

HAVANT BOROUGH COUNCIL

Town & Country Planning Act 1990

Consultation on Planning Application

MEMORANDUM

From:	Environmental Health	To:	Development Control
Our Ref:	CONS/17/02455	Your Ref:	APP/17/01324
EH Case Officer Extn:	44 6677	Date:	09 March 2018
DC Case Officer:	Daphney Haywood		
DC Case Officer Extn:	44 6513		
Application Number:	APP/17/01324		
Site Address:	Dunsbury Park, Fitzwygram Way, Havant, PO9 4EE		
Proposed Development:	Variation of Condition B6 of Planning Permission APP/15/00732 to remove restriction on proportion of B8 floorspace allowed within the Dunsbury Park development, and thus provide for a maximum mixed use floor space of 61,779sqm within Classes B1, B2 and/or B8 of the Use Classes Order 1987 as amended.		

Observations / Comments:

I have reviewed the Atkins Responses to my previous comments alongside prior submissions, and some other sources of air quality information. The submissions have provided some very helpful clarifications, which assist greatly in understanding the model.

It is clear however that were this considered as a new application, there is potential for the IAQM screening criteria to be met at two locations that are outside the scope of the air quality modelling previously submitted (College Road & Purbrook Way West of College Road). Atkins does not presently have information available to substantively address this - either in terms of whether the apparent new trips at this location are realistic, or in terms of the air pollution impact of those trips (assuming that they will occur).

As regards a way forward, it is not entirely clear to me how this should best be resolved. There are several potentially acceptable approaches, and I am mindful that the potential adverse impact would appear likely to be a scale whereby the proposed lifting of use-class restrictions could be made acceptable in planning terms with respect to air quality pollution (as opposed to be an issue which cannot be readily mitigated, whereby the application should be refused).

I hope that the comments below will assist in outlining points accepted / of agreement, will provide clarity on areas of uncertainty, and make clear the rationale underpinning my position. I'll keep it as brief as I can, but will try to give enough detail that the technical contributors have clarity on points that need to be addressed

Traffic

The submission from Atkins was especially helpful in understanding the traffic anomalies referenced in my original response. Essentially, it is understood the 2011 baseline was based upon recent 7-automatic traffic count (ATC) data, whilst the 2019 & 2026 DM & DS scenarios were based upon the PUSH area sub-regional transport model (SRTM).

The SRTM is a strategic model which incorporates route choice assumptions. Its purpose is to assess highway capacity, and hence it focuses upon peak flows. Annual Average Daily Traffic (AADT) figures were derived from the SRTM by factoring AM peak period flows using a factor calculated from the ATC data - presumably from a period corresponding to peak flow & the corresponding 24hr traffic count, averaged over 7 days (for the entire survey period). This approach is acceptable, but having performed similar calculations myself, I am aware that it can amplify 'errors' (variability) caused by seasonality and other factors that might impact the survey period. This can result in a wide variation in calculated AADT estimates (e.g. if calculations are repeated on new survey data, or a different data 'cut' from the same survey).

For these reasons, the 2011 baseline data is considered to be more realistic in terms of routing and link loading. The SRTM data has the advantage of accounting for local development in combination, which surveyed data obviously does not. It is possible that a portion of the noted difference in flow patterns (surveyed cf. modelled) could be related to production / attraction pressures associated with the spatial development model which underpins the SRTM. It is difficult to quantify how much of the noted discrepancy is likely to be related to development patterns, and how much is due to factors associated with extrapolation.

It is worth noting that AM peak flow routing preferences may differ from the average aggregated total / 24 hr link usage, and in this way extrapolation from peak flows could (in addition to creating an unrealistic link loading model, and as the distribution model for new development traffic is also based upon the SRTM) embed within the Air Quality assessment an unrealistic routing model.

Atkins has made the point the 2019 DM & DS scenarios are consistent. I agree that they are, and that in terms estimating 'magnitude of change', it is arguably immaterial that the 2011 baseline model differs from that used for the 2019 DM & DS scenario's. However, in terms of the *location* of the impact, it is significant if the modelled trip impact on the road network is spatially aligned to the likely location under real-world conditions.

