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Our Ref : T1999/PJB/EJJ

19 May 2021

Mr Kai Mitchell
Sustainable Planning Specialist
Environment Agency

Dear Kai

**EMPLOYMENT LAND TO THE NORTH OF MAPLE CROSS LODGE, MAPLE CROSS,
RICHMANSWORTH, WD3 9SE**

**Your Ref : NE/2021/133015/01-L01
Planning Ref : 21/0573/FUL**

Thank you for your letter dated 12 May 2021 addressed to Claire Westwood of Three Rivers District Council; the contents of which are noted.

Following our conversation on 17 May 2021, we record the fact that the Environment Agency had previously consulted on this development site; where a series of conditions were provided (see attached). These were taken through to an Appeal hearing, following refusal of said application Ref : 19/1179/FUL, conditioned under your letter dated 8 August 2019 Ref : 130549/01-L01; and subsequent letter dated 16 October 2019 Ref : 130549/01-L02. The Environment Agency had further opportunity to engage on this site at Appeal and chose not to on the basis that it had confirmed no further changes to the conditions and no objection.

The outcome of the Appeal was to provide Affinity Water, one of the major objections to the development, further evidence to ensure the ground water resource was protected. Prior to that hearing, Tier Consult made attempts to discuss the site in more detail with the Environment Agency through meeting consultation, only to be advised that conditions had been provided for inclusion and no further engagement was necessary.

We note that under both previous consultation responses to application Ref : 19/1179/FUL, a DQRA was not conditioned, but only noted as 'advice to the applicant'. Notwithstanding this, forward nine months later, Tier Consult submitted the DQRA developed in consultation with Affinity Water for the purpose of demonstrating that the Source Protection Zone 1 is not impacted upon and in support of new application 21/0573/FUL, only to receive a somewhat surprising Environment Agency objection under cover of the letter dated 8 April 2021, when the application virtually mirrors that previously submitted.



Following the Appeal, we have undertaken extensive investigation works at significant cost to comprehensively address Affinity Water's concerns. Therefore, on the basis that no previous objection was raised it is reasonable to conclude that the Environment Agency should maintain the same position as it did in respect of application Ref : 19/1179/FUL.

As you are aware, we have submitted our DQRA in response to the Environment Agency letter dated 8 April 2021 which informs the sensitivity in respect of controlled waters. namely :-

- Located in 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 560m) to an Affinity Water portable groundwater abstraction

As discussed in our telephone conversation of Monday 17 May 2021, we believe the non-redacted DQRA, which was issued following your letter dated 8 April 2021, fully addresses all three items noted within your objection; moreover, this satisfies Affinity Water such that they have not objected to this application in respect of water resource.

Notwithstanding our position regarding the above, we fully recognise the Environment Agency's responsibility to protect all ground water receptors and although the water body within the nature reserve to the south has never been previously mentioned in any of the Environment Agency's consultation responses, the following would satisfy the request for further information to overcome this recent objection as outlined below.

Firstly, we would wish to draw to your attention the following matters which have a bearing on the sensitivity of the Maple Lodge nature reserve as a potential receptor:

- The Maple Lodge nature reserve is not a statutorily designated Local Nature Reserve *registered* with Natural England. The land ownership is a 40 year leasehold to four trustees of the Maple Lodge Conservation Society (2015 – 2040), and access to the land is by membership of the Society or by agreement with the Society. It should be accorded the same status as a private landholding.
- Historical maps show the nature reserve to have been undeveloped in 1938, a large lake in 1960 and 1970, mostly infilled in 1976 and in its current form in 2002. The nature reserve has been artificially developed by raising and lowering the levels by way of mineral extraction and infilling respectively. This is therefore not a naturally occurring feature but is indeed a colonised artificial landform.
- Shallow groundwater flow at the site is to the southwest; groundwater does not flow directly from the site to the nature reserve. There is a component of groundwater that discharges as baseflow to the stream on the west of the site, which then flows into the nature reserve; however, our studies have shown that this is in the order of 3% of the surface water and groundwater flow received by the nature reserve.



- Our work has shown that the upper aquifer is very permeable (c. 100 m/d). Whilst the piling works will affect the permeability of the ground directly in the piling zone, we consider that groundwater will flow rapidly around the piling zone, and that impacts on downstream surface water or groundwater flows will be negligible.
- Our work has shown that there are no significant sources of pollution on the site that would cause the development to impact on the nature reserve.
- Our work has shown that turbidity is not transported through granular media, and risks of turbidity transport to the nature reserve via groundwater, or via discharge of groundwater to the stream on the western boundary, are negligible.
- Our DQRA and Piling Method Statement and Risk Assessment outline monitoring that will be undertaken throughout the piling works to protect the PWS boreholes, and this monitoring will also afford protection to the nature reserve.
- Any potential impacts of construction on groundwater and surface water quality can be managed by good site practices, enforceable through a Construction Environment Management Plan.
- Impacts on the nature reserve due to the changes in the quantity of surface water or groundwater leaving the site are considered highly unlikely but could in any event be mitigated through engineering measures designed to store, direct, and discharge water around and below the site. There would not therefore be a downstream impact on the nature reserve, and importantly no impacts on groundwater dependent habitats.

We note that the nature reserve has never been mentioned in any of the Environment Agency's previous consultation responses. It is our opinion that there is sufficient evidence in the work to date and the qualitative assessment above to assure you that the development will not have a significant negative impact on the nature reserve. We would therefore ask you to reconsider and withdraw your objection.

In the event you are unable to reconsider, we offer the following scope of works to overcome your objection :-

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.*

Based on the extensive studies undertaken to date and the additional work noted above, we do not anticipate any significant impact on the nature reserve, and we consider that the proposed work will be sufficient to demonstrate that any further concerns that you have can be dealt with by detailed mitigation design, as a condition of planning. Such detailed design may rely on further evaluation such as catchment studies, surface water and/or groundwater modelling, water balance studies, and mitigation design.

In light of the delay in dealing with the consultation, we would be grateful if you would consider conditioning those items scheduled and remove your objection. If you are unable to do such, please could you advise us of your agreement to the suggested studies (items 1, 2, and 3 above) and thereafter, confirm a swift turn around following submission.

We trust the above is self-explanatory and we look forward to closing out your objection with your assistance in a timely manner.

Yours sincerely

A handwritten signature in black ink, appearing to read "Philip J. Barlow", written over a light blue circular stamp.

Philip J. Barlow

Director

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