

Document3

Name: Callam Hart Date: 14 November 2024
 Company: H-U Job/Doc No: 65771/163,776
 Email: callam@h-u.au Inquiries: Rachael Pratt

Supplementary flora and vegetation survey of road reserve at Smiths Beach

Smiths 2014 Pty Ltd (the Proponent) propose to develop the Smiths Beach Project, Yallingup – Coastal Tourism Village at Lot 4131 (P061991) Smiths Beach Road, Yallingup (EPA Assessment No. 2340/ EPBC 2021/9141). The Proponent wishes to amend the proposed Development Envelope to include a Universal Access Ramp (UAR) to Smiths Beach, and to incorporate a 1.128 ha section of the ‘Leeuwin Way’ road reserve into the Proposal.

As these areas had not been previously surveyed, a site visit was proposed to undertake a Targeted flora survey of the road reserve, an inspection of vegetation units to verify extrapolated vegetation and habitat mapping, and to search for black cockatoo habitat and Western Ringtail Possum dreys.

Previous database searches undertaken for the Proposal identified nine threatened orchid species with potential to occur in the survey area (one of which does not flower at the time of this survey) and a further two priority orchid species listed by Department of Biodiversity, Conservation and Attractions (DBCA) (JBS&G, 2023). In addition to these, *Banksia sessilis* var. *cordata* (P4) had been previously recorded immediately adjacent to the road reserve. The likelihood of these taxa occurring in the Survey Area has been reassessed in Table 1.

Table 1 Species targeted in the survey

| Species name | Common name | State listing | Federal listing | Habitat | Flowering period | Likelihood of occurrence |
|--|-----------------------------|---------------|-----------------|--|----------------------|----------------------------------|
| Threatened species | | | | | | |
| <i>Caladenia busselliana</i> | Bussell’s Spider Orchid | CR | EN | Sandy loam and winter-wet swamps. | Sep-Oct | Unlikely (inappropriate habitat) |
| <i>Caladenia caesarea</i> subsp. <i>maritima</i> | Cape Spider-orchid | CR | EN | Loam, granite and rock outcrops. | Aug-Sep | Unlikely (inappropriate habitat) |
| <i>Caladenia huegelii</i> | Grand Spider Orchid | CR | EN | Well-drained, deep sandy soils in lush undergrowth in a variety of moisture levels. | Sep-Oct | Possible |
| <i>Caladenia procera</i> | Carbunup King Spider Orchid | CR | CR | Jarrah, Marri and Peppermint woodland on alluvial sandy-clay loam flats with <i>Anigozanthos manglesii</i> . | Sep-Oct | Possible |
| <i>Caladenia viridescens</i> | Dunsborough Spider-orchid | CR | EN | Well-drained, lateritic sandy loam soils in marri (<i>Eucalyptus calophylla</i>) and peppermint (<i>Agonis flexuosa</i>) woodlands or coastal heath over a range | mid-Sept to late Oct | Possible |

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|---|-------------------------------|---------------|-----------------|---|-----------------------|---|
| | | | | of only 12 linear kilometres in the Dunsborough area. | | |
| <i>Drakaea elastica</i> | Glossy-leaved Hammer Orchid | CR | EN | Bare patches of sand within otherwise dense vegetation in low-lying areas alongside winter wet swamps. | late Sept to late Oct | Unlikely (out of range and inappropriate habitat) |
| <i>Caladenia excelsa</i> | Giant Spider Orchid | EN | EN | Hilltops, slopes, swales and low plains in deep pale yellow, white or grey sandy soils; found among dense low shrubs in Banksia, Jarrah and Marri woodlands. | Late Sept to Nov | Possible |
| <i>Drakaea micrantha</i> | Dwarf Hammer-orchid | EN | VU | Occurs in infertile grey sands, in Banksia, Jarrah and Common Sheoak woodland or forest, usually found in cleared fire breaks or open sandy patches that have been disturbed. | late Sept to late Oct | Unlikely (inappropriate habitat) |
| Priority species | | | | | | |
| <i>Caladenia nivalis</i> | Crystalline Spider Orchid | P2 | - | Coastal granite outcrops between Cape Naturaliste and Moses Rock | Sep-Oct | Likely (occurs in Lot 4131 adjacent to the Survey Area) |
| <i>Caladenia speciosa</i> | Sandplain White Spider Orchid | P4 | - | Banksia woodland with scattered Jarrah. | Sep-Oct | Unlikely (out of range) |
| <i>Banksia sessilis</i> var. <i>cordata</i> | Cordate Parrot Bush | P4 | - | White/grey sand over coastal limestone. | Jul-Oct | Likely (occurs in Lot 4131 adjacent to the Survey Area) |

On 25 October 2024, Associate Ecologist Rachael Pratt visited the Survey Area and undertook a targeted flora survey in the road reserve in accordance with Environmental Protection Authority (2016) guidance. Rachael has more than 21 years of experience undertaking flora surveys and more than five years' experience in the Southern Jarrah Forest subregion. The survey was undertaken during the flowering season for *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) listed threatened orchid species which are known to occur locally. The survey was undertaken by traversing the Survey Area on foot at 10 m intervals. Any listed, or potentially listed, flora taxa located during the survey, and associated data, were recorded on an Android device using the Fulcrum™ data collection app, and a waypoint was recorded using a Garmin handheld GPS.

