amendment. The lot size controls for the adjoining 13ha lot were amended in January 2017. The adjoining lot comprises minimum lot sizes of 2,000m², 1ha and 1.5ha (Figure 6, page 4).
- The suburbs of Kurmond and Kurrajong are part of Council's Structure Planning – Kurmond and Kurrajong Investigation Area. This seeks to identify land in the investigation area suitable for large lot rural residential development (Figure 10, page 9). The site is in the Kurmond-Kurrajong investigation area and is just over 1km from Kurmond village shops.



Figure 1: Land zoning.



Figure 2: Subject site, outlined in red, in wider context.

Site description

- The site is at Lot 2 DP 600414, 2 Inverary Drive, Kurmond.
- It is rectangular, approximately 10.96ha in size and fronts Bells Line of Road.
- A dwelling house is in the south-west corner and the site comprises cleared pasture, scattered vegetation and two dams (Figures 3 and 4).
- A minor watercourse runs through the centre of the property and supports denser vegetation of varying quality (Figure 5, next page).
- The site contains Shale Sandstone Transition Forest and Shale Plains Woodland, which are critically endangered species under the *Threatened Species Conservation Act 1995*.
- The site has previously been used for animal grazing.



Figure 3: Cleared grazing land.



Figure 4: Scattered trees.



Figure 5: Watercourse.

Current and proposed planning provisions

- The proposal seeks to amend HLEP 2012 by:
 - amending the minimum lot size map (Map Sheet LSZ_008AA) from 10ha to part 1,000m², part 2,000m², part 6,000m² and part 2ha; and
 - identifying part of the land as being included within Area A subject to clause 4.1D(1). This clause restricts subdivision on certain land unless satisfactory arrangements have been made to service the sites by reticulated sewerage systems and that any lot created by the subdivision contains or is to contain a dwelling house not less than 4,000m².
- Figures 6 and 7 show current and proposed minimum lot size maps.
- The site is zoned RU1 Primary Production. No changes to the land zoning are proposed.
- A copy of the planning proposal is provided at **Attachment B**.

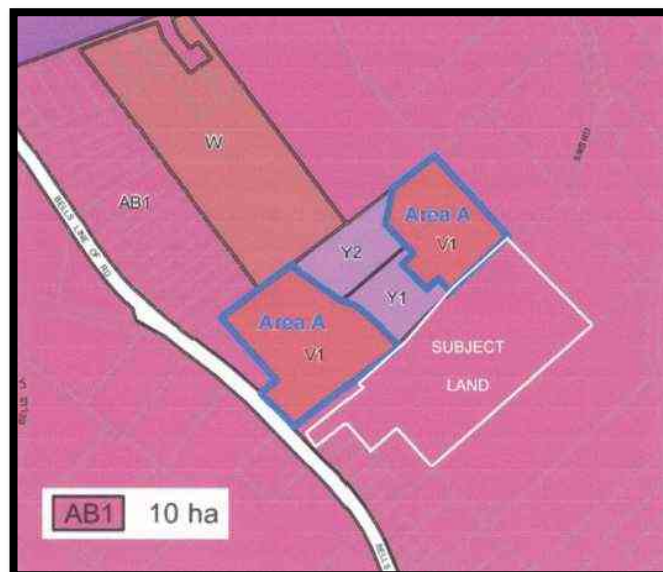


Figure 6: Current HLEP 2012 minimum lot yield map – sheet LSZ_008AA.

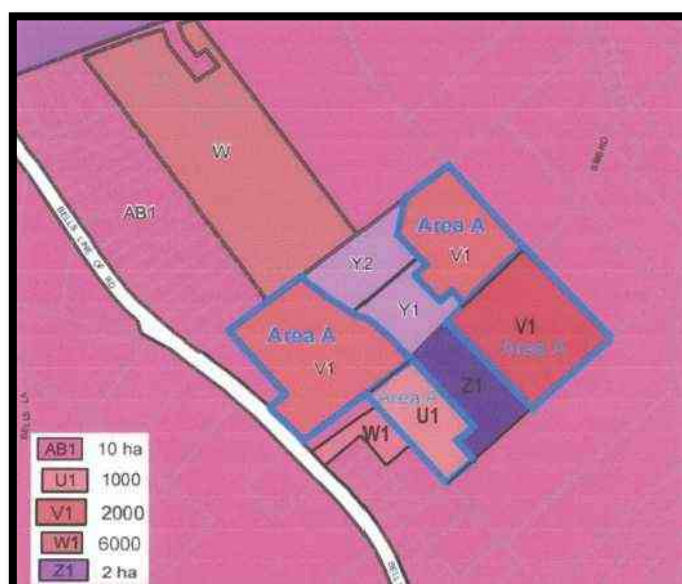


Figure 7: Proposed HLEP 2012 minimum lot yield map – sheet LSZ_008AA

INFORMATION ASSESSMENT

Does the proposal seek to amend a zone or planning control that is less than five years old?

- No. HLEP was made on 21 September 2012.

STRATEGIC MERIT TEST

Consistency with the relevant regional plan outside of the Greater Sydney Region, the relevant district plan within the Greater Sydney Region, or corridor/precinct plans applying to the site, including any draft regional, district or corridor/precinct plans released for public comment.

Proponents will not be able to depend on a draft regional, district or corridor/precinct plan when the Minister for Planning, Greater Sydney Commission or Department of Planning and Environment have announced that such a plan will be updated before being able to be relied upon.

A Plan for Growing Sydney

- The planning proposal addresses A Plan for Growing Sydney and indicates it is consistent with the plan, specifically *Goal 2: A city of housing choice, with homes that meet our needs and lifestyles*, as it seeks to provide housing in a location supported by appropriate infrastructure for the rural locality.
- The subject land is identified as being in the metropolitan rural area within A Plan for Growing Sydney. Action 4.1.2 of the plan seeks to protect and enhance the metropolitan rural area's broad range of environmental, economic and social assets. Further, the site is within the West subregion of the plan, which seeks to protect the natural environment of this region by promoting early strategic consideration of natural hazards.

Draft Greater Sydney Region Plan

- The plan was released in October 2017 and seeks to align housing around employment and infrastructure, such as transport, educational institutions and health care. The proposed residential development is not located around employment, educational institutions and the nearest bus stop is located outside the 800m walking catchment.

- The plan also seeks to protect environmental, economic and social assets of land in rural areas identified as metropolitan rural area. The subject land is within the metropolitan rural area.
- The plan indicates sufficient land is available in designated urban areas to deliver housing and that urban development is not consistent with the values of the metropolitan rural area.

Draft Western City District Plan

- The rezoning review process allows the proponent an opportunity to provide justification to meet the strategic and site-specific merit tests. The proponent submitted an addendum (**Attachment C**) to the proposal on 20 November 2017 addressing the recently released Draft Western City District Plan.
- The addendum asserts that the proposal is consistent with the plan by providing additional housing choice and variety of housing available within the LGA, and economic support to Kurmond village.
- The addendum also noted that the plan also seeks to protect and enhance bushland and biodiversity and better manage rural areas, and that the subject site is identified as being in the metropolitan rural area.

Consistency with a relevant local strategy that has been endorsed by the Department

- There is no relevant local strategy that has been endorsed by the Department that can be relied on to establish strategic merit.

Responding to a change in circumstances, such as the investment in new infrastructure or changing demographic trends that have been recognised by existing planning controls.

- The proposal states that it has been prepared in the context of the Hawkesbury Residential Lands Strategy, which recognises that there is limited capacity in the existing residential-zoned land of the LGA to accommodate more dwellings. Therefore, most new dwellings will need to be provided from greenfield sites/extension of the footprint of existing centres.

SITE-SPECIFIC MERIT TEST

The natural environment (including known significant environmental values, resources or hazards).

- The site is constrained by several environmental factors:

Acid sulfate soils

- The site comprises acid sulfate soils (Figure 8, next page) and is identified as being class 5, which is the least constrained class of acid sulfate soils.
- An acid sulfate soils study has not yet been prepared for the proposal.



Figure 8: Extract from HLEP 2012 acid sulfate soils map.

Terrestrial biodiversity and riparian corridors

- The terrestrial biodiversity map contained in HLEP 2012 shows that the site comprises areas of significant vegetation and connectivity between significant vegetation, as illustrated in Figure 9 (next page).
- The proposal was supported by a flora and fauna assessment (**Attachment G**), which states:
 - endangered ecological community Shale Sandstone Transition Forest is present on the site;
 - most of the significant vegetation is within the riparian watercourse, which runs through the centre of the site; and
 - there is no evidence of koala habitation and the proposal is unlikely to have a significant effect on threatened species, endangered populations, ecological communities or their habitats.
- The proposal provides that the proposed 2ha lot creates an over-width riparian corridor to minimise vegetation removal and avoid fragmentation and that this approach was adopted as a result of considerable discussion with Council's planning staff and ecologist.

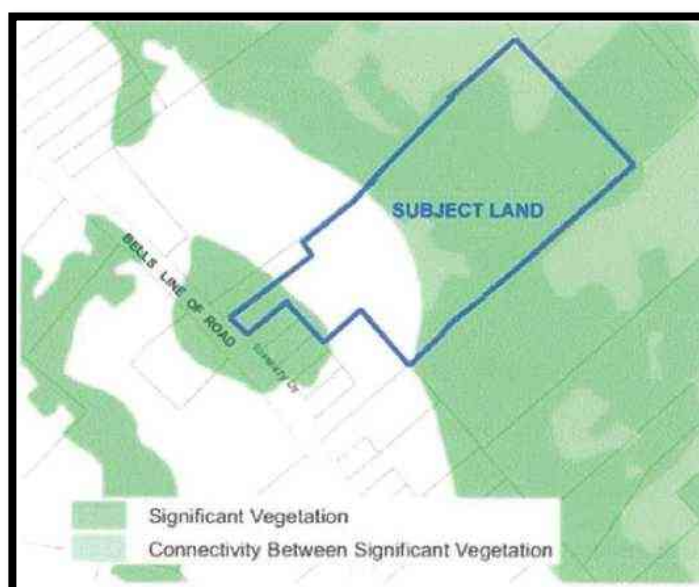


Figure 9: Extract from HLEP 2012 terrestrial biodiversity map.

Bushfire-prone land

- The subject site is bushfire prone.
- The proposal was supported by a bushfire hazard assessment report (**Attachment H**), which recommended several measures including the provision of asset protection zones to ensure the overall principles and requirements for bushfire protection can be achieved.

Land contamination

- The land has been previously used for agricultural purposes. A preliminary contamination report was not submitted as part of the proposal.

The existing uses, approved uses and likely future uses of land in the vicinity of the proposal.

- The adjacent site on the north-western boundary comprises one 13ha residential lot.
- In January 2017, the HLEP 2012 minimum lot size map was amended and the adjoining site now has minimum lot sizes of part 2000m², part 1ha and part 1.5ha.
- Land to the south comprises residential lots of approximately 2,000m².
- The remainder of the land to the south-east and north-east is rural residential lots (Figure 1, page 2).
- Future development in the surrounding area is likely to be large lot residential in nature. Several large lot residential proposals have been approved in recent years, including on the adjoining land to the north-east taking into account:
 - Council's Hawkesbury Residential Lands Strategy. The strategy seeks to identify suitable locations for new development by providing a framework and criteria to accommodate, among other things, "changing population which presents new demands in terms of housing, services and access" in the Hawkesbury locality.
 - Council's adopted interim Structure Planning – Kurmond and Kurrajong Investigation Area, which was developed to provide a planning framework for development in the area by identifying locations suitable for development and impediments to development, including site constraints and mechanisms for funding, and to prevent ad hoc development in the locality. The subject site is within the Kurmond and Kurrajong investigation area (Figure 10).

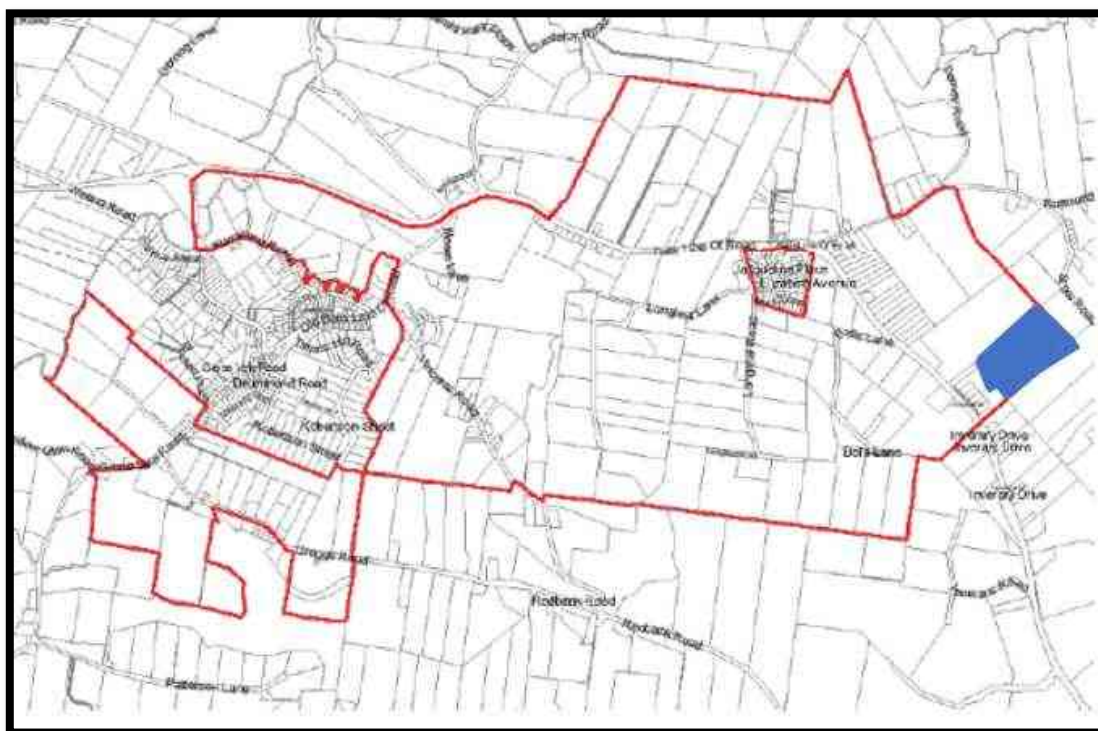


Figure 10: Kurmond and Kurrajong investigation area outlined in red, with the subject land in blue.

The services and infrastructure that are or will be available to meet the demands arising from the proposal and any proposed financial arrangements for infrastructure provision.

- The purpose of Council's Hawkesbury Regional Lands Strategy and the Kurmond and Kurrajong investigation area plan is to enable an informed, planned approach to the delivery of housing and the provision of services.
- The development constraints that are required to be addressed under the Kurmond and Kurrajong investigation area include consideration of the road network, public transport services, wastewater, stormwater, water, emergency services, education, electricity, waste removal and telecommunications.

Transport infrastructure

- The proposal indicates a bus service is available at Kurmond village. The distance from the subject land to the village exceeds 800m. Busways operates the Berambing to Richmond and Kurrajong 682 route. The bus route coincides with the arrival and departure of trains from Richmond train station. The frequency of buses is outlined in the table below:

Route frequency	
am peak	every 30 minutes
pm peak	every 30 minutes
off peak	every 120 minutes
Saturday am and pm peak	2 trips
Sunday am and pm peak	1 trip

- An off-road pedestrian/bike path runs along the Bells Line of Road and links Kurmond to Richmond. Access to Colo High School and Kurmond Public School is provided by this pathway.

Road network

- The proposal seeks to generate 41 lots. Council notes that Roads and Maritime Services has advised of its concerns regarding the cumulative impacts on the local road network of planning proposals for subdivision in the area.
- Council also advises that Bells Line of Road is the major east-west thoroughfare through the Kurmond and Kurrajong investigation area and it experiences significant volumes of traffic in the morning and evening peak periods.

Electricity, telephone, communications, reticulated water and wastewater

- The proposal indicates that the land is serviced by electricity, telephone, communications and reticulated water.
- The proposal advises that Sydney Water has confirmed future dwellings will be connected to the Sydney Water treatment plant at North Richmond.

COUNCIL VIEWS

- Council confirmed that the proposal is the same proposal it received (**Attachment D**) except for the addendum addressing the strategic merit of the proposal in relation to the Draft Western City District Plan.
- Council confirmed that its interpretation (**Attachment D1**) of clause 4.1D(1) *Exceptions to minimum subdivision lot size for certain land* of HLEP 2012 is as follows:
 - clause 4.1D(1) prevents the subdivision of land in Area A into lots smaller than 4,000m² (even if the lot size map has a smaller minimum lot size) if the land is not serviced by reticulated sewerage.
- Advice from the Department's Legal Services Branch has confirmed that while this may have been the intent of the original provision, the clause does not allow this outcome. Should a LEP amendment proceed, it is likely that an amendment to clause 4.1D(1) of HLEP 2012 will be required to rectify this issue.
- Council's comments also reference a restricted lot yield map; however, it is noted that the planning proposal does not seek to introduce a restricted lot yield for this site.
- The planning proposal is not supported by Council officers for the following reasons:
 - progress with respect to the Kurmond and Kurrajong investigation area has been hampered by the receipt of a significant number of planning proposals;
 - Council's preference would be to complete the broader planning studies to better inform the appropriateness of increased development in the area, and proper allocation of zonings and lot sizes to facilitate suitable future development if found to be feasible;
 - should the planning proposal proceed, aside from consideration of the broader study/policy work highlighted above, Council officers note there are several matters that will require careful consideration, including demonstration that the intended outcome of the planning proposal to achieve 41 lots for residential purposes is feasible considering the constraints of the land and Council's adopted development constraint principles, including:
 - ensuring that minimum lot sizes are capable of supporting future residential development while protecting significant natural features such as watercourses, riparian areas and endangered ecological communities;
 - minimum lot sizes are capable of supporting future development having regard to the slope constraints of the subject site;



Figure 12: Watercourse locations and riparian corridor width.

Lot sizes

- Council officer's state the proposed development is inconsistent with the objectives of this zone, which seek to: minimise fragmentation and alienation of resource lands; promote conservation and enhancement of local native vegetation; and retain or enhance existing landscape values, including the agricultural element.
- Comments provided by Council planning officers indicate the proposal is likely to result in increased potential for land-use conflicts and an increased number of lots of smaller residential size that will not be suitable for agricultural purpose or maintaining the rural character of the area.
- The comments provided by Council officers support the proposed 2,000m² lot nominated for the centre of the site as it seeks to retain the significant vegetation and riparian corridor while providing an area suitable for a dwelling house, however, the remainder of the proposal is not supported by council staff as:
 - the proposed minimum lot size area of 6,000m² is not consistent with the standard instrument minimum lot sizes. Most lots in the vicinity have a lot size of 4,000m² or greater and a minimum lot size of 4,000m² is considered more appropriate for this location; and
 - the minimum lot size for the adjoining site is 2,000m². To provide consistency, Council recommends a minimum lot size of 2,000m² be adopted for the remainder of the subject site.

Voluntary planning agreement

- A section 94 plan is not in place for the Kurmond and Kurrajong investigation area and Council requires the implementation of a voluntary planning agreement to be underway prior to the finalisation of a planning proposal.
- If this proposal were to proceed, in accordance with Council's resolution of 10 November 2015, it would be normal for Council to enter into negotiations for a contribution to be levied on each additional lot created to assist in the implementation of traffic and other infrastructure in the locality.
- The planning proposal does not make adequate arrangements for contributions towards the provision and/or upgrade of infrastructure.

Structure planning

- Council resolved in November 2016 to undertake a structure plan process for the locality to guide future land release, and in February 2017 resolved not to support two proposals in the area “pending completion of studies which will determine the total lot yield in Kurmond-Kurrajong Investigation Area and a report explaining the impact of that yield on relevant infrastructure be considered by Council and the adoption of a long-term policy for the development in the locality”.
- Council staff advised the proponent in April 2017 that due to the above resolution, if the proposal was presented to Council then the likely decision would be to defer or potentially refuse it. Council staff recommended the proponent provide written advice agreeing to the deferral of the proposal until the studies referred to in the resolution have been completed and a long-term policy for development in the area has been adopted.

Contact Officer: Alicia Hall
Planning Officer, Sydney Region West
Contact: (02) 9860 1587

**SYDNEY WESTERN CITY
PLANNING PANEL MEETING**

TUESDAY 27 FEBRUARY 2018

LGA – HAWKESBURY

**ATTACHMENT B
PLANNING PROPOSAL
REZONING REVIEW**

PLANNING PROPOSAL

Lot 2 DP 600414 (No. 2)
Inverary Drive Kurmond



May 2017

TABLE OF CONTENTS

Introduction	1
Description of Site	2
Site Analysis	7
Surrounding Land Use	8
Existing Statutory Provisions	10
Part 1 – Objectives or Intended Outcomes	12
Part 2 – Explanation of Provisions	14
Part 3 – Justification	15
Section A – Need for the planning proposal	15
Section B – Relationship to strategic planning framework	16
Section C – Environmental, social and economic impact	36
Section D – State and Commonwealth Interests	38
Part 4 – Mapping	39
Part 5 – Community Consultation	39
Part 6 – Project Timeline	39
Conclusion	40

LIST OF FIGURES

Figure 1	Satellite Image
Figure 2	Topographical Map
Figure 3	Watercourse Classification
Figure 4	Images of the Land
Figure 4	Images of the Land
Figure 5	Images of the Land
Figure 6	Images of the Land
Figure 7	Images of the Land
Figure 8	Images of the Land
Figure 9	Images of the Land
Figure 10	Images of the land
Figure 11	Images of the Land
Figure 12	Site Analysis
Figure 13	Surrounding Land Use and Subdivision Patterns
Figure 14	HLEP 2012 Zone Map Extract
Figure 15	HLEP 2012 Lot Size Map Extract
Figure 16	Concept Subdivision
Figure 17	Proposed Amendment to HLEP Lot Size Map
Figure 18	Kurmond Investigation Area
Figure 19	Proximity to Local Services
Figure 20	HLEP 2012 Acid Sulfate Soils Map Extract
Figure 21	HLEP 2012 Terrestrial Biodiversity Map Extract
Figure 22	Extract from Envirotech Report (Figure 6)

Description of Site

The land is described as Lot 2 DP 607906 (No. 2) Inverary Drive, Kurmond. The land is 10.96 hectares in area and is essentially rectangular in shape, with a frontage of approximately 35.4 metres to Bells Line of Road.

Figure 1: Satellite Image. Source: LPI SIX Maps



The land falls gradually from Bells Line of Road, at a level of approximately 88m AHD, to a minor watercourse running north-west to south-east through the centre of the property, at approximately 60m AHD. The land then rises to a level of approximately 72m AHD at the north-east boundary.

Figure 2 below is a topographical map showing watercourses and contours at 10 metre intervals. Figure 3 shows the watercourse classification in accordance with the Strahler system as adopted by the NSW Office of Water¹

Smaller tributaries join the watercourse from the north and south. However, inspection confirms that these watercourses are drainage depressions with no defined bed or banks. It is noted on page 2 of "Guidelines for riparian corridors on waterfront land", that "where a watercourse does not exhibit the features of a defined channel with bed and banks, the Officer of Water may determine that the watercourse is not waterfront land for the purposes of the WM Act".² Therefore these are not considered to be watercourses for the purposes of the Water Management Act.

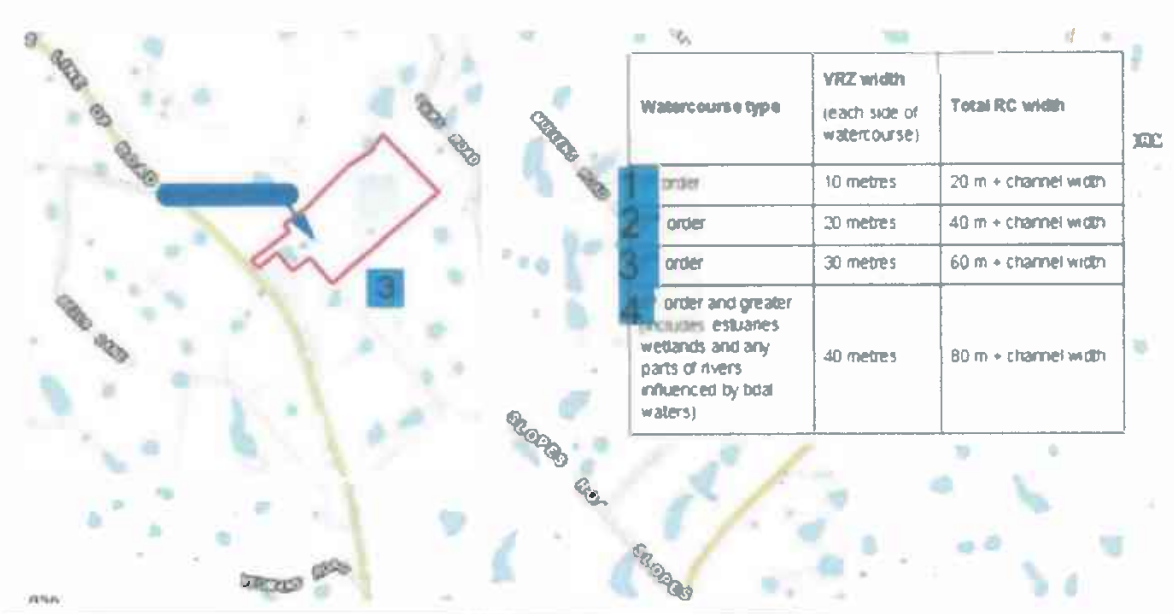
¹ NSW Office of Water, Guidelines for riparian corridors on waterfront land, July 2012.

² NSW Office of Water, Guidelines for riparian corridors on waterfront land, July 2012, pg 2

Figure 2: Cadastre, Source: NSW LPI SIX Maps



Figure 3: Watercourse Classification



The land comprises cleared pasture with scattered trees and two dams. The minor watercourse supports riparian vegetation of varying quality. A dwelling is positioned close to Bells Line of Road in the south-west corner of the land. The land has been used for animal grazing for many years.

Figures 4 - 11 provide views over the land and beyond. The images clearly demonstrate that the land is suitable for the proposed development.

Figure 4: View from cattle loading race looking south with adjoining dwellings along Bells Line of Road in background



Figure 5: View over cleared area towards rear of land



Figure 6: Scattered trees towards rear of land



Figure 7: Cleared area and scattered trees



Figure 8: Cleared area with surrounding scattered trees (west of watercourse)



Figure 11: Watercourse looking upstream

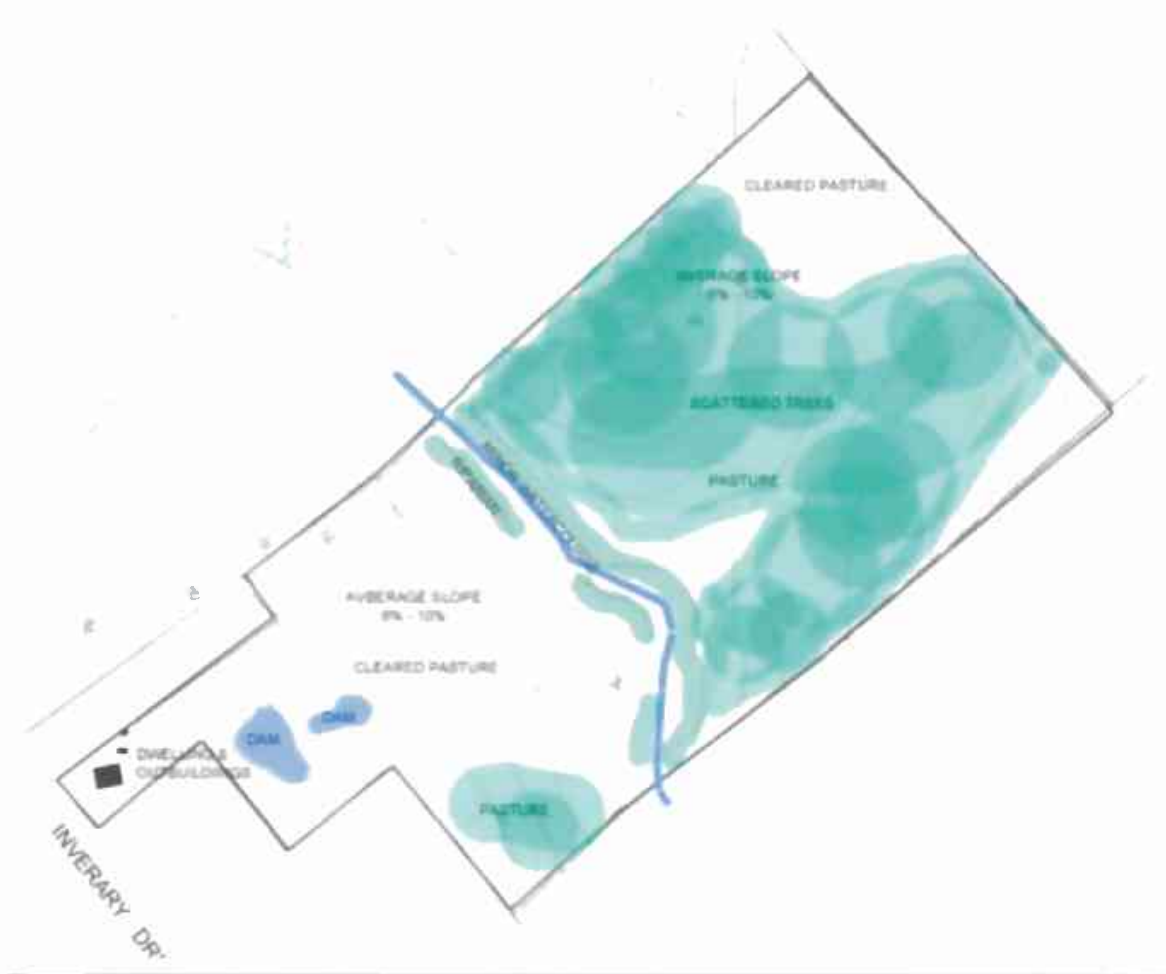


Site Analysis

Figure 12 below is a site analysis based on the physical constraints of the land.

The following observations are made:

- The land is gently sloping with an average slope of between 6% and 10%;
- The land is currently managed pasture;
- There are large cleared areas;
- Vegetation comprises scattered trees which have remained within the pastures;
- There is more dense vegetation along the watercourse;
- The proposed local road links from the adjoining land are well placed to service the future subdivision;

Figure 12: Site Analysis (Base Plan: North Western Surveys)

Surrounding Land Use

Land adjoining to the north-west along Bells Line of Road comprises one residential lot and a 13 hectare property (396 Bells Line of Road) which has minimum lot sizes of 2000m², 1ha and 1.5ha on the HLEP Lot Size Map as amended on 27 January 2017.

Land adjoining to the south-west along Bells Line of Road comprises a number of residential lots of around 2,000m² in area. The remainder of the land to the south-east and north-east is surrounded by rural-residential lots. Land on the opposite side of Bells Line of Road comprises a veterinary establishment within a lot of approximately 9,000m² and a larger property which is the subject of a current planning proposal for large residential lots, which was recently supported by Council.

It is noted that the only agricultural activity in the locality is light animal grazing. There is no commercial or intensive agriculture.

Figure 13 below shows the established subdivision pattern in the locality, surrounding land use and land which is the subject of residential planning proposals approved by Council.

Figure 13: Surrounding land use and subdivision patterns. Source: NSW LPI SIX Maps



Existing Statutory Provisions

The subject land and surrounding land is "RU1 Primary Production" under the provisions of Hawkesbury Local Environmental Plan 2012.

Figure 14: Extract from HLEP 2012 Land Zoning Map – Sheet LZN_008AA

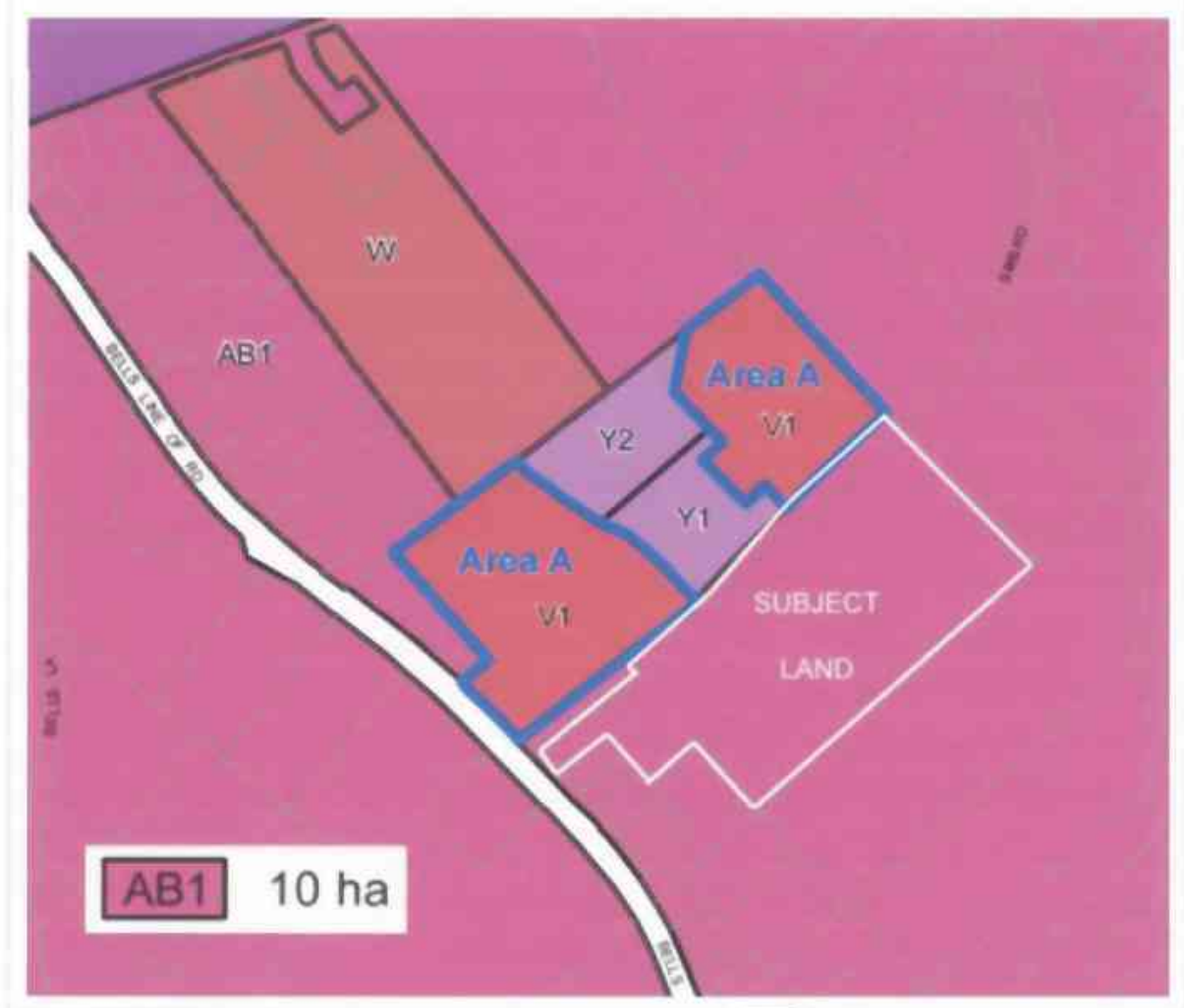


The objectives of the RU1 Primary Production zone are as follows:

- *To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.*
- *To encourage diversity in primary industry enterprises and systems appropriate for the area.*
- *To minimise the fragmentation and alienation of resource lands.*
- *To minimise conflict between land uses within this zone and land uses within adjoining zones.*
- *To encourage agricultural activities that do not rely on highly fertile land.*
- *To ensure that development occurs in a way that does not have a significant adverse effect on water catchments, including surface and groundwater quality and flows, land surface conditions and important ecosystems such as waterways.*
- *To promote the conservation and enhancement of local native vegetation including the habitat of threatened species, populations and ecological communities by encouraging development to occur in areas already cleared of vegetation.*
- *To ensure that development retains or enhances existing landscape values including a distinctive agricultural component.*
- *To ensure that development does not detract from the existing rural character or create unreasonable demands for the provision or extension of public amenities and services.*

In accordance with Clause 4.1 of HLEP 2012 the minimum permissible lot size is 10 hectares.

Figure 15: Extract from HLEP 2012 Lot Size Map Sheet LSZ_008AA



It is considered that the land is unsuitable for intensive agriculture due to the close proximity of existing and proposed residential development along Bells Line of Road and the relatively small lot size in terms of agricultural production. The land is located within 1 kilometre of Kurmond Village, and therefore satisfies the necessary criteria for rural village expansion.³

Council has seen many conflicting situations with orchards, market gardens and the like. Most of the lots in this locality are well below the minimum lot size. The lots which do meet the minimum lot size, and the subject land, are not large enough to support viable agriculture or to provide sufficient buffers between agriculture and residential uses.

It is considered that providing additional land for housing in this location is logical and represents *"the promotion and coordination of the orderly and economic use and development of land"* as stated in the Objects of the Environmental Planning & Assessment Act, 1979.

³ Hawkesbury Residential Land Strategy, Adopted 10 May 2011.

Part 1 – Objectives or Intended Outcomes

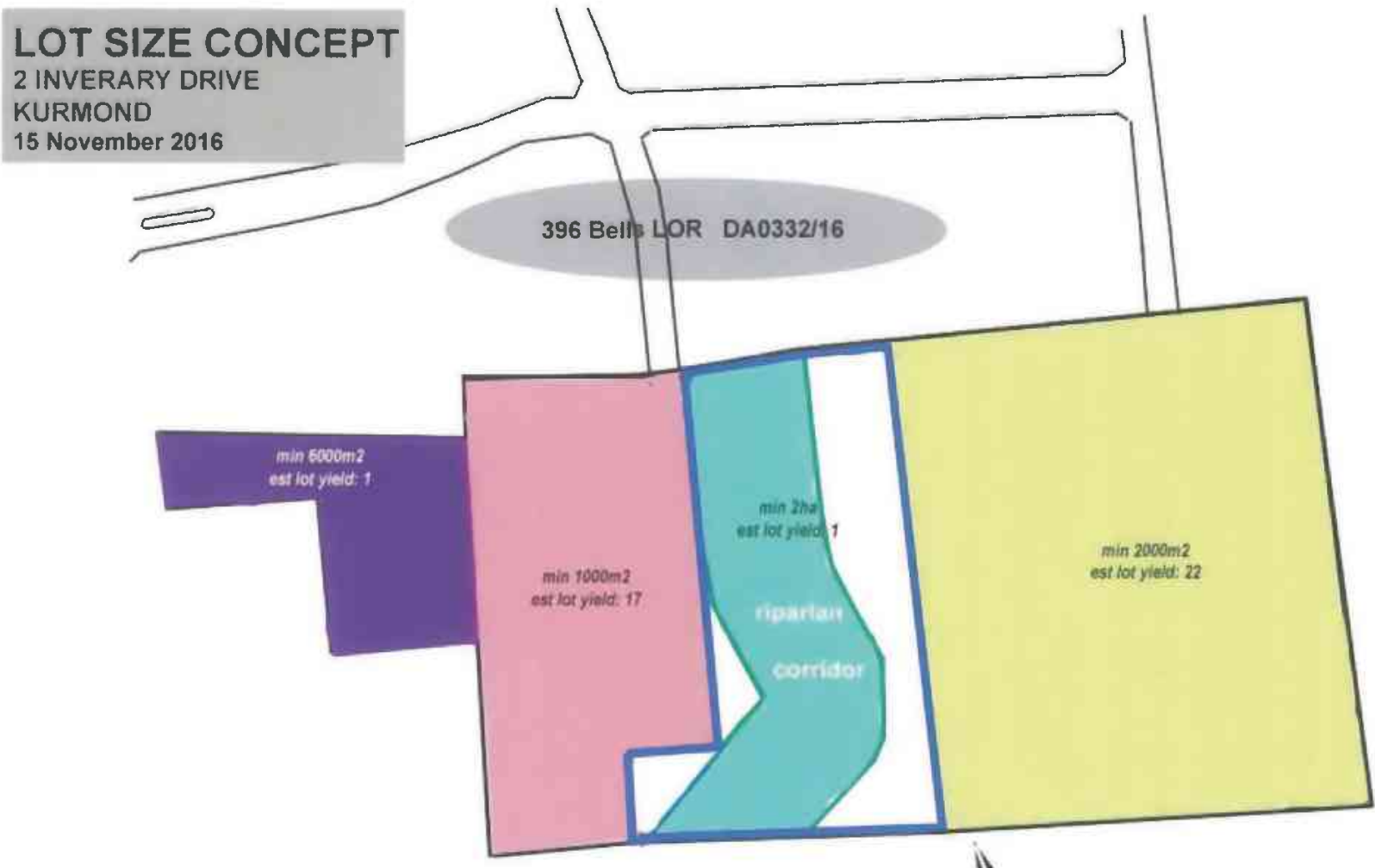
The objective of the planning proposal is to allow the land to be subdivided into large residential lots, which are sufficient in size to support sustainable housing within a rural village setting.

The intended outcome is to facilitate a development application to subdivide the land into an estimated 41 lots, with a minimum size of 1,000m², 2,000m², 6,000m² and 2ha.

Figure 16 below is a concept plan showing proposed minimum lot size locations. The plan makes provision for connecting roads to the adjoining land to the north-west which provides a single access road connecting with Bells Line of Road. The riparian corridor is protected within a large single lot.

The concept layout was prepared in consultation with Hawkesbury Council Planning staff, having regard to the slope of the land, the location of the watercourse and the location of significant vegetation.

