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EXECUTIVE SUMMARY

This paper aims to provide a background context and give direction and recommendations to formulate a Communications Infrastructure Policy for Melton City Council.

This paper does this by providing research and detail on the legislative context, existing communications sites in Melton and the current acquisition process by developers and approval process by Council.

As part of this case studies were undertaken on existing communications infrastructure sites in Melton against other councils' local telecommunications policies.

These sites were examined and assessed against the policies of City of Casey, City of Boroondra, Yarra Ranges and Moreland City Councils.

This paper also looks to provide a background on the current science and regulatory system for electromagnetic emissions and communications infrastructure and how this is considered within the planning process.

This paper also seeks to outline the process and practice of developing communications infrastructure on Council land.

This paper details two workshops that were held, one with Council staff and one with telecommunications carriers. The results of these workshops have informed and been discussed throughout this paper and have helped shape the recommendations and will continue to be considered as a draft policy is developed.

This paper recommends that:

- A two-tiered approach is considered for the formulation of the policy with a policy guidance note or framework held by Council and a Policy to be incorporated into the *Melton Planning Scheme*;
- The policy guidance or framework will provide a protocol and prescriptive guidelines for the placement of communications infrastructure on Council land. This can also provide background information and further detail on requirements for planning permit application (what needs to be submitted within a planning permit application) to illustrate compliance with Clause 52.19 of the *Melton Planning Scheme* and *A Code of Practice for Telecommunications in Victoria*;
- The Communications Infrastructure Policy provides prescriptive guidance to communications infrastructure developers on what needs to be demonstrated within a planning permit application to satisfy Council that Clause 52.19 and the principles of *A Code of Practice for Telecommunications in Victoria* have been complied with. This could include details such as:
 - Prescriptive visual impact assessment guidance
 - Mandatory number of existing sites assessed for co-location
 - Mandatory number and explanation of alternative new sites considered
- The Policy could also provide more prescriptive controls on siting and design on communications infrastructure for communications infrastructure providers who are not bound by the telecommunications regulatory framework of the carriers such as private networks for businesses, digital radio and the like.

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1. INTRODUCTION

The City of Melton is located the rural urban fringe to the west of Melbourne and has land within it identified within the Melbourne Western Growth Corridor and the Sunbury Growth Corridor. The Melton area has experienced significant growth and future projected population growth will create increasing demand for communications services and associated infrastructure. Therefore, telecommunications carriers and other communications infrastructure providers will seek to locate new infrastructure that may at times require Council approval.

It is anticipated that the Communications Infrastructure Policy (the Policy) will provide direction for the deployment of communications facilities within the community. This includes providing location and siting guidance for carriers, ensuring that they avoid visually sensitive locations and to ensure that the infrastructure is provided appropriately in Melton's urban, rural and growth areas.

The City of Melton has recently received several planning permit applications for a range of telecommunications infrastructure facilities, which has highlighted the need for a policy that provides location and siting guidance. A policy is going to be more necessary as demand for telecommunications services increase due to significant population growth expected in Melton.

It is Council's intention that to deliver the best outcomes, a regular, open dialogue is required to ensure all parties work together to achieve the best outcomes possible for the community.

1.1. PURPOSE OF THE BACKGROUND PAPER

The purpose of this background paper is to give an overview of the essential context of the Policy, including current policies and specific events that have laid the foundation for the Policy, provide details of the research already undertaken, illustrate findings, draw conclusions/implications and summarise recommendations for the Policy and set out the next steps in the process of producing the Policy.

In 2012, Council produced a Communications Infrastructure Policy Scoping Paper. The paper was to provide information to Officers and councillors on the current provision of communications infrastructure in Melton. It also provided four approaches for creating a Policy.

These approaches were to:

- a) do nothing;
- b) a restrictive approach where policy would focus on areas where infrastructure should not be located;
- c) a limited restrictive approach where carriers would be encouraged to locate facilities within the city; and
- d) a guidance approach where Council will provide carriers with guidance and support in the deployment of infrastructure, while balancing the needs of the community.

Given the time elapsed since the Scoping Paper and the desire to see the process through to fruition this time, it was decided to start afresh and involve infrastructure providers in the formation of the Policy from the start.

1.2. POLICY CONTEXT

In October 2002, *Melbourne 2030 - Planning for sustainable growth* was released as a 30-year plan to manage urban growth and development across metropolitan Melbourne.

In 2005, *A plan for Melbourne's growth areas* was released and set out a strategic approach for development in Melbourne's growth areas. This included the establishment of the Growth Areas Authority.

In 2008, two integrated policy statements were released, *Melbourne 2030: a planning update - Melbourne @ 5 million* and *The Victorian Transport Plan*. These documents provided a long-term plan for managing Melbourne's growth and outlined several initiatives to ensure that the city remained liveable and sustainable.

Delivering Melbourne's newest sustainable communities was a "culmination of work focused on land use, transport and environmental initiatives. It took an integrated approach to land use and transport planning so that infrastructure and essential services are delivered as new communities in the growth areas of Melbourne are developed."

Melbourne 2030 is the Victorian government's plan for managing Melbourne's growth and development. Released in December 2008, *Melbourne 2030: a planning update - Melbourne @ 5 million* outlined policy implications for Victorians using 2008 growth projections.

In June 2012, *Growth Corridor Plans – Managing Melbourne's Growth* was produced by the Victorian Planning Authority (VPA) (Then known as the Growth Areas Authority). The *Growth Corridor Plans* are high level integrated land use and transport plans that provide a strategy for the development of Melbourne's growth corridors over the coming decades.

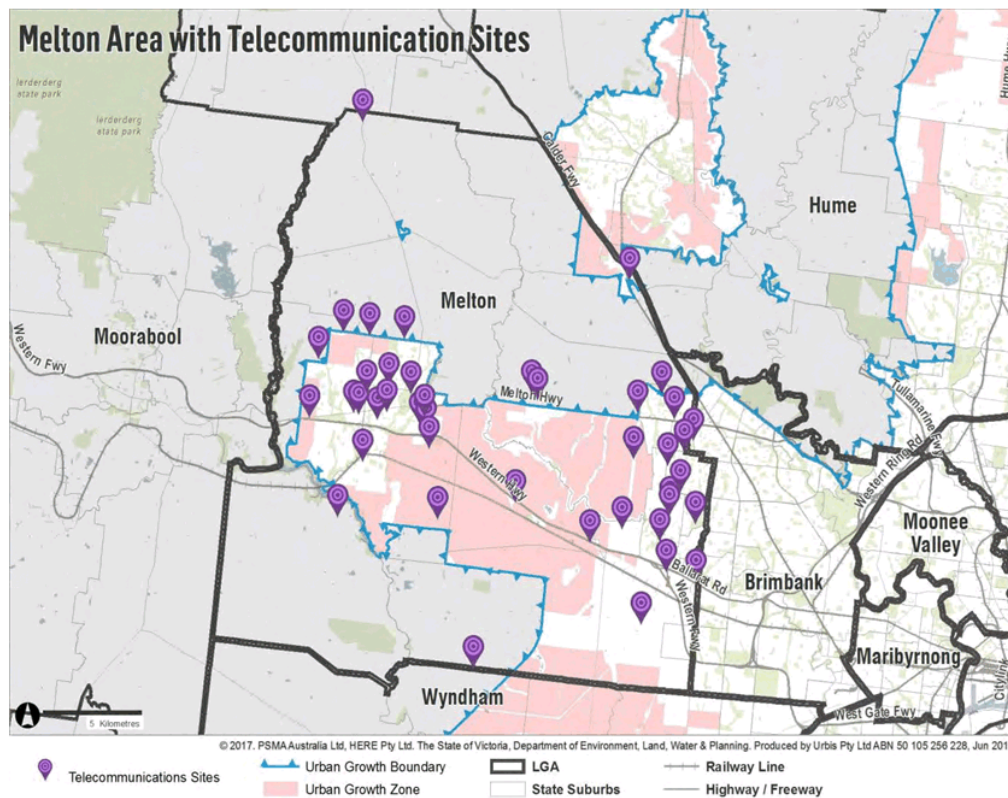
The *Growth Corridor Plans* focus on four metropolitan growth corridors over the coming decades and will provide for housing, jobs, transport, town centres, open space and key infrastructure across our city's newest metropolitan suburbs. The plans also identify broad transport networks, industrial and employment zones, residential areas and recreation precincts. The *West Growth Corridor Plan* refers to Melbourne's western region as one of the fastest growing in Australia and includes the City of Melton.

In May 2014, *Plan Melbourne* sought to integrate long-term land use, infrastructure and transport planning to meet the population, housing and employment needs of the future. The plan outlined the vision for Melbourne's growth to the year 2050.

Plan Melbourne 2017-2050 is a long-term plan designed to respond to the state-wide, regional and local challenges and opportunities Victoria faces between now and 2050. It revises the 2014 version of *Plan Melbourne* to reflect current policies and priorities, creating continuity, clarity and certainty for communities, businesses and governments. A separate five-year implementation plan has been produced as a complimentary document to *Plan Melbourne*. *Plan Melbourne* and growth areas are discussed in more detail in Chapter 2.

Below in Figure 1 is a Map showing the growth area boundaries overlaid with the and existing telecommunications facilities within the City of Melton. This map illustrates that population density will increase throughout nearly the entirety of the City of Melton but, especially to the south around Eynesbury and Mt Atkinson and to the north around Toolern Town Centre. It is clear from the projected population growth against the current existing telecommunications sites in the City of Melton, that more sites will be required particularly in the north and south of the LGA and closer to residential uses as population density and mobile phone and wireless internet use increases over the next several years.

Figure 1 – Maps Showing Growth Areas Against Location of existing Telecommunications Sites in the City of Melton



1.3. AIM OF THE POLICY

The Policy should seek to guide the siting and design of communications infrastructure including mobile telecommunications facilities and facilities that support the National Broadband Network (NBN). It will also help facilitate excellent telecommunications and NBN coverage in the municipality to service the community.

It is considered that a Policy will assist Council Officers and Councillors with the assessment and determination of planning permit applications as well as applications for leasing. The Policy is intended to be used to guide the assessment and associated provision of new infrastructure within the City of Melton, as well as being a planning decision making tool which can be implemented into the *Melton Planning Scheme*.

The Policy should have regard to, but not replicate, both the *State Planning Policy Framework* which seeks to 'facilitate the orderly development, extension and maintenance of telecommunications infrastructure' and Clause 52.19 of the *Victorian Planning Provisions*, which sets out state government requirements in relation to telecommunications facilities, including:

- Consistent provision of facilities;
- Encouragement of an effective state-wide telecommunications network consistent with economic, environmental and social objectives of the *Planning and Environment Act 1987*; and
- Encouragement for facilities to have minimal impact on the amenity of the area.

2. TELECOMMUNICATIONS LEGISLATIVE BACKGROUND

This section aims to provide a legislative background on communications infrastructure planning in Victoria. Communications infrastructure development within Victoria is legislated at a Commonwealth and State level. Prior to 1997, telecommunications development of any kind was exempt from state and territory law and therefore did not need development approval from any form of consent authority.

2.1. COMMONWEALTH LEGISLATION

2.1.1. 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. Under the *Act*, carriers are no longer exempt from state and territory planning laws except in limited instances. Approval for most telecommunications facilities, were designed to be the responsibility of state and territory governments that would usually be dealt with by relevant local government authorities.

There are exemptions for inspection of land, maintenance of facilities, installation of "low-impact facilities", subscriber connections and temporary defence facilities. These exemptions are detailed in the *Telecommunications (Low-impact Facilities) Determination 1997* (the *Determination*) and the *Amendment No. 1* of 2011 and these exceptions are subject to the *Telecommunications Code of Practice 1997*.

2.1.2. Telecommunications (Low-impact Facilities) Determination 1997

The licensed telecommunications carriers in Australia (Telstra, Optus and Vodafone) are authorised by the *Act* to install a limited range of facilities without seeking state, territory or local government planning approval. The most common of these are known as "low-impact facilities" which are specified in the *Telecommunications (Low-impact Facilities) Determination 1997* and its amendment of 2011.

Low-impact facilities include small radiocommunications antenna and dishes that are erected on existing towers or buildings and that are designed to be unobtrusive. Other types of low-impact facilities include underground and above ground housing, underground cables, public payphones and temporary emergency facilities. The *Act* precludes certain types of facilities from being defined as low-impact. For example, aerial cables cannot be low-impact facilities.

The *Determination* defines where facilities may be installed based on the predominant land use of the site either commercial, industrial, residential or rural under state or territory laws. For example, a facility that is deemed low-impact in a rural or industrial zone may not be low-impact if installed in a residential area. A facility in an area of environmental significance, such as a World Heritage area or a heritage item cannot be designated as a low-impact facility.

The Commonwealth Government does not provide determinations whether a site is low-impact or not. Binding determinations as to whether a facility is a low-impact facility are made by courts, typically in response to proceedings commenced by state, territory or local governments.

2.1.3. Land Access and Activity Notices Under the Provisions of the Telecommunications Act 1997 and Telecommunications (Low-impact Facilities) Determination 1997

Once a suitable location for a telecommunications facility has been identified, carriers normally enter a tenure arrangement (lease/licence/access deed) with the landowner for the portion of land to be utilised by the proposed facility.

However, carriers installing telecommunication facilities under the provisions of the *Determination* have access rights that are not available to them when installing a facility under state and local environmental legislation. Under the *Act*, a carrier may enter upon land and exercise their powers:

- to inspect the land to determine whether the land is suitable for the carrier's purposes;
- to install a facility on the land; and
- to maintain a facility that is situated on the land.

In exercising these powers, a carrier must comply with certain conditions, which as a minimum include doing as little damage as practicable, acting in accordance with good engineering practice, complying with recognised industry standards and giving notice to the owner of land.

Under the legislation, if the carrier complies with the conditions, it has the right to serve a Land Access and Activity Notice (LAAN) to construct a facility on land or a building without the consent of the property owner. However, generally these land access rights granted under the Act are most commonly used upon request by public authorities such as state government departments and local councils where access deeds are, at times, the preferred arrangement.

When issuing a LAAN it must specify the purpose for which the carrier intends to engage in the activity. If following the issue of a LAAN, a person or organisation suffers financial loss or damage because of anything done by a carrier in relation to the property, a reasonable amount of compensation directly determined by the financial loss or damage may be payable to that person or organisation.

If an owner or occupier receives a LAAN from a carrier regarding its intention to undertake an activity upon the land, the owner or occupier may give the carrier a written objection to the activity. The grounds for objection may include any or all of the following:

- using the objector's land for the activity;
- the location of a facility on the objector's land;
- the date for the proposed activity to commence;
- the likely effect of the activity on the objector's land; and
- the carrier's proposals to minimise detriment and inconvenience, and to do as little damage as practicable, to the objector's land.

A written objection must be made to the carrier by the owner or occupier within five business days of receiving a proposed LAAN from a carrier. The carrier then has five business days to satisfactorily resolve the objection. If no agreement is reached, the objector must request the carrier to forward the dispute to the Telecommunications Industry Ombudsman (TIO). If an agreement is reached or the objector does not request the involvement of the TIO within the five business days after the LAAN was given, the carrier may install the facility.

As stated previously, this LAAN is only applicable when the Determination is used by a carrier to install a telecommunications facility. Installation of a telecommunications facility, via a planning permit to a council or under state planning legislation requires an agreed arrangement (such as a lease) with the owner. These tenure arrangements contain rights of access to the property for maintenance of the facility.

2.1.4. Telecommunications Code of Practice 1997

As a guidance code, the *Telecommunications Code of Practice 1997* and its amendment of 2002, sets out in detail carriers obligations and responsibilities when installing low-impact facilities, inspecting land and maintaining facilities. The *Code of Practice* emphasises "best practice" design, planning, and installation of facilities, compliance with industry standards and minimisation of adverse impacts, particularly in terms of environmental and visual impacts

2.1.5. Review of Commonwealth Legislation

There are number of changes proposed to the *Telecommunications (Low-impact Facilities) Determination 1997*, *Telecommunications Code of Practice 1997* and *Telecommunications Act 1997* via the form of a public consultation paper, the point of which is to ensure the telecommunications powers and immunities remain relevant in a changing technology landscape.

Since 1997 when the original legislation was passed, fixed-line and mobile communications technologies have evolved and there has been a major uptake and increase in demand for voice and broadband services.

The changes proposed clarify existing powers and immunities and make changes to some existing facility types, and streamline notification and objection rules. These are outlined in brief below:

Telecommunications (Low-Impact Facilities) Determination 1997

- Revised definition of co-located facility
- Low Impact activities permissible in local heritage conservation areas
- Shrouding permissible as a Low Impact activity
- Maximum dish size increased for industrial and rural areas
- Height increase from 3m to 5m for antennas protruding from a building or structure

- Omni antennas permissible in residential and commercial areas
- Microcells and Wifi redefined to allow greater flexibility
- Equipment installed inside a non-residential structure in residential areas
- 5m tower extensions now permissible in commercial areas
- New antenna type included as low impact: 'radiocommunications lens antennas'
- Revised cabinet size: up to 3m high with a base area of not more than 2m²
- Size of solar panels in rural increased from 7.5m² to 12.5m²
- Length of trench open in residential areas increased from 100m to 200m
- Cable and conduit on or under bridges included as Low Impact
- Remove volume restrictions entirely for works commercial areas. Increase from 25%-50% in residential areas
- Updates to environmental legislation references

Telecommunications Code of Practice 1997

- Clarify requirements for joint venture arrangements
- LAAN objection period reduced from 9 days to 5 days
- Allow carriers to refer land owner and occupier objections to the Telecommunications Industry Ombudsman
- Updates references to legislation, standards and organisations

Telecommunications Act 1997

- Poles up to 12m high and 500mm in diameter used to support cabling for the NBN to be permissible as Low Impact. Telecommunications tower will remain not permissible.
- Carriers will be able to install temporary facilities as Low Impact
- Replacement towers permissible as Low Impact
- Tower extensions up to 10m permissible in commercial, industrial and rural areas.

This consultation paper is seeking comments until July 2017. After this date these will then be considered and a decision is expected on adaptation of any or all of the proposed amendments by early 2018.

2.1.6. Environmental Protection and Biodiversity Conservation Act 1995

The *Environment Protection and Biodiversity Conservation Act 1995* (the *EPBC Act*) commenced on 16 July 2000. It introduced a new role for the Commonwealth Government in the assessment and approval of development proposals where those proposals involve actions that have a significant impact on matters of national environmental significance, the environment of Commonwealth-owned land and actions carried out by the Commonwealth Government. If there it is deemed or expected that there may be an impact under one of these matters, then a referral to the Commonwealth for assessment and approval is required before proceeding.

2.2. VICTORIAN LEGISLATION

2.2.1. Planning and Environment Act 1987

The Act sets out procedures for preparing and amending the Victoria Planning Provisions and planning schemes. It also sets out the process for obtaining permits under schemes, settling disputes, enforcing compliance with planning schemes and permits, and other administrative procedures.

