

TECHNICAL NOTE

DATE: 01 November 2023 **CONFIDENTIALITY:** Public

SUBJECT: Westdown Quarry Revised Scheme of Working – Flood Risk Assessment Addendum

PROJECT: 62280202 AUTHOR: Jack Park

CHECKED: Guy Douglas APPROVED: Nienke Pengelly

INTRODUCTION

A consolidated planning submission and supporting Environmental Statement (ES) was submitted to Somerset Council, now Somerset Council, in January 2021 and remains with the Council for determination. The submission was for the reopening of Westdown Quarry near Frome in Somerset, extend operations into adjacent farmland, and restore the adjacent Asham Wood Quarry Void using materials from the farmland extension.

A Flood Risk Assessment (FRA) was prepared to accompany the submission. Detailed hydraulic modelling was subsequently undertaken on Whatley Brook (also known as Fordbury Water) to provide a more accurate definition of fluvial flood risk from the watercourse as presented to Somerset Council in December 2022.

However, a revised scheme of working is now proposed. This FRA addendum forms a supplementary document to the originally submitted FRA, identifying any material changes and providing updated information where applicable.

KEY SCHEME DETAILS

The main change is that the revised scheme of working concentrates all mineral working and associated works within Westdown Quarry and farmland extension and does not use the Asham Wood Quarry Void on the west bank of Whatley Brook (also known as Fordbury Water).

Therefore, the revised scheme is within the area that was previously assessed but covers a much smaller area, predominantly situated within Flood Zone 1. The periphery of the north western consolidated planning submission boundary overlaps with Flood Zone 2, however, it can be confirmed that there are no activities proposed within that area.

UPDATED SUPPORTING INFORMATION

Legislation, Policy and Guidance

Since the initial FRA submission in January 2021, there have been no fundamental updates to relevant policy and guidance underpinning the FRA.

The only amendment to policy relates to the National Planning Policy Framework (NPPF) and associated Planning Practice Guidance (PPG), which have since been replaced by 2023 and 2022 updates, respectively. The revised PPG contains a number of updates regarding application of the Sequential Test, development lifetime, and functional floodplain definition; however, these updates do not have any significant impact on the assessment or outcome of the original FRA.

Updated climate change allowances for FRAs were published alongside the 2022 PPG update. The updated 'upper end' pluvial allowance for the Avon Bristol and North Somerset Streams Management Catchment covering development lifetimes of up to 2060 (applicable to the site) is 40%, which is the same allowance as used in the original outline drainage strategy accompanying the FRA. The updated fluvial climate change allowances for the management catchment were incorporated into the hydraulic modelling undertaken in December 2022.



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Flood risk baseline

Since the submission of the original FRA there has been no change to the Environment Agency (EA) Flood Map for Planning (FMfP) or Risk of Flooding from Surface Water (RoFSW) mapping. The revised scheme of working is situated predominantly in Flood Zone 1 (with no activities proposed within Flood Zone 2 or 3), as defined in the EA FMfP and based on the updated (and refined) modelled flood extents (presented to Somerset Council in December 2022), and the site remains primarily at very low risk of surface water flooding as outlined in the original FRA.

Updated reservoir flood maps were published by the EA in November 2021, following the submission of the original FRA. The updated mapping indicates that the Whatley Brook Valley and northern boundary of the updated scheme is at risk of flooding in the event of a dam failure of Torr Works Balancing Reservoir, approximately 4km southwest of the site. However, the likelihood of such a dam failure event occurring is considered to be extremely low, given that arrangements are in place under the Reservoirs Act 1975 and the Flood and Water Management Act 2010 to ensure that regular inspection and essential safety work is carried out.

No further information or data relevant to the assessment of groundwater or sewer flood risk at the site has been made available or is known of.

REVIEW OF FRA CONCLUSIONS

In summary, the revised scheme of working is at lower overall flood risk owing to the reduced extent and limited interaction with the flood zones associated with Whatley Brook.

The overall approach set out in the outline surface water drainage strategy provided in Section 4 of the original FRA remains valid, and the detailed design of the system can be refined to take into account the revised scheme of working as part of the detailed drainage strategy.

Flood risk management measures recommended in Section 5 of the original FRA in relation to the sequential approach to working and restoration, the emergency flood response plan and water level management remain applicable to the revised scheme of working.

Fundamentally, the previously submitted FRA has not materially changed and is still applicable for supporting the Revised Proposed Development. On the basis of the flood risk management measures mentioned above, it can be concluded that the revised scheme of working would not be subject to an unacceptable level of flood risk nor increase flood risk elsewhere.