

For: PLANNING AND REGULATION COMMITTEE – 27 NOVEMBER 2017

By: DIRECTOR FOR PLANNING AND PLACE

Development Proposed:

The extraction of sand, gravel and clay, creation of a new access, processing plant, offices with welfare accommodation, weighbridge and silt water lagoon system with site restoration to agriculture and nature conservation including lakes with recreational afteruses and the permanent diversion of footpath 171/15 and creation of new footpaths

Division Affected: Berinsfield and Garsington

Contact Officer: Mary Thompson **Tel:** 07393 001 257

Location: Land at Fullamoor Plantation, Clifton Hampden, Abingdon, OX14 3DD

Application No: MW.0039/16 P16/S1192/CM

District Council Area: South Oxfordshire

Applicant: Hills Quarry Products Ltd

Application Received: 23 March 2016

Consultation Periods: 7 April – 13 May 2016
26 January – 16 February 2017
13 July – 3 August 2017
12 October – 2 November 2017

Contents

Part 1- Facts and Background
Part 2 – Other Viewpoints
Part 3 – Relevant Planning Documents
Part 4 – Assessment and Conclusions

Recommendation: The report recommends that application MW.0039/16 be refused

PART 1- FACTS AND BACKGROUND

Location (see Plan 1)

1. The application site is located in the south of the county, between the A415 and the River Thames, to the west of Clifton Hampden and the east of Culham railway station. The site lies approximately 4 km south east of Abingdon and 4km west of Dorchester.

Site and Setting (see Plan 2)

2. The application site area is approximately 104 hectares in area and lies 47-49 metres above ordnance datum (AOD).
3. The site lies within the Oxford Green Belt.
4. To the west of the site boundary lies agricultural land containing an early Bronze Age Barrow cemetery which is a Scheduled Monument (SM) and beyond that the Oxford to Didcot railway line. The River Thames forms the southern boundary of the western part of the site. To the east and south east the site is surrounded by agricultural land. The A415 and residential properties along it lie to the north. The application area does not extend as far north as the A415, except to allow a new access onto that road. The road and properties are situated at the top of a slope overlooking the application area, which lies approximately 10 metres lower.
5. The closest properties include Fullamoor Farm, South Cottage, Warren Farm cottage to the north, Lock Cottage and Home Farm to the East, Meadow House and Manor Farm in Appleford to the south and Zouch Farm to the West. Warren Farm Cottage is the closest, at 30 metres north of the northern application area boundary near the north east corner. The second closest is Fullamoor Farmhouse, 140 metres north of the northern application area boundary near the north west corner. There is also a property immediately opposite the proposed new access onto the A415, which is set back 60 metres from the road.
6. The River Thames lies immediately to the south of the application site.
7. The application area includes land in flood zone 2 and flood zone 3, including land in zone 3b, the functional floodplain. The southern part of the site towards the river contains the land in zone 3. Small areas within the site are in zone 1, the area of least risk. The Flood Risk Assessment states that, according to the model used, 20% of the site is in FZ1, 24% in FZ 2 and 56% in FZ 3. This compares to 5% in FZ1, 42% in FZ 2 and 53% in FZ 3 according to the Environment Agency definition.

8. The site comprises agricultural land classified as grades 2, 3a and 3b. Grades 1, 2 and 3a are defined as 'best and most versatile agricultural land' and the application states that 62.5 hectares of the site are best and most versatile land. The site also contains some areas of trees, two tracks, a drain and a number of hedgerows.
9. The closest SSSI is Little Wittenham, 2.4 kilometres to the south east of the application site. This is also designated as a Special Area of Conservation (SAC). Culham Brake SSSI lies 2.8 kilometres to the north west.
10. Nuneham Park lies 1.3 kilometres to the north of the application site, beyond Culham Science Centre. This is a grade 1 registered 18th century landscape park surrounding a country house. It covers 480 hectares.
11. The villages of Clifton Hampden and Long Wittenham are designated Conservation Areas and each contains a number of listed buildings, the closest being grade II listed Lower Town Farmhouse and associated barn and granary at the west end of Clifton Hampden High Street approximately 220 metres from the north eastern application boundary. Culham station overbridge and ticket office 480 metres west of the application boundary are also listed (grade II and II* respectively.) Appleford also contains a number of listed buildings, but does not have a conservation area.
12. Public footpath 171/15 crosses the site from the north east to the south, connecting with the Thames Path. This would need to be diverted. There are no other rights of way within the site, but the Thames Path national trail runs along the north bank of the Thames immediately to the south.
13. The site is located approximately 11 km (7 miles) from RAF Benson, and it is therefore within the statutory safeguarding zone for managing bird strike risk.
14. The site is not within an AONB, however, the boundary of the North Wessex Downs AONB lies approximately 1.5 kilometres to the south east, at Little Wittenham. Wittenham Clumps lies approximately 3 km south east of the site.
15. The site is currently agricultural land and there are no other gravel workings in the immediate vicinity. The closest existing quarry is Bridge Farm, Appleford, which lies to the south west on the other side of the railway line and River Thames.

Details of Proposed Development

Mineral Extraction

16. It is proposed to extract 2.5 million tonnes of sand and gravel over a ten year period, with an average annual extraction rate of 250 000 tonnes. The proposed extraction area covers 76 hectares and would be worked in ten phases, each taking between 6 and 18 months to work. The site would be progressively restored as working was completed in each phase. Clay would be extracted along with the sand and gravel and used for onsite engineering works and would not be sold or transported off site. Phases would be worked in numerical order starting in the north west of the site and then progressing south and east around the plant site. The mineral under the plant site would be worked last.
17. The sand and gravel deposit is anticipated to be up to 4 metres deep, with Gault Clay lying beneath to be worked to provide an engineering material for sealing the sides of the excavations and restoration.
18. The remaining 28 hectares of the site area which would not be subject to extraction would be used for access, soil storage, landscaping and other operational uses.
19. 44 hectares of best and most versatile agricultural land would be disturbed and there would be an overall net loss of 15 hectares of best and most versatile agricultural land.
20. The working area would be dewatered by pumping the groundwater, to allow the mineral to be extracted dry, maximising recovery. Water would be pumped to settlement ponds in the centre of the site and then discharged to the adjacent ditch.
21. Soils and overburden would be stripped to expose the mineral and sand and gravel would then be dug using a mechanical shovel and transported to the plant site using a conveyor. Soil and overburden would be stored in noise and visual attenuation bunds up to 10 metres high.
22. Upon arrival at the plant site, extracted mineral would undergo initial screening at the head of the conveyor and then be processed through the wash plant to grade it into various sizes. It would then be stored in stocking areas before being exported by road.
23. It is proposed that there would be a 25 metre buffer between the quarry workings and the River Thames.

Minerals Processing Plant

24. The sand and gravel processing plant would be located in the central north part of the site closest to the access road.

25. The plant site would also include offices, welfare accommodation, and a weighbridge. There would be external lighting in this area, operational when necessary during working hours.
26. There would be a system of silt lagoons in two silt management areas to settle out the particles removed from the mineral in the processing. A clean water pond would also be required to feed the processing plant.
27. There would be parking spaces for 20 cars, 10 HGVs and 6 bicycles. The plant site would be surrounded in soil bunds between 5 and 10 metres high. There would be a 10 metre bund along the western plant site boundary, an 8 metre bund north of the silt lagoons, and 7 metre bunds to the east of the track running south east from the plant site, along which a diverted footpath would run. The bunds along the footpath would have gaps with straw bale acoustic barriers behind. The access road would have 2 metre high bunds on either side. There would also be 5m and 7m bunds on the northern plant site boundary, a 7m high bund in the north east corner and 5 and 7m high bunds on the plant site eastern boundary.
28. The development would create 5 jobs at the quarry and 10 driving jobs, for the duration of the development.
29. The processing plant would comprise a series of conveyors and screens. The sand and gravel would be screened into different sizes and washed using water to produce a variety of products for sale. The processing plant would be up to 7.5 metres high, up to 40 metres wide and 130 metres long.
30. It is proposed to raise land in the area where the access road and site office would be located, in order to bring them out of predicted peak flood levels. The plant and stockyard would be surrounded by bunds to mitigate noise impacts and these would be staggered with gaps between them to allow flood waters to flow.
31. The application originally included a concrete plant within the plant site, but the application was amended to remove this element of the proposals.

Flood compensation

32. An area in the north east corner of the site is identified for compensatory flood storage. This would involve the removal of soil over a 1.8 ha area to a maximum depth of 1.5m in order to level the area to 48m AOD.

Vegetation Removal and Landscaping

33. Sandy Bury vegetation strip would be removed to allow for mineral working. However, Grasshill Covert in the northern part of the site and

an unnamed wooded area in the south east of the site would be retained. The Environmental Statement identifies 43 trees and tree groups that would be removed.

34. There would be landscaping works to screen the development from the surrounding area. The landscaping works proposed include a quick growing tree belt on the eastern boundary and on the northern boundary between the site and the residential properties at Fullamoor Farm and Barns, gapping up the existing hedge to the west of the application site, a hedge along the length of the southern boundary which would screen the Thames Path from the workings, a new hedge along the concrete track with the re-routed footpath, improved planting around the site access and a tree belt and hedge along sections of the concrete track on the western boundary.

Restoration and Afteruse

35. The quarry void would be restored using materials from within the site. It is not proposed to import inert waste to achieve the proposed restoration. It is anticipated that restoration would be complete eleven years after the commencement of extraction.
36. The north western and north eastern parts of the site would be restored to agriculture. There would be a large lake to the south, which would be used for a quiet recreational use such as fishing or sailing. There would be a smaller wildlife lake surrounded by reed marsh and lowland meadow in the central/eastern part of the site. The silt ponds would be allowed to revegetate and develop into reed marsh and then wet woodland. The restoration would incorporate additional woodland planting. The applicant has offered long term (20 years) management of the part of the site to be restored to nature conservation.
37. Restoration would include woodland planting to replace vegetation removed during the operational phases. The area of woodland and length of hedgerows would increase by the completion of restoration compared to the current situation.
38. A bird management plan is proposed to minimise bird strike hazard from the water bodies left by the restoration.
39. There were some minor changes to the restoration plan following comments made during consultation. These changes included amended restoration contours in the eastern agricultural area, additional planting and minor changes to the shape of the lake.

Rights of Way

40. It is proposed to permanently divert the existing footpath 171/15 along an alternative route to the east of the workings to avoid the proposed area

of mineral extraction. No diversion would be needed to the Thames Path, which runs along the edge of the site.

41. New footpath routes would be created as part of the restoration. It is also proposed to provide an interpretation board as part of the restoration, including around the new lake with access from the Thames Path and from Clifton Hampden village. This would be located on the north westerly point of the footpath around the southern lake near to the SM. It would provide information about the archaeology of the area.

Traffic and Access

42. It is proposed to create a new access from the A415 and a 250m long internal road between the access and the plant site. This would have space for two vehicles to pass for the first 50 metres and then reduce to single track with passing places.
43. The development would typically generate 95 vehicle movements per day. The Transport Assessment states that on average there would be an additional 4 HGV movements per hour through Abingdon and an additional 6 HGV movements per hour along the A415 to the east of the site.
44. The applicant has proposed vehicle routeing to ensure that HGVs use only suitable routes. They have proposed that vehicles would turn either left or right out of the site onto the A415. Other suitable roads would be the A34, the A4074 and the A4183. The routeing would therefore ensure that construction traffic and HGVs related to the quarry operation would not travel on local roads through villages, including Culham, Clifton Hampden and Long Wittenham. The B4015 would also be prohibited.

Hours of Operation

45. The proposed hours of operation are 07.00-18.00 Mondays to Fridays and 07.00-13.00 on Saturdays. There would be no operations on Sundays or on Bank or Public holidays. These hours would apply to the quarry, the plant and to vehicle movements.

Highways Mitigation

46. The applicant has proposed improvements to the footway alongside the A415 at its junction with High Street in Clifton Hampden. The proposals include reclaiming a stretch of the northern verge as footway, widening the southern verge from 0.8 metre to 2 metres, installation of bollards to provide protection from passing vehicles and relocation of existing road signs and telegraph poles to accommodate this. These mitigation works would be funded by the applicant.

Environmental Impact Assessment

47. The application is supported by an Environmental Impact Assessment (EIA) and an Environmental Statement (ES) was submitted with the application. This covers the range of potential environmental impacts of the proposal. A summary of the findings can be found in Annex 2.

PART 2 – OTHER VIEWPOINTS

48. There were four periods of public consultation. The application was originally consulted on in April and May 2016. This resulted in a number of requests for further information which was submitted and consulted on.
49. Amendments made to the application when the further information was submitted included minor changes to the plans showing the development stages and the restoration plan. Most of the further information compromised amended chapters for the Environmental Statement.
50. The full text of the consultation responses can be seen on the eplanning website¹, using the reference MW.0039/16. These are also summarised in Annex 3 to this report.
51. The application is being reported to this Committee as objections have been received from a number of Parish and Town Councils, South Oxfordshire District Council, the local County Councillor, a local objector group, Oxford Green Belt Network, CPRE, Transport Development Control and the Transport Strategy and Policy team.
52. A total of 580 third party representations were received during the first round of consultation, these are summarised in Annex 4. 273 representations were received during the second round of consultation, primarily from people who had already objected who wished to reiterate their concerns. 128 representations were received during the third consultation. Objectors had been advised that their original comments would be taken into account and they only needed to write again if they had specific comments on the new information that was being consulted on.
53. The main concerns raised in representations were the impact on the countryside and historic environment, traffic, that the mineral provided is not necessary, flooding, amenity, inappropriate restoration, inadequate engagement with local communities, Green Belt and impact on ecology.
54. In addition to comments made by local residents, objections were received from local businesses including UKAEA at Culham Science Centre, these are also summarised in Annex 4. Representations were

¹ <http://myeplanning2.oxfordshire.gov.uk/swiftlg/apas/run/Wphappcriteria.display>

also received from John Howell MP for Henley, in which area the application site lies, and also from Ed Vaizey MP for Didcot and Wantage, which covers the villages of Long Wittenham and Appleford immediately adjacent to the site but on the other side of the Thames. Nicola Blackwood MP for Oxford West and Abingdon also wrote to forward a number of objection letters which had been sent to her. Simon Hoare MP for North Dorset also forwarded a letter sent to him.

PART 3 – RELEVANT PLANNING DOCUMENTS

Relevant planning documents and legislation (see Policy Annex to the committee papers)

55. In accordance with Section 70 of the Town and Country Planning Act 1990, planning applications must be decided in accordance with the Development Plan unless material considerations indicate otherwise.

Development Plan Documents

56. The Development Plan for this area comprises:
- Oxfordshire Minerals and Waste Local Plan Part 1: Core Strategy (OMWCS)
 - Oxfordshire Minerals and Waste Local Plan 1996 (saved policies) (OMWLP)
 - South Oxfordshire Local Plan 2011 (saved policies) (SOLP)
 - South Oxfordshire Core Strategy (adopted 2012) (SOCS)
57. The OMWCS was adopted in September 2017 and covers the period to 2031. The Core Strategy sets out the strategic and core policies for minerals and waste development, including a suite of development management policies. It is anticipated that Part 2 of the Plan will include Site Allocations and any further development management policies that may be necessary in relation to the allocated sites.
58. The OMWLP was adopted in July 1996 and covered the period to 2006. 46 policies within the OMWLP were 'saved' until the adoption of the OMWCS and 16 of these policies continue to be saved until the Part 2 Site Specific document is adopted. The saved policies are non-strategic site-related policies and none of them apply to the area proposed in this planning application. Therefore, they are not relevant to the determination of this planning application.

Other Policy Documents

59. The National Planning Policy Framework (NPPF) is a material consideration in taking planning decisions. Relevant sections include those on facilitating the sustainable use of minerals, meeting the challenge of climate change, flooding and coastal change, conserving and enhancing the natural environment.

60. The National Planning Policy Guidance (NPPG) contains specific advice on matters including flood risk, minerals, conserving and enhancing the historic environment, determining a planning application and natural environment.
61. Clifton Hampden and Burcot has been designated as a neighbourhood area by South Oxfordshire District Council and Clifton Hampden Parish Council is in the process of developing a Neighbourhood Plan. The area identified includes the application site and once approved the Neighbourhood Plan would form part of the development plan for the area. Clifton Hampden and Burcot have a Village Plan. This is not part of the development plan.
62. The publication version of the emerging South Oxfordshire Local Plan 2011-2033 (SOLP 2033) was published on the 11th October 2017. Following the publicity period it will be submitted to the Secretary of State after which there would be an Examination in Public with a view to adoption in summer 2018. Therefore, this emerging plan is a material consideration and its policies should be given the appropriate weight. Therefore, this emerging plan is a material consideration, although as it is not yet adopted its policies should be given limited weight.
63. Connecting Oxfordshire: Local Transport Plan 2015 – 2031(LTP) sets out Oxfordshire County Council's policy and strategy for developing the transport system in Oxfordshire to 2031 and is a material consideration.

Relevant Development Plan Policies

- OMWCS:

- M2 – Provision for working aggregate minerals
- M3 – Principal locations for working aggregate minerals
- M5 – Working of aggregate minerals
- M10 – Restoration of mineral workings
- C1 – Sustainable development
- C2 – Climate Change
- C3 – Flooding
- C4 – Water environment
- C5 – Local environment, amenity and economy
- C6 – Agricultural land and soils
- C7 – Biodiversity and Geodiversity
- C8 – Landscape
- C9 – Historic environment and archaeology
- C10 – Transport
- C11 – Rights of way
- C12 – Green Belt

- The saved policies of the SOLP 2011:

G2 – Protection and enhancement of the environment
GB4 – Visual Amenity in the Green Belt
C3 – The River Thames and its valley
C6 – Biodiversity conservation
C9 – Landscape features
CON5 – The setting of listed buildings
CON7 – Conservation areas
EP1 – Pollution prevention
EP2 – Noise and vibrations
EP3 – Light pollution
EP6 – Surface water protection
EP7 – Groundwater protection
R8 – Public rights of way

•SOCS

CSEN1 – Protection of landscape character
CSEN2 – Green Belt
CSEN3 – Historic Environment
CSB1 – Biodiversity
CSG1 – Green Infrastructure
CS1 – Presumption in favour of sustainable development

Relevant Emerging Plan Policies

•South Oxfordshire Local Plan 2011-2033 – Final Publication Version (SOLP 2033)

TRANS3 – Safeguarding land for strategic transport schemes

PART 4 – ASSESSMENT AND CONCLUSIONS

Comments of the Director for Planning and Place

64. The NPPF sets out a presumption in favour of sustainable development (paragraph 14), which is supported by policy C1 of the OMWCS and CS1 of the SOCS. This means taking a positive approach to development and approving an application which accords with the development plan without delay, unless material considerations indicate otherwise.
65. All planning applications must be determined in accordance with the Development Plan, unless material considerations indicate otherwise, in accordance with the Town and Country Planning Act 1990. The key planning policies are set out above and discussed below in accordance with the key planning issues.
66. The key planning issues are:
 - i) Prematurity

- ii) Need for sand and gravel
- iii) Green Belt
- iv) Location
- v) Landscape
- vi) Visual impacts
- vii) AONB
- viii) Traffic
- ix) Rights of way
- x) Potential amenity impacts
- xi) Flood risk and water environment
- xii) Archaeology and historic environment
- xiii) Biodiversity
- xiv) Restoration
- xv) Soils and agriculture
- xvi) Socio- economic
- xvii) Cumulative impact

Prematurity

67. A number of representations have raised an objection to the application on the grounds of prematurity, stating that it pre-empts the Oxfordshire Minerals and Waste Local Plan.
68. Most of the representations on this topic were received in response to earlier rounds of consultation. Prematurity is no longer an issue in relation to the Oxfordshire Minerals and Waste Local Plan Part 1 – Core Strategy (OMWCS), which was adopted in September 2017, which was after the initial consultation periods but prior to the determination of this application.
69. Paragraph 216 of the NPPF states that from the day of publication, decision-takers may also give weight to relevant policies in emerging plans.’
70. There is not yet a published draft of the Oxfordshire Minerals and Waste Local Plan Part 2, which will include specific sites. Therefore, it is not possible to give weight to any policies in that plan and prematurity is not a consideration in relation to the Part 2 plan at this stage.
71. The NPPF sets out the presumption in favour of sustainable development and the NPPG provides guidance on the circumstances where it may be justifiable to refuse planning permission on the grounds of prematurity (paragraph 14):
- ‘...arguments that an application is premature are unlikely to justify a refusal of planning permission other than where it is clear that the adverse impacts of granting permission would significantly and demonstrably outweigh the benefits, taking the policies in the Framework and any other material considerations into account. Such circumstances are likely, but not exclusively, to be limited to situations where both:

- a) the development proposed is so substantial, or its cumulative effect would be so significant, that to grant permission would undermine the plan-making process by predetermining decisions about the scale, location or phasing of new development that are central to an emerging Local Plan or Neighbourhood Planning; and
 - b) the emerging plan is at an advanced stage but is not yet formally part of the development plan for the area.
72. Refusal of planning permission on grounds of prematurity will seldom be justified where a draft Local Plan has yet to be submitted for examination, or in the case of a Neighbourhood Plan, before the end of the local planning authority publicity period. Where planning permission is refused on grounds of prematurity, the local planning authority will need to indicate clearly how the grant of permission for the development concerned would prejudice the outcome of the plan-making process.'
73. With regard to part a) the OMWCS paragraph 4.19 identifies a need for approximately 5 million tonnes (Mt) of additional sand and gravel provision over the plan period). This has since increased to around 5.98 Mt due to permitted reserves at Thrupp Farm Quarry no longer being included in the landbank. The 2.5 Mt of mineral proposed to be produced by this development would comprise almost 50% of this identified mineral need. Whilst it is considered that the development proposed is significant in relation to the provision currently identified within the OMWCS, it would not satisfy the entire assessed need. It would not prejudice the policies of the OMWCS and a policy concerning sharp sand and gravel will be required in any event.
74. Further, it is not considered that part b) is met. The Part 1 plan is adopted and the Part 2 plan is not yet published in draft form.
75. The Council sought Counsel's advice on the concerns relating to prematurity. Having taken into account the legal advice as well as the NPPG, the NPPF, the ongoing need to plan for mineral extraction, and all of the representations concerning prematurity, I do not consider that this application would undermine the emerging local plan process in the circumstances, particularly in light of the very early stage of Part 2 of the Core Strategy, and that a refusal on prematurity grounds would not be justified.

