PINGELLY TOURISM STRATEGY

2020 - 2025

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Overview

This Tourism Strategy has been developed to provide the framework for tourism planning, destination development and marketing of the Shire's tourism experience for a four year period.

Tourism is a key component of economic diversification and the future sustainability of Pingelly. The local economy is underpinned by the agricultural sector and the region has excellent potential for growth in the visitor economy, as this largely remains untapped.

A holistic approach to destination development will be required – from marketing and positioning, through to the physical environment, and developing positive, tangible experiences unique to the region.

Context

The Shire of Pingelly is a Local Government Area in the Wheatbelt Region of Western Australia, located about 160km southeast of Perth. It covers an area of 1,294 km2 and is bounded by the Shires of Wandering, Brookton, Cuballing and Wickepin. The climate is Mediterranean with an average yearly rainfall of 439.7mm which mainly falls during winter. The main localities are the townsites of Pingelly, Moorumbine and Dattening.

Pingelly's population of 1,146 (2016 census) is projected to remain relatively stable over the next 10 years. Farming is the primary economic activity within the district, and this is likely to continue, however, if the population is to prosper, business and job creation activities need to be explored. These may be either linked to or complement farming activity – with tourism recognised as a significant opportunity.

Tourism Partnership

Shire of Pingelly

The Shire of Pingelly (SoP) has relied heavily on the Pingelly Tourism Group (PTG) to develop and deliver tourism initiatives in the past. The review of the Tourism Strategy has provided an opportunity to recalibrate this partnership between the SoP and PTG to enable tourism opportunities to be assigned and resourced adequately.

Pingelly Tourism Group

The PTG is a volunteer group which has been the lead for progressing tourism initiatives within Pingelly. Until 2014 the group operated under the umbrella of the Pingelly Development Association (PDA) as one of the many community volunteer groups striving to make a difference to the Pingelly community. In 2014, the PTG had gathered sufficient momentum to operate as an independent group, with the incorporation of the Group occurring in 2014.

Since incorporation, the PTG have focused on projects and issues which had already been identified as beneficial to the local community and directly relating to tourism. Some of these projects include:

- Boyagin Rock
- Tutanning Wildflowers
- Bush Schools Project
- Arts, Craft and Culture Weekend
- Historical Town Walk

In 2017 the PTG identified the need to develop a Strategic Plan in order to build support and credibility toward its stated objectives. This would also provide alignment with strategies established by the Shire of Pingelly and the wider community, including the Wheatbelt Development Commission (WDC) in its Economic Development Blueprint. The Strategic Plan has provided a base for the development of the Pingelly Tourism Strategy 2020.

Strategy Development

The principles of ownership, collaboration and engagement have been at the heart of the Strategy's development process. To ensure the Strategy is reflective of the values and aspirations of the local community, an engagement program was designed to provide the opportunity for community input and ideas to be considered with a whole of Council approach. An engagement session was held early in the Strategy development process with participants from the business sector, community groups, and tourism organisations.

The draft Strategy was circulated throughout the community for final comment prior to endorsement by the PTG and the SoP Council.

Issues and Trends

Global

The international market for inbound visitors will continue to fluctuate based on currency and security issues, however, there is large scope for development of nature based, cultural, and food and beverage experiences. 2020 has provided unique challenges for the global market due to the Coronavirus effect – with significant travel restrictions implemented that are likely to continue to have impacts for several years.

Interstate and Intrastate

The 'drive tourism' market consists of visitors who use a vehicle to travel for leisure. Tourism is an important contributor to regional economies, offering opportunities not only for tourism focused businesses, but for supporting businesses who benefit from visitor spend as they pass through communities.

The Family Market conventionally consists of two adults and their children, who live together in the same household, travel together and look for short stays (1-3 nights) which are quick, cheap and easy. These three aspects have proven to be a vital selling point for many family holidays with the increasing importance placed on having an enriching and connecting experience as a whole family, before returning back to the demands of work and life. Many families are now choosing to do multiple small holidays throughout the year rather than the traditional once a year longer break. Pingelly is ideally positioned as a day or weekend destination due to its proximity to the metropolitan area.

Key growth areas in Australia for drive and family tourism

Camping and Caravans

- 11.7million caravan and camping overnight trips Australia wide
- 88% of 55+yrs drive tourists travel to rural Australia
- A growing family market

Heritage and Cultural tourism

- Visitor expenditure in heritage / cultural tourism exceeds $14million
- High area of growth over next 5 years

Festivals and events – sports and culture

- Events play an important role in drive and family tourism and supporting local economies

Rural Tourism

- Rural tourism encompasses all forms of tourism that showcase the rural life, art, culture and heritage of rural locations

Tourism Context

Federal

Tourism Australia is the Australian Federal Government agency responsible for attracting international visitors to Australia, both for leisure and business. It is active in 15 key areas including advertising, public relations, trade shows and industry programs, online communications and consumer promotions and research. In 2010, Tourism Australia released a national strategy entitled "Tourism 2020" - a whole-of-government and industry long-term strategy designed to build the resilience and competitiveness of Australia's tourism industry and grow its economic contributions. The strategy focuses on improving performance by pursuing new opportunities for growth and increased consumer spending and addressing supply-side factors. The primary goal of "Tourism 2020" is to achieve more than $115 billion in overnight spend by 2020 (up from $70 billion in 2009). With the impact of COVID-19, the tourism in Australia is pivoting to the intrastate and domestic market.

State

Tourism WA is the State Government agency responsible for developing tourism in WA and promoting it as an extraordinary tourism destination. It works in partnership with industry, private sector and government to develop and promote WA's tourism experiences, attract events to the State, and help the tourism industry thrive, including providing funding, strategic direction, domestic marketing, research and other resources. In response to "Tourism 2020", Tourism WA published WA Tourism 2020 Strategy in 2012, which describes 7 strategic 'pillars' of growth (Brand; Infrastructure; Business Travel; Regional Travel; Indigenous Tourism; Events; Asia) linked by ongoing operations, to deliver a goal of doubling tourism spend from $6 billion in 2010 to $12 billion by 2020.

Tourism Council WA is the peak body representing tourism businesses, industries and regions in WA. It promotes the value of tourism, facilitates sustainable tourism development and advocates industry policy on behalf of members, comprising more than 1,500 private and public sector organisations including aviation, accommodation, venues, hospitality, tours, attractions and events sectors.

Tourism makes an increasingly significant contribution to the WA economy. In 2016-2017, Tourism WA reported that the tourism industry employed over 7.7% of the WA workforce and was valued at $11.8 billion by Gross State Product (GSP) – a rise of 0.9% from the previous year and over $3 billion in 4 years (2012-2013 $8.6 billion GSP). However, whilst 2017-2018 saw an increase of 7.4% in overnight and daytrip visitors to or within WA, visitor spend declined by 5.2%, largely due to reduced length of stays by interstate and international visitors and declining daily spend of intrastate visitors.

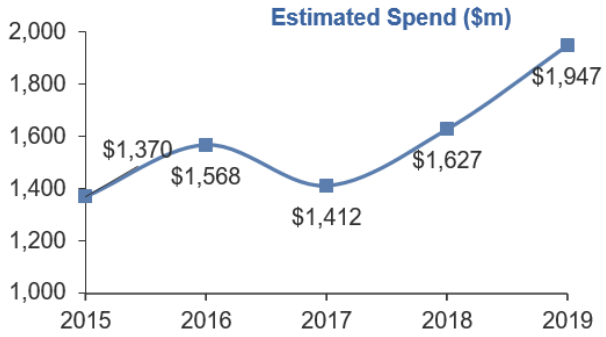
Local

Within WA, there are 5 State Government funded Regional Tourism Organisations who work both independently and in partnership with Tourism Australia, Tourism Western Australia, the tourism industry and key local stakeholders to promote tourism across the State. The Shire of Pingelly sits within the Australia's Golden Outback region, which captures around 10% of interstate visitors to the State.

Total interstate overnight visitors to Western Australia

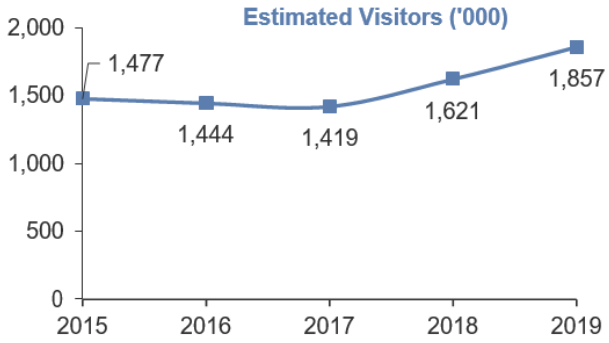
SPEND +19.7%

- $1,947 million in spend
- Average daily spend: $132
- Average spend per visitor: $1,049
- 6.7% of interstate spend in Australia

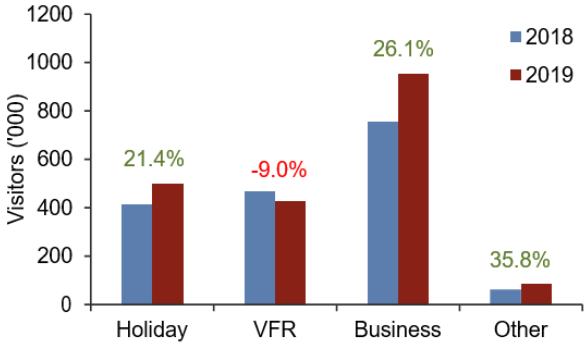


VISITORS +14.5%

- 1.9 million interstate visitors
- 5.1% of interstate visitors to Australia



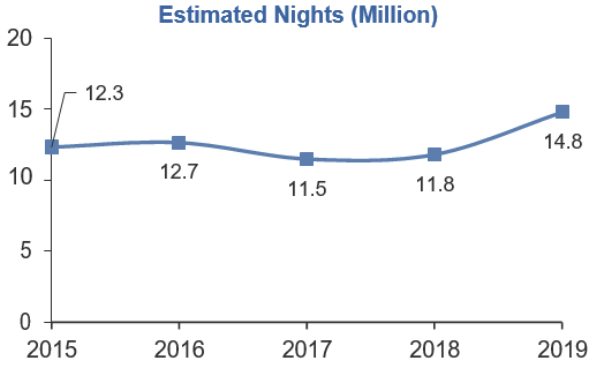
PURPOSE OF VISIT



Note: *Estimates are based on a sample size of 751 and must be considered with the following confidence intervals: Visitors ± 8.0%, Nights ± 8.5%, Spend ± 9.2%

VISITOR NIGHTS +25.1%

- 14.8 million nights
- Average length of stay: 8.0 nights
- 9.5% of interstate visitor nights in Australia



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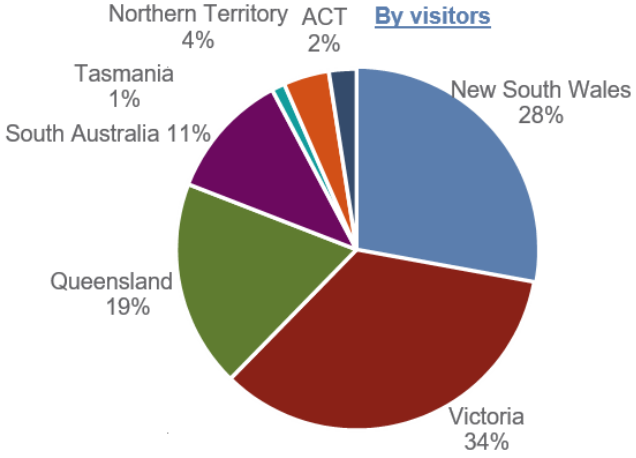
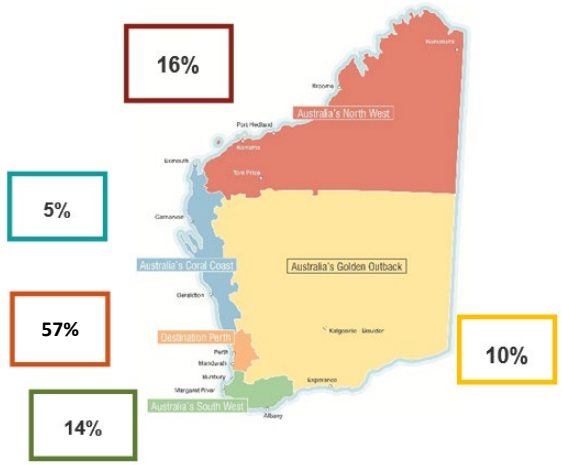


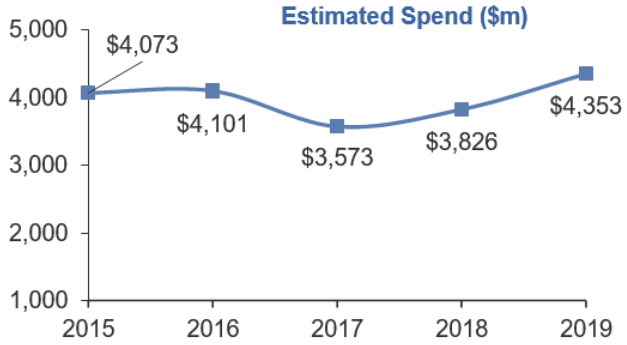
REGIONAL DISPERSAL



Total intrastate overnight visitors in Western Australia

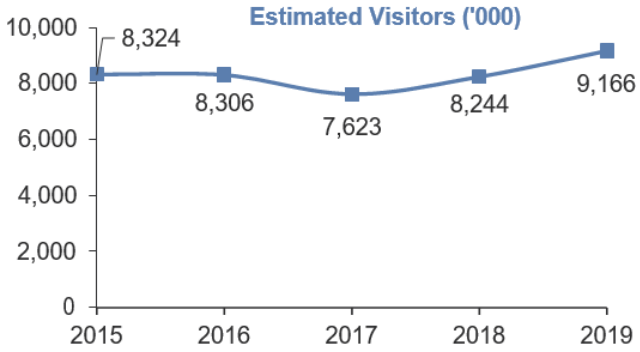
SPEND +13.8%

- $4,353 million in spend
- Average daily spend: $123
- Average spend per visitor: $475

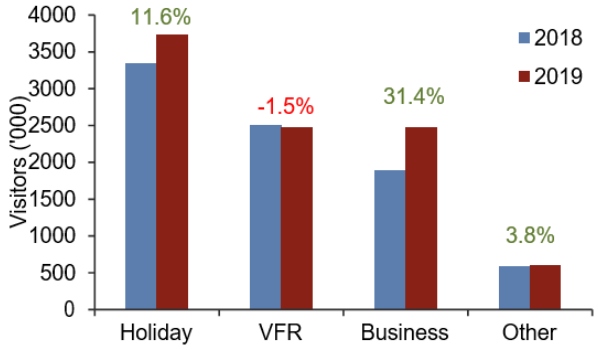


VISITORS +11.2%

- 9.2 million intrastate visitors

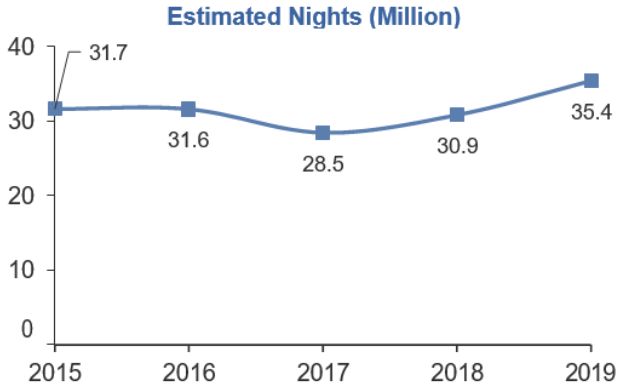


PURPOSE OF VISIT



VISITOR NIGHTS +14.8%

- 35.4 million nights
- Average length of stay: 3.9 nights



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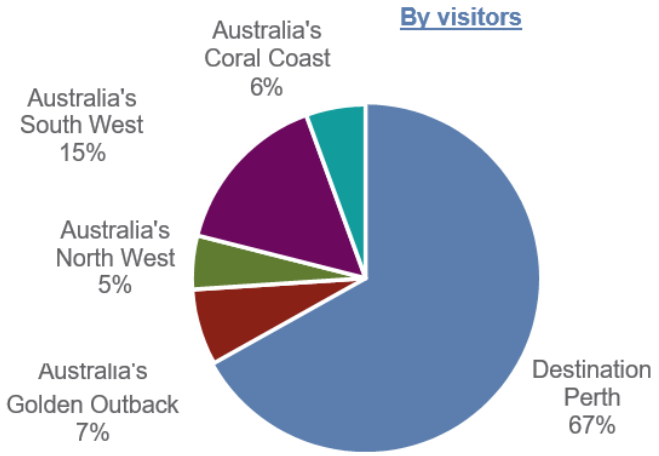
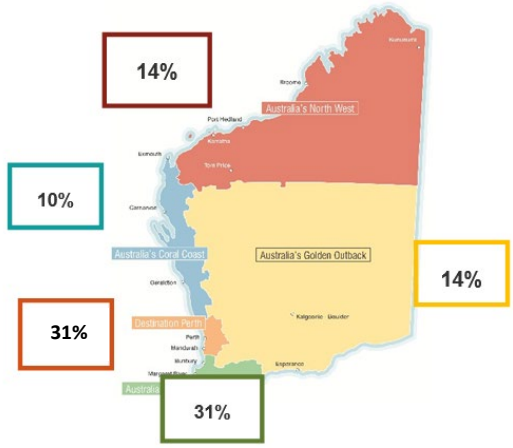


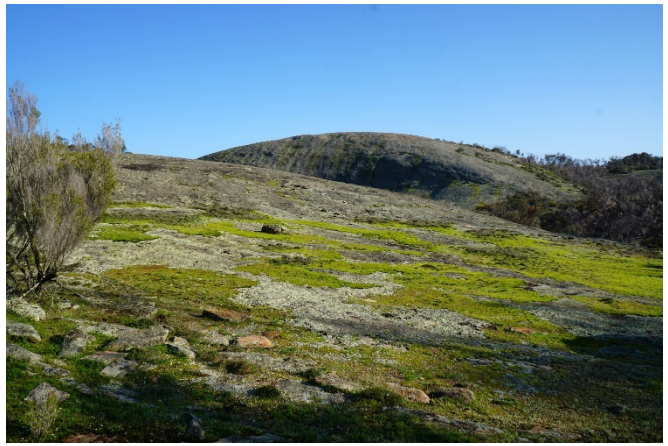
REGIONAL DISPERSAL



DOMESTIC VISITATION TO/IN WESTERN AUSTRALIA

KEY FACTS | YEAR ENDING DECEMBER 2019

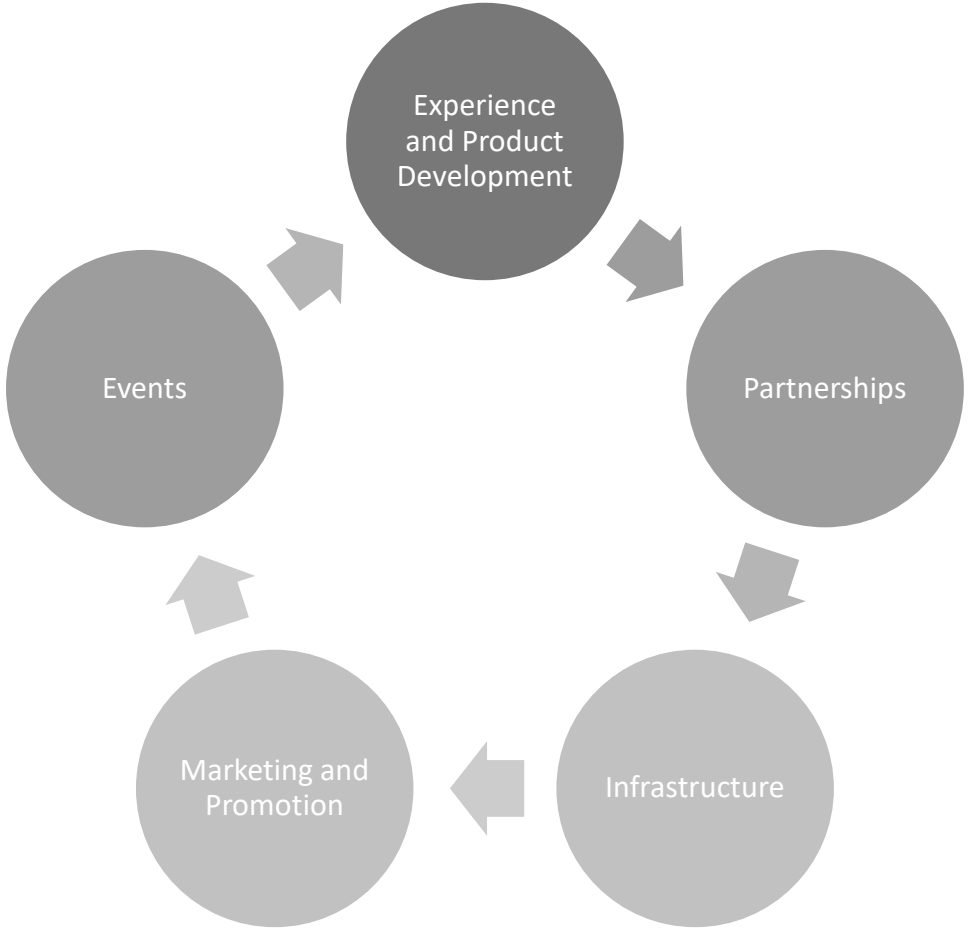
- **The number of interstate visitors to Western Australia increased (+) 14.5% to 1.86 million visitors in 2019.**
- **Interstate spend in WA increased by (+) 19.7% to $1.95 billion as a result of an increase from both leisure and business visitors, as well as an increase in their average length of stay.**
- **WA's market share of interstate visitors grew by 0.1% points to 5.1% whilst share of spend grew by 0.4% points to 6.7%.**
- **Positively, WA received 501,100 interstate holiday visitors, an increase of 21.4% compared to the previous year. Interstate holiday visitor spend increased by (+) 30.4% to $857 million.**
- **WA's market share of interstate holiday visitors grew by 0.4% points to 4.0% whilst share of holiday spend grew by 0.8% to 5.9%.**
- **West Australians took more overnight trips within the State compared to the previous year, increasing (+) 11.2% to 9.17 million intrastate overnight visitors.**
- **Intrastate spend in WA increased by (+) 13.8% to $4.35 billion as a result of increases in visitation from both leisure and business, as well as an increase in their average length of stay.**
- **The number of intrastate holiday trips grew by (+) 11.6% to 3.74 million overnight visitors, whilst intrastate holiday visitor spend increased by (+) 5.4% to $2.13 billion dollars.**
- **The number of daytrips taken intrastate increased (+) 20.1% to 24.2 million daytrips, driven by growth across all purpose of visits.**



SWOT Analysis

Strengths	Weaknesses
• Nucleus of multiple transport corridors for regional traffic to/from Perth, Mandurah, Bunbury, Albany, Esperance and Kalgoorlie. • En route to Wave Rock • Proximity to Perth (day trips) • Proximity to Bibbulmun Track and Munda Biddi Track • Well-connected local road network within region • Strong cultural and heritage tourism products • Balance between built form and natural assets • Nature and ecotourism, i.e. Boyagin Rock, Tutanning Reserve, Dryandra • Telecommunication infrastructure which is improving • PTG and SoP collaboration • PRACC facility can house large events	• Lack of active promotion of the southern Wheatbelt as a destination and/or stopover. • Poor online presence and lack of co-ordinated approach. • Poor signage • Little current collaboration between LGAs. • Limited image as a destination. • Local perception of tourism investment is divided. • Lack of resources (financial and workforce) dedicated to tourism development • Inadequate accommodation – quality and variety • Fractured groups • Lack of activity for families, 10 – 16 year old age group • Accessibility to Museum
Opportunities	**Threats**
• Shifting trends in tourism demand, particularly growth in the day-tripper and weekender segments. • Marketing and Communications – develop a tourism website • Information Technology, i.e. Free Wi-Fi, QR Codes • Tour operations • Improving collaboration across the region • Job creation and economic development for participating communities • Hallmark event • Untapped tourism market • Astro Tourism • Develop Agritourism – i.e. Farm stay, Farm tours • Further develop heritage offerings - both Aboriginal and European • Develop better camping areas • Develop more tracks, running, bikes, orienteering • Develop Chalet style accommodation • More self-drive routes	• Lack of consistency with Main Roads signage and detail • Deterioration of natural assets due to fires or uncontrolled dumping. • Competition from other regions, i.e. York, Northam. • Operational service delivery is provided by external tourism bodies which may be open to varying standards of service quality.

