



Welwyn Hatfield Borough Council
The Campus,
Welwyn Garden City,
Herts.
AL8 6AE

Reference Number: 6/2018/2768/OUTLINE

14 January 2020

Dear Madam/Sir

DESCRIPTION: Outline application for a large-scale mixed use development including 1,100 new homes and supporting infrastructure including a primary school, local centre and open space with all matters reserved

LOCATION: Hatfield Business Park Hatfield AL10 9SL

Thank you for notification of the above planning application. Planning applications are referred to us where our input on issues relating to water quality or quantity may be required.

Water Quality

Upon our review of the recent submission of the Phase 2 of the Geo-environmental Site Investigation, we have updated our original response sent in December 2018.

You should be reminded that the proposed development site is located near an Environment Agency defined groundwater Source Protection Zone 2 (SPZ2) corresponding to Hatfield Pumping Station. This is a public water supply, comprising a number of Chalk abstraction boreholes, operated by Affinity Water Ltd. The area is also impacted by Bromate contamination.

We are writing to **object** to this Application because we are concerned, for the reasons set out below, that it has the potential to impact adversely the public water supply. The Phase 2 ground investigation identifies the need for further investigation which we will need to review before considering the removal of our objection. If you are minded to approve the Application, it is essential that appropriate conditions are imposed to protect the public water supply, which would need to address the following points:

1. Contamination

From the latest investigations we understand that deeper foundations or piling is still a possibility on site, particularly for the larger builds (i.e Primary School) and further investigation as stated in the Phase 2 investigation is required. The true depth of the Lowestoft Formation is unknown so if piles were to go beyond the investigated 14m this could cause an issue particularly with the high Bromate levels found in the collected water samples. We are concerned at the potential for the below boulder clay to be excavated, which could create more

pathways to the Chalk/lower gravel aquifer. We require the following condition to be implemented:

Condition

- A)** No works involving excavations (e.g. piling or the implementation of a geothermal open/closed loop system) shall be carried until the following has been submitted to and approved in writing by the Local Planning Authority in conjunction with Affinity Water:
- i)** An **Intrusive Ground Investigation** to identify the current state of the site and appropriate techniques to avoid displacing any shallow contamination to a greater depth.
 - ii)** A **Risk Assessment** identifying both the aquifer and the abstraction point(s) as potential receptor(s) of contamination.
 - iii)** A **Method Statement** detailing the **depth** and **type** of excavations (e.g. piling) to be undertaken including **mitigation measures** (e.g. appropriate piling design, off site monitoring boreholes etc.) to prevent and/or minimise any potential migration of pollutants. Any excavations must be undertaken in accordance with the terms of the approved method statement.

Reason: To avoid displacing any shallow contamination to a greater depth, to prevent and/or minimise any potential migration of pollutants and to avoid connections beyond the boulder clay to the Chalk/lower aquifer.

2. Contamination during construction

Construction works may exacerbate any known or previously unidentified contamination. If any pollution is found at the site, then works should cease immediately and appropriate monitoring and remediation will need to be undertaken to avoid any impact on water quality.

Condition

- B)** If, during development, contamination not previously identified is found to be present at the site, then no further development shall be carried out until a **Remediation Strategy** detailing how this contamination will be dealt with has been submitted to and approved in writing by the Local Planning Authority in conjunction with Affinity Water. The remediation strategy shall be implemented as approved with a robust pre and post monitoring plan to determine its effectiveness.

Reason: To ensure that the development does not contribute to unacceptable concentrations of pollution posing a risk to public water supply from previously unidentified contamination sources at the development site and to prevent deterioration of groundwater and/or surface water.

3. Infiltration

Surface water should not be disposed of via deep direct infiltration into the ground via a soakaway and additional investigation is required for the proposed attenuation features to ensure a suitable thickness of cohesive Lowestoft Formation remains in order to limit any pathways between the surface and the underlying aquifer.

Condition

- C) Prior to the commencement of development, details of a Surface Water **Drainage Scheme** that shall be submitted to and approved in writing by the Local Planning Authority in conjunction with Affinity Water.

Reason: To provide confirmation that deep direct infiltration via soakaways will not be used due to the potential presence of Bromate contamination in the upper aquifer and the risk for contaminants to remobilise causing groundwater pollution potentially impacting public water supply.

4. Bunding

If any tanks, generators and filling areas are to be installed as part of the development, they will need to have secondary containment which can hold 110% of the volume the tank or generator is designed to contain.

Condition

- D) Prior to the commencement of development, details of all substance containers confirming **bunding** of 110% capacity shall be submitted to and approved in writing by the Local Planning Authority in conjunction with Affinity Water.

Reason: To prevent contaminants being discharged into the surface and groundwater network in the event of a spill.

For further information we refer you to CIRIA Publication C532 "Control of water pollution from construction - guidance for consultants and contractors".

Water efficiency

Being within a water stressed area, we expect that the development includes water efficient fixtures and fittings, as required under the submission *Welwyn Hatfield Local Plan*.

Measures such as rainwater harvesting and grey water recycling help the environment by reducing pressure for abstractions in chalk stream catchments.

They also minimise potable water use by reducing the amount of potable water used for washing, cleaning and watering gardens. This in turn reduces the carbon emissions associated with treating this water to a standard suitable for drinking, and will help in our efforts to get emissions down in the borough.

Infrastructure connections and diversions

There are potentially water mains running through or near to part of proposed development site. If the development goes ahead as proposed, the developer will need to get in contact with our Developer Services Team to discuss asset protection or diversionary measures. This can be done through the My Developments Portal (<https://affinitywater.custhelp.com/>) or aw_developerservices@custhelp.com.

In this location Affinity Water will supply drinking water to the development. To apply for a new or upgraded connection, please contact our Developer Services Team by going through their My Developments Portal (<https://affinitywater.custhelp.com/>) or aw_developerservices@custhelp.com. The Team also handle C3 and C4 requests to cost potential water mains diversions. If a water mains plan is required, this can also be obtained by emailing maps@affinitywater.co.uk. Please note that charges may apply.



Thank you for your consideration.

Yours sincerely

Kim Harding MRTPI

Asset Protection Specialist
Environmental Policies and Strategies