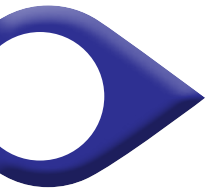


940 Ocean Beach Road

Visual Impact Assessment

24th January 2020

Issue 05 - FINAL



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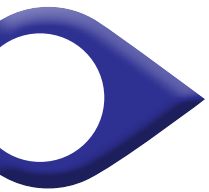
Document Title 940 Ocean Beach Road - Visual Impact Assessment

File Name B1045_940 Ocean Beach Road_Visual Impact Assessment_FINAL

Author EPCAD Pty Ltd

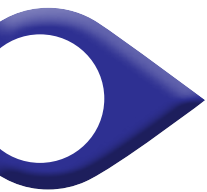
Client [REDACTED]

Issue	Issued To	Date	Reviewed
DRAFT	Planning Solutions	231219	HM
FINAL	Planning Solutions	070120	HM
FINAL	Planning Solutions	080120	HM
FINAL	Planning Solutions	220120	HM
FINAL	Planning Solutions	240120	HM



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1. Introduction

EPCAD have been commissioned to study the visual effects of a Telstra mobile phone base station (monopole) on the public realm to its immediate and greater surrounds.

The subject site is situated at the Denmark Community Wind Farm, Ocean Beach WA. The site is on Crown land leased to the wind farm within a large coastal lot (Lot 555). Lot 556 directly abuts the site to the east and there is a public access track to the wind turbine towers passing directly south of the site.

The site is located within the Shire of Denmark approximately 50km west of Albany and 8km south of Denmark.

The image locations selected within this report are views taken from the public realm (public surrounds to the subject site). These image locations represent a general cover of possible viewpoints of the site. EPCAD acknowledges that there may be additional locations where potential views to the site are possible which have not been covered within this report.

The locations selected should serve as a general statement of the subject site, its surrounds and their associated character and potential views offered of the site.

An initial zone of visual influences was determined utilizing computer generated inter-visibility data (Refer Figure 1), this in turn suggested locations that required site assessment.

Weather conditions on the days of the site visits were sunny with clear skies and high visibility.

Glossary of Terms Featured in This Report:

EPCAD / The Landscape Architect: EPCAD Pty Ltd, Landscape Architects; Author of this report and conductor of this Visual Impact Assessment.

Planning Solutions / The Client: The client for which this assessment was conducted for.

The site / The subject site / The development site: The area of land on which the proposed Telstra mobile phone base station (as indicated within Figure 7 & 8) is to be sited.

Viewing Locations / View Locations / Key Views: The locations where photos were taken from.

ZVI: Zones of Visual Influence

Monopole: The proposed telecommunications pole within the subject site.



Figure 1: Computer Generated Inter-visibility Data - Zone of Visual Influence (ZVI)



2. Landscape Evaluation

2.1 Scope

This study has been undertaken utilising three methods;

- Site survey and analysis by two experienced Landscape Architects.
- Desktop study of cartographic and photographic material.
- Computer generated inter-visibility data.

This study is to ascertain the local and district visual assets and characteristics and to evaluate the likely effects of a proposed Telstra mobile phone base station (monopole) and associated infrastructure within the context of the overall landscape, its character and values.

The assessment has been undertaken in general alignment with “Visual Landscape Planning in Western Australia”. WAPC, November 2007.



2.2 Context

The subject site as identified in Figure 2 of this report, is located at the Denmark Community Wind Farm atop Wilson Head approximately 1km south of Ocean Beach and the Wilson Inlet. The site is approximately 50km west of Albany and 8km south of Denmark, Western Australia.

The local area is bounded to the east by Ocean Beach Road, Lights Road to the north and the Great Southern Ocean to the South.

The site forms part of an interconnected network of tourist walking trails and lookouts stretching across Wilson Head and beyond. The Wilderness Ocean Walk (WOW) part of the Munda Biddi walk/ride trail traverses the site which offers spectacular coastal views and a unique recreational opportunity. The Bibbulmun Track passes the popular tourist lookout, Monkey Rock approximately 3.5km to the north of the site.

The site is approximately 1.5km south west of the western tip of the Nullaki Peninsula conservation area.

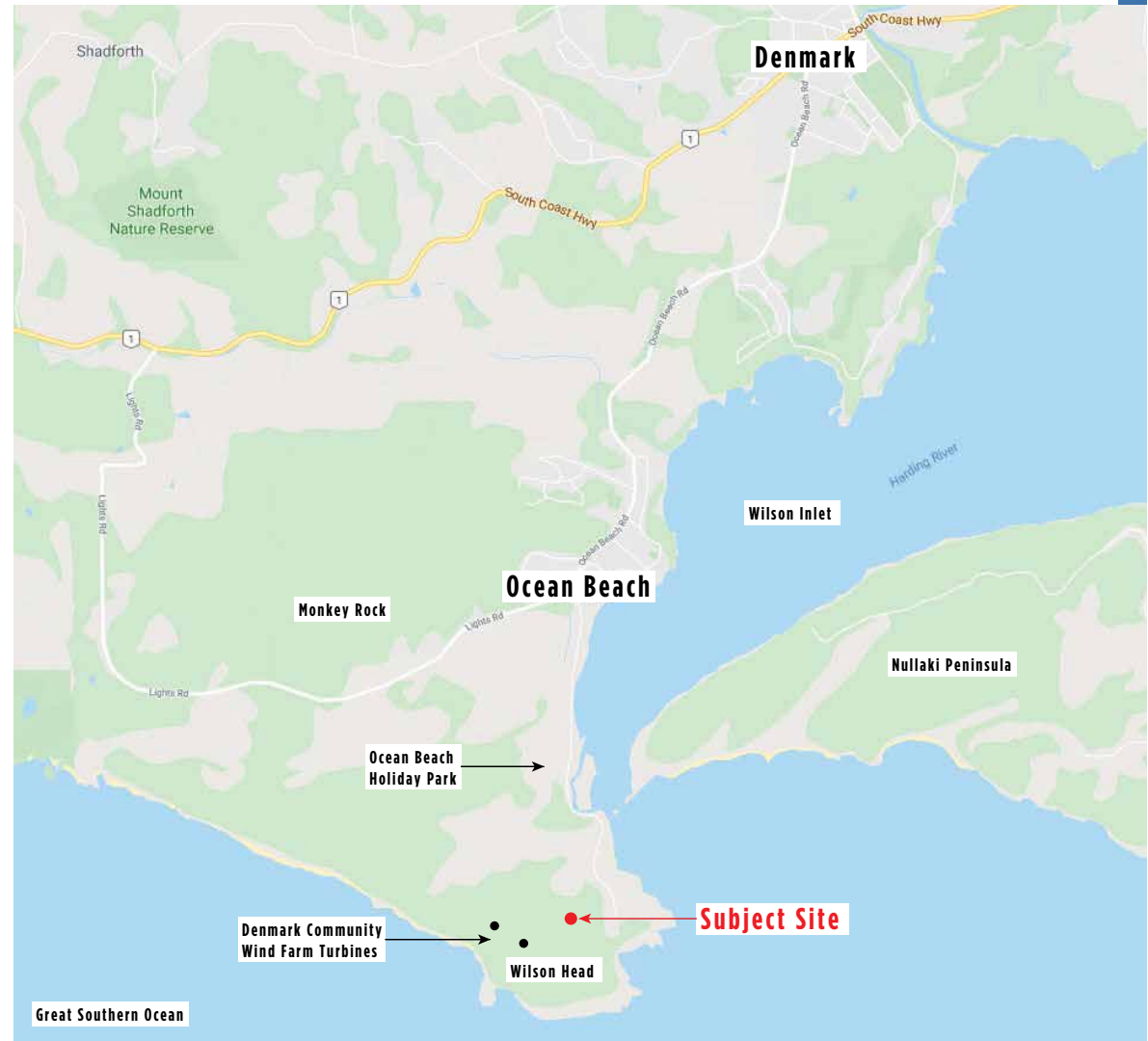


Figure 2: Contextual Site Plan



2.3 The Visual Landscape

2.3.1 Topography

Typically, topography within the subject site and wider area is sloping to steeply sloping. Wilson Head is a prominent ridge running east to west, approximately 100m AHD at its highest point sloping down to sea level (Refer Figure 3 & 4). The subject site is located at one of the higher points on the ridge at approximately 75m AHD with the existing wind turbines slightly higher still.

The significant level differences mean that roads and pathways are generally meandering to follow the landform. The topography has obviously been modified in places to help with transecting paths or roads transects or localised levelling for buildings, access ways and grounds.

The lowest points of the surrounding area are on the coastline. Generally the coastline is made up of granite rock outcrops punctuated by sandy beaches.