Key Focus Areas



1. Experience and Product Development

Pingelly's proximity to Perth, vast agricultural landscape and wide open spaces, make it an ideal location for visitors of all age groups. Pingelly's diverse natural environment, with a number of significant state assets located within the Shire, offers a unique experience to visitors. Many attractions already exist, including Tutanning, Moorumbine, Boyagin and their associated unique flora and fauna. A focus needed on linking these together, as well as introducing additional experiences that will increase the visitation 'product'.

Development of tourism experiences around the agricultural sector fits well with the Pingelly brand, and opportunities such as an agricultural museum would create a unique experience for visitors. The close ties with large agricultural handling companies creates a tangible opportunity to progress this in the short to medium term.

Significant opportunity also exists to develop Aboriginal cultural experiences to promote the heritage of the region's first people. Cultural tourism includes Indigenous tourism as well as elements of history and heritage, to museums and galleries, to elements of food and art trails. Both Australian and European cultural experiences are in high demand, with Pingelly having a fascinating story to tell. This history, the associated heritage buildings, and the modern architecturally significant Pingelly Recreation and Cultural Centre, provide a surprising and pleasing element for tourists visiting the area.

Actions		Lead Agency	Est. Cost	Timeline
1.1	Investigate the potential of an agricultural museum within Pingelly	SoP	Nil	2021
1.2	Develop a self-drive trail that links key attractions such as Moorumbine, Boyagin, Tutanning and the Pingelly Recreation and Cultural Centre	PTG and SoP	$1,500	2021
1.3	Explore opportunities for Astrotourism	SoP	Nil	2022
1.4	Support local Aboriginal organisations and individuals to develop cultural experiences, such as tours, interpretive information, displays of artworks and artefacts, etc.	SoP	Nil	2022
1.5	Investigate opportunities for bike/walk/run/equestrian trails	SoP	Nil	2023
1.6	Develop a heritage walk / drive trail	PTG and SoP	$1,500	2023
1.7	Develop a wildflower itinerary throughout the Shire	PTG and SoP	$1,500	2023
1.8	Investigate options to facilitate walking tours of the Pingelly townsite	PTG and SoP	Nil	2024

2. Partnerships

Successful partnerships are key to a strong collective tourism experience and ultimate success. Opportunities exist for regional tourism development which will require collaborative approaches with other Shires and organisations involved in tourism to explore alternative ways of expanding and promoting regional tourism initiatives. The key partners identified through the development of this Strategy include:

- Pingelly Tourism Group
- Caravan Clubs
- Tourism WA
- Australia's Golden Outback
- Pingelly Community Groups
- RDA Wheatbelt
- WAITOC
- Regional Shires
- Pingelly Aboriginal Progress Association
- Wheatbelt Development Commission
- Tourism Council WA
- Schools / Universities
- Wheatbelt Tourism WA
- TRANSWA
- Local Businesses
- Heritage WA
- Farmers / Producers
- Visitor Centres
- Emergency Services
- Motorbike Clubs

To fulfil our growth potential we need a collaborative industry, empowered by leadership from across Government, business and community. Collaboration and contribution from all stakeholders will allow the Shire of Pingelly and the Pingelly Tourism Group to better pool their resources and insights, agree on shared priorities and leverage the opportunities for driving growth.

Actions		Lead Agency	Cost	Timeline
2.1	Nurture a strong relationship between the Shire of Pingelly and the Pingelly Tourism Group	PTG and SoP	Nil	All years
2.2	Participate in opportunities with the Wheatbelt Development Commission to develop and promote regional tourism	SoP	Nil	All years
2.3	Partner with regional local governments to develop the southern Wheatbelt as a destination	SoP	Nil	All years
2.4	Develop a strong relationship with Caravan Clubs to understand their needs and offering to Pingelly	PTG	Nil	2021
2.5	Continue to undertake promotional activities with Australia's Golden Outback, and explore opportunities for increased focus on Pingelly.	SoP	$1,500	All years

3. Infrastructure

The quality and quantity of short term accommodation has been identified as a significant weakness for Pingelly's economy. This lack of accommodation has several implications for Pingelly including the inability to secure larger events and functions as there is insufficient high quality accommodation for attendees. Potential opportunities in this area need to be actively explored to allow longer trips for visitors, which is considered to be a key enabler of tourism growth.

A small caravan park exists in a central location, with some upgrades required to attract longer stays. 2 dump points exist within the townsite, and one free 72 hour parking area allocated for recreational vehicles was established in early 2020. Over the past 15 years, the caravan, motor home and camping industry has been the fastest growing domestic tourism sector in Australia. Successful parks have responded to consumer demand for better standards and facilities by transforming from traditional transit parks (having very basic facilities and are used as overnight accommodation when travelling between two destination) to a holiday park featuring a combination of caravan/camping sites and camp kitchens as well as chalets and children's entertainment. There Pingelly Caravan Park would benefit from master planning (to maximise the use of the area) and an upgrade to facilitate longer periods of visitation.

There is currently a lack of directional signage, which is crucial to encourage visitation to places of interest, walks and trails (such as heritage and cultural walks). It is important to consider that better signposting of Pingelly's natural attractions could also potentially encourage visitors and the community to make better use of these facilities for activities including walking, cycling and picnicking. There is also currently a lack of interpretive signage at entry points to Pingelly, at key attractions, and sites of significance. There is a need to develop a signage program to ensure there is a uniform approach to directional and interpretive signage throughout the Shire.

Actions		Responsibility	Est. Cost	Timeline
3.1	Explore options to utilise the Town Hall for a tourism purpose	SoP	Nil	2020
3.2	Maintain RV Friendly accreditation and facilities that support increases in RV visitation	SoP	$500 pa	ongoing
3.3	Improve tourism signage throughout the Pingelly townsite, including signage for attractions, services e.g. fuel and medical, caravan parking, and trails	SoP	$2,000 pa	ongoing
3.4	Develop a Short Term Accommodation Strategy that identifies the potential opportunities to support tourism	SoP	Nil	2021
3.5	Upgrade the Pingelly Caravan Park to include self-contained accommodation options and improve the overall level of service	SoP	$750,000	2023
3.6	Improve playground facilities / activity areas throughout the Shire	SoP	TBD	2021
3.7	Review the ability for businesses to use footpaths for displays, with a view to encouraging this to create an interesting and vibrant streetscape	SoP	Nil	2021

4. Marketing and Promotion

The aim of marketing and promotion relevant to Pingelly tourism is twofold:

1. Increasing awareness of the region, the Shire and the attractions within; and
2. Using modern technology to attract new visitors and stimulate a desire to travel to the area.

A core aspect of the approach is the development of a brand template for new brochures, signage and the tourism website. The lack of a tourism website is considered a key weakness, and has been allocated a high priority. The new site will contain a wealth of knowledge for potential and current touring visitors, particularly those who fit into the 'Drive Tourism' market.

The town entry signage is considered an important opportunity for improvement, having a dual role of welcoming visitors and marketing Pingelly's most significant tourism assets. The design and construction elements together represent a substantial investment for the Shire.

Actions		Responsibility	Cost	Timeline
4.1	Establish a modern brand template for new brochures and signage to promote iconic experiences	SoP	$3,000	2021
4.2	Develop a Pingelly Tourism website	SoP	$2,000	2021
4.3	Promote RV Friendly facilities that support increases in RV visitation	SoP	Nil	ongoing
4.4	Review and upgrade the town entry signage	SoP	$2,000 + $25,000	2021 2022
4.5	Implement a placement and restocking of brochure stands at accommodation facilities, key events and specific businesses throughout the Shire	PTG	$1,000	2022
4.6	Explore social media opportunities to promote tourism, including Facebook and Instagram	SoP	Nil	2023

5. Events

Tourism Events play a key role in fostering regional tourism and economic development. They are an ideal way to build brand awareness and a key driver for regional visitation.

The most popular event categories are food and wine, music related, garden and botanical, sport and art exhibitions. Research by Tourism Research Australia suggests that events in natural settings are gaining popularity. The findings suggest that event participation is strongly influenced by word of mouth recommendations, with events in natural settings such as local food and drink events being more likely to be recommended than others.

As a result of Federal and State funding, the multi-million dollar Pingelly Recreation and Cultural Centre was developed with the vision of creating a multipurpose building, accommodating year round sport, recreation, cultural and community activities. In addition to providing the facility for the community, the state of the art centre could be a significant drawcard in attracting events and sporting groups from outside of the Shire, thereby increasing the regional economy. Events are a key trip driver - three-quarters of event attendees surveyed would not have gone to the destination on this occasion if not for the event. This highlights the enormous potential events have for regional tourism. Local food and beverage events have broad mainstream appeal and potential to drive overnight trips. Sporting competition events have a strong niche appeal and are key trip drivers having the ability to drive trips further from home. Events appeal to visitors for a variety of reasons with key drivers including opportunities for once in a lifetime experiences, natural settings and opportunities to participate.

High profile events and festivals help grow awareness of destinations as a diverse and attractive places to visit, and as a result, can directly drive visitation to the Shire of Pingelly, giving potential visitors a reason to visit. Utilising events to create reasons to visit Pingelly across the whole year, and strengthen the quieter seasons, is a core aim. It should be noted that events and festivals have a role across all of the previously outlined Priority Action Areas and should be treated in a coordinated way. While growing the size and number of events, the challenge is to encourage visitors to stay longer and add more touring options, which ultimately leads to greater visitor expenditure in the region, and to create repeat visitation.

Actions		Responsibility	Cost	Timeline
5.1	Prepare a Pingelly Events Plan to guide the Events Program allowing focus of scarce financial and people resources	PTG and SoP	Nil	2021
5.2	Support existing events to expand through capacity building, strong event planning and innovative marketing.	PTG and SoP	Nil	ongoing
5.3	Reconsider the rebranding of the Pingelly Community Markets to attract day trippers and improve the visitor experience.	PTG	Nil	2021
5.4	Support local community groups and event organisers to establish new events during gaps in the annual calendar that meet market demands and expectations.	PTG and SoP	Nil	ongoing
5.5	Undertake an audit of event facilities and infrastructure within Pingelly to allow the Shire to be added to national event programming.	SoP	$27,500	2022

Shire of Pingelly

Minutes

Bushfire Advisory Committee Meeting
6 October 2020

Minutes of the Bushfire Advisory Committee Meeting of the Shire of Pingelly held in the Council Chambers, 17 Queen Street, Pingelly on 6 October 2020.

Charter (Item 10.6 – 17 March 2010):

Is to advise Council on all matters relating to:

- the prevention, controlling and extinguishing of bush fires;
- prosecutions for breaches of the Bush Fires Act;
- the formation and de-formation of bush fire brigades;
- the co-ordination of the efforts and activities of the bush fire brigades; and
- any other matter relating to bush fire control.

Membership

- Cr D Freebairn - Member
- Cr B Hotham - Deputy
- Brigade representatives
- FCOs

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1. OPENING & ANNOUCEMENTS

The CBFCO, Mr Rod Shaddick, declared the meeting open at 7.03 pm.

2. ATTENDANCE & APOLOGIES

2.1 Attendance

Membership Deputy	Cr B Hotham
Shire of Pingelly	Mrs Julie Burton (CEO)
West Pingelly	Nil
Moorumbine-Noonebin	Mr Rodney Shaddick (CBFCO)
East Brigade	Mr Andrew Marshall
Pingelly Central	Mr Peter Narducci
DFES	Mr Paul Blechynden
DPAW	Mr Greg Durrell (DBCA)

2.2 Observers & Visitors

Nil

2.3. Apologies

Cr David Freebairn
Mr Darryn Watkins (DTS)
Mrs Sheryl Squiers (AOT)
Mr Anthony Turton
Mr Sam MacNamara

3. DECLARATIONS OF INTEREST

Nil

4. CONFIRMATION OF MINUTES

Minutes of the Shire of Pingelly Bushfire Advisory Committee meeting held on 8 October 2019 have been circulated.

Statutory Environment:
Section 5.22 of the *Local Government Act* provides that minutes of all meetings to be kept and submitted to the next ordinary meeting of the council or the committee, as the case requires, for confirmation.

Recommendation:
That the Minutes of the Shire of Pingelly Bushfire Advisory Meeting held in the Council Chamber on 8 October 2019 be confirmed subject to correction of dates on items 5 and item 6.

11353 – Moved Peter Narducci, Seconded Bryan Hotham

That the Minutes of the Shire of Pingelly Bushfire Advisory Committee Meeting held in the Council chamber on the 8 October 2019 be confirmed.

CARRIED 12/0

Business Arising:
Nil

5. AGENDA ITEMS

5.1 Volunteers Requirements for Insurance Cover

For the purpose of insurance for Active Volunteer Fire Fighters our insurers LGIS only require an estimated number of active volunteers. When some one who is not registered as

an active volunteer but attends a fire ground to offer help, the FCO in charge is to record all their relevant details – Name, address, DOB and the directions that have been given to them.

There is only a requirement for full details of a volunteer to be submitted to LGIS when a claim for injury is submitted.

With auxiliary members they come under the policy for community volunteers as they are not active fire fighters and are not covered under the policy for the brigade members.

Any of the existing active members on our register who are also members of another Local Government Brigade will need to nominate their primary brigade so that we are not paying insurance cover that we don't need to.

Definition of a volunteer fire fighter under the Act is below:
"volunteer fire fighter means a bush fire control officer, a person who is a registered member of a bush fire brigade established under this Act or a person working under the direction of that officer or member."

Recommended:
Information be received and discussion.

Action: Send email to FCO's to clarify requirements – create paper trail etc. Sign on to fire ground etc
Moved A Marshall Seconded P Narducci

5.2 Pingelly Central Brigade Minutes 4 August 2020

Minutes of the meeting of the Pingelly Central Bushfire Brigade held at the Pingelly Fire Station on 4 August 2020.

Meeting commenced at 2030 hours. Present
Captain: - R A Kirk
Ist Lieutenant: - Travis Hodges
2nd Lieutenant: - Lindsay Johns
Secretary: - Peter Narducci

Fire-fighters
As recorded in the Roll Call.

Apologies
As recorded in the Roll Call.
1. Minutes
The minutes of the previous meeting were emailed to all members and the minutes were accepted to be true and correct.

Moved: S Diamond Seconded: M. Hall Carried

2 Business Arising
Nil

3 Correspondence
There was no inward correspondence received or outward correspondence to be endorsed.

Moved: L Johns
Seconded: R. Stone Carried

4 General Business

4.1 Appointment of Officers for the 2020/21 Year.

Members present agreed that the current officer positions remain as is for the 2020/2021 year.

Robert KIRK - Captain and DCFCO.
Travis HODGES - Ist Lieutenant.
L. JOHNS 2nd Lieutenant.
Peter NARDUCCI. Secretary and FCO.

4.2 4.4 Pingelly Central Rural Appliance
Pingelly Central 4.4 Rural Appliance has attended a number of fires in the Pingelly District. It was also a critical extra appliance in being able to deliver much needed water at a commercial building fire in Park Street, Pingelly.

4.3 Training.
A number of crew members have undergone extra training in the area of Advanced Bushfire Fighting, First Aid, Manage Injuries and Casualty Handling.

4.4 Hazard Reduction Burns
Secretary reported that there have been a number of enquiries from landholders regarding bushland and whether hazard reduction burns would be carried out.

4.5 ARC Rail
Discussion took place regarding the condition of the railway reserve land from Kulyaling to Hotham River. The amount of litter build up and lack of firebreaks pose for a serious fire to develop with the right conditions prevailing. The main concern was the railway reserve areas south and north of the Pingelly town site.

4.6 High Season Bushfire Light Tanker
Discussion centred around the High Season Light Tanker (West Pingelly Bushfire Appliance) The High Season Light Tanker is housed in the Pingelly Fire Station along with the Pingelly Central 4.4 Rural Appliance. Members felt that the High Season Light Tanker is arriving on Station far too late into the season. When the High Season Light Tanker is on Station, it is used frequently to attend bushfires and other incidents. The High Season Light Tanker is subject to availability, depending when the North West Fire Season is nearing the end. However, while all this is happening, West Pingelly does not have a Fire Appliance and this raises some questions as to whether West Pingelly is being adequately equipped with a fire fighting appliance. Pingelly Central Bushfire Brigade and Pingelly VFRS fire crews are happy to assist West Pingelly Bushfire Brigade with any fire situation but the lack of an appliance does question what help can be offered.

As there was no further business, the meeting was closed at 2115 hours.

Recommended:
Information be received and discussion.
Moved A Marshall Seconded B Hotham

5.3 <u>High Fire Season Light Tanker.</u>
When will this be available as raised in the Pingelly Central Brigades minutes above?

P Blechynden outlined previous discussions re risk to resource analysis.
Action: Review the model and resubmit the request for priority appliances.
Pick the top couple – e.g. light tanker and truck for out west. Put this up for ESL funding.

5.4 East Pingelly Brigade AGM Minutes

AGM held on the 4 March 2020 in C Walton's Shearing Shed. Meeting Opened 5.50 pm.

Present: C Walton, G Poultney, R Shaddick (CFCO), S MacNamara, G Marsh, J Edwards, A Marshall, S Blechynden, D Gent, L Corke, R Marshall, R Hickmott, Q Dungey, K McBurney, D Squiers, L Marshall, M Walton, B Nicholls, R Elson, N Stone, A Robinson,
Apologies: A Fairhead, J Burton (CEO), D Watkins (DTS), S Squiers, B Blechynden.

Minutes of the previous meeting were read and moved to be true and correct by A Marshall and Seconded S MacNamara.

Business Arising: Lamination of members details is done. There were a couple of wrong numbers.

Correspondence Inward and Outward:
Inward:
5.4.1 Another $1000 of fuel.
5.4.2 No news on new truck.
5.4.3 There is goggles, gloves and bags for members thanks to Rodney.

Outward:
Nil

General Business:

1. C Walton suggested that we should set up a whatsapp group for the brigade. It will be handy as it can be used to let neighbours know of upcoming burning. It was resolved, M Walton to set up the whatsapp group.
2. R Marshall moved the motion that the fuel has been passed around for the members. Seconded: R Elson.
3. We will stay with restricted permits until another significant rain event. No Permits over Easter are from Thursday to midnight Tuesday.
4. New members need to let shire know their overall sizes before the start of the next fire season.
5. Be aware that sometimes harvest ban text messages don't always come through. Turning phone on and off can help retrieve messages.
6. Rod still can't get a build date from DFES for the new truck hoping it will be before next fire season.
7. Rod has found Julie and Darren from Shire very obliging and good to work with.
8. Rod noted again how well the weather stations are working and it has been money well spent.
9. The fires in February with the bad weather we had were well controlled and a good effort by all involved.
10. A Marshall saw subcontractors from Telstra whipper snipping around the East Pingelly Exchange on a harvest ban day. Be aware that not everyone receives our harvest ban messages.
11. L Marshall noted fire breaks in Tutanning Reserve are not good enough. DCBA need to be made aware. Tracks need to be pruned and access made available for our fire truck. Resolved to request a meeting with DCBA about these issues in Tutanning Reserve.

President: C Walton Nominated by R Marshall, Seconded J Edwards. Accepted and Elected.
Secretary: G Poultney Nominated by D Squiers, Seconded M Walton. Accepted and Elected.

FCO's: A Marshall, J Edwards, S MacNamara, V Lee. Nominated by M Walton, Seconded R Hickmott.
Accepted and Elected.
Captain: C Walton Nominated by L Marshall, Seconded J Edwards. Accepted and Elected.
Lieutenants: B Blechynden, B Nicholls Nominated by Q Dungey, Seconded by M Walton. Accepted and Elected.
Meeting Closed 6.45 pm

Recommended:
Information be received and discussed.

A Marshall provided an update of works around Tutanning. Will provide the Shire with a map of the new access tracks in the Reserve.

P Narducci outlined BART – replacement option for Whatsapp. VFRS team proceeding with this as a trial. Price involved. 15 members = $150 per year.

Moved A Marshall
Seconded P Narducci

5.5 Portable Defibrillators for Brigades

The Shire of Pingelly have received a portable defibrillator for each brigade and a training unit to learn how to use them.

Recommended:
Information be received and discussed.

Moved A Marshall Seconded P Narducci

6 Reports

DFES – report as tabled. Plus :

DFES Report – Paul Blechynden Pingelly BFAC 6 October 2020
2019 / 20 Fire Season
Last fire season was very busy with local firefighters traveling to help in Kondinin, Lake Grace, Katanning and Norseman as well as Queensland, NSW & Victoria.
A register of firefighters interested in interstate deployments has been setup (firefighters need shire approval, a minimum of 4 years' experience and a level of basic training).

