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Three Rivers District Council
Development Control
Three Rivers House Northway
Rickmansworth
Hertfordshire
WD3 1RL

Our ref: NE/2021/133015/04-L01
Your ref: 21/0573/FUL
Date: 1 July 2021

Dear Claire

**Employment Land to the North of Maple Cross Lodge Maple Cross
Rickmansworth WD3 9SE**

**Comprehensive redevelopment to provide 2 no. Warehouse class E(GIII)/B2/B8
units comprising a total of 16,115 sqm including 1,882 sqm ancillary E(GI) office
space, access, landscaping and associated works**

The applicant has proposed additional assessment to evaluate the risks that the development poses to the Maple Lodge Nature Reserve Groundwater Dependent Terrestrial Ecosystem via the following documents;

- Email correspondence (Tier Ref: T1999/PJB/EJJ dated 19th May 2021).
- Hydrogeological Impact Assessment & GQRA of Maple Lodge nature reserve (Ref 30422R3 dated 07/06/2021)

As such we are now able to **withdraw our objection**, and recommend that the following conditions are attached to any grant of planning permission. Without these conditions we feel that the development would pose an unacceptable risk to groundwater and we would object.

Condition 1

No development shall take place until a scheme for the provision and management of compensatory habitat creation has been submitted to, and agreed in writing by, the local planning authority and implemented as approved. Thereafter, the development shall be implemented in accordance with the approved scheme.

Reasons

Development that encroaches on the the marshy grassland (B5) habitat associated with the Maple Lodge Farm Ditch (main river) may severely affect its ecological value. The National Planning Policy Framework (paragraph 175) states that if significant harm resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused.

Advice

The scheme as it is currently submitted would result in the net loss of marshy grassland and has the potential to fragment the landscape for species that use this habitat. The

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ecology report identifies standing water amongst the scattered trees at the eastern and southern boundaries of the site; wet woodland is a habitat of principle importance as identified by S41, NERC (2006). Development must not result in fragmentation or isolation of wildlife habitats and should seek opportunities for habitat connectivity within the wider landscape.

The applicant should use the latest DEFRA Biodiversity Net Gain Metric to assess the value of current habitats on site and appropriately design the scheme. The metric should be used to assess all habitats on site, including the Maple Lodge Farm Ditch and the adjoining marshy grassland. A management plan for these habitats should be included with the designs. A minimum 8m buffer zone and any newly created habitat should be managed to develop a natural character, with planting options that may include native trees and shrubs, but planned as such to not cause shading issues or bank instability over time. Grass areas should be left unmown or mown later in the season to enhance their floristic and habitat value. Fencing and structures should be kept minimal and set back beyond the buffer zone.

Fostering the development of a continuous and structurally diverse buffer zone along the watercourse will ensure this 'wildlife corridor' provides a wider and therefore more robust and sustainable range of linked habitats.

This condition will ensure the protection of wildlife and supporting habitat and secure opportunities for enhancing the site's nature conservation value in line with national planning policy. The NPPF (2018) now identifies that developments should be achieving net gain, in line with the 25 Year Environment Plan. A biodiversity net gain assessment will ensure the loss of habitat at this site is compensated for and provide connectivity within a fragmented landscape whilst complying with these policies.

Condition 2 – Groundwater Levels

No development should take place until a monitoring and maintenance plan in respect of groundwater levels across the site and the Maple lodge nature reserve including a timetable of monitoring and submission of reports to the Local Planning Authority, shall be submitted to and approved in writing by the Local Planning Authority.

Reports as specified in the approved plan, including details of any necessary contingency action arising from the monitoring, shall be submitted to and approved in writing by the Local Planning Authority. Any necessary contingency measures shall be carried out in accordance with the details in the approved reports.

Reasons:

This condition will ensure that the development does not cause undue detriment to groundwater levels upon which the Maple Lodge nature reserve relies in line with paragraph 170 of the National Planning Policy Framework.

Condition 3 – Land Affected By Contamination

No development approved by this planning permission shall take place until a remediation strategy that includes the following components to deal with the risks associated with contamination of the site shall be submitted to and approved, in writing, by the local planning authority:

1. A preliminary risk assessment which has identified:
 - all previous uses
 - potential contaminants associated with those uses
 - a conceptual model of the site indicating sources, pathways and receptors
 - potentially unacceptable risks arising from contamination at the site.

1. A site investigation scheme, based on (1) to provide information for a detailed assessment of the risk to all receptors that may be affected, including those off site.
2. The results of the site investigation and the detailed risk assessment referred to in (2) and, based on these, an options appraisal and remediation strategy giving full details of the remediation measures required and how they are to be undertaken.
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 (3) are complete and identifying any requirements for longer-term monitoring of pollutant linkages, maintenance and arrangements for contingency action.

