APPENDIX T **Earlier Environmental Health (Environmental Control Officer) Consultation Responses**

Further Comments:

Observations / Comments:

These additional comments follow recent discussions with the Highways Authority (HA) to clarify the agreed net change in traffic that is considered likely to result from the development, alongside the basis of calculation of that estimate. Establishing a reasonable estimate of transport net change allows a qualitative assessment of the acceptability of the existing Delta Simons Air Quality Assessment (Ref: 20-1275.01 iss.2), and the extent to which wider inferences may be drawn from it's conclusions.

Net-Change in Development Land Transport Demand

Transport demand net-change is a function of two factors – i) existing transport demand that is associated with the existing consent & the physical commercial floorspace at the previously developed land, and ii) the likely gross transport demand associated with the proposed development; net change being the difference between the two.

The HA had principally challenged net-change figures on the basis of the former, namely the transport demand of the development land in it's current state. It is understood that the bulk of discussions between the applicant have focussed upon this element, rather than the gross demand associated with the proposals.

Two alternative net-change scenario's were originally presented (Vectos Transport Statement, Feb 2021), representing a 'previous maximum usage' scenario, and an 'existing site usage' scenario. Both estimates are based upon the respective floorspace area consented for different commercial landuse classes at the site (at different points in time), and TRICS database estimates of trip rates on a 'per sq.m' basis for each commercial use class.

It is not believed that the reasonableness of the TRICS trip rates is in dispute (e.g. the

selection or exclusion of surveys from the aggregate rates), but is understood that the HA raised concerns over the representativeness of the 'existing site usage' scenario, given that commercial activity at the site has been in a 'wound down' state for a number of years at the development land (i.e., where existing trip rates were expected to fall below TRICS estimates). Recent survey data was obtained by the applicant (post-dating the lifting of covid restrictions, at a time where the HA accepts that traffic conditions have returned 'to normal levels'). This data is understood to support the view that 'existing site usage' scenario is broadly reasonable, and further, that in the absence of the current proposals gaining consent, there exists a reasonable prospect of traffic demand meeting or exceeding the 'existing site usage' scenario values within the scope of the extant consent.

I am not aware that the HA has raised any significant challenge to the 'Gross Development Trip Generation with Van Parking' estimates (Table 5.1 from the Feb '21 Vectos assessment); these being generated from survey-derived trip-generation data supplied by the intended operator (Appendix F). It is assumed at this stage that these (Table 5.1) values are accepted by the HA.

This provides clarity on the origin & value of the reasonable estimate of AADT trip generation associated with the existing consent that the HA agree is acceptable to discount from the estimate of gross transport demand.

In the interests of clarity, it is understood that the HA has accepted the existing site trip generation figures presented in Table 5.5 (from the Feb '21 Vectos assessment) to be a reasonable estimate (1950 AADT existing), and so has also accepted the AADT net change figure based upon Table 5.5 & Table 5.1, amounting to +466 AADT.

Gross Proposed Development Trip Generation – Impact on Net Estimate

Whilst the HA has not raised any significant challenge to the figures given in Table 5.1, or Appendix F (to my knowledge), I am aware that Havant Civic Society has challenged these figures. Having reviewed those objections, I consider that some of the concerns raised would appear to have merit.

I have previously referred to the 'fluidity' in trip generation estimates (by way of example, as demonstrated substantially differing net change estimates within the respective transport & air quality assessments). As the estimates of 'gross' demand form the 'other side' of the calculation of net-change (and given the concerns raised by others), these do warrant consideration being given to their representativeness.

Firstly, it must be said that the survey-derived estimates provided by the intended operator (the bespoke traffic data) account for additional traffic in the peak hours, when compared to TRICS estimates taken from surveys at the most similar available commercial operations. This is likely to be a factor in the HA agreeing the figures to be 'robust' (more conservative than alternative methods). The applicant does refer to HA agreement of the robustness of the bespoke data.

It is not clear from the comparisons presented that the uplift seen in bespoke data over TRICS estimates would be proportionate at peak hours when considered at a daily resolution – this is probably derivable from the submissions by calculation, but I have not investigated the time required to do so.

Comments provided previously (APP/21/00200, CONS/21/01300, 27/04/2021, pg.5) question the apparently significant redundant capacity within the proposed scheme, relative to the assessment of operational need (transport demand) given, noting that *'it appears unlikely that the estimates represent* [either] *target capacity, or maximum capacity.'*(see referenced comments for rationale). Other consultees have also pointed to this inconsistency, alongside the persisting opacity in the process for derivation of the presented bespoke traffic data from the constituent surveys and the apparent likelihood that it does not represent the proposed operational model for the proposed development. In the case of the latter, I am referring to the absence of any trips associated with the midnight shift changeover, where the car park management plan notes that the *'…highest number of employees on site would be during the night shift…'* and the bespoke data only accounts for HGV movements during this period. Notably, this would appear contrary to point 10 of the Vectos *Daily Trip Generation Note*
Ref: 205452/N10, which states that the survey sites have an equivalent operational model to the proposed development. The inconsistency between the presented operational description and the diurnal trip distribution remains unexplained.

I have previously referred to the fluidity in estimates, which derive from the above factors (amongst others). The values presented in Table 5.1 from the Feb '21 Vectos assessment

are regarded to be a ‘middle estimate’ of gross demand, for which there are several reasons to expect in practice represent to a ‘low middle-estimate’.

In the absence of staffing figures or other operational details, it is helpful to provide a crude estimate of ‘saturation operational intensity’ as an upper limit to the transport demand under consideration, based upon the quantum of capacity sought by these proposals. Assuming 100% utilisation of the van storage deck capacity for driver personal car / van changeover, and one delivery round/day; and 3 no. shifts/day of sufficient size that each utilises 100% of the staff parking capacity sought, and HGV deliveries as proposed; the upper limit of gross demand would be in the region of 4792 AADT, resulting in a net change of +2842 AADT against accepted values (representing more than 600% of the ‘low middle-estimate’).

If sustainable at the site, the ‘saturation transport demand’ would have the potential to be hugely significant in both highway capacity & air quality terms. However, the risk that activity of this level of intensity may arise (in a sustained & sustainable way-) is considered to be negligible. I refer to this scenario only as an illustration of the upper limit of short-term peak demand.

It is understood that the figures presented in Table 5.1 / Appendix F (Vectos Feb ’21) aim to capture demand on the ‘average day’. In this way, seasonality in the intensity of activity is ‘smoothed out’, and the figures will not represent usage on peak days. On this basis, in considering the apparent redundancies in quantum of capacity sought it is considered reasonable to assume;

- That the ~42% ‘spare’ capacity on the van storage deck (for LDV delivery rounds) is required to accommodate both operational outages for maintenance, and substantial seasonal peaks that might be expected to be associated with retail deliveries (e.g. Christmas retailing conditions).

