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Department of Planning, Industry and Environment, Green and Resilient Places Division  
Locked Bag 5022  
Parramatta NSW 2124

**Attention: Green & Resilient Places Division**

**RE: PLANNING SUBMISSION TO THE DRAFT CUMBERLAND PLAIN CONSERVATION PLAN,  
AS IT RELATES TO [REDACTED]**

To whom it may concern,

This planning submission has been prepared by Willowtree Planning Pty Ltd (Willowtree) on behalf of JBHL Agricultural Pty Ltd (the Landowner), in relation to the **draft Cumberland Plain Conservation Plan ('the Draft Plan')** which is currently on exhibition until 9 October 2020. As per correspondence received from the Green & Resilient Places Division of the Department of Planning, Industry and Environment (DPIE), an extension of time to provide a further considered submission was granted, until 14 October 2020.

This submission has focused on the impacts of the Plan on an approximate 300-hectare (ha) parcel of land located at [REDACTED] **Werombi (the Site)** legally referred to as Lot [REDACTED]

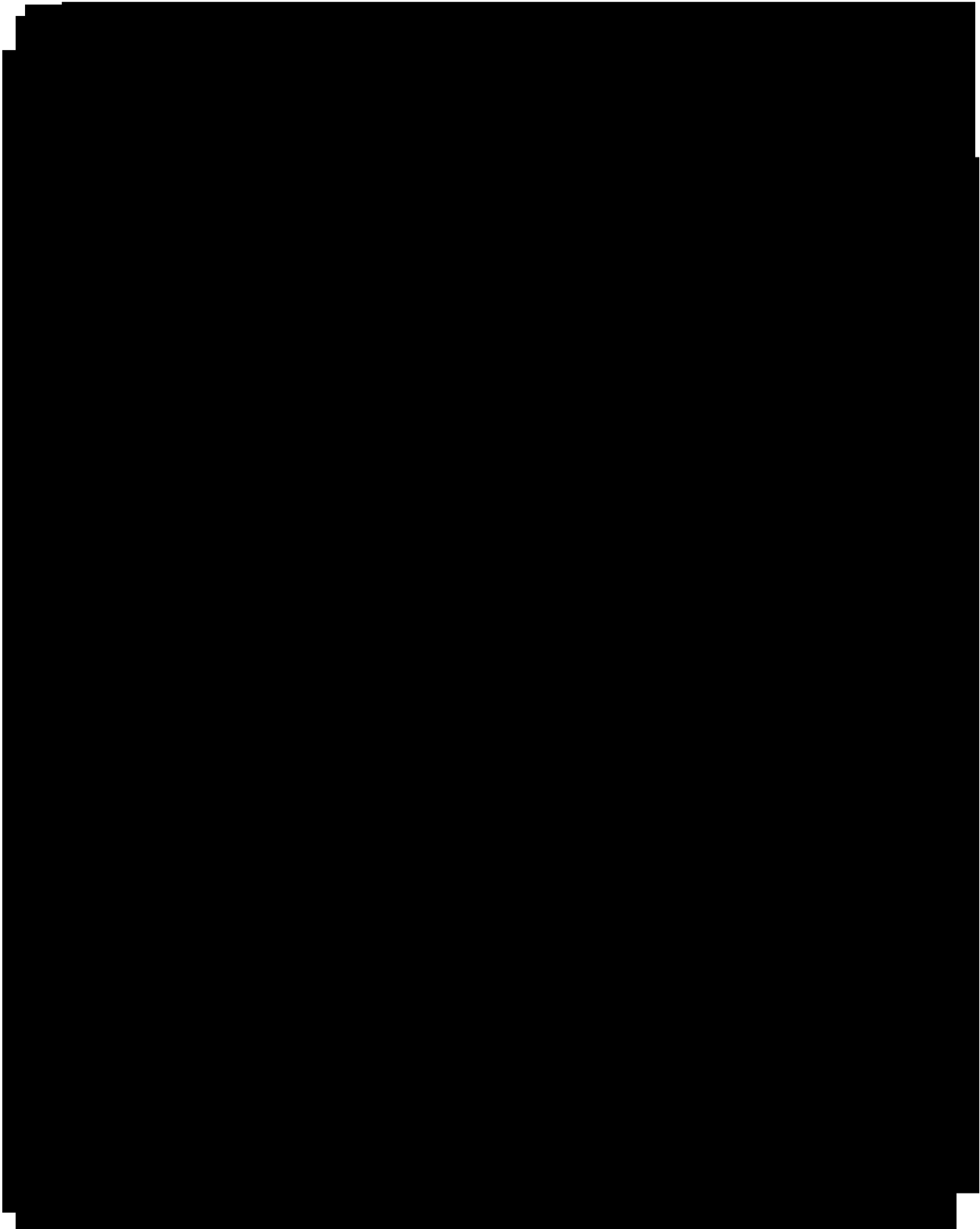
The Draft Plan seeks to contribute to the Western Parkland City by supporting the delivery of housing, jobs and infrastructure while protecting important biodiversity. The Plan identifies strategically important biodiversity areas to offset the biodiversity impacts of future urban development, while ensuring a vibrant and liveable city.

In relation to the Site specifically, the Draft Plan proposes to establish a '**strategic conservation area**' to the majority of the Site as illustrated in **Figure 1** below. The Site is currently zoned **RU2 Rural Landscape** pursuant to the Wollondilly Local Environmental Plan 2011 (**WLEP2011**) which encourages agricultural and other supporting uses and is currently subject to a minimum lot size of 40ha. Additionally, the WLEP 2011 Natural Resources – Biodiversity Map does not identify the Site or any part of the Site, as sensitive land.

There is adequate space on the Site for conservation areas to be provided elsewhere without sterilizing the majority of the Site. The main focus of this submission is to demonstrate which area of the land is of a lower biodiversity value and suitable for redevelopment and will also identify, the biodiversity sensitive areas within the Site which would reasonably preclude development from occurring.

This submission does not object to the Draft Plan in principle, but raises concerns with the application of the Draft Plan, as it relates to the Site, for the following reasons:

- There is adequate space on the Site for conservation areas to be provided elsewhere without sterilizing the whole Site



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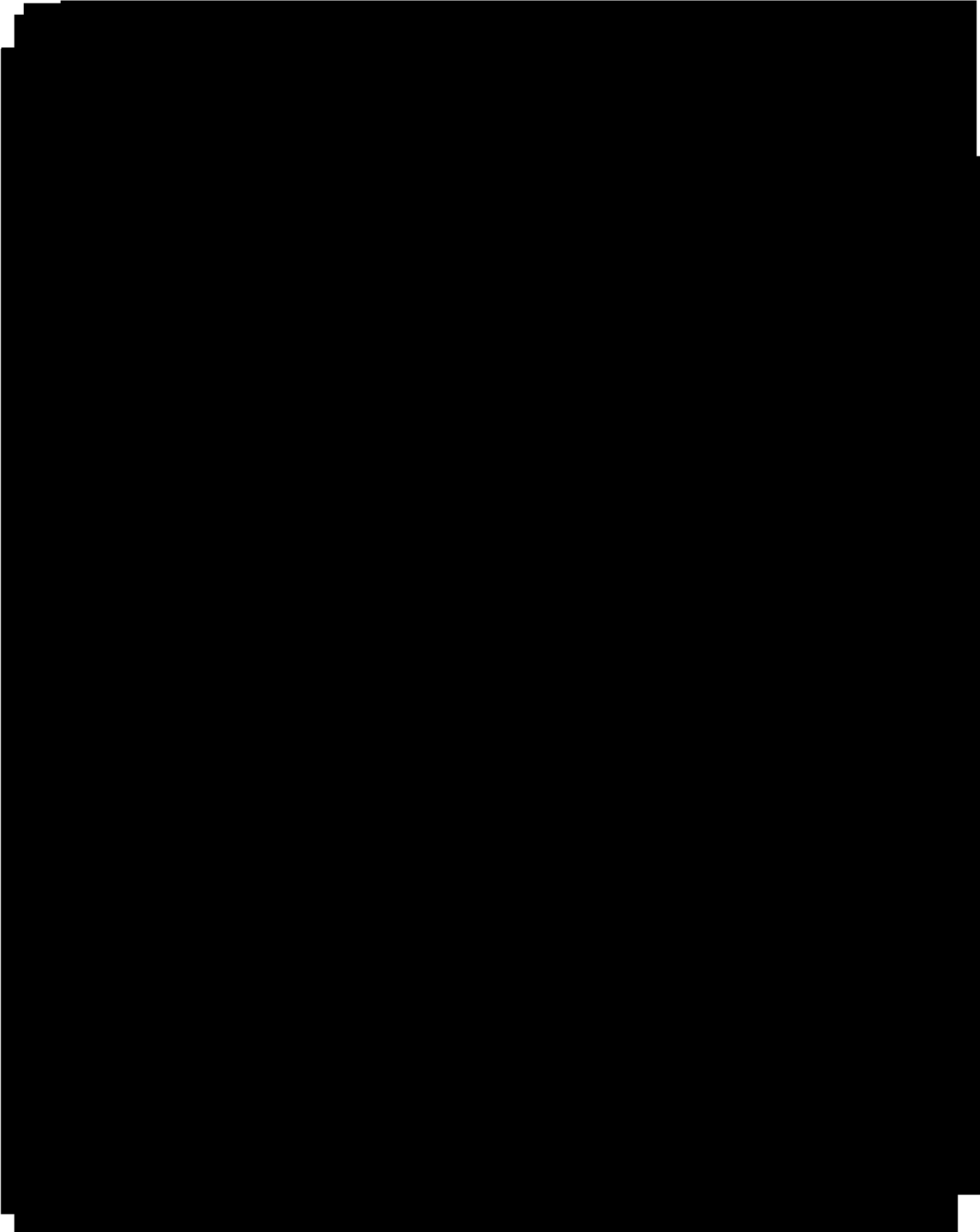
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**Planning Submission**

Draft Cumberland Plain Conservation Plan

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conservation value over this amount of the Site directly opposes the existing RU2 Rural Landscape zoning and existing development located on the Site.