Need for the Mineral

76. The NPPF contains a 'presumption in favour of sustainable development,' and Section 13 specifically promotes 'facilitating the sustainable use of minerals'. It clearly sets out at paragraph 144 that when determining planning applications, local planning authorities should 'give great weight to the benefits of mineral extraction, including to the economy', which is one of the strands of sustainable development.

77. Paragraph 142 of the NPPF states that ‘minerals are essential to support economic growth and our quality of life.’ The mineral industry plays a large part in the construction industry and is vital to support the current demand for new housing, schools, roads and major infrastructure projects.
78. Paragraph 145 of the NPPF states that minerals planning authorities (MPAs) should plan for a steady and adequate supply of aggregates by, amongst other things:
- Preparing an annual Local Aggregate Assessment (LAA);
 - Making provision for the land-won and other elements of their LAA in their minerals plans...such provision should take the form of specific sites, preferred areas and/or areas of search and locational criteria as appropriate;
 - Taking account of National and Sub National Guidelines on future provision;
 - Using landbanks of aggregate minerals reserves principally as an indicator of the security of supply, and to indicate the additional provision that needs to be made for new aggregate extraction and alternative supplies in mineral plans;
 - Making provision for the maintenance of landbanks of at least 7 years for sand and gravel... taking into account productive capacity of permitted sites;
 - Ensuring that large land banks bound up in very few sites do not stifle competition; and
 - Calculating and maintaining separate landbanks for any aggregate materials of a specific type or quality which have a distinct and separate market.
79. OMWCS policy M2 requires that planning permissions be granted to enable a landbank to be maintained for sharp sand and gravel with at least 7 years supply in accordance with the annual requirement rate in the most recent Local Aggregate Assessment (LAA), taking into account the need to maintain sufficient productive capacity to enable that rate to be realised. It also states that provision will be made to enable the supply of 1.015 million tonnes per annum (mtpa) of sharp sand and gravel.
80. OMWCS policy M2 identifies the total requirement over the Plan Period 2014 to 2031 for sharp sand and gravel to be 18.270 Mt. Taking into account sales in 2014 and 2015, permitted reserves at the end of 2015 (excluding those that are expected to be worked after the plan period) and permissions granted in 2016, OMWCS paragraph 4.19 identifies a need for a further 5 Mt of sharp sand and gravel over the plan period. Taking into account sales from 2016 and permitted reserves at the end of 2016, this has now been recalculated as 5.979 Mt. The increase in the remaining requirement is due to permitted reserves at Thrupp Farm

Quarry no longer being included in the landbank due to the planning permission going into suspension.

81. The NPPG makes it clear that landbanks are principally a monitoring tool to provide MPAs with early warning of possible disruption to the provision of an adequate and steady supply of aggregate. It should be used as a trigger for a MPA to review the current provision and consider a review of the allocation of sites. At paragraph 82, the NPPG says that low landbanks may be an indicator that suitable applications should be permitted as a matter of importance.

82. The NPPG makes it clear that there is no maximum landbank level and each application for minerals extraction must be considered on its own merits (paragraph 84). It goes on to set out reasons why an application for mineral extraction might be brought forward where an adequate landbank exists, these include:
 - Significant future increases in demand that can be forecast with reasonable certainty;
 - The location of the consented reserve is inappropriately located relative to the main market areas;
 - Known constraints on the availability of consented reserves that might limit output over the plan period.

83. The Aggregates Monitoring Survey 2016: Quarry Sales and Reserves in Oxfordshire shows that permitted reserves of sharp sand and gravel in Oxfordshire totalled 11.383 Mt at the end of 2016. No additional reserves have been granted permission so far in 2017. Sales of sharp sand and gravel in 2016 are recorded as 651 000 tonnes and although they fell back from this level in 2015, from 2009 there has been a trend of increasing sales. The average of 10 years sales of sharp sand and gravel (2007-2016) was 595 000t and the average of 3 years sales (2014-2015) was 686 000t. The current Local Aggregate Assessment provision rate for sharp sand and gravel, in the Oxfordshire Local Aggregate Assessment 2014, is 1.015 Mt per annum. Based on this figure (in line with OMWCS policy M2), the landbank for sharp sand and gravel at the end of 2016 was 11.2 years.

84. Therefore, new permissions are not currently needed to maintain a landbank of at least 7 years. However, the NPPF is clear that a 7 year landbank is a minimum and not a maximum level to be maintained. The fact that the landbank is currently more than 7 years is not a reason to refuse planning permission.

85. Objections have been raised in representations received regarding the lack of need for mineral. However, as set out above, landbanks are a minimum and provide an indicator for when reserves are critically low. They are not to be used as a reason to refuse applications for further mineral extraction.

86. Approximately half of the current permitted reserves of sharp sand and gravel are at a single site (Gill Mill Quarry) and those reserves are expected to be worked over a period up to 2036. Therefore, it would not be possible for Oxfordshire's production of sharp sand and gravel to be maintained at the LAA level of 1.015 mtpa throughout the theoretical period of the current landbank (11.2 years available from the end of 2016), since the reserves at other sites are expected to be worked out within a shorter period. Some quarries are expected to be worked out in less than 7 years (the minimum landbank period required by the NPPF), which would result in a decrease in production as quarries close. Currently, it is expected that production capacity will fall below the policy M2 provision level (LAA requirement) of 1.015 mtpa in 2019. In accordance with OMWCS policy M2, and the NPPF paragraph 145 requirement that MPAs should ensure that large landbanks bound up in very few sites do not stifle competition, consideration must be given to the need to maintain sufficient productive capacity to enable the annual requirement rate in the LAA to be realised.
87. In view of this, notwithstanding the current sharp sand and gravel landbank being significantly more than 7 years, there is a strong argument that there is a need for further reserves to be permitted to ensure the continuation of a steady and adequate supply of aggregates at the required level established in the LAA, and in accordance with OMWCS policy M2.
88. The Inspector's Report on the Examination of the Core Strategy (Appendix A – Interim Report, paragraph 117) noted that Oxfordshire is an area likely to experience considerable growth with potential housing construction well above recent rates.
89. National policy and guidance make it clear that the existence of a landbank greater than 7 years is not in itself justification for a refusal of permission. It also indicates that the productive capacities of the sites that make up the landbank, and the consequent limitations this imposes on overall output, and having a large part of the landbank contained at a single site are factors that may justify additional reserves being permitted notwithstanding the existence of a landbank of more than 7 years.
90. OMWCS policy M5 (first paragraph) is also relevant. This states the circumstances in which permission will be granted for the working of aggregate minerals in advance of the Site Allocations Document being adopted, these being where it would contribute towards meeting the requirement for provision in policy M2, provided the proposal is in accordance with the locational strategy in policy M3. The application site lies within 'The Thames and Lower Thame Valleys area from Oxford to Cholsey' sharp sand and gravel strategic resource area that is identified in policy M3 as a principal location for aggregate minerals extraction. The last paragraph of policy M3 seeks to achieve an approximately equal split of production capacity for sharp sand and gravel between northern and southern Oxfordshire by 2031. The current situation is that

significantly more than half of permitted reserves and production capacity are at sites in northern Oxfordshire, whereas the split of demand between northern and southern Oxfordshire is believed to be approximately 50:50. To achieve an equal split of production capacity between northern and southern Oxfordshire, policy M3 seeks to locate approximately 75% of the additional tonnage requirement in southern Oxfordshire and 25% in northern Oxfordshire. The application would contribute towards achieving this and would be in line with the spatial strategy in policy M3.

91. This is also supported by NPPG paragraph 084, which includes amongst the reasons why an application for mineral extraction might be brought forward where an adequate landbank exists: 'The location of the consented reserve is inappropriately located relative to the main market areas.'
92. It is not necessary to consider policies relating to clay extraction as clay would only be extracted for use in on-site engineering works.

Green Belt

Green Belt Policy

93. NPPF paragraph 79 confirms that the Government attaches great importance to Green Belts and states that the essential characteristics of Green Belts are their openness and permanence.
94. NPPF paragraph 80 sets out the five purposes that Green Belts serve. These are to check the unrestricted sprawl of large built-up areas; to prevent neighbouring towns merging into one another; to assist in safeguarding the countryside from encroachment; to preserve the setting and special character of historic towns; and to assist in urban regeneration, by encouraging the recycling of derelict and other urban land.
95. NPPF paragraph 87 states that inappropriate development is, by definition, harmful to the Green Belt and should not be approved except in very special circumstances. This is also set out in OMWCS policy C12.
96. NPPF paragraph 88 states that when considering any planning application, local planning authorities should ensure that substantial weight is given to any harm to the Green Belt. 'Very special circumstances' will not exist unless the potential harm to the Green Belt by reason of inappropriateness, and any other harm, is clearly outweighed by other considerations.
97. NPPF paragraph 90 states that certain forms of development are not inappropriate in the Green Belt providing that they preserve the openness of the Green Belt and do not conflict with the purposes of

including land in the Green Belt. Mineral extraction and engineering operations are listed as examples of these forms of development that are not necessarily inappropriate.

98. SOCS policy CSEN2 states that the special character and landscape setting of Oxford will be protected by the Oxford Green Belt.
99. SOLP policy GB4 states that where new development is permitted in the Green Belt it should be designed and sited in such a way to minimise its impact on the open nature, rural character and visual amenity of the Green Belt.
100. OMWCS policy C12 states that proposals that constitute inappropriate development in the Green Belt, will not be permitted except in very special circumstances. 'Very special circumstances' will not exist unless the potential harm to the Green Belt by reason of inappropriateness, and any other harm, is clearly outweighed by other considerations.

Consideration of whether development is inappropriate in the Green Belt

101. NPPF paragraph 90 states that mineral extraction is not inappropriate in the Green Belt, provided that it preserves the openness of the Green Belt and does not conflict with the purposes of including land in the Green Belt. Therefore, it must be considered whether development would preserve the openness of the Green Belt and whether it would conflict with the purposes of including land in the Green Belt, in order to confirm whether the development proposed for this mineral extraction operation is inappropriate development in the Green Belt. This is considered below in relation to each element of the proposals.

Mineral Extraction and conveyors

102. It is not considered that the extraction of mineral would conflict with the five purposes of including land in the Green Belt as set out in NPPF paragraph 80. The development is not urban in nature and would not conflict with the purposes of checking unrestricted sprawl of large built up areas, preventing towns merging into each other or safeguarding the countryside from encroachment. There has been no objection from the relevant heritage consultees and it is considered that the development would not conflict with the purpose of preserving the setting and special character of historic towns, the fourth purpose of including land in the Green Belt. The fifth purpose is to assist in urban regeneration by recycling derelict and other urban land. The development would not conflict with this purpose.
103. Mineral would be extracted from the land using a hydraulic excavator and transported on a field conveyor. It is considered that the extraction of the mineral and transport within the site would not have an impact on the openness of the Green Belt as neither the excavator nor the conveyor would enclose any space or land and they would be mobile

and relatively small and low. The mineral extraction plant and conveyor are considered to be reasonably necessary and integral to the extraction of mineral in any case.

104. Mineral can only be extracted where it is found and this is one reason why it is not necessarily inappropriate in the development in the Green Belt. It is also by its nature temporary development, although this does not preclude the need to consider whether it would be inappropriate.
105. Therefore, the mineral extraction, mobile plant required to undertake mineral extraction and the field conveyor system are not considered to be inappropriate development in the Green Belt.

Processing Plant

106. Following extraction, mineral would be transported by conveyor within the site and processed for export. The plant site includes the wash plant and associated hardstandings and temporary buildings. The height of the wash plant would be up to 7.5 metres. Therefore, it is considered that this structure would have an impact on the openness of the Green Belt. Therefore, it is considered to be inappropriate development in the Green Belt.

Soil storage bunds

107. The soil storage bunds would be an integral and necessary part of the mineral extraction operation. They would also be temporary and their volume and alignment would vary at different phases of the development. However, I consider that they would have some impact on the openness of the Green Belt whilst they are in place as they would be up to 10 metres high and limit views across the site. Therefore, this aspect of the development would also be inappropriate development in the Green Belt due to its impact on openness.

Access, hardstandings, silt ponds

108. The development would also involve the formation of a new access, silt ponds and hardstandings. It is considered that these would comprise an integral part of the mineral extraction development and also comprise engineering operations and therefore fall under paragraph 90 of the NPPF. They would not enclose space or be high and therefore would not have an impact on the openness of the Green Belt. Therefore, these elements are not considered to be inappropriate.

Conclusion – inappropriate development

109. As set out above it is concluded that the mineral extraction itself, including machinery used to remove the mineral and conveyors used to transport it across the site, is not inappropriate development. Neither is the proposed access, hardstandings and silt ponds.

110. The proposed processing plant and soil storage bunds are considered to be inappropriate development in the Green Belt and therefore NPPF paragraphs 87 and 88 must be considered.

Very Special Circumstances

111. NPPF paragraph 87 states that inappropriate development is, by definition, harmful to the Green Belt and should not be approved except in very special circumstances. Case law has established that if one element of a proposal is inappropriate then the whole development must be assessed as if it is inappropriate. Therefore very special circumstances are required in relation to the development as a whole, not only the specific elements assessed above as inappropriate.

112. NPPF paragraph 88 states that substantial weight should be given to any harm to the Green Belt and very special circumstances will not exist unless potential harm to the Green Belt by reason of inappropriateness, or any other harm, is clearly outweighed by other considerations.

Applicant's position on Green Belt

113. The applicant has provided very special circumstances in relation to the processing plant and bunding elements of the proposal, because they conclude that these would be inappropriate development in the Green Belt, because of the effect on openness and because they could be perceived as encroachment for the period of working, contrary to the third of the listed purposes of the Green Belt in NPPF paragraph 80. The applicant concludes that the other elements of this development are not inappropriate development.

114. In summary, the applicant's very special circumstances comprise:

- a. The proposed plant and bunds are necessary infrastructure for a quarry and it would be nonsensical for the NPPF to state that mineral extraction need not be inappropriate development in the Green Belt, if this did not include some associated infrastructure.
- b. The buildings have been designed to minimise their physical presence and a condition could be used to ensure that they are only used for mineral worked from this quarry.
- c. On-site processing is necessary because if the mineral dug from this site was processed elsewhere it would not be possible to implement a satisfactory restoration, because reject material would not be available from the processing, also there would be additional vehicle movements and a suitable site elsewhere would need to be found for processing.

- d. Bunds cannot be placed in the quarry voids to eliminate impact on openness because this would delay restoration and prevent the bunds from mitigating amenity impacts.
- e. The temporary nature of the development means that there would be no permanent encroachment or impact on openness.
- f. The restoration proposals would enhance the beneficial use of the Green Belt, by increasing access, opportunity for outdoor recreation and biodiversity, as encouraged by NPPF paragraph 81.

Officer view on Green Belt

115. As set out in the section on need, although Oxfordshire currently has sufficient permitted reserves of sharp sand and gravel to meet the minimum required landbank of 7 years, it is considered that there is a need for further reserves to be permitted in order to ensure the continuation of a steady and adequate supply of aggregates at the level established in OMWCS policy M2.
116. At present over half of the permitted reserves are at a single site (Gill Mill Quarry) in the west of the county. The annual production capacity is limited by the plant at this site which the operator has stated has an output of up to 400,000 tonnes per year and it is estimated that it will take at least until 2035 to extract all of the permitted reserves.
117. NPPF paragraph 145 requires that MPAs should ensure that large land banks bound up in very few sites do not stifle competition. The large permitted reserves at Gill Mill Quarry are due to be worked over a long time period, limiting the amount of aggregate that can be supplied to the market in each year. Most other permitted sites are expected to be worked out within a shorter period than the 7 year minimum landbank period required by the NPPF. This would result in a fall in the total number of production sites and therefore a fall in production capacity within coming years. OMWCS policy M2 states that permission will be granted for sharp sand and gravel working to enable a landbank of at least 7 years to be maintained in accordance with the annual requirement rate in the LAA, taking into account the need to maintain sufficient production capacity to enable the rate to be realised. The current LAA rate for sharp sand and gravel is 1.015 mtpa. The total annual production capacity of quarries with permitted reserves in Oxfordshire was estimated to be approximately 1.16 Mt at the start of 2017, but on the basis of current permissions this is expected to fall to approximately 0.81 Mt by 2023 towards the end of the 7 year landbank period and to approximately 0.55 Mt within ten years.
118. On the basis of current permitted reserves, despite there being a landbank of sharp sand and gravel of more than 7 years, the total production capacity would not be sufficient to enable the annual

requirement rate in the LAA to be maintained at least throughout the minimum landbank period, as required by OMWCS policy M2.

119. In addition, quarries sometimes produce mineral at levels under what is anticipated and permitted, for example due to temporary factors such as being closed due to flooding in winter months, as was the case at Gill Mill quarry in early 2014. Therefore, to meet OMWCS policy M2, in practice it might be necessary to have permissions equating to a higher total production capacity.
120. OMWCS policy M3 states that sites allocated for sharp sand and gravel working to meet the requirement in policy M2 will be located such that approximately 25% of additional tonnage is in northern Oxfordshire and 75% of the additional tonnage requirement is in southern Oxfordshire, to achieve an approximately equal split of production capacity between northern and southern Oxfordshire by 2031. Northern Oxfordshire is defined as West Oxfordshire and Cherwell Districts and southern Oxfordshire comprises South Oxfordshire and the Vale of White Horse Districts. At the start of 2017 75% of the total permitted reserves of sharp sand and gravel were in northern Oxfordshire.
121. OMWCS policy M5 states that, prior to adoption of the Site Allocations Document, proposals for aggregate mineral working should be in accordance with the locational strategy in OMWCS policy M3. Therefore, there is policy support for additional reserves to be permitted in the southern part of the county. This application could contribute towards that.
122. Taken together, the need for additional permissions to enable annual requirement rates to be met at least throughout the minimum landbank period and the need to rebalance supply between the north and south of the county are considered to comprise a need for new mineral permissions in this area of the county. This need for the development is considered to be a very special circumstance for this development to take place in the Green Belt.
123. Although mineral extraction can be carried out without an on-site processing plant, it is usual for sand and gravel extraction operations to include on-site processing and extraction would only generally take place without on-site processing if there was a specific reason that it could not take place. The presence of the processing plant makes the development more sustainable as it avoids the additional vehicle movements which would be needed to take the mineral to be processed elsewhere. Overall, the processing plant is considered to be an integral part of the mineral extraction, for which there is a strong need, therefore it is considered that very special circumstances also apply to the processing plant.
124. The extraction of mineral will inevitably lead to soils which would need to be stockpiled during the extraction period prior to use in the site's

restoration. The soil storage bunds are proposed be located in a position which would mitigate impacts from the quarry, including noise and dust and although this would lead to an impact on openness, it is considered to be outweighed by the fact that the storage of soils is an integral part of the mineral extraction. It is considered that the very special circumstances applying to the development as a whole extend to the proposed bunds, as the development would not be able to take place without them.

Green Belt Conclusions

125. NPPF paragraph 88 and OMWCS policy C12 states that very special circumstances will not exist unless the potential harm to the Green Belt by reason of inappropriateness, and any other harm, is clearly outweighed by other considerations. There would be some harm to the Green Belt through inappropriateness of the processing plant and bunds. However this harm would be limited by the temporary and phased nature of the development and the fact that in the long term the proposals have the potential to enhance the beneficial use of the Green Belt, in accordance with NPPF paragraph 81. The harm that would be caused by the development by reason of inappropriateness would be outweighed by the need to rebalance the supply of mineral in the county and to provide sufficient processing capacity to meet annual requirements. It is not considered that there would be any other harm.

