

Sarah Ng

From: Anthony Tavella on behalf of DPE PS ePlanning Exhibitions Mailbox
Sent: Wednesday, 7 October 2020 10:31 AM
To: DPE PS Biodiversity Mailbox
Subject: FW: Webform submission from: Draft Cumberland Plain Conservation Plan
Attachments: [REDACTED] luddenham_e2assessment_narlaenv_2020_final_v1.0_0.pdf

From: noreply@feedback.planningportal.nsw.gov.au <noreply@feedback.planningportal.nsw.gov.au>
Sent: Wednesday, 7 October 2020 7:48 AM
To: DPE PS ePlanning Exhibitions Mailbox <eplanning.exhibitions@planning.nsw.gov.au>
Subject: Webform submission from: Draft Cumberland Plain Conservation Plan

Submitted on Wed, 07/10/2020 - 07:46
Submitted by: Anonymous
Submitted values are:
Submission Type: I am making a personal submission
First Name: [REDACTED]
Last Name: [REDACTED]
Name Withheld: Yes
Email: [REDACTED]
Suburb/Town & Postcode: Luddenham
Submission file:
[235255willowdeneaveluddenham_e2assessment_narlaenv_2020_final_v1.0_0.pdf](#)

Submission: I oppose the E2 zoning as it's inaccurate and that the said zoned land has no Environmental significance. Please see attached report

URL: <https://pp.planningportal.nsw.gov.au/draftplans/exhibition/draft-cumberland-plain-conservation-plan>

[REDACTED]
[REDACTED]
Luddenham NSW 2745
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29th September, 2020

Re: Proposed E2 Assessment at [REDACTED]

To whom it may concern,

Narla Environmental Pty Ltd (Narla) were engaged by the proponents [REDACTED] to undertake an ecological assessment of the area proposed to be rezoned as E2: Environmental Conservation, under the Draft Aerotropolis State Environmental Planning Policy (the SEPP), located between [REDACTED] Luddenham NSW 2745 [REDACTED] the 'Subject Site'; **Figure 1**).

Narla understand that the zoning has been conducted in accordance with the Draft Cumberland Plain Conservation Plan (The Plan; DPIE 2020c) that proposes to protect lands containing high-value vegetation. The Plan is also being applied to land that is deemed unsuitable for development due to the presence of riparian corridors along creek lines, and steep land.

It appears that the Subject Site has been mapped as E2 due to the presence of a 2nd order watercourse and associated riparian corridor located within the Subject Site.

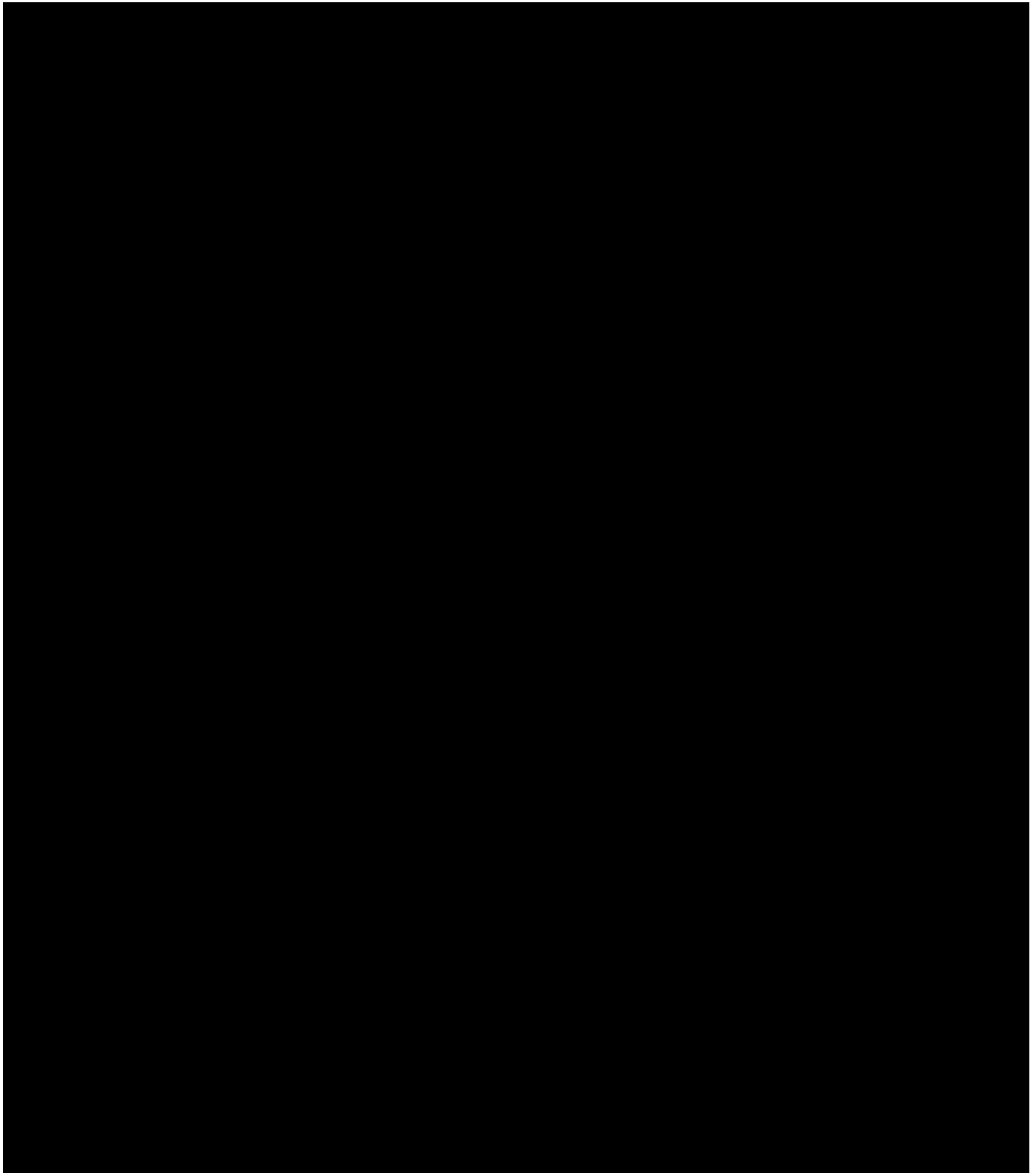
Narla were engaged to conduct an assessment to support the proponents submission which is contesting the accuracy of the mapping of the watercourse, and to identify any additional ecological features found within the Subject Site to justify the proposed E2 zoning.

