Colac Otway
SHIRE

PLANNING COMMITTEE MEETING

AGENDA

Wednesday 13 September 2023

at 4:00 PM

COPACC

95 - 97 Gellibrand Street, Colac

COLAC OTWAY SHIRE COUNCIL PLANNING COMMITTEE MEETING

Wednesday 13 September 2023

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COLAC OTWAY SHIRE COUNCIL PLANNING COMMITTEE MEETING

NOTICE is hereby given that the next ***PLANNING COMMITTEE MEETING OF THE COLAC OTWAY SHIRE COUNCIL*** will be held at COPACC on Wednesday 13 September 2023 at 4:00 PM.

AGENDA

1 DECLARATION OF OPENING OF MEETING

OPENING PRAYER

Almighty God, we seek your
blessing and guidance in our
deliberations on behalf of the
people of the Colac Otway Shire.
Enable this Council's decisions to be
those that contribute to the true
welfare and betterment of our community.

AMEN

2 PRESENT

3 APOLOGIES AND LEAVES OF ABSENCE

4 WELCOME AND ACKNOWLEDGEMENT OF COUNTRY

Colac Otway Shire acknowledges the original custodians and law makers of this land, their elders past, present and emerging and welcomes any descendants here today.

RECORDING AND PUBLICATION OF MEETINGS

Please note: All Planning Committee meetings are live streamed and recorded when the meeting is held either at COPACC or online. When meetings are held in other locations, Council will endeavour to make an audio recording of the meeting for community access. Matters identified as confidential items in the Agenda will not be live streamed or recorded regardless of venue or mode.

By participating in open Planning Committee meetings, individuals consent to the use and disclosure of the information they share at the meeting (including any personal and/or sensitive information).

As soon as practicable following each open Planning Committee meeting, the live stream recording will be accessible on Council's website. Recordings are also taken to facilitate the preparation of the minutes of open Planning Committee meetings and to ensure their accuracy. Recordings will be retained by Council for a period of four years.

As stated in the Governance Rules, other than an official Council recording, no video or audio recording of proceedings of Planning Committee meetings will be permitted without specific approval by resolution of the relevant Planning Committee meeting.

This meeting will be livestreamed to the public via Council's YouTube channel (search Colac Otway Shire Council at www.youtube.com).

5 DECLARATIONS OF INTEREST

A Councillor who has declared a conflict of interest, must leave the meeting and remain outside the room while the matter is being considered, or any vote is taken.

6 CONFIRMATION OF MINUTES

- **Planning Committee Meeting held on Wednesday 9 August 2023.**

RECOMMENDATION

That the Planning Committee confirm the minutes of the Planning Committee Meeting held on Wednesday 9 August 2023.

Colac Otway SHIRE

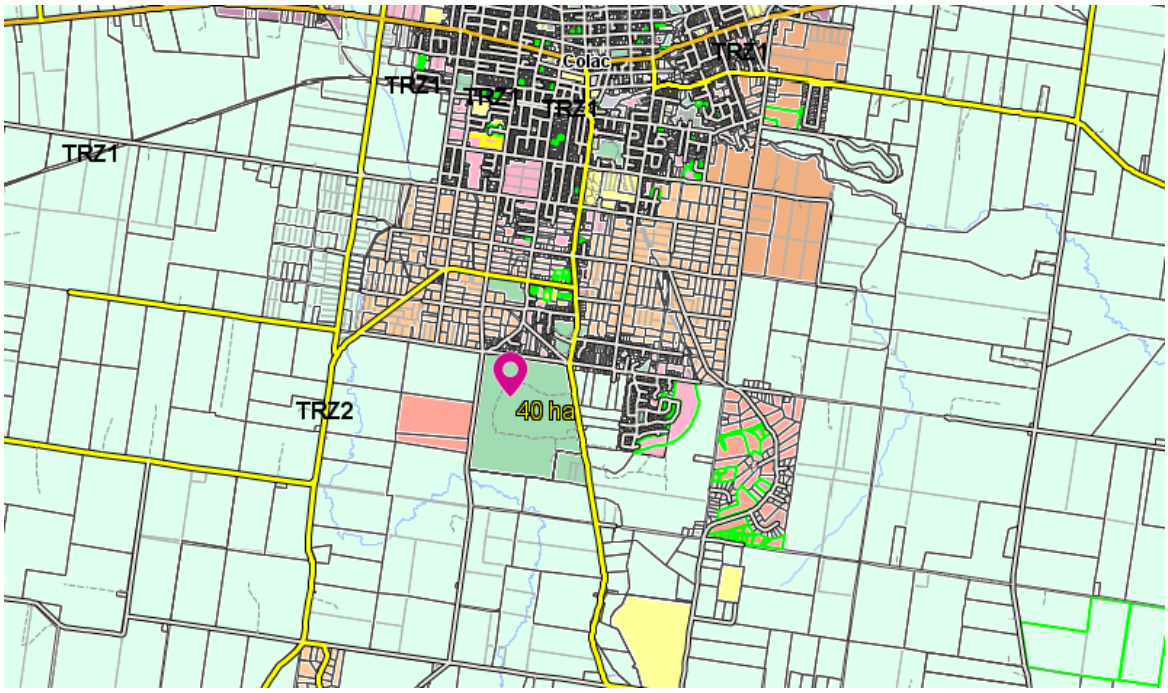
Item: 7.1

Development of Telecommunications Monopole at 100 Colac Lavers Hill Road ELLIMINYT

ADDRESS AND PROPERTY DETAILS	100 Colac Lavers Hill Road ELLIMINYT C/A: 38 V/F 11733/501 Parish of Elliminyt	**APPLICATION NUMBER**	PP47/2023-1
PROPOSAL	Development of Telecommunications Monopole		
PERMIT TRIGGERS	Clause 36.02-2 – Buildings and Works – PPRZ Clause 52.19-1 – Telecommunications Facility		
TRIGGER FOR DETERMINATION BY COMMITTEE	Eight (8) objections received		
ZONE	Public Park and Recreation Zone (PPRZ)	**OVERLAYS**	Nil (all overlays are south of the proposed monopole location)
COVENANTS	Reservation MI091472K 06/08/2016 Permanent Racing and Other Purposes of Public Recreation *No document is available for the above instrument. When parcels of land under Crown Management are migrated to other landowners, no further information is available. The Crown Land Data Migration has confirmed that 'no Instrument is available'.*		
CULTURAL HERITAGE	Yes – a small section in the south-west corner of the site. The proposed monopole would be 950m north of the area of land identified as being in an area of cultural heritage sensitivity.		
OFFICER	Ian Williams	**CHIEF EXECUTIVE OFFICER**	Anne Howard
DIVISION	Planning and Strategic Focus		
ATTACHMENTS	1. P P 472023-1 - Planning Report [**7.1.1** - 74 pages] 2. P P 472023-1 - Plans [**7.1.2** - 4 pages] 3. P P 472023-1 - Applicant Response to Objectors [**7.1.3** - 12 pages]		

1. LOCATION PLAN / AERIAL PHOTO

LOCATION PLAN



AERIAL PHOTOS

AREA OF CULTURAL HERITAGE SENSITIVITY (hatched yellow)

2. RECOMMENDATION

That the Planning Committee resolves to issue a Notice of Decision to Grant a Permit for the Construction of a Telecommunications Facility (35m Monopole) and Associated Works at 100 Colac Lavers Hill Road ELLIMINYT (C/A: 38 V/F 11733/501 Parish of Elliminyt), subject to the following conditions:

Endorsed Plans

1. The development as shown on the endorsed plans must not be altered without the written consent of the Responsible Authority.

Amenity

2. The nature and colour of materials employed in the construction of the telecommunications facility hereby permitted must be non-reflective to the satisfaction of the Responsible Authority.

3. The telecommunications facility hereby permitted must be maintained in good condition to the satisfaction of the Responsible Authority.

Removal of Facility

4. In the event that the telecommunications facility hereby permitted ceases to be operational, the facility must be decommissioned and removed from the site in its entirety within 12 months of the use ceasing, and the land must be reinstated, all to the satisfaction of the Responsible Authority.

Protection of Vegetation

5. To prevent damage to remaining vegetation, there must be no temporary or permanent storage of any materials, vehicles or equipment within areas of native vegetation identified to be retained in accordance with the endorsed plans. All storage sites must be restricted to existing cleared areas close to existing roads and tracks, and must not adversely impact upon native vegetation, including the root zones of existing trees. Such sites must not be located on or near erodible surfaces, surface water runoff areas or areas infested with weeds.

Access

6. Prior to the construction of the monopole and associated equipment hereby permitted, unless otherwise approved in writing by the Responsible Authority, the accessway must be constructed to an all-weather standard and with a minimum width of 3m to the satisfaction of the Responsible Authority.

Stormwater

7. During construction works, the site must be developed and managed to ensure there is no stormwater pollution through the contamination of runoff by chemicals, sediments, wastes or pollutants in accordance with 'Best Practice Environmental Management Guidelines for Stormwater Management and Construction Techniques for Sediment Pollution Control' (EPA) to the satisfaction of the Responsible Authority.

Expiry

8. This permit will expire if one of the following circumstances applies:

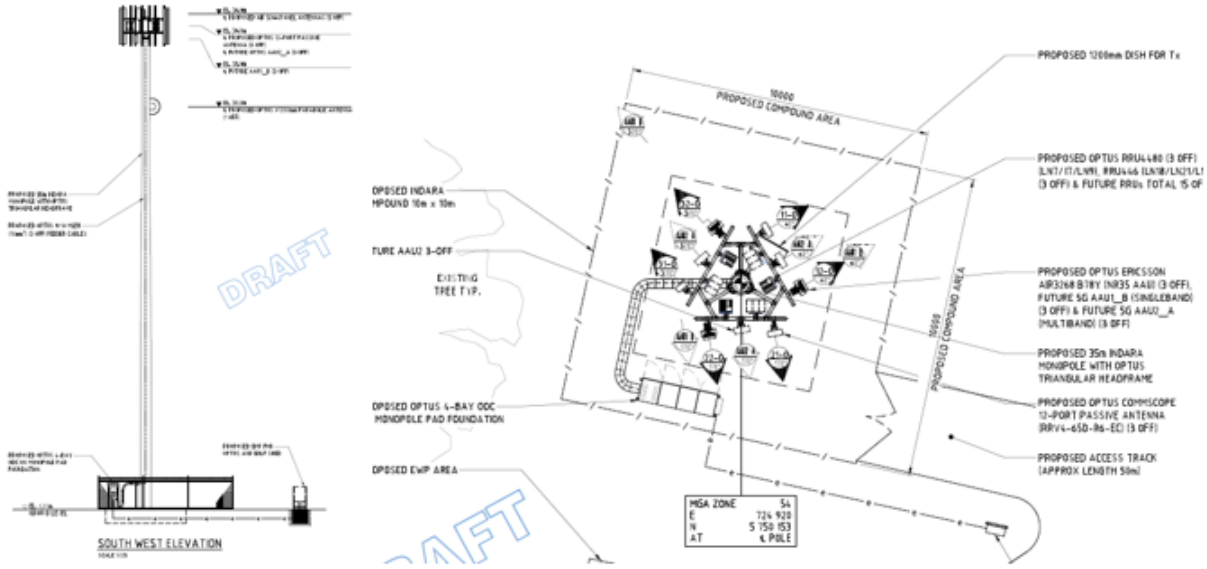
a) The development is not commenced within two years of the date of this permit.

b) The development is not completed within four years of the date of this permit.

In accordance with section 69 of the Planning and Environment Act 1987, an application may be made to the Responsible Authority to extend the periods referred to in this condition.

3. PROPOSAL

Planning permission is sought for the construction of a telecommunications facility at Colac Golf Club, 100 Colac-Lavers Hill Road, Elliminyt (C/A: 38 PP2586). The proposed facility would be owned by the Indara Group and would host Optus telecommunications equipment.



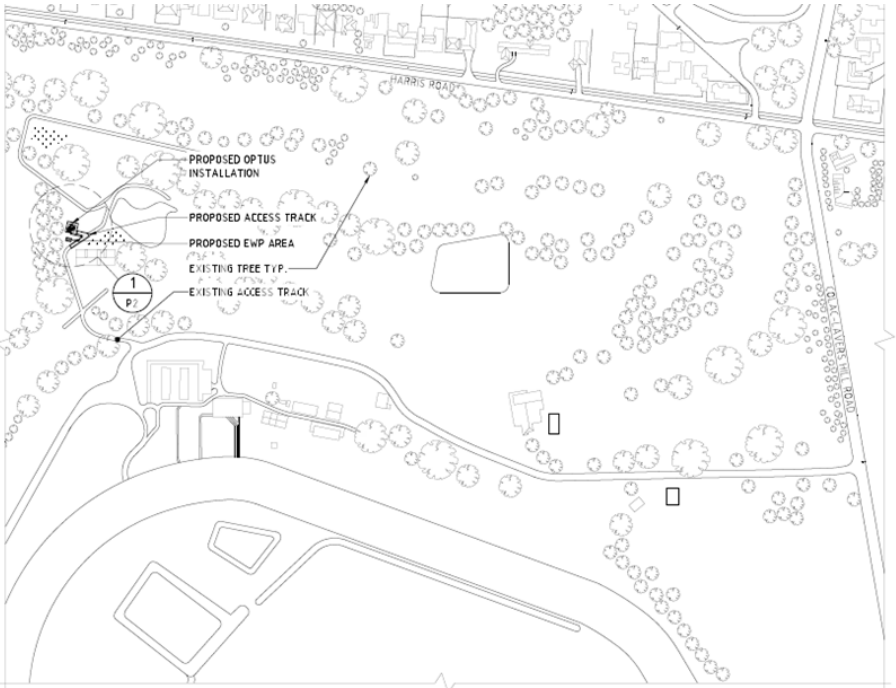
The proposal includes the following:

- One (1) 35m monopole (total height 37.5m with antennae).
- One (1) new triangular headframe supporting the following equipment:
  - Three (3) Optus 4G panel antennae, each up to 2.8m in length
  - Three (3) Optus 5G panel antennae, each up to 1m in length
  - One (1) Optus parabolic antenna.
- Ancillary equipment associated with the operation and safety of the facility, including remote radio units, cabling and antenna mounts.
- One (1) outdoor equipment cabinet at ground level (note: only the monopole and ground works require a permit, as the equipment cabinets are exempt under Clause 52.19-1).

The applicant has advised that, whilst the facility proposed at the Golf Course is focussed as a 5G deployment, 4G antennae are also proposed (as many customers are still using 4G phones).

The telecommunications monopole is proposed to be located within a 10m x 10m lease area. The compound would be enclosed with a 2.1m high chain-link security fence, positioned approximately 181m from Harris Road and 680m from Colac-Lavers Hill Road. The monopole and associated equipment are proposed to be finished in non-reflective pale grey.

LOCALITY MAP



OVERALL SITE PLAN

An Arboricultural Impact Assessment (dated 5 May 2023) was submitted as part of the application. The findings of this report note that the construction impacts associated with the 'lease area' would be limited to the compound fencing structure, i.e. fencing posts. The closest tree would not be impacted by the compound fencing or the foundation slab.

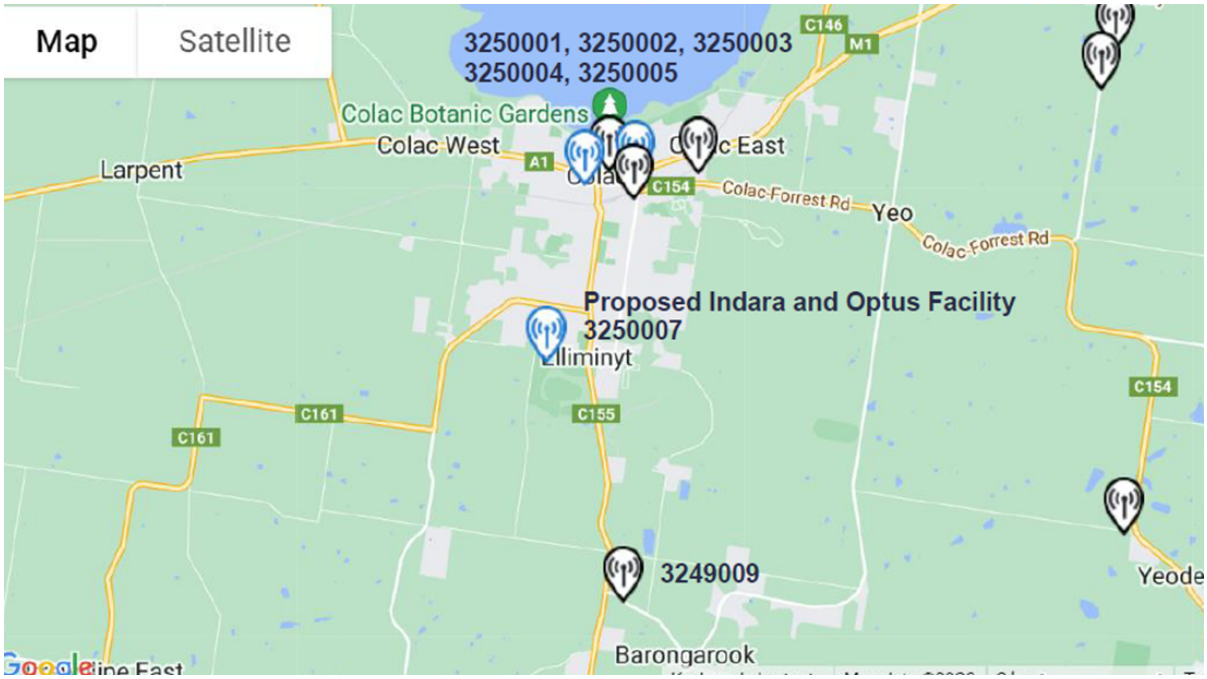
The applicant has advised that the proposed facility would provide for enhanced 4G and new 5G phone and data services to the surrounding area. It would be designed as a neutral host facility, capable of supporting co-location by other carriers, government entities and wireless service providers. The facility is proposed to improve Optus mobile services in the Elliminyt area. The applicant has advised that consumer usage in Elliminyt reflects an increase in demand for speed and data bandwidth and, as such, Optus requires a new site in the area to ensure this quality of service is provided.

The applicant has noted that 5G is the fifth generation of wireless cellular technology, offering higher upload and download speeds. The applicant also advised that, despite its fast speeds, 5G does not have the same range as 4G and large structures and trees may also block the bandwidth of the 5Gbps (gigabits per second), creating several problems.

The proposed telecommunications facility is not funded, or partly funded, by the Commonwealth through the Mobile Black Spot Program or the State of Victoria.

Co-Location Opportunities

The applicant has confirmed that there are no feasible co-location opportunities in the area. Existing telecommunications facilities in the area are shown below. These have been assessed and the applicant has confirmed that they are not suitable for co-location.



- *119-121 Murray Street, Colac (corner of Gellibrand Street/Murray Street) (Optus/Vodafone) - too far to the north of the target coverage area and would not meet the necessary coverage objectives (C1Z).*
- *99A Queen Street, Colac (NBN/Telstra) - too far to the north of the target coverage area and would not meet the necessary coverage objectives (PUZ1).*
- *97 Bruce Street, Colac (Optus) - too far to the north of the target coverage area and would not meet the necessary coverage objectives (INZ1).*
- *57-61 Queen Street, Colac (Telstra) - too far to the north of the target coverage area and would not meet the necessary coverage objectives (C1Z).*
- *2-28 Connor Street, Colac (Optus) - too far to the north of the target coverage area and would not meet the necessary coverage objectives (PUZ3).*
- *50 Barongarook Road, Barongarook - this facility is not established for mobile call and data services (FZ).*

The applicant has advised that, in identifying the candidate site, they have sought to maximise separation from residences and sensitive land uses, whilst also endeavouring to minimise impacts on the environment and scenic amenity as far as practicable.

<u>The following candidate sites were also considered, the location of which is shown on the aerial image below.</u>

- Candidate Site A – subject site (100 Colac Lavers Hill Road, Elliminyt).
- Candidate Site B – applicant's reference is Christies Road (the street address is in Harris Road, Elliminyt). The site, which is located in the Farming Zone (FZ)), is privately owned and the landowner was not willing to enter into a rental agreement.

- Candidate Site C – applicant's reference is Hart Street (the street address is 60 Irrewillipe Road, Elliminyt - Lot 2 PS501660). This site is Council owned and located in the Public Park and Recreation Zone (PPRZ). Whilst the application indicated that a request had been made to Council to use this site, it appears from internal discussions and further correspondence with the applicant that such a request was not made. It is noted that the Colac 2050 Plan shows that land in the vicinity of this site is planned to be rezoned to residential.

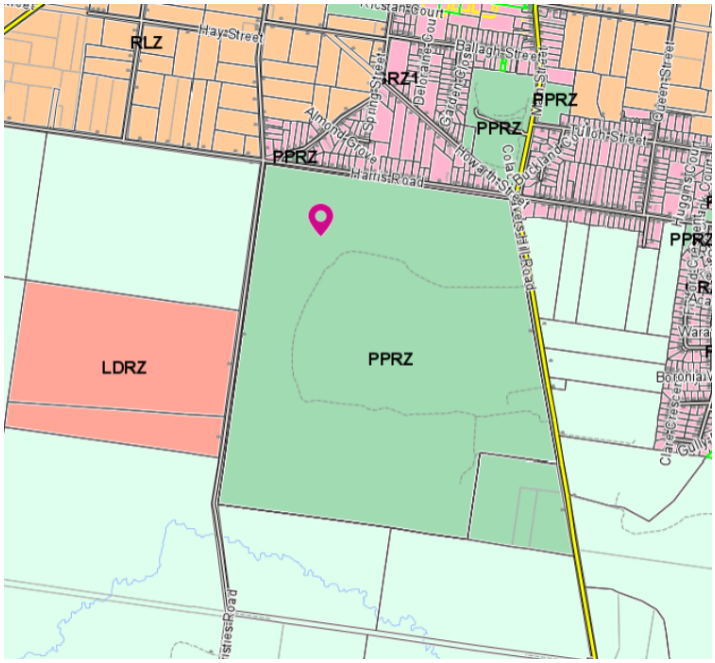
- Candidate Site D – applicant's reference is Hart Street (street address is in Howarth Street, Elliminyt). This site is in the General Residential Zone (GRZ1). The applicant has advised that the landowner was not willing to enter into a rental agreement.