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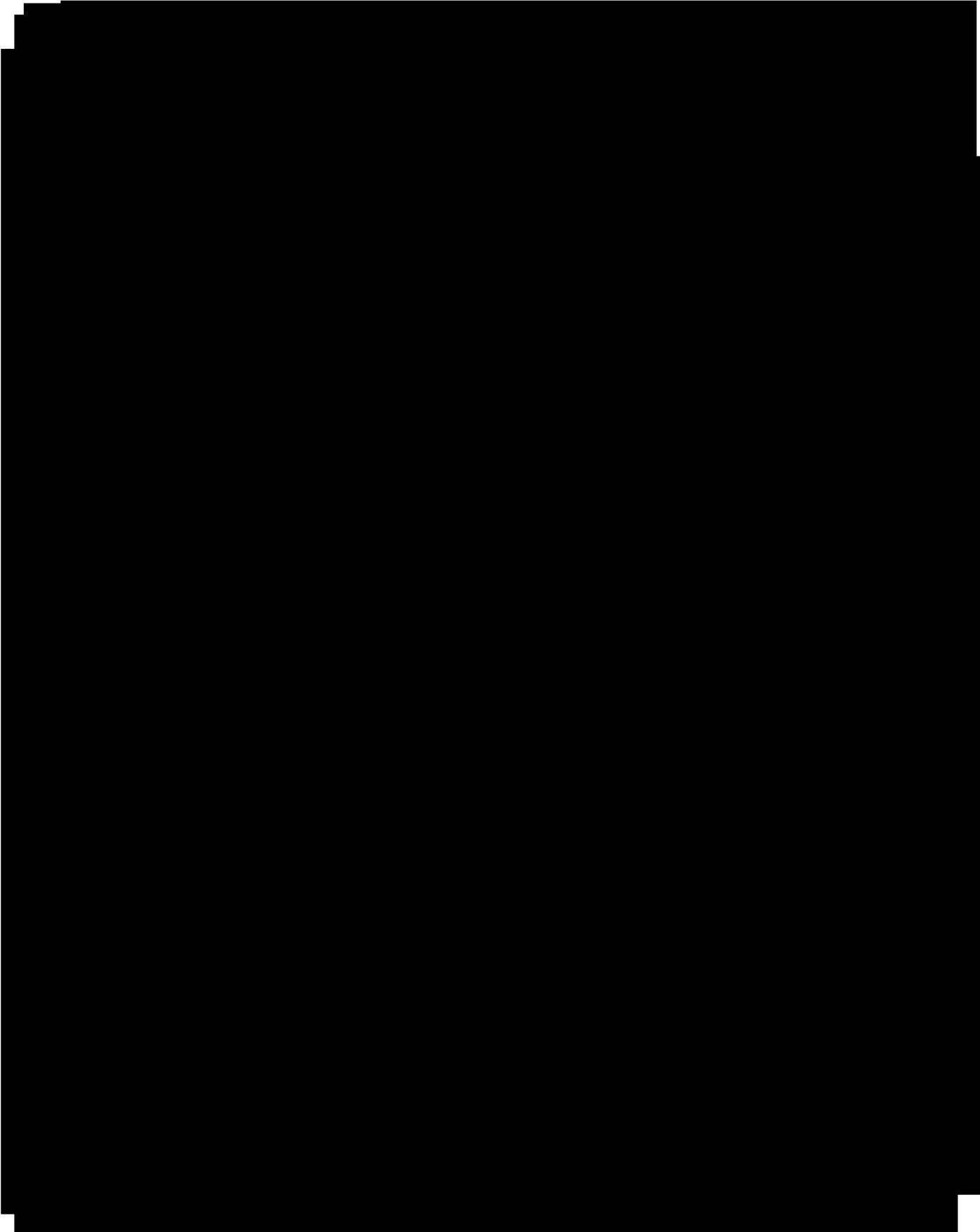
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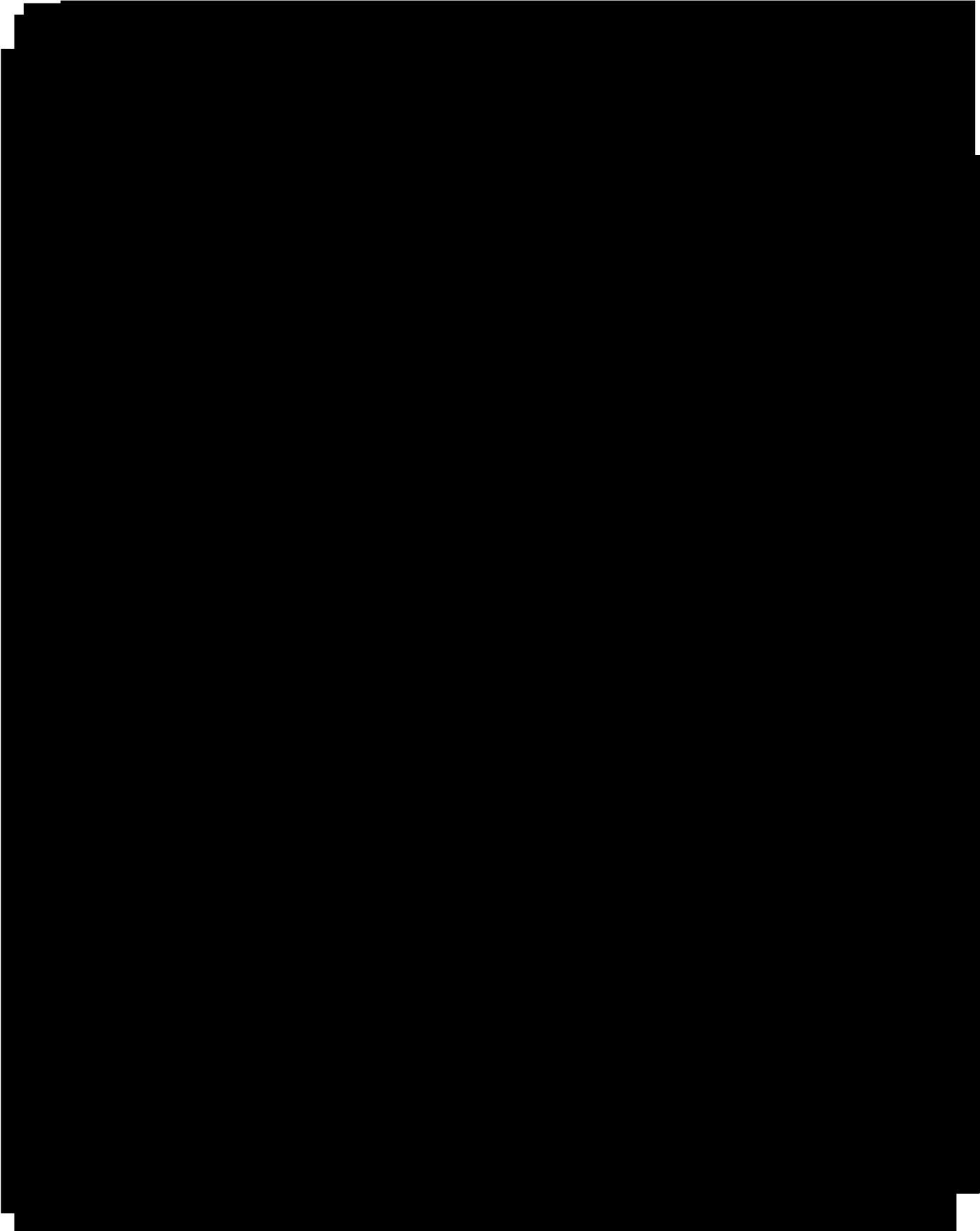
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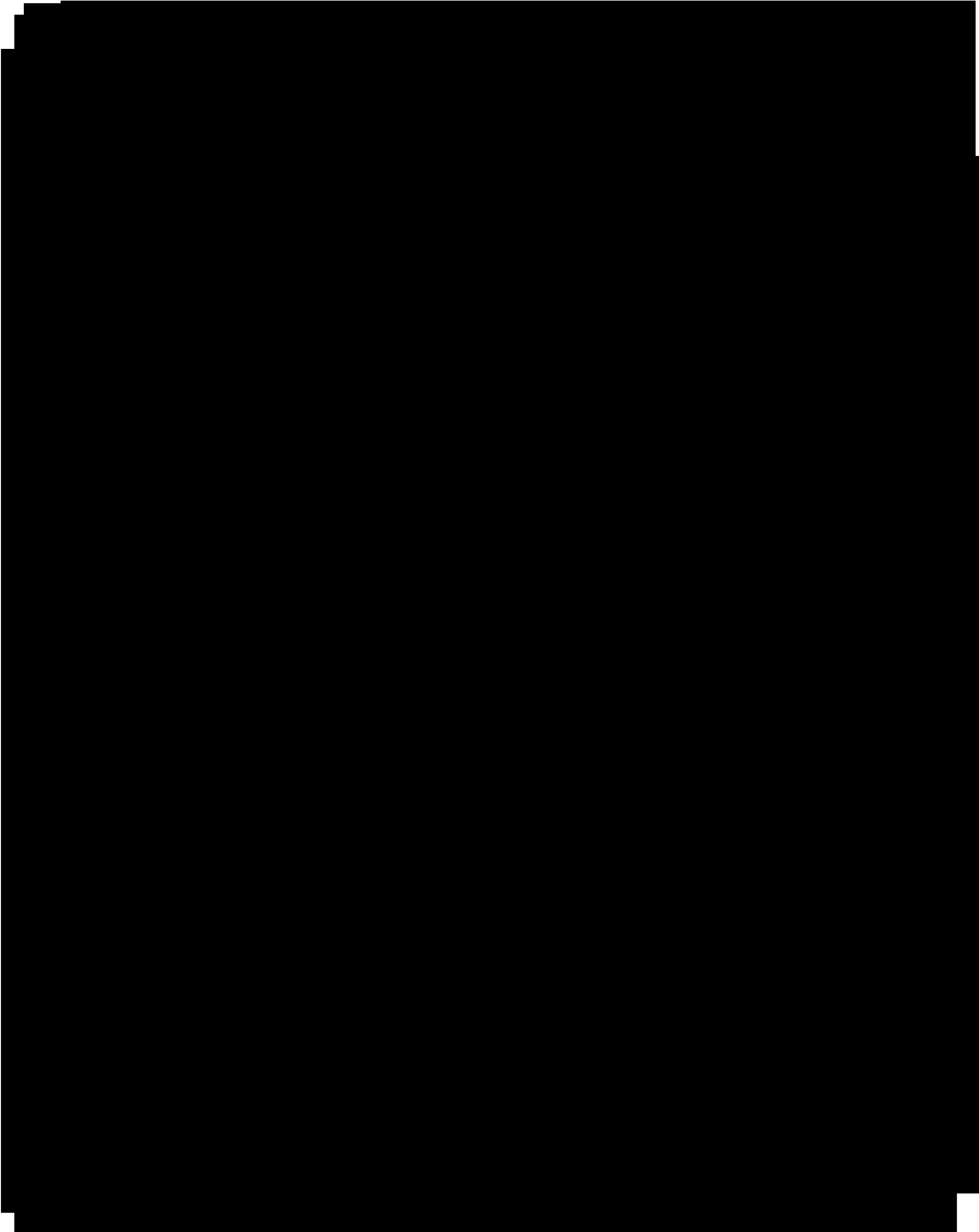
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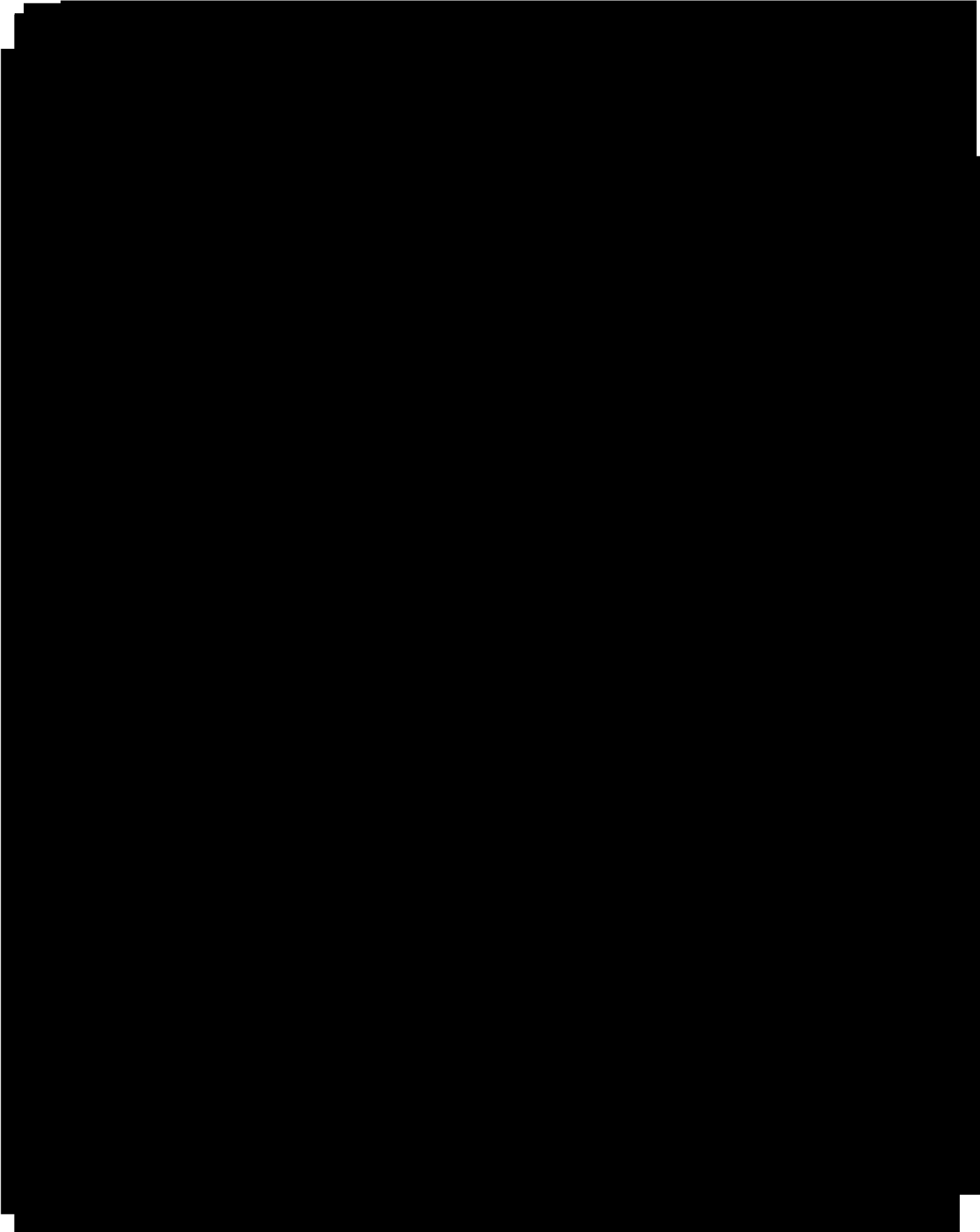
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9 October 2020