Methodology

A thorough literature review of local information relevant to the Subject Site was undertaken. This included a review of the Plan and the SEPP as well as searches using NSW Wildlife Atlas (BioNet; DPIE 2020a) and the Commonwealth Protected Matters Search Tool (DAWE 2020) were conducted to identify all current threatened flora and fauna, as well as migratory fauna records within a 10km x 10km cell centred on the Subject Site. These data were used to assist in establishing the presence or likelihood of any ecological values as occurring on or adjacent to the Subject Site, and helped inform our ecologist on what to look for during the site assessment. In addition, soil landscape and geological mapping was examined to assist in determining whether any threatened flora or ecological communities may occur within the Subject Site (Bannerman & Hazelton 2011; DPIE 2020b).

A site assessment was undertaken by Narla Ecologist Chris Moore on Tuesday 22nd September 2020. During the site assessment, the following activities were undertaken within the Subject Site:

- Accurate mapping of the watercourse;
- Identification of vegetation communities;
- One (1) Vegetation Integrity Survey (VIS) plot was conducted to show the condition of the vegetation within the E2 zone;
- Opportunistic surveys for threatened flora and fauna
- Any other additional significant habitat features were recorded.



Location of the Subject Site

-  Subject Properties (235 and 255 Willowdene Ave, Luddenham)
-  Proposed E2 Environmental Conservation Zoning (Subject Site)
-  Mapped Hydroline (Liverpool Council - SIX Maps)
-  Proposed Western Sydney Transport Corridors
-  Proposed Certified- Urban Capable

0 25 50 75 100 m



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Date: 29/09/2020
Coordinate System: GDA94 MGA Zone 56
Data Source: NSW SEED Portal; NSW SIXMaps 2020
Image Source: Nearmap Australia Pty Ltd [August 2020]



Figure 1. Location of the proposed E2 zone (Subject Site).

Results

Hydroline

Site assessment revealed that the 2nd order hydroline and associated riparian corridor on which the E2 zones has been based, is not accurate. The hydroline is located running from the large dam on 235 Willowdene Ave to another large dam on 255 Willowdene Ave, then proceeding down the fence line of 255 Willowdene Ave until exiting the property through a culvert under Willowdene Avenue (**Figure 2; Plate 3**).

Vegetation communities

Site assessment indicated the following vegetation communities were present within the Subject Site (**Figure 3**):

- Low condition Cumberland Plain Woodland (CPW), Listed as Critically Endangered under the Biodiversity Conservation Act 2016;
- Historically cleared pasture vegetation; and
- Planted Pines.

CPW within the Subject Site was comprised of a single *Eucalyptus tereticornis* in the corner of the Subject Site above a cleared understory and ground layer. Additional areas of CPW were identified in areas adjacent to the Subject Site, however only a small portion intersected with the E2 zone (**Plate 1**).

The majority of the Subject Site was comprised of historically cleared pasture vegetation typical of a rural landscape, largely dominated by exotic species including *Eragrostis curvula*, *Senecio madagascariensis*, *Medicago trunculata*, *Trifolium repens*, *Conyza* sp., *Taraxacum officinale* and *Plantago lanceolata* (**Plate 2**). As these species are exotic, they do not conform to a locally occurring native vegetation community, and as such, the vegetation was considered to be historically cleared pasture vegetation.

