

Digital Signage – Sydney Park Road, Erskineville

Test of Significance

JCDecaux

18 April 2024

Version 1.0



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18 April 2024

Cordelia Maxwell-Williams National Development Manager JCDecaux Level 11, 190 George Street Sydney NSW 2000

Via email: cordelia.maxwell-williams@jcdecaux.com

Dear Cordelia

Sydney Park Road, Erskineville Test of Significance for Signage

JCDecaux is working on a development application for a large format monopole digital sign at Sydney Park Road, Erskineville (PAN-381735 - DA 23/14504). The development application is currently subject to an RFI from the Department of Planning, Housing and Infrastructure (File ref: EF23/14504). This largely relates to whether the proposed development is likely to impact on biodiversity / threatened species. The department has requested that a Test of Significance be produced and included as part of the development application.

The objective of a Test of Significance under Section 7.3 of the *Biodiversity Conservation Act 2016* (BC Act) is to provide standardised and transparent consideration through the development assessment process of whether the proposed development is likely to significantly affect threatened species or ecological communities, or their habitats.

Development is considered likely to significantly affect threatened species if:

- it is likely to significantly affect threatened species or ecological communities, or their habitats, according to the test in Section 7.3 of the *Biodiversity Conservation Act 2016*, or
- the development exceeds the biodiversity offsets scheme threshold if the biodiversity offsets scheme applies to the impacts of the development on biodiversity values, or
- it is carried out in a declared area of outstanding biodiversity value.

The following Test of Significance was prepared by Environmental Services & Education Australia (ESEA) and écologique in accordance with section 7.3 of the BC Act.

Yours faithfully

Clayton Woods Director – Environment Services & Education Australia

Kat Duchatel Director écologique



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1 SITE DESCRIPTION

The subject site is described as Lot 332 DP 1296528 and is located on the northern side of Sydney Park Road, Erskineville. The site is situated in between Sydney Park Road and the St Peters railway line. It currently contains existing security fencing, behind which is mostly weedy vegetation that is growing within the steeply sloped railway corridor (Figure 1).

The surrounding area is characterised by low-density residential development to the north and medium density residential development to the east, and mixed-use development to the north-west. Sydney Park Road is immediately south of the subject site and a Sydney Trains rail track is immediately north. Sydney Park is located to the south, on the opposite side of Sydney Park Road, and St Peters Railway Station is approximately 100 m to the west.

The subject site has a good level of connectivity to native vegetation within Sydney Park to the south, but otherwise has minimal connectivity to the north, east or west. The subject site is considered subject to a high level of disturbance due to traffic, train and pedestrian activity.



Figure 1 Existing characteristic of site.



2 PROPOSED DEVELOPMENT

The proposed development involves the installation of a digital advertising sign (dimensions 7.986 x 2.684 m) on the northern side of Sydney Park Road, Erskineville (Figure 2). The digital signage will be illuminated using LEDs installed within the front face.

The new digital advertising sign provides:

- an advertising display area of 21.15 m²,
- the continued display of illuminated advertisements (24-hour operation), and
- a maximum night time luminance of 120 cd / m².

The new sign will be constructed in the vegetated area, on the northern side of Sydney Park Road, Erskineville and above the railway line. No trees are present within the area, and as such, no trees are required to be removed as part of the proposed development.



Figure 2 Proposed location of new signage.



3 DESKTOP RESEARCH AND ANALYSIS

ESEA has reviewed background information and data and undertake searches of relevant online databases and mapping of the subject site and its surrounding environment. The following resources were accessed to develop a comprehensive list of threatened species and ecological communities with potential to occur on the site:

- NSW Biodiversity Values Map (NSW OEH);
- NSW State Vegetation Type Map (NSW DPE);
- BioNet Vegetation Classification (NSW OEH);
- BioNet Atlas of NSW Wildlife (NSW OEH);
- EPBC Protected Matters Search Tool (DAWE);
- NSW Threatened Species Profile Database (DPIE 2020b).

3.1.1 Biodiversity Values Map

The Biodiversity Values Map is prepared under Part 7 of the BC Act. It identifies land with high biodiversity value that is particularly sensitive to impacts from development and clearing. The map forms part of the Biodiversity Offsets Scheme (BOS) threshold, which is one of the triggers for determining whether the Biodiversity Offset Scheme applies to a clearing or development proposal.