JBHL Agricultural Pty Ltd  
Governor Macquarie Tower  
Suite 4, Level 24, 1 Farrer Place  
SYDNEY NSW 2000



**Attention:** Mr B Lin

**Re:** [REDACTED] **Werombi Ecological Constraints Assessment**

*Travers bushfire & ecology* has been requested to prepare an ecological constraints assessment of the above site on behalf the land owner as a result of the Draft Cumberland Plain Conservation Plan (The Draft Plan). The reason is that the mapped biodiversity zones and corridors are intended as a precursor for biodiversity certification but also to guide the eventual rezoning of the land with E2 Environmental Conservation which can affect the land value and opportunities for its use into the future. In the case of this site it is proposed under the Draft Cumberland Plain Conservation Plan that the land in its most part be established as a strategic conservation area.

Whilst the land owner has been advised that appropriate investigations have been undertaken to substantiate the strategic conservation area, this appears to be completely at odds with the current nature of the site and results in a significant restriction on future land use. The imposition of the strategic conservation area is a major call that has significant impact on the land, its future use and its land value.

Consequently, the ecological constraints assessment is to confirm the conservation value of the ecological features on site, identifies the true ecological value and to recommend appropriate environmental zoning that matches with the sites high, medium and low conservation value lands.

A comparison will be drawn against the mapping of The Draft Cumberland Plain Conservation Plan and whether it represents a true an accurate representation of the site's constraints.

The key information that needs to be presented is confirmation of the vegetation communities present using the Biodiversity Assessment Methodology (BAM) and brief check for habitat types and quality. The assessment was undertaken onsite by Dr George Plunkett (Botanist) *B.Sc. (Hons), PhD - Accredited BAM Assessor no. BAAS19010* and assisted by Senior Botanist - Mr Robert Sansom with over 20 years of experience.

### **Purpose of this report**

*Travers bushfire & ecology* consider that the following four (4) elements need to be considered for the purposes of recommending areas for conservation and protection as part of any biodiversity certification process or future zoning that may be imposed as a result of the Draft Cumberland Plain Conservation Plan:

- Are there any endangered ecological communities within the site?
- Does the land contain threatened species or associated habitat of high ecological value?
- Does the site contain any watercourses and associated riparian lands form part of connectivity between remnants?
- Does the site have any corridor of connectivity function of high value to retain?

The ecological constraints advice will directly answer the above questions and recommend land to be protected of high conservation value, moderate value zones that would normally be allowed to contain some form of development but in a more sensitive manner and land of low conservation value which subject to habitat connectivity can be used for a range of future options. Land that is cleared is clearly land that is capable of being certified from an ecological perspective subject to the need for any connective ecological corridors that may be provided in the form of terrestrial or riparian links.

There are three (3) attached A3 figures to this report:

- Attachment 1 – Vegetation Communities
- Attachment 2 – Site Conservation Values
- Attachment 3 – Recommended Strategic Conservation Zones.

Attachment 1 shows the modified OEH 2013 vegetation mapping which is the basis of preliminary site assessments of vegetation and habitat.

Attachment 2 shows the native vegetation confirmed by BAM assessment methodology and how it's been split into high, moderate and low conservation value.

Attachment 3 shows the Draft Cumberland Plain Conservation Plan mapped strategic area with our mapped PCTs and their associated conservation value.

## 2.0 Site details and features

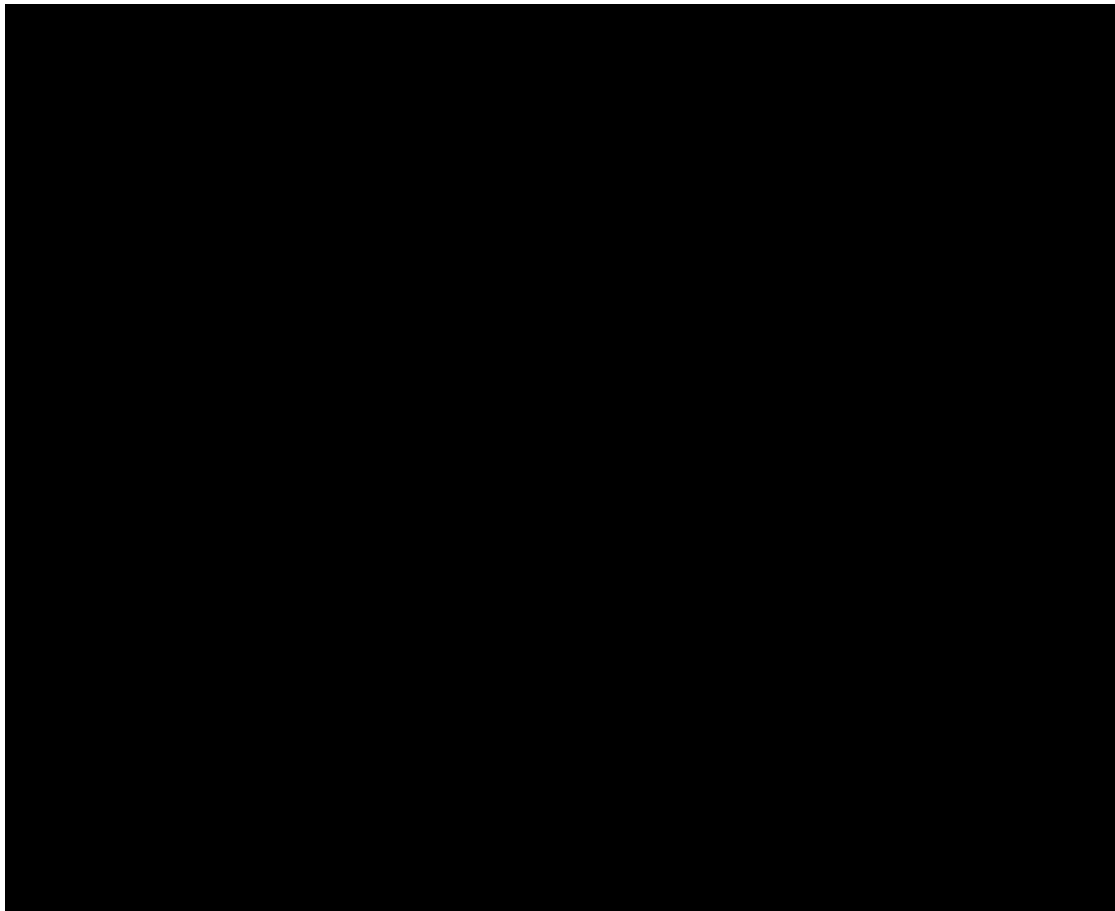
The site is made up of a number of land parcels as shown on Figure 1. Site features are tabulated in Table 1.

**Table 1 – Site features**

<b>Location</b>	██████████ Werombi
<b>Location description</b>	Located north of Werombi Road and east of Silverdale Road. Approximately 23km north-west of Campbelltown and 25km south south-west of Penrith
<b>Area</b>	Approximately 300 ha
<b>Local government area</b>	Wollondilly
<b>Zoning</b>	RU2 – Rural Landscape
<b>Grid reference MGA-56</b>	270500E 6239300N
<b>Elevation</b>	Approximately 130-220 AHD
<b>Topography</b>	Gentle slopes around plateaus and moderate-steep gully areas following creek lines
<b>Catchment and drainage</b>	Forest Hill Creek and its tributaries which lead to the Nepean River
<b>Existing land use</b>	Rural



**Figure 1 – Study area (approximately 3km<sup>2</sup>)**

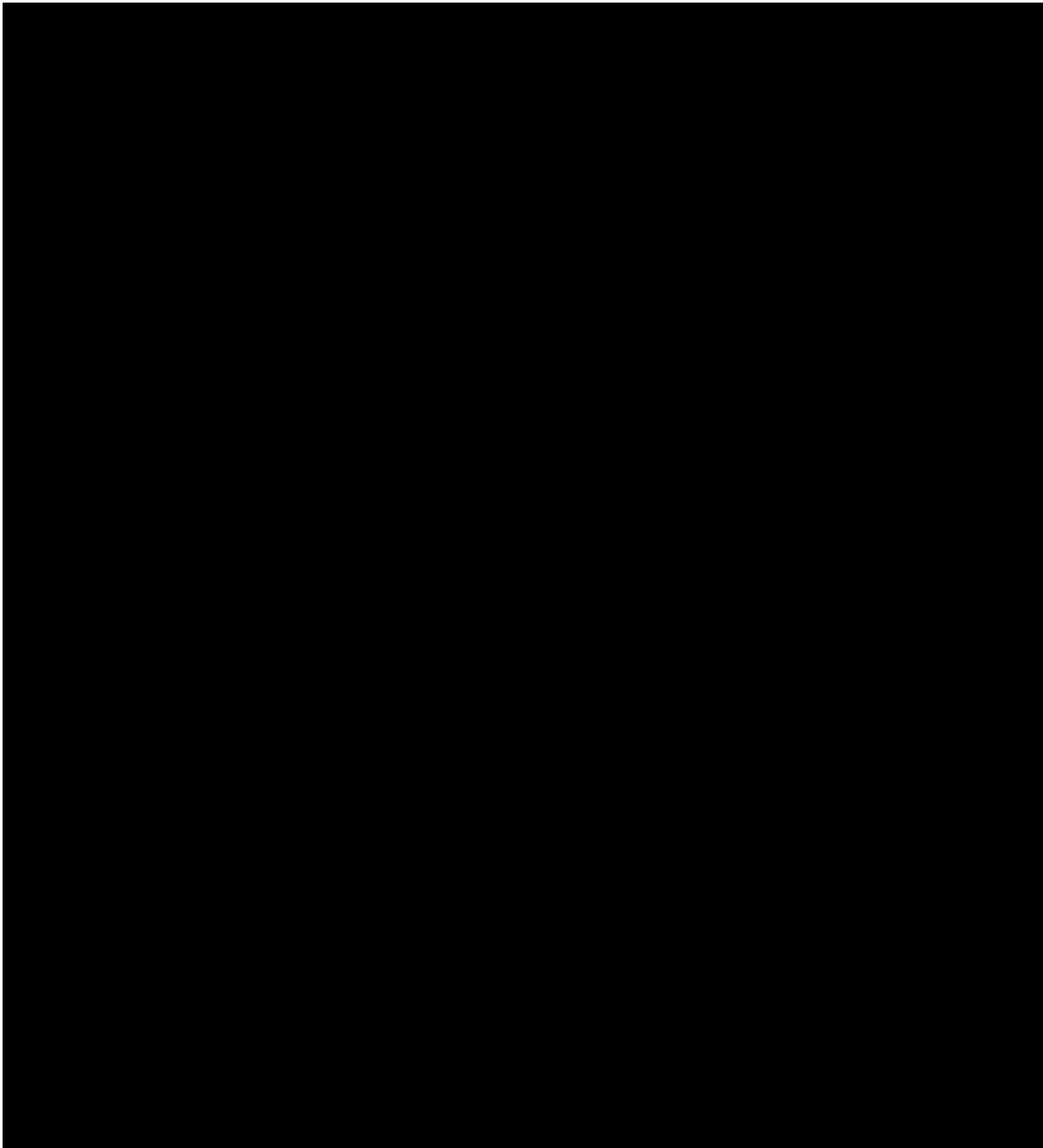


**Figure 2 – Existing land zoning**

Currently, the land is zoned as RU2 – Rural landscape. This is a rural zone that encourages agriculture and other supporting uses. This zoning allows for large lots with a minimum lot size is 40 ha.