A row of *Callitris* spp. were present along the fence line of the two properties. These were historically planted for privacy screening.

Vegetation Integrity Survey (VIS) Plot

A 50m x 20m VIS plot was conducted within the historically cleared pasture vegetation which made up the vast majority of the Subject Site (**Appendix A**). The plot revealed the following scores:

- Composition Condition Score: 0.3;
- Structure Condition Score: 40.9;
- Function Condition Score: 7.2; and
- Current Vegetation Integrity Score: 4.2.

The Current Vegetation Integrity Score indicates how strongly the vegetation within the site differs from the “best-on offer” condition for the same vegetation type in the contemporary landscape (OEH 2017). The vegetation within the Subject Site had a Current Vegetation Integrity Score of 4.2 out of a possible 100, showing that the sampled patch of vegetation is of a considerably degraded.

Threatened flora and fauna

No threatened flora and fauna species were found to occur within the Subject Site during the site assessment.

It was determined that the Subject Site was severely degraded such that the presence of threatened flora was highly unlikely.

In addition, minimal habitat for threatened fauna species existed within the Subject Site. Only one (1) nectar-bearing tree was present within the Subject Site which may provide potential foraging habitat for threatened species.

All flora and fauna located within the Subject Site and the immediate surrounds are recorded within **Appendix B** and **Appendix C**.

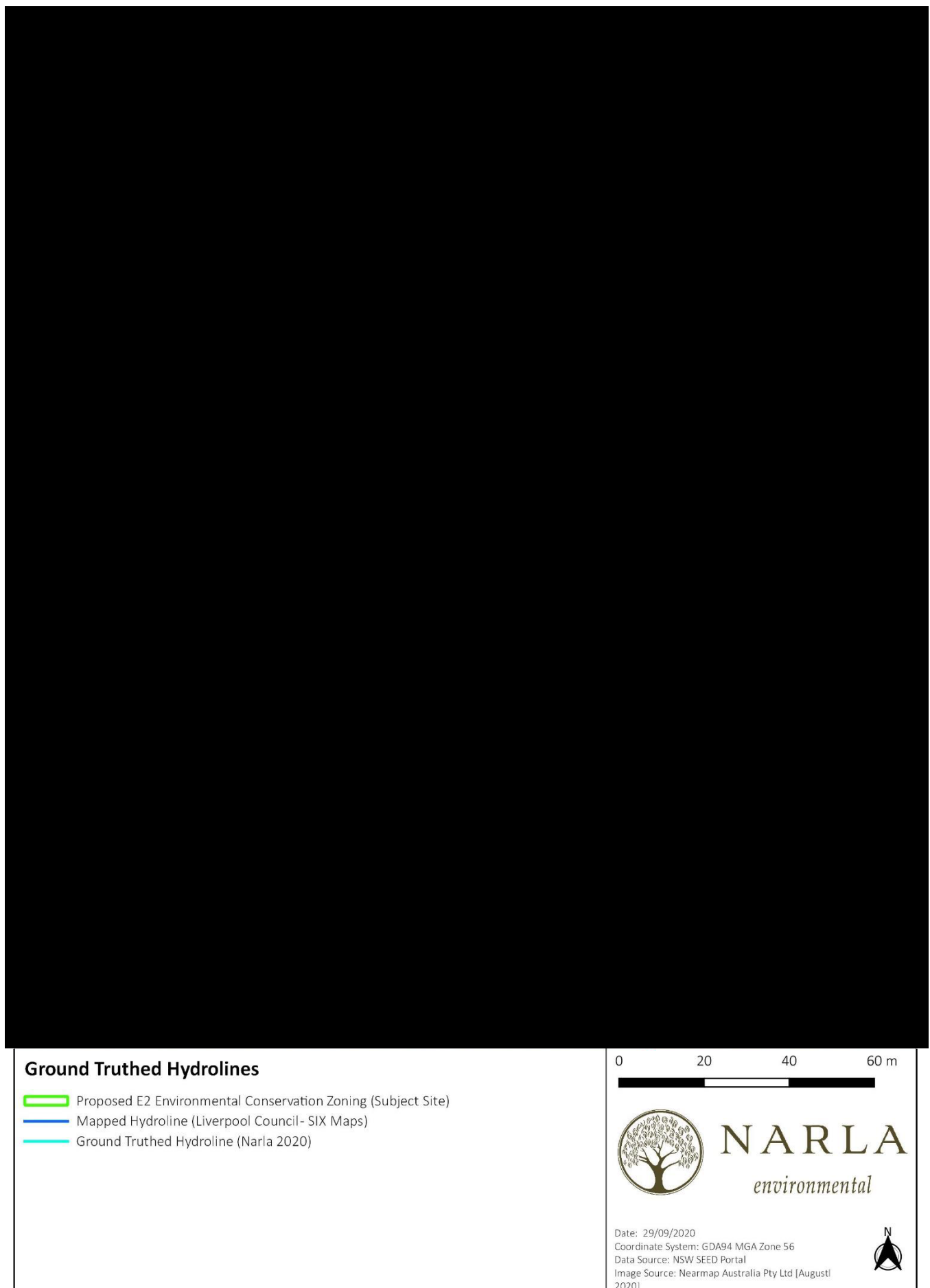


Figure 2. Ground truthed hydroline's compared to mapped hydroline's within the Subject Site