No mapped biodiversity value areas are present within the subject site (Figure 3). The closest mapped Biodiversity Values area is approximately 3 km from the subject site.

3.1.2 BioNet Vegetation Classification

The NSW State Vegetation Type Map is a regional-scale map of NSW Plant Community Types. The map represents the current extent of each Plant Community Type (PCT), Vegetation Class and Vegetation Formation, across all tenures in NSW. PCT mapping provides an indication of the vegetation communities present within the vicinity of the subject site.

According to the NSW State Vegetation Type Mapping, no PCTs are mapped as occurring within approximately 3 km of the subject site (Figure 3).



EVICENTIAL SERVICES & Education Australia Client: JCDecaux Project: Sydney Park Road Test of Significance for Signage Eigure Title: Native Vegetation and Biodiversity Values Areas Date: 10 April 2024 Version: 1.0	Legend New Signage Plant Community Type ID 3788 3806 3963 3972 4028 4091 Biodiversity Values

Figure 3 Biodiversity values and PCT mapping.



3.1.3 NSW Bionet Atlas and NSW Seed Portal

A search was conducted for records of threatened species using the NSW BioNet database found 2,054 records of 41 species from within 10 kms of the subject site over the past 10 years. Species with a relatively high number of previous records include:

- Green and Golden Bell Frog (*Litoria aurea*) (Endangered BC Act; Vulnerable EPBC Act) (497 records), and
- Grey-headed Flying Fox (*Pteropus poliocephalus*) (Vulnerable BC Act; Vulnerable EPBC Act) (1354 records).

Analysis of the TBDC indicates that the following species have been previously recorded as occurring in close proximity to the subject site (Figure 4):

- Superb Fruit Dove (*Ptilinopus superbus*) (Vulnerable BC Act),
- Grey-headed Flying Fox (*Pteropus poliocephalus*) (Vulnerable BC Act; Vulnerable EPBC Act), and
- Powerful Owl (*Ninox strenua*) (Vulnerable BC Act),

No other threatened species have previously been recorded in close proximity to the subject site.

3.1.4 Likelihood of Occurrence

A Likelihood of Occurrence (Appendix A) has been compiled using information obtained from the NSW BioNet database, NSW Threatened Species Profile Database, and the site characteristics that have been assessed in the desktop review and site inspection. This informs which species have a high probability of occurring within the subject site and guides whether any Test of Significance should be conducted.

The likelihood of occurrence indicates that only Grey-headed Flying Fox (*Pteropus poliocephalus*) and Powerful Owl (*Ninox strenua*) (Vulnerable – BC Act) have a high likelihood of occurrence within the subject site. These species have been assessed in the Test of Significance in Section 5.





Figure 4 Threatened species records.



4 SITE ASSESSMENT

An ecological assessment of the subject site was conducted by ESEA's ecologist Clayton Woods (BSc Hons – Ecology and Environmental Science – 1st Class, University of Edinburgh). The site inspection was conducted on Monday 8th April 2024.

The purpose of the site inspection was to classify and verify any PCTs / ecological communities present within the site, and to conduct a habitat assessment / identify microhabitats that may support threatened species.

The site assessment found the development area is highly modified and consists only of weedy groundcover species – including *Cortaderia selloana* (pampas grass), *Cenchrus setaceus* (fountain grass) and *Lantana camara* (lantana) (Figure 5). No trees occur in the development area. Two specimens of *Melaleuca linariifolia* (flax-leaved paperbark) are present within the pedestrian footpath of Sydney Park Road. These are not expected to be impacted by the proposed works.

The results of the field survey found that the development area is not representative of any PCT. The site inspection also determined that the proposed development area does not contain any potential habitat features for threatened fauna such as waterbodies and riparian areas, rocky outcrops, cliffs, bush rock, fallen timber, or hollow-bearing trees.



Figure 5 Flora within subject site.



5 TEST OF SIGNIFICANCE

All species and ecological communities considered likely to occur in the study area, and known to use that type of habitat, have been considered in the test of significance. Species and ecological communities included in the test of significance include:

- Ninox strenua (powerful owl) (Vulnerable BC Act), and
- Pteropus poliocephalus (grey-headed flying fox) (Vulnerable BC Act; Vulnerable EPBC Act).

All other species and ecological communities have been excluded from the Test of Significance as recent and reliable data, relating to the subject site and derived from field surveys consistent with NSW guidelines, clearly show that these species:

- do not occur in the subject site and surrounding area, and
- will not use on-site habitats, and
- will not be influenced by off-site impacts of the proposal.