The land owners intend to seek future subdivision of these lands under an appropriate rezoning (Figure 3). The smaller lots are proposed in areas where there has been substantive clearance of native vegetation. Medium sized lots are proposed for areas where there is some native vegetation or connected corridors that allow for a building envelope in the cleared or disturbed parts of the lots. The large lots are proposed in areas of relatively intact vegetation where there is a small area of previous disturbance that may be utilised for a future building envelope.



**Figure 3 – Concept subdivision**

This concept has merit for the site based on the observed vegetation communities and has considered the use of large lots as a means of retaining vegetated connected landscape. This is a likely outcome for the site subject to a future rezoning proposal.

Modifications to this layout may be warranted to conserve habitat connectivity for the currently recorded threatened fauna species and to conserve threatened flora habitat. A desktop assessment was undertaken prior to the investigation of the site's ecological constraints occurred on 6 October 2020. This site investigation included the placement of BAM plots at selected locations to assist in the determination of plant community types (PCTs) across the site. These plots assisted in confirming the PCT and conservation value of mapped vegetation

communities across the site by OEH in 2013 as part of the Cumberland Plain West vegetation mapping exercise.

The Draft Plan mapping, LIDAR data, existing vegetation mapping, Bionet databases and local knowledge from nearby site investigations have been utilised in the preparation of our report.

### 3.0 Vegetation

The existing vegetation mapping on the Cumberland Plain West (OEH 2013) has been utilised to define the vegetation communities across the site, and manipulated in selected location where it is apparently incorrect or absent based on our site investigation.

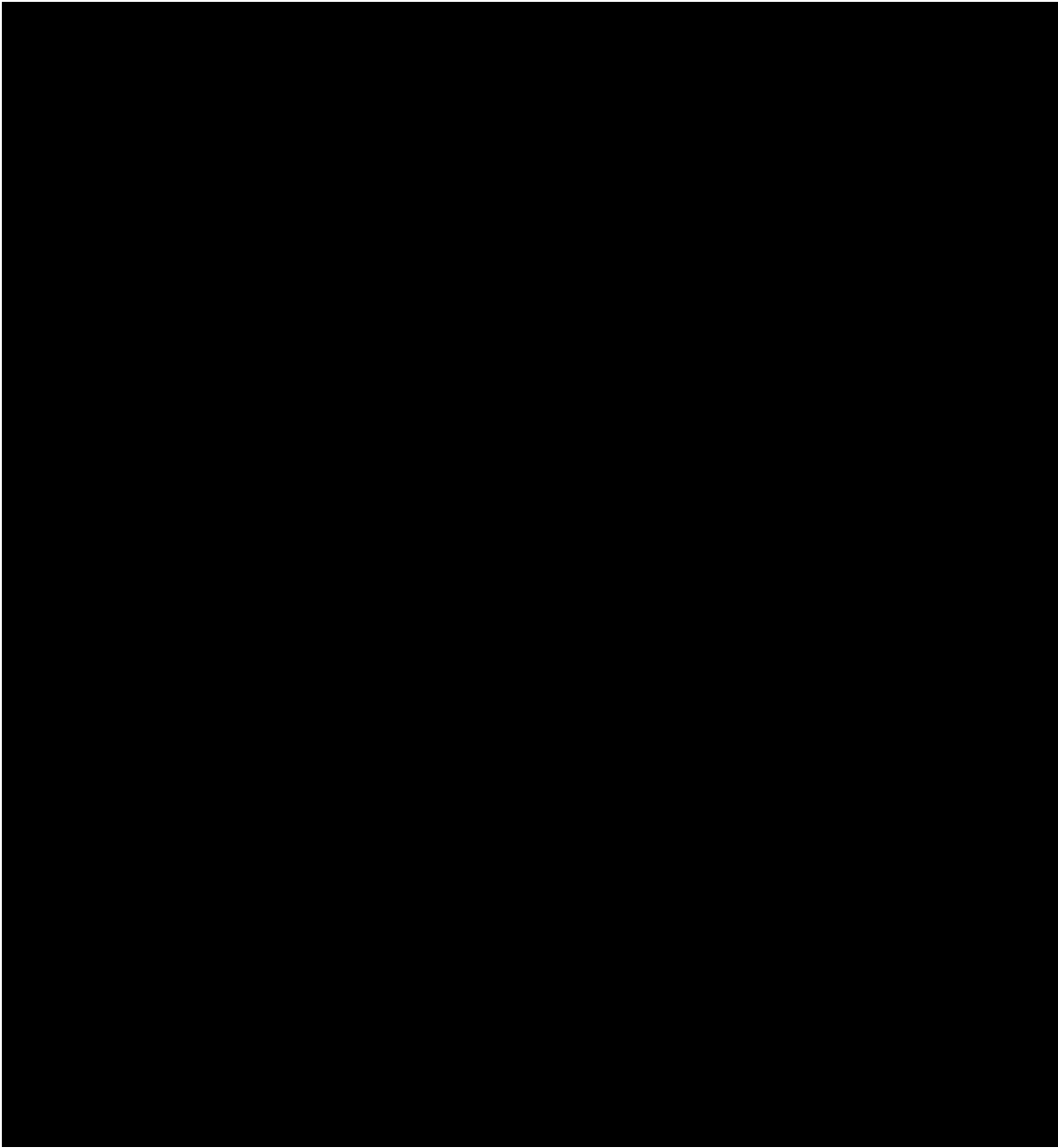
Figure 4 shows the mapping by OEH 2013 and the corresponding Plant Community Types (PCT) numbers. The corresponding name and conservation status as listed under the *BC Act* are shown in Table 2.

PCTs observed across the site include the following in Table 2 which have been verified through a field survey.

**Table 2 – Vegetation communities on site**

<b>PCT</b>	<b>Name</b>	<b>BC Act status</b>	<b>Location on site</b>
1081	Red Bloodwood - Grey Gum woodland on the edges of the Cumberland Plain, Sydney Basin Bioregion	Not listed	Gully edges (uncommon)
1181	Smooth-barked Apple - Red Bloodwood - Sydney Peppermint heathy open forest on slopes of dry sandstone gullies of western and southern Sydney, Sydney Basin Bioregion	Not listed	Creek line gullies
1395	Cumberland shale - sandstone Ironbark forest	Critically endangered - Shale Sandstone Transition Forest in the Sydney Basin Bioregion	Plateau areas from edge of creek line gullies

Attachment 1 shows the PCTs across the site which have been manipulated from the OEH mapping on Figure 4.



**Figure 4 – OEH 2013 vegetation mapping with corresponding Plant Community Type numbers**

**PCT 1081 Red Bloodwood - Grey Gum woodland on the edges of the Cumberland Plain, Sydney Basin Bioregion**

Occurs in very small areas around the periphery of the site and just beyond usually around the edges of gullies leading onto the plateau, over sandstone geology. This is a common vegetation community occurring on sandstone ridges and plateaus around the edge of the Cumberland Plain. The community is not listed as an endangered ecological community on the schedules of the *BC Act*.

Canopy – *Eucalyptus pilularis*, *Syncarpia glomulifera*, *Corymbia gummifera*.

Mid-storey – *Kunzea ambigua*, *Leucopogon juniperinus*, *Pimelea linifolia*, *Leptospermum trinervium*.

Ground layer – *Pomax umbellata*, *Wahlenbergia gracilis*, *Glycine clandestine*, *Solanum prinophyllum*, *Dichondra repens*, *Cheilanthes sieberi*, *Lobelia purpurascens*, *Entolasia stricta*.

**PCT 1181 - Smooth-barked Apple - Red Bloodwood - Sydney Peppermint heathy open forest on slopes of dry sandstone gullies of western and southern Sydney, Sydney Basin Bioregion**

Occurs in gully areas on low and mid-slopes, extending to the edge of the plateau along creek lines. A common community around the edges of the Cumberland Plain on sandstone geology. The community is not listed as an endangered ecological community on the schedules of the *BC Act*.

Canopy – *Corymbia maculata*, *Eucalyptus pilularis*, *Allocasuarina torulosa*, *Syncarpia glomulifera*, *Angophora costata*, *Corymbia gummifera*.

Mid-storey – *Glochidion ferdinandi*, *Myrsine variabilis*, *Leucopogon juniperinus*, *Kunzea ambigua*, *Sannantha pluriflora*, *Acacia falciformis*, *Ceratopetalum apetalum*, *Xylomelum pyriforme*, *Leucopogon muticus*, *Persoonia linearis*, *Leptospermum trinervium*, *Persoonia levis*.

Ground layer – *Lomandra longifolia*, *Entolasia stricta*, *Lepidosperma laterale*, *Microlaena stipoides*, *Omplismenus imbecillis*, *Lomandra filiformis*, *Anisopogon avenaceus*, *Schoenus melanostachys*.

### **PCT 1395 Cumberland shale sandstone Ironbark forest – CEEC Shale Sandstone Transition Forest**

A common community where shale and sandstone geology meet on the edge of the Cumberland Plain. Land is highly sought for urban expansion and its extent has been reduced greatly. The community is listed as **Shale Sandstone Transition Forest** and is critically endangered under the *BC Act*, and unless heavily degraded, would be classed as critically endangered under the *EPBC Act*. The *EPBC Act* may also have other conditional thresholds to assess.

Canopy – *Corymbia maculata*, *Eucalyptus pilularis*, *Corymbia maculata*, *Eucalyptus punctata*, *Eucalyptus sparsifolia*, *Eucalyptus crebra*, *Eucalyptus fibrosa*, *Allocasuarina littoralis*.

Mid-storey – *Persoonia linearis*, *Acacia floribunda*, *Ozothamnus diosmifolius*, *Leucopogon juniperinus*, *Elaeocarpus reticulatus*, *Acrotriche divaricata*, *Pimilea linifolia*, *Bursaria spinosa*.

Ground layer – *Lobelia purpurascens*, *Xanthorrhoea media*, *Lomandra longifolia*, *Lepidosperma laterale*, *Pomax umbellata*, *Microlaena stipoides*, *Dichondra repens*, *Cheilanthes sieberi*, *Solanum prinophyllum*, *Entolasia marginata*, *Imperata cylindrica*, *Echinopogon caespitosus*, *Entolasia stricta*, *Aristida vagans*, *Lomandra multiflora*, *Hibbertia aspera*, *Centella asiatica*.