As is noted above, the SRTM may differ from real-world conditions. With reference to the queries I've raised previously, there are certainly substantial differences between a model based upon traffic monitoring, and that based upon SRTM extrapolations.

Atkins acknowledge this, in particular with reference to the route to access the strategic road network (SRN), where it would appear that the model incorporates an unrealistic bias toward access via J4 in preference to J3. More realistic proportions have been suggested (with which I would broadly agree), but models have not been adjusted at this stage. Atkins do note that routing via the local- (as opposed to the strategic-) road network is a 'worst case assessment' (in terms of both junction impact, and impact on human receptors), which I would not dispute.

Taking this as the adopted approach (i.e. disregard any concerns about how closely the SRTM aligns with network usage from baseline surveys), there are trips accounted for on local routes that have not been included in the worst case assessments in terms of air quality (receptors noted above), or at specific road junctions (e.g. Stakes Rd. / Stakes Hill Rd. / Crookhorn Ln. / Purbrook Wy., and Purbrook Way / College Rd). The latter may or may not be of any material significance - the relevant Highways consultees will have made their own comments in this respect, I am of course only concerned with the traffic model insofar as it relates to the air quality assessment,

Air Quality

The Air Quality screening (IAQM guidance on the need, or otherwise, for a formal air quality assessment) pivots upon whether there is an impact amounting to >100 new HDV movements (as AADT) on local roads, where there are nearby receptors.

In this way, determination depends upon an estimate of development flows on specific road links. As is noted above, for this assessment the distribution of development traffic on the road network is derived from the SRTM, which is known to differ quite substantially in places from that indicated from 2011 traffic surveys. In the most part, this can be disregarded; however for the area queried, the allocation of flows is likely to be critical to the need (or otherwise) for a formal reassessment of air quality impacts.

Atkins agree that the model indicates an increase of 227 HDV (being greater than the screening criteria of +100) on Purbrook Way between the A3(M) & College Road, but note that there were no receptors along this section of road. This is true with specific regard to the referenced road link, but the model does not consider the onward routing of those HDV.

Development traffic on this section of road is necessarily routing to destinations without accessing the SRN. Onward routing options are therefore limited to East/West via Purbrook Way (AADT flows are 2-way); or North/South routing via College Road (we know that the model routes this traffic from/to the development site East/West along Purbrook Way, over J4). There are receptors within 15m kerbside on both these unaccounted-for routes, and it is possible in principle for both links to experience a >+100 AADT increase in HDV, assuming a 50/50 split at the College Rd / Purbrook Way junction. Both routing options are considered plausible, and so it is likely to be appropriate to allocate trips to both. A 50/50 split is not necessarily likely (a directional bias might be more realistic), and it is possible that an addendum to the air quality assessment could be necessary to assess the impact at one, or other, or both - the worst case receptors on these routes.

I don't believe that it will prove necessary to consider receptors beyond those identified above, as the network 'dilutes' development traffic impact with distance from the application site. I do note however that in the event that a significant proportion of the development traffic routing East/West (West of College Road) is expected to follow the principle route (toward the A3, via Stakes Rd), the worst case receptors are within 5m of the kerbside, approximately 1/2 the distance of the worst case receptor at Khandala Gdns. Consequentially, it could in principle be necessary to include Stakes Road receptors in any revised model.

It strikes me that the first step is to determine what the SRTM would suggest is the route distribution at this point (Purbrook Wy. / College Rd.), in order to determine which receptors the screening assessment should consider.

The (air quality) comments above refer to point 2) from the Atkins Memo. As regards point 3), we are in agreement - I highlighted this in connection with the consequential impact of differing background estimates noted at point 1), in that whilst the overall ambient air quality result might be expected to be lower overall, the proportional development impact might at the same time be elevated, and that mitigation of this might still be appropriate.

As regards point 1), background estimates; the submission notes that the estimates were the best estimates at the time of the assessment. With reference to source figures from DEFRA, I have now verified, and recognise the figures used - there was a plotting error affecting 2011 data only which led to my raising this point.