Location

126. The application site lies within 'The Thames and Lower Thame Valleys area from Oxford to Cholsey' sharp sand and gravel strategic resource area that is identified in policy M3 of the OMWCS as a principal location for aggregate minerals extraction within which sites for mineral working will be allocated in the Part 2 Minerals and Waste Local Plan.

127. Policy M3 seeks to rebalance supply and demand of sharp sand and gravel across the County, by setting out that site allocations will be located such that approximately 25% of additional tonnage requirements will be in northern Oxfordshire and 75% in southern Oxfordshire. The current situation is that significantly more than half of permitted reserves and production capacity are at sites in northern Oxfordshire (and mainly within West Oxfordshire District) whereas the split of demand between northern and southern Oxfordshire is believed to be nearer 50:50. This indicates that any additional reserves and production capacity should preferably be provided within southern Oxfordshire, as set out in paragraphs 4.28 – 4.30 of the OMWCS. This application would therefore help to achieve this aim, enabling local supplies of aggregate for construction and economic growth in this part of the county, including the Science Vale area and therefore accord with policy M3.

128. Mineral can only be worked where it is found. At this time the Site Allocations Plan (Part 2 of the Core Strategy) is not yet available, even in a draft form.
129. OMWCS policy M5 states that prior to the adoption of the Part 2 Minerals and Waste Local Plan permission will be granted for the working of aggregate minerals where it would contribute towards the requirement for provision identified in policy M2 and is in accordance with the locational strategy in policy M3 and the core policies for minerals and waste (C1-C12). The proposed development would contribute towards the requirement for provision as identified within policy M2 and as discussed elsewhere in this report, it is also considered to accord with policies C1 – C12.

Landscape

130. Policy C8 of the OMWCS requires that minerals development respects and where possible enhances local landscape character and are informed by landscape character assessment. It states that proposals shall include adequate and appropriate measures to mitigate adverse impacts.
131. SOLP policy C3 states that the distinctive character of the River Thames and its valley will be maintained and where possible enhanced. Proposals for any form of development which detracts from its special character will not be permitted. SOLP policy C9 states that development will not be permitted if it would cause the loss of a landscape feature which makes an important contribution to the local scene, or contains important wildlife habitat, or has important historical value.
132. SOLP policy G2 states that the district's countryside, settlements and environmental resources will be protected from adverse developments. SOCS policy CSEN1 states that the district's distinct landscape character and key features will be protected against inappropriate development and where possible enhanced. The landscapes and waterscapes of the River Thames corridor will be maintained and where possible enhanced.
133. The application site does not lie within an AONB, but is within 1.5km of its boundary and therefore could be considered to be within its setting. The southern part of the site is adjacent to the Thames. The land is currently agricultural and falls into three Oxfordshire Wildlife and Landscape Study (OWLS) landscape types; river meadowlands (southern part of site and river corridor), terrace farmland (majority of the site), and vale farmland (area to the north including site access).
134. The applicant's Landscape and Visual Assessment (LVIA) acknowledges that without mitigation there would be adverse landscape impacts resulting from the disturbance of land, changes to landform, loss of hedgerow and diversion of footpath, changes to the landscape character,

intrusion to scenic beauty and disturbance to the recreational experience. However, it concludes that the mitigation measures proposed would adequately mitigate most landscape effects. The proposed mitigation measures include retention of some woodland, advance planting, woodland management, stand-off from the Thames Path, progressive restoration, restoration of the field pattern and biodiversity gains through the site restoration.

135. The council's landscape advisor initially raised concerns about the methodology and conclusions of the applicant's LVIA and advised that he considered it highly likely that that proposals would lead to significant adverse landscape and visual effects over an extended period, leading to major and unacceptable impacts.
136. In response to the landscape advisor's concerns, the applicant amended the proposals to provide for increased advance planting to improve the screening and mitigation and increase the enclosure of the site during the workings. The Landscape Advisor confirmed that subject to minor amendments to the detail, to be developed through detailed proposals required by condition, the revised landscape mitigation measures were sufficient to remove the previous objection. Therefore, subject to a condition requiring the implementation of agreed landscape mitigation measures, the development is considered to be acceptable in terms of impacts on landscape and it is not considered that there is a conflict with policies protecting landscape including OMWCS policy C8; SOLP policies C3, C9 and G2 and SOCS policy CSEN1.

Visual Impacts

137. In addition to the impacts on the wider landscape, the proposals would have visual impacts for individual properties in close proximity to the site. OMWCS policy C5 states that proposals for mineral development shall demonstrate that they will not have an unacceptable adverse impact on residential amenity, the local environment or the local economy including from visual intrusion.
138. The quarry workings themselves would have the potential for visual impacts, and so would the proposed screening bunds in the plant site area, which would be up to 10 metres high.
139. A number of high soil bunds are proposed in the plant site area in order to store soils and reduce the impacts of noise from the processing plant. The highest bund would be 10 metres and there would be an 8 metre high bund directly south of the residential properties at Fullamoor Farmhouse and bunds. Concerns have been raised about the visual intrusion caused by these bunds.
140. These potential visual impacts are also assessed in the LVIA, which found that there would be major/moderate adverse effects in the winter and spring on properties at Fullamoor Farmhouse and Barns. This would

be reduced by foliage in the summer and autumn. The visual impact would principally come from views of the grassed bunds.

141. The amended advance planting proposals would provide additional screening of the quarry and bunds for the properties at Fullamoor Farm and Barns as it is proposed to implement a quick growing willow and poplar block up to 4.5 metres high between the 8m high bund and the properties. A supplement to the LVIA concludes that this would provide additional screening of the bunds and would be effective in winter as well as summer. It would reduce views across the valley, but these could be re-instated if the woodland is removed following restoration.
142. Overall, it is considered that the visual impacts on individual properties would be reduced to acceptable levels given the mitigation proposed. The advance planting proposals would be secured by planning condition. Subject to this, the development is considered to be in accordance with OMWCS policy C5, in terms of amenity impacts arising from visual intrusion.

AONB

143. Paragraph 115 of the NPPF places great weight on conserving landscape and scenic beauty in National Parks, the Broads and Areas of Outstanding Natural Beauty (AONBs), which have the highest status of protection in relation to landscape and scenic beauty. Paragraph 116 states that planning permission for major development in these areas should be refused except in exceptional circumstances.
144. Policy C8 of the OMWCS states that great weight will be given to conserving the landscape and scenic beauty of AONBs, with high priority given to the enhancement of their natural beauty. Policy CSEN1 of the SOCS, requires that planning decisions have regard to the setting of AONBs. It goes on to say that proposals which support the economies and social well-being of the AONBs and their communities, including affordable housing schemes, will be encouraged provided they do not conflict with the aims of conservation and enhancement.
145. The application site could be considered to be within the setting of the AONB as it is within 1.5km of its boundary.
146. The North Wessex Downs AONB unit raised concerns during the original consultation. They were concerned that the development might harm views in and out of the AONB, in particular from Wittenham Clumps. They were also concerned about the impact on users of the Thames Path. They asked for changes to the size and shape of the restoration waterbodies and woodland areas. The applicant did not amend the waterbodies or woodland in response to these comments and stated that the restoration scheme is limited by the availability of restoration material and the woodland planting reflects the configuration of existing planting

on site. The North Wessex Downs AONB unit did not respond to subsequent consultations.

147. It is considered that the development has the potential to affect the setting of the AONB, however impacts would be limited by the fact that extraction would be phased and progressively restored, minimising the amount of land in active quarrying use at any point in time. The presence of the quarrying operation in the setting of the AONB would also be temporary and the restoration to agriculture and lakes is considered generally compatible with the location in the setting of an AONB. Overall, the proposals are not considered to conflict with development plan policy aimed at protecting AONBs and their setting.

Traffic

148. NPPF paragraph 32 states that all development that generates a significant amount of movement should be supported by a Transport Statement or Transport Assessment. Decisions should take account of whether opportunities for sustainable transport modes have been taken up, safe and suitable access to the site can be achieved and whether improvements can be undertaken within the transport network that cost effectively limit the significant impacts of the development. It goes on to state that development should only be refused on transport grounds where the residual cumulative impacts of the development are severe.
149. Connecting Oxfordshire: Local Transport Plan 2015 – 2031 (LTP) policy 02 states that Oxfordshire County Council will manage and, where appropriate, develop the county's road network to reduce congestion and minimise disruption and delays, prioritising strategic routes.
150. Transport Development Control (commenting in the County Council's statutory role as Local Highway Authority) has objected to this application because they consider it does not comply with NPPF paragraph 32 and LTP policy 02. They consider that the impacts of the development would be severe, so as to justify refusal. They note that excessive queuing has been observed at the Clifton Hampden junction at peak times and at peak times queuing at the Culham Bridges results in blocking of the bridge and adjacent junctions, therefore given the existing flows on the local highway network, the addition of even a few additional vehicle movements is disproportionate and may add to significantly to delays. The Transport Development Control team are concerned about the impact on road safety due to the increased likelihood of rear end shunt collisions resulting from queuing. They are also concerned about amenity and health impacts of the increased vehicle movements due to increased particulate and carbon dioxide emissions from idling vehicles.
151. Policy C10 of the OMWCS states that minerals development will be expected to make provision for safe and suitable access to the advisory lorry routes shown on the Oxfordshire Lorry Routes Maps, in ways that

maintain and, if possible lead to improvements in, the safety of all road users, the efficiency and quality of the road network and residential amenity including air quality. The objection from Transport Development Control indicates that the proposal would not maintain the safety and efficiency of the network, or amenity. Therefore, it is considered that the proposal is contrary to OMWCS policy C10 in this respect.

152. OMWCS policy C10 also requires that where minerals will be transported by road, they should be located so as to minimise road distance to locations of demand. The proposals are considered to comply with this part of the policy as the proposed quarry would serve the local area where there is expected to be demand, including Wallingford, Didcot, Abingdon, Oxford and other parts of south Oxfordshire.
153. Regarding sustainable transport modes, it is considered that there are no practical opportunities for more sustainable transport modes at this site. Although it is in close proximity to a railway line, there is no rail head or siding to facilitate loading or unloading. Although the site is also adjacent to the river, the mineral worked here is bound for local markets and so transport by river is not practical to take the mineral to construction sites in the local area.
154. A new access road is proposed and measures have been incorporated into the design to mitigate the impacts, including a kink to prevent direct views into the site and bunds on either side to reduce visual impact. The new access road is acceptable in technical terms and it is concluded that the development provides suitable access into the site from the highway network.
155. The applicant has submitted a plan showing which routes would be used by HGVs, these are the A415, A34, A4183 and the A4074. Other roads, including the B4015 and minor roads through local villages would not be used. Transport Development Control have confirmed that these routes are acceptable and that if permission is granted for the development a routeing agreement would be needed to ensure that other routes are not used.
156. Improvements to the existing transport network have been proposed to mitigate the impact of additional HGVs. These include the new access to the site and footway improvements in Clifton Hampden. Notwithstanding their overall objection, Transport Development Control has welcomed the highways mitigation measures proposed.
157. In terms of the new access, the proposed highway mitigation works and the routeing arrangements, the proposals, subject to conditions and legal agreements, are considered to comply with relevant transport policy, including the NPPF and OMWCS policy C10.

158. However, the proposal is contrary to relevant transport policy, including NPPF paragraph 32, LTP policy 02 and OMWCS policy C10 in terms of the impacts that the proposed additional vehicle movements would have on the road network. It is considered that these impacts would be severe and would include increased delays, increased likelihood of accidents and health and amenity impacts due to emissions from idling vehicles. Therefore, overall the proposals are considered to be contrary to policy due to severe impacts arising from the proposed additional vehicle movements.

Proposed new road and Thames Crossing

159. An objection has been received from Oxfordshire County Council's Transport Strategy and Policy Team, expressing concern that the quarry site area could overlap with proposed options for a new road linking the A415 with the A4130 in Didcot and incorporating a new bridge over the River Thames and this would prejudice the route of a Link Road and Thames River Crossing and as such would harm the County Council's ability to deliver its Local Transport Plan and support future growth within the County. Concerns have also been raised in relation to this by South Oxfordshire District Council and Vale of White Horse District Council and members of the public.
160. Draft policy TRANS3 of the South Oxfordshire Local Plan 2033 Final Publication Version (SOLP 2033) safeguards a route for a new Thames road crossing between Culham and Didcot Garden Town. The safeguarding map shows two potential routes as safeguarded for this development, one of which includes land within the application site. The alternative safeguarded route is to the west of the railway line. Parts of the potential routes to the south of the River Thames fall within the Vale of White Horse District Council area and land in this area has been safeguarded by the Vale of White Horse Local Plan 2031 (VLP 2031). However, the application site falls entirely within South Oxfordshire.
161. A consultation on the SOLP 2033 is being held between 11th October and 30th November 2017, following which the plan will be submitted for independent examination. Following this there would be an Examination in Public with a view to adoption in summer 2018. The draft plan is a material consideration, but it is not adopted and therefore at present the weight that can be given to policy TRANS 3 and the safeguarding map is limited. However, although limited, it should be given enhanced weight due to the fact that part of the proposed route is already safeguarded by the adopted VLP 2031, and the safeguarded corridor in the Vale of White Horse District would not enable a complete route unless land was also safeguarded in South Oxfordshire District.
162. The applicant has stated that the quarry proposals have been designed around the major road construction proposals and that a new road could be accommodated on the site post restoration as most of the land affected by the potential alignment would be restored back to original

ground levels. Any new road would need to be raised on pillars to cross the southern lake, however the restoration proposals were amended to provide extended peninsulas on the lake banks which could accommodate pillars.

163. At present the alignment for the proposed new route has not been finalised and there is no adopted policy within South Oxfordshire that safeguards specific land for this development. In any case, it is considered that the quarry proposals would not prejudice the delivery of the new road and river crossing. The timescale for the quarry workings means that it is likely that working could be completed and the affected area restored before any new road would be built. The restoration plan submitted would not prevent a new road and bridge being built on the restored site. Therefore, although it is acknowledged that the proposed quarry restoration would create a lake which would affect the design and engineering requirements of any new road, it is not considered that the proposed new road crossing could be sustained as a reason to refuse the quarry application, as the quarry proposals would not prevent it from going ahead.

Rights of Way

164. NPPF paragraph 75 states that planning policies should protect and enhance public rights of way and access and local authorities should seek opportunities to provide better facilities for users, for example by adding links to existing rights of way networks including National Trails.
165. OMWCS policy C11 states that the integrity and amenity value of the rights of way network shall be maintained and where possible routes shall be retained in situ in a safe and usable condition. Improvements and enhancements will be generally encouraged and public access sought to restored mineral workings.
166. SOLP policy R8 states that the retention and protection of the existing rights of way network will be sought and where possible proposals to improve it will be supported.
167. A representation was received from a local resident who queried the dimensions of the proposed disabled kissing gate referred to in the supporting statement. They were concerned that the British Standard BSI5709 – 2006 kissing gate would be too short and too narrow to accommodate the cross county electric scooters which would be needed on this type of path. This is a detailed matter which could be dealt with through condition on any permission granted. The applicant has confirmed that they would be willing to accept a condition specifying that the proposed disabled kissing gate must be wide enough to accommodate mobility scooters, to allow wheelchair users to access the countryside in this location.

168. The Rights of Way Team have no objections. They urged the applicant to investigate the possibility of creating an additional footpath link between the diverted footpath and the Thames Path. This was also suggested by CPRE. However, the applicant was unable to progress this as the land is not in their ownership.
169. OMWCS policy C11 states that where possible routes should be retained in situ. This is not possible in this case as there is an existing footpath route through a proposed extraction area. The policy requires that routes are kept safe and usable and it is considered that this would be achieved through the proposed diversion and stand-offs between the working and rights of way.
170. OMWCS policy C11 also protects the amenity value of the rights of way network. The proposals have the potential to change the experience of using the Thames Path and footpath 171/15 in this area, particularly at the stages of the development when extraction is close to the route. Concerns were raised during earlier consultations about a potential tunnel effect on the diverted footpath as bunds were proposed on either side. Amendments were made to the proposals so that soil bunds would be on the east side of the path only, and a hedge would be planted on the west side to remove the tunnel effect. allowing views in the other direction. The amendments also include the replacement of some of the soil bunds with straw bale acoustic screens, which could potentially suit the rural context better. Overall, it is considered that the measures proposed to protect the amenity of users of the rights of way in the area are adequate.
171. Although it is disappointing that the applicant could not do more to progress the footpath link sought by the Rights of Way team, it is considered that the provision made for rights of way on the site both during and after the development, is sufficient to meet the policy requirements. The proposed diversion of the existing footpath is suitable and additional access is proposed following restoration, in accordance with OMWCS policy C11 which encourages improvements, enhancements and public access to restored workings. The proposals are considered to be in accordance with relevant development plan policy.

Potential Amenity and Health Impacts

172. Policy C5 of the OMWCS states that proposals for minerals development shall demonstrate that it will not have an adverse effect on the local environment; human health and safety; residential amenity; and the local economy from impacts including noise, dust, visual intrusion, light pollution, traffic and air quality. Where necessary, appropriate separation distances or buffer zones between minerals and waste developments and occupied residential property or other sensitive receptors and/or other mitigation measures will be required, as determined on a site-specific, case-by-case basis.

173. NPPF paragraph 125 states that by encouraging good design planning decisions should limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation.
174. NPPF paragraph 144 states that when determining planning applications, planning authorities should ensure that there are no unacceptable adverse impacts on human health and that any unavoidable noise, dust and particle emissions are controlled, mitigated or removed at source. Local planning authorities should establish appropriate noise limits for extraction in proximity to noise sensitive properties.
175. NPPF paragraph 143 states that in preparing Local Plans, local planning authorities should, when developing noise limits, recognise that some noisy short term activities, which might otherwise be regarded as unacceptable, are unavoidable to facilitate minerals extraction. In the absence of an adopted Local Plan which specifies noise limits, this is considered to also be relevant to decision making.
176. SOLP policy EP1 states that proposals which would (by reason of smell, fumes, smoke, soot, ash, dust, grit, or other forms of polluting emissions) have an adverse effect on people and other living organisms, the atmosphere, the land, underground water supplies or watercourses will not be permitted, unless effective mitigation measures will be implemented.
177. SOLP policy EP2 states that proposals which would have an adverse impact on occupiers by reason of noise or vibrations will not be permitted, unless effective mitigation measures will be implemented.
178. SOLP policy EP3 states that proposals for new floodlighting or other external lighting which would have an adverse effect on neighbouring residents, the rural character of the countryside or biodiversity will not be permitted, unless effective mitigation measures will be implemented.
179. Objections have been received from a number of local residents, concerned about amenity impacts at their properties. There has also been an objection on behalf of Culham Science Centre due to concerns that dust from the development would have adverse effects on sensitive scientific equipment. Details of the concerns of residents of nearby properties and Culham Science Centre can be found in Annex 4.
180. Following the submission of further noise monitoring information, the Environmental Health Officer confirmed that they have no objection to the application in terms of noise. The proposed bunds will be necessary to ensure that noise levels can be kept to the limits specified in the application and a condition can be applied to ensure that these are constructed and maintained. Subject to this, the development is

acceptable in terms of noise and accords with the NPPF and SOLP policy EP2 in this regard.

181. The ES included a lighting strategy, which concludes that external lighting on site would comply with the relevant British Standards and spill lighting from the site should not exceed 1 Lux through windows. There has been no objection from consultees in relation to this, however the residents of the properties closest to the plant site have expressed concern about the level of detail. Therefore, it is recommended that a condition be added to any permission granted requiring full details of external lighting to be submitted, approved and implemented. The hours of operation would limit the impact of external lighting.
182. The Air Quality Officer has confirmed that the potential dust impact on nearby receptors was sufficiently addressed in the original assessment and they have no objection subject to the implementation of the mitigation set out in the Environmental Statement. This can be secured by condition. Public Health England has also confirmed that there is no objection to the proposals and there would not be a significant impact on public health, subject to good dust management practices. Further information was submitted in relation to the concerns that Culham Science Centre had not been included in the original dust assessment and it is considered that this issue has now been satisfactorily addressed. Therefore, subject to the necessary conditions, including for a Dust Management Plan for the duration of the operations, the development is considered to be in accordance with NPPF paragraph 144 in terms of dust emissions and the potential impact on amenity and health.
183. The buffer zones between the nearest properties and the operational areas are considered to be appropriate because the detailed assessment work in the ES has shown that there would not be unacceptable impacts as a result of working at the distances proposed. The development is therefore considered to be in accordance with OMWCS policy C5 with respect to buffer zones.
184. Concerns have been raised about adverse impacts on amenity arising from increased HGV traffic. Transport Development Control has objected to the proposals due to severe impacts and expressed concern that idling vehicles would add to particulate and carbon dioxide emissions.
185. It is acknowledged that the A415 runs through Clifton Hampden village and HGVs can create an unpleasant and potentially dangerous environment particularly for vulnerable people. The applicant has proposed mitigation works in the form of footway improvements and bollard installation at the intersection between the A415 and the High Street in Clifton Hampden. This is welcomed by Transport Development Control.

