

Planning

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4 February 2022

Ref: P21/S4797/CM

Dear Emily

Re: Planning application R3.0138/21

Proposal:

- **The dualling of the A4130 carriageway (A4130 Widening) from the Milton Gate Junction eastwards, including the construction of three roundabouts;**
- **A road bridge over the Great Western Mainline (Didcot Science Bridge) and realignment of the A4130 north east of the proposed road bridge including the relocation of a lagoon;**
- **Construction of a new road between Didcot and Culham (Didcot to Culham River Crossing) including the construction of three roundabouts, a road bridge over the Appleford railway sidings and road bridge over the River Thames;**
- **Construction of a new road between the B4015 and A415 (Clifton Hampden bypass), including the provision of one roundabout and associated junctions;**
- **Controlled crossings, footways and cycleways, landscaping, lighting, noise barriers and sustainable drainage systems.**

Location: A linear site comprising a corridor between the A34 Milton Interchange and the B4015 north of Clifton Hampden including part of the A4130 east of the A34 Milton Interchange, land between Didcot and the former Didcot A Power Station and the Great Western Mainline, land to the north of Didcot where it crosses a private railway sidings and the River Thames to the west of Appleford-on-Thames before joining the A415 west of Culham Station, land to the south of Culham Science Centre through to a connection with the B4015 north of Clifton Hampden.

Thank you for consulting South Oxfordshire District Council on the above application.

This planning application includes highways infrastructure and measures to support active travel that will benefit existing residents in South Oxfordshire and enable the delivery of the new homes across the District that are allocated in our Development Plan.

The proposals will provide vital infrastructure that is essential for the delivery of around 3,500 new homes on land adjacent to Culham Science Centre and 1,700 new homes on land at Berinsfield Garden Village. The scheme will also provide infrastructure for more than 6,000 homes that have / will be delivered in Didcot between 2011 and 2035.

The highways infrastructure is essential to enable jobs growth at key employment sites in the area. This project provides important support to the economic and social prosperity of Science Vale UK, including two Enterprise Zones. It is home to one of the largest science-based research and knowledge clusters in Western Europe, based around Harwell (space sector), Culham Science Centre (nuclear fusion), and Milton Park (life sciences). These sites are subject to significant public and private investment and generate thousands of jobs.

Consent for this planning application is required to deliver infrastructure necessary to provide homes for the growing highly skilled workforce required by the world leading businesses and their supply chains. The employment land allocations linked to this infrastructure in South Oxfordshire include Culham Science Centre, Didcot and Berinsfield.

This proposal will therefore deliver key transport infrastructure, relieve congestion and improve connectivity in our District, and unlock the new homes and jobs required for Oxfordshire to grow as a thriving economy. In addition to supporting new housing and employment growth, it will also help alleviate current congestion issues in and around Didcot Garden Town.

These schemes will provide essential support for the development coming forward in our Local Plan and are important for the delivery of key housing and employment sites. Without this proposed infrastructure planned new growth is unlikely to be delivered. The principle of this development is therefore supported by our current Local Plan policies.

The comments in the table below set out this council's further observations on the planning merits of the proposals for your consideration.

Whilst consultation has been undertaken with this council's technical specialist officers, only high-level comments have been possible. The County Council should therefore use its own internal specialist advisors to provide advice to ensure that proposals meet all relevant policy or legislative requirements.

Planning Officer
Overview: The proposed infrastructure schemes are a key component of the South Oxfordshire Local Plan (SOLP) 2035 and as stated in policy STRAT3, infrastructure will need to be in place to enable sites allocated in the Local Plan in and around Didcot to be delivered. To enable the delivery of these key transport infrastructure schemes,

policy TRANS3 safeguards land to ensure that any proposals for development do not prejudice the delivery of the road schemes.

Policy TRANS1b of the SOLP 2035 outlines measures that the council will take to support strategic transport investment and this includes working with Oxfordshire County Council to support the development and delivery of the proposed road schemes. Together, these policies demonstrate the importance of the proposed road schemes to achieve the vision and objectives of the Local Plan.