The Planning and Environment Act underpins and applies to all aspects of this Policy and how it will be implemented to fit in with current local and State level applicable legislations, guides and planning provisions. It is also important as the enabling legislation in implementing a Policy and how much weight the Policy will be able to have in City of Melton making planning determinations and at VCAT.

2.2.2. Local Government Act 1989

This is the principal legislation in Victoria governing the establishment and operation of councils, along with various Regulations made under this Act. This defines the purposes and functions of local government as well as providing the legal framework for establishing and administering Councils.

When seeking to enter into a lease with Council as part of an agreement to install Communications infrastructure on Council land the processes set out in the Local Government Act must be followed. In particular the provisions governing Councils public notification requirements and consideration of submissions to ensure that the community has an input and is notified regarding the leasing process. This is detailed further in section 6 of this report.

2.2.3. Aboriginal Heritage Act 2006

The *Aboriginal Heritage Act 2006* commenced on 28 May 2007. The commencement of the *Aboriginal Heritage Act* proceeded after the completion of the *Aboriginal Heritage Regulations 2007*. The *Regulations* provide for the protection and management of Aboriginal cultural heritage in Victoria by specifying the circumstances in which a cultural heritage management plan (CHMP) is required and prescribing standards for the preparation of a CHMP. This is required if all or part of the proposed activity is in an "Area of Culture Heritage Sensitivity", and all or part of the activity is a "high impact activity". Areas of Cultural Heritage Sensitivity include registered Aboriginal cultural heritage places, as well as landforms and land categories that are generally regarded as more likely to contain Aboriginal cultural heritage.

2.2.4. Heritage Act 1995

The *Heritage Act 1995* commenced operation on 5 December 1995. The *Heritage Act* establishes a legislative framework for heritage protection in Victoria and the *Victorian Heritage Register*, the *Heritage Inventory* and the Heritage Council of Victoria.

If proposed works affect an item or land on the *Victorian Heritage Register*, then a heritage permit is required under Section 67 of the *Heritage Act*. Generally, this must be granted within 30 days of this application. Generally, if the site is only subject to an item on the *Victorian Heritage Register* and not subject to a heritage overlay and there is no other trigger for a planning permit application within the local government planning scheme, then a heritage permit would only be required and no planning permit would be required for works.

However, in the case of telecommunications facilities, as they are subject to Clause 52.19 in all local government planning schemes, a heritage permit must be applied for in conjunction with a planning permit from Council (which is required under Clause 52.19 except for exemptions allowed under the Determination and *A Code of Practice for Telecommunications Facilities in Victoria*). It will generally be a condition of any planning permit that a heritage permit is also obtained for the works.

The Heritage Council of Victoria can grant an exemption to a heritage permit for works affecting an item on the *Victorian Heritage Register*. This works as a site-specific exemption based on a recommendation to the Heritage Council from the Executive Director following an application of exemption by a proponent under Section 66 of the *Heritage Act 1995*.

2.2.5. A Code of Practice for Telecommunications Facilities in Victoria

A Code of Practice for Telecommunications Facilities in Victoria (the *Vic Code*) is an incorporated document in all planning schemes in Victoria. It aims to set out circumstances and requirements for telecommunications development in Victoria without the need for a planning permit. The *Vic Code* also sets out principles for the design, siting, construction and operation of a telecommunications facility in Victoria which are set out below in Table 1 on page 9 of this paper.

Figure 2 below sets out the general process for telecommunications approvals within Victoria, where a planning permit is required and when planning scheme provisions apply.

Figure 2 – Telecommunications Approval Process in Victoria (Source: *A Code of Practice for Telecommunications in Victoria, 2004*)

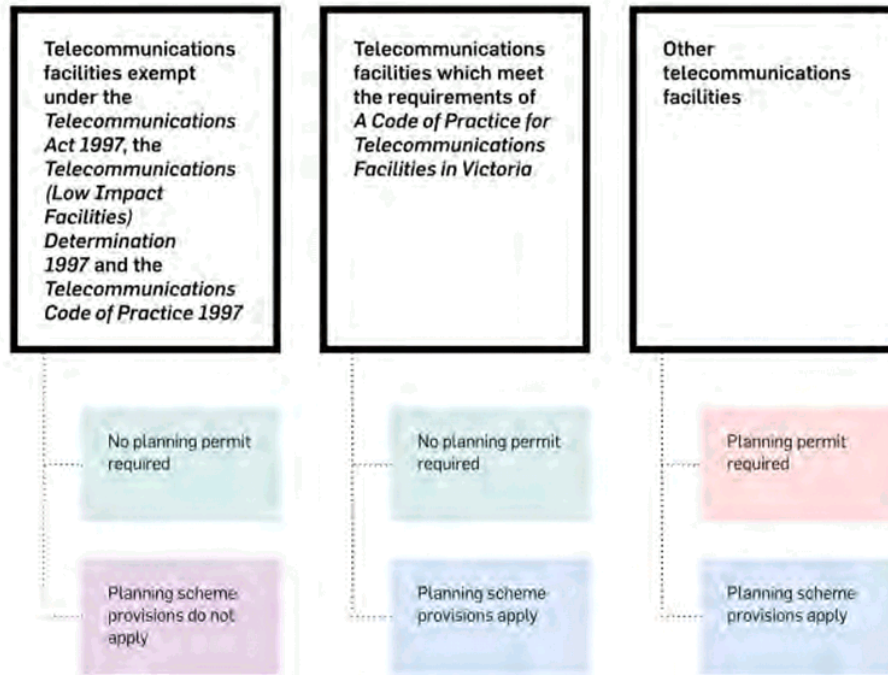


Table 1 – Table showing the Principles set out in *A Code of Practice for Telecommunications Facilities in Victoria, 2004*

Principle	Application of Principle	Policy Inclusions to Comply with Provisions
1 - A Telecommunications facility should be sited to minimise visual impact.	<ul style="list-style-type: none"> On, or in the vicinity of a heritage place, a telecommunications facility should be sited and designed with external colours, finishes and scale sympathetic to those of the heritage place. A heritage place is a heritage place listed in the schedule to the Heritage Overlay in the planning scheme. A telecommunications facility mounted on a building should be integrated with the design and 	<ul style="list-style-type: none"> Planning report supporting the permit application should include photomontages and a visual impact statement showing impacts from any significant views, streetscapes, vistas, panorama and from any heritage place or landmark. Site plans with schedule of colours and finishes.

	<p>appearance of the building.</p> <ul style="list-style-type: none"> • Equipment associated with the telecommunications facility should be screened or housed to reduce its visibility. • The relevant officer of the responsible authority should be consulted before any street tree is pruned, lopped, destroyed or removed. • A telecommunications facility should be located so as to minimise any interruption to a significant view of a heritage place, a landmark, a streetscape, vista or a panorama, whether viewed from public or private land. 	
<p>2 - Telecommunications facilities should be collocated wherever practical.</p>	<ul style="list-style-type: none"> • Wherever practical, telecommunications lines should be located within an existing underground conduit or duct. • Overhead lines and antennae should be attached to existing utility poles, towers or other radiocommunications equipment to minimise unnecessary clutter. 	<ul style="list-style-type: none"> • Planning report supporting planning permit application should identify several nearby opportunities to co-locate and an explanation as to why they can or cannot be used.
<p>3 - Health standards for exposure to radio emissions will be met.</p>	<ul style="list-style-type: none"> • A telecommunications facility must be designed and installed so that the maximum human exposure levels to radio frequency emissions comply with Radiation Protection Standard – Maximum Exposure Levels to Radiofrequency Fields – 3kHz to 300 GHz, ARPANSA, May 2002. 	<ul style="list-style-type: none"> • Predictive EME report to be submitted as part of planning permit application showing compliance with Radiation Protection Standard – Maximum Exposure Levels to Radiofrequency Fields – 3kHz to 300 GHz, ARPANSA, May 2002.
<p>4 - Disturbance and risk relating to siting and construction should be minimised. Construction activity and site location should comply with State environment protection policies and best</p>	<ul style="list-style-type: none"> • Soil erosion during construction and soil instability during operation should be minimised in accordance 	<ul style="list-style-type: none"> • Soil and erosion plan, stormwater management, flora and fauna plans and any other specific site plans pertaining to site conditions be submitted

<p>practice environmental management guidelines.</p>	<p>with any relevant policy or guideline issued by the Environment Protection Authority.</p> <ul style="list-style-type: none"> • Construction should be carried out in a safe and effective manner in accordance with relevant requirements of the Occupational Health and Safety Act 1985. • Obstruction or danger to pedestrians or vehicles caused by the location of the facility, construction activity or materials used in construction should be minimised. • Where practical, construction should be carried out during times that cause minimum disruption to adjoining properties and public access. • Traffic control measures should be taken during construction in accordance with Australian Standard AS1742.3 – 2002 Manual of uniform traffic control devices – Traffic control devices on roads. • Open trenching should be guarded in accordance with Australian Standard Section 93.080 – Road Engineering AS 1165 – 1982 – Traffic hazard warning lamps. • Disturbance to flora and fauna should be minimised during construction and vegetation replaced to the satisfaction of the land owner or responsible authority at the conclusion of work. • Street furniture, paving or other existing facilities removed or damaged during construction 	<p>with planning permit application.</p> <ul style="list-style-type: none"> • Construction and access details to be documented within the planning report supporting the planning permit application.
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	<p>should be reinstated (at the telecommunication carrier's expense) to at least the same condition as that which existed prior to the telecommunications facility being installed.</p>	
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The principles set out general provisions in line with the Mobile Carriers Forum (MCF) guidelines and the intentions of the Commonwealth as set out in the *Determination*. Generally, this sets out that as a first preference all facilities should be co-located and it should be established early whether it is possible and if a new facility cannot be co-located, then an explanation will need to be provided before moving onto a new site.

The other major factors relate to visual amenity and the need to reduce any potential impact on visual amenity of telecommunications facilities, especially regarding specific viewpoints, vistas or heritage items. This means that the carrier will seek to reduce visual impact through the siting, design and use of existing and/or proposed natural or manmade screening having regard to its visual challenges.

The *Vic Code* also requires all telecommunications facilities to comply with the maximum human exposure levels to radio frequency emissions comply with *Radiation Protection Standard – Maximum Exposure Levels to Radiofrequency Fields – 3kHz to 300 GHz, May 2002 (The ARPANSA Standard)*. The *Radiation Protection Series* is published by the Australian Radiation Protection and Nuclear Safety Agency (ARPANSA). It should be noted that all telecommunications facilities comply and operate within the ARPANSA Standard and audits have found that no site has ever operated outside of the ARPANSA Standard. This means that electromagnetic emissions (EME) should not be a planning consideration for telecommunications facilities. This is detailed further in Chapter 3 of this paper.

Finally, in the questions contained within section 6 of the *Vic Code* question 5 states:

Can a Council include a local policy in a planning scheme which provides more stringent requirements than those set out in this Code?

No. Clause 52.19 of planning schemes and this Code, provide consistent provisions for telecommunications facilities in Victoria.

This poses the inherent challenge in making a relevant policy for the City of Melton, given that it cannot be more stringent requirement than those set out in the *Vic Code* or Clause 52.19 it means that the strength and nature of the Policy is questionable. This is discussed in further detail in Chapters 2.8 and 7 of this paper especially in regards to the comments from the MCF following the carrier workshop and the reviews in place for the *Vic Code*, Clause 52.19 and more broadly the *Determination* and the *Mobile Phone Base Station Deployment Industry Code*.

2.2.6. Plan Melbourne

Plan Melbourne is a metropolitan planning strategy that defines the future shape of the city and state over the next 35 years.

Integrating long-term land use, infrastructure and transport planning, *Plan Melbourne* sets out the strategy for supporting jobs and growth, while building on Melbourne's legacy of distinctiveness, liveability and sustainability.

The plan includes:

- 9 principles to guide policies and actions;
- 7 outcomes to strive for in creating a competitive, liveable and sustainable city;
- 32 directions outlining how these outcomes will be achieved; and
- 90 policies detailing how these directions will be turned into action.

Outcome 1 of the *Plan* is that "*Melbourne is a productive city that attracts investment, supports innovation and creates jobs*". A vital part of this is a reliable fast telecommunications service therefore the infrastructure for these needs to be encouraged and grown as peoples work and life moves more to the digital economy and telecommuting.

Policy 1.2.3 of Outcome 1 is entitled *Support the provision of telecommunications infrastructure*. This Policy states:

“Next-generation communications—from fixed and wireless broadband, cloud computing, augmented reality applications and social media—are changing the way people live and work.

These changes have made telecommunications infrastructure as fundamental to commercial enterprises as electricity. The absence of telecommunications pathways can hinder or delay the provision of services and increase costs.

To remain globally competitive, Melbourne’s employment areas must support high-quality telecommunications infrastructure. That is why employment, urban renewal and growth area precincts need to include early planning for fibre-ready facilities and wireless infrastructure—eliminating the need for the costly and time-consuming retrofitting of telecommunications pathways”.

The Policy needs to take account of the above statement which is part of the shift in thinking over the 20 years since the Act was introduced and the move to more integrated and digital economies. This directly relates to Melton in the fact that Melton is based within the West Growth Corridor and subject to Precinct Structure Plans (please see section 2.2.5) which are approved and incorporated into the *Melton Planning Scheme*.

These new master planned areas need to incorporate fibre for broadband and wireless infrastructure (such as telecommunications facilities) as part of their essential infrastructure to make these communities connected and achieve the policy outcomes of *Plan Melbourne*.

The Policy also needs to take account of this and where possible provide a means to allow communications infrastructure providers means to engage with developers, Council and VPA to ensure that this infrastructure can be provided for and planned into the precinct at the master planning stage thereby avoiding ad hoc communications development and making sure that fast and reliable communications is available to new and growing communities.

The formulation of the Policy also needs to take account of the fact that the Victorian Government in seeking to implement *Plan Melbourne* set out a 5-year Implementation Plan. In relation to Policy 1.2.3, the Action 15 of the *Implementation Plan* is named *Review planning for telecommunications infrastructure*. It is intended that this will be achieved via the following actions:

1. *Review A Code of Practise for Telecommunications Facilities in Victoria 2004 to ensure it meets the needs of service users and providers;*
2. *Ensure adequate telecommunications pathways in new buildings, particularly multi-unit dwellings, shopping centres and office buildings; and*
3. *Ensure that all areas identified as significant employment centres (e.g. NEICs, metropolitan activity centres, major commercial and industrial areas and major urban renewal precincts) include early planning for fibre-ready facilities and telecommunications infrastructure.*

The actions detailed above will be implemented by the Department of Environment, Land, Water and Planning (DELWP), the Department of Economic Development, Jobs, Transport and Resources (DEDJTR) and VPA and were expected to be over a timeframe of 2-5 years (by 2021 when realised in 2014 it was intended that the review of the *Vic Code* by 2018. However, this has been updated as the first action to implement this action and therefore acting on Policy 1.2.3 of *Plan Melbourne*).

As discussed in Chapter 2.8 of this paper, the implications on the Policy for Melton by this must be considered as any review of the *Vic Code* and in turn Clause 52.19 may render the Policy superseded or irrelevant. Nevertheless, the Actions specified above by Action 15 can be implemented in any local policy and can be used as a guideline.

The challenge is for any policy to work within these parameters and thus compliment the *Vic Code* and Clause 52.19 (and any future amendments) and therefore also supporting and fitting in with the vision of Policy 1.2.3 and the associated actions. This is particularly clear with the third action where guidance to developers and Council can be brought into the Policy to make sure that employment and commercial areas (including a future Metropolitan Activity Centre) and the new precincts developed as part of the West Growth Corridor have sustainable telecommunications development integrated into them early or at planning stage recognising its role as essential infrastructure such as water, electricity and sewage works.

It is recommended that the Policy is developed with *Plan Melbourne* and Policy 1.2.3 very much in mind and its envisaged that this approach could ensure a policy approach in line with the Victorian Government’s approach and aims for ongoing telecommunications connectivity and development.

2.2.7. West Growth Corridor Area – Precinct Structure Plans

Council has been identified as being a growth area council and is situated within the West Growth Corridor. The purpose of the growth areas has been developed in conjunction with the strategic plan for Melbourne to identify areas of growth as Melbourne expands and the master planning of new suburbs. One of the defining philosophies has been that an area must have *“great amenity, including large open space, terrific facilities and bustling neighbourhoods.”*

As part of this the VPA has designated that suburbs have incorporated into them World Class services and infrastructure. To facilitate this the VPA have been preparing Precinct Structure Plans (PSP) for areas. These plans are high level master plans for showing layout roads, shopping centre, schools, parks, housing, employment, connections to transport and generally resolve the complex issues of biodiversity, cultural heritage, infrastructure provision and Council charges. More than 50 PSP's have been completed so far with a percentage of these located in Melton and with others currently in the pipeline being prepared and to be prepared in this ongoing process.

The PSP have identified the objective *“to provide to all lots, to the satisfaction of the relevant authorities, with potable water, electricity, a reticulated sewerage, drainage, gas and telecommunications”*.

This broad objective set out the need for telecommunications as essential utility infrastructure, however the mechanism for implementing them at the early stages of development is not necessary in place. Therefore, the Communications Infrastructure Policy needs to take account of this and establish a means that communications infrastructure providers, developers within the PSP areas and Council can come together to incorporate the planning of telecommunications (including NBN fibre connections) into the detailed plans and construction in such a way that it doesn't affect the amenity and biodiversity aims of the PSPs whilst establishing the integration of communications infrastructure.

Therefore, the Policy will need to incorporate measures to account for this, providing guidance for this process, as well providing the type and examples of desired and high-quality design that could be incorporated into these areas. This is required to meet the objectives of the PSPs for better communications infrastructure whilst being compatible with the visual and biodiversity ideals of these areas. It should be noted that Telecommunications services in the PSP areas is not designated as items to be included within a Development Contribution Plan or the Infrastructure Contribution Plans (that will supersede these in the future). Therefore, as Telecommunications has not been considered these must be provided by developers as a matter of course. Given that there is sometimes, and historically a level of disconnect between developers, communications infrastructure providers and the intentions of Council, the Policy needs to bridge this gap and provide this mechanism without invoking further developer contributions to enact this measure.

2.2.8. Melton Planning Scheme

If a telecommunications permit is required for a proposed Communications facility then there are two main considerations that must be addressed, contained within the individual planning scheme:

- Clause 19.03-4 Telecommunications of the State Planning Policy Framework; and
- Clause 52.19 which contains decision guidelines for telecommunications development in addition to the general guidelines contained within Clause 65 of an individual planning scheme.

State Planning Policy Framework (SPPF)

The SPPF covers strategic issues of state importance. It lists policies under nine headings: settlement, environmental and landscape values, environmental risks, natural resource management, built environment and heritage, housing, economic development, transport and infrastructure. Every planning scheme in Victoria contains this policy framework, which is identical in all schemes.

