Summary of Meeting Responses from Waldons/MBNL

Health risks:

Waldons rely on information provided by the scientific advisors and have to adhere to the guidance. Radio waves may cause agitation/warming to skin but there is an exclusion zone around the mast (so will not affect employees). They advised there is no risk to anyone at ground level which is why the mast is so high. The site is **modelled** in 3D to show that there is no risk and has to have an ICNIRP (International Commission for Non-Ionising Radiation Protection) certificate. They also advised the signal is like a torch beam – bright at source, dimmer as the beam spans out – and it is better to be closer to the mast as your phone is working less hard. The only risk is if you climb the mast – down below is absolutely fine. When engineers access the mast the signal has to be isolated to protect them. This is why they are so tall. They remarked that neon lights and vacuum cleaners emit more EMR (electro-magnetic radiation) than phones. They concluded that the scientific evidence is ongoing and updated but peoples' perception is a valid thing, the concerns are valid.

PC asked about the impact on property prices and possibility of having RICS surveys carried out. Waldons advised property values is a complex issue – not a planning consideration. Some estate agents note that a good signal is an asset to a property value – this is a subjective view. Their view was that it was unlikely a Chartered Surveyor would be willing to risk their indemnity by putting a value (or impact) on house prices.

Technology/Coverage:

App showing signal location: Waldons did not consider the EE app to be correct! They advised it was difficult to respond to this question as they did not know info such as type of phone, battery level, if it was facing the mast, in a building. They use **desktop software** to model connectivity and there will be variations and you might get a signal from elsewhere rather than where the **modelling** suggests. The topography affects the signal and they would need to do a drive trial to analyse the signal and information correctly. It is much easier to model a flat area.

Waldons presented info on 2G/3G/4G coverage (based closer to Godshill rather than Hyde) – showing the impact of topography – some higher points further away got coverage (according to the modelling) but that there are areas with no coverage. It is very difficult to provide the best solution to ensure capacity and coverage. Phone may lock on to a mast and then not be released as the person moves closer to another mast. *They would be willing to look at the information provided by the residents EE app.*

Waldons showed screen shots of the prior notification application showing coverage when the mast was in situ and when it was removed. This information was provided by the radio planner using network modelling software which shows capacity and coverage – showing application again is based on desktop modelling rather than physical assessment. They concluded that they would not be installing a site if they didn't really need it due to the huge planning effort and financial implications.

MBNL represent EE (2-5G) and Three (3–5G), joint venture to provide the network. As you move up the technology the communication improves 5G being the fastest. (2G is voice & messaging, 3G web browsing, 4G video and 5G is even better technology – supporting autonomous vehicles and more streaming.)

5G will open up possibilities and they are trying to manage the demand of the public i.e. more people working from home. 5G works on the same radio spectrum as home broadband but can only work within the parameters of the phones that are receiving the signals (2-3 miles). If the phone is in a building, in a car (faraday cage), differing building materials are obstacles they need to overcome.

The same transmitters are in the phones as on the mast (different power levels). Each mast can only provide a certain level of capacity (if too many phones are in the area you might not get a signal) but in rural locations (such as Hyde) they are concentrating on coverage rather than capacity. In urban areas you need more transmitters to cope with the capacity demands.

The mast height is to achieve broadcast area (the signal won't penetrate into buildings, wet leaves, etc).

5G ready: 5G will be rolled out once supply issues relating to Government decisions that were out of their control have been resolved.

Not-spots: Waldons talked about providing alternative solutions for 'not spots' within the parish – such as repeaters to relay the signal to the not spots – but these need a direct line of sight. Alternatively wifi calling can be used or building base stations closer to the 'not spots' but these cost in excess of £½ million to install so if there are only 2 or 3 difficult to reach residents in these areas the investment would not be made.
The parish council can provide details of these not spots to WO to investigate further.

Mast sharing: Waldons advised each supplier has their own network the layout is not the same so sharing a mast might not provide the coverage to an area missing in that suppliers network. They talked about the leases and financial issues and that there was often no financial benefit *(to the supplier or the host)* to mast sharing. There are two main MBNL (EE (T-Mobile/Orange) & Three) and Cornerstone (Vodafone and O2) cellular patterns differ so integration is not an option.
Waldons noted that the drive bys undertaken by the radio planner and acquisition agent would identify the areas possible and any potential mast sharing within those areas.
They reiterated they do not install sites they do not need and they need to replace the mast that was at Ashley View.
They advised that EE are taking over the 4G supply for the Emergency Services so this would be the essential benefit to the community (rather than the individual users) and there are no sites they can share to replace the one that was at Ashley View as the cellular patterns don't meet/match.
Each network supplier uses slightly different parts of the radio spectrum within the two network, so they can't replicate the same area as they have different licences.