- That storage deck capacity utilisation may approximate saturation for such short-term trading peaks (probably <21 days/annum), and similarly that utilisation may be substantially lower than the indicated ‘average day’ during ‘low season’ trading.

- That a degree of parking space redundancy is required in the quantum of warehouse staff parking, to accommodate shift changeover (staff arriving before end of the prior shift)

- That the three operational (warehouse) shifts do not necessarily require a workforce of equal size, and that shifts may require additional staff to account for seasonal shifts in operational intensity.

- That the quantum of warehouse staff parking needs to be capable of accommodating the changeover of the most labour-intensive shift, at peak periods (where there may be additional seasonal staff), and;

- That staff parking space utilisation may fall significantly below saturation at certain times of day and at certain periods during the year.

I have undertaken some calculations (derived from development particulars and values given the various Vectos reports) in order to derive a representative 'high middle-estimate' of average gross trip generation, for comparison to the low-middle- & saturation- estimates.

I have generated a figure of 2653 AADT, which would represent a net uplift of +703 AADT. I believe this to represent a reasonable illustration of the range of likely real-world impact of the development, and it is interesting to note that the Air Quality assessment has accounted for an net change in AADT which approximates to a middle value between the (Vectos-derived) low- and (EH calculated) high- estimates. Figures presented below for clarity;

- Conceptual 'saturation transport demand' (calculated by EH) = 4792/day (Gross) [+2842 Net]
    - 'high middle-estimate' (calculated by EH) = 2653/day (Gross) [+703 Net]
    - Delta Simons Air Quality Assessment = 2549/day (Gross) [+599 Net]
    - 'low-middle-estimate' (Vectos Feb'21) = 2414/day (Gross) [+466 Net]

The conceptual saturation demand estimate is rejected as an AADT scenario for the reasons given above. Given the issues highlighted with the bespoke traffic data, the low-middle-estimate is considered to slightly under-represent likely gross AADT demand. The basis for the Delta Simons estimate is unclear. I will use the 'high middle-estimate' as the basis for qualitative consideration of air quality impacts.

Qualitative Assessment of likely Air Quality Impacts

The difference between the 'high middle-estimate' and the demand used in the Delta Simons Air Quality assessment is +104 AADT, or +17.36%. Accounting for the effect of this additional traffic for receptors calculated within the air quality assessment does not result in any material change to the conclusions.

I have previously highlighted that the most air-quality-sensitive receptor likely to be affected by traffic associated with the proposed development was not included within the scope of the report.

I note that the traffic distribution model is not in dispute. This means that 56-59% gross development traffic will be routing via Park Road South, and up to 15% could benefit from utilising local road network 'rat runs'. Assuming a broadly similar routing model applies to the existing site, the corresponding net-change equates to +395 & +105 AADT respectively. Of these, it is noted that around 20% might be expected to be zero-emission vehicles (at this development, given the specific proposals), contributing principally to particulate pollution, but negligibly to Nitrogen Oxides (NO_x & NO_2). Emissions factors apply to conventionally fuelled vehicles.

In terms of NO_2 (the pollutant of concern for the receptor identified), the effective uplift (of conventionally emitting vehicles) might be expected to be +316 AADT. Rough calculations based upon both the results of the Delta Simons report & local monitoring data indicate that the likely impact at Cardinal House would be classified as 'slight, adverse', with a predicted environmental concentration (PEC) of approximately 86% of the NAQS objective at the receptor. In other words, the development may be expected to adversely impact local air quality at this sensitive receptor, but that the development can be sustainably

accommodated without breach of any air quality standards, and without causing a deterioration in local air quality of unacceptable magnitude.

Applying the same logic to receptors located on the viable rat runs, the +104 AADT is considered to be extremely unlikely to create a significant adverse impact, in air quality terms.

In consideration of the above, an objection on air quality grounds cannot reasonably be sustained, and on this basis I withdraw my holding objection.

Preventing use of rat-runs by delivery vehicles

Following discussions with the development management service, it is understood that the use of conditions restricting development operational traffic to certain routes on the wider road network may be considered to be both reasonable & proportionate in this case principally due to the support of the applicant, and to the visibility of operational traffic (liveried vehicles) which serves to make the demonstration of a breach of condition feasible. It is understood it is proposed to secure these controls via the Full Operational Management Plan (OMP), required by a planning condition.

In respect of the content of the framework OMP, I would also highlight the transposition of previously noted distribution anomalies contained within Table 4.1, namely the implicit expectation that 28% of development traffic would route via Old Copse Road / Lavant Drive / Leigh Road . Notably, this provision / error fails to preclude use of advantageous rat runs sought by allocating 100% traffic via either Bartons Rd. or Crossland Drv.

It would be simpler if the OMP were to contain explicit prohibitions or limits on certain routes – this would remove ambiguity and simplify enforcement. Similarly, given that the enforceability of this planning control is dependent upon the visibility of relevant traffic, it would be very helpful if the plan committed the operator to maintaining an identifiable / consistent vehicle livery on a minimum proportion of it's fleet. It is expected that these issues could be deferred to the conditions discharge stage.

As regards the means of securing these controls, comments from the HA indicate that for it's recommendation to approve the proposed development it is reliant on the associated condition having the following effects:

- Any change in operation by the initial proposed occupier (that would be contrary to the approved plan) will require a variation of the OMP,
- Any subsequent operator would be bound by the approved OMP, and;
- Any subsequent change in operation by a subsequent operator would require a variation of the approved OMP.

These expectations appear to derive from text at section 3.5 (stipulating terms in respect of generation) and 4.4 (stipulating terms in respect of trip distribution). It is not clear to me that a future occupant could be bound by these clauses.

Given that the condition wording proposed by the HA omits any requirement to adhere to the plan in perpetuity, it is similarly unclear that the initial operator would be bound by these clauses – the condition only requires that the OMP be submitted and agreed. The same issue arises with the conditions proposed by the HA seeking to secure the Car Park Management Plan and the Delivery Servicing Management Plan.

I would suggest alternative wording which tightens up controls as envisaged by the HA, in order for the condition to have the envisaged effects;

Suggested amendment to HA proposed Condition [1] (Operational Management Plan)

> *Prior to the occupation of any relevant part of the permitted development, a Full Operational Management Plan shall be submitted to and approved in writing by the Local Planning Authority.*
>
> *The plan shall be based upon the principles outlined within the Vectos Ltd. Framework Management Plan document dated July 2021, be implemented as approved, and be observed throughout the period that the lawfulness of activity at the development land relies upon this Planning Permission.*
>
> *No significant deviation from the provisions of the approved plan shall be permitted, including a change of operator-, without the express written consent of the Local Planning Authority.*
>
> ***Reason:** To ensure any future occupier abides by the assumptions within the Transport Assessments agreed at planning.*

A similar tightening of controls may be appropriate for HA proposed conditions [2] & [3] (numbers in square brackets referring to the order of bullet points on page 10 of 11 to HA comments to APP/21/00200, Ref: 6-3-13-212, dated 23/07/2021).