Clause 19.03-4 of the SPPF refers to telecommunications. The objective for Clause 19.03-4 – Telecommunications is *“To facilitate the orderly development, extension and maintenance of telecommunications infrastructure.”*

In general, when considering proposals for telecommunications facilities against the SPPF, the responsible authority must seek a balance between the provision of important telecommunications services and the need to protect the environment from possible adverse impacts (for example visual intrusion) arising from telecommunications infrastructure. There is strong state policy support for improved telecommunications facilities if, when balancing improved telecommunications services with environmental impacts, a proposal provides a net community benefit.

Clause 52.19 – Telecommunications

Clause 52.19 refers to Telecommunications Facilities. Its purpose is:

- To ensure that telecommunications infrastructure and services are provided in an efficient and cost effective manner to meet community needs.
- To ensure the application of consistent provisions for telecommunications facilities.
- To encourage an effective state-wide telecommunications network in a manner consistent with the economic, environmental and social objectives of planning in Victoria as set out in section 4 of the Planning and Environment Act 1987.
- To encourage the provision of telecommunications facilities with minimal impact on the amenity of the area.

Clause 52.19-2 states:

"A permit is required to construct a building or construct or carry out works for a Telecommunications facility".

Clause 52.19 includes certain types of telecommunications facilities that are exempt from the need for a planning permit. These include low-impact facilities (as outlined in Chapter 2.1) and planning exempt under the *Vic Code* (as incorporated document in all Victorian planning schemes). Before deciding on an application for the development of a telecommunications facility, in addition to the guidelines of Clause 65, Council must consider as appropriate the decision guidelines contained in Clause 52.19-6. These are as follows:

- *The principles for the design, siting, construction and operation of a Telecommunications facility set out in A Code of Practice for Telecommunications Facilities in Victoria.*

These are as detailed in Table 1 above and must be addressed in any permit application by a site analysis and design response explaining how the proposed facility addresses the principles for the design, siting, construction and operation of telecommunications facilities and the requirements in the *Vic Code*. The proposed policy could set out a prescriptive means contained within any permit application of how to address this objective such as in a compliance table or the like.

- *The effect of the proposal on adjacent land.*

This is a part of the planning assessment of the facility. In general, this should have regard for any effects on adjacent land such as visual impact, access and other environmental considerations.

- *If the Telecommunications facility is located in an Environmental Significance Overlay, a Vegetation Protection Overlay, a Significant Landscape Overlay, a Heritage Overlay, a Design and Development Overlay or an Erosion Management Overlay, the decision guidelines in those overlays and the schedules to those overlays.*

As with any development affected by an overlay. The facility needs to be compliant with the objectives of each overlay and the Council must make an assessment against the decision guidelines and schedules to those overlays.

Clause 52.19-4 sets out the requirements for exemption from notice and review of a permit for Telecommunications facilities. In general, most facilities that require a permit are subject to the statutory notification and review process these include:

- A radio communications dish greater than 1.2 metres in diameter or
- A Telecommunications tower (other than a low-impact facility described in the *Telecommunications (Low-impact Facilities) Determination 1997*).
- If the land is in an Environmental Significance Overlay, a Vegetation Protection Overlay, a Significant Landscape Overlay, a Heritage Overlay, a Design and Development Overlay or an Erosion Management Overlay.
- If the land is public land not in a public land zone and the responsible authority is not the public land manager.

Further to this on 23 November 2016 the Minister for Planning authorised *Amendment VC131* to the *P&E Act*.

Permit applications for a telecommunications facility funded (or partly funded) under the Commonwealth Government's *Mobile Black Spot Program* are now exempt from the notice and review requirements of the *Act*. In particular:

- Planning applications for Commonwealth Black Spot sites still need to be made to Council who retain authority to assess local impacts through the permit application process. However, they will not be advertised publicly and third parties will not have the opportunity to make a submission.
- Third party appeal rights will not apply. This means that objectors will not be able to apply to Victorian Civil and Administrative Tribunal (VCAT) for review of a decision to grant a permit. This also applies to VCAT proposals which are currently live.
- Proposals will be assessed by Council purely on their merits and in most cases will be decided under delegation. The result is a slightly expedited process, down from 12 weeks to 6-10 weeks.
- The amendment also assumes that “telecommunications carriers also usually provide notice and undertake consultation prior to lodging a permit application”. Although notification is not required under the assessment process, the state governments expectation is that carriers still consider undertaking consultation prior to lodgement, particularly for sensitive sites.

It should be noted however that there are currently no Black Spot funded sites within the Melton LGA. Given the above it should be assumed that the majority (barring some rooftop sites that do not meet the requirements of the *Vic Code* or *Determination*) will require permit applications, to be publicised and have the same review process as the majority of statutory applications. Therefore, it is important that the Policy provide guidance to applicants on details required for the permit application that will provide a logical basis for making a decision for either approval (based on compliance with Clause 52.19) or the alternative of refusing an application.

2.3. OTHER TELECOMMUNICATIONS SPECIFIC POLICIES AND GUIDANCE

2.3.1. Mobile Phone Base Station Deployment Industry Code

The *Mobile Phone Base Station Deployment Industry Code* (the *Deployment Code*) was developed by the Communications Alliance Limited who considered the views of the carriers and community stakeholders to formulate an industry code for the application of the precautionary approach (for more detail on the precautionary approach please see Chapter 3.3) and set out consultation requirements for the deployment of mobile phone base stations.

The *Deployment Code* was registered by the Australian Communications and Media Authority (ACMA) and came into effect on 1 July 2012. This means that the ACMA can investigate and enforce any breaches of the *Deployment Code* by a carrier when undertaking consultation activities. The consultation activities outlined in the *Deployment Code* are undertaken when a carrier utilises the *Determination* or the *Vic Code* to acquire a site.

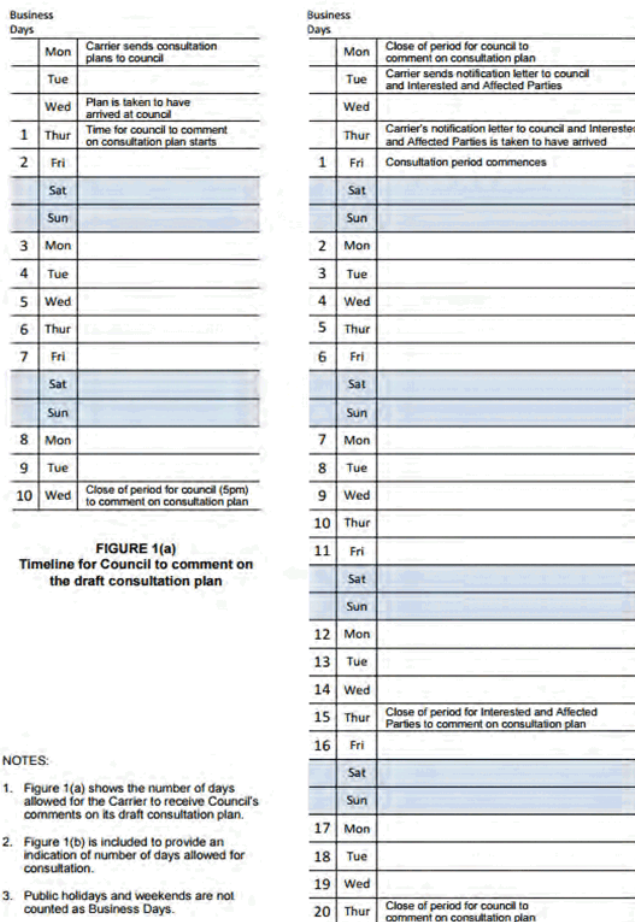
In general, these are split into consultation activities for new sites (Section 6 of the *Deployment Code*) and existing sites (Section 7 of the *Deployment Code*).

Section 6 of the Mobile Phone Base Station Deployment Industry Code

When undertaking the installation of a new mobile base station under the *Determination* or *Vic Code* the carrier must:

- Develop a consultation plan and provide this to Council for comment;
- Consider any comments received on the plan and then proceed with notification which should include at a minimum:
 - Letter-drop to interested and affected parties identified within the plan
 - Site notice placed on site
 - Webpage with notification information published on RFNSA webpage (see 2.3.2 for explanation of RFNSA)
- Once the notification period has passed (15 business days for interested and affected parties and 20 business days for Council) the carrier must decide based on the responses received if they will go ahead and if any changes or further consultation is required. This is summarised in a consultation report which is issued to Council and the webpage is updated with a date scheduled for construction of the mobile phone base station. Figure 3 below shows the timeline for a Section 6 notification process.

Figure 3 – Timeline for a Section 6 process under the Mobile Phone Base Station Industry Deployment Code (Source: MCF - Mobile Phone Base Station Industry Deployment Code)



Section 7 of the Mobile Phone Base Station Industry Code

When undertaking the installation of mobile equipment on an existing telecommunications site (which includes certain alterations and additions to an existing telecommunications site) the carrier must undertake a process which is as follows:

- Submit a notification letter to Council with the following information:
 - the proposed location;
 - a written description of the proposed work;
 - a statement setting out whether the carrier regards the infrastructure as a low-impact facility under the *Determination* and the reasons for that conclusion;
 - a statement that the proposed infrastructure will be in compliance with the ACMA EMR regulatory arrangements;
 - a statement of estimated EME exposure levels in the ARPANSA Report format;
 - a statement that Council may obtain further information on the proposed work, and contact details for the carrier's representative from whom the information may be obtained;
- The carrier must also place a notice in the public notices section of a local paper with the following information:
 - describe the proposed work and its location, including street address and suburb if applicable;

- state that members of the public may obtain further information on the proposed work, and set out contact details for the carrier's representative from whom the information may be obtained;
- invite written submissions on the proposed work;
- specify the closing date for submissions, which must be at least 10 days after the date on which the notice is published; and
- state the address to which submissions should be sent.

The carrier must have regard for any submissions received and update the RFNSA after the 10 days has been completed by which time they can proceed with the works.

Review of the Mobile Phone Base Station Deployment Industry Code

The *Deployment Code* is currently under review with opportunities for comments and submissions as part of this review closing on 15 May 2017. Following this, it is expected that although the *Deployment Code* will remain, it will be amended to reflect changes in the landscape with regards to base station deployment. This would in general only affect installations that do not require permit applications and as such this should not impede or effect the formulation of the Policy.

2.3.2. The Radio Frequency National Site Archive

The RFNSA is a web based system managed by the MCF which all carriers and communications providers can record and share information so that all parties such as carriers, statutory bodies and the general public can have visibility of a mobile phone base station's compliance with the ARPANSA Standard and the Industry Code. This can be assessed at www.rfnsa.com.au and can be searched by entering an address or site specific number which the carrier will quote on any Code notifications and planning permit applications such as in the predictive EME report.

The intention of this system is to ensure visibility and compliance for all mobile base stations and other communications infrastructure across Australia. This can be used in conjunction with the ACMA licence database which contains details of all licences for communications infrastructure nationally which can be assessed at <https://web.acma.gov.au/rrl/>.

2.3.3. City of Melton Significant Landscape Features Strategy

The City of Melton adopted a Significant Landscape Features Strategy on 2nd May 2016. This strategy identified significant landscapes based on the following features:

- Aesthetic values (both visual and non visual)
- Historic values (e.g. buildings, structures, locations, landmarks)
- Environmental/scientific values (e.g. vegetation, geology, topography, watercourses, flora and fauna)
- Social values (e.g. community or cultural connection)

The Strategy also highlighted current challenges and future threats to the natural landscape in the context of an outer Melbourne growth area, and recommended a range of measures to better protect and manage these areas into the future.

In regards to communications infrastructure this has a direct implications, as the main impact from such structures is their visual impact upon the landscape. The powers and immunities provided by the Commonwealth allows for Carriers and Commonwealth entities (such as Air Services Australia) to be able to not have to take account of the Significant Landscape Features Strategy due to operating at a higher level of legislative assessment. However, it is important that the Policy ties into the Strategy and is aligned with it to guide development where planning permits are required. Also on non-carrier development where certain landscape features and areas identified in the strategy can be excluded from future communications infrastructure development unless innovative and complementary design can be achieved.

The strategy makes particular mention of the future threats from communications infrastructure on the volcanic cones and in particular Mt Atkinson which is located within an Urban Growth Boundary and therefore susceptible to a need for communications infrastructure to meet growing population needs. The Policy therefore needs to set out a means to protect against this and future expansion upon the Cones. This may be difficult for existing infrastructure but the Policy can have a strong stance and guidance to new development to lead them to areas more aligned with the Significant Landscape Strategy rather than ad hoc and visually detrimental development.

2.4. TYPES OF DEVELOPMENT AND APPROVALS PROCESS

As stated above, there are numerous forms of approval and public notification that can occur according to the type of facility, the site and various constraints. Figure 4 below outlines what types of facilities require Council approval and what levels of notification are required for each. This is an overview and each case should be considered on its merits, although this is a good guide to the distinctions in each type.

Figure 4 – Communications Infrastructure and Planning Approval Pathways

Type of Development	New/Existing	Approval Pathway	Responsible Authority	Consultation/ Notification Requirements
Communications infrastructure mounted on a structure with support structure up to 3m	Existing	Telecommunications (Low Impact Facilities Determination) 1997	Commonwealth	Section 7 of the Mobile Phone Deployment Code (10 day process)
Communications infrastructure mounted on a structure with support structure up to 3m	New	Telecommunications (Low Impact Facilities Determination) 1997	Commonwealth	Section 6 of the Mobile Phone Deployment Code (8 week process)
Communications infrastructure mounted on a structure with support structure up to 5m (not in Residential Zone)	Existing	A Code of Practice for Telecommunications Facilities in Victoria	Victoria State Government - Department of Environment, Land, Water and Planning	Section 7 of the Mobile Phone Deployment Code (10 day process)
Communications infrastructure mounted on a support structure up to 5m (not in Residential Zone)	New	A Code of Practice for Telecommunications Facilities in Victoria	Victoria State Government - Department of Environment, Land, Water and Planning	Section 6 of the Mobile Phone Deployment Code (8 week process)
All other Communications infrastructure mounted on a support structure	Existing	Melton Planning Scheme	Melton City Council	Notification as per the requirements of S52 of the Planning and Environment Act 1987
All other Communications infrastructure mounted on a support structure	New	Melton Planning Scheme	Melton City Council	Notification as per the requirements of S52 of the Planning and Environment Act 1987
Standalone telecommunications tower	New	Melton Planning Scheme	Melton City Council	Notification as per the requirements of S52 of the Planning and Environment Act 1987
Standalone telecommunications tower	Existing	Telecommunications (Low Impact Facilities Determination) 1997	Commonwealth	Section 7 of the Mobile Phone Deployment Code (10 day process)
Temporary facility	N/A	A Code of Practice for Telecommunications Facilities in Victoria	Victoria State Government - Department of Environment, Land, Water and Planning	Section 6 of the Mobile Phone Deployment Code (8 week process)
Replacement tower or facility	N/A	A Code of Practice for Telecommunications Facilities in Victoria	Victoria State Government - Department of Environment, Land, Water and Planning	Section 7 of the Mobile Phone Deployment Code (10 day process)

2.5. APPROVALS REQUIRED BY OTHER COMMUNICATIONS INFRASTRUCTURE PROVIDERS

There are other communications providers who are required to construct infrastructure within the City of Melton. Depending on their ownership and authority (Commonwealth, State or privately owned) and their purpose, these may be exempt from the planning permit process and therefore outside of Council authority for approval.

Clause 52.19-2 of the *Melton Planning Scheme* as amended lists certain bodies that can carry out building and works for a telecommunications facility without a planning permit.

Figure 5 – Clause 52.19-2 of the *Melton Planning Scheme* (as Amended) (Source: *Melton Planning Scheme 2015*)

A permit is required to construct a building or construct or carry out works for a Telecommunications facility.

This does not apply to:

- Buildings and works associated with:
 - A low-impact facility as described in the Telecommunications (Low-impact) Facilities Determination 1997.
 - The inspection and maintenance of a Telecommunications facility as defined in the Telecommunications Act 1997 (Cwth).
 - A facility authorised by a Facilities Installation Permit issued under the Telecommunications Act 1997 (Cwth).
 - A temporary defence facility.
 - The connection of a building, structure, caravan or mobile home to a Telecommunications line forming part of a Telecommunications network.
 - Any Telecommunications facility described in A Code of Practice for Telecommunications Facilities in Victoria which complies with the requirements of the Code.
- Buildings and works associated with activities which are:
 - Authorised under Clause 6(2) of Division 3 of Schedule 3 of the Telecommunications Act 1997 (Cwth).
 - Carried out by bodies listed in Sections 46 to 51 (inclusive) of the Telecommunications Act 1997 (Cwth) pursuant to legislation applying to those bodies.

Section 46 to 51 of the *Act* lists various types of activities and organisations that would be exempt from a planning permit. The ones that maybe applicable in Melton are:

- *intelligence operations*

This includes any communications infrastructure erected by Australian Secret Intelligence Service (ASIS) or Australian Security Intelligence Organisation (ASIO).

- *transport authorities*

This applies to any communications infrastructure erected by Air Services Australia or state transport body such as the Victorian Rail Track Corporation (VicTrack) if the works are to carry communications necessary or desirable for the workings of aviation services (in the case of Air Services Australia) or to carry communications necessary or desirable for the workings of train, bus, tram or road services of a kind provided by the authority.

- *broadcasting services*

This excludes any broadcaster service (such as Broadcast Australia) from a permit if the infrastructure is to carry communications that are necessary or desirable for either or both; the supply of broadcasting services to the public and the supply of a secondary carriage service by means of the main carrier signal of a primary broadcasting service.

- electricity supply bodies

This excludes any electricity supply body (such as Jemena or Powercor) from applying for a permit to carry communications necessary or desirable for: managing the generation, transmission, distribution or supply of electricity; or charging for the supply of electricity;

- Ministerial determination

This excludes a permit being required for any communications infrastructure specified by the Australian Government's Minister for Communications.

The above only applies to planning permits for building and associated works and it does not exempt the body from applying for other approvals (such as a Heritage Exemption or permit for works pertaining to a heritage overlay).

There are other communications infrastructure providers who are not carriers and not exempt from permit provisions by Clause 52.19-2. These providers are subject to planning permit applications for new towers and additions to existing facilities that fall outside of the parameters of the *Vic Code*.

These are generally private broadcasters, Wi-Fi and telecommunications providers (for private networks) and other others such as digital radio. These must follow the statutory planning requirements and any applicable overlays as per the *Melton Planning Scheme*.

It should be noted that these providers are not bound by the same restrictions in place that govern carriers and may not be defined as telecommunications facilities and as such may be subject to more restrictive measures in Policy (such as providing guidance on where and where not they can be located), whereas this cannot be applied to telecommunications carriers due to the restriction place in Section 6 Question 5 of the *Vic Code* (discussed in section 2.2.3 and 2.8 of this paper).

2.6. OTHER VICTORIAN COUNCILS' TELECOMMUNICATIONS POLICIES

Some councils have inserted additional telecommunications policies into their planning schemes against which planning permit applications must be assessed. As stated above, a policy in a planning scheme cannot provide more stringent requirements than those set out in *Vic Code*. Examples of council specific telecommunications policies are provided in this section.