186. Overall, it is considered that the development would be unacceptable in terms of the impacts caused by the additional HGV movements associated with this development, contrary to the requirement in OMWCS policy C5 that minerals proposals should demonstrate that they will not have an unacceptable impact in terms of the local environment, human health and safety and residential amenity including from traffic.
187. The development is considered to be acceptable in respect of the other criteria listed in OMWCS and other relevant policies protecting amenity, including in terms of noise, light nuisance and dust emissions. This is subject to planning conditions to ensure that the development is carried out as proposed and that the measures in the ES are adhered to.

Flood Risk and Water Environment

Sand and Gravel Extraction

188. OMWCS policy C4 requires that applications demonstrate no unacceptable adverse impact on the quantity or quality of surface or groundwater resources required for habitats, wildlife and human activities; water abstraction; flow of groundwater; and waterlogged archaeological remains. It goes on to say that the River Thames and other water courses of significant landscape, nature conservation or amenity value should be adequately protected from unacceptable adverse impacts.
189. Policy EP1 of the SOLP states that proposals should not have an adverse effect on underground water supplies or watercourses, similarly SOLP policy EP7 protects groundwater resources. Policy EP6 of the SOLP requires that development accords with sustainable drainage principles.
190. The application is supported by a Flood Risk Assessment (FRA). This was revised to reflect revisions to the operational and restoration layouts. It states that the risk of fluvial flooding from the River Thames to the site is high. There is also a minor risk of flooding from groundwater and surface water. It identifies elements of the development which could affect flood risk, including a decrease in floodplain storage capacity due to stockpiling and mineral processing, increase in surface water due to new access roads and changes to the drainage and flood regime from the removal of soil, overburden and mineral. The FRA also details the mitigation measures which have been built into the design of the development, including gaps in bunds to allow flood water to pass and the retention of separation between the main and secondary floodplain to prevent a new flood route opening up. The FRA reports the findings of a 1D-2D flood model used to assess the impacts of working and restoration phases on flood levels and river flows.
191. The FRA concludes that subject to the mitigation proposed, there would be no significant effects. It confirms that there would be an increase in

flood storage during the quarry operation at every level. Risk from surface water flooding would remain low and there would be no increase in risk of groundwater flooding. Fluvial flood risk is also assessed including the differences in peak flood levels and velocities. It is confirmed that there would be no increase in peak velocities in most locations. No significant effects are recorded.

192. The Environment Agency has responsibility to provide advice on the risk of fluvial flooding and does not have an objection to this application. The EA initially objected to the application on the basis that the FRA did not comply with the NPPF as it did not demonstrate that level for level flood plain compensation was not achievable before resorting to a loss of flood plain storage at certain levels. The objection was withdrawn, subject to a number of conditions, following the submission of the revised FRA.
193. The Lead Local Flood Authority has responsibility for surface water, ground water, ordinary watercourses and sustainable drainage and has no objection subject to conditions to cover the staggering of bunds to allow flood water to pass around them, dewatering to go through settlement before discharge, no dewatering in flood conditions and provision of information from groundwater monitors. The response on the further information confirmed that there should be a condition for monitoring boreholes in the Greensand. The applicant confirmed in their additional information that they would be prepared to install this and a condition is recommended to cover this. Further advice has been sought on groundwater in relation to comments made during the consultation period. This was not available at the time of finalising this report, but will be included in an addendum.
194. OMWCS policy C2 states that proposals for minerals or waste development, including restoration proposals, should take account of climate change for the lifetime of the development. This includes accounting for anticipated more frequent, short duration, high intensity rainfall events and periods of long duration rainfall in the future. The FRA includes a 15% allowance for climate change during operational phases and 35% allowance during restoration phases, in agreement with the Environment Agency and in accordance with this policy.
195. Subject to the additional advice with regard to groundwater, it is therefore considered that, subject to the mitigation measures as proposed, the proposed development would not result in adverse impacts to the surface or groundwater quantity or quality and accords with OMWCS policies C3 and C4, SOLP policies EP1, EP6 and EP7 and the NPPF.

Sequential Test

196. NPPG 066 Reference ID: 7-066-20140306 Table 2 classifies sand and gravel working as 'water compatible' and Table 3 confirms that this

means that it is appropriate in all flood zones, including the functional floodplain.

197. Regardless of the water compatible classification of sand and gravel extraction, the NPPG Notes to Table 3 confirm that the sequential test should be applied. OMWCS policy C3 states that mineral development will, wherever possible, take place in areas with the lowest probability of flooding. Where development takes place in an area of identified flood risk this should only be where alternative locations in areas of lower flood risk have been explored and discounted using the sequential test and where a flood risk assessment is able to demonstrate that the risk of flooding is not increased.
198. As set out above, the FRA demonstrates that the risk of flooding is not increased. However, OMWCS requires that a Sequential Test is undertaken by the County Council to assess whether there are other sites reasonably available for the extraction of sand and gravel in an area of less flood risk. This is contained in Annex 5 to this report and it concludes that there is a potential alternative site located in an area of lesser flood risk, at New Barn Farm, Cholsey.
199. The proposal is therefore not in complete accordance with OMWCS policy C3, which states that where development takes place in an area of identified flood risk this should only be where alternative locations in areas of lower flood risk have been explored and discounted. However, it should be noted that even if permission was granted for the extraction of 2.5 million tonnes of sand and gravel at New Barn Farm, there would still be the need for additional permissions for sand and gravel extraction before the end of the OMWCS plan period. There have been no objections from the Environment Agency or Lead Local Flood Authority following the provision of a site specific Flood Risk Assessment.
200. The conflict with OMWCS policy C3 needs to be weighed against the compliance with other relevant policies and the need for the development.

Sand and Gravel Processing

201. Sand and gravel processing is classified as 'less vulnerable' rather than 'water compatible' in the NPPG. NPPG 066 Reference ID: 7-066-20140306 Table 3 shows which land uses are compatible with which flood zone and states 'less vulnerable' development should not be permitted in the functional floodplain (3b).
202. The application does not propose all elements of 'less vulnerable' development to be restricted to Flood Zone 1. The proposed sand and gravel processing area would be partly in Flood Zone 2 and partly in Flood Zone 3. The weighbridge and offices and most of the processing plant is proposed to be located in flood zone 2, with part of the processing plant falling into zone 3a. Some bunds and conveyors in the

plant site area would fall into the area of highest risk of flooding, zone 3b.

203. The applicant has stated that due to the high proportion of the site covered by floodplain it has not been possible to locate all 'less vulnerable' development outside of it. They state that where possible stockpiles and bunds have been located in Flood Zone 1, however some are proposed in Flood Zones 2 and 3 (including 3b) where they are required to reduce the noise impact on neighbours around the plant site. These bunds are proposed to be staggered with gaps to allow flood waters to flow. An area of lower ground would be created to direct floodwaters through the gaps and into the quarry void, away from residential properties.
204. The applicant has stated that although efforts have been made to locate the processing plant within an area of the site with lowest flood risk, it was not possible to locate it entirely outside of the floodplain. This is because it needed to be located close to the access onto the A415 in order to avoid vehicle movements through the site, which would have a visual and environmental impact. It also needed to be located in an area which could be well screened, as the plant itself would have a landscape and visual impact. It has been possible to locate most of the plant in flood zone 2, although parts of it fall into flood zone 3.
205. The Environment Agency have stated that they would prefer the processing plant to be located in an area at a lower risk of flooding within the site and that the planning authority will need to be satisfied with the reasons for locating the processing plant partly within zone 3a. However, they have also confirmed that they are satisfied with the mitigation provided for the location of the processing plant and the development is acceptable in terms of flood risk.
206. NPPF paragraph 103 states that development in areas at risk of flooding should only be considered where development is appropriately flood resilient and resistant, including safe access and escape routes where required. There would be no workings in the excavation during flood conditions, as it would be a requirement that water pumping must cease. The plant site is largely in flood zone 2 and access to flood zone 1 could be gained via the proposed access road. Therefore, it is considered that this requirement can be met and it is recommended that a condition be added to any permission granted requiring the submission and approval of a flood management plan including details of safe access and escape routes, in order to provide the details.
207. Although the location of the processing plant within the application site does not follow the sequential approach to locating different landuses within the development, it is accepted that it has been located in the area of lowest flood risk that was practically possible within the site, given the other factors and constraints. The FRA confirms that the location of the

processing plant does not give rise to an increased risk of flooding and there has been no objection from the Environment Agency.

Clay extraction

208. Clay extraction is also classified as 'less vulnerable' development, which should not be permitted in flood zone 3b. However, in this case the clay would be worked from the base of the sand and gravel workings in order to provide an engineering material for restoration. It would not be removed from the site or sold to the market. It would therefore be an integral part of the sand and gravel working and it is not necessary to consider it as a separate development for the purpose of applying flooding policy, especially given that the flood risk for the development has been assessed in the ES and it has been demonstrated that there would not be an increased risk of flooding.

Restoration

209. OMWCS policy C3 states that the opportunity should be taken to increase flood storage capacity in the flood plain where possible, particularly through the restoration of sand and gravel workings.
210. The restoration proposals incorporate areas of lakes and other wetlands, which would increase the flood storage capacity in this area of the flood plain, in accordance with OMWCS policy C3. Land levels would be raised in the area of the access road and site office, in order to bring these areas out of the floodplain, however the site specific flood risk assessment has demonstrated that the proposal would not increase flood risk. There has been no objection from the Local Flood Authority in terms of the effect of the restoration on groundwater levels or quality.

Archaeology and Historic Environment

211. NPPF paragraph 132 states that when considering the impact of a development on the significance of a heritage asset, great weight should be given to the asset's conservation. It confirms that significance can be harmed or lost through alteration or destruction of the heritage asset, or development within its setting. As heritage assets are irreplaceable, any harm or loss should require clear and convincing justification. Substantial harm to, or loss of, scheduled monuments should be wholly exceptional. Paragraph 133 states that consent should be refused, where development will lead to substantial harm or total loss of significance of a designated heritage asset, unless the substantial harm or loss is necessary to achieve substantial public benefits that outweigh that harm or loss. Paragraph 134 states that where development will lead to less than substantial harm, this harm should be weighed against the public benefits of the proposal.

Archaeology on-site

212. OMWCS policy C9 states that proposals for minerals and waste development will not be permitted unless it is demonstrated, including where necessary through prior investigation, that they or associated activities will not have an unacceptable adverse impact on the historic environment.
213. NPPF paragraph 141 states that planning authorities should require developers to record and advance understanding of the significance of any heritage assets to be lost. Para 144 of the NPPF states that there should be no unacceptable adverse impacts on the historic environment from mineral development.
214. Policy CSEN3 of the SOCS seeks to conserve and enhance historic assets.
215. An archaeological desk based assessment has been submitted with the planning application, including a geophysical survey. Further information was requested in relation to archaeology and cultural heritage.
216. Following the submission of further information, the County Archaeology team confirmed that they had no objection to this application, subject to conditions to ensure that the proposed archaeological investigation is implemented.
217. Therefore, it is considered that the proposals make adequate provision for the recording of archaeology, as required by the NPPF paragraph 141.

Scheduled Monument

218. SOCS policy CSEN3 states that designated heritage assets, including Scheduled Monuments and conservation areas, will be conserved and enhanced for their historic significance and their important contribution to local distinctiveness, character and sense of place.
219. Historic England has confirmed that the development is not likely to increase the risk of erosion to the monument through changes to the hydrology. They consider that there would be some harm to the monument, through the impact on the setting. There would be some residual impact even following restoration and the planting designed to screen the restoration lakes would itself cut across existing open views which make a minor contribution to the setting. The archaeology team have also expressed concern about the impact of the development on the setting of the scheduled monument. However, Historic England has concluded that the level of harm would be 'less than substantial' and have not objected.
220. NPPF policy 134 states that when a development will lead to less than significant harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal.

NPPG paragraph 020 (Reference ID: 18a-020-20140306) states that public benefits could be anything that delivers economic, social or environmental progress.

221. There are some public benefits of the proposal, including the economic benefits from a local supply of aggregate and the environmental benefits coming from the restoration and long term management. Therefore, these need to be balanced against the harm to the setting. Given the limited ('less than substantial') nature of the harm to the setting and the clear need for the mineral and the related economic benefits of the proposal, as set out elsewhere in this report, it is considered that the harm to the setting is outweighed.
222. Historic England have recommended a planning condition for the provision of a heritage interpretation board on the site adjacent to the Thames Path, which would provide information about the scheduled monument. They have also requested that a viewing gap be maintained in the proposed new hedge adjacent to the Thames Path. This would allow the public to view the site of the scheduled monument in its wider context and to learn about it. This is also considered to be a public benefit of the proposal. The applicant has confirmed that they would be willing to maintain the gap and provide and maintain the board.

Setting of Listed Buildings

223. Section 66 (1) of the Listed Buildings and Conservation Areas Act 1990 states that in considering whether to grant planning permission for development which affects a listed building or its setting, the local planning authority shall have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses.
224. SOLP policy CON5 states that proposals which would adversely affect the setting of a listed building will be refused.
225. The ES included a chapter on cultural heritage, which was updated with the further information submitted by the applicant. This includes an assessment of the impact of the proposals on listed buildings. The assessment found that although there would be some impact on the setting of the closest listed buildings (specifically Lower Town Farm, barn and associated granary building) the noise and visual intrusion that the quarry could potentially cause would be mitigated by the proposed 7m bunds on the eastern boundary. The effects of the bunds themselves are also considered and it is concluded that the effects of the development on the significance of Lower Town Farm and granary would be minor adverse during the workings and reduce to negligible/neutral by the completion of restoration when the quarry operations would cease and the bund would be removed.

226. Overall, it is considered that there would be no significant effects on listed buildings or their setting, given the distance between the workings and listed buildings, the mitigation proposed and the limited views between the site and listed buildings.

Setting of Conservation Areas

227. Policy CON7 of the SOLP states that permission will not be granted where development would harm the character or appearance of a conservation area.
228. SOCS policy CSEN3 states that designated heritage assets, including Scheduled Monuments and conservation areas, will be conserved and enhanced for their historic significance and their important contribution to local distinctiveness, character and sense of place.
229. The cultural heritage chapter submitted by the applicant states that there are no direct views from Clifton Hampden conservation area into the site, although there are glimpsed views from the lane outside Lower Town Farmhouse, on the western edge of the conservation area. The assessment states that there is no meaningful visible or contextual relationship between the site and the majority of the conservation area, therefore no further assessment of the effects of the development on the setting of the conservation area is required.
230. Impacts on Lower Town Farmhouse are assessed, as set out above. This found that this listed building and the character of the Conservation Area do derive some significance from their setting on a village edge defined by the gentle transition into the surrounding farmland. However, the proposals would not change this physical relationship. The proposed bund on the eastern extraction boundary would provide a visual screen to the quarry workings and reduce noise levels. The bund itself would be temporary. Overall, the assessment finds that there would be a minor adverse effect on the significance of the western edge of the Clifton Hampden Conservation Area which would lessen to a negligible/neutral impact once restoration is complete.
231. Concerns have also been raised about impacts on Long Wittenham conservation area, which lies on the other side of the River Thames. The cultural heritage assessment states that there is no functional or associative relationship between the villages of Long Wittenham or Appleford and the modern farmland separating them and therefore detailed consideration of the effects on the heritage assets of these villages is not necessary.
232. As the development would not give rise to significant adverse impacts on conservation areas or their setting, it is considered to be in accordance with the relevant policies, including SOLP policy CON7 and SOCS policy CSEN3.

Biodiversity

233. Policy C7 of the OMWCS states that minerals and waste development should conserve and where possible provide a net gain in biodiversity. The highest level of protection will be given to sites and species of international nature conservation importance and in all other cases development that would result in significant harm will not be permitted unless the harm can be avoided, adequately mitigated or, as a last resort, compensated for to result in a net gain in biodiversity. Proposals shall demonstrate how the development will make an appropriate contribution to the maintenance and enhancement of local habitats, biodiversity or geodiversity, including contributing to the objectives of the Conservation Target Areas wherever possible. Satisfactory long-term management arrangements for restored sites shall be included in proposals.
234. SOLP policy G2 states that the district's countryside and environmental resources will be protected from adverse development. SOLP policy C6 states that the maintenance and enhancement of the diversity resource will be sought and full account of the effects on wildlife will be taken. Where there is any significant loss in biodiversity new habitat will be required to ensure there is no net loss.
235. NPPF paragraph 109 states that the planning system should contribute to and enhance the natural and local environment by minimising impacts on biodiversity and providing net gains in biodiversity where possible, including by establishing coherent ecological networks that are more resilient to current and future pressures.
236. NPPF paragraph 118 states that when determining planning applications, planning authorities should aim to conserve and enhance biodiversity by refusing planning permission if significant harm cannot be avoided and by encouraging opportunities to incorporate biodiversity in and around developments.
237. NPPF paragraph 118 also states that planning permission should be refused for development resulting in the loss or deterioration in irreplaceable habitats, including ancient woodland, unless the need for, and benefits of, the development in that location clearly outweigh the loss.
238. SOCS policy CSB1 states that a net loss of biodiversity will be avoided and opportunities for net gain will be sought. The highest level of protection will be given to sites and species of international importance but damage to nationally and locally important sites and species will be avoided unless the importance of the development outweighs the loss. Policy CSG1 requires that new development takes into account the relationship to existing green infrastructure and where appropriate contributes to improvements. Net loss of green infrastructure and biodiversity will be avoided.

239. The Ecology Officer is satisfied that there would be a net biodiversity gain, in accordance with policy. She is also satisfied with the ecological surveys that have been submitted with the application, following the submission of further information. Therefore, the Ecology Officer has no objection to the development, subject to the conditions and a legal agreement securing 20 years of long term management after the 5 year statutory aftercare period.
240. Following the submission of an arboricultural assessment with the further information, the Arboricultural Officer confirmed that he has no objection to the proposals, subject to a condition for a detailed restoration plan for trees and hedgerows which should include specifications including planting, soil enrichment, replacement, protection and pruning. There would be an overall increase in tree cover following restoration.
241. Therefore, it is considered that the proposals comply with relevant policies relating to the protection of biodiversity. Although there would be an impact on the current ecology, including the loss of trees, the potential for an overall biodiversity gain in the longer term has been demonstrated. The commitment to an extended management period would ensure that the relevant areas of the site could be managed for biodiversity for long enough for habitats to establish. Therefore, the short term loss of habitat and impact on existing biodiversity is considered to be outweighed by the longer term gain in habitats and biodiversity.
242. The development is considered to be in accordance with relevant development plan policies and emerging policies relating to biodiversity including SOLP policies G2 and C6, SOCS policies CSB1 and CSG1 and OMWCS policy C7.

Restoration

243. OMWCS policy M10 states that mineral workings shall be restored to a high standard and in a timely and phased manner to an afteruse which is appropriate to the location and delivers a net gain in biodiversity. It contains criteria which the restoration must take into account.
244. NPPF paragraph 144 states that local planning authorities should provide for restoration and aftercare at the earliest opportunity, to the highest environmental standards.
245. The proposed restoration provides a balance of afteruses including agriculture, nature conservation and recreation. Areas of open water have been limited in accordance with the Ministry of Defence's (MOD) requirements with regard to bird strike risk. The applicant has agreed to fund 20 years of long term management following the statutory aftercare period to ensure that the areas restored to nature conservation develop successfully. Overall, it is considered that the restoration proposals are appropriate and in accordance with the relevant policies, including

OMWCS policy M10 and NPPF paragraph 144. Conditions would be used to ensure that the proposed restoration is implemented to high standards.

Birdstrike

246. NPPF paragraph 144 states that mineral development should not result in unacceptable adverse effects on aviation safety.
247. The application site lies within the safeguarding zone for RAF Benson and therefore the MOD was consulted on the application plans to confirm whether they had concerns about an increase in risk of bird strike, due to habitat creation.
248. The MOD has reviewed the amended restoration plan and does not object to the application. However, they state that the site has the potential to support large flocking bird species which could pose a risk of birdstrike to RAF Benson and therefore a robust bird hazardous management plan would be needed to cover the entire restored site. This can be covered by legal agreement. The MOD would also like to be consulted on detailed restoration plans for each phase of the working. Therefore, a condition can be used for the submission of detailed working and restoration plans, prior to the commencement of extraction in each phase. Subject to the bird management plan and conditions, the development is acceptable in terms of birdstrike and compliant with the NPPF in this regard.

