Department of Environment & Transport
and Sustainable Growth

Hertfordshire

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Contact Chris Bowyer
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Date 2 February 2023

Dear Mr. Myers

RE: 6/2023/0013/COND – YMCA, 90 Peartree Lane, Welwyn Garden City, AL7 3UL

Thank you for your consultation on the above site, received on 9 January 2023. We have reviewed the application as submitted and wish to make the following comments.

The Discharge of Conditions application relates to Condition 5 (Drainage Scheme), 29 (Drainage Strategy), and 33 (Final Design of Drainage Scheme) of the Outline Application (6/2019/2714/OUTLINE) that was submitted on the 28 October 2019.

The previous application was for a hybrid application for the demolition of the existing hostel, development of a four-story 100 bed YMCA Hostel (All details submitted for determination), and up to 43 residential apartments (All details retained for future determination as reserved matters, except means of access) with associated car parking and landscaping.

Based on the information that has been provided in support of Conditions 5, 29, and 33 of the decision notice for the planning application 6/2019/2714/OUTLINE, the LLFA **objects** to the approval of application 6/2023/0013/COND.

Condition 5 is worded as follows

No development other than demolition, site clearance, or remediation works in respect of land contamination shall take place until the final design of the drainage scheme is completed and sent to the Local Planning Authority for approval. The surface water drainage system will be based on the submitted Drainage Strategy Report produced by Pinnacle Consulting Engineers, project number C190906, version 3.3, dated 03 December 2020, and Flood Risk Assessment produced by Pinnacle Consulting Engineers, project number C190906, version 2.0, dated 3 June 2020. The scheme shall also include:

1. *Detailed infiltration testing in accordance with BRE Digest 365 at the proposed depth and location of the proposed SuDS feature.*
2. *Provision of additional ground investigations to assess the potential for solution features.*
3. *Groundwater monitoring is to be carried out following any ground remediation works to determine the level of groundwater. If the site is found to be impacted by groundwater, an assessment of this flood risk and its mitigation should be provided. Details on how the site drainage features will be secured against groundwater should also be provided.*
4. *A minimum of 1m buffer zone needs to be provided between the bottom of any infiltration feature and the existing groundwater levels on the proposed development site.*
5. *Detailed engineering drawings of the proposed SuDS features including their location, size, volume, depth, and any inlet and outlet features including any connecting pipe runs and all corresponding calculations/modelling to ensure the scheme caters for all rainfall events up to and including the 1 in 100 years + 40% allowance for climate change event, with a supporting contributing area plan.*
6. *Demonstrate appropriate SuDS management and treatment for the entire site including the access road. To include exploration of source control measures and include above-ground features such as permeable paving.*
7. *Provision of half drain down times within 24 hours.*
8. *Exceedance plan for events greater than the 1 in 100 years plus 40% for climate change events.*

REASON: To protect the surrounding environment from flooding in accordance with Policies R7 of the Welwyn Hatfield District Plan 2005 and the National Planning Policy Framework 2019.

Condition 29 is worded as follows

The development permitted by this planning permission shall be carried out in accordance with the Drainage Strategy Report produced by Pinnacle Consulting Engineers, project number C190906, version 3.3, dated 03 December 2020, and Flood Risk Assessment produced by Pinnacle Consulting Engineers, project number C190906, version 2.0, dated 3 June 2020 and the following mitigation measures:

1. *Provision of drainage strategy based on infiltration (for catchments A and C) and discharge into Thames sewer (Catchment B)*
2. *Limiting the surface water run-off rates to a maximum of 5l/s for all rainfall events up to and including the 1 in 100 years + climate change event with discharge into the Thames surface water sewer.*
3. *Provide attenuation to ensure no increase in surface water run-off volumes for all rainfall events up to and including the 1 in 100 years + climate change event.*

4. *Implement drainage strategy utilising lined permeable paving with sub-base and attenuation tanks.*
5. *Provision of a filter drain to manage existing surface water flood risk.*

REASON: To protect the surrounding environment from flooding in accordance with Policies R7 of the Welwyn Hatfield District plan 2005 and the National Planning Policy Framework 2019.