Whilst the applicant's reference to candidate sites C and D were both referenced as Hart Street in the public notice material, it was clear from the supporting image in the application where these candidate sites are actually located. The applicant has apologised to the objectors for the misunderstanding.

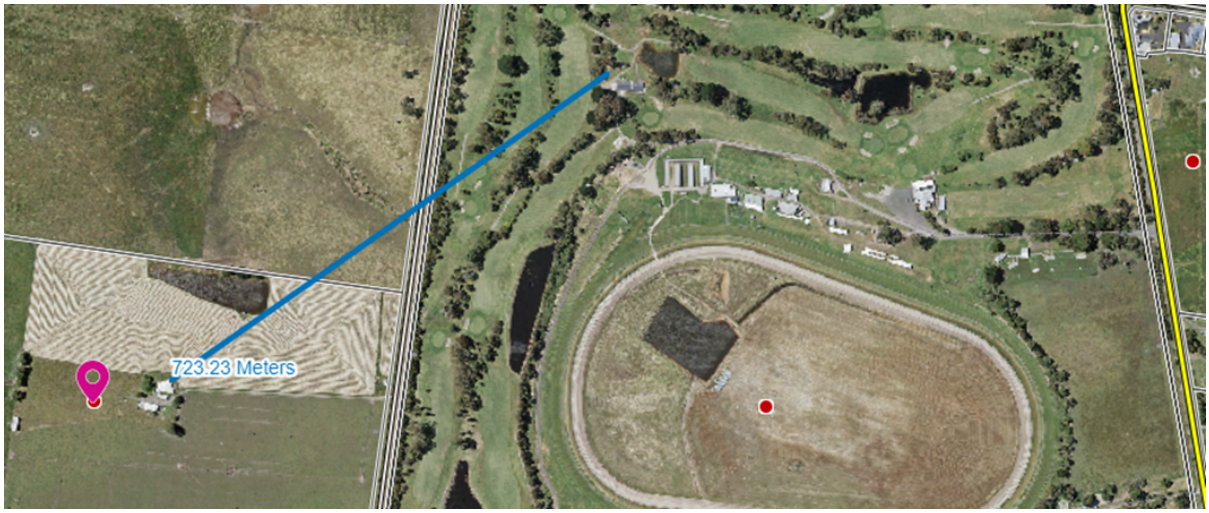
4. SUBJECT LAND & SURROUNDINGS

The site is located approximately 3.25 km south of the existing mobile facilities within Colac, on land approximately 50m higher in elevation. The subject site is in the Public Park and Recreation Zone (PPRZ) and is used as a golf club and turf club. Access to the property is via Colac-Lavers Hill Road. The nearest residences are located to the north of the site along Harris Road (the closest at 119 Harris Road being approximately 210m north of the selected site).

Land to the immediate north and north-east of the subject land on Harris Road is in the General Residential Zone (GRZ1). Land to the north-west is in the Rural Living Zone (RLZ). Land to the south, east and west is generally in the Farming Zone, apart from two lots to the west of 100 Colac Lavers Hill Road - at 70 and 90 Christies Road, each of which contains a dwelling – which are within the Low Density Residential Zone.



(Note: the applicant advised within the submitted documentation that the nearest residence on the western side of Christies Road is located approximately 1.8 km from the selected site when in fact this is located 723m to the south-west as shown below.)



In relation to the LDRZ land, it is noted that a VCAT decision in 2009 affirmed Council's decision to refuse an application to subdivide this LDRZ land and that the *Rural Living Strategy* 2011 recommended the back-zoning of 70 and 90 Christies Road to Farming Zone on the basis that the land "*is not well connected with the town and isolated from existing services"* and that "l*and included in the LDRZ on the west side of Christies Road is isolated and remote from the township and fails to meet the tests of Ministerial Direction No 6, on this basis it is recommended this be back zoned to Farming Zone".*

The Colac 2050 Growth Plan has established a new settlement boundary for Colac. It identifies land south of Harris Road as a '*Residential Investigation Area'*, to be considered for longer term development. Given the amount of land identified for short and medium term development north of Harris Road within the new settlement boundary established by the Growth Plan, it is unlikely the potential for development of this land will be investigated within the next 10-20 years. The Growth

Plan confirms the LDRZ should be rezoned to Farming Zone in the short term. This will be actioned by Council's Strategic Planning team as part of a future broader amendment.

5. PLANNING SCHEME PROVISIONS

Planning Policy Framework

The objectives, strategies and policies of the Planning Policy Framework were considered in the assessment of this application, notably:

Clause 12 – Environmental and Landscape Values
Clause 12.01-1S – Protection of Biodiversity
Clause 13 – Environmental Risks and Amenity
Clause 13.05 – Noise
Clause 13.07-1S – Land Use Compatibility
Clause 15.01 – Built Environment
Clause 15.03-2S – Aboriginal Cultural Heritage
Clause 17 – Economic Development
Clauses 17.0 1-1S and 17.01-1R – Diversified Economy
Clause 19.03-4S – Telecommunications.

Clause 13.07-1S (Land Use Compatibility) seeks:

> *To protect community amenity, human health and safety while facilitating appropriate commercial, industrial, infrastructure or other uses with potential adverse off-site impacts.*

Clause 15 (Built Environment and Heritage) includes clauses 15.01-1S (Urban Design), 15.01-2S (Building Design) and clause 15.01-5S (Neighbourhood Character). Objectives and supporting strategies include, among others:

- *Require development to respond to its context in terms of character, cultural identity, natural features, surrounding landscape and climate.*
- *To achieve building design and siting outcomes that contribute positively to the local context, enhance the public realm and support environmentally sustainable development.*
- *Ensure development responds and contributes to the strategic and cultural context of its location.*
- *Support development that respects the existing neighbourhood character or contributes to a preferred neighbourhood character.*

Clause 17.01-2S (Innovation and Research) includes the following strategy:

- *Encourage the expansion and development of logistics and communications infrastructure.*

Clause 19.03-4S (Telecommunications) seeks:

- *To facilitate the orderly development, extension and maintenance of telecommunications infrastructure.*

Other Relevant Provisions

Clause 52.19 – Telecommunications Facility

Relevant Planning Scheme Amendments

Amendment VC226 (dated 04 November 2022) made state-wide changes to the Victoria Planning Provisions (VPP) and all planning schemes to support telecommunications facilities. A summary of the relevant changes is provided below:

- *A Code of Practice for Telecommunications Facilities in Victoria* (Department of Sustainability and Environment, July 2004) was deleted from the list of policy documents.
- Clause 62.01 (Uses Not Requiring a Permit) specifies that a permit is not required for the use of land for a telecommunications facility. [emphasis added] This was not previously listed in Clause 62,01.
- Clause 62.02 (Buildings and Works Not Requiring a Permit) specifies that certain buildings and works for a telecommunications facility are exempt from the requirement for a permit under clause 52.19-1.
- Exemption under Clause 52.19-1 - A telecommunications facility equipment shelter.

This was a Ministerial amendment, with the following reasons provided for the intervention in the planning system relating to telecommunications:

Telecommunications

9. *Telecommunications services are vital for supporting economic and social outcomes, as well as liveability and public safety across Victoria. Policies from both the Federal and Victorian Governments support improving telecommunications infrastructure in Victoria, and significant investment has been made to upgrade facilities.*

10. *Existing planning requirements for telecommunications facilities are almost 20 years old and include references to technology and practices that have become out-dated and obsolete and difficult to apply to modern telecommunications requirements.*

11. *Updates to planning provisions for telecommunications facilities are required to ensure clarity, consistency with current policy settings and to ensure provisions reflect modern technology.*

12. *Amendment VC226 also updates and modernises Victoria's telecommunications planning provisions and facilitates the development of telecommunications infrastructure and facilities through appropriate permit exemptions. The amendment will enable the prompt delivery of critical telecommunications infrastructure through simplified and modernised planning provisions, to support improvements to the telecommunications network for all Victorians. This also ensures the community is warned about emergency events including bushfire and flood.*

13. *The amendment updates and expands the list of telecommunications facilities exempt from a planning permit, exempts more permit applications from the notice and review requirements of the Planning and Environment Act 1987 and updates and clarifies other elements of the telecommunications planning provisions.*

The benefit of the exemption for telecommunications was stated to be:

"The exemption will facilitate the delivery of telecommunications facilities across Victoria, allowing the community to realise the social, economic and safety benefits of better access to telecommunication network sooner, and to ensure the community is warned about emergency events including bushfire and flood."

Note: the Telecommunications Code of Practice 2018, which used to be referenced in reports about telecommunication facilities, is no longer an incorporated document within the planning scheme and therefore its content is not relevant to the assessment of this application.

6. REFERRALS

Internal Referrals

The application was referred internally to Council's Infrastructure Department, the Health Protection Unit and the Environment Unit. No objection has been raised, subject to conditions being included on any permit issued.

External Referrals/Notifications

The Department of Energy, Environment and Climate Action (DEECA) and Barwon Water were notified of the application as land manager and adjoining landowner.

Barwon Water did not respond to the notification.

DEECA noted that landowner consent is required to be obtained and provided to Council under the requirements of Clause 36.02-3 to the Public Park and Recreation Zone. As public land manager, DEECA confirmed on 03 May 2023 that, as delegate of the Minister for Environment, approval is given for the Grant and Purpose of the proposed lease to Indara pursuant to section 17D(1) of the *Crown Land (Reserves) Act* 1978. DEECA also advised on 03/07/2023 that it does not object to a planning permit being granted and does not require conditions to be included on any permit issued.

7. PUBLIC NOTIFICATION & RESPONSE

COMMUNICATION

The application was advertised to all surrounding landowners and a notice was displayed on site for a period of 14 days.

At the end of the public notice period, eight (8) letters of objection had been received from surrounding landowners. The content of the objections is summarised below.

<u>Public Health (EME impact)</u>

1. *There are potential health risks to humans, livestock, flora and fauna. The electromagnetic emissions coming from the 5G would be too close to homes, jockeys, children, disabled, and the public attending/participants of golf, gun and equine clubs. The public are highly sensitive to radio waves and there have been no individual studies to the effects on human health, on breeding bovine females with regard to decreased conception rates or increased abortion of fetus', hence jeopardising primary production of high-quality beef.*

Comment

As discussed in this officer report, neither the use of land for a telecommunications facility nor the health implications of emissions are matters for consideration under the planning system. The permit triggers in this case relate to buildings and works only.

2. *EME* (electromagnetic energy) *towers cause tiredness, fatigue, headaches, lack of concentration, changes in memory, dizziness, sleep disturbances, including insomnia, disturbed immune function through various allergic and inflammatory responses, effects in tissue repair, increases the risk of diseases such as cancer, neuro-behavioural disorders, including circadian imbalance, anxiety, increases pro inflammatory cytokines making the inflammation of joints worse and can increase blood pressure. Council has not had an Independent Health Risk Assessment Study done on the impact and effects that this 5G EMF* (electromagnetic field) *tower is going to have on the community - the people, animals, environment.*

   Comment

   The level of emissions from a telecommunications facility is not a matter that is regulated under planning legislation, or for consideration undet this planning application. The applicant has provided an EME report confirming emissions would be within the relevant public exposure limit, as discussed later in this report.

3. *The golf club/gun club is public land used for recreational use and this proposal will result in an unsafe environment and degradation to pristine recreation facilities. Patrons use the golf course, not just the club house; as do patrons of the racecourse (accessed through golf course), racehorse training facility tenants and patrons of private functions at both Golf Club and Turf Club. There are schools, kindergarten and day care facilities in close proximity.*

   Comment

   It is noted that the public land manager has provided in principle approval of the lease of the land and raised no objection to a planning permit being issued. Council is required to assess the proposed building and works on their planning merits.

4. *The EME report does not reflect 'ramping up' of 5G output during times of high demand or the impact levels of future equipment placed on the proposed tower by other parties. Council has no control of future leases of the tower/part thereof and associated increased electronic impost on the reserve. Council has a duty of care for human and animal health, safety of participants and bystanders when considering such developments.*

   Comment

   The applicant has advised that the EME Report shows the maximum EME levels if the facility was operating at maximum capacity – which includes those times when demand is very high. Adaptive power control is a network feature that automatically adjusts the power – according to the demand at the time – and hence minimises EME from both the base station and the handset.

   The applicant has also advised that facilities are equipped with a feature, called discontinuous transmission, which reduces EME emissions by automatically switching the transmitter off when no speech or data is sent.

   The applicant also stated:

"As telecommunications technology advances, Carriers upgrade their facilities in order to provide the best available mobile call and data services to their customers. Each time an upgrade is proposed, Carriers investigate (via computer modelling) the proposed EME output expected from the proposed equipment. As with the initial installation of a facility, all upgrades to a facility must always comply with the ARPANSA standard. In addition, once equipment is installed at a facility and is operational, the ARPANSA regulations require that 'post-installation' testing is undertaken to ensure that the facility is operating within the Australian standard. Therefore, you may be assured that any future installations at this, or any, facility would always operate within the required Australian safe levels for EME."

No demand for monopole

5. *There is no evidence to support the applicant's statement that there is an increase in demand for speed and data bandwidth in this area or that patrons of the Colac Golf Club and adjacent racecourse are placing increasing demands on existing mobile telecommunications services and additional capacity is required. Mobile users in the precinct have not voiced concern over lack of telecommunication services here, even on event days.*

Comment

The decision to erect a telecommunications facility is a commercial one. Council is required to consider the proposal on its planning merits.

Locations of alternative candidates

6. *The other locations selected on lower elevated land are not in Hart Street as the applicant has stated. One of the sites is owned by Colac Otway Shire. Why is Colac Otway Shire unwilling to enter into a rental agreement for this type of development on its own property?*

Comment

The applicant acknowledged (and apologised) that an error was made on some addresses. The relevant map submitted with the application showed the correct sites. As noted above, it appears from discussions with other Council departments and the applicant that Council was not actually approached.

Inaccuracies in the application

7. *The Planning Report is inaccurate as it claims the 'Low Density Residential' zone land to the west is undeveloped.*

Comment

There are two dwellings within the LDRZ land, and the application has been assessed having regard to those properties.

8. *The applicant claims the nearest residence is located approximately 1.8km from the selected site, which is incorrect.*

Comment

This error has been noted. Distances to surrounding residences have been checked as part of the officer assessment.

9. *Applicant claims the selected location's distance would provide a buffer zone between Golf Club patrons and the facility.*

Comment
The proposed telecommunications facility would be over 400m from the club house.

10. *Planning Report states proposed tower will accommodate 3 x 4G panels, 3 x 5G panels and 1 antenna. EME report shows 6 x 5G panels and no antenna.*

    Comment
    The applicant has confirmed that 3 x 4G panels, 3 x 5G panels and 1 antenna would be installed, as per the plans.

11. *No details provided of owner who has given permission for application.*

    Comment
    The application form shows the land is Crown land, whilst the title lists DEECA as the landowner. These documents were put on public exhibition.

It is noted that no objection has been received from any of the properties on Harris Road. The nearest objection received is from a property over 700m away. One of the objections received was from the owner of a property in Barongarook, which is over 21km to the southwest on the subject site.

8. OFFICER'S ASSESSMENT

The provision of telecommunications services on this land is proposed to be undertaken as a private commercial venture. The carriers that provide telecommunication services are aware of the capacity needs of their networks and work as private businesses to meet the requirements of their customers. Council is obliged to consider the current application on its merits and against the relevant planning controls that apply to the proposal.

As noted earlier in this report, the *use* of the land for a telecommunications facility is an exempt use under Clause 62.01 of the planning scheme. Amendment VC226 (dated 04 November 2022) made changes to the Victoria Planning Provisions (VPP) and all planning schemes on a state-wide basis to support, inter alia, telecommunications. The matters for consideration in this case therefore relate to buildings and works associated with the proposed monopole.

Under Clause 36.02-2 (PPRZ), a permit is required to *'construct a building or carry out works'.* Under clause 36.02-3, an application for a permit by a person other than the relevant public land manager must be accompanied by the written consent of the public land manager, indicating that the public land manager consents generally or conditionally either:

- *To the application for permit being made.*
- *To the application for permit being made and to the proposed use or development.*

A letter of consent has been provided from the '*Colac Recreation Reserve Committee of Management*' confirming agreement to the proposal. The applicant has also provided written consent from DEECA, which states:

"As delegate of the Minister for Environment I hereby approve the Grant & Purpose of the proposed Lease to Indara pursuant to section 17D(1) of the Crown Land (Reserves) Act 1978.

Please note this approval provides in principle support only. As per previous advice the final Lease cannot be issued until Indara provides evidence of the Planning Permit being obtained for which I understand application has been made. Cultural Heritage Management Plan (CHMP) requirements and Native Title Act requirements will also need to be considered. The DEECA Planning & Approvals team will be a referral authority for the Planning Permit application by Indara and will provide comment on this application back to Council."

The application was referred to DEECA, which advised that it does not object to the granting of a planning permit and does not require conditions to be included on any permit issued.

The decision guidelines for consideration under clause 65 (Decision Guidelines) of the planning scheme include:

- *Any significant effects the environment, including the contamination of land, may have on the use or development.*
- *The Municipal Planning Strategy and the Planning Policy Framework.*
- *The purpose of the zone, overlay or other provision.*
- *Any matter required to be considered in the zone, overlay or other provision.*
- *The orderly planning of the area.*
- *The effect on the environment, human health and amenity of the area.*

Clause 52.19-5 (Telecommunications Facility) advises that the following two decision guidelines must be considered in the assessment of applications under this provision:

- *The design, siting, construction and operation of the telecommunications facility.*
- *The effect of the telecommunications facility on adjacent land.*

There is currently no existing telecommunications infrastructure in Elliminyt, with the monopole proposed to be located within an area where mature vegetation and equipment sheds would provide partial screening of the proposed facility. The proposed location is considered to be a practical and acceptable place for the facility, being adjacent to the existing golf course equipment shed and suitably recessed from the nearest residential dwellings.

While much of the telecommunications facility would not be visible beyond the subject site, the monopole and attached antennae are likely to be visible to varying degrees from surrounding properties and within the landscape more broadly. This is due to the monopole being higher than the prevailing height of existing buildings and landscaping, particularly canopy trees, in the surrounding area. However, the mere fact a facility is visible does not make it unacceptable. Rather, what is relevant is its visual impact on the landscape character of the area.

Views of the monopole and antennae would vary depending on the vantage point. Telecommunication facilities are, by their nature, visible infrastructure within the environment. It is considered that the proposed location would be acceptable, with any potential visual impact ameliorated by the distance from surrounding roads, the existing onsite vegetation and the slope of the land within the golf course. The proposed telecommunications facility would be over 400m from the club house, providing a buffer zone between patrons and the facility. Access to the site is already established, ensuring there would be no additional disruption. The image below is from Harris Road

and shows the separation distance from the closest tree line (200m) and the slope of the land which would assist in reducing any potential view lines.

View from Harris Road

Similarly, the tall mature trees and dense undergrowth of smaller trees along Colac-Lavers Hill Road would provide significant screening for the facility when travelling along this road.

View from Colac-Lavers Hill Road

The area to the west of Christies Road is cleared and largely undeveloped. Tall mature trees and dense undergrowth of smaller trees along the eastern side of Christies Road would also provide screening for the facility.

View from Christies Road

Consideration should be given as to whether the proposed height and appearance of the monopole would be likely to be dominant and visually intrusive from the neighbouring properties and the broader residential area to the north.

Even though glimpses of the monopole and antennae may be visible from the properties fronting Harris Road, it is considered that the substantial setbacks between the location of the monopole and the front of the dwellings along Harris Road, combined with the vegetation, would limit the visual impact of the proposed monopole and antennae when viewed from these properties.

In relation to the concern expressed about the impact on schools, kindergartens and day care centres in proximity to the subject site, it is noted that the closest such facility is Apex Kindergarten (7 Howarth Street) which is approximately 575m away from the proposed site. The Elliminyt Primary School (135 Slater Street) is approximately 1.1km away. Sacred Heart Primary School (125 Hart Street) is 1.7km away from above address and Nido Early Learning School (formally The Cubby House) in Pound Road and Trinity College in Hart Street are both approximately 2.6km from the site. Colac Secondary College (Queens Street) is 2.8km away. It is not considered that the proposed telecommunications facility would result in any adverse impact to surrounding schools, kindergartens or day care centres.

Furthermore, it is not considered that the proposed monopole and antennae would be a jarring or unacceptably dominant built form in this area. As vehicles and pedestrians move along Harris Road, Colac-Lavers Hill Road and Christies Road, the canopy trees along the road, plus buildings and vegetation, would variously filter and temper any partial views of the monopole and antennae. It is considered that the canopy trees and other vegetation along the sides of the road would remain the primary, unifying and prevailing character element along the road. For the reasons given, it is considered that the visual impact on the landscape character of the area and the amenity of surrounding residential properties would be acceptable.

As such, it is not considered that the proposal gives rise to a conflict in the planning policy objectives that variously seek to protect the landscape character and the amenity of the area and surrounding properties, and those that seek to facilitate telecommunications infrastructure.

Protected Matters

The applicant has advised that an investigation was undertaken on 28 February 2023 to determine if there are any Protected Matters existing or attached to the site location. The applicant noted that, apart from some local grass for the construction of the compound area, the removal of vegetation would not be required for this development. The proposed location would be partially screened by existing on-site vegetation. Council's Environment Unit has considered the proposal and raised no objection subject to a condition that has been included in the recommendation earlier in this report.

Servicing

The applicant notes that the facility would operate on a continual unmanned basis, aside from periodic routine maintenance visits (generally 2-4 times annually). Council's Infrastructure Department has considered the proposal and raised no objection subject to permit conditions. These are also included in the recommendation above.

Noise

The only part of the facility that would generate noise would be the cooling fans on the equipment cabinet. Council's Health Protection Unit has considered the proposal and has not raised any objection or requested that any conditions be imposed in the event a permit is issued.

Health Concerns

The level, or acceptability, of emissions from a telecommunications facility is not a matter that is regulated under planning legislation. The following provides some information about where such control lies, and the matters for consideration when assessing a planning application for the associated buildings and works.

All radio networks transmit 'electromagnetic radiation'. The macro cells of a telecommunications network provide opportunity for a connection between the network and computers, laptops and mobile phones. Therefore, electromagnetic emissions (EME) are present at both points of connection - i.e., the computer, laptop or mobile phone and the macro cell.

