

HAVANT BOROUGH COUNCIL

Town & Country Planning Act 1990

Consultation on Planning Application

MEMORANDUM

From:	Environmental Health	To:	Development Control
Our Ref:	CONS/17/02321	Your Ref:	APP/13/00317
EH Case Officer Extn:	44 6677	Date:	07 December 2017
DC Case Officer:	David Eaves		
DC Case Officer Extn:	44 6549		
Application Number:	APP/13/00317		
Site Address:	Yacht Haven Development Site, Copse Lane, Hayling Island		
Proposed Development:	Proposed Development: Construction of 6No. 5 bed detached houses, 1No. detached boat store and ancillary office building , 1No. detached boat store & Ancillary works Request to Discharge Condition Nos 7, 16-19, 26 and 27 (25.8.17).		

Observations / Comments:

I have reviewed the documentation submitted in support of the above, and would like to make some general comments with respect to c.7, c.17 & c.18.

I also note that a submission has been made in respect of c.20, which has also been reviewed, and I would like to make some comments on this document, for the benefit of the applicant.

There is an interrelationship between the requirements of c.20, and those of c.7, c.17 & c.18, as contamination risks are a driver to some of the requirements of conditions that are subject to this application.

Condition 7 (Slipway, sea defences, accesses, lighting, surface water disposal, and timetable)

The requirements of condition 7 are broad, and there is some overlap with other conditions, notably c.17 & c.18 (SuDS and avoiding use of infiltration drainage), and c.20 (contaminant migration pathways from soils / groundwater to harbour).

I note that the drawings submitted in support of discharge of c.7 (as part of the OPUS frontage statement, Appendix 3.3) do not cover all of the various requirements - focusing upon the slipway, pontoons & foreshore. With reference to the OPUS statement, I note in particular:

- the description of sensitive ecologies noted at s2.2 & s2.4 (which I will refer to further in comments regarding c.20)
- that the foreshore management strategy is one of allowing natural erosion processes to progress (at s3.4)

I understand that this treatment of the foreshore may be desirable from both an ecological, and a landscape standpoint, however it does represent a contamination migration pathway that has not received any specific attention to date - notably the physical transfer of soils which may

be contaminated with heavy metals, semi-metal, and metallic contaminants (Pb, Cu, Zn, Ni, As, Hg) to harbour sediments that in some cases directly support species to which the protection designation(s) relate.

Either the contamination assessment / remedial mitigation strategy needs to account for the proposed foreshore strategy as a fixed parameter (i.e. approve c.7, and deal with risk under c.20), or the appropriate time to finalise proposals pursuant to c.7 is subsequent to agreement of a remedial or risk mitigation strategy under c.20.

It is considered that details submitted in support of c 17 & c.18 can be regarded as being entirely relevant to c.7, and whilst the specific submission for discharge of c.7 omits details relating to access, lighting and scheduling - it is possible that details pursuant to these matters are included in documentation that I have not reviewed as part of this consultation, or that other conditions are / will remain in place to control these matters (as is the case with drainage). For this reason, I do not make specific recommendation on the approval of discharge of this condition, as determination requires a balanced view to be taken which accounts for all submissions / outstanding requirements (etc.) of which I am not fully apprised.

Condition 16 (Foul Drainage Scheme), Condition 17 (Surface Water Drainage Scheme, SuDS) & Condition 18 (No infiltration drainage)

The application form indicates that the Cowan FRA & addendums form the submission which justifies discharge. I would like to caveat my response, that part 3 of appendix 6.1 appears to be missing from the planning portal pages, so I have been unable to review these elements. Reference to the table of contents however would indicate that the missing information comprises a Topographic Survey, Development Layout, Flood Map, and proposed site grading & FFL's.

There appears to be no detailed drainage strategy outlined (for either foul or surface water), and no detailed consideration of how Surface Water proposals meet the principles of SuDS. It would appear unlikely that Part 3 of Appendix 6.1 contains information material to these matters.