Species / Ecological Community

Powerful Owl (Ninox strenua)

Species Listing Status

Vulnerable - BC Act

Adverse effects on the life cycle of a species

(a) in the case of a threatened species, whether the proposed development or activity 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 The powerful owl usually inhabits the moist forests of eastern Australia; however, with expanding populations of possums and other prey animals occurring in built-up areas, powerful owls are increasingly being recorded in the suburbs. The species will sometimes be found in open areas near forests such as in parks and suburban areas. The area surrounding the subject site may, on rare occasion, be used as feeding habitat by the powerful owl as they feed on small mammals and bats species that may traverse along the railway line and Sydney Park Road.

The subject site is considered to provide very poor-quality potential feeding habitat for the species, as it is thick with groundcover species which would limit visibility and access to prey. The subject site is unlikely to be used regularly for feeding activities. Removal of thick groundcover during construction works would likely have a small positive impact on the species by increasing prey visibility and access.

The powerful owl needs old growth hollow-bearing trees for breeding, which are absent from the subject site. No trees require removal for the installation of new signage. As such, no potential roosting or nesting habitat for powerful owls is likely to be impacted by the proposed works and the proposal will therefore not have any adverse effects on the life cycle.

Adverse effects on ecological communities	
(b) in the case of an endangered ecological community or critically endangered ecological community, whether the proposed development or activity:	
 (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 	N/A



(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	N/A
Adverse effects on habitats	
(c) in relation to the habitat of a threatened species or ecological community:	
(i) the extent to which habitat is likely to be removed or modified as a result of the proposed development or activity, and	The subject does is not considered to provide roosting or nesting habitat and only very poor quality potential foraging habitat for the powerful owl. No trees are required to be removed for the installation of new signage.
	The thick nature of the groundcover vegetation present, would most likely prevent hunting of ground mammals by powerful owl. Removal of thick groundcover during construction works may therefore have a small positive impact on the species by increasing prey visibility and access. However, the footprint of the proposed new signage a very small in nature, so any impacts are expected to be negligible.
(ii) whether an area of habitat is likely to become fragmented or isolated from other areas of habitat as a result of the proposed development or activity, and	The proposal will not fragment or isolate any areas of habitat for the powerful owl. Higher quality foraging habitat located in Sydney Park (proximal to the subject site) will not be affected by the proposal.
(iii) the importance of the habitat to be removed, modified, fragmented or isolated to the long-term survival of the species or	The area to be impacted is considered poor quality potential feeding habitat that is not likely to be used regularly by powerful owl.
ecological community in the locality	The proposal does not constitute a loss of important habitat for the species.
Adverse effects on areas of outstanding biodiversity val	ue
(d) whether the proposed development or activity is likely to have an adverse effect on any declared area of outstanding biodiversity value (either directly or indirectly)	The proposal will not have an adverse effect on any declared area of outstanding biodiversity value.
Key threatening processes	
(e) whether the proposed development or activity is or is part of a key threatening process or is likely to increase the impact of a key threatening process	The proposal is not part of a key threatening process.



Species / Ecological Community							
Grey-headed Flying Fox (<i>Pteropus poliocephalus</i>)							
Species Listing Status							
Vulnerable - BC A	ct; Vulnerable – EPBC Act						
Adverse effects on the life cycle of a species							
(a) in the case of a threatened species, whether the proposed development or activity is likely to have an adverse effect on the life cycle of the species such that	Grey-headed flying fox (GHFF) is likely to traverse over the area surrounding the subject site but would not visit or use the subject site.						
a viable local population of the species is likely to be placed at risk of extinction	The GHFF commutes daily to foraging areas, usually within 15 km of the day roost site, and are capable of nightly flights of up to 50 km from their roost to different feeding areas as food resources change.						
	The proposal is unlikely to disrupt flight lines, as the subject site has an extremely small footprint, has a low built height, is positioned between higher surrounding residential buildings and does not provide habitat for the GHFF.						
	The new signage will be subject to 24-hour illumination. Light pollution near bats' travel routes can increase their flight time and energy use by cutting them off from food and water sources. It is of note, that the subject site is already subject to high levels of light pollution due to surrounding street lighting along Sydney Park Road, as well as from surrounding residential building, shops, and other illuminated signage. The impact of additional light pollution caused by new signage is expected to be low, as the new signage is not in proximity to any roost sites, known feeding sites, water sources, or known connection corridors. The lights are not upwards facing.						
	No potential roosting or feeding habitat features will be impacted by the installation of new signage. No trees are required to be removed as such, no potential roosting or feeding habitat for GHFF is considered likely to be impacted by the proposal.						
	The proposal is not considered likely to have an adverse effect on the life cycle of GHFF such that a viable local species population is likely to be placed at risk of extinction.						
Adverse effects on ecological communities							
(b) in the case of an endangered ecological community or critically endangered ecological community, whether the proposed development or activity:							