When considering the issues surrounding EME, Indara and Optus have relied on the expert advice of the World Health Organisation (WHO), the International Commission on Non-Ionizing Radiation Protection (ICNIRP) and the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) for overall assessments of health and safety impacts. The WHO and ARPANSA advise that there is no substantiated scientific evidence that radiofrequency technologies that operate within national and international safety standards cause health effects. The Australian safety standard is set by ARPANSA and is based on the safety guidelines recommended by the WHO. This standard has a significant safety margin, or precautionary approach built into it. The Australian safety standard is designed to provide protection to all people, including vulnerable members of the community (the elderly, children and people with compromised health), 24-hours a day, 7 days a week.

As with the initial installation of a facility, all upgrades to a facility must always comply with the ARPANSA standard. In addition, once equipment is installed at a facility and is operational, the ARPANSA regulations require that 'post-installation' testing is undertaken to ensure that the facility is operating within the Australian standard.

The applicant has confirmed that the electromagnetic emissions (EME) emissions would be within the levels prescribed by ARPANSA and regulated by the Australian Communications and Media Authority (ACMA). An ARPANSA EME Report demonstrates compliance with Australian safety. The maximum EME level calculated for the proposal is 0.92% out of 100% for the public exposure limit, 244m from the location. Sites which operate at 100% of the limit are still considered safe. The applicant has

confirmed that the EME Report shows the maximum EME levels if the facility was operating at maximum capacity (which includes those times when demand is very high). The applicant also advised that adaptive power control is a network feature that automatically adjusts the power according to the demand at the time and hence minimises EME from both the base station and the handset. In addition, facilities are equipped with a feature, called discontinuous transmission, which reduces EME emissions by automatically switching the transmitter off when no speech or data is sent.

The applicant provided the following advice about the parabolic antennae. He advised that, in accordance with ARPANSA reporting practices, parabolic antennae are not included in the EME report as the radiofrequency signals from these antennae travel in a directed beam from a transmitting antenna to the receiving antenna. Dispersion of microwave energy outside of this narrow beam is minimal or insignificant. In addition, these antennae transmit using very low power levels, usually in the order of a few watts or less. The parabolic antenna for this proposal would be located where it is inaccessible to the general public. Significant exposures from these antennae could only occur in the unlikely event that an individual was to stand directly in front of and very close to an antenna for a period of time.

It should also be noted that the Victorian Civil and Administrative Tribunal (VCAT) has regularly confirmed that safety and health impacts of radio emissions from telecommunications facilities are regulated through other standards (outside the planning scheme) and, as such, these are not a basis on which to reject an application. This position has been clearly stated by VCAT Members over the years, including in cases that pre-date the planning scheme amendment that provides the exemption from the requirement for a planning permit for the use of land for a telecommunications facility. In the matter of *Marshall & Ors v Ararat Rural CC [2013] VCAT 90 (22 January 2013), at* paragraph 6 Tribunal Member Helen Gibson (then Deputy President) noted:

> *"With respect to health hazards of electro-magnetic radiation from mobile phone tower installations, the Tribunal held that whilst the objector's beliefs were sincerely held, the Tribunal is obliged to apply the relevant regulatory standards as it finds them, not to pioneer standards of its own. The creation of new standards is a matter for other authorities. This principle has been followed in numerous other decisions wherein the Tribunal has found that a telecommunications facility is obliged to meet the relevant standards that apply but it is not a basis to reject an application for reasons relating to potential health impacts if the relevant standards are met."*

Other examples of where the Tribunal has rejected health grounds as a reason for refusing an application for a telecommunications facility include:

- *Optus Mobile Pty Ltd v Knox CC [2023] VCAT 796 (18 July 2023) (proposed 5G Service)*
- *Buccheri v Wyndham CC [2023] VCAT 712 (27 June 2023) (proposed 5G Service)*
- *Caruana v Whittlesea CC [2023] VCAT 256 (9 March 2023) (proposed 5G Service)*
- *Telstra Ltd v Mornington Peninsula Shire Council [2005] VCAT 863*
- *Hutchison 3G Australia Pty Ltd v Hobsons Bay City Council [2005] VCAT 1470*
- *Optus Mobile Ltd v Whittlesea City Council [2003] VCAT 968*
- *Telstra Corporation Ltd v Casey City Council [2005] VCAT 2348.*

In the matter of *Caruana v Whittlesea CC [2023] VCAT 256* (9 March 2023), Whittlesea City Council granted a permit for the use and development of land situated at 52W Main Street, Thomastown, Victoria for a telecommunications facility. The proposed telecommunications facility consisted of a 30-metre-tall monopole (providing both 4G and 5G telecommunications services) and a four bay equipment cabinet. The subject land, which is owned by Council, is used as a recreational oval and is included in the Public Park and Recreation Zone. As already noted, Amendment VC226 amended the

planning scheme late last year by specifying, in clause 62.01, that a permit is not required for the use of land for a telecommunications facility (except in the Public Conservation and Resource Zone). VCAT advised as follows:

17. *"An objective consideration of the grounds of review extracted above does not reveal any concern or complaint about the proposed built form of the proposed telecommunications facility. The specific concern expressed therein arises from the 5G radiation alleged to cause neurological damage in humans. This concern was confirmed by the applicant orally at the practice day hearing wherein he submitted that if the proposed telecommunications facility were to be approved –*

    - *assault of persons using the park would be occasioned by the piercing of human skin by the 5G radiation; and*
    - *Council would be complicit in the commission of hundreds of criminal offences (being the physical assault of persons using the recreational oval/park).*
    - *Cellular damage and neurological damage would be suffered by the persons using the recreational oval/park.*

18. *I am satisfied that –*
    - *the applicant's grounds of review relate solely to the use of the subject land for a telecommunications facility; a permit for the use of the land for a telecommunications facility has not been required under the planning scheme since 4 November 2022;*
    - *an application for review under s.82 of the P&E Act for review of a decision of a responsible authority to grant a permit for the use of the land for a telecommunications facility has not been able to be lodged with the Tribunal since 4 November 2022; and*
    - *the application for review lodged with the Tribunal on 11 December 2022 was misconceived because the applicant did not have a right to seek review of the use of land for which no permit was required.*

19. *Accordingly, I am satisfied that the application for review should be summarily dismissed pursuant to s.75(1)(a) on the basis that it is misconceived."*

As discussed in that decision, and already noted in this report, Amendment VC26 made changes to Clause 62.01 (Uses Not Requiring a Permit) to specify that a permit is not required for the *use* of land for a telecommunications facility. In light of this, and for the reasons outlined in the VCAT decision, objections made on health grounds are not material planning reasons for rejecting an application for a telecommunications facility. Similarly, as a permit is not required for the use of land for a telecommunications facility, there is no right to seek a review of the proposed *use* of the land to VCAT.

The objectors have expressed concerns about excessive radiation health risks to humans associated with this type of telecommunications equipment. As part of the application, an EME report was submitted which indicates that the proposal would operate in accordance with the relevant Australian Standards with respect to electro-magnetic radiation. In light of this, and having regard to the fact that the application is solely for building and works, there is no basis on which to find that the proposed telecommunications facility would result in health risks that warrant a refusal of the planning application.

Consideration has been given during the assessment of this application to the recreational value of this land and the potential impact (if any) on the enjoyment of patrons of the golf course. The 10m by 10m leased area would be located adjacent to the existing golf course equipment shed, which it is considered would be the most practical and acceptable place for the new facility due to limited visual impact from the surrounding roads; boundary landscaping; the distance from the golf course clubhouse and main buildings; and the grouping of infrastructure.

9. OFFICER DIRECT OR INDIRECT INTEREST

No officer declared an interest under the *Local Government Act 2020* in the preparation of this report.


indara
DIGITAL INFRASTRUCTURE
Development Application for Planning Consent
Proposed New Telecommunications Facility
Colac Golf Club
100 Colac-Lavers Hill Road Elliminyt VIC 3250
Lot 38 PP2586
Town Planning Report
Project Reference: M3657 Colac South
RFNSA Reference: 3250007
February 2023

Site Reference: M3657 **Site Name:** Colac South				
Document Revision	**Date**	**Revision Details**	**Document Author**	**Document Reviewer**
1.0	28-2-23	Draft	Liz Easton	Clinton Northey

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Contents

Executive Summary

Site Information	**Lot description:** Lot 38 PP2586 **Physical address:** 100 Colac-Lavers Hill Road Elliminyt Vic 3250 **Coordinates:** -38.36856, 143.57455
Proposal	Ventia is seeking development consent for a new Telecommunications Facility at the Colac Golf Club, 100 Colac-Lavers Hill Road Elliminyt Vic 3250 (Lot 38 PP2586). The proposed facility will be owned by the Indara Group and will host Optus telecommunications equipment. The facility would provide Optus 4G and 5G services to Elliminyt. The proposal nvolves: • One (1) 35m Indara monopole • One (1) new triangular headframe supporting the following equipment: - Three (3) Optus 4G panel antennas, each up to 2.8m in length - Three (3) Optus 5G panel antennas, each up to 1m in length - One (1) Optus parabolic antenna • One (1) outdoor equipment cabinet at ground level • Ancillary equipment associated with the operation and safety of the facility, including remote radio units, cabling and antenna mounts The facility would be located within a fenced compound. The monopole and associated equipment would be finished in non-reflective pale grey.
Purpose	Indara Infrastructure Pty Ltd (part of the Indara group), with Optus, are proposing a new telecommunications facility at Elliminyt. The new facility would provide enhanced 4G and new 5G phone and data services to the surrounding area. The facility has been designed as a neutral host facility, capable of supporting co-location by other Carriers, government entities and wireless service providers.
Planning Considerations	**LGA:** Colac Otway Shire Council **Zoning:** Public Park and Recreation
Applicant	Ventia on behalf of Indara Infrastructure Pty Ltd Level 1, 10 Browning Street West End Qld 4101 Contact Person: [redacted] Email: [redacted]@ventia.com Our Reference: M3657 Colac South

Commented [MA1]: Please insert description of works - this will be different for each site (number of antennas, colour of facility etc)

1. Introduction

Ventia, on behalf of Indara Infrastructure Pty Ltd (part of the Indara Group), is seeking development consent for a new telecommunications facility at Colac Golf Club, 100 Colac-Lavers Hill Road Elliminyt Vic 3250 (Lot 38 PP2586).

The new facility would be comprised of a 35m monopole supporting Optus telecommunications antennas and equipment. The purpose of the project is to significantly improve Optus mobile telecommunications services, including coverage and network capacity, in the Elliminyt area.

This Town Planning Report provides an assessment of the project against relevant planning controls.

2. Background

2.1 Indara and Optus

This development application has been prepared and submitted by Ventia on behalf of the Indara Group. Indara are Australia's leading independent owner and provider of shared wireless telecommunications infrastructure, with a portfolio of over 4300 telecommunications sites across Australia.

Indara are Australia's leading independent owner and operator of digital infrastructure. We provide critical communications and data solutions that help support the digital transformation of our society. We are passionate about investing long term in our nation - building and designing digital infrastructure that creates long term value for our customers and the broader Australian community.

Indara owns and manages over 4300 mobile telecommunications facilities across Australia. Indara operate as a neutral host - our facilities are specifically designed to accommodate co-location by Australia's mobile Carriers, government agencies and other wireless services providers.

Indara has partnered with Optus Mobile Pty Ltd (Optus) to expand the Optus mobile network across Australia. This facility is being proposed to improve Optus mobile services in the Elliminyt area.

The proposed facility is comprised of a new monopole and associated passive infrastructure, which would be owned and managed by Indara; and active infrastructure (antennas and telecommunications equipment) which would be owned and managed by Optus.

Note for legal purposes, the applicant for this development application is Indara Infrastructure Pty Ltd.

2.2 Demand for Network Services

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Access to high quality telecommunications services is vitally important to the community. Mobile usage continues to trend upward.

- 99% of Australians use a mobile phone; 76% of Australians do not have a landline phone and rely exclusively on a mobile phone[1].
- Mobile data usage continues to significantly increase as the network is used in different ways. Between 2020 and 2021, the amount of data downloaded by phone increased by over 29%[2]. In the first quarter of 2022, global mobile data usage grew by 40%[3]. Streaming and video calling are major drivers of this increased demand.
- Covid-19 significantly changed the way that Australians live and work – 61% of employed Australians worked online from home in 2021[4]. With many Australians continuing to adopt flexible or hybrid work arrangements, additional demand has been placed on the mobile network.
- Public safety is a significant driver behind improvements to mobile coverage. In 2021, around 78% of emergency calls were made from a mobile handset[5].

More than ever, mobile telecommunications is an essential service. By extension, mobile base stations are essential infrastructure - it is important that mobile infrastructure keeps pace with this increasing demand.

[1] https://www.acma.gov.au/publica ions/2021-12/report/communications-and-media-australia-how-we-communicate
[2] https://www.acma.gov.au/publications/2021-12/report/communications-and-media-australia-how-we-use-internet
[3] https://www.ericsson.com/en/reports-and-papers/mobility-report/dataforecasts/mobile-traffic-update
[4] https://www.acma.gov.au/publications/2021-12/report/communications-and-media-australia-trends-and-developments-telecommunications-2020-21
[5] https://www.triplezero.gov.au/triple-zero/How-to-Call-000/advanced-mobile-location

2.3 Coverage Objectives

The continuing growth and expansion of urban areas requires that operators of telecommunications networks must regularly respond to changes in technology and increasing demand on existing infrastructure assets - to ensure mobile customers have access to fast and reliable mobile services.

5G (Fifth Generation) connection is now the latest industry standard for mobile phone network operators within the Australian marketplace.

Each base station can only carry a finite number of calls. In areas of high mobile phone use, such as central business districts and high-density areas, more base stations are required to handle the level of call and data traffic.

There are many factors that influence call connections and data speeds such as:

- distance from a facility
- objects blocking the signal from your nearest facility - such as hills, large buildings and trees
- the facility may be operating at capacity and unable to accept any more calls or data
- the depth of coverage may not be sufficient to allow reliable calls inside buildings

With consumer usage in Elliminyt reflecting an increase in demand for speed and data bandwidth in this area, Optus requires a new site in the area to ensure this quality of service is provided.

Patrons of Colac Golf Club and adjacent racecourse are placing increasing demands on existing mobile telecommunications services and additional capacity is required. Reliable telecommunications services are also ***vital*** for emergency services in the area.

This new facility at Elliminyt would provide improved 4G coverage and new 5G coverage across the area, especially for emergency services, by increasing the capacity of connections available on the network.

3. Candidate Selection

3.1 Site Selection

Before proposing a new base station, mobile Carriers will attempt to resolve service issues by reconfiguring or upgrading existing base stations. If upgrades do not resolve service issues, the Carrier will consider any opportunities to co-locate on an existing mobile facility, building or other structure.

If there are no feasible co-location opportunities, the Carrier will proceed to deploy a new 'greenfield' base station.

This facility is proposed in partnership with Optus, who have confirmed a new telecommunications facility is needed in the Elliminyt area and are working with Indara to deploy the new facility.

3.2 Upgrade and Co-Location Opportunities

Existing telecommunications facilities in the area have been assessed to confirm if they are feasible for co-location.

Figure 1 and Table 1 show the location of existing facilities in the area around the proposed new site, based on information from the Radio Frequency National Site Archive database (www.rfnsa.com.au). None of the existing sites in the area are suitable for co-location.

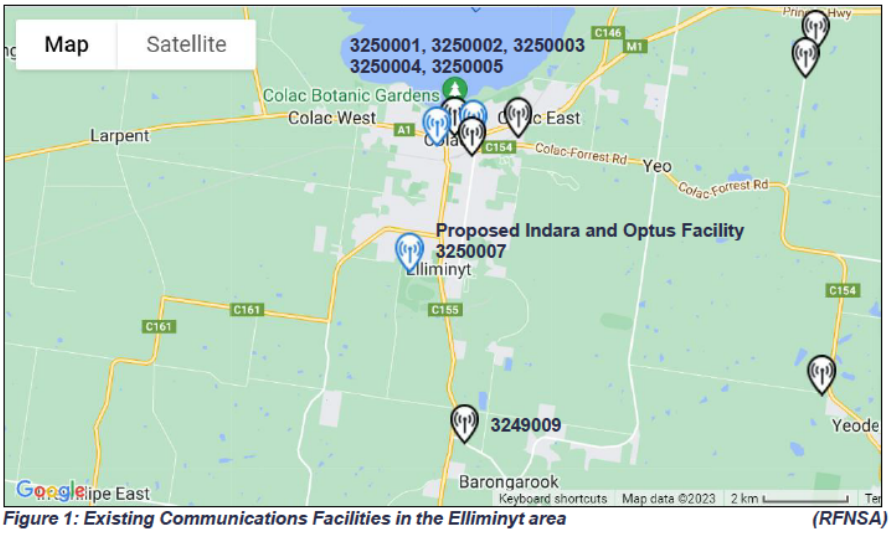


Figure 1: Existing Communications Facilities in the Elliminyt area *(RFNSA)*

Table 1: Existing Communications Facilities in the Elliminyt area

Existing Communications Facilities		
RFNSA Details	**Site Address**	**Comments**
3250001 Optus Vodafone	119 Murray St cnr Gelibran Rd Colac	This facility is located too far to the North of the target coverage area and would not meet the necessary coverage objectives.
3250002 Nbn Telstra	81-99 Queen St Colac	This facility is located too far to the North of the target coverage area and would not meet the necessary coverage objectives.
3250003 Optus	97 Bruce St Colac	This facility is located too far to the North of the target coverage area and would not meet the necessary coverage objectives.

3250004 Telstra	57-59 Queen St Colac	This facility is located too far to the North of the target coverage area and would not meet the necessary coverage objectives.
3250005 Optus	2-28 Connor St Colac	This facility is located too far to the North of the target coverage area and would not meet the necessary coverage objectives.
3249009 nbn	50 Barongarook Road Barongarook	This facility is not established for mobile call and data services.

3.3 Alternate Candidates

A robust investigation of potential candidates has been undertaken (please refer to Figure 2).

In identifying a candidate, we have sought to maximise separation from residences and sensitive uses where possible, whilst also endeavouring to minimise impacts on the environment and scenic amenity as far as practicable.

A precautionary approach has been taken to site selection in accordance with sections 4.1 and 4.2 of the *Industry Code C564:2020 Mobile Base Station Deployment*.

Figure 2: Prospective Candidates ***(Google Earth)***

A summary of the prospective candidates is listed in Table 2.

Table 2. Prospective Candidates

Prospective Candidates		
Candidate	**Site Address**	**Comments**
A	New 35m Monopole 100 Colac-Lavers Hill Road Elliminyt	Candidate A is located to the south of the township within a 'Public Park and Recreation' zone. The Lot is developed for use as the local Golf Course. The landowner was willing to discuss a suitable location on the property and consider a rental agreement.
B	New Monopole Christies Road	The landowner was not willing to enter into a rental agreement.

C	New Monopole Hart Street	The landowner was not willing to enter into a rental agreement.
D	New Monopole Hart Street	The landowner was not willing to enter into a rental agreement.

4. Site Context

When selecting a site for a new facility, it is important to note that this selection does not occur randomly. Among the factors considered are:

- expected usage patterns of service and proximity to users
- local topography and building types
- interaction with existing and future sites
- line of sight requirements for high quality communications
- opportunities to use existing structures
- availability of a willing Landlord
- the industry's commitment to high service standards and customer satisfaction

This proposal involves establishment of a new Indara and Optus facility at 100 Colac-Lavers Hill Road Elliminyt. The site is located approximately 3.25 kms south of the existing facilities within the Colac township, on land approximately 50m higher in elevation; and approximately 4.2 kms north of the Barongarook facility, on land approximately 90m lower in elevation.

The subject property retains a 'Public Park and Recreation' zoning and is developed for community and recreational purposes. The property is fully developed for use as a golf course. Access to the property is established off Colac-Lavers Hill Road (please refer to Figures 3-4).

Figure 3. Entrance to the Golf Course and Racetrack, off Colac-Lavers Hill Road (Google Earth)

Figure 4. Existing access route through the Golf Course to the selected site ***(Ventia)***

The property is bounded to the north by Harris Road. Land on this road, immediately across from the Golf Course, is currently zoned and developed as residential housing. The nearest residence is located approximately 210m from the selected site.

The area west of the property is generally zoned 'Farming' with a small section of 'Low Density Residential' zone. The low density residential zone is currently undeveloped. The nearest residence is located approximately 1.8kms from the selected site.

The area south of the property is zoned 'Farming' and is generally cleared land with only one (1) residence, situated approximately 1.4 kms from the selected site.

The property is bounded to the east by Colac-Lavers Hill Road. The eastern side of this road generally retains a 'Farming' zoning. A small section of 'Residential' zone exists along the southern side of Harris Road, with the nearest residence situated approximately 700m from the selected site. An additional 'Residential' zone exists further east and is approximately 1.3 kms from the selected site.

Please refer to Section 7, for further discussion regarding the visual impact of the proposed facility.

The proposed telecommunications facility would be a 35m monopole with triangular headframe situated adjacent to the Golf Course equipment shed, within a 10m x 10m lease area. The compound would be enclosed with a 2.1m high chain-link security fence.

An *ICS* 4-bay outdoor equipment cabinet would be installed on a new concrete slab adjacent to the monopole. The facility would be located in an area vegetated by mature trees and would provide additional screening for the surrounding area.

The telecommunications facility would retain the following setbacks from residential land uses:

- north - approx. 210 m from nearest residence
- west - approx. 1.8 kms from nearest residence
- south - approx. 1.4 kms from nearest residence
- east - approx. 700 m from nearest residence

A site visit was undertaken on 15 August 2022, to investigate poss ble suitable locations within the Golf Course grounds for the new facility. Photographs of the selected location at 100 Colac-Lavers Hill Road are provided (please refer to Figures 5-7).

Figure 5. Site selected for the new Indara and Optus facility *(Ventia)*

Figure 6. Site selected for the new Indara and Optus facility *(Ventia)*

Figure 7. Adjacent Golf Course Equipment Shed ***(Ventia)***

5. Proposed Works

5.1 Equipment to be Installed

The proposed works involves installation of:

- One (1) new 35m Indara monopole finished in unpainted, non-reflective grey
- One (1) new triangular headframe to support the antennas
- Optus telecommunications equipment on the pole and within the compound, including:
    - Three (3) 4G panel antennas, each up to 2.8m in length
    - Three (3) 5G panel antennas, each up to 1.0m in length
    - One (1) parabolic antenna, 1200mm in diameter
    - One (1) *ICS* 4-Bay outdoor equipment unit finished in either beige or pale eucalypt green, mounted at ground level near the base of the monopole
    - Ancillary equipment associated with the operation and safety of the facility, including remote radio units, cabling and safety equipment

The overall height of the facility, including antennas and equipment, would not exceed 37.0m above ground level.