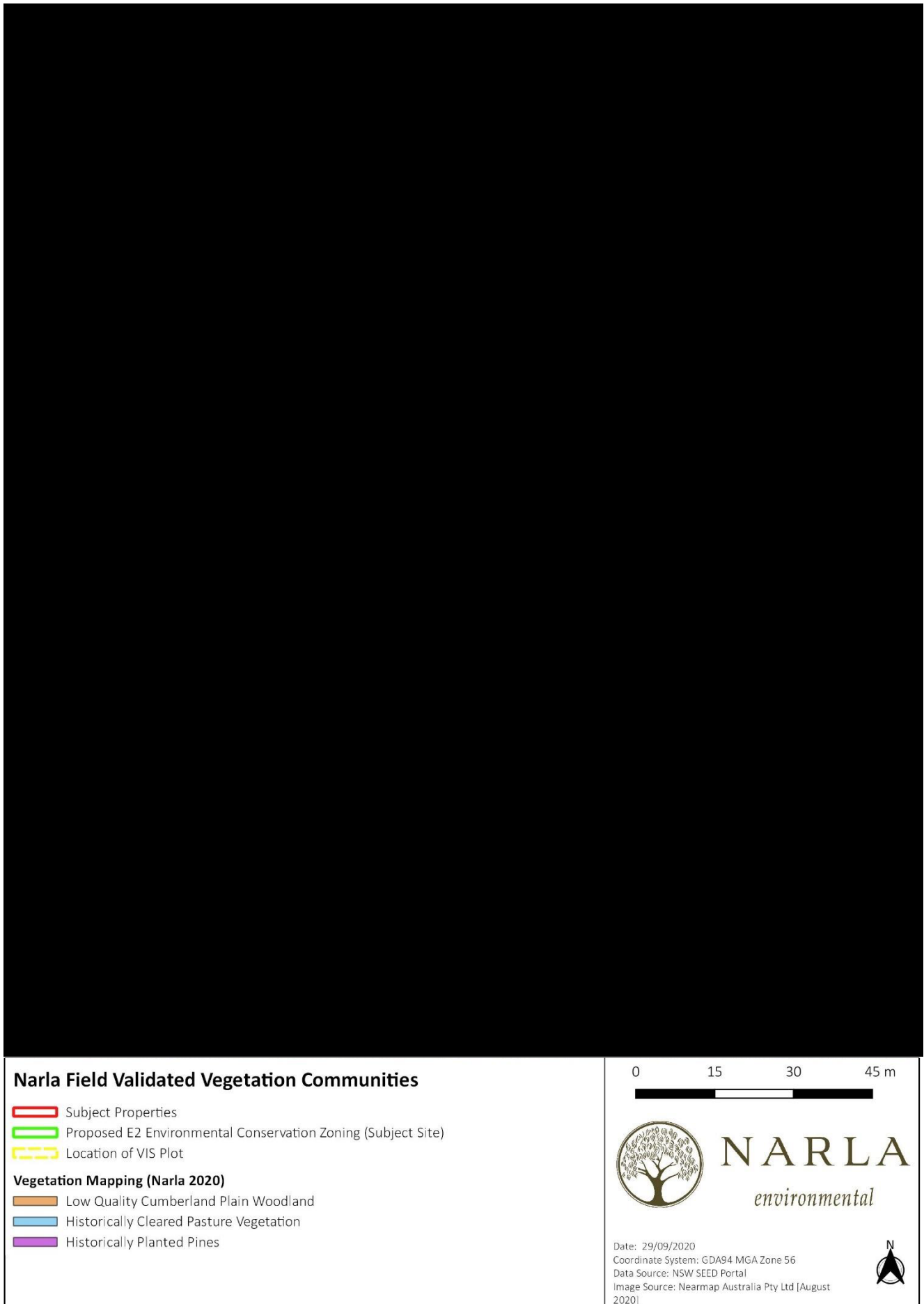


Figure 3. Narla Field Validated Vegetation Mapping.