2.6.1. City of Boroondara Council

Clause 22.11 of the *Boroondara Planning Scheme* refers to the Telecommunications Policy. *Telecommunications Facilities Policy, City of Boroondara, 1999* is listed as a reference document in Clause 22.11.

The following is a summary of the policies:

- Sensitive to health and safety and high environmental amenity;
- Telecommunications cabling is to be provided underground. This can sometime be prohibitively expensive;
- Utilisation of existing structures is preferred to co-location with existing infrastructure, followed finally by new facilities;
- Commercial and industrial zones are the preferred locations for telecommunications facilities and other non-residential zones are second preference. There are no rural areas in Boroondara;
- Residential and heritage areas to be avoided unless the other objectives of this policy are better achieved;
- Visual impact, especially on the skyline, is to be minimised;

- A decision guideline for council is to assess whether consultation with council and community at a pre-development application stage has been undertaken to identify suitable locations for telecommunications facilities.

2.6.2. City of Casey Council

Clause 22.19 of the *Casey Planning Scheme* contains the Telecommunications Facility Policy. *Vic Code* and Council's *Draft Telecommunications Facility Policy* are listed as reference documents in Clause 22.19.

The following is a summary of the policy:

- Preference for co-location, followed by utilising existing structures, followed finally by new towers;
- A preference for locating in commercial and industrial areas, avoiding new and existing residential areas and community sensitive locations;
- Minimise visual impact through appropriate siting, implement landscaping and avoid reflective materials;
- Requires a site selection including at least three other feasible sites when a new facility is proposed;
- 'A demonstration that the preferred site accords with the strategic rollout plan of the carrier that has been previously discussed with the responsible authority.';
- Listed as a decision guideline is consideration as to 'Whether potential adverse health impacts have been addressed'. This may be difficult for council to enforce because EME standards are regulated by the Commonwealth Government.;
- A notable difference between Clause 22.06 and the *Determination* is that Clause 22.06 places industrial and commercial areas equally in terms of siting preference. The *Determination* often treats industrial and rural areas with the same consideration as commercial and residential areas. *Vic Code* does not provide an ordered preference list of land uses.
- New telecommunications facilities should be designed to accommodate co-location with the infrastructure of other carriers. Telecommunications facilities often need extensions to accommodate other carriers and this sometimes requires development applications. It cannot be guaranteed that a planning permit application will be approved therefore co-location cannot always be inbuilt.

2.6.3. Yarra Ranges Council

The Telecommunications Policy for the Yarra Ranges Council exists outside of their planning scheme as a stand-alone document.

The following is a summary of the policies:

- Facilities should be sensitive to visual impact due to the nature of the environment. This includes minimising disturbances to vegetation and the form of the land;
- The amount of facilities should be minimised; co-location and upgrades are encouraged;
- Council will give preference to proposals which: demonstrate the need for a facility; comprise either co-location or upgrade of facilities; provide facilities that can be used by more than one provider; are consistent with the design objectives of any significant landscape overlay and design and development overlay; minimises visual impact by not locating in environmentally significant areas and disguising the facility into the landscape; avoid the need for native vegetation removal and vegetation removal to negate a fire risk;
- No Additional towers or masts should be constructed within the Dandenong Ridge area;
- The policy also sets out requirements for planning proposals, including:
 - Written explanations of: why the facility is required; assessment of at least three other feasible sites on different sites; how the facility is designed to minimise visual impact; and how new and existing vegetation will assist negating visual impact;
 - Details of: how the facility will improve emergency services coverage; any vegetation that is to be removed and fire risk mitigation;

- Indicative photomontages and 3D modelling from key vantage points; and
- A detailed analysis of the site and surroundings.

2.6.4. Moreland City Council

The Telecommunications Policy for the Moreland City Council exists outside of their planning scheme as a stand-alone document. However, it should be read in conjunction with *Telecommunications Code of Practice 1997 (Commonwealth)*, *Moreland Planning Scheme* and the incorporated *Vic Code*.

The following is a summary of the policies:

- Specific policy for planning permits prescribing the following:
 - Directing permits to consider planning policies and legislation for the area;
 - Considering principles for design as set out in the *Vic Code*;
- Specific policy for facilities on council owned land, prescribing:
 - A detailed planning report;
 - Details and descriptions of: the requirement for the facility; alternatives; the site; surrounding land use and any impacts on the surrounding land use; council's ability to use the site; the community benefit from the proposal and any infrastructure upgrades;
 - Technical specifications showing the latest technology is being used and electromagnetic field readings and mitigation measures.
 - Views of the public, where there is potential for detriment in a public use zone.
- Specific policy for urban character and amenity, which includes: the impact of the facility on the surrounding uses and users and the possibility of alternative sites being more appropriate.
- Aerial cabling is to be relocated or planned underground, reducing human exposure to electromagnetic fields.
- When co-locating the number, type and cumulative effects of the facility will be considered. Opportunities to co-locate with existing facilities and infrastructure must be considered.
- Redundant infrastructure must be removed and new technology considered to reduce the number of facilities;
- Clear documentation on how public exposure electromagnetic fields is limited. This includes prescribed testing at certain intervals and consider the cumulative effects of existing facilities within the surrounding area;
- When considering low-impact applications the council will consider the following issues: reinstatement; assets stewardship; siting; community information; co-ordination of works; urban design; cumulative effect; redundant infrastructure and response time.
- A guideline to submitting applications for planning approval which is in accordance of the *Vic Code*.

2.6.5. Interim Telecommunications Conduit Policy

The planning scheme for the following councils contains an identical interim telecommunications conduit policy:

- Cardinia Shire Council (Clause 22.08 – Interim Telecommunications Conduit Policy)
- Hume City Council (Clause 22.18 – Interim Telecommunications Conduit Policy)
- Wyndham City Council (Clause 22.06 – Interim Telecommunications Conduit Policy)
- Melton City Council (Clause 22.11 – Interim Telecommunications Conduit Policy)

New subdivisions of land where a permit is required must be provided with open access underground conduits to carry optical fibre.

2.6.6. Telecommunications Conduit Policy

Clause 22.13 of the *Whittlesea Planning Scheme* contains its Telecommunications Conduit Policy. This policy is largely the same as the Interim Telecommunications Conduit Policy described above, however it also applies where a permit is required to construct a dwelling or other buildings and states that council may allow cash in lieu of laying of conduits.

2.6.7. Summary

The City of Boroondara and the City of Casey are the only Greater Melbourne metropolitan councils identified which have developed unique telecommunications policies. These councils can guide telecommunications development more closely and have more requirements for development applications. These Policies are unusual in that they have had to navigate the conflict highlighted in the *Vic Code*. The City of Boroondara overcame this as it was implemented prior to the *Vic Code* being adopted. The City of Casey took a approach

to try and align their policy with Clause 52.19 so as to be argued that it is not more stringent than the provisions and principles outlined in the *Vic Code*.

The policies relating to telecommunications conduits are particularly relevant for areas in the outer Melbourne metropolitan area which are experiencing significant greenfield development, such as Cardinia, Hume, Melton, Whittlesea and Wyndham. These areas will become more urbanised as Melbourne grows and the conduit policy ensures that communications are adequately planned for in the early stages of development.

2.7. OTHER STATES TELECOMMUNICATIONS POLICIES

Specific policies and regulations have been prepared for individual states in Australia which are additional to the *Act*. State and local policies and regulations cannot prevent anything that is permitted in commonwealth legislation; the *Act* prevails over state legislation where there are any inconsistencies. However, state and local policies and regulations can provide additional permissions. This section provides further information for Australian Capital Territory, New South Wales, Northern Territory and Western Australian.

2.7.1. Australian Capital Territory (ACT)

Low-impact facilities are not permitted within the *National Capital Plan* area and planning approvals here are determined by the Commonwealth Government.

Outside of the *National Capital Plan* area but within the ACT, low-impact facilities are possible. Development in this area which is not low-impact is assessed against the *Territory Plan*. There are no provisions additional to the *Determination* provided in the *Territory Plan*.

2.7.2. New South Wales

In New South Wales, *State Environmental Planning Policies (SEPP)* deal with matters of state or regional environmental planning significance. *State Environmental Planning Policy (Infrastructure) 2007* commenced on 1 January 2008. This SEPP 'supports greater flexibility in the location of infrastructure and service facilities along with improved regulatory certainty and efficiency.'

This SEPP is relevant for telecommunications because prescribes additional activities that do not require approval from a consent authority. Development is split into three categories:

- Development permitted without consent;
- Exempt development; and
- Complying development.

The SEPP provides instances where equipment can be installed on local heritage items or in conservation areas, which cannot be undertaken as low-impact development. Antennas can be mounted at a higher height, 5.8 metres and 8 metres to the top of the antenna as exempt and complying development respectively. Temporary facilities may be installed with no design constraints or duration in situ specified. New towers, of up to 50 metres in height in certain cases, may be constructed on industrial or rural land, and extensions to towers in commercial areas are permitted.

In addition to the above, New South Wales councils have development control plans, the relevant parts of which must be addressed by development applications. Development control plans can include telecommunications provisions which can give council greater control over telecommunications infrastructure which requires development consent.

2.7.3. Northern Territory

Under the *Northern Territory Planning Scheme*, all development which is not for a low-impact facility requires consent. Development applications for proposed new telecommunications facilities must identify at least three feasible sites, must explain how the site minimises amenity impacts and must provide photomontages or similar media to illustrate this.

2.7.4. South Australia

All current South Australian planning policies are contained in the *South Australian Planning Policy Library Version 6*. All development applications in South Australia are to be assessed against the development plans contained here.

The *South Australian Planning Policy Library Version 6* contains a brief telecommunications facilities section. This provides no exemptions additional to the *Determination*, but provides criteria for developments to be assessed against. This includes design, location and visual impact considerations.

2.7.5. Tasmania

The *State Planning Provisions* (SPP) came into effect on 2 March 2017 as part of the *Tasmanian Planning Scheme*. The SPPs are provided to local councils to develop their own *Local Provisions Schedules* (LPS). This means that the SPPs will have no practical effect until an LPS is in effect in a municipal area.

Contained within the SPPs is a *Telecommunications Code*. This code is applicable to 'any part of the infrastructure of a telecommunications network and includes any line, equipment, apparatus, tower, mast, antenna, tunnel, duct, hole, pit, pole or other structure used, or for use, in or in connection with a telecommunications network'. The exemptions are based on the *Determination*, but also exempt certain new NBN poles.

There is one development standard, which is preventing unreasonable loss of visual amenity, and the solutions/performance criteria focus on minimising vegetation clearance limiting tower height. The most notable part of this code is the restrictions on tower height which is dictated by land use zone. A limit of 30 metres is specified in commercial, industrial and rural land use zones, and a limit of 20 metres is specified in residential and community land use zones.

2.7.6. Western Australia

State Planning Policy 5.2: Telecommunications Infrastructure (SPP 5.2) was prepared under Part 3 of the *Planning and Development Act 2005* and published in September 2015.

The policy measures in SPP 5.2 have an emphasis on minimising visual impact, avoiding heritage and encouraging co-location. SPP 5.2 recommends that local governments should consider exempting telecommunications infrastructure from the requirement for development approval where:

- a) The infrastructure has a maximum height of 30 metres from finished ground level;
- b) The proposal complies with the policy measures outlined in this policy; and
- c) The proponent has undertaken notification of the proposal in a similar manner to 'low-impact facilities' as defined and set out in the Mobile Phone Base Station Deployment Industry Code.

The implementation section of SPP 5.2 guides council in making planning decisions for telecommunications activities that are not low-impact. It does this by listing requirements of council when making local planning policies. This includes telecommunications infrastructure as a separate land use zone and not listing telecommunications infrastructure as prohibited in any land use zone. SPP 5.2 also states that councils cannot require buffer zones and setbacks from telecommunications facilities.

2.7.7. Findings from Other Telecommunications Policies

State policies can be an effective way of streamlining telecommunications deployment because interaction with council is minimised. The drawback can be poor siting or design of infrastructure, which is why it is important that the policies are designed to reflect the interests of that state.

The telecommunications policy approach of the Tasmanian Government will take longest to implement because local government planning policies need to be renewed at which point state policies are included before it takes effect on development applications. This is like Western Australian state policy however the Western Australian policy is also to be considered during assessment of development applications. Neither of these policies provide any exemptions from planning approval further to the *Determination*, except for NBN poles. The Western Australian policy is liberal in that it prevents council from specifying buffer zones and suggests that poles up to 30m be exempted from requiring development approval where the remainder of the policy is complied with.

Exemptions provide carriers and other communications infrastructure providers carriers with greater certainty in developing communications networks because the outcome of development applications remain unknown until determined. The New South Wales and Victorian state telecommunications policies provide exemptions from requiring planning approvals in some instances and therefore help to decrease timeframes.

There are differences in zoning considerations between states. In New South Wales, rural areas have the same restrictions as industrial areas when siting new towers but often there is greater potential for visual impact in rural areas than in commercial areas. On the other hand, the City of Boroondara's telecommunications

planning policy considers commercial and industrial land to be equally as preferable for siting telecommunications facilities.

In general, some commercial zoned areas are predominantly occupied by warehouses. These types of areas are often appropriate for telecommunications facilities and loosening restrictions in these types of commercial areas would enable quicker deployment in, as occurs in industrial and rural areas under New South Wales state planning policy. An alternative is to provide more specific classifications or descriptions of areas, rather than just 'commercial'.

In the *Vic Code*, new tower heights are limited in certain locations. Limiting tower heights aids reduction in visual impact but may encourage a greater number of towers because the coverage potential of each tower is reduced.

If Council prescribed specific consultation requirements for telecommunications development which requires a permit, this would make the development process more transparent.

The City of Melton is demonstrating a visible pattern of greenfield development therefore the conduit policy should be beneficial. This is a good example of an active telecommunications policy which reduces work required at later stages.

2.8. LEGISLATIVE RESTRICTIONS IN FORMULATING POLICY

As discussed above there are some inherent legislative restrictions in forming a Communications Infrastructure Policy due to the current regime in place which relies upon State Planning Policy Clause 52.19 contained in all planning schemes in the state and the *Vic Code*.

These can be reduced to two main points:

1. The restriction contained within Section 6 of the *Vic Code* question 5:

Can a Council include a local policy in a planning scheme which provides more stringent requirements than those set out in this Code?

No. Clause 52.19 of planning schemes and this Code, provide consistent provisions for telecommunications facilities in Victoria.

2. The current review of the *Vic Code* and the *Determination* and the *Deployment Code*, and Clause 52.19 all of which are on-going and are expected within the next five years.

Both points above make having a prescriptive policy difficult. This has been discussed in Chapters 2.2.3 and 7 where the MCF have provided a list of questions around this topic and the clarity of such a policy.

In regards to point 1 above, the aims of the Policy have to be balanced with this restriction. One reason for this and a desire of the State Government and carriers is so that the state policy approach is not fragmented. However, this does not mean that a local policy cannot be formed that compliments and assists with the Policy.

This could take the following form:

- A policy that is split into whether the developer is a telecommunications carrier, communications infrastructure developer (State or Commonwealth body)
 - For all developers, the Policy contained within *Melton Planning Scheme* could include guidance as to what needs to be contained within the planning permit application for Melton's Planning Officers to assess against the Principles contained in the *Vic Code* (for example, visual impact statement, photomontages, minimum number of existing and new alternative sites considered)
 - For communications infrastructure developers who are not carriers and thus not bound to Commonwealth and State policies specific prescriptive policy on site locations (for example away from heritage items)
- A policy that is split between sites on Council land and sites on non-council owned land
 - On Council-owned land due to the Council granting of a lease to the communications infrastructure provider could impose certain activities onto the communications infrastructure provider such as community consultation and design parameters as part of this ownership

negotiation without compromising the integrity of the existing policies in place through Clause 52.19 and the *Vic Code*.

With regard to point 2, there is a concern that this could supersede any changes implemented by the Policy. This means that the Policy will need to be futureproofed against any changes and being made irrelevant by such changes. To achieve this, the Policy needs to take into consideration changes taking place in telecommunications development and this could be achieved by the split approach mentioned above. In this the Policy, can have specific guidance within Clause 52.19 and the *Vic Code* (and therefore any updated *Code*) with background guidance in the form of guidance to guide development on Council land. This should also take account of:

- The PSP and West Growth Corridor and hence the policy related to telecommunications in *Plan Melbourne*;
- New updated technologies such as "small cells" and Wi-Fi technology such as the fixed wireless NBN technology;
- Fifth generation (5G) technology and the Internet of things (IoT);
- Innovative design and telecommunications design incorporated into existing infrastructure; and
- Mobile Black Spot Program and State Government funding to improve telecommunications coverage along major commuter train lines and in flood and fire prone areas with poor coverage.

3. ELECTROMAGNETIC EMISSIONS AND THE PLANNING REGIME IN AUSTRALIA

3.1. BACKGROUND

Since the 1990s when mobile phones grew in popularity, there has been mounting concern about the possibility of adverse health effects resulting from exposure to radiofrequency electromagnetic fields, such as those emitted by wireless communication devices.

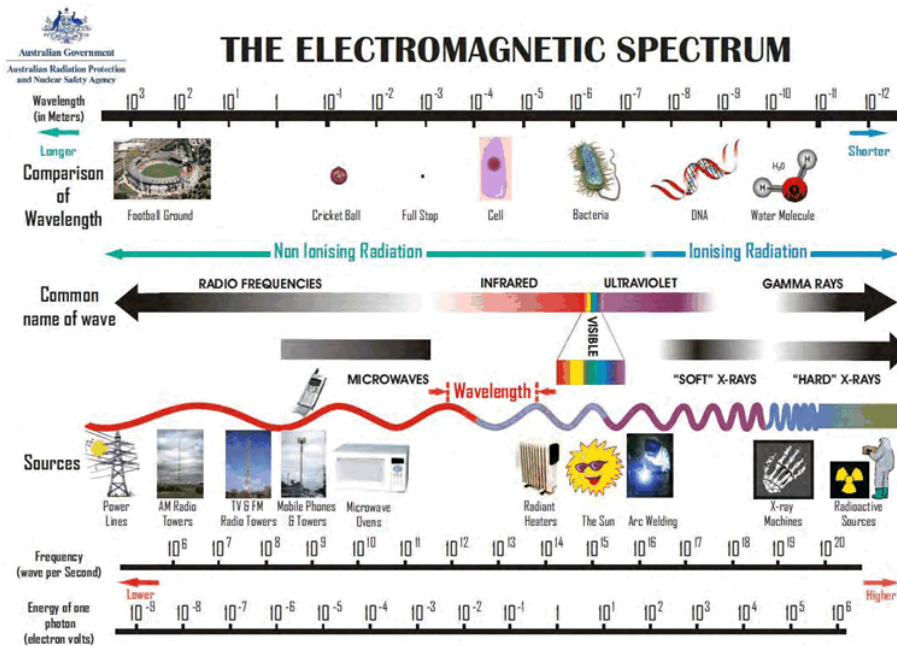
This “perceived” risk has caused concern in communities over the placement of mobile phone and other communications infrastructure and the use of mobile phones as they have become more and more prevalent in society. This concern is driven by the electromagnetic emissions (EME) that is emitted by base stations and is the principle method by which a cellular based network operates.