The facility would be located within a 10m x 10m compound, enclosed by a 2.1m high chain-link security fence.

Please refer to **Appendix 2** for proposal plans.

5.2 Site Access and Parking

Once constructed, the facility would operate on a continual unmanned basis, aside from periodic routine maintenance visits (generally 2-4 times annually). The facility would not generate significant vehicle traffic through its ongoing operation.

5.3 Noise

The facility would not be a significant generator of noise. The only part of the facility that generates noise would be the cooling fans on the equipment cabinet.

Cooling equipment would only operate when required and would not operate continuously. Cooling equipment would operate at levels generally comparable to those of a domestic air conditioner. The project is not expected to represent a noise nuisance. As the facility would be located more than 200m away from the nearest residence, any noise emitted would not present as a problem to residents.

5.4 Power and Utilities

The proposal would include installation of underground power and fibre infrastructure, via trench. No works associated with stormwater drainage, or connections to reticulated water and sewerage, are proposed or required.

5.5 Emissions

Operation of the facility would not result in emission of dust, heat, smoke, gaseous plumes or particulates.

To provide mobile coverage, the facility would produce electromagnetic emissions (EME). These emissions would be within the levels prescr bed by ARPANSA and regulated by ACMA. An ARPANSA EME Report, demonstrating compliance with Australian safety standards, is attached (please refer to Appendix 3). Further discussion on this matter is included in section 8 of this Report.

5.6 Environmental Considerations

The proposed facility would be located on land which was previously (mostly) cleared of vegetation during the construction of the Golf Course. Several groups of mature trees were left during construction to maintain an 'green and natural' appearance for patrons of the Golf Course; and, especially, to provide screening for the equipment shed which was (later) installed at this location.

Indara and Optus do not anticipate that any trees would need to be removed for the installation of this facility.

Minor excavation works within the compound area would be required to install the footings and concrete pad for the monopole and equipment cabinet. Once the footings and concrete pad were installed, the land would be returned to a state similar to what is was previously.

When the installation is completed, the land around the compound would be cleared of construction debris, returned to a state similar to what is was previously and allowed to re-generate naturally.

The Lot on which the facility would be located is not subject to landslides; and, while there are flood and bushfire overlays incumbent upon the Lot, the proposed facility would not have any adverse impact upon any flood or bushfire event (please refer to section 6.2.4 for further discussion on this matter).

5.7 Heritage

Investigations were undertaken to identify any cultural heritage that may be attached to, or located within the near vicinity of, this property. No Aboriginal or European Cultural heritage was identified (please refer to Figures 8-9).

However, if any Aboriginal artefacts were discovered during construction, work would cease and the Office of Aboriginal Heritage contacted. Work would not resume until all approvals to do so were received.

PLANNING PROPERTY REPORT

VICTORIA State Government | Environment, Land, Water and Planning

Areas of Aboriginal Cultural Heritage Sensitivity

All or part of this property is an 'area of cultural heritage sensitivity'.

'Areas of cultural heritage sensitivity' are defined under the Aboriginal Heritage Regulations 2018, and include registered Aboriginal cultural heritage places and land form types that are generally regarded as more likely to contain Aboriginal cultural heritage.

Under the Aboriginal Heritage Regulations 2018, 'areas of cultural heritage sensitivity' are one part of a two part trigger which require a 'cultural heritage management plan' be prepared where a listed 'high impact activity' is proposed.

If a significant land use change is proposed (for example, a subdivision into 3 or more lots), a cultural heritage management plan may be triggered. One or two dwellings, works ancillary to a dwelling, services to a dwelling, alteration of buildings and minor works are examples of works exempt from this requirement.

Under the Aboriginal Heritage Act 2006, where a cultural heritage management plan is required, planning permits, licences and work authorities cannot be issued unless the cultural heritage management plan has been approved for the activity.

For further information about whether a Cultural Heritage Management Plan is required go to http://www.gavnrms.net.au/gavQuestion1.aspx

More information, including links to both the Aboriginal Heritage Act 2006 and the Aboriginal Heritage Regulations 2018, can also be found here - https://www.aboriginalvictoria.vic.gov.au/aboriginal-heritage-legislation

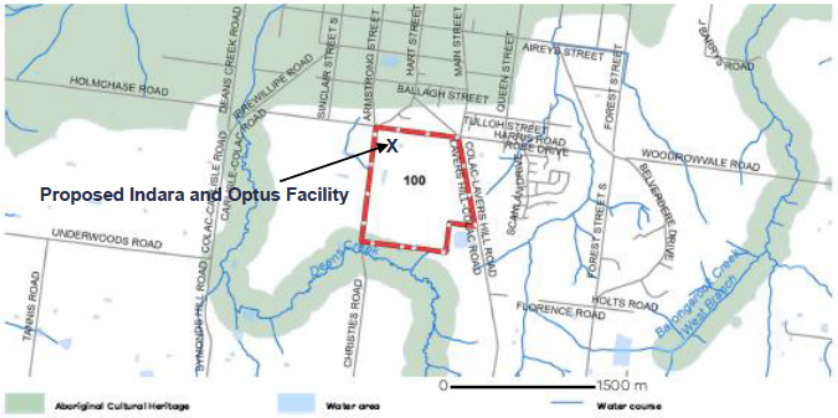


Figure 8. Aboriginal Cultural Heritage *(DELWP)*

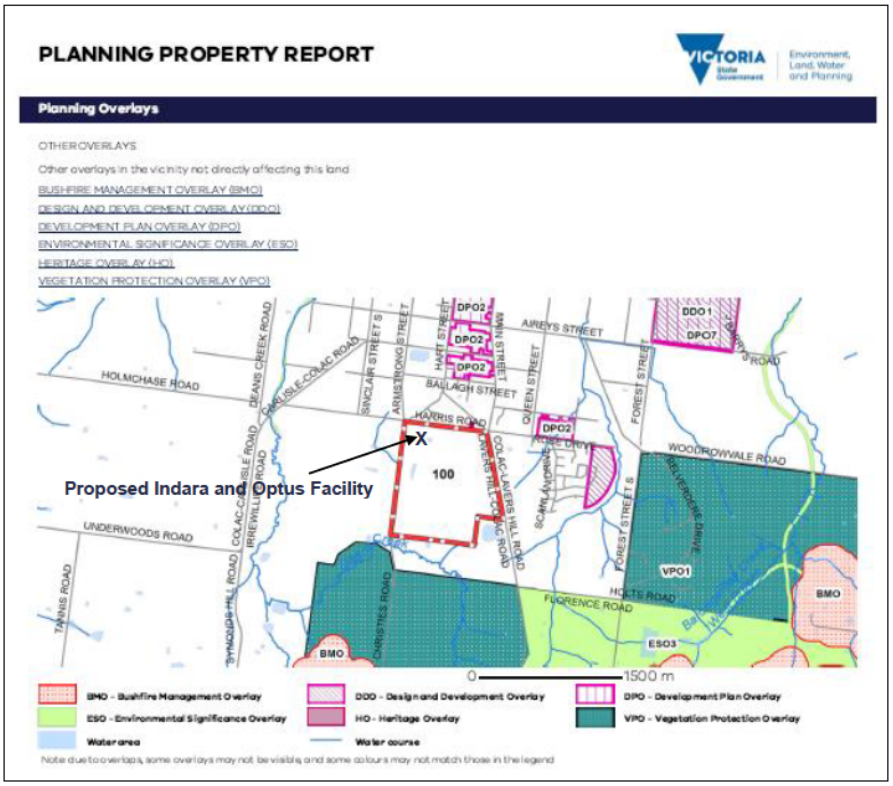


Figure 9. European Cultural Heritage *(DELWP)*

Protected Matters Report

An investigation was undertaken, dated 28 February 2023, to determine if there are any Protected Matters existing or attached to the site location. The Report (please refer to Appendix 4) identified the following:

- Listed threatened ecological communities 1
- Listed threatened species 39
- Listed migratory species 13

No Commonwealth Lands, Commonwealth Heritage Places, Critical Habitats, Commonwealth Reserves Terrestrial, State and Territory Reserves, Nationally Important Wetlands, Key Ecological Features or Areas or Biologically Important Areas were identified at the site location.

One of the Threatened Ecological Communities identified as possibly incurring in the area is the:

- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland - identified as being '*Critically Endangered*'

The subject site has been previously disturbed and cleared of native vegetation during the construction of the Golf Course and equipment sheds. The proposed development would have no detrimental impact upon any critically endangered communities. No trees are required to be removed for this proposed development.

5.8 Aviation

The proposed facility would be located approximately 12 km to the south-west of the nearest runway at Colac Airport (please refer to Figure 10).

While the proposed facility would be located within 30km of an airport, it is considered that the facility would not penetrate any Obstacle Limitation Surfaces. The proposed facility is not expected to have any impact on aviation safety. No specific aviation safety measures, such as lighting or obstacle paintwork, are currently proposed but would be included in the design, if required.

Confirmation has been requested from Air Services Australia (ASA) re any infringement on the OLS or PANS-Ops of the Airport.

Figure 10. Distance from Colac Airport ***(Google Earth)***

6. Legislative Context

6.1 Commonwealth Legislation

6.1.1 Telecommunications Act 1997 and Telecommunications (Low-Impact Facilities) Determination 2018

The *Telecommunications Act 1997* allows mobile Carriers to perform certain maintenance and installation works without needing development consent. The *Telecommunications (Low-Impact Facilities) Determination 2018* also allows for certain kinds of 'Low Impact' equipment to be installed without development consent.

New towers do not fall within these Federal Planning exemptions. Accordingly, this proposal requires Council approval.

6.1.2 Telecommunications Code of Practice 2018

The *Telecommunications Code of Practice 2018* emphasizes "best practice" for the installation of facilities, compliance with industry standards and minimisation of adverse impacts on the environment.

This proposal has been designed with consideration for the Code of Practice. All steps will be taken to do as little damage as practicable; the facility will be constructed and operated in accordance with industry standards and good engineering practice; and the design of the facility will be in accordance with industry best practice.

6.1.3 C564:2020 Mobile Phone Base Station Deployment Code

The Communications Alliance Limited '*Industry Code C564:2020 Mobile Phone Base Station Deployment*' (the 'Deployment Code') is an Industry code of practice registered by the Australian Communications and Media Authority.

The Code applies to all licenced telecommunications Carriers and sets guidelines for site selection, community notification, design, installation and operation of telecommunications facilities.

Sections 4.1 and 4.2 of the Deployment Code are relevant to this proposal and require a precautionary approach to site selection, infrastructure design and site operation. The proposed facility has been sited and designed in accordance with Sections 4.1 and 4.2. Checklists demonstrating compliance can be provided on request.

The Code also requires an ARPANSA EME report be prepared for all new mobile base stations, to demonstrate compliance with relevant safety standards. The report is enclosed in Appendix 3.

6.2 Colac Otway Planning Scheme

6.2.1 Clause 19.03 Development Infrastructure

The Victoria Planning Provisions (VPPs) are a comprehensive set of Planning provisions that apply across the state of Victoria and are incorporated into all planning schemes. The VPPs recognise the importance of telecommunications networks to Victoria, while also identifying that deployment of telecommunications infrastructure must be balanced against adverse environmental impacts.

Clause 19.03-4S provides guidelines for Councils to consider in relation to deployment of telecommunications facilities. The proposal is generally compliant.

Compliance with 19.03-4S Telecommunications	
Objective	**Comments**
To facilitate the orderly development, extension and maintenance of telecommunications infrastructure	There is currently no existing telecommunications infrastructure in the township of Elliminyt. In order to provide orderly development and minimise the impact of a new facility on the surrounding area, Indara and Optus have selected a location away from residential developments and community sensitive locations; and situated in an area where mature vegetation and equipment sheds would provide significant screening for the facility.

	Routine maintenance of the facility at this location would have negligible impact on residents and the regular activities of daily life in the area.
Strategies	**Comments**
Facilitate the upgrading and maintenance of telecommunications facilities	The proposed development involves the installation of a new facility.
Ensure that modern telecommunications facilities are widely accessible and that the telecommunications needs of business, domestic, entertainment and community services are met	Due to increasing demand for mobile call and data services in this area, the existing facilities in Colac township are not able to provide adequate services to the Elliminyt area. Therefore, a new facility is required to provide reliable connections and services around Elliminyt.

6.2.2 Zone Provisions

The site is zoned as '*Public Park and Recreation*'.

The proposed development is defined as a '*telecommunications facility*' under the Scheme. In accordance with Clause 62.01 of the Scheme, the installation of a telecommunications facility is a permitted use in this zone.

Pursuant to Clause 52.19-1, and Clause 62.02, certain telecommunications activities do not require a permit. This proposal does not fall within the exemptions under Clause 52.19-1 and will require Council development consent.

The purpose of the Public Park and Recreation is:

- To recognise areas for public recreation and open space
- To protect and conserve areas of significance where appropriate
- To provide for commercial uses where appropriate

Comment

In selecting this site as the location for a new telecommunications facility, Indara and Optus have been mindful of the recreational value of this property and have sought to identify a site for the installation of essential telecommunications infrastructure without interfering with, or interrupting, the existing uses, and enjoyment of patrons, of the Gold Course.

Indara and Optus consider that the location, adjacent to the existing Golf Course equipment shed, is the most practical and appropriate place for the new facility, for the following reasons:

- Distance from the surrounding roads, ensuring the visual impact is minimised for residents and visitors to the township of Elliminyt
- Existing tall mature trees along the roadsides, and within the Golf Course, would provide significant screening for the facility
- Distance from the Golf Course Club House and main buildings would provide a buffer zone between patrons and the facility
- Access to the site is already established, ensuring there is no additional disruption to patrons for the installation of a new access route
- Grouping of infrastructure at the one location ensures:
    - there is maximum use of the park and recreational space
    - protects and conserves the recreational nature of the space
    - minimal disruption to the recreational nature and use of the space
- Availability of power ensures that additional trenching through the Golf Course is not required
- Essential services would be provided which are ancillary to the commercial interests of the Golf Club, Racetrack; and residents, activities, businesses and patrons of Elliminyt township; with negligible impact on daily activities

6.2.3 Clause 52.19 Telecommunications Facility

This application seeks approval for the Development and Use of a Telecommunications Facility. Clause 52.19 provides specific requirements for new telecommunications facilities; and provides that certain kinds of telecommunications infrastructure do not require development consent.

Clause 52.19 Telecommunications Facility	
Objective	**Comments**
To ensure that telecommunications infrastructure is provided in an efficient and cost-effective manner to meet community needs	There is currently no existing telecommunications infrastructure in the township of Elliminyt. Due to increasing demand for mobile call and data services in this area, the existing facilities in Colac township are not able to provide adequate services to the Elliminyt area. In order to provide orderly development and minimise the impact of a new facility on the surrounding area, Indara and Optus have selected a location away from residential developments and community sensitive locations; and situated in an area where mature vegetation would provide significant screening for the facility.
To facilitate an effective state-wide telecommunications network consistent with orderly and proper planning	The proposed facility at Elliminyt would be integrated into the greater Optus network currently in operation throughout Victoria; which is also integrated into the greater Optus network throughout Australia. The proposed facility would provide enhanced 4G and new 5G call and date services to the Elliminyt area.
To support the provision of telecommunications facilities with minimal impact on the amenity of the area	In selecting this site for a new facility, Indara and Optus have been mindful of the recreational value of this property and have sought to identify a site for the installation of essential telecommunications infrastructure without interfering with, or interrupting, the existing uses, and enjoyment of patrons, of the Gold Course.

	The selected site is located away from general public activities, residents, community sensitive locations, roadways and access routes. It is adjacent to existing infrastructure and surrounded by mature trees. The facility and its location would have minimal impact on the amenity of the area.

Pursuant to Clause 52.19-2, the subject land is in public ownership. Written consent from the public land manager is forthcoming.

Under Clause 52.19-5, the following decision guidelines must be considered by Council in assessment of this application.

Clause 52.19-5 Decision Guidelines	
Objective	**Comments**
The design, siting, construction and operation of the telecommunications facility	Indara and Optus consider that the design, siting, construction and operation of the telecommunications facility is in accordance with the provisions as stated under the Colac Otway Planning Scheme
The effect of the telecommunications facility on adjacent land	Indara and Optus consider that the proposed telecommunications facility would have minimal impact on adjacent land

6.2.4 Overlays

The Planning and Property Report (please refer to Figure 11) for this property indicates a (very) small section of the Lot is subject to a:

- Significant Landscape Overlay (SLO)

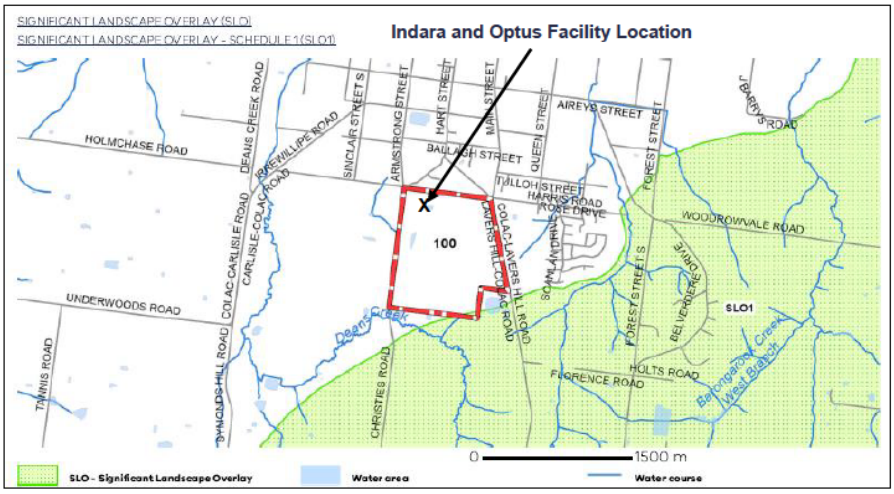


Figure 11. Significant Landscape Overlay ***(DELWP)***

However, the selected site is located in the north-west corner of the property. The land at this location has previously been cleared of natural vegetation during the construction of the Golf Course.

The area affected by the SLO is located in the furthest south-eastern corner of the Lot, approximately 1.5 kms from the proposed facility.

The proposed development would have no impact upon the area of Significant Landscape.

The Planning and Property Report (please refer to Figure 12) for this property indicates a (very) small section of the Lot is subject to a:

- Designated Bushfire Prone Areas (DBPA)

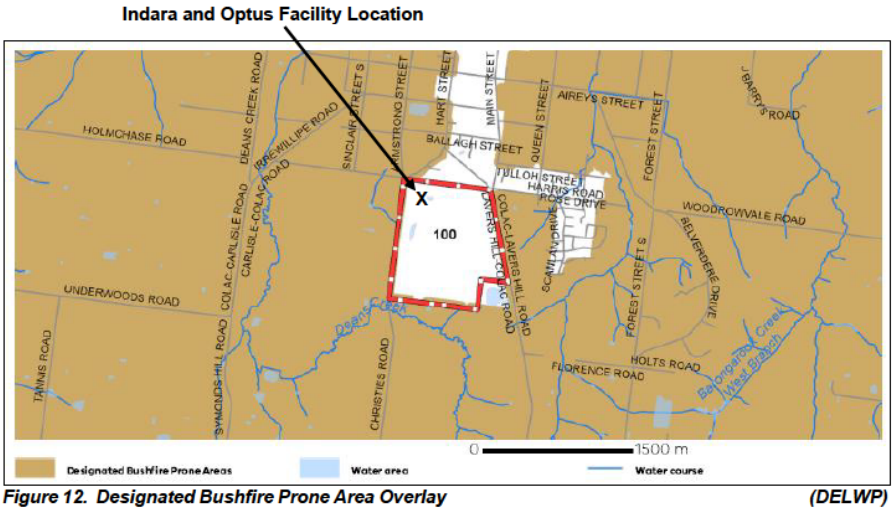


Figure 12. Designated Bushfire Prone Area Overlay ***(DELWP)***

However, the selected site is located in the north-west corner of the property. The land at this location has previously been cleared of natural vegetation for use as the local Golf Course.

The proposed development is designed such that it would not generate a fire, nor would it contribute to the spread of a fire.

The area affected by the DBPA is located along the southern boundary of the Lot, approximately 1.5 kms from the proposed facility; therefore, the selected location would have no direct or indirect impact upon the bushfire prone area.

6.2.5 Clause 65 Decision Guidelines

In deciding, Council must consider a number of matters as appropriate. The proposed facility has been sited and designed with consideration for these matters.

Clause 65.01 Decision Guidelines	
Matter	**Comments**
The matters set out in section 60 of the Act	The proposed development is in accordance with section 60 of the Act
Any significant effects the environment, including the contamination of land, may have on the use or development	No significant effects, including the contamination of land, have been identified at the selected location
The Municipal Planning Strategy and the Planning Policy Framework	The proposed development is in accordance with the Municipal Planning Strategy and the Planning Policy Framework
The purpose of the zone, overlay or other provision	The proposed development is in accordance with the purpose of the zone and overlays
Any matter required to be considered in the zone, overlay or other provision	The proposed development is in accordance with all matters required which relate to the zone and overlays
The orderly planning of the area	The proposed development is in accordance with the orderly planning of the area
The effect on the environment, human health and amenity of the area	The proposed development would have negligible effect on the environment, human health and amenity of the area
The proximity of the land to any public land	The proposed development would be located on public land
Factors likely to cause or contribute to land degradation, salinity or reduce water quality	The proposed development would operate on a continual un-manned basis. Minor disturbance of the ground during construction would be required - for the installation of footings and a concrete foundation pad. Once constructed, the facility would be a passive structure in the environment.