The external works drawing does provide some relevant detail, but shows a permeable paving solution for domestic driveways which arguably amounts to an infiltration drainage feature (contrary to c.18). I don't want to get too hung up on that per se, but it is notable that the reason given for c.18 is that "*as contamination may be present at the site we are concerned that the use of infiltration systems could cause contaminants to become mobilised and potentially pollute controlled water*" (EA Wording). The condition does allow for infiltration drainage to be agreed by the LPA, but given the reason for the condition, this again necessarily follows the consideration of the contamination conceptual site model. Until the site conceptual model has been robustly defined, it is difficult to judge whether or not limiting infiltration is a necessary precaution (or not)

Specifically regarding SuDS principles and being mindful of the sensitivity of the local environment, I note that there are no specific proposals relating to features which will assist in the interception and treatment of surface pollutants in runoff, preventing their transfer to the harbour ecology (e.g. filter strips, open conveyance, settlement ponds etc.). If only for this reason, I consider that insufficient detail has been put forward at this stage to justify discharge of c.17 & c.18.

I have not found any detailed submission relating to foul drainage, and it follows that the condition requirements are therefore unlikely to have been met. This could in principle be a pollution issue, particularly given the ecological sensitivities.

Condition 20 (Contamination)

The August '17 EAS contamination summary report identifies the principal receptors for the development to be both human exposures & ecological receptors, which aligns with the view of Environmental Health. The report also acknowledges that Environmental Health has previously indicated that future work should focus on development on contaminant mobility (including leachability), substances not previously tested (e.g. TBT), and on previously uninvestigated areas or areas where conditions may have changed.

The summary does however conclude that there is 'minimal' groundwater contamination. This I would challenge, as it is noted that of the 3 available groundwater analyses, all exceed dissolved phase Marine EQS for Copper, and 2 exceed for Zinc. These contaminants are relevant to ecology present within the near foreshore (e.g. Zostera Beds), both contaminants are noted to be present within soils at significant maximum concentrations, and the foreshore management strategy is one that deliberately permits erosion (soil transfer to harbour sediments).

I expect the applicant to seek to address pathways relevant to ecological receptors, and I would caution against being too dismissive of groundwater pathways - whether as dissolved phase, or as particle transport (mobilisation of contamination impacted soil particles as suspended sediment / colloid).

Regarding specific remedial proposals listed in the summary; I will provide some brief comment below;

- 1) Proposed to remove "all deposited and superficial waste as part of site clearance". *This is a large site, so I take this proposal to be limited to 'deposited waste at the surface', and not to extend to 'chasing out all made ground present'. The latter interpretation may be relevant in places, but applied generally is likely to cause unnecessary environmental damage (e.g by removing the natural seedbank in areas intended as wildlife areas)*
- 2) Provide clean cover in garden areas of 600mm, over textile and capillary break layer. *This is agreed to be adequate to break pathways (i.e. contact, inhalation, ingestion, and these as tracked / indoor) to human receptors for all elevated metals. Vapour protection for dwellings need only be considered where volatiles are known to be present. The applicant may wish to undertake PID screening during the proposed gas monitoring / advancing subsequent trial holes, as an indicative screen to inform the need or otherwise for building footprint protection.*
- 3) "Monitoring of works". *This is taken to amount to a contamination watching brief. As many elevated contaminants will not be readily apparent from soil colour / odour / appearance, I take this to mean that all made ground encountered will be either subject to chasing out (removal for disposal) or cover (under permanent hardstand, or system described in 2) above).*
- 4) Construction measures to minimise runoff to harbour. *This is not a contamination issue, but is welcome as part of the CEMP / method of works. The risk of runoff to the harbour applies in the long-term (i.e. post completion), and therefore should be considered in submissions under c.7 & c.17*
- 5) Superficial waste removal in "wildlife areas". *I interpret this proposal to be covered by (1) above. Contamination assessment should consider impact of soils upon the wildlife areas (as existing, and as it affects their ability to achieve the intended end state - e.g. develop to mature Atlantic sea meadow). If proposing no treatment / removal, it should be demonstrated that the impact (of the presence of contaminants) is acceptable in this context.*

I would broadly agree the interpretation of requirements & priorities previously indicated, but would clarify that there is no need to issue updated versions of previous reports. I cannot find reference to Environmental Health seeking this, although I may well have recommended that all available results are brought together and be considered holistically to inform the development of a comprehensive site conceptual model. It is worth noting that appendices were omitted from the 2011 EAS report, so I have not had sight of all available results.