 (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 	N/A
(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	N/A
Adverse effects on habitats	
(c) in relation to the habitat of a threatened species or ecological community:	
(i) the extent to which habitat is likely to be removed or modified as a result of the proposed development or activity, and	The subject site does not contain habitat for the GHFF and the proposal will not indirectly impact on any potential habitat for the species in the surrounding areas to the subject site.
(ii) whether an area of habitat is likely to become fragmented or isolated from other areas of habitat as a result of the proposed development or activity, and	Therefore the proposal will not modify, fragment or isolate any habitat for the GHFF.
(iii) the importance of the habitat to be removed, modified, fragmented or isolated to the long-term survival of the species or ecological community in the locality	
Adverse effects on areas of outstanding biodiversity values	ue
(d) whether the proposed development or activity is likely to have an adverse effect on any declared area of outstanding biodiversity value (either directly or indirectly)	The proposal will not have an adverse effect on any declared area of outstanding biodiversity value.
Key threatening processes	
(e) whether the proposed development or activity is or is part of a key threatening process or is likely to increase the impact of a key threatening process	The proposal is not part of a key threatening process.



6 CONCLUSION

This assessment has found that the subject site does not contain any remnant native vegetation or habitat for any threatened species, populations or communities either directly or indirectly.

Two highly mobile threatened species, the powerful owl and grey-headed flying fox, are likely to fly over / transit through the vicinity of the subject site but are considered highly unlikely to stop at or use the subject site.

The test of significance supports that a significant effect on these threatened species or their habitat is unlikely, and further consideration is not warranted.

Yours sincerely

Clayton Woods Director – Environment Services & Education Australia

Kat Duchatel Director écologique



APPENDIX A – LIKELIHOOD OF OCCURRENCE

Class	Family	Scientific Name	Common Name	NSW status	Comm. status	Records	Description	Likelihood
Amphibia	Hylidae	Litoria aurea	Green and Golden Bell Frog	E1,P	V	497	Inhabits marshes, dams and stream-sides, particularly those containing bullrushes or spikerushes. Optimum habitat includes water-bodies that are unshaded, free of predatory fish such as Plague Minnow, have a grassy area nearby and diurnal sheltering sites available. Some sites, particularly in the Greater Sydney region occur in highly disturbed areas.	None (No potential habitat)
Reptilia	Cheloniidae	Caretta caretta	Loggerhead Turtle	E1,P	E	5	Loggerhead Turtles are ocean-dwellers, foraging in deeper water for fish, jellyfish and bottom-dwelling animals. The female comes ashore to lay her eggs in a hole dug on the beach in tropical regions during the warmer months.	None (No potential habitat)



Class	Family	Scientific Name	Common Name	NSW status	Comm. status	Records	Description	Likelihood
Reptilia	Dermochelyidae	Dermochelys coriacea	Leatherback Turtle	E1,P	E	1	Occurs in inshore and offshore marine waters. Rarely breeds in Australia, with the nearest regular nesting sites being the Solomon Islands and Malayan Archipelago. Occasional breeding records from NSW coast, including between Ballina and Lennox Head in northern NSW. Number of sightings in southern waters suggest species actively seeks temperate feeding grounds, rather than occurring only as stray vagrants.	None (No potential habitat)
Reptilia	Varanidae	Varanus rosenbergi	Rosenberg's Goanna	V,P		1	Found in heath, open forest and woodland. Associated with termites, the mounds of which this species nests in. Termite mounds are a critical habitat component. Individuals require large areas of habitat.	None (No potential habitat, few previous sightings)
Reptilia	Elapidae	Hoplocephalus bitorquatus	Pale-headed Snake	V,P		1	The Pale-headed Snake is a highly cryptic species that can spend weeks at a time hidden in tree hollows. Found mainly in dry eucalypt forests and woodlands, cypress forest and occasionally in rainforest or moist eucalypt forest. In drier environments, it appears to favour habitats close to riparian areas.	None (No potential habitat, few previous sightings)