EME is the energy stored in an electromagnetic field. It is a part of the natural environment, emitted by sources like the sun, the Earth and the ionosphere, as well as manmade sources such as mobile phones and base stations, broadcast towers, radar facilities and electrical and electronic equipment such as microwaves, cordless phones, electric blankets, bed side digital clocks, baby monitors and computer and television screens.

EME is non-ionising radiation, meaning that it has insufficient energy to break chemical bonds or remove electrons (ionisation). In contrast ionising radiation (such as X-rays) can remove electrons from atoms and molecules thus leading to damage in biological tissue.

Wireless communication works by the transfer of energy by radio waves, this is known as radiofrequency (RF) radiation, which is the same as EME when referenced in scientific papers and in the industry and government.

Figure 6 – The Electromagnetic Spectrum (Source: ARPANSA)



Humans have been living with artificial sources of RF electromagnetic fields in one form or another for over a hundred years since Guglielmo Marconi sent the first wireless telegraph in 1895. In the last 50 years, the

electromagnetic field (EMF) environment has changed with the advent of TV and more recently mobile telephony.

Because high levels of RF EME can heat biological tissue and potentially cause tissue damage, there has been a lot of scientific research into the health effects of EME on human and animals. This damage is caused because the body is unable to cope with the excessive heat generated by very high RF exposure. However, studies have shown that environmental levels of RF EME routinely encountered by the public, in their everyday lives, are significantly below the levels needed to produce significant heating and increased body temperature.

Regarding mobile phones and base stations the RF emissions have been measured and are shown to be weak in the everyday environment. At low levels of exposure to RF EME, such as that is emitted from mobile phones and base stations (i.e. field intensities lower than those that would produce measurable heating), the evidence for production of biological effects is unproven. Although there have been studies reporting a range of biological effects at low levels, there has been no indication that such effects might constitute a human health hazard, even with long-term exposure.

The epidemiological evidence does not give clear or consistent results that indicate that exposure to RF EME causes disease in people. Although the epidemiological research that has been carried out to date does not give cause for concern, it has too many limitations to give reassurance that there is no health hazard. More rigorous long term studies are being coordinated and ongoing into this field.

However, the weight of national and international scientific opinion is that there is no substantiated evidence that exposure to low level RF EME causes health effects. This view is backed by every major review panel on the subject including the International Expert Group on Mobile Phones (2000), the French Health General Directorate (2001), the Health Council of the Netherlands (2002), ARPANSA's RF Standard Working Group (2002), the National Radiological Protection Board and more recently the Scientific Committee on Emerging and Newly Identified Health Risks (2007).

Figure 7 – Comparison of Different Transmitter Power Outputs (Source: Radiocommunications in the Community. EMF Explained Series. www.emfexplained.info)

Radio Systems*	Typical Transmitter Power (Watts)
TV & Radio broadcast	5,000 – 100,000
Air traffic control radars	5000 – 20,000
Radio paging services	50 – 100
Emergency communications	50 – 100
Government radio systems	50 – 100
Mobile phone base station / Wireless Broadband base station	2 – 50
Radio Devices	Typical Transmitter Power (Watts)
Walkie Talkies	0.1 – 5
Mobile phones	0.002 – 0.2
Wi-Fi Modem - domestic	0.1
Cordless phones	0.01 – 0.2
Baby monitors	0.01 – 0.1
Car remote control	0.001 – 0.1

* typical power into antenna

3.2. AUSTRALIAN PUBLIC PROTECTION STANDARDS

As discussed in Chapter 2.2.3 above, in Australia, the low levels of EME emission from mobile phones and base stations is regulated by the *Radiation Protection Standard – Maximum Exposure Levels to Radiofrequency Fields – 3kHz to 300 GHz* (known as the ARPANSA Standard).

The ARPANSA standard is set by the ACMA, the independent regulator of the nation's telecommunications industry. To fulfil this regulatory responsibility, they adopted the ARPANSA limits into the Radiocommunications (Electromagnetic Radiation – Human Exposure) Standard 2003 and the licence conditions for radiocommunications transmitters.

All manufacturers and importers of mobile and cordless phone handsets, as well as licensees of transmitter installations (like mobile phone base stations) are required to comply with the public exposure limits in the ARPANSA Standard.

The ARPANSA Standard contains mandatory limits of human exposure for the following:

- Electrostimulation of excitable tissue (3 kHz – 100 kHz),
- Adverse effects arising from localised and/or whole body heating (100 kHz – 6 GHz),
- Excess heating of skin or cornea for frequencies in the range (6 GHz – 300 GHz),
- Nuisance auditory effects (300 MHz – 6 GHz),
- Adverse effects associated with extremely high pulsed fields (3kHz – 300GHz).

These basic restrictions in the standard are fundamental limits designed to ensure that known adverse health effects do not arise from exposure to RF fields.

Because direct assessment against the basic restrictions can be difficult, time consuming and costly, reference levels are provided as a way of ensuring that the basic restrictions are not exceeded.

Reference levels are defined by quantities that are relatively easy to measure directly and where in general there is commercial equipment available to make such measurements.

The purpose of the ARPANSA Standard is stated to be “to specify limits of exposure to electromagnetic fields within radiofrequency range from 3kHz to 300 GHz such that any persons exposed below the limits will be fully protected against all established adverse health effects”:

The limits in the ARPANSA Standard are based on the 1998 guidelines of the International Commission on Non-Ionising Radiation Protection (ICNIRP) for limiting exposure to time-varying electric, magnetic, and electromagnetic fields (up to 300 GHz).

There are differences, however, between the ARPANSA Standard and the ICNIRP Guidelines. In establishing the standard, ARPANSA followed the original intent of the ICNIRP Guidelines. However the ICNIRP Guidelines do not constitute a technical Standard and in some circumstances their application may be unclear. It was also necessary that various Australian regulatory bodies can readily interpret and implement the ARPANSA Standard. Consequently, some of the ICNIRP specifications were modified to provide an unambiguous technical definition (such as the addition of limits for pulsed exposure).

In its practical application, the ARPANSA standard requires the aggregate of the RF EME emitted from all sources at the site of a telecommunications facility's location (for example all sources of EME measured from that spot not just limited to the telecommunications facility) to comply with the exposure limits set by the standard. Signals from different sources are identifiable by their different frequencies. For example, in the case of a base station accommodating different carriers on different frequencies, the calculation of the emissions includes these sources as well as any other existing radiofrequency emissions in the atmosphere at and nearby the base station site.

Also with the advent of third generation (3G) technology “adaptive power controls” were introduced. This means that when a base station does not need to transmit full power to communicate with a mobile phone, it will automatically power down its transmit power to reduce interference so that it can boost traffic capacity, to the network. The outcome of this is that the RF EME output levels from a base station fluctuate and are generally lower than that stated by carriers as compliance with the ARPANSA Standard is taken as a worst case measurement. The maximum the base station will operate at compared as a percentage against the ARPANSA Standard.

3.3. PRECAUTIONARY APPROACH

At the global level, it has been established that a precautionary approach should be undertaken on the placement and use of artificial EME sources. The World Health Organisation (WHO) defines the precautionary approach (sometimes known as the precautionary principle) as a risk management concept that provides a flexible approach to identifying and managing possible adverse consequences to human health even when it has not been established that the activity or exposure constitutes harm to health. The WHO considers scientific

assessments of risk and science based exposure limits should not be undermined by the adoption of arbitrary cautionary approaches.

The Australian Government considers compliance of mobile base stations and handsets with the ACMA regulations as a prudent and cautious approach under the precautionary principle to ensure that communities are protected from any adverse effects from developments in communications.

The application of the precautionary approach in relation to the development of mobile phone infrastructure was discussed in detail in the NSW Land and Environment Court. However, it is a good explanation of the precautionary approach in relation to the ARPANSA Standard and illustrates how the precautionary approach has already been undertaken through use of the ARPANSA Standard and industry standards:

- **in the standard-setting process which involved a comprehensive review of all relevant scientific literature on the potential biological effects of exposure to RF EME.** How the ARPANSA Standard used in the Commonwealth was set based on current and ongoing scientific research.
- **in the adoption of the Australian Standard RPS3 with margins of safety.** The implantation of the ARPANSA Standard in the deployment and issuing of licences for mobile base stations and associated infrastructure.
- **in the requirements of the relevant industry code (the *Mobile Phone Base Station Deployment Code*) to comply with the adopted standard.** The industry adopted a code of practice to set out a practical implementation of the precautionary approach through a set of guidelines and practices that must be followed in site selection, design and operation of mobile base station sites
- **in the measurement of existing and the estimation of predicted RF EME levels from proposed base stations, in accordance with the accepted methodology.** As stated above, EME emissions are predicted and measured after a base station is installed, this is produced and updated via a set ARPANSA methodology report by the individual carriers. This report is publicly viewable for each individual telecommunications site on the RFNSA which can be accessed at www.rfnsa.com.au.
- **in the selection of equipment and antennas to be used in a proposed base station.** The equipment and antennas are configured and designed so that their emissions cannot breach the ARPANSA Standard.
- **in the efficient operation of the equipment and antennas to minimise RF EME levels generated from a proposed base station.** As stated above, antennas used from 3G onwards have adaptive power controls automatically built in to them to ensure that they power down below their maximum levels when not in use.

The consensus is that the ARPANSA Standard in conjunction with the industry's own *Code* applies the precautionary principle and keeps the community safe and reassured against low level RF EME emissions

This has also been referenced many times in Victoria particularly at VCAT such as in *Mason v Greater Geelong City Council* [2013 VCAT 2057], where the Tribunal held, with respect to a telecommunications facility, that VCAT is unable to consider emissions of electromagnetic radiation as a relevant or determinative issue where the relevant Commonwealth standard will be met.

In reaching this conclusion, the Tribunal noted that:

"public health concerns about electromagnetic radiation are often raised in planning cases about a telecommunications facility. However, it is not the role of VCAT to second-guess the expert authorities that regulate the area.

The Australian Communications and Media Authority has set a clear regulatory standard – the ARPANSA standard - under Commonwealth law, to protect the health or safety of those who may be affected by the operation of a telecommunications network or facility from the potential impacts of electromagnetic radiation. Compliance with that standard has been effectively incorporated into the Victorian planning framework through clause 52.19 of all Victorian planning schemes and the requirements of 'A Code of Practice for Telecommunications Facilities in Victoria'. VCAT cannot look behind the ARPANSA standard where it will be met, nor does it have the expertise to do so".

In February 2014, Helen Gibson, Deputy Chair of VCAT, looking back on the above case stated that:

"The amount of electromagnetic radiation emitted by a telecommunications facility may well be a legitimate issue of public concern. However, VCAT is not a forum for addressing all issues of social or community concern, nor is it an investigative body. It cannot give great weight to unsupported assertions about public health concerns in the context of an individual planning application, particularly in relation to matters outside its own expertise or beyond the limited ambit of its statutory role or discretion in relation to that application. Accordingly, VCAT is not the appropriate forum where generalised opposition to telecommunications facilities based on public health concerns can or should be raised. It is a waste of the parties' and the Tribunal's resources as, ultimately, VCAT is essentially bound to apply the ARPANSA standard.

Allowing objectors to continue to air their concerns about electromagnetic radiation at a VCAT hearing creates false expectations about the role of VCAT and the ambit of its discretion, and the extent to which it can realistically deal with such issues."

Taking the above into account, carriers must provide predictive EME reports with planning permit applications to show compliance with the ARPANSA standard and the precautionary approach and in demonstrating such, means that the development and ongoing operation of mobile phone infrastructure is regulated by sound scientific bodies who have the knowledge and expertise to adjudicate these matters, in conjunction with international bodies such as the WHO and therefore if compliance can be shown then this is not a planning consideration when Council are determining planning permit applications and thus beyond showing this compliance does not need to be referenced further in the Policy.

3.4. LATEST RESEARCH

Despite these safeguards and the current research, over the last few years there has been mounting concern within the community regarding RF Emissions as mobile infrastructure becomes more prevalent, covering more of the globe and coming into being as an essential and common part of everyday lives, as evidenced by the number of mobile phone subscriptions being estimated at 5 billion globally.

As part of the ongoing research into the health effects from low level RF EME on 31 May 2011 the International Agency for Research on Cancer (IARC), which is part of the WHO, released its classification of radio frequency electromagnetic fields, which are emitted by mobile phones, wireless devices, radio, television and radar.

Their classification of radio waves emitted from wireless devices (such as mobile phones and base stations) was "possibly carcinogenic to humans (Group 2B)" based on an increased risk of glioma, a malignant type of brain cancer.

The IARC classification is used for agents for which there is:

- limited evidence of carcinogenicity in humans and less than sufficient evidence of carcinogenicity in experimental animals
- inadequate evidence of carcinogenicity in humans but there is a sufficient evidence of carcinogenicity in experimental animals
- inadequate evidence of carcinogenicity in humans and less than sufficient evidence of carcinogenicity in experimental animals together with supporting evidence from mechanistic and other relevant data

An agent may also be classified as 2B "possibly carcinogenic to humans" solely based on strong evidence from mechanistic and other relevant data.

The reason for the inconclusive classification in regards to wireless technology is based on the fact that:

"a positive association between the agent (wireless devices) and cancer for which a causal interpretation is considered by IARC, but chance, bias or confounding could not be ruled out with reasonable confidence. Also it could mean that the available studies are of insufficient quality, consistency or statistical power to permit a conclusion regarding the presence or absence of a causal association between exposure and cancer, or no data on cancer in humans are available."

In conclusion, following the above findings, the WHO updated its advice on EME from wireless devices to say:

"A large number of studies have been performed over the last two decades to assess whether mobile phones pose a potential health risk. To date, no adverse health effects have been established as being caused by mobile phone use."

To put these findings into context the other agents classified in class 2B "possibly carcinogenic to humans" includes coffee, occupational exposure to dry cleaning, pickled vegetables, the bracken fern and diesel fuel.

Even though the topic of mobile phones and health effects gets a lot of press attention, there have been a relatively small number of studies on mobile phones and cancer. Most of these are "case-control studies" – they compare people who already have cancer (cases) with healthy people (controls), and ask them about how they used their phones in the past. These studies include the InterPhone study, an international collaboration of scientists from 13 countries, and work by Lennart Hardell's group at University Hospital, Orebro.

So far, only one Danish study has followed a group of healthy people (approximately 420,000) to see if their use of mobile phones affected their future risk of cancer. In concluding their findings, they found:

"no indication of an increased risk of tumours of the central nervous system. The extended follow-up allowed us to investigate effects in people who had used mobile phones for 10 years or more, and this long-term use was not associated with higher risks of cancer. Furthermore, we found no increased risk in temporal glioma, which would be the most plausible tumour location if mobile phone use was a risk. As a small to moderate increase in risk for subgroups of heavy users or after even longer induction periods than 10-15 years cannot be ruled out, however, further studies with large study populations, where the potential for misclassification of exposure and selection bias is minimised, are warranted."

A smaller number of publications, mostly from Lennart Hardell's group (see above), have found associations between mobile phones and brain cancer risk but most papers, including those from InterPhone and the Danish study, have found that mobile phone use does not increase the risk of brain cancer, or any other type of cancer, for at least 10 years of use.

The inclusive and conflicting nature of all these studies is a major reason why the industry is heavily regulated, incorporating the precautionary principle despite no positive findings either way.

Scientists are confident that tobacco, alcohol or asbestos can cause cancer because they can explain how these things affect the way our cells work. These explanations are called "biological mechanisms" and they play a vital role in establishing that something causes cancer. However, so far no one has been able to provide a good biological mechanism for a link between mobile phones and cancer. Thus, leaving the question an open one and open to further research.

However as stated above most of the research has been channelled into mobile phone use as opposed to the base stations themselves. This is because of the nature of the use of the phones (held to a user's head) and because as explained previously mobile base station RF EME are many times weaker and regulated to be well below Australian (through the ARPANSA Standard) and international guidelines.

The research will continue into its effects on humans although there have been many safeguards placed on emissions to ensure that the public is adequately protected from any adverse health effects from RF EME emissions to date.

Therefore, the current global consensus based on the advice and research by national and international health authorities such as ARPANSA and the WHO is that there is no substantiated scientific evidence of health effects from the EME generated by RF technology, that complies with current national (ARPANSA Standard) and international safety guidelines.

3.5. CONCLUSIONS AND POLICY IMPLICATIONS

In relation to the Policy it is clear that the current Commonwealth regulations are backed up by current science on this matter. Therefore, if a permit application is supported by a predictive report showing compliance with the ARPANSA Standard than this shouldn't warrant further assessment or discussion from Council in regard to EME and the decision of a positive permit determination.

However, this is a subject that still does elicit an emotive response and concern from some members of the community and therefore the science and education should continue. In this respect, the Policy could encourage communications infrastructure providers to provide pre consultation information and referrals to current literature in planning permit applications to provide this education to assist Council in the decision making process within the current legislation and regulations governing this subject.

4. EXISTING PROCESSES FOR ACQUIRING AND DETERMINING APPLICATIONS FOR COMMUNICATIONS INFRASTRUCTURE IN MELTON

4.1. CARRIER PROCESS FOR ACQUIRING SITES

Once a need for enhanced service is identified by, for example, extensive field testing or customer complaints, the initial solution investigated is by manipulating a carriers' existing sites in the area or co-locating on other carriers' facilities. The Act requires all carriers to consider co-location and upgrading existing facilities as priority. New site acquisition is undertaken only when all other options are exhausted.

Communications facilities operate by transmitting and receiving a signal in an area. To work effectively, and given the very low power of telecommunications transmissions, line of sight to the area requiring coverage is necessary. Accordingly, sites must be in the area they are designed to provide coverage to.

Therefore, once a need is identified the Carrier will look to certain parameters to see if a new site can solve the coverage need. As part of this it needs to be established if the need can be provided by an existing site by manipulating it to provide improved coverage or through co-location (with approval provided via the determination or Vic Code). If this is not viable, then a new greenfield site will be required.

The suitability of each new site candidate for a facility is assessed on several factors, which include, but are not limited to, the following:

- Environmental considerations, including local and state planning policies;
- Co-location opportunities that fit within the coverage objectives;
- Engineering constructability;
- Minimal environmental impact during the construction phase and operation of the facility;
- Visual amenity;
- Topographical constraints;
- Occupational health and safety;
- Radio frequency coverage objectives; and
- Ability to secure tenure on the property.

Given the complex topography and significant existing obstructions in many areas requiring coverage, locating technically suitable sites can be difficult.

The carrier issues an area or site brief, which includes but is not limited to an indicative location or point and objectives of site and outline of requirements. The carrier then undertakes a desktop analysis, including a Google Earth search to identify potential sites and provide a plot of the area with the different sites identified, real estate database search to identify property owners, title searches to establish legal ownership, several searches including but, not limited to an EPBC Protected Matters Search, heritage search and land use overlays.