**Table 3 – Approximate vegetation extent on site**

<b>PCT</b>	<b>Low conservation value (ha)</b>	<b>Moderate conservation value (ha)</b>	<b>High conservation value (ha)</b>
1081 – Non EEC		1.08	
1181 – Non EEC			67.51
1395 - CECC		18.28	125.28
Cleared lands	82.20		

#### **Cleared lands**

No BAM plots have been undertaken in the central cleared patch which may or may not contain derived native grasslands of Shale-Sandstone Transition Forest origin. Despite this, the land would still be considered as having low conservation value. Further investigation of the area would need to be undertaken as part of a comprehensive rezoning study.

## 4.0 Threatened species

### 4.1 Threatened flora

There appears to be limited ecological survey in the locality given the lack of threatened flora records, refer to Figure 5.

Threatened flora nearby includes *Eucalyptus benthamii*, *Epacris purpurascens* var. *purpurascens*, *Pultenaea pedunculata*, *Cynanchum elegans* and specimens in the endangered population *Marsdenia viridiflora* subsp. *viridiflora*.

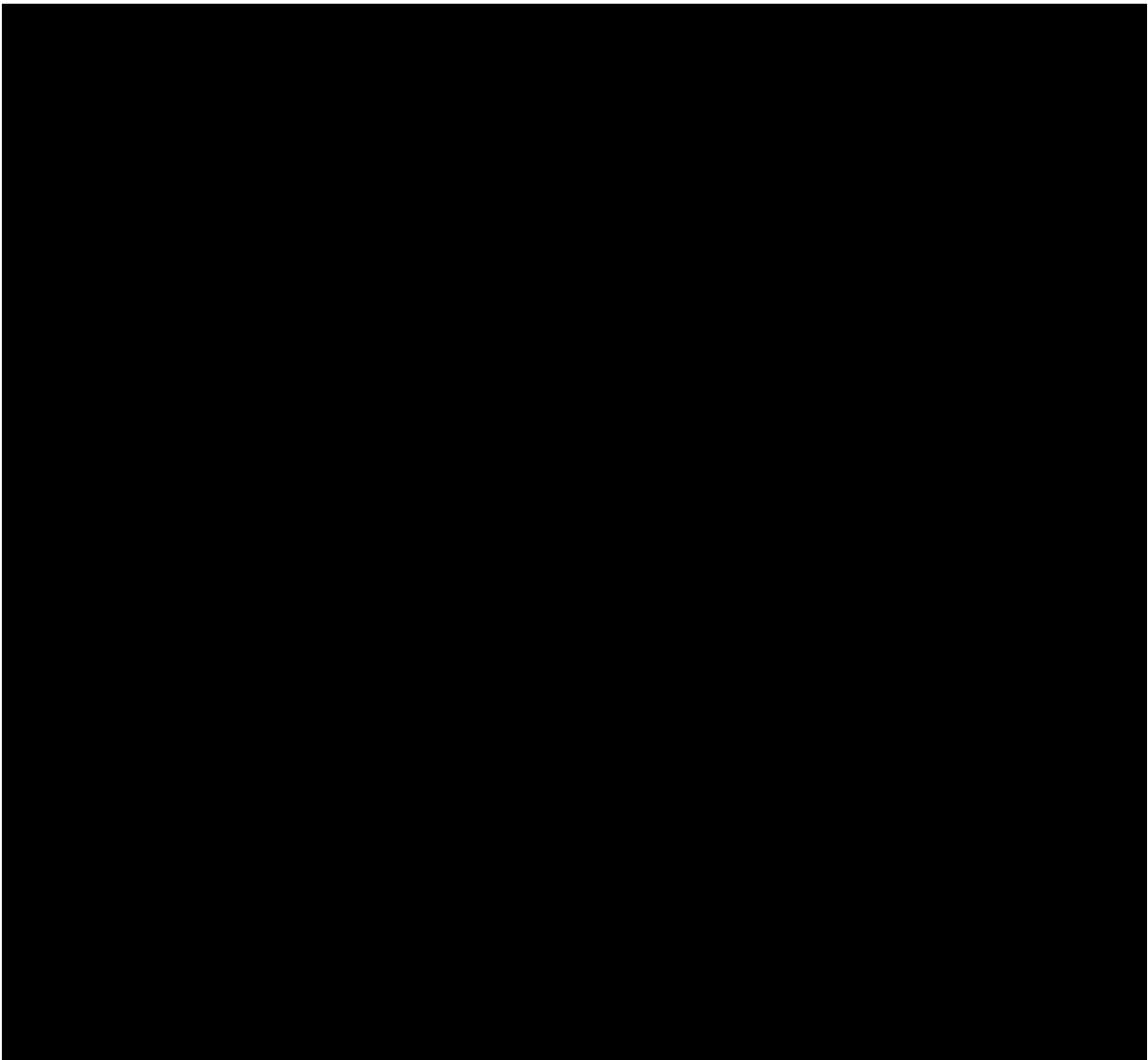
*Eucalyptus benthamii* occurs on the riverbanks of the Nepean river and on floodplains. There is no suitable habitat present on site.

*Epacris purpurascens* var. *purpurascens* often occurs on the edge of shale and sandstone geology near creek headwalls. There is suitable habitat across parts of the site, particular near first order streams.

*Pultenaea pedunculata* often occurs on tertiary alluviums which is absent on site. It may also occur on shale geology, and in the Appin area occurs near the shale – sandstone interface. There is potential habitat present, however low likelihood of occurrence given the lack of local records.

*Cynanchum elegans* more often will occur in dry rainforest vegetation. In south-western Sydney it will favour Western Sydney Dry Rainforest, Moist Shale Woodland and Cumberland Shale Hills Woodland. Each of these vegetation types is absent from the site, therefore the likelihood of occurrence is low.

The endangered population of *Marsdenia viridiflora* subsp. *viridiflora* does not include Wollondilly LGA therefore not a constraint on site if specimens were to occur.

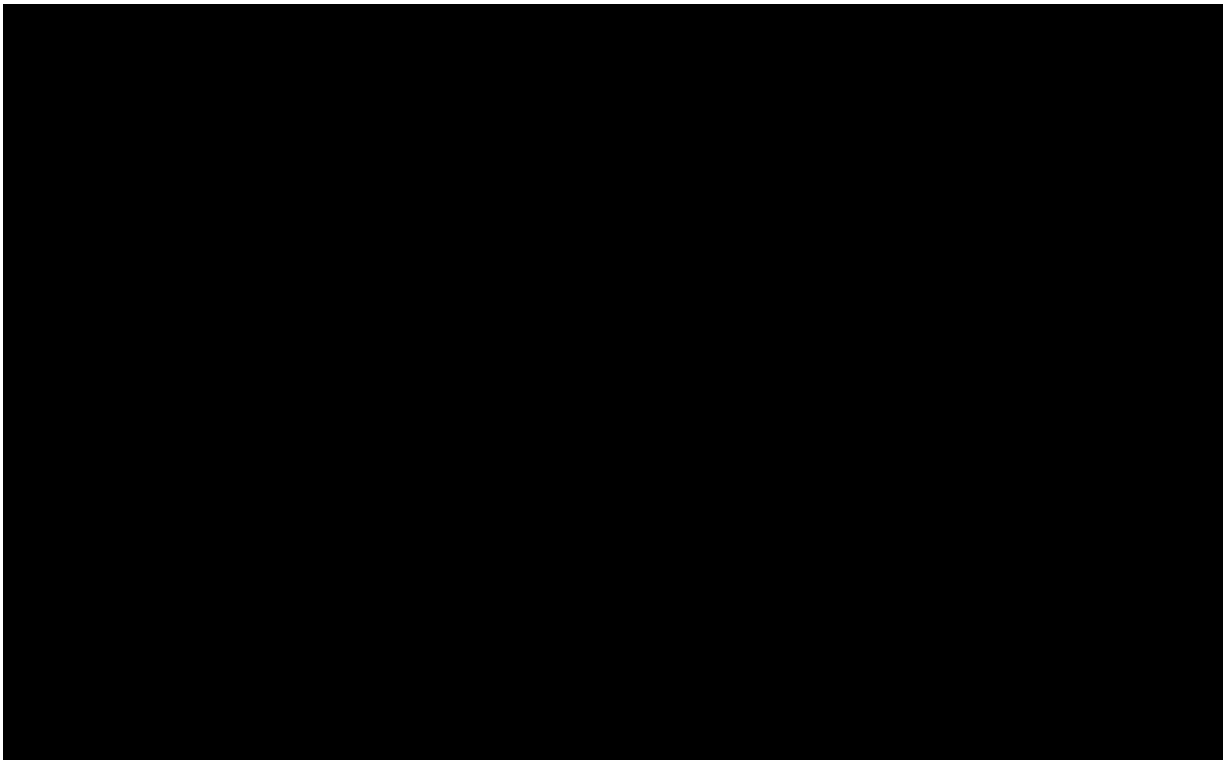


**Figure 5 – Bionet threatened flora records**

#### **4.2 *Threatened fauna***

The site provides very good connectivity to patches of native vegetation which are conserved in Gulguer Nature Reserve. The incised gullies from Forest Hill Creek and its tributaries are not suitable for development due to slope constraints and are fully vegetated along most parts. Movement for animals throughout the locality is very good given that the patches of vegetation are wide and the existing fragmentation is low. As such, the potential for threatened fauna on site is moderate-high or known for several species.

Figure 6 shows Bionet threatened fauna records in close proximity to the site and are considered to be highly likely candidates for occurrence with the site.



**Figure 6 – Bionet threatened fauna records**

The highest concern species include Koala, Powerful Owl, Glossy Black-Cockatoo and Large-eared Pied Bat.

Koala – Suitable feed trees are present across the landscape. There is a record from 2016 less than 200m from the site (north-west corner) in connected vegetation, therefore the likelihood of occurrence on site is high, and connective vegetation will need to be retained for their movement.

Powerful Owl – Several records nearby to the site. Breeding habitat including large hollows of 30cm plus will need to be checked and should be retained.

Glossy Black-Cockatoo – Foraging habitat is mostly *Allocasuarina* trees. Stands of mature trees within the landscape should be retained.