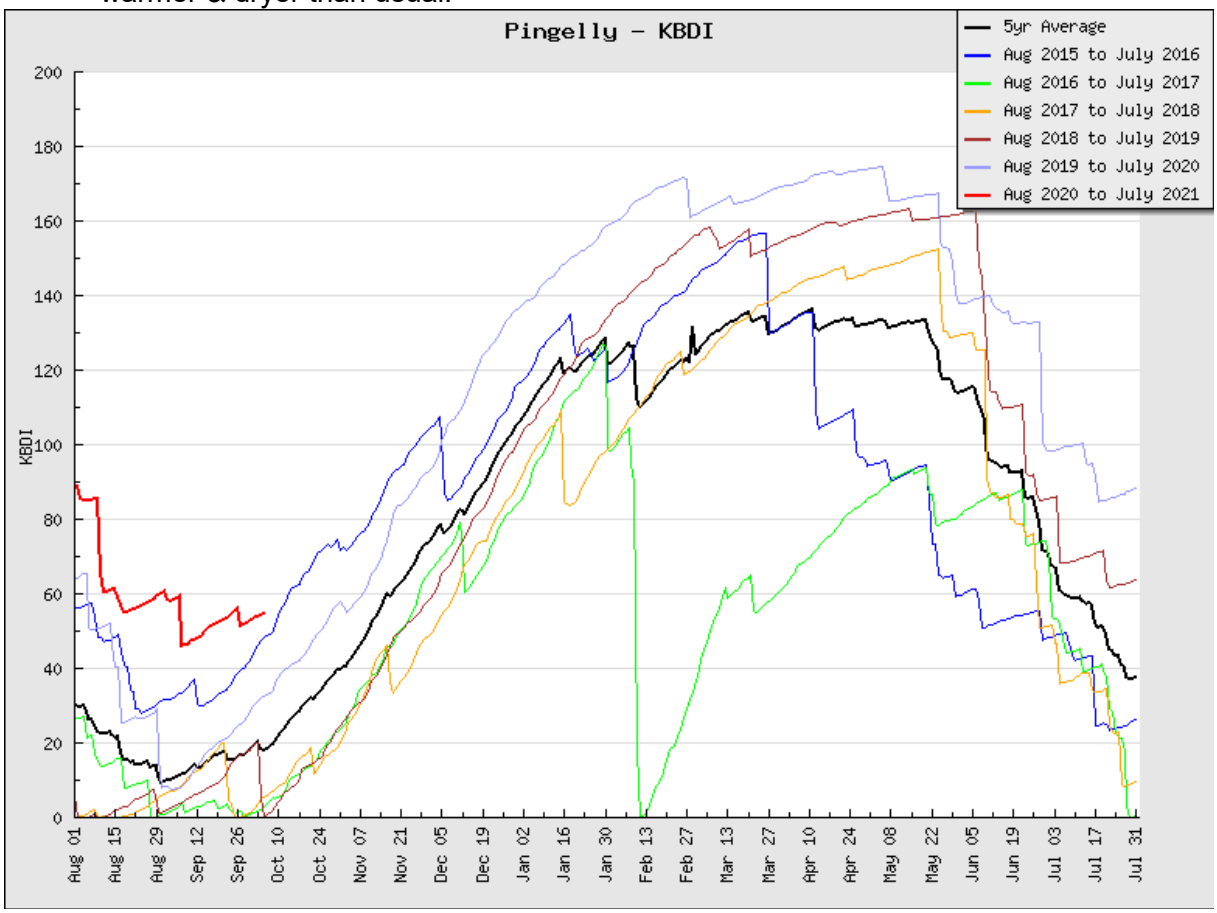
Prescribed burning
We completed a successful Autumn burning season, despite the very dry conditions three strategic prescribed burns were completed in Cuballing, Brookton & Wandering.

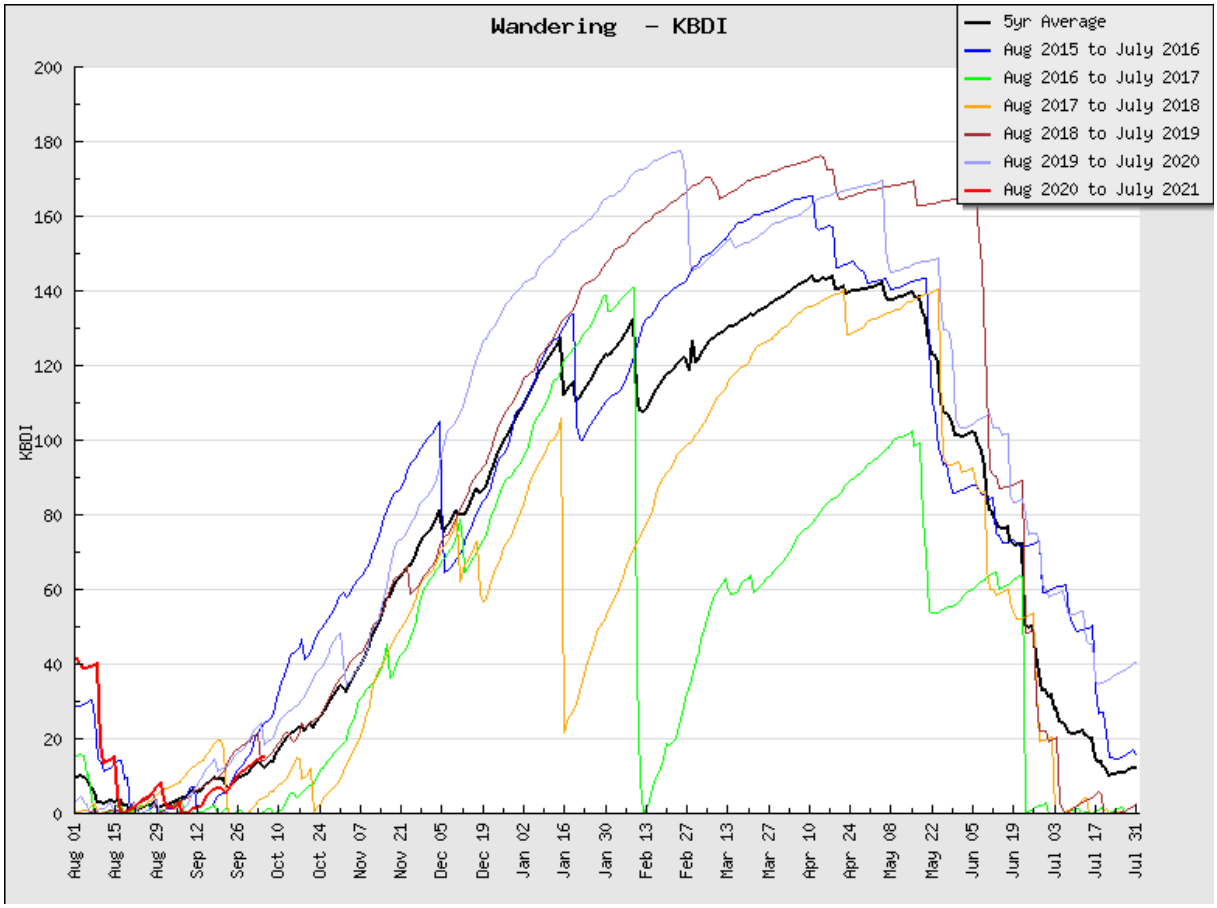
Training
Despite the COVID related interruption a range of training courses including more advanced training was conducted around the region.

2020/21 Fire Season
Conditions in the central and eastern parts of this region are significantly drier than average, limited runoff has reduced the amount of water available for firefighting. As a result, we have been working with shires to get a better understanding of the equipment, particularly water trucks that they have available together with private contractors they use who can be called in to assist this season.

The seasonal outlook provided by the Bureau of Meteorology is:

- The 2019/20 fire season saw widespread hot & dry conditions across large areas of Australia. Nationwide we are unlikely to have a repeat of these conditions in 2020/21. The maximum temps this year are expected to be closer to average where the temperatures last season were well above average.
- Warm & dry conditions over winter 2020 has resulted in very much lower soil moisture (top 1 metre) compared to the average for that area / that time of year. See the Pingelly soil dryness graph – Wandering is also included to provide an indication of conditions to the west (next page). Please note: o Red line is the soil moisture for this year, black line is the 5-year average
- The higher the line, the dryer the conditions
- A rough interpretation is that the soil dryness now is like that normally experienced in mid-November.
- Drier soils mean drier fuels (leaf litter, logs etc) in the bush. As a result, fires in the bush may be more intense than expected at this time of year.
- Outlook for Spring & Summer is not as extreme as last year. However, we are entering Spring in a slightly worse position compared to last year due to Winter being warmer & dryer than usual.





Seeking (or have sought) list of equipment, contractor details, arrangements for having shire operators and equipment on call during period of high risk e.g. total fire ban.
Note of appreciation from R Shaddick for comms from Darryn last season as to location of equipment.
Focusing on water conservation. Option to use foam – available through ESL funding.
Some discussions at ROAC about getting thermal imaging cameras put on the ESL.
Collar tanks – option to increase water availability on site. Water tankers can unload into the collar tank and then go back to reload – no waiting. Not currently covered under ESL but there is a push for this to be included. Shire may wish to put in a request for one.
Replacing water – what are the opportunities to replenish water. Shire potentially needs to have a position on this. Discussion was that this is best dealt with on a case by case basis.

Moorumbine Noonebin BFB Meeting
Minutes tabled at meeting

Moorumbine Noonebin BFB Minutes 18/09/2020

Meeting opened	5.05pm
Present:	S Leake, R Shaddick, J Shaddick, E Blechynden, S Cunningham, B Cunningham, M Cunningham, R Overington, T Hodges, B Eva, L Johns,
Apologies:	J Overington B Jennings C Shaddick, L Smith, C Davis.
Minutes:	Were not available
Correspondence:	Read
	Treasurers Report: $353.53 in bank account moved by L Johns Second B Cunningham
	Captains Report: All fires over the summer will be well attended
FCO Report:	Nil

General Business: The question was asked about hazard reduction burn in Moorumbine reserves. Bush fire risk management will be looking at reserves and road side verges.

Fire breaks to be done by 1st November fire units checked and made ready especially ropes. Maybe make a 10ml socket spanner available just in case.

Make a hose available at sheds to fill fire units.

Our current soil moisture is nearly at Nov average already.

As of Sunday you will need a permit to burn no permit will be issued for pushed up timber. Make sure you are registered at the Shire for bushfire and check clothing and radios.

Next Meeting: 26/03/2021 at R Overingtons
Meeting closed at 6.00pm

Moved A Marshall Seconded B Hotham

Action: follow up supply levels for foam and PPE at the Shire Depot and advise Rod Shaddick.

DBCA – verbal report, update on previous fire season and staffing.

7 GENERAL BUSINESS

Rod

- Requested update on DFES taking on management of volunteers. Paul Blechynden reported nil movement at this point
- Requested update on the CESM position. Paul Blechynden provided advantages, Julie Burton provided recruitment update.
- Bushfire Risk Management Planning – DFES officer met with Rod Shaddick in early July.
- Need to follow up weather stations urgently (Sheryl)
- Water pump at depot - short term solution may be to use a petrol driven unit. Fast fill pump. Other option is to use the bowling club pump (Peter Wood is the contact). Check ESL stationary pump may fit within the guidelines.
- Restricted burning period - Chief suggesting stopping permits east side of Great Southern Highway immediately due to soil dryness. Restricted burning period to potentially end 19 October 2020. Rod will speak to other FCO's to gain feedback and will advise the Shire.
- FCO ID cards. Some have an expiry date 31/10/2020. May be able to be reissued and use photos on file.

A Marshall

Updated that there is plenty of water to put out a fire at Tutanning.

Pingelly Bushfire Exercise provided by Paul Blechynden discussed.

8 CLOSURE

9.11pm

9 Next Meeting

Tuesday 6 April 2021 at 7.00pm in Council Chambers

These minutes were received by Council at an Ordinary Meeting held on 18 November 2020 .....

Signed .....

Presiding Person at the meeting at which the minutes were confirmed.

Level 1, 10 Browning Street
WEST END QLD 4101
Telephone: 3169 8300

20 October 2020

Sheryl Squiers
Shire of Pingelly
17 Queen Street
PINGELLY WA 6308

Via email: aot@pingelly.wa.gov.au

Attn: Sheryl Squiers

Submission response for a proposed Telecommunications Facility at

Visionstream has reviewed the submission provided by the Shire of Pingelly on 19 October 2020 and provides the following response.

Service from other base stations

The proposed facility has been identified by the Federal Government as being within an identified mobile black spot. Contrary to the submission, the nearest telecommunication facility is not "*4 to 5 kilometres east of this proposed location*". As provided under **Figure 1**, the nearest existing tower in the area is an NBN tower 10km south-east of the proposed facility. While this NBN tower does not have Telstra equipment on it, it is located too far from the required coverage area to provide the level of coverage required under the Federal Government Mobile Black Spot Program.

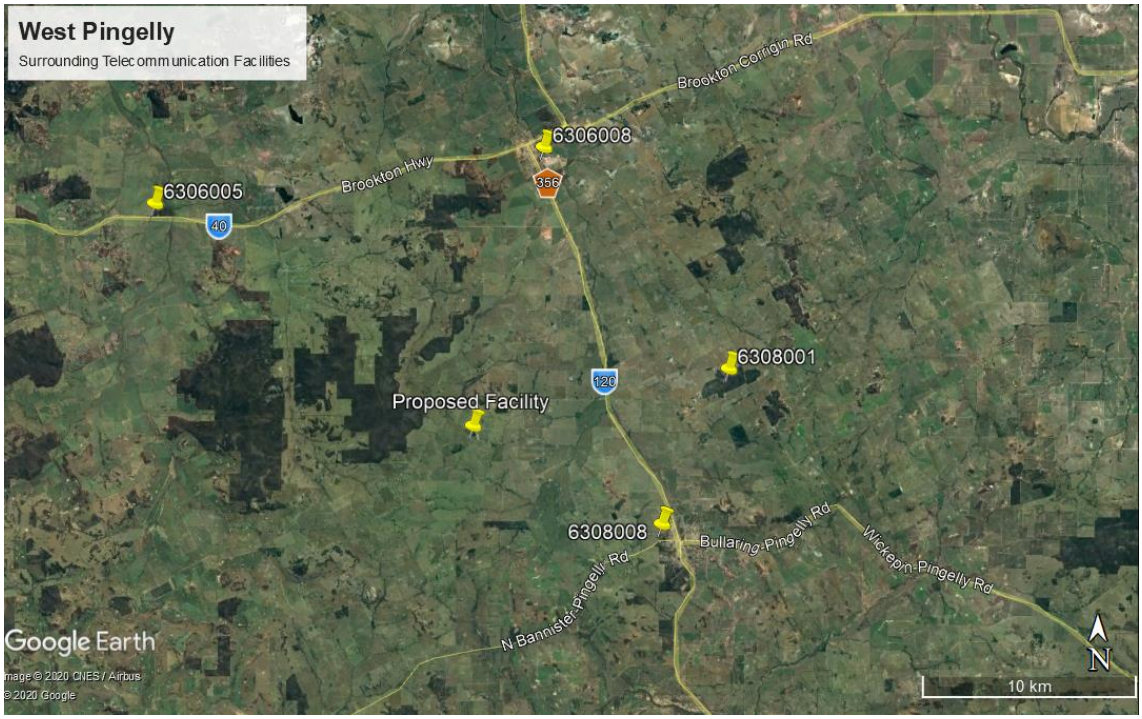


Figure 1: Map of nearby Telecommunication Facilities (includes NBN towers and non-Telstra facilities)

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ABN 85 093 384 680
ventia.com

As shown in **Figure 1**, the proposed facility is located in the exact centre of ring of surrounding towers, with an average distance of 13.5km. Based on this, it can clearly be seen that the proposed facility will fill a coverage gap. Furthermore, the location and height meets the coverage objectives set by the Federal Government, which include consideration for new coverage areas, new coverage dwellings and new coverage transport networks and will provide a critical service to the surrounding area.

Need for mobile services at Kubbine Road, York-Williams Road or Pumphreys Bridge

With regards to coverage to the areas of Kubbine Road, York-Williams Road and Pumphrey's Bridge, **Figure 2** provides an extract from the Mobile Black Spot database used for Black Spot rounds 1 to 4. As identified, the **Figure 2** shows that Kubbine Road and York-Williams Road are close to the identified Black Spots of Hastings (identifier WA-0852) and Kubbine Road (identifier WA-0922), while Pumphreys Bridge is close to the identified black spots of Pumphreys Road (identifier WDA-0399) and Pumphryes Bridge (identifier WA-0400). Funding for black spots under the Mobile Black Spot program is at the sole discretion of the Federal Government, however funding has been allocated for future rounds of the program for which specific locations have not been decided. As such, it may be that the areas identified in the submission are provided mobile coverage under future black spot funding rounds.

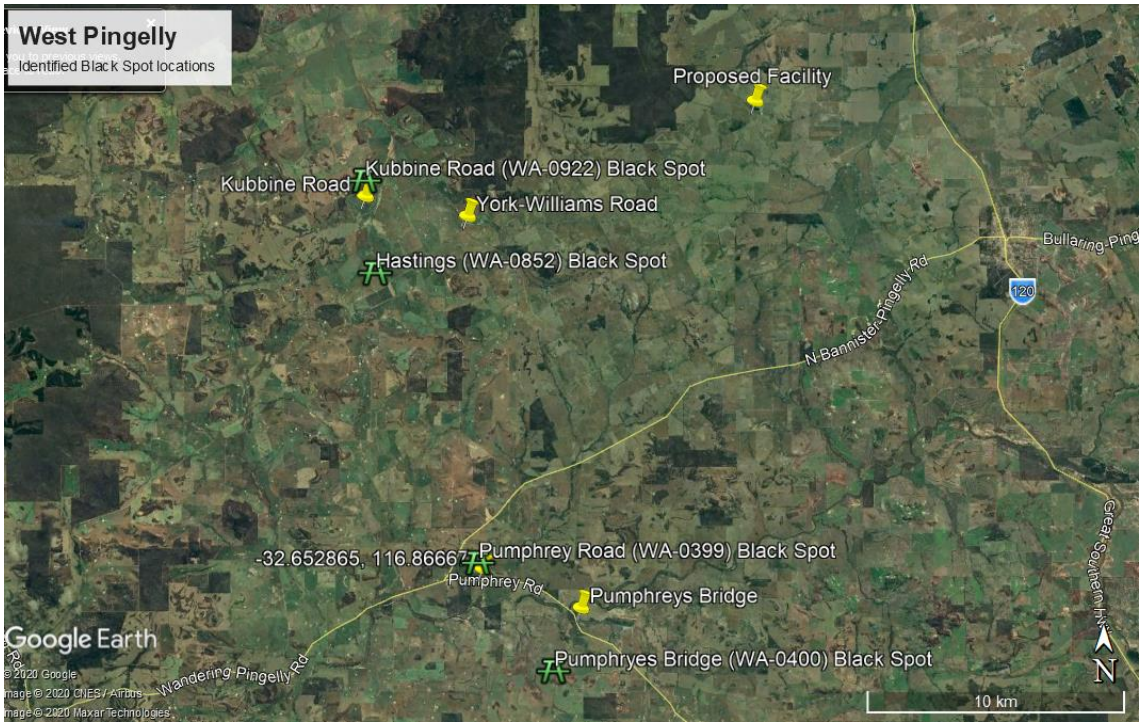

Figure 2: Identified Black Spots in surrounding area

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ABN 85 093 384 680
ventia.com

Visionstream hopes that this information has been of use to the Shire of Pingelly in its assessment of the proposed and important community facility.

For further information on the proposal please contact Daniel Park on 0437 318 758 or via email at daniel.park@visionstream.com.au.

Yours sincerely

Daniel Park
Senior Planning Officer
Visionstream Australia Pty Ltd
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E-mail: daniel.park@visionstream.com.au

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PLANNING ASSESSMENT REPORT

Planning Permit Application for a Telecommunications Facility

167 Page Road Road, West Pingelly WA 6308

(Lot 3 Diagram 17175 and Lot 4 D17175)

Prepared by Visionstream Australia Pty Ltd

On behalf of Telstra Corporation Limited

Project No: WA10279.01

September 2020

visionstream

CONTENTS

Document Quality Control

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0.1	20/08/2020	Draft	KH	DP
1.0	14/09/2020	Final	DP	DP

1.0 EXECUTIVE SUMMARY

1.1 Site and Proposal Details

Address of Site	167 Page Road, WEST PINGELLY, WA 6308
Legal Property Description	Lot 3 Diagram 17175 and Lot 4 Diagram 17175 (access only)
Coordinates	-32.490570°, 116.979010°
Site Area	6341086m²
Registered Owner	The University of Western Australia
Local Authority	Shire of Pingelly
Proposal	60m lattice tower, six (6) panel antennas on a triangular headframe, one (1) GPS antenna, one (1) microwave link dish, nine (9) radio units, three (3) twin tower mounted amplifiers, one equipment shelter and ancillary equipment.
Planning Instrument	Shire of Pingelly Local Planning Scheme No. 3
Zone	General agriculture
Overlays	None identified
Application seeking	Development permit for a Telecommunications Facility
Use definition	Telecommunications Facility

1.2 Applicant Details

Applicant	Telstra Corporation Limited ABN 051 775 556
Contact Person	Daniel Park 0437 318 759 Daniel.Park@visionstream.com.au
Our Reference	WA10279.01 West Pingelly

2.0 INTRODUCTION

This report has been prepared by Visionstream on behalf of Telstra as supporting information to a Planning Permit Application for the works and use of a Telecommunications Facility at 167 Page Road, WEST PINGELLY, WA 6308. The property is formally described as Lot 3 Diagram 17175. Access to the subject site will be via Lot 4 on D17175.

As part of Telstra's commitment to regional Australia, Telstra is excited to bring high-speed mobile internet to even more communities around the country as part of the Federal Government's Mobile Black Spot program.

The Black Spot Program is one of the largest ever expansions of mobile coverage in regional and remote Australia. Areas which will receive new mobile network coverage have been announced in multiple rounds since 2015, starting with Round 1, and most recently with Round 4 announced in March 2019. This program will deliver mobile coverage to a large number of regional and remote communities who, for the first time, will be able to access fast mobile voice and data services. The improved coverage is increasing access to new technologies for key regional sectors like agriculture, transport, mining and tourism – technologies which rely on a fast, reliable and affordable mobile network.

After the fourth round of the Mobile Black Spot Program is completed, Telstra will have invested over $280 million and built over 780 new sites to improve coverage for regional areas around the country - a significant proportion of the total 1047 sites co-funded by Government under the Program since 2015.

The Mobile Black Spot Program Round 4 has identified a need to provide mobile service to West Pingelly and surrounding areas.

All mobile phone network operators are bound by the operational provisions of the federal *Telecommunications Act 1997 ("The Act")* and the *Telecommunications Code of Practice 2018*. The proposed telecommunications facility installation is not defined as a low-impact facility and is therefore subject to relevant State and local planning provisions.

The proposal is subject to the provisions of the WA Planning and Development Act 2005 and the provisions of the Shire of Pingelly Local Planning Scheme No. 3.

