Our ref: Caversham

7 September 2026

SAQ Consulting Pty Ltd
ABN 76 864 757 592
P O Box 50
Clayfield QLD 4011

City of Swan
2 Midland Square
MIDLAND WA 6056

Attention: Planning Department

RE: Proposed telecommunications facility
175 Suffolk Street CAVERSHAM

I advise SAQ Consulting acts on behalf of Waveconn Operations ('Waveconn') in respect of this application.

Waveconn is a licenced carrier for the purposes of the *Telecommunications Act 1997 (Cth)* and operates as an infrastructure provider or 'neutral host', whereby new facilities are sited, designed, acquired, built and maintained by Waveconn but utilised by the mobile carriers as part of their respective networks.

The proposal by Waveconn is to establish a telecommunications facility, in the form of a 25m-tall monopole with shrouded antenna headframe and ground cabinets on land at 175 Suffolk Street, Caversham. The specific location is in the northern carpark of the Caversham Village Shopping Centre, near the Suffolk Street frontage. The proposed facility will be utilised by Vodafone to improve its mobile network services in the surrounding area.

The subject land is located within the *Residential Development Zone* pursuant to the City of Swan Local Planning Scheme No. 17, with the proposed land use is defined in the Scheme as *'telecommunications infrastructure'.*

The subject land is also within the Caversham Structure Plan area, which is the document responsible for setting out the land use pattern in the area. The document designates the subject land as a 'neighbourhood centre' (which is entirely consistent with the manner in which it has already been developed).

The structure plan does not mention telecommunications infrastructure at all and as such does not designate its permissibility or otherwise. Given the intended and actual non-residential nature of the subject land and to ensure consistency with State Planning Policy 5.2, the proposal is properly defined as a 'discretionary' use within the zone and subject to the notice requirements set out in Council's telecommunications Local Planning Policy (POL-C-059 Telecommunication (Mobile Phone) Facilities). More detail on this assessment pathway is set out below.

Background

Waveconn has previously planned for a 'low-impact' rooftop facility at the shopping centre and undertook the required consultation and notification of that proposal in October 2025. There were no objections received from the community during the period.

Subsequent detailed investigations of the roof structure identified design constraints and the project was halted while discussions with the owners of the shopping centre continued.

It was agreed that a suitably designed monopole in the northern carpark area would be more viable, with the shopping centre owners very keen to help solve the long-term lack of service within the centre and in the surrounding area more generally.

A monopole design and cabinet location compatible with the current layout of the carpark was devised, with a shroud proposed to screen the headframe and antennas and designed to show integration with the shopping centre itself.

Need for the Facility

The poor levels of mobile phone service in this area (from all carriers) is well known by the owners and tenants of the shopping centre and surrounding residents, with particularly poor indoor coverage and unreliable access to data services.

Figure 1 below is an extract from www.rfnsa.com.au, which is a publicly accessible database listing all existing and proposed telecommunications facilities in Australia. The proposed facility at 175 Suffolk Street is shown in the centre of image and marked in orange.

