
1.0 Introduction

- 1.1 My name is Richard Bettridge. I am a Director of Motion Consultants Limited, a Transport Planning and Infrastructure Design Consultancy with offices in Guildford, London and Reading.
- 1.2 I am a Chartered Engineer and a Chartered Environmentalist and Member of the Institution of Civil Engineers. I am a Fellow of the Chartered Institution of Highways and Transportation and a Member of the Chartered Institution of Water and Environmental Management. I became a Member of the Society for the Environment in 2005. I hold an Upper 2nd Class Honours degree in Civil Engineering and a Bachelor of Arts degree in Humanities.

2.0 Scope of Evidence and Policy Framework

- 2.1 My evidence focuses on the drainage reason for refusal, namely Reason 5. I have considered this in the context of the Cherwell Local Plan 2011-2031 and National Planning Policy Framework and national Planning Practice Guidance
- 2.2 I have also reviewed the scheme proposals with specific reference to policies ESD 6 and ESD 7 of the Cherwell Local Plan 2011-2031

2.3 Reason for Refusal 5

- ▶ *Reason 5 – The submitted drainage information is inadequate due to contradictions in the calculations and methodology, lack of robust justification for the use of tanking and buried attenuation in place of preferred SuDS and surface management, and therefore fails to provide sufficient and coherent information to demonstrate that the proposal is acceptable in terms of flood risk and drainage. The proposal is therefore contrary to Policies ESD 6 and ESD 7 of the Cherwell Local plan 2011 – 2031 Part 1 and Government guidance contained within the national Planning Policy Framework.*
- 2.4 The two primary allegations of Reason for Refusal 5 are as follows:
1. *"The submitted drainage information is inadequate due to contradictions in the calculations and methodology";* and
 2. *"Lack of robust justification for the use of tanking and buried attenuation in place of preferred SuDS and surface management".*

I addressed these points and I demonstrate that they are unfounded, and the Proposed Development will not just be acceptable in terms of flood risk and drainage but deliver significant benefits.

- 2.5 I highlight the relevant sections the National Planning Policy Framework (NPPF) and Planning Practice Guidance (PPG) which identify how the issue of flooding is dealt with through the planning process, i.e. with the creation of a site-specific Flood Risk Assessment (FRA) for sites over 1ha in area or in Flood Zones 2 & 3.
- 2.6 Policy ESD 6 relates to Sustainable Flood Risk Management. It aims to reinforce the guidance set out in the NPPF and outlines Cherwell District's requirements for new developments in respect to flooding. As with the requirements of the NPPF, ESD 6 outlines the requirements of site-specific flood risk assessment.
- 2.7 Policy ESD 7 relates to Sustainable Drainage Systems (SuDS). It aims to promote the use of SuDS for all new developments in the management of surface water runoff.

- 2.8 I have also referred to (a) CDC's Strategic Flood Risk Assessment (SFRA) which provides guidelines on use of SuDS and guidance for FRAs and (b) the Oxfordshire Flood Risk Management Plan, which is produced by Oxfordshire County Council (OCC), which acts as the Lead Local Flood Authority (LLFA) for the county.

3.0 Discussions with the Lead Local Flood Authority

- 3.1 I have engaged in discussions with the LLFA since November 2020 following Curtin's attempts to reach agreement since January 2020. The issues addressed are as follows:

- ▶ Establishment of groundwater levels
- ▶ Qbar as the allowable discharge rate.
- ▶ Default coefficient of Cv resolved
- ▶ Calculations should be re-run for all relevant return periods and critical durations established
- ▶ Sub-catchment approach should be applied to surface water management, with flow controls and site storage
- ▶ Consider groundwater in respect of the proposed tanked attenuation and justify the need for buried attenuation as opposed to surface SuDS and surface water management techniques
- ▶ Flow control from the site
- ▶ Proposal to divert two ditch lines will affect existing pond levels and biodiversity
- ▶ Completion of OCC proforma
- ▶ Rainwater Harvesting

All of the above matters have been discussed and generally agreed apart from the attenuation tank where disagreement remains over its choice over an underground surface water storage tank. I have shown that the tank provides flood storage volume to enable the discharge from site to be controlled to greenfield rates and also includes an active rainwater harvesting system. The LLFA believe that a storage pond should be provided, however I have shown that the tank is required for storage and rainwater harvesting and that this accords with the NPPG and sustainable drainage requirements.