3.0 PROPOSED SCOPE OF WORKS

The proposal is inclusive of the following scope of works:

- installation of one (1) 60m high lattice (overall height 62.4m to top of antennae);
- installation of one (1) triangular headframe;
- installation of six (6) new panel antennas;
- installation of one (1) GPS antenna;

- installing one (1) microwave link dish;
- installation of one (1) equipment shelter at the base of the lattice tower;
- installation of associated ancillary cabling and equipment on the tower and within the equipment shelter
- 2km power extension
- Reuse of existing access track from Lot 4 on D17175

Refer to Plans attached in **Appendix A** for further details and **Appendix B** for Land Titles.

Figure 1: Left: Constructed 60m lattice tower. Top right: Example of lproposed headframe design. Bottom right: Lattice tower base including equipment shelter and stock fence *Source: Visionstream 2019*

4.0 PURPOSE OF THE PROPOSAL

The primary drivers for proposing a new telecommunications facility at the subject site are as follows:

Federal Government's Mobile Black Spot Program

This program will deliver mobile coverage to a large number of regional and remote communities who, for the first time, will be able to access fast mobile voice and data services. The improved coverage is increasing access to new technologies for key regional sectors like agriculture, transport, mining and tourism – technologies which rely on a fast, reliable and affordable mobile network.

This program will deliver mobile coverage to a large number of regional and remote communities who, for the first time, will be able to access fast mobile voice and data services. The improved coverage is increasing access to new technologies for key regional sectors like agriculture, transport, mining and tourism – technologies which rely on a fast, reliable and affordable mobile network.

The Mobile Black Spot Program builds upon significant investments already undertaken by Telstra to expand and upgrade Telstra's mobile network. Telstra's partnership with the Federal Government will involve Telstra investing up to $280 million of their own funds to build over 780 new sites under all rounds of the Mobile Black Spot Program. This is over and above the billions of dollars Telstra have spent on their mobile network in recent years.

Telstra has worked with State and Local Governments, to attract tens of millions of dollars in additional targeted funding. This means Telstra will be able to deliver a combined investment of over $540 million for regional telecommunications under the program.

Telstra is committed to providing improved mobile coverage to regional and remote Australia. Over the five years to June 2019 their total mobile network investment has been around $8 billion, of which almost $3 billion has been invested in regional areas.

In addition to the Mobile Black Spot Program, Telstra has also delivered over 200 small cells in selected areas where appropriate infrastructure is available, which will bring high speed 4G data services to small country towns.

Telstra continues to invest significantly in maintaining and expanding our mobile network across Australia.

By way of a background:

Mobile phones and mobile broadband devices continue to play an important role in the lives of Australians. This includes providing the fundamental ability to be in contact with family and friends, operating businesses more efficiently and effectively as well as dialing triple 0 during a natural disaster or other emergency.

Because of the ever-growing demand for more data and better reception, mobile phone carriers such as Telstra continually must upgrade and expand mobile phone networks to eliminate coverage blackspots and to keep up with the demands and expectations placed upon them by the community.

The Federal Government through the Mobile Black Spot Program has identified the need to increase the capacity of the mobile phone network in the West Pingelly area due to demands placed upon the existing network by people in the locality.

As the incumbent telco Telstra knows how important access to modern telecommunications infrastructure is and in order to remedy the lack of mobile phone coverage in the aforementioned areas Telstra wishes to establish a new mobile telecommunications base station facility the subject site.

5.0 THE NEED FOR THE PROPOSAL

Access to wireless services is a critical requirement in the modern era. While Australia has among the fastest mobile networks speeds across the globe, there is an identified coverage disparity between urban and rural areas. This disparity is due to the population concentration in urban areas, with existing wireless services covering 99% of the population but only 33% of the total landmass. As a result, major transport routes and large landholdings miss out on the critical wireless services available in urban areas.

While satellite services for mobile phone and data are available in some rural areas, the steep cost for landholders, unreliability and low data caps are all significant impediments to their daily use.

The 2018 Regional Telecommunications Review (the **Edwards Review**) brought these issues into clear focus, with important findings relating to:

- economic benefits; and
- social benefits

The Edwards Review found that economic benefits in regional areas are increasingly linked to wireless services, with regional businesses in a weak position to take advantage of new digital applications and economic opportunities. The Australian Government Response to the review strengthened this argument, stating that "*digital agriculture could increase the gross value of Australian agricultural production by $20.3 billion, a 25% increase over 2014-15 levels. The greatest gains are expected to come from remote monitoring, automation, better tailoring of inputs such as fertiliser and seed, and environmental benefits such as efficiencies in water and pest management*".

Tourism is often touted as a key asset to Australia as a whole, with the emerging areas of agri-tourism and eco-tourism combining with the rich and unique history and experiences available in outback areas to provide new economic opportunities for regional areas. Connectivity is a driver of such economic opportunities, even in rural areas. Data from Tourism Australia shows that 289 million visitor nights were spent in regional Australia in 2017, up from 234 million in 2012. The Edwards Report includes first-hand examples from

regional tourism operators on the challenges they have faced and how technologies have or could improve their businesses.

The education opportunities in regional areas of Australia have lagged behind those in urban areas for several decades (Karmel. 1973 and Lamb et al. 2014). The need to send children and young adults to cities to obtain the education available in urban areas was long seen as a necessity. The advent of digital education services has proven a boon in ensuring that families in regional areas can stay together while still receiving a high-quality education. Irrespective of students being educated via distance or at local schools, education is increasingly digital. With video being a key component of lessons, access to wireless services is essential.

Social cohesion and connectivity is another important aspect of the digital age. Expanded wireless services allow for regional and rural communities more options to communicate with each other and with relatives and/or friends in other cities and countries. Additionally, rural and remote communities are less likely to have access to a range of health care services (Rural Health Standing Committee, 2016: National Strategic Framework for Rural and Remote Health). Given the natural hazards such as drought, bushfires and floods that are a frequent and ongoing occurrence in Australia, access to mental health services can be of critical importance. Wireless services allow for more communications opportunities in regional areas and opens additional avenues for mental health services (National Mental Health Commission, 2018).

Wireless services are also important for safety reasons, particularly in relation to the aforementioned natural hazards present in Australia. The 2017-2018 ACMA Communications Report showed that in 2017-2018 there were nine (9) millions calls made to emergency services numbers, and increase of 4.8 per cent from 2016-2017, with the majority made from mobile phones. This increase in emergency numbers calls from mobile phones is a continuing trend, with the share increase by approximately 2-3% on average every year from 2012-2014. In regional and remote communities, where potentially dangerous tasks are undertaken on a daily basis, but where neighbours or family-members are oftentimes out of earshot, the ability to call for assistance from a mobile phone can be critical.

The Federal Government Mobile Black Spot Programme is an important aspect of bridging the digital disparity between urban and remote communities, and in doing so better supporting their communities in a range of areas, including economic, education, social and safety.

6.0 MOBILE TELECOMMUNICATIONS NETWORKS

A mobile telecommunications network is made up of multiple base stations covering a geographic area. They work by sending and receiving radio signals from their antennas to mobile phones and other mobile devices such as tablet computers, wireless dongles etc. Base stations are designed to provide service to the area immediately surrounding the base station which can be up to several kilometers in distance. Depending on the technical objectives of a base station, the physical characteristics of each

telecommunications facility; such as its height, number and size of antennas, equipment, cabling etc. will vary.

As a general rule, the higher the antennas of a base station the greater the range of coverage and the ability to relieve capacity issues. If this height is compromised then additional facilities, and thus more infrastructure, will be required for any given locality. The further a facility is located away from its technically optimum position the greater the compromise of the service. This may result in coverage gaps and require additional or taller base stations to provide adequate service.

Each base station transmits and receives signals to and from mobile devices in the area. As the mobile device users move around their devices will communicate with the nearest base station facility to them at all times. If the users cannot pick up a signal, or the nearest base station is congested because it is already handling the maximum number of phone calls or maximum level of data usage, then the users may not be able to place a call, they may experience call "drop outs" or they might experience a slow data rate while attempting to download content.

There are three main factors that can cause the above:

- You may be too far away from a facility to receive a signal, or there may be objects blocking the signal from the nearest facility; such as hills and large trees. To ensure optimum service the radio signals transmitted between the facility's antennas and mobile devices need to be unimpeded, maintaining a "line-of-sight" between them.
- The facility may be transmitting as much data and calls as it can handle. This can result in call drop-outs and slower data rates when too many users are connected to a facility at once.
- The depth of coverage, which affects the ability to make calls inside buildings, may be insufficient in some local areas.

The current proposal will form part of Telstra's 4GX network solution to the West Pingelly locality and will deliver essential mobile services (voice calling, SMS), as well as live video calling, video-based content including; news, finance and sports highlights, and high-speed wireless internet – wireless broadband. With a coverage footprint of more than 2.1 million square kilometers and covering more than 99% of the Australian population. Telstra's 4GX is Australia's largest and fastest national mobile broadband network and as such requires more network facilities, located closer together to ensure a high-quality signal strength to achieve reliable service and the fastest possible data transfer rates.

7.0 SITE SELECTION PROCESS

Telstra commences the site selection process with a search of potential sites that meet the network's technical requirements, with a view to also having the least possible impact on the amenity of the surrounding locality. Telstra applies and evaluates a range of criteria as part of this site selection process.

Telstra assesses the technical viability of potential sites through the use of computer modelling tools that produce predictions of the coverage that may be expected from these sites as well as from the experience and knowledge of the radio engineers.

There are also a number of other important criteria that Telstra uses to assess options and select sites that may be suitable for a proposed new facility. These take into account factors other than the technical performance of the site, and include:

- The potential to co-locate on an existing telecommunications facility.
- The potential to locate on an existing building or structure.
- Visual impact and the potential to obtain relevant town planning approvals.
- Proximity to community sensitive locations and areas of environmental heritage.
- The potential to obtain tenure at the site.
- The cost of developing the site and the provision of utilities (power, access to the facility and transmission links).

Telstra is also contracted to meet objectives of the Mobile Black Spot Programme, with parameters set by the Federal Government. A number of factors determined which areas received funding, including the lack of outdoor coverage and the number of people who would benefit from a new facility.

In the Mobile Black Spot Programme Discussion Paper, the Australian Government Department of Communications 2013, it states that:

"The Mobile Black Spot Programme will improve mobile phone coverage and competition in regional and remote Australia, including along major transport routes, in small communities and in locations prone to experiencing natural disasters. The Guidelines aim to ensure the Programme is delivered as efficiently and effectively as possible and achieve maximum value for money."

In making the proposal for this site at West Pingelly, Telstra has carefully weighed all of the aforementioned criteria. This analysis is detailed in the next section.

8.0 CANDIDATE SITES

Telstra carefully examined a range of possible deployment options in the area before concluding that a new mobile base station at 167 Page Road, West Pingelly would be the most appropriate solution to provide necessary mobile phone coverage to the West Pingelly locality.

Accordingly, this section of the report will demonstrate the following:

- Colocation opportunities and existing telecommunications infrastructure within proximity to the proposed installation; and
- An analysis of the locations considered when determining an appropriate location for a new telecommunications installation within the required coverage area.

8.1 Colocation opportunities

The Communications Alliance Ltd. (formerly Australian Communications Industry Forum Ltd. - ACIF) *Industry Code C564:2018 – Mobile Phone Base Station Deployment* promotes the use of existing sites in order to mitigate the effects of the facilities on the landscape. It should also be noted that as a first preference Telstra attempts to utilise, where possible, any existing infrastructure or co-location opportunities.

A map has been prepared that shows the location of existing and proposed telecommunications facilities surrounding the West Pingelly locality (**Figure 1**).

Figure 2: Location of nearby existing and proposed telecommunications facilities *Source: www.rfnsa.com.au/6308011*

The map shows two (2) nearby sites 12.23km north-east and 9.94km south-east from the proposed location (**Figure 2**). The characteristics of the mobile phone base station identified in **Figure 1** are provided below in **Table 1**.

Table 1: Summary of co-location opportunities within West Pingelly area

Site No.	Site Address	Structure type	Is site constructed?	Suitable for co-location?	Comments

6308008	2 North Bannister-Pingelly Road West Pingelly	81m Guyed Mast	Yes	No	Located over 9km from nominal.
6308001	751 Moorunbine Rd, East Pingelly	53.3m Steel Lattice Tower	Yes	No	Located over 12km from nominal.

As evidenced in **Table 1**, the nearby mobile phone base stations are inappropriate for co-location due to not being within an appropriate distance to service the Black Spot West Pingelly area.

8.2 Candidates considered

The site selected is deemed to be the most optimal location to achieve the required coverage for the identified Black Spot and requires the installation of a new mobile base station. Alternative candidates were considered in locating on the selected site. This is further outlined in **Table 2** along with the balance of alternative candidates considered as part of the site selection process. **Figure 2** provides a map of the non-colocation candidates considered for the proposed facility.

Table 2: Summary of non-colocation candidates considered

Candidate	Location	Proposal	Zoning	Description
Candidate A	143 Ivanhoe Road, West Pingelly, WA 6308	New 60m tower	Rural Agriculture	Could not obtain tenure
Candidate B	143 Ivanhoe Road, West Pingelly, WA 6308	New 60m tower	Rural Agriculture	Could not obtain tenure
Candidate C	Lot 6203 On Deposited Plan 255492	New 60m tower	Rural Agriculture	Could not obtain tenure
Candidate D	202 Ivanhoe Road, West Pingelly, WA 6308	ew 60m tower	Rural Agriculture	Could not obtain tenure

Candidate E	3724 North Wandering Road, West Pingelly, WA 6308	New 60m tower	Rural Agriculture	Planning approval was received 13 December 2019 (reference: ADM299/A820/OPA19352)
Candidate F	167 Page Road, West Pingelly, WA 6308	New 60m tower	Rural Agriculture	Subject site

Figure 2: Location of non-colocation candidates *Source: Google Earth*

8.3 Nominated Candidate

A preferred nominated candidate was selected for the proposed facility based on the radiofrequency objectives, property tenure, planning and environmental issues, potential community sensitive uses and engineering criteria as noted above. For this project, co-location on an existing telecommunications facility is not possible and a new macro tower is considered suitable given:

- the site is technically feasible and can achieve Telstra's coverage and capacity objectives by installing the new mobile base station;

- the site will provide improved coverage to the West Pingelly area, which provides an important first response tool in emergency situations and can assist with agricultural production;
- the proposed location is situated on freehold land;
- the proposed facility maintains what is considered to be appropriate separation from sensitive land uses;
- the facility will not alter the land use and will instead support any future university development;
- the site is not located within a culturally significant area;
- the site is appropriately serviced and has access to the electricity supply network and existing transport network;
- the site will not require the clearing of any vegetation;
- the costs associated with delivering the site and constructing the facility are considered by Telstra to be reasonable.

As stated above, the site selection process carefully considered environmental and visual constraints, existing and future land use characteristics, the orderly planning of the area and the design of the facility. On balance, it is considered that the location and height of the facility ensure optimal service provision to the area whilst minimising any perceived impacts. The proposed Telstra site has been sited and designed to minimise any adverse impact on the amenity of the surrounding locality. The site is located on an existing cleared lease area away from sensitive sites such as schools and child care centres and is not within an identified aboriginal heritage area.

As a result of the aforementioned points it is considered that the siting and design effectively responds to the landscape setting in the area.

9.0 SUBJECT SITE AND SURROUNDS

9.1 Site details

Site Details	
Site address	167 Page Road, West Pingelly
Real property description	Lot 3 on Diagram 17175 and Lot 4 on Diagram 17175 (access only)
Coordinates	-32.490570°, 116.979010°
Site area	6,341,086m²
Registered owner	The University of Western Australia
Existing land use	Rural residential / agricultural
Vegetation	The subject site is clear of vegetation
Topography	The proposal area is relatively flat
Services	As yet unconfirmed. This is subject to design from Western Power

Figure 3: Proposed Telstra Site – 3724 North Wandering Road, West Pingelly *Source: Google Earth*

9.2 Surrounding area

The proposed facility is located within West Pingelly, approximately 117 kilometres south west of Perth. The subject property is situated off Page Road. The entrance to the property is taken directly from Page Road. The surrounding properties in the area are predominantly large rural properties with pockets of vegetated spaces. The closest residences not on the subject site being located approximately 2km to the north east of the subject site and 3km north.

Table 2: Summary of land bordering subject site (*Source: Visionstream, 2020*)

North	The northern edge of the property borders two (2) rural farmland properties with pockets of mature vegetation and dams.
East	The eastern edge of the property borders five (5) rural properties. Rural farmland properties with pockets of vegetation, outhouses, dams and one possible residential dwelling.
South	The southern edge of the property borders two (2) rural properties. Rural farmland properties with scattered vegetation, dams and one residential dwelling to the south west.
West	The western side of the property borders one rural property. The rural farmland includes scattered vegetation, vegetation pockets and dams.

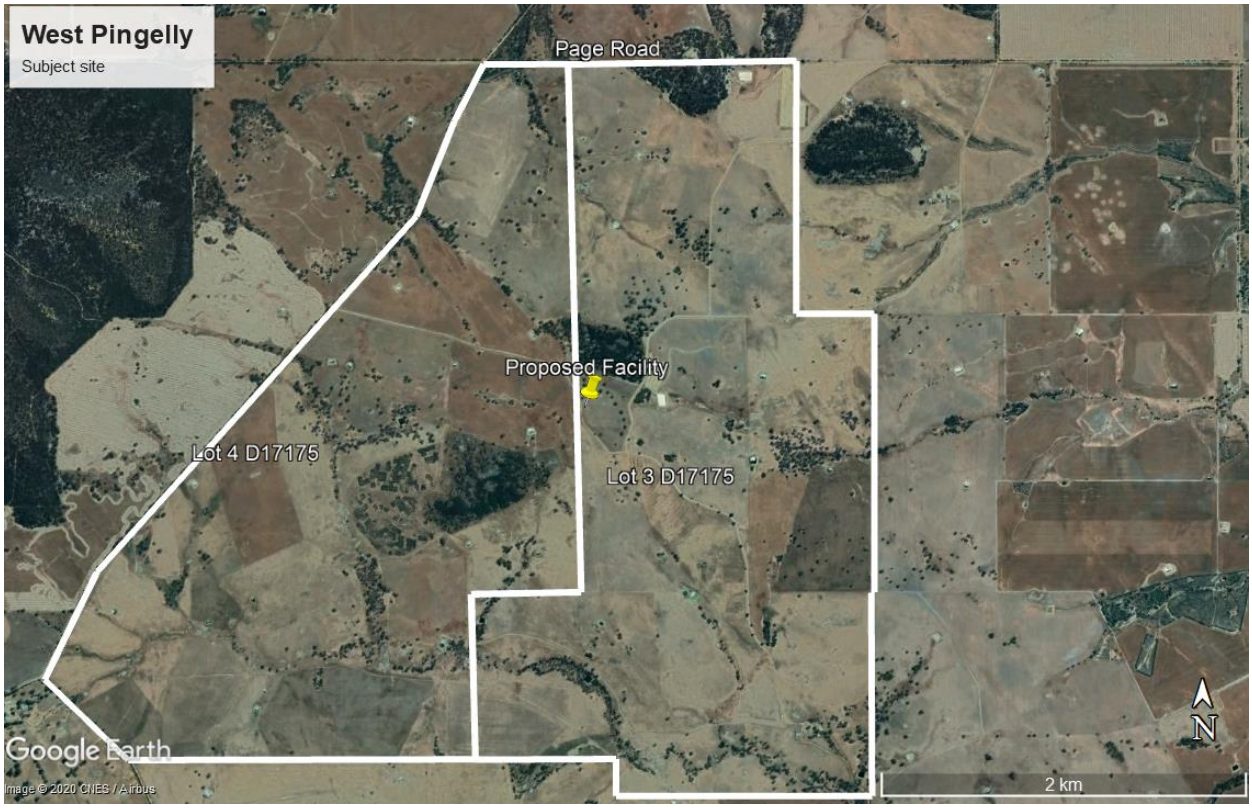


Figure 3: Aerial view of subject site and surrounds *Source: Visionstream, 2020*

The surrounding area can be described as being predominantly rural with pockets of vegetation or scattered vegetation, several dams and farm outhouses. The below figures show the surrounding areas from the proposed tower's location. **Figure 4** to **Figure 7** show the area to be rural with no residences within view from ground level.

Figure 4 View north of proposed facility *Source: Visionstream, 2020*

Figure 5: View east of proposed facility *Source: Visionstream, 2020*

Figure 6: View south of proposed facility
Source: Visionstream, 2020

Figure 7: View west of proposed facility
Source: Visionstream, 2020

From ground level, views will be limited to the existing cleared land and pockets of vegetation in the surrounding area.

10.0 PROPOSAL DETAILS

The proposal is necessary to provide improved 4G telecommunications services within the West Pingelly area and surrounding localities. The proposal is a part of Round 4 of the Federal Government's Mobile Blackspot Program.

10.1 Facility and Equipment Overview

The proposed telecommunication installation requires the following works:

- installation of one (1) 60m high lattice (overall height 62.4m to top of antennae);
- installation of one (1) triangular headframe;
- installation of six (6) new panel antennas;
- installation of one (1) GPS antenna;
- installing one (1) microwave link dish;
- installation of one (1) equipment shelter at the base of the lattice tower;
- installation of associated ancillary cabling and equipment on the tower and within the equipment shelter

The proposed installation will be an unpainted/untreated galvanized grey in colour. This is considered appropriate given the low level of visual impact from the proposed facility. While green-coloured facilities can be a better option in some circumstances, the proposed facility will not have a vegetated backdrop to blend into and so a green pole will be more noticeable against the sky. The proposed galvanized grey facility will blend better into a variety of skybackdrop. Galvanised facilities also tend to weather over time, creating a low reflective facility that matches the tin and timber style of rural Australia.

The proposal is demonstrated through the proposal plans, attached in **Appendix A**.

10.2 Access, traffic and and parking

Access to the facility will be via an internal access track that comes off Walwalling Road with ample parking on site (**Figure 8** and **Figure 9**). All vehicles will be able to use the access straight off Page road.