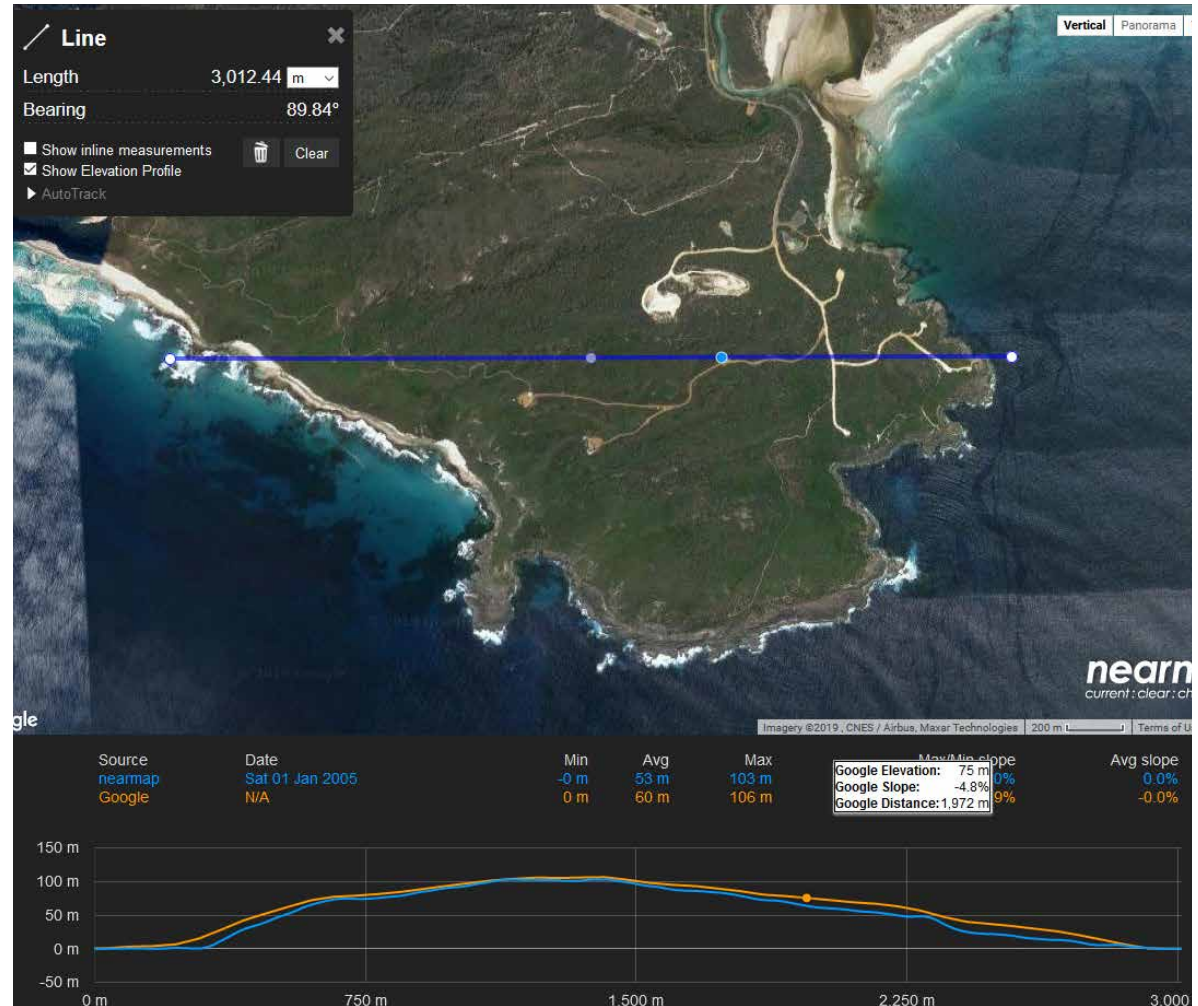


Figure 3: Topography

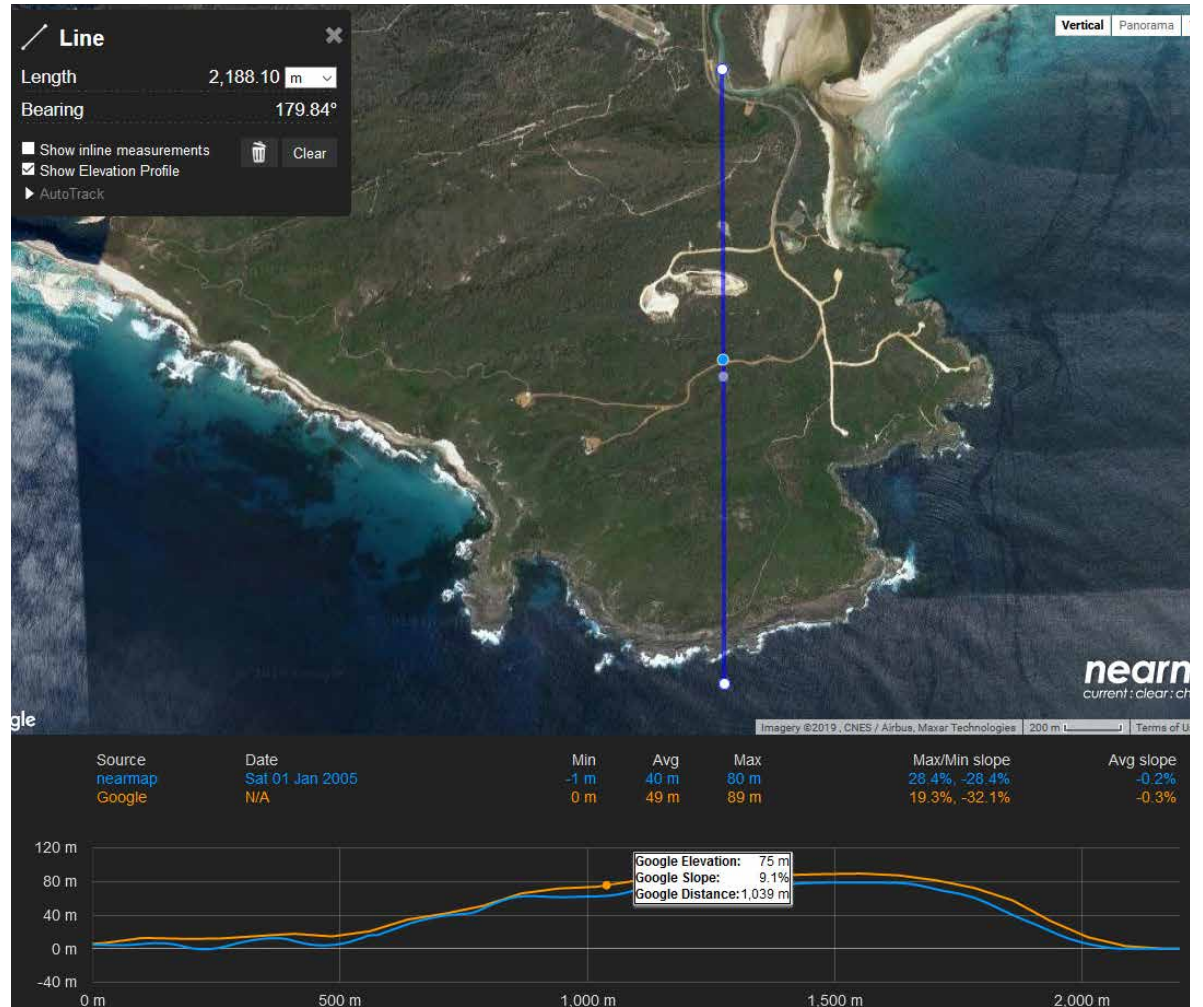


Figure 4: Topography



2.3.2 Vegetation

The subject site is a largely unaltered coastal landscape containing a typical matrix of coastal plant species.

In the immediate vicinity of the site vegetation has been cleared to accommodate the existing wind farm infrastructure and public access track. The clearing is not at significant levels and the landscape can be viewed as largely undisturbed. The vegetation is typical of a windy, exposed coastal location. It is low growing consisting of coastal shrubs approximately 0.5m to 3.0m high with no tall trees (Refer Plate 1 & 2).

Further towards the coast on the more exposed southerly side of the ridge the vegetation is no higher than 2.0m. Vegetation has been cleared for a number of lookouts, road and walking trails. Again this is not at significant levels and the landscape can be viewed as largely undisturbed (Refer Plate 3 & 4).

Vegetation increases in height to the east and north east of the site along Ocean Beach Road and at various lookouts. In these more sheltered areas, tree species such as peppermint and paperbark are taller and provide more screening (Refer Plate 5 & 6).

Approaching the site from the north at the Denmark Ocean Beach Holiday Park and where Ocean Beach Road runs alongside the Harding River, the vegetation is more mature typically peppermint and paperbark species. Trees within the holiday park are typically scattered throughout to provide shade and are a mix of peppermints up to approximately 12m in height and smaller bottlebrush and ornamental species (Refer Plate 7 & 8).



Plate 1: Typical Vegetation in the Immediate Vicinity of the Site.



Plate 2: Typical Vegetation in the Immediate Vicinity of the Site.



north and north west of the site along Lights Road, the landscape is a mix of flat open fields and occasional bands of semi-mature trees on the southern side of Lights Road, and mature bushland consisting of Gum tree and Casuarina species on the northern side (Refer Plate 9 & 10).



Plate 3: Typical Vegetation South of the Site.

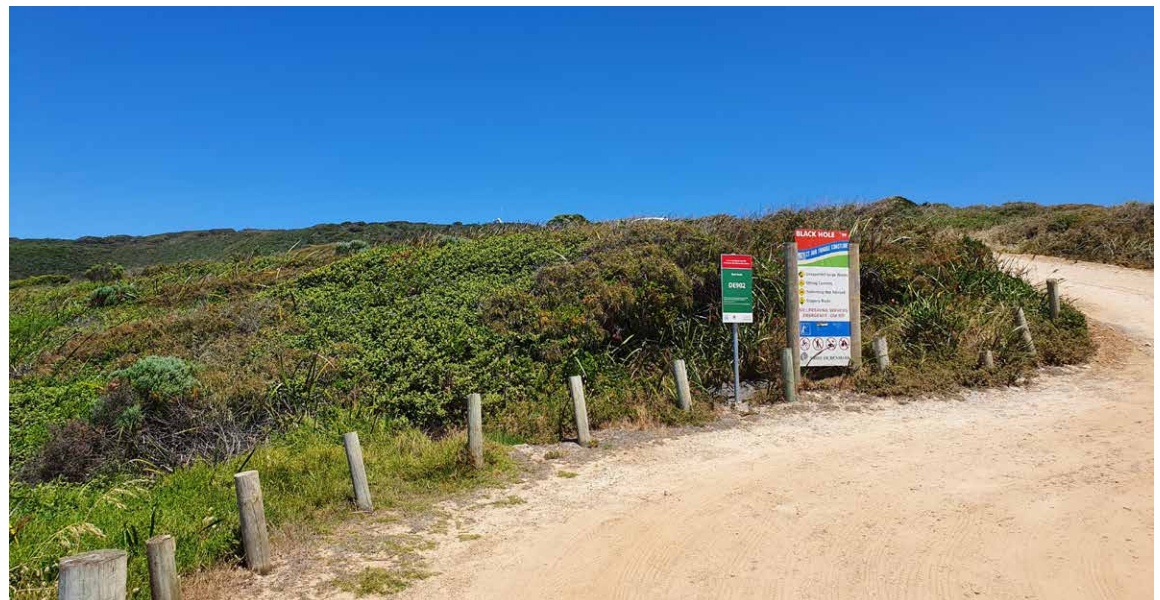


Plate 4: Typical Vegetation South of the Site.



Plate 5: Typical Vegetation East of the Site at Lions Lookout.

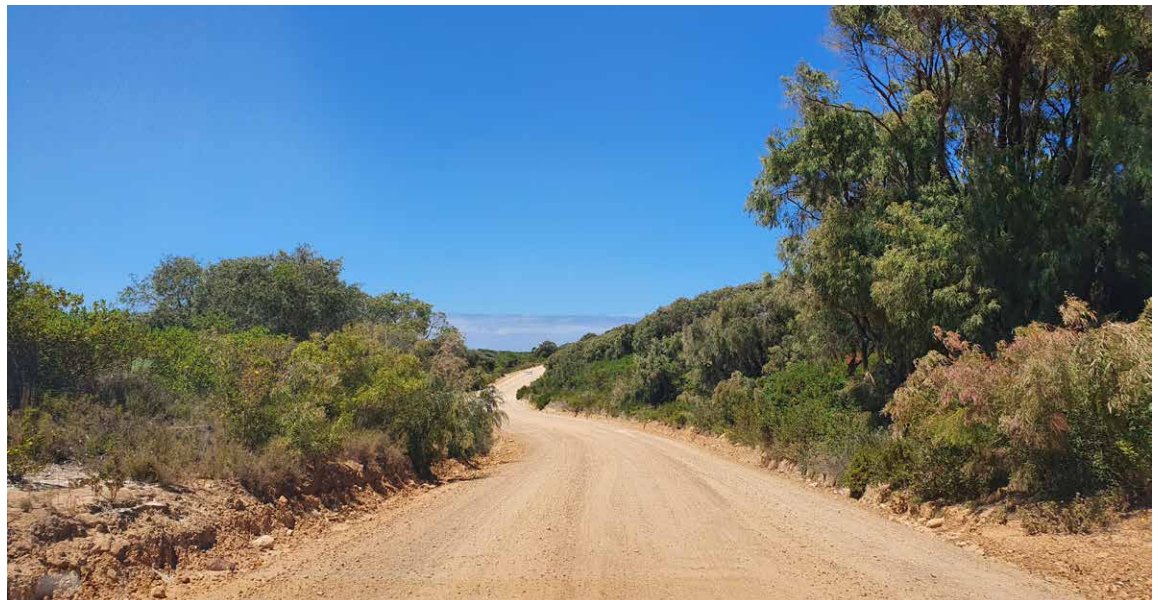


Plate 6: Typical Vegetation North East of the Site Along Ocean Beach Road.