Two potentially significant flora taxa were identified during the survey, *Banksia sessilis* var. *cordata* (P4) and *Caladenia* sp. (sterile). Fifteen *Banksia sessilis* var. *cordata* and 12 *Caladenia* sp. were found. The *Caladenia* located had leaves consistent with threatened orchid species which occur locally, but did not have flower stalks present at the time of the survey. In the absence of a conclusive identification for the *Caladenia*, they should be treated as potentially threatened. Locations of significant flora identified during the survey are listed in Table 1 and Figure 2.

Table 2 Significant flora taxa identified during the survey

| Taxon | Listing | | Abundance | Latitude (GDA2020) | Longitude (GDA2020) |
|---|------------|---------|-----------|--------------------|---------------------|
| | Federal | State | | | |
| <i>Banksia sessilis</i> var. <i>cordata</i> | Not listed | P4 | 2 | -33.665501 | 115.010204 |
| <i>Banksia sessilis</i> var. <i>cordata</i> | Not listed | P4 | 6 | -33.665559 | 115.009979 |
| <i>Banksia sessilis</i> var. <i>cordata</i> | Not listed | P4 | 1 | -33.665621 | 115.015915 |
| <i>Banksia sessilis</i> var. <i>cordata</i> | Not listed | P4 | 1 | -33.665624 | 115.015874 |
| <i>Banksia sessilis</i> var. <i>cordata</i> | Not listed | P4 | 4 | -33.665468 | 115.010015 |
| <i>Banksia sessilis</i> var. <i>cordata</i> | Not listed | P4 | 1 | -33.665481 | 115.010015 |
| <i>Caladenia</i> sp. | Unknown | Unknown | 12 | -33.665583 | 115.011892 |

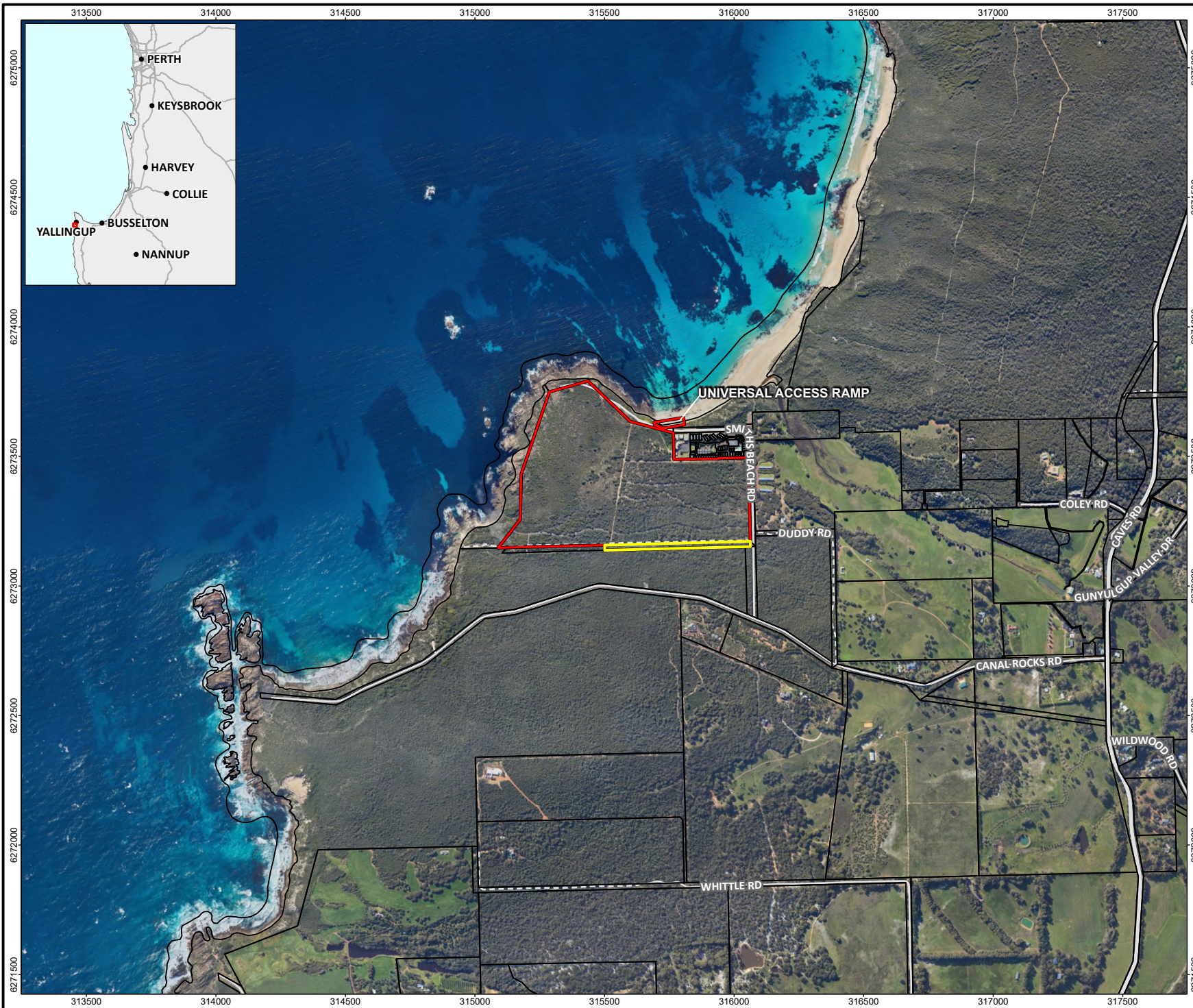
Banksia sessilis var. *cordata* is an erect shrub which usually grows to 2.5 m high, although individuals in the Survey Area were taller, likely due to their sheltered position. Its cream-yellow flowers appear from July to October. It prefers white or grey sands over coastal limestone. It is distinguished from other *B. sessilis* subtaxa by its larger, often auriculate leaves and long pistil. It was flowering at the time of the survey. The WA Herbarium holds 58 specimens of *B. sessilis* var. *cordata* from coastal locations ranging from Cape Naturaliste to West Cape Howe, many of which are in National Park. At many of those locations 50 or more individuals were present. Three records of *Banksia sessilis* var. *cordata* were listed in DBCA's Threatened and Priority Flora List database within a 20 km radius of the Survey Area, for a total of approximately 302 plants. Three hundred of these were in National Park.

