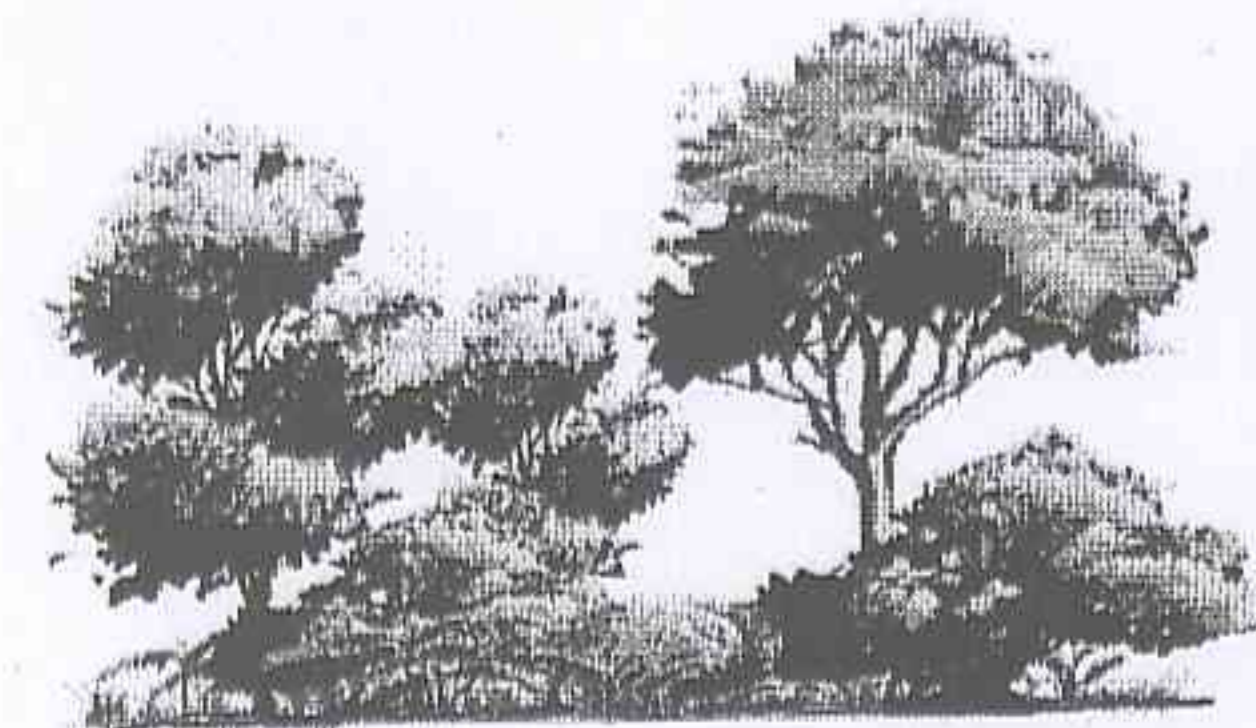


existing site habitats units



open forest bushland

28,200 m²



disturbed vegetation

3,400 m²



cleared market garden area

22,000 m²



riparian habitats

3,200 m²

general site information

- site area - 56,800m² (aprox.)
- aspect - north;
- general slope - typical slopes 15 deg (21%), flats 30 deg (5%);
- catchment - narrabeen creek / narrabeen lagoon;
- geology - hawkesbury sandstone;
- soil landscape - hawkesbury soil landscape & warriewood soil landscape;
- vegetation structure - open forest / modified / cleared;
- vegetation association - sydney sandstone gully forest / cleared grassland;
- bushfire prone land - yes

regional context

The site is situated on the lower interface of the bushland areas of the Warriewood / Ingleside Escarpment and the industrial and residential areas of the Warriewood Valley.

The site adjoins the bushland reserve of Healesville Estate which forms part of the Warriewood / Ingleside Escarpment bushland areas. Healesville Estate is managed by Pittwater Council as a natural area and is contiguous with the bushland areas of Ingleside Park and Heydon Reserve. In total these contiguous bushland within reserves is approximately 70ha in area.

Outside the local bushland reserves the indigenous vegetation is fragmented by the rural allotments in Ingleside and Elanora Heights. Ku-ring-gai Chase National Park is 2km from the site to the north west and Garigal National Park is 2 km to the south west. To the north, east and south of the site there are developed industrial, commercial and residential areas.