Soils and Agriculture

249. OMWCS policy C6 states that the presence of best and most versatile (BMV) agricultural land should be taken into account, the permanent loss of BMV land will only be permitted where there is an overriding need and provision should be made to maintain agricultural land quality, soil quality and for the long-term conservation of soils.
250. The NPPF paragraph 143 states that worked land should be reclaimed at the earliest opportunity taking into account the safeguarding of the best and most versatile agricultural land to conserve soil resources, amongst other considerations including biodiversity and recreation. NPPF paragraph 112 states that local planning authorities should take into account the economic and other benefits of the best and most versatile agricultural land.
251. Following initial comments from Natural England, further information was sought to support the agricultural land classification and soil resources ES chapter. This information was provided by the applicant, and Natural England then confirmed that although there would be a net loss of 15 ha best and most versatile agricultural land, they have no objection to the proposals subject to conditions to cover soil handling, stripping, storage and replacement, and aftercare.

252. Although the application affects a large area of BMV agricultural land, most of this (47ha) would be restored back to BMV land following the mineral working. The proposals for restoration and aftercare have been considered and assessed as suitable for achieving this. Therefore, subject to the conditions recommended by Natural England being added to any permission granted, the development would be in accordance with relevant policies regarding the protection of best and most versatile agricultural land, including OMWCS policy C6 and NPPF paragraphs 112 and 143.

Socio-economic

253. A number of objections have been raised in relation to the impacts on tourism in the area, especially in relation to the Thames Path and visitors to Clifton Hampden and Abingdon, with associated impacts for local businesses.

254. The SOLP contains a number of policies relating to tourist related development, including TSM1 which states that the prosperity of the area's tourist industry will be supported through encouraging enterprises based on the conservation and enjoyment of the inherent qualities and heritage of the area. However, this policy does not directly address the consideration of proposals with the potential to have an impact on existing tourist attractions and facilities. The concern of objectors is that the development proposed here will be detrimental to existing attractions which encourage visitors to the area.

255. It is not considered that the proposed development would have direct significant detrimental impacts on the attractiveness of the area for visitors specifically interested in walking the Thames Path or visiting historic villages. It is considered unlikely that potential walkers of the Thames Path, which passes through a variety of riverside settings, would be put off doing so due to the presence of a quarry along part of its length. Similarly it seems unlikely that significant numbers of potential visitors looking to explore and enjoy the historic interest and attractiveness of local villages would be deterred due to the location of a quarry in the vicinity.

256. The quarry would not be worked on Saturday afternoons, Sundays or Bank and Public Holidays, when it could be expected that there would be more recreational visitors. The quarry would be worked in phases and so at any point in time the workings would be small in scale compared to the scale of the application site. It is not visible from the historic core of Clifton Hampden village.

257. The ES includes a consideration of socio-economic impacts, including impacts on tourism. An impact on tourism is identified along the Thames Path, but this would be temporary and measures are proposed to mitigate the impacts on the Thames Path, including new planting to

screen the development from the path. The development would affect only a short section of the long distance route.

258. Overall, it is not considered that there would be a significant impact on the tourism industry in the local area as a result of this development. There is the potential for socio-economic benefits from employment and aggregate supply.

Cumulative Impact

259. NPPF paragraph 143 states that in relation to minerals, local plans should set out environmental criteria to assess planning applications against and the cumulative effect of multiple impacts from individual sites in a locality should be taken into account.

260. The ES takes into account potential cumulative impacts within the different assessments that it contains. Cumulative noise (including traffic noise) and dust impacts are assessed in relation to developments including the proposed new road crossing over the River Thames, proposals at Culham Science Centre and the proposed new quarry at New Barn Farm near Wallingford

261. The hydrogeological assessment did not identify any cumulative impacts, as the River Thames provides a hydraulic boundary to quarry areas south of the river. The archaeological assessment considers the potential cumulative impact of the proposed new road alignment.

262. A number of the assessments in the ES identify the proposed new Thames crossing road as a development with the potential for cumulative impacts, but state that it is not possible to assess these until a route is known.

Conclusions

263. The proposed development is contrary to NPPF paragraph 32, OMWCS policy C10 and LTP policy 02, as in the context of the existing flows on the local network the additional vehicle movements proposed would have severe impacts on the safety and efficiency of the highway network, leading to increased delays and accident risk.

264. The proposed development is contrary to OMWCS policies C5 and C10 in relation to the environmental and amenity impacts of the proposed additional vehicle movements. These additional movements would affect a local network already shown to experience peak time queueing (at the Clifton Hampden crossroads and junction of Abingdon Road and Tollgate Road) and therefore additional vehicle movements in these circumstances would lead to stationary and idling vehicles with associated air emissions.

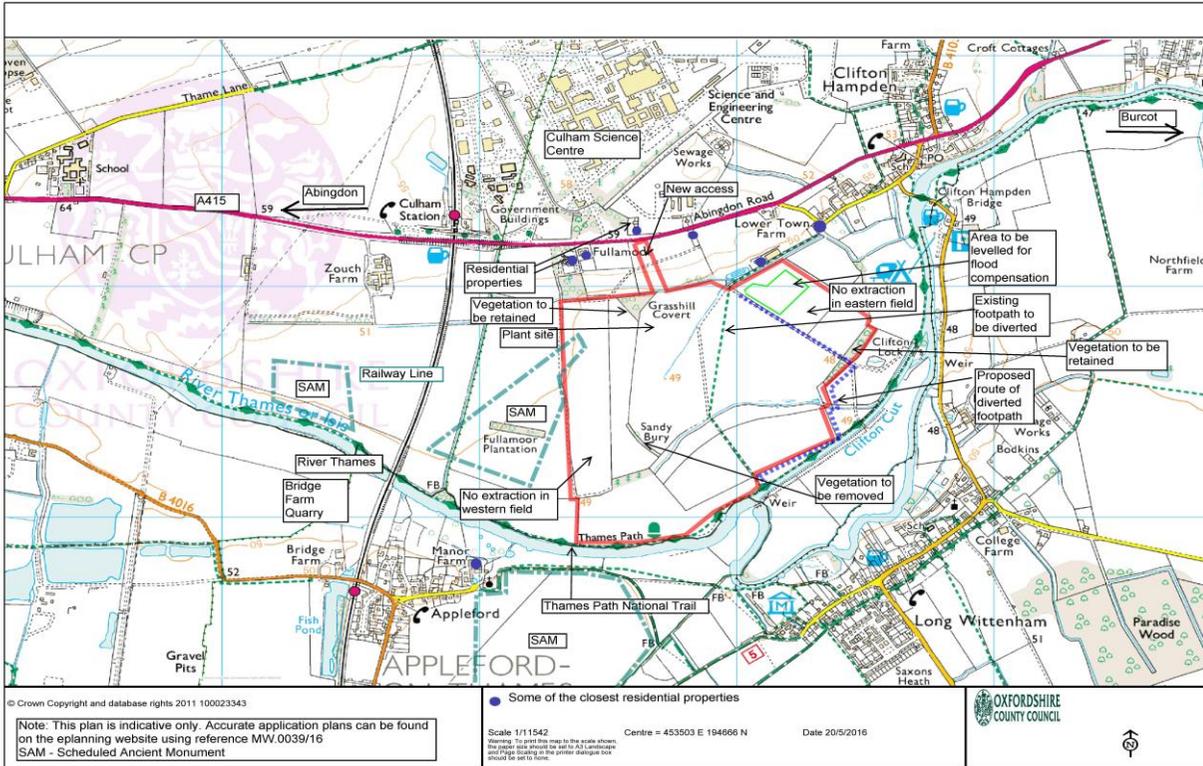
265. The proposed site does not pass the flooding sequential test and therefore there is a conflict with OMWCS policy C3. However, this is not considered to be a reason for refusing the application as detailed flood risk assessment work has shown that the development would not lead to an increased risk of flooding and there has been no objection from the Environment Agency or Lead Local Flood Authority.
266. The development is in accordance with the Development Plan and the NPPF in other respects, subject to conditions and legal agreements. It is considered that with the exception of traffic impacts, the potential impacts arising from the development could be adequately addressed through the use of planning condition and legal agreements. With the exception of the severe traffic impacts the proposed development is considered to be sustainable development in environmental, social and economic terms. The proposed development would be beneficial in terms of contributing towards Oxfordshire's supply of sharp sand and gravel and providing a high quality restoration.
267. However, due to the severe traffic impacts and the conflict with development plan policy that arises from these impacts, it is recommended that the application is refused.

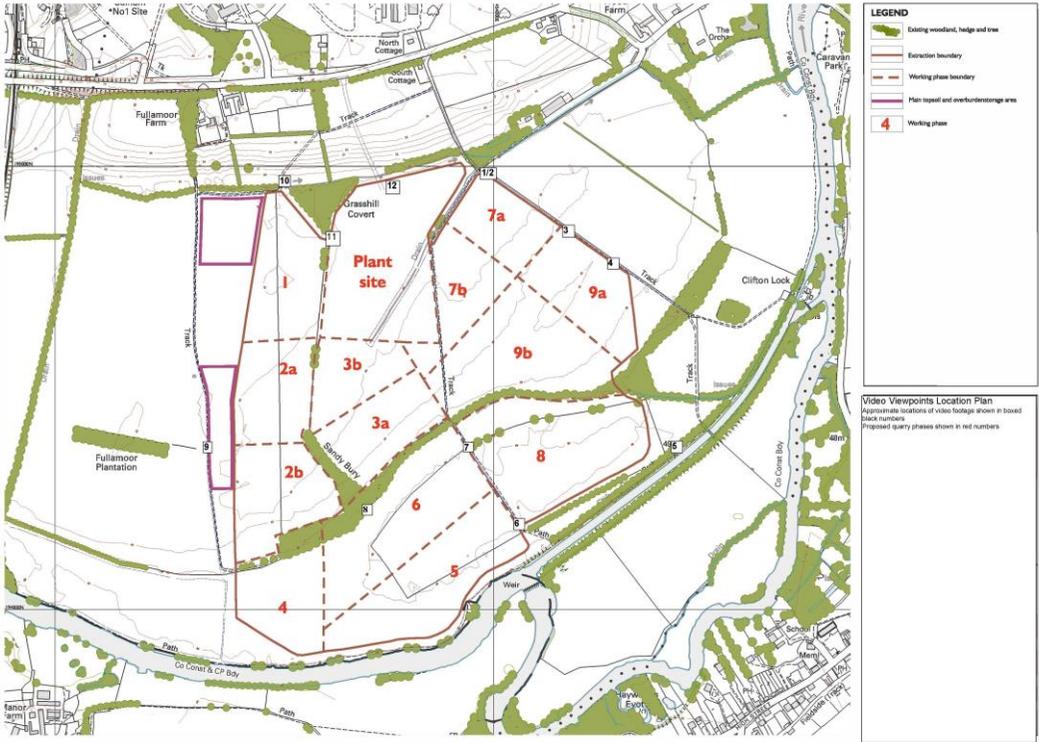
RECOMMENDATION

268. **It is RECOMMENDED that Application MW.0039/16 (P16/S1192/CM) be refused planning permission for the following reasons:**
- i) The additional vehicle movements arising from the development would lead to severe highways impacts contrary to paragraph 32 of the NPPF; would not maintain the safety of road users and the efficiency of the road network contrary to OMWCS policy C10 and would contribute to congestion, disruption and delays on the road network, contrary to LTP policy 02.**
 - ii) The additional vehicle movements arising from the development would worsen queuing at the local junctions leading to stationary vehicles with associated air emissions, causing unacceptable adverse impacts on environmental amenity, contrary to OMWCS policies C5 and C10.**

SUSAN HALLIWELL
Director for Planning and Place

November 2017





Annex 1 - Compliance with National Planning Policy Framework paragraphs 186 & 187

In accordance with paragraphs 186 and 187 of the NPPF Oxfordshire County Council take a positive and proactive approach to decision making focused on solutions and fostering the delivery of sustainable development. We work with applicants in a positive and proactive manner by:

- offering a pre-application advice service, as was the case with this application, and
- updating the agent and applicant of issues that have arisen in the processing of the application through meetings, phone calls and emails suggesting further information that could be submitted to overcome these concerns.
- This application was taken to committee for decision prior to the concerns of Transport Development Control being addressed by the applicant at the applicant's own request.

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. This includes details of the predicted effects of the development. Possible effects during the working phase which have been assessed include derogation of private water supplies and licensed abstraction, reduction in the water resource potential of the aquifer, change in stream and river flows, changes to groundwater quality and changes to surface water quality. It concludes that the predicted effects can be mitigated such that effects would not be significant. Mitigation measures are described, including the use of clay barriers.
4. Chapter 3 assesses flood risk. It identifies a number of activities with the potential to affect flood risk and assesses the potential effect on flood risk receptors. Mitigation measures for the operational and restoration phases are described. These have been incorporated into the design and include the location of stockpiles and noise bunds and scalloping to direct flood water towards bund gaps, management of the water level in restored lakes and maintenance of hydraulic continuity with the aquifer. The chapter concludes that subject to mitigation there would be no significant effects.
5. Chapter 4 covers archaeology and the historic environment and was revised following the Regulation 22 request. This submission set out the desk based assessment, geophysical survey and trial trench evaluation which have been carried out across area originally considered for the application. An area within the original area site was designated as a Scheduled Monument (early Bronze Age Barrow cemetery) and the extraction area was reduced to exclude this. The chapter considers the significance of the archaeological interest within the site and states that there would be a high adverse impact which without mitigation would result in a major adverse impact on the historic environment resource. However, a mitigation strategy is proposed including a programme of full archaeological excavation in the areas of most intensive levels of deposits (phases 5, 6 and 8) and a strip, map and sample programme in other areas. With mitigation the overall effects of the development, including in relation to the setting of Clifton Hampden Conservation Area and listed buildings, is assessed as minor. A minor adverse residual effect is also predicted in relation to the setting of the SM resulting from the alteration to the restored landscape.
6. Chapter 5 assesses the impact on soils and agriculture. This concludes that the development would lead to the loss of less than 10 hectares of

best and most versatile agricultural land and this is considered to be a minor adverse impact. 23.5 hectares would be restored to best and most versatile agricultural land. The impact on farm holdings within the site is assessed as minor adverse following restoration.

7. Chapter 6 considers bird strike. It states that most potential hazards relate to the restoration of the site following mineral working. It considers the potential impacts 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. For example, no islands have been provided in the lakes, a public footpath is proposed around the two larger lakes to introduce a level of disturbance, goose proof fencing would be installed 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 contains the Landscape and Visual Assessment. This identifies the key visual receptors, including public footpaths and dwellings. It also sets out proposals to mitigate the potential impacts including advance woodland planting and retention of existing woodland where possible. Even taking into account the mitigation there would be a major adverse impact on visual effects from the Thames Path in the short to medium term. However, this only affects a 800 metre stretch of a long distance path. The visual impact on dwellings is considered to be minor adverse during the operational period and negligible 15 years post restoration. A supplement to the chapter was submitted to address changes to the proposals, which concluded that the removal of the concrete plant would have a negligible influence on the landscape and visual effects, and the amended advance planting proposals and changes to the bunds alongside the diverted footpath would have beneficial influences.
9. Chapter 8 considers transport and access and assesses the proposals in terms of 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.
10. Chapter 9 is a noise assessment. This 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 calculated noise levels exceed the suggested limits and so mitigation is proposed. This includes noise attenuation bunds and barriers. Road traffic noise is assessed and is considered to be negligible.

11. Chapter 10 considers biodiversity. This 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. This states that the only residual adverse impact is the loss of 2350 metres of hedgerow. It concludes that in the long term the development would not alter the functioning of existing habitats and there would be habitat creation as part of the restoration. Overall, it is concluded that the residual ecological effect would be positive at the site level with benefits potentially becoming significant at the local, district or county scale.
12. Chapter 11 covers geology and mineral resources. This presents the results of boreholes and describes the investigations which have estimated the total reserves of sand and gravel and the estimated depth and thickness of the mineral. This provides an estimate of the mineral tonnage by phase with a total of 2.57 million tonnes.
13. Chapter 12 considers air quality and is split into two parts, one covering dust and the other traffic. 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 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 covers 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. A new Chapter 16 was provided as part of the additional information submitted. This 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 43 trees/tree groups, four of which are

classified as category A (good quality.) It states that a qualified arboricultural consultant must be retained during to inspect tree protection fencing prior to ground work on each phase commencing.

18. Additional technical work was submitted for a number of chapters in response to the Regulation 22 requests. There were no changes to the overall conclusions of the ES as a result of the additional assessment work, however, some additional mitigation measures were proposed as a result, including a new amenity bund on the north west boundary, an amendment to the extraction area to protect trees, additional planting and a change to the configuration of the southern lake on the restoration plan. Updates to a number of the assessments were also received following the amendment of the proposal to remove the concrete plant. There were no significant changes to the environmental impacts as a result of this change.

Annex 3 – Consultation Responses Summary

South Oxfordshire District Council - Planning

1. S
 September 2017 – Re-iterates strong objection, particularly in relation to the landscaping and bunds proposed. Concerns are reinforced by the August comments from OCC’s landscape advisor. Whilst there is scope to consider a restoration scheme that is more sensitive to the surrounding landscape than currently proposed, it is not clear that harm associated with the operation and bunds can be overcome without reintroducing harm to amenity. The impact of the height and number of bunds is exacerbated by the topography of the site, and its prominence within the landscaping setting of the river corridor. Not clear what other mitigation could be provided that would satisfactorily safeguard nearby occupants from prolonged noise disturbance. Full consideration should be given to the ‘in principle’ landscape objection.

2. M
 March 2017 – Object. The proposed development increases the risk of adverse impact to initiatives and investment associated with the Science Vale UK area and risks jeopardising infrastructure project aimed at addressing traffic congestion in the immediate area. The proposed bunds intended as mitigation would introduce landscape impacts. Also concerned about the removal of trees, noise, emissions and vibrations, insufficient information on the effectiveness of the proposed bunds, insufficient information regarding heritage assets.

3. May 2016 - Object. The proposals are contrary to development plan policy, including in relation to landscape, environmental protection and biodiversity. Although the site is within the ‘Thames Valley (Oxford to Goring Gap) area identified in the draft Minerals and Waste Core Strategy, this application pre-empts the examination of that plan and any site allocation plan.

4. Strategic Issues - The site is within a key area of Science Vale, which is nationally significant. This has the potential to adversely impact emerging plans in both South Oxfordshire and the Vale of White Horse. The proposal has the potential to exacerbate traffic congestion and impact the delivery of an identified strategic opportunity to relieve that congestion and deliver planned growth. A new north-south link road at Clifton Hampden and bridge crossing the Thames is important to the delivery of Local Plans for both SODC and Vale of White Horse District Council. Allowing mineral extraction at this site could undermine identification of opportunities for this. Proposals should therefore ensure that the delivery of the river crossing is not prejudiced in any way.

5. Landscape – The River Thames is particularly picturesque around Clifton Hampden. Large scale development is inappropriate in river corridors and this is reflected in SODC Core Strategy policy CSEN1.
6. Historic environment – An assessment of the impact on the setting of designated heritage assets should be provided and this should demonstrate how the development would conserve and enhance their historic significance in line with policy.
7. Green infrastructure and biodiversity – There appears to be a conflict in conservation terms and the area is identified as important for birds and yet bird fencing and bird scarers are proposed for the restored lake. The applicant should undertake baseline surveys of the site to assess its current value and demonstrate how the proposals can avoid a net loss in biodiversity.
8. Neighbourhood Development Plan – Clifton Hampden has a designated Neighbourhood Development Plan area. Whilst gravel working is excluded from such plans, we encourage closer working between the applicant and the Parish Council.

SODC Environmental Health

9. November 2017 – Requests further information about impact of changes to bunds on noise impacts. Indicated verbally that clarifications provided by the applicant's noise consultants adequately resolve these concerns, but a written response had not been received at the time of drafting this report and will be included in an addendum if received.
10. February 2017 – No objection subject to conditions to control noise, including the implementation of the proposed bunds, and noise limits in accordance with submitted report.
11. May 2016 – Concerned that noise levels recorded at position 8 do not represent the background noise existing to the rear of Fullamoor Farm. Requires further noise monitoring to be carried out directly to the rear of Fullamoor Farm and also at the four houses to the east. Requires more detail about temporary operations. Will provide final comments once additional information is received.

SODC Air Quality Officer Response

12. May 2016 - The potential dust impact of the development on nearby receptors is a concern, however this has been sufficiently addressed in the assessment and therefore there are no objections provided the mitigation laid out in chapter 12 of the Environmental Statement is adhered to. Recommend condition for a detailed dust management scheme.

Clifton Hampden Parish Council
Culham Parish Council
Long Wittenham Parish Council
Appleford Parish Council

13. T
 These Parish Councils have confirmed that the detailed objection submitted by a planning consultant on behalf of the objector group Bachport (Burcot and Clifton Hampden for the Protection of the River Thames) was also submitted on their behalf. The Bachport response is summarised in the representations annex.