	The facility would not require the use of water to operate, nor would it produce any by-product which would reduce the quality of the existing water supply.
Whether the proposed development is designed to maintain or improve the quality of stormwater within and exiting the site	The proposed development involves the installation of a new telecommunications facility and is not designed to maintain or improve the quality of stormwater. The only hardstand runoff from the proposed development would be from the roof of the small equipment cabinet. The base of the compound would be covered with weed matting and loose gravel, thereby allowing the free flow of stormwater across the compound and the natural percolation of water to the water table. The facility would not produce any by-product which would impact the quality of stormwater.
The extent and character of native vegetation and the likelihood of its destruction	The selected site has been previously cleared of all natural vegetation during the construction of the Golf Course. Apart from some local grass for the construction of the compound area, the removal of vegetation would not be required for this development.
Whether native vegetation is to be or can be protected, planted or allowed to regenerate	The selected site has been previously cleared of all natural vegetation during the construction of the Golf Course.
The degree of flood, erosion or fire hazard associated with the location of the land and the use, development or management of the land so as to minimise any such hazard	The selected site is not located within a flood prone area and is not near any waterway. The proposed development would not require the use of water to operate, nor would it produce water as a by-product of its operation. Minor disturbance of the ground during construction would be required - for the installation of footings and a concrete foundation pad. Once constructed, the facility would be a passive structure in the environment and would not contribute to the erosion of the surrounding land.

	The selected site is not located in a bushfire prone area. The facility is designed such that it would not generate a fire, nor would it contribute to the spread of a fire.
The adequacy of loading and unloading facilities and any associated amenity, traffic flow and road safety impacts	The selected site is located adjacent to the equipment shed of the local Golf Course. There is an existing tarred access route through the Golf Course to the shed which would provide adequate access to the site. There is sufficient area around the selected site to provide safe space for the loading, unloading and installation of equipment. There is sufficient space to, and around, the selected site to provide safe access and installation of the small crane required for construction. The proposed installation would have minimal impact on traffic flow, road safety and the amenity of the area. Any impact would be minor and of short duration.
The impact the use or development will have on the current and future development and operation of the transport system	Once installed, the proposed development would be a passive facility in the environment and would operate on a continual un-manned basis. The proposed development would have no impact upon the current or future development and operation of the transport system.

7. Visual Impact

Telecommunications facilities are, by their nature, vis ble infrastructure within the surrounding environment.

While they are identified as essential infrastructure and vital for supporting effective commerce and essential for educational and personal usage, no specific areas or zones are established for their installation. This is not a problem with zone identification; rather, is a result of the need for each individual facility to be located in the area where it is most required.

Siting facilities in residential or highly visible locations is, unfortunately, sometimes required - when these are the areas where services are required. Mobile phone facilities only have a limited range; and need to be installed in close proximity to the area to be covered. If a facility is located too far from a proposed coverage area, connections would be unavailable, and interference may occur with another facility.

In selecting this location for a new facility at Elliminyt, Indara and Optus needed to consider the coverage requirements and balance these with the historical, commercial, recreational and residential aspects of the town. Elliminyt is located to the south of the township of Colac and appears to be an outer suburb area of Colac.

The proposed facility at Elliminyt would provide enhanced 4G and new 5G telecommunications services to the greater area in and around Colac township.

The region of Colac and Elliminyt spread across land which drops in elevation from the south towards *Lake Colac* in the north. The southern area of the township, at Harris Road, is at elevation 189m and the northern area of the township, at Queens Avenue, is at elevation 131m. The township also drops in elevation from the east, at Hugh Murray Drive, at elevation 150m to the west, at Deans Creek Road, at elevation 120m.

However, the change in elevation appears gradual, with the land sloping gently across the area of the two townships. The township of Colac appears mostly fully developed with a central commercial area along Princes Highway surrounded on four sides with residential and recreational development. The township area is compact with farming areas circling the town area.

Much of Elliminyt consists of the built environment with pockets of recreational areas and '*Rural Living*' and '*Farming*' zones. The site selected for the proposed facility is located within the local Golf Course grounds. The Golf Course is located on the southern edge of Elliminyt and shares its zoning with the local racetrack (please refer to Figure 13).

The site is located adjacent to the equipment storage sheds which are situated in an area between fairways. The immediate area is surrounded by tall mature trees.

The selected site is easily accessible from existing access routes into, and through, the Golf Course; however, a small extension of the track from the equipment sheds to the facility compound would be required.

Figure 13. Selected site with the Golf Course grounds ***(Google Earth)***

The nearest residences are located on Harris Road approximately 200m to the north of the selected site; however, tall mature trees would provide significant screening for the facility (please refer to Figure 14).

Figure 14. View from nearest residences in Harris Road (approx. 190m away), looking north towards the facility site (Google Earth)

The area to the east is cleared and largely undeveloped. It is currently zoned and utilised for farming purposes. Tall mature trees and dense undergrowth of smaller trees grow along Colac-Lavers Hill Road and would provide significant screening for the facility when viewed from areas along this road (please refer to Figures 15-17).

Figure 15. View along Colac-Lavers Hill Road, showing the dense vegetation coverage (Google Earth)

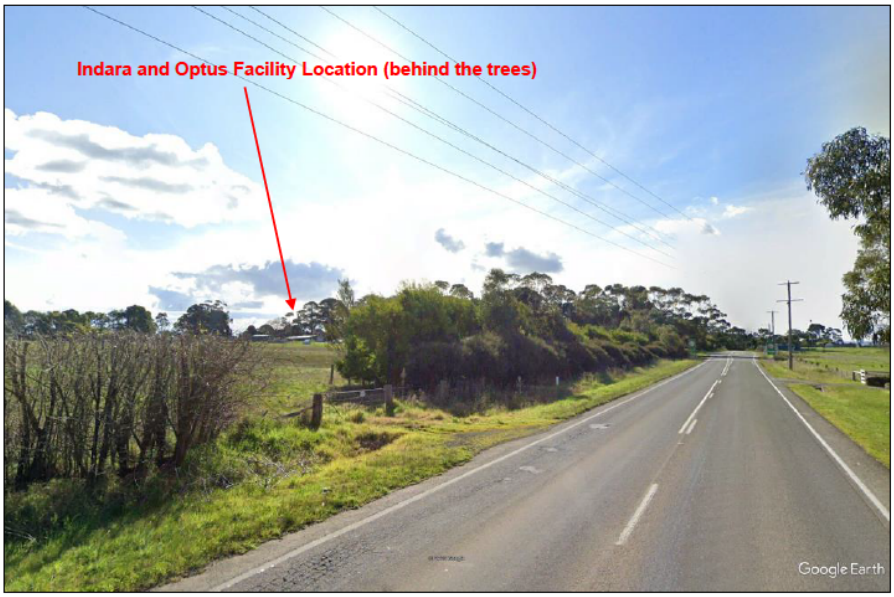


Figure 16. View from a residence (approx. 850m away) on Colac-Lavers Hill Road, looking towards the site location (Google Earth)

Figure 17. View from the intersection of Colac-Lavers Hill Road and Harris Road (approx. 690m away), looking towards the site location. The facility would not be visible (Google Earth)

The area to the west of Christies Road is cleared and largely undeveloped. It is currently zoned and utilised for farming purposes. Tall mature trees and dense undergrowth of smaller trees grow along the eastern side of Christies Road and would provide significant screening for the facility when viewed from areas along this road (please refer to Figure 18).

Figure 18. View along Christies Road, looking towards the site location (Google Earth)

The area to the south of the Golf Course is currently developed as a racetrack; and further south of the racetrack, the land is zoned and utilised for farming purposes. The only residence located south of the racetrack is located approximately 1.4kms from the facility location. A dense grove of tall mature trees between this residence and the site location would provide significant screening for the facility (please refer to Figure 19).

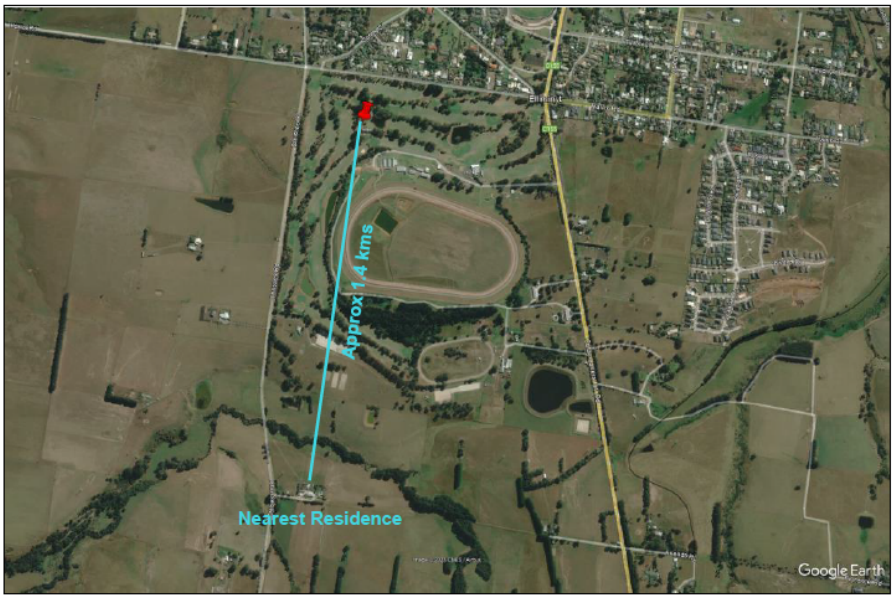


Figure 19. Nearest residence located to the south of the facility site ***(Google Earth)***

The facility is designed as a 35m monopole with a triangular headframe on the top to support the antennas. The pole would be light grey in colour - which has been shown to blend more readily into the skyscape. The feeder cables for the antennas would run internally through the centre of the pole.

When viewed from different aspects of the surrounding area, as well as from within the Golf Course grounds, it would either be difficult to identify the facility; or the facility would only be visible above the treetops - due to the dense coverings of tall mature trees which surround, and are planted within, the Golf Course.

The proposed facility would have some visual presence; however it is essential for the supply of telecommunications services to Elliminyt. Any impact upon the amenity of the area needs to be considered in conjunction with the necessity for the facility.

8. Radiofrequency Emissions and Safety

It is the position of the Australian government, and peak health bodies like the World Health Organization (WHO), that mobile base stations are safe.

Statement from Australia's Chief Medical Officer

I'd like to reassure the community that 5G technology is safe. There is no evidence that telecommunication technologies, such as 5G, cause adverse health impacts. This position is supported by health authorities in Australia – such as the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) – and around the world, such as the World Health Organization.

Mobile phone networks and other wireless telecommunications emit low-powered radio waves also known as radiofrequency (RF) electromagnetic energy (EME). This is different to ionising radiation associated with nuclear energy or use in medicine. The radio waves to which the general public is exposed from telecommunications are not hazardous to human health.

https://www.health.gov.au/news/safety-of-5g-technology

Australian Government Advice

What do we know about EME? Answer: extensive scientific research confirms that mobile technology has no long or short term health effects; and the Australian Government is focused on capturing the benefits of advanced telecommunications while ensuring strict protections and safety standards are met.

The EME standard set by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) defines the maximum exposure limit for all wireless equipment and is strictly enforced by the Australian Communications and Media Authority (ACMA). Measurements undertaken by carriers and ACMA show that mobile telecommunication sites emit a tiny fraction of maximum EME exposure limits. The exposure limits are themselves very conservative. As such, sites which operate at 100% of the limit are still considered safe.

This standard is informed by decades of quality studies undertaken by expert Australian and international scientists which show the low levels of EME produced by telecommunications equipment have no adverse effects. This includes previous generations of mobile technology, like 3G and 4G, and the higher, more efficient, radio waves used for 5G.

https://www.infrastructure.gov.au/media-centre/5g-and-electromagnetic-energy

EME is one of the most heavily studied types of energy in the world. Decades of research shows there is no verifiable evidence that EME from telecommunications facilities pose a negative health risk, especially when emission levels are below the maximum exposure limits set out in the Standard for Limiting Exposure to Radiofrequency Fields – 100 kHz to 300 GHz (the Standard).

https://www.infrastructure.gov.au/media-technology-communications/spectrum/5g-eme

All mobile base stations in Australia must comply with a strict safety standard called the *Standard for Limiting Exposure to Radiofrequency Fields – 100 KHz to 300 GHz (RPS S-1)*. The standard has been prepared by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA), based on the recommendations of ICNIRP (International Commission for Non-Ionising Radiation Protection).

The Australian Communications and Media Authority (ACMA) regulates compliance with the standard. The safety standard applies to all mobile frequencies currently used in Australia, including 3G, 4G and 5G.

The Standard operates by placing a limit on the strength of the signal (or RF EME) that mobile carriers can transmit to and from any network base station. The environmental standard restricts the signal strength to a level low enough to protect all people at all times. It has a significant safety margin, or precautionary approach, built into it.

An ARPANSA EME report has been prepared to demonstrate compliance with the Australian standard. This report demonstrates the maximum signal strength that a proposed telecommunications facility is capable of producing, assuming it is operating at maximum capacity.

This facility would operate at maximum EME levels representing **0.92%** of the Australian standard (please refer to Appendix 3).

Note that mobile base stations are designed to operate at minimum, not maximum, power levels at all times. The facility will only operate at a level necessary to accommodate the number of customers using the facility at any one time. Actual EME levels emitted by the facility will generally be much lower than those shown in the ARPANSA EME Report.

9. Conclusion

Ventia, for the Indara Group, is seeking development consent to install a new telecommunications facility at 100 Colac-Lavers Hill Road Elliminyt Vic 3250. The new facility is proposed to improve mobile services in the Elliminyt area.

The facility has been sited to minimise impact on surrounding land uses as far as practicable and generally accords with Planning requirements for the site. It has been designed and sited to minimise any visual impact on the surrounding areas.

Given the significant public benefit afforded by the proposal, it is requested that consent be granted to undertake the project.

Appendix 1: Certificate of Title

CROWN FOLIO STATEMENT

VOLUME 11733 FOLIO 501 — Secur y no : 124104170049P
No CofT ex s s — Produced 23/02/2023 11:41 AM

CROWN FOLIO

LAND DESCRIPTION

Crown A o en 38 Par sh of E ny .
Crea ed by ns ru en MI091470P 06/08/2016

CROWN LAND ADMINISTRATOR

SECRETARY TO THE DEPARTMENT OF ENVIRONMENT, LAND, WATER AND PLANNING of 8 NICHOLSON STREET EAST MELBOURNE VIC 3002
MI091470P 06/08/2016

STATUS, ENCUMBRANCES AND NOTICES

RESERVATION MI091472K 06/08/2016
PERMANENT
RACING AND OTHER PURPOSES OF PUBLIC RECREATION

DIAGRAM LOCATION

SEE CD037620U FOR FURTHER DETAILS AND BOUNDARIES

ACTIVITY IN THE LAST 125 DAYS

NIL

DOCUMENT END

Department of Environment, Land, Water & Planning

Electronic Instrument Statement

The Victorian Government acknowledges the Traditional Owners of Victoria and pays respects to their ongoing connection to their Country, History and Culture. The Victorian Government extends this respect to their Elders, past, present and emerging.

Produced: 23/02/2023 11:41:43 AM

Dealing Number: MI091470P

Rectification Date: 06/08/2016
Rectification Category: Crown Land Data Migration
Status: Registered

RECTIFICATION

Raised By: REGISTRAR OF TITLES
DX 250639 MELBOURNE

Folio Affected	CofT Supplied	Controlling Party
11733/501	No	

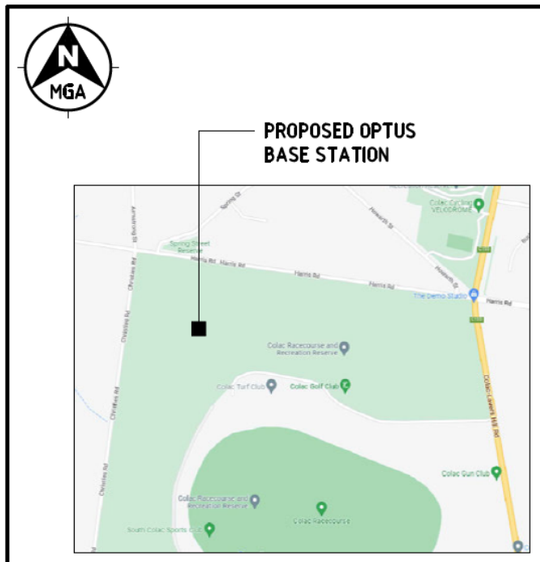
Details of Rectification

This Crown Land Migration transaction was created as part of the crown land data migration. No instrument is available for this transaction.

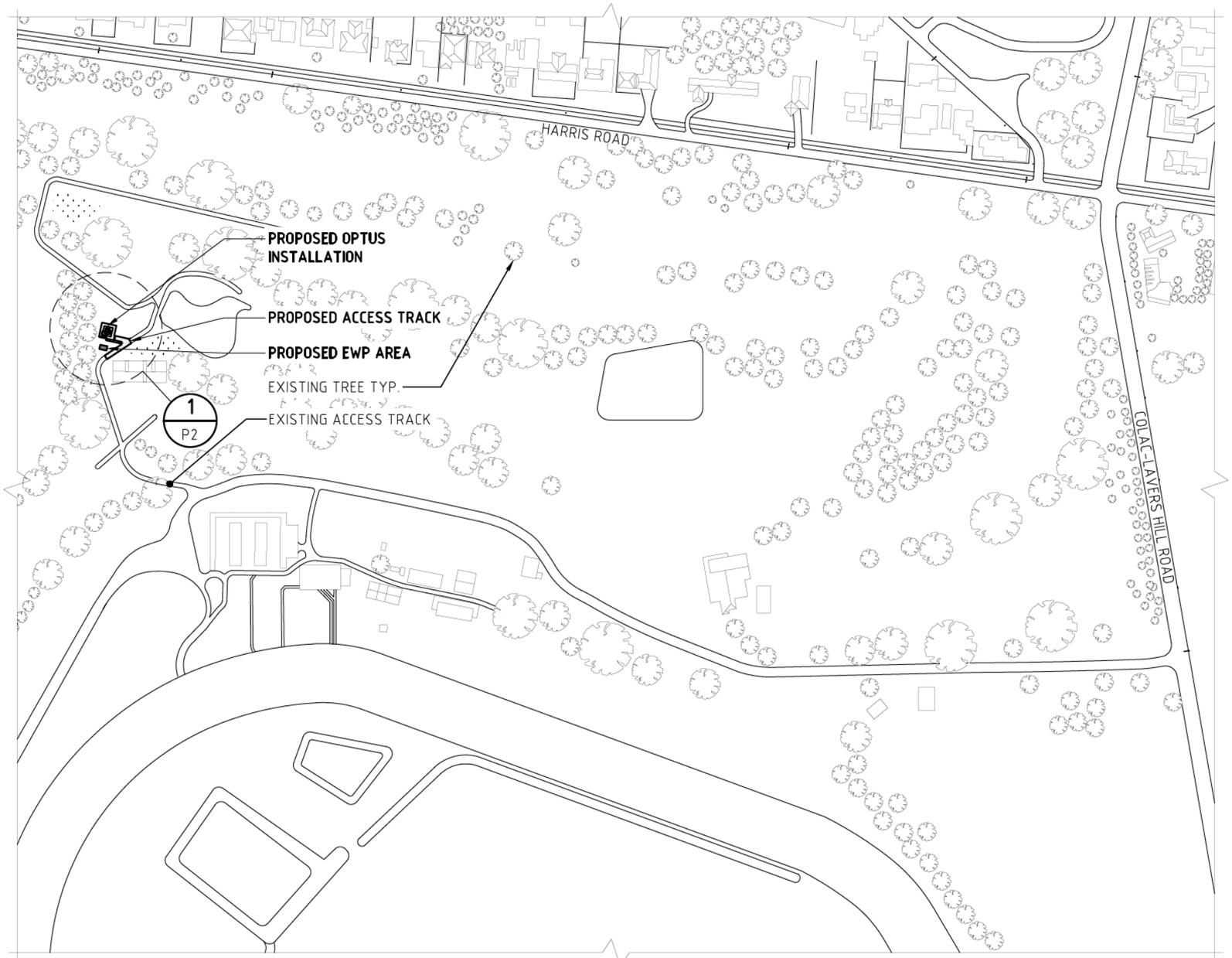
Statement End.