Further Comments:

Observations / Comments:
Further to the comments provided 27/04/2021, I have now had opportunity to review;

- Supplementary Transport Assessment (July 2021),
- Delta Simons Response to HBC EH comments on Air Quality (20-1275.03 24/05/2021),
- Drainage Strategy Report (27/05/2021)
- EPS Ltd. Outline Remedial Strategy & Implementation Plan (UK20.5052D Iss.2.1, 24/05/2021)
- EPS Ltd. Phase II Geo-Environmental Assessment (UK20.5052b Iss.1, 24/03/2021)

In addition to the above, I have reviewed the comments of relevant consultees, inclusive of the Highways Authority comments which follow review of the Supplementary Transport Assessment referenced above.

Air Quality – Impact of Development Transport Demand (Delta Simons Response, Supplementary Transport Assessment)

The key concluding comments following review of the Delta Simons Air Quality Assessment Report Ref: 20-1275.01 iss.2 (April 2021) are reproduced below;

"It would seem to me to be irrational to accept the conclusions of an air quality assessment which is based upon a baseline scenario which is poorly justified, and a development impact scenario which has not been agreed to be reasonable…In the event that the justification for

the baseline scenario cannot be agreed, or that the Highways Authority will only agree a development impact scenario which differs significantly from that accounted for within the air quality report, it may be necessary to update the air quality assessment. Otherwise, following receipt of those assurances it may be possible to accept the report."

Delta Simons Response to [EH] 'Comment 3' addresses the baseline scenario, and 'Comment 4' the development impact scenario.

The response to Comment 3 confirms the source of traffic flow figures to be a WYG Air Quality Assessment undertaken for another development (APP/18/00244). Figures appear to have been taken from this source in preference to available DfT figures, and in general, the figures used are conservative relative to the DfT values (available for Petersfield Rd, New Road, New Lane)

The authors refer to both conservative traffic flows & conservative emissions assumptions, and point out that the verification correlation was close to real-world monitoring values. I am not sure I understand the latter comment; my understanding was that the ratio referred to followed the application of a correction factor that was required to adjust for under-prediction occurring despite the conservative values adopted.

I would stand by the comments regarding the 'crudeness' of baseline figures. By 'crude', I am referring to identical AADT flow values being used for multiple road links (e.g. New Lane/Eastern Road/ Leigh Road/Elmleigh Road/Crossland Drive; or Park Road North/Petersfield Road), which is unlikely to reflect real-world conditions. This is not necessarily a reason to reject the report in & of itself, however it is notable that two of the roads affected by the uncertainty in traffic flow figures are adjacent to the verification points used, and that the greatest degree of under-prediction of road contribution NOx is at the monitoring position adjacent to the sensitive receptor I identified in my prior comments that was not considered in the report (see 'response to Comment 5, below).

The response to Comment 4 serves to demonstrate the 'fluidity' of estimates of transport demand which I have previously referred to, highlighting that the most recent demand estimates (presented in the supplementary Transport Assessment) amount to a net increase in transport demand from the site of reduced magnitude to that included within the Delta Simons Air Quality report. At the time of writing, the Highways Authority was understood to remain unsatisfied with the estimates of net change relative to the extant site (in it's wound-down state, i.e. the real world impact), and I had for this reason intended to reiterate comments made previously. However, the applicant has today forwarded further comments from the Highway Authority, which I have now reviewed. This response is amended to reflect those comments.

It is understood that the Highways Agency has now agreed a degree of 'netting' of traffic for the purpose of junction capacity modelling. Whilst it is implicit from the Highways Agency response that it has agreed figures for 'traffic net-change', the net change in AADT transport demand associated with the site is not specified within the consultation response, and is not specified in either the Supplementary- or Addendum- Transport Assessment.

The purpose of the air quality assessment is to estimate the net change in air quality as a result of the development – the 'net change in transport demand associated with the development land' must be known / agreed to be reasonable. It appears that the gross demand of ~/<2500 AADT is agreed, however I remain unclear as to whether the final agreed net change estimate is significantly greater than the value assumed within the Delta Simons Air Quality Report (or not).

The Delta Simons response to EH Comment 4 is noted (rather than disputed), and is

considered to form the context within which the ‘transport net change’ values ultimately agreed with the Highway Authority will be considered in terms of the associated transport emissions.

The Air Quality Response document also addresses Environmental Health’s comment that it considers the residents of Cardinal House to be the most sensitive human receptors in air quality terms – as 57% of development traffic will be carried by the Park Road North>Park Road South link.

Delta Simons seeks to dismiss this concern by asserting that the greatest proportional change (in air quality, associated with development traffic emissions-) will be in the immediate vicinity of the site where the impact of it’s transport demand will be most concentrated. I would however highlight that ‘significance’ of a material change in Air Quality at the receptor is proportional to both the existing ambient concentration and to the distance between the receptor and the carriageway kerbside (pollutant source). Cardinal house is in a location with high baseline ambient concentrations, especially at the junction with Elm Lane, and the receptor is within 5m of the kerbside. In this sense, it is more sensitive to the same degree of change than would be a receptor with a lower extant ambient air quality, and where the receptor is set back from the carriageway (as is the case in the vicinity of the development). For these reasons, I still consider the residents of Cardinal House to be the most sensitive receptors to net change in local levels of traffic derived air pollution.

In light of the above, I do not feel able at this stage to recommend approval of the air quality report – this remains to a significant extent depend upon the outcome of discussions with the Highway Authority in respect of the view of net change that balances the need to acknowledge a theoretical consented transport demand, and the real-world change relative to the actual existing site use. In the first instance, clarity on the transport net change scenario agreed to be representitive of the site (as AADT values) should be sought in order to frame consideration of the Air Quality assessment.

Supplementary Transport Assessment

Table 6.5 provides an assessment of the net impact of the development. It is not immediately obvious whether this is based upon a TRICS estimate derived from extant floorspace, or whether these figures refer to existing actual usage (in wound-down state). It is similarly unclear whether these represent figures agreed by the Highways Authority given that it undertook independent modelling of the B2149/Crossland drive junction, as a direct result of the conceptual contradiction between development traffic volumes at the Eastern & Western Ends of Crossland drive – not explicitly explained by a significant change in traffic routing via Old Copse Road.