Long Wittenham Parish Council

14. L
 Long Wittenham Parish Council responded separately to the October 2017 consultation. They state that the removal of the concrete batching plant does not change their opposition to the quarry. Concerned that a concrete plant could be developed in the future under permitted development rights. Remain concerned about impact on the River Thames, Oxford Green Belt, traffic congestion, landscape, proposals for a new road and river crossing. Housing requirement figures have been revised downwards, undermining argument that the quarry is needed to meet additional demand.

Little Wittenham Parish Council

15. F
 February 2017 – Object – appears that nothing has changed. The noise survey does not take account of this side of the river. No survey has been carried out to take account of impact on village church and school. Concerned that no mitigation can be provided between the quarry and the river frontage and this would affect flood prevention.

16. M
 May 2016 - Object. Objection centres on traffic impact on already congested road network, particularly the A415. Although it is a designated lorry route it seems it cannot safely accommodate much additional traffic as it already suffers heavy traffic from Culham Science Centre and airfield industrial site. There are safety concerns regarding the junction in Clifton Hampden which is immediately adjacent to the school and doctors' surgery. The site is in the Green Belt and there must be alternative sites that would have less impact. Little confidence that Hills would not seek to extend working beyond the initial 10 year period. Not clear that the mineral is actually required bearing in mind other operational sites and increased supplies of recycled and marine aggregate.

Abingdon Town Council

17. O
 October 2017 - In addition to the Town Council's previous objections, members expressed concerns about the volume of traffic through Abingdon and damage to buildings caused by vibration of HGVs.
18. A
 August 2017 – Re-iterates strong objection for reasons previously stated. Emphasise serious concerns regarding impact of HGVs on Abingdon town centre, which is an air quality management area. HGV restrictions should be considered alongside new technologies such as electric HGVs. Concerned about impact on the structure of the bridges carrying the A415 over the Thames in Abingdon.
19. F
 February 2017 – Re-iterates strong objection. Application not within Abingdon or in an adjoining parish, however the proposal is to access the site via the already busy A415 passing through Abingdon. Serious concerns regarding the potential effect of the proposals on Abingdon as a result of increased traffic. There will be congestion and a lorry breakdown would have the potential to cause long delays. Major adverse impact on air quality, noise pollution and overall environment in the town centre. Proposal does not take into account the scoping opinion which stated there should be a commitment to exclude lorry traffic passing through Abingdon town centre.
20. M
 May 2016 - Object. Concerned about the potential increase in traffic. Proposed additional lorries would cause congestion, impact air quality, cause noise pollution and adversely affect the environment in the historic town centre, pedestrians, cyclists, residents, traders and motorists. Also concerned about the effect on villages. Oxfordshire County Council's scoping opinion stated that there should be a commitment to excluding HGVs from Abingdon town centre. This is not reflected in the application.

Drayton St Leonard Parish Council

21. M
 May 2016 - Fully support the application. Impressed by the proposals put forward at the public exhibition including the attention to detail and phased design. This proposal seems to offer a significant contribution to the county's minerals requirement with minimal environmental impact.

Sutton Courtenay Parish Council

22. February 2017 - Concerned about the impact of the development on the immediate rural area and locality. If approved HGVs could cross the Thames and travel through Sutton Courtenay. There should be a routeing agreement to prevent this. F

Vale of White Horse District Council

23. Response on Further Information – Maintain previous comments and endorses the detailed comments made by SODC in March 2017. The proposed development would increase the risk of adverse impact to initiatives and investment associated with the Science Vale UK area. The proposed mitigation bunds introduce further concerns in terms of landscape. The Vale Local Plan 2031, Part 1 (adopted in December 2016) identified the need for a new river crossing as a necessary piece of infrastructure to support development in Science Vale UK and land to the south of the application site has been safeguarded for road development.
24. First Response - The site is not within the Vale District, but adjoins it. Would like to endorse the comments of SODC and specifically highlight concerns regarding the potential to exacerbate traffic congestion on important routes and the implications of this, for example on neighbours and air quality.

Berkshire, Buckinghamshire and Oxfordshire Wildlife Trust (BBOWT)

25. July 2017 – No objection. Note that a number of survey updates have been carried out. Could not find reptile survey information, but content with avoidance mitigation measures proposed for reptiles. Also content with mitigation for other habitats and species. Support the comments of the County Ecology Officer on biodiversity net gain, extended aftercare and conditions. Note that much detail is proposed to be provided at later stage under condition. Recommend that the restoration management plan is developed sooner rather than later to provide confidence that ecological benefits can be achieved as stated and to provide clarity on management issues. J
26. First Response - Further ecological survey work should be submitted in relation to reptiles, water vole, breeding birds, bat roosts and foraging/commuting routes. Support the guidance from the Ecologist Planner on further surveys needed. Consideration should be given to F

the need to update survey work given that it was undertaken in 2013/14. The value of the arable margins should be further assessed as the report as identified the presence of wild pansy. The site has further potential to provide habitats for biodiversity.

Natural England

- 27. S
 eptember 2017– No objection subject to conditions to safeguard soil resources. The development will lead to the net permanent loss of 15 ha best and most versatile agricultural land. However the restoration proposals are such that the application should not be considered inappropriate. The proposals should lead to the restoration of 47 ha of best and most versatile agricultural land.

- 28. F
 ebruary 2017– Additional information does not address all of the concerns about agricultural land.

- 29. J
 une 2016 - Soil, Land Quality and Reclamation – Strong reservations about the proposal. Unable to advise on the reliability of the Agricultural Land Classification data provided unless the applicant provides further information. On the basis of the information provided, the development could result in the irreversible loss of at least 10 ha of best and most versatile agricultural land. The applicant has not provided enough evidence to confirm the maximum area of land would be restored to BMV agricultural land. Therefore, the submitted proposals do not meet with the requirements for sustainable minerals development. Soil information should be revised for the proposed site area, as submitted information is based on a larger site area. Any changes to restoration design resulting from changed soil volumes should be addressed. Information on post restoration underdrainage should be provided. Soils should not be handled between November and March inclusive. The submitted information on aftercare does not contain enough detail to meet the requirements of an outline scheme. Notwithstanding strong reservations regarding loss of BMV land, the proposed restoration may be capable of delivering significant biodiversity and green infrastructure benefits.

Ministry of Defence - Defence Infrastructure Organisation

- 30. July 2017 –No objection. The applicant has identified that they will be preparing a bird management plan for the management of the entire restored site. As per previous response, no objection subject to this requirement.

- 31. M
 arch 2017– The revised restoration plan does not appear to introduce

new habitats but would increase the amount of wetland available to gulls and waterfowl. Therefore, as previously advised a robust bird management plan would be needed, including remedial action to be taken should trigger levels be exceeded. The MOD would also wish to review the detailed restoration plans submitted by the applicant, prior to the extraction of each phase of extraction.

32. J
- une 2016 - No objection. The site falls within the safeguarding consultation zone for RAF Benson. The proposed restoration would create 3 lakes and restore 8 silt lagoons to a mosaic of open water with reed marsh and wet woodland. Concerned that this scheme would create wetland habitats attractive to large and flocking birds which are hazardous to air traffic. The lakes are devoid of islands which would limit breeding habitat. However, the dimensions of the lakes would attract waterfowl and provide opportunities for roosting gulls. The lake banks would be shallow, but to inhibit the movement of geese, sides should be steep and planted with marginal vegetation. Once established the proposed reedbeds should reduce the area of open water. However, provisions will need to be made for managing these habitats to prevent roosting flocks of starlings or nesting geese. Therefore, there should be a bird management plan as part of a Section 106 legal agreement and this should be implemented for as long as RAF Benson remains in use. Would wish to comment on detailed restoration plans submitted under conditions.

Historic England

33. N
- ovember 2017 – No objection. Previous advice remains unchanged. One on small point of detail, the revised plans show a new hedge adjacent to the Thames Path to screen the quarry. A viewing gap should be maintained to allow users of the Thames Path to look towards the Scheduled Monument. This would also be an appropriate place for an information board about the monument and other heritage assets on the site. This would be in addition to the heritage interpretation scheme proposed as part of the restoration.
34. J
- uly 2017 – No objection. There would be some harm, but this would be less than substantial harm. Consider that there would be some residual effect on the scheduled monument due to the change in the landscape following restoration and the new woodland which would cut across existing open views. The rise in water level predicted is unlikely to have any impact on scheduled archaeology.
35. M
- arch 2017 – No objection. Groundwater levels would be reduced by 2-3 metres during quarrying and to a minor extent water levels will also be

lower after restoration due to evapotranspiration of the lake. These lower water levels would not directly impact on the erodibility of the monument, but there could be minor increased agricultural impacts due to a lower water table, for example plant roots extending deeper. The monument lies up-gradient of the proposed quarry, which would decrease any impacts. Backfilling the quarry workings with less permeable material would result in a rise in water levels up gradient. Overall, therefore the quarrying activity would not increase the risk of erosion to the monument. There would be some harm through the impact on setting to this monument and the one to the south of the river, this harm needs to be considered against public benefit.

36.

A

April 2016 – The quarry would extend to within 40 metres of the Round Barrow Cemetery Schedule Monument. There is a risk that the development could cause the monument to dry out and erode. Specialist advice is being sought on this issue. There would be some harm to the significance of the monument and another monument to the south of the river, through impact on their settings. There would be harm to the monument through the bunds and plant site and probably also through the restoration proposals. Permission should not be granted until further advice has been received regarding the risk of the monument drying out. The harm to the settings of the monument should be considered against public benefit by the Minerals Planning Authority.

Network Rail

37. August 2017 – No objection in principle, however have some concerns and request conditions to cover groundwater monitoring, trigger levels and contingency plans, submission of quarterly groundwater monitoring reports and provision of a clay lined barrier. Previous comments also remain.

38. March 2017- Provides comments and requirements for the safe operation of the railway including advice on drainage, safety, design of any works adjacent to Network Rail's property.

39. February 2017– Further information required regarding dewatering proposals.

40.

M

May 2016 - No objection provided comments and requirements for the safe operation of the railway including advice on drainage, safety, design of any works adjacent to Network Rail's property.

Environment Agency

41. November 2017 – No objection. Previous queries have been resolved following clarifications from the applicant. Comments and conditions from July 2017 response still apply. The proposed bund alignment is not likely to significantly affect flood flows and satisfied that biodiversity issues have been resolved.
42. October 2017 – Queries for the applicant about the additional information. A plan should be provided showing the 16m ecological buffer from the River Thames and the 25m standoff between the river and the edge of mineral extraction. Concerned about the proposed hedgerow parallel to the River Thames as there should not be formal landscaping within the buffer zone. It could also act as a barrier to habitat connectivity. Would like some clarification regarding the removal of bunds and the flood risk modelling.
43. August 2017 – The revised Landscape and Visual Impact Assessment includes proposals for the Thames Path to be screened from the site by a new hedgerow. We would not want to see any formal landscaping within the 25 metre buffer from the top bank of the Thames. Formal landscaping would include non-native species, trimmed shrubs and hedge lines and ornamental planting.
44. July 2017 – No objection. Previous objection on flood risk and biodiversity grounds is withdrawn, subject to conditions being imposed on any planning permission. Conditions are required to cover compliance with the FRA and mitigation measures, scheme to show the final design and alignment of bunds and stilts under the aggregate plant, plan to show implementation of surface and ground water pumping scheme, ecological protection and restoration scheme including details of a 25 metre buffer between the Thames and the quarry works. The Minerals Planning Authority should be satisfied that the sequential test is passed. Clay extraction is classified as 'less vulnerable' development which is not appropriate in flood zone 3b. Would prefer the processing plant to be located at an area of lower risk of flooding, however we are satisfied with the flood risk as mitigation is proposed.
45. A
 pril 2017 – Object to the development in fluvial flood risk and nature conservation grounds. The FRA does not comply with the requirements of the NPPF. This objection could be overcome by submitting a revised FRA. Object on the grounds of nature conservation because the assessment and mitigation of the risks to nature conservation is inadequate. The applicant should provide further information to demonstrate that the risks can be satisfactorily addressed.
46. A
 ugust 2016 – Object due to flood risk. Further work is needed before the flood risk model can be accepted as fit for purpose. Object due to

nature conservation. The assessment and mitigation of risks to nature conservation are inadequate. The applicant should provide further information including ecological surveys, impacts of removing ditches, impacts on local wildlife sites, impacts of lighting, mitigation for protecting the River Thames. Clarifications are also needed to correct inconsistencies in the submission. The restoration scheme is inadequate and should be revised.

47. M
 ay 2016 – Further information about fluvial flood risk modelling required before a full formal response can be given.

Public Health

48. N
 o objection. On the basis of the information provided, and subject to good dust management practices, PHE does not anticipate that the operation of the site is likely to result in any significant impact on public health

North Wessex Downs AONB

49. C
 oncerned about the quarry’s location within the setting of the AONB and its potential to harm important views and vistas in and out of the AONB, in particular from Wittenham Clumps. Didcot Power Station is also visible from the clumps but is in the process of being demolished. The primary purpose of AONB designation is to conserve and enhance the natural beauty of the area and the North Wessex Downs are particularly susceptible to developments which are visually prominent, noisy, or of an urban, suburban or industrial nature.

50. T
 he development has the potential to have a negative impact on the Thames Path. It has not been demonstrated that noise levels would be appropriate in the very tranquil environment. The proposed advance planting would need to be planted significantly in advance to provide visual or acoustic screening. The development would alter the character of the large open field pattern. The restoration scheme should be improved. The bodies of water need to be more naturally contoured and reduced in size to create multiple ponds and a natural drop towards the Thames. The woodland belt to the north of the larger water body should be broken into smaller clumps to conserve views into the AONB. There is the potential for restoration of land to wildflower meadow or skylark plots.

Transport Development Control

51. November 2017 – Object. Recommend the application is refused in the interests of highway safety, convenience and sustainability and in accordance with Paragraph 32 of the National Planning Policy Framework and Policy 02 of the Oxfordshire Local Transport Plan. The submitted Transport Statement suggests that new trips from the proposed development would be insignificant in terms of highway impact given existing flows on the network. Although I previously agreed with this, recent County Council traffic surveys and modelling show excessive queuing and junction blocking bringing about a situation best described as gridlock. In such circumstances the impact of additional trips is disproportionate and very few trips may add to delay significantly. Frustrated drivers merging and manoeuvring indiscriminately will have an adverse impact on road safety as will the increased likelihood of rear end shunt collisions resulting from queuing, especially where forward visibility may be limited. In addition, idling vehicles would add to particulate and carbon dioxide emissions. The Local Highway Authority considers the traffic impact of this development would be unacceptable and would meet the NPPF criteria of ‘severe harm’ so as to justify the refusal of planning permission.
52. The proposed junction with the A415 is acceptable in principle, routeing is in accordance with County Council’s Lorry Routeing and footway improvements adjacent to Clifton Hampden Primary School are welcomed. Therefore, permission be granted conditions and legal agreements should be sought to secure these. However, the recommended obligations, conditions and informatives would not resolve the objection set out.
53. May 2016 - No objection subject to conditions and obligations to ensure the proposed routeing (routeing agreement) and the works to highway to achieve footway improvements and new access (Section 278 agreement). Routeing of HGVs is in accordance with OCC’s Lorry Routeing Strategy, there would be no significant traffic impact on the local highway network. The proposed footway improvements are welcomed. Conditions should be attached to ensure the new access and visibility splays are in accordance with approved plans and that the development takes place in accordance with an approved Construction Traffic Management Plan (CTMP). The access proposals comply with the required standards. Traffic impact on the local highway network would be minimal, with few trips coinciding with peak network hours. Given the background traffic on the local highway network the impact of the proposed additional movements is considered to be negligible. In relation to Abingdon town centre, the additional trips would not have a significant impact on flows but there may be an implication for air quality and advice should be sought from the relevant body.

Transport Strategy and Policy

54. November 2017 – Object. The proposal, as submitted, would prejudice the route of a Link Road and Thames River Crossing and as such

would harm the County Council's ability to deliver its Local Transport Plan and support future growth within the County. The response provided by the applicant on this issue does not alleviate concerns. Three options are offered to protect the alignment of the proposed road; to retain an undisturbed corridor, to reinstate the route of the road over the proposed water or to make a Section 106 contribution for the construction and maintenance of a piled viaduct or piled road.

55. May 2016 - Object. The proposal would prejudice a potential alignment for the route of a Link Road and Thames River Crossing and as such would harm the County Council's ability to deliver its Local Transport Plan and support growth. The proposed application area fully coincides with one of two route options being considered for a new road. The three options available are to retain a undisturbed corridor, to reinstate the route of the road over the proposed water or to make a Section 106 contribution for the construction and maintenance of a piled viaduct or piled road.

Oxford Green Belt Network

56. February 2017 – Object for the same reasons as given in first response. The principle remains the same despite the proposed changes.

57. May 2016 - This area is currently one of the most open and unspoilt parts of the Oxford Green Belt. It is a landscape of historic importance and is enjoyed by the public, for example those walking on the Thames Path. The quarry would transform this into an industrial landscape. Although it is temporary the landscape would not be the same afterwards and afteruses could impact on the openness of the Green Belt. The period of working is almost always extended.

58. T
 he Core Strategy has not yet been adopted and the examination has not been held. This application is premature. Extensive areas of the Oxford Green Belt landscape have been affected by quarrying and it would be wrong to open up an entirely new site at this point. The site contains good quality agricultural land, the development would disrupt villages, there would be additional traffic on the A415 and other roads. Application is in the wrong place at the wrong time.

CPRE

59. M
 arch 2017 – Object. Remain of the view that the application is premature given that Core Strategy and sites allocation document have not been agreed and there is no urgent need. Other issues of concern include impact on the Green Belt, loss of high grade agricultural land, loss and damage to trees and hedgerows, major adverse impacts on footpaths.

60. R
 response on footpaths February 2017 – The southern end of the circuitous temporary diversion of Clifton Hampden FP15 would run parallel and close to the Thames towpath for 400m without linking to it. A link would be highly desirable so that walkers do not need to walk back and forth along parallel paths.
61. M
 ay 2016 - Object. The landbank is well in excess of the recommended 7 year supply. The need to increase stocks has not been shown. The application is premature before the new plan is agreed.

County Councillor for Berinsfield and Garsington - Cllr Lorraine Lindsay-Gale

62. Object on the grounds of significant increase in existing traffic problems, safety of pedestrians, premature to grant permission ahead of agreement on the level of need, there are two alternative sites near Wallingford that would be more suitable.

County Archaeological Services

63. A
 ugust 2017 – Re-iterate previous recommendation.
64. F
 ebruary 2017 – No objection, subject to conditions for a written scheme of archaeological investigation, staged programme of archaeological investigation and fencing to protect archaeological interests in the area. Following the additional information, there are no longer any significant archaeological constraints.
65. A
 pril 2016 – Further information is required regarding the potential for further cropmarks. Should permission be granted conditions would be attached requiring further investigation into features corresponding to the cropmarks, advance of extraction. Concerned about the setting of the scheduled monument, the impact is not considered to be either temporary or minor as set out in the Environmental Statement. Further advice is needed from the Historic England Scientific Advisor to evaluate the impact on the hydrology of the monument.

Rights of Way and Countryside access

66. T
 hames Path Manager May 2016 - It would be unacceptable to divert The Thames Path off its bankside position. The proposed 25 metre buffer zone would have to be adhered to at all times, and measures for

screening noise pollution should be applied within the boundary of the site and not within the buffer zone. In the interests of public safety there should be no driving or crossing over onto the National Trail. Should any erosion of the river bank happen along this reach, then we would require a guarantee that the company be responsible to undertake any in keeping, fit for purpose revetment work and so maintain the 25 metre buffer zone. Should the company damage the surface of the National Trail they would need to repair and improve the damaged area to National Trail standards. Any maintenance along the buffer zone needs to be undertaken by the company, including vegetation management in accordance to National Trails standards. After extraction, any facilities should be open for use by the public and trail users with circular walks linking onto the Thames Path National Trail.

67. C
 ountryside Access Team – July 2017 – No objection. Would like the applicant to investigate the possibility of creating a new footpath link between the Thames Path and the proposed diversion route via the ‘pinch point’ located at the eastern end of the proposed lake. Previous concerns raised have now been addressed by the additional information.
68. J
 une 2016 - Based on the current proposals, accept the principle of the proposed permanent diversion of Clifton Hampden footpath 15. However, would like clarification as to whether it is possible to design the restoration such that this footpath could be accommodated back on its existing line following a temporary diversion during extraction.
69. W
 elcome the proposal to dedicate a number of new public footpaths on the restored site. The specifications, including structures and surfaces, should be agreed prior to implementation. The construction details for any bridge crossing points will also need to be agreed prior to installation and the landowner will need to take on the maintenance of these new structures.
70. T
 he applicant should investigate the possibility of creating a footpath link between the Thames Path and the proposed diversion route via the pinch point at the eastern end of the proposed lake and also of a dedication between the proposed diversion route and Clifton Lock.
71. S
 tandard conditions should be added to ensure that there are no obstructions on the public rights of way, no changes to the rights of way and no construction or demolition vehicle access along the rights of way.

