Dear Sir / Madam,

Land West of Kingsclere Road, Overton, Hampshire. Outline planning application for the development of up to 165 class C3 dwelling houses alongside a 65sqm home-working hub. The development provides vehicular access off Kingsclere Road, residential car parking, public open space, playspace and a pedestrian link to Overton railway station including Access.

Additional information in the form of Technical Note dated 28th January 2016 has now been submitted by the applicant to address our comments regarding the following areas:

- Site Access
- Overton Crossroads Operation
- Pedestrian and Cycle Access Improvements
- Bus infrastructure improvements
- Travel Plan

A further Technical Note dated June 2016 providing an updated position on the Overton Crossroads Linsig Modelling work has been submitted.

It is also noted that the housing number has been reduced to 165 dwellings.

**Site Access**

The full speed data set has been provided and reviewed and this demonstrates that 85th percentile vehicle speeds are 39mph Southbound and 42mph Northbound. Visibility spays of 120m are therefore required in each direction. These have been provided within the most recent design drawing.

Confirmation that the data was collected in dry road conditions has been...
provided.

It is noted that on the latest drawings in relation to the site access (drawing number JNY8595-01) the existing priority working build out and crossing point have been relocated further south. The reason for this is not clear. Clarification is sought from the applicant. The current build out places the crossing point on the desire line. Relocating the crossing further south will require pedestrians to divert away from the desire line in order to use the crossing; this should be avoided if possible.

Confirmation on the taper details of the right turn lane are also sought as from the information provided these appear to be substandard and not in accordance with TD42/95 or TSRGD Chapter 5. The tapers would need to be adjusted to accord to this design guidance in order for the access to be acceptable.

Traffic calming proposals have been offered north of the access to aid with speed reduction generally on Kingsclere Road. However no details of this have been provided within the design work or further submissions to the planning authority. Details of any additional traffic calming measures should be outlined through the submission of a drawing of the proposals.

Overton Crossroads – B3051 Kingsclere Road/B3400 Winchester Street

A Technical Note including the modelling of the Overton Crossroads junction was provided in January 2016. The original modelling provided in support of the application demonstrates that this signal controlled junction will operate significantly over capacity in the forecast year of 2020 with the additional development traffic.

It has been proposed within this technical note that in order to address this that a sensitivity test be undertaken to determine the impact the any modal shift to sustainable modes would have on the junctions operation as a result of the travel plan. A 10% reduction in the forecast trip generation has therefore been applied. This demonstrates that the junction still operates significantly over capacity even with the assumed reduction in trips with maximum Degree of Saturation of 115.5 in the AM peak on Kingsclere Road resulting in an average queue of 35 PCU's.

Securing a 10% modal shift would be extremely challenging in this location and therefore whilst this may represent an ambitious target to achieve through the travel plan, this can not be relied upon for the purposes of assessing the forecast impact of the development traffic.

In order to mitigate the impact on this junction further it has been proposed that implementing the MOVA system to control the junction would provide additional benefit. This system however is already in operation at this junction. The applicant was informed of this and additional modelling work has been undertaken, the results of which have been set out within an additional technical note submitted in June 2016. With regards to this further note I have the following comments.
The Linsig model does not match the observed maximum average queue lengths for the baseline AM peak. However for the PM peak the difference between the baseline model and observed queue lengths is minimal and I would considered the differences in that peak to be acceptable. For both peak periods the saturation flows were adjusted to calibrate the baseline Linsig model against the observed maximum average queues. However for the PM peak given the closeness of the match between the baseline model and observed queues the RR67 saturation flows should be used for all PM peak scenarios.

It is noted that the deviations from the standard RR67 standard values used in the baseline model are quite significant. For London Road and both High Street arms the calibrated values range from 2200 to 2500 pcu per hour for most arms. This equates to a vehicle passing over the stop line every 1.44 to 1.6 seconds. These values are exceptionally high for a single lane approach at an urban junction where typically values of 1800 to 1900 pcu per hour are common and in line with RR67 values (vehicles passing over the stop line around every 2 seconds).

With the apparent need to use such high saturation flows to calibrate the AM model results with observations using such high adjusted values has to be questioned. As the signal junction already exists actual saturation flows values can be collected from the site. It is recommended that the actual on site saturation flows are recorded to help to indicate whether the adjusted saturation flows are realistic. Alternatively an adjustment to the stage lengths or frequency of the pedestrian stage could be revisited to seek a better match between the baseline model results and observed queue lengths.

It is noted that there is also a large disparity on the Kingsclere Road arm in the AM peak between the baseline model and observed queue lengths with the model under predicting queuing on this arm. While higher saturation flows have been used on the remaining arms to better match the modelled and observed queue lengths this has not been applied to Kingsclere Road. The note states that this would be unreasonable to do although the same approach has been taken to adjusting the values for the other arms albeit to higher values. To better match the AM peak queues it is likely that the calibrated saturation flow would need to be reduced in the baseline model.

Without knowing the extent to which the Kingsclere Road calibrated saturation flow would change it is not possible to verify its acceptability. Indeed depending on the magnitude of change to the saturation flow on Kingsclere Road it may be prudent to undertake on street saturation flow measurements on this arm.