This should be collated to be brought to the pre-scoping meeting to discuss issues and locations to provide an efficient and focussed scoping visit. A scoping visit is undertaken as a multi-disciplinary group and where, ideally, multiple sites are identified.

Following the scoping visit, a report on the sites is compiled and completed by all disciplines. In this report, there will be sites that score or rank highly with one discipline (for example Town Planning) but lowly with another (for example RF Engineer) but, it is the purpose of this report to recommend a prime candidate that will be progressed.

Then a site design visit is undertaken. The site design visit is attended by all disciplines and where possible the land owner to gather the required information and possibly reach agreement for the proposal with the land owner.

Following the site design visit, preliminary drawings are produced. It is at this stage that the consent authority, in this case Melton City Council, should be approached for pre-application discussions and feedback.

Depending upon the feedback provided by Council, either the design can be amended, an alternative candidate progressed or a planning permit application made.

4.2. COUNCIL PROCESS FOR DETERMINING SITES

When Council receive a telecommunication's permit application it is registered and given an application number and is allocated to a Planning Officer. The Planning Officer will check that all the required information has been supplied. Council has 28 days to ask for further information and/or seek clarification on the documentation supplied. If the further information is not received within 30 days from the date of the request the application will lapse and cannot be recommenced. An applicant may make a request in writing for an extension of time to give the required information prior to the application lapsing. The applicant is sent a letter advising of the application number and details of the Planning Officer dealing with the application.

The application may also be referred to a public authority (such as water and power authorities), who have 28 days to respond. Referral authorities can impose conditions or object to a planning application.

Most planning applications are notified unless the Council is satisfied that granting a permit will not cause material detriment to any person, or the planning scheme says advertising is not required.

Notification may include sending letters to owners and occupiers of land surrounding the site; placing a large notice on site; placing a notice in a newspaper circulating in the area; and a combination of all three.

Should the planning application be notified, the decision process will commence 14 days after the date of notification or the notice was placed on-site.

Council will decide either to grant a permit, refuse a permit or, if there are objections, issue a "Notice of Decision" to grant a permit.

A decision regarding a planning application is often made by Planning Officers who have delegated authority from the Council, but some applications will be determined at Council Meetings. However, the City of Melton has determined that all permits for communications infrastructure are to be considered by Council and not under delegation.

5. COMMUNICATIONS INFRASTRUCTURE IN MELTON

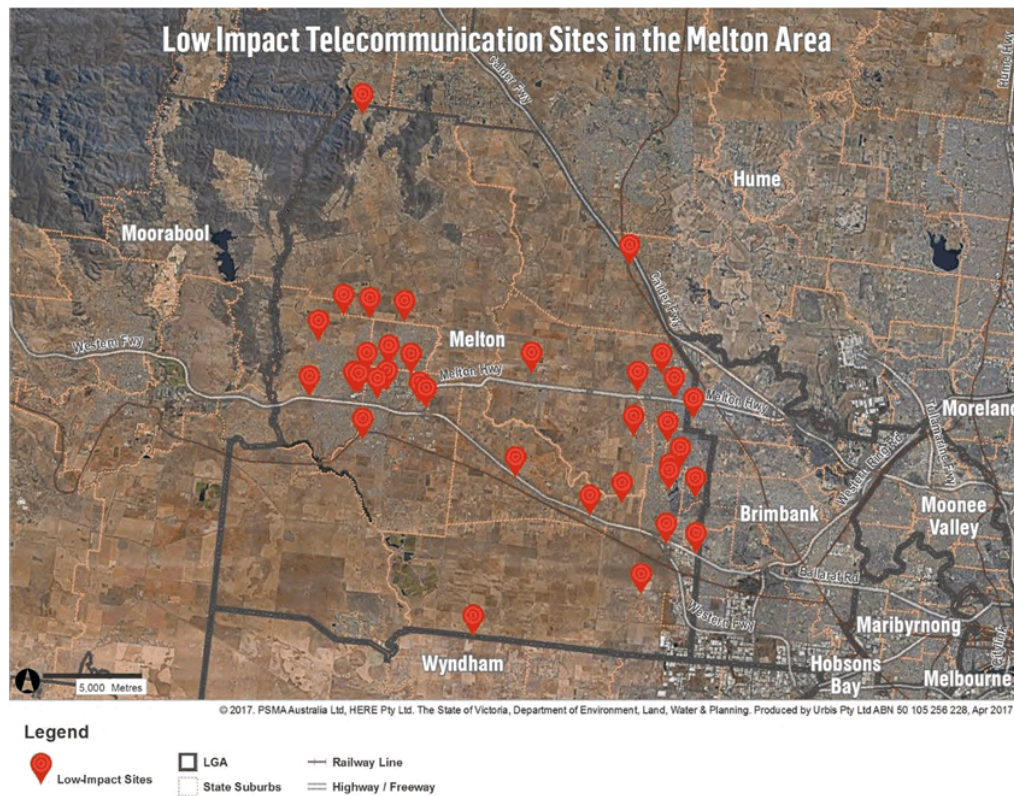
5.1. EXISTING SITES

This section provides a review of the existing telecommunications infrastructure within the City of Melton. Both existing low-impact facilities and planning permits will be assessed. The sites will be listed and mapped out, to identify their location and type of facility. An overall assessment will be made on the key findings behind the impact of siting these facilities in their current location. The assessment will be based around critique of planning decisions as well as the policy implications that have come apparent.

5.1.1. Low-impact Sites

A desktop review was completed of all the low-impact sites within the Melton LGA. The sites are mapped out below and listed in appendix B:

Figure 8 – Low-impact sites

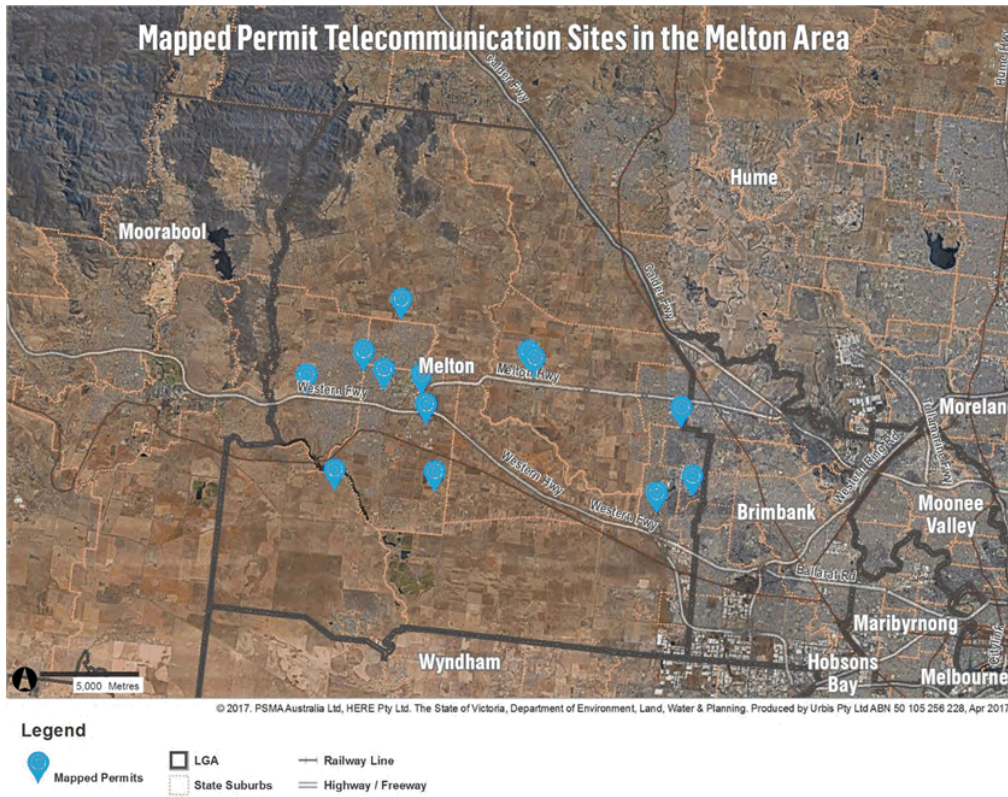


5.1.2. Planning Permits

Site visits and a desktop review were completed of all the planning permit sites within the City of Melton since 2011. The sites are mapped out below and listed in appendix C.

RFNSA site no:	Address	Type of facility
3337015	41 McKenzie Street, Melton, VIC, 3777	Rooftop Facility
3337009	308-374 Minns Road, Kurunjang, VIC, 3337	Telstra 25m steel pole
3337019	Melton Waves Car Park - 206 Coburns Road, Melton	VHA 30m Monopole
3337020	799 High Street, Melton West, VIC 3337	Optus 30m Monopole
3338003	178-248 Murphys Road, Exford, Victoria, 3338	Telstra 25m Monopole
3023016	1-31 Freelands Drive, Burnside Heights, Vic, 3023	Optus 27m Monopole
3037017	142 Hume Drive, Taylors Hill Central, VIC, 3037	VHA 18m Monopole
3335003	110-148 Leaks Road Plumpton	Axicom 15m monopole
3023022	Brookside Recreational Reserve 72-80 Caroline Springs Boulevard, Caroline Springs, Vic 3023	Poleswop 30m monopole
3335007	1646-1658 Melton Highway PLUMPTON VIC 3335	Telstra 25m monopole
3338006	43-67 Ferris Road, Melton South, VIC 3338	NBN 40m monopole
3337004	28-30 and 32-34 Gateway Drive, Melton, VIC 3337	Telstra 30m monopole
3338005	1200-1220 Mount Cottrell Road, Melton South, VIC 3338	NBN 40m monopole

Figure 9 – Planning Permit Sites



5.2. KEY FINDINGS FROM EXISTING INFRASTRUCTURE PLACEMENT

Several regular themes can be drawn out of the assessments completed on low-impact sites and planning permits above. The key findings are highlighted below. For each key finding, the possible policy implications are explored:

Table 2 – Key findings and policy implications

	Key Findings	Policy Implications
1	Sites being located too close to sensitive uses and residences (or future Growth area)	Policy can be used to ensure certain limits on the proximity from sensitive uses and residences, as well as planning for telecommunications in potential growth areas.
2	Sites too close together, co-location not considered or not investigated properly	Ensuring that co-location options are identified in planning reports, and correct investigations completed. Policy can be used to create a hierarchy when approving applications.
3	Maintenance provision being used inappropriately	Ensuring that a process is set up to check low-impact and maintenance provisions sent to council for comment and providing feedback in the required time limit

	Key Findings	Policy Implications
4	Alternative sites not being identified or investigated correctly in planning permit application's	Ensure that planning reports provide in-depth investigations of alternative sites and assessment on why they may not be viable
5	An absence of consideration of radiofrequency interference that the planned service may present to other services	The precautionary approach checklist needs to be followed for all applications, be it low-impact or planning permit. These will need to be checked for each application to ensure that the principles are being followed
6	Good use of hoarding, or existing infrastructure for locating facilities	Using policy and conditions when approving planning permits to provide hoarding or screening
7	Sites that were referred to VCAT, ended up with the tower approved	Ensure that applications do not end up at VCAT, by ensuring that if notice of refusals are sent, they can clearly state why Clause 52.19 and in particular the principles contained within are not adhered to.
8	Common objections: <ul style="list-style-type: none"> • Visual amenity • EME and health issues • Property values • Proximity to sensitive users • Community not notified correctly 	Receiving objections on any site would be out of the control of the council, however if the policy is followed, and strengthened to support established communities, the number of objections may be cut. Further, if low-impact sites follow the correct Deployment Code process, interested and affected parties will be notified correctly.

5.3. CASE STUDIES USING EXISTING VICTORIAN COUNCIL'S TELECOMMUNICATIONS POLICIES

As discussed Chapter 2.6, several other Victorian councils have incorporated specific telecommunication policies within their planning schemes. To evaluate what impact these policies would have on telecommunication facilities within the local context, several case studies from within the City of Melton have been assessed against these policies. The aim of assessing sites against other Victorian councils' telecommunications policy is to be able to highlight which policy elements may be applicable in the Melton context and will help shape the Policy.

The case studies will include the assessment of two planning permit sites and one low-impact site. Siting of the facility and the planning process involved will be evaluated against four different Victorian council telecommunication policies. The four policies are; The City of Casey Telecommunications Facility Policy, the City of Boroondara Telecommunications Policy, the Yarra Ranges Council Telecommunication Facilities Policy and the Moreland City Council Telecommunications Policy. This Chapter will conclude with a list of key findings from the case studies.

5.3.1. Case Studies of Planning Permit Sites

PA2012/3471-2 - Melton Waves Carpark, 206 Coburns Road, Melton West, Vic 3023 – RFNSA No: 3337019



This site can be characterised as follows:

- 30 metre monopole, which was a lamppost replacement.
- Close to residences and sensitive land uses
- Nine objections and two petitions (23 and 15 signatories) were received, objection to adverse health impacts, visual amenity, property devaluation, entering a lease with inadequate community consultation and communications and the "proposal is not in keeping with the general amenities of Melton Waves and Beatty Park"
- Although reasons for not co-locating have been provided, there is no in depth study as to why this was not possible and what other sites have been explored. The report does not look at ant site alternatives.
- Consultation on the location of site was held before proceeding, as the area is predominantly residential
- Council approved the application

This site was a contentious with the local community.

City of Casey
Telecommunications Facility
Policy

The following implications would be found when applying this policy:

- The policy lists an order of preference for new facilities, a new monopole is the least preferable. However, the policy states that if co-location is not possible, then existing structures should be

	<p>utilised. As this facility was a light-pole swap-out, existing structures are being used and the proposal would comply.</p> <ul style="list-style-type: none"> • The policy states that when siting a new facility, it should be sited in commercial or industrial areas away from new residential areas, schools, hospitals and childcare facilities. This facility is only 100 metres away from residences and 200 metres away from schools. Therefore, the location would not be compliant with the policy. However, as Melton West is mainly a residential suburb, there are not many locations that do meet this criteria. Residents still require mobile phone coverage; therefore, a compromise would need to be met. • The policy calls for a minimisation of visual impacts through sensitive siting, use of non-reflective finishes and appropriate landscaping. Although the site was a floodlight replacement, slimline design was not applied and no landscaping was done around the shelter. The policy would have directed the carrier to a more sensitive design. • New facilities need to be able to provide further co-location opportunities for other carriers. The facility complies with this provision. • The policy also sets out a guide for planning reports. A detailed assessment of three other feasible sites would have to be provided, rationalising the final choice. Further photographic imaging and EME assessment would also need to be provided. As well evidence to show the site accords with the carrier's strategic role out plan. <p>As per the above, the facility would have not been approved by the council had this policy been in place. Further assessment of possible alternatives and better design that considers visual amenity would have been required. The location would have been a point of contention, but the fact that the carrier consulted with the council would be sufficient.</p>
<p>The City of Boroondara Telecommunications Policy</p>	<p>The following implications would be found when applying this policy:</p> <ul style="list-style-type: none"> • Facilities need to be provided in a manner that is sensitive to health, safety and environmental amenity of the area. The facility does comply with the industries safety standards, however a new monopole in direct view of residents is not sensitive to the environmental amenity of the area. • All telecommunications cabling would need to be provided underground. This facility complies. • The policy lists an order of preference for new facilities, a new monopole is the least preferable. However, the policy states that if co-location is not possible, then existing structures should be utilised. As this facility was a light-pole swap-out, existing structures are being used and the proposal would comply. • The policy guides telecommunication facilities away from residential zones. Residential and public use zones are only to be considered when the facility can achieve the objectives of the policy. As such the facility, would not comply with this provision. • The policy calls for facilities to be sited and designed to protect visual amenity, particularly on the skyline. The facility in its current location and form would not have been acceptable. <p>The application of this telecommunications policy would have led to the facility not being approved by the Council. The location and design of the facility would have not met the policy guidelines.</p>

<p>Yarra Ranges Council Telecommunication Facilities Policy</p>	<p>The following implications would be found when applying this policy:</p> <ul style="list-style-type: none"> • The policy would require that the need for the facility be demonstrated. This was sufficient within the planning report when locating the said facility. • The policy calls for upgrading of existing facilities, and ensuring that co-location occurs for new facilities. Further, new facilities need to be designed to be used by more than one provider. In the case of this site, there are no co-location opportunities in the locality. The design allows for further co-location in the future, but this will impact the visual amenity. • The policy requires that visual impact is minimised through siting facilities away from exposed locations or areas of value, Disguising and designing them into the surrounding built landscape. The facility would also be subject to design objectives due to overlays within the planning scheme. The site would not comply with this policy as the pole has not been disguised or designed into the surrounding landscape. A slimline design would have been more appropriate. • Native vegetation and habitats are not to be disturbed per the policy. As this facility is in a storm water verge / nature strip it would have complied. • The policy sets out an extensive list of requirements for certain information within a planning proposal. The planning proposal would not have been accepted and would have required substantially more detail. Including co-location options, at least three alternative locations, photomontages, an analysis of the surrounding area, and an explanation on the visual impact. <p>The application of this policy would have led to the said facility not being approved. A more detailed planning report would have been required. An inclusion in the report of the location assessment, possible co-location alternatives and photomontages would have been required. Improved design that considers visual amenity would have been required.</p>
<p>Moreland City Council Telecommunications Policy</p>	<p>The following implications would be found when applying this policy:</p> <ul style="list-style-type: none"> • Telecommunications facilities are encouraged in all zones, balancing the need for the site with the environmental impacts. As such this site, would not be suitable in its location due to its impacts on the surrounding environment. • Council will assess the urban character, visual amenity, effects on the environment, planning provisions for the area and effects on surrounding land-uses. As such this location, would have come under scrutiny due to its proximity to residences and effects visually on the amenity of the area. • The policy provides specific guidelines for facilities located on council land. The policy calls for viable and practical alternatives to be explored, impact of site on councils use of the land, conflict of use as a public purpose, views of the local community and community benefit. This policy would have ensured that there was some sort of community consultation completed before proceeding on council land. More in depth alternative analysis would have been required before the council approved the facility. • There is extensive policy on the protection of urban character and amenity. Including calling for aerial cables to be placed underground. The facility would have not complied with this policy as it is not a slimline design and no landscaping was completed. • The policy guides telecommunication facilities to co-location. This facility was a light pole swap-out, as such would comply with this part of the policy.

	<ul style="list-style-type: none"> • The policy provides several provisions around electromagnetic fields and requires a report and consideration on the implications of a new facility. This was provided in the form of an EME report. • The policy follows the <i>Vic Code</i> for setting out a planning permit. As such the planning permit for the facility would have been suitable. <p>The policy is not very concise and sometimes hard to follow. However, further consultation with the community would have been needed as the facility is on council land. The design of the monopole would have come under scrutiny due to its environmental effects. Further analysis around alternatives would have been required.</p>
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PA2011-3251 - 308-374 Minns Road, Kurunjang



Site description and proposal

This site can be characterised as follows:

- Vodafone Hutchinson Australia (VHA) 35 metre monopole.
- Approved less than 50 metres away from another monopole, co-location was ignored and precautionary approach was not followed.
- Located in a rural field on the urban edge, only 50 metres away from residences. There is clear visual impact on the surrounding residences.
- Located on land that would form part of the future residential growth area.
- Council requested carrier to co-locate, the carrier's response was that there was no suitable co-location option. Pole extension was not discussed.
- Council issued a notice of refusal due to its visual impact and noncompliance with the *Vic Code* in particularly in failing to address co-location options with another telecommunications site in close vicinity to its location. The matter was referred to VCAT who overturned the decision on the basis that Telecommunications are an important requirement and co-location requirements were satisfied.
- The planning report did explore five other suitable sites.