Figure 16: Concept Subdivision Layout



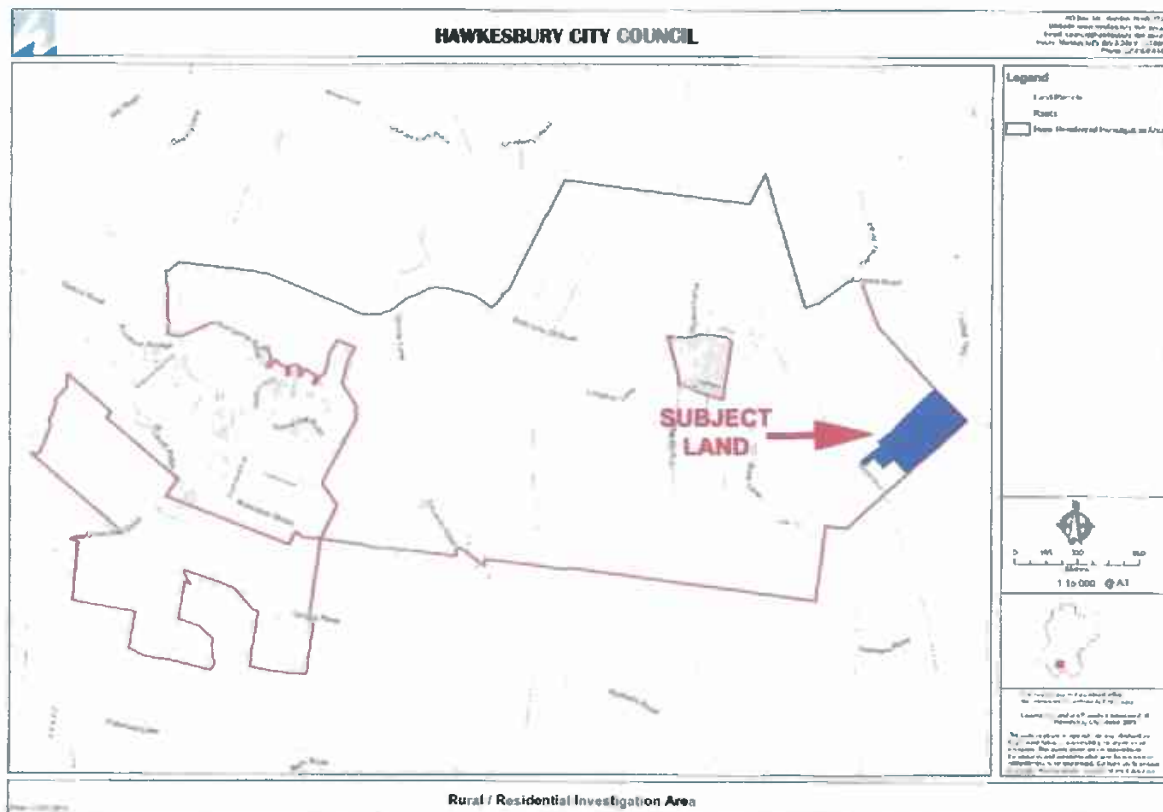
Part 3 – Justification

Section A – Need for the planning proposal

1. *Is the planning proposal a result of any strategic study or report?*

Yes. The planning proposal has been prepared as a result of the Hawkesbury Residential Land Strategy (HRLS). The proposal satisfies the criteria for rural village expansion as contained within the Strategy. The subject land is located within the Kurmond Kurrajong Rural / Residential Investigation Area, which was identified by Council in accordance with, and subsequent to, the HRLS.

Figure 18: Kurmond Kurrajong Rural Residential Investigation Area – Source: HCC



2. *Is the planning proposal the best means of achieving the objectives or intended outcomes, or is there a better way?*

The alternative is to amend Hawkesbury LEP 2012 by including an additional permitted use of the land within Schedule 1 to allow the proposed subdivision of the land. However, it is considered that amending the Lot Size Map and inclusion of a lot yield clause as proposed is consistent with the ethos of the Standard Instrument LEP and is the best, most efficient and time effective approach to delivering the intended outcome of the proposal.

Section B – Relationship to strategic planning framework.

3. *Is the planning proposal consistent with the objectives and actions of the applicable regional or subregional strategy (including the Sydney Metropolitan Strategy and exhibited draft strategies)?*

The Hawkesbury Local Government Area is identified in *A Plan for Growing Sydney 2014* as within the West Subregion. The following goals, directions and actions have relevance to the proposal.

Goals / Directions / Actions	Response
<p>Goal 2: A city of housing choice, with homes that met our needs and lifestyles</p> <p>Direction 2.1: Accelerate housing supply across Sydney</p> <p>Action 2.1.1: Accelerate housing supply and local housing choices</p> <p>Action 2.3.1: Require local housing strategies to plan for a range of housing types</p>	<p>The Plan's focus is on providing more housing, with a greater choice of dwelling types in well serviced locations. The Plan requires local housing strategies to plan for a range of housing types. This proposal is prepared in accordance with the Hawkesbury Residential Lands Strategy, prepared by Council to put such housing strategies in place.</p> <p>The proposal is supported by appropriate infrastructure for the rural locality including transport, schools, health facilities, open space and recreation.</p> <p>The Hawkesbury Residential Lands Strategy has identified both the need for additional housing and suitable locations for additional housing.</p> <p>A range of opportunities are identified including urban infill, new urban areas and additional housing around rural villages.</p>
<p>Goal 4: A sustainable and resilient city that protects the natural environment and has a balanced approach to the use of land and resources.</p> <p>Direction 4.2: Build Sydney's resilience to natural hazards</p> <p>Action 4.2.3: Map natural hazard risks to inform land use planning decisions</p> <p>Direction 4.3: Manage the impacts of</p>	<p>This planning proposal is prepared in the context of the Hawkesbury Residential Lands Strategy. The Strategy recognises that there is limited capacity within existing residential zoned land of the LGA to accommodate more dwellings, hence the majority of new dwellings will need to be provided from greenfield sites / extension of the footprint of existing centres.</p>

<p>development on the environment</p>	<p>The Strategy recognises that urban growth in the Hawkesbury is severely limited by environmental constraints such as State and National parks, agricultural land values, flooding issues, and noise constraints.</p> <p>The subject site is free from these constraints and satisfies the Hawkesbury Residential Lands Strategy criteria for rural village expansion.</p> <p>The minor increase in housing in suitable locations around existing rural villages will contribute to the continued viability of those villages, while not substantially changing the rural character of the area.</p> <p>The land is classified as bushfire prone land. Any future subdivision will address the requirements of Planning for Bushfire Protection in detail. However, a review of the proposal indicates that compliance will be achievable.</p> <p>The land will be serviced with reticulated sewer via private main to the Sydney Water sewage treatment plant at North Richmond.</p> <p>It is considered that the proposal has taken account of the natural hazards and environmental constraints and features and the development will be designed and managed to ensure that the proposal will have minimal impacts.</p>
<p>Priorities for West Subregion: Accelerate housing supply, choice and affordability and build great places to live</p>	<p>One of the stated priorities is to:</p> <p>"Work with councils to identify suitable locations for housing intensification and urban renewal, including employment agglomerations – particularly around established and new centres and along key public transport corridors including the Western Line and the Blue Mountains Line."</p> <p>This planning proposal will assist by creating new housing opportunities in a</p>

	suitable location as identified by the Hawkesbury Residential Lands Strategy.
--	---

Although it is not consistent with the regions identified by *A Plan for Growing Sydney*, the Northwest draft Subregional Strategy remains relevant as an “exhibited draft strategy”. The following table lists the relevant actions from the Subregional Strategy.

Actions	Response
NW Action C5.1.2 Councils to reflect best practise established by the Growth Centres Commission in land release areas outside the North West Growth Centre.	The Planning Proposal is a minor expansion of an existing rural village.
<p>NW Action D2.3.3 State and local government to improve existing interchanges and bus stops.</p> <p>NW Action D3.1.1 The Roads and Traffic Authority (now Roads and Maritime Service (RMS)), in cooperation with the local government, to continue to upgrade walking and cycling facilities, including cycleway development in Blacktown, Castle Hill and Colo.</p> <p>NW Action D3.1.2 The NSW Government and local government to work together to align local walking and cycling networks with public transport routes to improve accessibility to public transport.</p>	<p>Westbus operates along Bells Line of Road between Richmond and Kurrajong via Kurmond. This service operates every 30 minutes during the peak periods with the closest stop being located on Bells Line of Road.</p> <p>An off-road pedestrian/bike path which links Kurmond to North Richmond runs along Bells Line of Road. Colo High School and Kurmond Public School are also linked by this pathway.</p>
NW Action E2.1.2 Sydney Metropolitan and Hawkesbury – Nepean Catchment Management Authorities to work with agencies and North West councils to ensure that the aims and objectives of Catchment Action Plans are considered in the future management and planning of local council areas.	The relevant public authorities will be consulted during preparation of the draft plan.
NW Action E2.1.5 North West councils to continue to promote water sensitive urban design.	The Planning Proposal is a minor expansion of an existing rural village. Future subdivision design will incorporate best practice stormwater

	design.
NW Action E4.1 Maintain rural activities and resource lands.	Due to the size of the land and the proximity to residential neighbours, the land is not suitable for viable agriculture. There is currently no commercial agriculture in the immediate locality.
NW Action E6.3.1 The Heritage Office to work with local councils to identify areas in the North West Subregion to promote and provide access to heritage places, contribute to local economies and assist in sustaining heritage places.	The land and surrounding land is not identified as having heritage significance.
<p>NW Action F2.1.1 Councils to maintain or enhance the provision of local open space particularly in centres and along transport corridors where urban and residential growth is being located.</p> <p>NW Action F2.1.2 Council to consider open space improvement programs with better facilities to encourage use.</p> <p>NW Action F2.1.3 Councils to consider mechanisms to increase the capacity of local sports fields to a district level.</p> <p>NW Action F2.1.4 NSW Government and local councils to develop links between smaller reserves to create diversity and broader user experience.</p> <p>NW Action F2.1.5 Local councils to consider modifying underutilised open space for informal activities such as skating, basketball, netball and the establishment of cafes.</p>	<p>It is considered that the additional population generated by this Planning Proposal is unlikely to trigger a requirement for acquisition of additional open space land.</p> <p>This is especially the case where the minimum lot size will be 1,000m², 2,000m², 6,000m² and 2 ha, which provides for large amounts of private open space.</p>

This planning proposal represents minor growth north-west of the Hawkesbury River which is associated with the existing Kurmond village centre. Therefore, the proposal is consistent with the draft North West Subregional Strategy and A Plan For Growing Sydney.

4. *Is the planning proposal consistent with the local Council's Community Strategic Plan or other local strategic plan?*

The relevant strategic plans are the Hawkesbury Community Strategic Plan 2013-2032 and the Hawkesbury Residential Land Strategy, 2011.

4.1 Hawkesbury Community Strategic Plan 2013-2032

This plan was adopted by Hawkesbury City Council in May 2013. The provisions of the Community Strategic Plan which are of most relevance to the planning proposal are:

Looking after people and place

Directions

1. Be a place where we value, protect and enhance the historical, social, cultural and environmental character of Hawkesbury's towns, villages and rural landscapes
2. Offer residents a choice of housing options that meets their needs whilst being sympathetic to the qualities of the Hawkesbury
3. Population growth is matched with the provision of infrastructure and is sympathetic to the rural, environmental, heritage values and character of the Hawkesbury
4. Have development on both sides of the river supported by appropriate physical and community infrastructure
5. Have an effective system of flood mitigation, fire and natural disaster management and community safety which protects life, property and infrastructure
6. Have friendly neighbourhoods, connected communities, and supported household and families
7. Have future residential and commercial development designed and planned to minimise impacts on local transport systems, allowing easy access to main metropolitan gateways

Strategies

1. Revitalise and enhance town centres and villages
2. Encourage affordable, diverse and quality housing solutions in serviced areas
3. Manage rural and natural lands to support a balance of agriculture, environment and housing that delivers viable rural production and rural character
4. Recognise, protect and promote the values of indigenous, natural and built heritage through conservation and active use
5. Upgrade the necessary physical infrastructure and human services to meet contemporary needs and expectations
6. Provide for a safer community through planning, mitigation and response

Goals

1. Towns and villages to be vibrant places that people choose to live in and visit
2. Appropriate and affordable range of infrastructure and services available to meet contemporary needs
3. Viable tourism economy
4. Funded viable and sustainable events
5. Housing is available and affordable for the population whilst retaining agricultural and heritage values
6. Managed population growth that contributes to and sustains the local economy and services and respects agricultural and heritage values of the area

7. Maintain and foster the rural and heritage character within the Hawkesbury
8. Viable and sustainable agriculture industries retained and developed
9. Natural and built heritage valued socially and economically
10. Ongoing review and implementation of community disaster and safety plans
11. Continue to support agencies and volunteers who assist in maintaining a safe and socially valuable community

Caring for Our Environment

Directions

1. Be a place where we value, protect, and enhance the cultural and environmental character of Hawkesbury's towns, villages and rural landscapes
2. To look after our cultural and environmental assets for future generations so that they too can enjoy, and benefit from, a clean river and natural eco-systems, rural and cultural landscape
3. Take active steps to encourage lifestyle choices that minimise our ecological footprint
4. Work with our communities and businesses to use our resources in a sustainable way and employ best practices and technologies that are in harmony with our natural environment

Strategies

1. Effective management of our rivers, waterways, riparian land, surface and groundwaters, and natural eco-systems through local action and regional partnerships
2. Reduce our environmental footprint through resource and waste management
3. Manage growth with ecologically sustainable principles
4. Engage with the community and work together to care for our environment

Goals

1. Clean, healthy, usable rivers and waterways
2. Balance the needs of our ecology, recreational and commercial activities
3. Maximise sustainable use of potable and recycled water
4. Reduced greenhouse gas emissions
5. Our community is living more sustainably
6. Waste management facility operating on a commercial basis
7. Reduced waste to landfill
8. Environmental impact of growth is minimised
9. Healthy and functioning catchments and riparian corridors
10. Improved community awareness of the importance and value of healthy catchments, natural waterways, vegetated riparian corridors, surface water and groundwater resources.

Sustainability Principles

The following are considered relevant to the Planning Proposal.

- Principle 4: Use of energy and other resources must be just and efficient, both across the globe and between generations
- Principle 5: Even if there is doubt about the environmental impact that an action will have, one should err on the side of caution to protect the environment

It is submitted that the planning proposal is consistent with the Hawkesbury Community Strategic Plan. The planning proposal will assist in the achievement of some of the above Goals, particularly in terms of providing housing choice and creating a sustainable local economy. The proposal satisfies the environmental goals, by minimising the impact of growth and providing sustainable, managed housing opportunities in an area of high amenity.

The environmental impacts have been carefully considered through bushfire, flora and fauna and traffic assessment. It is considered that the planning proposal satisfies the sustainability principles of the Plan.

The Hawkesbury Community Strategic Plan 2013 - 2032 can be viewed on Council's website www.hawkesbury.nsw.gov.au.

4.2 Hawkesbury Residential Land Strategy 2011

The Hawkesbury Residential Land Strategy guides the location and type of future residential development within the LGA. The strategy is based on best practice models of sustainable development which seek to guide future residential development within the LGA over the next 30 years and ensure future residential development is sustainable and meets the needs of the Hawkesbury population.

The review of population and dwelling characteristics (Chapter 3.0) identified that future population growth within the LGA is ageing and household sizes are decreasing. This will have significant impact on housing needs, services and facilities within the LGA.

The projections show an estimated demand for an additional 5,932 dwellings which is slightly higher than the dwelling target set in the North Western Subregional Strategy.

The Residential Strategy is designed to be suitably flexible to provide 5,000-6,000 dwellings with the final number of dwellings being shaped by market demand and more detailed environmental capacity analysis. As outlined in Section 3.3.6 [of the Strategy], the majority of additional dwellings (5,400 dwellings) will be located in existing or expanded urban and village areas where they can access such services and facilities. The remainder of future development (600 dwellings) will be located in the remaining localities, subject to compliance with the sustainability matrix for neighbourhood centres.⁴

The following table sets out the Rural Village Criteria from the Strategy, with comments in relation to the subject planning proposal.

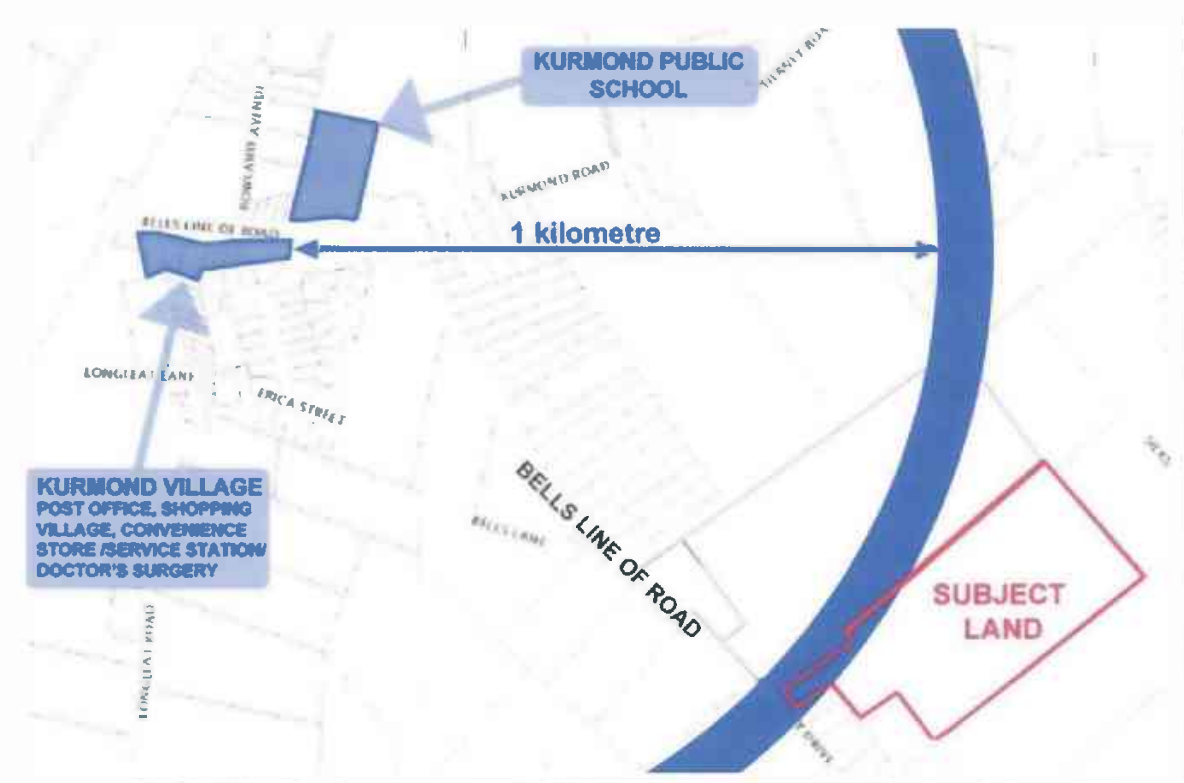
6.5 Rural Village Criteria	Consistency
Be able to have onsite sewerage disposal	Arrangements have been made for reticulated sewage to each lot which will be piped to the Sydney Water North Richmond STP. This provides a better environmental outcome than on-site disposal.
Cluster around or on the periphery of villages	Yes. The land adjoins residential allotments which form part of Kurmond

⁴ Hawkesbury Residential Land Strategy, 2011, pg 7/1

	Village.
Cluster around villages with services that meet existing neighbourhood criteria services as a minimum (within 1km radius)	Yes. The land is located within 1000m of Kurmond Village, which provides a range of services including primary school, post office, medical, neighbourhood shops, take-away and dine-in food and cafes.
Address environmental constraints and with minimal environmental impacts	Yes. The proposal will have minimal environmental impacts.
Within the capacity of the rural village	Yes. The proposal represents a minor expansion of the Kurmond Village only.

It is therefore concluded that the proposal meets all relevant criteria within the Hawkesbury Residential Land Strategy. Figure 19 shows the relationship between the land and the available nearby services.

Figure 19: Proximity to Local Services



4.3 Structure Planning Report for the Kurmond and Kurrajong Investigation Area

On 28 July 2015, Council resolved that current planning proposals within the Kurmond and Kurrajong Investigation Area only proceed to Gateway if the 'fundamental' development constraints have been addressed. The relevant fundamental constraints and associated recommendations are shown below in Tables 1 and 2. These tables also provide comments regarding the proposal's compliance with the recommendations.

Table 1: Physical Environment

Factor	Degree of Constraint to Development	Recommendation
<i>Terrestrial Biodiversity</i> Impact of development on threatened or endangered flora and fauna	Fundamental - Major	Legislation applies to threatened and endangered species. OEH concurrence may be required Removal of significant vegetation is to be avoided Fragmentation of significant vegetation is to be minimised
<p>Comment: Detailed ground survey by Envirotech Pty Ltd demonstrates that the majority of significant vegetation is located within the riparian corridor, which runs through the centre of the subject land. This is shown in Figure 6 of the Envirotech Report⁵, which is reproduced as Figure 22 below. The proposed 2ha minimum lot size in this area creates an over-width riparian corridor to minimise vegetation removal and avoid fragmentation. There has been considerable discussion and consultation with Council's planning staff and ecologist, who agree with this approach.</p> <p>If required, this vegetation can be further protected during the subdivision DA process by a requirement for a positive covenant to be registered on the title(s).</p>		
<i>Watercourses and Riparian Areas</i> Impact of development on watercourses and riparian areas	Fundamental - Major	Legislation applies to threatened and endangered species. OEH concurrence may be required Building envelopes, APZs, driveways and roads (not including roads for the purposes of crossing watercourses) are to be located outside of riparian corridors Road crossings of watercourses are to be minimised Fragmentation of riparian areas is to be minimised
<p>Comment: As detailed above, a 2 hectare minimum lot size will be placed over the property, which includes the riparian corridor. Accordingly, no building envelopes, APZ's, driveways or roads will be located within the riparian corridor. The future subdivision will be accessed through the road network created on the adjoining land to the north (396 Bells Line of Road). Therefore, no road crossing is required over the riparian corridor.</p>		
<i>Dams</i> Impact of development on aquatic habitat. Proximity of dams to effluent disposal systems	Fundamental - Minor	Legislation applies to threatened and endangered species. OEH concurrence may be required Removal of dams containing significant aquatic habitat is to be avoided. Minimum required buffer distances for effluent disposal systems is to be adhered to

⁵ Envirotech Pty Ltd, Flora and Fauna Assessment Report, 2 Inverary Drive Kurmond, 9 June 2016.

Comment: A small turkey nest dam is located in the north-west corner of the land. This dam will be contained within the proposed 6,000m ² lot which will contain the existing dwelling. Accordingly, the dam will not be impacted by future subdivision.		
Factor	Degree of Constraint to Development	Recommendation
Bush Fire threat Impact of the location and management of APZs and perimeter roads	Fundamental - Major	RFS concurrence may be required Building construction and water supply is to comply with NSW Rural Fire Service's <i>Planning for Bushfire Protection 2006</i> , e.g. APZs and roads
Comment: The preliminary bushfire hazard assessment submitted with the proposal demonstrates that this can be satisfactorily dealt with at development application stage by way of referral to the RFS and conditions of consent.		
Aboriginal Heritage Impact of development on Aboriginal heritage items	Fundamental - Moderate	<i>National Parks and Wildlife Act 1974</i> applies Council and developers are also to consider relevant provisions of <i>Heritage Act 1977</i> when preparing and considering development applications
Comment: No known aboriginal relics are located on the site. Further consideration can be given to this at development application stage		
Land Contamination Suitability of land to be developed given potential for land to be contaminated	Fundamental - Minor	Remediation action plans and validation may be required Council and developers are to consider relevant provisions of <i>State Environmental Planning Policy No 55—Remediation of Land</i> when preparing and considering development applications
Comment: The applicant advises the land has been used for agriculture in the form of animal grazing for many years and that there is no evidence to suggest that any activities have occurred on the land which would give rise to contamination. Further considered can be given to this at development application stage		
Acid Sulfate Soils Impact of disturbance of acid sulfate soils on the environment and development	Fundamental to Minor	Development proposals and land class are to be assessed with respect to Clause 6.1 Acid Sulfate Soils of LEP 2012. Acid sulfate soils management plans required
Comment: The subject site is within the Acid Sulfate Soils Class 5 categorisation which is the least restrictive of the 5 classifications. Further consideration, if required, can be given to this at development application stage		

Table 2: Infrastructure and Services

Factor	Degree of Constraint to Development	Recommendation
<i>Road network</i> Capacity and safety of existing road network	Fundamental - Major	RMS concurrence may be required Development contributions are to be levied for road improvements Council and developers are to consider relevant provisions of <i>State Environmental Planning Policy (Infrastructure) 2007</i> when preparing and considering development applications
Comment: RMS has not requested a development contribution for road works. Council staff have had detailed discussions with RMS regarding the road network. The proposal satisfies the relevant requirements of the SEPP (Infrastructure) 2007.		
<i>Wastewater</i> Capacity of land to cater for on-site effluent disposal	Fundamental	Sydney Water concurrence may be required Developers are to demonstrate that waste water can be disposed of on site in an environmentally sensitive manner. Alternatively, developers may provide reticulated sewer service to new lots in accordance with relevant licences and/or authority requirements Clause 6.7 - Essential Services under LEP 2012 applies
Comment: The proposed future subdivision will be serviced by reticulated sewer, with a private main shared by the subject land and the adjoining No. 396 Bells Line of Road draining to the Sydney Water North Richmond sewage treatment plant.		
<i>Public Transport Services</i> Provision of bus service to cater for the needs of incoming population	Fundamental - Moderate	Transport NSW and RMS concurrence may be required Possible levying of development contributions for bus services Clause 6.7 - Essential Services under LEP 2012 applies
Comment: The draft plan will be referred to the relevant Agencies for comment.		
<i>Stormwater drainage</i> Quantity and quality of stormwater run-off entering watercourses	Fundamental - Moderate	Developers are to demonstrate that stormwater can be captured, treated and released in an environmentally sensitive manner Possible levying of development contributions for stormwater purposes Clause 6.7 - Essential Services under LEP 2012 applies
Comment: It is considered this can be satisfactorily dealt with at development application stage by way of the assessment of drainage designs and conditions of consent.		
<i>Water Supply</i> Provision of reticulated water supply to new lots	Fundamental - Moderate	Sydney Water concurrence may be required. A reticulated water service is to be provided to new lots by developers in accordance with relevant authority requirements Clause 6.7 - Essential Services under LEP 2012 applies

Comment: It is considered this can be satisfactorily dealt with at development application stage by way of condition of consent.		
Factor	Degree of Constraint to Development	Recommendation
<i>Electricity</i> Provision of electricity service to new lots	Fundamental	Electricity provider concurrence may be required Electricity services are to be provided to new lots by developers in accordance with relevant authority requirements Clause 6.7 - Essential Services under LEP 2012 applies
Comment: It is considered this can be satisfactorily dealt with at development application stage by way of condition of consent.		

4.4 Our City Our Future Rural Rezoning Policy

This Policy was adopted by Hawkesbury City Council on 7 November 1995 and revised on 16 May 1998. Since that time, the Policy has essentially been superseded by the following studies and documents:

- NSW Department of Planning draft North West Subregional Strategy
- Hawkesbury Residential Land Strategy
- Hawkesbury Community Strategic Plan

Notwithstanding the above strategies and plans, the Our City Our Future Rural Rezoning Policy remains a formal policy of the Council. The following comments are provided in response to the relevant policy statements.

a. Fragmentation of land is to be minimised;

It is considered that the proposal minimises fragmentation of rural lands by creating an average density of one lot per 3,130m², allowing for an acceptable increase in population, while not fragmenting larger agricultural lots.

b. Consolidation within and on land contiguous with existing towns and villages be preferred over smaller lot subdivision away from existing towns and villages;

It is submitted that the proposal is within a location which has access to services and facilities and is contiguous with residential lots associated with Kurmond Village.

This policy statement has been adopted by the Hawkesbury Residential Lands Strategy in Section 6.5 – Rural Village Criteria:

Cluster around or on the periphery of villages

Cluster around villages with services that meet existing neighbourhood criteria services as a minimum (within 1km radius)

c. No subdivision along main roads and any subdivision to be effectively screened from minor roads;

Bells Line of Road is a main road. The proposal intends to utilise the proposed single access to Bells Line of Road on the adjoining property, 396 Bells Line of Road. This new intersection is supported by Council and the NSW Roads and Maritime Services.

The land falls away from Bells Line of Road, and proposed lots will have frontage and access to new internal roads. The proposed subdivision will not be readily visible from this road.

d. No subdivision along ridgelines or escarpments;

Bells Line of Road follows a minor ridgeline. The land which is proposed to be subdivided falls away from the road to the north, which reduces visual impact of the proposal. It has been demonstrated that the proposal satisfies all relevant criteria of the Hawkesbury Residential Land Strategy and the Council supports the proposal.

e. Where on site effluent disposal is proposed, lots are to have an area of at least 1 (one) hectare unless the effectiveness of a smaller area can be demonstrated by geotechnical investigation;

This policy statement has been adopted by the Hawkesbury Residential Lands Strategy in Section 6.5 – Rural Village Criteria:

Be able to have onsite sewerage disposal

Sydney Water Corporation has advised that there is capacity within the North Richmond STP to accept sewage from the proposal. The owner is committed to providing a private main from the site to the existing Sydney Water main in Bells Line of Road at North Richmond.

It is submitted that reticulated sewer will provide a better environmental outcome and the Planning Proposal is therefore consistent with this policy statement.

f. The existing proportion of tree coverage on any site is to be retained or enhanced;

The Planning Proposal will have minimal impact on tree coverage. The subdivision concept has been designed to retain riparian vegetation within individual lots. It is not intended to clear trees other than for proposed road works. Additional plantings as part of subdivision works will enhance the overall tree coverage of the land.

g. Any rezoning proposals are to require the preparation of Environmental Studies and Section 94 Contributions Plans at the applicant's expense.

It is submitted that an environmental study is not required, as sufficient information is provided with the Planning Proposal in accordance with Department of Planning Local Plan Making Guidelines. Discussions have been held with Council officers about a possible Section 94 Plan and/or Special Infrastructure Contribution. At this stage, the plan has not progressed sufficiently and it is agreed that the developer would enter into a voluntary planning agreement with the Council, should the Section 94 plan not be completed in time.

h. Community title be encouraged for rural subdivision as a means of conserving environmental features, maintaining agricultural land and arranging for the maintenance of access roads and other capital improvements.

The form of title of subdivision is more appropriate for discussion in the lead up to a development application, once the Planning Proposal has progressed to the final stage. However, the preliminary subdivision concept provides that all lots will have access to a public road.

4.5 HCC Policy: Rezoning of Land for Residential Purposes – Infrastructure Issues

This Policy was adopted by Council on 30 August 2011 and states:

That as a matter of policy, Council indicates that it will consider applications to rezone land for residential purposes in the Hawkesbury LGA only if the application is consistent with the directions and strategies contained in Council's adopted Community Strategic Plan, has adequately considered the existing infrastructure issues in the locality of the development (and the impacts of the proposed development on that infrastructure) and has made appropriate provision for the required infrastructure for the proposed development in accordance with the sustainability criteria contained in Council's adopted Hawkesbury Residential Land Strategy.

Note 1:

In relation to the term "adequately considered the existing infrastructure" above, this will be determined ultimately by Council resolution following full merit assessments, Council resolution to go to public exhibition and Council resolution to finally adopt the proposal, with or without amendment.

Note 2:

The requirements of the term "appropriate provision for the required infrastructure" are set out in the sustainability matrix and criteria for development/settlement types in chapter six and other relevant sections of the Hawkesbury Residential Land Strategy 2011.

It is submitted that the Planning Proposal is consistent with the directions and strategies contained in Council's adopted Community Strategic Plan, as demonstrated in Section 4.1.

The Council has resolved to investigate the matter of infrastructure and staff are currently examining the relevant issues in the locality. The proposal also satisfies the relevant sustainability criteria contained within the Hawkesbury Residential Land Strategy, as detailed in Section 4.2.

It is submitted that the planning proposal is consistent with this policy.

5 Is the planning proposal consistent with applicable state environmental planning policies?

A review of state environmental planning policies reveals that the following may be applicable and relevant:

SEPP No 44 Koala Habitat Protection

An assessment was carried out by Envirotech Pty Ltd in accordance with the provisions of the SEPP. The assessment found no evidence for koala habitation and concluded that a Species Impact Statement is unlikely to be required.

SEPP 55 – Remediation of Land.

The land has been used for agriculture in the form of animal grazing for many years. However, there is no evidence to suggest that any activities have occurred on the land which would give rise to contamination.

Notwithstanding, it is noted that the Department of Planning Local Plan Making Guidelines states as follows:

In some cases it will be necessary to undertake technical studies or investigations to justify different aspects of a planning proposal. Generally, these studies or investigations should not be carried out in the first instance. Instead, the issues giving rise to the need for these studies or investigations should be identified in the planning proposal. The initial gateway determination will then confirm the studies or investigations required and the process for continuing the assessment of the proposal, including whether it will need to be resubmitted following completion of the studies or investigations.

In terms of this planning proposal, it is considered that no study is warranted in order to progress the draft LEP. Any future development application for subdivision may then require further investigation if warranted.

SREP No. 20 – Hawkesbury - Nepean River

The aim of SREP 20 is to protect the environment of the Hawkesbury – Nepean River system by ensuring that the impacts of future land uses are considered in a regional context. Part 2 of SREP 20 provides general planning considerations, specific planning policies and recommended strategies. The following specific policy is relevant to the Planning Proposal:

(1) Total catchment management

Policy: *Total catchment management is to be integrated with environmental planning for the catchment.*

Strategies:

- (a) *Refer the application or other proposal for comment to the councils of each adjacent or downstream local government area which is likely to suffer a significant adverse environmental effect from the proposal.*
- (b) *Consider the impact of the development concerned on the catchment.*
- (c) *Consider the cumulative environmental impact of development proposals on the catchment.*

The land drains to a minor watercourse which is a tributary of Redbank Creek.

Development of this type is encouraged by the Hawkesbury Residential Land Strategy. It has been demonstrated that there is no adverse cumulative impact in terms of this planning proposal.

(6) Flora and fauna

Policy: *Manage flora and fauna communities so that the diversity of species and genetics within the catchment is conserved and enhanced.*

The land is cleared pasture, with scattered trees mainly associated with the minor water course.

Envirotech Pty Ltd was engaged to carry out a flora and fauna assessment of the land, including seven part tests in relation to threatened species. The assessment concludes that there is unlikely to be any significant impact.

(9) Rural residential development

Policy: *Rural residential development should not reduce agricultural sustainability, contribute to urban sprawl, or have adverse environmental impacts (particularly on the water cycle or on flora or fauna).*

Note. Refer also to items (1)–(7) and (12) for relevant strategies.

Strategies:

- (a) Give priority to agricultural production in rural zones.
- (b) When considering a proposal for the rezoning or subdivision of land which will increase the intensity of development of rural land (for example, by increasing cleared or hard surface areas) so that effluent equivalent to that produced by more than 20 people will be generated, consider requiring the preparation of a Total Water Cycle Management Study or Plan.
- (c) Maintain or introduce appropriate separation between rural residential use and agricultural use on the land that is proposed for development.
- (d) Do not locate development in areas identified for future urban purposes in the Metropolitan Strategy.
- (e) Consider the suitability of the land for keeping livestock, whether or not for commercial purposes, and appropriate mitigating measures to prevent land degradation.
- (f) Consider the ability of the land to accommodate on-site effluent disposal in the long term.
- (g) Consider any adverse environmental impacts of infrastructure associated with the development concerned

It is considered that this planning proposal will not be in conflict with the relevant policies and strategies of Sydney REP 20 and can proceed.

SREP 9 – Extractive Industry (No. 2 1995)

The primary aims of SREP No 9 (No.2 -1995) are to facilitate the development of extractive resources in proximity to the population of the Sydney Metropolitan Area by identifying land which contains extractive material of regional significance and to ensure consideration is given to the impact of encroaching development on the ability of extractive industries to realise their full potential. The site is not within the vicinity of land described in Schedule 1, 2 and 5 of the SREP nor will the proposed development restrict the obtaining of deposits of extractive material from such land.

6. *Is the planning proposal consistent with applicable Ministerial Directions (s.117 directions)?*

The Minister for Planning and Infrastructure, under section 117(2) of the EP&A Act, issues directions that local councils must follow when preparing planning proposals for new local environmental plans. The directions cover the following broad categories:

- a. employment and resources
- b. environment and heritage
- c. housing, infrastructure and urban development
- d. hazard and risk
- e. regional planning
- f. local plan making.

The following section provides an assessment of the planning proposal against applicable Section 117 directions. A full copy of the directions can be viewed at

<http://www.planning.nsw.gov.au/LinkClick.aspx?fileticket=dOkLhSFp9eo%3d&tabid=248&language=en-AU>

Direction	Consistency	Reason
1.2 Rural Zones	Yes	<p>The draft LEP will be consistent with paragraphs 4(a) and 4(b).</p> <p>4(a): The rural zoning of land is not proposed to be changed.</p> <p>4(b): The proposal will increase the permissible density of land within a rural zone, however the land is effectively within an existing village.</p> <p>Notwithstanding the above it is considered that the proposal is justified by a strategy (Hawkesbury Residential Land Strategy) as it meets the criteria for rural village development.</p>

1.3 Mining, Petroleum Production and Extractive Industries	Yes	<p>There are no existing extraction sites within or near this locality. It is understood that no specific resources have been identified in this locality. Notwithstanding, the current RU1 zone permits extractive industries and open cut mining with the consent of Council.</p> <p>This planning proposal does not change the land use table, therefore these activities remain permissible uses. In reality, however, extractive industries or open cut mines are simply not suitable for this locality due to the existing residential and rural residential nature of the area.</p> <p>Whether the minimum lot size is 10 hectares or 2000m², the conflict between extracting any resources and the established pattern of development would be far too significant.</p> <p>Should the planning proposal be supported by Council and receive Gateway approval, NSW Trade & Investment will be consulted during draft plan preparation.</p>
3.4 Integrated Land Use and Transport	Yes	<p>The draft LEP will provide housing opportunities in a locality which is adequately serviced by public transport (in rural village terms).</p> <p>The draft LEP is consistent with the relevant guidelines and policy.</p>

4.1 Acid Sulfate Soils	No	<p>Figure 20 below is an extract from the Council's Acid Sulfate Soils Map, which shows that the property is identified as Class 5.</p> <p>It is considered that the inconsistency with this Direction is justified as the proposal is of minor significance.</p>
4.4 Planning for Bushfire Protection	Yes	The Rural Fire Service will be consulted by the Council during preparation of the draft LEP. A preliminary assessment prepared by Envirotech Pty Ltd concludes that the proposal is able to comply with <i>Planning for Bushfire Protection</i> .
6.2 Reserving Land for Public Purposes	Yes	There are no reservations affecting the subject land. The planning proposal does not propose to create any reservations.
6.3 Site Specific Provisions		The proposal will amend the lot size map as it applies to the land.
(4)(a)	Yes	The inconsistency is of minor significance and considered to be justified given the characteristics and constraints of the site.
(4)(b)	Yes	
(4)(c)	No	
7.1 Implementation of the Metropolitan Strategy	Yes	The planning proposal is consistent with the Metropolitan Strategy. This is discussed in question 4 under Section B of this report.

Figure 20: Extract from HLEP 2012 Acid Sulfate Soils Map - Sheet ASS_008AA

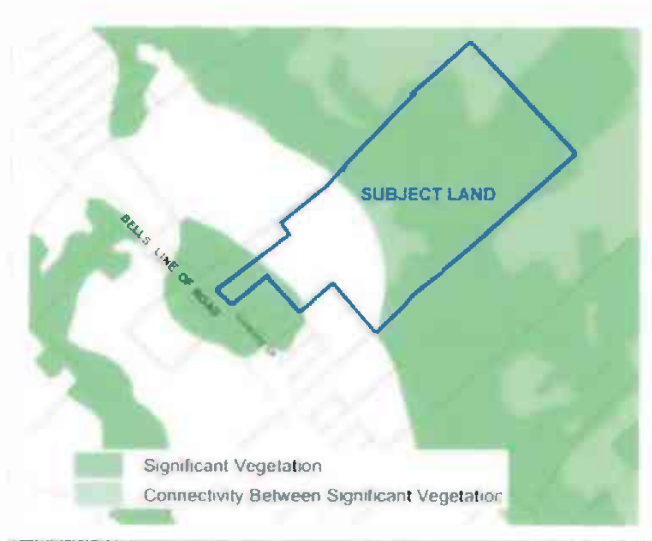


Section C – Environmental, social and economic impact.

7. *Is there any likelihood that critical habitat or threatened species, populations or ecological communities, or their habitats, will be adversely affected as a result of the proposal?*

The Council's biodiversity mapping identifies some significant vegetation within the riparian corridor, and extending to the north and north-west. Figure 21 below is an extract from the relevant map.

Figure 21: Extract from HLEP 2012 Terrestrial Biodiversity Map Sheet BIO_008AA



Detailed ground survey by Envirotech Pty Ltd demonstrates that the majority of significant vegetation is located within the riparian corridor, which runs through the centre of the subject land. This is shown in Figure 6 of the Envirotech Report⁶, which is reproduced as Figure 22 below.

Figure 22: Extract from Envirotech Report (Figure 6)



⁶ Envirotech Pty Ltd, Flora and Fauna Assessment Report, 2 Inverary Drive Kurmond, 9 June 2016.

The proposed 2ha minimum lot size creates an over-width riparian corridor to minimise vegetation removal and avoid fragmentation. There has been considerable discussion and consultation with Council's planning staff and ecologist, who agree with this approach.

If required, this vegetation can be further protected during the subdivision DA process by a requirement for a positive covenant to be registered on the title(s). The Envirotech flora and fauna assessment, including seven part tests for endangered species and ecological communities, concludes that there is unlikely to be any significant impact.

8. *Are there any other likely environmental effects as a result of the planning proposal and how are these to be managed?*

The land is classified as bushfire prone land. Any subdivision application which may follow this planning proposal will address the requirements of *Planning for Bushfire Protection* in detail. However a review of the proposal indicates that compliance will be achievable.

9. *Has the planning proposal adequately addressed any social and economic effects?*

Yes.

There are positive social and economic effects arising from utilising land for minor expansion of the rural village of Kurmond. The land is within close proximity to existing schools, services and shops, all of which will benefit from the additional households which will be established on the land. The proposal will provide additional housing opportunities in a suitable area as identified by the Hawkesbury Residential Land Strategy.

It is noted that the land has not been identified as containing any items of European or aboriginal cultural heritage.

Section D – State and Commonwealth Interests

10. *Is there adequate public infrastructure for the planning proposal?*

The land is serviced by electricity, telephone and communications and reticulated water. The likely demand for services created by the subdivision would be met by the usual contribution process with the relevant authorities.

Future dwellings resulting from future subdivision will be connected to the Sydney Water Sewage Treatment Plant at North Richmond. Sydney Water has confirmed that there is sufficient capacity.

11. *What are the views of State and Commonwealth public authorities consulted in accordance with the gateway determination?*

The following public authorities should be consulted in relation to the issues listed in the following table.

Public Authority	Issue
NSW Office of Environment & Heritage	Potential impact on flora and fauna
Transport for NSW-Roads and Maritime Services	Access to Bells Line of Road via adjacent approved intersection.
NSW Rural Fire Services	The land is identified as bushfire prone
NSW Department of Trade & Investment – Mineral Resources Branch	Requirement of S 117 Direction 1.3
Hawkesbury Nepean Catchment Management Authority	SREP 20 – Hawkesbury Nepean River
Endeavour Energy	Electricity Supply

Part 4 – Mapping

Sufficient mapping has been included in this Planning Proposal to identify the mapping changes which are required. The Council will provide appropriate mapping in accordance with the *Standard technical requirements for LEP Maps*. The Council's mapping will be produced for public notification and for gazettal.