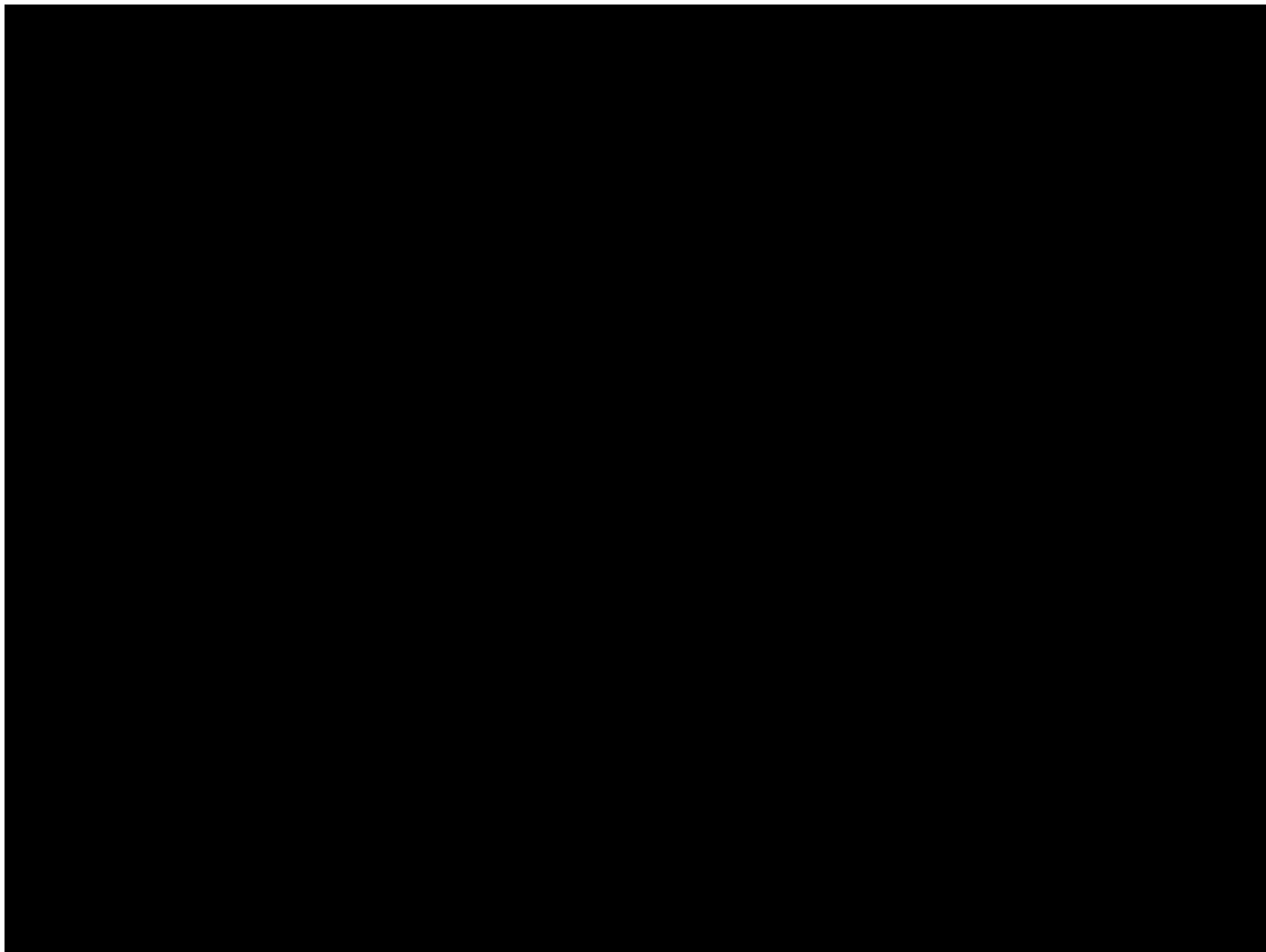
Large-eared Pied Bat – Breeding habitat may be present on the steeper escarpment areas where cave-type features may form. Breeding habitat will be absent from any areas likely to be suitable for development although surveys should be undertaken to see if there are potential roost sites nearby that can be protected and have a suitable buffer to them.

Other threatened fauna species with potential to occur on site are likely to be more mobile species such as birds and bats. There may be exception for snails however. The potential for Cumberland Plain Land Snail is low as Cumberland Plain Woodland habitat does not occur on site, but does occur near the southern boundary. Dural Land Snail is possible in the area as it prefers Shale-Sandstone vegetation.

For the purposes of evaluating fauna constraints, high conservation values are those which provide effective links throughout the landscape. Moderate conservation values are those peripheral areas that have partly impacted native vegetation with some shelter and / or foraging attributes. The existing paddock areas with very sparse trees are generally low conservation value with possible habitat trees that may contain low to high quality hollows or nests.

## 5.0 Habitat corridors

The local corridors across the landscape are shown in Figure 7. Primary corridors are those in which there is continuity of the native vegetation and no fragmentation, where the vegetation is usually 30m in width or greater. Secondary connectivity in this instance is shown as moderate to good quality remnants of native vegetation that form stepping stones in the landscape. These are usually fragmented, but the gaps between fragments are small. The secondary corridor vegetation is often partially impacted or may be restricted to canopy only vegetation.

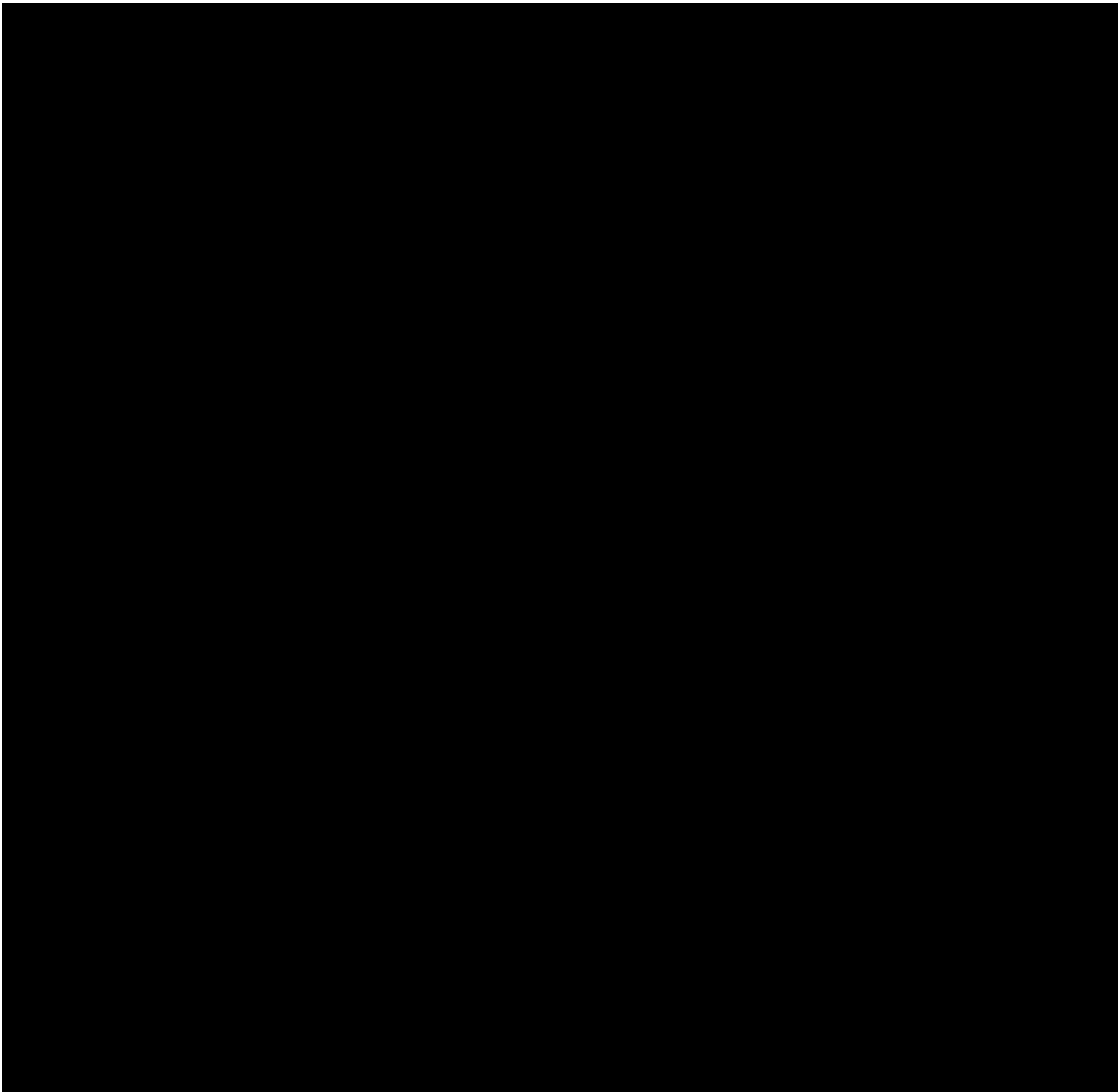


**Figure 7 – Primary and secondary habitat corridors**

Most of the native vegetation in the locality is marked as Koala habitat in the 2019 Koala SEPP mapping (Figure 8). There are also several records in the locality (shown on Figure 9). Given that the records are spread in all directions from the site and there are several records in the last 18 years, it is quite likely that they will utilise some part of the site at some point.

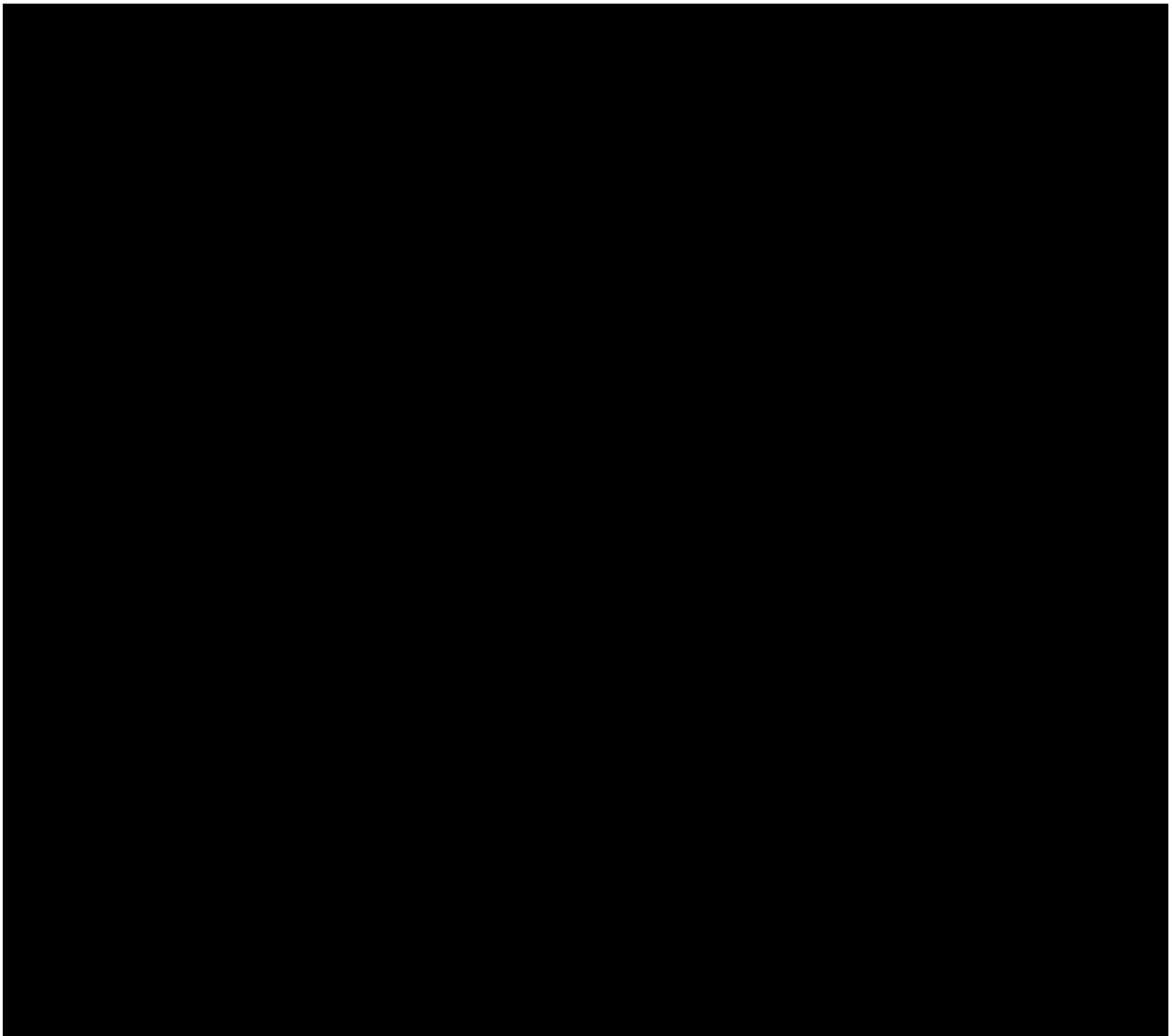
Future rezoning of the site would need to ensure sufficient movement corridors are maintained for Koala movement. This is more appropriately assessed as part of a rezoning application by the land holder with a Koala Assessment report which investigates the ability to retain high quality and core Koala habitat with solid landscape linkages for future movement.