In terms of traffic flows – I note that that section 9.5 refers to the inclusion at Appendix G of Manual Classified (turning) Counts at both ends of Crossland Drive. The data presented appear to be from two no. 7-day Automatic Traffic Count points positioned both north & south of Crossland Drive on New Lane. Given this, it strikes me as odd that the air quality report is reliant upon a third party air quality assessment for traffic figures where both bespoke survey data & DfT values are available for comparison/to support both the road network & air quality impact assessments. It is not clear why the ATC’s have not been referred to, or whether the omission of the manual counts is likely to be material – it is understood that the relevant figures have been made available to the Highway Authority and have informed it’s response.

I note that Table 6.2 provides corrected values, and has maintained the 1% allocation of development traffic to New Lane South. Paragraph 10.5 refers to an 'operational management plan' (OMP) that will include a 'traffic distribution' section that will state that all traffic will use Crossland Drive with the exception of employees living locally and parcels being delivered to local Havant Residents. 10.7 envisages this plan, alongside it's implementation-, being secured by condition, and indeed the Highways Authority proposes such a condition, and it's conclusion substantially relies upon it's effect.

Concerns have been raised by other's in respect of the possibility of 'rat running' via local roads, and these sections of the report aim to address those concerns.

I have previously considered the concerns raised, and find that routing eastbound via the National Trunk Road Network would derive distance & journey time benefits by using local roads. This applies most strongly via the Fairfield Road route (which the OMP aims to prohibit), but also to a lesser extent, via the Old Copse Road / Lavant Drive which may fall outside the scope of the proposed restrictions. Benefits are also likely to apply during periods of peak congestion in Havant Town Centre (by avoiding the Petersfield Road / New Road roundabout for Eastbound or Westbound trips vie the A27. The OMP seeks to prohibit such journeys despite the likely economic benefit of utilising these local routes, and despite the ultimate legality of using road-legal vehicles on the local adopted highway network.

My understanding is that enforcement of this aspect of the OMP would be difficult, if not infeasible in practice as a planning matter. Certainly, the condition wording proposed by the Highways Agency would not achieve the objectives upon which the Agency would ultimately wish to rely upon, notably [where the occupier wishes to operate in a manner which differs from that assessed at planning stage, the OMP-] '*will need to be varied and will therefore require a re-assessment which the Highway Authority must agree…'* and that the OMP *'would need to be formally varied to allow a different occupier to use the site'*.

Notwithstanding that the planning condition may prove to be unenforceable, there is no provision in the proposed condition wording to require that the required OMP be adhered to in perpetuity, or that any operational change requires reassessment or re-approval.

In principle, other instruments available to the Council could be applied which use the OMP as a benchmark of 'reasonableness' in order to enforce a prescribed routing prohibition, however enforcement could still be high risk (given the inherent legality of activity referred to above) and would depend upon the will of the Council to enforce such conditions & defend that enforcement in the event of issues arising.

My preference would be to consider the appropriateness of the proposed development at the proposed site as a planning matter – i.e. to determine whether it's likely net impacts are acceptable (or not). In principle, around 15% of routine trips (approx. 375 gross development demand) would be expected to have an origin or destination accessed via the A27 East, and so which may be expected to utilise a materially shorter 'rat run'.

These impacts are likely to be of greater concern with respect to local amenity, and to highway capacity of these narrow local roads than they would be in respect of air quality – however it should be noted that residents already have air pollution concerns related to both the controlled rail crossing and to traffic congestion associated with the Fairfield Infants School. Perceived routing concerns may be particularly relevant for this development given the likelihood of a large fleet of branded delivery vehicles, and so the visibility of road use to local residents.

Rather than seeking to restrict use of certain routes / local roads via instruments of arguably questionable efficacy, it may be more robust to seek to characterise a 'permitted route' scenario using the agreed transport demand model, and to consider the acceptability (or otherwise) of it's impacts. Consideration could be limited to 'conceptual' only, or could be quantitative in terms of highway &/or air quality impact. Similarly, it could be something that HBC is equipped to consider in making it's decision, or it may be something that it requires be undertaken by the applicant. Avoidance of congestion scenario's are expected to be non-routine, and probably need not be considered.

I would not go so far as to object in the absence of such an assessment on air quality grounds – rather, I would consider this to be a planning matter which cuts across a number of development impact related issues, of which air pollution (and perceived air pollution impact – irrespective of actual impact) is just one. Highlighted for information only, being aware of the scale of local opposition to this development, that rat-running forms a key element of those objections, and that the Highways Agency is relying upon a condition that is unlikely to be capable of delivering the intended effect.

The package of highway improvement schemes referred to within the transport assessment are supported – in particular the provision of a formalised crossing point on Crossland Drive to facilitate access to local schools, to sports & play facilities, and local food retail outlets via sustainable modes of travel (and so assisting to divert trips from private motor car, and so improve & sustain local air quality).

Drainage Strategy Report

I have briefly reviewed the revised documents, and have not identified any changes that would be material to the advice given previously – the scheme represents best practice pollution control, and can be supported.

Ground Contamination Assessment & Remediation (UK20.5052D Iss.2.1 & UK20.5052b Iss.1)

The additional phase 2 site investigation (UK20.5052b Iss.1) did not find any soil contamination considered to be significant against a human health commercial landuse scenario. The investigation was however unable to target areas of the site known to be 'of potential concern' ("AOPC"), and vapour monitoring identified light-fraction hydrocarbons quite widely across the site, indicating that there is a source of relatively 'fresh' (non-degraded) contaminants within soils at the site that has not been captured by the soil sampling undertaken to date.

Section 6.3 includes a vapour phase risk assessment which concludes a low-negligible risk to a sensitive commercial receptor (female employee), claiming on the strength of this assessment that the off-site migration risk is also low-negligible. Whilst it is accepted that it is possible that this interpretation may ultimately prove to be reasonable; in the absence of clarity on whether a separate CLEA assessment has been undertaken to determine an appropriate benchmark for a residential receptor, this conclusion is not considered to be well supported by the data at this stage.

Section 6.2 includes a groundwater risk assessment, concluding that screening criteria (GAC) are not exceeded in groundwater samples. However, I note that there is no GAC given for Chromium within Appendix J, and the GAC selected for Nickel is substantially greater than the EA's 'priority hazardous substances' environmental quality standard (EQS). Contrary to the conclusions of the report, exceedances are noted of CrVI EQS-AA (total Chromium results are not speciated) and Ni EQS-AA (max. recorded dissolved phase Ni

results approximate to the EQS maximum allowable concentration, EQS-MAC). Similarly, one Ali C5-C6 result is approx.. 400% of the Appendix J GAC.

I am cautious to agree that the site is unlikely to pose a significant risk to groundwater given that results indicate the likely presence of a low-solubility denser-than-water (DNAPL) hydrocarbon, which may be present within the topographic low-points of gravel lenses of the river terrace deposits (noted to be present at the site). This is a similar conceptual model to that which applied at a nearby site where similar materials were identified to have migrated in free-phase over distances of several hundred meters.

