



Airfield Quarry

Waste Recovery Plan

10th October 2023

Land &
Mineral
Management

Notice

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Appendices

Appendix A	Correspondence with the DIO Safeguarding Team
Appendix B –	Correspondence with E&B Advisor, Landfill and Deposit for Recovery

Drawings

D10_LAN_201	Location Plan
D10_LAN_203	Existing Situation
D10_LAN_204	Phasing Plan
D10_LAN_215	Restoration Proposals
D10_LAN_216	Cross Sections

1 Introduction

Recovery Operation

- 1.1 The recovery operation is to allow the reinstatement of quarried ground to a combination of woodland, wet woodland, reed marsh progressing to wet woodland, agricultural land, and lowland meadow at Airfield Quarry, Gally Leaze, Gloucestershire following mineral extraction.
- 1.2 The main aim of the recovery operation is to replace non-waste material that would otherwise have to be used for reinstatement, with imported inert materials, which are able to perform the same function, providing a useful purpose by using fewer natural resources.
- 1.3 The proposals have previously been discussed with a senior EA officer and a draft of this WRP provided. Their positive response and confirmation that it is possible to agree a WRP ahead of a planning decision being made is included as Appendix B to this submission. Additionally enhanced pre-app discussions on the Permit application that is in preparation have been undertaken with the EA GOT with the most recent being referenced: EPR/KB3507KY.
- 1.4 Since those discussions, Gloucestershire County Council resolved to grant planning permission on 28th September 2023., ref 21/0032/CWMAJM.

The Site

- 1.5 Airfield Quarry is centred at National Grid Reference (NGR) SU 11186 96519. It lies to the south-east of the village of Down Ampney and in the Parish of Down Ampney. The village of Latton is to the south-west, with the Parish of Latton largely to the west and south. The village of Marston Meysey and the corresponding Parish is to the south-east of the site.
- 1.6 Drawing No. D10_LAN_201 shows the location and areal extent of the site, while D10_LAN_204 shows the phases of the quarry.
- 1.7 The area occupied by the proposed quarry currently comprises agricultural land used for growing arable crops, which is enclosed by hedgerows. A proportion of the area comprises the runways of the former RAF Down Ampney airfield.
- 1.8 The area of proposed extraction is approximately 178Ha. Full details submitted with the planning application can be found on Gloucestershire County Council's website [here](#).

Environmental Permitting and Requirement for a Waste Recovery Plan

- 1.9 To undertake the necessary reinstatement work, by recovering imported inert materials in an environmentally sound manner, an Environmental Permit is required. The permitting procedure

requires confirmation from the Environment Agency that the operation is a recovery activity, with the approval of a Waste Recovery Plan (WRP).

Guidance

- 1.10 This WRP has been prepared in line with the current guidance provided [here](#) on the gov.uk website “Waste recovery plans and deposit for recovery permits” dated 23rd June 2023.
- 1.11 The activities are a recovery operation with the ‘*waste serving a useful purpose by replacing other materials which would otherwise have been used to fulfil a particular function, or waste being prepared to fulfil that function, in the plant or wider economy.*’¹ The European Court case law confirms the essential characteristic of a waste recovery operation is that its principal objective is that the waste serves a useful purpose in replacing other materials which would have had to be used for that purpose, thereby enabling natural resources to be preserved.
- 1.12 The WRP confirms there will be obligation for the works and confirms that the operation is a recovery activity.
- 1.13 The design of the restoration proposals has been subject to extensive and prolonged discussion with the Defence Infrastructure Organisation (DIO) acting on behalf of the MoD in relation to the safeguarding of RAF Fairford. The DIO advised that it could accept no open water in the restoration proposals for this quarry despite a significant number of alternative schemes being put to them, the restoration scheme presented in this WRP is the scheme that the DIO would not object to, subject to a number of caveats.
- 1.14 The restoration proposals have also been directed by the policies of Gloucestershire Mineral Local Plan which, where Best and Most Versatile land is to be quarried, requires its reinstatement.

¹ Article 3(15) of Directive 2008/98

2 Waste Recovery Activities

- 2.1 The site restoration could be undertaken theoretically with non-waste material, i.e. virgin mineral materials, but that would be nonsensical as this is a quarry proposal for the purpose of meeting demand for sand and gravel. Using waste material as opposed to virgin material conserves natural resources.
- 2.2 The guidance outlines three ways to show evidence that waste is to be used in place of non-waste. This covers the following:
- Financial gain by using non-waste materials: evidence;
 - Funding to use non-waste: evidence;
 - Obligations to do the work: evidence.
- 2.3 Following grant of planning permission, the operator will be legally obliged to comply with the approved restoration plan detailed in the planning decision document. That plan will be Plan No. D10_LAN_215 Restoration Proposals. This restoration proposal requires importation of an estimated 4,900,000 tonnes of appropriate inert materials to restore the quarry void.
- 2.4 There are three key planning policy drivers that have influenced the development of the restoration plan and the site has been designed to comply with these:
- Safeguarding aerodromes (in line with Policy DM11 of the current Gloucestershire Minerals Local Plan)
 - Returning agricultural land graded best and most versatile prior to mineral development, back to a similar grade (in line with Policy DM07 of the current Gloucestershire Minerals Local Plan); and
 - Supporting and enhancing national, regional and local diversity (in line with Policy DM06 of the current Gloucestershire Minerals Local Plan).