It is also important that the details of the scheme are appropriate to meet the aspirations of the Local Plan to deliver high quality, innovative and well-designed developments that respect the scale and character of our towns and villages and enhance the special character of our historic settlements and the surrounding countryside.

Comments on details of the scheme:

The proposals should demonstrate how they positively contribute to the achievement of the Didcot Garden Town Masterplan Principles. The Didcot Garden Town Delivery Plan (the DGTDP) is a material consideration, and we have the following feedback in relation to the design of the proposals:

For the A4130, defined by the DGTDP as The Gateway Spine, it envisages improvements *“to deliver a spectacular arrival experience into Didcot from the east, the west or the station - enhancing first impressions of the town. Movement along the east-west corridor will be enhanced with three key projects: infrastructure improvements to carriageways, cycle and footpaths, a SuDS scheme along its length and a public art programme to enhance neglected bridges and underpasses”*.

The DGTDP explains that improving the arrival experience into Didcot as well as accommodating multi modal infrastructure to enhance this key corridor must be a key aim of the HIF1 proposals. Improvements could allow a separate lane for public transport vehicles and potentially for autonomous vehicles. It is disappointing that this vision and aim is not met with the proposal favouring private vehicle movements over sustainable modes of travel.

The DGTDP envisages Didcot as a *“super green town prioritising green infrastructure including tree lined streets”*. The widened A4130 is a key gateway to Didcot. To aspire to the DGTDP vision the A4130 needs to be tree and hedge lined with opportunities taken to plant trees in the central reservation. The proposals lack ambition in this respect.

Tree and hedge planting will help screen the road in views from new housing on sites allocated for housing on the southern side of the A4130 and act as a noise buffer. Trees and hedges should visually separate the road from the cycle and pedestrian paths alongside the road.

Street lighting is excessive with much of it proposed in spaces shown on the landscaping plans for hedge and tree planting. It is therefore questionable as to whether adequate tree planting could be secured. Judicious landscaping is crucial in providing some mitigation for the carbon footprint of the proposals, in reducing their landscape and visual impacts and some compensation for biodiversity impacts.

To prevent increased visual intrusion in the rural area, street lighting should not extend north of Didcot beyond Hartwright House (OX14 4PJ).

The Science Bridge should be a landmark feature as envisaged in the DGTDP. The proposed design is mediocre, uninspiring and will not meet the aims of the DGTDP. The design of the River Thames Crossing between Didcot and Culham is also disappointing. The concrete supporting columns, mass of the concrete retaining walls and acoustic barrier on the bridge will be incongruous and intrusive features in the landscape particularly in views from the Thames path.

The proposals contain limited information on how SUDS will be designed including to benefit biodiversity or how public art can be incorporated into the scheme. Further information is required in relation to these matters.

The proposed 3m high acoustic barriers beside the road leading from Didcot to the River Thames Crossing are likely to be visually intrusive. Please note the discrepancy between plans with the cross-section plan sheet 5 of 6 showing a 3m high noise barrier whereas the River Crossing Structures GA and Proposed Elevations plan sheet 1 of 3 showing a 1.5m high barrier.

All maintenance areas and tracks should be of an absolute minimum width necessary for maintenance vehicle access and should be surfaced in grasscrete or similar to allow vegetation to grow through and limit their visual impact.

The cycle and pedestrian ways beside the roads are welcomed and provide sustainable links between Didcot and villages to the north as well as linking the town and residential areas with employment sites at its northern and western edges.

Landscape Officer

Comments:

Scheme Design

There are inconsistencies between the information submitted in the planning application and additional information or clarification is required. These inconsistencies predominantly relate to the amount of vegetation loss and the associated proposed mitigation. Changes could be required to ensure the scheme provides appropriate mitigation, however, it is unlikely that these changes would impact on the conclusions of the LVIA.

Tree and vegetation removal, replacement and mitigation

Overall, the proposed mitigation to the road is limited, with limited planting and where hedgerows have been used, they tend to follow the road accentuating its alignment. A more imaginative approach sympathetic to the existing landscape pattern could help to integrate the road into the landscape.