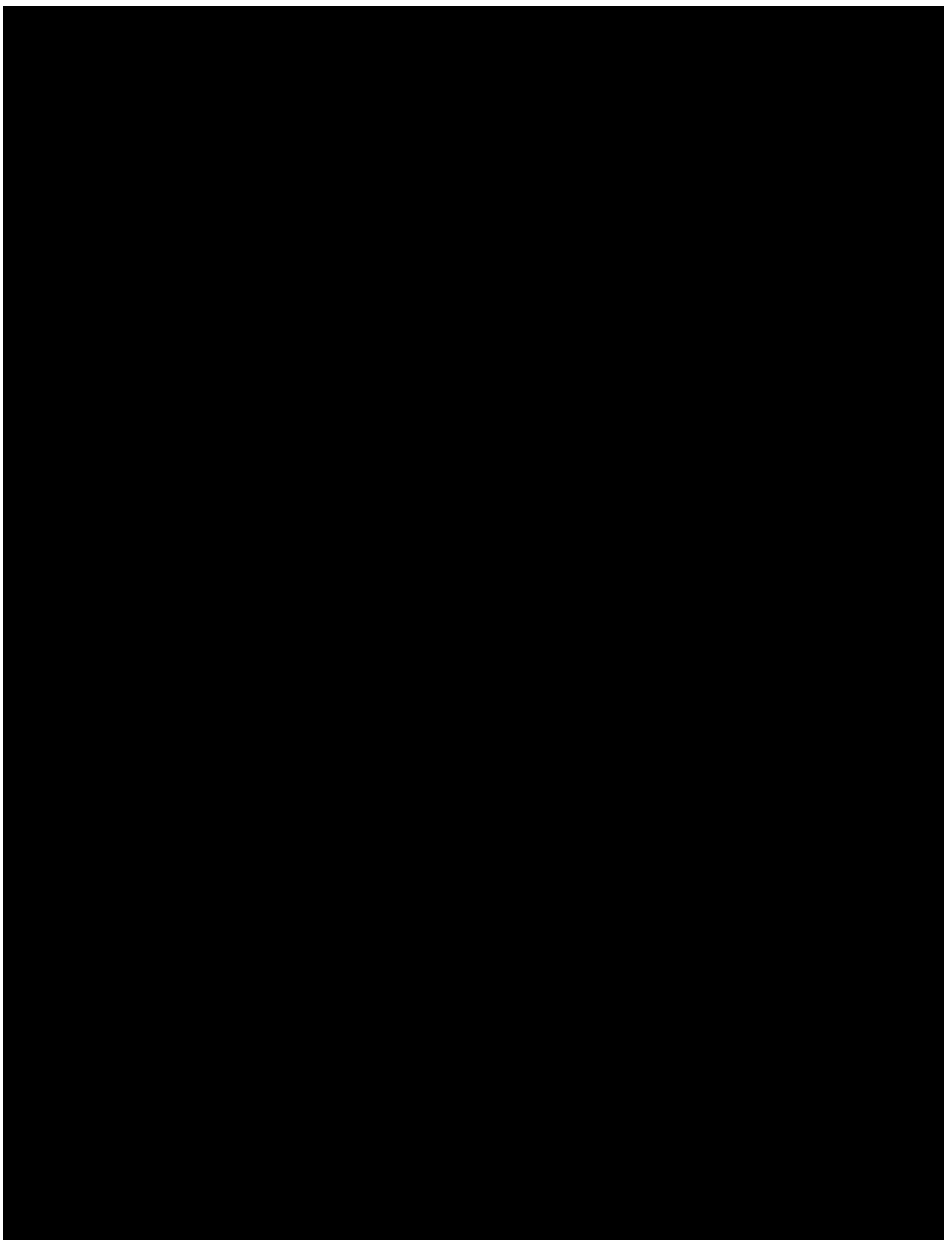


Plate 1. Cumberland Plain Woodland Vegetation within the Subject Site