Fauna that do not reside locally and have broader foraging ranges are also expected to frequent the site, some of which such as the Grey-headed Flying-fox (*Pteropus poliocephalus*) and Glossy Black-Cockatoo (*Calyptorhynchus lathami*) are listed in the schedules of the Threatened Species Conservation Act (NSW) 1995.

site habitats

The Open Forest Bushland habitats contains indigenous vegetation that is characteristic of Sydney Sandstone Gully Forest described by Benson & Howell (1994). Within this area there are however several subtle changes in the vegetation composition. The open forest lower slopes are dominated by Sydney Red Gum (*Angophora costata*), Sydney Peppermint (*Eucalyptus piperita*) and Red Bloodwood (*Corymbia gummifera*) with associated species of Turpentine (*Syncarpia glomulifera*) and Forest Oak (*Allocasuarina torulosa*). Adjacent the existing dwelling, to the south and south east, is an ephemeral gully line where the habitats are moister and the vegetation association includes Bangalay (*Eucalyptus botryoides*), Sydney Peppermint (*Eucalyptus piperita*) and Cabbage Palm (*Livistona australis*).

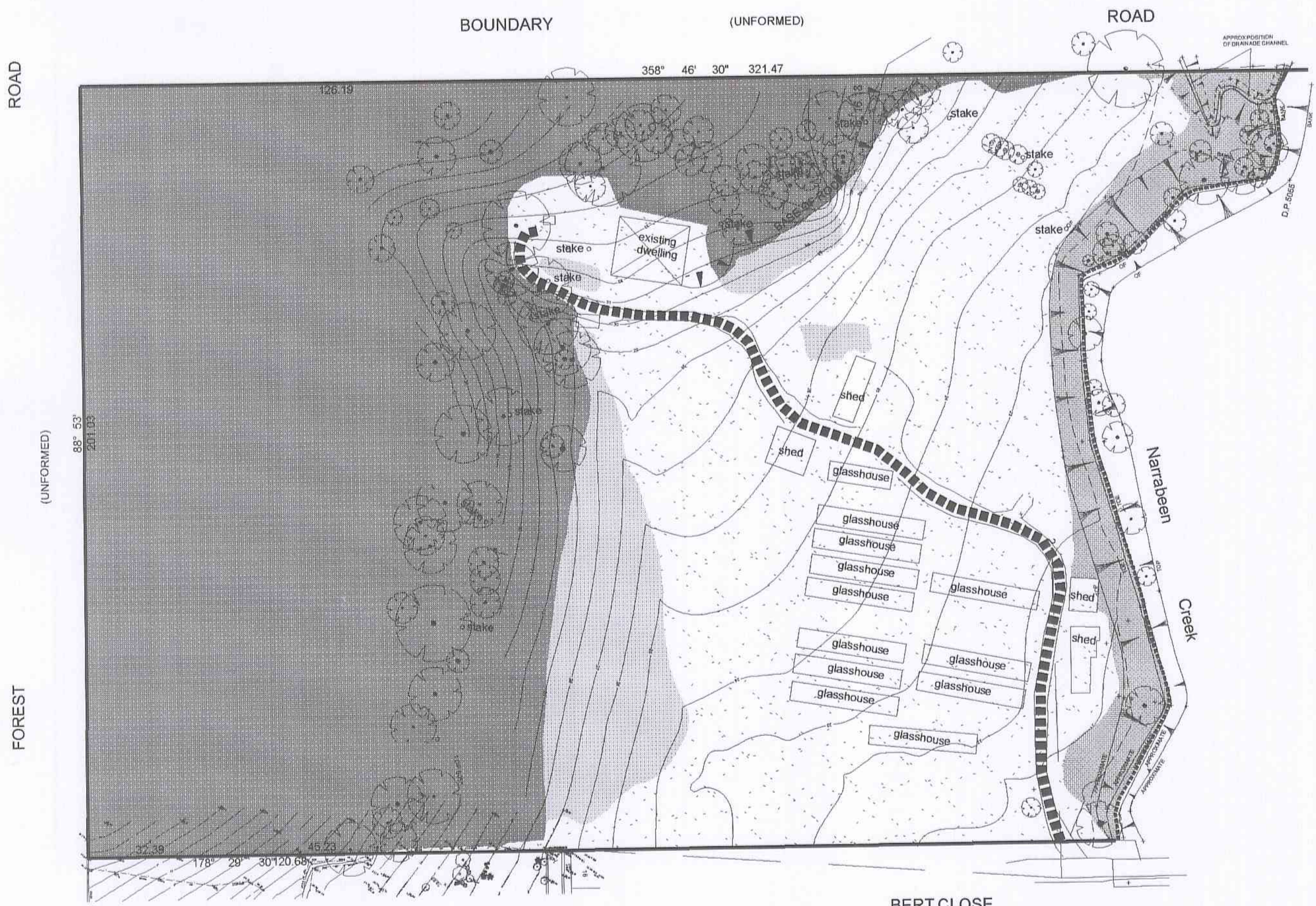
The avifauna within the Open Forest is characteristic of the urban/bushland interface with Sulphur-crested Cockatoos (*Cacatua galerita*) Galahs (*Eolophus roseicapillus*) and Rainbow Lorikeets (*Trichoglossus haematodus*) present. Several arboreal termite nests have been hollowed out and are typically used by Laughing Kookaburras (*Dacelo novaeguineae*) as nests. Scats of Swamp Wallaby (*Wallabia bicolor*) were present within the Open Forest Bushland area and there is some evidence of Long-nosed Bandicoots (*Perameles nasuta*) foraging activity. Spotlight surveys also identified a Sugar Glider (*Petaurus breviceps*) on a Sydney Peppermint (*Eucalyptus piperita*). The rock boulders and fallen trees, logs etc also provide refuge habitat for a number of reptiles such as Dark-flecked Delicate Skink (*Lampropholis delicata*) that commonly occurred across the Open Forest habitats.