Part 5 – Community Consultation

Following consultation with Council, it is considered that an exhibition period of 14 days is sufficient community consultation for this planning proposal.

Part 6 – Project Timeline

It is suggested that it would be reasonable for the LEP to be completed within 9 months from the week after the Gateway Determination is issued. The suggested project timeline is as follows:

Project Phase	Indicative Timeline
1. Anticipated commencement date	4 weeks from date of referral to P&E of revised planning proposal
2. Completion of technical information prior to government agency consultation	Nil
3. Government agency consultation	4 weeks
4. Preparation of written advice to the adjoining / affected property owners, public notice in a local newspaper, and exhibition material	2 weeks
5. Public consultation period	2 weeks
6. Consideration of submissions, assessment report and decision to proceed to final LEP	6 weeks
7. Request to PC to prepare a draft LEP under Section 59(1) of the Act	2 weeks
8. Finalisation of the content of the draft LEP by PC in consultation with Council and issuing of legal opinion on the draft plan	6 weeks
9. Request for online notification of the LEP	2 weeks

Conclusion

It is considered that this planning proposal satisfies all requirements for a Gateway Determination by the LEP Review Panel. The fundamental development constraints identified in the "Structure Planning for the Kurmond and Kurrajong Investigation Area" have been addressed by this planning proposal.

In summary, the proposal is justified for the following reasons:

1. The land has the appropriate physical characteristics to support large lot residential development as proposed.
2. There will be no adverse environmental or visual impact as a consequence of development of the land. The proposal effectively represents infill development.
3. The proposed rezoning will make use of existing infrastructure, therefore no additional infrastructure is required.
4. The proposal represents a suitable expansion of the existing Kurmond Village.
5. The proposal will add to the variety and availability of housing stock within the Hawkesbury LGA.
6. The proposal is consistent with all relevant State, Regional and Local Strategies, including the Hawkesbury Residential Land Strategy.

It is therefore recommended that Council support the planning proposal and resolve to prepare an amendment to Hawkesbury Local Environmental Plan 2012 as proposed.

**SYDNEY WESTERN CITY
PLANNING PANEL MEETING**

TUESDAY 27 FEBRUARY 2018

LGA – HAWKESBURY

**ATTACHMENT C
ADDENDUM TO PLANNING
PROPOSAL**

Addendum to PLANNING PROPOSAL

montgomery planning
solutions



Lot 2 DP 600414 (No. 2) Inverary Drive Kurmond

The purpose of this addendum is to address the newly released Draft *Western City District Plan*, which was released by the Greater Sydney Commission in October 2017.



November 2017

This Addendum was prepared by Robert Montgomery, Principal, Montgomery Planning Solutions, for the purpose of addressing the draft Western City District Plan, and in support of our application to NSW Planning & Environment for a rezoning review.



Robert Montgomery BApSc (Environmental Planning) MPIA

Date: November 2017
MPS Reference: 1432
DP&E Reference: 17/13920

Montgomery Planning Solutions
PO Box 49
Kurmond NSW 2757

Tel: 4572 2042
Mobile: 0407 717 612

Email: robert@montgomeryplanning.com.au

© MONTGOMERY PLANNING SOLUTIONS
REPRODUCTION OF THIS DOCUMENT OR ANY PART
THEREOF IS NOT PERMITTED WITHOUT PRIOR WRITTEN
PERMISSION.

Contents

Background	1
Introduction	1
Review of draft Western City District Plan	2
Conclusion	12

Background

- A planning proposal (in its current form) was submitted to Hawkesbury City Council in May 2017.
- An application for rezoning review was submitted to NSW Planning & Environment in October 2017, as the Council had not dealt with the proposal.
- The objective of the planning proposal is to allow the land to be subdivided into large residential lots, which are sufficient in size to support sustainable housing within a rural village setting.
- The intended outcome is to facilitate a development application to subdivide the land into an estimated 41 lots, with a minimum size of 1,000m², 2,000m², 6,000m² and 2ha.
- In October 2017, the draft *Western City District Plan* was released for comment by the Greater Sydney Commission.
- The purpose of this addendum is review and comment on the matters contained within the draft *Western City District Plan*, as are relevant to the planning proposal.
- It is concluded that the planning proposal is consistent with the draft *Western City District Plan*.

Introduction

The Western City District comprises the local government areas (LGA) of Blue Mountains, Camden, Campbelltown, Fairfield, Hawkesbury, Liverpool, Penrith and Wollondilly. Significant urban growth is targeted for Greater Penrith, Badgerys Creek Airport, Liverpool and Campbelltown – Macarthur.

The Hawkesbury LGA contains the strategic centre of Richmond – Windsor, an aerospace cluster around the Richmond RAAF Base at Clarendon and a University of Western Sydney Campus.

The opportunity for urban growth in particular, new housing and increased densities, is very limited by the constraints imposed by Hawkesbury River flood events and the capacity of the local and regional road system for resident evacuation in times of flood. Indeed, a number of planning proposals for small residential projects around the Richmond - Windsor centre have been recently rejected by the Gateway due to flooding and evacuation constraints.¹

This major constraint is recognised by the draft *Western City District Plan* in the fact that no significant growth is planned within the Hawkesbury LGA. Previous regional and local strategies have also recognised that minimal residential growth will occur with the LGA.

The subject land is located at Kurmond, some 5 kilometres to the north-west of the Hawkesbury River (North Richmond bridge) off Bells Line of Road. The land is not constrained by flooding or evacuation capacity, and the proposal represents a small increase in the number of dwellings within the rural village of Kurmond.

¹ PP_2016_HAWKE_005_00 Decision: 15/16, PP_2015_HAWKE_003_00 Decision: 5/5/15, PP_2015_HAWKE_012_00 Decisi

In 2011 Hawkesbury City Council prepared a Residential Land Strategy, largely in response to dwelling targets suggested by the then Northwest Draft Subregional Strategy. This Strategy, inter alia, provided a number of criteria for rural village expansion, which would allow minor growth while not significantly changing the character of the villages. This Planning Proposal was prepared in response to the Hawkesbury Residential Strategy.

It is fair to say that the Hawkesbury LGA is not a major contributor to the growth in housing and jobs. However, minor planning proposals such as this provide additional choice and variety of housing available locally within the LGA.

Review of draft *Western City District Plan*

The following table lists the Planning Priorities and Actions with relevant commentary in relation to the planning proposal.

Planning Priority W1 Planning for a city supported by infrastructure	
Actions	Comment
1. Prioritise infrastructure investments to support the vision of a metropolis of three cities	<p>This planning proposal will provide the opportunity for some 41 additional dwellings. This minor growth will assist in better utilising existing infrastructure, in terms of roads, schools and community facilities.</p> <p>It has been demonstrated the land will be serviced with reticulated sewer, by a private main to the North Richmond STP.</p> <p>This is in conjunction with the property adjoining to the north-west (396 Bells Line of Road), which has recently been rezoned to reduce the minimum lot size. A development application is currently with the Council to subdivide the adjoining land into 37 rural residential lots.</p> <p>The existing water supply has capacity for additional dwellings and if necessary can be supplemented by roof water collection as is common on large lot residential properties in the area.</p> <p>There is no negative impact in relation to the provision of infrastructure.</p>
2. Sequence growth across the three cities to promote the north-south and east-west connections	
3. Align forecast growth with infrastructure	
4. Sequence infrastructure provision using a place-based approach	
5. Consider the adaptability of infrastructure and its potential for shared use	
6. Maximise the utility of existing infrastructure assets and consider strategies to influence behavior changes, to reduce the demand for new infrastructure, including supporting the development of adaptive and flexible regulations to allow decentralized utilities.	

Planning Priority W2	
Working through collaboration	
7. Identify, prioritise and deliver Collaboration Areas	This Action is not relevant to the planning proposal.
Planning Priority W3	
Providing services and social infrastructure to meet people’s changing needs	
8. Deliver social infrastructure to reflect the needs of the community now and in the future	This planning proposal essentially represents minor infill development. It is considered that existing social infrastructure will become more viable to retain with minor increases across various age groups.
9. Optimise the use of available public land for social infrastructure	
Planning Priority W4	
Fostering healthy, creative, culturally rich and socially connected communities	
10. Deliver inclusive places for people of all ages and abilities that support healthy, resilient and socially connected communities by: a. Providing walkable places with active street life and a human scale b. Co-locating schools, social, health, sporting, cultural and shared facilities.	The planning proposal will facilitate a small number of large lot residential properties located within a rural village setting. Existing facilities will be better utilised by the marginal increase in population.
11. Consider cultural diversity in strategic planning and engagement.	Not applicable to this proposal, as it proposes to facilitate housing in a rural setting to meet local demand
12. Strengthen the economic self-determination of Aboriginal communities by engagement and consultation with Local Aboriginal Land Councils to better understand and support their economic aspirations as they relate to land use planning.	This is a matter for Council and government agencies. This proposal will facilitate housing for a specific sector of the community,
13. Facilitate opportunities for creative and artistic expression and participation, wherever feasible with a minimum regulatory burden, including:	The proposal is for minor infill development around a rural village only. Notwithstanding, marginal increases in population in proximity to the villages will facilitate this action.

<ul style="list-style-type: none"> a. Creative arts and cultural enterprises and facilities b. Creative interim and temporary uses c. Appropriate development of the night time economy. 	
14. Strengthen social connections within and between communities through better understanding of the nature of social networks and supporting infrastructure in local places.	As stated above, the proposal is for minor infill development.
Planning Priority W5 Providing housing supply, choice and affordability, with access to jobs and services	
15. Prepare local or district housing strategies that address the following: <ul style="list-style-type: none"> a. The delivery of five-year housing supply targets for each local government area b. The delivery of 6-10-year (when agreed) housing supply targets for each local government area c. Capacity to contribute to the longer term 20-year strategic housing target for the District d. housing strategy requirements outlined in objective 10 of the draft Greater Sydney Region Plan that include: <ul style="list-style-type: none"> i. creating capacity for more housing in the right locations ii. supporting planning and delivery of priority growth areas and precincts as relevant to each local government area iii. supporting investigation of opportunities for alignment with investment in regional and district infrastructure iv. supporting the role of centres 	<p>This planning proposal was prepared in response to the Hawkesbury Residential Land Strategy, published in 2011.</p> <p>Part of the Strategy was to facilitate additional large lot residential development around existing rural villages. The Strategy provides a number of detailed sustainability criteria by which planning proposals such as this would be assessed. Pages 22 and 23 of the planning proposal submission provides a table of compliance.</p> <p>This type of minor increase in potential dwellings around the existing villages is sound planning practice and has the following benefits:</p> <ul style="list-style-type: none"> • providing increased availability and choice of housing within the LGA; • facilitating the entry of younger families to the housing market within the rural villages; • providing clear guidance and criteria for location and performance of new housing; • the rural village character is not substantially changed by large lot residential;

	<ul style="list-style-type: none"> existing infrastructure, which is underutilised due to declining dwelling occupancy rates and an ageing population. Is more fully utilised and becomes more sustainable existing commercial and medical services located within rural villages are bolstered by the minor increase in dwelling numbers, and are more likely to remain viable. <p>It is considered that this part of the Strategy is essential to the long-term survival of the rural villages and the services they provide.</p>
16. Prepare Affordable Rental Housing Target Schemes	Not applicable to this planning proposal
Planning Priority W6 Creating and renewing great places and local centres, and respecting the District's heritage	
17. Deliver great places by: <ul style="list-style-type: none"> a. Prioritising a people friendly public realm and open spaces as a central organising design principle b. Recognising and balancing the dual function of streets as places for people and movement c. Providing fine grain urban form, high amenity and walkability d. Integrating social infrastructure to support social connections and provide a community hub e. Encouraging contemporary interpretation of heritage where possible f. Using a place-based and collaborative approach throughout planning, design, development and management. 	<p>This planning proposal represents minor infill development on the edge of a rural village. The directions in this Planning Priority are aimed at creating new urban communities, and are therefore not relevant to this proposal.</p>
18. Conserve and enhance environmental heritage by:	<p>The land does not include any identified items of heritage. The subsequent development application will be required</p>

<ul style="list-style-type: none"> a. Engaging with the community early in the planning process to understand Aboriginal, European and natural heritage values b. Conserving and interpreting Aboriginal, European and natural heritage to foster distinctive local places. 	<p>to undertake a higher level of analysis/ review.</p>
<p>19. Use place-based planning to support the role of centres as a focus for connected neighbourhoods.</p>	<p>This direction is clearly aimed at urban development. However, there is some relevance for rural villages. This planning proposal supports the role of Kurmond Village in servicing the surrounding rural and rural residential properties.</p> <p>The adopted Hawkesbury Residential Land Strategy advocates the need to bolster the rural villages with additional population. By doing so, the Council is also sending a clear message that development of rural land in inappropriate locations will not be supported.</p>
<p>Planning Priority W7</p> <p>Establishing the land use and transport structure to deliver a liveable, productive and sustainable Western Parkland City</p>	
<p>20. Integrate land use and transport plans to deliver the 30-minute city.</p>	<p>The subject land is within a rural village setting. Although public transport (bus) operates through Kurmond. The level of service will never match the objective for urban communities. However, marginal increase in population in this area is likely to assist in keeping existing services viable.</p>
<p>21. Investigate, plan and protect future transport and infrastructure corridors.</p>	
<p>22. Support innovative approaches to the operation of business, educational and institutional establishments to improve performance of the transport network.</p>	
<p>23. Manage the interfaces of industrial areas, trade gateways and intermodal facilities by:</p> <p><i>(detail not included as not relevant to the proposal)</i></p>	

24. Optimise the efficiency and effectiveness of the freight handling and logistics network by: <i>(detail not included as not relevant to the proposal)</i>	
25. Investigate and plan for the land use implications of potential long-term transport connections.	
26. Plan for urban development, new centres and employment uses that are integrated with, and optimise opportunities of, the public value and use of the potential north-south train link	
27. Protect transport corridors as appropriate, including the Western Sydney Freight Line and the outer Sydney Orbital.	
28. Create landscaped boulevards along new and major transport corridor upgrades as appropriate to the existing environment.	
29. Prioritise the planning and delivery of east-west and north-south roads to facilitate access to the strategic centres (including Badgally Road transport corridor to Campbelltown, Spring Farm Parkway and the Horsely Drive) and improve walking and safe cycling connections nearby.	
Planning Priority W8 Leveraging industry opportunities from the Western Sydney Airport and Badgerys Creek Aerotropolis	
Actions 30-36 not detailed here as they are not relevant to the proposal	Not relevant
Planning Priority W9 Growing and strengthening the metropolitan city cluster	
Actions 37-45 not detailed here as they are not relevant to the proposal	Not relevant

Planning Priority W10 Maximising freight and logistics opportunities and planning and managing industrial and urban services land	
Actions 46 -50 not detailed here as they are not relevant to the proposal	Not relevant
Planning Priority W11 Growing investment, business opportunities and jobs in strategic centres	
Actions 51 -60 not detailed here as they are not relevant to the proposal	These actions are not relevant to this planning proposal. Notwithstanding, the proposal will assist in maintaining the economic viability of the Kurmond village.
61. Strengthen Richmond-Windsor through approaches that: <ul style="list-style-type: none"> a. support complementary land uses around the agglomeration of education and defence uses in Richmond b. support master planning processes for Richmond and Windsor that encourage new lifestyle and entertainment uses, employment opportunities, activate streets and places, grow the tourism economy and respect and enhance the significant heritage value and assets c. facilitate the attraction of office/commercial floor space and provide opportunities to allow commercial and retail activities to innovate, including smart work hubs. 	While not entirely relevant, incremental increases in dwellings within the LGA will assist in supporting the existing centres.
62. Strengthen St Marys through approaches that: Not relevant to proposal	Not relevant
Planning Priority W12 Protecting and improving the health and enjoyment of the District's waterways	
63. Protect environmentally sensitive waterways.	The subject land contains a minor watercourse. The preliminary concept

64. Enhance sustainability and liveability by improving and managing access to waterways and foreshores for recreation, tourism, cultural events and water-based transport.	plan contains a central larger rural residential lot (minimum 2 hectares) which contains the watercourse, associated riparian vegetation and a widened vegetation protection corridor.
65. Improve the health of catchments and waterways through a risk-based approach to managing the cumulative impact of development including coordinated monitoring of outcomes.	<p>This lot is designed to ensure that future building envelope, bushfire asset protection zone and effluent disposal area will achieve required separation distances and will not create interference with the vegetation corridor.</p> <p>In addition, a vegetation management plan will be implemented for this future lots through a positive covenant ensuring ongoing protection of the waterway and riparian corridor.</p>
66. Reinstate more natural conditions in highly modified urban waterways	Future vegetation management plans will be implemented through the development application and subdivision processes to enhance and protect the riparian corridor within the land.
Planning Priority W13 Creating a Parkland City urban structure and identity, with South Creek as a defining spatial element	
67. Implement the South Creek Corridor Plan and use the design principles for South Creek to deliver a cool and green Western Parkland City.	The Planning proposal is not within the South Creek Corridor Plan.
Planning Priority W14 Protecting and enhancing bushland and biodiversity	
68. Protect and enhance biodiversity by: <ul style="list-style-type: none"> a. supporting landscape-scale biodiversity conservation and the restoration of bushland corridors b. managing urban bushland and remnant vegetation as green infrastructure. 	<p>As a consequence of animal grazing over many years, the land is largely cleared pasture, with some minor regrowth in some areas. Bushland remnants remain along the minor watercourses with scattered trees along fence lines.</p> <p>The preliminary concept recognises the constraints of the land by using varying minimum lot sizes as appropriate locations. In particular, a minimum lot size of 2 hectares is proposed along the expanded central riparian corridor, which</p>

	<p>will ensure that this area is not fragmented.</p> <p>In addition, a vegetation management plan will be implemented for future lots through positive covenants ensuring ongoing protection of the waterway and riparian corridor. It is noted that this proposal continues the principles established for the recent planning proposal at 396 Bells Line of Road, which adjoins to the north-west.</p>
Planning Priority W15	
Increasing urban tree canopy cover and delivering Green Grid connections	
69. Expand the tree canopy in the public realm.	<p>There is no public land proposed as a consequence of this proposal. The land is not identified as a Green Grid opportunity.</p> <p>This Priority is not relevant to the proposal</p>
70. Progressively refine the detailed design and delivery of: a. Greater Sydney Green Grid opportunities b. connections that form the long-term vision of the network.	
71. Create Greater Sydney Green Grid connections to the Western Sydney Parklands	
Planning Priority W16	
Protecting and enhancing scenic and cultural landscapes	
72. Identify and protect scenic and cultural landscapes, specifically the Scenic Hills and the escarpments of the Blue Mountains.	<p>The land is located on the lower foot slopes to part of the Blue Mountains eastern escarpment. There are numerous minor ridgelines within the locality, including Bells Line of Road and local roads.</p> <p>Future development resulting from these planning proposals will be largely lower than the existing minor ridgelines and will not impact on distant views to the eastern escarpment.</p> <p>The proposal represents minor sustainable development which satisfies</p>
73. Enhance and protect views of scenic and cultural landscapes from the public realm.	

	all criteria of the Hawkesbury Residential Strategy for rural village expansion.
Planning Priority W17 Better managing rural areas	
74. Maintain or enhance the values of the Metropolitan Rural Areas using place-based planning to deliver targeted environmental, social and economic outcomes, including rural residential development.	Not relevant to the proposal.
75. Limit urban development to within the Urban Area, except for the investigation areas at Horsely Park, Orchard Hills, and east of The Northern Road, Luddenham	
Planning Priority W18 Delivering high quality open space	
76. Refers to existing open space areas. Details not included as not relevant to this proposal.	Not relevant to the proposal.
Planning Priority W19 Reducing carbon emissions and managing energy. Water and waste efficiency.	
77 – 82. Refers to Priority Growth Areas and other identified projects. Details not included as not relevant to this proposal.	Not relevant to the proposal.
Planning Priority W20 Adapting to the impacts of urban and natural hazards and climate change	
83. Support initiatives that respond to the impacts of climate change.	The proposal is for rural residential development within a rural village setting.
84. Mitigate the urban heat island effect and reduce vulnerability to extreme heat.	The land is not flood affected and residents in this locality are not reliant on

85. Respond to the direction for managing flood risk in the Hawkesbury-Nepean Valley as set out in <i>Resilient Valley, Resilient Communities – Hawkesbury Nepean Valley Flood Risk Management Strategy</i> .	flood prone roads near the Hawkesbury River and surrounding lowlands.
---	---

Conclusion

This Planning Proposal was prepared in response to the Hawkesbury Residential Strategy, which was adopted by Council in 2011. The Strategy encourages landowners to submit planning proposals such as this for sustainable rural village expansion.

The Planning proposal will facilitate minor growth and economic support to the Kurmond village, while not significantly changing the character of the locality.

Having reviewed the Priorities and Directions contained within the draft *Western City District Plan*, it is considered that this planning proposal is consistent with the draft Plan and satisfies all of the relevant requirements.

**SYDNEY WESTERN CITY
PLANNING PANEL MEETING**

TUESDAY 27 FEBRUARY 2018

LGA – HAWKESBURY

**ATTACHMENT D
HCC – INVERRARY DRIVE
REZONING REVIEW RESPONSE**

Your Ref: 17/13920
Our Ref: LEP005/14

1 December 2017

Mr T Doran
Team Leader Sydney Region West
Planning Services
Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Dear Sir

Submission in Response to Rezoning Review - PGR_2017_HAWKE_002_00

I refer to your correspondence dated 18 October 2017 inviting Council to make comment on planning proposal LEP005/14 which is subject to a Rezoning Review by the Sydney West Planning Panel.

In response, Council Officers wish to provide the following comments:

Background

The subject site is located on the eastern side of Bells Line of Road, approximately 3.6 kilometres north of the Hawkesbury River in the foothills of the Great Dividing Range as shown in Figure 1.

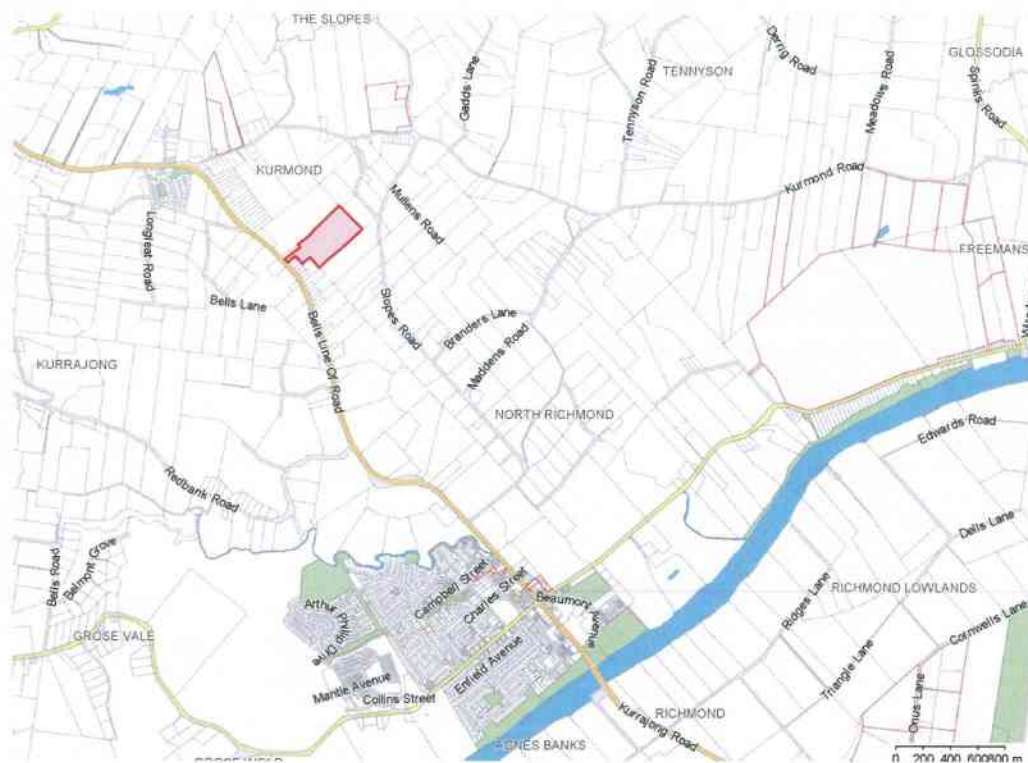


Figure 1: Location Plan

The subject site is located on the eastern boundary of the Kurmond Kurrajong Investigation Area (KKIA) as shown in Figure 2. As outlined further in this response, the KKIA is a defined area subject to structure planning to consider the potential for large lot residential/rural residential development.

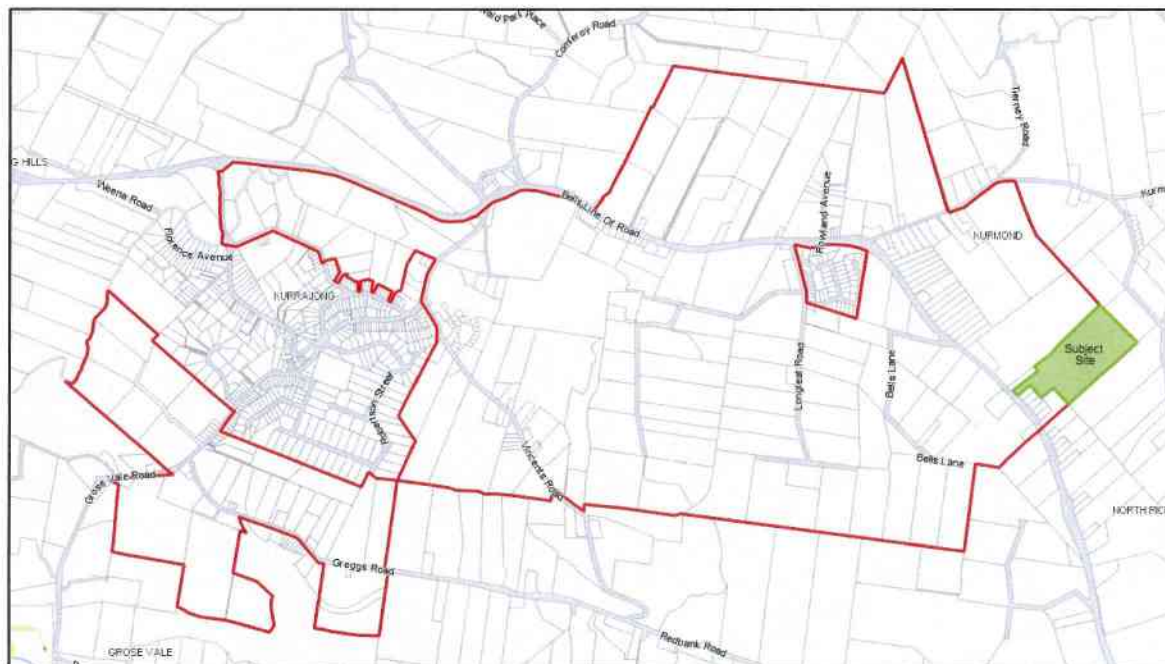


Figure 2: Site Location within Kurmond Kurrajong Investigation Area

The subject site has an area of 10.96ha and is mostly regular in shape with an average width of 246m and an average depth of 566m, but has a battle axe type frontage to Inverary Drive/Bells Line of Road of 35 metres as shown in Figure 3.

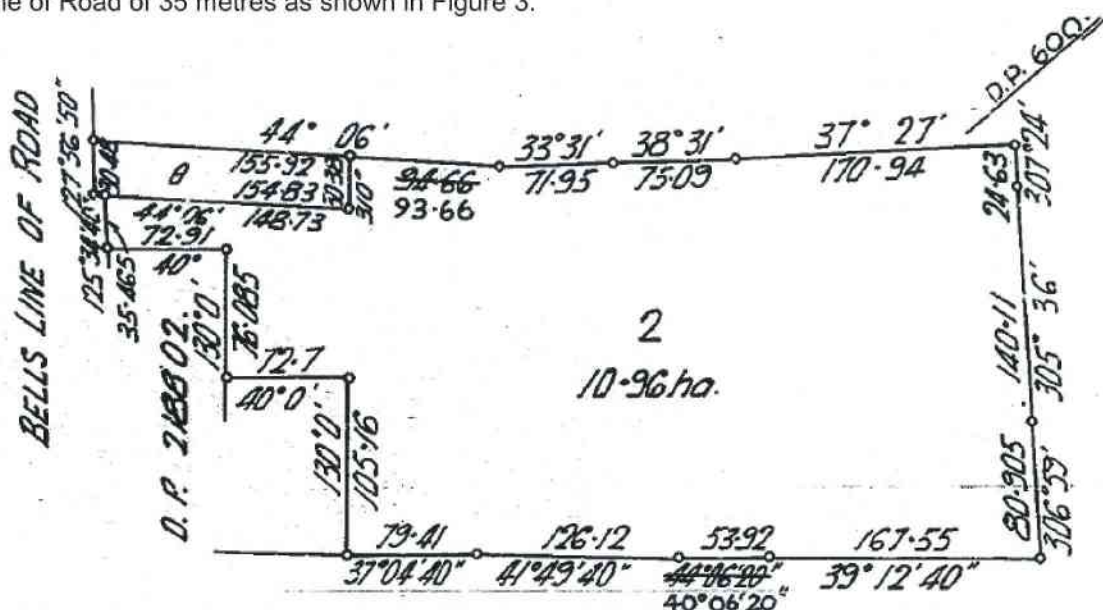


Figure 3: Site Plan

The land varies in height from approximately 90m AHD at the Inverary Drive/Bells Line of Road road frontage to approximately 60m AHD at the 3rd Order watercourse which runs north-west to south-east through the centre of the subject site. From this watercourse the land rises to a level of approximately 80m AHD at the rear of the subject site. Based on Council's slope mapping, the



The planning proposal is accompanied by a Flora and Fauna Assessment Report prepared by Envirotech P/L dated 9 June 2016. This Report concluded that *"the proposal is unlikely to have a significant effect on threatened species, endangered populations, ecological communities, or their habitats."* The Report also highlights that the area along the watercourse is to be retained for connectivity. In response to this the planning proposal was revised to provide a 2ha minimum lot size over the watercourse and associated riparian zone located centrally on the subject site.

In addition, since the lodgement of this Planning Proposal, the *Biodiversity Conservation Act 2016* (BC Act) has come into effect. Whilst the Hawkesbury Local Government Area is within a designated interim area under the *Biodiversity Conservation (Savings and Transitional) Regulation 2017*, the provisions of the BC Act will not apply until August 2018, and as such any future development application for subdivision of the subject site after this time will be subject to its provisions.

4



Figure 6 – Extract of OEH's Biodiversity Values Map

The requirements of the BC Act will have an economic influence on the future development of the subject site, and possibly an impact on the extent of vegetation clearing and minimum lot sizes for future development. At present these impacts of the BC Act are unknown and if the planning proposal is supported, the Applicant should be requested to address these matters as part of the planning proposal process.

Topography

The land varies in height from approximately 90m AHD at the Inverary Drive/Bells Line of Road road frontage to approximately 60m AHD at the watercourse which runs north-west to south-east through the centre of the subject site. From this watercourse the land rises to a level of approximately 80m AHD at the rear of the subject site. Based on Council's slope mapping, the subject site contains some land having slopes in excess of 15%, particularly around the watercourses and at the front of the property.

Figure 7 below provides a slope analysis of the subject site.

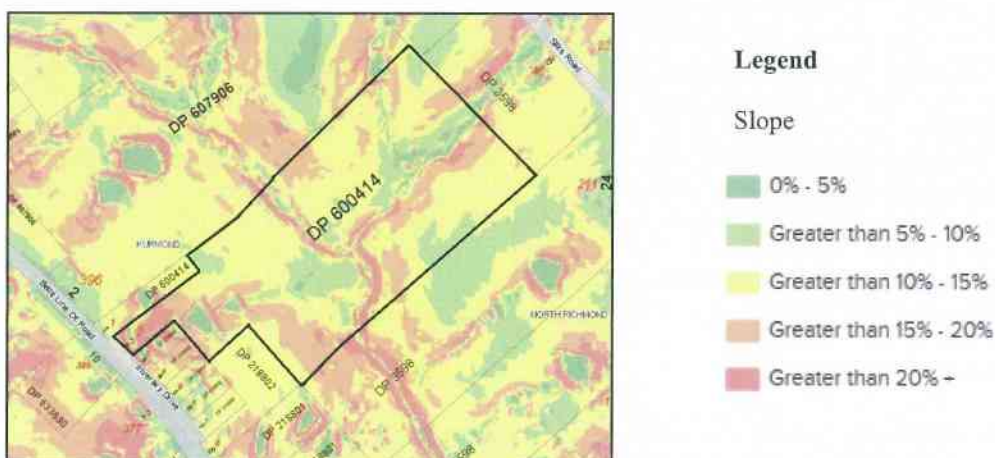


Figure 7 – Slope Analysis



The Hawkesbury Residential Land Strategy recognises slopes greater than 15% act as a constraint to development. As a consequence, the adopted development constraints principles within the KKIA require building envelopes, asset protection zones (APZs), driveways and roads to be located on land with a slope less than 15%.

The steeper sloping parts of the subject site will, to varying degrees, act as a constraint to the location and type of dwelling, outbuildings and driveways on future lots. One way of minimising these constraints would be to increase the minimum lot size in order to avoid as much as practicable development of the steeper sloping land. It is recommended that should the planning proposal proceed this should be further explored with the Applicant, and that the Applicant prepare a revised subdivision concept plan consistent with the adopted development constraints principles as part of the planning proposal process.

Regardless, it is considered that the subject site has a potential of being subdivided for large lot residential purposes, albeit not necessarily to the extent proposed.

Watercourse

A number of watercourses traverse the subject site. Figure 8 below shows the location of these watercourses, along with the Strahler classification of the watercourses and corresponding widths of their riparian corridors.



Figure 8 – Watercourse Locations and Riparian Corridor Width

The planning proposal only recognises the watercourse traversing north west to south east through the centre of the subject site. In respect to the other watercourses identified on Council's mapping, the Applicant advises "smaller tributaries join the watercourse from the north and south. However, inspection confirms that these watercourses are drainage depressions with no defined bed or banks. It is noted on page 2 of "Guidelines for riparian corridors on waterfront land", that "where a watercourse does not exhibit the features of a defined channel with bed and banks, the Office of Water may determine that the watercourse is not waterfront land for the purposes of the WM Act". Therefore these are not considered to be watercourses for the purposes of the Water Management Act." The above quoted wording states that the Office of Water **may** determine that the watercourse is not waterfront land. In this regard it is recommended that if the planning proposal is supported it be referred to the Office of Water to clarify the status of these watercourses.

Current Land Use Zone

The site is currently zoned as RU1 Primary Production pursuant to the Hawkesbury Local Environmental Plan 2012. The objectives of the RU1 Primary Production Zone are as follows:



- *To encourage sustainable primary industry production by maintaining and enhancing the natural resource base.*
- *To encourage diversity in primary industry enterprises and systems appropriate for the area.*
- *To minimise the fragmentation and alienation of resource lands.*
- *To minimise conflict between land uses within this zone and land uses within adjoining zones.*
- *To encourage agricultural activities that do not rely on highly fertile land.*
- *To ensure that development occurs in a way that does not have a significant adverse effect on water catchments, including surface and groundwater quality and flows, land surface conditions and important ecosystems such as waterways.*
- *To promote the conservation and enhancement of local native vegetation including the habitat of threatened species, populations and ecological communities by encouraging development to occur in areas already cleared of vegetation.*
- *To ensure that development retains or enhances existing landscape values including a distinctive agricultural component.*
- *To ensure that development does not detract from the existing rural character or create unreasonable demands for the provision or extension of public amenities and services.*

This is the zone that was adopted as part of the translation from the previous LEP 1989 to the new Standard Template LEP.

Historically, the locality has been zoned primarily for agricultural use, with previous zonings including the Mixed Agriculture zone and the Rural 1(a) zone under Hawkesbury Local Environmental Plan 1989. The primary objectives of these zones were not dissimilar to the current RU1 Primary Production zone objectives in that they sought to encourage agricultural activities, prevent the fragmentation of agricultural land, prevent land use conflicts, conserve and protect native vegetation, water bodies and land surfaces, and retain and enhance existing landscape values including a distinctive agricultural component.

It is considered that on face value the planning proposal does not meet, and will cause future development of the land to be inconsistent with the RU1 Primary Production zone objectives, and particularly:

- Increased potential for conflict between land uses could result, as the proposal will increase large lot residential development in an area primarily identified for primary production use;
- Increased number of lots of a smaller residential size will not provide suitable land for agricultural purposes, and rather than encouraging agricultural uses, these lots will be taken up by residential development and potentially prevent agricultural uses on adjoining land due to conflicts between these uses.
- A subdivision of this size and scale (residential) is not conducive to the conservation of habitat of threatened species, populations and ecological communities. It is considered highly likely that vegetation outside of any riparian zones will be removed/damaged during building works, with the establishment of asset protection areas. This is important for this proposal as the vegetation on the site has been identified as Critically Endangered Ecological Communities.
- The planning proposal only recognises one of the watercourses that traverse the subject site, and therefore does not consider the impacts of future development on all watercourses and riparian corridors. This matter is discussed further in this correspondence.
- The proposed lots sizes of 1,000m² and 2,000m² is not conducive to maintaining the existing rural character of the locality. This is discussed further in this correspondence.

It is noted that Hawkesbury Residential Land Strategy identified the KKIA as an area for further investigation for rural residential or large lot residential development. Individual planning proposals within the KKIA are not seeking to rezone the land, only to amend the minimum lot size requirements for subdivision. This highlights the inappropriateness of the piecemeal approach in accepting individual planning proposals prior to Council finalising its investigations into the



appropriateness of increased development in the area and proper allocation of zonings and lot sizes to facilitate suitable future development if found to be feasible.

The processing of a number of individual planning proposals within the KKIA to date has enabled an individual site based approach to the better understanding of development constraints within the KKIA so as to better inform the broader planning studies that are considered essential.

Kurmond Kurrajong Investigation Area

At its Meeting on 31 March 2015, Council resolved to commence structure planning and development contributions planning for the purposes of large lot residential/rural-residential development within the area known as the Kurmond Kurrajong Investigation Area (KKIA). This was in response to the recommendations of the Hawkesbury Residential Land Strategy, which signalled that this investigative work was required as a precursor to Council determining planning proposals on an individual basis.

Council, at its Meeting on 28 July 2015 adopted an Interim Policy comprising a local planning approach and including development constraints principles for the purposes of structure planning within the KKIA. At that Meeting Council also resolved that current planning proposals within the KKIA "*only proceed to Gateway if the 'fundamental' development constraints have been addressed*". A copy of the Council's Report and Minutes of 28 July 2015, which outlines the rationale for the development constraint principles, is attached for your information (Attachment 1).

In particular, Part B of this Policy contains the following development constraint principles:

Part B - Development Constraints

Planning proposals will not be supported by Council unless:

1. *Essential services under LEP 2012 and fundamental development constraints are resolved.*
2. *Building envelopes, asset protection zones (APZs), driveways and roads are located on land with a slope less than 15%.*
3. *Removal of significant vegetation is avoided.*
4. *Fragmentation of significant vegetation is minimised.*
5. *Building envelopes, APZs, driveways and roads (not including roads for the purposes of crossing watercourse) are located outside of riparian corridors.*
6. *Road and other crossings of water courses is minimised.*
7. *Fragmentation of riparian areas is minimised.*
8. *Removal of dams containing significant aquatic habitat is avoided.*

Since that time Council Officers have processed, or are processing, 21 individual planning proposals within the KKIA on the basis of the adopted development constraints principles.

Original Planning Proposal

On 23 December 2014 Council received a planning proposal in relation to 2 Inverary Drive, Kurmond. The purpose of the planning proposal was to amend the Lot Size Map of Hawkesbury Local Environmental Plan 2012 (LEP 2012) to permit subdivision of the subject site into lots having a minimum lot size of 2,000m² with a maximum lot yield of 35 lots.

Discussions between the Applicant and Council Officers were undertaken throughout 2015 – 2017 in an attempt to establish a realistic lot yield for the subject site having regard to the physical constraints of the subject site based on the slope of land, the presence of watercourses, riparian areas and significant vegetation. A chronology of the application is attached (Attachment 2).

Current Planning Proposal

It is noted that the planning proposal submitted for a Rezoning Review seeks to amend the Lot Size Map of LEP 2012 to permit subdivision of the subject site into a total of 41 lots having minimum lot sizes of 1,000m², 2,000m², 6,000m² and 2 ha.

It is also intended to include the land within “Area A” which is subject to Clause 4.1D(1) of LEP 2012. Clause 4.1D(1) prohibits the subdivision of land that is identified as “Area A” on the Lot Size Map if the land is not serviced by reticulated sewerage and the lots to be created for a dwelling house is less than 4,000m². It is proposed that the subject site will be serviced by Sydney Water’s reticulated sewerage system. However, should servicing of the site by Sydney Water not be feasible, this clause will ensure that proposed lots created by a subdivision of the subject site will be of a size to support the onsite disposal of effluent.

The Applicant also suggests that an appropriate provision be included in LEP 2012 to limit the maximum number of lots created by future subdivision of the subject site to 41 lots.

This represents an increase in the number of lots from the original proposal by 6 lots. The increase in the proposed lot yield is a result of changes made to provide a variety of minimum lots sizes (i.e. 1,000m², 2,000m², 6,000m² and 2 ha).