Safeguarding Aerodromes

- 2.5 The proposed development site sits beneath a piece of protected airspace called the Inner Horizontal Surface (OLS) and beneath the approach and take off climb for RAF Fairford. The approach, take off and Inner Horizontal Surfaces need to be kept free of obstruction from tall structures to ensure that aircraft transiting to and from or circuiting the aerodrome can do so safely.

- 2.6 Within this zone, the principal concern of the MoD is that the creation of new habitats may attract and support populations of large and, or, flocking birds close to the aerodrome. The principal safeguarding concern of the MoD in relation to the winning and working of sand and gravel extraction in the vicinity of RAF Fairford relates to the potential increase in bird strike risk to aircraft operations as a result of the creation of wetland habitats through the restoration of the working of sand and gravel extraction sites.
- 2.7 Any form of wet restoration in this location will provide a link between East and West Cotswold Water Park, as well as leading to flight lines between the Eastern Cotswold Water Park which will transit directly across the runway at RAF Fairford. Therefore, any form of wet restoration or open water in this location has been deemed to have the potential to affect the bird strike risk to aircraft operating out of RAF Fairford.
- 2.8 Due to proximity of the proposed quarry to the RAF Fairford Aerodrome, Gloucestershire County Council (GCC, the Mineral Planning Authority), advised that the risk of bird strike would need to be considered during the planning process and when developing a restoration scheme. The Defence Infrastructure Organisation (DIO) Safeguarding Team was consulted and, having viewed an initial open water-based restoration scheme that was submitted to them, highlighted that it would potentially object to wet restoration, since it increases the bird strike risk to aircraft.
- 2.9 Since this initial consultation, the land owner (Farmcare Trading Ltd) and quarry operator (Hills Quarry Products Ltd), have been in extensive discussions with the DIO Safeguarding Team to devise a restoration scheme that is acceptable to the MOD whereby it does not include a series of wetland habitats. This restoration scheme is shown on Plan No. D10_LAN_215. Appendix A includes correspondence both pre submission of the planning application for the quarry, and the formal consultation response from DIO.
- 2.10 The requirement to have dry restoration and for bird strike management to be implemented, thus avoiding changing bird strike risk at RAF Fairford, will be carried forward into the planning decision and will be conditioned as part of the decision, thus imposing an obligation on the operator to restore the quarry with due regard to this issue.

Restoring Best and Most Versatile Land

- 2.11 The Restoration Scheme is required to comply with GCC planning policy for the reinstatement of Best and Most Versatile (BMV) agricultural land. Much of the land at Airfield Quarry that would be lost through quarrying is classified as BMV, as demonstrated in an agricultural report produced by Land Research Associates in 2018, in support of the planning application and

available at the link provided before. The restoration of the site seeks compliance with current planning policy by including productive agricultural land within the range of habitats that are proposed.

Enhancing Biodiversity

- 2.12 Ecological Assessment of the land at Airfield Quarry indicates that the site is of low ecological interest. Therefore, in restoring the quarry in line with the Restoration Proposals, which include tree, shrub, hedge, woodland, wet woodland, reed marsh and lowland meadow, the biodiversity of the site will be improved and enhanced.
- 2.13 The restoration requirements of the DIO and the policy drivers mean that there are no meaningful alternatives to the restoration scheme that could be realistically agreed for the site.

Specific Obligations

- 2.14 Evidence of the obligation is provided in the correspondence with the DIO Safeguarding Team (Appendix A), which will be carried forward into the planning decision.
- 2.15 By delivering the land to a suitable configuration, in accordance with the approved plans, the waste recovery operation will deliver agricultural benefit and, critically, it will not increase the risk of bird strike. Imported inert materials utilised as a recovery operation will assist with the ground reinstatement and ensure usable ground as opposed to a void filled with water which would have no agricultural benefit and result in increased risk of bird strike.