Any changes to these components require the express written consent of the local planning authority. The scheme shall be implemented as approved.

Reason

The proposed development presents a high risk of contamination that could be mobilised during construction to pollute controlled waters. Controlled waters are particularly sensitive in this location because the proposed development site is:

- Located within a Source Protection Zone 1
- Located atop a Secondary Aquifer (River Terrace Deposits) in hydraulic continuity with the underlying Principal Aquifer (Chalk)
- Located in close proximity (within 500m) to an Affinity Water potable groundwater abstraction
- Located within a Water Framework Directive groundwater body with 'poor' classification (Mid-Chilterns Chalk)

This condition will ensure that the development does not contribute to, or is not put at unacceptable risk from/adversely affected by levels of water pollution in line with paragraph 170 of the National Planning Policy Framework.

Condition 4 – Verification Report

No occupation of any part of the permitted development shall take place until a verification report demonstrating completion of works set out in the approved remediation strategy and the effectiveness of the remediation shall be submitted to and approved, in writing, by the local planning authority. The report shall include results of sampling and monitoring carried out in accordance with the approved verification plan to demonstrate that the site remediation criteria have been met.

Reasons:

- 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 paragraph 170 of the National Planning Policy Framework.
- To prevent further deterioration of a water quality element to a lower status class of adjacent surface waterbodies and prevent the recovery of a drinking water protected area in the Mid-Chilterns Chalk groundwater body.

Condition 5 - Long Term Monitoring and Maintenance Plan for Groundwater

No development should take place until a long-term monitoring and maintenance plan in respect of contamination including a timetable of monitoring and submission of reports to the Local Planning Authority, shall be submitted to and approved in writing by the Local Planning Authority. Reports as specified in the approved plan, including details of any necessary contingency action arising from the monitoring, shall be submitted to and approved in writing by the Local Planning Authority. Any necessary contingency

measures shall be carried out in accordance with the details in the approved reports. On completion of the monitoring specified in the plan a final report demonstrating that all long-term remediation works have been carried out and confirming that remedial targets have been achieved shall be submitted to and approved in writing by the Local Planning Authority.

Reasons:

- To ensure that the site does not pose any further risk to human health or the water environment by managing any ongoing contamination issues and completing all necessary long-term remediation measures. This is in line with paragraph 170 of the National Planning Policy Framework.
- To prevent further deterioration of a water quality element to a lower status class of adjacent surface waterbodies and prevent the recovery of a drinking water protected area in the Mid-Chilterns Chalk groundwater body.

Condition 6 – Unidentified Contamination

If, during development, contamination not previously identified is found to be present at the site then no further development (unless otherwise agreed in writing with the local planning authority) shall be carried out until the developer has submitted a remediation strategy to the local planning authority detailing how this unsuspected contamination shall be dealt with and obtained written approval from the local planning authority. The remediation strategy shall be implemented as approved.

Reasons:

- No investigation can completely characterise a site. This condition ensures that the development does not contribute to, is not put at unacceptable risk from, or adversely affected by, unacceptable levels of water pollution from previously unidentified contamination sources at the development site. This is in line with paragraph 170 of the National Planning Policy Framework.
- To prevent further deterioration of a water quality element to a lower status class of adjacent surface waterbodies and prevent the recovery of a drinking water protected area in the Mid-Chilterns Chalk groundwater body.

Condition 7 – Borehole Management

A scheme for managing any borehole installed for the investigation of soils, groundwater or geotechnical purposes shall be submitted to and approved in writing by the local planning authority. The scheme shall provide details of how redundant boreholes are to be decommissioned and how any boreholes that need to be retained, post-development, for monitoring purposes will be secured, protected and inspected. The scheme as approved shall be implemented prior to the occupation of any part of the permitted development.

Reasons:

- To ensure that redundant boreholes are safe and secure, and do not cause groundwater pollution or loss of water supplies in line with paragraph 170 of the National Planning Policy Framework and Position Statement N Groundwater resources of '[The Environment Agency's approach to groundwater protection](#)'.
- Link to archived EA guidance: https://webarchive.nationalarchives.gov.uk/20140328154120/http://cdn.environment-agency.gov.uk/LIT_6478_8cbe6f.pdf
- To prevent further deterioration of a water quality element to a lower status class of adjacent surface waterbodies and prevent the recovery of a drinking water protected area in the Mid-Chilterns Chalk groundwater body.

Condition 8 – Piling / Foundation Works Risk Assessment with Respect to Groundwater Resources

Piling, deep foundations and other intrusive groundworks using penetrative measures shall not be carried out other than with the written consent of the local planning authority. The development shall be carried out in accordance with the approved details.