LEP 2012 Lot Size Map

The current planning proposal seeks to amend LEP 2012 in order to permit the subdivision of the subject site into lots having minimum lot sizes of 1,000m², 2,000m², 6,000m² and 2ha generally as shown in Figure 9:

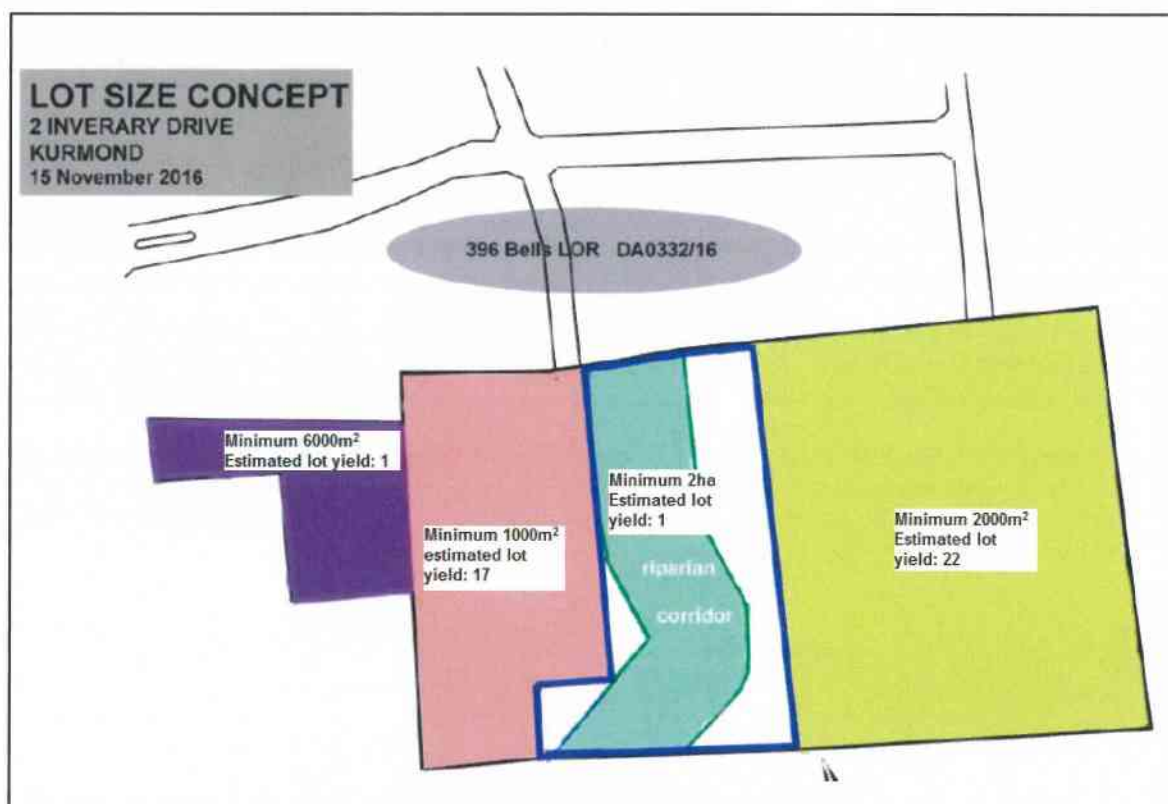


Figure 9 – Lot Size Concept Plan

A minimum lot size of 2 ha has been nominated for the centre of the subject site. Given that the main watercourse and Significant Vegetation/riparian vegetation are located in this area, a minimum lot size of 2 ha is supported for the retention and preservation of these features whilst providing an area suitable for future development on the subject site for a future dwelling house. The Applicant proposes a minimum lot size of 6,000m² for an area at the front of the property. The minimum lot size options currently available within LEP 2012 do not provide for a minimum lot size of 6,000m². The Department of Planning and Environment (DP&E) have previously indicated a reluctance to support a lot size outside of the suite of sizes currently used by LEP 2012, especially if its use is an isolated case. In this regard, it is considered that a minimum lot size of 4,000m² is appropriate for this location. Whilst the number of lots potentially capable of being created from this area will increase from 1 to 2 lots subject to a development application and assessment against the relevant provisions of LEP 2012, a 4,000m² lot size provides consistency with existing adjoining and nearby properties.

The Applicant has also nominated minimum lots sizes of 1,000m² and 2,000m², which are already lot sizes contained within the existing LEP 2012.

The area surrounding the subject site contains a mix of existing lot sizes as shown in Figure 10 below.



Figure 10 – Existing Lot Size Mix

Figure 10 shows that currently there are few properties in the vicinity of the subject site that have a lot size of less than 2,000m². In general the majority of properties surrounding the subject site have a size of 4,000m² or greater.

Amendment No. 8 to LEP 2012, which was gazetted on 27 January 2017 changed the minimum lot sizes for the adjoining property at 396 Bells Line of Road, Kurmond following consideration by Council of a planning proposal. That amendment provided minimum lots sizes of 2,000m², 1ha and 1.5ha as shown in Figure 11 below.



Figure 11 – Current LEP 2012 Lot Size Map

Whilst the KKIA is an area in transition, it is considered that the density of development created by lots sizes of 1,000m² and 2,000m² is not in keeping with the existing rural character of the locality around the subject site. As a result, careful consideration of the expected future character of the locality needs to be made as part of the planning proposal process.

It is also noted that lot sizes of 1,000m² and 2,000m² can only be achieved if the land can be provided with reticulated sewerage. In terms of the expected future character of the locality, it should be noted that the adjoining property at 396 Bells Line of Road has relatively recently completed an LEP amendment process that provided for minimum lot sizes of 2,000m² over a significant section of that site, based on the provision of reticulated sewerage. Should reticulated sewerage not be available to the property at 396 Bells Line of Road, then a minimum lot size of 4,000m² is then applicable.

The ability and capacity to connect into a reticulated sewerage system is not the case for the majority of the KKIA and isolated pockets such as the subject site (depending on the Rezoning review and planning proposal process) and the adjoining property (396 Bells Line of Road), are (based on connection to a reticulated sewerage system) capable of being subdivided into densities more akin to residential areas, rather than a typical rural or rural residential density.

In addition, the subject site is located on the boundary of the KKIA, and therefore future subdivision/development should not become incompatible with those adjoining areas which will not be subject to change in the short-term. In this regard consideration should be given to future lot sizes on the subject site and in the locality, and whether or not these should provide a transition between those adjoining areas not subject to change, and those areas within the KKIA that will be expected to be subject to change.

Given that the smallest lot size adopted for the adjoining property at 396 Bells Line of Road is 2,000m², it is considered that this size, at the minimum, should also be adopted for the subject site. It is therefore recommended that should the planning proposal proceed, that this be further explored with the Applicant as part of the planning proposal process.

LEP 2012 Restricted Lot Yield Map

The Applicant suggests an amendment to the Restricted Lot Yield Map of LEP 2012. The nomination of a lot yield can give an unrealistic expectation that the subdivision of the land will result in the nominated number of lots. The amended Planning Proposal does not clearly



demonstrate that the proposed number of lots on the subject site can be achieved having regard to the constraints of the land, and Council's adopted development constraints principles.

For this reason, Council Officers do not support the proposed amendment to the Restricted Lot Yield Map.

In addition, Council Officers wish to raise concern in the use of the Restricted Lot Yield Map and the structure of Clause 4.1G – *Restriction on the number of lots created by subdivision of certain land* of LEP 2012. Clause 4.1G states:

4.1G Restriction on the number of lots created by subdivision of certain land

- (1) *This clause applies to land identified as "Restricted Lot Yield" on the Restricted Lot Yield Map.*
- (2) *The total number of lots that may be created by the subdivision of land to which this clause applies must not exceed the number shown on the Restricted Lot Yield Map in relation to that land.*
- (3) *In this clause:
lot does not include a lot created for a public purpose or a lot created as neighbourhood property under the Community Land Development Act 1989.*

Within Clause 4.1G there is no reference to a particular land description (lot and DP). This clause only refers to "*land identified*" on the Restricted Lot Yield Map; that is, an area of land outlined with a number to indicate the lot yield. Within that outlined area on the Map owners may subdivide (subject to development approval) into the specified number of lots (for example 5 lots as indicated in Figure 12). You would also be restricted in lot size by the Lot Size Map.

However, one interpretation of the Restricted Lot Yield Map is that once an initial subdivision of the land into the specified number of lots has occurred, there is nothing preventing a further subdivision of a resultant lot if the minimum lot size can be met and the number of lots created does not exceed the specified number. Figure 4 below provides an example of this where the minimum lot size is 4,000m² and the maximum lot yield for subdivision is 5. The original site has been subdivided into 5 lots, however the resultant rear lot is of a size to accommodate a further 5 lot subdivision whilst meeting the minimum lot size of 4,000m².



Figure 12 – Extract from Restricted Lot Yield Map

This concern is raised on the basis of the outcome of recent court cases in relation to the interpretation of Clause 4.1E of LEP 2012.

Whilst Clause 4.1 of LEP 2012 establishes the general minimum lot size provisions for a 'conventional' subdivision of land, Clause 4.1E contains additional provisions relating to the subdivision of certain land within Grose Wold. In simple terms these provisions are based on the



concept of 'lot averaging', whereby proposed lots may be less than the conventional minimum lot size provided certain ecologically significant vegetation is protected and the overall number of proposed lots to be created is not greater than that which would be achieved by a conventional subdivision.

In *Ogg v Hawkesbury City Council* (LEC 10381/2015), *Oneten Properties Pty Ltd v Hawkesbury City Council* (LEC 154235/2016) and *Jeanette Bacic & John Bentley v Hawkesbury City Council* (LEC 154259/2016) the Commissioners' determined that Clause 4.1E of LEP 2012 be applied as follows:

- The lot yield for any subdivision is calculated by dividing the size of the 'original lot' by 4. The commissioners agreed that Clause 4.1E(4) did not require lots resulting from previous subdivisions to be taken into account.
- Each lot created from subdivision of land within the Grose Wold area must have a minimum lot size in accordance with Clause 4.1.

Relevantly, the construction of Clause 4.1G and the Restricted Lot Yield Map of LEP 2012 could result in a similar outcome, where the outlined area on the Map could be subsequently subdivided, without consideration to the number of lots created by previous subdivisions, as long as each subsequent subdivision did not yield more than 5 lots and each lot created met the minimum lot size requirement of Clause 4.1.

As a result, it is requested that, should the planning proposal be supported, only the Lot Size Map of LEP 2012 be amended.

Reduction in Number of Lots

An assessment of the planning proposal against the adopted development constraints principles of the KKIA was undertaken. Attached is an analysis plan for the subject site showing the location of significant vegetation, watercourses, riparian corridors, and slope (Attachment 3), which identifies the unconstrained areas of the subject site potentially suitable for development.

As a result of this assessment, the following matters are highlighted:

- The slope of the land will act as a constraint to the future development of the subject site as previously discussed.
- The planning proposal does not recognise the 1st and 2nd Order watercourses located at the rear of the property or their potential significance, or otherwise. The development constraint principles require future development to be located outside of riparian corridors, thereby reducing the area available for future development and therefore reducing the likely lot yield from subdivision of the subject site. Whilst the absence of defined bed and bank on much of these watercourses is noted, a determination from the Office of Water in respect of whether these are considered as watercourses is required.
- Future development of the land will result in the removal of significant vegetation for building and the creation of asset protection areas.

Having regard to the above, and to the attached analysis plan it is considered that the potential for the subdivision of the subject site into 41 lots is unrealistic, and the applicant should reconsider lot sizes and yield to ensure the creation of developable lots whilst protecting significant natural assets and character.

Voluntary Planning Agreement

Bells Line of Road is the major east – west vehicle thoroughfare through the KKIA. It is classified as a main road and is under the care, control and management of the Roads and Maritime Services (RMS). Bells Line of Road currently experiences significant volumes of traffic in the morning and evening peak period and major congestion regularly occurs east of the investigation area in North Richmond and Richmond.



The RMS has advised Council of its concerns regarding the cumulative impacts on the local road network of planning proposals for subdivision in the KKIA.

In previous reports to Council dealing with other planning proposals within the vicinity of Kurmond and Kurrajong it has been noted that Council has received petitions from residents west of the Hawkesbury River concerned about rezoning of land for residential purposes in the absence of required infrastructure upgrades. It is considered that it is a fundamental matter to be dealt with by Council prior to the finalisation of any planning proposals in the locality as the cumulative impact of these types of development could be unacceptable if no traffic improvements are made.

It would normally be envisaged that if this planning proposal were to proceed a contribution would be levied on the subdivision for each additional lot created to assist in implementation of traffic and other infrastructure in the locality. However, at present Council's strategic planning for the KKIA has not been finalised and therefore Council does not have a Section 94 Plan in relation to the KKIA.

Council considered a report on Voluntary Planning Agreements (VPAs) for the KKIA at its Meeting of 10 November 2015. The resolution at that Meeting was as follows:

"That:

- 1. Council agree to offers to enter into negotiations for Voluntary Planning Agreements in the Kurrajong/Kurmond Investigation Area in the absence of an adopted Section 94 developer contributions plan.*
- 2. Any Voluntary Planning Agreement for this locality to be based on CPI adjusted cash contributions on a per lot release basis consistent with the offers discussed in this report.*
- 3. Negotiations for draft VPAs should include consideration of a Clause to terminate the VPA once the Section 94 Plan is adopted with no retrospective provisions should the amended contributions be different to the VPA contribution amount.*
- 4. To reinforce Council's previous resolutions planning proposals that have completed public exhibition are not to be reported to Council for finalisation until a Section 94 Plan is adopted or the report is accompanied by a draft Voluntary Planning Agreement that is proposed to be placed on public exhibition."*

In the absence of a Section 94 Contributions Plan, Part 4 of this Resolution emphasises Council's requirement to have the process for the implementation of a VPA underway prior to the finalisation of a planning proposal.

The Planning Proposal states:

"Discussions have been held with Council Officers about a possible Section 94 Plan and/or Special Infrastructure Contribution. At this stage, the plan has not progressed sufficiently and it is agreed that the developer would enter into a voluntary planning agreement with the Council, should the Section 94 plan not be completed in time."

The Applicant's suggestion of a VPA is consistent with Council's resolution.

To ensure that the costs associated with the provision of infrastructure is distributed in a fair and equitable manner, Council has ensured that VPAs for other planning proposals within the KKIA have been entered into prior to gazettal of the LEP amendment. In this regard, if the planning proposal is to proceed, it is considered as necessary that a VPA be finalised prior to the making of the draft plan.



'A Plan for Growing Sydney' (the Sydney Metropolitan Strategy), Draft North West Subregional Strategy, Draft Greater Sydney Region Plan and Draft Western City District Plan

The NSW Government's 'A Plan for Growing Sydney', December 2014 (the Plan), the Draft North West Subregional Strategy (the draft Strategy), the Greater Sydney Region Plan (GSRP) and the Draft Western City District Plan (DWCDP) establish the broad planning directions for the Sydney metropolitan area, north-western and western sectors of Sydney respectively. These documents identify a number of strategies, objectives/priorities and actions relating to the economy and employment, centres and corridors, housing, transport, environment and resources, parks and public places, implementation and governance.

It is noted that, upon its adoption, the Draft Greater Sydney Region Plan will replace 'A Plan for Growing Sydney', and the Draft Western City District Plan will replace the Draft North West Subregional Strategy.

The Applicant has provided an assessment of the planning proposal against the Plan and the draft Strategy and concludes that the proposal is consistent with these strategies.

However, the Applicant has not provided an assessment with respect to the GSRP or the DWDP as these were not publically available at the time the planning proposal was prepared/lodged with Council. If the planning proposal is to proceed, this assessment should be provided by the Applicant prior to the issue of a 'Gateway' determination.

Review of Hawkesbury Residential Land Strategy

It should be noted that following consideration of a Mayoral Minute with respect to the Hawkesbury Residential Land Strategy at its Ordinary Meeting dated 30 May 2017, Council resolved as follows:

That:

1. *Council staff initiate a review of the Hawkesbury Residential Land Strategy and in doing so draw on all available data such as Council's recently adopted Community Strategic Plan and additional data as it becomes available, for example, Council's Economic Development Strategy, Council's Comprehensive Hawkesbury Traffic Study, the Hawkesbury-Nepean Flood Risk Management Strategy, the Hawkesbury Tourism Strategy, the Greater Sydney Commission's District Plan, the Rural Land Strategy, the Western Sydney 'City Deal' and data from the recent Census.*
2. *Council consider the Commonwealth Governments 'City Deal' focus areas in relation to:*
 - *infrastructure*
 - *employment*
 - *housing*
 - *environment and liveability*
 - *improving coordination and integration between infrastructure, land use, housing and environmental planning*

as a further consideration in the ongoing assessment of the nine applications that have received Gateway Approval to progress to formal Community Consultation and assessment by Council Planning Officers.

3. *Council reaffirm its previous resolution in relation to new Planning Proposals in relation to land, which read as follows:*

Council not accept any further planning proposal applications within the Kurmond and Kurrajong investigation area until such time as the structure planning as outlined in this report is completed. Council receive a progress report on the structure planning prior to July 2017.



4. *Council be provided with regular updates regarding the progress of reviewing the Hawkesbury Residential Land Strategy and associated matters.*
5. *Councillors be invited to attend a Councillor Workshop to further develop and discuss the Hawkesbury Residential Land Strategy.*

Whilst Officers have continued work on the Structure Planning for the KKIA, given the broader significance of the review of the Hawkesbury Residential Land Strategy, efforts have been focussed towards that so as to properly inform the Kurmond Kurrajong Investigation Area process. In terms of the review of the Hawkesbury Residential Land Strategy, initially the work focussed on confirming the range of relevant background studies required to be completed and then identifying those studies that are already available to inform the future work. These studies include:

- Flood Studies and Flood levels
- Bushfire prone land
- Agricultural land
- National Parks
- Environmentally sensitive land
- Existing transport networks
- Recreation and open space land and sporting facilities
- Climate change adaption
- Existing urban infrastructure

Council has recently been provided with its State Government targets in relation to its:

- Overall Population Target
- Employment Target
- Housing Target

In addition to the above, Council has also commenced the process of developing and/or updating studies in relation to:

- Integrated Transport Strategy
- Retail, Commercial and Industrial land
- Diverse and affordable housing
- Future Recreation, Open Space and Sporting facilities
- Heritage and conservation

When completed, the results of these studies will combined to inform Councils future Draft:

1. Integrated Urban Land, Rural Land and Integrated Transport Plan
2. Capital works Plans
3. Section 94 Plans
4. VPA policy

Which will be subject to public exhibition and community comment prior to finalising and then implementing these various plans.

Summary

In summary, Council is undertaking a number of broader study/policy work associated with the review of the Hawkesbury Residential Land Strategy, with the expressed intention that this work will appropriately inform further work with respect to the Kurmond Kurrajong Investigation Area and subsequent individual planning proposals should they be received.

To date, progress with respect to the Kurmond Kurrajong Investigation Area has been hampered by the receipt of significant numbers of individual planning proposals so as to lessen the ability to plan from the whole to the part. Council also recognises its statutory obligations with respect to



processing of individual planning proposals with a series of resolutions to that effect. The processing of a number of individual planning proposals within the KKIA to date has enabled an individual site based approach to the better understanding of development constraints within the KKIA so as to better inform the broader planning studies that are considered essential.

Council's preference though would be to complete the broader planning studies to better inform the appropriateness of increased development in the area, and proper allocation of zonings and lot sizes to facilitate suitable future development if found to be feasible.

Should the planning proposal proceed, aside from consideration of the broader study/policy work highlighted above, there are a number of matters that will require careful consideration, including:

- Demonstrate that the intended outcome of the planning proposal to achieve 41 lots for residential purposes is feasible having regard to the constraints of the land and Council's adopted development constraint principles, including:
 - ensuring that minimum lots sizes capable of supporting future residential development whilst protecting significant natural features such as watercourses, riparian areas and endangered ecological communities;
 - Minimum lot sizes are capable of supporting future development having regard to the slope constraints of the subject site.
- Ensuring that minimum lot sizes should be compatible with the locality. The minimum lot size of 1,000m² is not supported having regard to the existing and future desired character of the locality as discussed above;
- The amendment of LEP 2012 Restricted Lot Yield Map is not supported as it is not considered to be an effective way to restrict the number of lots created, as discussed above.
- The requirements of the Biodiversity Conservation Act 2016;
- The implementation of a Voluntary Planning Agreement; and
- An assessment of the proposal against the Draft Greater Sydney Region Plan and the Draft Western City District Plan.

Should you have any further questions in this regard then do not hesitate to contact me on (02) 4560 4604.

Yours faithfully



Andrew Kearns
Manager Strategic Planning

Attachment 1

Council Report and Minutes of 28 July 2015

ORDINARY MEETING

Meeting Date: 28 July 2015

Item: 114

CP - Kurmond and Kurrajong Large Lot Residential Investigation Area -
Progress Report - (95498, 124414)

REPORT:

Executive Summary

The purpose of this report is to provide Council with a progress report regarding structure planning and development contribution planning for large lot residential in the Kurmond and Kurrajong investigation area.

This report recommends that Council adopt an interim policy containing a set of draft development principles as part of a local planning approach for the investigation area. The draft development principles are derived from a detailed analysis of the major physical, infrastructure and servicing constraints of the land such as slope, vegetation, watercourses, roads, water and sewer.

The local planning approach for Kurmond and Kurrajong would include community consultation about the following:

- a) land constraints and opportunities
- b) draft development principles
- c) potential funding mechanisms (e.g. development contribution plans).

The local planning approach, if adopted by Council, would be used to guide consideration of any future planning proposal applications for rezoning and/or changes to lot sizes or other amendments within the Kurmond and Kurrajong investigation area and all other unmapped, non-urban investigation areas around rural villages as identified in the Residential Land Strategy (RLS).

The report also recommends that, in relation to lodgement of any new residential planning proposal applications, the current suspension imposed by Council's resolution of 3 February 2015:

1. Be lifted effective immediately for mapped investigation areas shown in the RLS around Richmond/Hobartville, North Richmond, Wilberforce, Glossodia Windsor/South Windsor/Bligh Park.
2. Be maintained for the Kurmond Kurrajong investigation area and all other unmapped, non-urban investigation areas around rural villages as identified in the Residential Land Strategy (RLS) until the local planning approach, including community consultation, is completed.

Consultation

At present the issues raised in this report concern matters which do not require community consultation under Council's Community Engagement Policy. However a suggested consultation about the interim policy is proposed following completion of the land analysis as discussed below.

Background

On 3 February 2015, Council considered a Mayoral Minute regarding implementation planning for the RLS. Specifically the Mayoral Minute highlighted the need to undertake structure planning and development contribution planning for all development areas.

Meeting Date: 28 July 2015

"That:

1. Council suspend acceptance of new planning proposals under the Hawkesbury Residential Land Strategy (RLS) until the key implementation actions of the RLS, in particular, structure planning and development contribution planning has been completed for the Kurrajong/Kurmond investigation areas or 31 July 2015.

The extent of the investigation was determined by considering the location criteria of the RLS (i.e. "within 1km radius" and "cluster around or on the periphery of villages"), undertaking a desk top analysis of matters such as slope, existing vegetation, existing road layout and accesses, and zone and property boundaries.

The map shows a grid of streets with several key locations labeled. The University of Illinois at Chicago campus is located in the upper right quadrant, bounded by Dearborn Road to the north, E. 12th Avenue to the east, and E. 13th Avenue to the south. To the west of the campus is the Dearborn Road area, which includes the Dearborn Hotel and the Dearborn School. Further west is the Irving Road area, which includes the Irving Hotel and the Irving School. The map also shows the location of the University of Illinois at Chicago Medical Center, which is situated to the east of the main campus area. The map is oriented with North at the top, and the streets are labeled with their names in a clear, legible font.

Kurmond and Kurrajong Investigation Area

1. What land may be suitable for large lot residential / rural residential development.
2. What land may need to be protected or conserved (e.g. land containing threatened species or endangered ecological communities, riparian areas, land with significant slope, significant view lines).

ORDINARY MEETING

Meeting Date: 28 July 2015

3. The nature and location of future development (e.g. the type of residential development and minimum lot size requirements).
4. Likely development yield and take up rate.
5. The extent of rural village expansion and limits to growth.
6. The nature and location supporting public infrastructure (e.g. roads, intersections, drainage infrastructure, community facilities, parks and recreation facilities).
7. Mechanisms to fund and provide supporting public infrastructure.

So far detailed consideration has been given to items 1 and 2, and in part items 6 and 7. A key purpose of this report is to propose guiding development principles that will enable consideration of items 3, 4 and 5 and further consideration of items 6 and 7.

Progress of Study of Investigation Area

Study of the investigation area so far has included examination of the broad State and local planning framework, demographic analysis, consideration of the physical environment, and identification of infrastructure and services within and surrounding the investigation area.

The tables in Attachment 1 provide a summary of physical environment, and infrastructure and servicing matters that have been considered. Accompanying each matter is an assessment of the degree of constraint to development and recommendations to address or mitigate that constraint.

The classifications for "Degree of Constraint to Development" are fundamental, major, moderate, minor and nil. These are explained fully and applied in detail under each of the different development constraints in Attachment 1.

It is intended that these principles would be used to inform the next steps in the process, i.e. to map where large lot residential development may or may not occur and determine minimum lot sizes for such development, and that they would be relied upon in any subsequent planning proposal(s). Note these principles are aimed at addressing the major constraints to development as shown in Attachment 1. They do not preclude the consideration and adoption, if necessary, of other principles that may be required for the purposes of preparing a Development Control Plan or determining development applications for resultant development.

Figures 3, 4 and 5 in Attachment 1 show areas that, if the above mentioned principles are adopted, would be avoided for the purposes of large lot residential development. Figure 9 in Attachment 1 is a composite map showing such land. However, Figure 9 does not include land described as Connectivity between Significant Vegetation in Figure 3 as it is considered such land should not be an immediate exclusion from future development. Also, Figure 9 does not include dams that contain significant aquatic habitat as this information is not known and would most likely only be known at individual planning proposal or development application stage.

Figure 9 shows that, if the principles are adopted, extensive large lot residential development throughout the investigation area is unlikely and that only selected pockets or corridors of development would appear to satisfy the key guiding development principles.

Residential Land Strategy

On 10 May 2011, Council adopted the RLS. The RLS seeks to:

1. Accommodate between 5,000 - 6,000 additional dwellings by 2031, primarily within the existing urban areas as prescribed in the Department of Planning's North West Subregional Strategy.
2. Preserve the unique and high quality natural environment of the LGA.

ORDINARY MEETING

Meeting Date: 28 July 2015

3. Accommodate changing population, which presents new demands in terms of housing, services and access.
4. Identify on-going development pressures to expand into natural and rural areas, as well as new development both in and around existing centres.
5. Identify physical constraints of flood, native vegetation and bushfire risk.
6. Ensure that the appropriate infrastructure is planned and provided to cater for future development.

Of particular relevance to the Kurmond and Kurrajong investigation area (and all other release areas) is Chapter 6 of the RLS which sets out the sustainable development framework (SDF) for preparing and assessing planning proposals. The draft development principles, proposed in this report, for Kurmond and Kurrajong have been developed consistent with the SDF.

Housing Supply and Demand Analysis

Under the previous "Metropolitan Sydney" plan for the North West the dwelling targets for the Hawkesbury were set at 5,000 dwellings by 2031. However, that plan required that those targets were to be verified on a local scale by the relevant council. The RLS was prepared in line with that requirement and subsequently set the target, based on housing/lot demand, at between 5,000 - 6,000 dwellings by 2031. To place that target into perspective, the estimated dwelling production proposed by the RLS over the 25 years (2006 to 2031) would be 240 dwellings per annum for the Hawkesbury. At that rate in 2015 Council should have produced and planned for approximately 2,160 dwellings. It is estimated that our targets will be achieved with a total of approximately 2,639 dwellings either planned or underway in the release areas of Pitt Town, North Richmond, Glossodia.

- Vermont Estate at Pitt Town - approximately 659 lots
- Redbank at North Richmond - approximately 1,400 lots
- Jacaranda Ponds at Glossodia - approximately 580 large lot residential and residential lots

(Note: these figures are lot production only and do not include the dwelling production figures since 2006 which is estimated to be approximately 800).

It should be noted that the Sub Regional planning and the RLS did NOT include the Growth Centres' projected dwelling or lot production. Within the Hawkesbury area, the Vineyard Precinct is part of the North West Growth Centre and is intended to contain at least 2,500 dwellings, subject to the finalisation of current master planning work.

In addition, since the Hawkesbury Local Environmental Plan 2012 (LEP 2012) commenced, Council has been receiving numerous planning proposals for various residential and rural lots to be created on the edges of Windsor, Richmond, Kurmond and Kurrajong in response to the RLS adopted by Council on 10 May 2011. A full list of planning proposals is provided as Attachment 2 to this report. So far nine LEP amendments have been made and 12 planning proposals have been supported with a further six proposals in progress. A total of two have been withdrawn and four have been refused either by Council or the Gateway process. To date no additional lots have been created from these LEP amendments. However, these planning proposals result in the planned release of approximately 320 additional allotments in the next few years.

Council is currently included in the development of the NSW Government's yet to be released subregional planning for the Metropolitan Rural area under the new plan "A Plan for Growing Sydney". No dwelling or lot targets have yet been indicated in this planning process.

As part of the Metropolitan West Sub Regional Planning with Penrith City Council and Blue Mountains City Council, a housing demand analysis has recently been commissioned that will assist in reviewing projected housing demand that was identified in the RLS. The consultant's housing demand analysis is expected to be completed by October 2015 and a further report provided to Council at that time.

ORDINARY MEETING

Meeting Date: 28 July 2015

The result of the above is that Council, according to the planned demand for additional allotments by this year (2015), needed to have planned for approximately 2,160 additional allotments. With the applications referred to above, the number of planned allotments for release or already produced dwellings total approximately 3,450. Whilst these figures require more detailed investigation as they are only estimates, it would seem that Council is ahead of the dwelling production target by approximately 1,290 dwellings/lots, or approximately 5.5 years ahead of target. In this regard, it would seem that there is some buffer available that Council could use to temporarily slow the rate of lot release to permit the proper structure planning of release areas without affecting Council's ability to meet the dwelling/lot production targets.

Structure Planning for Kurmond and Kurrajong Investigation Area

Without structure planning there is:

- Limited or no provision of public infrastructure (roads, services, transport facilities, community facilities).
- No development contributions plan for levying infrastructure charges e.g. roads, intersections, drainage, open space.
- Infrastructure provision is piecemeal and instead relies on DA conditions and VPAs which only have limited scope when ownership is fragmented (there are over 200 landowners in the Kurmond and Kurrajong Investigation area).
- Inequitable financial and land contribution by landowners.
- Maximised expenses and ongoing maintenance burden to Council.
- Fragmented vegetation and watercourse protection.
- Development on hill sides requiring a significant cut and fill and creating a character of cul-de-sacs and battle-axe driveways.

Undertaking structure planning:

- Enables community input at an early phase of planning, providing certainty for the community, Council and development industry.
- Council and the community can collectively determine the future development character rather than individual landowners.
- Co-ordinates staff resources to work on priority planning projects (e.g. Rural Lands Strategy, review of RLS) rather than dealing with multiple, individual planning proposals. (If 200 individual planning proposals were progressed at approximately 10 per year, it would take 20 years to finalise lot release in the investigation area).
- Maximise opportunities for large lot residential and rural-residential land.
- Provides certainty for landowners about financial obligations (e.g. development contributions), land protection requirements (e.g. vegetation), lot yield constraints and road layout.

Constraints Severity Index (CSI)

The RLS provided a broad - scale examination of opportunities and constraints and gave an indexed rating to constraints such as bushfire (-4) vegetation/ecology (-3 to -5) and slope >15 degrees (-3) as well as opportunities such as proximity to neighbourhood centres (5) and sewer (5).

The land analysis for the Kurmond and Kurrajong Area involves undertaking a more detailed consideration of the opportunities and constraints and application of the CSI by using Council's GIS information.

ORDINARY MEETING

Meeting Date: 28 July 2015

A site-by site examination at a finer grain would still need to be undertaken for individual planning proposals and more detailed again for the design, development approval and construction phases. Development constraint mapping has been prepared for Kurmond and Kurrajong guided by the CSI index. (Attachment 1)

Proposed Key Guiding Development Principles under the Residential Land Strategy

As mentioned in previous reports to Council, the RLS has defined the following criteria for large lot residential development:

- *Be able to have onsite sewerage disposal.*
- *Cluster around or on the periphery of villages.*
- *Cluster around villages with services that meet existing neighbourhood criteria services as a minimum (within 1km radius).*
- *Address environmental constraints and with minimal environmental impacts.*
- *Within the capacity of the rural village.*

Points 2 and 3 above have been address by the identification of the Kurmond and Kurrajong investigation area. In order to address dot points 1 and 4 and advance structure planning within the investigation area it is considered necessary to identify and agree upon a suite of guiding development principles. Taking into consideration the existing major physical environment constraints, as outlined in Attachment 1, it is recommended that the following draft development principles be adopted for the purposes of public consultation:

Interim Policy - Draft Development Constraint Principles for Planning Proposals

Part A - Lodgement of Planning Proposals

1. Applications be encouraged by Council for residential planning proposals **within** the mapped investigation areas shown in the RLS around Richmond/Hobartville, North Richmond, Wilberforce, Glossodia, Windsor/South Windsor/Bligh Park areas.
2. Applications not be accepted by Council for any new residential planning proposals **outside** the RLS mapped investigation areas of Richmond/Hobartville, North Richmond, Wilberforce, Glossodia, Windsor/South Windsor/Bligh Park until a local planning approach is in place consistent with the RLS and the local development constraints shown in Part B below.
3. Applications not be accepted by Council for any **new** residential planning proposals in the **Kurmond and Kurrajong Investigation area** until a local planning approach is in place consistent with the RLS and the local development constraints shown in Part B below.

Part B - Development Constraints

Planning proposals will not be supported by Council unless:

1. Essential services under LEP 2012 and fundamental development constraints are resolved.
2. Building envelopes, asset protection zones (APZs), driveways and roads are located on land with a slope less than 15%.
3. Removal of significant vegetation is avoided.
4. Fragmentation of significant vegetation is minimised.

ORDINARY MEETING

Meeting Date: 28 July 2015

5. Building envelopes, APZs, driveways and roads (not including roads for the purposes of crossing watercourse) are located outside of riparian corridors.
6. Road and other crossings of water courses is minimised.
7. Fragmentation of riparian areas is minimised.
8. Removal of dams containing significant aquatic habitat is avoided.

Timeframe for Kurmond and Kurrajong Investigation Area Structure Planning

Following previous advice to Council and subject to agreement being reached regarding the key guiding development principles, the following tasks are proposed to be undertaken.

Item (as per tasks listed in Council report dated 31 March 2015)	Date
1 (land suitability) 2 (environmental protection areas) 5 (village expansion) 6 in part (public infrastructure) 7 in part (explore funding mechanisms options)	Completed
Council Briefing then Council report - progress report	21 & 28 July 2015
3 (controls e.g. lot sizes) 4 (yield) 6 in part (public infrastructure) 7 in part (draft funding mechanisms proposals)	Sep 2015
Council Briefing then Council report	Sep 2015
Community Consultation – about interim policy	Oct - Nov 2015
Council Briefing then Council report	Nov 2015

It is anticipated that Tasks 3 and 4 can be undertaken by Council staff over the next two to three months. Tasks 6 and 7 will require discussion with State government agencies such as the Road and Maritime Services (RMS) and the Department of Planning and Environment (DPE). Whilst staff have commenced preliminary discussions with these agencies, at present it is not possible to confidently predict the time required for this work to be done. It is, however, hoped that these tasks would be completed within six months.

Consultation with landowners and the community about the Draft Development Principles would also occur within this timeframe with a further progress report to Council by November 2015.

Requested Modification to Planning Proposal Suspension

The preparation of a planning proposal and the assessment of the proposed amendment are costly, for both the applicant and Council, and can take a significant period of time and resources to resolve fundamental development constraints. Not all planning proposals are supported primarily due to these development constraints.

Many of the current planning proposals under consideration involve a similar objective of varying the minimum lot size to create subdivision potential. However, some have not fully addressed or resolved the fundamental infrastructure and service provisions or development constraints. This has created duplication (and costs) on the part of landowners, private consultants, State Government and Council resources. It is an inefficient and ad-hoc planning approach to the future needs of Kurmond and Kurrajong.

ORDINARY MEETING

Meeting Date: 28 July 2015

In response to the recent Council resolutions, whilst significant progress has been made to date, the anticipated timeframe for the abovementioned tasks shows that structure and development contribution planning for Kurmond and Kurrajong will not be completed by the end of July, partly due to the need to consider the many other current planning proposals.

Council is also advised that since the commencement of the suspension, staff have received some enquiries regarding new planning proposals for residential development under the RLS. Some of these enquiries have been for large lot residential development and others have been for residential development within the mapped investigation areas of the RLS. Whilst it appears that the focus of the 3 February 2015 Mayoral Minute was on large lot residential development generally and the Kurmond/Kurrajong area specifically, new planning proposals for other areas have not been able to be accepted due to the wording of the Council's resolution relating to *all* planning proposals under the RLS.

Local Planning Approach

It is noted that proponents may seek a review of Council's decision by the JRPP if the DPE so determines. However, other councils have received verbal advice from the Department that it will support a Council's decision to suspend any new Planning Proposals with regard to residential release areas and to review them as part of the local planning approach as that would be consistent with the strategic assessment framework recommended by the JRPP.

This approach has been undertaken by State government and other councils (e.g. Vineyard precinct planning, Wingecarribee Council) for similar reasons.

Accordingly it is recommended that:

1. The suspension for accepting new residential planning proposals in the Kurmond and Kurrajong investigation area be continued.
2. A local planning approach be taken for all areas with a location outside of the RLS mapped investigation areas of Richmond/Hobartville, North Richmond, Wilberforce, Glossodia, Windsor/South Windsor/Bligh Park.
3. Those current Planning Proposals within the Kurmond and Kurrajong Investigation area (see Attachment 2) only proceed to Gateway if the fundamental development constraints have been addressed (see Attachment 1).
4. Site specific planning proposals be kept to a minimum and any additional amendments to LEP 2012 outside the local planning approach be limited to correcting drafting errors or strategic amendments instigated by Council.
5. Any other proposed residential amendments resulting from the RLS or the local planning approach which are supported, be combined into a single Planning Proposal to amend LEP 2012 in 2016/17.

ORDINARY MEETING

Meeting Date: 28 July 2015

Conformance to the Hawkesbury Community Strategic Plan

The proposal is consistent with the Looking After People and Place Directions statement;

- Offer residents a choice of housing options that meets their needs whilst being sympathetic to the qualities of the Hawkesbury.
- Population growth is matched with the provisions of infrastructure and is sympathetic to the rural, environmental, heritage values and character of the Hawkesbury.
- Have development on both sides of the river supported by appropriate physical and community infrastructure.

and is also consistent with the nominated strategy in the CSP being:

- Identify community needs, establish benchmarks, plan to deliver and advocate for required services and facilities

Financial Implications

Whilst much of the suggested work in the investigation area, as set out above, can be undertaken by Council staff there may be a need to obtain specialist advice for some aspects of the investigation. At present it is anticipated specialist advice may be required with respect to development contributions planning; possible cumulative impacts of on-site effluent disposal systems; some of the road and traffic implications in relation to the RMS controlled roads; identification and management of threatened and endangered flora and fauna; and stormwater management.

The cost of engaging such specialists is yet to be determined and, if required, will be subject to a further report to Council in accordance with Part 3 of the abovementioned Mayoral Minute from 3 February 2015.

Conclusion

This report has provided Council with a progress report regarding structure planning and development contribution planning for large lot residential development in the Kurmond and Kurrajong investigation area as required by the resolution of 3 February 2015.

Work undertaken so far has included examination of the broad State and local planning framework, demographic analysis, consideration of the physical environment, and identification of infrastructure and services within and surrounding the investigation area

The major constraints to future development in the investigation area have been identified as the slope of land; the presence of threatened or endangered flora and fauna; watercourses and dams; managing the threat of bushfire; the capacity of the existing road network; and requirements for waste water disposal.

This report recommends the adoption of an Interim Policy containing draft development principles and a local planning approach. The Interim Policy will be used to continue the required structure planning work in light of the environmental constraints of the area and with the purpose of minimising environmental impacts of future development.

The report recommends that the suspension for accepting new residential planning proposals in Kurmond and Kurrajong be continued but permit planning proposals for residential development with less development constraints to proceed consistent with the RLS and in areas unencumbered by fundamental constraints.

ORDINARY MEETING

Meeting Date: 28 July 2015

Planning Decision

As this matter is covered by the definition of a "planning decision" under Section 375A of the Local Government Act 1993, details of those Councillors supporting or opposing a decision on the matter must be recorded in a register. For this purpose a division must be called when a motion in relation to the matter is put to the meeting. This will enable the names of those Councillors voting for or against the motion to be recorded in the minutes of the meeting and subsequently included in the required register.

RECOMMENDATION:

That:

1. The draft development principles and local planning approach outlined in this report be adopted as an Interim Policy for the purposes of structure planning within the Kurmond and Kurrajong investigation area.
2. Council officers initiate discussions with the Kurmond and Kurrajong landowners and community about the Interim Policy and local planning approach.
3. Council's resolution of 3 February 2015 in relation to lodgement of any NEW residential planning proposal applications:
 - a) be lifted effective immediately for mapped investigation areas shown in the Residential Land Strategy around Richmond/Hobartville, North Richmond, Wilberforce, Glossodia, Windsor/South Windsor/Bligh Park;
 - b) be maintained for the Kurmond and Kurrajong investigation area and all other unmapped, non-urban investigation areas around rural villages as identified in the Residential Land Strategy until the local planning approach is completed.
4. Those current planning proposals within the Kurmond and Kurrajong Investigation area (see Attachment 2) only proceed to Gateway if the 'fundamental' development constraints have been addressed (see Attachment 1).
5. Site specific planning proposals for any areas be kept to a minimum and any additional amendments to LEP 2012 outside the local planning approach be limited to correcting drafting errors or strategic amendments instigated by Council.
6. Any other proposed residential amendments resulting from the Residential Land Strategy or the local planning approach for Kurmond and Kurrajong Investigation Area which are supported, be combined into a single Planning Proposal to amend LEP 2012 in 2016/17.
7. A report be submitted to Council no later than November 2015 regarding the progress of the local planning approach for the Kurmond and Kurrajong investigation area and the status of other planning proposals.
8. A separate report be submitted to Council in early 2016 on the progress of the review of the Residential Land Strategy including the progress in implementing Council's resolution under Item 4 of 9 December 2014 for the Residential Land Strategy to include 'Second Dwellings'.

ATTACHMENTS:

- AT - 1 Structure Planning- Kurmond and Kurrajong Investigation Area - *(Distributed Under Separate Cover)*
- AT - 2 Summary of LEP 2012 Amendments and Current Planning Proposals

AT - 2 Summary of LEP 2012 Amendments and Current Planning Proposals

LEP 2012 Amendments

Since the commencement of LEP 2012 there have been eight amendments made as summarised below:

Amendment No.	Description	Location	Purpose	Date of Gazette/Amendment made
1	To rezone the subject land to RU1 Primary Production under HLEP 2012 to permit a broader range of land uses on the site.	46 Mulgrave Road Mulgraves	Industrial	7/04/2014
2	To rezone the subject land to B1 Neighbourhood Centre to allow a range of retail/commercial uses.	77- 87 Old Bells Line of Road Kurrajong	Business	6/08/2013
3	To include certain land uses as additional permitted land uses in Schedule 1 of HLEP 2012	541-547 Windsor Road and 389 Old Hawkesbury Road, Vineyard	Industrial and ancillary retail	7/02/2014
4	To rezone part of the subject land to facilitate large lot residential development.	1411 Kurmond Road Kurmond	Large Lot residential	16/01/2015
5	Jacaranda Ponds rezoning and VPA	Glossodia	580 lots*	19/12/2014
6	Redbank rezoning and VPA	North Richmond	1400 dwellings*	11/04/2014
7	South Windsor RSL rezoning	36 Argyle Street, South Windsor	Industrial	11/07/2014
8	Amendment to Clause 4.1D(1) (a) of HLEP 2012	Various street addresses	Residential	16/05/2014

*No dwellings or lots have yet been finalised from these amendments.