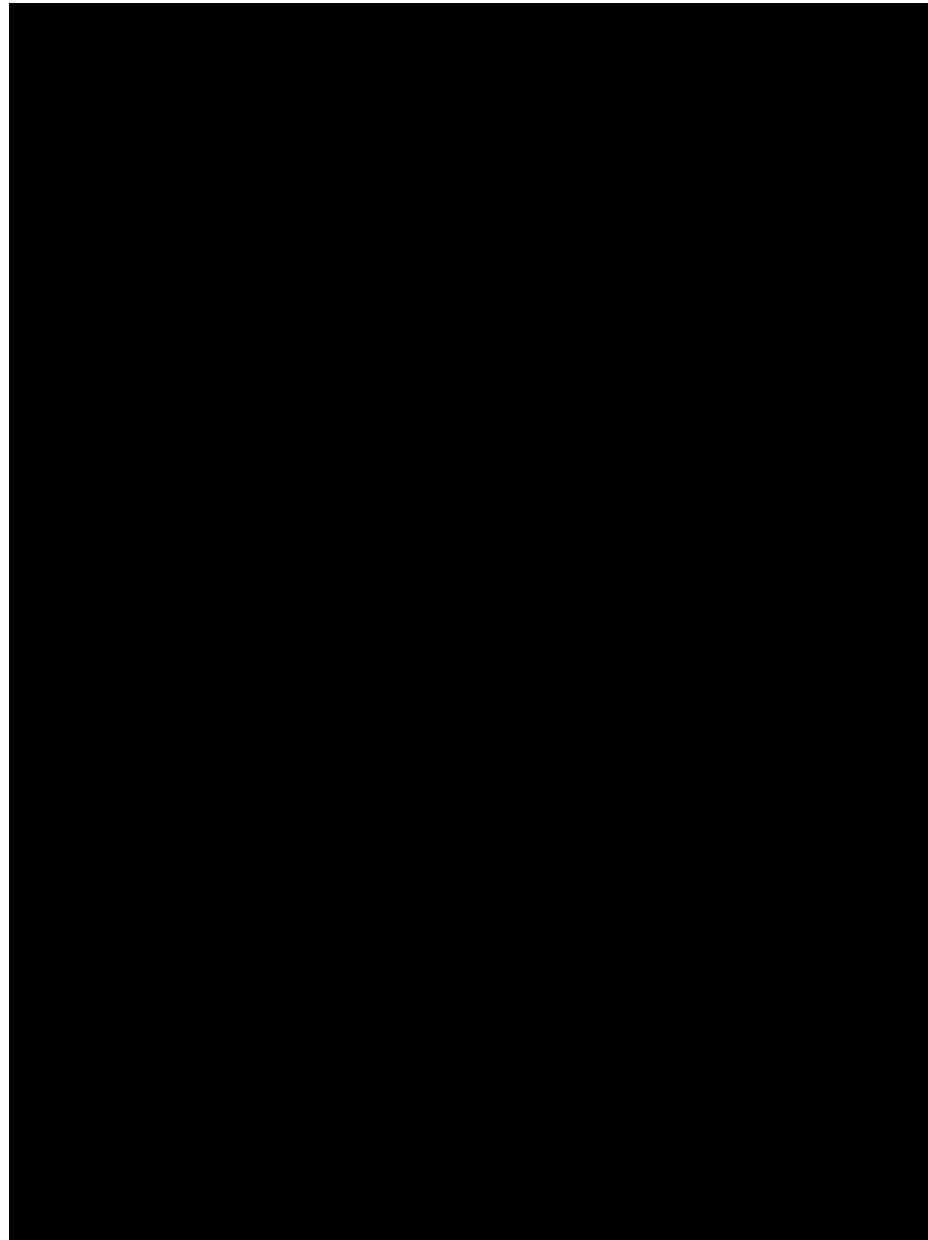


Plate 2. Historically cleared pasture vegetation encompassing the majority of the Subject Site.