Section 2.2. refers to previous investigations and quantitative risk assessments undertaken by Golder associates – notably including a quantitative detailed groundwater risk assessment. The Council has not had opportunity to review this document, and it's content may be material to the current application. The Golder reports (or the key sections of them) should be made available for context if the Council is to be able to account for their reported content.

The overall conclusion of the report is presented in the summary of findings, and the recommendations given at section 6. (broadly agreed). No refined conceptual site model (CSM) is presented at section 6.5, as "[the] contaminant linkages presented in the Conceptual Site Model all require the dataset for the whole site prior to re-evaluation. As this is not yet available, a refined CSM cannot yet be presented". The recommendations at 6.7 seek to obtain the data which section 6.5 concludes to be necessary to support a re-evaluation of the CSM.

The Outline Remedial Strategy & Implementation plan takes this recommendation forward by outlining the additional data collection required to support a comprehensive risk assessment, and development of remedial or risk mitigation options when a more refined CSM is available. In this sense, the works outlined do not amount to remediation, rather they represent proposals for further investigation.

The rationale and content of the report is broadly agreed, however I highlight concern with the reference within the remedial strategy table presented at section 3 to the application of GAC as 're-use criteria'. I would expect the 'no soils containing free-phase product' to take precedence over the hydrocarbon GAC, and I would expect DoWCOP procedures to apply to soils clearly contaminated with high concentrations of low-toxicity substances.

I would also highlight that verification of the proposed source reduction works in the vicinity of BH03 is to demonstrate 'effective removal' of phthalates, but no standard appears to be proposed to define 'effective removal' at this stage, whether in terms of total Phthalates, total VOC, or a substance-specific value for Benzylbutyl Phthalate. The additional works proposed should define a standard for 'adequate remediation' for this purpose. It may be that the Golder reports proposed such a value/concentration/standard.

In light of the above, there is no need to substantially alter the approach previously proposed – it remains appropriate to secure the proposed additional investigation / assessment by condition, and to respond appropriately to the results of that assessment. This does however require a minor revision to the previously proposed condition, and again I would reiterate that demolition should not be considered to constitute 'commencement' for the purposes of this condition.

Condition 1

Prior to the commencement of any specific phase of development approved by this planning permission (other than demolition, site clearance, or any other date or stage in development

as may be agreed in writing with the Local Planning Authority), an assessment of the nature and extent of contamination at the site shall be submitted to and approved in writing by the Local Planning Authority.

The assessment may comprise separate reports as appropriate, but shall be undertaken by competent persons and unless specifically excluded in writing by the Local Planning Authority, shall include;

1) Further intrusive site investigation & monitoring based on the proposals given within the EPS Ltd. Phase II Environmental Assessment Report Ref: UK20.5052D iss.2.1 (24/05/2021); to provide sufficient data and information to adequately identify & characterise any physical contamination on or affecting the site, and to inform an appropriate assessment of the risks to all identified receptors.

2) The results of an appropriate risk assessment based upon (1), and where unacceptable risks are identified, a Remediation Strategy that includes; • appropriately considered remedial objectives,
• an appraisal of remedial &/or risk mitigation options, having due regard to sustainability, and;
• clearly defined proposals for mitigation of the identified risks.

3) A verification plan providing details of the data that will be collected in order to demonstrate that the works set out in the Remediation Strategy in (2) are complete and identifying any requirements for longer-term monitoring of pollutant linkages, maintenance and arrangements for contingency action.

All elements shall be adhered to unless agreed in writing by the Local Planning Authority

***Reason:** Prior assessment has indicated the likely presence of contaminants within areas of the development land that have not previously been investigated. The site is above the secondary superficial aquifer which would be considered a moderately sensitive controlled water receptor. The chalk principal aquifer and associated SPZ1c occurs at depth beneath the site under a layer of London clay. The chalk would be considered a highly sensitive controlled water receptor. Alongside the health of future occupants of the development land, and the health of occupiers of adjacent land, these receptors could potentially be impacted by contamination present on this site. To ensure that the development does not contribute to-, and is not put at unacceptable risk from- or adversely affected by-, unacceptable levels of contamination, in line with policy DM10 of the Havant Borough Local Plan (Core Strategy) 2011, DM17 of the Havant Borough Local Plan (Allocations) [2014], and paragraphs 178-180 of the National Planning Policy Framework."*

There is no need to amend the other conditions previously proposed by the Environment Agency, save for the amend ‘reason’ previously recommended. Reproduced below for Convenience.

Condition 2

[As Environment Agency wording, with ‘reason’ substituted with that given below]

***Reason:** To ensure that the development does not contribute to, and is not put at unacceptable risk from- or adversely affected by-, unacceptable levels of contamination, in line with policy DM10 of the Havant Borough Local Plan (Core Strategy) 2011, DM17 of the Havant Borough Local Plan (Allocations) [2014], and paragraphs 178-180 of the National Planning Policy Framework."*

Condition 3

[As Environment Agency wording, with 'reason' substituted with that given below]

Reason: *To ensure that the site does not pose any further risk to human health or the water environment by demonstrating that the requirements of the approved verification plan have been met and that remediation of the site is complete. This is in line with policy DM10 of the Havant Borough Local Plan (Core Strategy) 2011, DM17 of the Havant Borough Local Plan (Allocations) [2014], and paragraphs 178-180 of the National Planning Policy Framework."*

Condition 4

[As Environment Agency wording, with 'reason' substituted with that given below]

Reason: *To ensure that the proposed Piling or other deep foundation does not harm groundwater resources, in line with policy DM10 of the Havant Borough Local Plan (Core Strategy) 2011, DM17 of the Havant Borough Local Plan (Allocations) [2014], and paragraphs 178-180 of the National Planning Policy Framework."*

Recommendations

Seek clarification of a definitive estimate of net-change in transport demand associated with the development. The value should be acceptable to- / supported by- the Highway Authority and be expressed as AADT. This is necessary to inform the acceptability or otherwise of the existing Air Quality assessment, and to provide context to the substance of objections of other consultees around transport-related impacts (amenity, highway capacity & air quality).

Apply ground contamination conditions 1-4 on any consent that Development Management is minded to recommend / grant.

Original Comments:

Observations / Comments:
Comments here relate to physical pollution, air quality (and air-quality-relevant aspects of development), and ground contamination. Comments are provided in respect of construction management, but these are limited in respect of loss of amenity due to noise impacts.

I will leave it to my nuisance / amenity focussed colleagues to comment on the noise impact assessment, and lighting strategy.