The use of off-site planting should be explored where the impact of the road is difficult to mitigate, such as the viaduct section, photomontage VP16. The use of hedges with trees, larger areas of tree planting alongside off-site roads and footpaths would help limit visibility.

At present there are inconsistencies in the information which would have an impact on the Landscape and Visual Assessment work as well as the associated Landscape Masterplans. The Tree Protection Sheets are indicating less tree and

hedge retention than illustrated on the Preliminary Landscape Masterplans. One example is Tree Protection Sheet 3 which shows the removal of the vegetation from the southern side of the existing road, however the Preliminary Landscape Masterplan Sheet 1 shows the southern vegetation retained within the roads central reservation. The road section plans show level changes which indicate potential difficulties in retaining the existing hedgerows on the A4130, west of the Science Bridge location. It would help to have the proposed retained areas of vegetation plotted on these sections.

It would help to have the tree and vegetation removal information marked on the Landscape Masterplan to fully understand the vegetation being lost and whether this is being replaced. For example, there are many areas of the side where the roadside vegetation/ hedgerows have been lost but are not proposed to be replaced. For example, the Northern side of the A4130 Northern Perimeter Road. Preliminary Landscape Masterplan Sheets 6 and 7, again show different information to the Tree Protection Sheets with the extent of tree removal greater than that shown on the landscape plans with the removed hedgerow and tree planting not proposed to be replaced. Replacement vegetation is required both to soften the edge of the roads and help reduce its landscape and visual impact but also to replace the lost vegetation linkages.

Culham Science Centre

I am concerned about the impact of the design of the link road and Culham Science Centre entrance. I note that there did not appear to be alternative options listed in the EIA documentation. The proposals result in the loss of a considerable number of trees which currently frame the entrance to the Culham Science Centre. These trees, especially in summer screen and help mitigate the scale of development within the Science Centre. The proposed road layout would remove these trees and other clumps of trees such as those along Thame Lane and also from where Abingdon Road, links into the Clifton Hampden village, all these trees help provide the softening of Culham Science Centre, especially in views from the south.

The layout of the Culham Science Centre entrance creates a complicated road layout with a triple line of roads with the new link road, the road to the station and then the road south of the nursery building. This limits the available space to implement any meaningful replacement planting especially once lighting, drainage etc. has been considered. The proposed planting is predominately species rich planting and bulbs with no tree belts or woodland blocks, additional planting is required in this area. Could this area be completely redesign to move the Clifton Hampden bypass connection to the east of the sewage works, with the Culham Science Centre and the Station being accessed via Thame Lane?

Planting

Detailed planting plans are not provided (these should be conditioned to follow) but I note the information provided on the Preliminary Landscape Masterplan Sheets does not fully tally with the information provided in the Landscape Biodiversity Plan.

With regards to the Road Verge mix, at present a Lawn Mix is proposed, I suggest that a seed mix bespoke to Highway verges should be specified, the species would be better suited to the different management and growing regimes such as grass cutting frequency and salt rather than a lawn mix.

More variety of shrub species are required for the woodland edge mix, such as hazel, holly, crab apple, guelder rose which are listed in the woodland mix. I also wouldn't plant blackberries, to limit competition at the establishment phase, this species is likely to self-seed at a later date.

Hedgerow planting should also contain hedgerow trees, there should be an indication of what species will be used for hedgerow trees.

There are some areas of larger tree planting blocks, it may be more appropriate to rabbit fence areas of planting rather than only using tree guards. Are there any proposals to protect planting from deer?

Bridges and Acoustic Fences

The design of the bridges does not necessary minimise their visual impacts, the viaduct supports are visually bulky, and there is limited space to soften the northern side of the Science Vale bridge.

The use of light concrete on the bridges and bridge abutments may make them more prominent when viewed against the landscape backdrop. Could darker materials be used to minimise the visual impact of the bridges?

The abutments of the Thames crossing bridge are located away from the river to provide a more open aspect to the Thames Path, and this is an appropriate approach. However, the abutments are of a large scale and will be prominent in views from the Thames Path National Trail. Can the extent of exposed concrete on the abutments be softened by breaking up their mass?