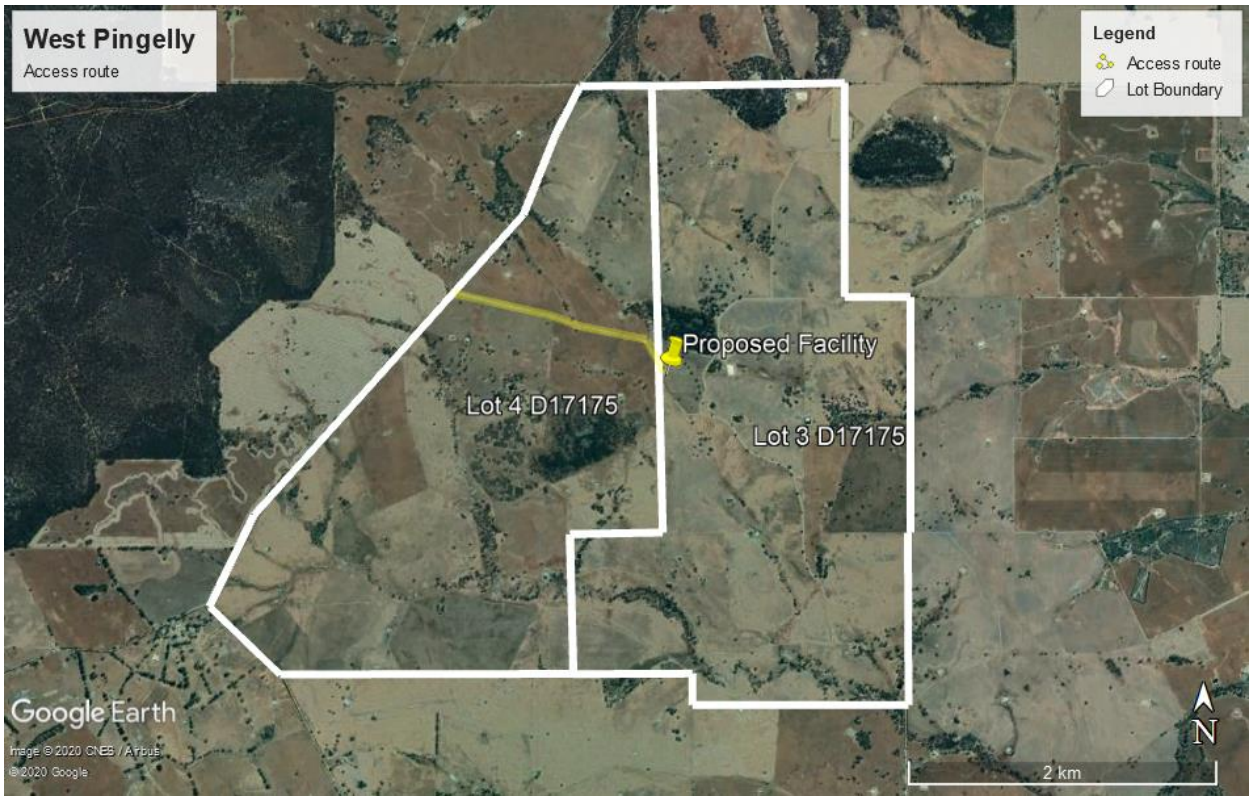


Figure 8: Proposed access route through Lot 4 D17175 to the subject site *Source: Visionstream, 2020*

Figure 9: View of subject site from existing internal access track*: Visionstream, 2020*

Mobile phone base stations require only infrequent maintenance visits (i.e. only two (2) to four (4) times per year). Furthermore, the site will operate on a continually unmanned basis. As such, the proposal will not be a significant generator of vehicular and/or pedestrian traffic.

The existing access will provide appropriate access to the site for the infrequent maintenance inspections. Furthermore, dedicated parking spaces are not considered necessary for the site given the very low traffic generation of the site and the unmanned nature of the site.

During the construction phase various vehicles will be used to deliver equipment and construct the Telstra Mobile Base Station Facility. Any traffic impacts associated with construction and establishment will be of a short-term duration (i.e. approximately five weeks over non-consecutive periods) and are not anticipated to adversely impact on the surrounding road network.

Traffic from this construction would only occur from the hours of 7am to 6pm. If a road closure is required for the erection and installation of equipment, the appropriate approvals will be obtained from the Department of Transport (DOT).

10.3 Utilities

The proposal will connect to the existing power supply on the subject property. The power supply route is indicatively shown in the proposed plans (**Appendix A**) and involves an extension of 2km.

The unmanned nature of the proposed mobile base station removes the need for connection to water or sewer services.

Furthermore, the proposal incorporates very minimal hard surfaces and therefore will generate insignificant stormwater runoff from the site. As such, the proposal does not require connection to the stormwater network.

10.4 Construction schedule

The construction of the mobile base station will take approximately five to six weeks over non-consecutive periods, subject to weather.

The construction of the proposed mobile phone base station primarily consists of the following processes:

- Site preparation and foundation earthworks – Including site clearing and access track preparation
- Tower foundation installation – Concreting of foundations and installation of underground conduits.
- Tower assembly including head frame and equipment shelter – Crane on site for duration of tower assembly
- Installation of new equipment using an EWP and laying of cabling – reflective of the scope of works outlined within this Development Application; and
- Network Integration – Ensuring that the mobile phone base station can connect with both end users and other sites within the Telstra network.
- Noise and vibration emissions associated with the Telstra Mobile Base Station Facility will be limited to the construction phase. Noise generated during the construction phase will be of short duration and will be in accordance with the standards outlined in the Environmental Protection (Noise) Regulations 1997. Construction works will only occur between the hours of 7am and 6pm.

No road closures will be required for the erection and installation of equipment, as all construction equipment can be set-up on the subject property. A mobile generator may be temporarily required until the external power authority has connected the site to mains power.

10.5 Acoustic

Noise and vibration emissions associated with the proposed facility would be limited to the construction/demolition phase outlined above. The works are to be concluded in a

timely manner with construction occurring over a period of 4 weeks, so that residents and visitors to West Pingelly should not be inconvenienced in the long term.

During normal operation the noise emanating from the air- conditioning equipment would be similar to those used in domestic situations and will comply with the background noise levels given in *Australian Standard AS 1055*.

11.0 RELEVANT FEDERAL LEGISLATION

The following information provides a summary of the Federal legislation relevant to telecommunications deployment.

As a licensed telecommunications carrier, Telstra must operate under the provisions of the *Telecommunications Act 1997* and the following legislation and industry codes:

- The Telecommunications Code of Practice 2018;
- The Telecommunications (Low-impact Facilities) Determination 2018 (as amended);
- Mobile Phone Base Station Deployment Code; and
- The Environment Protection and Biodiversity Conservation (EPBC) Act 1999

11.1 Telecommunications Act 1997

The *Telecommunications Act 1997* (the Act) came into operation on 1 July 1997. The Act provides a system for regulating telecommunications and the activities of carriers and service providers. The aim of the *Telecommunications Act 1997* is to provide a regulatory framework that promotes:

- The long-term interests of end users of carriage services or of services provided by means of carriage services; and
- The efficiency and international competitiveness of the Australian Telecommunications Industry.

Under the *Act*, telecommunications carriers are no longer exempt from State and Territory planning laws except in three limited instances:

1. There are exemptions for the inspection of land, maintenance of facilities, installation of "low impact facilities", subscriber connections and temporary defense facilities. These exemptions are detailed in the Telecommunications (Low-impact Facilities) Determination 2018 and these exemptions are subject to the Telecommunications Code of Practice 2018;
2. A limited case-by-case appeals process exists to cover the installation of facilities in situations of national significance; and
3. There are some specific powers and immunities from the previous Telecommunications Act 1991.

11.2 Telecommunications Code of Practice 2018

Noise and vibration emissions associated with the proposed facility would be limited to the construction/demolition phase outlined above. The works are to be concluded in a timely manner, so, the residents and visitors to West Pingelly should not be inconvenienced in the long term.

The Telecommunications Code of Practice 2018 (The Code) authorizes a carrier to enter land, inspect land and install and maintain a facility. The Code emphasizes "best practice' for the installation of facilities, compliance with industry standards and minimization of adverse impacts, particularly in terms of degradation of the environment and visual impact. The proposal is considered to comply with "best practice" given the proposal will:

- provide improved telecommunications and wireless internet coverage in the West Pingelly area;
- be located on a non-residential site within the local area, which maximizes separation to residential and other sensitive uses; and
- Comprises the smallest configuration possible for the site to reduce the visual impact of the proposal, while providing appropriate coverage to the surrounding area.

11.3 Telecommunications (Low-impact Facilities) Determination 2018

The Telecommunications (Low-impact Facilities) Determination 2018 came into effect in March 2018.

The *Determination* contains a list of Telecommunications Facilities that the Commonwealth will continue to regulate. These are facilities that are essential to maintaining telecommunications networks and are unlikely to cause significant community disruption during their installation or operation. These facilities are therefore considered to be 'Low-impact' and do not require planning approval under State or Territory laws.

The proposed facility at West Pingelly does not fall under the *Determination* and, therefore, requires approval under State planning legislation.

11.4 Communications Alliance Ltd. Industry Code C564: 2018 – Mobile Phone Base Station Deployment

The new Communications Alliance Ltd. *Industry Code C564:2018 – Mobile Phone Base Station Deployment* (referred to as the Deployment Code), replaced the 2011 version of the Deployment Code, which in turn replaced the Australian Communications Industry Forum (ACIF) '*Industry Code - Deployment of Mobile Phone Network Infrastructure'* (more commonly referred to as the ACIF Code) in July 2012.

Similar to the previous ACIF Code, the Deployment Code does not change the existing regulatory regime for telecommunications at Local, State or Federal levels. However, it supplements the existing obligations on Carriers, particularly in relation to community consultation and the consideration of exposure to radio signals, sometimes known as electromagnetic energy (EME or EMR).

The *Code* imposes mandatory levels of notification and community consultation for sites complying with the *Telecommunications (Low-impact Facilities) Determination 2018*. It identifies varying levels of notification and/or consultation depending on the type and location of the proposed infrastructure.

The subject proposal, not being designated a 'Low-impact' Facility', is not subject to the notification or consultation requirements associated with the Deployment Code. These processes are handled within the relevant State and Local consent procedures.

Nevertheless, the intent of the *Code* is to ensure Carriers follow a 'precautionary approach' to the siting of infrastructure away from sensitive land uses and this approach has been followed in the selection of this site, as demonstrated in the *Deployment Code* section 4.1 and 4.2 Precautionary Approach Checklists. The checklists will be uploaded to the RFNSA website, reference number 6308011.

Included in these section's Checklist is a statement of how the public's exposure to EME from the site has been minimised. All emissions from the site will be well within the requirements of the relevant Australian Standard. Details of this standard are contained in the following section.

This site has been selected and designed to comply with the requirements of the *Deployment Code* in so much as the precautionary approach has been adhered to and, as a result, the best design solution has been achieved.

11.5 Environment Protection and Biodiversity Conservation Act 1999

The *Environment Protection Biodiversity Conservation Act 1999* (the EPBC Act) controls matters of national environmental significance. The key objectives of the EPBC Act include:

a. "To provide for the protection of the environment, especially those aspects of the environment that are matters of national environmental significance; and
b. To promote ecologically sustainable development through the conservation and ecologically sustainable use of natural resources; and
c. To promote the conservation of biodiversity; and
d. To provide for the protection and conservation of heritage…"

Amongst other aspects, the EPBC Act relates to matters of national environmental significance, including world heritage areas, natural heritage places (including declared

RAMSAR wetland areas), listed threatened species in communities, listed migratory species, protection of environment on nuclear actions, and environment matters.

The proposal is **not** identified as having a significant impact on any of the above matters of national environmental significance. Therefore, the proposal will not require referral to the Government Minister for the Environment for assessment.

11.6 Native Title Act 1993

The *Native Title Act 1993* (the **Native Title Act**) was given effect on 1 January 1994 and recognises the rights and interests of Aboriginal and Torres Strait Islander people in land and waters according to their traditional laws and customs. The Native Title Act also sets out processes through which development as a Future Act can proceed with regards to the rights and interests of Traditional Owners.

The subject site is identified on a site that is the subject of a single Native Title claim (WC1998/058) that has been accepted for registration (**Figure 10**), with two (2) other claims not being accepted for registration.

Under section 23B of the Native Title Act, native title can be extinguished by previous exclusive possession, where that previous exclusive possession includes a grant or vesting that was granted or created on or before 23 December 1996. The current land title shows the land has been freehold since at least 9 June 1971 . Accordingly, Native Title is considered to be extinguished over the subject site and the development can proceed without requiring Native Title notification.

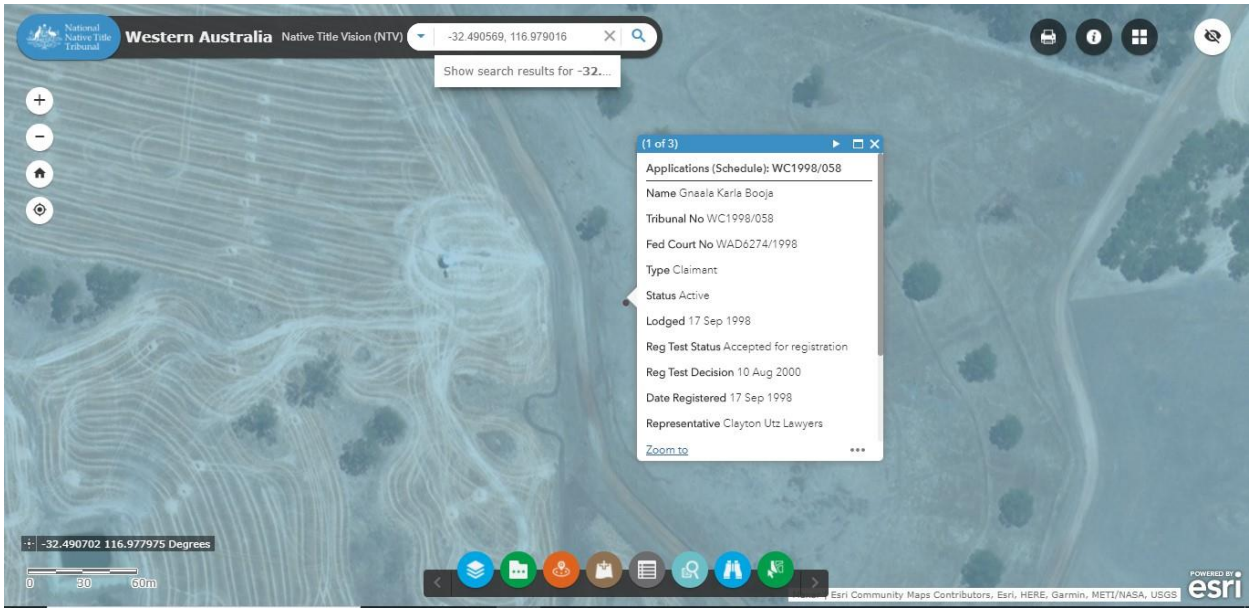


Figure 10: Excerpt of Native Title Tribunal Vision showing relevant Native Title dealings in area surrounding subject site *Source: Native Title Tribunal Vision, 2020*

12.0 STATE REGULATORY FRAMEWORK

The following information provides a summary of the State legislation/guidelines relevant to telecommunications development proposals.

12.1 Aboriginal Heritage Act 1972

The Aboriginal Heritage Act 1972 (the **Aboriginal Heritage Act**) is the main piece of legislation within Western Australia with regards to Aboriginal cultural heritage. The Aboriginal Heritage Act sets out the requirements for ensuring that Aboriginal heritage is appropriately identified and protected.

Under the Aboriginal Heritage Act the Western Australian must maintain an Aboriginal Sites Register where specific places of importance and significance to Aboriginal people are recorded and protected by Law.

Section 5 of the Aboriginal Heritage Act defines an Aboriginal site as;

a) Any place of importance or significance where people of Aboriginal descent have, or appear to have, left any object, natural or artificial, used for, or made or adapted for use for, any purpose connected with the traditional cultural life of Aboriginal people, past or present;

b) Any sacred, ritual or ceremonial site, which is of importance and special significance to people of Aboriginal descent;

c) Any place which, in the opinion of the committee, is or was associated with Aboriginal people and which is of historical, anthropological, archaeological or ethnographical interest and should be preserved because of its importance and significance to the cultural heritage of the State; and

d) Any place where objects to which this Act applies are traditionally stored, or to which, under the provisions of the Act, such objects have been taken or removed.

As a result of this definition a breach of Section 17 of the Aboriginal Heritage Act occurs when a person excavates, destroys, damages, conceals or in any way alters any Aboriginal site; or who deals with in a manner not sanctioned by relevant custom, or assumes the possession, custody or control of, any object on or under an Aboriginal site, commits an offence unless he is acting with the authorization of the Registrar under Section 16 or the consent of the Minister under Section 18.

Regulation 10 Consent can be granted by authorization by the Registrar or Minister under the AHA, usually granted for non-deleterious, site-preservation land uses (rehabilitation) or in emergencies. Aboriginal sites broadly fall into two categories, archaeological and anthropological or ethnographic sites. Archaeological sites are generally where material evidence of Aboriginal people's traditional cultural life is found. Sites of this type consist of artefact scatters, stone structures, marked trees, fish traps, middens, cave or rock paintings/engravings, arranged stones and burial sites. Most

archaeological sites are prehistoric, but some are also more contemporary in nature and are where Aboriginal cultural material objects from the post settlement period are found.

Visionstream has conducted an assessment of the area against the Aboriginal Heritage Due Diligence guidelines (the **Guidelines)**, as published originally by the Department of Aboriginal Affairs & Department of the Premier and Cabinet. This assessment considered that the Aboriginal Heritage Inquiry System did not show any aboriginal heritage matters in the area, the previous disturbance of the land, the current use of the land, the proximity of potential risk factors including freshwater, elevated lookouts, exposed stone or rock and other relevant factors.

This assessment has determined the area is not of high or medium risk for aboriginal heritage and so the works may proceed without further

This Aboriginal Heritage Due Diligence has been undertaken by Visionstream on behalf of Telstra for a proposed Telecommunications Facility at 167 Page Road, West Pingelly, WA 6308 (the subject site).

The area where works (including ground disturbance) are proposed (the **works area**) is a 192m^2 (16m x 12m) area of land located directly off Page Road. Given the characteristics of the proposed works it is unlikely this entire works area will undergo ground disturbance. The existing use in the area is for rural farming land.

The works area is located in a completely cleared area immediately adjacent to Page road. The area is relatively flat with a pocket of vegetation located to the north of the subject site (**Figure 11.)**

Figure 11: Surrounding area *Source: Google Earth*

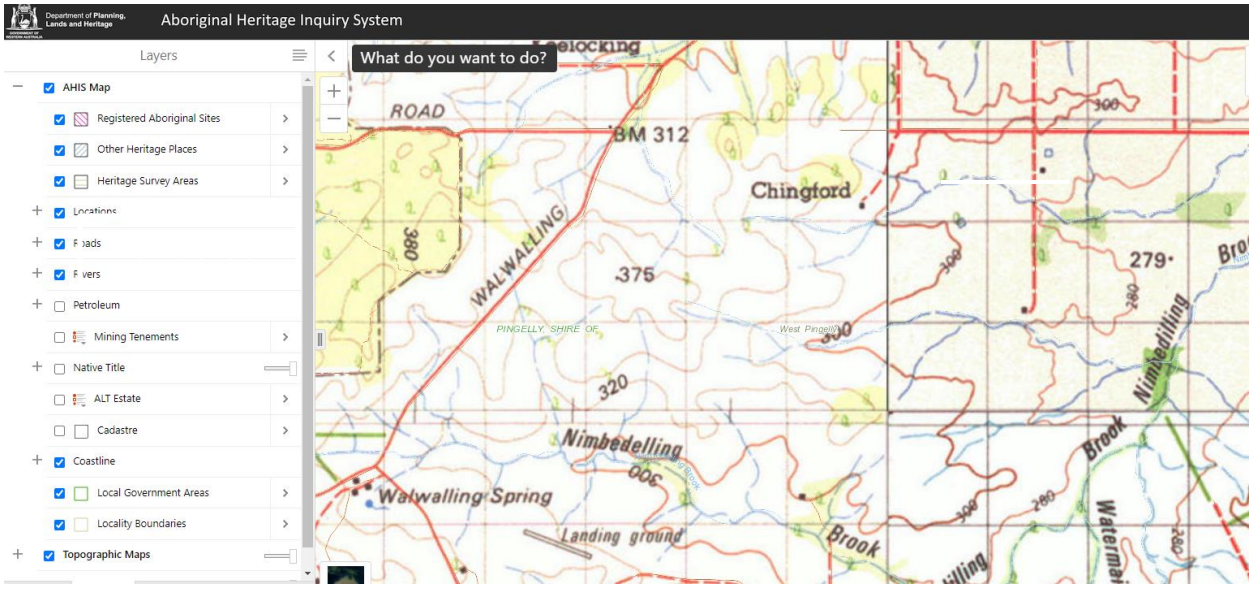


Figure 12: No Aboriginal sites identified

Source: https://espatial.dplh.wa.gov.au/AHIS/index.html?viewer=AHIS

12.2 Planning and Development Act 2005

The Minister of Planning and Infrastructure has ultimate authority for town planning in Western Australia. Development within Western Australia is controlled by the *Planning and Development Act 2005* through the application of environmental planning instruments. Under the *Planning and Development Act 2005*, the Western Australian Planning Commission (**WAPC**) is the responsible authority for land use planning and development matters and this report seeks to demonstrate compliance with the WAPC and other items of relevant legislation which pertain to the subject application.

12.3 State Planning Policy No. 5.2 – Telecommunications Infrastructure (WAPC)

State Planning Policy 5.2: Telecommunications Infrastructure Policy aims to aims to balance the need for effective telecommunications services and effective roll-out of networks, with the community interest in protecting the visual character of local areas. The SPP applies for above and below telecommunications infrastructure, other than those exempted under the Commonwealth Telecommunications Act 1997.

Under section 5.1.1 of the State Planning Policy 5.2: Telecommunications Infrastructure Policy the West Australian Planning Commission provides a set of measures in assessing the visual impact of a proposed telecommunications facility.

An assessment of these guidelines below has found that the proposed Telstra Mobile Phone Base Station is compliant with the intent and requirements of the State Planning Policy 5.2: Telecommunication Infrastructure Policy.