Summary

- The Construction Management Plan is considered adequate to manage dust emissions and development-phase air pollution impacts. It is recommended to list the plan as an approved document. No condition is proposed.
- I would raise a holding-objection on the basis that the development transport demand (trip generation potential) has not been sufficiently robustly defined, undermining the conclusions of the submitted air quality assessment
- Highways Agency concerns about the assessment of the impact of development traffic are supported.
- Concerns raised by the New Lane Community group about development traffic routing via New Lane / Beechworth Road are supported. Assessment of this routing option could require consideration of the air quality impact of development.
- The proposals are considered to have made a reasonable and proportionate response to emerging Air Quality policy E23 a. (development-emissions offsetting). No

objections on this basis.

- Further assessment to address the holding objection referred to above may justify additional air quality mitigation under the principles of policy E23 c. (air quality impact mitigation)
- The draft surface water drainage strategy (SuDS) represents best practice for pollution prevention, and is supported.
- The contamination assessment is accepted. Amendments are required to the suite of conditions proposed by the Environment Agency in order to bring risks to human health into scope, and to ensure that the applicant is not unduly constrained by a strict interpretation of the provisions of the Grampian condition (EA proposed Condition 1)

Air Quality – Impact Assessment, Construction Phase (Construction Management Plan)

Comments relate to the Delta Simons Air Quality Assessment Report Ref: 20-1275.01 iss.2 (April 2021) & the TSL Construction Management Plan dated 12/01/21 issue 1.

The Air Quality report concluded that unmitigated construction activities would represent up to high risk of dust soiling impacts and medium risk of increases in particulate matter concentrations, but that through the implementation of suitable mitigation measures, the effect of dust and PM10 releases would be significantly reduced (to a low/negligible risk). Suggested measures are outlined within section 6.1, and these measures are agreed to represent good practice.

The measures given in section 6.1 of the air quality report are broadly represented in the TSL management plan. I would recommend that the TSL management plan be listed as an approved supporting document comprising an integral part of the scheme, so as to make it's contents (in principle) 'enforceable'. I don't believe that a specific compliance condition is strictly necessary.

If the Development Management service considers it necessary to include a specific condition requiring that the CMP be observed, please let me know and I will draft some condition wording which refers to compliance the submitted framework document & establishes a requirement for LPA approval to be obtained for revisions in respect of certain sections (e.g. working hours, dust suppression etc.).

Air Quality – Impact Assessment, Operational Phase

Comments relate to the Delta Simons Air Quality Assessment Report Ref: 20-1275.01 iss.2 (April 2021).

The report refers to the EPUK & IAQM industry guidance 'planning for air quality' v1.2 2017 in determining significance of any changes to local air quality. The report does reference both National & Local Policy, but does not recognise that the industry guidance pre-dates both the NPPF & LP2036 Policies, nor that there is a compelling argument to make that the significance scales given within the industry guidance is no longer compatible with prevailing policy. Relevant illustrative text from the NPPF is quoted within the report.

In addition, emerging policy from the LP2036 deliberately aims to better the degree of protection offered by the industry guidance, and the extant policy (DM10) includes wording which is compatible with the latest version of the NPPF (i.e. including 'health' focus in addition to a 'standards focus'. I refer to this policy context in light of uncertainty in the reliability of the outputs of the assessment, and of the conclusions that are based upon these outputs.

I note that the baseline traffic figures used for the assessment are crude; there is poor resolution in traffic flow estimates between road links and the figures quoted do not appear to correspond to the values given by the referenced source; differing substantially in the estimate of proportion of traffic representing HGV's, for example. Some values attributed to key road links differ significantly from estimates used in assessments undertaken for other developments – differing by up to a -1/3rd (Park Road North / Park Road South in particular). This will reduce the accuracy of the model. Where the verification points are close to the affected road links (e.g. DT22), this will serve to increase the magnitude of the adjustment factor that needs to be applied. Where verification points are not on affected road links (e.g. if adjacent to an accurately characterised link, effects will not be fully accounted for within the verification process.

It should also be noted that the quantitative assessment of development impact is based upon overall operational trip generation figures and 'net change in trip generation' estimates which are both disputed by the Highways Authority. This raises doubts as to the validity (or 'representativeness') of the estimate of development impact (both in highway, and air quality terms).

Contradictory (development operational-phase traffic) trip distributions are also given in the transport assessment, understood to be a result of a typographical error. Allocation of the development trips to the local road network is not stated clearly in the report, and is only possible to derive by calculation. It appears the air quality assessment may have been based upon a distribution broadly corresponding to Table 5.8 of the traffic assessment (though full calculations have not been undertaken). Table 5.8 is expected to represent the 'correct' figures. Given that 57% of development traffic being expected to access the strategic road network ('SRN', A27) at the Havant Junction (approaching from the local road network, 'LRN'), and Park Road (North / South) is a road link where kerbside exceedances of national air quality standards are known to be likely to occur at junctions; I am unclear as to why no receptors have been considered on this route.

The residents of Cardinal House (on the corner of Park Road South & Elm Lane are considered to represent the worst-case receptor, and the omission of this receptor undermines confidence in the conclusions of the assessment.

In terms of the actual volume of traffic accounted for, it would appear the air quality assessment has considered a net growth in traffic demand as +599 as 'total vehicles, AADT'. The vehicle type distribution assumed is unclear, and I note that both the net-change in flows and the development traffic routing choices assumed (considered as a binary choice from site access) both differ from the net figures given in the transport assessment (from -90 to +466 depending on scenario & 70/30 direction split, given in the transport assessment, compared with +566 & 60/40 split in the air quality assessment). This is illustrative of the 'fluidity' of estimates of transport demand, which I will return to in the sections below.

I would conclude that the air quality assessment has-;

- been based upon baseline figures of poor resolution which differ from the quoted source in both overall volume estimates and in vehicle fleet composition. Additional justification is required for these figures.
- accounted for an AADT net change in 'total traffic' which has not been agreed with the Highways Authority to be either reasonable or robust, and which may differ substantially from the 'true' net change associated with this development
- omitted a receptor which is arguably the most sensitive to changes in air quality, and;

- has referred to industry guidance which is not fully compatible with either local policy

It would seem to me to be irrational to accept the conclusions of an air quality assessment which is based upon a baseline scenario which is poorly justified, and a development impact scenario which has not been agreed to be reasonable. I would recommend that the assessment be considered to have been 'rejected' until these aspects have been resolved. In the event that the justification for the baseline scenario cannot be agreed, or that the Highways Authority will only agree a development impact scenario which differs significantly from that accounted for within the air quality report, it may be necessary to update the air quality assessment. Otherwise, following receipt of those assurances it may be possible to accept the report.

Development Transport Demand - General (Air Quality)
Comments here refer to the general scheme particulars, the Vectos Transport Statement dated February 2021, the Delta Simons Air Quality Assessment Report Ref: 20-1275.01 iss.2 (April 2021), and relevant representations made by consultees and local community groups.