Planning Proposals Determined

There have been two planning proposals withdrawn. Four planning proposals were refused either by Council or by DPE at Gateway. Those proposals were refused due to such as flood evacuation and other fundamental development constraints.

Planning Proposals in Progress

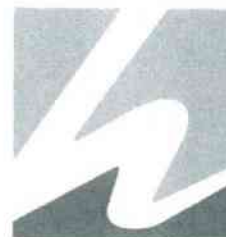
Proposal	Description	Location	Purpose	Council Resolution
LEP11-001/12	To rezone the subject land to R5 Large Lot Residential or RU5 Village to create 15 housing allotments.	1442 and 1442A Kurmond Road, Kurmond	Large lot residential	30/07/2013
LEP001/12	To subdivide land to a minimum lot size of 4000 m2	395 Bells Line of Road Kurmond	Large lot residential /rural residential	26/03/2013
LEP002/12	To rezone land to B7 Business Park and amend Schedule 1 of LEP 2012 to enable some bulky goods premises on the northern part of the land	120 - 188, Hawkesbury Valley Way, Clarendon	Industrial/Business	26/03/2013
LEP003/13	To rezone land to RU4 Primary Production Small Lots	1026 Grose Vale Road, Kurrajong	Rural residential	30/09/2015
LEP005/13	Amend Lot Size Map or Schedule 1 to permit subdivision of the land to a minimum lot size of 1,000m2	Mitchell Road, Pitt Town	Large lot residential	10/03/2015
LEP007/13	Amend Lot Size Map to permit rural residential subdivision	138 Longleaf Lane, Kurmond	Rural residential	29/04/2014
LEP009/13	To rezone part of land to R1 General Residential	35 Chapel Street Richmond	Residential	30/06/2015
LEP009/13	Amend minimum lot size map to provide for lots with a minimum of 4000m2 and the	373 Bells Line of Road, Kurmond	Rural residential	28/10/2014
LEP002/14	Amend Lot Size Map to permit rural residential	1420 Kurmond Road, Kurmond	Rural residential	11/11/2014

0000 END OF REPORT 0000

Proposal	Description	Location	Purpose	Council Resolution
	subdivision			
LEP003/14	Amend Lot Size Map to permit rural residential subdivision	431 Greggs Road, Kurrajong	Rural residential	9/12/2014
LEP004/14	Rezone part of land from RU1 to IN1	Speedwell Place South Windsor	Industrial	26/05/2015
LEP001/15	Amend Lot Size Map to permit 2 lot subdivision	219 Bells Line of Road, North Richmond	Rural residential	30/06/2015
LEP003/15	General Amendments	City Wide	Various	31/03/2015

Planning Proposals in Progress (not yet determined by Council)

LEP007/14	Amend Lot Size Map to permit rural residential subdivision	3 Bells Lane, Kumond	Rural residential	Waiting for additional information from the applicant.
LEP002/15	Amend Lot Size Map to permit rural residential subdivision	Bells Lane and Bells Line of Road, Kurrajong	Rural residential	Waiting for additional information from the applicant.
LEP004/15	To rezone land to IN2 Light Industrial	22, 39 and 41 Windsor Street Richmond	Industrial	Assessment of the planning proposal is to be commenced in early August 2015.
LEP005/14	Amend Lot Size Map to permit rural residential subdivision	2 Inventory Drive, Kumond	Rural residential	Waiting for a flora and fauna report from the applicant.



attachment 1
to
item 114

Structure Planning - Kurmond and
Kurrajong Investigation Area

date of meeting: 28 July 2015
location: council chambers
time: 6:30 p.m.

Hawkesbury City Council

AT - 1 - Structure Planning - Kurmond and Kurrajong Investigation Area

Introduction

The structure planning work undertaken shown below is in draft form and is subject to change as new information and analysis is undertaken on the following:

1. What land may be suitable for large lot residential / rural residential development.
2. What land may need to be protected or conserved (e.g. land containing threatened species or endangered ecological communities, riparian areas, land with significant slope, significant view lines).
3. The nature and location of future development (e.g. the type of residential development and minimum lot size requirements).
4. Likely development yield and take up rate.
5. The extent of rural village expansion and limits to growth.
6. The nature and location supporting public infrastructure (e.g. roads, intersections, drainage infrastructure, community facilities, parks and recreation facilities).
7. Mechanisms to fund and provide supporting public infrastructure.

So far detailed consideration has been given to items 1 and 2, and in part items 6 and 7.

Kurmond and Kurrajong Investigation Area



Figure 1: Kurmond and Kurrajong Large Lot Residential Investigation Area
(with cadastral data)



**Figure 2: Kurmond and Kurrajong Large Lot Residential Investigation Area
(with aerial photo 2014)**

Progress of Study of Investigation Area

Study of the investigation area so far has included examination of the broad State and local planning framework, demographic analysis, consideration of the physical environment, and identification of infrastructure and services within and surrounding the investigation area.

The following tables provide a summary of physical environment, and infrastructure and servicing matters that have been considered. Accompanying each matter is an assessment of the degree of constraint to development and recommendations to address or mitigate that constraint.

The classifications for Degree of Constraint to Development are fundamental, major, moderate, minor and nil and these are defined as follows:

Fundamental:	Legislative requirement to be met or State Government agency concurrence required to address a fundamental development constraint. Council or State Government consent cannot occur until solution is provided or delivery mechanism is in place to meet legislative requirement. CSI rating of -5.
Major:	In terms of physical characteristics of the land the matter is so significant that development should be avoided. In terms of required infrastructure and servicing the matter is so significant that development should not occur until a solution has been identified and delivery mechanism achieved. CSI rating of -4 or -5.
Moderate:	The matter should be carefully considered when preparing and assessing planning proposals or development applications. Referral to State government agencies may be required during the assessment of the application and specific responses or conditions of consent are likely CSI rating of -3.

Minor: Detailed consideration typically not required as it is expected this matter can be readily addressed by way of standard conditions of development consent or payment of developer contributions. CSI rating of -1 or -2

Nil: No specific action required. Positive CSI rating (1-5).

This structure plan summary includes an examination of

- Physical Environment eg. slope of land, vegetation, watercourses and bushfire
- Infrastructure and Services eg. road network

Preliminary work has been undertaken on Development Principles for Kurmond and Kurrajong that respond to constraints (-CSI) and opportunities (+CSI). These are summarised below:

Preliminary Development Principles Based on Constraints (-CSI)

1. Essential services under LEP 2012 and fundamental development constraints are resolved.
2. Building envelopes, asset protection zones (APZs), driveways and roads are located on land with a slope less than 15%.
3. Removal of significant vegetation is avoided.
4. Fragmentation of significant vegetation is minimised.
5. Building envelopes, APZs, driveways and roads (not including roads for the purposes of crossing watercourse) are located outside of riparian corridors.
6. Road crossings of water courses is minimised.
7. Fragmentation of riparian areas is minimised.
8. Removal of dams containing significant aquatic habitat is avoided.

Preliminary Development Principles Based on Opportunities (+CSI)

1. Be able to have onsite sewerage disposal.
2. Cluster around or on the periphery of villages.
3. Cluster around villages with services that meet existing neighbourhood criteria services as a minimum (within 1km radius).
4. Address environmental constraints and with minimal environmental impacts.
5. Within the capacity of the rural village.

Table 1: Physical Environment

Factor	Degree of Constraint to Development	Recommendation	Risk / Consequence
<i>Terrestrial Biodiversity</i> Impact of development on threatened or endangered flora and fauna	Fundamental -Major	Legislation applies to threatened and endangered species. OEH concurrence may be required. Removal of significant vegetation is to be avoided Fragmentation of significant vegetation is to be minimised	Flora and fauna species extinction
<i>Watercourses and Riparian Areas</i> Impact of development on watercourses and riparian areas	Fundamental -Major	Legislation applies to threatened and endangered species. OEH concurrence may be required. Building envelopes, APZs, driveways and roads (not including roads for the purposes of crossing watercourses) are to be located outside of riparian corridors Road crossings of watercourses are to be minimised Fragmentation of riparian areas is to be minimised	Water pollution Bank and gully erosion Loss of aquatic habitat
<i>Dams</i> Impact of development on aquatic habitat. Proximity of dams to effluent disposal systems	Fundamental - Minor	Legislation applies to threatened and endangered species. OEH concurrence may be required. Removal of dams containing significant aquatic habitat is to be avoided. Minimum required buffer distances for effluent disposal systems is to be adhered to	Water pollution Loss of aquatic habitat
<i>Bush Fire threat</i> Impact of the location and management of APZs and perimeter roads	Fundamental - Major	RFS concurrence may be required. Building construction and water supply is to comply with NSW Rural Fire Service's <i>Planning for Bushfire Protection 2006</i> . eg. APZs and roads.	Loss of life Loss of property

Factor	Degree of Constraint to Development	Recommendation	Risk / Consequence
<i>Bush Fire threat</i> Requirements for building construction and water supply for fire fighting purposes	Moderate	Building construction and water supply is to comply with NSW Rural Fire Service's <i>Planning for Bushfire Protection 2006</i> , eg. APZs and roads.	Loss of life Loss of property
<i>Landforms and soils</i> Suitability of land for development given the slope of the land	Major	Building envelopes, asset protection zones (APZs), driveways and roads are to be located on land with a slope less than 15% Clause 6.2 of LEP 2012 applies.	Landslip
<i>Traffic Noise</i> Suitability of land to be developed given traffic noise from Bells Line of Road	Moderate	Council and developers are to consider relevant provisions of <i>State Environmental Planning Policy (Infrastructure) 2007</i> when preparing and considering development applications	Loss of acoustic privacy
<i>Agriculture Land Uses and Agricultural Land Use Classifications</i> Impact of development on existing agricultural uses and suitability of land to be retained for existing or future agriculture uses	Minor - Moderate	Council and developers are to consider potential conflict between large lot residential and agricultural land uses when preparing and considering development applications	Loss of agricultural land Reduced agribusiness and food supply Increased land use conflicts with dwellings (eg. noise, traffic, spray drift, lighting)
<i>European Heritage</i> Impact of development on European heritage items	Fundamental - Moderate	Council and developers are to consider relevant provisions of <i>Heritage Act 1977</i> when preparing and considering development applications. Heritage office approval may be required. Where relevant development applications are to be assessed with respect to Clause 5.10 Heritage Conservation of the Hawkesbury Local Environmental Plan 2012 (LEP 2012) and Heritage Chapter of the Hawkesbury Development Control Plan 2002 (DCP 2002)	Loss of European heritage Loss of streetscape character

Factor	Degree of Constraint to Development	Recommendation	Risk / Consequence
<i>Aboriginal Heritage</i> Impact of development on Aboriginal heritage items	Fundamental - Moderate	National Parks and Wildlife Act 1974 applies. Council and developers are also to consider relevant provisions of <i>Heritage Act 1977</i> when preparing and considering development applications	Loss of Indigenous heritage Loss of landscape character
<i>Land Contamination</i> Suitability of land to be developed given potential for land to be contaminated	Fundamental - Minor	Remediation action plans and validation may be required. Council and developers are to consider relevant provisions of <i>State Environmental Planning Policy No 55—Remediation of Land</i> when preparing and considering development applications.	Risk to public health
<i>Flooding</i> Suitability of land to be developed given potential for flooding	Fundamental - Minor	DPE, OEH & SES concurrence may be required. Clause 6.3 of LEP 2012 applies and regional flood evacuation plans may be required. Council and developers are to consider potential impact of localised flooding on life and property when considering development applications.	Loss of life Loss of property
<i>Acid Sulfate Soils</i> Impact of disturbance of acid sulfate soils on the environment and development.	Fundamental to Minor	Development proposals and land class are to be assessed with respect to Clause 6.1 Acid Sulfate Soils of LEP 2012. Acid sulfate soils management plans required.	Salinity Loss of useable land
<i>Groundwater and Bores</i> Proximity of groundwater and bores to effluent disposal systems	Minor	Minimum required buffer distances for effluent disposal systems to be adhered to	Groundwater contamination Downstream flora and fauna impacts

Table 2: Infrastructure and Services

Factor	Degree of Constraint to Development	Recommendation	Risk / Consequence
<i>Road network</i> Capacity and safety of existing road network	Fundamental - Major	RMS concurrence may be required. Development contributions are to be levied for road improvements Council and developers are to consider relevant provisions of <i>State Environmental Planning Policy (Infrastructure) 2007</i> when preparing and considering development applications	Traffic congestion Loss of life Council budget required to fund road maintenance and intersection works
<i>Road network</i> Location and funding of new roads to serve future development	Major	RMS concurrence may be required. New roads and intersection works are to be provided by developer as part of subdivision of land. Where new roads do not front land to be developed, roads are to be funded by development contributions Council and developers are to consider relevant provisions of <i>State Environmental Planning Policy (Infrastructure) 2007</i> when preparing and considering development applications	Traffic congestion Loss of life Council budget required to fund road maintenance and intersection works
<i>Wastewater</i> Capacity of land to cater for on-site effluent disposal	Fundamental	Sydney Water concurrence may be required. Developers are to demonstrate that waste water can be disposed of on site in an environmentally sensitive manner. Alternatively developers may provide reticulated sewer service to new lots in accordance with relevant licences and/or authority requirements Clause 6.7 - Essential Services under LEP 2012 applies.	Contamination of land and water

Factor	Degree of Constraint to Development	Recommendation	Risk / Consequence
<i>Public Transport Services</i> Provision of bus service to cater for the needs of incoming population	Fundamental - Moderate	Transport NSW and RMS concurrence may be required. Possible levying of development contributions for bus services Clause 6.7 - Essential Services under LEP 2012 applies.	Traffic congestion Isolation of residents from facilities
<i>Stormwater drainage</i> Quantity and quality of stormwater run-off entering watercourses	Fundamental - Moderate	Developers are to demonstrate that stormwater can be captured, treated and released in an environmentally sensitive manner Possible levying of development contributions for stormwater purposes. Clause 6.7 - Essential Services under LEP 2012 applies.	Contamination of watercourses Erosion of watercourses Loss of flora and fauna
<i>Water Supply</i> Provision of reticulated water supply to new lots	Fundamental - Moderate	Sydney Water concurrence may be required. A reticulated water service is to be provided to new lots by developers in accordance with relevant authority requirements Clause 6.7 - Essential Services under LEP 2012 applies.	Isolation of residents from facilities
<i>Emergency Services</i> Capacity of RFS, Police and Ambulance services to respond to emergency situations.	Minor - Moderate	Possible levying of development contributions for emergency services	Loss of life Isolation of residents from facilities

Factor	Degree of Constraint to Development	Recommendation	Risk / Consequence
<i>Education Establishments</i> Capacity of existing education establishments to cater for needs of incoming population	Minor - Moderate	Council is to ensure education establishments are permissible land uses in and/or within the vicinity of the investigation area Possible levying of development contributions for education establishments	Isolation of residents from facilities
<i>Electricity</i> Provision of electricity service to new lots	Fundamental	Electricity provider concurrence may be required. Electricity services are to be provided to new lots by developers in accordance with relevant authority requirements. Clause 6.7 - Essential Services under LEP 2012 applies.	Isolation of residents from facilities
<i>Waste Collection</i> Provision of garbage and recyclable collection services to new lots	Minor	Subdivision and building designs are to allow for the orderly and efficient collection of waste from premises	Isolation of residents from facilities
<i>Telecommunications</i> Provision of telephone and NBN services to new lots	Minor	Telephone and NBN services are to be provided to new lots by developers in accordance with relevant authority requirements	Isolation of residents from facilities
<i>Parks and Reserves</i> Capacity and extent of existing parks and reserves to cater for needs of incoming population	Minor	Council is to ensure adequate provision of parks and reserves to cater for demands of incoming population Possible levying of development contributions for parks and reserves	Isolation of residents from facilities
<i>Community Buildings and Facilities</i> Capacity and extent of existing community buildings and facilities	Minor	Council to ensure adequate provision of community buildings and facilities to cater for demands of incoming population Possible levying of development contributions for community buildings and facilities	Isolation of residents from facilities

Factor	Degree of Constraint to Development	Recommendation	Risk / Consequence
<i>Child care centres</i> Capacity of existing child care centres to cater for needs of incoming population	Minor	Council to ensure home based child care and child care centres are permissible land uses in and/or within the vicinity of the investigation area	Isolation of residents from facilities
<i>Aged Care and Senior Living Developments</i> Capacity of aged care facilities to cater for needs of incoming population	Minor	Council to ensure aged care and senior living developments are permissible land uses in and/or within the vicinity of the investigation area	Isolation of residents from facilities
<i>Footpaths and Bicycle paths</i> Capacity and extent of footpaths and bicycle paths to cater for needs of incoming population	Minor	Council to ensure adequate provision footpaths and bicycle paths to cater for demands of incoming population Possible levying of development contributions for footpaths and bicycle paths	Isolation of residents from facilities

Primary Physical Constraint Discussion

As can be seen in the above table, the primary physical constraints to future development in the investigation area are the slope of land; the presence of threatened or endangered flora and fauna; watercourses and dams; managing the threat of bushfire; the capacity and the existing road network; and requirements for waste water disposal. Below is a brief discussion of these matters.

Slope of Land

Throughout the investigation area there is a relatively uniform occurrence of land with slope in excess of 15%. The RLS recognises land in excess of 15% as unsuitable for urban development as beyond this slope, soil erosion becomes an increasingly difficult problem to manage and may even expose development to landslip and mass movement hazards. This is supported by the State government's *Soil and land assessment constraint for urban and regional planning*, 2010 states:

The greater the slope (gradient), the greater the potential for erosion due to the increase surface water velocity, increase water runoff compared to infiltration and the increased gravitational force on the soil particles. Steeper slopes mean access is more difficult and cumbersome, especially where heavy machinery is required or heavy loads are being transported. Site preparation for construction work is more difficult, requiring greater cut and fill operations.

Furthermore this assessment defines land in excess of 15% as being highly constrained due to potential for failure of ground and structures and the increase in complexity of construction and long-term access

Figure 3 shows land that is in excess of 15% and 20% in slope.



Figure 3: Slope of Land

Slope 15% to 20% - Orange
Slope greater than 20% - Red.

Presence of Threatened or Endangered Flora and Fauna

Much of the land within the investigation area has been cleared of native trees, shrubs and groundcover. However significant stands and corridors of native vegetation do remain throughout the investigation area.

Substantial areas of the investigation area are shown as being classified either *Significant Vegetation* or *Connectivity Between Significant Vegetation* under LEP 2012. The categorisations are based on high level vegetation mapping undertaken on behalf of Council in 2007 and are shown in Figure 4.



Figure 4: Significant Vegetation and Connectivity between Significant Vegetation

Significant Vegetation - Dark green
Connectivity Between Significant Vegetation - Light green.

The land that is classified as *Significant Vegetation* typically contains critically endangered ecological communities or endangered ecological communities listed under the *Threatened Species Conservation Act 1995* (TSC Act) and/or the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The majority of these vegetation communities and their classifications under both Acts are shown in the table below.

Table 3: Vegetation community classifications

Vegetation Community	TSC Act Classification	EPBC Act Classification
Shale Sandstone Transition Forest	Critically Endangered Ecological Community	Critically Endangered Ecological Community
Sydney Turpentine Ironbark Forest	Endangered Ecological Community	Critically Endangered Ecological Community
Shale Plains Woodland	Critically Endangered Ecological Community	Critically Endangered Ecological Community
Western Sydney Dry Rainforest	Endangered Ecological Community	Critically Endangered Ecological Community

A search of the BioNet Atlas of NSW Wildlife website reveals that individual 23 fauna and 4 flora species listed under the TSC Act have been recorded within a 10km radius of the investigation area.

The TSC Act also provides a definition of "threatening processes". These are processes that threaten, or may have the capability to threaten, the survival or evolutionary development of species, populations or ecological communities. Key threatening processes of most relevance to future large lot residential within the investigation area are:

- Alteration to the natural flow regimes of streams
- Bushrock removal
- Clearing of native vegetation
- High frequency fire resulting in the disruption of life cycle processes in plants and animals and loss of vegetation structure and composition
- Invasion and establishment of exotic vines and scramblers
- Invasion of native plant communities by exotic perennial grasses
- Loss and degradation of native plant and animal habitat by invasion of escaped garden plants, including aquatic plants
- Loss of hollow-bearing trees
- Removal of dead wood and dead trees

Accuracy of Vegetation Mapping

The high level vegetation mapping undertaken in 2007 covered most of the LGA and hence due to the extensive area involved it was subject to only selective and representative groundtruthing. Some planning proposal applicants have questioned the accuracy of the vegetation mapping. Typically this questioning has been in the absence of a detailed flora and fauna assessment of the respective site. Where assessments have been carried out the 2007 vegetation mapping has been shown to be quite accurate. Hence, at present the vegetation mapping is considered by Council officers to be accurate in identifying the broad areas where future development may or may not occur. Hence widespread groundtruthing of the vegetation mapping within the investigation area is not considered necessary. It is however forecast that groundtruthing of some locations within the investigation area may be required at a later stage in the structure planning process.

Watercourses and Dams

The investigation area is traversed by many watercourses and can be divided into three general water catchment areas. These are as follows:

Redbank Catchment

Land to the south of Bells Line of Road and to the east of Old Bells Line of Road/Grose Vale Road. This land drains to the south-west into Redbank Creek which flows into the Hawkesbury River approximately 1.5km downstream of the North Richmond bridge.

Little Wheeny Creek Catchment

Land to the north-west of Old Bells Line of Road/Grose Vale Road. This land drains to the north into Little Wheeny Creek. Little Wheeny Creek flows into Wheeny Creek which in turn flows into the Colo River approximately 1.1 kilometres upstream of the Putty Road bridge over the Colo River

Howes Creek Catchment

Land to the north of Bells Line of Road and east of Comleroy Road. This land drains easterly into Howes Creek. Howes Creek flows in Currency Creek which in turn flows into the Hawkesbury River approximately 400m upstream of the Sackville Ferry crossing.

Watercourses within the investigation area and their corresponding Strahler watercourse order class are shown in Figure 5.

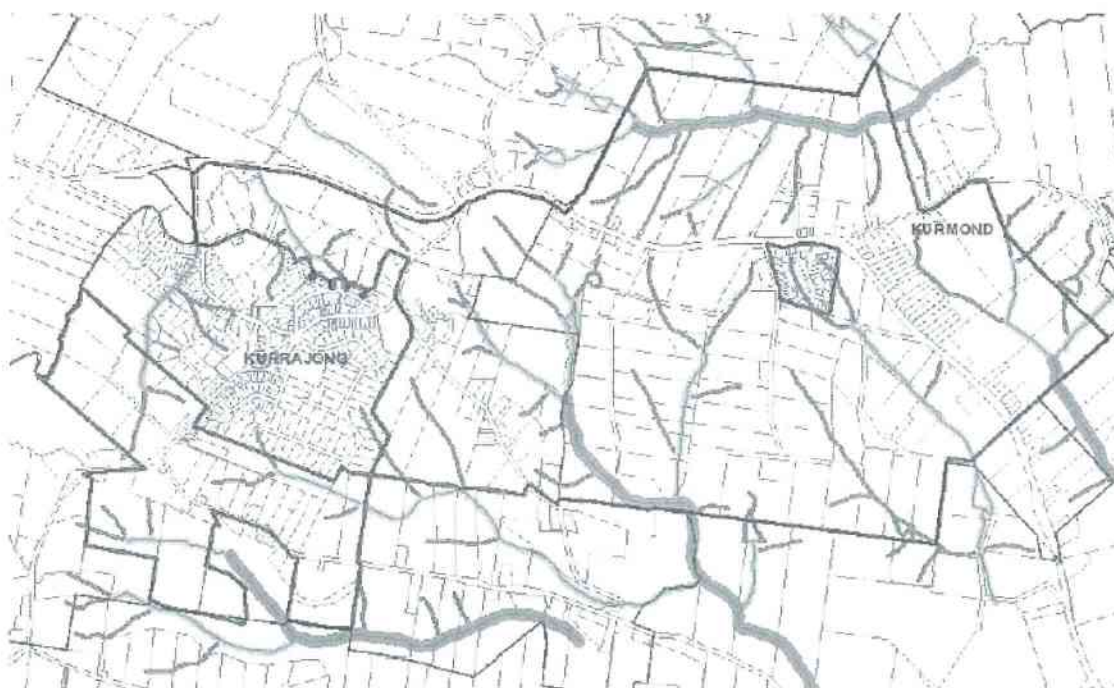


Figure 5: Watercourses and riparian areas

- 1st Order Stream - Blue band
- 2nd Order Stream - Yellow band
- 3rd Order Stream - Purple band

The Office of Water's *Guidelines for riparian corridors on waterfront land* contains recommended minimum riparian corridor widths based on stream order. These are as shown in Table 4 below. The Guidelines recommend that these riparian corridors be maintained or rehabilitated with fully structured native vegetation, disturbance and harm is minimised, the number of creek crossings is minimised and perimeter roads separate development from the riparian corridors, services and infrastructure is located outside of the riparian corridor, and stormwater run-off is treated before discharging into the riparian corridor.

Table 4: Recommended riparian corridor (RC) widths

Watercourse type	Vegetated Riparian Zone width (each side of watercourse)	Total RC width
1 st order	10 metres	20m plus channel width
2 nd order	20 metres	40m plus channel width
3 rd order	30 metres	60m plus channel width

A significant number of dams are located in the investigation area, generally west of the Kurrajong residential area. These dams are typically small and appear to be located on or adjacent to watercourses. The location of these dams is shown in blue in Figure 6.



Source: <https://maps.six.nsw.gov.au/>

Figure 6: Dams

Dams can have a major impact on development, primarily due to required minimum setbacks for on-site waste water treatment facilities and due to being a possible significant aquatic habitat. Where dams do not provide a significant aquatic habitat, developers often decommission and fill in dams in order to maximise the number of potential allotments. It is assumed that this practice would be adopted within the investigation area and hence, at a broad scale, it is considered that the number and location of dams presents a minor limitation to development within the investigation area. Detailed investigation at development application stage will however be required to determine whether or not individual dams are a significant aquatic habitat.

Bush Fire Threat

All of the land within the investigation area is classified as "bushfire prone land" on the Bushfire Prone Land Map for the LGA with the vast majority of the area falling within the Category 1 vegetation class. Bush fire prone land is shown in Figure 7.

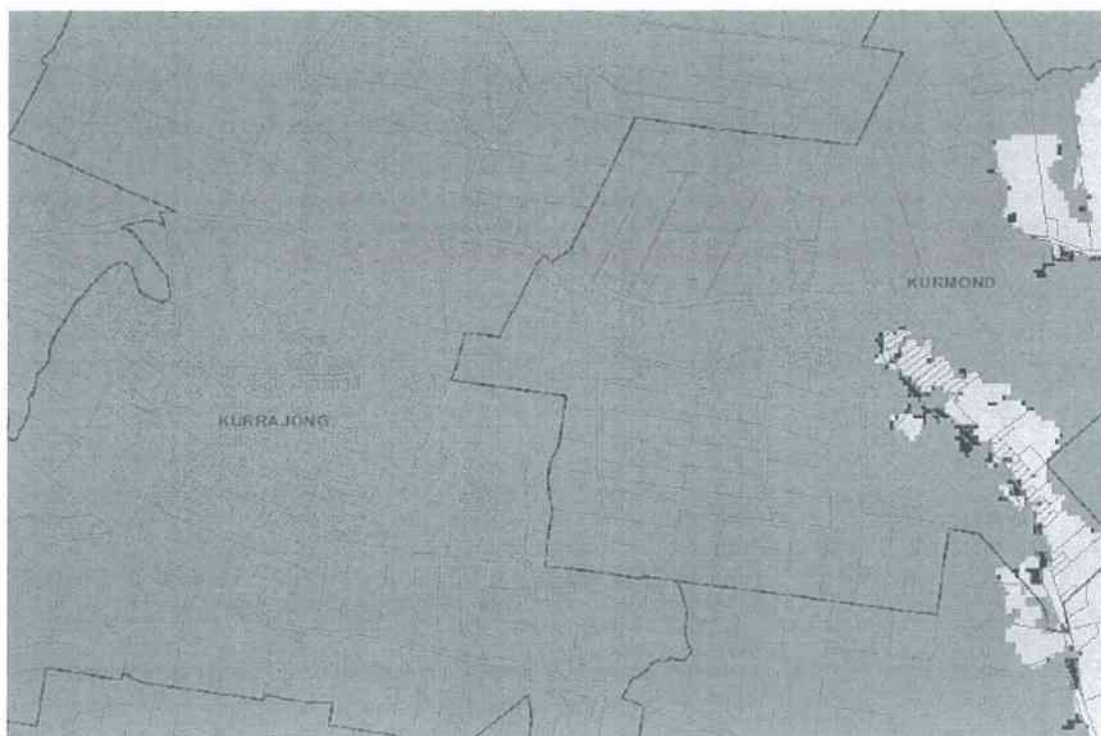


Figure 7: Bushfire prone land

Category 1 vegetation - Orange
 Category 2 vegetation - Yellow
 Buffer area - Red

All development on bushfire prone land must satisfy the aims and objectives of *Planning for Bushfire Protection 2006* (PBP) and Council must consider the provisions of PBP when considering planning proposals and development applications on bushfire prone land. A major matter to be addressed in satisfying the provisions of PBP is the determination and location of APZs and perimeter roads and their impacts on flora and fauna and neighbouring properties.

Road Network

Bells Line of Road

Bells Line of Road is the major east – west vehicle thoroughfare through the investigation area. It is classified as a main road and is under the care, control and management of the Roads and Maritime Service (RMS). Bells Line of Road currently experiences significant volumes of traffic in the morning and evening peak period and major congestion regularly occurs east of the investigation area in North Richmond and Richmond.

The RMS has advised Council of its concerns regarding the cumulative impacts of planning proposals for subdivision in the Kurmond and Kurrajong area. Further the RMS has advised that they do not have any current plans or funding available for upgrades to Bells Line of Road.

The RMS has recommended that Council undertake a Traffic Study to investigate impacts to the surrounding road network and individual intersections that are likely to be adversely impacted by the increase in traffic generated by large lot residential development in the investigation area. The RMS has offered assistance to Council via developer funded mechanisms to fund local and State road improvements in the vicinity.

Old Bells Line of Road

Old Bells Line of Road/Grose Vale Road is a southerly regional road loop connecting Kurrajong, Bowen Mountain, Grose Wold, Grose Vale and North Richmond.

Other Roads

The major local roads within the investigation area are Kurmond Road and Greggs Road/Redbank Road.

Kurmond Road provides an east - west route, connecting with either Gorricks Lane / Freemans Reach Road to access Windsor or Putty Road to access Wilberforce.

Greggs Road/Redbank Road is an east-west route connecting Kurrajong to Bells Line of Road approximately 1.2km south-east of the investigation area.

All other roads in the investigation area are minor local roads. These roads typically have a road reserve width of approximately 20m, a pavement width of approximately 3.5m to 5m and are not provided with kerb and gutter. The function and character of these roads is primarily that of a "rural lane" or cul-de-sac as they do not provide connection with other local roads in the investigation area.

Figure 8 shows the status of roads within the investigation area.

ORDINARY MEETING

Meeting Date: 28 July 2015

Item: 114

**CP - Kurmond and Kurrajong Large Lot Residential Investigation Area -
Progress Report - (95498, 124414)**

Ms Kim Smith addressed Council, on behalf of Ms Venecia Wilson, Ms Beatriz Insausti, Ms Fiona Smith and Mr Michael Want addressed Council, speaking against the item.

A MOTION was moved by Councillor Conolly, seconded by Councillor Reardon.

That:

1. The draft development principles and local planning approach outlined in this report be adopted as an Interim Policy for the purposes of structure planning within the Kurmond and Kurrajong investigation area.
2. Council officers initiate discussions with the Kurmond and Kurrajong landowners and community about the Interim Policy and local planning approach, in September 2015.
3. Council's resolution of 3 February 2015 in relation to lodgement of any NEW residential planning proposal applications:
 - a) be lifted effective immediately for mapped investigation areas shown in the Residential Land Strategy around Richmond/Hobartville, North Richmond, Wilberforce, Glossodia, Windsor/South Windsor/Bligh Park;
 - b) be maintained for the Kurmond and Kurrajong investigation area and all other unmapped, non-urban investigation areas around rural villages as identified in the Residential Land Strategy until the local planning approach is completed.
4. Those current planning proposals within the Kurmond and Kurrajong Investigation area (see Attachment 2) only proceed to Gateway if the 'fundamental' development constraints have been addressed (see Attachment 1).
5. Site specific planning proposals for any areas be kept to a minimum and any additional amendments to LEP 2012 outside the local planning approach be limited to correcting drafting errors or strategic amendments instigated by Council.
6. Any other proposed residential amendments resulting from the Residential Land Strategy or the local planning approach for Kurmond and Kurrajong Investigation Area which are supported, be combined into a single Planning Proposal to amend LEP 2012 in 2016/2017.
7. A report be submitted to Council no later than November 2015 regarding the progress of the local planning approach for the Kurmond and Kurrajong investigation area and the status of other planning proposals.
8. A separate report be submitted to Council in early 2016 on the progress of the review of the Residential Land Strategy including the progress in implementing Council's resolution under Item 4 of 9 December 2014 for the Residential Land Strategy to include 'Second Dwellings'.

ORDINARY MEETING

Meeting Date: 28 July 2015

An AMENDMENT was moved by Councillor Lyons-Buckett, seconded by Councillor Williams.

That:

1. The draft development principles and local planning approach outlined in this report be adopted as an Interim Policy for the purposes of structure planning within the Kurmond and Kurrajong investigation area.
2. Council officers initiate discussions with the Kurmond and Kurrajong landowners and community about the Interim Policy and local planning approach, in September 2015.
3. Council's resolution of 3 February 2015 in relation to lodgement of any NEW residential planning proposal applications:
 - a) be lifted effective immediately for mapped investigation areas shown in the Residential Land Strategy around Richmond/Hobartville, Windsor/South Windsor/Bligh Park;
 - b) be maintained for the Kurmond and Kurrajong investigation area and all other unmapped, non-urban investigation areas around rural villages as identified in the Residential Land Strategy until the local planning approach is completed.
4. Those current planning proposals within the Kurmond and Kurrajong Investigation area (see Attachment 2) only proceed to Gateway if the 'fundamental' development constraints have been addressed (see Attachment 1).
5. Site specific planning proposals for any areas be kept to a minimum and any additional amendments to LEP 2012 outside the local planning approach be limited to correcting drafting errors or strategic amendments instigated by Council.
6. Any other proposed residential amendments resulting from the Residential Land Strategy or the local planning approach for Kurmond and Kurrajong Investigation Area which are supported, be combined into a single Planning Proposal to amend LEP 2012 in 2016/2017.
7. A report be submitted to Council no later than November 2015 regarding the progress of the local planning approach for the Kurmond and Kurrajong investigation area and the status of other planning proposals.
8. A separate report be submitted to Council in early 2016 on the progress of the review of the Residential Land Strategy including the progress in implementing Council's resolution under Item 4 of 9 December 2014 for the Residential Land Strategy to include 'Second Dwellings'.

ORDINARY MEETING**Meeting Date: 28 July 2015**

In accordance with Section 375A of the Local Government Act 1993 a division is required to be called whenever a planning decision is put at a council or committee meeting. Accordingly, the Chairperson called for a division in respect of the amendment, the results of which were as follows:

For the Amendment	Against the Amendment
Councillor Calvert	Councillor Conolly
Councillor Lyons-Buckett	Councillor Creed
Councillor Paine	Councillor Ford
Councillor Williams	Councillor Mackay
	Councillor Porter
	Councillor Rasmussen
	Councillor Reardon
	Councillor Tree

The Amendment was **lost** and subsequently the Motion was put to the meeting.

In accordance with Section 375A of the Local Government Act 1993 a division is required to be called whenever a planning decision is put at a council or committee meeting. Accordingly, the Chairperson called for a division in respect of the motion, the results of which were as follows:

For the Motion	Against the Motion
Councillor Conolly	Councillor Calvert
Councillor Creed	Councillor Ford
Councillor Mackay	Councillor Lyons-Buckett
Councillor Reardon	Councillor Paine
Councillor Tree	Councillor Porter
	Councillor Rasmussen
	Councillor Williams

The Motion was **lost**.

ORDINARY MEETING

Meeting Date: 28 July 2015

MOTION:

RESOLVED on the motion of Councillor Conolly, seconded by Councillor Creed.

Refer to RESOLUTION

192 RESOLUTION:

RESOLVED on the motion of Councillor Conolly, seconded by Councillor Creed.

That:

1. The draft development principles and local planning approach outlined in this report be adopted as an Interim Policy for the purposes of structure planning within the Kurmond and Kurrajong investigation area.
2. Council officers initiate discussions with the Kurmond and Kurrajong landowners and community about the Interim Policy and local planning approach, in September 2015.
3. Council's resolution of 3 February 2015 in relation to lodgement of any NEW residential planning proposal applications:
 - a) be temporarily maintained for mapped investigation areas shown in the Residential Land Strategy around Richmond/Hobartville, North Richmond, Wilberforce, Glossodia, Windsor/South Windsor/Bligh Park pending the submission of a report regarding these areas to the second Council meeting in August 2015
 - b) be maintained for the Kurmond and Kurrajong investigation area and all other unmapped, non-urban investigation areas around rural villages as identified in the Residential Land Strategy until 30 November 2015.
4. Those current planning proposals within the Kurmond and Kurrajong Investigation area (see Attachment 2) only proceed to Gateway if the 'fundamental' development constraints have been addressed (see Attachment 1).
5. Site specific planning proposals for any areas be kept to a minimum and any additional amendments to LEP 2012 outside the local planning approach be limited to correcting drafting errors or strategic amendments instigated by Council.
6. Any other proposed residential amendments resulting from the Residential Land Strategy or the local planning approach for Kurmond and Kurrajong Investigation Area which are supported, be combined into a single Planning Proposal to amend LEP 2012 in 2016/2017.
7. A report be submitted to Council no later than November 2015 regarding the progress of the local planning approach for the Kurmond and Kurrajong investigation area and the status of other planning proposals.
8. A separate report be submitted to Council in early 2016 on the progress of the review of the Residential Land Strategy including the progress in implementing Council's resolution under Item 4 of 9 December 2014 for the Residential Land Strategy to include 'Second Dwellings'.

ORDINARY MEETING**Meeting Date: 28 July 2015**

In accordance with Section 375A of the Local Government Act 1993 a division is required to be called whenever a planning decision is put at a council or committee meeting. Accordingly, the Chairperson called for a division in respect of the motion, the results of which were as follows:

For the Motion	Against the Motion
Councillor Calvert	Councillor Ford
Councillor Conolly	Councillor Porter
Councillor Creed	Councillor Rasmussen
Councillor Lyons-Buckett	Councillor Tree
Councillor Mackay	
Councillor Paine	
Councillor Reardon	
Councillor Williams	

Attachment 2

Chronology of Planning Proposal

Chronology of Planning Proposal LEP005/14

2 Iverary Drive, Kurmond

- | | |
|------------|--|
| 23/12/2014 | Planning Proposal received. |
| 09/02/2015 | Applicant requested to provide the flora and fauna report referenced in the planning proposal but not included. |
| 17/02/2015 | Applicant advised that they have decided that the flora and fauna report will not be finalised at this point in time and requested that the planning proposal be progressed with the current documentation. |
| 27/02/2015 | Council Officer email advising that flora and fauna report will be required prior to the planning proposal being reported to Council. |
| 14/06/2016 | Meeting held between Council Officers and Applicant to discuss planning proposal, in particular the likely minimum lot size/s and yield for the subject site. |
| 15/06/2016 | Flora and fauna report received. |
| 09/08/2016 | Site inspection. |
| 21/09/2016 | Meeting held between Council Officers and Applicant to discuss lot sizes and potential land use conflicts with adjoining plant nursery at 211 Slopes Road. |
| 13/10/2016 | Applicant provides amended (1) lot size concept for Council Officers consideration in response to matters discussed at the meeting of 21 September 2016. |
| 02/11/2016 | Applicant provides draft Voluntary Planning Agreement. |
| 11/11/2016 | Council email to Applicant providing maps showing watercourses and riparian zones, and slope constraints on the land, and a concept plan showing the location of boundaries between minimum lot size areas, for consideration and comment. |
| 15/11/2016 | Applicant provides amended (2) lot size concept plan. |
| 14/02/2017 | Council resolves to defer two other planning proposals in Kurmond until such time as studies have been completed to determine the total lot yield within the Kurmond-Kurrajong Investigation Area and a report explaining the impact of that yield on relevant infrastructure be considered by Council and the adoption of a long term policy for development in the locality. |
| 04/04/2017 | Given Councils resolution of 14 February 2017, all Applicants of planning proposals were requested to advise how they wish to proceed with their planning proposals. |
| 23/05/2017 | Council Officers request the Applicant to provide a response to their correspondence of 4 April 2017. |
| 30/05/2017 | Council resolves to review the Hawkesbury Residential Land Strategy (HRLS). The review has commenced with confirmation of relevant background studies required to be completed. The review of HRLS is a priority in properly informing the KKIA process. |
| 31/05/2017 | Applicant provides a revised planning proposal and requests that the proposal be assessed and reported to Council. |
| 18/08/2017 | An assessment of the planning proposal and a report for Council was prepared, however, to date, this Report has not been presented to Council. |

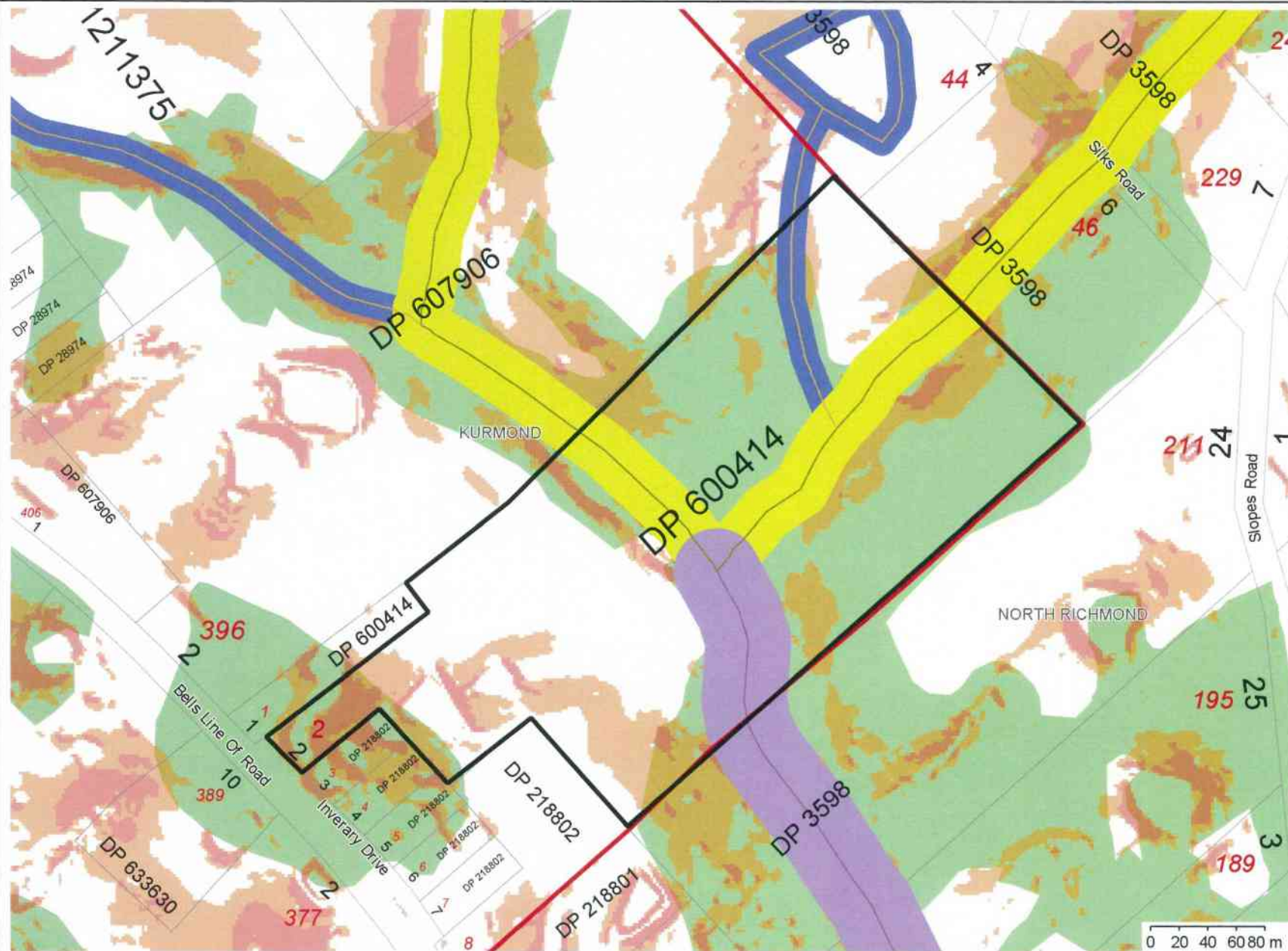
Attachment 3

Constraints Plans

Constraints Map – 2 Inverary Drive, Kurmond

Legend

- Residential / Rural-Residential D
- Structure Plan Watercourses
- Watercourse
 - 1
 - 2
 - 3
- Buffer
 - 10m
 - 20m
 - 30m
- Property
 - Az DP Text
 - Az Lot & DP
 - Az House Number
- Land Parcels
- Roads Data
 - Az Road Names
- Slope_SouthLGA_>15%
- Biodiversity Protection
 - Endangered Ecological Con
 - Conservation Significance
- Slope_SouthLGA_>15%
 - Greater than 15% - 20%
 - Greater than 20% +
- Kurmond Kurrajong Investigation Area Boundary



Disclaimer:
Hawkesbury City Council takes no responsibility for any errors or omissions. The assets shown on this map indicate the presence and general location only. Its accuracy or completeness is not guaranteed. Contours are to be used as a guide. A survey may be required for more accuracy.