The Cleared Market Garden area covers the lower flatter areas of the site and includes the glasshouses, sheds and the area surrounding the existing dwelling. The indigenous vegetation has been cleared in the past and contains a number of exotic grasses and annuals such as Parramatta Grass (*Sporobolus indicus*), Whiskey Grass (*Andropogon virginicus*), Feather-top Rhodes Grass (*Chloris virgata*), Flaxleaf Fleabane (*Conyza bonariensis*) and Coreopsis (*Coreopsis lanceolata*) with clumps of Lantana (*Lantana camara*) and Green Cestrum (*Cestrum parqui*). Several hardy indigenous species persist amongst the exotic species and include Blady Grass (*Imperata cylindrica*), Bracken Common (*Pteridium esculentum*) and Australian Bluebell (*Wahlenbergia gracilis*). This area also includes the cleared areas to the south of the existing dwelling which are mown and retain indigenous canopy trees of Sydney Peppermint (*Eucalyptus piperita*) and Blackbutt (*Eucalyptus pilularis*).

This Cleared Market Garden area is extensively used by Long-nosed Bandicoots (*Perameles nasuta*) and numerous signs of foraging activity are evident. Scats of Swamp Wallaby (*Wallabia bicolor*) were also present. The open areas and clumps of scrub vegetation provide foraging habitat for a number of small insectivorous birds including Red-browed Finch (*Neochmia temporalis*), Superb Fairy-wren (*Malurus cyaneus*) and Welcome Swallow (*Hirundo neoxena*). Other introduced species such as Indian Mynah (*Acridotheres tristis*) and Red-whiskered Bulbul (*Pycnonotus jocosus*) were evident.

The Riparian Habitats along Narrabeen Creek is dominated by noxious and environmental weeds species with the exception of a small section in the north west corner of the site. On the southern bank of Narrabeen Creek, within the subject site, the indigenous vegetation is predominately absent. Lantana (*Lantana camara*) Green Cestrum (*Cestrum parqui*) and Fishpole Bamboo (*Phyllostachys aurea*) are the dominant species on and adjacent the creek banks with other species including Large Leaf Privet (*Ligustrum lucidum*) and Wandering Jew (*Tradescantia fluminensis*) present. Amongst the environmental and noxious weeds a few indigenous trees remain. These remnant trees within the Riparian Habitats are predominately on the adjoining allotment and consist of Coachwood (*Ceratopetalum apetalum*) and Turpentine (*Syncarpia glomulifera*) which are characteristic of the sandstone gully forest that would have existed previously on the site. In the north west corner of the site the riparian vegetation is in better condition with an indigenous species of Cabbage Palm (*Livistona australis*), Cheese Tree (*Glochidion ferdinandi*) and Common Ground Fern (*Calochlaena dubia*) present.

A colony of Common Eastern Froglet (*Crinia signifera*) were evident along the degraded parts of the creek and Brown Striped Marsh Frog (*Heleioporus australiacus*) was also heard nearby. Towards the upper parts of the riparian area a Carpet / Diamond Python (*Morelia spilota*) was observed and several others have been reported by the owner and tenants of the site. Superb Fairy-wrens (*Malurus cyaneus*) used the Lantana (*Lantana camara*) thickets as refuge and the occasional Noisy Miner (*Manorina melanoccephala*) was present in very low numbers. Long-nosed Bandicoots (*Perameles nasuta*) foraging activity was also evident in the riparian area.



BERT CLOSE

legend

- centre line of creek
- existing vehicle access track
- ⊗ existing trees in the vicinity of proposed works