I note that paragraph 4.4 of the Transport Statement suggests that *'the vehicle movements associated with the proposed development are already on the local road network as the proposed end user currently operates within the Havant area.'*. I would challenge this statement on the basis that Table 5.6, which forms the basis of the 'trip distribution gravity model' indicates that 5% of freight delivery trips will be accounted for within the Havant Area. Given that the trip distribution model is based upon population density, it may be assumed that the employee commuting trips broadly correspond to the delivery demand distribution. Given that the operator doesn't currently operate *from* the borough, it may be assumed that the majority of HGV trips have both an origin & destination external to the borough, even though they may pass through the borough on the national strategic road network (A27 / A3(M)).

I would concede that the statement quoted above is probably true in relation to the 'regional road network', but it is unlikely to apply to the local road network within the Havant district, and it is the impact to the local road network that is most important when considering both the highway impact and the environmental impact of the development transport demand. This is relevant to the concept of 'net' development impact, and I would caution against accepting an offsetting of development trips from it's net impact on the basis that a significant number of these trips are already on the local road network – this is very unlikely to apply to any more than 10% of trips, and may even be <5%.

It should be noted that whilst the HA considers gravity distribution model to be robust, the net generation figures have not been agreed. The Highways Authority requires additional junction modelling to be undertaken once a credible net figure has been agreed – as is suggested in the section above, it may be appropriate to update the air quality assessment model to reflect the agreed figures.

The Highways Agency objections relate to the degree of 'netting', meaning the degree to which the transport demand of the operational Pfizer site (whether theoretical, based upon consented floor area by landuse type, or whether based upon actual demand at a given date -) may be offset against the estimated transport demand of the proposed development. What is not called in to question per se is the transport demand estimate for the proposed development under the intended occupant's target operational model.

As regards the transport demand estimate for the proposed development, section 5.4 states

"The methodology of calculating traffic movements is based on the experience from [operating the sites listed in Appdx.G] *and is applied to each proposed site on the basis of the number of parcels the site can process in a day, the number of vans operating from a site and the modal split journey to work for the area. This methodology is how the traffic data from the proposed development has been calculated."*.

The methodology referred to at 5.4 remains opaque; it is not presented, nor explained in any greater anecdotal detail than described in the quote above. With reference to the data provided in Appendix F of the Transport Statement, I note that it omits the modal split which is apparently available with reference to table 5.1. It appears that there is additional detail available that has not been included within the Transport statement.

I note that some well organised community representation has been made which calls into question the likely trip demand of the development (and so the highway and air quality impact). With reference to certain statements given in the Transport Assessment, the scheme particulars, and to the transport demand estimates given; it would appear that closer scrutiny of the origin of the transport demand figures may be justified.

In particular, it would appear that the operational provision sought under the proposed scheme is substantially elevated relative to the identified need. This applies to both the employee parking space provision as it does to the capacity of the van storage deck, despite statements given at Section 4.25 which argues that the capacity sought is essential for operational efficiency and the viability of the site.

By my calculation, anticipated car trips account for 86% of the parking quantum, ignoring the capacity of the van storage deck for the parking of driver's vehicles. Van storage deck utilisation accounted for is approximately 58%, implying that a 30% reduction in quantum would not harm the viability of the site.

The contrary conclusion is that this apparently redundant capacity is required for anticipated expansion of the operation at the site, which would mean that the transport demand figures given in the Transport Assessment, upon which both the air quality & highway impact assessments are based, may not fully reflect the intended transport demand of the development (i.e. the transport demand that is within scope of the consent under consideration).

It may be worth considering the point in time that the methodology referred to at 5.4 estimates the operational transport demand – it could be that it aims to estimate trip generation at the year of opening, or at a specific point in time (year 3, year 5 etc.). *It appears unlikely that the estimates represent target capacity, or maximum capacity*. This may be relevant to the consideration of a number of relevant policy matters – including whether the over-provision of parking spaces relative to SPD requirements is sufficiently supportive of sustainable transport policy, for example.

I am mindful of shifting trends in retail which no doubt underpins the business justification for this development, and would of course anticipate that a range of operational scenario's may arise in practice. I would anticipate that for consideration of highway or air quality impact, consideration of a worst case scenario might be helpful (e.g. max. operational capacity) or a 'bracketing' approach may be appropriate (e.g. middle estimate, compared with a target operational capacity or maximum feasible capacity).

It is expected that these matters will comprise material matters for the scheme currently under consideration.

Development Transport Demand – Distribution, "Rat-Running" (Air Quality)

I have reviewed the representation of the 'New Lane Neighbourhood' ('NLN') group (response to the Highways Authority comments). The response provides an arguably rather unrealistic worst case as a counter to the rather opaque 'middle estimate' accounted for within the application documents. I have addressed the issue of the overall development transport demand in the sections above.

The bulk of the NLN representation concerns the LGV routing likely to arise in practice. I have considered the routes suggested, and would dismiss a number of them as not making sensible routing choices for day-to-day operational traffic. Some represent routes that could be helpful when problems exist on principle routes, but other routes highlighted fail to bypass strategic junctions on principle routes, and so don't make good alternatives even under abnormal (congested) traffic conditions.

The exception to this is the Southbound routing option to A27 Warblington via New Lane, Beechworth Road, East Street & Emsworth Road. This route is more than 2km shorter than the anticipated route to this junction, and both routes are hampered by a controlled rail crossing that is not permanently available. This route would be preferable for all Westbound trips during peak periods or when abnormal conditions have caused congestion on the B2149 which hampers access to the A27 at Havant. It may be justified to consider the attractiveness of this route, and to assess the likely development impact along it's route.

I am mindful that the planning process has limited power to control the routing of road- legal vehicles on the adopted highway network – for this reason I would consider this to be a matter of properly assessing the likely highway impact (and securing any necessary mitigation), rather than being an argument for seeking to control the routing of development traffic.

Air Quality – Emissions Offsetting and Sustainability

I would acknowledge the applicant's positive response to comments about the loss of existing PV generation capacity, and the commitment to provide a PV provision within the development, as well as making a commitment to meet emerging policy requirements for sustainable construction.

The Electric vehicle charging provision of 20% van storage deck spaces, with the remaining 80% serviced with passive infrastructure to support future expansion is considered to be a proportionate response which represents good practice.
Other suggestions made at the pre-planning consultation have not been incorporated into the scheme design, but I do note that the scheme brought forward does have an enhanced landscaping scheme which will result in a net gain of 'air pollution interception & absorption' services within the development red-line area.

Whilst neither the Air Quality assessment, the Design & Access Statement, nor the Planning Statement make a specific response to the requirements of emerging policy E23 a., I would acknowledge that the above factors substantially contribute to the policy aims embodied by E23 a.. As such, I would raise no objections to the development on this basis.