Alternative supplier: Waldons were asked to confirm there was no other supplier to cover EEs gap in the village and they advised that the important point to note is that the emergency services use EE for downloading maps, building plans and schematic downloads and communication with hospital consultants (which is the direction the emergency services are heading). Whatever the local residents think they require the network provider needs to replace the existing 2G/3G/4G service so they may as well future proof it for 5G.

Permanent site progress: Waldons are currently investigating two other sites, both still at the very early stages. PC asked if the Gorley Common car park could be considered – despite being a SSSI it is a gravel car park and would have far less impact on residents. Waldons advised they would be happy for the PC to approach Natural England to remove the designations on this area of HCC land but that they would need a radio planner to review suitability of the site to see whether it was viable before proceeding.

Future proposals

With regards whether 4G would continue to be supplied on the 5G mast and whether individuals would need to swap phones Waldons advised there are no plans to get rid of 2G/3G/4G.

With regards whether there was any benefit to installing on non-private land and whether more masts would be required in the future Waldons advised the proposed mast would fill the current hole but in the future capacity demands may require more. The lease terms will dictate the length of time the mast will remain in situ but that there are break clauses and end of term contract details – different for each site.

WO noted that as part of any planning application there are statutory requirements to remove redundant equipment – so it can't be left on site if it is no longer used. It is difficult to predict future requirements – that would depend on technology changes and demand. He noted that the installation of mast with 5G would (in his opinion) make the area a more economically viable community *[no information was given to support this statement].*

Appearance

With regards the height of the proposed mast (18m) Waldons advised ICNIRP guidance dictates the height (health risks) and the location on the site is due to the proximity of power cables (the mast has to be 1 and a half times its height away from the power cables).

WO noted that a tree mast needs to be higher than a standard monopole as the canopy of the tree is at the top, to achieve this the antenna heights the overall structure has to be higher. The mast could be shorter but it would not then plug the hole in the service coverage/capacity. There are technical differences between the two operators which prevent mast/site sharing.

With regards the mast being shorter, Waldons advised it could be but it would be more difficult to achieve capacity and coverage and IGNYP compliance and the overhead power cables are the main issues for the area. It was also noted that conditions to the mast installation could be included if the mast were installed on land with a designation (SSSI/SAC) and once installed the mast could then not be changed without planning consent *[PC note - if they install on a site without designation and that does not require planning they have more future flexibility].*

With regards to where the entrance/access to the site would be Waldons advised there would be no new entrance and access terms would be agreed by the lease – although emergency access would be allowed at all times – they noted that 24 hour access would be within the lease but nothing has been agreed yet.

Consequences of no mast

Would 999 calls still be possible if the mast was decommissioned and not replaced: Waldon noted that calls would be possible but that maps, building plans and schematic downloads (for the emergency services) and communication with hospital consultants would not be (which is the direction the emergency services are heading). Whatever the local residents think they require the network provider needs to replace the existing 2G/3G/4G service so they may as well future proof it for 5G.

After two hours the meeting was concluded, next steps:

- Waldons to investigate the car park at Gorley Common to see if it is technically feasible.
- Waldons to review the signal information provided by the resident
- Waldons to confirm likely timescales for the parallel sites.
- Waldons advised residents will receive communications shortly regarding temporary mast sites.

QUESTIONS NOT COVERED AT MEETING

Health risks:

- Can we have mapping of the impact/footprint/lobes from transmitters of "radiation spread" & field plotting?
- What is the size of the safety zone around the mast in which there could be danger to health?
- Also, has any research been done into *perceived health risks* on people's mental health/ property prices etc?

Mast requirement, technology:

- How many people in the parish are with EE and actually need it?
- What alternative technologies have been considered and why were they not deemed suitable?
  (we could have a number of smaller masts rather than one big one; Micro-mesh solutions etc)
- How do **all** the other parishes in the national park get their service, do they all have huge masts?

Coverage

- Does any part of Hyde receive an EE signal from a mast other than the Hyde mast? Will those parts of Hyde that currently receive an inadequate or no 4G signal be better served with 5G?
- If more 5G masts are to be provided in the future, will there be wider coverage?
- Will the replacement mast, or any future masts in Hyde, provide a signal for areas outside Hyde?
- Will any mast outside Hyde provide an EE signal for any part of Hyde?

Appearance

- If there were more masts in the future, could they be lower?
- Are there any designs more appropriate than the proposed standalone plastic cypress-type tree?

Consequences of no mast

- Does EE have a legal duty to maintain the 4G signal and/or provide a new 5G signal?
- Will 4G continue to be provided? If not, would people need to replace smartphones, etc.?
- How many households in Hyde have no landline and rely on a mobile signal?
- How many households are there in Hyde with neither a copper landline or a fibre connection?
- Could all households in Hyde be provided with fibre broadband?
- Would this enable everything that a 5G signal would enable?
- Given that most people in Hyde appear to receive their EE signal from Fordingbridge, how many people, or what area, would lose their signal if the Hyde mast is not replaced?
- If there were to be no EE mast in Hyde, would other providers plug the gap?