Secure Electronic Registries Victoria (SERV), Level 13, 697 Collins Street Docklands 3008
Locked bag 20005, Melbourne 3001, DX 210189
ABN 86 627 986 396

Appendix 2: Proposal Plans



LOCALITY MAP



OVERALL SITE PLAN

SCALE 1:3000

Rev	Date	Revision Details	Consultant	CAD	Designer	Verifier	Approver
01	24.11.22	ISSUED FOR APPROVAL	VENTIA	SSM	XX	XX	XX

ventia
Level 8, 80 Pacific Hwy, North Sydney, NSW 2060
www.ventia.com

Client: OPTUS

Project: MOBILE NETWORK AUSTRALIA
SITE No:- M3657
COLAC SOUTH
COLAC GOLF CLUB

Drawing Title: DRAFT SITE LAYOUT - SHEET 1 OF 2

Drawing Status: FOR APPROVAL

Drawing No. M3657-P1

Revision 01

20 10 0 10 20 30 40 50mm

A3

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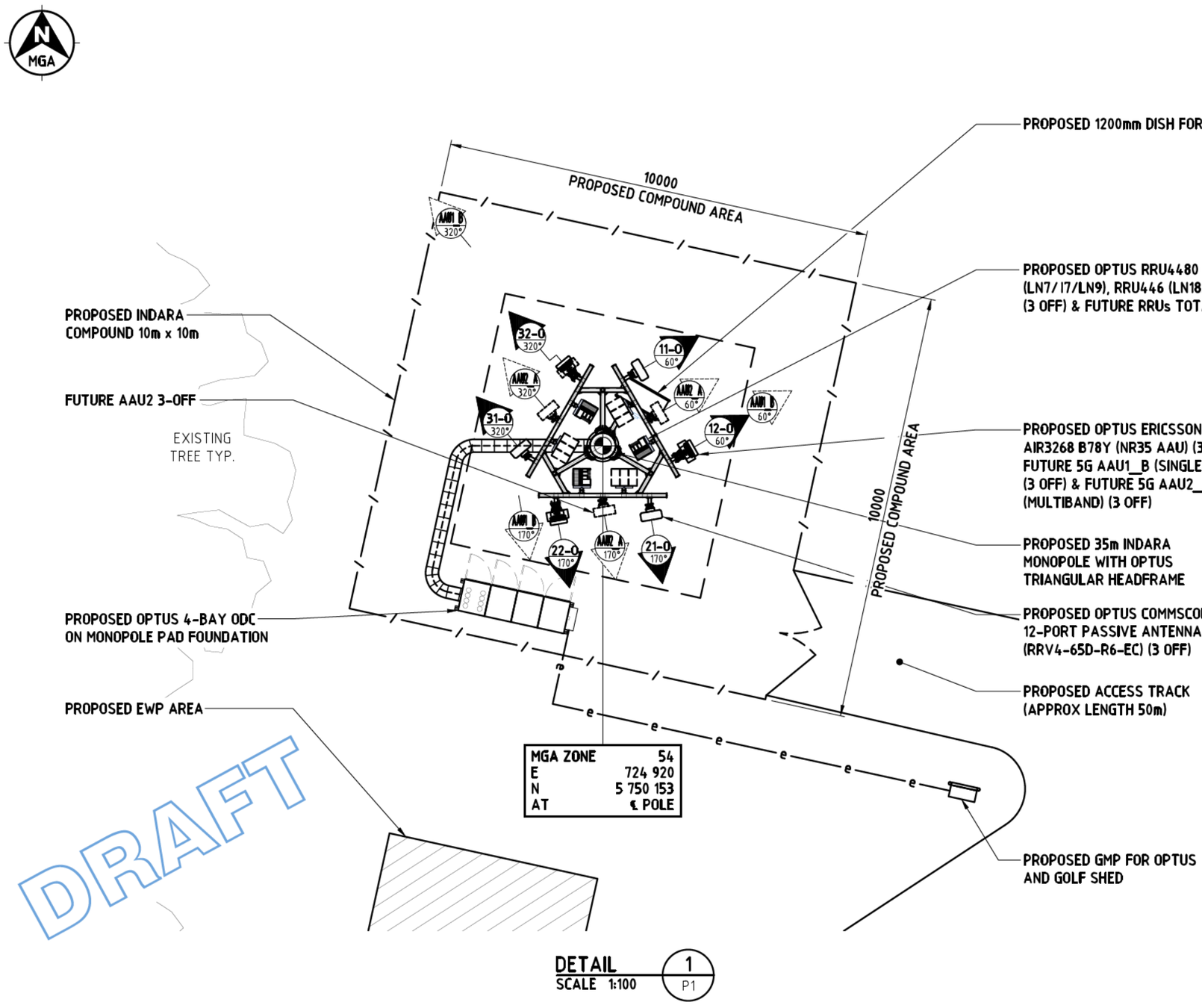
Plot By: Pathinathan Rayappan Date: 30/12/23 5:05 PM



DETAIL 1 / P1
SCALE 1:100

NOTES:
1. THIS DRAWING IS DIAGRAMMATIC ONLY AND SHOULD NOT BE SCALED.
2. DIMENSIONS, COORDINATES, AND LEVELS SHOWN ARE NOMINAL AND SUBJECT TO CONFIRMATION BY SURVEYOR.

SITE ADDRESS:
COLAC GOLF CLUB
100 COLAC-LAVERS HILL ROAD
ELIMINYT VIC

NOTES:
1. **BASIS OF DESIGN**
   - SITE INSPECTION ON 15/08/2022
2. **PANEL ANTENNAS**
   - 3 OFF PASSIVE ANTENNA (RRV4-65D-R6-EC_12P) (1 PER SECTOR) AT EL 36.0m
   - 3 OFF ERICSSON AIR3268 (1 PER SECTOR) AT EL. 36.9m
   - 3 OFF FUTURE 5G AAU2_A AT EL. 36.0m
   - 3 OFF FUTURE 5G AAU1_B AT EL. 35.9m
   - SECTOR 1 - 60°, SECTOR 2 - 170°, SECTOR 3 - 320°
   - MOUNTED ON PROPOSED TRIANGULAR HEADFRAME
3. **RRU'S & ANCILLARY EQUIPMENT**
   - 3 x ERICSSON RRU4480 (LN7/17/LN9)
   - 3 x ERICSSON RRU4466 (LN18/LN21/LN26)
   - 15 x FUTURE RRUs
4. **TRANSMISSION**
   - PROPOSED OPTUS Ø1200 PARABOLIC ANTENNA AT EL 30m
5. **4-BAY ODU**
   - PROPOSED OPTUS 4-BAY ODC
6. **OPTUS TOWER**
   - 35m MONOPOLE WITH TRIANGULAR HEADFRAME
7. **FEEDER CABLES**
   - SIZE: 3 x 9/18 MLEH (10mm²)
8. **SITE ACCESS**
   - VIA COLAC-LAVERS HILL RD
9. **ANTENNA ACCESS**
   - ANTENNA MAINTENANCE BY EWP ONLY
10. **POWER SUPPLY**
    - VIA OPTUS GMP
11. **OTHER (PAINTING, LANDSCAPING, SCREENING)**
    - TBC
12. **OTHER (UNDER GROUND SERVICE)**
    - THERE IS A RISK OF STORM WATER PIPE IN INDARA COMPOUND AREA. WE WILL CONDUCT UNDER GROUND SERVICE SEARCH IN PHASE 2.

Rev	Date	Revision Details						
			VENTIA	SSM	XX	XX	XX	
01	24.11.22	ISSUED FOR APPROVAL	Consultant	CAD	Designer	Verifier	Approver	

ventia
Level 8, 80 Pacific Hwy, North Sydney, NSW 2060
www.ventia.com

Client: OPTUS

Project: MOBILE NETWORK AUSTRALIA
SITE No:- M3657
COLAC SOUTH
COLAC GOLF CLUB

Drawing Title: DRAFT SITE LAYOUT - SHEET 2 OF 2

Drawing Status: FOR APPROVAL
Drawing No. M3657-P2
Revision 01

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Plot By: Pathmathan Rajappan Date: 30.01.23 5:05 PM

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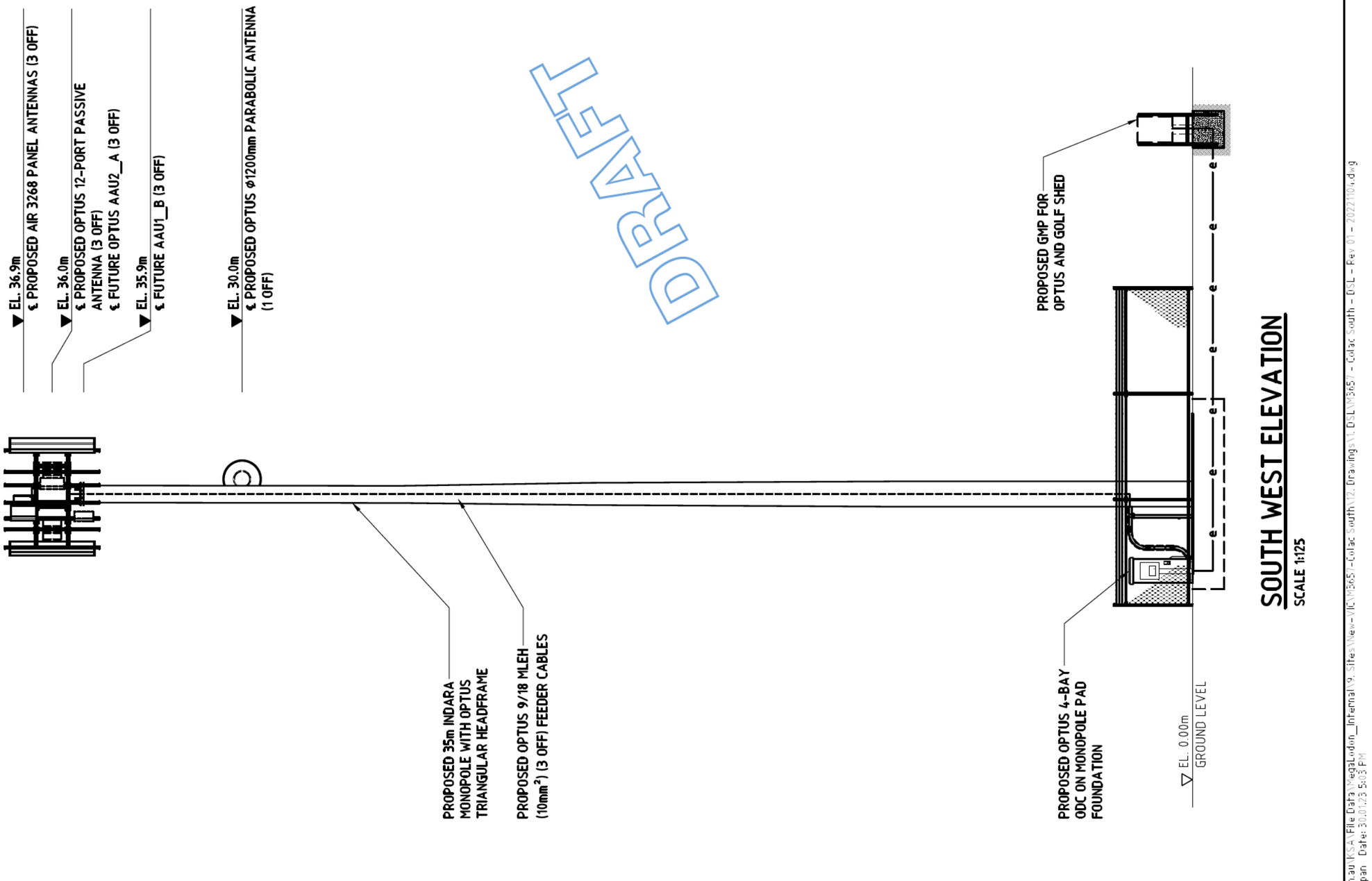

SOUTH WEST ELEVATION

SCALE 1:125

NOTES:
1. THIS DRAWING IS DIAGRAMMATIC ONLY AND SHOULD NOT BE SCALED.

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Client: OPTUS

Project: MOBILE NETWORK AUSTRALIA
SITE No:- M3657
COLAC SOUTH
COLAC GOLF CLUB

Drawing Title: DRAFT SITE ELEVATION

Drawing Status: FOR APPROVAL

Drawing No. M3657-P3

Revision 01

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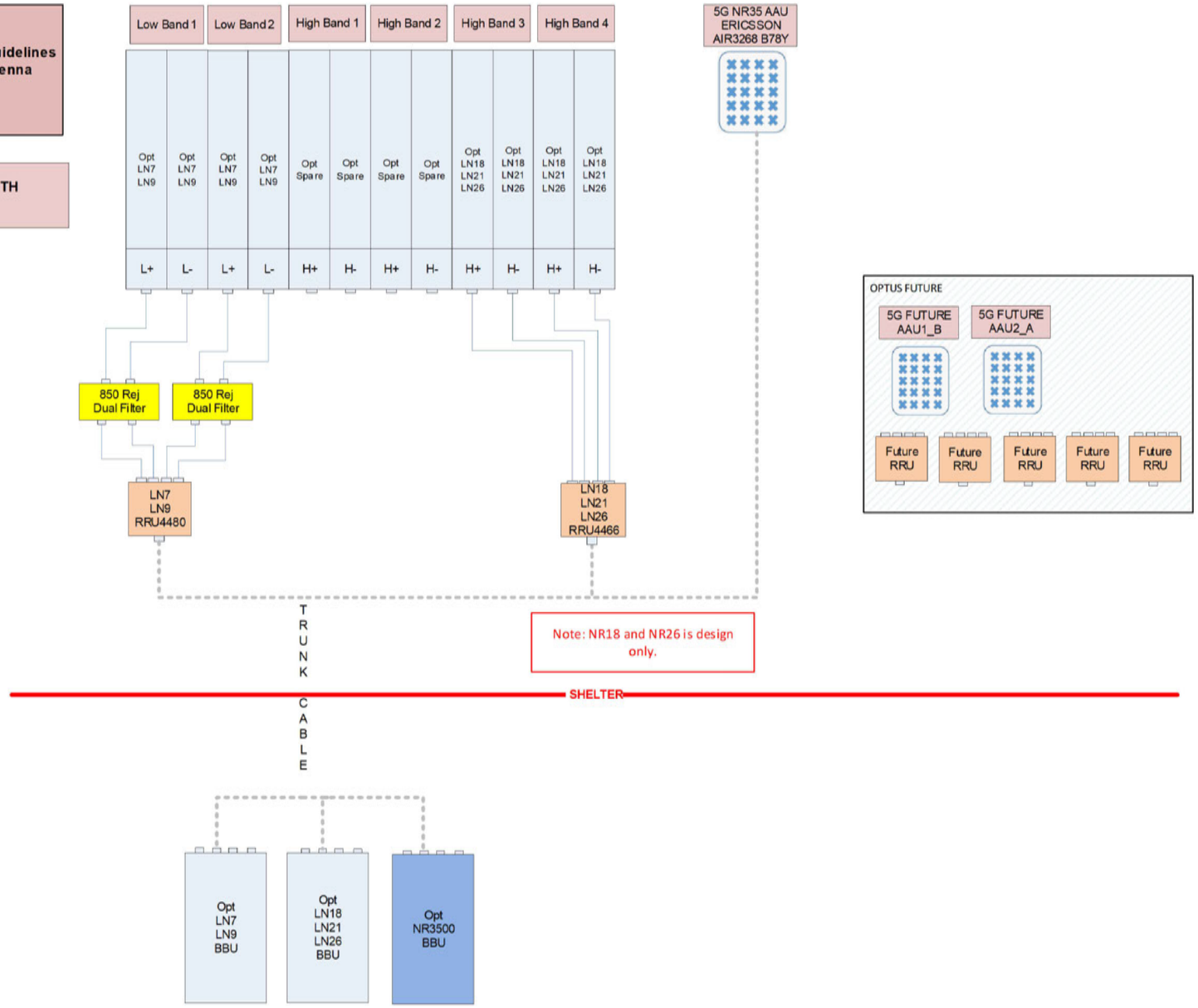
Plot By: Pathmathan Rajappan Date: 30/11/23 5:53 PM

OPTUS

Refer to Optus internal guidelines for detailed RRU - Antenna connections

M3657 COLAC SOUTH
RF PLUMBING



OPTUS RF PLUMBING DIAGRAM

PER SECTOR

Rev	Date	Revision Details	Consultant	CAD	Designer	Verifier	Approver
01	24.11.22	ISSUED FOR APPROVAL	VENTIA	SSM	XX	XX	XX

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Client: OPTUS

Project: MOBILE NETWORK AUSTRALIA
SITE No:- M3657
COLAC SOUTH
COLAC GOLF CLUB

Drawing Title: RF PLUMBING DIAGRAM

Drawing Status: FOR APPROVAL
Drawing No. M3657-A2
Revision 01

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Plot By: Pathmathan Rajappan Date: 30/01/23 5:03 PM

Appendix 3: ARPANSA EME Report

Environmental EME Report

Location	Colac Golf Club, 100 Colac-Lavers Hill Read, ELLIMINYT VIC 3250		
Date	18/11/2022	**RFNSA No.**	3250007

How does this report work?

This report provides a summary of levels of radiofrequency (RF) electromagnetic energy (EME) around the wireless base station at Colac Golf Club, 100 Colac-Lavers Hill Read, ELLIMINYT VIC 3250. These levels have been calculated by Ventia - IRFA using methodology developed by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA).

A document describing how to interpret this report is available at ARPANSA's website:
A Guide to the Environmental Report.

A snapshot of calculated EME levels at this site

There are currently no existing radio systems for this site.

The maximum EME level calculated for the **proposed** changes at this site is

0.92%

out of 100% of the public exposure limit, 244 m from the location.

EME levels with the proposed changes

Distance from the site	Percentage of the public exposure limit
0-50 m	0.59%
50-100 m	0.32%
100-200 m	0.79%
200-300 m	0.92%
300-400 m	0.76%
400-500 m	0.45%

For additional information please refer to the EME ARPANSA Report annexure for this site which can be found at *http://www.rfnsa.com.au/3250007*.

Radio systems at the site

This base station currently has equipment for transmitting the services listed under the existing configuration.
The proposal would modify the base station to include all the services listed under the proposed configuration.

	Existing		Proposed	
Carrier	**Systems**	**Configuration**	**Systems**	**Configuration**
Optus			5G	NR3500 (proposed), NR/LTE700 (proposed), NR/LTE900 (proposed), NR/LTE1800 (proposed), NR/LTE2100 (proposed), NR/LTE2600 (proposed)

Issued by: Ventia - IRFA, NAD (v1.0.178503.54556)
Environmental EME report (v12.4 Feb 2021)

Produced with RF-Map 2.1 (Build 3.2)

An in-depth look at calculated EME levels at this site

This table provides calculations of RF EME at different distances from the base station for emissions from existing equipment alone and for emissions from existing equipment and proposed equipment combined. All EME levels are relative to 1.5 m above ground and all distances from the site are in 360º circular bands.

	Existing configuration			Proposed configuration		
Distance from the site	Electric field (V/m)	Power density (mW/m²)	Percentage of the public exposure limit	Electric field (V/m)	Power density (mW/m²)	Percentage of the public exposure limit
0-50m				3.97	41.78	0.59%
50-100m				3.15	26.24	0.32%
100-200m				4.30	49.03	0.79%
200-300m				4.69	58.22	0.92%
300-400m				4.32	49.56	0.76%
400-500m				3.34	29.56	0.45%

Calculated EME levels at other areas of interest

This table contains calculations of the maximum EME levels at selected areas of interest, identified through consultation requirements of the Communications Alliance Ltd Deployment Code C564:2020 or other means. Calculations are performed over the indicated height range and include all existing and any proposed radio systems for this site.

Maximum cumulative EME level for the proposed configuration

Location	Height range	Electric field (V/m)	Power density (mW/m²)	Percentage of the public exposure limit
No locations identified				

Issued by: Ventia - IRFA, NAD (v1.0.178503.54556)
Environmental EME report (v12.4 Feb 2021)

Produced with RF-Map 2.1 (Build 3.2)

Appendix 4: Protected Matters Report

Australian Government

Department of Climate Change, Energy, the Environment and Water

EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Please see the caveat for interpretation of information provided here.

Report created: 28-Feb-2023

Summary

Matters of National Environment Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the Administrative Guidelines on Significance.

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance (Ramsar	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	1
Listed Threatened Species:	39
Listed Migratory Species:	13

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at https://www.dcceew.gov.au/parks-heritage/heritage

A permit may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Lands:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	20
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None
Habitat Critical to the Survival of Marine Turtles:	None

Extra Information

This part of the report provides information that may also be relevant to the area you have

State and Territory Reserves:	None
Regional Forest Agreements:	1
Nationally Important Wetlands:	None
EPBC Act Referrals:	3
Key Ecological Features (Marine):	None
Biologically Important Areas:	None
Bioregional Assessments:	None
Geological and Bioregional Assessments:	None

Details

Matters of National Environmental Significance

Listed Threatened Ecological Communities [Resource Information]

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.
Status of Vulnerable, Disallowed and Ineligible are not MNES under the EPBC Act.

Community Name	Threatened Category	Presence Text	Buffer Status
White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland	Critically Endangered	Community likely to occur within area	In feature area

Listed Threatened Species [Resource Information]

Status of Conservation Dependent and Extinct are not MNES under the EPBC Act.
Number is the current name ID.

Scientific Name	Threatened Category	Presence Text	Buffer Status
BIRD			
Anthochaera phrygia Regent Honeyeater [82338]	Critically Endangered	Foraging, feeding or related behaviour may occur within area	In feature area
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat known to occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area	In feature area
Callocephalon fimbriatum Gang-gang Cockatoo [768]	Endangered	Species or species habitat known to occur within area	In feature area
Falco hypoleucos Grey Falcon [929]	Vulnerable	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Grantiella picta			
Painted Honeyeater [470]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Hirundapus caudacutus			
White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area	In feature area
Lathamus discolor			
Swift Parrot [744]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
Numenius madagascariensis			
Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
Rostratula australis			
Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area	In feature area
FISH			
Galaxiella pusilla			
Eastern Dwarf Galaxias, Dwarf Galaxias [56790]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Nannoperca obscura			
Yarra Pygmy Perch [26177]	Vulnerable	Species or species habitat may occur within area	In feature area
FROG			
Litoria raniformis			
Growling Grass Frog, Southern Bell Frog, Green and Golden Frog, Warty Swamp Frog, Golden Bell Frog [1828]	Vulnerable	Species or species habitat likely to occur within area	In feature area
INSECT			
Synemon plana			
Golden Sun Moth [25234]	Vulnerable	Species or species habitat likely to occur within area	In feature area
MAMMAL			
Dasyurus maculatus maculatus (SE mainland population)			
Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population) [75184]	Endangered	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Isoodon obesulus obesulus			
Southern Brown Bandicoot (eastern), Southern Brown Bandicoot (south-eastern) [68050]	Endangered	Species or species habitat likely to occur within area	In feature area
Mastacomys fuscus mordicus			
Broad-toothed Rat (mainland), Tooarrana [87617]	Vulnerable	Species or species habitat may occur within area	In feature area
Miniopterus orianae bassanii			
Southern Bent-wing Bat [87645]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
Petauroides volans			
Greater Glider (southern and central) [254]	Endangered	Species or species habitat may occur within area	In feature area
Petaurus australis australis			
Yellow-bellied Glider (south-eastern) [87600]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Potorous tridactylus trisulcatus			
Long-nosed Potoroo (southern mainland) [86367]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Pseudomys fumeus			
Smoky Mouse, Konoom [88]	Endangered	Species or species habitat may occur within area	In feature area
Pteropus poliocephalus			
Grey-headed Flying-fox [186]	Vulnerable	Foraging, feeding or related behaviour may occur within area	In feature area
PLANT			
Amphibromus fluitans			
River Swamp Wallaby-grass, Floating Swamp Wallaby-grass [19215]	Vulnerable	Species or species habitat may occur within area	In feature area
Dianella amoena			
Matted Flax-lily [64886]	Endangered	Species or species habitat may occur within area	In feature area
Dodonaea procumbens			
Trailing Hop-bush [12149]	Vulnerable	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Glycine latrobeana Clover Glycine, Purple Clover [13910]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Lachnagrostis adamsonii Adamson's Blown-grass, Adamson's Blowngrass [76211]	Endangered	Species or species habitat may occur within area	In buffer area only
Lepidium aschersonii Spiny Pepper-cress [10976]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Lepidium hyssopifolium Basalt Pepper-cress, Peppercress, Rubble Pepper-cress, Pepperweed [16542]	Endangered	Species or species habitat may occur within area	In feature area
Poa sallacustris Salt-lake Tussock-grass [24424]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Prasophyllum spicatum Dense Leek-orchid [55146]	Vulnerable	Species or species habitat may occur within area	In feature area
Pterostylis chlorogramma Green-striped Greenhood [56510]	Vulnerable	Species or species habitat may occur within area	In feature area
Senecio macrocarpus Large-fruit Fireweed, Large-fruit Groundsel [16333]	Vulnerable	Species or species habitat may occur within area	In feature area
Senecio psilocarpus Swamp Fireweed, Smooth-fruited Groundsel [64976]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Thelymitra matthewsii Spiral Sun-orchid [4168]	Vulnerable	Species or species habitat may occur within area	In feature area
Xerochrysum palustre Swamp Everlasting, Swamp Paper Daisy [76215]	Vulnerable	Species or species habitat likely to occur within area	In feature area
REPTILE			

