

## **Annex 2 - Environmental Statement**

1. An Environmental Statement was submitted with the planning application.
2. Chapter 1 sets out the background to the Environmental Statement.
3. Chapter 2 considers hydrology and hydrogeology and provides an assessment of the potential effects of the development to the surface water and ground water environments, both during working and restoration. Receptors were identified as the River Thames and three ditches on the site, individual properties and land around the site including at Clifton Hampden, Appleford and Long Wittenham, private water supply/licensed extractions and aquifers. Effects considered include the impact of pollutants and settlement arising from the working and restoration phases, changes to flows from dewatering, and amendments to the ditches. The assessment concludes that the predicted effects can be mitigated such that they would not be significant.
4. Chapter 3 assesses the impact of the development on flood risk both during working and on restoration and includes a Flood Risk Assessment. Potential receptors were identified as land and properties in the vicinity of the site including at Clifton Hampden, Appleford and Long Wittenham and the potential effects were identified to arise due to changes to flood storage capacity and groundwater levels, changes to the drainage and flood regime, and the introduction of stockpiles and storage/attenuation bunds. The assessment concludes that, subject to mitigation measures, the majority of receptors would experience no significant change or small betterment in fluvial flood risk, although there would be a small but not significant increase in fluvial flood risk to areas of agricultural land and floodplain surrounding the site. Mitigation measures for the operational and restoration phases have been incorporated into the design and include the location of stockpiles and bunds with scalloping to direct flood water towards bund gaps and the monitoring and management of the water level in restored lakes.
5. Chapter 4 assesses the impact of the development on archaeology and cultural heritage, including six Scheduled Ancient Monuments within 3km of the site, the historic settlements of Clifton Hampden, Appleford and long Wittnham, and the grade II listed Fullamoor Farmhouse. Potential effects to the settings of heritage assets are assessed, along with the impact of the removal of deposits of archaeological interest. The chapter concludes that, with mitigation including archaeological investigation and recording, the effects of the development would be negligible to minor adverse.
6. Chapter 5 assesses the impact on soils and agriculture. The assessment concludes that the development would lead to the permanent loss of 15 hectares of best and most versatile agricultural land which, along with residual the impact on farm holdings within the

site, is considered to be a minor adverse impact. Mitigation measures are proposed to preserve the quality of soils, including a soil handling scheme and suitable methods for bund construction and excavation.

7. Chapter 6 assesses the impact of the development on bird strike hazards, in particular in relation to the impact of the restored landform on flights in and out of RAF Benson. It describes mitigation which has been incorporated into the design to reduce the attractiveness of the habitat to potential hazardous breeds of bird, including the lack of islands, the provision of footpaths to encourage human activity, goose proof fencing, and the use of reed fringes to the lakes. A bird management plan would be needed to manage the site in the long term. Subject to these measures, the chapter concludes that the development would not significantly increase bird strike risk.
8. Chapter 7 of the EIA, including an associated addendum document, contain a Landscape and Visual Impact Assessment (LVIA). The LVIA considers the impact of the development on the landscape, including the setting of North Wessex Downs AONB and also the impact on visual receptors which include public footpaths and nearby dwellings. The report sets out measures proposed to reduce the potential impacts, which include advance planting, the retention of woodland where possible, and the construction of temporary screening mounds. It concludes that, despite mitigation, there would be adverse impacts to some receptors (including major adverse effects to users of the Thames Path and minor adverse effects to Clifton Hampden Village and Conservation Area), although the effects would reduce to negligible or minor adverse in the longer term (15 years post restoration). The long term minor adverse effect arise from the creation of a large lake as part of the restoration scheme, which represents a permanent change in landscape character.
9. Chapter 8 considers transport and access and assesses the proposals in terms of traffic levels, vibration, severance and pedestrian delay, driver stress and delay, pedestrian amenity, fear and intimidation and accidents and safety. The residual effect in all cases is found to be negligible during construction and operation and will reduce further in the long term once the site is restored. This assessment includes consideration of the proposed mitigation measures which comprise a routing agreement, speed reduction measures along the site access road, improved footway/cycleway at the site entrance, peak hour vehicle movement restrictions, and footway improvements in Clifton Hampden.
10. Chapter 9 of the EIA, including an associated addendum documents, comprises a noise assessment. The assessment provides the results of noise surveys conducted at noise sensitive properties and suggests noise limits based on those existing background noise levels and on the advice on appropriate noise standards contained in the Planning Practice Guidance. In some cases, the calculated noise levels exceed the suggested limits and so mitigation is proposed, including the construction of temporary noise attenuation bunds. With mitigation in place, the residual noise effect is assessed to be in accordance with proposed noise limits.
11. Chapter 10 considers biodiversity and sets out the desk-based review, Phase 1 Ecology survey, Phase 2 Ecology survey and ecological

assessment which have been undertaken in relation to the site. The assessment considers the potential impact and significance of the development on key ecological receptors and protected species and concludes that the residual adverse effect relates to the loss of hedgerow, plantations, a stream, and field, which would be significant in a local (site) context; however these effects would be compensated through the provision of new habitats. In the longer term, the effect of the development on biodiversity would be significantly positive at a local (site) context, expanding to a district/county context over time.

12. Chapter 11 comprises a geology and mineral resources assessment. It presents the results of borehole analysis and provides estimations of the total sand and gravel reserves as well as the estimated depth and thickness of the mineral. The report concludes that there is an approximate total sales tonnage of 2.42 million tonnes.
13. Chapter 12 contains an air quality assessment. Part 1 of chapter 12 considers dust and air quality effects; whilst part 2 considers traffic related air quality effects. The dust related air quality section concludes that the cumulative dust impacts are considered to be localised and of negligible significance with appropriate mitigation. Mitigation measures include sheeting vehicles, maintaining haul roads, use of a water bowser in dry conditions, minimisation of drop heights, screening bunds and undertaking temporary operations such as soil stripping only in appropriate weather conditions. The traffic related air quality assessment considers the impact on air quality on local roads and in air quality management areas which vehicles may pass through. It concludes that the impact of the quarry traffic on local air quality, including the Abingdon AQMA would not be significant.
14. Chapter 13 considers alternative sites, working methods and supply options. It concludes that a meaningful alternative site or supply option has not been found and the application site is available for immediate development.
15. Chapter 14 considers climate change and explains that the proposals have taken climate change into account through site design and operation and in the assessment work.
16. Chapter 15 considers the socio-economic impacts of the proposals on the local community. It confirms the findings of the individual assessments that the proposals would not have an unacceptable impact on the local community. It states that there would be benefits in terms of employment and the supply of construction materials into the local market.
17. Chapter 16 contains an arboricultural assessment. This provides details of trees on site, including their age, condition and classification. It then confirms which trees are proposed for removal. It concludes that there would be an adverse landscape and environmental impact associated with the removal of 44 trees/tree groups, of which four oak trees are classified as category A (good quality).