Table 4: Assessment against State Planning Policy 5.2, Policy Measure 5.1.1

Measures	Comments	Complies
Be located where it will not be prominently visible from significant viewing locations such as scenic routes, lookouts and recreation sites;	The proposed 60m lattice structure has been sited to maintain the primary use of the land whilst considering the impact to the surrounding locality. The site carefully considered environmental and visual constraints, existing and future land use characteristics, the orderly planning of the area and the design of the facility. On balance, it is considered that the location and height of the facility ensure optimal service provision to the area whilst minimising any perceived impacts.	✓
Be located to avoid detracting from a significant view of a heritage item or place, a landmark, a streetscape, vista or a panorama, whether viewed from public or private land;	Telstra has selected a site and location that seeks to minimise any perceived negative impacts on the visual amenity of the area, particularly when viewed from residential areas. The lattice tower will remain unpainted (dull grey in colour) which blends in with the sky. Furthermore, the proposed subject site maintains suitable separation distance from surrounding residential areas.	✓
Not be located on sites where environmental, cultural heritage, social and visual landscape values may be compromised;	The proposed facility will not require the removal of any trees The site is not identified as containing matters of environmental or cultural heritage importance. The visual impact of the facility is mitigated to an appropriate level by both the significant distance to rural residences in the area, and the existing mature vegetation between it and surrounding residences.	✓
Display design features, including scale, materials, external colours and finishes that are sympathetic to the surrounding landscape;	The proposed 60m lattice tower structure has been sited to maintain the primary use of the land whilst considering the impact to the surrounding locality. The site carefully considered environmental and visual constraints, existing and future land use characteristics, the orderly planning of the area and the design of the facility. On balance, it is considered that the location and height of the facility ensure optimal service provision to the area whilst minimising any perceived impacts.	✓
Be located where it will facilitate continuous network coverage and/or improved telecommunications services to the community;	The Federal Government under the Mobile Black Spot Program has identified a need for wireless services in the West Pingelly locality. The proposed location at the subject site will provide improved and continuous coverage to the locality and will also provide other	✓

	carriers with the opportunity to co-locate their infrastructure in the future.	
Telecommunications infrastructure should be co-located and whenever possible: Cables and lines should be located within an existing underground conduit or duct; and Overhead lines and towers should be co-located with existing infrastructure and/or within an existing infrastructure corridor and/or mounted on existing or proposed buildings.	As per Section 7 of this report, all opportunities for co-location on existing structures without any changes to their design were investigated. All possible locations are too far from the subject area to meet the radio frequency objectives of the proposal. The proposed Telstra lattice tower will also provide other carriers with the opportunity to co-locate their infrastructure in the future. Overhead lines are not applicable to this application.	✓

Overall the proposed development application is consistent with the intent and requirements of the SPP 5.2.

12.4 Statement of Planning Policy No. 5.2 – Telecommunications Infrastructures (WAPC)

With the gazettal of State Planning Policy 5.2, the WAPC *Statement of Planning Policy No. 5.2 – Telecommunications Infrastructure* (Statement 5.2) has been repealed. However, it is recognised that the Statement 5.2 provides a more holistic set of criteria than SPP 5.2 which largely focuses on visual impacts. Given this, an assessment of the guiding principles of Statement 5.2 is provided in **Table 5**.

Table 5 Assessment against Statement 5.2 Guiding Principles

Principles	Comments	Complies
There should be a co-ordinated approach to the planning and development of telecommunications infrastructure, although changes in the location and demand for services require a flexible approach.	Telstra undertakes a carefully co-ordinated and planned approach to the development of their network.	✓
Telecommunications infrastructure should be strategically planned and co-ordinated, similar to planning for other essential	The proposed facility is strategically planned and co-ordinated to ensure that the facility will provide high level coverage to the West Pingelly locality.	✓

infrastructure such as networks and energy supply.		
Telecommunications facilities should be located and designed to meet the communication needs of the community.	The proposed facility is strategically planned and co-ordinated to ensure that the facility will provide high level coverage to the West Pingelly locality.	✓
Telecommunications facilities should be designed and sited to minimise any potential adverse visual impact on the character and amenity of the local environment, in particular, impacts on prominent landscape features, general views in the locality and individual significant views.	The proposed 60m lattice tower structure has been sited to maintain the primary use of the land whilst considering the impact to the surrounding locality. The site carefully considered environmental and visual constraints, existing and future land use characteristics, the orderly planning of the area and the design of the facility. On balance, it is considered that the location and height of the facility ensure optimal service provision to the area whilst minimising any perceived impacts.	✓
Telecommunications facilities should be designed and sited to minimise impacts on areas of natural conservation value and places of heritage significance or where declared rare flora are located.	The proposed telecommunications facility will not require the removal of any trees and is not located within an identified built heritage or cultural heritage area. As a result, the proposed facility will not have any impact on areas of natural conservation values, places of heritage significance or rare fora.	✓
Telecommunications facilities should be designed and sited with specific consideration of water catchment protection requirements and the need to minimise land degradation.	Prior to the commencement of work Telstra will undertake such measures as deemed necessary by Council to effectively protect water catchments within the immediate area.	✓
Telecommunications facilities should be designed and sited to minimise adverse impacts on the visual character and amenity of residential area.	Telstra has selected a site and location that seeks to minimise any perceived negative impacts on the visual amenity of the area, particularly when viewed from residential areas. The lattice will remain unpainted (dull grey in colour) which blends in with the sky. Furthermore, the proposed subject site maintains suitable separation distance from surrounding residential areas.	✓

Telecommunications cables should be placed underground, unless it is impractical to do so and there would be no significant effect on visual amenity or, in the case of regional areas, it can be demonstrated that there are long-term benefits to the community that outweigh the visual impact.	Overhead cabling is not proposed for this site.	✓
Telecommunications cables that are installed overhead with other infrastructure such as electricity cables should be removed and placed underground when it can be demonstrated and agreed by the carrier that it is technically feasible and practical to do so.	This principle does not apply to the subject of this application.	• N/A
Unless it is impractical to do so telecommunications towers should be located within commercial, business, industrial and rural areas and areas outside identified conservation areas.	The proposed site is located in a rural locality predominately used for agricultural uses. The location of the facility is by request of the landowner, ensuring the agricultural use is maintained. Given the rural nature of the land, the proposed facility will be located in the desired zone.	✓
The design and siting of telecommunications towers and ancillary facilities should be integrated with existing buildings and structures, unless it is impractical to do so, in which case they should be sited and designed so as to minimise any adverse impact on the amenity of the surrounding area.	As per Section 7 of this report, all opportunities for co-location on existing structures without any changes to their design were investigated. All possible locations are too far from the subject area to meet the radio frequency objectives of the proposal. The proposed development will minimise amenity impacts due to its location being approximately 2.17km from the nearest dwelling (to the north east of the subject site), and having sparse mature vegetation between it and all surrounding residences.	✓
Co-location of telecommunications	As per Section 7 of this report, all opportunities for co-location on existing	✓

facilities should generally be sought, unless such an arrangement would detract from local amenities or where operation of the facilities would be significantly compromised as a result.	structures without any changes to their design were investigated. All possible locations are too far from the subject area to meet the radio frequency objectives of the proposal.	
Measures such as surface mounting, concealment, colour co-ordination, camouflage and landscaping to screen at least the base of towers and ancillary structures, and to draw attention away from the tower, should be used, where appropriate, to minimise the visual impact of telecommunications facilities.	Telstra has selected a site and location that seeks to minimise any perceived negative impacts on the visual amenity of the area, particularly when viewed from residential areas. The lattice tower will remain unpainted (dull grey in colour) which blends in with the sky. Furthermore, the proposed subject site maintains suitable separation distance from surrounding residential areas.	✓
Design and operation of a telecommunications facility should accord with the licensing requirements of the Australian Communications Authority, with physical isolation and control of public access to emission hazard zones and use of minimum power levels consistent with quality services.	Telecommunications facilities include radio transmitters that radiate electromagnetic energy (EME) into the surrounding area. The levels of these electromagnetic fields must comply with safety limits imposed by the Australian Communications and Media Authority (ACMA, previously ACA). All Telstra installations are designed to operate within these limits.	✓
Construction of a telecommunications facility (including access to a facility) should be undertaken so as to minimise adverse effects on the natural environment and the amenity of users or occupiers of adjacent property and to ensure compliance with relevant health and safety standards.	During construction Telstra contractors will endeavour to minimise the impact of their works on the amenity of nearby residents and on the surrounding environment. As the proposed site is located in a rural area, adverse effects on nearby properties will be minimal. Following construction, maintenance (excluding emergency repair work) activities should not interfere with the amenity of users. All Health and Safety standards will be adhered to.	✓

Overall the proposed development application is consistent with the intent and requirements of the Statement 5.2

13.0 LOCAL REGULATORY FRAMEWORK

The following information provides a summary of the local provisions relevant to telecommunications development proposal.

13.1 Shire of Pingelly Local Planning Scheme No. 3

The *Shire of Pingelly Local Planning Scheme No.3* provides the legal basis for planning in the Shire of Pingelly's local government area.

The proposed site is within the General Agriculture Zone (**Figure 13**), and within a designated bushfire prone area which is further outlined in **section 14.8** of this report.

For the purposes of this proposal the Principal Designated Use of the property is 'Rural'.

The proposed telecommunications facility is identified as "D", where the use is not permitted unless the local government has exercised its discretion by granting planning approval. Nonetheless, the proposal complies with the objectives and general requirements of the General Agricultural Zone, encouraging process and value adding industries and further intensive agriculture through providing a mobile network to connect and support industries and future growth. Ensuring the protection of rural landscapes and the natural environment and maintaining an appropriate distance from any sensitive uses. As the proposal is located within an area not designated to an agricultural use and by request of the landowner, only taking up a small amount of space, there is no adverse impacts to the existing agricultural use of the land, or surrounding uses.

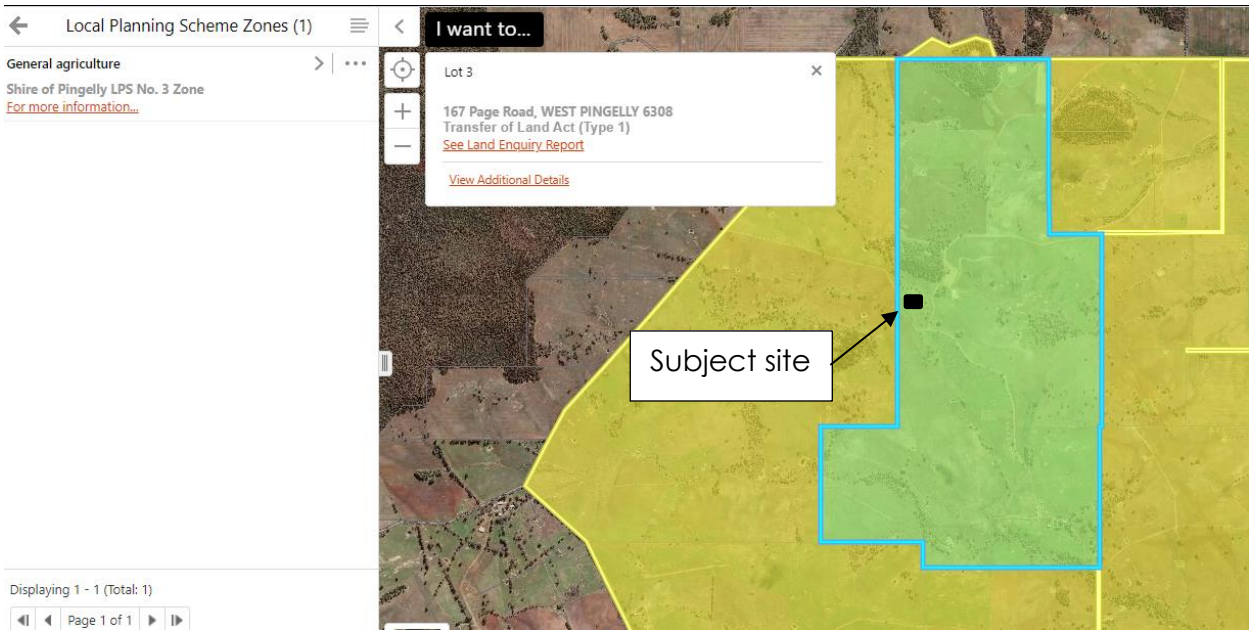


Figure 13: Zoning Map No.3

Source: https://espatial.dplh.wa.gov.au/PlanWA/Index.html?viewer=PlanWA)

Overall the proposed development application is consistent with the intent and requirements of the *Western Australian Planning Commission SPP 5.2* and the *Shire of Pingelly Local Planning Scheme No.3.*

14.0 GENERAL PROVISIONS

This proposal is for a new Telstra Mobile Base Station Facility in the West Pingelly area.

Telstra considers that the proposal is appropriate for the locality given the rural nature of the proposed site and the nature of existing and anticipated uses of the surrounding land.

Environmental considerations such as visual impact, heritage, flora and fauna, traffic, flooding, bushfire, social and economic aspects, health and safety have been discussed within the below sub sections.

14.1 Visual Impacts

The site has been identified as being located within land that is zoned general agricultural. The subject lot is predominately cleared with clustered areas of mature vegetation to the north. The site and the proposed works have been located and designed to take into consideration the aims of the *Shire of Pingelly Local Planning Scheme No.3.*

Telstra has selected a site and location that appropriately minimises any perceived negative impacts on the visual amenity of the area. An assessment of the area has shown that residences and /or farm outhouses in the area are relatively few (**Figure 14**), comprising:

- One residence 3.3km to the north
- One residence/ farm 2.14km to the north east
- One residence/ farm 2.15km to the south east
- One residence 3.4km to the south west
- One residence/ farm 3.4km to the south west
- One residence 2.96km to the north west

Views of the existing facility from these residences are significantly obstructed by the existing mature vegetation surrounding, and further lessened by the large distance between the proposal and each residence.

Figure 14: Aerial photo of subject site and closest residences *Source: Google Earth*

The site selection carefully considered environmental and visual constraints, existing and future land use characteristics, the orderly planning of the area and the design of the facility. On balance, it is considered that the location and height of the facility ensure optimal service provision to the area whilst minimising any perceived visual impact. Moreover, as previously mentioned the site will also provide other carriers with the opportunity to co-locate their infrastructure in the future.

14.2 Heritage

In order to determine any possible natural or cultural values of state or national significance associated with the site a search was conducted through the relevant Heritage Registers.

No Aboriginal or other heritage sites of significance have been identified within the subject land holding or within close proximity (see **section12.1**).

The site is located within Native Title Applications WC1998/058 and WC2003/006 and Native Title Indigenous Land Use Agreement (ILUA) WI2015/005. Visionstream will, where required under Native Title legislation, notify the relevant corporation during Telstra's notification or as otherwise directed by Council.

14.3 Flora and Fauna

In order to determine any possible natural Flora and Fauna significance associated with the site, a search was conducted through the relevant environmental registers. The

Protected Matters Search Tool from the Department of the Environment and Energy which shows matters of national environmental significance or other matters protected by the *Environment Protection and Biodiversity Conservation Act 1999*, found that no significant environmental matter was identified (**Figure 15**) (**Appendix C**).

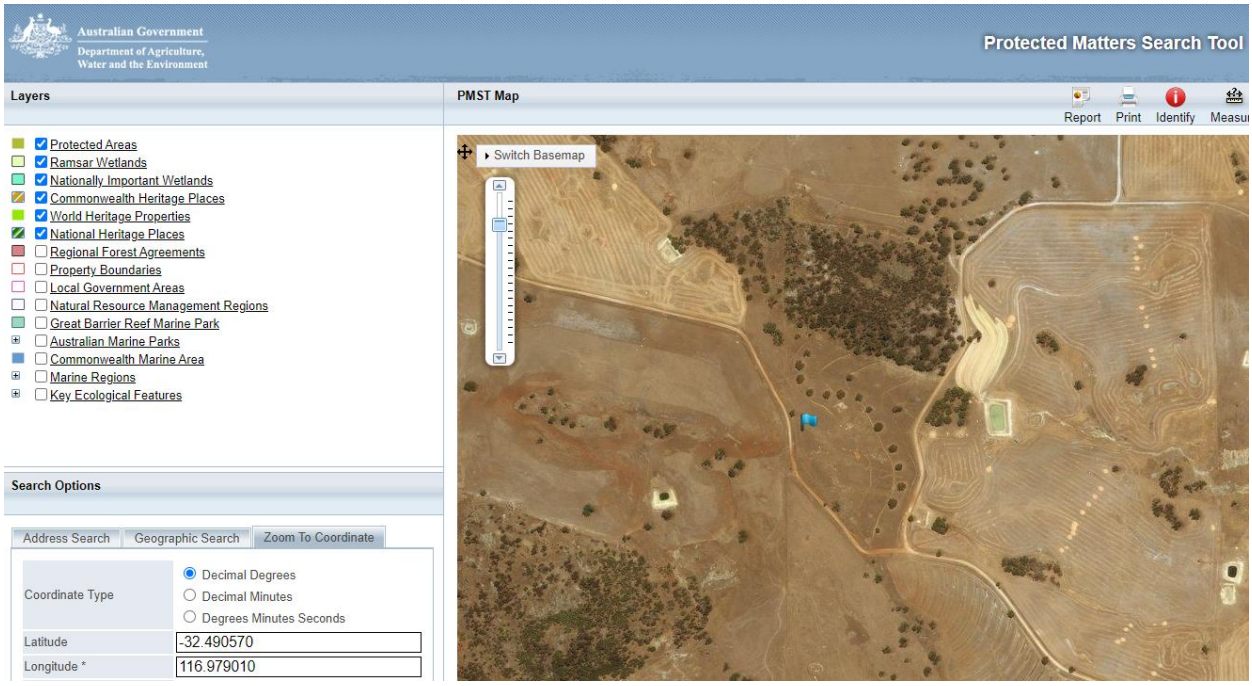


Figure 15: Excerpt from Protected Matters Search Tool Source: Department of Agriculture, Water and the Environment

14.4 Bushfire

The specific site location is not identified as being in a Bush Fire Prone Area by the Fire and Emergency Services Commissioner (**Figure 16**).

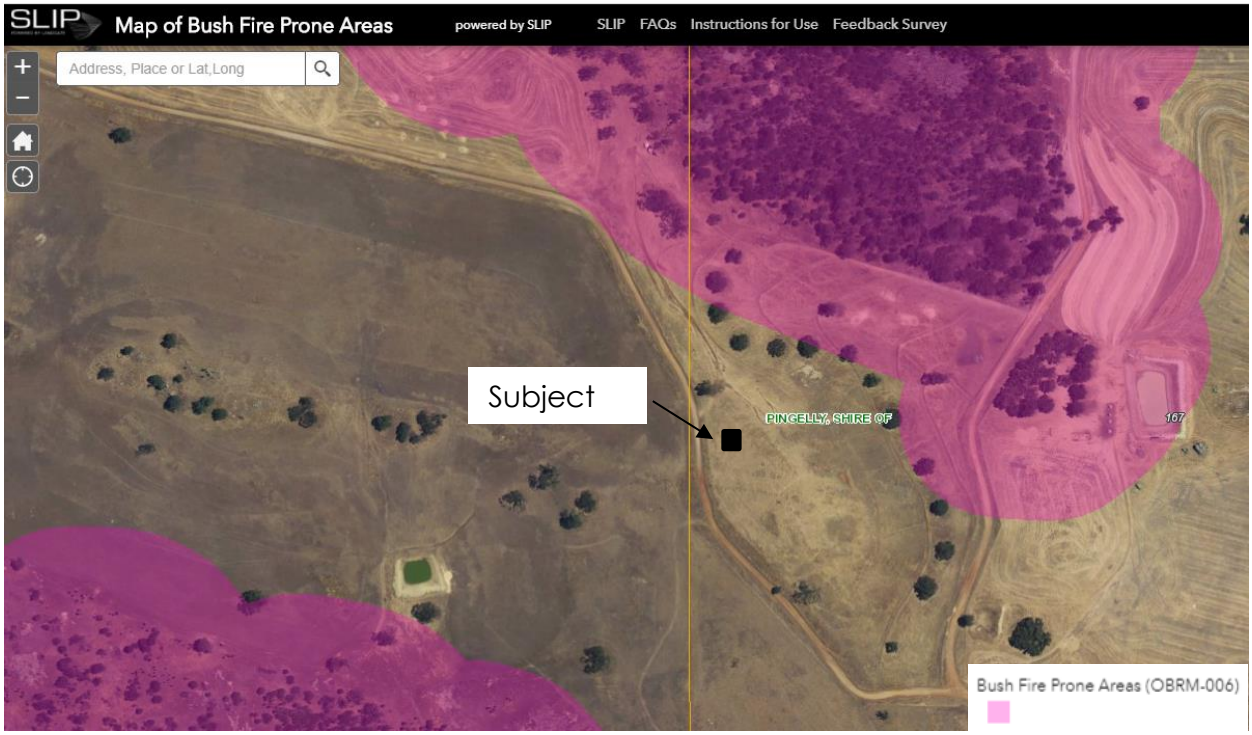


Figure 16 – Bushfire Prone Areas Mapping

Source:
https://maps.slip.wa.gov.au/landgate/bushfireprone/?center=13022786.8429561,-3828291.59547117,102100&scale=10000

Natural disasters, including the continuing threat of bushfires, have served to highlight the critical importance of effective telecommunications. Previous bushfire incident reviews have demonstrated effective telecommunications networks are essential for disaster response management, allowing emergency services providers to be alerted to medical or fire emergencies.

The subject lot is predominately cleared and not adjoining large vegetated areas which could cause high bushfire risk. Additionally, the proposed facility will operate on an unmanned basis acquiring only 2-4 maintenance visits per year. As a result, the proposed works do not increase the extent of bushfire risk currently affecting the land.

14.5 Health and Safety

Telstra acknowledges some people are genuinely concerned about the possible health effects of electromagnetic energy (EME) from mobile phone base stations and is committed to addressing these concerns responsibly.

Telstra, along with the other mobile phone carriers, must strictly adhere to Commonwealth Legislation and regulations regarding mobile phone facilities and equipment administered by the Australian Communications and Media Authority (ACMA).

In 2003 the ACMA adopted a technical standard for continuous exposure of the general public to RF EME from mobile base stations. The standard, known as the *Radiocommunications (Electromagnetic Radiation – Human Exposure) Standard 2003*, was prepared by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) and is the same as that recommended by ICNIRP (International Commission for Non- Ionising Radiation Protection), an agency associated with the World Health Organisation (WHO). Mobile carriers must comply with the Australian Standard on exposure to EME set by the ACMA.

The Standard operates by placing a limit on the strength of the signal (or RF EME) that Telstra can transmit to and from any network base station. The general public health standard is not based on distance limitations or the creation of "buffer zones". The environmental standard restricts the signal strength to a level low enough to protect everyone at all times. It has a significant safety margin, or precautionary approach, built into it.

In order to demonstrate compliance with the standard, the ARPANSA created a prediction report using a standard methodology to analyse the maximum potential impact of any new telecommunications facility. Carriers are obliged to undertake this analysis for each new facility and make it publicly available.

Importantly, the ARPANSA-created compliance report demonstrates the maximum signal strength of a proposed facility, assuming that it is handling the maximum number of users 24-hours a day.

In this way, the ARPANSA requires network carriers to demonstrate the greatest possible impact that a new telecommunications facility could have on the environment to give the community greater peace of mind. In reality base stations are designed to operate at the lowest possible power level to accommodate only the number of customers using the facility at any one time. This design function is called "adaptive power control" and ensures that the base station operates at minimum, not maximum, power levels at all times.

Using the ARPANSA standard methodology, Telstra is required to complete and make available an EME report which predicts the maximum environmental EME level the facility will emit. Telstra has completed this EME report and it shows that the maximum level of EME emitted by the proposed facility is 0.15% (1/66666) (**Appendix** D). To better understand the information within this EME report, an ARPANSA published *A Guide to the Environmental EME Report* (**Appendix E**).