Class	Family	Scientific Name	Common Name	NSW status	Comm. status	Records	Description	Likelihood
Aves	Columbidae	Ptilinopus regina	Rose-crowned Fruit-Dove	V,P		1	Rose-crowned Fruit-doves occur mainly in sub-tropical and dry rainforest and occasionally in moist eucalypt forest and swamp forest, where fruit is plentiful. They are shy pigeons, not easy to see amongst the foliage, and are more often heard than seen. They feed entirely on fruit from vines, shrubs, large trees and palms, and are thought to be locally nomadic as they follow the ripening of fruits. Some populations are migratory in response to food availability - numbers in north-east NSW increase during spring and summer then decline in April or May.	Low (No potential habitat, few previous sightings)



Class	Family	Scientific Name	Common Name	NSW status	Comm. status	Records	Description	Likelihood
Aves	Columbidae	Ptilinopus superbus	Superb Fruit-Dove	V,P		1	Inhabits rainforest and similar closed forests where it forages high in the canopy, eating the fruits of many tree species such as figs and palms. It may also forage in eucalypt or acacia woodland where there are fruit-bearing trees. Part of the population is migratory or nomadic. There are records of single birds flying into lighted windows and lighthouses, indicating that birds travel at night. At least some of the population, particularly young birds, moves south through Sydney, especially in autumn.	Low (No potential habitat, few previous sightings)
Aves	Procellariidae	Ardenna pacifica	Wedge-tailed Shearwater	p	J	3	The Wedge-tailed Shearwater is a pelagic, marine bird known from tropical and subtropical waters. The species tolerates a range of surface-temperatures and salinities but is most abundant where temperatures are greater than 21 °C and salinity is greater than 34.6 %. In tropical zones the species may feed over cool nutrient-rich waters. The species has been recorded in offshore waters of eastern Victoria and southern NSW, mostly over continental slope with sea-surface temperatures of 13.9–24.4 °C	None (No potential habitat)



Class	Family	Scientific Name	Common Name	NSW status	Comm. status	Records	Description	Likelihood
Aves	Procellariidae	Ardenna tenuirostris	Short-tailed Shearwater	Ρ	C,J,K	5	The most abundant seabird species in Australian waters. It is a migratory species that breeds mainly on small islands in Bass Strait and Tasmania and migrates to the Northern Hemisphere for the boreal summer.	None (No potential habitat)
Aves	Ardeidae	Ixobrychus flavicollis	Black Bittern	V,P		2	Inhabits both terrestrial and estuarine wetlands, generally in areas of permanent water and dense vegetation. Where permanent water is present, the species may occur in flooded grassland, forest, woodland, rainforest and mangroves. Feeds on frogs, reptiles, fish and invertebrates, including snails, dragonflies, shrimps and crayfish, with most feeding done at dusk and at night.	None (No potential habitat)



Class	Family	Scientific Name	Common Name	NSW status	Comm. status	Records	Description	Likelihood
Aves	Accipitridae	<i>Haliaeetus leucogaster</i>	White-bellied Sea- Eagle	V,P		3	Habitats are characterised by the presence of large areas of open water including larger rivers, swamps, lakes, and the sea. Occurs at sites near the sea or sea-shore, such as around bays and inlets, beaches, reefs, lagoons, estuaries and mangroves; and at, or in the vicinity of freshwater swamps, lakes, reservoirs, billabongs and saltmarsh. Terrestrial habitats include coastal dunes, tidal flats, grassland, heathland, woodland, and forest (including rainforest). Breeding habitat consists of mature tall open forest, open forest, tall woodland, and swamp sclerophyll forest close to foraging habitat. Nest trees are typically large emergent eucalypts and often have emergent dead branches or large dead trees nearby which are used as 'guard roosts'. Nests are large structures built from sticks and lined with leaves or grass.	Low (No potential habitat, few previous sightings)