<p>City of Casey Telecommunications Facility Policy</p>	<p>The following implications would be found when applying this policy:</p> <ul style="list-style-type: none"> • The policy lists an order of preference for new facilities, a new monopole is the least preferable. The facility would have not complied as further investigation for co-location on the pole 50 metres away would have been required. • The policy states that when siting a new facility, it should be sited in commercial or industrial areas away from new residential areas, schools, hospitals and childcare facilities. This facility is only 50m away from residences and located in an urban growth area. Therefore, the location would not be compliant with the policy. • The policy calls for a minimisation of visual impacts through sensitive siting, use of non-reflective finishes and appropriate landscaping. Siting two monopole's right next to each other and not pursuing co-location is not complaint with the policy. • New facilities need to be able to provide further co-location opportunities for other carriers. The facility complies with this provision. • The policy also sets out a guide for planning reports. While the planning report provided five alternatives, further rationalisation around the final choice, including further photographic imaging and EME assessment would have been required. <p>As per the above, if this policy was in place, the facility would also not have been approved (consistent with the determination from City of Melton). Co-location would have been a requirement, and extension of the existing pole supported. The report would have not been sufficient to comply with the policy.</p>
<p>The City of Boroondara Telecommunications Policy</p>	<p>The following implications would be found when applying this policy:</p> <ul style="list-style-type: none"> • Facilities need to be provided in a manner that is sensitive to health, safety and environmental amenity of the area. The facility does comply with the industries safety standards, however a new monopole in direct view of residents cannot be seen as being sensitive to the environmental amenity of the area. • All telecommunications cabling would need to be provided underground. This facility does not comply, as cable runs on cable ladders from the shelter to the pole. • The policy lists an order of preference for new facilities, a new monopole is the least preferable. As such the facility, would not comply with this provision. • The policy guides telecommunication facilities away from residential zones unless the proposed facility can achieve the objectives of the policy. This includes close proximity to residential zones. This site is within Green Wedge by future residential and therefore taking this into account the facility, would not comply with this provision. • The policy calls for facilities to be sited and designed to protect visual amenity, particularly on the skyline. The facility in its current location and form would not have been acceptable. <p>The application of this telecommunications policy similarly to the determination by City of Melton would have led to the facility not being approved by the council. The location and design of the facility would have been challenged by the policy. The fact that co-location was ignored and a new monopole was installed would have gone directly against the objectives of the policy.</p>
<p>Yarra Ranges Council Telecommunication Facilities Policy</p>	<p>The following implications would be found when applying this policy:</p> <ul style="list-style-type: none"> • The policy would require that the need for the facility be demonstrated. This was sufficient within the planning report. • The policy calls for upgrading of existing facilities, and ensuring that co-location occurs for new facilities. Further new facilities will need to

	<p>be designed to be used by more than one provider. In the case of this site, co-location on the Telstra monopole would have had to be explored more thoroughly. The design will allow for further co-location in the future, but this will impact the visual amenity further.</p> <ul style="list-style-type: none"> • The policy requires that visual impact is minimised through siting facilities away from exposed locations or areas of value and disguising and designing them into the surrounding built landscape. The site would not comply with this policy as the pole has not been disguised or designed into the surrounding landscape. The facility is very prominent from views within the suburb adjacent to it. • Native vegetation and habitats are not to be disturbed per the policy. An assessment showing that this was the case would have needed to be included into the planning report. • The policy sets out an extensive list of requirements for certain information within a planning proposal. The planning proposal would not have been accepted and would have required substantially more detail. Including co-location options, photomontages, an analysis of the surrounding area, vegetation removal and an explanation on the visual impact. <p>The application of this policy would have been consistent with the City of Melton determination in the said facility not being approved. Co-location would have had to been more thoroughly investigated. A more detailed planning report and improved design would have been required.</p>
<p>Moreland City Council Telecommunications Policy</p>	<p>The following implications would be found when applying this policy:</p> <ul style="list-style-type: none"> • Telecommunications facilities are encouraged in all zones, balancing the need for the site with the environmental impacts. As such this site would be suitable in the current zone, but questions around the environmental impact would have been raised. • Council will assess the urban character, visual amenity, effects on the environment, planning provisions for the area and effects on surrounding land-uses. The location of the facility would have come under scrutiny due to its proximity to residences and visual effects on the amenity of the area and future growth areas. • There is extensive policy on the protection of urban character and amenity. The facility would have not complied with this policy as establishing two towers within such proximity does not protect the urban character or amenity of the area. Furthermore, no landscaping was completed. • The policy guides telecommunication facilities to co-location. This facility was not co-located on the existing Telstra facility and would therefore not comply. • The policy provides several provisions around electromagnetic fields and requires a report and consideration on the implications of a new facility. This was provided in the form of an EME report. • The policy follows the Victorian guidelines for setting out a planning permit. As such the planning permit for the facility would have been suitable. <p>The policy is not very concise and sometimes hard to follow. However, the facility would have not been approved. Co-location would have come under further scrutiny as well as the visual effects of siting two monopoles near each other.</p>

5.3.2. Case Study of Low-impact Site

127 Gourlay Road, Taylors Hill



<p>Currently:</p>	<p>This site can be characterised as follows:</p> <ul style="list-style-type: none"> • Optus and VHA joint venture for a facility on the roof of Coles supermarket. • Located less than 150 metres away from residences. • There are several sensitive uses within 300 metres. • Site is zoned commercial • The antennas were designed to sit behind the Coles signage • This is a very good example of a successful Deployment Code 6 process. • One objection was received during consultation process. This was based on EME and health concerns.
<p>City of Casey Telecommunications Facility Policy</p>	<p>There is no specific policy for low-impact sites. However the following implications may be seen:</p> <ul style="list-style-type: none"> • The policy supports co-location and utilising existing structures. As such the above proposal, would have been supported. • The policy calls for facilities to be preferably located in industrial or commercial areas, away from residences or schools. The council may have not supported this location due to its proximity to schools and residences. However, within this locality, this is the best site. • The policy states that location and design minimise visual impacts. This site does this very well and would be supported. <p>The policy is not clear on low-impact sites. Although the facility makes good use of the roof and urban furniture and is located within an acceptable zoning. However, the facility is close to some sensitive uses.</p>
<p>The City of Boroondara Telecommunications Policy</p>	<p>There is no specific policy for low-impact sites, however the following implications may be seen:</p> <ul style="list-style-type: none"> • The policy supports co-location and utilising existing structures. As such the above proposal, would have been supported. • The policy calls for facilities to be preferably located in industrial or commercial areas, away from residences or schools. The council may have not supported this location due to its proximity to schools and residences. However, within this locality, this is the best site. • The policy states that location and design minimise visual impacts. This site does this very well and would be supported. <p>The policy is not clear on low-impact sites. Although the facility makes good use of the roof and urban furniture and is located within an acceptable zoning. However, the facility is close to some sensitive users.</p>

<p>Yarra Ranges Council Telecommunication Facilities Policy</p>	<p>There is no specific policy for low-impact sites, however the following implications may be seen:</p> <ul style="list-style-type: none"> • The policy supports co-location and utilising existing structures. As such the above proposal, would have been supported. • The policy calls for minimising visual impact by designing and disguising facilities into the built form. Therefore, the facility would have been supported due to its integration on the roof structures. <p>On the policy specifics highlighted above, the site would have been supported by council. Further than what is mentioned above, the policy does not provide any guidelines. It is unclear if the planning proposal requirements are also applicable to low-impact sites.</p>
<p>Moreland City Council Telecommunications Policy</p>	<p>This council has written specific policy for low-impact telecommunication facilities.</p> <ul style="list-style-type: none"> • The policy provides a list of issues that council will use when considering low-impact facilities. This is followed up by an extensive application from. Further communication with council would be needed no matter the facility. • Policy calls for Council to enter an agreement with carriers to address all policy issues and shape guidelines when siting and designing facilities. Hence, the facility would have had to be follow whatever agreements have been made between the council and the carrier. • The policy sets out timing and building within council time frames and regulations. <p>Although the policy is good in directing carriers in providing low-impact facilities, it may be too prescriptive. Further requirements other than those set out in the <i>Determination</i> are required.</p>

5.3.3. Key Findings

The following key findings have been found from the above case studies:

- The importance to policy of setting out requirements for planning applications to consider numerous alternative sites/sites;
- Co-location, be it on existing facilities or rooftops, can be specified in policy but, carriers may ignore co-location requirements unless a full analysis is required;
- Policy cannot be too prescriptive, however does needs to be to the point and direct. Otherwise policy is hard to follow and confusing for carriers trying to install new facilities;
- While providing guidance on low-impact facilities may be important, it is more important to ensure that this is not too restrictive;
- Even though a policy may lead to a site being rejected by Council, it may land up at VCAT and Council's decision may be overturned;
- Policy must guide good design of the facilities, be it slimline structures to improve visual amenity, colour matching the equipment to the surroundings or using existing roof structures to disguise the facility;
- Strong policy for facilities on council land, which could suggest community consultation.

6. PROPERTY APPROVALS

Council as a landowner often has to consider requests for communications infrastructure to be installed on their own land. This is normally secured by way of a lease between Council and the communications infrastructure provider, who is often a registered carrier.

As part of the background analysis this needs to be considered and what part this must play in the formulation and adoption of any policy. As touched upon in Chapter 3 of this paper, it is envisaged that the proposed policy could contain prescriptive controls as to what needs to be provided and considered by infrastructure providers before a site can be considered on Council land. Therefore, the policy will establish a set of parameters for Council to consider prior to issuing owner's consent for any development to proceed. This section of the background analysis report briefly outlines the leasing process, what needs to be considered and thus what could be included in any policy; the relationship between granting landowner approval and a communications infrastructure policy; and some best practice process recommendations that could be included into the Policy.

6.1. LEASING PROCESSES

As detailed in Chapter 4 of this paper, a carrier will often have a selection of sites that they will consider. Table 3 below details this process in a flow chart from the initial contact to the granting of a lease which ideally in a best practice occurs following the grant of a planning permit. It should be noted that the general practice of carriers is to seek 4 x 5-year lease terms.

Table 3 – Lease Process

Steps taken by communications infrastructure provider and council to grant a lease	Actions undertaken by communications infrastructure provider and council to grant a lease
1	Agree location and access to the proposed lease area
2	Agree Commercial terms ("Heads of Terms") which annexe preliminary drawings and pro forma lease document
3	Ideally Heads of Terms would be signed on behalf of council or otherwise ratified at a council meeting
4	Lawyers instructed for Council and communications infrastructure provider (upon execution or approval of Heads of Terms)
5	Council produces lease plan
6	Parties negotiate full terms of the lease*
7	Once lease agreed, carrier, then Council executes the lease
8	Carrier's lawyer attends to lease registration (if required)

- At either of these two points there would likely need to be a 28 day public notice pursuant to the Local Government Act 1989, consideration of any submission and a hearing of anyone wishing to be heard.

The grant of a lease by Council is subject to compliance with the *Local Government Act 1989* (as set out in clause 6.2 of this background analysis) which includes public notification.

Negotiation of a lease with a carrier can be protracted due to each party's own business and legal constraints.

From time to time carriers will "land bank" sites meaning that they have obtained a planning permit and have entered into a lease, but for business or network reasons, they have not built the proposed site. When it comes time to build the site (which could be some years later), there can often be different individuals involved who may not be familiar with the proposed site and any issues surrounding it. In addition, the locality of the site may physically change due to development and master planning of Council areas.

In this case, a communications infrastructure policy needs to have clear parameters around the suitability of the site, consideration as to how to deal with the local community (as they may have forgotten about the previously proposed development and be bewildered as to why it is being built, seemingly without Council approval) and any extensions of a planning permit approval.

Carrier infrastructure on Council land gives Council an opportunity to shape and encourage better communications, but Council needs to be careful not to discourage and effectively block Council land from communications infrastructure as Council land is often (especially in new master planned areas) the most appropriate location for communications infrastructure, particularly as it can be combined with existing infrastructure (such as floodlight poles). The additional revenue through ground rent can be used for the benefit of the LGA's ratepayers.

Table 4 below sets out eleven lease terms from existing telecommunications leases and provided on comment on why they may not be acceptable to a developer and thus cause delay in the lease process.

Table 4 – List of lease terms generally not acceptable to carriers

Lease Provisions	Comments
CPI rent increases	fixed increases are preferred for ease of administrative processes
Rates and taxes levied on the subject land	Carriers take the view that the rent paid for the site will cover any rates and taxes that may be applicable given the typical compound size
Costs and duty relating to the giving by Council of any consent required under the lease	The view is that if a Carrier is required under the tenure document to seek consent for any additional works, that consent should not be subject to fees and charges on the part of the owner. Generally, the consent would not require any involvement other than Council staff - no 3rd party fees would generally apply.
Lessor involvement in the carrier's choice of insurer or the review by the lessor of insurance conditions or exclusions in the Policy	The Carriers are major corporations and hold global insurance policies with very reputable insurance providers.
Indemnity provisions	These are specific to each carrier however; certain carriers will not accept indemnities with regard to EME
Consequential loss	Carriers will not accept consequential loss provisions generally.
Carrier's obligations at the end of the lease that include wear and tear	Normal wear and tear is always excluded from Carrier leases and is accepted generally with regard to property leasing
Inaccessibility of premises	24/7 access is required
Overholding rent greater than the rent payable on the last lease anniversary multiplied by the rent review	Overholding rent is always the rent payable on the last lease anniversary multiplied by the rent review.

<p>Redevelopment on less than 12 months' notice</p>	<p>The cost and time required to acquire a replacement site is prohibitive on a term under 5 years. Acquisition of a greenfield site can take 18 months and the cost of building a new greenfield site is approximately \$500,000.</p>
<p>Sharing rent (with the lessor) that is derived by the carrier licensing space on its infrastructure with another carrier</p>	<p>The Carrier rents an area of a property or building upon which it builds its infrastructure. If another Carrier chooses to co-locate on existing Carrier infrastructure the incoming Carrier will enter into a ground lease with the property owner or it will enter into a lease with the property owner to install its equipment on the building. The view is that the property owner receives rent for the use of its land/building and the Carrier receives rent from a co-locating Carrier for the use of its infrastructure.</p>

6.2. WHAT NEEDS TO BE CONSIDERED

When considering an approach by a communications infrastructure provider to utilise Council land to install communications infrastructure, Council need to set out clear guidelines as to whether the location and type of proposal is acceptable on Council land. This should be based around the following factors:

- Other Co-location opportunities
- Compliance with the ARPANSA Standard
- Any Impacts on Council Property
- Visual Impact and Design
- Any Community Benefit

Following this and as part of the steps in Table 5 as per S190 of the Local Government Act 1989 Council must advertise its intentions to lease land and to consider submissions under S223 if:

- (3) *If the lease is to be—*
- (a) *for 1 year or more and—*
- (i) *the rent for any period of the lease is \$50 000 or more a year; or*
- (ii) *the current market rental value of the land is \$50 000 or more a year; or*
- (b) *for 10 years or more; or*
- (c) *a building or improving lease— the Council must at least 4 weeks before the lease is made publish a public notice of the proposed lease.*
- (4) *A person has a right to make a submission under section 223 on the proposed lease.*

The Council as stated needs to consider submissions and should base any response around the factors raised above. This should enable a timeline to be produced for instructions to the carrier for obtaining the lease.

Generally, it is Council's preference for the carrier to obtain a planning permit prior to the lease being advertised. This means that in theory the factors and any questions raised by submissions to the public should have been considered prior to this stage and therefore this should flow to the application for grant of a lease. However, the first point of contact between the carrier and Council is often through the property or leasing officers of Council and therefore prior to the permit application being submitted it needs to be established if Council would entertain a facility on their land and if so, a location, access and a general design needs to be agreed. Therefore, it is crucial for the Policy to account for leasing on Council land with the same

considerations that would go into the planning permit application so that the two Council departments (Property and Planning), are aligned and complement each other.

6.3. LEASING AND POLICY RELATIONSHIP AND BEST PRACTICE PROCESS RECOMMENDATIONS

The policy needs to incorporate guidance for leasing on Council land and managing expectations of carriers when seeking to do so. This can be managed via the following:

- Having a written policy that is not included within the planning scheme that provides written guidance for leasing on Council land setting out the following:
 - Communication protocols including timeframes for the process and communications and points of contact
 - Parameters that need to be addressed by a carrier when seeking to enter into a lease on Council land (see section 6.2)
 - Specific siting and design requirements when seeking to enter into a lease on Council land.
 - Process and indicative timeline to finalise a lease

A policy will create a clear set of guidelines as to the information carriers needs to provide and with whom (in Council), they need to communicate. Once location, design and access have been agreed in-principle, the carrier can proceed into the planning permit stage with greater clarity and certainty.

If this is clear from the outset and in the Heads of Terms, it may deter carriers from "land banking" and extending the expiry time limit for permits. This would also seek to protect against negative design impacts which may occur from changes in technology which generally occur rapidly with regards to communications infrastructure on a regular basis. This may mean that when the carrier returns to negotiate the lease there may be other implications such as increased visual impact or footprint of the site which would further delay and complicate the lease negotiations and may need an amendment to the original planning permit to finalise the process. Therefore protections against protracted lease negotiations beyond the expiry of the planning permit timeframe is a desirable policy outcome. One way of achieving this in the Policy is to clearly via the form of a flow chart or a similar graphical representation, clarifying and outlining at a high level the Councils internal processes with indicative timelines for the lease process. This should make it clear what steps, by whom the process takes and in which timeframes this needs to be achieved. Having this clearly upfront in the policy should remove uncertainty and make all parties clear of the process before they seek to contact Council to seek to utilise Council land for communications development.

7. WORKSHOPS

As part of the background process of formulating the Policy, two workshops were held by Council and facilitated by Urbis.

7.1. COUNCIL WORKSHOP

The first workshop was for Council staff from several departments including City Strategy, Statutory Planning, Major Developments, Information Services, Recreation & Youth and Legal Services. The workshop took the form of a round-table discussion of issues staff face involving telecommunications infrastructure in the City of Melton.

The main topics discussed included the public concern around EME and the EME reports provided by carriers. Another issue was the potential impact upon visual amenity and, in particular, how visual amenity is not adequately addressed in permit applications. Another issue was carriers' social responsibility. There should be more information provided upfront by carriers as to the evolving technology and how it has changed, will change and how this impacts upon the need for sites. The Policy could use graphics to illustrate these changes.