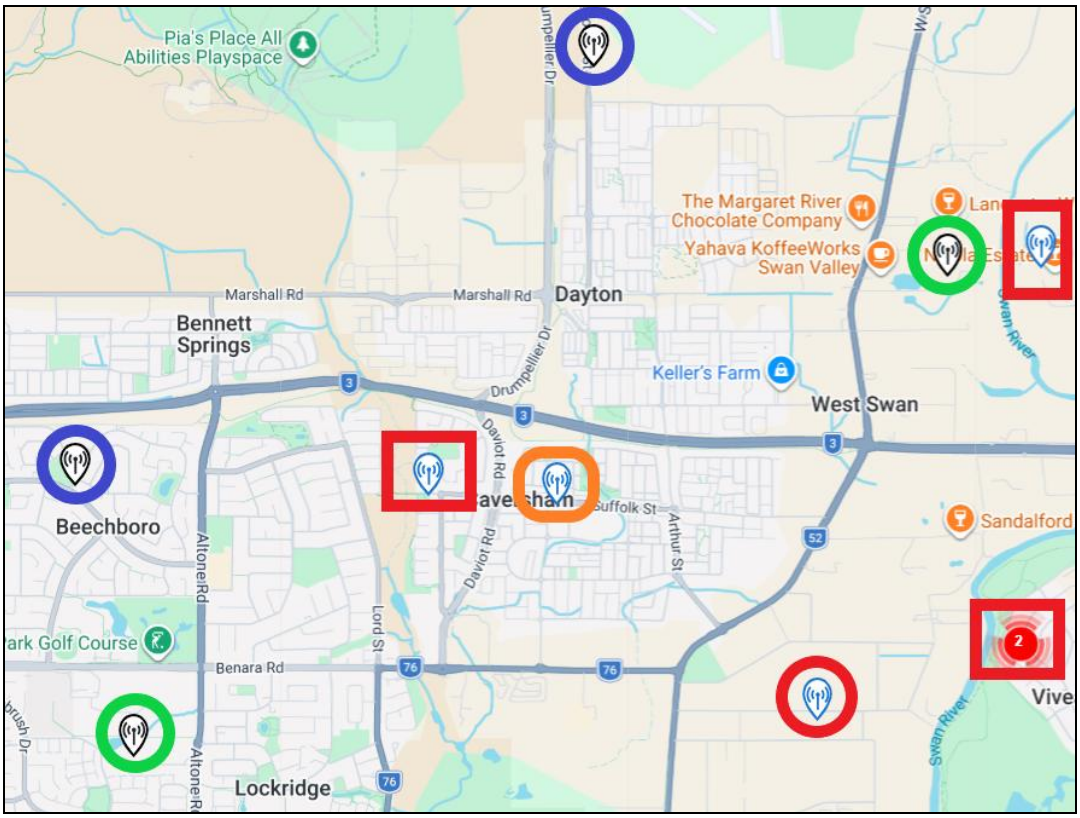


Figure 1: *Proposed Caversham facility (marked in orange) and existing telecommunications facilities (existing and proposed) in the surrounding area*

When interrogating the above image, it is important to note that at distances of more than 1-1.3 kilometres between base-stations, in urban areas such as these, 4G services are unreliable with generally poor data performance and indoor service, with performance also affected by local topography, tree cover and other obstructions (such as buildings), as well as the demand on the services from customers. Distance between base-stations is even more problematic for 5G services, which require a greater density of facilities than 4G.

Having regard for the above, telecommunications infrastructure in the wider area can be summarised as follows:

- Vodafone has two existing facilities servicing the wider area, which are indicated by the green circles in Figure 1. These are located at:
    - 4748 West Swan Road, West Swan (about 2.7kms to the north-west, RFNSA site number 6055016)
    - Lot 4 Altone Road, Kiara (about 2.9kms to the south-west, RFNSA site number 6054009).
- Other existing facilities in the surrounding area are:
    - A 30m-tall monopole, accommodating Telstra only, located at Lot 801 Harrow Street, Brabham (2.6kms to the north, RFNSA site number 6068005)
    - A 25m-tall monopole, accommodating Telstra only, located at 131 Sacramento Avenue, Beechboro (2.9kms to the west, RFNSA site number 6063002)

As such, the Figure 1 confirms there are no mobile phone base stations within 2.6 kilometres of the subject land and therefore no opportunity for collocation or upgrading to overcome the need for a new facility.

It is also noted there is a proposal by Indara (for Optus) at 96 Caversham Avenue, which appears to be for a 30m monopole. It is understood a planning application was lodged in August 2024 but the timing of any construction is unknown. In any event, the location is 2kms from the subject proposal in any event, which is too far away in any event to be of use.

The only other facilities in the wider area are two existing small cells located on Western Power poles in Viveash, a proposed small cell on the telephone exchange at Lot 107 Patricia Street, Caversham and a proposed in-building facility at 148 Dale Road, Middle Swan (Nikola Estate). Small cells are low-power facilities with low antenna heights (typically around 5-6m above the ground) and provide only localised coverage. As such, none of these facilities – whether or not they exist – provide any coverage solution for the Caversham shopping centre and surrounds.

Accordingly, the service improvements sought in the Caversham area cannot be made by way of changes or upgrades to the existing facilities as they are simply too far away, there are no suitable collocation opportunities and there are no existing structures on which the proposed facility could be located (including sufficiently tall buildings). As such, a new structure is required in this instance.

The Proposal

The proposal is to establish a new telecommunications facility in the form of a monopole and equipment cabinets at the Caversham Village Shopping Centre, 175 Suffolk Street, Caversham.