The appearance of the proposed acoustic fence is very hard, with limited softening proposed. Can a softer approach to the acoustic fencing be used? There is space in the vicinity of Clifton Hampden village, to use earth embankments softened with planting rather than the proposed fencing which is easily subject to vandalism. In other areas a living wall acoustic fence for example GreenSoundBlok or similar could be an appropriate approach.

Conclusion

There is currently inconsistent information submitted as part of the application with regards to the extent of level changes, tree and vegetation removal and how this is represented on and mitigated for within the scheme and the Landscape Masterplans.

I also have concerns to whether the design of the link road and entrance to Culham Science Centre minimises the impact of the scheme on the existing trees and vegetation located to the south and east of the Science Centre, this vegetation has considerable benefits in reducing the landscape and visual impact of the Culham Science Centre.

Overall, the proposed mitigation to the road is limited, and in many places hasn't been designed to link into the existing landscape pattern to help to integrate the road into the landscape. Embankments in many places need to grade out more softly and to better fit the topography rather than using a standard 1 in 3 gradient.

Recommendations

The mitigation planting associated with this scheme needs additional work and the scheme should provide the opportunity to create new woodland in line with the governments aims and be designed to fit in with the existing landscape pattern. Softer gradients are required for the embankments.

The issues raised in the comments above should be addressed including further clarity with regards to the extent of the loss of vegetation and if this extent has been fully incorporated into the Landscape Masterplans and LVIA. Also, the design of the link road south and west of Culham Science Centre should be revisited to see if this is the most appropriate design for this area.

Forestry Officer

Comments:

The submitted Arboricultural Impact Assessment report has identified a very significant amount of tree removal. According to the report, this includes 152 individual trees, 34 groups of trees, seven hedges, 50 partial groups, 2 partial woodlands and 13 partial hedges. This includes trees protected by Tree Preservation Order (trees shown as T237, G262, G318, G327, T352 and G355 within the report) and trees within a conservation area (trees shown as G454 within the report). Many of these trees have sufficient arboricultural quality to normally be considered as a constraint to development.

Works are required within the root protection areas of a large amount of other trees and therefore have the potential to adversely impact on more trees than indicated in the Arboricultural Impact Assessment.

There are inconsistencies between the information included within the Arboricultural Impact Assessment and shown on the Tree Protection Plan and information shown within other plans submitted for the application. For example, drainage shown on the Tree Protection Plans is not consistent with the locations of drainage shown on the drainage plans. Therefore, this may lead to further arboricultural impacts than is shown in the Arboricultural Impact Assessment.

The submitted Arboricultural Impact Assessment has not assessed the impact of works to existing services/utilities and new services/utilities will have on trees. Works for services/utilities have the potential to cause significant adverse impact on trees and should therefore be accurately assessed in an Arboricultural Impact Assessment.

It is not clear from assessing the Arboricultural Impact Assessment, whether or not all of the physical construction works that will be required to implement this project, for example any changes in land levels that may be required, have been assessed in relation to their impact on trees. The submitted Tree Protection Plans also include statements such as 'Final extent of tree removals to be determined following site clearance works and setting out of scheme'. It is therefore foreseeable that the proposed works may lead to a larger tree loss than has been identified in the Arboricultural Impact Assessment.

Tree shown as T424 has been categorised as a veteran tree. A drainage swale is shown within the root protection area/Buffer of this tree, contrary to BS 5837:2012,

Forestry Commission and Natural England standing advice and section 180 of the National Planning Policy Framework.

The preliminary landscape masterplans do not show the level of detail required to be able to scrutinise the mitigation planting in detail, to determine whether or not the proposed planting will mitigate the proposed tree loss. Considering the extensive tree removal proposed for this application, very considerable amounts of tree planting will be required. This is essential to ensure that the scheme delivers a net increase in canopy cover to address environmental issues such as climate change and carbon sequestration, as well as the landscape and amenity benefits required to be achieved for this project. Many of the landscape masterplans submitted appear to show very limited levels of tree planting along the route of the proposed road, for example from Sheets 6 of 19 to Sheets 12 of 19.