Plate 7: Typical Vegetation North of the Site Along Ocean Beach Road.



Plate 8: Typical Vegetation North of the Site Within Ocean Beach Holiday Park.



Plate 9: Typical Vegetation North of the Site Along Lights Road.



Plate 10: Typical Vegetation North of the Site Along Lights Road.



2.3.3 Built Form

The site is situated on a coastal headland with a relatively small amount of buildings and structures nearby.

The new monopole and associated infrastructure is proposed to be co-located next to the wind farm's existing electrical switch room building. This comprises of a small (approximately 4m high) building and steel antenna (approximately 12m high).

The wind farm's two wind turbines are located approximately 600m west of the site sitting approximately 30-35m higher than the site. The turbines are painted white and the 'windmill' form is typical of these types of installation. The tower is 55m high and the blades are 24m in length. When combined with the blade in vertical position this gives an overall height of 79m.

Lookouts range from simple cleared areas with timber bollards, low post and rail fences and signage to timber decks with simple seating and more elevated viewpoints accessed by steps and timber handrails.

A small function centre consisting of small single story building, antenna (approximately 8m high), shade structure, small car park and small open lawn area for events is located approximately 500m north east of the site accessed from Ocean Beach Road. The function centre is situated approximately 50m lower the subject site.

The Denmark Surf Life Saving Club is located 600m north east of the site. Several buildings are located at different levels in this area approximately 65m lower than the subject site. The main building is two story weatherboard and brick with pitched roof

and balcony with ocean views. The Surf Life Saving Club also consists of a smaller one story building at beach level, toilet block, small limestone walls and timber fencing.

Denmark Ocean Beach Holiday Park lies 1.3km to the north of the site. A large reception building is situated at the entrance to the park from Ocean Beach Road. Further into the park the accommodation consists of multiple chalets with associated toilet block and laundry facilities. The weatherboard chalets with deck verandahs are positioned to face in an easterly direction.





2.3.4 Adjacent Property

Lot 555 which contains the subject site and the wind farm is bounded by on all sides by Lot 556 and also the Ocean Beach limesand quarry to the north.

Lot 556 covers a much larger area than Lot 555. It contains the Denmark Surf Life Saving Club and small function centre to the east of the subject site as described above. Lot 556 extends along the coastline to the east, south and west of the subject site, containing numerous lookouts and walking trails as far as Lights Beach 4.8km to the west of the subject site.

The adjacent Ocean Beach limesand quarry within Lot 7836 is also situated on Crown land and is relatively small in comparison to Lot 555. Approximately a third of the Lot has been cleared for mining purposes and there does not appear to be any buildings or formalised infrastructure.

There are no residential private properties in close proximity to the subject site. The closest properties are those of the Ocean Beach Holiday Park approximately 1.3km to the north of the site. The nearest private residential properties are 2.0km north of the site on Ocean Beach Road which include a number of villas and a bed and breakfast lodge.

2.4 Landscape Character

The dominant elements that comprise the local landscape character can be summarised as a combination of the following;

- Rolling coastal landscape with gradual to steeply sloping topography. A prominent ridge running east to west with meandering sealed and unsealed roads and public walking trails.

- Predominantly native vegetation within road reserves.

- A network of tourist walking trails and lookouts which offer spectacular ocean views.

- Natural, coastal environment. Highly exposed and more sheltered areas with minimal fencing or restrictive infrastructure.

- Wind turbines are a prominent feature and reminder of the powerful natural weather conditions in the area.

- A tourist destination with accommodation and outdoor pursuits such as walking, fishing and surfing.

- Contrasting bands of vegetation in terms of size, species and density depending on proximity to the coast, Harding River foreshore and wider area.

- Low key, intimate signage highlighting trails, lookouts and points of interest.

These landscape elements combine to produce a spectacular coastal landscape that at affords long and broad views from certain locations. However the topography and density of vegetation in places often limits distant views (Refer Plate 11 - 12).



Plate 9: Broad Spectacular Views



Plate 10: Limited Views.



2.5 Strategies for Managing Landscape Character

Several measures can be taken when siting the mobile phone base station to ensure the management of the landscape character of this coastal destination is upheld.

- Where possible, allow the base station to slot in amongst retained pockets of vegetation to further utilise any retained vegetation to obscure views from the surrounding landscape.
- Where possible, select 'discrete' location on which to site the base station.
- Where possible, house any associated infrastructure (e.g. switchboard, communications, control equipment etc.) in enclosed structures.

2.6 Planning Context

Guidelines used as a reference/guide in this report are as follows;

- Visual Landscape Planning in Western Australia - a manual for evaluation, assessment, siting and design - Part Two - Visual Landscape Planning Methods, has been used as a reference/guide. WAPC, November 2007
- Guidelines for location, siting and design of Telecommunication Infrastructure. WAPC, March 2004.
- State Planning Policy 5.2 Telecommunications Infrastructure. September 2015.





3. Landscape & Visual Impact Assessment

3.1 Proposed Development

The subject site on which it is proposed to locate the Telstra mobile phone base station is situated in the north east of Lot 555 west of Ocean Beach Road (Refer Figure 5 & 6)

The proposed base station consists of a 50m high Rocla concrete monopole and steel equipment shelter surrounded by a 2.4m high security fence and access track (Refer Figure 6 & 7). The proposed cleared area for the compound is approximately 900m². The proposed access track and power easement which is approximately 1282m² in area, will link the proposed base station to the existing wind farm access track.

The proposed base station will sit at approximately 75m AHD approximately 30m lower than the base of the nearest wind turbine.

The materiality and colour (pale eucalypt) of the equipment shelter will produce little in the way of light reflectivity and will allow it to blend into the landscape. The monopole will have a non-reflective grey concrete finish allowing it to be absorbed into the landscape to minimize its prominence.