The Policy should have a statement as to what Council are trying to achieve through its Wi-Fi infrastructure, in terms of its aims and standard of service. There should be a review of other councils' telecommunications policies, not just those in Victoria. Regarding lease negotiations, these will not start until a planning permit has been granted. To be included, probably as an appendix, should be the standard lease document. The Policy could have a *Questions and Answers* section, updated every so often, that could attempt to address common misconceptions and questions relating to telecommunications infrastructure.

7.2. CARRIER WORKSHOP

The second workshop was for the Council and carrier representatives to discuss the background to the Policy, factors driving mobile deployment in the area and any challenges and issues that carriers face within the City of Melton with respect to current and future rollout plans.

Representatives from VHA, the MCF, Telstra and Optus attended the workshop. Many of the issues raised overlapped with those raised in the Council workshop, for example, the idea of carrier briefings to Council would be beneficial to carriers and Council Officers (the format would have to be agreed upon but, could be, for instance, a face to face forum or in writing), and included discussing the carriers plans for future deployment and the changing design of telecommunications infrastructure; facilities are becoming closer and smaller. One issue discussed was that historically, residential and commercial developers have been reluctant to provide carriers with the plans for development. However, more and more, commercial drivers, such as 50 percent of internet access now being via a mobile device, mean that developers want telecommunications infrastructure from the start and the information is being exchanged and relationship is changing.

Regarding leasing of Council-owned land, assistance could be provided with areas being identified as suitable for telecommunications infrastructure. One reoccurring issue is the perception of health and safety risks to the community and carriers providing information to the community on EME and telecommunications. Related to EME, it needs to be emphasised that ARPANSA is the Australian Government's primary authority on radiation protection and nuclear safety and is entirely independent of the carriers. It may be that, for sites that have the potential to be community sensitive, carriers offer to carry-out pre- and post-installation EME testing.

Another issue raised was that the Policy could introduce a standardised visual impact assessment for all planning applications, which should also adequately address alternative sites and the reasons that they were not progressed. It was suggested that the Policy should be explicit in that if a permit application meets the requirement of the Policy, the decision should be made under delegated authority. However, as set out in Chapter 4.2, it is current Council policy for all Planning permit applications to go to Council for determination. Therefore, in this case the Policy can be clear and assist the Council in the decision making process and be sure that decisions made by Council can be upheld and hopefully avoid the Carrier going to VCAT to challenge the decision if it results in the Permit being refused. This process will also mean similarly that the Carrier can demonstrate that they have followed this process adequately providing evidence to Council within their application that they have followed the Policy thereby providing greater confidence that an approval will be granted if the Policy has been followed

It was considered that mediation would be beneficial to all parties and would be best progressed between carriers and Council Officers as a small group to discuss the pertinent issues. Lastly, but, very importantly, is the need for the Policy to be no more onerous than the existing *Vic Code*.

7.3. RESPONSE TO WRITTEN SUBMISSION FROM THE MCF

Following the carrier workshop, the MCF provided a written submission on behalf of the carriers to summarise key points in their feedback from the session. Concern was expressed regarding a local communications infrastructure policy and its status which was feared may fragment the state-wide policy approach that is currently in place and further the review of this approach which is outlined within *Plan Melbourne*.

This has been discussed in throughout this paper, in particular, in Chapter 2.9. However, this is an important point and forms much of the consideration of the form as well as the content of the Policy. The MCF letter posed 7 questions which are set out below and will be answered as the Policy is established in 2017.

- 1) To what extent does Council wish to vary/contradict the State Planning Policy Framework (including the *Vic Code*) by being more prescriptive and restrictive over siting of telecommunications facilities in its Local Policy?
- 2) Will Council acknowledge in its new Policy that new "Greenfield" facilities from time to time be required in close proximity to residential land uses and within areas that are designated for future urban growth, due to demand for service in those areas?
- 3) Is it Council's intention to alter Precinct Structure Plans to incorporate areas deemed acceptable for establishment of facilities?
- 4) Is Council initiating its policy process because it sees any particular shortcomings in the State Planning Policy Framework, and the "Particular Provisions" (52.19) and *Telecommunications Code* (as an incorporated document) for the deployment of mobile network infrastructure?
- 5) If review of 52.19 and *the Code* was progressed, do Council see this as being a suitable alternative to producing its own Policy?
- 6) By travelling down this path of creating a local policy, to what extent is Council managing community expectations that such a policy will not always lead to amicable siting solutions? We note Council's objective to create "an informed policy to provide real benefit to carriers, the community and Council", however we note it is not always possible to satisfy all parties in a planning process
- 7) If the end result is clearer policy guidance, we assume that delegation to officers to decide applications can be increased, as Council's wishes will be clearer – is that the intention?

7.4. CONCLUSIONS AND RECOMMENDATIONS FROM THE WORKSHOPS

The workshops were very informative, productive and provided much input into this background stage and formulation of the Policy for Melton. The information and discussion points have provided some insightful input which will enable formulation of an informed policy that will provide real benefit to carriers, the community and Council.

Initially, it is envisaged that there will be the Policy and a Planning Policy Guidance Note or Framework to provide more information and details on how the Policy is to be implemented and interpreted on a day-to-day basis.

The recommendations, strategies or actions from both workshops are outlined in Chapter 8.

8. KEY RECOMMENDATIONS FOR INCLUSION INTO DRAFT PLANNING POLICY

Initially, it is envisaged that there will be a Policy and a Planning Policy Guidance Note or Framework to provide more information and details on how the Policy is to be implemented and interpreted on a day-to-day basis. This note or framework will be held by Council but not incorporated into the Planning Scheme. It is anticipated that such a framework provides a detailed background and can guide communications infrastructure developers in the following:

- Approaching Council for the placement of communications infrastructure on Council land. This can take the form of a protocol and guidelines for how to approach Council and what documentation and information is required to be submitted to consider this and move it to the planning permit stage.
- Background information and further detail on requirements on planning permit application (what needs to be submitted and demonstrated within a planning permit application) to illustrate compliance with Clause 52.19 of the *Melton Planning Scheme* and *Vic Code*.

Further detail on this is provided in Chapter 8.2 of this paper. Secondly it is recommended that the Communications Infrastructure Policy is incorporated into *Melton Planning Scheme* providing prescriptive guidance to communications infrastructure developers on what needs to be demonstrated within a planning permit application to satisfy Council that Clause 52.19 and the principles of the *Vic Code* have been complied with. This is detailed further in 8.1 below.

8.1. POLICY CONTENT RECOMMENDATIONS

The Policy should have an initial Policy Statement that the Policy is responding to urban growth and changes within the telecommunications industry, emphasise Council's support of telecommunications infrastructure and how the community's health is of utmost concern and that the Policy will accord with all provisions of Clause 52.19 of the VPP and the requirements of the *Vic Code*.

The Policy should be an active policy setting out clear objectives or desired outcomes of what Council is trying to achieve. The Policy should relate to all land within the Melton LGA, although the Planning Policy Guidance Note/Framework could differentiate between requirements for Council-owned and requirements for non-Council-owned land. The Policy could also provide more prescriptive controls on siting and design on communications infrastructure for Communications Infrastructure developers who are not bound by the Telecommunications regulatory framework of the carriers such as private networks for businesses, digital radio and the like.

The Policy itself should be direct, precise and include the following information:

- Set out hierarchy of locations, principle designated uses (Industrial, Commercial, Residential), co-locating on other telecommunications facilities, co-locating on existing structures and new facilities last.
- Set out planning application requirements, while not being more onerous than Clause 52.19, including:
 - a) Thoroughly detailed assessment of alternative sites;
 - b) There should be a minimum of four alternative sites;
 - c) Written evidence pre-planning application consultation with Council;
 - d) A detailed visual impact assessment, including photo montages, using a template provided by Council. It may be suitable for requirements to differ between different area types (for example zone, character) and the visual impact assessment should also take account of the significant landscape strategy
 - e) Detailed explanation of EME/RF issues;
 - f) Detailed explanation of technology involved and the benefits that the facility would deliver to the community;
 - g) Although low on the location hierarchy, if required, installations in conservation areas or on heritage items, should include a heritage impact assessment.
 - h) Adherence and comment on any impacts on future planning (Urban Growth Zones and PSPs) considering not just the current use but the future use of the land.
- Specific siting guidance to non carrier communications infrastructure providers such as being excluded from significant landscapes and heritage items.

The Policy should not introduce EME buffer zones nor explicitly “ban” infrastructure from certain area or land uses (in regards to EME) as this is contrary to the standards for EME set out by ARPANSA and regulated by the ACMA. As well as being unenforceable under the current Commonwealth and Victorian Planning regime. This would also be challenged by Commonwealth and State Government as well as Carriers and members of the community as reliable communications is required uniformly across all land uses which could not be achieved with the introduction of “buffer zones “or banning infrastructure from certain areas or land uses.

8.2. POLICY GUIDANCE RECOMMENDATIONS

The Planning Policy Guidance Note/Framework could be broader and more prescriptive and include the following information:

- The management plan should set out Council contacts and the procedure for contacting Council regarding proposed facilities.
- Written pre-application feedback should be sought by the carriers.
- Lease negotiations won't start until permit issued.
- Pre- and post-installation testing could be required for a community sensitive site.
- Mediation should be sought prior to try to avoid VCAT.
- A briefing by Officers of newly elected councillors.
- A biannual briefing by carriers on their deployment plans.
- A meeting between property developers, carriers and Council to provide and discuss telecommunications requirements and possible sites available and suitable for infrastructure.
- Provide a Council standard lease template.
- Provide commonly asked questions and answers.
- Specific location guidance for Council owned land.
- Forum for communications providers to engage with developers within Urban Growth Zones facilitated by Council. In this forum Council looking at projected population growth can look to mediate between both parties to try and provide sustainable communications infrastructure growth.
- Encouragement and incentives (such as streamlined approvals) for smart solutions (small cells, smart poles and the like) with an eye on development within growth areas (thereby not always having to be located on Council owned greenspaces)
- Specific high level siting and design guidance for locations within individual PSPs with an onus on the communications provider to submit design solutions compatible with surroundings. As part of this guidance Council can provide acceptable design solutions and locations within specific areas in PSPs.
- Set out internal Council process including timelines for a communications provider entering into a lease from Council.

9. CONCLUSION

This background paper has sought to set out the current context for communications infrastructure development not only in Melton but across Victoria and nationally. It seeks to, with the research undertaken thus far and demonstrated within this paper, provide direction on the form and content of the Policy recognising the legislative restrictions inherent within the existing State framework for regulating communications infrastructure development. This has also been highlighted in the feedback received from the workshops with telecommunications carriers.

To overcome this we have looked at the current state of infrastructure within Melton and placed it against existing local policies many of which are dated and formed prior to other guidance being available when the Telecommunications industry was immature.

In order provide a modern robust policy, it must encourage communications infrastructure to be developed in an age where this is essential infrastructure and build on the desire of Melton to be a place where its residents are able to access world class communications. This is especially important within the Melton LGA as the planned growth continues west of Melbourne. However, the Policy must also seek and guide responsible development that is unobtrusive and where Council can retain an element of control over its location and design.

Therefore, the recommendations provided of a two tier approach to this policy will retain this balance and will fit into the State policy framework. It is our belief that in doing so this will:

- Provide clear guidance to developers and the community of compliance with Clause 52.19 and the *Vic Code* in planning permit applications to increase transparency of the decision-making process. As articulated by the MCF in question 7 of their response this may increase the delegation to Council officers of planning permit applications and thus encourage communications growth while providing comfort to Council and the community that the principles contained within the *Vic Code* have been met.
- Assist in providing communications infrastructure at an earlier stage in PSPs and new developments within the municipality.
- Provide a more streamlined approach to assist Council officers and in turn, carriers when seeking to place communications infrastructure on Council land.

The intended next steps from this background paper will be to seek to turn the recommendations contained within Chapter 8 into the two tiered policy suggested, as part of a draft policy which will in turn be notified for comment to the community and the carriers.

The draft policy will also be tested in case studies for new communications infrastructure and these findings will inform the final policy in addition to all the feedback received. This will enable Melton City Council to implement the final policy in the latter part of 2017.

APPENDIX A - GLOSSARY OF TERMS AND ABBREVIATIONS

Abbreviation	Definition
3G	Third generation
4G	Fourth generation
5G	Fifth generation
ACMA	Australian Communications and Media Authority
ACT	Australian Capital Territory
The Act	Telecommunications Act 1997
ARPANSA	Australian Radiation Protection and Nuclear Safety Agency
The ARPANSA Standard	Radiation Protection Standard – Maximum Exposure Levels to Radiofrequency Fields – 3kHz to 300 GHz (2002)
ASIO	Australian Security Intelligence Organisation
ASIS	Australian Secret Intelligence Service
CHMP	Cultural heritage management plan
The Council	City of Melton Council
CPI	Customer Price Index
DEDJTR	<i>Department of Economic Development, Jobs, Transport and Resources</i>
DELWP	<i>Department of Environment, Land, Water and Planning</i>
The Determination	Telecommunications (Low-impact Facilities) Determination 1997
EME	Electromagnetic emissions or electromagnetic energy
EMF	Electromagnetic field
EPBC Act	Environmental Protection and Biodiversity Conservation Act 1999
HOT	Heads of Terms
ICNIRP	International Commission on Non-Ionising Radiation Protection
IARC	International Agency for Research on Cancer
IoT	Internet of things

LAAN	Land Access and Activity Notice
LGA	Local Government Authority
LPS	Local Provisions Schedules
MCF	Mobile Carriers Forum
NBN	National Broadband Network
NSW	New South Wales
P&E Act	Planning and Environment Act 1987
The Plan	Plan Melbourne
The Policy	Communications Infrastructure Policy
PSP	Precinct Structure Plans
RF	Radiofrequency
RFNSA	Radio Frequency National Site Archive
Scoping Paper	Communications Infrastructure Policy Scoping Paper
SPPF	State Planning Policy Framework
SPP	<i>State Planning Provisions</i>
TIO	Telecommunications Industry Ombudsman
Vic Code	A Code of Practice for Telecommunications Facilities in Victoria
VCAT	Victorian Civil and Administrative Tribunal
VHA	Vodafone Hutchinson Australia
VPA	Victorian Planning Authority
VPP	Victorian Planning Provisions
VicTrack	Victorian Rail Track Corporation
WHO	World Health Organisation

APPENDIX B - LOW-IMPACT TELECOMMUNICATIONS SITES WITHIN THE MELTON LGA

RFNSA site number	Address:	Type of Facility
3337003	273 Gisborne-Melton Road, Toolern Vale	Telstra 33.8m steel pole
3427001	1376 Calder Highway, Diggers Rest	Axicom 25m concrete pole
3037005	7b Melton Highway, Hillside	Council Water Tower
3037007	974-1048 Melton Highway, Plumpton	Optus 35m concrete pole
3037012	41 Bedingham Drive, Hillside	Telstra – Sydenham Exchange
3335003	393 Leakes Road, Plumpton	Axicom 15m Monopole
3337005	721-733 Minns Road, Melton West	Western Water, Water tower
3337009	308-374 Minns Road, Kurunjang	Telstra 25m steel monopole
3337011	559 Coburn Road, Melton West	Optus 33.5 concrete monopole
3337014	239-289 Harkness Road, Melton West	Telstra 30m monopole
3337013	Kurunjang Reserve, Centenary Avenue, Kurunjang	Telstra 28.8m monopole
3337019	Melton Waves Car Park, 206 Coburns Road, Melton West	VHA 30m monopole
3335002	1147-1151 Leakes Road, Rockbank	Telstra 46m steel lattice tower
3024002	Mount Cottrell Telephone Exchange, 1627 Boundary Road, Mount Cottrell	Telstra 20m concrete monopole
3023015	Boral - Masonry Admin Office, Riding Boundary Road, Ravenhall	IBC coverage
3335001	1611-1781 Western Highway, Rockbank	Axicom 30m lattice tower
3338001	Victoria University, 20-40 Rees Road, Melton South	Telstra 25m Steel Pole
3337020	799 High Street, Melton West	Optus 30m Monopole
3337001	533 High Street, Melton West	Telstra 30m Steel Pole
3337017	Woodgrove Shopping Centre, 533-555 High Street, Melton West	Vodafone IBC
3337018	Melton Golf Course, Yuille Street, Melton	Optus pole, not built
3337015	41 McKenzie Street, Melton	Rooftop Facility
3337012	58-60 Barries Road, Melton	Telstra exchange building
3337002	Melton Mini Storage Units, Production Road, Melton	Axicom 38.9m lattice tower
3337010	4-6 Grant Court Melton VIC 3337	Axicom 45m lattice tower
3023008	High Voltage Tower No 29, Lot 3 Ballarat Road, Burnside	SPI High Voltage Tower 31.8m

RFNSA site number	Address:	Type of Facility
3023002	1-7 Christies Road, Ravenhall	Axicom 50m steel triangular lattice tower
3037009	Site archived	N/A
3335004	567 Hume Drive, Plumpton	Ausnet 38.77m High Voltage Steel lattice tower
3037014	350 Calder Park Drive, Sydenham	Rooftop Facility
3023018	127 Gourlay Road, Taylors Hill	Rooftop Facility
3037001	750 Taylors Road, Taylors Hill	Telstra 25m concrete monopole
3023017	Hotel Mercure, 234 Caroline Springs Boulevard, Caroline Springs	Rooftop facility
3023009	Lot 2514, 15-17 Lake Street, Caroline Springs	Rooftop facility
3023016	Tenterfield Drive, Burnside Heights	Optus Rooftop Facility
3335005	502 Neale Road, Rockbank	Unbuilt Optus Tower

APPENDIX C - COUNCIL/VCAT APPROVED TELECOMMUNICATIONS SITES IN THE MELTON LGA

RFNSA number	site	Address	Type of facility
3337015		41 McKenzie Street, Melton	Rooftop Facility
3337009		308-374 Minns Road, Kurunjang	VHA and Optus 25m steel pole
3337019		Melton Waves Car Park - 206 Coburns Road, Melton	VHA 30m Monopole
3337020		799 High Street, Melton West	Optus 30m Monopole
3338003		178-248 Murphys Road, Exford	Telstra 25m Monopole
3023016		1-31 Freelands Drive, Burnside Heights	Optus 27m Monopole
3037017		142 Hume Drive, Taylors Hill Central	VHA 18m Monopole
3335003		110-148 Leaks Road Plumpton	Axicom 15m monopole
3023022		Brookside Recreational Reserve 72-80 Caroline Springs Boulevard, Caroline Springs	Pole-swop 30m monopole
3335007		1646-1658 Melton Highway Plumpton	Telstra 25m monopole
3338006		43-67 Ferris Road, Melton South	NBN 40m monopole
3337004		28-30 and 32-34 Gateway Drive, Melton	Telstra 30m monopole
3338005		1200-1220 Mount Cottrell Road, Melton South	NBN 40m monopole

APPENDIX D – LETTER FROM MCF FOLLOWING CARRIER WORKSHOP



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