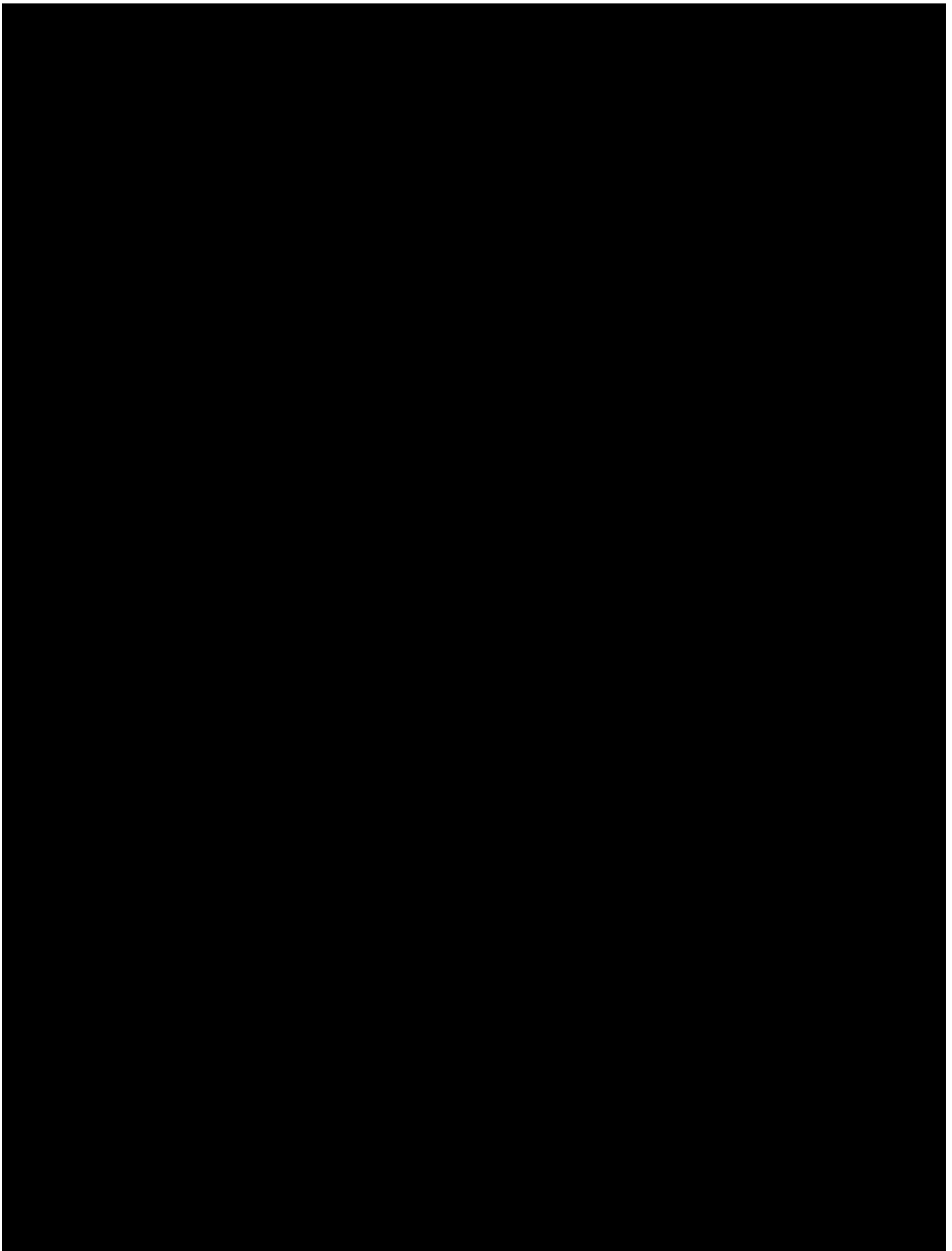


Plate 3. Ground truthed hydroline within [REDACTED] Luddenham.

Conclusion

The site assessment identified that there is a need for the accuracy of proposed E2 zone mapping to be reviewed within the Subject Site.

The Plan lists areas being zoned as E2 as either containing areas of high value vegetation or areas with low development potential such as riparian corridors or steep lands.

Whilst it is evident that the Subject Site has been mapped based on the existing watercourse and associated riparian corridor within the area, this ecological assessment has identified that the mapping is inaccurate. The majority of the existing watercourse and associated riparian corridor is located in land proposed to be mapped as 'Certified – urban capable land'.

In addition, undertaking a VIS plot provided further evidence that only a small portion of the Subject Site contained high value vegetation (areas mapped as CPW), with the majority of the site containing exotic pasture vegetation typical of a rural landscape.

Sincerely,

Chris Moore – Project Manager/ Ecologist
Narla Environmental Pty Ltd

References

- Australian Government Department of Agriculture, Water and the Environment (DAWE) (2020). Protected Matters Search tool. <http://environment.gov.au/epbc/protected-matters-search-tool>
- Bannerman S.M. and Hazelton P.A. (2011) Soil Landscapes of the Penrith 1:100,000 Sheet report, Office of Environment and Heritage, Sydney
- Department of Planning, Industry and Environment (DPIE) (2020a) NSW BioNet. The website of the Atlas of NSW Wildlife <http://www.bionet.nsw.gov.au/>
- Department of Planning, Industry and Environment (DPIE) (2020b) eSPADE v2.0 <https://www.environment.nsw.gov.au/eSpade2Webapp#>
- Department of Planning, Industry and Environmental (DPIE) (2020c) Draft Cumberland Plain Conservation Plan.
- Government Spatial Services (SIX Maps) (2020) NSW Government Land & Property Information Spatial Information Exchange map viewer, <https://six.nsw.gov.au/>
- Liverpool Council (2008) Local Environmental Plan
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- Office of Environment and Heritage (2017) Native Vegetation Integrity Benchmarks: An information Sheet
- PlantNET (2020) The NSW Plant Information Network System, Royal Botanic Gardens and Domain Trust, Sydney. <http://plantnet.rbgsyd.nsw.gov.au>
- Robinson, L. (2003) 'Field Guide to the Native Plants of Sydney', Third Edition, Kangaroo Press
- State Environmental Planning Policy (2020) Western Sydney Aerotropolis/
- Tozer, M.G., Turner, K., Simpson, C., Keith, D.A., Beukers, P., MacKenzie, B., Tindall, D. & Pennay, C., (2010) Native vegetation of southeast NSW: a revised classification and map for the coast and eastern tablelands. Version 1.0

Appendices

Appendix A. VIS Plot Conducted Within the Subject Site.

Appendix B. Flora species identified within the Subject Site.

Appendix C. Fauna species identified within and surrounding the Subject Site.

Appendix A. VIS Plot Conducted Within the Subject Site.