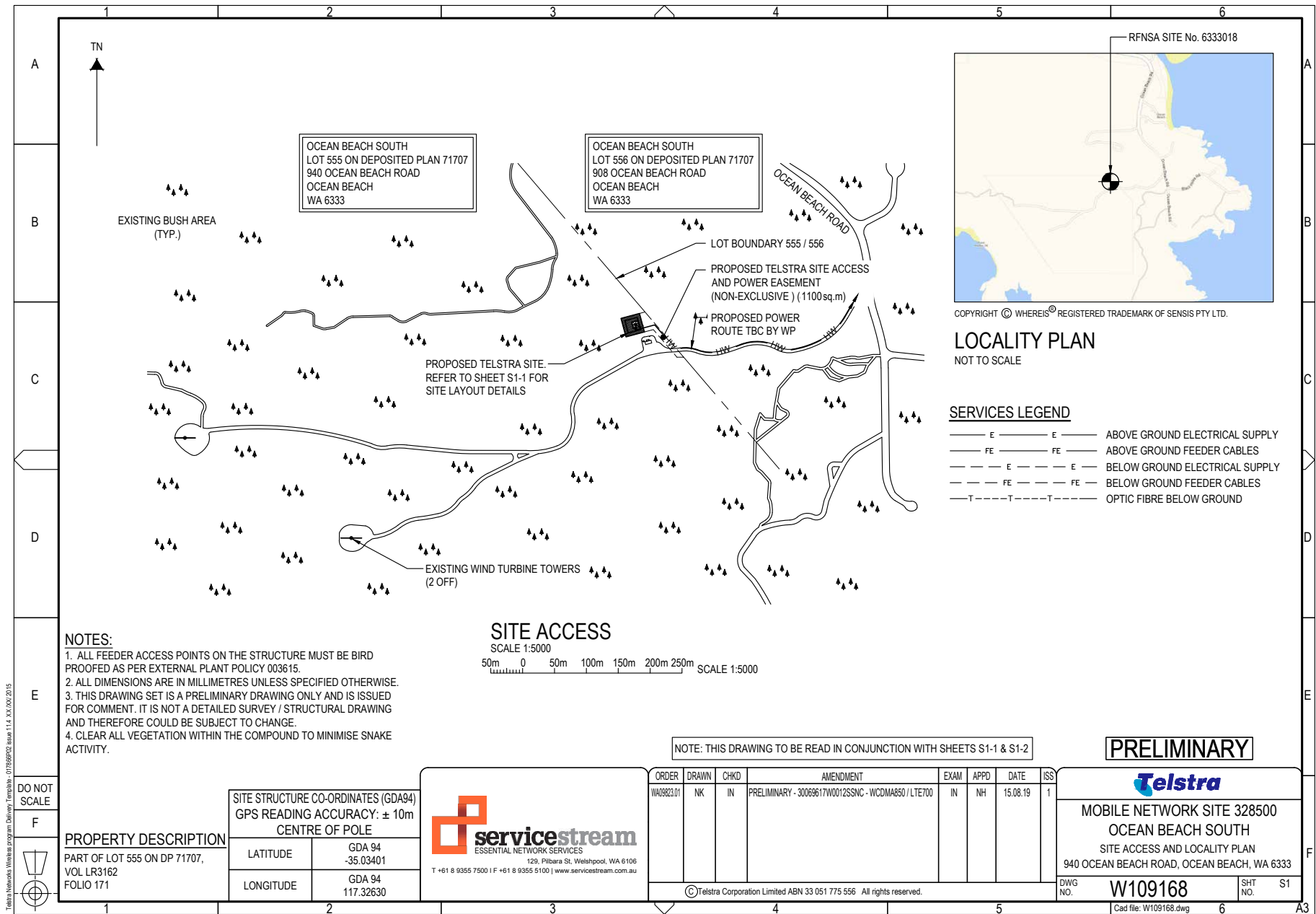


Figure 5: Site Locality Plan

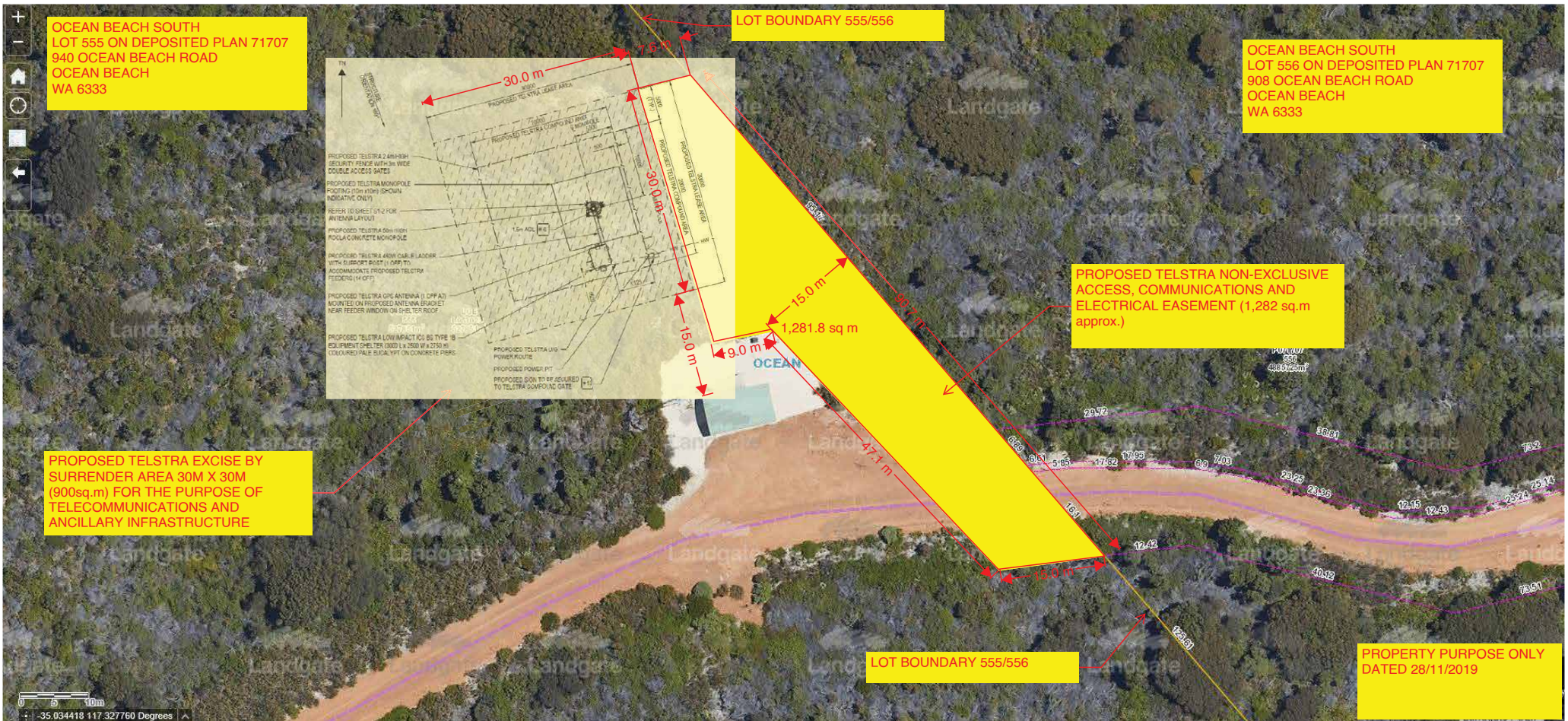


Figure 6: Site Layout Plan

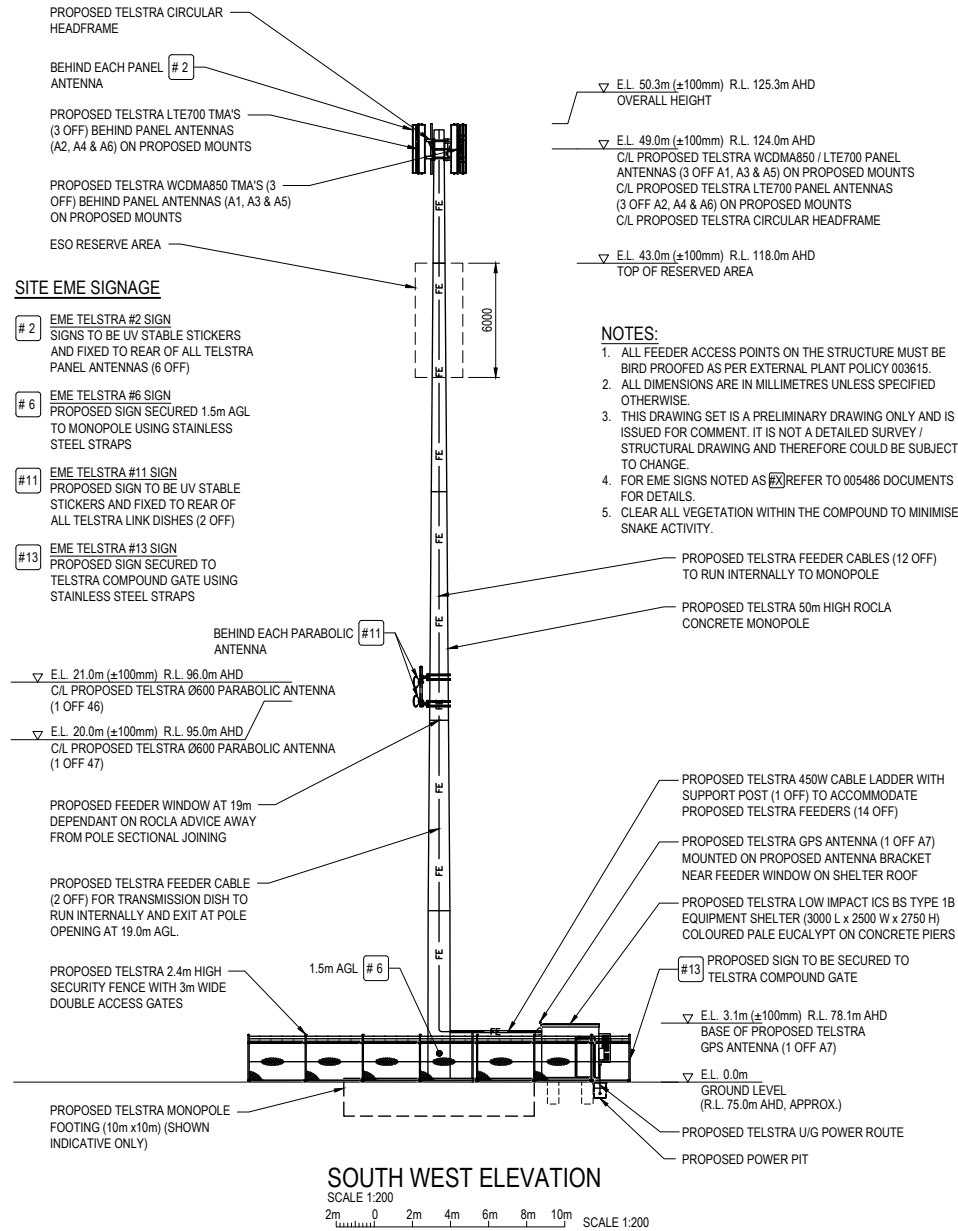


Figure 7: Site Locality Plan



3.2 Public Viewpoint Assessment

All viewing locations were selected by EPCAD as representative of typical visual impacts. Photos were taken from these locations within the public realm, from all sides of the subject site where access and potential views of the subject site may be possible (Refer Figure 8). There are no private residencies within the immediate local area.

This assisted in providing a broad understanding of the subject sites visibility from the surrounding contextual landscape which included varying directions, elevations, aspects, landforms, residential properties, areas of retained vegetation/introduced planting and varying road typologies. This coverage of locations also assists in providing a general statement and synopsis of the surrounding landscape itself.

Viewing locations within a 2km radius of the subject site are considered close to medium 'local' views. Viewing locations outside of this area are considered medium to long distance 'wider' views up to 5.0km away.

Local views were taken from the public realm and orientated towards the subject site. These captured views from the local area consisting of the wind farm, coastal lookouts, walking trails, Ocean Beach Function Centre, Denmark Surf Life Saving Club, Harding River Foreshore and the Ocean Beach Holiday Park.

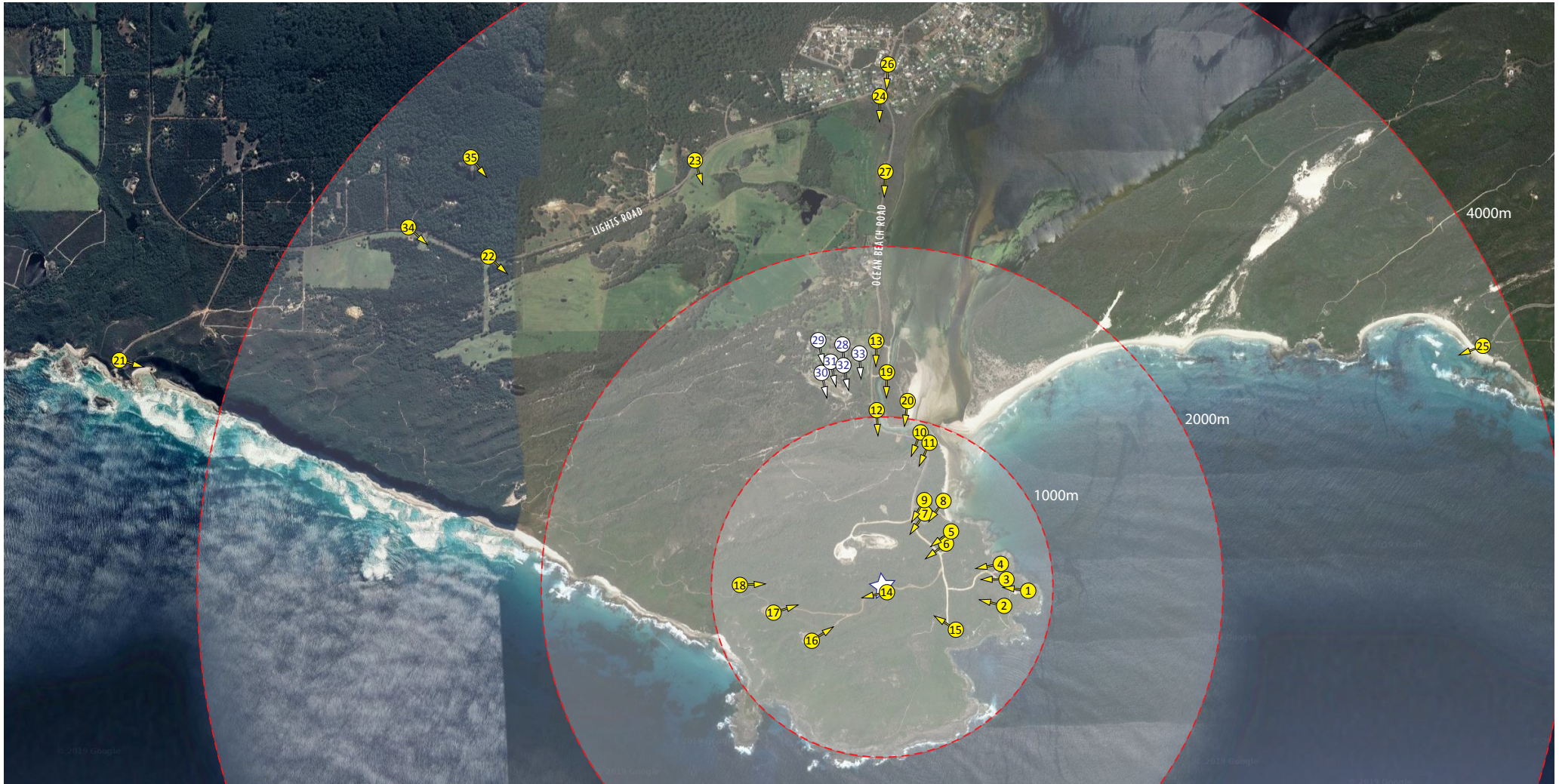
Wider views were taken from the public realm and orientated towards the subject site. These captured views from the wider area consisting of Ocean Beach Road, Lights Road, Anvil Beach, Monkey Rock and Lights Beach.