Scientific Name	Threatened Category	Presence Text	Buffer Status
Delma impar			
Striped Legless Lizard, Striped Snake-lizard [1649]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Eulamprus tympanum marnieae			
Corangamite Water Skink, Dreeite Water Skink [64487]	Endangered	Species or species habitat likely to occur within area	In buffer area only

Listed Migratory Species [Resource Information]

Scientific Name	Threatened Category	Presence Text	Buffer Status
Migratory Marine Birds			
Apus pacificus			
Fork-tailed Swift [678]		Species or species habitat likely to occur within area	In feature area
Migratory Terrestrial Species			
Hirundapus caudacutus			
White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area	In feature area
Motacilla flava			
Yellow Wagtail [644]		Species or species habitat may occur within area	In feature area
Myiagra cyanoleuca			
Satin Flycatcher [612]		Species or species habitat known to occur within area	In feature area
Rhipidura rufifrons			
Rufous Fantail [592]		Species or species habitat likely to occur within area	In feature area
Migratory Wetlands Species			
Actitis hypoleucos			
Common Sandpiper [59309]		Species or species habitat may occur within area	In feature area
Calidris acuminata			
Sharp-tailed Sandpiper [874]		Species or species habitat likely to occur within area	In feature area
Calidris ferruginea			
Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat likely to occur within area	In feature area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]		Species or species habitat likely to occur within area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
Pandion haliaetus Osprey [952]		Species or species habitat likely to occur within area	In buffer area only
Tringa nebularia Common Greenshank, Greenshank [832]		Species or species habitat likely to occur within area	In feature area

Other Matters Protected by the EPBC Act

Listed Marine Species			[Resource Information]
Scientific Name	Threatened Category	Presence Text	Buffer Status
Bird			
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area	In feature area
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area	In feature area
Bubulcus ibis as Ardea ibis Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area overfly marine area	In feature area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat likely to occur within area overfly marine area	In feature area
Chalcites osculans as Chrysococcyx osculans Black-eared Cuckoo [83425]		Species or species habitat likely to occur within area overfly marine area	In feature area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]		Species or species habitat likely to occur within area overfly marine area	In feature area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat likely to occur within area	In feature area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area overfly marine area	In feature area
Lathamus discolor Swift Parrot [744]	Critically Endangered	Species or species habitat likely to occur within area overfly marine area	In feature area
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Myiagra cyanoleuca Satin Flycatcher [612]		Species or species habitat known to occur within area overfly marine area	In feature area
Neophema chrysostoma Blue-winged Parrot [726]		Species or species habitat known to occur within area overfly marine area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
Pandion haliaetus Osprey [952]		Species or species habitat likely to occur within area	In buffer area only
Rhipidura rufifrons Rufous Fantail [592]		Species or species habitat likely to occur within area overfly marine area	In feature area
Rostratula australis as Rostratula benghalensis (sensu lato) Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area overfly marine area	In feature area
Tringa nebularia Common Greenshank, Greenshank [832]		Species or species habitat likely to occur within area overfly marine area	In feature area

Extra Information

Regional Forest Agreements [Resource Information]

Note that all areas with completed RFAs have been included.

RFA Name	State	Buffer Status
West Victoria RFA	Victoria	In feature area

EPBC Act Referrals [Resource Information]

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Not controlled action				
Improving rabbit biocontrol: releasing another strain of RHDV,	2015/7522	Not Controlled Action	Completed	In feature area

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Not controlled action				
sthrn two thirds of Australia				
INDIGO Central Submarine Telecommunications Cable	2017/8127	Not Controlled Action	Completed	In feature area
Not controlled action (particular manner)				
INDIGO Marine Cable Route Survey (INDIGO)	2017/7996	Not Controlled Action (Particular Manner)	Post-Approval	In feature area

Caveat

1 PURPOSE

This report is designed to assist in identifying the location of matters of national environmental significance (MNES) and other matters protected by the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) which may be relevant in determining obligations and requirements under the EPBC Act.

The report contains the mapped locations of:

- World and National Heritage properties;
- Wetlands of International and National Importance;
- Commonwealth and State/Territory reserves;
- distribution of listed threatened, migratory and marine species;
- listed threatened ecological communities; and
- other information that may be useful as an indicator of potential habitat value.

2 DISCLAIMER

This report is not intended to be exhaustive and should only be relied upon as a general guide as mapped data is not available for all species or ecological communities listed under the EPBC Act (see below). Persons seeking to use the information contained in this report to inform the referral of a proposed action under the EPBC Act should consider the limitations noted below and whether additional information is required to determine the existence and location of MNES and other protected matters.

Where data are available to inform the mapping of protected species, the presence type (e.g. known, likely or may occur) that can be determined from the data is indicated in general terms. It is the responsibility of any person using or relying on the information in this report to ensure that it is suitable for the circumstances of any proposed use. The Commonwealth cannot accept responsibility for the consequences of any use of the report or any part thereof. To the maximum extent allowed under governing law, the Commonwealth will not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance

3 DATA SOURCES

Threatened ecological communities

For threatened ecological communities where the distribution is well known, maps are generated based on information contained in recovery plans, State vegetation maps and remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Threatened, migratory and marine species

Threatened, migratory and marine species distributions have been discerned through a variety of methods. Where distributions are well known and if time permits, distributions are inferred from either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc.) together with point locations and described habitat; or modelled (MAXENT or BIOCLIM habitat modelling) using

Where little information is available for a species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc.).

In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More detailed distribution mapping methods are used to update these distributions

4 LIMITATIONS

The following species and ecological communities have not been mapped and do not appear in this report:

- threatened species listed as extinct or considered vagrants;
- some recently listed species and ecological communities;
- some listed migratory and listed marine species, which are not listed as threatened species; and
- migratory species that are very widespread, vagrant, or only occur in Australia in small numbers.

The following groups have been mapped, but may not cover the complete distribution of the species:

- listed migratory and/or listed marine seabirds, which are not listed as threatened, have only been mapped for recorded
- seals which have only been mapped for breeding sites near the Australian continent

The breeding sites may be important for the protection of the Commonwealth Marine environment.

Refer to the metadata for the feature group (using the Resource Information link) for the currency of the information.

Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

-Office of Environment and Heritage, New South Wales
-Department of Environment and Primary Industries, Victoria
-Department of Primary Industries, Parks, Water and Environment, Tasmania
-Department of Environment, Water and Natural Resources, South Australia
-Department of Land and Resource Management, Northern Territory
-Department of Environmental and Heritage Protection, Queensland
-Department of Parks and Wildlife, Western Australia
-Environment and Planning Directorate, ACT
-Birdlife Australia
-Australian Bird and Bat Banding Scheme
-Australian National Wildlife Collection
-Natural history museums of Australia
-Museum Victoria
-Australian Museum
-South Australian Museum
-Queensland Museum
-Online Zoological Collections of Australian Museums
-Queensland Herbarium
-National Herbarium of NSW
-Royal Botanic Gardens and National Herbarium of Victoria
-Tasmanian Herbarium
-State Herbarium of South Australia
-Northern Territory Herbarium
-Western Australian Herbarium
-Australian National Herbarium, Canberra
-University of New England
-Ocean Biogeographic Information System
-Australian Government, Department of Defence
Forestry Corporation, NSW
-Geoscience Australia
-CSIRO
-Australian Tropical Herbarium, Cairns
-eBird Australia
-Australian Government – Australian Antarctic Data Centre
-Museum and Art Gallery of the Northern Territory
-Australian Government National Environmental Science Program
-Australian Institute of Marine Science
-Reef Life Survey Australia
-American Museum of Natural History
-Queen Victoria Museum and Art Gallery, Inveresk, Tasmania
-Tasmanian Museum and Art Gallery, Hobart, Tasmania
-Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the Contact us page.

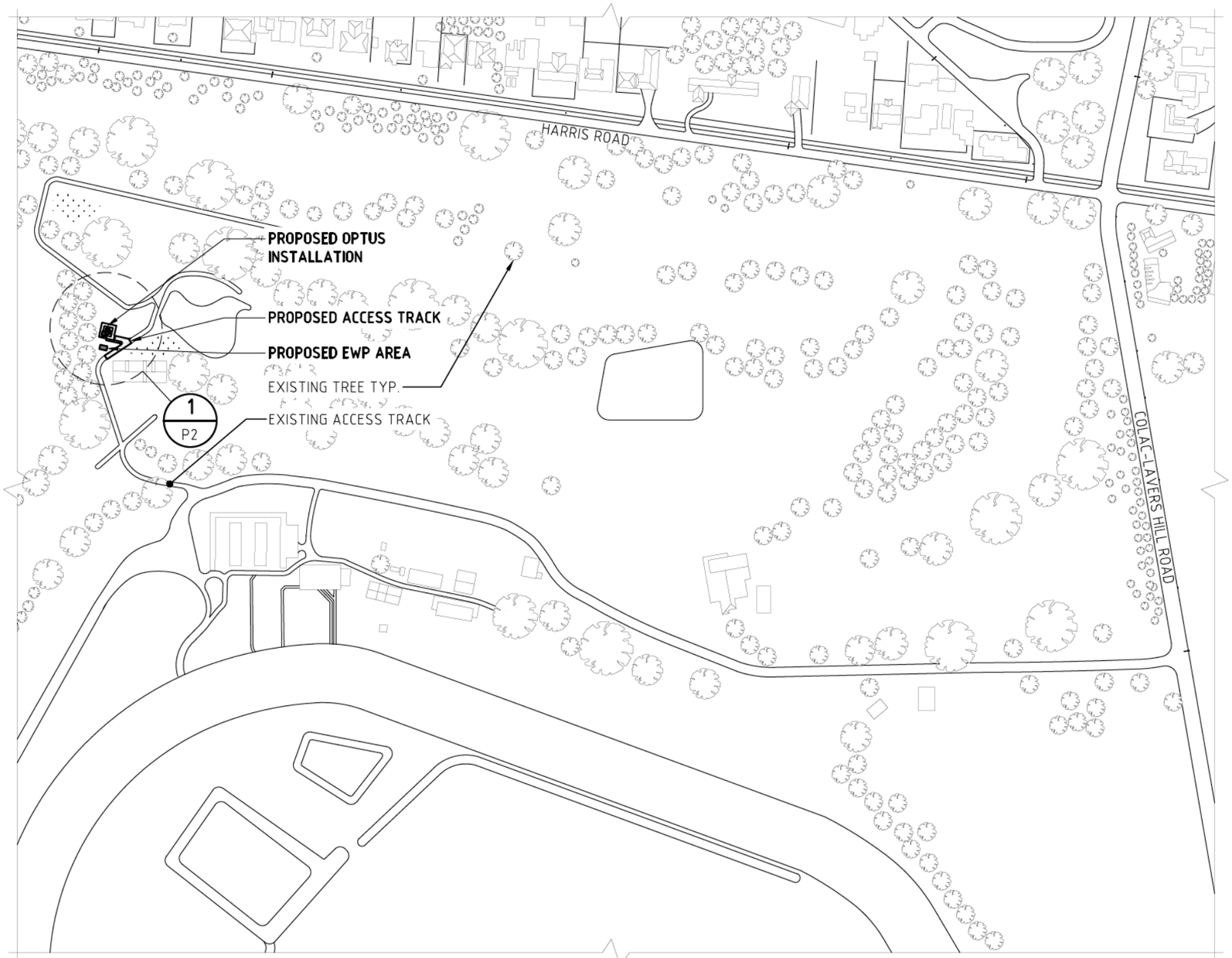
Department of Climate Change, Energy, the Environment and Water
GPO Box 3090
Canberra ACT 2601 Australia
+61 2 6274 1111

MGA

PROPOSED OPTUS BASE STATION

LOCALITY MAP

COPYRIGHT © - GOOGLE MAPS



DRAFT

OVERALL SITE PLAN

SCALE 1:3000

Rev	Date	Revision Details	Consultant	CAD	Designer	Verifier	Approver
01	24.11.22	ISSUED FOR APPROVAL	VENTIA	SSM	XX	XX	XX

ventia
Level 8, 80 Pacific Hwy, North Sydney, NSW 2060
www.ventia.com

Client: OPTUS

Project: MOBILE NETWORK AUSTRALIA
SITE No:- M3657
COLAC SOUTH
COLAC GOLF CLUB

Drawing Title: DRAFT SITE LAYOUT - SHEET 1 OF 2

Drawing Status: FOR APPROVAL

Drawing No. M3657-P1

Revision 01

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Plot By: Pathmathan Rajappan Date: 30/12/23 5:05 PM

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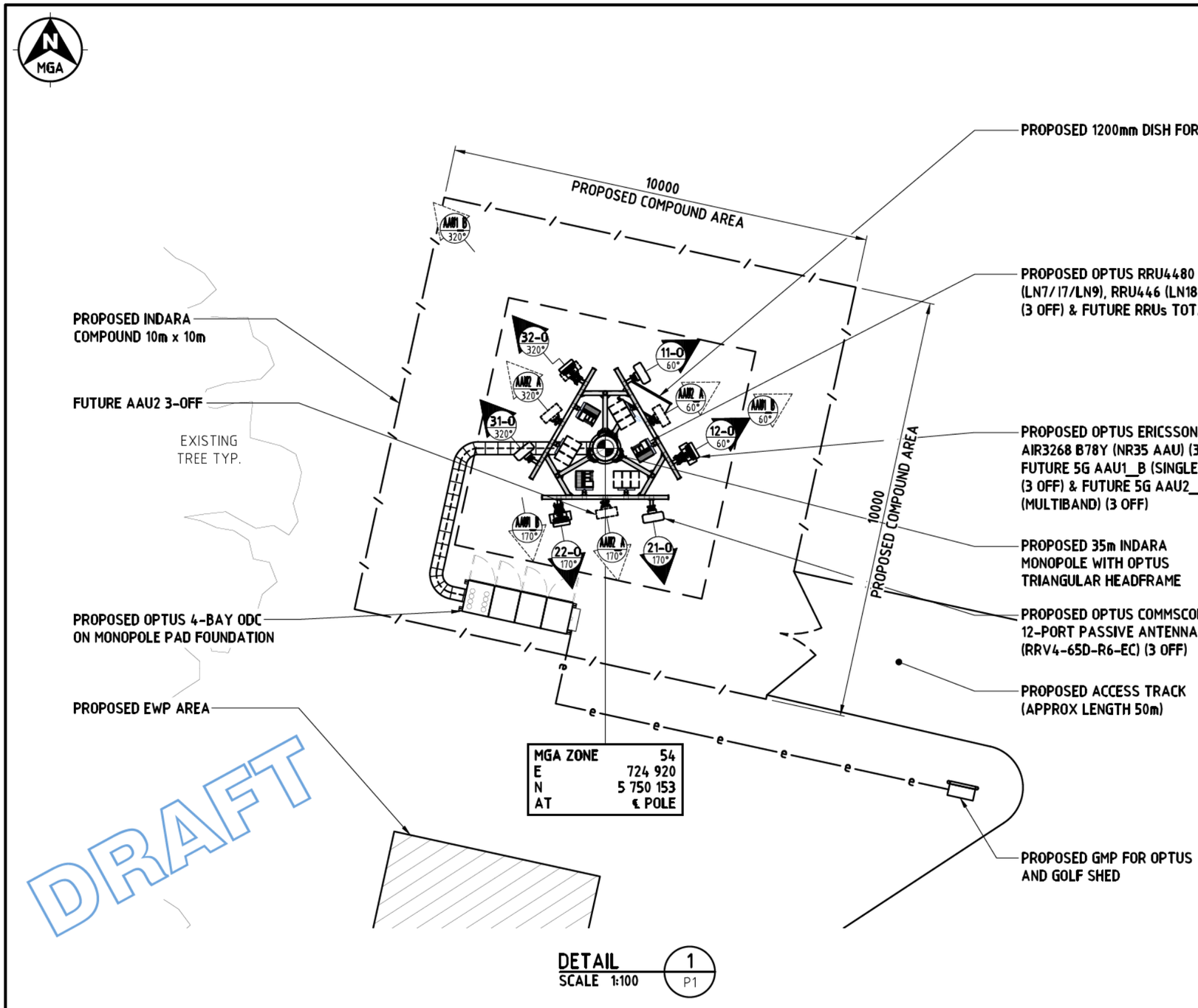
A3



NOTES:
1. THIS DRAWING IS DIAGRAMMATIC ONLY AND SHOULD NOT BE SCALED.
2. DIMENSIONS, COORDINATES, AND LEVELS SHOWN ARE NOMINAL AND SUBJECT TO CONFIRMATION BY SURVEYOR.

SITE ADDRESS:
COLAC GOLF CLUB
100 COLAC-LAVERS HILL ROAD
ELIMINYT VIC

NOTES:
1. **BASIS OF DESIGN**
   - SITE INSPECTION ON 15/08/2022
2. **PANEL ANTENNAS**
   - 3 OFF PASSIVE ANTENNA (RRV4-65D-R6-EC_12P) (1 PER SECTOR) AT EL 36.0m
   - 3 OFF ERICSSON AIR3268 (1 PER SECTOR) AT EL. 36.9m
   - 3 OFF FUTURE 5G AAU2_A AT EL. 36.0m
   - 3 OFF FUTURE 5G AAU1_B AT EL. 35.9m
   - SECTOR 1 - 60°, SECTOR 2 - 170°, SECTOR 3 - 320°
   - MOUNTED ON PROPOSED TRIANGULAR HEADFRAME
3. **RRU'S & ANCILLARY EQUIPMENT**
   - 3 x ERICSSON RRU4480 (LN7/17/LN9)
   - 3 x ERICSSON RRU4466 (LN18/LN21/LN26)
   - 15 x FUTURE RRUs
4. **TRANSMISSION**
   - PROPOSED OPTUS Ø1200 PARABOLIC ANTENNA AT EL 30m
5. **4-BAY ODU**
   - PROPOSED OPTUS 4-BAY ODC
6. **OPTUS TOWER**
   - 35m MONOPOLE WITH TRIANGULAR HEADFRAME
7. **FEEDER CABLES**
   - SIZE: 3 x 9/18 MLEH (10mm²)
8. **SITE ACCESS**
   - VIA COLAC-LAVERS HILL RD
9. **ANTENNA ACCESS**
   - ANTENNA MAINTENANCE BY EWP ONLY
10. **POWER SUPPLY**
    - VIA OPTUS GMP
11. **OTHER (PAINTING, LANDSCAPING, SCREENING)**
    - TBC
12. **OTHER (UNDER GROUND SERVICE)**
    - THERE IS A RISK OF STORM WATER PIPE IN INDARA COMPOUND AREA. WE WILL CONDUCT UNDER GROUND SERVICE SEARCH IN PHASE 2.