**Figure 8 – Koala SEPP 2019 mapping (DPIE 2020)**

The Koala habitat mapping significantly over represents the value of Koala habitat within cleared portions of the site. Whilst areas containing remnant trees is Koala habitat it is clear that these areas could support appropriate subdivision with appropriate Koala survey and assessment. Figure 9 shows the sparsity and extent of Koala records in the locality which is indicative of the lower quality Koala habitat present in the site and its value in the landscape.

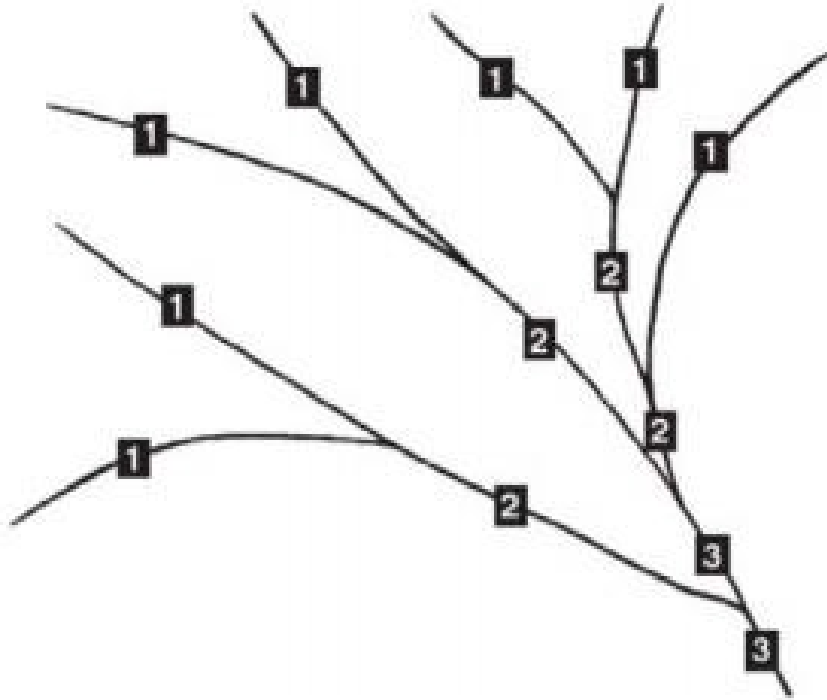


**Figure 9 – Bionet records of Koala's in the locality**

## **6.0 Watercourses**

There are many watercourses which occur on site, all of which are part of Forest Hill Creek or its tributaries. Forest Hill Creek flows into the Nepean River approximately, 1-2km to the east of the site.

There are different methods for describing stream order. The Water Management (General) Regulation 2018 uses the Strahler system, shown graphically on Figure 10.



**Figure 10 – Schematic diagram of Strahler system**

The major watercourses on site are located along the eastern boundary, and north-eastern corner, both of which are 4<sup>th</sup> order streams and will require a 40m buffer from the top of bank, either side of the stream.

### **6.1 Watercourse protection**

Riparian buffer distances must be measured on both sides of the stream from the top of bank, if this is defined, otherwise from the edge of the stream and only from the centre of the stream if the edge is not defined.

Where a stream has more than one bank on either side, the bank closest to the main channel must be used, to protect vegetation on and within the stream banks.

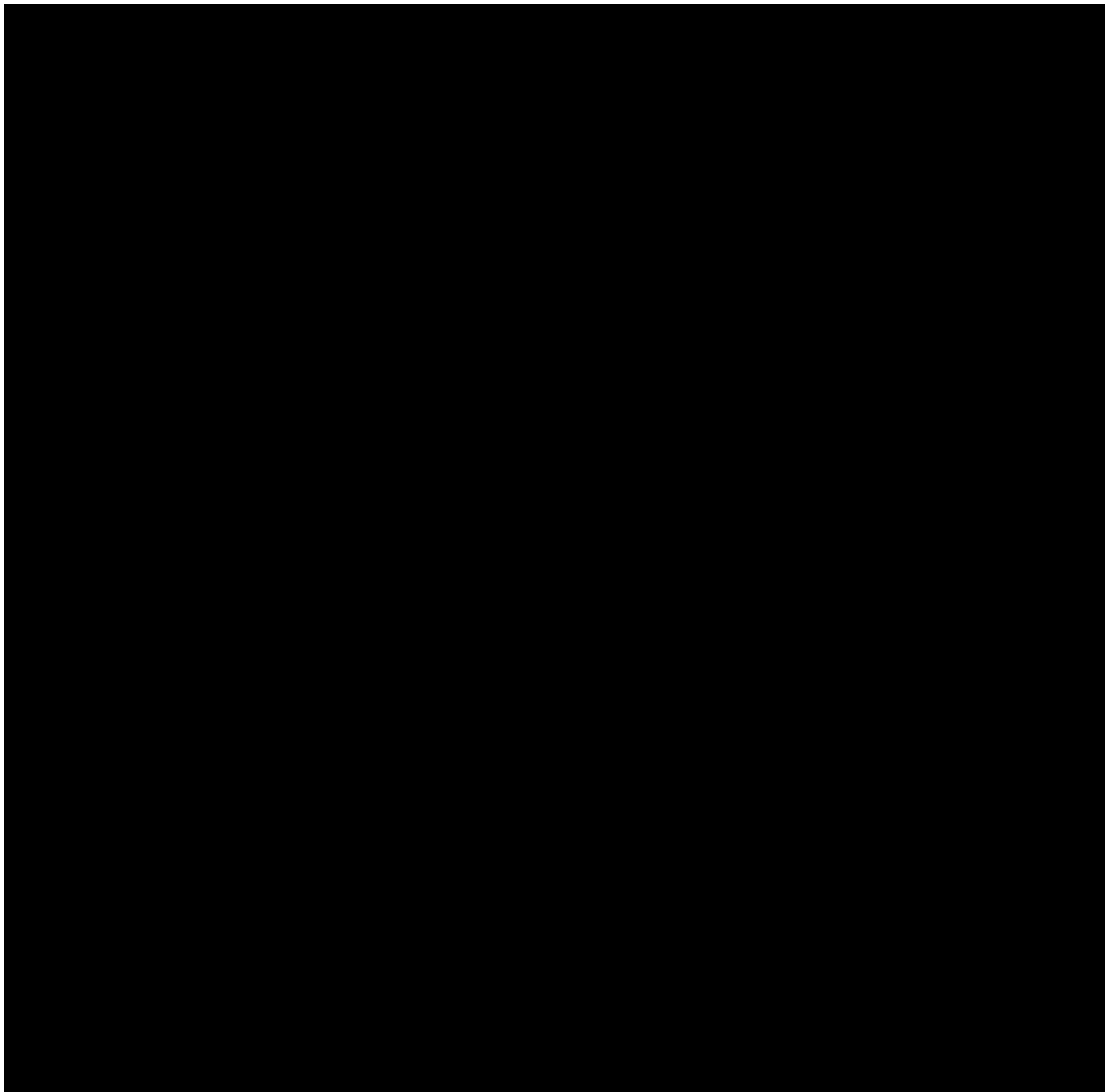
**Table 4 – Stream order and protection buffer**

<b>Stream order</b>	<b>Riparian buffer width (from top of bank)</b>
1 <sup>st</sup>	10m
2 <sup>nd</sup>	20m
3 <sup>rd</sup>	30m
4 <sup>th</sup> & Wetlands	40m
Farm dams	As per the order of the watercourse on which they are located

The current LPI mapped watercourses on site are shown on Figure 11. Watercourses need to be ground-truthed and validated as 1<sup>st</sup> order streams often are not present or do not meet the definitions of a watercourse with no clear evidence of channelling. The location of some of the mapped streams may be inaccurate. 1m LIDAR contours are a valuable desktop tool in confirming the stream locations to best fit with the local contours and has been proven across many sites to be a reliable indicator of stream presence. However the upper most expression of a watercourse always needs to be validated and the top of bank needs to be validated to derive where the riparian buffer needs to be measured from.

The site investigation and desktop assessment clearly indicates that the majority of watercourses on site are located within heavily vegetated areas that will likely be protected. Lot boundaries of a potential future subdivision can cross watercourses, however it would be preferred that the layout supports protection of riparian lands. Once again this is most appropriately assessed as part of a comprehensive site investigation however recognition of their presence appears to be ignored as part of the Draft Plan.

Where future development or rezoning is proposed, a comprehensive watercourse constraints assessment will clearly show which lands require protection for riparian purposes.



**Figure 11 – Watercourse orders (Six Maps)**

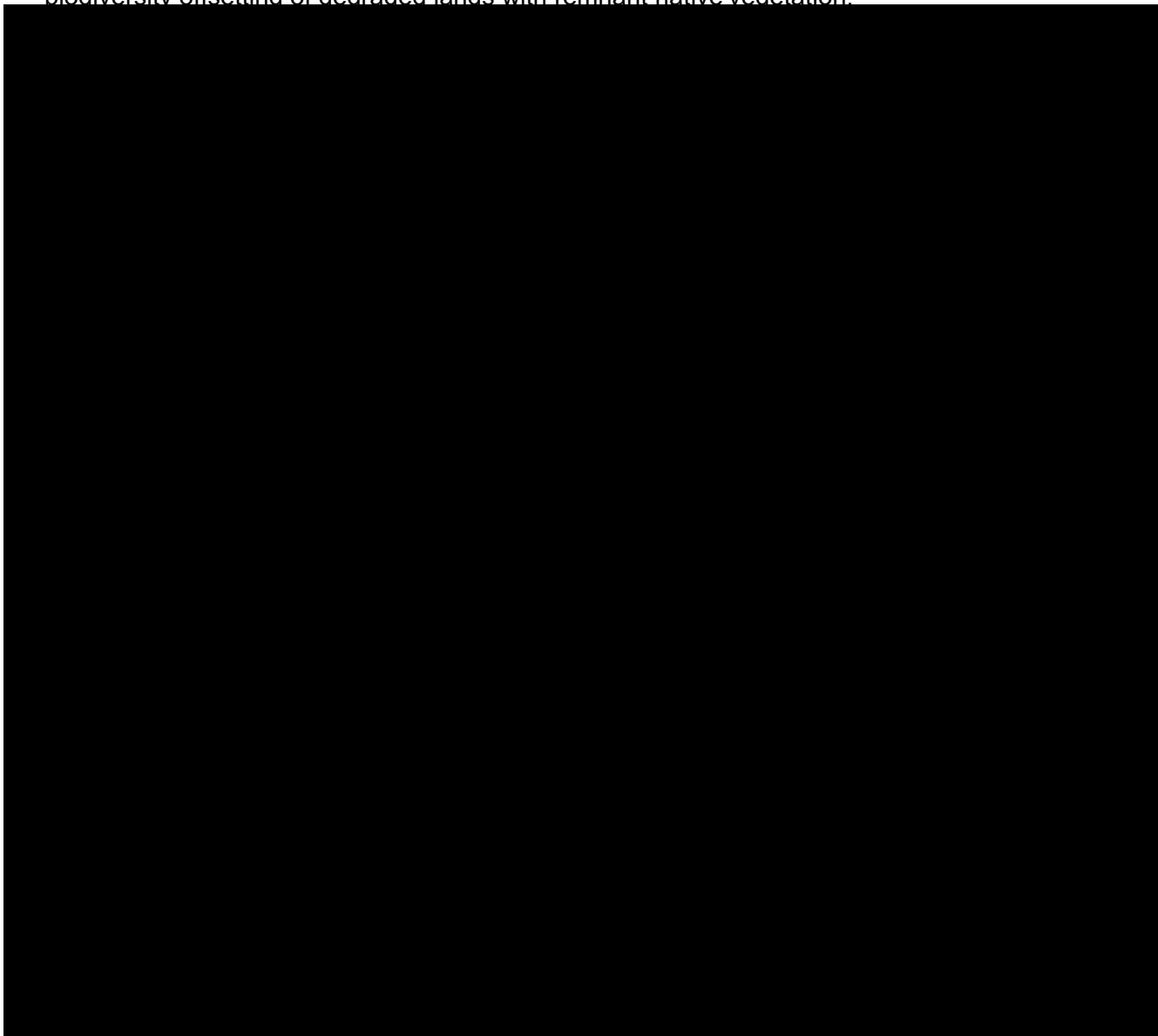
In the case of this site the watercourses are mostly located within protected vegetation areas and most likely will not impact significantly on any cleared lands. Therefore future zoning of this site can mostly rely on the existing vegetation constraints with proper consideration to effective use of the land for other future land uses.