This map cannot be reproduced without the permission of Hawkesbury City Council
Copyright © Department Finance, Service & Innovation - Spatial Services 2017 & Hawkesbury City Council 2017

Scale (A4): 1:4000

Projection: GDA94 / MGA zone 56

Coordinates: 286318.429390214,6284447.96173979 287203.065585267,6285097.38878181

Printed by: Colleen Haron

Date: 02/11/2017



**SYDNEY WESTERN CITY
PLANNING PANEL MEETING**

TUESDAY 27 FEBRUARY 2018

LGA – HAWKESBURY

**ATTACHMENT D 1
COUNCILS INTERPRETATION OF
CLAUSE 4.1 D**

Suzie Jattan

From: Colleen Haron <Colleen.HARON@hawkesbury.nsw.gov.au>
Sent: Wednesday, 13 December 2017 3:28 PM
To: Alicia Hall
Subject: HPE CM: RE: 2 Inverary Drive, Kurmond

Hi Alicia

Further to our discussion in relation to the interpretation of Clause 4.1D of LEP 2012, I wish to clarify:

- Areas designated as 'Area A' on the Lot Size Map are those where the minimum lot size for subdivision on the Lot Size Map is less than 4,000m².
- Clause 4.1D(1) prevents the subdivision of land in 'Area A' into lots smaller than 4,000m² (even if the Lot Size Map has a smaller minimum lot size) if the land is not serviced by reticulated sewerage.
- In the context of the planning proposal for 2 Inverary Drive, Kurmond, it would prevent lot sizes of 1,000m² and 2,000m² (if these were adopted) in the event that connection to Sydney Waters reticulated sewerage did not eventuate, for some unforeseen reason. In this case, a minimum lot size of 4,000m² would prevail.

If you have any questions, please contact me on direct line No (02) 4560 4564.

Regards,

Colleen Haron | Senior Town Planner | Hawkesbury City Council
P (02) 4560 4564 | **F** (02) 4587 7740 | **E** colleen.haron@hawkesbury.nsw.gov.au
W www.hawkesbury.nsw.gov.au

From: Alicia Hall [mailto:Alicia.Hall@planning.nsw.gov.au]
Sent: Wednesday, 13 December 2017 2:22 PM
To: Andrew Kearns; Colleen Haron
Subject: 2 Inverary Drive, Kurmond

Hi

Could one of you please give me a call, at your earliest convenience. I have a quick query regarding clause 4.1D(1) of HLEP 2012..

Also the comments provided by Council in regards to this proposal refer to a restricted lot yield map. However, the proposal submitted for our consideration did not include a restricted lot yield. I was wondering if you could shed any light?

Cheers

Alicia

Alicia Hall
Planning Officer
Sydney Region West
Level 1, 10 Valentine Street | GPO Box 39 | Sydney NSW 2001
T 02 9860 1587 E alicia.hall@planning.nsw.gov.au



Planning &
Environment



Subscribe to our [newsletter](#)

**SYDNEY WESTERN CITY
PLANNING PANEL MEETING**

TUESDAY 27 FEBRUARY 2018

LGA – HAWKESBURY

**ATTACHMENT E
REZONING REVIEW
APPLICATION FORM**



Date received:

Reference No.

LODGEMENT

Instructions to users

This form is to be completed if you wish to request an independent review of a request for a planning proposal prior to a Gateway determination being issued.

A **Rezoning Review** can be sought before a planning proposal has been submitted to the Department of Planning and Environment (Department) for a Gateway determination in the following circumstances:

- the council has notified the proponent that the request to prepare a planning proposal is not supported; or
- the council has failed to indicate its support 90 days after the proponent submitted a request, accompanied by the required information¹ or has failed to submit a planning proposal for a Gateway determination within a reasonable time after the council has indicated its support.

Before lodging a request for review, it is recommended that you consult the Planning Circular '*Independent reviews of plan making decisions*' and '*A guide to preparing local environmental plans*', which can be found on the Department's website www.planning.nsw.gov.au/Plans-for-Your-Area/Local-Planning-and-Zoning/The-Gateway-Process. The guide gives a step-by-step explanation of the review procedure and submission requirements.

To ensure that your request for review is accepted, you must:

- complete **all** relevant parts of this form
- submit **all** relevant information required by this form, including the **initial fee**.
- provide **one hard copy** of this form and required documentation
- provide the form and documentation in **electronic format** (e.g. CD-ROM)

Note: Requests for review will not proceed to initial assessment stage unless the correct fee is provided.

All requests **should be lodged** with the Department's relevant Regional Office. Please refer to www.planning.nsw.gov.au for contact details.

PART A – APPLICANT AND SITE DETAILS

A1 – Applicant Details

Principal contact

☒ Mr ☐ Ms ☐ Mrs ☐ Dr ☐ Other

First name

Robert

Family name

Montgomery

Name of company (N/A if an individual)

Montgomery Planning Solutions

Street address

Unit/street no.

Street name

Suburb/town

State

Postcode

Postal address
(or mark 'as
above')

PO Box or Bag

Suburb or town

49

Kurmond

State

Postcode

Daytime telephone

Fax

NSW

2757

0407 717 612

N/A

Email: robert@montgomeryplanning.com.au

Mobile 0407 717 612

¹ 'A guide to preparing planning proposals' sets out what information a proponent may provide when requesting council to prepare a planning proposal. Information requirements will depend on the complexity of the planning proposal. Section 55 of the Act sets out what information a planning

A2 – Site Details

Identify the land that is to be the subject of the planning instrument and for which you seek a review

Unit/street no.	Street name	
2	Inverary Drive	
Suburb/town	State	Postcode
Kurmond	NSW	2757

NAME OF THE SITE

REAL PROPERTY DESCRIPTION

*The **real property description** is found on a map of the land or on the title documents for the land. If you are unsure of the real property description, you should contact the Department of Finance and Services, Land and Property Information. Please ensure that you place a forward slash (/) to distinguish between the lot, section DP and strata numbers. If the proposal applies to more than one piece of land, please use a comma (,) to distinguish between each real property description.*

PROVIDE DETAILS OF ALL AFFECTED LANDOWNERS WHERE THEY ARE NOT THE DIRECT APPLICANT

HAVE ALL OWNERS OF LAND TO WHICH THIS PROPOSED INSTRUMENT APPLIES BEEN NOTIFIED?

- ☒ Yes
☐ No
☐ Some have but not all
☐ N/A (Applicant is owner)

Note: If some land owners, but not all, have been notified, list below those notified:

CURRENT ZONING OF THE LAND AT THE SITE

CURRENT LAND USE AT THE SITE

PART B – REASON FOR REVIEW AND THE PLANNING PROPOSAL

B1 – Reason for Rezoning Review and the Relevant Planning Authority (RPA)

Indicate below the reason for seeking a rezoning review. A review can only proceed if either of these two circumstances has occurred.

- ☐ The council has confirmed in writing that the request to prepare a planning proposal is not supported. Confirmation dated
- ☒ The council has failed to indicate its support 90 days after the proponent submitted a request, accompanied by the required information² or has failed to submit a planning proposal for a Gateway determination within a reasonable time after the council has indicated its support.

Indicate below whether the request to prepare a planning proposal was submitted to the council prior to November 2012?

- ☐ Yes Date: Originally submitted in December 2014, revised proposal submitted in May 2017
☒ No

Note: If you have answered 'yes' to the above question, please note that a review can only be sought where the supporting information accompanying the request is less than two years old.

Note: If you have answered 'no' to the above question, please note that a review request accompanied by information that is more than 2 years old, may, but will not normally, be considered.

NAME OF THE LOCAL GOVERNMENT AREA

² 'A guide to preparing planning proposals' sets out what information a proponent may provide when requesting council to prepare a planning proposal. Information requirements will depend on the complexity of the planning proposal. Section 55 of the Act sets out what information a planning

CONTACT DETAILS OF THE RELEVANT OFFICER AT COUNCIL

Andrew Kearns, Ph: 4560 4604 email: andrew.kearns@hawkesbury.nsw.gov.au

B2 – The Proposed Instrument

DESCRIPTION OF PROPOSED INSTRUMENT

Amend Hawkesbury LEP 2012 Minimum Lot Size Map LSZ_008AA

LOCAL ENVIRONMENTAL PLAN (LEP) TO BE AMENDED BY THE PROPOSED INSTRUMENT

Hawkesbury LEP 2012

IS THE LEP TO BE AMENDED (ABOVE) A STANDARD INSTRUMENT LEP?

- ☒ Yes
☐ No

INFORMATION REQUIREMENTS

A proponent may request a review by writing to the Department and providing the following:

- a completed application form;
- a copy of the proponent's request for the council to prepare and submit a planning proposal for Gateway determination, including all supporting material and information that was submitted to Council (Note: A planning proposal request which has been amended after Council has resolved to not support the matter is not eligible for a Rezoning Review. The revised planning proposal request would need to be submitted to Council as a new planning proposal request);
- all correspondence from the council in relation to the proposed instrument, including (if relevant) a copy of the council's advice detailing why the council did not proceed with preparing a planning proposal;
- all correspondence from other Government agencies, if available, about the proposed instrument;
- proponent's justification to the Strategic and Site Specific Merit tests (refer to Step 2 of the Rezoning Review process as set out in 'A guide to preparing local environmental plans'), to confirm why a review is warranted;
- disclosure of reportable political donations under section 147 of the Act, if relevant; and
- fee for lodging a rezoning review.

INFORMATION PROVIDED

List below all the documents, maps, plans, studies, information and any other supporting information that comprises your proposed instrument and request for rezoning review.

Planning Proposal
Bushfire Hazard Assessment
On-site Wastewater Report
Hawkesbury City Council letter dated 4 April 2017
Montgomery Planning Solutions letter to HCC dated 23 May 2017

PART C – PAYMENT, DISCLOSURE AND SIGNATURES

C1 – Application Fees

You are required to pay a fee on lodgement of your request. The relevant fee is confirmed on the Department's website www.planning.nsw.gov.au/Plans-for-Your-Area/Local-Planning-and-Zoning

Please note that a further fee payment shall be required if a Planning Panel or the Secretary of the Department of Planning and Environment is appointed as an alternate relevant planning authority. Further details can be found within 'A guide to preparing local environmental plans' and the Planning Circular 'Independent reviews of plan making decisions'

Payment methods:

- Cheque / bank order

C2 – Donation and Gift Disclosure

Section 147 of the Environmental Planning and Assessment Act 1979 requires the public disclosure of *reportable political donations* or gifts when lodging or commenting on a *relevant planning application*. This law is designed to improve the transparency of the planning system.

DO YOU HAVE ANY DONATIONS OR GIFTS TO DISCLOSE?

- ☐ Yes
☒ No

How and when do you make a disclosure?

The disclosure to the Minister or the Director-General of a *reportable political donation* or gift under section 147 of the Act is to be made:

- (a) in, or in a statement accompanying, the relevant planning submission if the donation is made before the submission is made, or
- (b) if the donation is made afterwards, in a statement of the person to whom the relevant planning submission was made within 7 days after the donation is made.


What information needs to be included in a disclosure?

The information requirements of a disclosure of reportable political donations are outlined in section 147(9) of the Act. A Disclosure Statement Template which outlines the information requirements for disclosures to the Minister or to the Director-General can be found on the department's website: www.planning.nsw.gov.au/Assess-and-Regulate/Development-Assessment/Systems/Donations-and-Gift-Disclosure

C3 – Signature(s)

By signing below, I/we hereby declare that all information contained within this application form is accurate at the time of signing.

Signature(s)



Name(s)

Robert Montgomery

In what capacity are you signing

Applicant

Date

13 October 2017

**SYDNEY WESTERN CITY
PLANNING PANEL MEETING**

TUESDAY 27 FEBRUARY 2018

LGA – HAWKESBURY

**ATTACHMENT F
LETTER FROM COUNCIL
RE PLANNING PROPOSAL**

Hawkesbury City Council

Your Ref:

Our Ref: LEP005/14

4 April 2017

Mr Robert Montgomery
Montgomery Planning Solutions
P.O. Box 49
KURMOND NSW 2757

Dear Sir

Planning Proposal: LEP005/14 – Lot 2 DP 600414 2 Inverary Drive, Kurmond

I refer to your planning proposal seeking an amendment to Hawkesbury Local Environmental Plan 2012 to permit subdivision of 2 Inverary Drive, Kurmond.

Recently, two planning proposals for land within the Kurmond area were reported to Council to determine whether or not the proposed amendments to Hawkesbury Local Environmental Plan 2012 would be supported. Council, at its Meeting of 14 February 2017, resolved to defer these matters *"pending completion of studies which will determine the total lot yield in Kurmond-Kurrajong Investigation Area and a report explaining the impact of that yield on relevant infrastructure be considered by Council and the adoption of a long term policy for development in the locality."*

However, it should be noted that the most recent decision of Council with respect to the Kurmond Kurrajong Investigation Area (KKIA) in terms of the overall Structure Planning process was at Council's Ordinary Meeting dated 29 November 2016, where Council resolved:

That:

1. Council receive the results of the Kurmond and Kurrajong Investigation Area Survey.
2. Council Staff identify a number of specific areas (based upon Constraints Mapping, survey results and the preferred approach as outlined in this report) for possible, but not certain, development of additional large lot residential/rural-residential development throughout the Investigation Area and some residential development up to, but not within, the existing villages of Kurmond and Kurrajong.
3. The identified areas be further consulted with the community regarding future development.
4. The results of that further consultation be reported to Council.
5. Council not accept any further planning proposal applications within the Kurmond and Kurrajong investigation area until such time as the structure planning as outlined in this report is completed. Council receive a progress report on the structure planning prior to July 2017.

366 George Street
(PO Box 146)
Windsor NSW 2756
Phone 02 4550 4444
Facsimile 02 4587 7740
DX 8601 Windsor

Where people make the difference.

All communications to be addressed to the General Manager
P.O. Box 146, Windsor NSW 2756
Website www.hawkesbury.nsw.gov.au
E-mail: council@hawkesbury.nsw.gov.au
Hours: Monday to Friday 8.30am - 5.00pm

6. *Council continue processing the planning proposals within the investigation area that have received support via a Council resolution to proceed to a Gateway determination and any planning proposals currently lodged with Council as at 29 November 2016.*

To date there has been no change to this resolution of Council, and as such ordinarily Council Officers would have continued to process all matters that had been lodged with Council by the 29 November 2016. However, it is considered that the Council resolutions of 14 February 2017 for the two separate matters have implications for the processing of other applications within the KKIA, particularly those that have yet to receive Council's approval to proceed to a Gateway determination. It is considered that if those matters are presented to Council for consideration the likely resolution based on the decisions made on 14 February 2017 would be to defer those matters or potentially refuse the application.

As a result, Council Officers are writing to applicants of planning proposal applications to provide advice to assist in making a decision as to how they wish their matters to proceed.

In this regard, there are a number of options available for consideration, including:

1. Providing written advice to Council agreeing to the deferral of the planning proposal until such time as the studies referred to in Council's resolution of 14 February 2017 are completed and a long term policy for development within the KKIA has been adopted;
2. The withdrawal of the planning proposal;
3. Requesting Council Officers to report the planning proposal to Council; or
4. Making application to the Greater Sydney Commission for a Rezoning Review.

In light of our correspondence and discussions since the lodgement of the planning proposal it is recommended that you request Council to defer this planning proposal as per Option 1 above, whilst continuing to liaise with Council Officers in respect of the application in the meantime.

Your advice in this respect would be appreciated prior to Council Officers further processing this matter.

Should you have any questions regarding this matter, please contact Colleen Haron, Senior Town Planner on (02) 4560 4564.

Yours faithfully



Andrew Kearns
Manager Strategic Planning

**SYDNEY WESTERN CITY
PLANNING PANEL MEETING**

TUESDAY 27 FEBRUARY 2018

LGA – HAWKESBURY

**ATTACHMENT G
FLORA AND FAUNA
ASSESSMENT**

FLORA AND FAUNA ASSESSMENT REPORT

2 INVERARY DRIVE

KURMOND

PREPARED FOR: 101 Group

OUR REFERENCE: 299516

ISSUE DATE: 9/06/2016

QDO 029-0
F&F Assessment


Release Date: 9/06/2016
Approved By: Daniel Mathew

CONTROLLED DOCUMENT

DISTRIBUTION AND REVISION REGISTER

<u>DISTRIBUTION LIST</u>		
<u>Copy No.</u>	<u>Custodian</u>	<u>Location</u>
1 Original	Daniel Mathew	ENVIROTECH PTY. LTD (Filed)
2 Soft Copy (PDF, emailed)		

Note: This register identifies the current custodians of controlled copies of the subject document.

<u>DOCUMENT HISTORY</u>		
<u>Document No.</u>	<u>Revision No.</u>	<u>Issue Date</u>
299516	A	9/06/2016
<u>AUTHOR</u>		<u>TECHNICAL REVIEWER</u>
Shane Maloney (Ecologist) B.Env.Sc (Hons), Grad. Dip.Ed, M.Sc.Res		
		

COPYRIGHT © 2016 ENVIROTECH PTY. LTD.

The report is protected by copyright law and may only be reproduced, in electronic or hard copy format, with the prior written permission of EnviroTech Pty. Ltd.

Executive Summary

This report describes the biological environment of 2 Inverary Drive, Kurmond and assesses the potential effects on threatened and migratory species, endangered populations and ecological communities of a planning proposal to allow development of the land for a large-lot residential estate.

A desktop search for threatened species within a 10 km radius of the site was generated, and a flora (12.5 hours) and fauna (14.5 hours) assessment was undertaken to ascertain if any threatened species were on site or might use the site. The endangered ecological community Shale Sandstone Transition Forest was mapped as being on site, a large area will be retained along the Riparian habitat, and some areas of this community were assessed as being in a degraded structure. A SEPP 44 assessment concluded the site should be classed as potential koala habitat.

No other threatened species, endangered populations or endangered ecological communities listed on the schedules of the *NSW Threatened Species Conservation Act 1995*, or the *Commonwealth Environment Protection and Biodiversity Conservation Act 1999* were recorded in the study area.

Following the application of the seven factors from Section 5A of the *NSW Environmental Planning and Assessment Act 1979*, as required by the *NSW Threatened Species Conservation Act 1995*, in accordance with relevant assessment guidelines, it is concluded that the proposal is unlikely to have a significant effect on threatened species, endangered populations, ecological communities, or their habitats. A Species Impact Statement is not required for the proposal.

Following consideration of the administrative guidelines for determining significance under the *Commonwealth Environment Protection & Biodiversity Conservation Act 1999*, it is concluded that the proposal is unlikely to have a significant impact on matters of National Environmental Significance or Commonwealth land, and a referral to the Commonwealth Environment Minister is not necessary.

A number of impact mitigation and amelioration strategies have been recommended for the proposal. These strategies mitigate the effects of the proposal on threatened species, endangered populations, ecological communities, or their habitats and minimise the impacts of the proposal on the flora and fauna values of the study area in general.

Table of Contents

1. Introduction	
1.1 Aims.....	6
1.2 Project Context.....	7
1.3 Description of Study Area.....	7
1.4 Proposed Development	7
1.5 Maps and Imagery.....	8
2. Legislative Requirements and International Agreements	10
3. Methodology	12
3.1 Literature and Database Search.....	12
3.2 Terrestrial Flora Survey.....	12
3.3 Terrestrial Fauna Survey	16
3.4 Key Threatening Processes	22
3.5 Limitations of the Report	22
4. Results	24
4.1 Vegetation Communities.....	24
4.2 Flora.....	27
4.3 Terrestrial Fauna	31
4.4 Migratory Species	40
5. Impacts of the Proposed Development	41
5.1 Potential Impacts on Endangered Ecological Communities (EECs).....	41
5.2 Potential Impacts on Threatened Flora Species.....	41
5.3 Potential Impacts on Threatened Fauna Species	44
6. Conclusion	48
7. Recommendations	49
8. References	50
Appendix 1: Developable Land	51
Appendix 2: Species Recorded Onsite	52
Flora	53
Fauna	57
Appendix 3 Assessment of Significance	59
Appendix 4 EPBC Act Considerations	69
Appendix 5: SEPP 44 Assessment	73

List of significant tables

Table	Description	Page Number
Table 10	<i>0: Key threatening processes relating to the development</i>	22
Table 11	<i>Results of Bionet and Protected Matters Search tool, identifying endangered ecological communities recorded</i>	24
Table 13	<i>An analysis of threatened flora species</i>	29
Table 15	<i>An analysis of threatened fauna species likely to occur onsite</i>	33
Table 16	<i>16. Results of the Desktop research, showing the occurrence of migratory species within a 10km radius of the site (C=CAMBA; J=JAMBA, K=ROKAMBA)</i>	40
Table 17	<i>The potential impact on threatened flora species that have habitat represented on site, and whether a Seven Part Test is required (TSC Act has been applied)</i>	43
Table 18	<i>The potential impact on threatened fauna species, and whether a Seven Part Test is required (TSC Act has been applied)</i>	45

List of significant figures

Figure	Description	Page Number
Figure 1	Aerial map of 2 Inverary Road, Kurmond.	8
Figure 2	Vegetation Map of 2 Inverary Drive, Kurmond (six maps vegetation viewer) Cumberland Plain	8
Figure 3	Vegetation Map of 2 Inverary Drive, Kurmond (six maps vegetation viewer) Hawkesbury LGA	9
Figure 4	The position of the 3-quadrat areas sampled on the subject site	14
Figure 5	Fauna habitat features recorded for 2 Inverary Drive, Kurmond	21
Figure 6	The Riparian Complex on site to be conserved and connection to the area to the North	42
Figure 7	Records of the Koala within 10 km of 2 Inverary Drive, Kurmond	75

1. Introduction

This report determines the presence of threatened species, habitats, populations (and their associated habitats) as well as ecological communities within the subject property. It is written in accordance with the requirements of the *Environmental Planning and Assessment Act* (1979), *Threatened Species Conservation Act* (1995) and the *Environment Protection and Biodiversity Conservation Act* (1999).

1.1 Aims

The aim of this report is to produce a flora and fauna assessment to:

- Assess the ecological resources of the study site;
- Fulfil the requirements of the *Environmental Planning and Assessment Act* (1979);
- To assess the impact of the development on matters of conservation significance;
- Assess the potential for threatened flora and fauna species and Endangered Ecological Communities (EECs) to occur within the study site which may be listed under commonwealth and state legislation;
- Suggest measures, which may alleviate the disturbance, in alignment with the *Threatened Species Conservation Act*, (1995) and the *Environmental Conservation and Biodiversity Act*, (1999).

The specific objectives of the report are to:

- Conduct a database search of the study site;
- Plan and undertake field surveys, designed in accordance with the *Working Draft Threatened Biodiversity Assessment Guidelines for Developments and activities* (2004)
- Identify habitat for threatened species on the study site that are listed in the schedules of the TSC Act and the EPBC Act that are known or are likely to occur in the study area;
- Undertake an Assessment of Significance in accordance with the TSC Act and significant impact criteria assessments under the EPBC Act for threatened species, communities and populations that can be impacted by the proposal, either directly or indirectly;
- Undertake an assessment for SEPP 44, and,
- Provide recommendations to mitigate the impacts of the proposed action

1.2 Project Context

Table 1: Name and address of client

Client Name	101 Group
Address	2 Inverary Drive Kurmond
Local government area	Hawkesbury City Council

1.3 Description of Study Area

Table 2: Description of study area

Size of Property	10 ha
Proposed land use	Planning proposal to allow development of the land for a large-lot residential estate
Map of study site	Refer to Figure 1.

1.4 Proposed Development

Table 3: Description of proposed development

Proposed Development	Planning proposal to allow development of the land for a large-lot residential estate
----------------------	---

1.5 Site details



Figure 1: Aerial Map of 2 Inverary Drive, Kurmond (Six Maps vegetation viewer)



Figure 2: Vegetation map for 2 Inverary Drive, Kurmond (Six Maps Vegetation Viewer)





-    = Shale Sandstone Transition Forest (LT10pc_E_2222 and GT10pc_E_2221)
-  = Shale Hills Woodland (Cumberland Plain GT10pc_E_2221)



Figure 3: Vegetation map 2 Inverary Drive Kurmond (Six maps Vegetation Viewer)

  = Shale Sandstone Transition Forest (Hawkesbury LGA_2007_E_3958)

2. Legislative Requirements and International Agreements

Threatened Species Conservation Act, 1995 (New South Wales)

The central aim of the *Threatened Species Conservation Act* is to protect any threatened flora and fauna occurring in NSW, omitting marine plants and fish. The Act provides information for the identification, conservation and recovery of threatened species as well as their associated populations and communities, and any threats that are imposed on those species. If a proposed action is likely to have an effect on a threatened species, population or ecological community, then this is considered in the development approval process. If the impact is considered significant then a Species Impact Statement (SIS) must be prepared and submitted to the Director General and further agreement and approval is needed. In certain circumstances, the Minister for the Environment may additionally be consulted.

Environmental Planning and Assessment Act 1979 (NSW)

The primary objective of the *Environmental Planning and Assessment Act* (1979), is focused on the protection of the environment. This includes the protection of native flora and fauna, threatened species, populations, ecological communities and their associated habitats. The secondary objective of this act is to implement the precautionary principle, outlined in the *Protection of the Environment Administration Act* (1991). Under section 5A of the Act and Section 94 of the *Threatened Species Conservation Act* (1995), seven listed factors collectively termed the '7-part assessment of significance', allows the determination of the likely impact of a proposed action on threatened species, population or endangered ecological communities. If the proposed action is assessed as likely to have an effect on any of these, then a SIS is required.

State Environmental Planning Policy 44 – SEPP 44 (NSW)

State Environmental Planning Policy 44 (SEPP 44) aims to encourage the proper conservation of areas of natural vegetation that provide habitat for koalas, to ensure a permanent free-living population over their present range, and reverse the current trend of koala habitat decline. The objectives of SEPP 44 are achieved by:

- Requiring the preparation of management plans before development consent can be granted in relation to areas of core koala habitat;
- Encouraging the identification of areas of core koala habitat; and
- Encouraging the inclusion of areas of core koala habitat in environment protection zones.

Environment Protection and Biodiversity Conservation Act (1999; Commonwealth legislation)

The EPBC Act is legislation of the Commonwealth. In accordance with this act, all proposed actions are to be assessed to determine impacts on *Matters of National Environmental Significance*. These matters include: World heritage properties; Natural heritage; Wetlands of national importance (RAMSAR, CAMBA, JAMBA and ROKAMBA wetlands); Threatened species and ecological communities; Migratory species; Marine areas in the Commonwealth; and Nuclear actions.

International migratory animal agreements include:

- a. Appendices to the Bonn Convention (Convention on the Conservation of Migratory Species of Wild Animals) for which Australia is a Range State under the Convention;
- b. The recognised agreement between Australia and the People's Republic of China for the Protection of Migratory Birds in Danger of Extinction and their Environment (CAMBA);
- c. The recognised agreement between Australia and the Republic of Korea on the Protection of Migratory Birds (ROKAMBA); and,
- d. The recognised agreement between Australia and Japan for the Protection of Migratory Birds and Birds in Danger of Extinction and their Environment (JAMBA).

If the proposed action is likely to affect a *Matter of National Environmental Significance*, it is necessary that this action is assessed via the EPBC Acts 'considerations' assessment. If there is likely to be a significant impact on these matters, referral to the Commonwealth Environment Minister is required for review. Approval for the proposed action may then be granted, so long as accompanied control measures alleviate likely impacts.

3. Methodology

3.1 Literature and Database Search

A database review was conducted prior to undertaking onsite surveys. This was done to give Envirotech ecologists an insight into which threatened or migratory species should be targeted during field surveys. Table 4 provides an overview of the desktop review.

Table 4: Overview of Desktop Search

Search Tool	Description	Search Parameters
The NSW Bionet <i>Atlas of New South Wales Wildlife</i>	Used to generate a list of species listed under the TSC Act.	Parameters set to a 10km radius of the study site (Flora, Fauna and Vegetation Communities).
Commonwealth <i>Protected Matters Search Tool</i>	Used to generate a list of species protected under the EPBC Act.	Parameters set to a 10km radius of the study site (Flora, Fauna and Vegetation Communities).
<i>Vegetation Information System</i>	Used to generate a map of the vegetation community onsite.	Six Map Vegetation Viewer (Figure 2 and 3)

3.2 Terrestrial Flora Survey

Envirotech ecologists have undertaken flora surveys on this property on the 29th July 2014 for a period of 4.5 hours; on the 11th January 2015 for 5 hours (3 quadrats), and 28th February 2016 for 3 hours. Flora surveys have also been undertaken on the adjoining property 396 Bells Line of Road, on the 13th, 18th and 20th November 2014 for 2, 2.5 and 3 hours respectively. Six 400-m² quadrats were also undertaken on this adjoining property.

The methodology employed was designed in accordance with the *Working Draft Threatened Biodiversity Assessment Guidelines for Developments and activities (2004)*. Table 5 refers to specific techniques employed.

Table 5: Survey techniques employed to target threatened flora

Date	Survey Type	Description	Effort	Is this in accordance with Guidelines?
29 th July 2014	Random Meander	The site was traversed and the flora species observed were recorded.	4.5 Hours	Yes
11 th January 2015	Quadrat	Three quadrats of 400m ² were undertaken on site. (see figure 4)	5 Hours	Yes
28 th February 2016	Random Meander	The site was traversed and the flora species observed were recorded.	3 Hours	Yes
Total			12.5 Hours	
Total on Adjoining property	Random Meander	The adjoining property was traversed and the flora species observed were recorded. Plus 6 400m ² quadrats (no time recorded)	7.5 Hours	
Total flora survey in the study area			20 Hours (Plus 6 400m² quadrats)	

3.2.1 Habitat Assessment

The degree to which the vegetation on the site resembled natural, undisturbed vegetation was used to determine the habitat potential of the site. This included the following criteria:

- The composition of the species (diversity, degree of weed invasion); and
- Structure of the vegetation (how many original layers of vegetation existed).

Criteria used to evaluate the habitat values of the area in general terms, were *good*, *moderate*, *poor* and *cleared/disturbed*. These are detailed in table 6.

Table 6: Criteria used to assess habitat quality for threatened flora

Score	Criteria
Good	There is a high diversity of species, no weeds are extant or those weeds that are present only occur on the edges of the study site, the vegetation represents many layers (i.e. ground, shrub, canopy layers) and these are readily identifiable
Moderate	There are a high number of native species, some weed invasion but these only occur in small patches, one or more of the vegetation layers are disturbed but these are relatively intact;
Poor	There is a low number of native species, many of the plants that are on the site consist of exotic species that occur in dense patches, more than one of the vegetation layers has been disturbed or removed;
Cleared and disturbed	This represents a significantly modified landscape that has less than three native species, invasive species are mostly dominant, there is little representation of vegetation layers, the soil profile is disturbed and there is the likelihood that the area will not regenerate to its natural condition and that revegetation techniques would need to be implemented in order to achieve this.



Figure 4. The position of the 3-quadrat areas sampled on the subject site (yellow Q1, Q2 and Q3).

3.2.2 Detailed Vegetation Description

The site at 2 Inverary Drive, Kurmond is 11 hectares in area (with only 10 being part of the proposal). The site has native vegetation along the watercourse, and canopy trees with no understorey towards the East and South West from the watercourse (see Figures 1, 2 and 3); the vegetation maps for the site are presented in Figure 2 (Six maps vegetation viewer Cumberland Plain) and Figure 3 (Six maps vegetation viewer Hawkesbury LGA). These resources have indicated that the vegetation communities:-

1. Shale Sandstone Transition Forest (Figure 2 and 3); and
2. Shale Hills Woodland (Figure 2)

are present on the site; The area overall has been highly modified with only canopy species present for the most.

Both of the vegetation-mapping resources have indicated the presence of the critically endangered ecological community Shale Sandstone Transition Forest (See Figures 2 and 3). This community on site is in a degraded form with only canopy species present, excepting for the area along the waterway through the site, which has 3 levels of strata in situ. For this report this area is referred to as Riparian Complex.

The dominant canopy species of the Riparian Complex are *Angophora floribunda* and *Alphitonia excelsa*, with *Backhousia myrtifolia* and *Melaleuca styphilooides* in the mid storey/upper shrub layer. The lower shrub layer and the groundcover contained *Rapanea variabilis*, and introduced and native grasses and shrubs.

The areas to the East and South West of the Riparian complex were degraded, displaying past grazing practices, being majority cleared, except for canopy species. The area to the North East from the Riparian Complex contained *Eucalyptus tereticornis* and 3 individual *Eucalyptus punctata*; while the area South East from the Riparian complex contained *Eucalyptus creba*, *Alphitonia excelsa* and *Exocarpus compressiformis*. The area to the South West contained *Angophora floribunda* and *Eucalyptus creba*.

Using the criteria listed in Table 6, the vegetation in the area described as Riparian Complex, would be classified as moderate to good; and the areas to the East and West would be classified as cleared and disturbed to poor.

Quadrat description (see Appendix 2 for details and Figure 4 for siting).

Three 400m² quadrats were undertaken on site (Figure 4), to ascertain if these areas were equivalent to the characteristic species composition of the Endangered Ecological Communities mapped on site (Figure 2 and 3). The results for the quadrats are presented in Appendix 2 and the following are descriptions for the quadrats.

1. Within the number 1-quadrat eighteen species were recorded with numbers ranging from 1 to 140 individuals. Ten native and eight introduced, only four of the native species were equivalent to characteristic species of the Cumberland Plain Woodland (EEC), indicating that this area is not equivalent to Cumberland Plain Woodland; and six of the species recorded were characteristic of Shale Sandstone Transition Forest (EEC).
2. Within the number 2 – quadrat twenty-six species were recorded with numbers ranging from 1 to numerous. Twenty-one were native and 5 introduced; eight of the native species recorded were characteristic of Shale Sandstone Transition Forest (EEC).
3. Within the number 3 – quadrat twenty-four species were recorded ranging from 1 to 36 individuals. Sixteen were native and 8 introduced; ten of the native species recorded were characteristic of Shale Sandstone Transition Forest (EEC).

While there are some individual species recorded within the three quadrats that are characteristic with Shale Sandstone Transition Forest, the boundaries of this vegetation community are indistinct with little connectivity, excepting for the vegetation along the watercourse. This vegetation along the watercourse (Riparian Complex) has been assessed as moderate to good, as it has good connectivity and three levels of strata in situ. It is recommended that this area be conserved see Figure 6.

3.3 Terrestrial Fauna Survey

Envirotech have undertaken fauna surveys for the site on the 29th July 2014, the 18th and 20th November 2014, and on Wednesday 28th February 2016. Weather conditions experienced ranged from cool and sunny to hot and sunny, approximately 22°C to 27 °C. Envirotech also undertook fauna surveys on the adjoining property 396 Bells Line of Road, on the 13th, 18th and 20th November 2014 for 2, 2.5 and 3 hours respectively.

Table 7: Dates, effort and type of Fauna survey undertaken at the site.

Date	Survey Type	Description	Effort	Is this in accordance with Guidelines?
29 th July 2014	Fauna	See Table 8 below for the techniques undertaken to survey for threatened Fauna.	4.5 Hours	Yes, however the survey was limited in effort and time (See section 3.5)
18 th Nov 2014	Koala Habitat Assessment	Call playback, spotlighting and examination of trees for markings and scats	3 hours	Yes, however the survey was limited in effort and time (See section 3.5)
20 th Nov 2014	Koala Habitat Assessment	Call playback, spotlighting and examination of trees for markings and scats	3 hours	Yes,
28 th February 2016	Fauna	See Table 8 below for the techniques undertaken to survey for threatened Fauna.	3 Hours	Yes,
Total Effort			14.5 Hours	
13 th , 18 th and 20 th November 2014	Fauna	Undertaken on the adjoining property 396 Bells Line of Road	7.5 Hours	
Total Fauna survey in the study area			22 Hours	

Methodology employed was in accordance with the *Working Draft Threatened Biodiversity Assessment Guidelines for Developments and activities (2004)* and consisted of the following survey methods (Table 8):

Table 8: Survey techniques employed to target threatened fauna

Survey Type	Description	Does this match guidelines?
Frog	The site was surveyed for potential habitat and any calls emitted from species present.	Yes, however the survey was limited in effort and time. (see section 3.5)
Reptile Search	A targeted habitat search was undertaken, across the entire site. Techniques used to locate species included peeling back loose bark from trees, upturning logs and disturbing leaf litter.	Yes, however the survey was limited in effort and time. (see section 3.5)
Koala Search and Habitat Assessment	A targeted search for the koala including nocturnal spotlighting and call playback, with diurnal searches for scats and scratchings and individuals.	Yes,
Bird point Count Survey	Point count surveys were undertaken onsite, for a period of 20 minutes, using both visual and aural detection.	Yes, however the survey was limited in effort and time. (see section 3.5)
Opportunistic (Diurnal)	The site was traversed with emphasis on searches for mammal scats, tracks, burrows, diggings and scratchings.	Yes.

3.3.1 Habitat Assessment

A number of habitat values were recorded during the site inspection (Table 8).

The potential for the site to provide habitat for threatened fauna species was based upon habitat values provided in Table 8, and the specific habitat requirements of threatened species. Criteria used to evaluate the overall quality of the habitat, were *good*, *moderate*, and *poor*. This criteria is detailed in Table 9.

Table 8: Description of fauna habitat values

Habitat Value	Description
Hollow Bearing Trees	The hollows on the site were small to medium (Figure 5)
Stags	Six stags were recorded 3 along the watercourse, 3 to the East (Figure 5)
Connectivity	There was connectivity on the North and South of the site along the watercourse (see Figure 3).
Water	There was a watercourse running North to South through the site
Rocky Outcrops	The rocky outcrops at the site were along the watercourse
Leaf Litter	The study area had a covering of leaf litter and grasses within the riparian zone; the remainder of the area was covered in grasses and trees.

Table 9: Criteria used to assess habitat quality for the site

Score	Criteria
Good	The presence of the ground flora consists of a diverse range of native species, the assemblages of species of the vegetation, leaf litter, significant number of refuge, feeding and breeding sites and the presence of a diverse range of native fauna species
Moderate	The ground flora contains a relatively high number of native species, the assemblages of species is relatively undisturbed, leaf litter, the presence of some refuge, feeding and breeding sites and diverse presence of native fauna
Poor	There was a low diversity of ground flora and very little presence of native flora, the assemblages of species of vegetation is low, poor presence of leaf litter, little or no refuge, feeding and breeding sites and a low diversity of fauna species.

3.3.2 Detailed Fauna habitat description

The study area indicates significant disturbances in the past, such as clearing and grazing. At present there are paddocks on site, with scattered trees and a covering of introduced grasses, with good habitat along the watercourse. The site is found adjacent to and surrounded by other large areas of predominantly cleared grazing land.

The fauna habitat ranges from a tall canopy (up to 25m), to a well developed mid storey and shrub layer down to a lower strata along the watercourse; the majority of the site contains open paddocks with canopy trees down to a grassy groundcover. The study area generally contains the following fauna habitats:

- Nectar, pollen and insect foraging resources for mammals and birds from canopy and sub-canopy trees; along the watercourse and surrounds;
- A watercourse with rocky outcrops, leaf litter and ground shelter for small mammals, reptiles and amphibians;
- Some hollows and stags for arboreal mammals and birds.