Reasons:

- To ensure that any proposed piling, deep foundations and other intrusive groundworks do not harm groundwater resources in line with paragraph 170 of the National Planning Policy Framework and Position Statement N. Groundwater Resources of the '[The Environment Agency's approach to groundwater protection](#)'.
- To prevent further deterioration of a water quality element to a lower status class of adjacent surface waterbodies and prevent the recovery of a drinking water protected area in the Mid-Chilterns Chalk groundwater body.

Condition 9 – Infiltration of Surface Water onto the Ground

No drainage systems for the infiltration of surface water to the ground are permitted other than with the written consent of the local planning authority. Any proposals for such systems must be supported by an assessment of the risks to controlled waters. The development shall be carried out in accordance with the approved details.

Reasons:

- To ensure that the development does not contribute to, is not put at unacceptable risk from, or adversely affected by, unacceptable levels of water pollution caused by mobilised contaminants. This is in line with paragraph 170 of the National Planning Policy Framework
- To prevent further deterioration of a water quality element to a lower status class of adjacent surface waterbodies and prevent the recovery of a drinking water protected area in the Mid-Chilterns Chalk groundwater body.

Advice

Additional risk assessment

The applicant has proposed the following further works in relation to the Maple Lodge Nature Reserve:

1. A controlled waters risk assessment conducted with the nature reserve identified as a groundwater receptor of potential contamination arising from the site, and a risk assessment undertaken to determine if there is a significant risk of pollution arising from the development To comprise a description of potential contamination sources, a description of the receptor, identification of pathways between them, and a description of whether the development will have any impact on potential contaminant transport from the site to the receptor.

2. A semi-quantitative assessment of long and short term impacts to water quantity and quality drawing on the detailed and robust site investigation, monitoring information, conceptualisation and Detailed Quantitative Risk Assessment works already carried out to date and submitted. To include semi-quantitative assessment of groundwater and surface water flows between the site and the nature reserve, and an assessment of potential impacts arising from turbidity.

3. Detailed drawings of the location and the construction of the proposed development

to be provided alongside a Piling Method Statement and Risk Assessment which includes details of timing of works, methods and materials to be adopted.

We would expect the outcomes of proposals 1 & 2 to be included in any future consultation on our Condition 3 (Land affected by Contamination) and the outcome of proposal 3 to be included in any future consultation on our Condition 8 (Piling / Foundation Works Risk Assessment with Respect to Groundwater Resources)

Advice

We recommend that developers should:

- Follow the risk management framework provided in [Land Contamination: Risk Management](#) (formerly CLR11), when dealing with land affected by contamination.
- Refer to the [Environment Agency Guiding principles](#) for land contamination for the type of information that we require in order to assess risks to controlled waters from the site. The Local Authority can advise on risk to other receptors, such as human health.
- Consider using the [National Quality Mark Scheme for Land Contamination Management](#) which involves the use of competent persons to ensure that land contamination risks are appropriately managed. The Planning Practice Guidance defines a "Competent Person (to prepare site investigation information): A person with a recognised relevant qualification, sufficient experience in dealing with the type(s) of pollution or land instability, and membership of a relevant professional organisation." (<http://planningguidance.planningportal.gov.uk/blog/policy/achieving-sustainable-development/annex-2-glossary>)
- Refer to the [contaminated land](#) pages on GOV.UK for more information.

We expect the site investigations to be carried out in accordance with best practice guidance for site investigations on land affected by land contamination. E.g. British Standards when investigating potentially contaminated sites and groundwater, and reference with these documents:

- BS5930:2015 Code of practice for site investigations;
- BS 10175:2011 A1:2013 Code of practice for investigation of potentially contaminated sites;
- BS ISO 5667-22:2010 Water quality. Sampling. Guidance on the design and installation of groundwater monitoring points;
- BS ISO 5667-11:2009 Water quality. Sampling. Guidance on sampling of groundwaters (A minimum of 3 groundwater monitoring boreholes are required to establish the groundwater levels, flow patterns but more may be required to establish the conceptual site model and groundwater quality. See RTM 2006 and MNA guidance for further details).
- BS ISO 18512:2007 *Soil Quality. Guidance on long-term and short-term storage of soil samples*
- BS EN ISO 5667:3- 2018. *Water quality. Sampling. Preservation and handling of water samples*
- Use MCERTS accredited methods for testing contaminated soils at the site.
- Guidance on the design and installation of groundwater quality monitoring points Environment Agency 2006 Science Report SC020093 NB. The screen should be located such that at least part of the screen remains within the saturated zone during the period of monitoring, given the likely annual fluctuation in the water table. In layered aquifer systems, the response zone should be of an appropriate length to prevent connection between different aquifer layers within the system.

