

## 8. VODAFONE - PROPOSED UPGRADE

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The purpose of this report is to seek the Committee's approval for Vodafone to upgrade 14 existing low impact sites within Christchurch. These approvals are required to enable Vodafone to proceed with their application for resource consent.

### CONTEXT OF THE REPORT

Under the current process the telecommunications companies make application under their licence agreement with the Council to locate a cell site on a City Streets asset on Council land. The Facility Assets Manager considers whether there are any issues with the preferred site and should forward these applications on sites where the poles have generally been considered low impact, which includes being no greater than 10 metres in height to the Property and Major Projects Committee. Any relevant resource consents needed are still the responsibility of the telecommunications company.

The current protocol provides for consultation to be undertaken for high impact sites. This consultation would include public notices and consultation with owners within the vicinity. In addition to this a public open day would also need to be held which would allow those in the neighbourhood to gain a better understanding of the impact of the site if constructed.

### DESCRIPTION OF THE PROPOSAL

#### Vodafone - Broadband Internet Provider

Vodafone, who have a current licence agreement with the Council, have advised that they are about to embark on an upgrade of a number of their existing sites. Initially there are 14 sites to be upgraded, which will involve replacing the existing pole with a new pole of increased height. The effect of these upgrades is considered minor but not provided for in current officer delegations.

The proposed upgrade will see Vodafone replace the existing 10 metre "Spunlite" galvanised pole and telecommunication equipment with the following:

- A 15 metre "Spunlite" galvanised pole with a single light arm attached
- 3 panel antenna measuring 1355mm(H) x 168mm(W) x 54mm(D)
- 3 panel antenna measuring 1302mm(H) x 155mm(W) x 69mm(D)
- 6 masthead amplifiers measuring 230mm(H) x 125mm(W) x 58mm(D)
- 1 equipment cabinet measuring 1300mm(H) x 200mm(W) x 790mm(D)
- Associated cabling

All panel antennas and masthead amplifiers will be mounted inside a fibreglass sleeve attached to the "Spunlite" galvanised pole above the light arm. The equipment cabinet will be painted green and utilise with extension the existing concrete cabinet plinth.

Of the 14 sites to be upgraded it is proposed that 12 will be upgraded to the standard described above. In the other two instances the height of the poles will be 20 metres with the equipment attached being the same.

In general the current site agreements allow equipment on the 10 metre poles as follows:

- 3 panel antenna measuring 1500mm(H) x 200(W) x 50mm(D)
- 1 equipment cabinet measuring 1200mm(H) x 950mm(W) x 500mm(D)
- Associated cabling

The proposed upgrade therefore proposes slightly smaller panel antennas but has two sets. The equipment building is 100mm longer, has considerably less width but an increase in depth by 290mm.

These applications have been reviewed by officers and are consistent with the Council's protocol/policy for cellular transmitting sites and the following require approval in accordance with the current protocol:

- Hills Road and Shirley Road intersection
- Normans Road and Wairakei Road intersection
- Barrington Street, Spreydon
- Solway Avenue, Ilam
- Daniel Road, Redwood
- Lyttelton Street, Spreydon
- Richardson Terrace, Opawa
- Fendalton Road and Clifford Avenue intersection
- Ernlea Terrace and Colombo Street intersection
- Aldwins Road and Linwood Avenue intersection
- Halswell and Hoon Hay Road intersection
- Deans Avenue and Riccarton Road intersection
- Dallington Terrace and McBratney Road intersection.

Council officers reserve the right with Vodafone to discuss further the location of the equipment cabinets.

## **ISSUES FOR CONSIDERATION**

### **Emissions**

The proposed upgrade of Vodafone proposes two sets of antennas on the increased height light poles.

The Council's Senior Environmental Health Officer comments with regard to emission levels are as follows:

*"I have reviewed the application for a series of micro cellsite upgrades to existing road side installations in various locations.*

*The upgraded sites comprise an additional three panel antennas mostly at a height of 15m (with two sites being 20m high) on a street lamppost. The City Plan limit of 450 microwatts per square centimetre is reached by all the panels at a distance of 5.3m directly in front of them and some 12m above the ground. This compares with the original limits being met at 3.75m in front of the panels but at approximately 8.5m above the ground.*

*As these limits occur well above the ground there is very little likelihood of the general public being present in this air space.*

*The net emission at ground level will remain approximately the same very small amount and will decrease even more as the panels are placed further above ground level.*

*In conclusion, given that the predicted exposures are so very far below the New Zealand standards, I have no concerns over this series of upgrades with regard to the possibility of adverse public health effects."*

### **Planning Issues**

Any application for a cell site on Council land is processed in accordance with the licence agreement and protocol but is still subject to any necessary resource consents. For the Committee's information under the City Plan cell poles of up to 20 metres in height are being erected on private land with a certificate of compliance being issued. Resource consent has not been necessary therefore and in many instances adjoining owner consent has not been required.

## **SUMMARY**

Based on the comments from the Council's Environmental Health Officer with regard to emissions, and the fact that the proposed upgrade by Vodafone is the replacement of existing poles, it is considered that approval be given to the installation of those sites listed above.

### **Staff**

**Recommendation:** That the sites detailed above be approved in accordance with the current protocol.

### **Chairman's**

**Recommendation:** For discussion.