My comments under point 1) remain valid however, insofar as use of the most recent background estimates for the 2019 DM & DS scenario's does still serve to increase the proportional development impact, by up to +33%, from some basic calculations (cf. those used in the original assessment). I would agree that this is not likely to be material relative to receptors already calculated (no need to re-visit the existing assessment), but I would expect the latest available figures to be used for any addendum assessments that might be deemed to be necessary (e.g. for receptors at Khandala Gardens (receptors to Purbrook Wy.), Lind Cl. (Receptors to College Rd.), or Stakes Rd.).

As regards the need for an assessment, it seems likely that based upon the adopted routing model, and considered against the IAQM criteria, a reasonable conclusion would be that an addendum Air Quality assessment would be required. I would however be open to clear conceptual arguments as to the likely outcome of that assessment were it to be undertaken (i.e. a rationale for assessment not being necessary or likely to produce useful / definitive results, or the result being so readily predictable as to be assumed, and addressed.)

Mitigation

Were a revised / addendum Air Quality assessment to be undertaken, and to return adverse results (e.g. a significant proportional impact) - the question would arise as to how to address (reduce, or mitigate) that impact.

I see little value in pursuit of an Air Quality assessment which does not steer the decision-making process, whether this be to refuse 100% B8, and consider a new / compromise proportional cap on use class at the development; or to serve as a vehicle to implementing an acceptable scheme (or form) of mitigation which allows 100% B8 usage at the development to be made acceptable in planning terms, and consented.

Atkins has noted that *"...it would be possible, and desirable, to implement operational traffic routing plans which specify desirable routes for HDVs to the strategic highway network, which avoid the more sensitive locations of residences for example on Hulbert Road and Purbrook Way"*. Given the uncertainties with the network loading, and development traffic routing model, and in particular the acknowledged unrealistic southerly routing bias for SRN access - it may well prove to be much more efficient to simply pursue this desirable option.

I am at this point unclear as to how a routing plan (or it's principles) could be specified, implemented, monitored, and made enforceable. I do however consider that this is likely to be the single most effective form of mitigation that could be implemented to reduce the proportional impacts at local residential receptors represented by implementation of an 'in principle' 100% B8 use, which on a worst-case basis, could see several 24 hour distribution hub type operations at the site.

In general, I would consider that the above 'worst case occupation' scenario would on a conceptual basis contribute to local air pollution in such a way as to make proportionate mitigation appropriate, and consider that proposals for effective mitigation (of the assumed general adverse impact) could be accepted in lieu of expending modelling effort looking at specific receptors based upon an inputs likely to be subject to a wide margin of error.

Routing controls would serve to reduce local impacts specifically associated with additional new HDV trips associated with this development. I would consider firm proposals to achieve surety on appropriate routing to be sufficient to resolve any objection from Environmental Health.

Other off-site mitigation options might also be viable, especially where (as I would expect) any non-negligible adverse impact on local air quality is likely to be proportional, and not to breach an IAQM objective or air quality limit value at any specific location. In this way, alternative mitigation aiming to facilitate emissions reductions elsewhere on the network could appropriately compensate for the contribution of the development to elevated local background pollution.

This is an approach advocated by central government policy, and is a theme emerging in current consultation drafts of a revised NPPF. As indicated above, I do not object to taking a general offset or specific mitigation approach, as opposed to getting mired in detail of assessment models.

Conclusions

I don't regard the Atkins submissions as being sufficient to negate my prior objection. There remains room for a significant proportional impact at receptors not considered in the submitted assessment.

I would be content to deal with that residual uncertainty in impact magnitude by whichever approach the applicant prefers, be that to;

- put forward robust conceptual arguments as to the probable triviality of impact,
- model the receptors not previously considered,
- assume a significant impact, and adopt appropriate mitigation (targeting a specific assumed impact, e.g. routing restrictions to avoid receptors on the local road network), or
- acknowledge a general adverse overall air quality impact and to adopt an approach whereby the incremental adverse elevation in local ambient air pollution (associated with additional HDV trips represented by the removal of the use class cap) is offset, by securing or contributing toward effective mitigation elsewhere within the Borough.

For any of the above approaches, it would appear that some additional input is required from the applicant. I would maintain my objection pending further clarification on how the applicant wishes to address the remaining questions - but I don't believe that the issue is in any way insurmountable.

Mr. Jonathan Driver
Environmental Control Officer