A Detailed Quantitative Risk Assessment (DQRA) for controlled waters using the results of the site investigations with consideration of the hydrogeology of the site and the degree of any existing groundwater and surface water pollution should be carried out. The following should be considered:

- Use MCERTS accredited methods for testing contaminated soils at the site
- The DQRA report should be prepared by a “Competent person” (e.g. a suitably qualified hydrogeologist). The DQRA should be based on site-specific data, however in the absence of any applicable on-site data, a range of values should be used to calculate the sensitivity of the input parameter on the outcome of the risk assessment.
- Where groundwater has been impacted by contamination on site, the default compliance point for both Principal and Secondary aquifers is 50m. Further guidance is available at <https://www.gov.uk/guidance/land-contamination-groundwater-compliance-points-quantitative-risk-assessments>

Following the DQRA, a Remediation Options Appraisal to determine the Remediation Strategy in accordance with the [Land Contamination: Risk Management](#) guidance.

Any remediation strategy must be carried out by a competent person, in line with paragraph 178 of the National Planning Policy Framework. The National Planning Policy Framework defines a “Competent Person (to prepare site investigation): A person with a recognised relevant qualification, sufficient experience in dealing with the type(s) of pollution or land instability, and membership of a relevant professional organisation”.

Where SUDs are proposed - Infiltration SUDs should not be located in unsuitable and unstable ground conditions such as land affected by contamination or solution features. Where infiltration SuDS are to be used for surface run-off from roads, car parking and public or amenity areas, they should have a suitable series of treatment steps to prevent the pollution of groundwater. For the immediate drainage catchment areas used for handling and storage of chemicals and fuel, handling and storage of waste and lorry, bus and coach parking or turning areas, infiltration SuDS are not permitted without an environmental permit. Further advice is available in the updated CIRIA SUDs manual http://www.ciria.org/Resources/Free_publications/SuDS_manual_C753.aspx

Waste off-site

Contaminated soil that is, or must be disposed of, is waste. Therefore, its handling, transport, treatment and disposal is subject to waste management legislation, which includes:

- Duty of Care Regulations 1991
- Hazardous Waste (England and Wales) Regulations 2005
- Environmental Permitting (England and Wales) Regulations 2010
- The Waste (England and Wales) Regulations 2011

Developers should ensure that all contaminated materials are adequately characterised both chemically and physically in line with British Standard BS EN 14899:2005 'Characterization of Waste - Sampling of Waste Materials - Framework for the Preparation and Application of a Sampling Plan' and that the permitting status of any proposed treatment or disposal activity is clear. If in doubt, the Environment Agency should be contacted for advice at an early stage to avoid any delays.

If the total quantity of waste material to be produced at or taken off site is hazardous waste and is 500kg or greater in any 12 month period the developer will need to register with us as a hazardous waste producer. Refer to the [waste management](#) page on GOV.uk for more information.

Material Re-use on-site

The CL:AIRE Definition of Waste: Development Industry Code of Practice (Version 2)

provides operators with a framework for determining whether or not excavated material arising from site during remediation and/or land development works are waste or have ceased to be waste. Under the Code of Practice:

- excavated materials that are recovered via a treatment operation can be re-used on-site provided they are treated to a standard such that they fit for purpose and unlikely to cause pollution
 - treated materials can be transferred between sites as part of a hub and cluster project
 - some naturally occurring clean material can be transferred directly between sites
- Developers should ensure that all contaminated materials are adequately characterised both chemically and physically, and that the permitting status of any proposed on-site operations are clear. If in doubt the Environment Agency should be contacted for advice at an early stage to avoid any delays.

We recommend that developers should refer to:

- The [position statement](#) on the Definition of Waste: Development Industry Code of Practice
- The [waste management](#) page on GOV.uk

Informative

Flood Risk Activity Permit

The Environmental Permitting (England and Wales) Regulations 2016 require a permit to be obtained for any activities which will take place:

- on or within 8 metres of a main river (16 metres if tidal)
- on or within 8 metres of a flood defence structure or culvert (16 metres if tidal)
- on or within 16 metres of a sea defence
- involving quarrying or excavation within 16 metres of any main river, flood defence (including a remote defence) or culvert
- in a floodplain more than 8 metres from the river bank, culvert or flood defence structure (16 metres if it's a tidal main river) and you don't already have planning permission.

For further guidance please visit <https://www.gov.uk/guidance/flood-risk-activities-environmental-permits> or contact our National Customer Contact Centre on 03702 422 549 or by emailing enquiries@environment-agency.gov.uk. The applicant should not assume that a permit will automatically be forthcoming once planning permission has been granted, and we advise them to consult with us at the earliest opportunity.

Final comments

Thank you for contacting us regarding the above application. Our comments are based on our available records and the information submitted to us. Please quote our reference number in any future correspondence. Please provide us with a copy of the decision notice for our records. This would be greatly appreciated

Yours sincerely

Mr Kai Mitchell
Sustainable Places Planning Specialist

Direct e-mail HNL SustainablePlaces@environment-agency.gov.uk