The *Caladenia* found during the survey were not flowering at the time of the Survey but had leaves approximately 30 cm long and 10 mm wide. They were growing in a tight cluster in a shaded position 7 m from the southern boundary of the road reserve. This leaf size is within the known size range for *Caladenia excelsa* (T). *Caladenia excelsa* is a tuberous perennial orchid growing to 0.9 m high. Its green, white and red flowers appear from September to October. It prefers hilltops, slopes, swales and low plains in deep pale yellow, white or grey sandy soils; found among dense low shrubs in Banksia, Jarrah and Marri woodlands. The WA Herbarium holds 18 specimens (approximately 115 plants) from locations ranging from Dunsborough to Augusta. Most of these locations had several plants and some locations were in National Park. A further 158 *C. excelsa* were listed in DBCA's Threatened and Priority Flora List database within a 20 km radius of the Survey Area, including 69 *C. excelsa* recorded from National Park.

During the Survey, the road reserve was inspected for the presence of suitable nesting trees for black cockatoos (trees with a diameter at breast height of over 500 mm) and Western Ringtail Possum dreys, however, neither of these were observed in the Survey Area. Minimal foraging habitat for black cockatoos was present, with forage species restricted to low densities of *Banksia sessilis* var. *cordata* and *Acacia saligna*. No black cockatoos, Western Ringtail Possums or Western Ringtail Possum scat were seen during the survey.

Vegetation in the Survey Area was consistent with the extrapolated vegetation, habitat and condition maps.

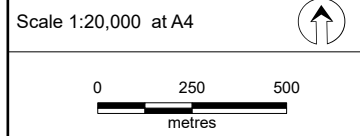
In addition to the road reserve, the proposed UAR was visited to verify the vegetation present, and photos of the location were taken (Plate 1). The proposed UAR location consisted of unvegetated beach, road and weedy foredune with common coastal species, including *Scaevola nitida*, *Lepidosperma gladiatum*, **Tetragonia decumbens*, **Bromus diandrus* and **Lolium* sp.. This vegetation was in Degraded condition and would require intensive weed management and infill planting to return it to a Very Good or better condition.