BAM Site – Field Survey Form					
Date:	22/09/2020	Plot ID:	1	Photo #:	0
Zone:	56	Plot Dimensions:	50x20m	Easting:	██████████
Datum:	94	Middle bearing from 0m:	219°	Northing:	██████████
PCT:	Historically cleared and disturbed grassland				

Growth Form	Scientific Name	Cover	Abundance
HTE	<i>Eragrostis curvula</i>	45	100
Exotic	<i>Anagallis arvensis</i>	2	100
Exotic	<i>Soliva spp.</i>	1	100
Exotic	<i>Medicago truncatula</i>	1	100
Exotic	<i>Plantago lanceolata</i>	0.5	25
Exotic	<i>Bromus catharticus</i>	2	30
Grass & grasslike (GG)	<i>Cynodon dactylon</i>	55	1000
Exotic	<i>Sisymbrium officinale</i>	0.2	15
HTE	<i>Senecio madagascariensis</i>	2	15
Exotic	<i>Vicia sativa</i>	0.2	10
Exotic	<i>Cyclosporum leptophyllum</i>	0.2	15
Exotic	<i>Trifolium repens</i>	0.4	30
Exotic	<i>Lotus angustissimus</i>	1	100
HTE	<i>Stenotaphrum secundatum</i>	3	100
HTE	<i>Chloris gayana</i>	1	20
Exotic	<i>Verbena bonariensis</i>	0.5	10
Exotic	<i>Sida rhombifolia</i>	0.1	2
Exotic	<i>Taraxacum officinale</i>	0.3	10
Exotic	<i>Conyza bonariensis</i>	0.1	1
Exotic	<i>Gamochaeta spp.</i>	0.1	3
Exotic	<i>Modiola caroliniana</i>	0.5	20
HTE	<i>Cyperus eragrostis</i>	0.5	20

DBH	# Tree Stems Count	# Hollow Bearing Trees
80+cm	0	0
50-79cm	0	0
30-49cm	0	0
20-29cm	0	0
10-19cm	0	0
5-9cm	0	0
<5cm	0	0

Length of Logs (m)	0
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BAM Attribute (1x1m)	Litter Cover (%)
1 (5m)	15
2 (15m)	20
3 (25m)	20
4 (35m)	10
5 (45m)	12
Average	15.4

Growth Form	Composition Data (Count of Native Cover)	Structure Data (Sum of Cover)
Tree	0	0
Shrub	0	0
Grass	1	55
Forb	0	0
Fern	0	0
Other	0	0
High Threat Exotics	5	51.5

Appendix B. Flora species identified within the Subject Site.

Species	Exotic	Canopy	Midstory	Ground layer
<i>Anagallis arvensis</i>	x			x
<i>Briza minor</i>				x
<i>Bromus catharticus</i>	x			x
<i>Bursaria spinosa</i>			x	
<i>Callitris spp.</i>				x
<i>Carex spp.</i>				x
<i>Cirsium vulgare</i>	x			x
<i>Conyza bonariensis</i>	x			x
<i>Cynodon dactylon</i>				x
<i>Cyperus eragrostis</i>	x			x
<i>Dichondra repens</i>				x
<i>Eragrostis curvula</i>	x			x
<i>Eruca sativa</i>	x			x
<i>Eucalyptus moluccana</i>		x		
<i>Eucalyptus tereticornis</i>		x		
<i>Glycine clandestina</i>				x
<i>Medicago truncatula</i>	x			x
<i>Microlaena stipoides</i>				x
<i>Olea europaea</i>	Priority		x	
<i>Plantago lanceolata</i>	x			x
<i>Rubus fruticosus agg.</i>	Priority			x
<i>Rumex spp.</i>	x			x
<i>Rytidosperma spp.</i>	x			x
<i>Senecio madagascariensis</i>	Priority			x
<i>Sherardia arvensis</i>	x			x
<i>Sida bonariensis</i>				x
<i>Solanum sisymbriifolium</i>	x			x
<i>Taraxacum officinale</i>	x			x
<i>Trifolium repens</i>	x			x
<i>Verbena bonariensis</i>	x			x
<i>Vicia sativa</i>	x			x

Appendix C. Fauna species identified within and surrounding the Subject Site.

Class	Scientific Name	Common name	Status
Aves	<i>Cacatua galerita</i>	Sulphur-crested Cockatoo	Protected
	<i>Chenonetta jubata</i>	Australian Wood Duck	Protected
	<i>Corvus coronoides</i>	Australian Raven	Protected
	<i>Cracticus tibicen</i>	Australian Magpie	Protected
	<i>Egretta novaehollandiae</i>	White-faced Heron	Protected
	<i>Hirundo neoxena</i>	Welcome Swallow	Protected
	<i>Malurus cyaneus</i>	Superb Fairy Wren	Protected
	<i>Manorina melanocephala</i>	Noisy Miner	Protected
	<i>Manorina melanophrys</i>	Bell Miner	Protected
	<i>Rhipidura albiscapa</i>	Grey Fantail	Protected
	<i>Taeniopygia bichenovii</i>	Double-barred Finch	Protected



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