View locations from within the public realm consisted of road reserves along major arterial roads

traversing the greater area, connector roads and smaller residential roads and tracks both sealed and unsealed particularly at junctions and intersections.

Views taken from roads will largely be experienced by people travelling in vehicles and in some cases bicycles where a dual use path is present. Speed limits are generally 60km/h. Generally minimal traffic exists within the surrounding roads with no congestion of note.

All photos were taken using an iphone 11 with the main wide-angle camera which has an f1.8 aperture and the equivalent focal length of 26mm (in 35mm-format film-era camera terms).



KEY VIEWS

Public Realm Key View Locations 01-27 & 34-35

- Location 1 - Black Hole Rock Lookout
- Location 2 - Black Hole Rock Trail
- Location 3 - Black Hole Rock Approach
- Location 4 - McGeary's Rock Lookout
- Location 5 - Lions Lookout Carpark
- Location 6 - Lions Lookout
- Location 7 - Ocean Beach Function Centre
- Location 8 - Denmark Surf Life Saving Club
- Location 9 - Denmark Surf Life Saving Club Carpark
- Location 10 - Ocean Beach Lookout
- Location 11 - Ocean Beach Lookout Carpark
- Location 12 - Harding River Foreshore
- Location 13 - Denmark Ocean Beach Holiday Park Entry off Ocean Beach Road
- Location 14 - Denmark Community Windfarm Switchroom Compound
- Location 15 - Sinker Bay

- Location 16 - Denmark Community Windfarm South Turbine
- Location 17 - Denmark Community Windfarm North Turbine
- Location 18 - WOW Trail
- Location 19 - Harding River Dog Exercise Area Carpark
- Location 20 - Harding River Dog Exercise Area
- Location 21 - Lights Beach Carpark / WOW Trail
- Location 22 - Lights Road
- Location 23 - Lights Road
- Location 24 - Junction of Lights Road & Ocean Beach Road
- Location 25 - Anvil Beach Lookout
- Location 26 - Junction of Ocean Beach Road & Minsterly Road
- Location 27 - Ocean Beach Road






- Location 34 - Monkey Rock Carpark
- Location 35 - Monkey Rock / Bibbulmun Track

Private Realm Key View Locations 28-33

- Location 28 - Denmark Ocean Beach Holiday Park Entry Road
- Location 29 - Denmark Ocean Beach Holiday Park Entry Road
- Location 30 - Denmark Ocean Beach Holiday Park
- Location 31 - Denmark Ocean Beach Holiday Park
- Location 32 - Denmark Ocean Beach Holiday Park
- Location 33 - Denmark Ocean Beach Holiday Park

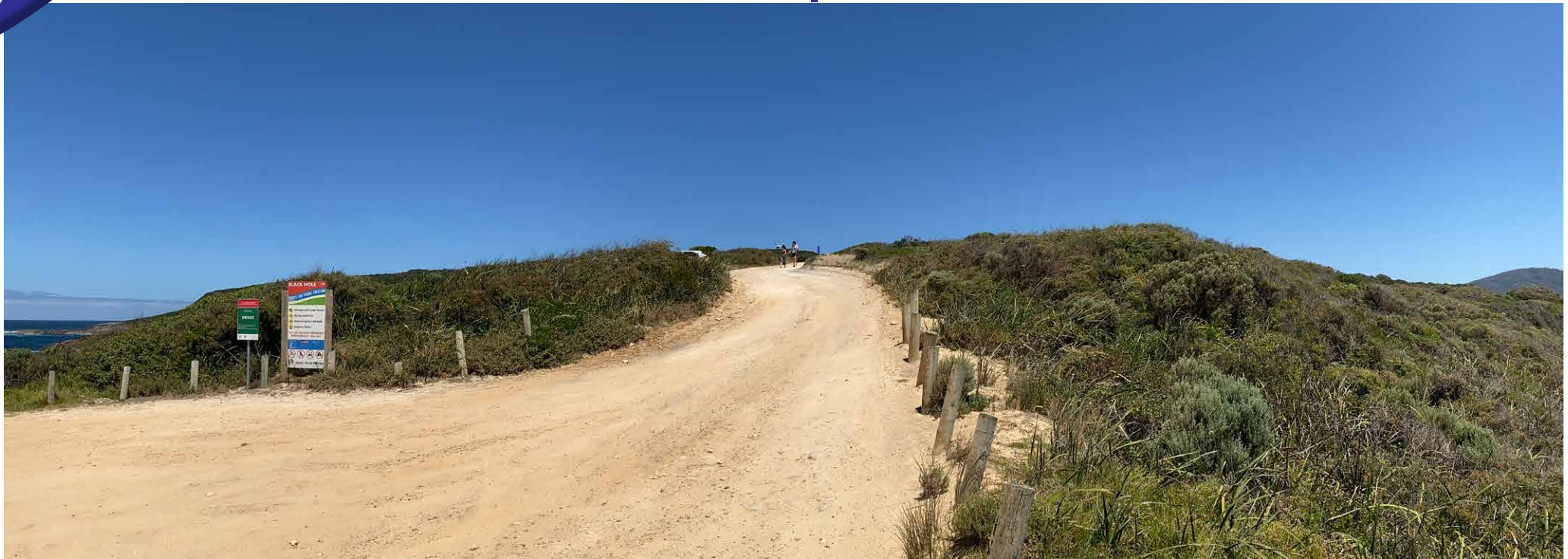
Figure 8: Photo Location Plan

Legend:

-  Subject Site
-  Views from Public Realm
Location of Image & Direction of View
-  Views from Private Realm
Location of Image & Direction of View
-  Radial Distances Considered
- 



Location 1 - Black Hole Rock Lookout



View west towards the subject site from a crest in the road with low coastal vegetation, timber bollards and low key signage.

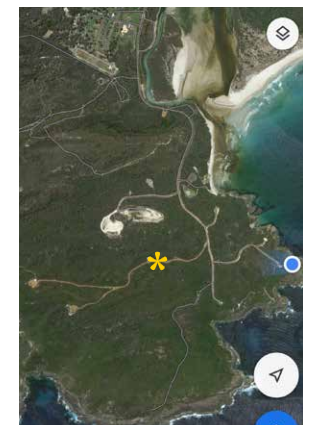
Visibility of Proposed Monopole

The monopole will be seen from this location.

Note

This is a panoramic photograph.

- Legend**
- Indicative location and height of monopole
 - Indicative location of monopole only

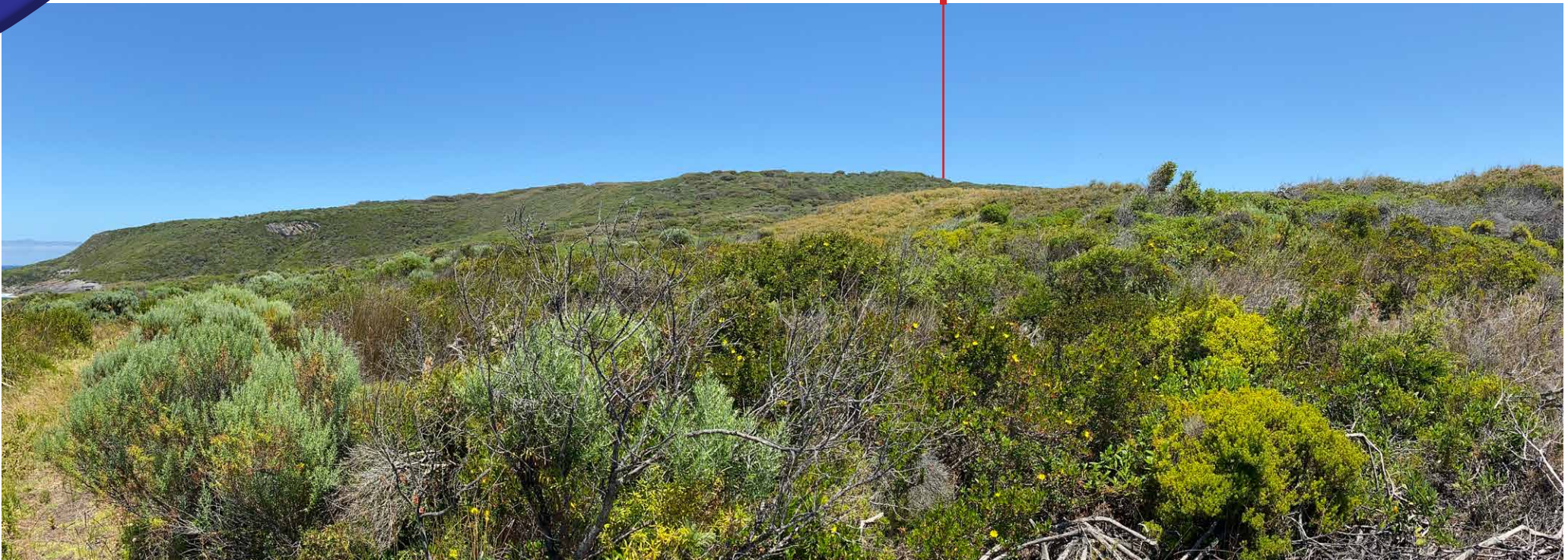


Location Plan

NTS

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Location 2 - Black Hole Rock Trail



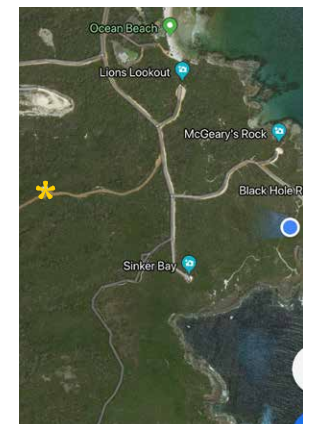
The topography lifts to a crest with low coastal vegetation restricting views of the subject site.

Visibility of Proposed Monopole

The monopole will not be seen.

Note

This is a panoramic photograph.



- Legend**
- Indicative location and height of monopole
 - Indicative location of monopole only

Location 3 - Black Hole Rock Approach



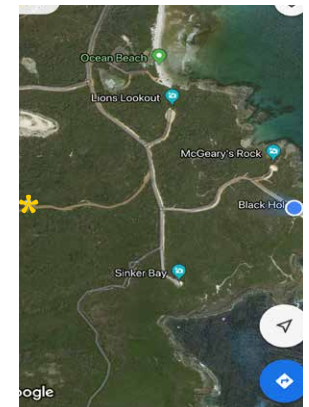
Views of the western portion of the subject site with low coastal vegetation along the unsealed road. The flattened topography at this location allows glimpsed views of the top of the proposed monopole.