Rev	Date	Revision Details						
			VENTIA	SSM	XX	XX	XX	
01	24.11.22	ISSUED FOR APPROVAL	Consultant	CAD	Designer	Verifier	Approver	

ventia
Level 8, 80 Pacific Hwy, North Sydney, NSW 2060
www.ventia.com

Client: OPTUS

Project: MOBILE NETWORK AUSTRALIA
SITE No:- M3657
COLAC SOUTH
COLAC GOLF CLUB

Drawing Title: DRAFT SITE LAYOUT - SHEET 2 OF 2

Drawing Status:	Drawing No.	Revision
FOR APPROVAL	M3657-P2	01

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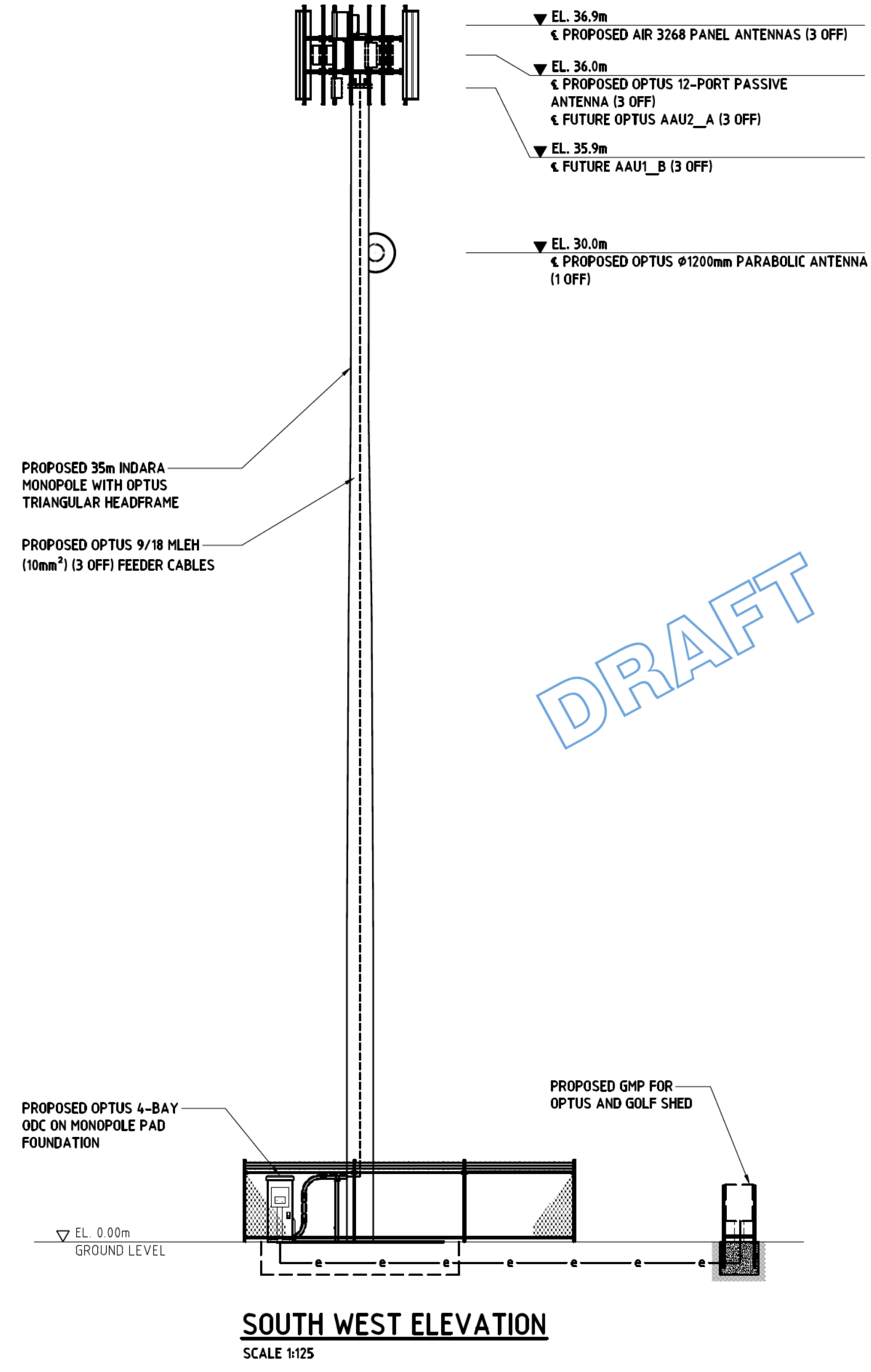
Plot By: Pathmathan Rajappan Date: 30.01.23 5:05 PM

NOTES:

1. THIS DRAWING IS DIAGRAMMATIC ONLY AND SHOULD NOT BE SCALED.



DRAFT

SOUTH WEST ELEVATION

SCALE 1:125

Rev	Date	Revision Details	Consultant	CAD Designer	Verifier	Approver
01	24.11.22	ISSUED FOR APPROVAL	VENTIA	SSM	XX	XX

ventia
Level 8, 80 Pacific Hwy, North Sydney, NSW 2060
www.ventia.com

Client: OPTUS

Project: MOBILE NETWORK AUSTRALIA
SITE No:- M3657
COLAC SOUTH
COLAC GOLF CLUB

Drawing Title: DRAFT SITE ELEVATION

Drawing Status: FOR APPROVAL

Drawing No. M3657-P3

Revision 01

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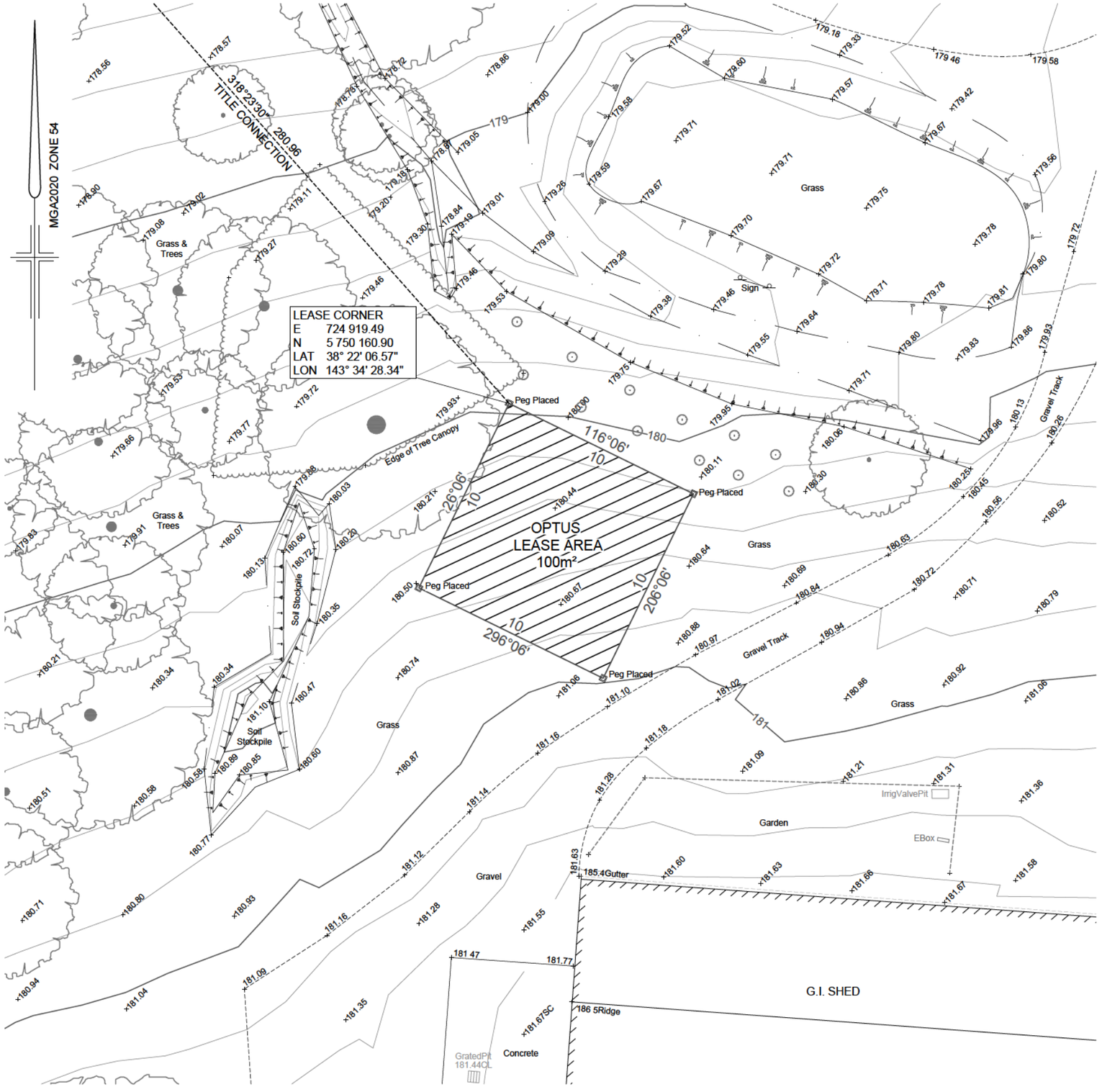
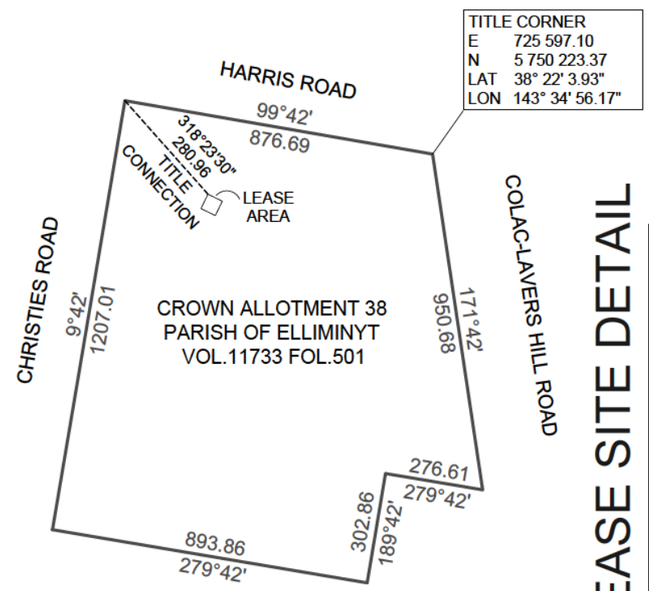


LOCALITY PLAN
(NOT TO SCALE)



LEASE SURVEY PLAN - LEASE SITE DETAIL

SITE NO: M3657 COLAC SOUTH
COLAC GOLF CLUB, 100 COLAC-LAVERS HILL ROAD, ELLIMINYT, VIC 3250

NOTATIONS

1. THIS SITE HAS BEEN SURVEYED BY REEDS CONSULTING PTY. LTD. ON 09/03/2023.
2. ALL LEVELS ARE SHOWN IN METRES TO A.H.D. VIDE ELLIMINYT PM 46 WITH STATED RL: 142.484 AS AT 10/03/2023.
3. GRID CO-ORDINATES ARE TO MGA2020 ZONE 54.
4. LAND STATUS: CROWN FOLIO
   CROWN ALLOTMENT 38
   PARISH OF ELLIMINYT
   VOL.11733 FOL.501
5. THE LEASE AREA IS CONTAINED WHOLLY WITHIN THE TITLE BOUNDARIES.
6. DETAILS FROM VENTIA PLAN M3657 (VERSION 01) AS SUPPLIED.
7. CONTOUR INTERVALS 0.2m

I [redacted] of REEDS CONSULTING Pty. Ltd., at 440 Elizabeth Street, Melbourne, Vic, 3000, certify that the M.G.A. Co-ordinates (GDA2020 Datum) and A.H.D. Height measurements are within a given accuracy of 1 (one) metre.

[redacted] Licensed Surveyor

16/03/2023 Date

ventia | OPTUS

MOBILE NETWORK AUSTRALIA
SITE No: M3657 COLAC SOUTH
COLAC GOLF CLUB, 100 COLAC-LAVERS HILL ROAD, ELLIMINYT, VIC 3250

2 0 2 4 6 8 10
SCALE 1: 200 SHEET A3
G:\21813\21813-137 Colac Golf Course\Office Work\Plans\In Progress\21813-137-LP-A.dwg

Date: 17/03/2023 Drawn: CD
Ref: 21813/137 Check: TO
Rev: A

Level 6,440 Elizabeth Street
Melbourne, Vic 3000
p (03) 8660 3000
www.reedsconsulting.com.au
survey@reedsconsulting.com.au

REEDS CONSULTING

5 July 2023

Colac Otway Shire Council
PO Box 283
Colac Vic3250
Email: inq@colacotway.vic.gov.au

PLANNING APPLICATION: PP47/2023-1

PROPERTY ADDRESS: 100 Colac-Lavers Hill Road Elliminyt 3250

PROPOSAL: Development of Telecommunications Monopole with Associated Works

RE: Submissions to Planning Permit Application

Dear Sir/Madam,

Indara and Optus are pleased to have this opportunity to respond to the submissions received by Colac Otway Shire Council regarding the proposed telecommunications facility at the above address. While each submission may detail different concerns, Indara and Optus provide this response to all the issues raised - ensuring that all respondents receive as much information as possible regarding the proposed development.

Indara and Optus note that the concerns raised relate to the:

- location within a public area
- possible impact of EME
- increase of EME during times of high demand
- future increase of EME
- confirmation that a new facility is required
- locations of alternative candidates
- Council not wanting a facility on Council land
- location of nearest residence on the western side of the Golf Course
- buffer zone from patrons of the Golf Course
- technologies to be installed
- details of the owner

Since the mid-1990s, thousands of telecommunication facilities have been installed throughout Australian metropolitan and regional areas. Please know that Indara and Optus take their responsibilities to the general community very seriously when considering the deployment of telecommunications infrastructure.

When investigating locations for any new base station, Indara and Optus adopt the 'Precautionary Approach' as outlined in the Industry Code, '*C564:2020 Mobile Phone Base Station Deployment: Section 4 Mobile Phone Radiocommunications Infrastructure Site Selection, Design and Operation*'.

This section of the Industry Code stipulates the requirements for ensuring that all members of the community are protected and considered when researching opportunities and options for new deployment locations and designs.

What is 5G

5G is the fifth generation of wireless cellular technology, offering higher upload and download speeds, more consistent connections, and improved capacity than previous networks. 5G is much faster and more reliable than the currently popular 4G networks and has the potential to transform the way the internet is used to access applications, social networks, and information. For example, technologies like self-driving cars, advanced gaming applications, and live streaming media that require very reliable, high-speed data connections are set to benefit greatly from 5G connectivity.

However, despite its fast speeds, 5G does not have the same range as 4G. Large structures and trees may also block the bandwidth of the 5Gbps, creating several problems. As a result, additional towers are required for coverage, which is both time-consuming and costly.

While earlier generations of cellular technology (such as 4G LTE) focused on ensuring connectivity, 5G takes connectivity to the next level by delivering connected experiences from the cloud to clients. 5G networks are virtualized and software-driven and utilise cloud technologies.

With regards to the specific issues raised by members of the community, the following is offered in response.

Location within a public area

When selecting a site for a new facility, it is important to note that this selection does not occur randomly. Among the factors considered are:

- expected usage patterns of service and proximity to users
- local topography and building types
- interaction with existing and future sites
- line of sight requirements for high quality communications
- opportunities to use existing structures
- availability of a willing Landlord
- the industry's commitment to high service standards and customer satisfaction

In selecting this site as the location for a new telecommunications facility, Indara and Optus have been mindful of the recreational value of this property and have sought to identify a site for the facility without interfering with, or interrupting, the existing uses and enjoyment of patrons of the Gold Course.

Indara and Optus consider that the location, adjacent to the existing Golf Course equipment shed, is the most practical and appropriate place for the new facility because of:

- the distance from the surrounding roads ensures the visual impact is minimised for residents and visitors to the township of Elliminyt
- existing tall mature trees along the roadsides, and within the Golf Course, would provide significant screening for the facility
- the distance from the Golf Course Club House and main buildings would provide a visual buffer zone between patrons and the facility
- grouping of infrastructure at the one location ensures:
  - there is maximum use of the park and recreational space
  - protects and conserves the recreational nature of the space
  - minimal disruption to the recreational nature and use of the space

While the proposed facility would be located within a generally public area, it would not be situated in an area specifically established for use by patrons of the Golf Club - being the equipment shed area for the Course. In selecting this site, Indara and Optus consider the location would minimise the visual impact on the general community.

The application to Colac Otway Shire Council for Planning Approval for the proposed development is assessed against the Planning Provisions of the local Planning Scheme, thereby ensuring that the interests and welfare of the Colac Otway community is best considered and managed.

Possible impact of EME

The issue of possible impacts of EME on the health of people and animals is raised often when telecommunication infrastructure is proposed for installation. Indara and Optus appreciate the concerns raised but would like to assure you that we take the responsibilities regarding the health and safety of our customers and the community very seriously.

Nonetheless, Indara and Optus also appreciate that significant research has been undertaken, and is continuing, in the area of potential hazards for human health and the environment from this form of radiation.

We note that some concerns have likened being in close proximity to a telecommunications facility as '*like being constantly in a microwave oven*'. **Radiofrequency emissions from macro cells are radio signals, not microwaves**. Radio waves have a low energy and low-frequency wave; and microwaves are high-energy and high-frequency waves.

Also, radio waves are not 'radioactive'. Radiofrequency signals are 'non-ionising' and do not accumulate in the body. All radio networks transmit 'electromagnetic radiation'. This is also the correct technical term for AM and FM radio broadcasts, television broadcasts and all other radio network signals that we have been living with for more than 100 years.

The macro cells of a telecommunications network provide opportunity for a connection between the network and the computers, laptops and mobile phones that are used inside and outside of residences and businesses.

When these devices connect to a network, they connect using radio waves between the device and the macro cell. Therefore, the EME is present at both points of connection - ie the computer, laptop or mobile phone and the macro cell.

When considering the issues surrounding EME, Indara and Optus rely on the expert advice of the *World Health Organisation* (WHO), the *International Commission on Non-Ionizing Radiation Protection* (ICNIRP) and the *Australian Radiation Protection and Nuclear Safety Agency* (ARPANSA) for overall assessments of health and safety impacts. Research into EME and health has been going on for over 100 years now.

The WHO and ARPANSA advise that there is no substantiated scientific evidence that radiofrequency technologies that operate within national and international safety standards cause health effects.

The Australian safety standard is set by ARPANSA and is based on the safety guidelines recommended by the WHO. The current standard for monitoring exposure to EME is the ***Radiation Protection Series – S1. (Standard for Limiting Exposure to Radiofrequency Fields - 100 KHz to 300 GHz),*** published by ARPANSA in 2021.

This standard has a significant safety margin, or precautionary approach built into it. The Australian safety standard is designed to provide protection to all people, including vulnerable members of the community (the elderly, children and people with compromised health), 24-hours a day, 7-days a week. This standard protects public health by placing a limit on the strength an antenna signal can transmit.

Increase of EME during times of high demand

When investigating possible locations for a new facility, Carriers undertake desktop research into the anticipated EME levels that would be emitted from the antennas at each possible location. The 'EME Report' is produced, based on this research.

The EME Report shows the maximum EME levels if the facility was operating at maximum capacity - which includes those times when demand is very high. Adaptive power control is a network feature that automatically adjusts the power - according to the demand at the time - and hence minimises EME from both the base station and the handset.

In addition, facilities are equipped with a feature, called discontinuous transmission, which reduces EME emissions by automatically switching the transmitter off when no speech or data is sent.

Future increase of EME

As telecommunications technology advances, Carriers upgrade their facilities in order to provide the best available mobile call and data services to their customers. Each time an upgrade is proposed, Carriers investigate (via computer modelling) the proposed EME output expected from the proposed equipment.

As with the initial installation of a facility, all upgrades to a facility must always comply with the ARPANSA standard. In addition, once equipment is installed at a facility and is operational, the ARPANSA regulations require that 'post-installation' testing is undertaken to ensure that the facility is operating within the Australian standard.

Therefore, you may be assured that any future installations at this, or any, facility would always operate within the required Australian safe levels for EME.

If you would like additional information regarding electro-magnetic emissions, I refer you to the following sites:

http://www.emfexplained.info/

https://amta.org.au/

If you would like additional information regarding the Australian Standards or the research behind EME, ARPANSA provides an opportunity for the community to talk directly with scientists on issues about radiation exposure and protection in Australia. This service is available at:

https://www.arpansa.gov.au/contact-us/talk-to-a-scientist

Confirmation that a new facility is required

Concern has been raised that '*no data or evidence has been provided … to support … consumer usage in Elliminyt …* (and that) *patrons of Colac Golf Club and adjacent racecourse are* (not) *placing increasing demands on existing mobile telecommunications services and additional capacity is* (not) *required*'.

As you may appreciate, the provision of these telecommunications services is undertaken as a private commercial venture. The Carriers who provide these services are aware of the capacity needs of their Networks and work as private businesses to meet the requirements of their customers.

Locations of alternative candidates

As stated in the Planning Application, four (4) options were investigated as possible locations for a new facility. Of these 4 options, two (2) options were identified as being located in 'Hart Street'.

However, while both of these properties front onto Hart Street, they each have a different registered address. Indara and Optus apologise for this mis-statement but also acknowledge that a map was provided with the Application to Council, confirming the exact location of these alternative candidates. By providing the map, Indara and Optus ensured that Council was aware of the actual locations involved.

There was no intentional desire of Indara or Optus to mis-inform the Council or community regarding the candidates investigated and believe there has been no lack of transparency in providing information to Council regarding the candidates investigated.

As stated in the Planning Permit Application, the owners of the properties for the alternative locations were not interested in entering into a lease agreement. Therefore, there was no opportunity to proceed with negotiations.

Council not wanting a facility on Council land

Indara and Optus discussed the opportunity to locate a new facility with each of the owners of the candidates identified. Each owner provided their own reasons for not wanting to enter into a lease agreement.

If additional information regarding Council's reasons for not wanting to enter into a lease agreement is required, please contact Council to discuss the matter with them.

Location of nearest residence on the western side of the Golf Course

It was stated in the Planning Application that the nearest residence on the western side of Christies Road is located approx. 1.8 kms from the selected site. It is, however, located approx. 770m away. While this residence is closer to the selected site, the tall mature trees and topography would still provide significant screening of the facility from this location (please refer to Figure 1).

A copy of this photograph was included in the Planning Application.

Figure 1. View from the nearest residence along Christies Road, looking towards the site location (Google Earth)

Further comment was received regarding the area on Christies Road that is zoned as 'low density residential':

'The Planning Report claims the Low Density Residential zone land to the West is undeveloped. This is in correct (sic)'

Desktop investigations were conducted to identify the current uses of this area of land and it was determined that, while the area is utilised, it was not developed as low density residential housing at the time the Planning Application was submitted to Council (please refer to Figures 2&3).

Figure 2. Current view of development within the Low Density Residential zone on Christies Road (Google Earth)

Figure 3. Current view of development, looking South-West from Christies Road across the Low Density Residential zone (Google Earth)

Buffer zone from patrons of the Golf Course

Indara and Optus appreciate that the facility is located at a golf course where patrons walk around the grounds. In proposing the location adjacent to the equipment sheds, it was anticipated that there would be minimal direct use of the equipment shed area by those patrons.

There are existing tall mature trees surrounding the equipment shed area to provide some visual buffer for the proposed facility. Telecommunications facilities are visible infrastructure in any area but it was Indara's and Optus' intention to select a site where the visual impact was minimised as much as possible.

Technologies to be installed

The proposed facility is part of the Optus 5G upgrade deployment programme. As part of the deployment, many existing facilities are being upgraded with new 5G antennas; and new facilities are proposed where 5G equipment is the focussed installation.

The facility proposed at the Golf Course is focussed as a 5G deployment; however, 4G antennas are also proposed - as many customers are still using 4G phones. The proposed development plans were provided to Council with the Planning Application, confirming the design as being:

- Three (3) 4G panel antennas, each up to 2.8m in length
- Three (3) 5G panel antennas, each up to 1.0m in length
- One (1) parabolic antenna, 1200mm in diameter

In accordance with ARPANSA reporting practices, parabolic antennas are not included in the EME report as the radiofrequency signals from these antennas travel in a directed beam from a transmitting antenna to the receiving antenna. Dispersion of microwave energy outside of this narrow beam is minimal or insignificant. In addition, these antennas transmit using very low power levels, usually on the order of a few watts or less.

The parabolic antenna for this proposal is located where it is inaccessible to the general public. Significant exposures from these antennas could only occur in the unlikely event that an individual were to stand directly in front of and very close to an antenna for a period of time.

Details of the owner

The development is proposed for installation at Colac Golf Club.

Indara and Optus thank you again for detailing your concerns regarding this proposal and hopes the information provided has been helpful in addressing the issues you have raised.

As stated, telecommunications facilities are, by necessity and requirement, visible infrastructure within any environment.

Indara and Optus have researched and investigated as many options as possible in order to select a location where the impact of the proposal within the local community is minimised while still being able to provide and maintain the high level communications services necessary for both private and commercial uses within the township of Elliminyt.

Indara and Optus thank you again for your interest in this proposal.

Sincerely,

[redacted]
Senior Planning Consultant
ventia
Level 1, 10 Browning Street West End QLD 4101
P [redacted]
E [redacted]@ventia.com W www.ventia.com.au