The details of the proposed facility are shown on the plans lodged with the application but more particularly, the proposal consists of the following elements:

- a 25-metre tall monopole located in the central row of the northern carpark, about 15m south of the Suffolk Street boundary;
- a new triangular headframe mounted at the top of the monopole to accommodate six panel antennas for Vodafone 4G and 5G services. The headframe will be enclosed by a shroud (bearing the Caversham Village logo and name);
- a new 3-bay Vodafone equipment cabinet (dimensions 2.32m H x 0.75m D x 2.2m L) located on the opposite side of the pedestrian footpath and connected to the monopole by underground cabling; and
- bollards to prevent vehicle impact.

There will also be a need for ancillary equipment associated with the antennas such as remote radio units (RRUs), tower mount amplifiers (TMAs) and various cables. These pieces of ancillary equipment will be mounted within the proposed headframes or behind proposed antennas and given a shroud is proposed these pieces of equipment will have no impact on the visual impact or bulk of the installation.

Access to the facility will be via the existing carpark and no car-parking spaces are lost as a result of the proposal. No vegetation is impacted by the proposal.

All cables connecting the antennas will be internal to the monopole or screened by the proposed shroud. The monopole does not have any provision to allow it to be climbed but does have the capacity to accommodate collocation.

It is proposed to paint the monopole to provide a consistent finish and minimise any residual impact. The shroud will also be painted and bear the shopping centre logo and name.

Whilst not a relevant planning issue, it is worthy of note that the maximum levels of electromagnetic energy from the proposed facility at 1.5m above the ground is estimated at 3.07% of the exposure limits mandated by the Commonwealth Government. A copy of the standard form EME report is attached for Council's information and also includes a number of community 'points of interest' to assist the reader in better understanding the expected maximum EME levels in the area.

The proposed infrastructure will be in compliance with the ACMA EME regulatory arrangements. The facility will also comply with Australian government regulations in relation to emission of electromagnetic energy (EME), this specifically being Australian Standard Radiation Protection Series S-1 Standard for Limiting Exposure to Radiofrequency Fields – 100

kHz to 300 GHz published by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA) in 2021.

Subject Land

The subject land is located on the southern side of Suffolk Street at Caversham, between Waldeck Road and Bodley Road. The subject land is regular in shape with a frontage to Suffolk Street of about 100 metres and to the two side roads of about 140 metres. The total site area is approximately 1.52 hectares and it is located in the *Residential Development Zone*.

Figure 2 below shows the subject land, which accommodates the Caversham Village Shopping Centre. The shopping centre building is located on the southern half of the land with the main car-parking area to the north. Vehicle access is available from all three frontages and the main servicing/loading area is located off Bodley Road, with a smaller loading area in the south-western corner of the centre.

The shopping centre is of 'big box' form and contains an anchor supermarket (Coles) and a number of speciality shops and other services. The shopping centre is surrounded by housing and community/educational uses and is the key neighbourhood centre for Caversham.