Visibility of Proposed Monopole

The monopole will be seen from this location.

Note

This is a panoramic photograph.



Legend

- Indicative location and height of monopole
- Indicative location of monopole only

Location 4 - McGeary's Rock Lookout





High coastal vegetation surrounding the McGeary's Rock lookout will screen the proposed monopole from view.

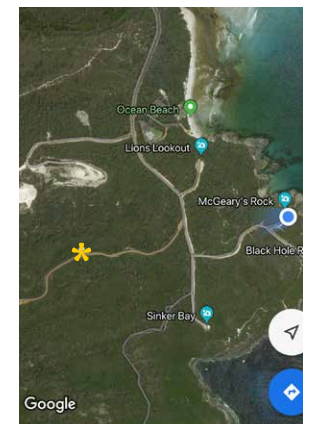
Visibility of Proposed Monopole

The monopole will not be seen.

Note

This is a panoramic photograph.

- Legend**
-  Indicative location and height of monopole
 -  Indicative location of monopole only



Location Plan

NTS

28

Location 5 - Lions Lookout Carpark



Larger semi mature native trees along with high coastal vegetation surrounding Lions Lookout Carpark will screen the proposed monopole from view.

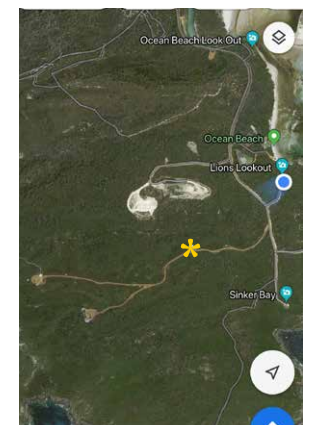
Visibility of Proposed Monopole

The monopole will not be seen.

Note

This is a panoramic photograph.

- Legend**
- Indicative location and height of monopole
 - Indicative location of monopole only



Location 6 - Lions Lookout



View south west toward the subject site towards a crest with low coastal vegetation allow views of the top of the proposed monopole.

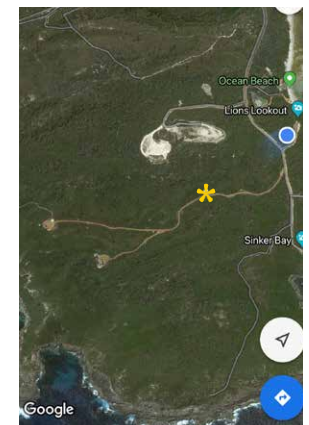
Visibility of Proposed Monopole

The monopole will be seen from this location.

Note

This is a panoramic photograph.

- Legend**
- Indicative location and height of monopole
 - Indicative location of monopole only



Location Plan

NTS

30

Location 7 - Ocean Beach Function Centre



View south west towards the subject site. High coastal vegetation behind the Ocean Beach Function Centre will not allow views of the proposed monopole.

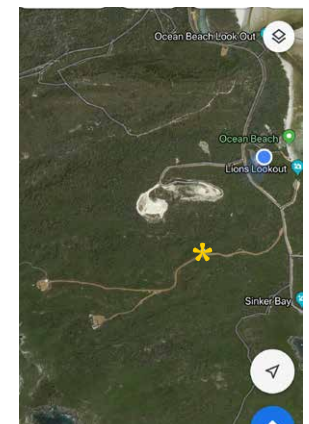
Visibility of Proposed Monopole

The monopole will not be seen.

Note

This is a panoramic photograph.

- Legend**
- Indicative location and height of monopole
 - Indicative location of monopole only



Location 8 - Denmark Surf Life Saving Club



Low coastal vegetation on higher ground along the foreshore will not allow views of the proposed monopole from Denmark Surf Life Saving Club. It is not clear if the proposed monopole will be seen from the back of the Denmark Surf Life Saving Club buildings.

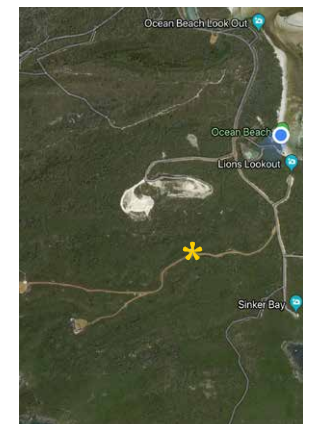
Visibility of Proposed Monopole

The monopole will be not seen.

Note

This is a panoramic photograph.

- Legend**
- Indicative location and height of monopole
 - Indicative location of monopole only



Location Plan

NTS

Location 9 - Denmark Surf Life Saving Club Carpark



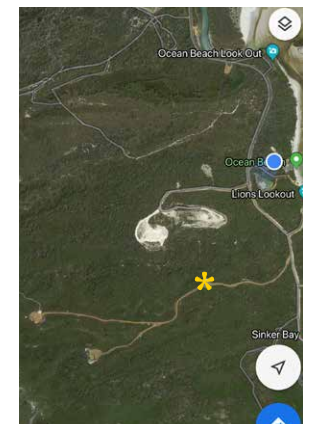
View south west towards the subject site. Low coastal vegetation and overhead lines surrounding the Denmark Surf Life Saving Carpark.

Visibility of Proposed Monopole

The monopole will be seen from this location.

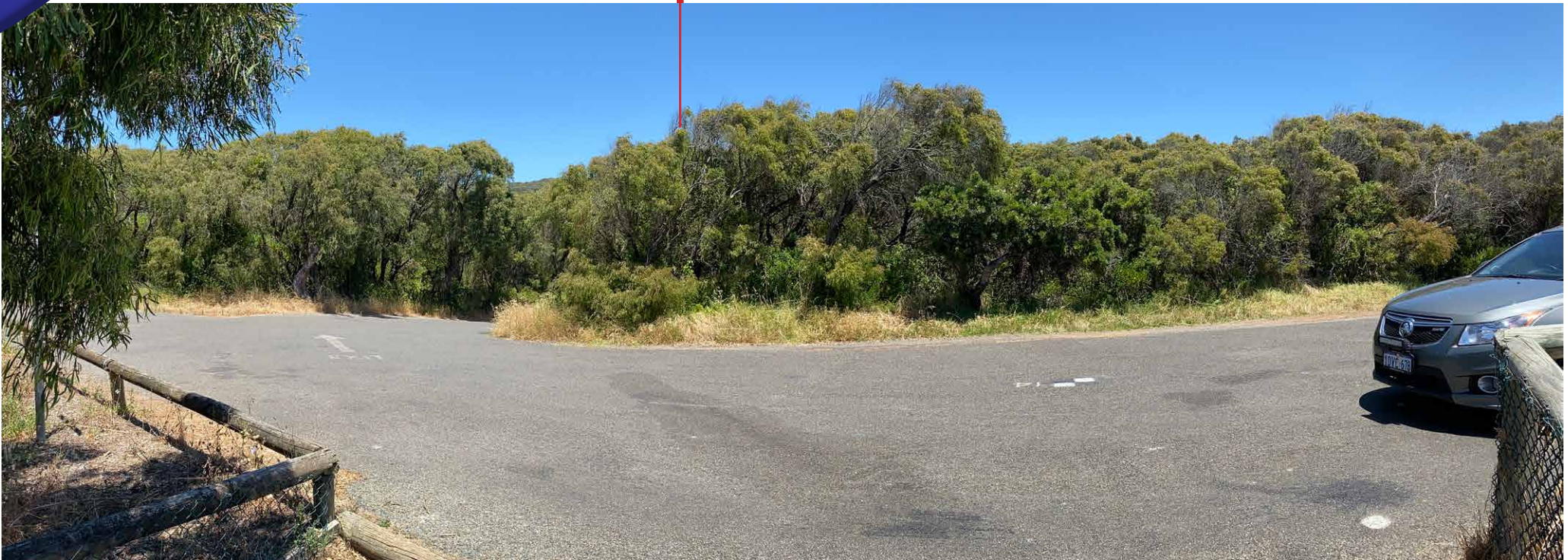
Note

This is a panoramic photograph.



- Legend**
- Indicative location and height of monopole
 - Indicative location of monopole only

Location 10 - Ocean Beach Lookout



View south towards the subject site. High coastal vegetation with large native trees will not allow views of the proposed monopole.

Visibility of Proposed Monopole

The monopole will not be seen.

Note

This is a panoramic photograph.

- Legend
- Indicative location and height of monopole
 - Indicative location of monopole only



Location Plan

NTS

34

Location 11 - Ocean Beach Lookout Carpark



View south towards the subject site. High coastal vegetation with large native trees will not allow views of the proposed monopole.

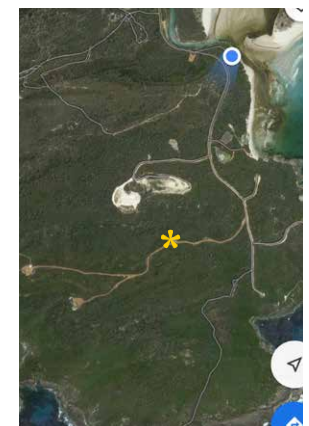
Visibility of Proposed Monopole

The monopole will not be seen.

Note

This is a panoramic photograph.

- Legend**
- Indicative location and height of monopole
 - Indicative location of monopole only



Location 12 - Harding River Foreshore





High coastal vegetation along Ocean Beach Road will not allow views of the proposed monopole.

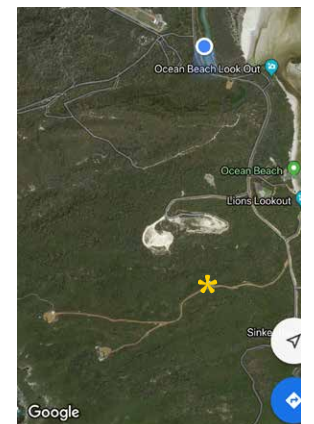
Visibility of Proposed Monopole

The monopole will not be seen.

Note

This is a panoramic photograph.

- Legend**
-  Indicative location and height of monopole
 -  Indicative location of monopole only



Location 13 - Denmark Ocean Beach Holiday Park Entry from Ocean Beach Road



View south west towards the subject site. Scattered large mature native trees along the road. The proposed monopole will be seen at the crest in the back of the frame.

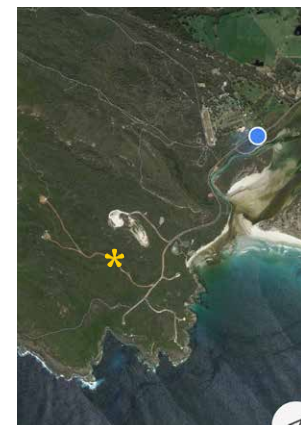
Visibility of Proposed Monopole

The monopole will be seen from this location.

Note

This is a panoramic photograph.