Aside from the use of significant highly altered saturation flows in the model, the methodology used to justify the development impact on the junction is questioned due to the use of the number of cycles taken to pass through the junction as the measure of junction performance.

This is not a typical measure used to determine the impact on a junction and generally accepted results include average delay times per vehicle, average maximum queue lengths, degree of saturation and practical reserve capacity.
This is an unusual modelling approach and not considered to be appropriate for this scheme.

In my experience the use of number of cycles taken is not a widely judged criteria used by drivers. It can be particularly difficult for drivers to gauge this when joining the back of the queue particularly if they are unable or are unaware of signals themselves and therefore determine the number of changes. Far more commonly used assessment by drivers is the average delay incurred while waiting in the queue to pass through the junction.

The modelling work evolves with the reassignment of green time from other arms specifically in favour of Kingsclere Road. The note discussed the use of MOVA control at the existing signals. MOVA continually assesses both delay and capacity to optimise the timings and cycle time around the whole junction and not just for an individual arm in isolation. Therefore the manual reassignment of the green time on to Kingsclere Road does not replicate how MOVA would perform and assign the green times on a varying cycle time. It would not be an appropriate means of testing the junction performance within the modelling. A more robust approach would be to optimise the overall junction with an optimised cycle time, as MOVA would undertake continuously, to obtain the optimum overall junction performance.

The note appears to concentrate on the AM peak scenarios beyond the baseline model. Modelling would be required for future scenarios for the PM peak and this should be included in the note.

Evidence and agreement of the saturation flows in the AM peak period is essential. Until this is agreed further assessment and comments on the overall acceptability of the proposals can not be provided. Additionally the measure of the junction performance should be taken as average vehicle delay, maximum queue lengths, degree of saturation and practical reserve capacity. The number of cycles is not considered to be an acceptable measure from which to determine the overall acceptability of the impact on the junction.

Therefore at this stage the objection to the development based on the impact on Overton Crossroads along with the risk of rat running via Church Road to gain access to the B3400 due to delays at the junction still remains. It has not been demonstrated that the impact is not severe or that any significant impact can be mitigated.

**Forecast Year**

The applicant has confirmed that there will not be a planned delay in construction as implied in the original TA. Therefore a forecast year of 2020 is acceptable.

**Committed Development**

It is noted that since the planning application has been made the Local Plan has been approved and this includes development allocations within the Overton area. It has been confirmed that these are included within the original
assessment as the proposed Local Plan allocation is assumed in the background growth figures within TEMPRO.

**Pedestrian and Cycle Access Improvements**

Whilst discussions have been had with the applicant about the routes to the railway station no details of how it is proposed to improvement these routes has been provided.

My initial comments made in my response dated 26th November 2015 still stand. For clarity these were:

“There are existing footway links to the village centre and crossing improvements to Kingsclere Road are proposed to link to the bus stops on Kingsclere Road. However the route to Overton Railway Station requires improvement. The TA refers to improvements to Right of Way Number 3 and further details are sought on this. Whilst improvements to this route in terms of surfacing and width are welcomed it is unlikely to be an appropriate route for use in the dark. A predominantly lit route to the station via Foxdown exists and inclusion of a signing strategy along this route should be considered to complement any right of way improvements. In addition where Copse Road meets Hilltop Road the pedestrian facilities are limited. There is an existing footway on Hilltop Road northern side which links to the station, the possibility of continuing this footway and improvements to crossing from Copse Road should be explored.”

**Bus Infrastructure Improvements**

My comments within my response of the 26th November 2015 were as follows:

“Opportunities to improve bus waiting facilities in the area should be explored in liaison with the Parish Council.”

No additional information has been provided on this matter.

**Travel Plan**

The proposed actions outlined within the Technical note are acceptable. However before formal approval of the submitted travel plan can be given a revised document will need to be submitted.

**Recommendation**

Further information is required to address the matters raised in this response, in particular relating to the impact of development traffic on the Overton crossroads junction, the site access layout, pedestrian and bus infrastructure improvements. In the absence of this additional information, I recommend the following reasons for refusal;

- *In the opinion of the Planning Authority the proposal involves development that cannot be reconciled with the National Planning Policy Framework in that the significant movements generated could*
not be accommodated adequately on the existing transport network. This would result in a severe impact on the road safety and operation of the local transport network contrary to the NPPF and saved policy E1 of the Basingstoke and Deane Local Plan.

Reason: In the interest of highway safety

- In the opinion of the Planning Authority the proposal involves development that cannot be reconciled with the National Planning Policy Framework in that there is insufficient provision of, or support for, sustainable transport options. This would result in a greater number of trips by private car which will create a severe impact on the local transport network and environment contrary to the NPPF and policy E1 and A2 of the Basingstoke and Deane Borough Council Core Strategy.

Reason: In the interest of highway safety

I trust that the above is clear but I would ask you not to hesitate to contact Holly Drury should you wish to discuss anything further.

Yours faithfully

Ben Clifton  
Team Leader- Highways Development Planning.

CC Owen Pocock, Basingstoke Highways, Basingstoke Borough Council