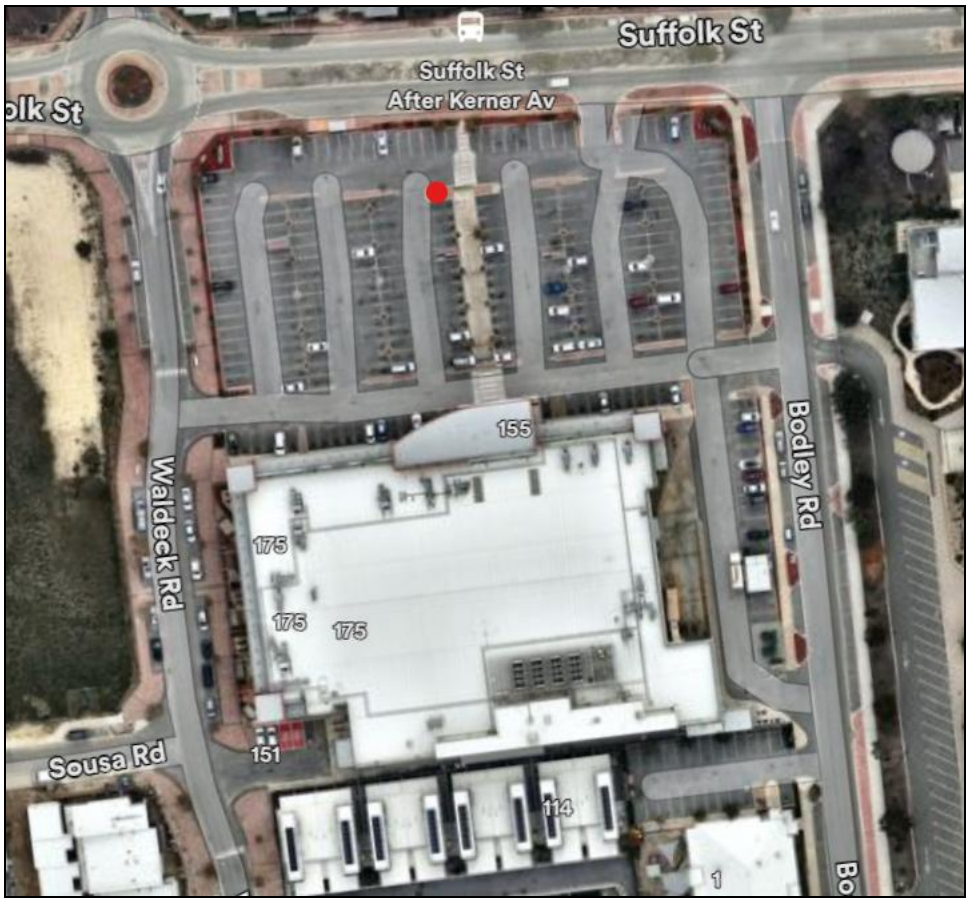


Figure 2: Subject land with proposed facility location shown (red dot)

The Locality

The locality is made up primarily of residential dwellings, with some areas of development still to occur directly west. Most dwellings are detached and 1-2 stories in height, with the areas to the north, west and south of the shopping centre almost exclusively residential.

Caversham Valley Primary School is located to the east as part of a larger community complex that incorporates a community centre and other facilities. An early learning centre adjoins the shopping centre at its south-eastern corner.

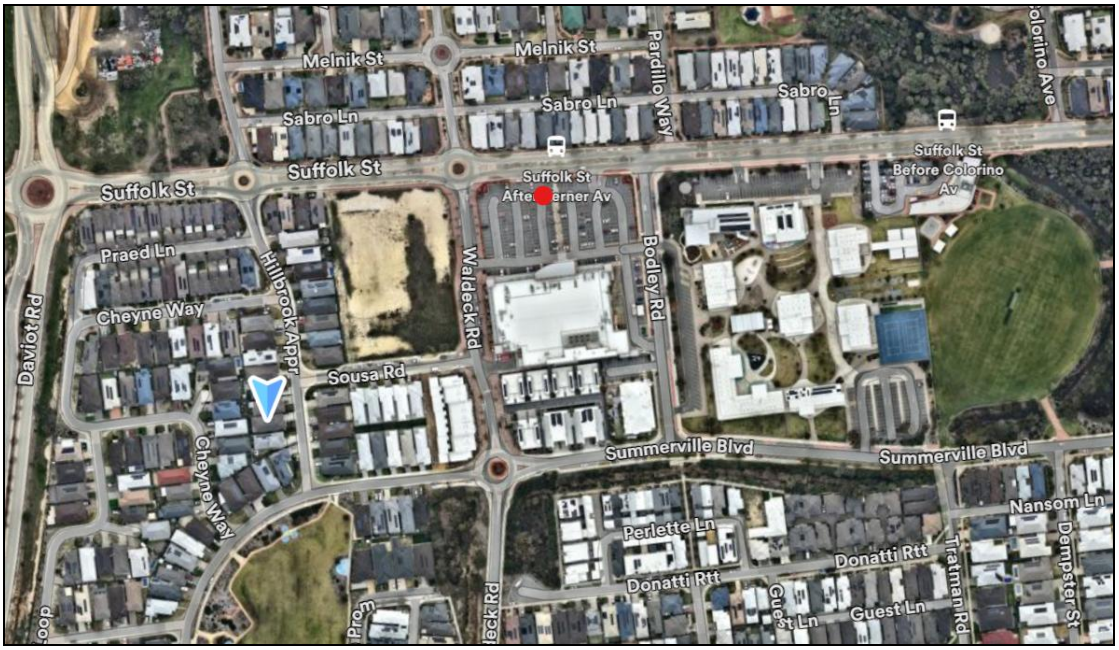


Figure 3: *Locality with proposed facility location shown (red dot)*

The nearest existing dwellings to the proposed facility are located on the northern side of Suffolk Street, about 35m away.