Class	Family	Scientific Name	Common Name	NSW status	Comm. status	Records	Description	Likelihood
Aves	Accipitridae	^^Lophoictinia isura	Square-tailed Kite	V,P,3		1	Found in a variety of timbered habitats including dry woodlands and open forests. Shows a particular preference for timbered watercourses. In arid north-western NSW, has been observed in stony country with a ground cover of chenopods and grasses, open acacia scrub and patches of low open eucalypt woodland. Appears to occupy large hunting ranges of more than 100 km ² .	Low (No potential habitat, few previous sightings)
Aves	Burhinidae	Burhinus grallarius	Bush Stone-curlew	E1,P		1	Inhabits open forests and woodlands with a sparse grassy groundlayer and fallen timber. Largely nocturnal, being especially active on moonlit nights. Feed on insects and small vertebrates, such as frogs, lizards and snakes. Nest on the ground in a scrape or small bare patch.	None (No potential habitat, few previous sightings)



Class	Family	Scientific Name	Common Name	NSW status	Comm. status	Records	Description	Likelihood
Aves	Haematopodidae	Haematopus longirostris	Pied Oystercatcher	E1,P		2	Favours intertidal flats of inlets and bays, open beaches and sandbanks. Forages on exposed sand, mud and rock at low tide, for molluscs, worms, crabs and small fish. The chisel-like bill is used to pry open or break into shells of oysters and other shellfish. Nests mostly on coastal or estuarine beaches although occasionally they use saltmarsh or grassy areas. Nests are shallow scrapes in sand above the high tide mark, often amongst seaweed, shells and small stones.	None (No potential habitat)
Aves	Charadriidae	Pluvialis fulva	Pacific Golden Plover	Ρ	C,J,K	1	In non-breeding grounds in Australia this species usually inhabits coastal habitats, though it occasionally occurs around inland wetlands. Pacific Golden Plovers usually occur on beaches, mudflats and sandflats (sometimes in vegetation such as mangroves, low saltmarsh such as Sarcocornia, or beds of seagrass) in sheltered areas including harbours, estuaries and lagoons, and also in evaporation ponds in saltworks.	None (No potential habitat)



Class	Family	Scientific Name	Common Name	NSW status	Comm. status	Records	Description	Likelihood
Aves	Charadriidae	Pluvialis squatarola	Grey Plover	Ρ	C,J,K	4	In Australia, the Grey Plover has been recorded in all states, where it is found along the coasts. The species is only occasionally recorded along the coast of NSW.	None (No potential habitat)
Aves	Scolopacidae	Calidris acuminata	Sharp-tailed Sandpiper	Ρ	C,J,K	4	In Australasia, the Sharp-tailed Sandpiper prefers muddy edges of shallow fresh or brackish wetlands, with inundated or emergent sedges, grass, saltmarsh or other low vegetation. This includes lagoons, swamps, lakes and pools near the coast, and dams, waterholes, soaks, bore drains and bore swamps, saltpans and hypersaline saltlakes inland. They also occur in saltworks and sewage farms. They use flooded paddocks, sedgelands and other ephemeral wetlands, but leave when they dry.	None (No potential habitat)



Class	Family	Scientific Name	Common Name	NSW status	Comm. status	Records	Description	Likelihood
Aves	Scolopacidae	Gallinago hardwickii	Latham's Snipe	р	J,K	8	In Australia, Latham's Snipe occurs in permanent and ephemeral wetlands up to 2000 m above sea-level. They usually inhabit open, freshwater wetlands with low, dense vegetation (e.g. swamps, flooded grasslands or heathlands, around bogs and other water bodies). However, they can also occur in habitats with saline or brackish water, in modified or artificial habitats, and in habitats located close to humans or human activity.	None (No potential habitat)
Aves	Laridae	Sterna hirundo	Common Tern	р	C,J,K	1	Common Terns are marine, pelagic and coastal. In Australia, they are recorded in all marine zones, but are commonly observed in near-coastal waters, both on ocean beaches, platforms and headlands and in sheltered waters, such as bays, harbours and estuaries with muddy, sandy or rocky shores.	None (No potential habitat)



Class	Family	Scientific Name	Common Name	NSW status	Comm. status	Records	Description	Likelihood
Aves	Laridae	Thalasseus bergii	Crested Tern	Ρ	J	7	Nests are located on low-lying sandy, rocky, or coral islands, sometimes amongst stunted shrubs, often without any shelter at all.[16] When not breeding, the greater crested tern will roost or rest on open shores, less often on boats, pilings, harbour buildings and raised salt mounds in lagoons. It is rarely seen on tidal creeks or inland waters.	None (No potential habitat)
Aves	Strigidae	^^Ninox strenua	Powerful Owl	V,P,3		54	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, Black She-oak, Blackwood, Rough-barked Apple, Cherry Ballart and a number of eucalypt species.	Low (Previously recorded in close proximity)