- Legend
- Indicative location and height of monopole
 - Indicative location of monopole only



Location Plan

NTS

Location 14 - Denmark Community Windfarm Switchroom Compound



View west at the subject site. The location of the proposed monopole is in the right-hand side of the frame besides the existing windfarm switchroom compound.

Visibility of Proposed Monopole



The monopole will be seen from this location.

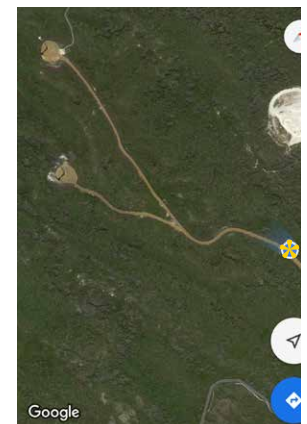
Note

This is a panoramic photograph.

NOTE: Monopole outside of viewshed.

Legend

-  Indicative location and height of monopole
-  Indicative location of monopole only



Location Plan

NTS

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Location 15 - Sinker Bay



Views from the western portion of the subject site with low coastal vegetation along the unsealed road. The topography lifts to a crest restricting views of the proposed monopole.

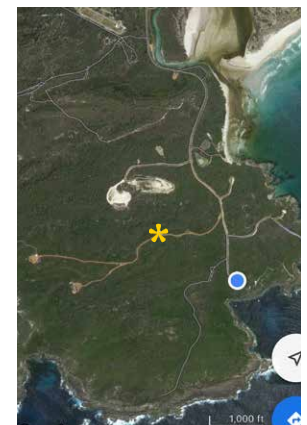
Visibility of Proposed Monopole

The monopole will be seen from this location.

Note

This is a panoramic photograph.

- Legend
- Indicative location and height of monopole
 - Indicative location of monopole only



Location 16 - Denmark Community Windfarm South Turbine



Views east towards the subject site from the crest with low coastal vegetation along the unsealed road will allow views of the proposed monopole.

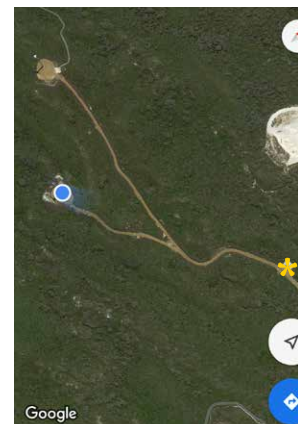
Visibility of Proposed Monopole

The monopole will be seen from this location.

Note

This is a panoramic photograph.

- Legend**
- Indicative location and height of monopole
 - Indicative location of monopole only



Location 17 - Denmark Community Windfarm North Turbine



Views south east towards the subject site from the crest with low coastal vegetation along the unsealed road will allow views of the proposed monopole.

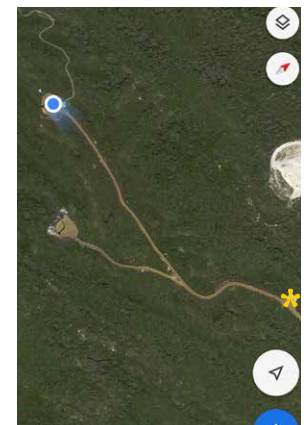
Visibility of Proposed Monopole

The monopole will be seen from this location.

Note

This is a panoramic photograph.

- Legend**
- Indicative location and height of monopole
 - Indicative location of monopole only



Location Plan

NTS

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Location 18 - WOW Trail





Views south east towards the subject site from the crest with low coastal vegetation along the walking trail will allow views of the proposed monopole.

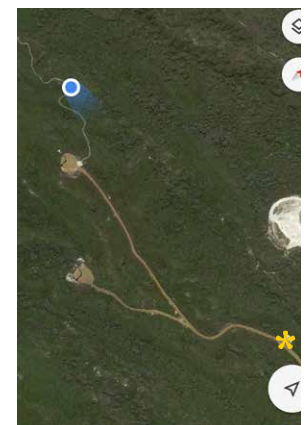
Visibility of Proposed Monopole

The monopole will be seen from this location.

Note

This is a panoramic photograph.

- Legend**
-  Indicative location and height of monopole
 -  Indicative location of monopole only



Location Plan

NTS

Location 19 - Harding River Dog Exercise Area Carpark



View south west towards the subject site. Medium-high coastal vegetation along the right-hand side of the Harding River. The proposed monopole will be seen on the ridge in the back of the frame.

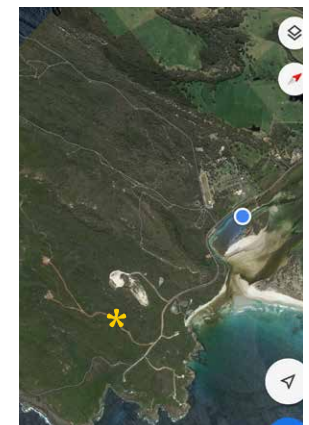
Visibility of Proposed Monopole

The monopole will be seen from this location.

Note

This is a panoramic photograph.

- Legend
- Indicative location and height of monopole
 - Indicative location of monopole only



Location 20 - Harding River Dog Exercise Area



View south east towards the subject site. Low coastal vegetation along the Harding River Dog Exercise Area with views of the proposed monopole situated on the crest in the back of the frame.

Visibility of Proposed Monopole

The monopole will be seen from this location.

Note

This is a panoramic photograph.

- Legend
- Indicative location and height of monopole
 - Indicative location of monopole only



Location Plan

NTS

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Location 21 - Lights Beach Carpark / WOW Trail



View east towards the subject site. The higher western side of Wilson Head conceals distant views of the proposed monopole.

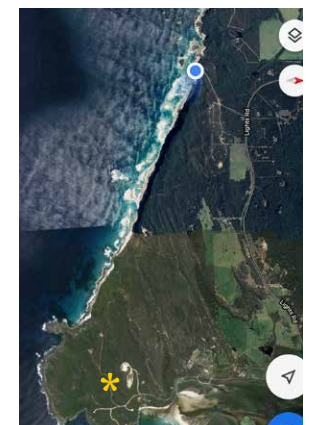
Visibility of Proposed Monopole

The monopole will not be seen.

Note

This is a panoramic photograph.

- Legend
- Indicative location and height of monopole
 - Indicative location of monopole only



Location Plan

NTS

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Location 22 - Lights Road



View south east towards the subject site. Large mature native trees along the sealed road will restrict views of the proposed monopole.

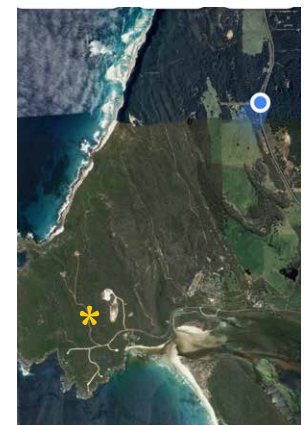
Visibility of Proposed Monopole

The monopole will not be seen.

Note

This is a panoramic photograph.

- Legend**
- Indicative location and height of monopole
 - Indicative location of monopole only



Location Plan

NTS

Location 23 - Lights Road



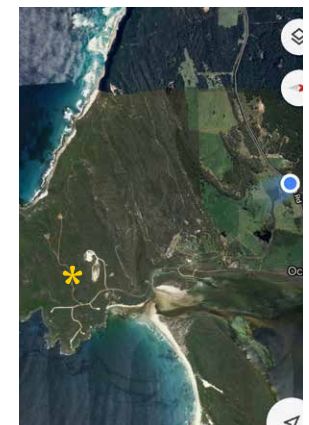
View south towards the subject site from Lights Road. Scattered low vegetation along the northern side of the road and open grassland with scattered bands of mature native trees on the southern side of the road. The monopole will be visible on Wilson Head at the back of the frame.

Visibility of Proposed Monopole

The monopole will be seen from this location.

Note

This is a panoramic photograph.



- Legend**
- Indicative location and height of monopole
 - Indicative location of monopole only

Location 24 - Junction of Lights Road & Ocean Beach Road



View south towards the subject site. Med-high native vegetation along both sides of the sealed road. Overhead lines in the foreground create visual 'clutter' which detract from the clear views of the monopole. At this distance the monopole will be seen but will appear very small on the horizon.

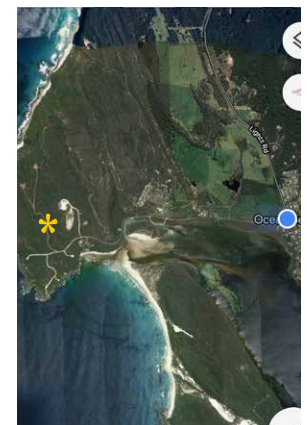
Visibility of Proposed Monopole

The monopole will be seen from this location.

Note

This is a panoramic photograph.

- Legend**
- Indicative location and height of monopole
 - Indicative location of monopole only



Location Plan

NTS

Location 25 - Anvil Beach Lookout



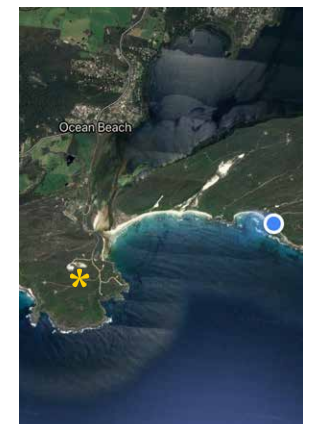
View west towards subject site. Long distance views of the monopole atop Wilson Head across low coastal vegetation. At this distance the monopole will be seen but will appear very small on the horizon.

Visibility of Proposed Monopole

The monopole will be seen from this location.

Note

This is a panoramic photograph.



Legend

- Indicative location and height of monopole
- Indicative location of monopole only

Location 26 - Junction of Ocean Beach Road & Minsterly Road



View south towards the subject site. High vegetation along the left-hand side of the Ocean Beach Road and scattered large mature trees along the right-hand side. The proposed monopole will sit on the ridge at the back of the frame. At this distance the monopole will be seen but will appear very small on the horizon.

Visibility of Proposed Monopole

The monopole will be seen from this location.

Note

This is a panoramic photograph.



- Legend**
- Indicative location and height of monopole
 - Indicative location of monopole only

Location 27 - Ocean Beach Road



View south along Ocean Beach Road towards the subject site. High coastal vegetation along with scattered large mature native trees at the left-hand side of the sealed road and scattered large mature native trees at the right-hand side of the road. A dual use pedestrian and cycle path runs along the eastern side of the road. Glimpses of the proposed monopole on the ridge at the back of the frame will be possible approaching the site.

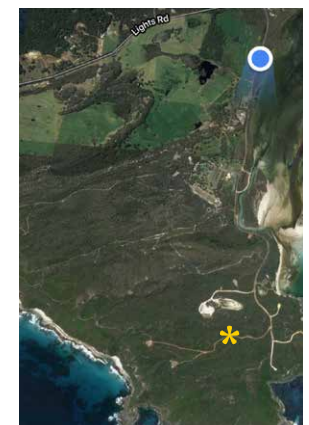
Visibility of Proposed Monopole

The monopole will be seen from this location.