The rocky outcrops along the watercourse and grassy groundcover over the site would provide some shelter and foraging for terrestrial fauna. The small number of hollows on site ranged from small to medium and would make available resources for hollow dependent fauna (see Figure 5). Habitat connectivity to other areas of native vegetation occurs at the Eastern end of the study area (see Figure 3).

Overall the site was assessed to have a moderate to good habitat quality assessment (see Table 9 above) for the Riparian area, the exception being in the area to the East and South West of the Riparian area. Which has been assessed as having a poor to moderate habitat quality assessment. This is due to the amount of introduced species (flora and fauna in rabbit burrows) and previous clearing that has happened on site; and the paucity of hollows and ground shelter for fauna species.



Figure 5: Fauna habitat features for 2 Inverary Drive, Kurmond

3.4 Key Threatening Processes

A list of the Key Threatening Processes, listed under the *Environmental Protection and Biodiversity Conservation Act* (1999) and *Threatened Species Act* (1995), was generated by conducting a desktop search of the *Species Profile and Threats* database. During the site inspection, the presence or absence of these processes occurring on the site were documented, with additional threats not otherwise being listed, considered and listed in Table 10 below.

Where the proposal is shown to contribute to KTP, these are further considered in section 5, and Appendix 4.

Table 10: Key threatening processes relating to the development

Threatening Process	Act	Likely to Occur on site at present	Proposal may contribute
Bushrock removal	TSC	No	No
Clearing of native vegetation	TSC/EPBC	No	Yes
High frequency fire resulting in the disruption of life cycle processes in plants and animals and loss of vegetation structure and composition	TSC/EPBC	No	No
Invasion of native plant communities by exotic perennial grasses	TSC	Yes	No
Loss and degradation of native plant and animal habitat by invasion of escaped garden plants, including aquatic plants	TSC/EPBC	Yes	No
Competition and Grazing by the feral European Rabbit, <i>Oryctolagus cuniculus</i> (L)	TSC/EPBC	Yes	No

3.5 Limitations of the Report

The methodological design employed for the purposes of this report was habitat based, in accordance with Section 5A of the *Environment Planning and Assessment Act* (1979).

In respect to the timing of the survey and the survey effort employed, a considerable continuum of fauna and flora species and assessments of the ecological processes that are likely to be imposed on the study site, have been derived through desktop searches, and background and literature searches. Therefore, a full inventory of flora and fauna and the ecological processes likely to occur on the study site and surroundings cannot be fully provided in this report.

It is also acknowledged that the presence and detection of threatened and migratory species can alter in respect to time, which includes seasonal weather and climatic cycles. These limitations have been mitigated by identifying any potential habitat for flora and fauna species and by assessing the likelihood of occurrence of these species, with respect to previous records, the habitat present, the land use on the study site and the landscape context of the wider area.

The report has collected data from publically available data sources and is bound by the limitations of the collection, processing and management of those databases used (Table 4).

Nevertheless, the techniques used in this investigation are considered adequate to gather the data necessary to assess the impacts of the proposal on the flora and fauna and habitats in the study area.

4. Results

4.1 Vegetation Communities

Results of the desktop research are provided in Table 11, with a vegetation community map of the study site provided in Figure 2 and 3.

Table 11. Results of Bionet and Protected Matters Search tool, identifying endangered ecological communities recorded within 10 km of the site.

Community name	NSW Status	Commonwealth status	Occurrence
Agnes Banks Woodland in the Sydney Basin Bioregion	Endangered	Critically Endangered	Not detected
Blue Gum High Forest in the Sydney Basin Bioregion	Critically Endangered	Critically Endangered	Not detected
Blue Mountains Shale Cap Forest in the Sydney Basin Bioregion	Endangered	Critically Endangered	Not detected
Castlereagh Scribbly Gum Woodland in the Sydney Basin Bioregion	Vulnerable	Not listed	Not detected
Castlereagh Swamp Woodland Community	Endangered	Not listed	Not detected
Coastal Saltmarsh in the New South Wales North Coast, Sydney Basin and South East Corner Bioregions	Endangered	Vulnerable	Not detected

Community name	NSW Status	Commonwealth status	Occurrence
Coastal Upland Swamp in the Sydney Basin Bioregion	Endangered	Endangered	Not Detected
Cooks River/Castlereagh Ironbark Forest in the Sydney Basin Bioregion	Endangered	Not Listed	Not Detected
Cumberland Plain Woodland in the Sydney Basin Bioregion	Critically Endangered	Critically Endangered	Not Detected
Elderslie Banksia Scrub Forest in the Sydney Basin Bioregion	Endangered	Not Listed	Not Detected
Freshwater wetland on coastal floodplains of the New South Wales North Coast, Sydney Basin and South East corner bioregions	Endangered	Not listed	Not Detected
Montane peatlands and swamps of the New England Tableland, NSW North Coast, Sydney Basin, South Easter Corner, South Eastern Highlands and Australian Alps Bioregions	Endangered	Endangered	Not Detected
River-flat Eucalypt Forest on Coastal Floodplains of the New South Wales, North Coast, Sydney Basin and South East Corner Bioregions	Endangered	Not listed	Not Detected
Shale Gravel Transition Forest in the Sydney Basin Bioregion	Endangered	Critically Endangered	Not Detected

Community name	NSW Status	Commonwealth status	Occurrence
Shale/Sandstone Transition Forest in the Sydney Basin Bioregion	Critically Endangered	Critically Endangered	Detected (Mapped)
Southern Sydney sheltered forest on transitional sandstone soils in the Sydney Basin Bioregion	Endangered	Not listed	Not Detected
Swamp Oak Floodplain Forest of the New South Wales North Coast, Sydney Basin and South East Corner Bioregions	Endangered	Not listed	Not Detected
Sydney turpentine Ironbark Forest	Endangered	Critically Endangered	Not Detected
Western Sydney Dry Rainforest in the Sydney Basin Bioregion	Endangered	Critically Endangered	Not Detected

Note: the Endangered Ecological Communities that were mapped on site (refer to figures 2 and 3); Shale Sandstone Transition Forest only has canopy tree species remaining in the East and South West; and has many introduced species and some clearing within these areas that is mapped for this EEC. The area along the watercourse that is mapped as SSTF will be conserved. The area that is mapped with one resource as Shale Hills Woodland is assessed as degraded SSTF.

4.2 Flora

4.2.1 Desktop Research

Results of the desktop research are provided in Table 13. A total of 5 threatened flora species have been recorded within a 10km radius of the study site. This includes:

- 5 species listed under the TSC Act
- 3 species listed under the EPBC Act

4.2.2 Site Habitat Features

Flora surveys revealed the following habitat features for the study area (Table 12): A total of 91 species were recorded during the survey 50 (55%) were native and 41 (45%) were exotic (Appendix 2). The results from the three 400m² quadrats undertaken on site are presented in Appendix 2. No threatened flora species were recorded within the site and the adjacent site over the 20 hours of survey effort undertaken.

Table 12: Habitat features present onsite for threatened flora

Feature	Quantity	Description
Species diversity	Moderate	During the vegetation survey 50 native species and 41 exotic species were recorded.
Structural integrity	Low – Moderate	The area within the riparian complex, has a moderate level of structural integrity with 3 levels of strata intact. The areas with canopy trees east and southwest of the watercourse have grass cover and no shrubs or mid storey.
Habitat quality	Low – Moderate	The site represents good habitat quality within the boundaries of the riparian complex. While the remaining area has been significantly modified.
Disturbances	Moderate – High	The riparian complex has the least disturbance compared to the significantly modified area contained within the rest of the site.

4.2.3 Assessment of Occurrence (Flora)

Table 13 below provides a summary of the results from desktop and field surveys, findings indicate there is:

- A low likelihood of the occurrence of 4 species to be present onsite
- A moderate likelihood of occurrence of 1 species to be present onsite

Species with a moderate likelihood of occurrence are:

- *Cynanchum elegans*

For this species, a 7 Part Test of Significance was deemed **not** to be required, as no habitat that is required by this flora species, will be removed by the proposal. As the Riparian complex vegetation of which this species may be found will be retained along the watercourse.

Where required, species nationally protected have had an impact assessment undertaken with respect to the EPBC Act presented in Appendix 4.

Details of the assessment of available habitat resources onsite, specific to threatened flora species is provided in Table 13.

Table 13: An analysis of threatened flora species likely to occur onsite (Using species habitat requirements and site habitat features (Table 12) and surveys).

Species	Common name	NSW status	Commonwealth status	Habitat	Likelihood of occurrence on the study site
<i>Cynanchum elegans</i>	White flowered wax plant	Endangered	Endangered	Usually occurs on the edge of dry rainforest or littoral rainforest. Also occur in <i>Leptospermum laevigatum</i> – <i>Banksia integrifolia</i> coastal scrub, <i>Eucalyptus tereticornis</i> aligned open forest and woodland, <i>Corymbia maculata</i> aligned open forest and woodland, and <i>Melaleuca armillaris</i> scrub to open scrub.	Moderate
<i>Leucopogon fletcheri</i> subsp. <i>Fletcheri</i>		Endangered	Not Listed	Occurs in dry eucalypt woodland or in shrubland on clayey lateritic soils, generally on flat to gently sloping terrain along ridges and spurs.	Low
<i>Pimelea spicata</i>		Endangered	Endangered	In both the Cumberland Plain and Illawarra environments this species is found on well-structured clay soils. On the Cumberland Plain sites it is associated with Grey Box communities (particularly Cumberland Plain Woodland variants and Moist Shale Woodland) and in areas of ironbark.	Low
<i>Tetratheca glandulosa</i>	Glandular pink bell	Vulnerable	Not Listed	Associated with shale-sandstone transition habitat where shale-cappings occur over sandstone. Often occurs on ridgetops and shallow clayey/sandy loam. Vegetation communities correspond broadly to Benson & Howell's Sydney Sandstone Ridgetop	low

Species	Common name	NSW status	Commonwealth status	Habitat	Likelihood of occurrence on the study site
				Woodland (Map Unit 10ar). Common woodland tree species include: <i>Corymbia gummifera</i> , <i>C. eximia</i> , <i>Eucalyptus haemastoma</i> , <i>E. punctata</i> , <i>E. racemosa</i> , and/or <i>E. sparsifolia</i> , with an understorey dominated by species from the families Proteaceae, Fabaceae, and Epacridaceae.	
<i>Zieria involucrata</i>		Endangered	Vulnerable	Occurs primarily on Hawkesbury sandstone. Also occurs on Narrabeen Group sandstone and on Quaternary alluvium. Found primarily in sheltered forests on mid- to lower slopes and valleys, e.g. in or adjacent to gullies which support sheltered forest, although some populations extend upslope into drier vegetation.	Low

4.3 Terrestrial Fauna

4.3.1 Desktop Research

Results of the desktop research are provided in Table 15. A total of 26 threatened fauna species have been recorded within a 10 km radius of the study site. This includes:

- 25 species listed under the TSC Act
- 8 species listed under the EPBC Act (1 migratory see Table 16)

4.3.2 Fauna Surveys

A list of the species recorded onsite during the survey period is presented in Appendix 2. In total, 41 species were recorded on site, 25 birds, 5 mammals, 6 reptiles and 5 amphibians.

Of the 41 species recorded, the introduced Indian Mynah was recorded and three of the mammal species recorded were the introduced European Rabbit, hare and fox.

No threatened fauna species were recorded in the study area over the 22 man hours of survey effort.

4.3.3 Habitat Assessment

An overview of the habitat assessment is provided in the Table 14 below.

Table 14: Habitat features onsite for threatened fauna

Habitat Value	Quantity	Description
Hollow Bearing Trees	Low -Moderate	The hollows observed ranged in size from small (6) to medium (2) Figure 5
Stags	Low - Moderate	6 small stags were observed,
Connectivity	Moderate	The site is connected on the North and South boundaries by the watercourse.
Water	Moderate	A watercourse runs through the site from North to South
Rocky Outcrops	Low	There were rocky outcrops along the watercourse.
Leaf Litter	Low	The lack of leaf litter and grassy groundcover would provide a low level of shelter and foraging for terrestrial fauna

4.3.4 Assessment of Occurrence:

Table 15 below provides the results from desktop and field surveys, it has been determined that there is:

- A low likelihood for the occurrence of 19 threatened species to be present on the study site;
- A moderate likelihood for the occurrence of 6 threatened species to be present on the study site.

Species with a moderate likelihood of occurrence are:

- Powerful owl – *Ninox strenua*
- Eastern Freetail Bat - *Mormopterus norfolkensis*
- Eastern False Pipistrelle - *Falsistrellus tasmaniensis*
- Eastern Bentwing-bat - *Miniopterus schreibersii oceanensis*
- Southern Myotis - *Myotis macropus*
- Greater Broad-nosed Bat *Scoteanax rueppellii*

For the Powerful Owl a 7 Part Test of Significance were deemed **not** to be required, as the proposed action will not remove any habitat of which these species might require or utilise for breeding or foraging, and no large hollows or stags were recorded.

For the five micro bat (microchiropterans) species listed above, 7 Part Tests of Significance were deemed to be required and are presented in Appendix 3 (Table 18).

Where required, species nationally protected have had an impact assessment undertaken, with respect to the EPBC Act presented in Appendix 4. No nationally protected species were recorded on site, any species recorded within 10km of the site (Tables 15 and 16) are not considered likely to be impacted by the proposed development as, the proposed action will not remove any habitat of which these species might require or utilise.

Table 15: An analysis of threatened fauna species likely to occur onsite (Using species habitat requirements and habitat features of the site (Table 13) and surveys).

Species	Common Name	NSW Status	Commonwealth Status	Habitat	Likelihood of occurrence on study site
Herpetofauna					
<i>Heleioporus australiacus</i>	Giant Burrowing Frog	Vulnerable	Vulnerable	Found in heath, woodland and open dry sclerophyll forest on a variety of soil types except those that are clay based. Spends more than 95% of its time in non-breeding habitat in areas up to 300 m from breeding sites. Whilst in non-breeding habitat it burrows below the soil surface or in the leaf litter. Individual frogs occupy a series of burrow sites, some of which are used repeatedly. The home ranges of both sexes appear to be non-overlapping suggesting exclusivity of non-breeding habitat. Home ranges are approximately 0.04 ha in size.	Low
Aves					
<i>Hieraetus morphnoides</i>	Little Eagle	Vulnerable	Not Listed	Occupies open eucalypt forest, woodland or open woodland. She-oak or Acacia woodlands and riparian woodlands of interior NSW are also used. Nests in tall living trees within a remnant patch, where pairs build a large stick nest in winter.	Low
<i>Lophoictinia isura</i>	Square-tailed Kite	Vulnerable	Not Listed	Found in a variety of timbered habitats including dry woodlands and open forests. Shows a particular preference for timbered watercourses.	Low
<i>Onychoprion fuscata</i>	Sooty Tern	Vulnerable	Not Listed	Large flocks can be seen soaring, skimming and dipping but seldom plunging in off shore waters. Breeds in large colonies in sand or coral scrapes on offshore islands and cays including Lord Howe and Norfolk Islands.	Low

Species	Common Name	NSW Status	Commonwealth Status	Habitat	Likelihood of occurrence on study site
<i>Callocephalon fimbriatum</i>	Gang-gang Cockatoo	Vulnerable	Not Listed	In summer, generally found in tall mountain forests and woodlands, particularly in heavily timbered and mature wet sclerophyll forests. In winter, may occur at lower altitudes in drier more open eucalypt forests and woodlands, and often found in urban areas. May also occur in sub-alpine Snow Gum (<i>Eucalyptus pauciflora</i>) woodland and occasionally in temperate rainforests. Move to lower altitudes in winter, preferring more open eucalypt forests and woodlands, particularly in box-ironbark assemblages, or in dry forest in coastal areas. Favours old growth attributes for nesting and roosting.	Low
<i>Lathamus discolor</i>	Swift Parrot	Endangered	Endangered	Found where eucalypts are flowering profusely or where lerp infestations are evident. Will return to feed areas where there is foraging resources. Favoured species include Swamp Mahogany <i>Eucalyptus robusta</i> , Spotted Gum <i>Corymbia maculata</i> , Red Bloodwood <i>C. gummifera</i> , Mugga Ironbark <i>E. sideroxylon</i> , and White Box <i>E. albens</i> in the winter. Commonly used lerp infested trees include Inland Grey Box <i>E. microcarpa</i> , Grey Box <i>E. moluccana</i> and Blackbutt <i>E. pilularis</i> .	Low

Species	Common Name	NSW Status	Commonwealth Status	Habitat	Likelihood of occurrence on study site
<i>Ninox strenua</i>	Powerful Owl	Vulnerable	Not Listed	The Powerful Owl inhabits a range of vegetation types, from woodland and open sclerophyll forest to tall open wet forest and rainforest. The Powerful Owl requires large tracts of forest or woodland habitat but can occur in fragmented landscapes as well. The species breeds and hunts in open or closed sclerophyll forest or woodlands and occasionally hunts in open habitats. It roosts by day in dense vegetation comprising species such as Turpentine <i>Syncarpia glomulifera</i> , Black Sheoak <i>Allocasuarina littoralis</i> , Blackwood <i>Acacia melanoxylon</i> , Rough-barked Apple <i>Angophora floribunda</i> , Cherry Ballart <i>Exocarpus cupressiformis</i> and a number of eucalypt species. Powerful Owls nest in large tree hollows (at least 0.5 m deep), in large eucalypts (diameter at breast height of 80-240 cm) that are at least 150 years old.	Moderate
<i>Anthochaera phrygia</i>	Regent Honeyeater	Critically Endangered	Endangered	The Regent Honeyeater is a flagship threatened woodland bird whose conservation will benefit a large suite of other threatened and declining woodland fauna. The species inhabits dry open forest and woodland, particularly Box-Ironbark woodland, and riparian forests of River Sheoak. Regent Honeyeaters inhabit woodlands that support a significantly high abundance and species richness of bird species. These woodlands have significantly large numbers of mature trees, high canopy cover and abundance of mistletoes.	Low

Species	Common Name	NSW Status	Commonwealth Status	Habitat	Likelihood of occurrence on study site
<i>Epthiamura albigfrons</i>	White-fronted Chat	Vulnerable	Not Listed	Gregarious species, usually found foraging on bare or grassy ground in wetland areas, singly or in pairs. They are insectivorous, feeding mainly on flies and beetles caught from or close to the ground. Nests in the Sydney region have also been seen in low isolated mangroves.	Low
<i>Grantiella picta</i>	Painted Honeyeater	Vulnerable	Not Listed	Inhabits Boree, Brigalow and Box-Gum Woodlands and Box-Ironbark Forests. A specialist feeder on the fruits of mistletoes growing on woodland eucalypts and acacias. Prefers mistletoes of the genus <i>Amyema</i> . Insects and nectar from mistletoe or eucalypts are occasionally eaten.	Low
<i>Melithreptus gularis gularis</i>	Blacked Chinned Honeyeater	Vulnerable	Not Listed	Occupies mostly upper levels of drier open forests or woodlands dominated by box and ironbark eucalypts. Also inhabits open forests of smooth-barked gums, stringybarks, ironbarks, river sheoaks (nesting habitat) and tea-trees.	Low
<i>Daphoenositta chrysoptera</i>	Varied sitella	Vulnerable	Not listed	This species occurs in Eucalypt forests particularly where rough barked species are found.	Low
<i>Pachycephala olivacea</i>	Olive Whistler	Vulnerable	Not Listed	Mostly inhabit wet forests above about 500m. During the winter months they may move to lower altitudes. Forage in trees and shrubs and on the ground, feeding on berries and insects. Make nests of twigs and grass in low forks of shrubs. Lay two or three eggs between September and January	Low

Species	Common Name	NSW Status	Commonwealth Status	Habitat	Likelihood of occurrence on study site
<i>Petroica boodang</i>	Scarlet Robin	Vulnerable	Not Listed	The Scarlet Robin lives in dry eucalypt forests and woodlands. The understorey is usually open and grassy with few scattered shrubs. This species lives in both mature and regrowth vegetation. It occasionally occurs in mallee or wet forest communities, or in wetlands and tea-tree swamps. Scarlet Robin habitat usually contains abundant logs and fallen timber: these are important components of its habitat.	Low
Mammalia					
<i>Dasyurus maculatus</i>	Spotted tailed quoll	Vulnerable	Endangered	This species occurs in a range of habitat types which encompass woodland, rainforest, open forest and heath. This species requires fallen logs, caves, rock crevices and rocky cliff faces for refuge.	Low
<i>Phascolarctos cinereus</i>	Koala	Vulnerable	Vulnerable	This species occurs in Eucalypt woodlands and forests. Require a home range of 2 hectares up to several hundred hectares.	Low
<i>Petaurus australis</i>	Yellow bellied glider	Vulnerable	Not listed	This species occurs in mature or old growth Ironbark Woodlands as well as River Red Gum Forest. It occurs in places where an <i>Acacia</i> midstory is present. They require abundant tree hollows for nesting and refuge	Low
<i>Petaurus norfolkensis</i>	Squirrel Glider	Vulnerable	Not Listed	Inhabits mature or old growth Box, Box-Ironbark woodlands and River Red Gum forest west of the Great Dividing Range and Blackbutt-Bloodwood forest with heath understorey in coastal areas. Prefers mixed species stands with a shrub or <i>Acacia</i> midstorey. Live in family groups of a single adult male one or more adult females	Low

Species	Common Name	NSW Status	Commonwealth Status	Habitat	Likelihood of occurrence on study site
				and offspring. Require abundant tree hollows for refuge and nest sites.	
<i>Pteropus poliocephalus</i>	Grey-headed Flying Fox	Vulnerable	Vulnerable	Occur in subtropical and temperate rainforests, tall sclerophyll forests and woodlands, heaths and swamps as well as urban gardens and cultivated fruit crops. Roosting camps are generally located within 20 km of a regular food source and are commonly found in gullies, close to water, in vegetation with a dense canopy.	Low
<i>Mormopterus norfolkensis</i>	Eastern Freetail Bat	Vulnerable	Not Listed	Occur in dry sclerophyll forest, woodland, swamp forests and mangrove forests east of the Great Dividing Range. Roost mainly in tree hollows but will also roost under bark or in man-made structures.	Moderate
<i>Falsistrellus tasmaniensis</i>	Eastern False Pipistrelle	Vulnerable	Not listed	Found in moist habitats where there is an abundance of trees taller than 20 metres	Moderate
<i>Miniopterus schreibersii oceanensis</i>	Eastern Bentwing-bat	Vulnerable	Not Listed	Caves are the primary roosting habitat, but also use derelict mines, storm-water tunnels, buildings and other man-made structures. Hunt in forested areas, catching moths and other flying insects above the tree tops.	Moderate
<i>Myotis macropus</i>	Southern Myotis	Vulnerable	Not listed	Generally roost in groups of 10 - 15 close to water in caves, mine shafts, hollow-bearing trees, storm water channels, buildings, under bridges and in dense foliage. Forage over streams and pools catching insects and small fish by raking their feet across the water surface.	Moderate

Species	Common Name	NSW Status	Commonwealth Status	Habitat	Likelihood of occurrence on study site
<i>Scoteanax rueppelli</i>	Greater broad nosed bat	Vulnerable	Not listed	This species occurs in a wide range of habitats. It is mostly found in tall wet forest. Forages along creek and river edges.	Moderate

4.4 Migratory Species

4.4.1 Desktop Research

Results of the desktop research are provided in Table 16. A total of 1 migratory species has been recorded within a 10km radius of the study site.

4.4.2 Fauna Surveys

No migratory species were recorded onsite during the fauna surveys.

4.4.3 Assessment of Occurrence

In collating results from desktop and field surveys, it has been determined that there is a low likelihood of the occurrence of the 1 migratory species potentially occurring on the study site.

Table 16. Results of the Desktop research, showing the occurrence of migratory species within a 10km radius of the site (C=CAMBA; J=JAMBA, K=ROKAMBA)

Species	Common Name	NSW Status	Commonwealth Status	Habitat	Occurrence on Study Site
<i>Ardea ibis</i>	Cattle Egret	Not Listed	C,J	The Cattle Egret occurs in tropical and temperate grasslands, wooded lands and terrestrial wetlands. The Cattle Egret often forages away from water on low lying grasslands, improved pastures and croplands. It is commonly found in cattle fields and other farm areas that contain livestock.	Low

Note: This species is very mobile and would be able to move very efficiently through the area.

5. Impacts of the Proposed Development

5.1 Potential Impacts on Endangered Ecological Communities (EECs)

The endangered ecological communities Shale Sandstone Transition Forest and Cumberland Plain Woodland are mapped as being present on the site (see figure 2 and 3). Notwithstanding, this assessment has concluded that the Cumberland Plain Woodland mapped is not on site. While the mapped Shale Sandstone Transition Forest is on site, the boundaries of this vegetation community are indistinct with little connectivity, excepting for the vegetation along the watercourse. This Riparian complex was assessed as being in a moderate to good condition, and is to be conserved, as it connects to similar vegetation that has been retained on the adjoining development to the North (Figure 6). The Shale Sandstone Transition Forest area to the East and South West of the Riparian complex has a scattered canopy with no mid or understorey and little connectivity.

Therefore the proposed action will have minimal effect on the mapped Shale Sandstone Transition Forest on site. The Riparian vegetation along the watercourse and a buffer area will be retained as it is in a moderate to good condition and will provide connectivity to other areas (see Figure 6), this will also help to align the lots for this parcel.

5.2 Potential Impacts on Threatened Flora Species

The proposal is **unlikely** to cause the following impacts on threatened flora species:

- Removal of habitat
- Individual death or injury
- A disturbance to reproduction
- Functional and structural changes within flora populations

Table 17 provides a justification for the conduct of a Seven Part Test, in relation to individual flora species.

This assessment has determined that the development will **NOT** have a significant impact upon the one threatened flora species with suitable habitat represented onsite (Table 17), as there will not be a significant amount of suitable habitat removed.

An assessment of considerations under the *Environmental Protection and Biodiversity Conservation Act* (1999) has also determined that it is **unlikely** that this development will lead to the local extinction of the two threatened flora species listed (Table 13, 17).



Figure 6: The Riparian Complex on site to be conserved and connection to the area to the North.

Table 17: The potential impact on threatened flora species that have habitat represented on site, and whether a Seven Part Test is required (TSC Act has been applied)

Scientific Name	TSC Act	EPBC Act	Individual death or injury	Disturbance to reproduction	Impact assessment applied?
<i>Dillwynia tenuifolia</i>	Vulnerable	Not Listed	Unlikely	Unlikely	No
<i>Grevillea parviflora</i> subsp. <i>Supplicans</i>	Endangered	Not Listed	Unlikely	Unlikely	No
<i>Pimelea spicata</i>	Endangered	Endangered	Unlikely	Unlikely	No
<i>Tetratheca glandulosa</i>	Vulnerable	Not Listed	Unlikely	Unlikely	No
<i>Zieria involucrata</i>	Endangered	Vulnerable	Unlikely	Unlikely	No

5.3 Potential Impacts on Threatened Fauna Species

The potential impacts of the proposal on threatened fauna species, can be assessed by utilising the information from Table 15 (regarding the potential habitat available), and whether a threatened species was recorded on site; this information is used to determine if the proposal is likely to cause any of the following impacts on threatened fauna species:

- Death of individuals
- Injury of individuals
- Reduction and loss of breeding resources
- Reduction and loss of foraging resources
- Disturbance to a larger habitat area
- Loss of connectivity within and between habitats

Table 18 outlines the potential impacts that the proposal may have on threatened species and determines whether a Seven Part Test (TSC Act) is to be applied. The species that were assessed in Table 15, as having a moderate chance of being found on site were the:

- Powerful owl – *Ninox strenua*
- Eastern Freetail Bat - *Mormopterus norfolkensis*
- Eastern False Pipistrelle - *Falsistrellus tasmaniensis*
- Eastern Bentwing-bat - *Miniopterus schreibersii oceanensis*
- Southern Myotis - *Myotis macropus*
- Greater Broad-nosed Bat *Scoteanax rueppellii*

As the proposed action will not remove any habitat that the Powerful Owl will utilise, it has been determined that it is **unlikely** that the proposed action will cause:-

- any death or injury to any of this species,
- a reduction and loss of breeding resources and foraging resources for this species,
- a disturbance to a larger habitat area for this species
- a loss of connectivity within and between habitats for this species

It has been determined that this species **does not** require that a seven part test is to be applied as part of this assessment (See Table 18).

A seven-part test of significance is presented in Appendix 3 for the five micro bats listed above, as there may be removal of trees on site.

Table 18: The potential impact on threatened fauna species, and whether a Seven Part Test is required (TSC Act has been applied).

Common name	Scientific name	TSC Act	EPBC Act	Individual death or injury	Loss or disturbance to limiting of foraging resources	Loss or disturbance of breeding resources	Impact assessment applied?
Giant Burrowing Frog	<i>Heleioporus australiacus</i>	Vulnerable	Vulnerable	Unlikely	Unlikely	Unlikely	No
Cattle Egret	<i>Ardea ibis</i>	Not Listed	C, J	Unlikely	Unlikely	Unlikely	No
Little Eagle	<i>Hieraaetus morphnoides</i>	Vulnerable	Not Listed	Unlikely	Unlikely	Unlikely	No
Square-tailed Kite	<i>Laphoictinia isura</i>	Vulnerable	Not Listed	Unlikely	Unlikely	Not likely	No
Sooty Tern	<i>Onychoprion fuscata</i>	Vulnerable	Not Listed	Unlikely	Unlikely	Not likely	No
Gang-gang Cockatoo	<i>Callocephalon fimbriatum</i>	Vulnerable	Not Listed	Unlikely	Unlikely	Unlikely	No
Swift Parrot	<i>Lathamus discolor</i>	Endangered	Endangered	Unlikely	Unlikely	Unlikely	No
Powerful Owl	<i>Ninox strenua</i>	Vulnerable	Not Listed	Unlikely	Unlikely	Unlikely	No
Regent Honeyeater	<i>Anthochaera phrygia</i>	Critically Endangered	Endangered	Unlikely	Unlikely	Unlikely	No

White-fronted Chat	<i>Ephiamura bibifrons</i>	Vulnerable	Not Listed	Unlikely	Unlikely	Unlikely	No
Painted Honeyeater	<i>Grantiella picta</i>	Vulnerable	Not Listed	Unlikely	Unlikely	Unlikely	No
Black-chinned Honeyeater	<i>Melithreptus gularis gularis</i>	Vulnerable	Not listed	Unlikely	Unlikely	Not likely	No
Varied sittella	<i>Daphoenositta chrysoptera</i>	Vulnerable	Not listed	Unlikely	Unlikely	Unlikely	No
Olive Whistler	<i>Polycephala olivacea</i>	Vulnerable	Not Listed	Unlikely	Unlikely	Unlikely	No
Scarlet Robin	<i>Petroica boodang</i>	Vulnerable	Not Listed	Unlikely	Unlikely	Unlikely	No
Spotted-tailed Quoll	<i>Dasyurus maculatus</i>	Vulnerable	Endangered	Unlikely	Unlikely	Unlikely	No
Koala	<i>Phascolarctus cinereus</i>	Vulnerable	Vulnerable	Unlikely	Unlikely	Unlikely	No
Yellow-bellied Glider	<i>Petaurus australis</i>	Vulnerable	Not Listed	Unlikely	Unlikely	Unlikely	No
Squirrel Glider	<i>Petaurus norfolkensis</i>	Vulnerable	Not Listed	Unlikely	Unlikely	Unlikely	No
Grey-headed flying fox	<i>Pteropus poliocephalus</i>	Vulnerable	Vulnerable	Unlikely	Unlikely	Unlikely	No

Eastern Freetail Bat	<i>Mormopterus nofolkensis</i>	Vulnerable	Not Listed	Possible	Unlikely	Unlikely	Yes
Eastern False Pipistrelle	<i>Falsistrellus tasmaniensis</i>	Vulnerable	Not Listed	Possible	Unlikely	Unlikely	Yes
Eastern Bentwing-bat	<i>Miniopterus schreibersii oceanensis</i>	Vulnerable	Not Listed	Possible	Unlikely	Unlikely	Yes
Southern Myotis	<i>Myotis macropus</i>	Vulnerable	Not listed	Possible	Unlikely	Unlikely	Yes
Greater Broad-nosed Bat	<i>Scoteanax rueppellii</i>	Vulnerable	Not Listed	Possible	Unlikely	Unlikely	Yes

6. Conclusion

This report assesses whether any threatened flora and fauna species, endangered populations and endangered ecological communities, are likely to be impacted upon by the proposed residential development. It addresses the *Threatened Species Conservation Act* (1995) and the *Environmental Protection and Biodiversity Conservation Act* (1999).

The site was assessed as potential koala habitat, and the endangered ecological community Shale Sandstone Transition Forest while mapped as being on site was assessed as being in a degraded structure to a moderate structure. The area along the watercourse is to be retained for connectivity.

No other threatened species, endangered populations or endangered ecological communities listed on the schedules of the *NSW Threatened Species Conservation Act 1995*, or the *Commonwealth Environment Protection and Biodiversity Conservation Act 1999* were recorded in the study area.

Following the application of the seven factors from Section 5A of the *NSW Environmental Planning and Assessment Act 1979*, as required by the *NSW Threatened Species Conservation Act 1995*, in accordance with relevant assessment guidelines, it is concluded that the proposal is unlikely to have a significant effect on threatened species, endangered populations, ecological communities, or their habitats.

A Species Impact Statement is not required for the proposal.

Following consideration of the administrative guidelines for determining significance under the *Commonwealth Environment Protection & Biodiversity Conservation Act 1999*, it is concluded that the proposal is unlikely to have a significant impact on matters of National Environmental Significance or Commonwealth land, and a referral to the Commonwealth Environment Minister is not necessary.

A number of impact mitigation and amelioration strategies have been recommended for the proposal. These strategies mitigate the effects of the proposal on threatened species, endangered populations, ecological communities, or their habitats and minimise the impacts of the proposal on the flora and fauna values of the study area in general.

7. Recommendations

The following recommendations are suggested in order to mitigate and ameliorate the impacts of the proposal on threatened flora and fauna species and endangered communities:

Vegetation Removal:

- Selective retention of larger canopy trees in order to maintain connectivity within the landscape and among habitat patches; and selective retention of hollow bearing trees at the expense of younger trees lacking hollows.
- Clearing for the proposal should be undertaken such that areas of native vegetation to be retained within the identified Riparian corridor are not impacted upon during construction works.
- Invasive exotic perennial grass species listed in the Final Determination of the NSW Scientific Committee for this key threatening process (Appendix B) should not be sown within 10m of vegetation to be retained intact. Sterile cover crops should be sown if necessary to stabilise exposed surfaces, and native grasses or non-invasive exotic grasses should be sown to provide the final vegetative cover in these areas if required.
- Native plants from the species list in Appendix 2 of this report should be considered in any landscaping for the proposal.
- Known weed or invasive species should not be planted for landscaping purposes.
- Any invasive weeds and escaped garden plants should be removed from the site.

Offsetting the Impacts:

- If any fauna is injured during construction works WIRES should be called immediately.
- Appropriate sediment control measures should be established before the commencement of work on the proposal and retained in place until all bare areas have been revegetated, and to avoid polluting the watercourse, which traverses the site.
- Vehicles and earthmoving machinery should only be parked in restricted areas in order to protect the Riparian vegetation on site.
- If hollow bearing trees are to be removed, they must be assessed for any fauna, and replaced with artificial nest boxes in Riparian habitat BEFORE clearing is underway. These are to be replaced with the artificial hollows being of a similar size to those removed. (Numbers to install 6 small <5cm, 6 medium <10cm, 2 large <30cm and 6 micro bat boxes)
- In regards to the waterway habitat, all littoral vegetation should remain undisturbed and uncleared by means of a buffer zone. This protection area should extend from the creek line out to approximately 20m and will retain the majority of the Shale Sandstone Transition Forest vegetation.
- The proposal to protect this area is to apply a minimum lot size of 1ha within the identified riparian complex and to create restrictions on the titles of those lots to protect and enhance the vegetation, as has occurred on the adjoining land to the north. These are considered appropriate protection mechanisms.

8. References

- Christides, L. & Boles, W. 1994, *The Taxonomy and Species of Birds of Australia and its Territories*, Royal Australasian Ornithologists Union, Victoria.
- Churchill, S. 1998, *Australian Bats*, Reed New Holland, Sydney.
- Cogger, H.G. 1996, *Reptiles and Amphibians of Australia*, Reed Books, Sydney
- Department of the Environment (2013) Protected matters search tool (online). Accessed 27th February 2016 [<http://www.environment.gov.au/epbc/pmst/>]
- Department of the Environment (2012) Species profiles and threats database (online). Accessed 2nd March 2016 [<http://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl>]
- Leonard, G. 1996, *Eucalypts A Bush Walkers Guide*, University of New South Wales Press.
- Griffiths, K. 2012. *Frogs and Reptiles of the Sydney Region*. New Holland. Sydney.
- National Herbarium of NSW (n.d.) New South Wales Flora Online. NSW Government. Accessed 2nd March 2016 [<http://plantnet.rbgsyd.nsw.gov.au/search/simple.htm>]
- NSW Government (2011) Cumberland Plain Recovery Plan. Australian Government
- Office of Environment and Heritage (2013) *NSW Bionet* (online). Accessed 27th February 2016 [<http://www.bionet.nsw.gov.au/>]
- Office of Environment and Heritage (undated) Threatened species profile search (online). Accessed 2nd March 2016 [<http://www.environment.nsw.gov.au/threatenedspeciesapp/>]
- Robinson, L. (2003). *Field Guide to the Native Plants of Sydney*. Kangaroo Press, Sydney.
- Slater, P., Slater, P., and Slater, R. 1998, *The Slater Field Guide to AUSTRALIAN BIRDS*, Lansdowne Press, Sydney.
- Van Dyke, S., Gynther, I., Baker, A., 2011, *Field companion to the Mammals of Australia*, New Holland.
-

Appendix 1: Developable Land



Appendix 2: Species Recorded Onsite

Flora

* Denotes exotic species

Plant Family	Scientific Name	Common Name	Conservation/Weed Status
Apiaceae	<i>Hydrocotyle bonariensis</i> *	Pennywort	
Apocynaceae	<i>Vinca major</i> *	Blue periwinkle	
Asclepiadaceae	<i>Araujia hortorum</i> *	Moth Vine	
Asparagaceae	<i>Asparagus asparagoides</i> *	Bridal Creeper	Declared Noxious Weed
Asteraceae	<i>Ageratina riparia</i> *	Mist Flower	
Asteraceae	<i>Cirsium vulgare</i> *	Thistle	
Asteraceae	<i>Bidens pilosa</i> *	Farmers Friend	
Asteraceae	<i>Conyza bonariensis</i> *	Fleabane	Weed of National Significance
Asteraceae	<i>Onopordum acanthium</i> *	Thistle	
Asteraceae	<i>Ozothamnus diosmifolius</i>	Rice Flower	
Asteraceae	<i>Senecio madagascariensis</i> *	Fireweed	Class 4 Noxious Weed
Asteraceae	<i>Sonchus oleraceus</i> *	Common Sowthistle	
Campanulaceae	<i>Wahlenbergia gracilis</i>	Native Bluebell	
Clusiaceae	<i>Hypericum gramineum</i>	Small St. John's Wort	
Commelinaceae	<i>Commelina cyanea</i>	Scurvy Weed	
Convolvulaceae	<i>Dichondra repens</i>	Kidney Weed	
Cyperaceae	<i>Carex appressa</i>	Tall Sedge	
Cyperaceae	<i>Cyperus aggregatus</i> *	Flat Sedge	
Cyperaceae	<i>Cyperus eragrostis</i> *	Umbrella Sedge	
Cyperaceae	<i>Gahnia aspera</i>	Rough Saw Sedge	
Cyperaceae	<i>Lepidosperma laterale</i>	Variable Swordsedge	
Cyperaceae	<i>Schoenus imberbis</i>	Beardless Bog Rush	
Dennstaedtiaceae	<i>Pteridium esculentum</i>	Bracken	
Euphorbiaceae	<i>Ricinus communis</i> *	Castor Oil Plant	
Fabaceae	<i>Acacia decurrens</i>	Black Wattle	
Fabaceae	<i>Acacia implexa</i>	Hickory Wattle	
Fabaceae	<i>Acacia ulicifolia</i>	Prickly Moses	
Fabaceae	<i>Glycine clandestine</i>		
Fabaceae	<i>Glycine microphylla</i>		
Fabaceae	<i>Hardenbergia violacea</i>	False Sarsparilla	
Fabaceae	<i>Senna pendula</i> *	Easter Cassia	
Geraniaceae	<i>Geranium homeamum</i>	Native Geranium	
Geraniaceae	<i>Geranium solanderi</i>	Native Geranium	
Haloragaceae	<i>Gonocarpus teucroides</i>	Germander Raspwort	
Juncaceae	<i>Juncus usitatus</i>	Common Rush	

Laminaceae	<i>Chloanthes glandulosa</i>		
Lilliaceae	<i>Myrsiphyllum asparagoides</i> *		
Lomandraceae	<i>Lomandra longifolia</i>	Spiny-headed Matt-rush	
Loranthaceae	<i>Amyema congener</i>	Mistletoe	
Malvaceae	<i>Sida rhombifolia</i> *	Arrowleaf Sida	
Malvaceae	<i>Modiola caroliniana</i> *	Red Flower Mallow	
Myrsinaceae	<i>Anagallis arvensis</i> *	Scarlet Pimpernel	
Myrsinaceae	<i>Rapanea variabilis</i>	Mutton Wood	
Myrtaceae	<i>Angophora floribunda</i>	Rough-barked Apple	
Myrtaceae	<i>Backhousia myrtifolia</i>	Grey Myrtle	
Myrtaceae	<i>Eucalyptus creba</i>	Thin leaved ironbark	
Myrtaceae	<i>Eucalyptus eugenoides</i>	Thin-leaved Stringybark	
Myrtaceae	<i>Eucalyptus fibrosa</i>	Large leaved Ironbark	
Myrtaceae	<i>Eucalyptus paniculata</i>	Grey Ironbark	
Myrtaceae	<i>Eucalyptus punctata</i>	Grey Gum	
Myrtaceae	<i>Eucalyptus tereticornis</i>	Forest Red Gum	
Myrtaceae	<i>Leptospermum polygalifolium</i>	Tantoon	
Myrtaceae	<i>Melaleuca styphelioides</i>	Prickly Leaved Tea Tree	
Oleaceae	<i>Ligustrum sinense</i> *	Small leaved privet	
Oxalidaceae	<i>Oxalis corniculata</i> *	Yellow Wood Sorrel	
Oxalidaceae	<i>Oxalis bowiei</i> *	Bowie Wood Sorrel	
Oxalidaceae	<i>Oxalis articulata</i> *	Shamrock Oxalis	
Oxalidaceae	<i>Oxalis debilis</i> *	Pink Shamrock	
Phytolaccaceae	<i>Phytolacca octandra</i> *	Inkweed	
Pittosporaceae	<i>Bursaria spinosa</i>	Blackthorn	
Plantaginaceae	<i>Plantago lanceolata</i> *	Lambs Tongue	
Plantaginaceae	<i>Plantago major</i> *	Greater Plantain	
Poaceae	<i>Andropogon virginicus</i> *	Whisky Grass	
Poaceae	<i>Aristida vagans</i>	Three-awn Speargrass	
Poaceae	<i>Bothriochloa macra</i>	Red Grass	
Poaceae	<i>Cymbopogon refractus</i>	Barbed Wire Grass	
Poaceae	<i>Cynodon dactylon</i> *	Couch	
Poaceae	<i>Echinopogon caespitosus</i>	Hedgehog Grass	
Poaceae	<i>Imperata cylindrical</i>	Blady Grass	
Poaceae	<i>Setaria pumila</i> *	Pale Pidgeon Grass	
Poaceae	<i>Paspalum dilatatum</i> *	Paspalum	
Poaceae	<i>Pennisetum clandestinum</i> *	Kikuyu	
Poaceae	<i>Poa labillardieri</i>	Tussock Grass	
Poaceae	<i>Themeda australis</i>	Kangaroo Grass	
Primulaceae	<i>Anagallis arvensis</i> *	Pimpernel	
Proteaceae	<i>Grevillea robusta</i>	Silky Oak	Planted
Pteridaceae	<i>Adiantum aethiopicum</i>	Common Maidenhair	
Pteridaceae	<i>Cheilanthes sieberi</i> subsp. <i>Sieberi</i>	Poison Rock Fern	

Rhamnaceae	<i>Alphitonia excels</i>	Red Ash	
Rosaceae	<i>Rubus fruticosus</i> *	Blackberry	Weed of national Significance
Rosaceae	<i>Rubus parviflorus</i>	Native Raspberry	
Rubiaceae	<i>Pomax umbellata</i>	-	
Salicaceae	<i>Salix alba</i> *	Willow	
Santalaceae	<i>Exocarpos compressiformis</i>	Cherry Ballart	
Solanaceae	<i>Physalis peruviana</i> *	Cape Gooseberry	
Solanaceae	<i>Solanum mauritianum</i> *	Wild Tobacco	
Solanaceae	<i>Solanum nigrum</i> *	Blackberry Nightshade	
Solanaceae	<i>Solanum prinophyllum</i>	Forest Nightshade	
Solanaceae	<i>Solanum sisymbriifolium</i> *	Sticky Nightshade	
Verbenaceae	<i>Lantana camara</i> *	Lantana	Class 4 Noxious Weed
Verbenaceae	<i>Phyla nodiflora</i> *	Carpet Weed	
Verbenaceae	<i>Verbena bonariensis</i> *	Purple Top	

Quadrat Data (400m²)- *Denotes introduced species, #Denotes Cumberland Plain Woodland, ^ Denotes Shale Sandstone Transition Forest.