Telstra relies on the expert advice of national and international health authorities such as the ARPANSA and the WHO for overall assessments of health and safety impacts.

The WHO advises that all expert reviews on the health effects of exposure to radiofrequency fields have concluded that no adverse health effects have been established from exposure to radiofrequency fields at levels below the international safety guidelines that have been adopted in Australia.

Telstra has strict procedures in place to ensure its mobile phones and base stations comply with these guidelines. Compliance with all applicable EME standards is part of Telstra's responsible approach to EME and mobile phone technology.

14.6 Social and Economic Impact

Reliable mobile phone coverage is important to ensure the economic growth of communities. It is not expected to have any adverse social or economic impacts as a result of the development. Indeed, it is anticipated that there would be positive impacts because of the mobile telephone coverage, and the proposed facility could also be utilised in the event of an emergency with reference to mobile phone and internet use.

The proposed development is essential to enable Carriers to remain competitive and increase the choice of mobile telephone services to consumers. Additional competition in the market will have economic benefits for individual consumers and the community as a whole. The development is consistent, with the objectives of the *Telecommunications Act 1997*, namely:

- To promote "the efficiency and international competitiveness of the Australian telecommunications industry" (s.3 (1)); and
- To ensure that telecommunications services "*are supplied as efficiently and economically as practicable*" (s.3 (2) (a) (ii).

15.0 CONCLUSION

This application is a direct result of the community's requests for reliable telecommunications to be provided to the West Pingelly area. There is strong State policy support for telecommunications facilities if, when balancing improved telecommunications services with environmental impacts; including for example, visual impact and flood or fire hazard, a particular proposal provides a net community benefit.

The proposed works provide the community with reliable 4G access which in turn supports the various rural, residential and tourist industries in the region and form part of a wider plan to ensure reliable and accessible coverage during emergency situations such as in the event of bush fires.

The proposed telecommunications facility will form an integral component in Telstra's national 4GX network. This 4G service brings higher speeds and extra 4G coverage to a range of communities across the nation. 4GX will include services provided over Telstra's new 700MHz spectrum and deliver higher typical mobile speeds on compatible devices, allowing more Australians to experience more reliable connections and ultra-fast mobile internet.

Telstra has undertaken an assessment of the relevant matters as required by the *Telecommunications Act 1997*, State Legislation and the *Shire of Pingelly Local Planning Scheme No. 3*. The proposal is considered appropriate in light of the relevant legislative, environmental, technical, radio coverage and public safety requirements.

The proposed development is considered appropriate for the subject site for the following reasons:

- The proposed works are located as part of the Mobile Blackspot Program to provide reliable mobile phone service to the West Pingelly area. It will deliver mobile coverage to regional and remote communities who, for the first time, will be able to access fast mobile voice and data services. The improved coverage is increasing access to new technologies for key regional sectors and communities, which rely on a fast, reliable and affordable mobile network.
- Public views to the existing facility are adequately contained due to the presence of mature vegetation and the undulating topography, and appropriate distances to surrounding residents.
- The proposal is consistent with the relevant provisions of the Shire of Pingelly Local Planning Scheme No. 3.
- The proposal will improve Telstra 4GX communications services to the area, including voice calls, video calling and Wireless Broadband – a high speed wireless internet service via the 3G/4G phone network.
- The proposal does not require any vegetation clearing.
- The proposal will not affect the future use of the site, but will instead support any future university development on the site.
- The proposed facility is appropriately located in a rural area, providing good separation from residential properties and roads.
- Emissions from the proposed facility will be significantly below the Australian Radiation Protection and Nuclear Safety Agency standards adopted by the Australian Communications and Media Authority.

The assessment of the proposal demonstrates that the proposal represents sound and proper town planning and it is respectively requested that consent is granted for this development application.

Should Council have any further queries regarding the subject application, please do not hesitate to contact the nominated representative outlined within this document.

12th October 2020

Shire of Pingelly

17 Queen Street

PINGELLY WA 6308

Dear [redacted]

Relocation of Proposed Communications Facility – Lots 3 & 4 – 167 Page Road

On behalf of [redacted] and [redacted] ([redacted]) [redacted]), we would like to express our deepest disappointment and concern with the location of this telecommunication proposal.

We understand, from previous conversations and discussions with Telstra technicians, this proposal will be receiving direct funding from the Mobile Black Spot Program. We understand this funding is to facilitate in eliminating mobile black spots, defined as **expanding and improving mobile coverage for regional and remote Australia**. This location is clearly not within a 'mobile black spot' zone. The current tower is only 4 to 5 kilometres east of this proposed location, therefore another tower is not warranted in this area.

In addition, if the proposed tower was erected and utilised, the intersecting arcs of both towers will decrease coverage and it would be questionable if this would improve anybody's mobile coverage.

We believe the telecommunications tower would be better located further west to an area in need of improved coverage. For instance, Kubbine Road, York-Williams Road or Pumphreys Bridge, where there are vast areas of little or limited mobile coverage.

We look forward to hearing the reasoning for such a proposal considering the lack of need and wrong use of funding.

Regards

[redacted]

TN

CONSTRUCTION ACCESS
VIA WALWALLING RD

EXISTING ACCESS TRACK
OFF WALWALLING ROAD

LOT 3 ON
DIAGRAM 17175

LOT 4 ON
DIAGRAM 17175

EXISTING TREES

PROPOSED TELSTRA SITE. REFER TO
SHEET S1-1 FOR SITE LAYOUT DETAILS.

PROPOSED POWER LINE ROUTE
TO BE CONFIRMED BY WP

2.5 km

2.0km

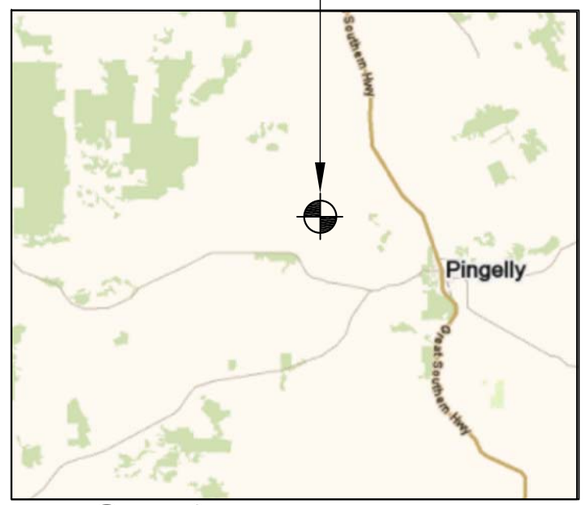
EXISTING WESTERN POWER
POLE # 558028

EXISTING AIRSTRIP

SITE ACCESS
SCALE 1:2000

20m 0 20m 40m 60m 80m 100m SCALE 1:2000

Appendix A



LOCALITY PLAN
NOT TO SCALE

UNAPPROVED DRAWING

COMPLIANCE BOX
COMPLETED AS PER DESIGN ☐
ALTERATIONS IN RED ☐
NAME (PRINT)
SIGNATURE DATE

PRELIMINARY

TO BE READ IN CONJUNCTION WITH SHEETS S1-1, S1-2, S3 & S3-1.

PROPERTY DESCRIPTION
LOT 3 ON DIAGRAM 17175

SITE STRUCTURE CO-ORDINATES (GDA94) GPS READING ACCURACY: ±10m CENTRE OF TOWER	
LATITUDE	-32.49057° (GDA94)
LONGITUDE	116.97901° (GDA94)

visionstream

ORDER	DRAWN	CHKD	AMENDMENT	EXAM	APPD	DATE	ISS
WA10279.01	RH	AH	PRELIMINARY - 30082845WO257 VPL - LTE700 / WCDMA850	SR	RO	16.08.20	1

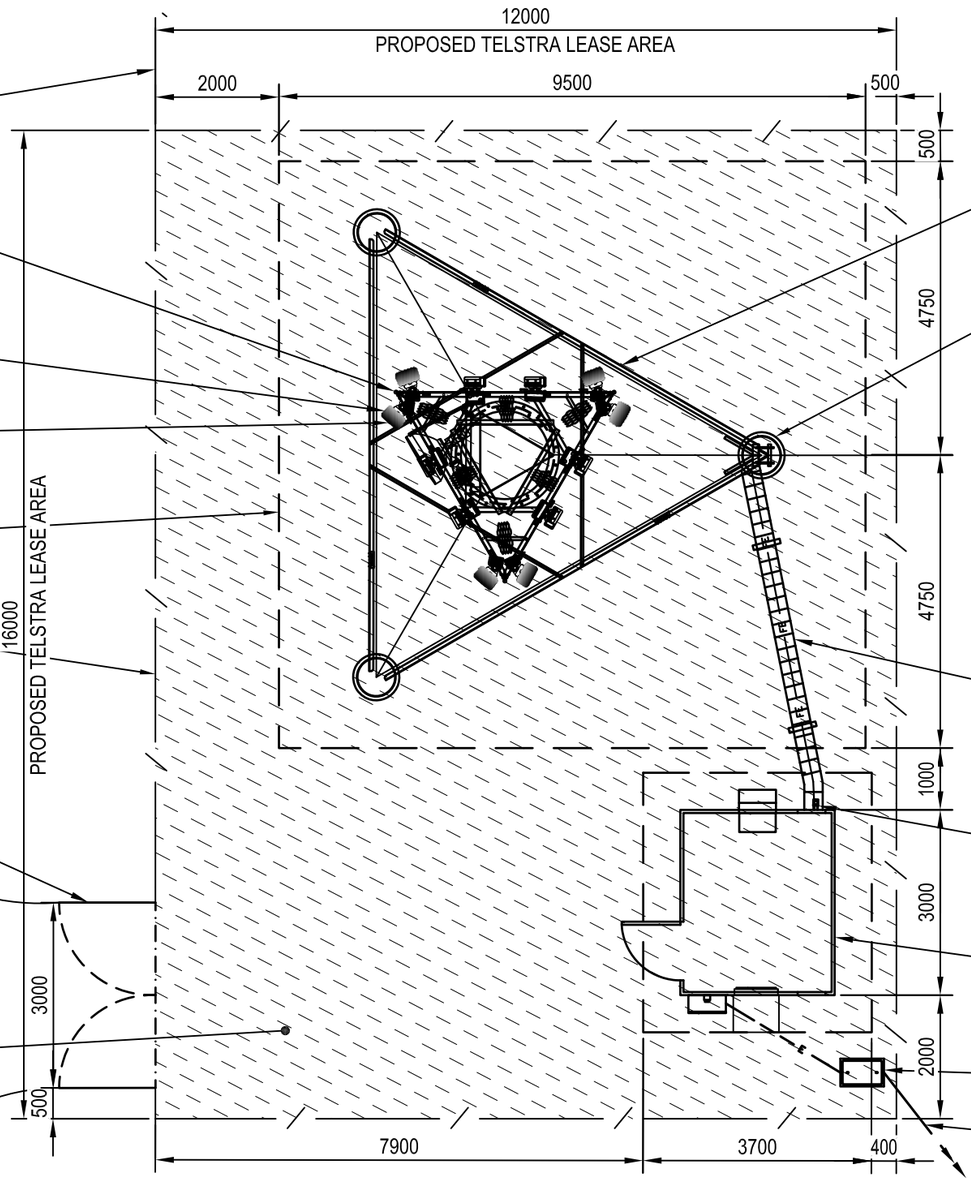
Telstra

MOBILE NETWORK SITE 330347
WEST PINGELLY
SITE ACCESS AND LOCALITY PLAN
167 PAGE ROAD, WEST PINGELLY, WA 6308

DWG NO. W109422 SHT NO. S1 .

Cad file: W109422_PD.dwg A3

TN



EXISTING FENCE TO TIE INTO COMPOUND

PROPOSED TELSTRA TRIANGULAR ROTATABLE HEADFRAME ACCOMMODATES PROPOSED ANTENNAS, COMBINERS, RRU'S & TMA'S.

PROPOSED SIGNS TO BE UV STABLE STICKERS AND FIXED TO REAR OF ALL TELSTRA PANEL ANTENNAS (6 OFF) [# 2]

PROPOSED TELSTRA PANEL ANTENNAS, RRUS, COMBINERS & TMA'S. REFER TO SHEET S1-2 FOR DETAILS.

PROPOSED TELSTRA TOWER SLAB FOOTING (9.5m x 9.5m) INDICATIVE ONLY.

PROPOSED TELSTRA (12.0m x 16.0m) COMPOUND WITH STOCK FENCE AND 3.0m WIDE ACCESS GATE.

PROPOSED TELSTRA SIGN TO BE SECURED TO COMPOUND ACCESS GATE USING STAINLESS STEEL STRAPS [#13]

PROPOSED ACCESS OFF EXISTING GARVEL ROAD

PROPOSED TELSTRA LEASE AREA (12.0m x 16.0m)

PROPOSED TELSTRA 60.0m HIGH LeBLANC 207 LATTICE TOWER WITH TRIANGULAR HEADFRAME.

[# 6] PROPOSED SIGN SECURED AT 1.5m AGL TO LEG OF LATTICE TOWER

PROPOSED TELSTRA 300W NEMA 20B CABLE LADDER WITH SUPPORT POSTS TO ACCOMMODATE PROPOSED TELSTRA 7/8" HYBRID CABLES (3 OFF).

PROPOSED TELSTRA LTE700 GPS ANTENNA (1 OFF) TO BE INSTALLED ON SHELTER USING STANDARD MOUNT.

PROPOSED TELSTRA BLACKS POT TYPE 1B SHELTER ON CRUSHED ROCK PAD (3.7m x 4.2m).

PROPOSED TELSTRA P5 POWER PIT

PROPOSED TELSTRA POWER CABLE TO RUN (APPROX. 2.0km) TO BE CONFIRMED BY WESTERN POWER

UNAPPROVED DRAWING

SITE LAYOUT

SCALE 1:100

1m 0 1m 2m 3m 4m 5m SCALE 1:100

TO BE READ IN CONJUNCTION WITH SHEETS S1, S1-2, S3 & S3-1.

PRELIMINARY

COMPLIANCE BOX
COMPLETED AS PER DESIGN ☐
ALTERATIONS IN RED ☐
NAME (PRINT)
SIGNATURE DATE

NOTES :

1. ALL EXTERNAL FEEDERS AND TAILS MUST BE BIRD PROOFED AS PER EXTERNAL PLANT POLICY 003615.
2. FOR EME SIGNS NOTED AS [#X] REFER TO 005486 DOCUMENTS FOR DETAILS.
3. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED.
4. ▨ PROPOSED TELSTRA LEASE AREA.

visionstream

ORDER	DRAWN	CHKD	AMENDMENT	EXAM	APPD	DATE	ISS
WA10279.01	RH	AH	PRELIMINARY - 30082845WO257 VPL - LTE700 / WCDMA850	SR	RO	16.08.20	1

Telstra

MOBILE NETWORK SITE 330347
WEST PINGELLY
SITE LAYOUT
167 PAGE ROAD, WEST PINGELLY, WA 6308

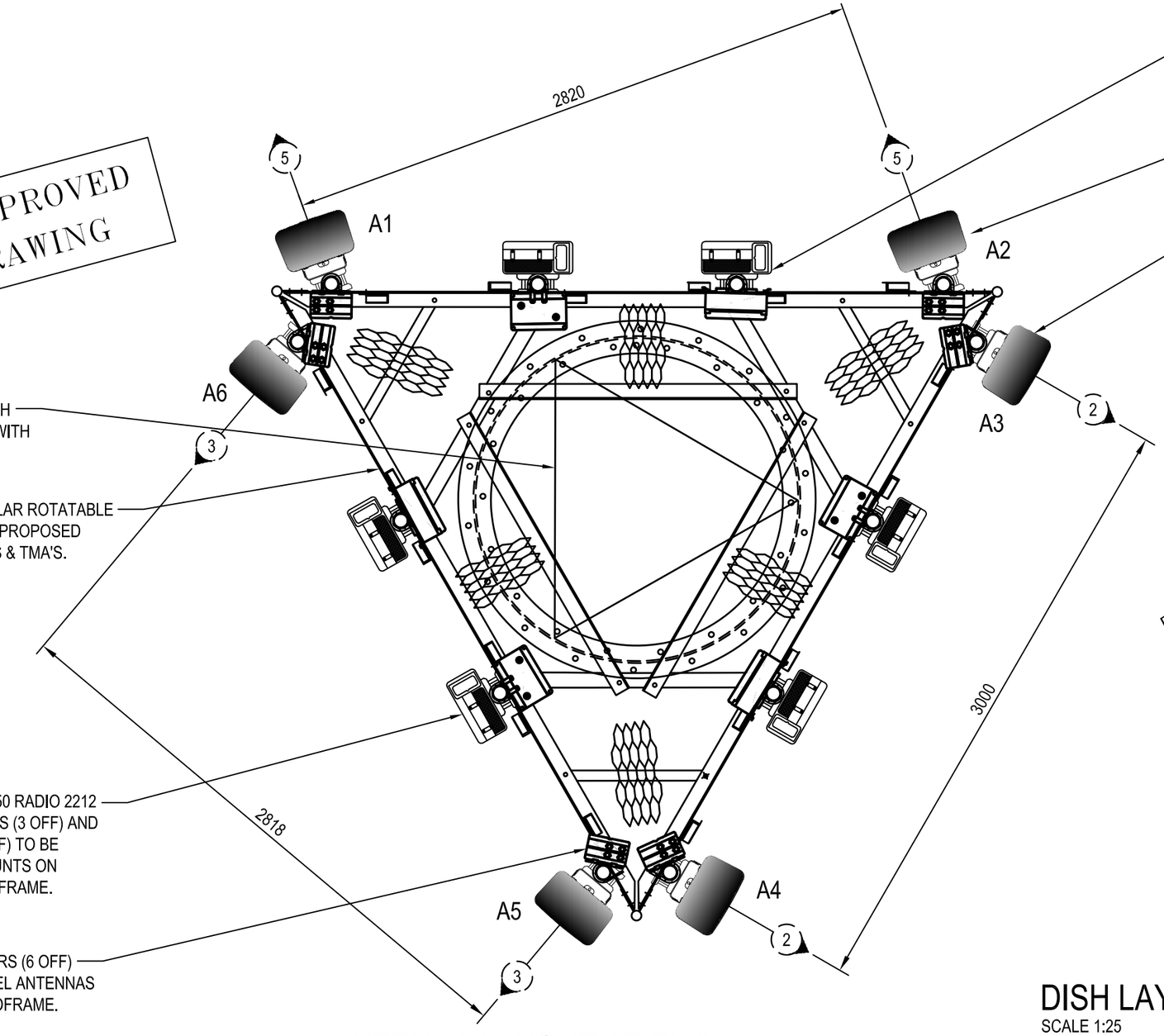
DWG NO. W109422 | SHT NO. S1-1

Cad file: W109422_PD.dwg | A3

TN

HEADFRAME ORIENTATION 0° TN

UNAPPROVED DRAWING



PROPOSED TELSTRA LTE700 RADIO 2217 (B28) (6 OFF) AND RRU INTERFACE JUNCTION BOXES (3 OFF) TO BE INSTALLED ON PROPOSED MOUNTS ON PROPOSED TRIANGULAR HEADFRAME.

PROPOSED TELSTRA LTE700 PANEL ANTENNAS (3 OFF A2, A4 & A6) TO BE INSTALLED ON PROPOSED MOUNTS ON PROPOSED TRIANGULAR HEADFRAME.

PROPOSED TELSTRA LTE700 / WCDMA850 PANEL ANTENNAS (3 OFF A1, A3 & A5) TO BE INSTALLED ON PROPOSED MOUNTS ON PROPOSED TRIANGULAR HEADFRAME.

PROPOSED TELSTRA 60.0m HIGH LeBLANC 207 LATTICE TOWER WITH TRIANGULAR HEADFRAME.

PROPOSED TELSTRA TRIANGULAR ROTATABLE HEADFRAME ACCOMMODATES PROPOSED ANTENNAS, COMBINERS, RRU'S & TMA'S.

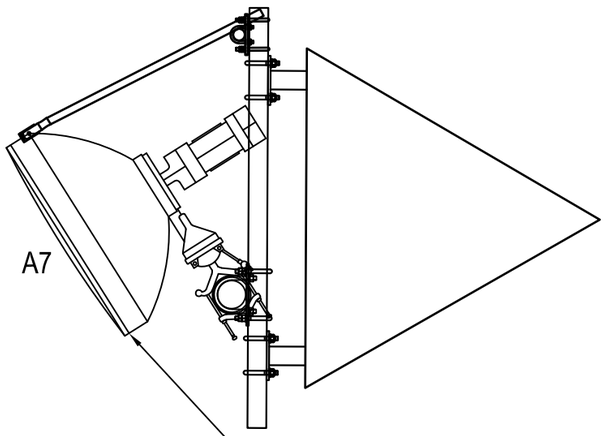
PROPOSED TELSTRA WCDMA850 RADIO 2212 (B5) (3 OFF), WCDMA850 FILTERS (3 OFF) AND LTE700/WCDMA850 TMA'S (3 OFF) TO BE INSTALLED ON PROPOSED MOUNTS ON PROPOSED TRIANGULAR HEADFRAME.

PROPOSED TELSTRA COMBINERS (6 OFF) TO BE INSTALLED BEHIND PANEL ANTENNAS MOUNTED ON PROPOSED HEADFRAME.

ANTENNA LAYOUT AT EL 61.1m

SCALE 1:25

250 0 250 500 750 1000 1250 SCALE 1:25



PROPOSED TELSTRA MICROWAVE LINK DISH (1 OFF, A7) TO BE INSTALLED ON PROPOSED MOUNT.

DISH LAYOUT AT EL 20.0m

SCALE 1:25

250 0 250 500 750 1000 1250 SCALE 1:25

PRELIMINARY

TO BE READ IN CONJUNCTION WITH SHEETS S1, S1-1, S3 & S3-1.

ORDER	DRAWN	CHKD	AMENDMENT	EXAM	APPD	DATE	ISS
WA10279.01	RH	AH	PRELIMINARY - 30082845WO257 VPL - LTE700 / WCDMA850	SR	RO	16.08.20	1

COMPLIANCE BOX
COMPLETED AS PER DESIGN ☐
ALTERATIONS IN RED ☐
NAME (PRINT)
SIGNATURE DATE

visionstream

Telstra

MOBILE NETWORK SITE 330347
WEST PINGELLY
ANTENNA LAYOUT
167 PAGE ROAD, WEST PINGELLY, WA 6308

DWG NO. W109422 SHT NO. S1-2 .

Cad file: W109422_PD.dwg A3

PROPOSED TELSTRA LTE700 / WCDMA850 PANEL ANTENNAS (3 OFF A1, A3 & A5) TO BE INSTALLED ON PROPOSED MOUNTS ON PROPOSED TRIANGULAR HEADFRAME.