## **7.0 Biodiversity values and conservation values**

Figure 12 shows parts of the vegetated lands and major riparian zones on site being mapped as having biodiversity values by DPIE, 2020. These will need to be considered in the future

should a development application be lodged. Any impacts on native vegetation within the purple polygons will trigger the Biodiversity Offset Scheme.

Most intact vegetation is not mapped as biodiversity values, instead the mapping focusses on peripheral moderate quality vegetation which appears to be disturbed Shale-Sandstone Transition Forest. Consequently, this mapping is not a useful guide as to the conservation value of the existing vegetation or habitats onsite and is a nonsensical assessment of the sites biodiversity values. This may have been mapped this way to capture any potential future biodiversity offsetting of degraded lands with remnant native vegetation.



**Figure 12 – Biodiversity values map (DPIE 2020)**

Attachment 2 shows the partly ground-truthed conservation value of the vegetation across the site. In general, all intact Shale-Sandstone Transition Forest which is a critically endangered ecological community vegetation is considered in this report to be of a high conservation value. Patches of PCT 1181 along the gullies would have moderate importance but due to their location along riparian lines and connectivity value, they have also been given high conservation value due to the interaction with riparian lands.

Remnants of impacted Shale-Sandstone Transition Forest on the periphery of corridors have been given a moderate conservation value primarily due to their listed conservation status but disturbed condition. Therefore PCT 1081 was given moderate conservation value due to previous disturbances but clearly should be considered for removal under the NSW Biodiversity Offset Scheme and should not be weighted with an E2 zoning without proper investigation.

Cleared areas that have very sparse paddock trees have been given a low conservation value, however individual trees should be surveyed for fauna values as those with hollows will be important to retain.

The native vegetation across the site is important for local biodiversity due primarily to the following:

- High quality habitat connectivity
- Highly probable Koala habitat corridors
- Waterbodies and watercourses that may form important aquatic habitat within the site.
- Likely to contain a good quality tree hollows for fauna use and potential breeding habitat for species like Powerful Owl
- Foraging habitat for threatened species
- Potential caves (specialist microbat breeding habitat) along steep sandstone embankments in the east and north-east corners of the site or adjacent
- High quality remnants of vegetation that have low densities of weed species
- Presence of critically endangered vegetation under the *BC Act* and *EPBC Act*; Shale-Sandstone Transition Forest
- Presence of sandstone boulders and outcrops that provide refuge for threatened fauna

## **8.0 Suitability of lands for future rezoning or development opportunities**

Cleared landscapes within the site have been classed as low conservation value. Although some individual trees may be important due to hollows or nests, their presence in cleared landscape is not an immediate call for conservation but for appropriate survey and assessment to determine their value.

Dams although mapped as low conservation value, are of landscape value for riparian connectivity and they may provide threatened frog habitat, Southern Myotis foraging habitat and habitat for migratory bird species such as the Japanese Snipe. This aspect is however once again more appropriately assessed as part of a comprehensive rezoning proposal.

Areas marked as low conservation value should largely be able to support a future zoning of E4 similar to all adjoining lots to the south. E4 zoning is environmental living. The lots to the south have a minimum lot size of 4 ha. Smaller lot sizes can potentially be supported across the majority of the low conservation land, with individual remnant trees largely retained within lots and around the building footprints.

Moderate conservation value land is remnant vegetation of moderate quality that has been previously impacted by clearing or thinning, or undergoes regularly understorey slashing for the current land-use. Moderate conservation value lands can support E4 zoning subject to investigation and consequently should not be mapped as E2 zoning until comprehensive investigations are conducted.

Larger lots should be considered with building envelopes placed in the areas of highest disturbance allowing for the retention of higher conservation value vegetation within that lot.

Attachment 2 shows the current partially ground-truthed conservation values on site which are mostly relating to the vegetation types present and whether or not they form quality connective corridors.

Areas marked as high conservation value are Shale-Sandstone Transition Forest or highly connected and high-quality habitat corridors. These important features have low suitability for development and should be considered as E2 Environmental Conservation. Edges of vegetation may be refined to provide a pragmatic conservation zone boundary. Attachment 3 provides a recommendation to protect high conservation value areas as potential E2 lands.



**Figure 13 – Mapped strategic conservation zone (in purple hatch) as per the Draft Cumberland Plain Conservation Plan**

## 9.0 Appropriateness of proposed strategic conservation area within the site

Figure 13 shows the Draft Cumberland Plain Conservation Plan and the area proposed as a strategic conservation area. Attachment 3 shows an alternative strategic conservation area recognising the existence of the cleared and disturbed landscapes within the site.

The mapped proposed strategic conservation area (Figure 13) covers greater than 80% of the site, excluding only the southern portions. Attributing a high conservation value over the site is completely at odds with the existing use of the land and its future potential use for alternative uses when there are clearly opportunities for future development that will have limited environmental impacts that would normally be acceptable and potentially offset under the Biodiversity Offset Scheme.

The mapped strategic conservation area is clearly over representing the conservation value of the land and does not reflect its current condition. If the site was fully vegetated this would make a lot of sense but it is not and therefore the approach taken by the Draft Cumberland Plain Conservation Plan should be rejected and reviewed removing all restrictions that may be imposed on the cleared lands and lands of future development potential that can also conserve the high quality habitat onsite.

The site evidence supports the following conservation measures:

- Shale-Sandstone Transition Forest is the high conservation value vegetation present and is appropriately classed as high conservation value where that vegetation is in good condition.
- Disturbed Shale-Sandstone Transition Forest remnants have been classed as moderate conservation value that can clearly support alternative uses to conservation which should be clearly left open for future investigation.
- The site contains high ecological value and wide habitat corridors mostly within the steep lands of the site. The cleared and impacted areas of the site do not form part of this connective landscape and do not warrant protection as a conservation area.
- Figure 7 shows primary and secondary corridors that occur in the general locality and those which occur on site. There are important habitat corridors worthy of retention, conservation and improvement for fauna and movement.
- The cleared lands containing some remnant managed landscapes are highly suitable for other alternative uses and the imposition of a strategic conservation area of the cleared lands is not warranted.

If you require any further information please do not hesitate to contact our office on [REDACTED]

Yours faithfully

[REDACTED]

**Michael Sheather-Reid | *Managing Director***  
***BAM Accredited (BAAS17085)***  
*(B. Nat. Res. Hons)*

## ATTACHMENTS

**Attachment 1 – Vegetation Communities**

**Attachment 2 – Site Conservation Values**

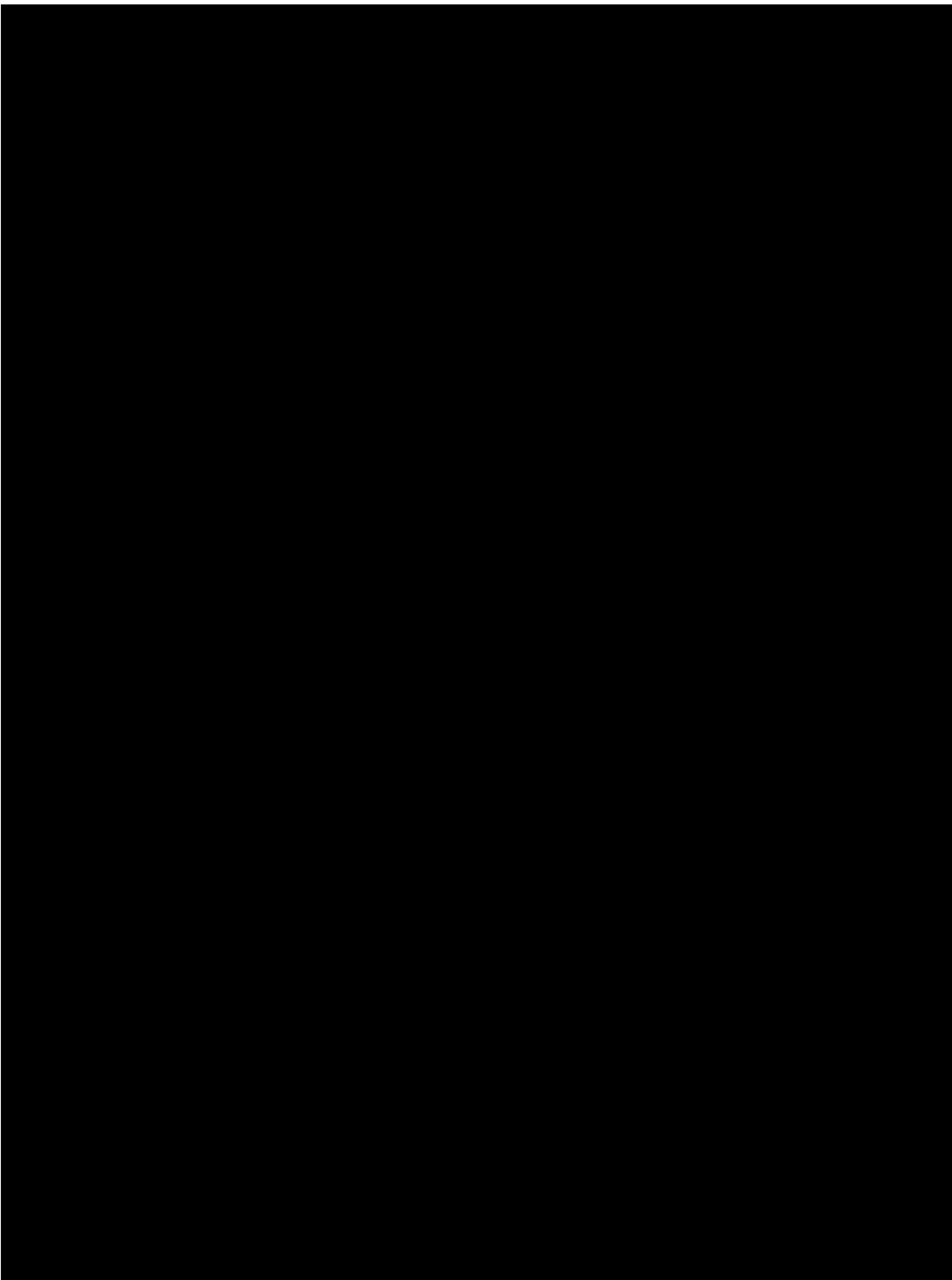
**Attachment 3 – Recommended Strategic Conservation Zones**



# **ATTACHMENT 1 – VEGETATION COMMUNITIES**



# **ATTACHMENT 2 – SITE CONSERVATION VALUES**



# **ATTACHMENT 3 – RECOMMENDED STRATEGIC CONSERVATION ZONES**