Condition 33 is worded as follows

No development other than demolition, site clearance, or remediation works in respect of land contamination shall take place until the final design of the drainage scheme is completed and sent to the Local Planning Authority for approval. The surface water drainage system will be based on the submitted Drainage Strategy Report produced by Pinnacle Consulting Engineers, project number C190906, version 3.3, dated 03 December 2020, and Flood Risk Assessment produced by Pinnacle Consulting Engineers, project number C190906, version 2.0, dated 3 June 2020. The scheme shall also include:

1. *Detailed infiltration testing in accordance with BRE Digest 365 at the proposed depth and location of the proposed SuDS feature.*
2. *Provision of additional ground investigations to assess the potential for solution features.*
3. *Groundwater monitoring is to be carried out following any ground remediation works to determine the level of groundwater. If the site is found to be impacted by groundwater, an assessment of this flood risk and its mitigation should be provided. Details on how the site drainage features will be secured against groundwater should also be provided.*
4. *A minimum of 1m buffer zone needs to be provided between the bottom of any infiltration feature and the existing groundwater levels on the proposed development site.*
5. *Detailed engineering drawings of the proposed SuDS features including their location, size, volume, depth, and any inlet and outlet features including any connecting pipe runs and all corresponding calculations/modelling to ensure the scheme caters for all rainfall events up to and including the 1 in 100 years + 40% allowance for climate change event, with a supporting contributing area plan.*
6. *Demonstrate appropriate SuDS management and treatment for the entire site including the access road. To include exploration of source control measures and include above-ground features such as permeable paving.*
7. *Provision of half drain down times within 24 hours.*
8. *Exceedance plan for events greater than the 1 in 100 years plus 40% for climate change events.*

REASON: To protect the surrounding environment from flooding in accordance with Policies R7 of the Welwyn Hatfield District Plan 2005 and the National Planning Policy Framework 2019.

As Conditions 5 and 33 are identical, we will respond to these jointly. Condition 29 will be responded to separately.
All points of the conditions are discussed further below:

The LLFA is **able to recommend the discharge of Point 1 of Conditions 5 and 33** based on the information provided in the Drainage Design Information document dated 20 December 2022. This is based on the ASKWard Drainage Strategy Report (Revision P01, dated October 2021) which identifies the site should be classed as 'High Risk' to the occurrence of solution features relatively close to the site, which has led to the surface water drainage being designed with infiltration ruled out.

The LLFA notes there has been some confusion around the use of infiltration to drain the surface water.

The LLFA is satisfied that ground investigations have been completed to assess the potential for solution features. The ground investigations were undertaken by geotechnical consultants who identified a number of solution features between 70m and 495m bgl. The LLFA is **able to recommend the discharge of Point 2 of Conditions 5 and 33**.

The LLFA is satisfied with the groundwater conditions beneath the site following the monitoring visits that have been carried out in March 2020 by Delta Simons and June/July 2021 by SCL. Following the monitoring, the site was recorded as having 'Static' groundwater. This has been supported by the groundwater tests being carried out in two relatively dry years with the variations in groundwater levels being linked to seasonal variation. The LLFA is **able to recommend the discharge of Point 3 of conditions 5 and 33**.

Point 4 of Conditions 5 and 33 outlines the requirement for a 1m buffer between the base of any infiltration feature and the existing groundwater level on the proposed development site. While we appreciate that the proposed development does not include any infiltration features, there is the inclusion of an attenuation tank constructed with polystorm units wrapped in impermeable geomembrane that could be at risk of floatation. Therefore, the LLFA is **not able to recommend the discharge of Point 4 of conditions 5 and 33**.

For the LLFA to be able to recommend the discharge Point 4 of Conditions 5 and 33, the applicant is required to provide further information on the depth of the attenuation tank base. If this depth is deeper than 1.5m bgl, then based on the information provided there is likely to be interaction with groundwater. The applicant is required to provide information on the mitigation of the risk of floatation of the attenuation tank or the demonstration the tank is not going to interact with the groundwater.

While the LLFA is satisfied that the applicant has provided the relevant engineered drawings of the proposed SuDS features including their location, size, volume, depth, and any inlet and outlet features. However, there is a lack of clarity over what the additional $50m^3$ is an allowance for. Therefore, until further clarification on this matter is provided the LLFA is **unable to recommend the discharge of Point 5 of Conditions 5 and 33**.

As this is an outline planning application, the LLFA is able to accept the developer will appoint a management company to be responsible for undertaking the maintenance and treatment of the entire site including the access road. However, no maintenance schedule has been provided in the submission and there is no confirmation on who will own the site and therefore hold the long-term management liability for the site.

The LLFA is **unable to recommend the discharge of Point 6 of Conditions 5 and 33** based on the lack of a maintenance schedule that provides a timescale for the maintenance onsite and the lack of confirmation on the site ownership. We note that the applicant has stated that there will be regular day-to-day care, occasional tasks, and remedial works undertaken but there is no timeframe provided.

The LLFA is **unable to discharge Point 7 of Conditions 5 and 33** due to the lack of up-to-date half-drain times. While the LLFA notes the applicant was able to provide half drain times in their outline planning application, the LLFA is unable to accept these as the drainage design has since been updated. The LLFA requires half drain times from the proposed design to be provided.

