

OXFORDSHIRE COUNTY COUNCIL

**REFUSED**

DATE: 03/09/2024  
APPLICATION No: P21/S3961/CM, (MW.0115/21)

19 December 2022

y/ref - MW.0115/21

**Mary Hudson**

Principal Planning Officer  
Oxfordshire County Council

**Re: Flood risk assessment (FRA) for Extraction And Processing Of Sand And Gravel Including The Construction Of New Site Access Roads, Landscaping And Screening Bunds, Minerals Washing Plant And Other Associated Infrastructure With Restoration To Agriculture And Nature Conservation Areas, Using Inert Fill**

Dear Ms Hudson,

Further to your email to Simon Heaton on the 14 December 2022 concerning the Flood Risk Assessment for the Wallingford Mineral Workings: (Revision B: Jan 2022). Their letter of the 21 September states that:

*"The FRA states there will be offsite impacts, so the applicant should provide an assessment of those impacts."*

The impacts are discussed in Section 6.3.2 (Third Party Dis-benefit) of the FRA and the discussion is supported by Table 6.2 and Figures 6.5 to 6.7. The impacts have been quantified using difference mapping for a 1% AEP event for a range of excavation phases during the extraction of the minerals working over the period of the lifetime of the development (i.e. five years). The modelling reflects the local changes to flood patterns in the environs of the site during the works.

The mapping shows that there will be a local increase in flood depth of approximately 25mm on the floodplain during Phase 2 of the works (1 in 100 year event). An increase in depth of 25mm only represents a 0.13% increase in flood depth on the flood plain in areas where depths are in the order of 2m. It should also be noted that Phases 1, 3 and 4 the works have a lower impact on the existing floodplain.

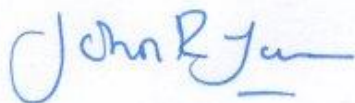
It is important to appreciate that the development lifetime is five years, and this is hugely significant. The Environment Agency will be able to confirm to you, that the probability of 1 in 100 year event occurring or being exceeded in the next 100 years is 63%. However, the probability that a 1 in 100 year event occurring or being exceeded in the next 5 year is significantly lower at 5% (i.e. the lifetime of the scheme).

Accordingly, the flood risk profile for this scheme, is significantly reduced by comparison to a conventional commercial or housing development which is generally tested for a 50 or 100 year lifespan. Indeed, even a 1 in 20 year event has a lower probability of exceedance (22.6%) over a five year period that the traditional bench mark test of a 1 in 100 year event over 100 years of 63%.

It should also be recognised that in terms of flood storage compensation there is a significant increase in flood storage during the scheme's lifetime by virtue of the fact that the excavation of the work will result in large temporary storage areas. The conventional view is that the provision of flood storage areas will reduce flood risk on a more regional basis.

Finally, there is no change in flood hazard and the hydraulic modelling confirms that there is no additional flooding elsewhere as a result of the works. In conclusion it is considered that the impact on third parties will be negligible. I trust that this is sufficient information for the EA to reconsider its objection to the works. However, if you have any further questions, please do let me know.

Yours sincerely

A handwritten signature in blue ink that reads 'John Young'.

John Young (BEng MSc (Eng) CEng, MICE, MCIWEM)  
Director