SuDS – Surface Water Drainage (Pollution Prevention)

I note that 5no. proprietary petrol interceptors are included on the drainage network, and that a final stage of treatment via an Aco Quadraceptor* unit is proposed. All high-risk areas of the site are appropriately directed via the proprietary treatment units.

Coupled with the permeable surfacing to parking areas, the outline surface water drainage scheme exceeds the SuDS manual Ch.26 requirements for pollution control, representing best practice. The drainage proposals are supported on this basis.

Contaminated Land Assessment

Comments here refer to the EPS Ltd. Phase I Environmental Assessment Report Ref: UK20.5052 iss.4 (25/01/2021). Representations made by relevant consultees have been reviewed.

The assessment refers to a number of prior intrusive investigation reports which identified the presence of contamination in various areas of the site. Some remediation is referred to, alongside report conclusions which characterise the contamination as 'not requiring remediation'.

Some of the reports referenced have been previously reviewed by Environmental Health, others have not been submitted to the Council previously to the best of my knowledge.

I would highlight that both the conclusions of reports, and the standards of remediation that have been accepted in the past are applicable to the context of the site at the time of the assessment (or acceptance by Havant Borough Council). It should be noted that this context may differ under a scenario of 'comprehensive redevelopment' of the site.

The broad conclusions of the EPS Ltd. Phase I report are accepted. However, I do have some limited comments to make;

- Paragraph 7.3 envisages the primary risk drivers to be secondary aquifer & local surface water's (e.g. the Lavant) alongside the health of future employees of the site. The identified receptors / risk drivers are not disputed, however I would highlight that off-site migration of contaminants to 'contamination sensitive' human receptors that are external to the development red-line area may also represent a significant risk driver. This has been the case for other investigations / remediations in the vicinity of this site.
- Paragraph 7.3 also suggests that sufficient information is available to 'outline' a 'remediation strategy'. I would challenge the 'face value' interpretation of this statement, at least in the absence of a comprehensive synopsis of available results to present a comprehensive site conceptual model which accounts for the result of investigations which have not to date been reported to the Council.
- It is worth noting that the 'remediation strategy' is envisaged within the report to have broad scope, including both an 'assessment of data gaps', and 'additional phases of investigation'. I might disagree the overlapping distinction between the terms 'remediation' and 'assessment' given in the report, these conclusions are accepted.
- A 'high level' data-gap assessment has identified that for further Site investigation, understood to be underway. The assessment targets are broadly agreed, although I would like to see some additional stratified-random trial holes across the site in order to bolster knowledge of the general context of the site (to support statistical assessments & identification of discrete contamination sources / contamination-impacted areas).

The report acknowledges that additional work is required, and that the Local Planning Authority is likely to seek to secure this work by means of a Grampian-style planning condition. I note that the Environment Agency has requested a suite of conditions to this effect, and also that Portsmouth Water has made a pragmatic assessment in respect of the risks to the principle (abstracted) aquifer (with which I would concur).

The planning agent has also made representation directly to Environmental Health in respect to the contamination assessment, and the imposition of related conditions. I have reviewed the proposed wording of the Environment Agency conditions, and would note that it omits wording commonly used by Environmental Health to support a flexible approach to commencement & condition discharge, which the planning agent would prefer to be used in the event that conditions are sought. I would suggest that it would be helpful to apply consistent 'reason' for each 'contamination-related' condition, and to amend the reasons proposed by the Environment Agency to consistently include human health within the scope of the conditions.

Suggested revisions are presented below:

Condition 1
Prior to the commencement of any specific phase of development approved by this planning permission (other than demolition, site clearance, or any other date or stage in development as may be agreed in writing with the Local Planning Authority), an assessment of the nature and extent of contamination at the site shall be submitted to and approved in writing by the Local Planning Authority.

The assessment may comprise separate reports as appropriate, but shall be undertaken by competent persons and unless specifically excluded in writing by the Local Planning Authority, shall include;

1) An intrusive site investigation based on the previous assessments summarised within the EPS Ltd. Phase I Environmental Assessment Report Ref: UK20.5052 iss.4 (25/01/2021); to provide sufficient data and information to adequately identify & characterise any physical contamination on or affecting the site, and to inform an appropriate assessment of the risks to all identified receptors.

2) The results of an appropriate risk assessment based upon (1), and where unacceptable risks are identified, a Remediation Strategy that includes;
• appropriately considered remedial objectives,
• an appraisal of remedial &/or risk mitigation options, having due regard to sustainability, and;
• clearly defined proposals for mitigation of the identified risks.

3) A verification plan providing details of the data that will be collected in order to demonstrate that the works set out in the Remediation Strategy in (2) are complete and identifying any requirements for longer-term monitoring of pollutant linkages, maintenance and arrangements for contingency action.

All elements shall be adhered to unless agreed in writing by the Local Planning Authority

***Reason:** Potentially contaminating activities have been identified on this site. In particular, various pharmaceutical and other industrial activities have been highlighted. The site is above the secondary superficial aquifer which would be considered a moderately sensitive controlled water receptor. The chalk principal aquifer and associated SPZ1c occurs at depth beneath the site under a layer of London clay. The chalk would be considered a highly sensitive controlled water receptor. Alongside the health of future occupants of the development land, and the health of occupiers of adjacent land, these receptors could potentially be impacted by contamination present on this site. To ensure that the development does not contribute to, and is not put at unacceptable risk from- or adversely affected by-, unacceptable levels of contamination, in line with policy DM10 of the Havant Borough Local Plan (Core Strategy) 2011, DM17 of the Havant Borough Local Plan*

(Allocations) [2014], and paragraphs 178-180 of the National Planning Policy Framework."

Condition 2
[As Environment Agency wording, with 'reason' substituted with that given below]

Reason: *To ensure that the development does not contribute to, and is not put at unacceptable risk from- or adversely affected by-, unacceptable levels of contamination, in line with policy DM10 of the Havant Borough Local Plan (Core Strategy) 2011, DM17 of the Havant Borough Local Plan (Allocations) [2014], and paragraphs 178-180 of the National Planning Policy Framework."*

Condition 3
[As Environment Agency wording, with 'reason' substituted with that given below]
Reason: *To ensure that the site does not pose any further risk to human health or the water environment by demonstrating that the requirements of the approved verification plan have been met and that remediation of the site is complete. This is in line with policy DM10 of the Havant Borough Local Plan (Core Strategy) 2011, DM17 of the Havant Borough Local Plan (Allocations) [2014], and paragraphs 178-180 of the National Planning Policy Framework."*

Condition 4
[As Environment Agency wording, with 'reason' substituted with that given below]
Reason: *To ensure that the proposed Piling or other deep foundation does not harm groundwater resources, in line with policy DM10 of the Havant Borough Local Plan (Core Strategy) 2011, DM17 of the Havant Borough Local Plan (Allocations) [2014], and paragraphs 178-180 of the National Planning Policy Framework."*