As noted above, there are no other telecommunications monopoles or similar structures in the surrounding area for 2.6 kilometres and no other location within the locality could be identified that would be more suitable for the proposed facility.

Assessment against the Local Planning Scheme

As noted above, the subject land and proposal is located in the *Residential Development Zone* pursuant to the City of Swan Local Planning Scheme No. 17. The subject land is located within the Caversham Structure Plan area, in which it is denoted as 'neighbourhood centre.'

The proposed facility is defined by the planning scheme as 'telecommunications infrastructure', but the classification of land uses in the *Residential Development Zone* is not listed in the Zoning Table at 4.3 due to the existence of the structure plan.
The Caversham Structure Plan does not deal with telecommunications infrastructure at all and as such does not designate any permissibility or otherwise for this type of infrastructure. Further, the subject land is not listed in Schedules 2 or 3 of the planning scheme as have 'additional' or 'restricted' uses.

As such, a decision must be made on the proposal in the context of the intent of the structure plan for the subject land, which is designated as a 'neighbourhood centre' for the surrounding area and has already been developed as such.

The structure sets out the following at 1.3.2 with respect to the neighbourhood centre:

> *An important element of the Structure Plan design is the Neighbourhood Centre, situated on the intersection of two important connector streets to gain maximum exposure to the future movement economy. This will incorporate a main shopping centre with accompanying specialty shops, and a Residential R80 site with non-residential ground floor commercial/office/medical centre uses.*
>
> *The intent of the LSP is to create a centrally located Shopping Centre site and adjoining Mixed Use site, which will provide a mixed use hub for the community focused on a traditional design with an obvious defined core and easy walking distances. Buildings which address the street with active street fronts on the ground floor shall be mandatory and potential shop-top housing will be explored. Co-located with the adjacent Primary School, the Neighbour Centre will establish a sense of arrival in Caversham and will become the centre for community activity.*
>
> *The Shopping Centre and adjoining Mixed Use site will be the subject of a Detailed Area Plan (DAP) as part of any future Subdivision approval. The DAP is intended to document things such as:*
>
> - *Vehicle access and parking;*
> - *Pedestrian amenity;*
> - *Building height and scale;*
> - *Intended land uses; and*
> - *Integration with surrounding uses*

While within the broad *Residential Development Zone,* It is crystal clear the neighbourhood centre component is <u>not</u> intended to be for residential uses.

Turning to the Objectives of the *Residential Development Zone,* these are set out at 4.2.8 of the Planning Scheme as follows:

> *The objectives of the Residential Development Zone are to –*
> *(a) Provide for the coordinated development of future residential areas through the application of a comprehensive plan to guide subdivision and development to be known as a "Structure Plan";*
> *(b) Provide for predominantly residential development, but including also a range of compatible services, consistent with the needs of an integrated neighbourhood, and planned so as to minimise adverse impacts on amenity;*
> *(c) Avoid the development of land for any purposes or at a time when it is likely to compromise development elsewhere in the district or prejudice the future development of land in the Residential Development zone for more appropriate purposes;*
> *(d) Take account of the need to protect the amenity and on-going use of adjacent property Owners as well as to provide for the needs of future residents.*

As such, it is also clear the *Residential Development Zone* is intended to identify an area predominantly for residential development, but within which a structure plan identifies the supporting land uses and infrastructure needed for such development, which include such things as schools, shops, open space and other community and physical infrastructure.

In these respects the subject proposal:

- Performs an important local function, providing essential wireless telecommunications services to this neighbourhood (including current and future residents and businesses) and the shopping centre complex, with services known (and easily shown) to be lacking in this area;
- Is shrouded to avoid the visual impacts of antennas and bears the logo of the shopping centre to further assist with its integration into the setting; and
- Does not have any impact on development in the immediate area or elsewhere in the district, nor does it prejudice further development of land within the zone.

On that basis, for the purposes of determining the assessment pathway, the subject land sits most comfortably within the commercial/industrial part of the planning scheme zone categories, all of which allow telecommunications infrastructure as a discretionary use.