While we appreciate the applicant has submitted the ASKWard Drainage Strategy Report which states that 'It will also be ensured that all final building floor levels will be built a minimum of 300mm above the critical 1:100 year plus 40% climate change storm event flood level elevation', we require the applicant to submit a full set of finished floor levels and finished ground levels. The LLFA requires the applicant to submit a set of detailed drawings which identify the exceedance flow paths for any water that cannot be catered for in the drainage system. Therefore, the LLFA is **unable to recommend the discharge of Point 8 of Conditions 5 and 33**.

Based on the information provided, the LLFA is **unable to recommend the discharge of Conditions 5 and 33 of the 6/2019/2714/OUTLINE** planning application for the site at the YMCA Hostel on Peartree Lane at this time. For the LLFA to consider removing their objection, the applicant must provide the relevant information and evidence to address the points above.

The ASKWard Drainage Strategy Report is not clear whether infiltration could take place onsite. The LLFA requires clarification and supporting information on the different catchments before we can consider whether this point can be discharged for condition. The LLFA is **not able to make any further comments on Point 1 of Condition 29 and therefore can not recommend discharge of this point**.

The LLFA is **able to recommend the discharge Point 2 of Condition 29** based on the agreement with Thames Water of a discharge rate of 5l/s from the combined site, split equally to 2.5l/s per sub-site. The applicant has submitted information showing that they are limiting discharge into the Thames Water surface water sewer at a rate of 2.5l/s through a Hydro-Brake Flow Control Chamber. This matches the agreement of 2.5l/s per site.

The LLFA is **unable to recommend the discharge of Point 3 of Condition 29** as the LLFA requires further information in support of the calculation of attenuation volume to ensure there is no increase in surface water runoff volumes. The LLFA requires the pre-

development runoff rates along with the post-development runoff rates to ensure there is no increase.

Point 4 of Condition 29 required a drainage strategy to be implemented using permeable paving with a sub-base and attenuation tanks. While the LLFA can confirm that permeable paving and attenuation tanks have been included in the detailed drawings, the LLFA noted the permeable paving to the east and southeast of the site does not drain through the Hostel flow control device. The discharges from the permeable paving to the east and southeast are not flow controlled. Therefore, the LLFA considers the proposed drainage design to exceed the 2.5 l/s discharge rate for this portion of the site. The LLFA understands that this area of permeable paving will be draining into the Residential area of the development, therefore using some of the allocated 2.5 l/s of drainage. Therefore, the LLFA is **unable to recommend the discharge of Point 4 of Condition 29**. To overcome this, the applicant is required to provide further information as to why the design is as such and adapt the drainage design so that all of the permeable paving areas drain into the drainage system for the Hostel part of this development.

As there is no mention of a filter drain in any of the information that has been provided, the LLFA requires more information on this before we can consider whether or not to discharge Point 5 of Condition 29. Therefore, the LLFA is **able to recommend the discharge of Point 5 of Condition 29**

Based on the information provided, the LLFA **is unable to recommend the discharge Condition 29 of the 6/2019/2714/OUTLINE planning application** for the site at the YMCA Hostel on Peartree Lane at this time. For the LLFA to consider removing their objection, the applicant must provide the relevant information and evidence to address the points above.

For further advice on what we expect to be contained within the FRA to support a planning application, please refer to our Developers Guide and Checklist on our surface water drainage webpage https://www.hertfordshire.gov.uk/services/recycling-waste-and-environment/water/surface-water-drainage/surface-water-drainage.aspx this link also includes HCC's policies on SuDS in Hertfordshire.

In December 2022 it was announced FEH rainfall data has been updated to account for additional long-term rainfall statistics and new data. As a consequence, the rainfall statistics used for surface water modelling and drainage design have changed. In some areas, there is a reduction in comparison to FEH2013, and in some places an increase (see FEH22 - User Guide (hydrosolutions.co.uk)). Any new planning applications that have not already commissioned an FRA or drainage strategy to be completed, should use the most up-to-date FEH22 data. Other planning applications using FEH2013 rainfall, will be accepted in the transition period up to the 1st April 2023. This includes those applications that are currently at an advanced stage or have already been submitted to the Local Planning Authority. For the avoidance of doubt, the use of FSR and FEH1999 data has been superseded by FEH 2013 and 2022, and therefore, use in rainfall simulations is not accepted.

Please note if you, the Local Planning Authority review the application and decide to grant planning permission, you should notify us, the Lead Local Flood Authority, by email at FRMConsultations@hertfordshire.gov.uk.

Yours sincerely

Chris

Chris Bowyer
SuDS and Watercourses Support Officer
Environment & Transport and Sustainable Growth

Annex

The following documents have been reviewed, which have been submitted to support the application;

- Boundary Plan – Planning Application (47-WPA-Z1-SP-DR-A-3003), Will + Partners, 7 December 2022, Revision T4
- YMCA Hostel, Peartree Lane, Welwyn Garden City, Drainage Design Information (Report Reference: 203905-SWH-ZZ-01-S-RP-0001), Scott White and Hookins, 20 December 2022, Revision 01