4.0 Drainage Proposals

- 4.1 I have set out the key features and requirements of a SuDS system and demonstrated that the proposed drainage arrangements (detailed within the Drainage & SuDS Strategy report prepared by Curtins) form a site wide system of SuDS which combine to reduce the volume of runoff, improve water quality, provide amenity and promote biodiversity across the Proposed Development, as recommended by The SuDS Manual.
- 4.2 I explain that the system has been designed to control runoff at source, with most of the storage provided within the first five measures set out in the SuDS hierarchy. The remainder of the storage is provided within the tank which will also double as storage for the rainwater harvesting system. The SuDS features provided significant benefits to the Proposed Development and the wider area.

5.0 Scheme Compliance with SuDS Guidance

- 5.1 I have demonstrated that the proposed drainage arrangements comply with the Non-statutory Technical Standards for Sustainable Drainage Systems (March 2015); a document published by DEFRA which sets out technical standards for SuDS and should be used in conjunction with the NPPF and PPG.
- 5.2 I have demonstrated that the proposed Drainage Strategy for the development complies in full with the DEFRA document by (a) restricting discharge rates, (b) incorporating a number of interception components which will reduce the runoff from the site and (c) incorporating rainwater harvesting into the system.

- 5.3 I have demonstrated that the Proposed Development is compliant with the OCC's Local Standards and Guidance for Surface Water Drainage on Major Development in Oxfordshire (a guide which sets out the standards that will be applied by the LLFA for new development in Oxfordshire and reflect the National Non-Statutory Technical Standards for SuDS).
- 5.4 I show that the Proposed Development is compliant with the SuDS Manual CIRIA C753, a document which provides detailed guidance on the use of SuDS, on below ground attenuation storage tanks, and rainwater harvesting systems.

6.0 Treatment of Objections

- 6.1 I have addressed the objections raised by Cherwell District Council (CDC) in its Statement of Case and application response provided by Chesterton Parish Council and other Parish Councils (the Parishes).
- 6.2 I have reviewed the key sections of these statements and responses which relate to The Sequential Test, surface water runoff, restriction of offsite flows, tanking and buried attenuation, LLFA discussions; and provided rebuttal on each point.
- 6.3 I rebut CDC's claim that the information submitted did not provide a sufficient, coherent basis on which to demonstrate that there would be an acceptable impact in terms of flood risk and drainage; and the assertion that the proposals would be harmful in raising the risk of flooding on and off site.
- 6.4 With respect to the Parishes Against Wolf (PAW) response to the application, I consider that the matters raised do not constitute appropriate reasons for refusal. These matters include (a) PAW's assertion that the FRA pays little attention to the 'downstream' effects that a proposal of this nature would have, (b) the impact on the Wendlebury Brook and Wendlebury. I explain that these assertions are incorrect as the proposed drainage scheme does in fact address these concerns and will in fact deliver benefits to the surrounding area.
- 6.5 PAW also raises the matter of pressures on the water supply for this area, and I have pointed out that the proposals include for the use of rainwater by storing surface water runoff in a Rainwater Harvesting System, which will reduce water demand whilst at the same time helping to reduce flood risk for downstream properties.

7.0 Precedents Set by Other Planning Permissions

- 7.1 I have included a review of other proposed local developments within the administrative areas of CDC and OCC. This highlights another application where neither the LLFA or LPA raised any objections to proposal of a large underground cellular storage tank.

8.0 Summary and Conclusions

- 8.1 My evidence demonstrates that the Proposed Development is supported by a comprehensive Drainage Strategy and Flood Risk Assessment. On that basis the Proposed Development accords with the principles set out in the Cherwell Local Plan and the NPPF.
- 8.2 On that basis, I am of the professional opinion that the Proposed Development accords with the Cherwell Local Plan and the NPPF and therefore should not be resisted or refused on flood risk or drainage grounds.