Conclusion:

When assessed against both local and national policies the impact of the proposal is contrary to:

- South Oxfordshire Local Plan policies ENV1, ENV8, DES1 and DES2
- Sections 131 and 180 of the NPPF
- As well as BS 5837, 2012 Trees in Relation to Design, Demolition and Construction.

Conservation Officer

Heritage Assets to be considered:

Chapter 7 of the Environment Statement (ES) accurately identifies the designated and non-designated heritage assets likely to be impacted by the proposed infrastructure scheme. Appendix 7.1 to the ES provides a gazetteer of Cultural Heritage Assets and I am satisfied that this captures the assets relevant to the scheme.

Of particularly high sensitivity owing to the nature of the assets and the proximity to majors works are: Culham Road Bridge, the Culham Station Ticket Office and associated buildings that are listed Grade II and Grade II* respectively as well as some non-designated assets that form part of this group; Fullamoor Farmhouse, a grade II listed building; Clifton Hampden Conservation Area and Nuneham Courtenay Registered Park and Garden (RPG) and designated Conservation Area.

Discussion:

The assets most susceptible to harmful change to their setting are those in the vicinity of the works that extend from the A415 rail crossing to the northern end of the proposed Clifton Hampden bypass. These comments focus on those aspects of the proposals.

There is no direct physical impact proposed to any of the designated heritage assets. I have no objection to the proposed layout of the junctions or route on this basis as I do not consider there are alternatives that would result in less of an impact.

Lighting is likely to be one of the biggest changes to the context of all these assets. At present there is very little street lighting across the existing route network that surrounds the Culham Station assets, Fullamoor Farmhouse or Clifton Hampden Conservation Area and the listed buildings within it. The nature of Nuneham

Courtenay RPG is that some areas are more susceptible to impact from this proposal than others. The southern areas of the RPG will be more exposed to changes from lighting that erodes the sense of the area being rural than those to the north and on the higher ground above the river. The bypass is not proposed to be lit which will mitigate some of the impact to the wider setting of both the Nuneham Courtenay RPG and CA as well as the Clifton Hampden CA.

The ES indicates that lighting is proposed from the rail bridge on the A415 to the new junctions that provide CSC access and onward travel to the bypass. This lies to the north-west of Fullamoor Farmhouse. Specific mitigation should be provided to preserve the dark and rural setting of the farmhouse. Chapter 7 of the ES does not specifically assess Fullamoor Farmhouse which lies a similar distance from the new junction into Culham as the GWR Station buildings that have been assessed. This is an oversight and more detailed assessment of the impact on this heritage asset should be undertaken to ensure the proposal is fully informed by an understanding of the likely impacts and appropriate mitigation is incorporated into the scheme.

Conclusion and recommendations:

The conclusion of Chapter 7 of the ES is that some harm to the designated heritage assets is likely to arise as a result of the proposals. This is considered to be less-than-substantial under the tests of paragraphs 202 and 203 of the NPPF. I agree with this assessment as the impact of necessary lighting at the new junctions will alter the existing rural character of the area, compromising the experience of the assets in a rural setting, in particular this affects Nuneham Courtenay RPG and Clifton Hampden Conservation Area.

The impacts to Fullamoor Farmhouse have not been fully considered as a result of the omission of a detailed assessment of this heritage asset from Section 7.10 of Chapter 7 of the ES. Without this additional assessment that would directly inform potential mitigation, the impact of the proposed new roundabout on the A415 that provides access to CSC and the bypass is considered highly likely to cause harm to the Listed Building contrary to paragraphs 199 and 200 of the NPPF and Local Plan Policy ENV7.

Countryside Officer

The following summary comments are intended to aid Oxfordshire County Council in assessing this application but should not be considered as a full and comprehensive assessment of the proposed development.

Oxfordshire County Council, as the determining authority, is obliged by law to have regard for the impacts of the proposed development on biodiversity (section 40 of the Natural Environment and Rural Communities Act 2006) and consider the potential for adverse impacts on certain sites and species (regulation 9 of the Conservation of Species and Habitats Regulations 2017 (as amended)).

Comments:

The proposed development would cross areas of low ecological value (former power station, arable land) and high ecological value (reedbeds, lakes, rivers, woodland).