The summary makes specific proposals with respect to further investigation. As above, I will address these briefly;

- 1) Further site walkover to ensure knowledge of changes to site following last investigation. *Agreed to be prudent.*
- 2) Advance Trial holes (pits) at locations previously identified as being significantly impacted by contamination, and at areas used for waste incineration, at the infilled pond (formerly licensed fill) and at the foreshore. *Sampling targeting the foreshore is considered particularly prudent in light of the foreshore management strategy presented. Sampling in areas previously identified as having high maximum concentrations (i.e. in the vicinity of previous trial pits - not repeat sampling) is similarly considered to be helpful, providing more targeted information from which it should be possible to discern whether these high results are representative of a meaningful contamination hotspot, and to estimate the likely extent of the affected area. Samples taken should be consistent with depths where maximum concentrations were previously identified, and should also seek to characterise the contamination profile with depth.*
- 3) Analysis for substances previously identified, and a 'full range' of potential contaminants + specialist tests e.g. TBT. *This proposal is welcome. The most significantly elevated contaminants at this site would appear to be metals - however the lack of speciation in PAH & TPH screening previously undertaken could mask significant impact by specific compounds. TPH CWG (speciated ali + aro) & PAH(USEPA16) will provide helpful context which will enhance the value of all previous tPAH & TPH screening sampling. Inclusion of TBT is welcome as this is a substantially bio-active compound, and the ecology of the mud flats is sensitive.*
- 4) Carry out leachate tests. *This is considered to be an important line of evidence in assessing the ecological impact.*
- 5) Undertake Groundwater monitoring, if available. *Agreed - ideally grab samples should be used in preference to use of 'low flow' techniques, especially from extant wells not affected by construction related mobilisation issues. Grab samples from extant wells are considered likely to be broadly representative of the site contaminant mobility conditions. If samples are filtered to exclude sorbed contaminants, the report should comment on the character of groundwater (e.g. % suspended solids).*

The above (investigation proposals numbered 1) to 5)) are to be presented in an updated, and definitive risk assessment (and I would expect a revised remedial / risk mitigation strategy to be put forward on the basis of that assessment, whether enhanced or scaled back measures appear to be required).

As regards the risk assessment - it is notable that prior assessments have not to my knowledge addressed the available data as logical statistical populations, for example identifying and characterising outliers, identifying sample grouping by strata, soil type, or spatially by former

landuse activity. Consequently, 'true' population mean estimates have not been made, and we (therefore) only have the maximum concentrations to inform the degree of concern.

I am naturally cautious with this site, due to the multiple protection designations relating to sensitive ecologies; and to the proximity of protected habitats and species to the site - as an example, outcrops of *Zostera* with the area of the proposed pontoons, and mud flats within the intertidal zone which contribute to the value of the area for waders. Contaminants present are heavy metals (prone to bio-accumulation), or phytotoxic metals (which may directly impact *Zostera*), and so there are sensitivities at this site which are uncommon on brownfield developments. To some extent, human risks are easier to manage.

For these reasons, I consider it to be particularly important for this site that the conceptual model is well developed, addressing exceptions / outliers robustly (whether they are being dismissed, or treated as a separate population that can be conceptually explained), and characterising pathways within the context of site proposals (e.g. erosion processes at foreshore, interception or treatment of contaminants within pluvial runoff at SuDS features, etc.), and perhaps also in the context of the site specific local ecology.

As a planning consideration, it is possible that the County ecologist will need to be consulted on future submissions relating to c.20, particularly if the remedial / risk mitigation strategy does not propose site betterment (i.e. relies upon the risk assessment demonstrating no material adverse effect likely).

Summary

Object to discharge of c.17 & c.18 on basis of information reviewed, for reasons above. No recommendation on c.7, subject to issues flagged above for consideration by development management.

No information seen regarding c.16, so I cannot recommend approval at this time.

No comment is offered with respect to c.19, c.26, or c.27

Regarding c.20. It is not the intention that the applicant re-cover old ground, and it is acknowledged that a substantial body of factual information is available in respect of soil conditions at this site. The above substantive advice aims to steer future assessment to a form which affectively addresses all concerns, with luck avoiding the need for subsequent incremental assessment amendments. Please feel free to make this advice available to the applicant / agent, as it is provided primarily for the applicant's benefit.

Mr. Jonathan Driver
Environmental Control Officer