Class	Family	Scientific Name	Common Name	NSW status	Comm. status	Records	Description	Likelihood
Aves	Meliphagidae	Grantiella picta	Painted Honeyeater	V,P	V	1	Inhabits Boree/ Weeping Myall, 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 Amyema. Insects and nectar from mistletoe or eucalypts are occasionally eaten.	None (No potential habitat, few previous sightings)



Class	Family	Scientific Name	Common Name	NSW status	Comm. status	Records	Description	Likelihood
Aves	Petroicidae	Petroica boodang	Scarlet Robin	V,P		2	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.The Scarlet Robin breeds on ridges, hills and foothills of the western slopes, the Great Dividing Range and eastern coastal regions; this species is occasionally found up to 1000 metres in altitude. The Scarlet Robin is primarily a resident in forests and woodlands, but some adults and young birds disperse to more open habitats after breeding. In autumn and winter many Scarlet Robins live in open grassy woodlands, and grasslands or grazed paddocks with scattered trees.	None (No potential habitat, few previous sightings)



Class	Family	Scientific Name	Common Name	NSW status	Comm. status	Records	Description	Likelihood
Aves	Petroicidae	Petroica phoenicea	Flame Robin	V,P		1	Breeds in upland tall moist eucalypt forests and woodlands, often on ridges and slopes. Prefers clearings or areas with open understoreys. The groundlayer of the breeding habitat is dominated by native grasses and the shrub layer may be either sparse or dense. Occasionally occurs in temperate rainforest, and also in herbfields, heathlands, shrublands and sedgelands at high altitudes. In winter, birds migrate to drier more open habitats in the lowlands (i.e. valleys below the ranges, and to the western slopes and plains). Often occurs in recently burnt areas; however, habitat becomes unsuitable as vegetation closes up following regeneration. The species lives in dry forests, open woodlands and in pastures and native grasslands, with or without scattered trees.	None (No potential habitat, few previous sightings)



Class	Family	Scientific Name	Common Name	NSW status	Comm. status	Records	Description	Likelihood
Aves	Estrildidae	Stagonopleura guttata	Diamond Firetail	V,P	V	1	Found in grassy eucalypt woodlands, including Box-Gum Woodlands and Snow Gum Eucalyptus pauciflora Woodlands. Also occurs in open forest, mallee, Natural Temperate Grassland, and in secondary grassland derived from other communities. Often found in riparian areas (rivers and creeks), and sometimes in lightly wooded farmland.	None (No potential habitat, few previous sightings)
Mammalia	Dasyuridae	Dasyurus maculatus	Spotted-tailed Quoll	V,P	E	4	Recorded across a range of habitat types, including rainforest, open forest, woodland, coastal heath and inland riparian forest, from the sub-alpine zone to the coastline. Individual animals use hollow-bearing trees, fallen logs, small caves, rock outcrops and rocky-cliff faces as den sites.	None (No potential habitat, few previous sightings)
Mammalia	Peramelidae	Perameles nasuta	Long-nosed Bandicoot population in inner western Sydney	E2,P		2	Shelter mostly under older houses and buildings Forage in parkland and back-yards.	Low (No potential habitat, few previous sightings)
Mammalia	Phascolarctidae	Phascolarctos cinereus	Koala	E1,P	E	6	Inhabit eucalypt woodlands and forests. Feed on the foliage of more than 70 eucalypt species and 30 non-eucalypt species, but in any one area will select preferred browse species.	None (No potential habitat, few previous sightings)



Class	Family	Scientific Name	Common Name	NSW status	Comm. status	Records	Description	Likelihood
Mammalia	Burramyidae	Cercartetus nanus	Eastern Pygmy- possum	V,P		1	Found in a broad range of habitats from rainforest through sclerophyll (including Box-Ironbark) forest and woodland to heath, but in most areas woodlands and heath appear to be preferred, except in north-eastern NSW where they are most frequently encountered in rainforest. Feeds largely on nectar and pollen collected from banksias, eucalypts and bottlebrushes; an important pollinator of heathland plants such as banksias; soft fruits are eaten when flowers are unavailable.	None (No potential habitat, few previous sightings)
Mammalia	Pteropodidae	Pteropus poliocephalus	Grey-headed Flying-fox	V,P	V	1354	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 (High number of previous records and previously recorded in close proximity)