The proposed bridge crossing over the River Thames has been designed to be a clear span structure, which avoids direct impacts to the river channel itself. The position of supports and piles would be approximately 7m away from the top of the

bank and would have some impacts on the riparian zone either side of the watercourse. The river crossing is not proposed to be lit. “Hop over” planting is proposed to mitigate against mortality and severance impacts on commuting and foraging bats. Detailed planting is not proposed at this stage and the efficacy of such an approach described.

Great crested newt (GCN) surveys have concluded that impacts on the species are unlikely. Surveys concluded absence in waterbodies previously known to support GCN. OCC has their own GCN district level licence and the proposed development would impact habitats within the red and amber zones of the GCN impact risk map. OCC should consider utilising their own GCN district level licence to ensure that impacts on GCN are adequately mitigated and compensated.

The proposed development would involve direct and indirect impacts on waterbodies and aquatic habitats of high ecological value (ponds, lakes, reedbeds, etc.). It is likely that development, particularly around the Culham Finger Lakes, will require the draining of waterbodies, which are known to support protected species. This approach would require the capture and translation of species (e.g. European eel) from the waterbodies. It is not clear whether a receptor site has been identified for captured species. This matter should be confirmed prior to the grant of any permission.

Initial habitat surveys were conducted in January 2020, at a time of year unsuitable to determine botanical assemblage. Certain areas of the site were resurveyed in June 2020, related to changes in the red line area. The PEA recommends that further botanical surveys are undertaken at a suitable time of year to ensure that habitats, particularly grassland habitats near to the Culham Science Campus (known to support acid grassland, recorded as improved grassland), are adequately recorded. This would have impacts on the biodiversity net gain (BNG) assessment.

The BNG assessment has not provided justification for pre or post development habitat conditions. These should be justified against the technical supplement habitat condition tables.

The BNG assessment appears to take into account habitats proposed as part of minerals restoration agreements (e.g. Hanson Restoration Area). These areas of habitat creation have been agreed separately and should not be accounted for as benefits of the scheme. Indeed, in areas where previously agreed habits would be lost in these areas, the target condition of those habitats should be accounted for as if they were existing at the time of development.

It has been concluded that development will deliver a calculated 11% net gain for habitat units, 13% gain for hedgerow units and 1% net gain for river units. In the absence of part 6 of the Environment Act 2021 taking force, this level of gain would be complaint with the NPPF.

The proposed development is likely to result in adverse impacts on roosting, foraging and commuting bats. Tree lines, particularly those close to the River Thames and other waterbodies, have been demonstrated to have high levels of use by foraging and commuting bats. The habitats and levels of bat activity on site have been assessed as being of County importance. OCC, in determining the application, should be satisfied that the adverse impacts of the proposed development can be

adequately avoided, mitigated or compensated to ensure that the favourable conservation status of the local bat population is not prejudiced by the development. Specific mitigation details, such as hop over planting adjacent to roads, has not been described in detail and as such it is not clear whether mitigation measures would be adequate to ensure no impacts.

Impacts on designated sites are unlikely as reasonable impact pathways do not exist.

Details documents (landscape and biodiversity management plans, biosecurity management plans, construction environmental management plans, etc.) will need to be secured.

Air Quality Officer

Due to the nature and the size of the proposed development we would request a detailed Air Quality Assessment to be carried out in order to fully assess the air quality impacts of the development. This must be in line with the Council's Air Quality Guidance for Developers document and include both mitigation and incorporate basic good practice design in order to help mitigate against the air quality impacts and the potential cumulative effects of piecemeal developments and to enable future proofing of the development as laid out in the guidance.

Environmental Protection Officer

The acoustic report submitted in support of the application identifies 38 residential and two non-residential properties that will be subject to Significant Observable Adverse Effect by the operation of this scheme, but only two properties that are likely to qualify under the Noise Insulation Regulations 1975. How is it proposed that the identified significant adverse impact will be mitigated for those properties not qualifying for assistance under the Noise Insulation Regulations?