County Drainage Engineer and Lead Local Flood Authority

72. J
 June 2017 – Would like a monitoring borehole in the Greensand as the removal of sand and gravel may allow a greater movement of flow between this aquifer and the overlying aquifer. Water will not free flow down to the river through the proposed backfill material as it does with the existing sand and gravel and ground water may rise to different heights across the site. This will affect the flow through ditches. The applicant should be aware of this when backfilling and material which is free flowing must be laid in within the back fill material to allow the passage of water through the back fill material.

73. M
 May 2016 - No objection, subject to:

- Staggering of noise bunds so as not to cause flooding is required as stated
- Environmental permits are required from the EA for the dewatering
- All dewatering to go through settlement tanks or systems before discharging to the ditches
- No dewatering in flood conditions as stated
- All dewatering outfalls to be monitored regularly to measure the quality of the flow
- Information from the network of Ground Water Monitors to be supplied for checking
- Land Drainage Consent will be required for the temporary filling in of the Central Ditch from South Oxfordshire District Council

County Ecology Officer

74. A
 April 2017 – No objection subject to conditions for an environmental management plan, revised restoration and management plan and ecological monitoring strategy and a Section 106 agreement for a funded 20 year management plan following the statutory 5 years of aftercare. Some outstanding detailed points which can be addressed through revised documents or condition submissions.

75. M
 May 2016 – Further information required. Concerns regarding the survey scope and timings.

Arboricultural Officer

76. M
 May 2017 – No objection subject to a condition for a detailed restoration scheme for the woodland and hedgerows and an informative to prevent removal of trees and hedgerows in bird nesting season. The tree survey did not identify any veteran trees. The proposals for tree

protection fencing are now satisfactory. The applicant has confirmed that tree T91 will be retained. The restoration plan shows an overall increase in tree cover. On balance, satisfied that the restoration proposal is sufficient to overcome the loss of tree cover caused by the development.

77. April 2016 – A tree survey is needed to properly assess the proposals. A

County Landscape and Green Infrastructure

78. May 2016 - It is recommended that specialist landscape advice is sought to further review the landscape and visual impacts arising from the development. Concerned that the South Oxfordshire Landscape Character Assessment has not been used. It is not clear that new tree and hedgerow planting would grow to the point of successfully mitigating the development during its operational life, clarifications needed on methodology, further consideration of impact on AONB and Wittenham Clumps is needed. M
79. In terms of Green Infrastructure, the development provides for the creation of a range of new habitat and new recreational uses. Further information about the proposed afteruses would be helpful. I

Landscape Advisor

80. October 2017 – Previous concerns are partially allayed by the further mitigation proposals submitted. The ‘in principle’ landscape objection can be removed subject to conditions for detailed landscape mitigation measures based on those now proposed. Some concerns remain regarding the overall landscape and visual effects, and timescales of the proposed quarry development and some aspects of the LVIA methodology and impact recording processes. However the proposed mitigation measures should achieve a more positive balance of landscape and visual effects during working stages, and post restoration. Lists a number of matters to be accommodated in the detailed landscape mitigation proposals. O
81. August 2017 – Maintain an ‘in principle’ objection. The LVIA does not appear entirely objective. It seems likely that the proposals would lead to significant adverse landscape and visual effects over an extended period. Limited additional mitigation measures proposed require confirmation from the Environment Agency. A

82. arch 2017 – Maintain an ‘in principle’ objection due to uncertainty over aspects of the LVIA and the need for further supporting data. M

83. uly 2016 - Objection – There is uncertainty over some aspects of the LVIA and a need for further supporting data. J

Letters from MPs (2016)

84. ohn Howell MP for Henley (2016) – Writing to register concerns on behalf of constituents and myself. Do not believe there is a need for a quarry as existing quarries are producing sufficient gravel to last 20 years and demand is in decline. Inappropriate to make a decision at this time given the current status of the OCC minerals strategy. Extremely concerned about traffic, the area is already congested and the large vehicles would present problems with lorries and cars being unable to pass each other at the crossroads. The location of the access point to the quarry seems to pose a problem as it is near a school. The positioning on the Thames floodplain seems very problematic. Risk of flooding is very real. J

85. John Howell MP for Henley (February 2017) – Concerned that issues previously raised have not been sufficiently addressed. The residents are ably represented by Bachport. Trust that these concerns will be taken to heart in the assessment of the application.

86. d Vaizey MP for Wantage and Didcot (2016) – Development would have a direct and adverse effect on constituents in Long Wittenham and Appleford. There would be a very significant increase in traffic on the A415, which is already over capacity. Traffic will also cause problems for those accessing Culham Science Centre, the place of work for many constituents. This is contrary to the aims of the County's Local Transport Plan 4. E

87. icola Blackwood MP for Oxford West and Abingdon (2016) – Whilst this development falls out of my constituency, a number of my constituents are concerned that the large lorries required to carry concrete through Abingdon will cause traffic disruption where there is already heavy traffic flow and congestion. Would be grateful if the objections in attached correspondence could be taken into account. N

88. imon Hoare MP for North Dorset (2016) – encloses a letter from a constituent who formerly resided in Clifton Hampden. S

Annex 4 – Representations Summary

1. A total of 580 representations have been received during the first period of consultation. These were mostly from individuals living close to the site in Clifton Hampden and surrounding villages such as Long Wittenham. However, there were also some letters from people who visit the site from locations including London, Cambridgeshire and Devon and people who are originally from the area but currently reside in others areas. All representations received were objections, there were no letters of support.
 2. 273 representations were received during the second consultation period. The majority of the points made in these letters were re-iterating or confirming points made during the first period of consultation.
 3. 126 representations were received during the third consultation period. The majority of these were stating that previous concerns had not been addressed by the additional information received and confirming points made during previous consultations.
 4. 128 representations were received during the fourth period of consultation. One of these was in support of the application and the others were objections.
 5. A petition containing 808 signatures was also received during the first round of consultation.
 6. The majority of representations were from local residents; however letters were also received from local businesses.
 7. Representations were received from John Howell MP, Ed Vaizey MP, Nicola Blackwood MP and Simon Hoare MP, Culham Science Centre, Clifton Hampden Neighbourhood Plan Steering Group and The University of Reading. A detailed representation was received on behalf of the objector group Bachport including reviews of various sections of the Environmental Statement.
 8. The points raised in representations during the first and second consultations are set out below, accompanied by an officer response.
- Impact on countryside
 - Eyesore in a scenic area

- Visual impact on the AONB and Thames Path
- Loss of trees and hedgerows – impact on biodiversity and on landscape and intervisibility
- Visual impact – worse because of floodplain location restricting screening bunds
- Impact on views from Wittenham Clumps and other sensitive viewpoints
- Impact on the tranquillity of the river
- Impact on Green Belt
- Large size of quarry would be out of proportion with the village
- Pollution of river
- Proposed buildings would dominate the skyline
- Effect on boaters on the Thames
- Measures to mitigate visual impacts would have their own visual impacts
- Duty to protect the countryside for the future
- Opposed to all industrial-type development in the countryside
- Area already blighted by the expansion of Didcot
- Impact on views should be more thoroughly assessed using a computer model
- Quarry at Sutton Courtenay already creates a nuisance and an eyesore and is in close proximity

Officer Response – Mineral workings are usually found in the countryside and the impacts would be temporary and phased. The site would be restored back to countryside following working. The EIA assesses the landscape and visual impacts of the proposals. Impacts on the water environment have also been fully assessed.

- Impact on historic landscape
 - Harm to the setting of a listed buildings (e.g. Lower Town Farm House)
 - Clifton Hampden Bridge is listed as a Grade II* building of historic interest and importance
 - This whole area is archaeologically rich and therefore unsuitable for mineral extraction, due to damage to undiscovered remains
 - Impact on pretty and historic Clifton Hampden village, including on the setting of listed buildings and the conservation area
 - Additional HGVs would harm Abingdon's historic centre

Officer Response – There has been no objection to this application from Historic England or the archaeology team. The impact of the development on listed buildings and conservation areas is assessed in

the applicant's Environmental Statement and covered in the main body of this report.

- Increase in HGVS
 - Impact on road surfaces – there are already potholes
 - No local roads are suitable, any proposed route has problems either local roads with damages to verges or roads through the already congested centres of Abingdon or Clifton Hampden
 - Increased problems of mud and dust
 - Already not safe in the area around traffic lights and school
 - Access near Culham Science Centre could result in accidents, the access to CSC already unsafe
 - Cumulative impact on traffic congestion with expansion at Culham Science Centre, new housing in Didcot and regeneration in Berinsfield, new housing next to the Science Centre
 - Noise from traffic
 - Air pollution, especially in Abingdon and Clifton Hampden – would particularly affect those with breathing difficulties and asthma, impact on children outside school. OCC has a statutory responsibility to reduce exhaust emissions
 - Danger to pedestrians and cyclists, especially vulnerable pedestrians – does not appear to have been properly considered
 - Mud, diesel and oil on the road – dangerous slippery surface – who would check this
 - Mud and debris would be thrown up from the road onto pedestrians on rainy days
 - Wide vehicles prevent traffic queuing at the lights from forming two lanes
 - Undermine strategies to improve movement around the Science Vale
 - HGVs speed on the approach to Clifton Hampden – the police are aware of this problem
 - Existing weight and speed restrictions not adhered to despite complaints
 - A new bridge over the river is needed to remove traffic from Clifton Hampden
 - Impact of HGVs on businesses and residents in Abingdon
 - Impact on residents of The Close nursing home and Masefield House care home
 - How will restrictions on Culham and Clifton bridges be enforced?
 - HGV numbers understated in application
 - Material would need to be imported to the site to make concrete, this would lead to additional HGVs above what the application suggests
 - Increased congestion might lead to further bus route cuts

PN6

- Near a number of schools – safety and health of children
- Vibration
- Pressure on road infrastructure is the reason why housing development at north Didcot was refused.
- Village hall, school and doctors surgery next to congested traffic junction
- Will take even longer to get to doctors' surgery, which may mean people switch surgeries reducing its viability
- Concerned that parents would think twice about sending their children to the school, due to traffic, concerned about losing local school.
- Likely to be more HGVs than assessed through Clifton Hampden due to unsuitability of route through Abingdon
- HGV numbers likely to be higher than assessed as gravel would need to be imported to the concrete plant due to high sand content of indigenous material
- Hills have misunderstood the problems at the junction in their proposed remodelling. Their changes relate to the south side of the junction, whereas the issues are now related to the pedestrian crossing on the north side. Proposal to reclaim verge on northern footway is welcome, but of minor benefit. Main concern is width of footway at the crossing on the north side of A415.
- Queueing traffic bad for emergency vehicles, people trying to use village services, people trying to access their properties and local businesses which rely on passing trade
- Increase in traffic on A415 inconvenient for all users – not only local residents
- Would reduce ease of access to Culham Science Centre – contrary to OCC's aims
- Dangerous for the motorcyclists who meet at the café on the A415/44074 roundabout
- Effect on Abingdon, Burcot and Maud Hale bridges – historic structures
- HGV movements underestimated as it assumes all HGVs would be fully laden and does not include movements of staff and people visiting the concrete plant to pick up
- Transport assessment contains errors – for example the suggestion that Ock Street in Abingdon has two lanes in each direction
- Hill's proposals to improve the junction would not address the root problem- road is too narrow for HGVs
- Intimidating effect on pedestrians and cyclists not insignificant as claimed.
- Cyclists prefer to use the A415 rather than the cycle path – safety concerns

- TA not accurate because it is based on averages whereas in fact movements would have peaks
- TA does not take account of fact that large vehicles lead to slower vehicle movements in queues or additional delays to queue due to lorries crossing the A415 to get into the quarry
- TA assumes that only Hills vehicles would export from the site but it is likely that they would also sell to third parties, adding to vehicle movements and which Hills would not control the routing or timing of
- The s106 should include that only sand and gravel extracted at Fullamoor should be used on the cement plant and only Hills vehicles should be used
- Applicant's estimate of vehicle movements does not take into account vehicles associated with cement making
- It is a shame that rail cannot be used to export mineral from this site, as it is close to the railway line
- There should be cameras to ensure that lorries do not use the B4015.
- A415 is a village road
- Experience with LGVs travelling to Biffa site has shown that GPS tracking makes no difference, they consistently exceed the speed limit
- Should not be permitted until a village bypass is built

Officer Response – Transport Development Control have objected to this application as set out in the main report.

- Potential new Thames crossing
 - Application would be acceptable with new Thames crossing but this is not proposed
 - Application does not take account of proposed new road and Thames crossing/ should not proceed until it is built/ should reinstate land to allow for it to proceed.
 -

Officer Response – At this point in time the alignment for a proposed new road and Thames crossing has not been finalised and there is no adopted policy safeguarding a particular route within South Oxfordshire District. The applicant has stated that the quarry designed would allow for the proposed new road, although pillars would need to be built over the southern lake by any developer of such a road. This is covered in more detail in the main body of the report.

- Additional mineral is not needed
 - Demand in decline despite economic growth
 - 18 year supply planned for already
 - 18 year supply misleading as based on past supply

- Not clear what contribution recycled aggregate could make, therefore need is not clear
- As there is already sufficient sand and gravel the only objective is commercial interests of Hill's
- Mineral could be supplied from mothballed sites elsewhere in County
- Is gravel needed at all? Aren't there better building materials?
- Indications that housing demand is to be reviewed and could be decreased – this review should feed into consideration of quarry applications
- There are enough mineral permissions for the medium term and therefore no urgency to make a decision on increasing provision
- Mineral would not be used in local area as claimed but transported large distances
- Would be producing a third of the County's total output – disproportionate

Officer Response – This is covered in the main body of the report. The landbank requirement is a minimum and not a maximum and in Oxfordshire currently approximately half of the permitted reserve comes from one site belonging to one operator which is due to be worked until 2036.

- Other sites are better
 - For example near Wallingford where access and flooding is better and outside Green Belt, access does not include HGVs through villages, closer to where the material would be used,
 - Quarry at Sutton Courtenay could continue to supply mineral well into the future

Officer Response – The application needs to be considered on its merits. It is not a case of comparing it to other proposals or sites.

- Duration of works
 - Believe that it would be extended in the future and the quarry would last longer than currently proposed
 - Hills own surplus land on which to expand in future
 - A legal agreement should be used to ensure 10 years is a maximum

Officer Response – The application needs to be determined on the basis of the details submitted. This is for a ten year extraction period. Any proposal to extend this would need to be the subject of a separate planning application which would be assessed on its merits at that

point. It would not be possible to seek a legal agreement to prevent an application being made in the future.

- Flooding

- Already a problem in the area, causing the closure of the local roads e.g. between Clifton Hampden and Long Wittenham and Culham Bridge
- Measures being taken to prevent flooding in Oxford might impact this area and this was not taken into account in the modelling
- Do not trust flood models
- Proposed banking to prevent flooding might cause a problem elsewhere
- Concerned that changes to the floodplain in this area would increase risk of flooding to properties
- Hill's confirmed that proposal would not lead to an improvement in terms of flood risk
- Would increase the duration of flooding even if it does not increase flood levels
- Would like written confirmation that compensation would be paid if property floods
- Allowing void to flood could lead to sediment escape
- Flooding cuts off communities and facilities
- Do not believe the proposed measures would prevent the site from flooding, and if they did the water would go to surrounding villages instead.
- More flood modelling work should be done to allay concerns
- Dust from HGVs would cause dirty water in the drains and add to flooding
- Development should not take place in the floodplain/this would reduce the floodplain
- Sequential test – does not stand up to scrutiny – rules sites out without justification
- Concerned that the operator would not allow the workings to provide flood storage capacity in times of flood as that would require them to cease operations for weeks

Officer Response – There has been no objection from the Environment Agency or the Lead Local Flood Authority. Flood Risk was assessed in the submitted Environmental Statement. This is covered in detail in the main body of the report.

- Not compliant with policy

- Not identified in the 1996 plan
- Premature to grant planning permission for this prior to the adoption of the Minerals Core Strategy, sites should be assessed and selected through the minerals strategy
- The plan inspector has indicated that applications should be refused until preferred sites have been identified and if granted permissions would be subject to legal challenge (para 37 in letter dated 22nd January)
- OMWCS bias towards extraction in the Thames and Lower Thame Valley is not approved, not compliant with government guidelines and suggests that the application will not be considered on its merits.
- OMWCS fails to identify sites, contrary to government guidelines
- Not appropriate in the Green Belt, particularly the concrete plant

Officer Response – The current policy position is set out in full in the main body of the report. Legal advice has been sought and it has been confirmed that a refusal on the grounds of prematurity would not be legally tenable. The concrete plant proposal has been removed from the application.

- Impact on ecology

- Otters nearby
- Lodden Lily
- Badgers
- Skylarks and lapwings
- Loss of trees and hedges, including protected and ancient trees
- Although site is agricultural many birds can be seen there – kingfisher, robin, buzzard
- Removal of Sandy Bury woodland, which is BAP priority habitat
- Concerned about deficiencies in the Biodiversity chapter of the ES
- Impacts on other areas of BAP priority habitat, such as the Earth Trust's meadows

Officer Response – The Ecology Officer has confirmed that the restoration proposals would result in a net biodiversity gain as a result of this development. The applicant has confirmed that they are willing to enter into a legal agreement for 20 years long term management of the site (excluding areas restored to agriculture.)

- Impact on amenity

- Impact on rights of way – diversions affecting walkers and cyclists, would make the area unpleasant to walk through

- Impact on the Thames Path – a National Trail and tourist attraction – should not be diverted from river
- Noise impacts – can already sometimes hear the quarry at Appleford from Long Wittenham
- Noise impacts – no noise barrier proposed to protect residents south of the Thames
- Dust impacts, including health implications particularly for residents with health problems such as asthma
- Noise and dust impacts worse in Clifton Hampden due to prevailing south westerly winds
- Impact on church users – will affect weddings and other events
- Long operating hours including Saturdays – other Hills sites seem to close at 5pm
- Dust assessment is oversimplified. Details of mitigation measures not provided.
- Noise assessment does not take account of short term variation in noise levels
- Impact on enjoyment of property – restricts outlook, noisiest operations nearest houses, long time period, silt ponds near properties would remain a quicksand hazard

Officer Response – The impact on amenity is assessed in the Environmental Statement and mitigation measures are proposed. Conditions can be used to secure these. There has been no objection from the Environmental Health Officer, Public Health, or the Countryside Access (Rights of Way) team. The hours proposed are standard operating hours for minerals sites in Oxfordshire.

- Economic Impact

- Does not create that many jobs compared to the disruption caused
- Impact on tourism in the immediate area and also in Abingdon
- Impact on Culham Science Centre which is a major employer – noise, dust (many uses particularly sensitive), impact on only road to access it (A415)
- Concerned about effect on local businesses (e.g. Post Office) by reducing tourists in village, increasing flood risk, increasing traffic,
- Loss of community
- Blow for employers in the area as it is important to have an attractive area for people to live
- Impact on nursery – traffic could make it difficult to recruit, might not be able to provide quiet village location for children, health impacts

Officer Response – The EIA includes a chapter on socio-economic impacts. An impact on tourism is identified along the Thames Path, but this would be temporary. Impacts on sensitive receptors are assessed in the EIA.

- Restoration proposals
 - Not developed with the input of local residents
 - Radical and inappropriate altering of landscape, permanently and in the Green Belt
 - Further lakes are not needed in this area, land might be needed in future for agriculture, business use or housing
 - Built development including club house and boat storage would have permanent visual impacts
 - Access road would remain in constant use
 - Restoration plan aims to attract fishermen and walkers – types of visitors that already use the village. Village aspiration is to attract new tourist visitors
 - Does not secure public access
 - Not enough detail on the long term ownership of restored site
 - Have financial safeguards been put in place to ensure that long term management is secured and the site is not abandoned after the mineral is extracted?

Officer Response – The restoration proposals are considered to be acceptable and would be secured by condition and long term management through a section 106 agreement.

- Criticism of Hill's engagement with local communities
 - Misleading and unhelpful information when Hill's have attended public meetings, question honesty of Hill's for example the claim that no significant archaeology was found when there is a nationally significant monument
 - Hills did not engage with the Burcot and Clifton Hampden Neighbourhood Plan steering group
 - Exhibition was held too far away from affected communities
 - Lack of consultation by Hills is clear from their not understanding how increased traffic would impact sustainability of local businesses
 - Views of locals weren't taken into account – a footpath between Clifton Hampden and Long Wittenham would have offered some compensation for loss of ROW on the site

This proposal has been the subject of pre application consultation carried out by the applicant. Local views were sought then, and since through the Council's consultations on the planning application, and are considered in this report

- Green Belt

- Although the NPPF does not rule out minerals development in the Green Belt, it should only be permitted if there are no alternatives which does not seem to be the case OCC preliminary site options mostly not in the Green Belt
- Concrete plant not justifiable and could end up requiring imports Creeping development associated with commercial uses in the restoration scheme – would conflict with Green Belt policy

Green Belt policy is addressed in detail in the main body of the report. It is no longer proposed to include a concrete plant.