Quadrat 1 – species composition (total numbers)		
<i>Eragrostis curvula</i> * - 140	<i>Dichondra repens</i> # – 115	<i>Lomandra obliqua</i> - 63
<i>Axonopus fissifolius</i> * - 57	<i>Sonchus olearaceus</i> * - 42	<i>Pratia purpurescens</i> # ^ – 20
<i>Anagallis arvensis</i> * - 29	<i>Oxalis corniculata</i> * - 16	<i>Glycine microphylla</i> – 15
<i>Cyperus eragrostis</i> * – 8	<i>Tradescentia flumenensis</i> * - 7	<i>Entolasia stricta</i> ^ – 5
<i>Eucalyptus creba</i> # ^ – 5	<i>Ozothamus diosmifolius</i> ^ - 2	<i>Desmodium varians</i> - 2
<i>Wahlenbergia gracilis</i> # ^ – 2	<i>Acacia</i> sp. (Juv) ^ – 1	<i>Cynodon dactylon</i> * - 1
Quadrat 2 – species composition (total numbers)		
<i>Centella asiatica</i> (numerous)	<i>Cheilanthes sieberi</i> ^ – 29	<i>Dichondra repens</i> - 27
<i>Adiantum aethiopicum</i> – 14	<i>Bursaria spinosa</i> ^ – 12	<i>Commelina cyanea</i> - 10
<i>Backhousia myrtifolia</i> – 10	<i>Juncus usitatus</i> – 10	<i>Eragrostis curvula</i> * - 8
<i>Conyza bonariensis</i> * - 6	<i>Solanum prinophyllum</i> ^ - 5	<i>Eustrephus latifolius</i> - 5
<i>Leucopogon juniperinus</i> ^ – 4	<i>Alphitona excelsa</i> – 3	<i>Rapanea variabilis</i> – 3
<i>Pratia purperascens</i> ^ – 3	<i>Angophora floribunda</i> ^ - 2	<i>Cyperus eragrostis</i> - 2
<i>Lantana camara</i> * – 2	<i>Viola hederaceae</i> – 2	<i>Sonchus olearaceus</i> * - 2
<i>Glycine microphylla</i> – 2	<i>Cymbopogon refractus</i> ^ - 1	<i>Circium vulgare</i> * - 1
<i>Ozothamnus diosmifolium</i> ^ – 1	<i>Gahnia aspera</i> – 1	
Quadrat 3 – species composition (total numbers)		
<i>Paspalum dilitatum</i> * – 36	<i>Dichondra repens</i> – 35	<i>Sonchus olearaceus</i> * - 27
<i>Cheilanthes sieberi</i> ^ – 26	<i>Cyperus aggregatus</i> * - 24	<i>Conyza bonariensis</i> * - 20
<i>Bursaria spinosa</i> ^ – 19	<i>Eragrostis curvula</i> * - 16	<i>Oxalis corniculata</i> * - 14
<i>Leucopogon juniperinus</i> ^ - 12	<i>Sida rhombifolia</i> * - 10	<i>Pratia purparescens</i> ^ - 9
<i>Glycine microphylla</i> – 9	<i>Commelina cyanea</i> - 9	<i>Solanum prinophyllum</i> ^ - 8
<i>Eustrephus latifolius</i> – 5	<i>Lomandra obliqua</i> – 5	<i>Angophora floribunda</i> ^ – 3
<i>Eucalyptus paniculata</i> ^ – 3	<i>Eucalyptus creba</i> ^ – 2	<i>Cymbopogon refractus</i> ^ – 2
<i>Acacia</i> sp. (Juv) ^ – 2	<i>Lantana camara</i> * - 2	<i>Gahnia aspera</i> – 1

Fauna *Denotes introduced species - # Denotes Threatened species

SCIENTIFIC NAME	COMMON NAME
Amphibians	
<i>Litoria latopalmata</i>	Broad-palmed Frog
<i>Crinia signifera</i>	Common Eastern Froglet
<i>Limnodynastes dumerili</i>	Eastern Banjo Frog
<i>Litoria fallax</i>	Eastern Dwarf Tree frog
<i>Litoria peronei</i>	Perons' Tree Frog
Aves	
<i>Calyptorhynchus funereus</i>	Yellow-tailed Black Cockatoo
<i>Manorina melanophrys</i>	Bell miner
<i>Acanthiza chrysorrhoa</i>	Yellow Rumped Thornbill
<i>Acathanza lineata</i>	Striated Thornbill
<i>Acanthorhynchus tenuirostris</i>	Eastern Spinebill
<i>Rhipidura albiscapa</i>	Grey Fantail
<i>Rhipidura leucophrys</i>	Willy Wagtail
<i>Platycercus eximius</i>	Eastern Rosella
<i>Smicrornis brevirostris</i>	Weebill
<i>Chenonetta jubata</i>	Wood Duck
<i>Manorina melanocephala</i>	Noisy Miner
<i>Gymnorhina tibicen</i>	Magpie
<i>Grallina cyanoleuca</i>	Magpie Lark
<i>Acridotheres tristis</i> *	Mynah Bird*
<i>Hirundo neoxena</i>	Welcome Swallow
<i>Phaps chalcoptera</i>	Common Bronzewing
<i>Corvus coronoides</i>	Raven
<i>Eopsaltria australis</i>	Eastern Yellow Robin
<i>Dacelo novaeguineae</i>	Kookaburra
<i>Ocyphaps lophotes</i>	Crested Pidgeon
<i>Trichoglossus moluccanus</i>	Rainbow Lorikeet

<i>Coracina novaehollandiae</i>	Black-faced Cuckoo Shrike
<i>Malurus cyaneus</i>	Superb Blue Wren
<i>Sericornis frontalis</i>	White-browed Scrubwren
<i>Zosterops lateralis</i>	Silvereye
<i>Anthochaera chrysoptera</i>	Brush Wattlebird
Mammals	
<i>Lepus europaeus</i> *	European Hare
<i>Trichosurus vulpecular</i>	Brush-tailed Possum (scat)
<i>Wallabia bicolor</i>	Swamp wallaby (skull)
<i>Oryctolagus cuniculus</i> *	European Rabbit (scat)*
<i>Vulpes vulpes</i> *	European Fox (scat)*
Reptiles	
<i>Pseudonaja textilis</i>	Eastern Brown Snake
<i>Cryptoblepharus virgatus</i>	Wall Lizard
<i>Eulamprus quoyii</i>	Eastern Water Skink
<i>Intellagama lesueurii</i>	Eastern Water Dragon
<i>Lampropholis delicata</i>	Delicate Garden Skink
<i>Lampropholis guichenoti</i>	Common Garden skink

Appendix 3 - Effects on Threatened Biota (Assessment of Significance)

Ecological Communities

An assessment of the effects of the proposal on threatened species, populations and ecological communities likely to occur in habitats similar to those available in the study area, may be carried out by applying the seven factors from Section 5A of the amended *NSW Environmental Planning And Assessment Act 1979* in accordance with gazetted assessment guidelines to each identified threatened species, population and ecological community.

This assessment of significance is presented below for the following threatened ecological communities:

Shale Sandstone Transition Forest (Critically Endangered)

Part a)

In the case of a threatened species, whether the action proposed is likely to have an adverse effect on the life cycle of the species such that a viable local population of the species is likely to be placed at risk of extinction.

Not applicable. This test is for a endangered ecological community

Part b)

In the case of an endangered population, whether the life cycle of the species that constitutes the endangered population is likely to be disrupted such that the viability of the population is likely to be significantly compromised.

Not applicable. This test is for an endangered ecological community.

Part c)

In the case of an endangered ecological community, whether the action proposed:

(i) is likely to have an adverse effect on the extent of the ecological community such that its local occurrence is likely to be placed at risk of extinction, or

(ii) is likely to substantially and adversely modify the composition of the ecological community such that its local occurrence is likely to be placed at risk of extinction.

- i). The proposed action is unlikely to place the local occurrence of Shale Sandstone Transition Forest (SSTF) at risk of extinction as the Riparian vegetation which is mapped as SSTF will be retained, extending the area from the adjoining area to the North (396 Bells Line of Road).
- ii). The composition of the ecological community onsite will only be modified in that some trees to the East of the retained Riparian vegetation that will be retained may be removed. It is unlikely that this modification will place the local occurrence of the critically endangered ecological community at risk of extinction.

Part d)

In relation to the habitat of a threatened species, population or ecological community:

(i) the extent to which habitat is likely to be removed or modified as a result of the action proposed, and

(ii) whether an area of habitat is likely to become fragmented or isolated from other areas of habitat as a result of the proposed action, and

(iii) the importance of the habitat to be removed, modified, fragmented or isolated to the long-term survival of the species, population or ecological community in the locality.

- i). The extent to which the habitat for this ecological community is to be removed is unknown, the area along the watercourse will be retained and is connected to the area that has been retained to the North (396 Bells Line of Road).
- ii). The area that is mapped on site is joined to the area to the North (396 Bells Line of Road) and will be retained along the watercourse and thus will not fragment or isolate this area from other areas to a greater extent.
- iii). The habitat to be removed is not of great importance to the long term survival of the endangered ecological community as an area of this vegetation community will be retained along the watercourse.

Part e)

Whether the action proposed is likely to have an adverse effect on critical habitat (either directly or indirectly).

The action proposed will not adversely affect critical habitat.

Part f)

Whether the action proposed is consistent with the objectives or actions of a recovery plan or threat abatement plan.

The Office of Environment and Heritage (OEH) is developing a targeted strategy for Shale Sandstone Transition Forest under the Saving Our Species program; which aims to maximise the extent and condition of Ecological Communities in the state. In the interim, 26 management actions have been identified for this community.

These management actions have been reviewed and it is considered that the action proposed is consistent with the objectives and associated actions of the 26 management actions.

Part g)

Whether the action proposed constitutes or is part of a key threatening process or is likely to result in the operation of, or increase the impact of, a key threatening process.

The action proposed may marginally increase the impact of the key threatening process Clearing of native vegetation as some trees will be removed, and could potentially result in the Invasion of native vegetation by exotic perennial grasses, and the loss and degradation of native plant and animal habitat by invasion of escaped garden plants, including aquatic plants.

The disturbances within the subject site may result in adjacent areas of retained native vegetation becoming susceptible to invasion by exotic perennial grasses. However, if sterile cover crops are sown to stabilise exposed surfaces if necessary, and native grasses or non-invasive exotic grasses sown to provide the final vegetative cover in these areas, rather than invasive exotic perennial grass species (such as those listed in the Final Determination of the NSW Scientific Committee for this key threatening process - Appendix B) then the action proposed is not expected to substantially increase the impact of this key threatening process.

Some hollow bearing trees (3) may be removed for the proposal, and as such there will be an increase in the impact of the key threatening process Loss of Hollow-bearing Trees. The installation of double the number of hollows along the retained watercourse will aid in alleviating this KTP.

Fauna

An assessment of the effects of the proposal on threatened species, populations and ecological communities likely to occur in habitats similar to those available in the study area, may be carried out by applying the seven factors from Section 5A of the amended *NSW Environmental Planning And Assessment Act 1979* in accordance with gazetted assessment guidelines to each identified threatened species, population and ecological community.

This assessment of significance is presented below for the following threatened species:

- Eastern Freetail Bat - *Mormopterus norfolkensis*
- Eastern False Pipistrelle - *Falsistrellus tasmaniensis*
- Eastern Bentwing-bat - *Miniopterus schreibersii oceanensis*
- Southern Myotis - *Myotis macropus*
- Greater Broad-nosed Bat *Scoteanax rueppellii*

Part a)

In the case of a threatened species, whether the action proposed is likely to have an adverse effect on the life cycle of the species such that a viable local population of the species is likely to be placed at risk of extinction.

For the purposes of this assessment, these microbats are assessed collectively as their broad habitat requirements are similar. Each of these species forages for insects within or around forested environments and each are dependent on tree hollows or other similar cavities (such as caves) for roosting and breeding. The study area provides an area of suitable foraging habitat for these species and the hollow-bearing trees could offer potential roosting habitat for individuals. No caves were found in the study area, the trees with hollows were up to 15 metres in height. Three within the Riparian complex and three to the East of this area (Figure 5)

No evidence of roosting activity was found via the nocturnal survey.

These species are expected to utilise a very large home range, as they are highly mobile. An area of suitable foraging resources occurs on site and within the surrounding landscape.

The retaining of any hollow bearing trees, and the placement of bat boxes will ensure these resources remain available to dependent species, and any species utilising hollows in the study area for shelter or breeding are likely to continue to do so.

Under these circumstances, the action proposed is unlikely to effect the life cycle of these species such that a viable local population of these species is likely to be placed at risk of extinction.

Part b)

In the case of an endangered population, whether the life cycle of the species that constitutes the endangered population is likely to be disrupted such that the viability of the population is likely to be significantly compromised.

None of the species considered in this assessment of significance are species, which constitute an endangered population.

Part c)

In the case of an endangered ecological community, whether the action proposed:

(i) is likely to have an adverse effect on the extent of the ecological community such that its local occurrence is likely to be placed at risk of extinction, or

(ii) is likely to substantially and adversely modify the composition of the ecological community such that its local occurrence is likely to be placed at risk of extinction,

Not applicable - This test is not for an Endangered Ecological Community.

Part d)

In relation to the habitat of a threatened species, population or ecological community:

(i) the extent to which habitat is likely to be removed or modified as a result of the action proposed, and

(ii) whether an area of habitat is likely to become fragmented or isolated from other areas of habitat as a result of the proposed action, and

(iii) the importance of the habitat to be removed, modified, fragmented or isolated to the long-term survival of the species, population or ecological community in the locality.

i. Effects on Extent of Habitat

Threatened Species

The Riparian complex vegetation to be conserved contains many fauna habitat resources (Hollows, Shelter, Foraging) within this area; and will be connected to a similar area to the North (see figure).

Endangered Populations

No endangered populations occur in the study area.

Endangered Ecological Communities

This test is for threatened species.

ii. Effects on Habitat Connectivity

Threatened Species

The action proposed will not fragment or isolate any areas of habitat for sedentary or wide-ranging species. The proposal will not restrict access to any resources or areas of habitat for these species. The vegetation in the study area will remain well connected to other areas of similar habitat to the North and South of the site.

Endangered Populations

No endangered populations occur in the study area.

Endangered Ecological Communities

This test is for threatened species.

iii. Importance of Habitat to be affected

Threatened Species

The action proposed is unlikely to affect the long-term survival of these species in the locality, as a vast majority of the subject site Ecological Community is to be conserved along the watercourse.

Endangered Populations

No endangered populations occur in the study area.

Endangered Ecological Communities

This test is for a threatened species.

Part e)

Whether the action proposed is likely to have an adverse effect on critical habitat (either directly or indirectly).

The action proposed will not adversely affect critical habitat.

Part f)

Whether the action proposed is consistent with the objectives or actions of a recovery plan or threat abatement plan.

Eastern Free-tail Bat

The Office of Environment and Heritage has developed a recovery strategy for this species under the Saving Our Species program; it has been assigned to the Data Deficient species management stream. This stream has assigned 18 state-wide management actions; and one research action, which can inform effective management of this species.

Eastern False Pipistrelle

The Office of Environment and Heritage has developed a recovery strategy for this species under the Saving Our Species program; it has been assigned to the Landscape species management stream. This stream has assigned 4 management actions; to ensure that the species is secure in the wild in NSW and that its NSW geographic range is extended or maintained.

Eastern Bent-wing Bat

The Office of Environment and Heritage has developed a recovery strategy for this species under the Saving Our Species program; it has been assigned to the Landscape species management stream. This stream has assigned 25 management actions; to ensure that the species is secure in the wild in NSW and that its NSW geographic range is extended or maintained.

Southern Myotis

The Office of Environment and Heritage has developed a recovery strategy for this species under the Saving Our Species program; it has been assigned to the Landscape species management stream. This stream has assigned 13 management actions; to ensure that the species is secure in the wild in NSW and that its NSW geographic range is extended or maintained.

Greater Broad-nosed Bat

The Office of Environment and Heritage has developed a recovery strategy for this species under the Saving Our Species program; it has been assigned to the Landscape species management stream. This stream has assigned 10 management actions; to ensure that the species is secure in the wild in NSW and that its NSW geographic range is extended or maintained.

These management actions have been reviewed and it is considered that the action proposed is consistent with the objectives and associated actions of the management actions, and recovery plan.

Part g)

Whether the action proposed constitutes or is part of a key threatening process or is likely to result in the operation of, or increase the impact of, a key threatening process.

The action proposed may marginally increase the impact of the key threatening process Clearing of native vegetation, and could potentially result in the Invasion of native vegetation by exotic perennial grasses, and the loss and degradation of native plant and animal habitat by invasion of escaped garden plants, including aquatic plants

While the proposal involves the clearing of some native vegetation, the amount of disturbance involved is relatively minor and will not substantially contribute to this key threatening process, considering that the Riparian complex will be retained.

The disturbances to the native vegetation within the subject site may result in adjacent areas of retained native vegetation becoming susceptible to invasion by exotic perennial grasses. However, if sterile cover crops are sown to stabilise exposed surfaces if necessary, and native grasses or non-invasive exotic grasses sown to provide the final vegetative cover in these areas,

rather than invasive exotic perennial grass species (such as those listed in the Final Determination of the NSW Scientific Committee for this key threatening process - Appendix B) then the action proposed is not expected to substantially increase the impact of this key threatening process.

Three hollow bearing trees may be removed for the proposal, it is a recommendation to install bat boxes at the site along the Riparian complex, and as such there will not be an increase in the impact of the key threatening process Loss of Hollow-bearing Trees.

Seven-part Test Conclusion

The proposal is unlikely to have a significant effect on threatened species, populations or ecological communities or their habitats pursuant to Section 5A of the NSW Environmental Planning and Assessment Act.

A Species Impact Statement is not required for the proposal.

Appendix 4: EPBC Act Considerations

An assessment of the impact of the proposed development upon threatened species, populations, ecological communities, World Heritage values, and migratory species listed under the *Environment Protection and Biodiversity Conservation Act 1999* are listed below.

Impacts on threatened species and ecological communities

An action has, will have, or is likely to have a significant impact on a threatened species if it does, will, or is likely to:

- Lead to a long-term decrease in the size of a population
- Reduce the area of occupancy of the species
- Fragment an existing population into two or more populations
- Adversely affect habitat critical to the survival of a species
- Disrupt the breeding cycle of a population
- Modify, destroy, remove, isolate, or decrease the availability or quality of habitat to the extent that the species is likely to decline
- Result in invasive species that are harmful to a critically endangered or endangered species becoming established in the endangered or critically endangered species habitat; or
- Interfere with the recovery of the species

Critically endangered and endangered species

No critically endangered or endangered species were observed on the subject site, however potential habitat exists for the endangered species *Pimelea spicata*. This species was not detected in the study area however may potentially occur in the soil seedbank.

It is considered that the proposed development will not disrupt the lifecycle of this species such that any potentially viable local population would be placed at increased risk of extinction. The potential impacts of the proposed development is not likely to lead to significant exacerbation of those points listed above.

Vulnerable Species

No vulnerable species were recorded at the study site, however potential habitat exists for the vulnerable flora species *Zieria involucrata*. This species was not detected in the study area however may potentially occur in the soil seedbank.

It is considered that the proposed development will not disrupt the lifecycle of this species such that any potentially viable local population would be placed at increased risk of extinction. The

potential impacts of the proposed development is not likely to lead to significant exacerbation of those points listed above.

Critically endangered and endangered ecological communities

An important population is one that is necessary for a species long-term survival and recovery. This may include populations that are:

- Key source populations either for breeding or dispersal
- Populations that are necessary for maintaining genetic diversity; and/or
- Populations that are near the limit of the species range.

The Critically Endangered Ecological Shale Sandstone Transition Forest was mapped on the site, and was in a degraded structure. It is unlikely that the proposed action will have a detrimental effect on the ecological community in the area due to the fact that the development will conserve an area of this community, which runs along the waterway through the site, and connects, with the area to the north.

Impacts on migratory species

An action has, will have, or is likely to have a significant impact on a migratory species if it does, will, or is likely to:

- Substantially modify (including by fragmenting, altering fire regimes, altering nutrient cycles or altering hydrological cycles), destroy or isolate an area of important habitat of the migratory species;
- Result in invasive species that are harmful to the migratory species, and prevent the species becoming established in an area of important habitat;
- Seriously disrupt the lifecycle (breeding, feeding, migration or nesting behaviour) of an ecologically significant proportion of the population of the species.

An area of important habitat is:

- Habitat utilised by a migratory species occasionally or periodically within a region that supports an ecologically significant portion of the population of the species
- Habitat utilised by a migratory species which is at the limit of the species range; or
- Habitat within an area where the species is declining.

One (1) migratory species (Cattle egret), has been recorded within a 10km radius of the site (Table 16). The proposed development will not significantly decrease habitat available for this species, or disrupt the lifecycle of this species such that viable populations are likely to be placed at risk of extinction. The proposed development is therefore not likely to have a significant impact on these species and is not likely to result in any points listed above under the migratory species provisions of the EPBC Act.

EPBC Act Assessment

- The proposed action will not significantly impact on any of the 2 flora and 6 fauna species listed under the EPBC Act and recorded within a 10 km radius of the site (Tables 13 and 15).
- The proposed action will not significantly impact on the Critically Endangered Community Shale Sandstone Transition Forest, which was mapped on site.
- The proposed action will not significantly impact on the 1 migratory species that is listed under the EPBC Act and recorded within a 10km radius of the site (Table 16).

Referral Recommendation

The proposed development will **not** require referral to the Commonwealth Minister for the Environment for consideration under the EPBC Act.

Appendix 5:
State Environmental Planning Policy 44
Koala Habitat Protection
SEPP 44

Background Details:

State Environmental Planning Policy 44 (SEPP 44) aims to encourage the proper conservation of areas of natural vegetation that provide habitat for koalas, to ensure a permanent free-living population over their present range, and reverse the current trend of koala habitat decline. The objectives of SEPP 44 are achieved by:

- Requiring the preparation of management plans before development consent can be granted in relation to areas of core koala habitat;
- Encouraging the identification of areas of core koala habitat; and
- Encouraging the inclusion of areas of core koala habitat in environment protection zones.

Core koala habitat means an area of land with a resident population of koalas, evidenced by attributes such as breeding females (that is, females with young) and recent sightings of, and historical records of, a population.

Potential koala habitat means areas of native vegetation where the trees of the types listed in Schedule 2 (feed tree species) constitute at least 15% of the total number of trees in the upper or lower strata of the tree component.

Koala Assessment:

The local government area of the Hawkesbury City Council is listed in Schedule 1 of the Local Government Areas to which SEPP 44 applies, and is recognised as containing potential koala habitat.

The site contains three species of known food trees, including one primary feed species (*Eucalyptus tereticornis*) and two secondary/supplementary food species (*Eucalyptus punctata* and *Eucalyptus eugenioides*). These species together comprise approximately 15% of the total number of trees in the upper or lower strata of the tree component.

During targeted koala surveys (which included call playback sessions, spotlighting, examining trees for scratch marks/koalas and searching under trees for scats within the immediate area and surrounds), no koalas and no evidence for the koala were recorded.

There have been 6 recorded Koala sightings within 10km Kurmond (See Figure 7), these include:-

1. SW – 1 km – 1956 – accuracy 1000
2. W – 1.5 km – 1934 – accuracy 100
3. WSW – 2 km – 2014 – accuracy 1000
4. W – 4 km – 2013 – accuracy 500
5. N – 4km – 2006 – accuracy 25
6. NNE – 5 km – 2002 – accuracy 20

The closest recent sighting (record 3) is 2km away to the West South West of the site in 2014, records 4, 5 and 6 are within 4 to 5 km away and were recorded between 3 to 14 years ago. Records 1 and 2 while being closer 1 to 1.5 km away, they were recorded 60 and 82 years ago.

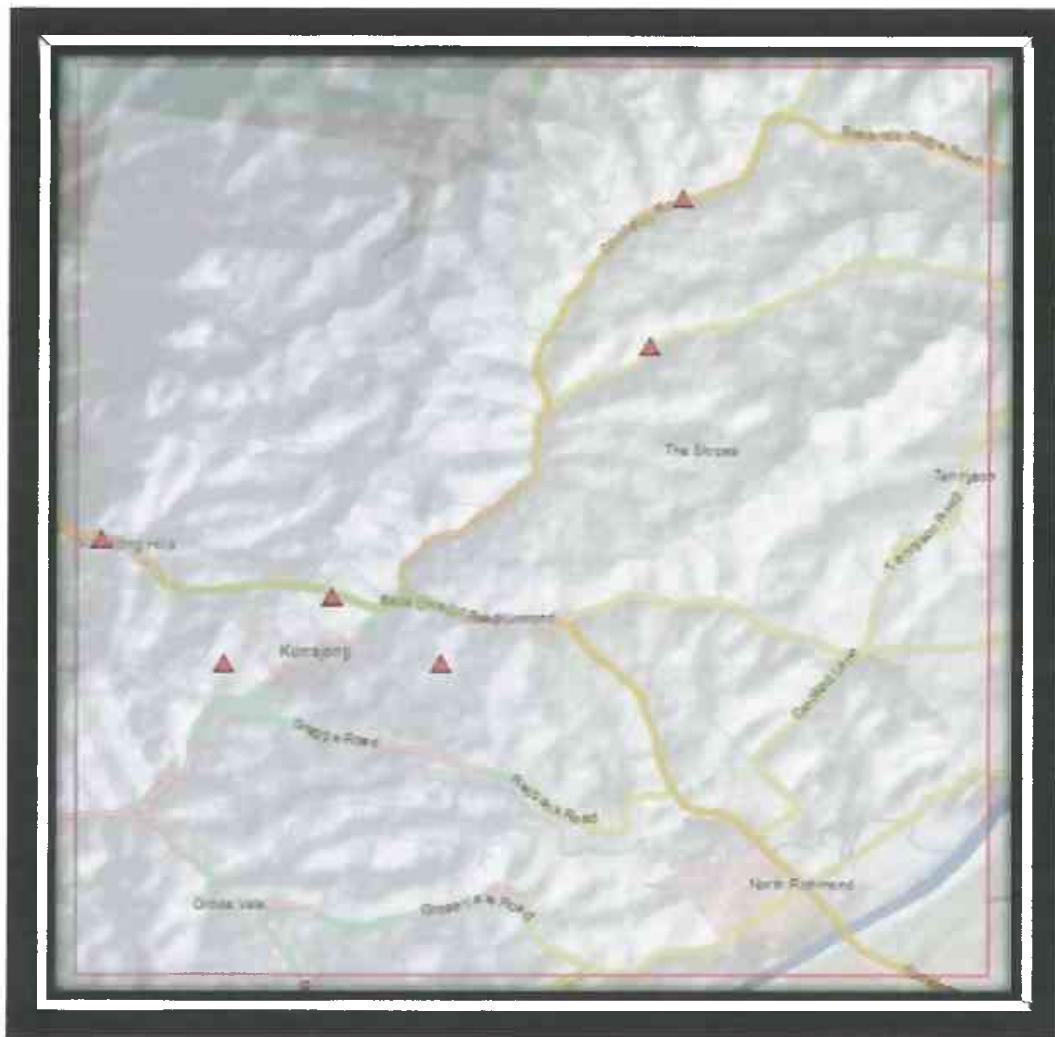


Figure 7: Koala records within 10 km of 2 Inverary Drive, Kurmond

Conclusion

The site contains approximately 15 % of preferred feed tree species, it does not have a breeding population, recent and historic records are within 1 to 2 km away; and there was no evidence of use of the site by koalas from surveys. The site is considered to be Potential koala habitat and not core koala habitat, thus a koala plan of management is not required.

**SYDNEY WESTERN CITY
PLANNING PANEL MEETING**

TUESDAY 27 FEBRUARY 2018

LGA – HAWKESBURY

**ATTACHMENT H
BUSHFIRE HAZARD
ASSESSMENT**

'BUSHFIRE HAZARD ASSESSMENT'

For:

2 Inverary Drive, KURMOND

CLIENT: Hardaker

REFERENCE: REF-143614-A



DATE: 11th August 2014

DISTRIBUTION & REVISION REGISTER

<u>DISTRIBUTION LIST</u>		
<u>Copy No.</u>	<u>Custodian</u>	<u>Location</u>
1 Original	Daniel Mathew	ENVIROTECH PTY. LTD (Filed)

Note: This register identifies the current custodians of controlled copies of the subject document.

<u>DOCUMENT HISTORY</u>		
<u>Document No.</u>	<u>Revision No.</u>	<u>Issue Date</u>
REP- 143614	A	11/08/14

<u>AUTHORS</u>	<u>TECHNICAL REVIEWERS</u>
	
<u>Simon Doberer</u> Environmental Scientist	<u>Jessica Wait</u> Ecologist/Environmental scientist

COPYRIGHT © 2013 ENVIROTECH PTY. LTD.

The report is protected by copyright law and may only be reproduced, in electronic or hard copy format, if it is copied and distributed in full with the prior written permission of EnviroTech Pty. Ltd

TABLE OF CONTENTS

1. INTRODUCTION	1
1.1 Legislative Background	1
1.2 Project Background.....	1
1.3 Objective	2
1.4 Scope of Report.....	2
2. BUSHFIRE HAZARD ASSESSMENT	4
2.1 Slope and Topography	4
2.2 Asset Protection Zones (APZ)	4
2.3 Fire Fighting.....	6
2.4 Level of Construction	7
2.5 Fire Service Response.....	8
3. CONCLUSION	8
4. RECOMMENDATIONS	9
4.1 Asset Protection Zones	9
4.2 Fire Fighting.....	9
4.3 Construction Method	9
4.4 Landscaping	9

Appendices: APZ locations and distances from nearest vegetation and building envelope for all lots.

1. INTRODUCTION

1.1 Legislative Background

The *Environmental Planning and Assessment Act* (1979) and the *Rural Fires Act* (1997) was amended via the *Rural Fires and Environmental Assessment Legislation Amendment Act* (2002) to:

- a) Require local government councils to record on maps, land identified by the Commissioner of the NSW Rural Fire Service as bushfire prone land;
- b) Prevent development consent being granted for the carrying out of development for certain purposes on bushfire prone land unless the consent authority is satisfied that the development conforms to certain documented bushfire protection specifications and requirements ('Planning for Bushfire Protection' (2006) and AS 3959 – Construction of Buildings in Bushfire Prone Areas) or has consulted with the Commissioner.

Planning for Bushfire Protection (2006) defines bushfire prone areas as an area that can support a bushfire or is likely to be subject to bushfire attack. In general, a bushfire prone area is an area containing a high, medium or low bushfire hazard, or any area within 100 m of a high or medium bushfire hazard, or within 30 m of a low bushfire hazard.

1.2 Project Background

EnviroTech Pty. Ltd. has been engaged by Mr Hardaker ('the Principal'), to prepare a Bush Fire Hazard Assessment Report for 2 Inverary Road, KURMOND. This report is to accompany a development application being submitted to Hawkesbury Council, for the intended subdivision for subject site (Appendix A). A locality plan is shown in **Figure 1** and **Figure 2**.

The Hawkesbury City Council Fire Prone Land Map indicates that the subject property is defined as containing *Category 1 vegetation*.

1.3 Objective

The purpose of this Bushfire Hazard Assessment Report is to provide the owners, the Rural Fire Service and the Hawkesbury City Council with an independent bushfire hazard determination. Within this report, necessary recommendations are given for construction and for bushfire mitigation measures, in accordance with the legislative requirements applicable to developing in 'bushfire prone' areas.

The recommendations contained within this report may assist in forming the basis of any specific construction conditions and/or bushfire mitigation measures that Council and/or the NSW Rural Fire Service may elect to place within any consent conditions issued for the subject Development Application.

1.4 Scope of Report

The scope of this report is limited to a Bush Fire Hazard Assessment on the site for the proposed development, containing recommendations for the subject property. Where reference is made to adjacent or adjoining lands, this report does not purport to assess those lands; rather it may discuss bush fire progression on and through those lands with the possible bush fire impact to the subject property. As required by legislation, the proposal must therefore be assessed in accordance with:

- *Planning for Bushfire Protection* (2006), (PBP) and,
- AS 3959 – *Construction of Buildings in Bushfire Prone Areas*.

2. BUSHFIRE HAZARD ASSESSMENT

A site inspection was conducted on the 21st of July 2014, for the purpose of assessing the intended development's bush fire risk and related matters.

Direct access to the site is currently via Bells Line of Road, to the South West of the site. There will be access via sealed roadways amongst the proposed subdivision. Each individual allotment will have sealed driveways provided for secondary use by fire trucks if ever needed.

The site itself includes undulating hills and is moderately cleared. The subject site is surrounded by rural allotments with bushland to the south.

2.1 Slope and Topography

The slope that would most significantly affect fire behaviour must be assessed for at least 100 metres from the building footprint. The slope within the bushfire hazard that would most significantly influence bushfire impact was determined to be:

- Downslope 0-5 degrees.
- Upslope/Flat

In accordance with PBP, the predominant vegetation class has been determined for a distance of at least 140m out from the proposed development.

The predominant vegetation within the bushfire hazard area was found to be Woodland (Figure 1).

2.2 Asset Protection Zones (APZ)

The primary purpose of an APZ is to ensure that a progressive reduction of bushfire fuels occurs between the bushfire hazard and any habitable structures.

In accordance with *Planning for Bushfire Protection* (2006), Woodland Vegetation, which is Upslope/Flat, requires a minimum protection zone of 10 metres.

The following addresses the requirements for an Asset Protection Zone (APZ) to be established for the proposed subdivision. The APZs are to be established from the building footprint.

As a major part of the woodland will be cleared for the construction stage of the subdivision it is Envirotech opinion that the woodland classification and the bushfire risk associated would be greatly minimised. There is however a number of allotments which still need to incorporate APZs as the property backs onto a potential fire hazard (Woodland).

If an allotment is to remain totally uncleared the below applies.

Table 1: Proposed Asset Protection Zones (Lot 407, 408, 423 and 424)

Direction	Vegetation	Slope	APZ (m)
North, East	Woodland	Upslope/Flat	16

Some vegetation removal is needed to achieve the desired APZs (Appendix).

2.3 Fire Fighting

2.3.1 Property Access/Egress, and evacuation

Property access roads from Bells Line of Road to the building, is to be based on the Performance criteria for 'Acceptable Solutions' (NSW RFS, 2006; Pgs. 35). This criteria enables safe access for emergency services, and allows fire crew to work with vehicle equipment without impediments. Specifically:

- The access roads to the development should be a two-wheel drive, sealed, all-weather road;
- A vertical clearance of four metres is to be established and maintained for all access roads;
- The access roads should not traverse a wetland or other land potentially subject to periodic inundation;
- The cross fall of the access road should not exceed 10 degrees.

To address this criteria, it is recommended that the access from Bells Line of Road and the proposed access roads are maintained to the requirements suggested. This will accommodate for firefighting trucks facilitating evacuation and controlling the spread of fire. So long as fire trucks are able to defend all aspects of the building through the incorporation of the APZ, a satisfactory level of property access/egress shall be provided.

2.3.2 Electricity Supply

Electricity supply is to be provided underground where possible.

2.3.3 Gas

Reticulated or bottled gas shall be installed and maintained in accordance with AS/NZS 1596-2002: *Storage and Handling of LP Gas* and the requirements of the relevant authorities. If gas cylinders are to be kept close to buildings, the release valve must be directed away from the building and away from any hazardous materials such as firewood, so that it does not act as a catalyst to combustion.

2.3.4 Water Supply

Being a rural-residential allotment, the subject development is to incorporate a minimum un-reticulated water supply, according to PBP Guidelines, of 10,000L. Development Control

Services (NSW Rural Fire Service), no longer require this water supply to be solely 'dedicated' for firefighting purposes, only that the supply be 'provided' when requested.

2.4 Level of Construction

Australian Standard 3959 (2009) *Construction of buildings in bushfire-prone* specifies construction standards for buildings within various Bushfire Attack Levels (BAL), as determined by the *Planning for Bushfire Protection* (2006) document.

Six (6) levels of building construction exist, these being:

- | | | |
|-------------|--------------|------------|
| - BAL - Low | - BAL - 12.5 | - BAL - 19 |
| - BAL - 29 | - BAL - 40 | - BAL - FZ |

Based upon an area that does not have a bushfire hazard but is within The Hawkesbury City Council Fire Prone Land Map the category of Bush Fire Attack Level (BAL) in this instance, is **BAL – 12.5** for all lots except the below.

Attack by burning debris is significant with radiant heat (not greater than 12.5 kW/m²). Radiant heat is unlikely to threaten building elements (eg unscreened glass). Specific construction requirements for ember protection and accumulation of debris are warranted.

If an allotment is to remain substantially uncleared the below applies.

Based upon an APZ area of >16 metres with an upslope/flat APZ area the category of Bush Fire Attack Level (BAL) in this instance, is **BAL – 29** for Lots 407, 408, 423 and 424.

Attack by burning debris is significant and radiant heat levels (not greater than 29 kW/m²) threaten building integrity. Specific construction requirements for ember and higher radiant heat are warranted. Some flame contact is possible.

2.5 Fire Service Response

The NSW Rural Fire Service is the combat agency for bushfires in the Kanahooka local area. The following is the closest station to the site.

Grose Wold Rural Fire Brigade

Grose Wold Road, GROSE WOLD NSW

3. CONCLUSION

The determination of any bushfire hazard must be made on a site-specific basis that includes an assessment of the local bushland area and its possible impact to the subject property.

It is intended for the subject site to become a residential development. The hazard was identified as woodland vegetation from the east and north to subject site.

Based upon an area that does not have a bushfire hazard but is within The Hawkesbury City Council Fire Prone Land Map the category of Bush Fire Attack Level (BAL) in this instance, is **BAL – 12.5 for all lots except the below**

Based upon an APZ area of >16 metres with an upslope/flat APZ area the category of Bush Fire Attack Level (BAL) in this instance, is **BAL – 29 for Lots 407, 408, 423 and 424.**

If an allotment is to remain substantially uncleared then a construction of **BAL-29** is recommended with a total surrounding APZ of 16m.

4. RECOMMENDATIONS

The following recommendations are provided as the minimum necessary for compliance with *Planning for Bushfire Protection* (2006) and AS3959. Additional recommendations are provided to supplement these minimum requirements where considered necessary.

4.1 Asset Protection Zones

- All APZs are maintained in accordance with Appendix 2 of *Planning for Bushfire Protection* (2006) and the RFS document *Standards for Asset Protection Zones*.

4.2 Fire Fighting

- Maintenance of landscaped vegetation is needed to ensure that access roads have a 4 metre trafficable width, and a 4 metre vertical clearance for the entire length;
- Any landscaped vegetation surrounding these roads are thinned and maintained to make the roads safe for use during evacuation; and
- It is recommended that all or part of the road is sealed.

4.3 Construction Method

The highest Bushfire Attack Level to the proposed development was determined to be **BAL-29**. Construction provisions listed in Section 7 of Australian Standard 3959 (2009) are deemed adequate for asset protection and occupant safety for Lots 407, 408, 423 and 424.

The lowest Bushfire Attack Level to the proposed development was determined to be **BAL-12.5**. Construction provisions listed in Section 5 of Australian Standard 3959 (2009) are deemed adequate for asset protection and occupant safety on all remaining allotments. So long as the recommendations contained within this report are followed, a reasonable and satisfactory level of bushfire protection shall be provided

4.4 Landscaping

- Do not use plants with high volatile oil content such as eucalyptus;
- Avoid the use of plants which support large proportions of dead leaves, dead twigs, dead bark or produce copious quantities of litter in the local fire season (e.g. pines, melaleucas, xanthorrhoea sp.);

- Use plants with a high moisture content such as succulents and native Australian rainforest species. Fire retardant introduced species include lavender and camellias;