During the construction phase, a number of properties have been identified that will suffer Significant Observable Adverse Effect and vibration annoyance. The construction environmental management plan must identify specific, achievable and measurable steps to minimise noise and vibration impacts.

Contaminated Land Officer

Comments:

Following the site walkovers and scrutiny of historic mapping, areas for potential contamination relating to both historic and current land uses were identified. These included past and current landfills, above and underground storage tanks, sewage treatment works, unknown filled land, buried infrastructure related to the former Didcot power station, railways and agricultural land.

The preliminary conceptual site model resulted in a minimal/negligible risk to identified receptors for all four locations. Intrusive investigations revealed made ground at varying depths, with levels of contaminants in soils not exceeding the commercial/industrial and public open space (POS) generic assessment criteria (GAC), except for a slight exceedance at one location (TP401), for arsenic (180 mg/kg at 1.5 mbgl). Both groundwater testing and gas monitoring were undertaken, but only on a limited scale. While groundwater samples gave results for metals and non-metals above drinking water standards, sampling of hydrocarbons appears not to have been undertaken.

Further groundwater risk assessment is planned and should include samples taken for the measurement of hydrocarbons. Following limited monitoring, risks from ground gas can be regarded currently as non-significant for end users, but with risks to construction workers possible, due to the possible build-up of gas in enclosed spaces, such as drainage runs and manholes. Further visits will be required to ensure worse-case gas regime is established for all four locations.

It is anticipated that material excavated will be re-used on site. Where this occurs a Material Management Plan should be produced and followed, in accordance with best practice, as stipulated in the Definition of Waste: Code of Practice (CL:AIRE, Sept 2011). To ensure such re-use of material is appropriately undertaken details of the MMP activities followed are to be included with the verification report, following the completion of all remedial works required.

Conclusion and recommendation:

No objection to the development from a contaminated land perspective. However, given review of the above reports, it is evident that further investigations are required, and that remediation is likely in some areas. Therefore, the following contaminated land conditions are recommended, should the County Council be mindful to grant permission:

1. Prior to the commencement of the development a phased risk assessment shall be carried out by a competent person in accordance with current government and Environment Agency Guidance and Approved Codes of Practice such as Land Contamination: Risk Management 2020 and BS10175:2011 +A2:2017 'Investigation of potentially contaminated sites'. Each phase shall be submitted to and approved in writing by the Local Planning Authority.

Phase 1 shall incorporate a desk study and site walk over to identify all potential contaminative uses on site, and to inform the conceptual site model. If potential contamination is identified in Phase 1 then a Phase 2 investigation shall be undertaken.

Phase 2 shall include a comprehensive intrusive investigation in order to characterise the type, nature and extent of contamination present, the risks to receptors and if significant contamination is identified to inform the remediation strategy.

Phase 3 requires that a remediation strategy be submitted to and approved by the LPA to ensure the site will be rendered suitable for its proposed use.

Reason: To ensure that any ground, water and associated gas contamination is identified and adequately addressed to ensure the safety of the development, the environment and to ensure the site is suitable for the proposed use in accordance with Policy ENV11 of the South Oxfordshire Local Plan 2035.

2. The developer shall confirm in writing to the Local Planning Authority the presence of any unsuspected contamination encountered during the development. In the event of any contamination to the land and/or water

being encountered, no development shall continue until a programme of investigation and/or remedial works to include methods of monitoring and certification of such works undertaken. Where land contamination investigation/remedial works are required this must be carried out by a competent person in accordance with current government and Environment Agency Guidance and Approved Codes of Practice such as Land Contamination: Risk Management 2020 and BS10175:2011 +A2:2017 'Investigation of potentially contaminated sites' and submitted to and approved in writing by the Local Planning Authority.

Reason: To ensure that any ground, water and associated gas contamination is identified and adequately addressed to ensure the safety of the development, the environment and to ensure the site is suitable for the proposed use in accordance with Policy ENV11 of the South Oxfordshire Local Plan 2035.

I hope the above comments will assist in your determination of the application and if you require any clarification please do not hesitate to contact me.

Yours sincerely,

A handwritten signature in cursive script, appearing to read "Emma Bowerman".

Emma Bowerman
Principal Major Applications Officer