This approach would also ensure consistency with the State Planning Policy for telecommunications (SPP 5.2), which states at Part 4 and clause 6.1:

> *4. POLICY OBJECTIVES*
> *The objectives of this policy are to:*
>
> *a) facilitate the provision of telecommunications infrastructure in an efficient and environmentally responsible manner to meet community needs;*
> *b) manage the environmental, cultural heritage, visual and social impacts of telecommunications infrastructure;*
> *c) ensure that telecommunications infrastructure is included in relevant planning processes as essential infrastructure for business, personal and emergency reasons; and,*
> *d) promote a consistent approach in the preparation, assessment and determination of planning decisions for telecommunications infrastructure.*
>
> *6.1 Local planning schemes and local planning policies*
> *When preparing or reviewing local planning schemes or local planning policies, local governments should ensure that:*
>
> *a) Telecommunications infrastructure is included in the zoning table as a land use;*
> *b) Telecommunications infrastructure is not designated as a 'use not permitted' (X) by the scheme in any zone in the zoning table.*

Accordingly, it is considered the proposed facility can be properly considered and approved in this part of the *Residential Development Zone* and the location and design of the proposal is such that it has minimised its impact on amenity to the extent it can while provided improved telecommunications services to the surrounding area.

With respect to the General Development Requirements set out at Part 5 of the LPS, the following comments are made:

- Council has a telecommunications local planning policy, against which the proposal can be assessed (discussed in more detail below)
- With respect to 5.8.1:
    - The proposed facility cannot be collocated on any existing telecommunications facility as there are none within 2.6 kilometres;
    - The proposed monopole can accommodate collocation;
    - The visual impact of the proposed structure has been minimised (to the practical extent it can be) through:
        - Siting with a non-residential use, being the primary neighbourhood centre for the area
        - Setting back the facility from the nearest residential interface to the extent possible (and minimising impacts on the carpark)
        - Shrouding the antenna headframe
        - Painting the monopole and shroud
        - Minimising the monopole height, noting that sufficient height is required for both proper functioning and to allow for future collocation
    - The proposal is consistent with the policy intent of State Planning Policy 5.2

In more general terms:

- The proposed facility will occupy two small parts of the carpark which are not currently utilised for anything in particular. No carparking is impacted and the pedestrian walkway from Suffolk Street to the main shopping centre entrance is not materially impacts;

- The proposed facility will provide essential communication services that are demonstrably lacking in the area; and

- The design and siting of the facility, which is supported by the shopping centre, has minimised its impact on the locality to the extent it can while still providing efficient and effective improvements to service levels.

Local Planning Policy

The City of Swan has a local planning policy relating to telecommunications, namely POL-C-059 Telecommunication (Mobile Phone) Facilities. The objectives of the policy are set out as follows:

> *The objectives of this policy are to:*
>
> > *1. Prescribe development standards for telecommunication facilities and promote a consistent approach in the preparation, assessment and determination of applications for development approval for telecommunication facilities;*
> > *2. Manage the impact of telecommunication facilities on the built and natural environment, and the amenity of an area; and*

3. Promote co-location of telecommunication infrastructure on existing or proposed telecommunication facilities.

With respect to the General Principles set out at 6.1, the following comments are made with respect to the proposal:

- The facility cannot be integrated with the existing shopping centre building, despite previous efforts to do so. The monopole proposal has been developed in collaboration with the shopping centre owners, as the need for a facility is dire;
- The facility is a slimline monopole;
- Painting of the facility is proposed, as is shrouding of the antennas and the headframe. No landscaping is practical given the location within the carpark;
- As set out in detail above, there are no collocation opportunities as the nearest facility is 2.6kms away;
- There are no heritage matters of concern; and
- Although located in the *Residential Development Zone*, as set out above the subject land's principle designated use (and the reality today) is commercial/retail and is the key centre for the area.

With respect to the Development standards set out at 6.2, the following comments are made with respect to the proposal:

- The proposed facility is designed to accommodate three carriers (with one currently proposed);
- The proposal is not located on council-owned land;
- The proposal is noted located in a Midland Sub-Regional Centre zone;
- A setback of 200m is not possible in this area of Caversham, due to the established land use pattern and doing so would involve moving far away from this area and therefore not meeting the objective of the facility;
- The proposal is located on land designed for commercial/retail use, but the existing building is located on the rear boundary and has limited room (that is unavailable) on either side, so siting it forward of the main building is the only available option in this instance.