PROPOSED SIGNS TO BE UV STABLE STICKERS AND FIXED TO REAR OF ALL TELSTRA PANEL ANTENNAS (6 OFF) # 2

PROPOSED TELSTRA COMBINERS (6 OFF) TO BE INSTALLED BEHIND PANEL ANTENNAS MOUNTED ON PROPOSED HEADFRAME.

PROPOSED TELSTRA TRIANGULAR ROTATABLE HEADFRAME ACCOMMODATES PROPOSED ANTENNAS, COMBINERS, RRU'S & TMA'S.

PROPOSED TELSTRA LTE700 PANEL ANTENNAS (3 OFF A2, A4 & A6) TO BE INSTALLED ON PROPOSED MOUNTS ON PROPOSED TRIANGULAR HEADFRAME.

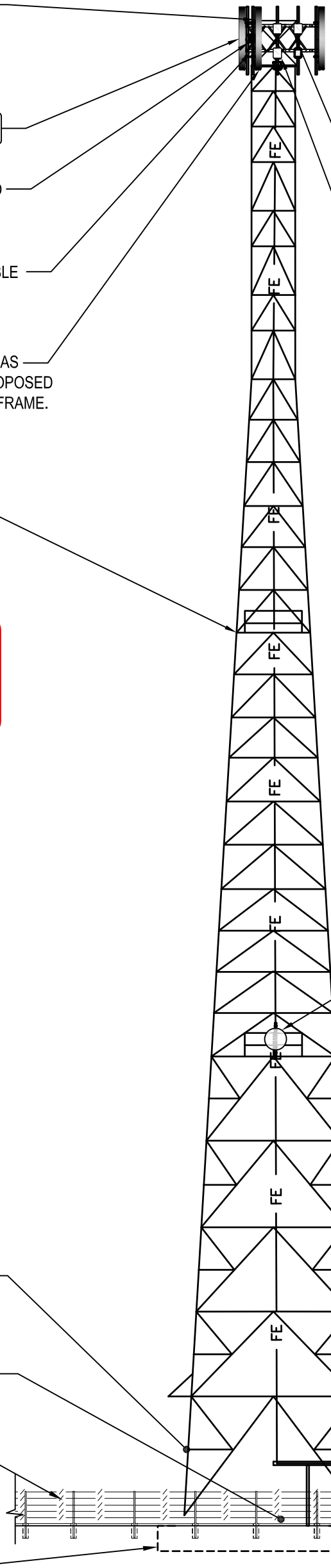
PROPOSED TELSTRA 60.0m HIGH LeBLANC 207 LATTICE TOWER WITH TRIANGULAR HEADFRAME.

PROPOSED SIGN SECURED AT 1.5m AGL TO LEG OF LATTICE TOWER # 6

PROPOSED TELSTRA SIGN TO BE SECURED TO COMPOUND ACCESS GATE USING STAINLESS STEEL STRAPS #13

PROPOSED TELSTRA (12.0m x 16.0m) COMPOUND WITH STOCK FENCE AND 3.0m WIDE ACCESS GATE.

PROPOSED TELSTRA TOWER SLAB FOOTING (9.5m x 9.5m) INDICATIVE ONLY.



▽ E.L. 62.4m RL 457.4m A.H.D.
OVERALL HEIGHT

▽ E.L. 61.5m RL 431.5m A.H.D.
C/L PROPOSED TELSTRA LTE700 RADIO 2217 (B28) (3 OFF)
C/L PROPOSED TELSTRA WCDMA850 RADIO 2212 (B5) (3 OFF)

▽ E.L. 61.1m RL 432.1m A.H.D.
C/L PROPOSED TELSTRA LTE700 / WCDMA850 PANEL ANTENNAS (3 OFF, A1, A3 & A5)
C/L PROPOSED TELSTRA LTE700 PANEL ANTENNAS (3 OFF, A2, A4 & A6)
C/L PROPOSED TELSTRA WCDMA850 COMBINERS (6 OFF)

▽ E.L. 60.5m RL 431.5m A.H.D.
C/L PROPOSED TELSTRA LTE700 RADIO 2217 (B28) (3 OFF)
C/L PROPOSED TELSTRA LTE700/WCDMA850 TMA'S (3 OFF)
C/L PROPOSED TELSTRA FILTERS (3 OFF)

▽ E.L. 60.0m RL 431.0m A.H.D.
TOP OF PROPOSED TOWER
C/L PROPOSED TELSTRA RRU INTERFACE JUNCTION BOXES (3 OFF)

PROPOSED TELSTRA LTE700 RADIO 2217 (B28) (6 OFF) AND RRU INTERFACE JUNCTION BOXES (3 OFF) TO BE INSTALLED ON PROPOSED MOUNTS ON PROPOSED TRIANGULAR HEADFRAME.

PROPOSED TELSTRA WCDMA850 RADIO 2212 (B5) (3 OFF), WCDMA850 FILTERS (3 OFF) AND LTE700/WCDMA850 TMA'S (3 OFF) TO BE INSTALLED ON PROPOSED MOUNTS ON PROPOSED TRIANGULAR HEADFRAME.

PROPOSED TELSTRA MICROWAVE LINK DISH (1 OFF, A7) TO BE INSTALLED ON PROPOSED MOUNT.

▽ E.L. 20.0m RL 391.0m A.H.D.
C/L PROPOSED TELSTRA MICROWAVE LINK DISH (1 OFF, A7)

PROPOSED TELSTRA 300W NEMA 20B CABLE LADDER WITH SUPPORT POSTS TO ACCOMMODATE PROPOSED TELSTRA 7/8" HYBRID CABLES (3 OFF).

PROPOSED TELSTRA LTE700 GPS ANTENNA (1 OFF) TO BE INSTALLED ON SHELTER USING STANDARD MOUNT.

PROPOSED TELSTRA BLACKS POT TYPE 1B SHELTER TO ACCOMMODATE PROPOSED TELSTRA EQUIPMENT

PROPOSED TELSTRA POWER CABLE TO RUN (APPROX. 2.0km) TO BE CONFIRMED BY WESTERN POWER

▽ E.L. 0.00m RL 371.0m A.H.D.
GROUND LEVEL

PROPOSED TELSTRA P5 POWER PIT

PROPOSED TELSTRA BLACKS POT TYPE 1B SHELTER ON CRUSHED ROCK PAD (3.7m x 4.2m).

NOTES :

1. ALL EXTERNAL FEEDERS AND TAILS MUST BE BIRD PROOFED AS PER EXTERNAL PLANT POLICY 003615.
2. FOR EME SIGNS NOTED AS #X REFER TO 005486 DOCUMENTS FOR DETAILS.
3. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS OTHERWISE STATED.

COMPLIANCE BOX
COMPLETED AS PER DESIGN ☐
ALTERATIONS IN RED ☐
NAME (PRINT)
SIGNATURE DATE

UNAPPROVED DRAWING

WEST ELEVATION

SCALE 1:200

2m 0 2m 4m 6m 8m 10m SCALE 1:200

PRELIMINARY

TO BE READ IN CONJUNCTION WITH SHEETS S1, S1-1, S1-2 & S3-1.

ORDER	DRAWN	CHKD	AMENDMENT	EXAM	APPD	DATE	ISS
WA10279.01	RH	AH	PRELIMINARY - 30082845WO257 VPL - LTE700 / WCDMA850	SR	RO	16.08.20	1

Telstra

MOBILE NETWORK SITE 330347
WEST PINGELLY
WEST ELEVATION
167 PAGE ROAD, WEST PINGELLY, WA 6308

DWG NO. W109422 SHT NO. S3

visionstream

Cad file: W109422_PD.dwg A3V

TELSTRA ANTENNA CONFIGURATION TABLE

ANTENNA No	ANTENNA TYPE & SIZE H x W x D	ANTENNA ACTION REQUIRED	ANTENNA HEIGHT C/L A.G.L.	ANTENNA BEARING (x°T)	SECTOR NO. & TECHNOLOGY
A1	ARGUS RVVPX310.11B-T2 PANEL 2533 x 350 x 208mm	INSTALL	61.1m	340°	S5: LTE700 / S5: WCDMA850 S5: LTE700 / S5: WCDMA850 - - - -
A2	ARGUS RVVPX310.11B-T2 PANEL 2533 x 350 x 208mm	INSTALL	61.1m	340°	S5: LTE700 S5: LTE700 - - - -
A3	ARGUS RVVPX310.11B-T2 PANEL 2533 x 350 x 208mm	INSTALL	61.1m	120°	S2: LTE700 / S2: WCDMA850 S2: LTE700 / S2: WCDMA850 - - - -
A4	ARGUS RVVPX310.11B-T2 PANEL 2533 x 350 x 208mm	INSTALL	61.1m	120°	S2: LTE700 S2: LTE700 - - - -
A5	ARGUS RVVPX310.11B-T2 PANEL 2533 x 350 x 208mm	INSTALL	61.1m	220°	S3: LTE700 / S3: WCDMA850 S3: LTE700 / S3: WCDMA850 - - - -
A6	ARGUS RVVPX310.11B-T2 PANEL 2533 x 350 x 208mm	INSTALL	61.1m	220°	S3: LTE700 S3: LTE700 - - - -
A7	RFS SCX3-W100ASIA1 (900mm DIA)	INSTALL	20.0m	237.8	-
A200	GPS ANTENNA KRE 101 2082/1 Ø68 x 96mm	INSTALL	BASE OF GPS 3.2m	0°	-

COMPLIANCE BOX
COMPLETED AS PER DESIGN ☐
ALTERATIONS IN RED ☐
NAME (PRINT)
SIGNATURE DATE

UNAPPROVED DRAWING

PRELIMINARY

TO BE READ IN CONJUNCTION WITH SHEETS S1, S1-1, S1-2, & S3.

ORDER	DRAWN	CHKD	AMENDMENT	EXAM	APPD	DATE	ISS
WA10279.01	RH	AH	PRELIMINARY - 30082845WO257 VPL - LTE700 / WCDMA850	SR	RO	16.08.20	1

visionstream

Telstra

MOBILE NETWORK SITE 330347
WEST PINGELLY
ANTENNA CONFIGURATION TABLE
167 PAGE ROAD, WEST PINGELLY, WA 6308

DWG NO. W109422 SHT NO. S3-1

Cad file: W109422_PD.dwg A3V

Appendix C

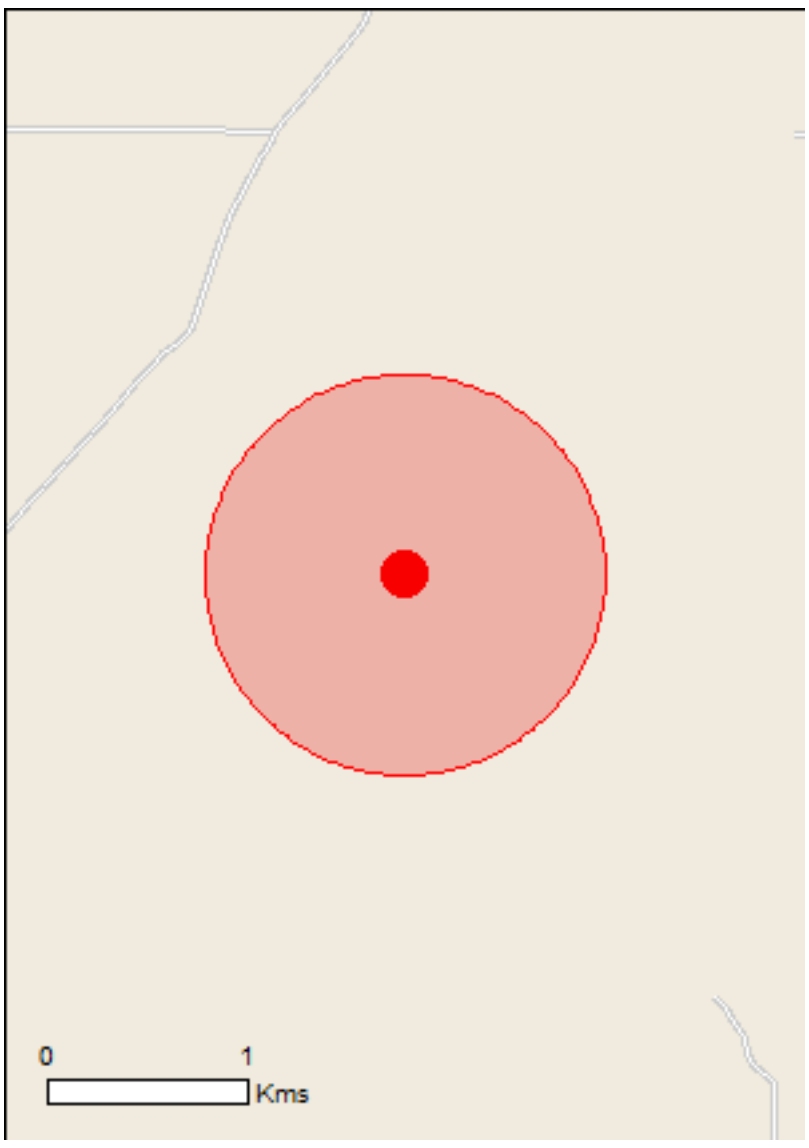
EPBC Act Protected Matters Report

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.

Information on the coverage of this report and qualifications on data supporting this report are contained in the caveat at the end of the report.

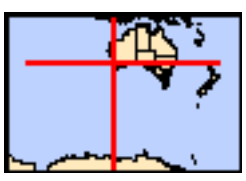
Information is available about Environment Assessments and the EPBC Act including significance guidelines, forms and application process details.

Report created: 21/08/20 11:40:01



Coordinates

Buffer: 1.0Km



Summary

Matters of National Environmental 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:	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	1
Listed Threatened Species:	15
Listed Migratory Species:	6

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 http://www.environment.gov.au/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 Land:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	12
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None

Extra Information

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

State and Territory Reserves:	None
Regional Forest Agreements:	None
Invasive Species:	18
Nationally Important Wetlands:	None
Key Ecological Features (Marine)	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.

Name	Status	Type of Presence
Eucalypt Woodlands of the Western Australian Wheatbelt	Critically Endangered	Community likely to occur within area

Listed Threatened Species [Resource Information]

Name	Status	Type of Presence
Birds		
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Calyptorhynchus banksii naso Forest Red-tailed Black-Cockatoo, Karrak [67034]	Vulnerable	Species or species habitat may occur within area
Calyptorhynchus latirostris Carnaby's Cockatoo, Short-billed Black-Cockatoo [59523]	Endangered	Breeding likely to occur within area
Falco hypoleucos Grey Falcon [929]	Vulnerable	Species or species habitat may occur within area
Leipoa ocellata Malleefowl [934]	Vulnerable	Species or species habitat may occur within area
Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species habitat may occur within area
Mammals		
Bettongia penicillata ogilbyi Woylie [66844]	Endangered	Species or species habitat may occur within area
Dasyurus geoffroii Chuditch, Western Quoll [330]	Vulnerable	Species or species habitat may occur within area
Phascogale calura Red-tailed Phascogale, Red-tailed Wambenger, Kenngoor [316]	Vulnerable	Species or species habitat likely to occur within area
Plants		
Acacia cochlocarpa subsp. cochlocarpa Spiral-fruited Wattle [23877]	Endangered	Species or species habitat may occur within area

Name	Status	Type of Presence
Banksia oligantha Wagin Banksia [20697]	Endangered	Species or species habitat likely to occur within area
Boronia capitata subsp. capitata a shrub [29156]	Endangered	Species or species habitat may occur within area
Diuris micrantha Dwarf Bee-orchid [55082]	Vulnerable	Species or species habitat may occur within area
Thomasia montana Hill Thomasia [12136]	Vulnerable	Species or species habitat likely to occur within area
Verticordia fimbrilepis subsp. fimbrilepis Shy Featherflower [24631]	Endangered	Species or species habitat may occur within area

Listed Migratory Species [Resource Information]

* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.

Name	Threatened	Type of Presence
Migratory Marine Birds		
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Migratory Terrestrial Species		
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area
Migratory Wetlands Species		
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area

Other Matters Protected by the EPBC Act

Listed Marine Species [Resource Information]

* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.

Name	Threatened	Type of Presence
Birds		
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area

Name	Threatened	Type of Presence
Ardea alba Great Egret, White Egret [59541]		Species or species habitat likely to occur within area
Ardea ibis Cattle Egret [59542]		Species or species habitat may occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area
Chrysococcyx osculans Black-eared Cuckoo [705]		Species or species habitat likely to occur within area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat may occur within area
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area
Rostratula benghalensis (sensu lato) Painted Snipe [889]	Endangered*	Species or species habitat may occur within area

Extra Information

Invasive Species	[Resource Information]

Weeds reported here are the 20 species of national significance (WoNS), along with other introduced plants that are considered by the States and Territories to pose a particularly significant threat to biodiversity. The following feral animals are reported: Goat, Red Fox, Cat, Rabbit, Pig, Water Buffalo and Cane Toad. Maps from Landscape Health Project, National Land and Water Resouces Audit, 2001.

Name	Status	Type of Presence
Birds		
Columba livia Rock Pigeon, Rock Dove, Domestic Pigeon [803]		Species or species habitat likely to occur within area
Streptopelia chinensis Spotted Turtle-Dove [780]		Species or species habitat likely to occur within area
Streptopelia senegalensis Laughing Turtle-dove, Laughing Dove [781]		Species or species habitat likely to occur within area
Mammals		
Canis lupus familiaris Domestic Dog [82654]		Species or species habitat likely to occur within area

Name	Status	Type of Presence
Capra hircus Goat [2]		Species or species habitat likely to occur within area
Felis catus Cat, House Cat, Domestic Cat [19]		Species or species habitat likely to occur within area
Mus musculus House Mouse [120]		Species or species habitat likely to occur within area
Oryctolagus cuniculus Rabbit, European Rabbit [128]		Species or species habitat likely to occur within area
Rattus rattus Black Rat, Ship Rat [84]		Species or species habitat likely to occur within area
Sus scrofa Pig [6]		Species or species habitat likely to occur within area
Vulpes vulpes Red Fox, Fox [18]		Species or species habitat likely to occur within area
Plants		
Asparagus asparagoides Bridal Creeper, Bridal Veil Creeper, Smilax, Florist's Smilax, Smilax Asparagus [22473]		Species or species habitat likely to occur within area
Carrichtera annua Ward's Weed [9511]		Species or species habitat may occur within area
Cenchrus ciliaris Buffel-grass, Black Buffel-grass [20213]		Species or species habitat may occur within area
Chrysanthemoides monilifera Bitou Bush, Boneseed [18983]		Species or species habitat may occur within area
Chrysanthemoides monilifera subsp. monilifera Boneseed [16905]		Species or species habitat likely to occur within area
Solanum elaeagnifolium Silver Nightshade, Silver-leaved Nightshade, White Horse Nettle, Silver-leaf Nightshade, Tomato Weed, White Nightshade, Bull-nettle, Prairie-berry, Satansbos, Silver-leaf Bitter-apple, Silverleaf-nettle, Trompillo [12323]		Species or species habitat likely to occur within area
Tamarix aphylla Athel Pine, Athel Tree, Tamarisk, Athel Tamarisk, Athel Tamarix, Desert Tamarisk, Flowering Cypress, Salt Cedar [16018]		Species or species habitat likely to occur within area

Caveat

The information presented in this report has been provided by a range of data sources as acknowledged at the end of the report.

This report is designed to assist in identifying the locations of places which may be relevant in determining obligations under the Environment Protection and Biodiversity Conservation Act 1999. It holds mapped locations of World and National Heritage properties, Wetlands of International and National Importance, Commonwealth and State/Territory reserves, listed threatened, migratory and marine species and listed threatened ecological communities. Mapping of Commonwealth land is not complete at this stage. Maps have been collated from a range of sources at various resolutions.

Not all species listed under the EPBC Act have been mapped (see below) and therefore a report is a general guide only. Where available data supports mapping, the type of presence that can be determined from the data is indicated in general terms. People using this information in making a referral may need to consider the qualifications below and may need to seek and consider other information sources.

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.

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

Where very little information is available for 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 reliable distribution mapping methods are used to update these distributions as time permits.

Only selected species covered by the following provisions of the EPBC Act have been mapped:

- migratory and
- marine

The following species and ecological communities have not been mapped and do not appear in reports produced from this database:

- threatened species listed as extinct or considered as vagrants
- some species and ecological communities that have only recently been listed
- some terrestrial species that overfly the Commonwealth marine area
- migratory species that are very widespread, vagrant, or only occur in small numbers

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

- non-threatened seabirds which have only been mapped for recorded breeding sites
- seals which have only been mapped for breeding sites near the Australian continent

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

Coordinates

-32.4905 116.97901

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 the Environment
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Canberra ACT 2601 Australia
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Environmental EME Report

Location	167 Page Road, WEST PINGELLY WA 6308		
Date	14/09/2020	**RFNSA No.**	6308011

How does this report work?

This report provides a summary of levels of radiofrequency (RF) electromagne c energy (EME) around the wireless base sta on at 167 Page Road, WEST PINGELLY WA 6308. These levels have been calculated by Telstra using methodology developed by the Australian Radia on Protec on 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 exis ng radio systems for this site.

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

0.15%

out of 100% of the public exposure limit, 348 m from the loca on.

EME levels with the proposed changes

Distance from the site	Percentage of the public exposure limit
0-50 m	Less than 0.01%
50-100 m	0.02%
100-200 m	0.02%
200-300 m	0.13%
300-400 m	0.15%
400-500 m	0.14%

For addi onal informa on please refer to the EME ARPANSA Report annexure for this site which can be found at *http://www.rfnsa.com.au/6308011*.

Radio systems at the site

This base sta on currently has equipment for transmitting the services listed under the exis ng con gura on.
The proposal would modify the base sta on to include all the services listed under the proposed con gura on.

	Existing		Proposed	
Carrier	**Systems**	**Configuration**	**Systems**	**Configuration**
Telstra			3G, 4G	LTE700 (proposed), WCDMA850 (proposed)

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

This table provides calcula ons of RF EME at di erent distances from the base sta on for emissions from exis ng equipment alone and for emissions from exis ng equipment and proposed equipment combined. All EME levels are rela ve 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				0.29	0.23	Less than 0.01%
50-100m				0.52	0.71	0.02%
100-200m				0.57	0.87	0.02%
200-300m				1.40	5.23	0.13%
300-400m				1.50	5.99	0.15%
400-500m				1.47	5.70	0.14%

Calculated EME levels at other areas of interest

This table contains calcula ons of the maximum EME levels at selected areas of interest, iden ed through consulta on requirements of the Communica ons Alliance Ltd Deployment Code C564:2018 or other means. Calcula ons are performed over the indicated height range and include all exis ng 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 loca ons iden ed				