- Legend**
- Development envelope
 - Survey area
 - Cadastral boundary (LGATE - 002)
- Roads (LGATE - 195)
- Major road
 - Minor road
 - Track



Job No: 59550
 Client: Linc Property Real Estate Pty Ltd
 Version: A Date: 14/11/2024
 Drawn By: ianandagoda Checked By: RP

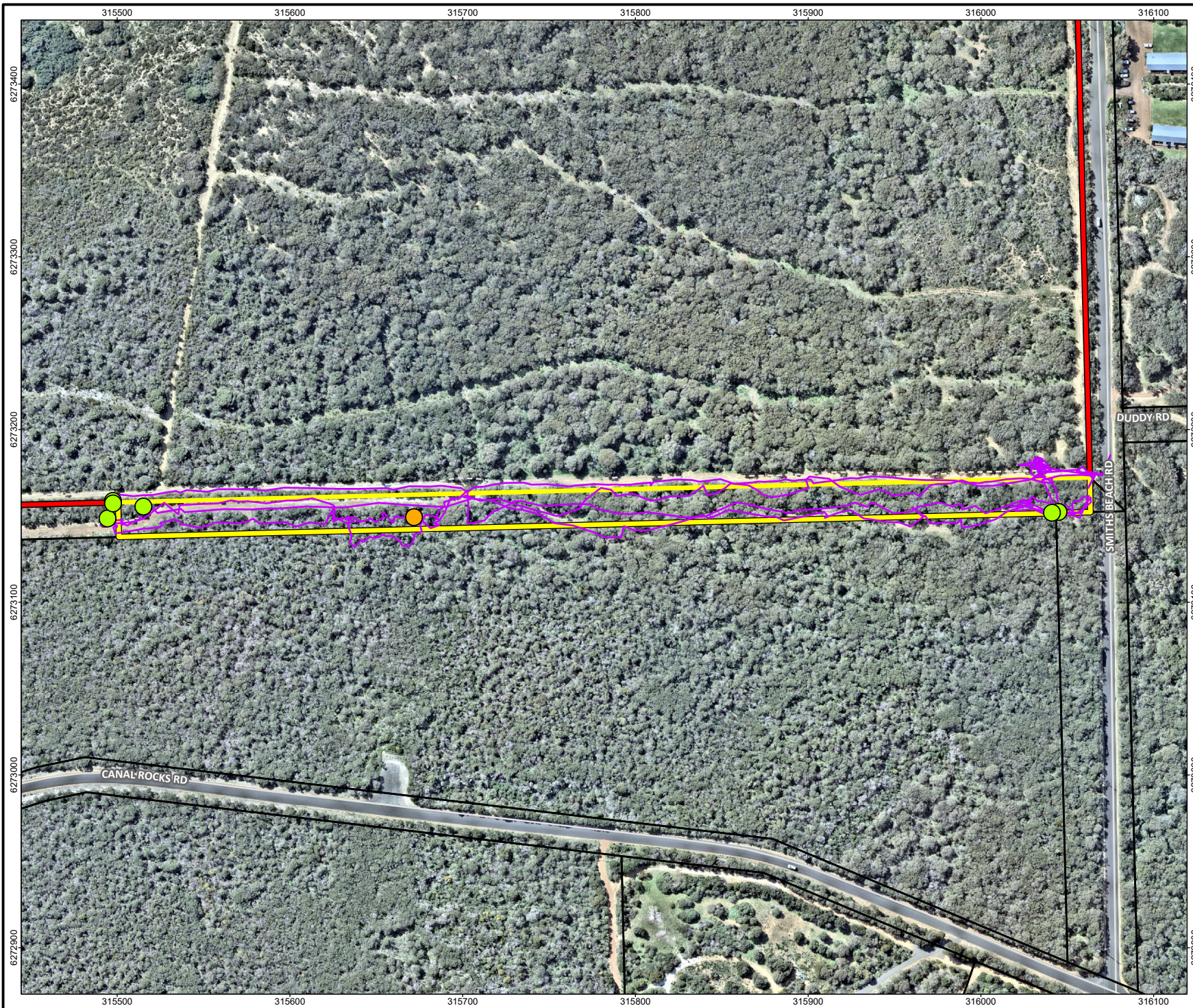


Coord. Sys. GDA2020 MGA Zone 50

**Lot 4131 (P061991)
 Smiths Beach Road
 Yallingup, WA**

**SURVEY AREA AND
 REGIONAL LOCATION**

FIGURE 1



Legend

- Development envelope
- Survey area
- Cadastral boundary (LGATE - 002)
- Traverse

Significant flora

- *Banksia sessilis* var. *cordata* (P4)
- *Caladenia* sp.

Roads (LGATE - 195)

- Minor road
- Track



Job No: 59550

Client: Linc Property Real Estate Pty Ltd

| | |
|-----------------------|------------------|
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Scale 1:3,000 at A4

0 50 100
metres

Coord. Sys. GDA2020 MGA Zone 50

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Smiths Beach Road
Yallingup, WA

SURVEY EFFORT AND SIGNIFICANT FLORA LOCATION

FIGURE 2



Plate 1 Photo taken from western end of proposed universal access ramp location, showing coastal sedges, fanflowers (*Scaevola*), grasses and succulents