The application requirements set out at 7.1 have been generally provided either in this statement, on the proposal plans or on the attachments. Council may request additional information as it sees fit.

Given the constraints of the subject land and the predominantly residential nature of the locality, the proposal has responded by way of siting and design (to the extent it can) to minimise impacts and achieve the coverage and network objectives of the facility. As such, the proposal is generally consistent with Council's local planning policy.

State Planning Policy 5.2 – Telecommunications Infrastructure

All telecommunications facilities in Western Australia are subject to the provisions of State Planning Policy 5.2.

The background to SPP 5.2 states:

> *Adequate and reliable telecommunications are essential for all aspects of contemporary community life, from supporting the State's economy to creating and maintaining connected and cohesive social networks. Contact between emergency services and the community increasingly relies on the telecommunications networks.*
>
> *The importance of telecommunications services in Western Australia is recognised in the Western Australian Planning Commission's (WAPC's) State Planning Strategy 2050 (2014), which advocates for the provision of an effective state-wide telecommunications network. This network includes both above and below ground infrastructure to support both fixed line and wireless telecommunications.*
>
> (emphasis added)

The proposal and its rationale set out above is consistent with the policy principles set out in the SPP, which seeks to minimise the visual impact of such facilities through siting and design and facilitate improved telecommunications services to the community.

As such, the assessment of the proposal again SPP5.2 is as follows:

> *5.1.1 The benefit of improved telecommunications services should be balanced with the visual impact on the surrounding area.*

This outcome has generally been achieved as set out above. Further:

- the visual impact has been assessed with specific regard to this proposal, which incorporates a shroud to screen the headframe and antennas;
- the location selected is not prominently visible from a significant viewing location, including scenic routes, lookouts and recreation sites;
- the proposal does not detract from heritage items or landmarks and has been sited to minimise its impacts on streetscapes;
- the proposal is not located on land where environmental, cultural heritage, social and visual landscape values are compromised;
- the external colours and finishes can be selected to be sympathetic to the surrounding landscape, which in this location is commercial;
- the infrastructure has a maximum height of 25 metres;
- the location selected will facilitate new and improved telecommunications services to the community; and
- no collocation opportunities are available (but the facility will be designed to facilitate collocation).

All application requirements set out under 6.3.1 have been addressed.

As such, the proposed facility demonstrates a high level of compliance and consistency with SPP5.2, which is the pre-eminent document against which such infrastructure must be assessed in Western Australia.

State Planning Policy 2.4 – Basic Raw Materials
The proposed facility occupies only 35sqm of the subject land, which is 1.52 hectares in size, and therefore have no impact on the objectives of this SPP.

State Planning Policy 2.9 – Water
The proposed facility does not have requirement for, nor impact on water resources. As such, there is no impact on the objectives of this SPP.

Conclusion

The proposal is to construct a new telecommunications facility in the form of a monopole and equipment cabinets in the carpark at the Caversham Village Shopping Centre, 175 Suffolk Street, Caversham. The proposal will provide the necessary infrastructure to improve telecommunications services in the surrounding area, which consists of large residential area with very poor levels of existing service and little by way of telecommunications infrastructure.

The proposed facility has been designed and sited on the subject land to minimise its impact to the extent it can, with the headframe and antennas shrouded from view and the facility is set back from the nearest residential interface and integrated into the carpark layout.

The monopole is capable of accommodating a future collocated facility and will be painted to further minimise its impact.

The proposed facility will be located on a part of the subject land that has no material impact on its current or future use, does not materially interfere with the use of surrounding land and will greatly improve the ability to provide for the communication requirements of the area.

As set out above, the proposal is generally consistent with the outcomes sought by the Local Planning Scheme with regard to the subject land, the relevant local planning policy and the State Planning Policy 5.2.

Accordingly, I am of the view the application warrants planning consent.

Should Council require any additional information prior to making its determination, please do not hesitate to contact the undersigned.

Yours sincerely



MARK BAADE
Planning Consultant
B. Plan (Hons)
M: 0417 088 000
mark@saqconsulting.com.au

Enc.