Wastes Suitable for Use

- 2.16 A range of inert wastes are proposed; however, the specific List of Waste codes will be determined by assessment through the hydrogeological risk assessment that also accompanies the Permit application and will ultimately be those which are included in the Permit as issued. It is likely that the waste types will be of very similar list as found in the Standard Rules for Recovery (SR 2015 No 39) found [here](#).
- 2.17 The Permit application, in the outline EMS includes waste acceptance procedures. These WAP will reflect those which have been recently agreed elsewhere by the EA, relative to the findings of the HRA in terms of the wastes that will be suitable for the facility. The precise range of wastes do not impact of the recovery nature of the proposal.

Amount of Waste

- 2.18 The restoration scheme details are shown on D10_LAN_215 with cross sections shown on D10_LAN_216. The existing contours are shown on D10_LAN_203. The amount of material

required for the recovery activity has been calculated based on the volume of mineral, overburden, subsoil and topsoil that will be extracted and the resultant void that needs to be restored to achieve the landform shown. The landform has been designed based, part around known groundwater levels to ensure that the minimum material is imported, but with the balance of ensuring no water bodies arise that would be unacceptable to DIO and therefore the planning authority.

- 2.19 The total volume of inert waste materials required to be brought to site to meet the restoration proposals has been calculated as 4,870,000 tonnes (3,270,000 cubic metres). In combination with the in-situ materials retained during extraction, this will ensure that the land can be successfully restored in line with the restoration plan.
- 2.20 It should be noted that, in keeping with all quarry recovery operations, volumes and tonnages quoted are estimates only, based on a representative number of boreholes across the site. As the mineral extraction progresses across the site variances occur and these estimates volumes and tonnages will be subject to change. Additionally the conversion factor of 1.5 tonnes / cubic metre has been used for the purpose of this WRP, but experience has shown that this can vary both seasonally and dependent on the materials received.

Substitution

- 2.21 In terms of suitable non-waste material that could be used instead of waste materials, the works could be completed using a material similar in nature, i.e. a low-grade fill material suitable to be engineered. This could be either an aggregate sourced as a primary land-won aggregate or a recycled aggregate or clay dug specifically to restore this void.

Operation to Appropriate Standard

- 2.22 The proposed development has been carefully and professionally designed, considering any physical constraints, such as land stability, land condition and drainage. The works will comply with planning condition requirements and the Environmental Permit conditions, including the operation of an Environmental Management System incorporating WAPs, Noise and Dust Management Plans and any other management, monitoring or mitigation that the environmental risk assessment for the Permit concludes is necessary.
- 2.23 A Soil Management Plan has been submitted with the planning application. Additionally, an outline Landscape and Ecological Management Plan (LEMP), incorporating details on restoration and aftercare management has also been provided. Compliance with these schemes will be an obligation of the planning consent.

- 2.24 Additionally the site will potentially, subject to agreement through the Permit application, require installation of an engineered barrier to an agreed permeability. The specifications of this barrier will be established through the hydrogeological risk assessment (HRA), and this will then dictate the degree of work needed to achieve that barrier's standard. This works will be subject to a Construction Quality Assessment by a suitably qualified engineer on completion which will be provided to the before waste is placed in that specific area.
- 2.25 The imported material will be placed using earthmoving equipment, primarily bulldozers, and will be shaped into the appropriate profile as per the restoration plan employing GPS technology to ensure the correct, approved landform configuration is complied with. The material will be placed within each phase in layers 0.3-0.5m in depth, layers will be laid to a slight fall if they are to remain exposed to aid surface water run off.
- 2.26 Material will not be handled if excessively wet or frozen. Any large "boulders" of material will be placed in the lower layers of the restoration. Any areas noted as being excessively wet will be re-worked. The measures noted in the Soils Management Plan will be employed and tracking reduced where possible in the upper layers to reduce compaction.

3 Conclusions

- 3.1 The grant of planning permission forms an obligation to restore the quarry to the restoration scheme set out on D10_LAN_215 Restoration Proposals, as it is the design acceptable to the planning authority and the DIO. The scheme will ensure that there is no increased risk of bird strike to aircraft operations at RAF Fairford. In addition, there will be clear agricultural and biodiversity benefits, which arise from a specific obligation placed on the operator in connection with the mineral development.
- 3.2 The minimum amount of material will be used, and suitable waste types will be used. The works will be completed to an appropriate standard.
- 3.3 Critically, there is a clear obligation to undertake these works with the implementation of the planning permission for quarrying. The works are in accordance with recovery as set out in Article 3(15) of the Waste Framework Directive and with Environment Agency guidance and are a recovery operation.
- 3.4 Agreement that this is a Recovery Operation was sought, prior to planning permission being granted. The EA's response is included with this submission (Pre-application RvD Assessment Advice -(17122021)) noting that this is a recovery operation, but could not be confirmed as such until planning had been granted.