Note

This is a panoramic photograph.

- Legend**
- Indicative location and height of monopole
 - Indicative location of monopole only



Location Plan

NTS

Location 28 - Denmark Ocean Beach Holiday Park Entry Road



View south towards the subject site. Flat topography along with large mature native trees at the Denmark Ocean Beach Holiday Park entry road will not allow views of the proposed monopole.

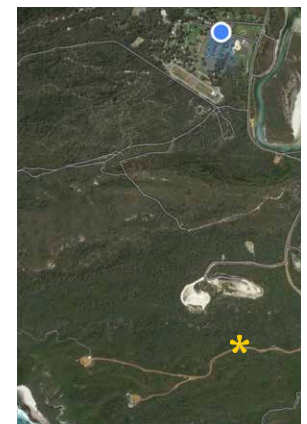
Visibility of Proposed Monopole

The monopole will not be seen.

Note

This is a panoramic photograph.

- Legend
- Indicative location and height of monopole
 - Indicative location of monopole only



Location Plan

NTS

Location 29 - Denmark Ocean Beach Holiday Park Entry Road



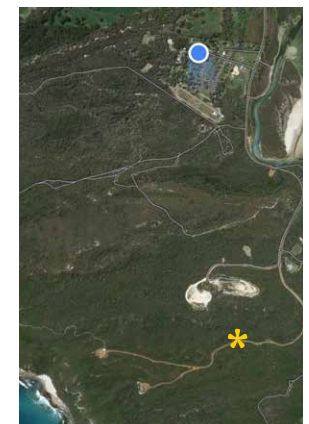
View south towards the subject site. Flat topography along with large mature native trees at the Denmark Ocean Beach Holiday Park entry road will only allow glimpsed views of the proposed monopole.

Visibility of Proposed Monopole

The monopole will be seen from this location.

Note

This is a panoramic photograph.



- Legend
- Indicative location and height of monopole
 - Indicative location of monopole only

Location 30 - Denmark Ocean Beach Holiday Park



View south towards the subject site. Glimpses of the top of the proposed monopole across flat topography between scattered large mature native trees.

Visibility of Proposed Monopole

The monopole will be seen from this location.

Note

This is a panoramic photograph.

- Legend**
- Indicative location and height of monopole
 - Indicative location of monopole only



Location 31 - Denmark Ocean Beach Holiday Park





View south towards the subject site. Possible glimpses of the top of the proposed monopole across flat topography between scattered large mature native trees.

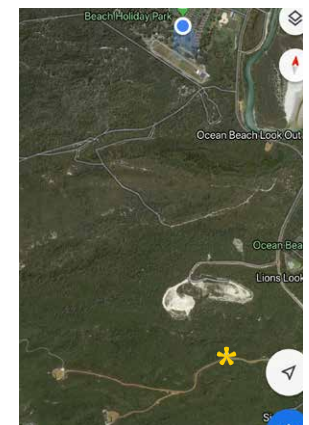
Visibility of Proposed Monopole

The monopole will be seen from this location.

Note

This is a panoramic photograph.

- Legend**
-  Indicative location and height of monopole
 -  Indicative location of monopole only



Location Plan

NTS

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Location 32 - Denmark Ocean Beach Holiday Park



View south towards the subject site. Flat topography along with scattered large mature native trees and chalets will not allow south western views of the proposed monopole.

Visibility of Proposed Monopole

The monopole will not be seen.

Note

This is a panoramic photograph.

- Legend**
- Indicative location and height of monopole
 - Indicative location of monopole only



Location 33 - Denmark Ocean Beach Holiday Park



View south towards the subject site. Flat, open topography at the playground and sports area will allow views of the proposed monopole.

Visibility of Proposed Monopole

The monopole will be seen from this location.

Note

This is a panoramic photograph.

- Legend**
- Indicative location and height of monopole
 - Indicative location of monopole only



Location 34 - Monkey Rock Carpark





View south east towards the subject site. Large mature native trees along the Monkey Rock Carpark. Glimpses of the proposed monopole will be obtained from this location. At this distance the monopole will be seen but will appear very small on the horizon.

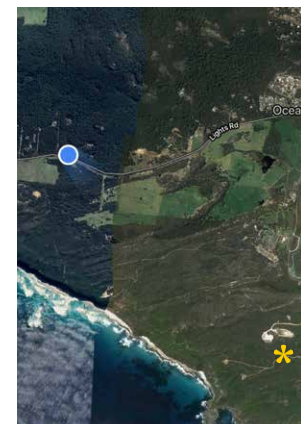
Visibility of Proposed Monopole

The monopole will be seen from this location.

Note

This is a panoramic photograph.

- Legend
-  Indicative location and height of monopole
 -  Indicative location of monopole only



Location Plan

NTS

Location 35 - Monkey Rock / Bibbulmun Track



View south east towards the subject site. The monopole will be visible from this location. From this elevated point facing east long distance views of the proposed monopole will be seen. At this distance the monopole will be seen but will appear very small just below the horizon line.

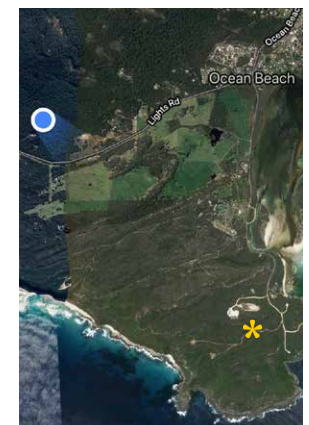
Visibility of Proposed Monopole

The monopole will be seen from this location.

Note

This is a panoramic photograph.

- Legend
- Indicative location and height of monopole
 - Indicative location of monopole only



Location Plan

NTS



3.3 Visual Management Objectives & Potential Visual Impacts Summary (Visual Change/Effects)

The management, retention and possible enhancement of the landscape character (as outlined within this report) through development, can be achieved by ensuring that where possible strategies for siting a development such as the Telstra mobile phone base station are observed.

The objective by doing so, is to minimise any visual impacts from the base station and maintain the coastal scene through a comprehensive analysis of the surrounding landscape and the identification of public vantage points from which this landscape is observed.

As stated within this assessment, the subject site itself is located on a coastal ridge at height which is consistent with its telecommunications function. As such the 50m monopole will be prominent when viewed from certain medium to long distant locations in the wider area.

There is the potential for glimpsed views of the top of the monopole from the local area. Full, uninterrupted views of the proposal would be possible when approaching the site from the existing wind farm access track.

The proposed monopole is located in close proximity to the existing wind farm turbines, at ground levels approximately 30-35m lower than the base of the turbines. The height of the monopole structure is approximately 29m shorter than the wind turbine structures (tower and blade). The resulting difference means that the top of the monopole is approximately 59-64m lower than the top of the wind turbines (tower and blade).

There is minimal loss of existing vegetation proposed. This will be contained to the area housing the mono-

pole and the access track and will not cause significant visual change to the observed site.

Due to the height of the proposed monopole, the typical size of the existing vegetation and exposed position of the site it would be impractical to establish new vegetation of substantial height for screening purposes.

Glimpses of the monopole are possible from within the Ocean Beach Holiday Park. These would largely be obtained when moving through the park and not from the accommodation which generally faces away from the subject site.

The proposed location of the monopole complies with guidance and policy (Refer SPP 5.2 & State Guidance) located in association with other contemporary mast structures of the wind turbines, generally not in the line of direct sight in the direction of travel.

There will be minimal change in the landscape character as large infrastructure elements are a component of the existing landscape character and addition of one more is not a significant change.

It should be noted that the two wind turbines stand largely alone in the landscape and provide a contemporary, iconic feature in the natural landscape visited by tourists. As such, too much additional infrastructure similar to the proposed monopole would start to detract from the current scene. Therefore acceptance of the proposed Telstra base station should not set a precedent and further infrastructure should be kept to a minimum.



3.4 Concluding Statements

The substantial variances in elevation of the immediate local area and size and density of vegetation approaching by road can fully or partially conceal the monopole depending on the position of the viewer.

The subject site is prominent from certain positions in the local area however attention is drawn to the spectacular ocean views which face away from the proposal.

The proposed monopole is visible when viewed from the wider area however it is of an approximate scale and nature to the existing wind farm turbines. As such its prominence is reduced.

When observed from distance the proposed monopole will appear no larger or taller than the existing wind farm turbines which do not dominate the skyline.

With reference to the statements and findings made within this report, it is concluded that the proposed Telstra mobile phone base station to be situated within the subject site will not have a significant negative impact on the landscape character of the local area as supported by the following;

- The subject site is elevated above natural eye level when approached from the immediate area.
- The proposal is screened by vegetation along Ocean Beach Road in the immediate area.
- When visible, only a small section of the top of the monopole will be seen.
- Public views in the immediate area are directed towards the spectacular ocean vista away from the proposal.
- The proposal is located at the existing wind farm which is of a similar scale and nature.

- The proposed monopole structure is shorter than the existing wind turbines and is situated at a lower level.
- The monopole is not prominent when observed from the wider area.
- The proposal complies with SPP 5.2.

The landscape character of the subject site and its greater contextual surroundings (as described within this report) is such that it possesses the ability to absorb reasonable change or development in context of this character, often referred to as Visual Absorption Capacity (VAC).

Although the Telstra mobile phone base station is a significant piece of built infrastructure in the context of this coastal landscape there is only the potential of full, direct views of the monopole from distance. The majority of these views would be experienced from a vehicle travelling at 60km/h and would not be static.

There are opportunities for views of the subject site from within the public realm. These will be obtained from vehicular and pedestrian infrastructure, including but not limited to; Ocean Beach Road, Lights Road, DUP along a section of Ocean Beach Road, walking trails, designated locations for vehicles to pull over, designated lookout points.

The materiality of the proposed infrastructure will produce little in the way of light reflectivity and should be coloured for maximum absorption into the landscape. Mid greens and greys are readily found within the coastal vegetation and the monopole will generally be viewed against a sky background suggesting a lighter colour would be appropriate.



3.5. Visual Management Measures and Recommendations/Options for Monitoring

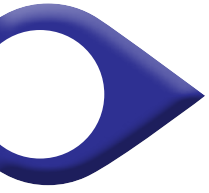
Siting:

The proposed Telstra mobile phone base station will be in an elevated position due to its intended telecommunications functionality. As such it would be impractical to recommend siting at lower levels to further mitigate visibility. The proposed location maintains height but ensures the monopole remains on the periphery of the ocean panoramas experienced by visitors to the local area.

Amelioration:

Colour - Colours suitable and sympathetic to the surrounding landscape (mid greens, greys, beige) should be selected for proposed elements of the base station.

Vegetation - As previously stated in this report, due to the height of the proposed monopole, the typical size of the existing vegetation and exposed position of the site it would be impractical to establish new vegetation of substantial height for screening purposes. The removal of vegetation within the immediate area around the subject site, road reserves and look-outs should be limited.



Appendix 1 - Photorealistic Montage of Telecommunications Tower (Location 18)