Class	Family	Scientific Name	Common Name	NSW status	Comm. status	Records	Description	Likelihood
Mammalia	Emballonuridae	Saccolaimus flaviventris	Yellow-bellied Sheathtail-bat	V,P		8	Roosts singly or in groups of up to six, in tree hollows and buildings; in treeless areas they are known to utilise mammal burrows. When foraging for insects, flies high and fast over the forest canopy, but lower in more open country. Forages in most habitats across its very wide range, with and without trees; appears to defend an aerial territory.	Low (Low number of previous records, and potential very low quality feeding habitat present)
Mammalia	Molossidae	Micronomus norfolkensis	Eastern Coastal Free-tailed Bat	V,P		1	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.	Low (Low number of previous records, and potential very low quality feeding habitat present)
Mammalia	Vespertilionidae	Chalinolobus dwyeri	Large-eared Pied Bat	V,P	E	1	Roosts in caves (near their entrances), crevices in cliffs, old mine workings and in the disused, bottle-shaped mud nests of the Fairy Martin, frequenting low to mid- elevation dry open forest and woodland close to these features. Females have been recorded raising young in sandstone caves and overhangs. Also found in well- timbered areas containing gullies.	Low (No potential habitat, few previous sightings)



Class	Family	Scientific Name	Common Name	NSW status	Comm. status	Records	Description	Likelihood
Mammalia	Vespertilionidae	Falsistrellus tasmaniensis	Eastern False Pipistrelle	V,P		5	Prefers moist habitats, with trees taller than 20 m. Generally roosts in eucalypt hollows, but has also been found under loose bark on trees or in buildings.	Low (Low number of previous records, and potential very low quality feeding habitat present)
Mammalia	Vespertilionidae	Myotis macropus	Southern Myotis	V,P		10	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.	Low (Low number of previous records, and potential very low quality feeding habitat present)



Class	Family	Scientific Name	Common Name	NSW status	Comm. status	Records	Description	Likelihood
Mammalia	Miniopteridae	Miniopterus orianae oceanensis	Large Bent-winged Bat	V,P		30	Caves are the primary roosting habitat, but also use derelict mines, storm-water tunnels, buildings and other man-made structures. Form discrete populations centred on a maternity cave that is used annually in spring and summer for the birth and rearing of young. At other times of the year, populations disperse within about 300 km range of maternity caves. Cold caves are used for hibernation in southern Australia. Hunt in forested areas, catching moths and other flying insects above the tree tops.	Low (No potential habitat, few previous sightings)
Flora	Fabaceae (Mimosoideae)	Acacia pubescens	Downy Wattle	V	V	1	Occurs on alluviums, shales and at the intergrade between shales and sandstones. The soils are characteristically gravely soils, often with ironstone. Occurs in open woodland and forest, in a variety of plant communities, including Cooks River/Castlereagh Ironbark Forest, Shale/Gravel Transition Forest and Cumberland Plain Woodland.	None (not present in subject site)



Class	Family	Scientific Name	Common Name	NSW status	Comm. status	Records	Description	Likelihood
Flora	Fabaceae (Mimosoideae)	Acacia terminalis subsp. Eastern Sydney	Sunshine wattle	E1	E	1	Coastal scrub and dry sclerophyll woodland on sandy soils. Habitat is generally sparse and scattered. Most areas of habitat or potential habitat are small and isolated. Most sites are highly modified or disturbed due to surrounding urban development.	None (not present in subject site)
Flora	Hygrophoraceae	Hygrocybe austropratensis		E1		3	Occurs in gallery warm temperate forests dominated by Lilly Pilly, Grey Myrtle, Cheese Tree and Sweet Pittosporum. Associated with alluvial sandy soils of the Hawkesbury Soil Landscapes with naturally low fertility and erodible.	None (not present in subject site)
Flora	Myrtaceae	Syzygium paniculatum	Magenta Lilly Pilly	E1	V	17	On the south coast the Magenta Lilly Pilly occurs on grey soils over sandstone, restricted mainly to remnant stands of littoral (coastal) rainforest. On the central coast Magenta Lilly Pilly occurs on gravels, sands, silts and clays in riverside gallery rainforests and remnant littoral rainforest communities.	None (not present in subject site)