Miscellaneous

- Impact on property price, already having problems selling due to the threat of the quarry

Property prices are not a material consideration in planning decisions.

- Area has had enough – gravel pits, waste sites, housing development, power station, proposed prison, JET project etc.

Each application must be considered on its merits and the specific impacts of the proposed development assessed.

- Site is too close to the Thames to be suitable

Sand and gravel is often found in close proximity to rivers. In this case a stand-off from the river is proposed, which could be secured by condition.

- High grade agricultural land should not be used when other sites are available

This is a relevant issue and is considered in the main report.

- Changes to groundwater could affect foundations at Culham Science Centre
- Potential impact on private wells

The EIA assessed potential impacts on groundwater and there has been no objection on these grounds from the relevant consultees.

- Impact should be assessed alongside proposed new residential development next to Culham Science Centre
- Representation from a company promoting a strategic housing allocation on land adjacent to Culham Science Centre – consider the decision is premature in relation to the emerging SOLP and further information should be requested to assess the impact of the proposals on this land. Also concerned about impacts on potential new river crossing and improvements to the railway line.

Land adjacent to the Culham Science Centre has been identified as a possible site for 3500 new homes in the South Oxfordshire emerging Local Plan 2011-2033 Final Publication Version (October 2017) (policy STRAT7). However, any new housing in that area would be further from the site than existing residential dwellings and it is not considered that the quarry proposal would prejudice future proposals in this area. This policy has limited weight as the plan is not yet adopted.

- Quarry would sterilise the plot for future housing development for Culham Science Centre employees

The application submitted for determination is for mineral extraction. There is no proposal for housing development on this site, which is in the Green Belt and floodplain. There are policies protecting sand and gravel resources from sterilisation by other forms of development. The proposed quarry would not prevent other land being released for housing nearer the Science Centre.

- Property specific concerns
 - Warren Farm Cottage concerned about flooding to their property and septic tank which is controlled by a water pumping system which is sensitive to changes in water levels
 - Stable House, Fullamoor Barns – background noise measurements were not taken from properties on the ridge to the north of the site. Concerned about the noise from temporary stripping and soil moving operations. LVIA underestimates visual impact from this property – can be seen all year not just in winter. Mitigation measures referred to in LVIA would not be seen. Challenge other assumptions in this chapter. Not clear how a bund will mitigate noise when the house is on a ridge above the level of the bund.
 - Fullamoor Farmhouse – concerned about working scheme –although it was revised so the last phases of working weren't behind the property,

the new scheme proposes the noisiest works at the back of the property, restricts outlook to large bunds for ten years or potentially dangerous silt ponds close to properties.

- Fullamoor Farmhouse – is a heritage asset and the riverside farmland to the south is an important part of its setting.
- Lights from lorry headlights illuminating property opposite access (3 Fullamoor Cottages)
- Old Dairy, Fullamoor Barns – Concerned about noise and dust due to close proximity

Consultees with specialist technical expertise have considered the proposals and have no objection in terms of flood risk to properties, heritage impact or noise and dust impact on dwellings. Silt ponds would need to be safe and fenced-off under health and safety legislation. Overall, the Landscape Advisor has no objection to the proposals. There would be a condition limiting HGV movements to working hours, which would ensure that lorry headlights would only be noticeable on winter afternoons and would not cause disturbance into the evening. The impact on the heritage significance of Fullamoor Farmhouse is assessed in the cultural heritage ES chapter, which records a minor temporary adverse effect on the significance of the historic farmhouse.

July 2017 consultation – specific points raised in relation to additional information

- Additional information fails to address original concerns, for example no reduction in hours or alternative method of gravel transport, no winter landscape assessment; the applicant has not listened to the community
- Additional information shows a much greater loss of high grade agricultural land than previously stated - no justification for this loss.
- Hill's have refused permission for a tree expert to access the site, their original assessments on archaeology and agricultural land were shown to be wrong so their tree survey might be too. Concern about loss of trees and impact on bats.
- Details of the bunds show that they will be very high – visually intrusive and prone to slumping
- Transport concerns have grown since original consultation, due to proposals for housing at Culham, Didcot and Long Wittenham
- Recent increase in traffic should have been picked up in an updated assessment
- Contrary to the aims of Didcot Garden Town

Natural England were consulted on the revised information on agricultural land and do not object to the proposals. The landscape impact of the bunds has been considered by the Landscape Advisor who does not object, subject to mitigation. Transport Development Control has objected to this application, as set out in the main report. The trees on the site were assessed as part of the EIA and OCC's Arboricultural Officer has confirmed that he has no objection to the application. There is also no objection from the Ecology Officer regarding impact on bats. The site is located some distance from Didcot and there are no specific policies related to its Garden Town status which are relevant to the determination of this application.

October 2017 consultation – comments in relation to additional landscape mitigation proposals and amendment to remove concrete batching plant

Most representations during this consultation re-iterated concerns about the development which had previously been raised including in relation to the conflict with the proposed new road and river crossing and landscape impacts of the bunds. These points are addressed above.

- Removal of concrete batching plant does not change anything
- Expect concrete batching plant will be implemented in future in any case

This application must be assessed on its merits and the application under consideration now does not include a concrete batching plant. If the applicant did wish to construct one in the future they would need to apply and that application would also be considered on its merits. There are some permitted development rights for concrete batching plants at quarries, however it is proposed that a condition be attached to any permission granted for this development to remove permitted development rights. This would ensure that any proposed new plant would be the subject of a planning application that could be assessed against all relevant policies including those relating to Green Belt and amenity.

- Proposed landscaping would destroy openness and limit views with adverse impacts on Green Belt and footpaths

The Landscape Advisor has removed his previous objection, subject to the implementation of the proposed landscaping. It is considered that this would mitigate the landscape impacts of the development. It is not considered that there would be an impact on the openness of the Green Belt.

- Government has recently revised housing needs calculations downwards, no need for this quarry

The relevant figures for need are those relating to the sand and gravel landbank requirement, this is fully addressed in the main report.

- Concerned about the impact of HGVs in the village given recent central government statements on air quality and noise pollution from road traffic

There has been no objection from the public health team in terms of air quality.

Summary of Bachport Objection

1. A detailed objection was submitted by a planning consultant on behalf of the objector group Bachport (Burcot and Clifton Hampden for the Protection of the River Thames). This response also contains the response from four Parish Councils. Clifton Hampden and Burcot, Culham, Long Wittenham and Appleford Parish Councils have confirmed that the Bachport objection has been submitted on their behalf. A number of individual representations also stated that they agree with Bachport, including a representation prepared by a planning consultant representing the residents of 5 of the closest properties to the site.
2. The Bachport objection includes appendices reviewing a number of the Environmental Statement chapters including those on hydrology and flood risk, agriculture, geology and mineral reserves, alternatives, biodiversity and birdstrike. The objections made by Bachport are summarised in this section and the full report and appendices is available to read on the e-planning website.
3. The Bachport objection is summarised below with an officer response in italics beneath each topic.
4. Policy and need - Bachport consider that the proposal is not in accordance with development plan policy as it is not in an area identified in the OMWLP, it is not needed to maintain the landbank and has not been allocated through the new plan.

Compliance with relevant development plan policies and other material considerations, including emerging plan policies, are fully considered in the main report. This also explains the landbank position and how it should be applied to decision making.

5. Balance of supply - The objection states that the objective in the OMWCS to rebalance supply between the north and the south of the county is intended to be achieved through site allocations not decisions on applications, that the balance of supply objective is already met by the existing location of quarries in Oxfordshire, that there is no immediate need to find new sites to shift the balance of supply, and that the application site is not well located to reach the growth areas in south Oxfordshire.

Compliance with material considerations, such as the supporting text in the submitted OMWCS, is covered in detail in the main report

6. Quality and quantity of mineral – The deposit is not gravel rich and would only produce a limited range of products and require the import of aggregates from elsewhere adding to HGV movements and that the yield per hectare is lower than at other sites meaning more land needs to be disturbed for the same amount of mineral.

The applicant has confirmed that they would be willing to accept a planning condition preventing the import of minerals from elsewhere to this site. The application must be assessed on its merits. The fact that other schemes might result in a higher yield per hectare is not relevant if it is found that the environmental impacts of this development would be acceptable.

7. Alternative options – The applicant's assessment of alternatives is inadequate and does not appreciate the advances in the quality of recycled aggregate.

Following the submission of additional information as requested, the applicant's EIA is considered adequate.

8. Landscape and Visual Impact – The applicant's LVIA does not take proper account of the South Oxfordshire Landscape Assessment or North Wessex Downs AONB landscape assessment. Important viewpoints have been missed. Length of Thames Path affected by the development is more than stated. No proper assessment of the landscape impact of soil storage mounds or tree assessment, insufficient assessment of hedgerows.

Further information was ought in relation to the LVIA until the information provided was sufficient for the Landscape Advisor to confirm he no longer objected to the proposals.

9. Historic environment – No assessment of the consequences of changes to groundwater on the SM or of the impact on its setting. Assessment underplays the impact on heritage assets which derive some significance from the surrounding farmland and the impact of the 7m landscape bund.

Historic England has assessed the impact of changes to groundwater to the SM on the basis of the submitted information. They have not objected. The impact on the setting on the SM is addressed in the report.

10. Green Belt – The development would not maintain the openness of the Green Belt and would conflict with the purposes of including land within it. Very special circumstances have not been demonstrated to justify this as there is no definite and immediate need for the mineral that warrants opening up a quarry in this area.

Green Belt policy is fully assessed in the main report

11. Traffic – The Traffic Assessment has not been produced to an adequate standard or scope, it fails to recognise the queueing problems at the Clifton Hampden junction or consider air quality and environmentally sensitive areas. There are flaws in the accident data. Slow turning HGVs would pose a safety hazard on the congested A415.

Transport Development Control was originally satisfied with the scope and standard of the Traffic Assessment, then later objected to the application due to highways impacts, as set out in the report.

12. Health and quality of life – The site is in close proximity to sensitive receptors. Noise assessment does not take account of tonal or impulsive factors. Concern about amenity impact of floodlighting.

There has been no objection from the Environmental Health Officer. As set out in the report, it is considered that potential impacts on amenity could be satisfactorily addressed by condition.

13. Water Management – The sequential test provided is not fit for purpose, flood model is not capable of accurately predicting floodplain levels, predicted increase in flow velocity would increase erosion risk, modelling does not assess potential floodplain interactions between this development and the proposed new road and river crossing. There

are a number of areas of weakness in the ES sections on water management.

There has been no objection from the Environment Agency or the lead local flood authority on flood risk grounds.

14. Agricultural land – Sufficient evidence not provided on the percentage of the site that is best and most versatile land and the figures provided contain discrepancies. Alternatives that do not lead to the loss of BMV land have not been properly considered.

Natural England also originally requested further information with relation to the information on agricultural land. When this was provided they confirmed that they had no objections to the proposals.

15. Rights of Way – Insufficient justification for proposed permanent diversion of footpath, proposed new routes do not provide a direct access onto the Thames Path and are likely to be affected by flooding. There would be harm to the enjoyment of the Thames Path due to visual, noise and dust impacts during operations and unnatural lake feature following restoration. Stand off from the path should be 50m not 25m as there is a hedgerow providing a natural barrier.

The Countryside Access team also initially queried the permanent diversion of the footpath, however following submission of further information on this point they had no objections. There has been no objection from the Thames Path officer, and the amenity of users of the path would be protected by a buffer zone and additional landscape planting, secured by condition.

16. Biodiversity – Survey data provided with the application is insufficient to assess the impacts.

The Ecology Officer also considered that the biodiversity information submitted with the application was insufficient, and further details were requested. Following the submission of further information the Ecology Officer confirmed that there was no objection on biodiversity grounds.

17. Restoration – The potential contradiction between biodiversity and management of bird strike risk is not resolved. It seems inevitable that the large lake would lead to pressure for further development which would be contrary to Green Belt policy and further impact the landscape. Scheme would draw visitors away from the village, contrary

to the aims of the Neighbourhood Plan. There is no need for further water based recreation in this area.

This application does not propose any further development associated with the lake. It is considered that overall the restoration could potentially attract more visitors to the village through the provision of additional access. There has been no objection to the restoration proposals from the MOD on bird strike grounds or the Ecology Officer on biodiversity grounds.

18. Cumulative Impacts – The ES does not systematically assess cumulative impacts with other future development taking place around the site.

Following the submission of additional information as requested, the applicant's EIA is considered adequate. Individual assessments within the EIA consider potential cumulative impacts.

19. The objection concludes by listing further information considered to be necessary to allow a full assessment of the proposals, a summary of the reasons for objecting to the application and a list of requirements for conditions should the planning application be granted.

Summary of Bachport response to March 2017 consultation

1. Landscape and visual impact – No winter viewpoints have been provided. Key viewpoints have been missed. Large bunds should have been assessed separately. Details of the flood compensation feature are incomplete. Does not recognise the extent of landscape change, rate that the restored site would mature is overestimated, do not accept that footpath 171/15 needs to be diverted.
2. Trees and hedgerows – Tree survey did not inform development of the application scheme, some trees have been omitted, does not consider cumulative impact, does not include classification of veteran trees, hedgerows meet 'important hedgerow' criteria.
3. Noise – Further information on temporary works is unsatisfactory, noise impacts associated with afteruse too readily dismissed, some noise monitoring figures considered to be unreliable.
4. Agricultural land – amount of best and most versatile agricultural land has been underestimated, requirement for soil drainage not addressed.

5. Water management – sequential test has not been revisited, number of detailed matters of concern regarding the assessments provided for example the model is not reliable enough.
6. Wildlife – insufficient information regarding wintering and migrant birds, no additional breeding bird surveys, no consideration of cumulative impact on bats, inconsistencies and omissions on the revised ES chapter.
7. Traffic – Information submitted does not address concerns previously raised.
8. Cumulative impacts - Information submitted does not address concerns previously raised.

Further information was sought where considered necessary to address Bachport's remaining concerns, which in some cases were shared by the relevant consultee. In each case the relevant consultee is now satisfied with the information provided.

Summary of Bachport response to July 2017 consultation

9. Landscape and Visual Impact Assessment – Consider that this is not a thorough or robust document. Value and importance of existing landscape character not recognised and effects of proposed development therefore underestimated.

Further information was sought in relation to the LVIA until the information provided was sufficient for the Landscape Advisor to confirm he no longer objected to the proposals.

10. Visual amenity – No attempt to address the significant visual intrusion which would be caused by the bunds. These would be too steep and high to be properly maintained. Despite height, they would not screen the Fullamoor properties. Visual impact of silt lagoons has not been assessed. Retaining all the mature and significant hedgerow and tree cover at the site would mitigate the harm, but instead vegetation is to be removed and views opened up.

The applicant has proposed additional planting as mitigation for the impacts on landscape and visual impact.

11. Flood compensation feature – More details should be provided and LVIA underplays its impact.

Further details were provided on the area for flood compensation following these comments.

12. Trees and hedgerow – Bachport would like a further arboricultural assessment by their own advisor. However, the applicant has not permitted access to the land for this purpose.

The Council's Arboricultural Officer has confirmed that the arboricultural assessment submitted by the applicant is sufficient and there is no need for further assessment work.

13. Noise – still no information provided on the proposed nature of the noise controls for temporary works. Therefore, it has not been demonstrated that the temporary works would not cause unacceptable amenity impact.

There has been no objection from the Environmental Health Officer. There would be noise and time limits to the temporary works, in line with national policy. Operations would not be permitted at the higher noise level associated with temporary works for more than 8 weeks in any 12 month period. The noise limit for temporary works is 70 dB.

14. Best and most versatile agricultural land – Bachport continues to disagree with the applicant's assessment of the amount of best and most versatile agricultural land on the site. Additional drainage should be included in the restoration scheme, rather than the need for it being assessed during the aftercare, as proposed by the applicant.

Natural England have confirmed that they have no objection to the proposals.

15. Silt lagoons – Remain concerned about the proximity of the silt lagoons to residential property and public rights of way.

It is usual for quarries to have silt lagoons and these would be required by other legislation to be safe and secure.

16. Wildlife habitats – Some survey requirements from the Regulation 22 request have not been complied with. There continues to be no appropriate quantification of the impact of the proposed development

on breeding birds in terms of numbers and diversity and impacts on vulnerable or protected species.

The Council's Ecology Officer has considered the information provided and following a site meeting with the applicant's ecologist has accepted that some additional information originally required is not needed.

17. Traffic – No further assessment work of the traffic controlled signal junction at Clifton Hampden, as originally required in the Scoping Opinion. Traffic is the highest source of concern for local residents. The Highway Authority recently raised an objection to the proposed access arrangements for a new sand and gravel quarry at New Barn Farm, Cholsey. The same level of scrutiny should be applied here.

Transport Development Control has objected to this application, as set out in the main report.

18. Water Environment – Bachport submitted a technical review of the Oxfordshire County Council Drainage/Lead Local Flood Authority consultation response.

Further groundwater advice has been sought in response to the technical work submitted by Bachport. This further advice has not been received at the time of drafting the report; however it will be reported in an addendum.

Summary of Bachport Response to October 2017 consultation

1. The LVIA supplement does not address the deficiencies in the original LVIA. It fails to appreciate the baseline landscape character, continues to ignore the South Oxfordshire Landscape Assessment and does not consider SOCS policy CSEN1. Large scale development of any kind is inappropriate in areas identified as 'conserve' in this document, which the application area is. The loss of existing trees and hedgerows is underplayed in the LVIA. These should have been retained.
2. Concerned about proposed additional planting – would enclose footpaths, remove the connection between Fullamoor Farmhouse and the agricultural land to the south, tree screen to west would be ineffective, planting to north would not mature in time to be effective, not clear that it would be possible to secure planting on land outside of applicant's control.

3. Assessment of landscape impact of bunds is not objective, these would affect the landscape character and the openness of the Green Belt. Concerned about flood risk in relation to the proposed changes to bunds and straw bales.
4. Removal of the concrete plant is welcomed. However, a condition would be needed to remove permitted development rights to ensure that it is not put up anyway. The layout of the plant site could be improved now that the concrete plant is no longer proposed to reduce bunding and provide better screening.
5. Development Stage Plans do not clearly show the retention of a ridge of high ground to prevent floodwater entering the northern part of the floodplain as advised by applicant. Concerned that the proposal to manage aquatic vegetation could increase the erosion potential of the river during flood events.
6. Application does not show that the quarry proposal would not harm the delivery of the river crossing transport scheme, which is safeguarded by SOLP 2033.
7. There is no immediate need for new reserves of sand and gravel to be permitted. Although there is no maximum landbank level, caution should be exercised in interpreting this as meaning that there can be no justification for refusing an application for mineral extraction on the basis of lack of need. Additional reserves should be found through the allocation of sites in the Part 2 plan.
8. The plans show the existing farm track being blocked. If the quarry access is to be used for the agricultural operations as a result of this development, this should be included in the Transport Statement.
9. There are some inconsistencies in the revised Planning Statement which cause uncertainty about the nature of the proposed development and its effects.

Although OCC's Landscape Advisor also initially had some concerns about the LVIA methodology and assessments, sufficient information has now been submitted for him to remove his in principle objection. The applicant has confirmed that the landowner has indicated willingness to enter into a Section 106 agreement to secure planting on areas outside the control of the applicant. The Environment Agency has provided advice on the amended bund configuration and flood risk and does not consider that there would be a significant impact. The

need for the mineral and the impacts on the proposed Thames crossing are covered in detail in the main report. The applicant has confirmed that the farmer would use the new quarry access to transport animals, and has provided comments from the transport consultants confirming that this is not considered to pose a risk to highway safety. Transport Development Control has confirmed that the proposed access would accommodate those movements appropriately and they would not have any significant traffic impact as although they would travel along the A415 for a short distance, they would not use the junction in Clifton Hampden or Tollgate Road. There are some instances where the Planning Statement has not been updated to reflect changes recorded elsewhere in the application. However, it is not considered that these give rise to uncertainties about what is proposed. The concrete batching plant is no longer referenced in the description of development and the planning statement is clear that it is no longer proposed, so subsequent references included in error can be disregarded. The applicant has confirmed that it is the intention to maintain a ridge of high ground as set out elsewhere in the application, but the Development Stage plans do not include this level of detail. Detailed working schemes would be required by condition for each phase. The applicant has confirmed that it would not be possible to change the location of the processing plant following the removal of the concrete plant from the plans, as the processing plant has a bigger footprint.

Summary of Representation on behalf of residents of Fullamoor Farmhouse and 1-4 Fullamoor Barns

- The operations, including extensive bunding, and the restoration would cause wholesale landscape change in an unspoilt and attractive area which includes heritage assets, well used footpaths, old hedgerows and woodland.
- Visual intrusion to the properties, which site on elevated land with open views over the extraction site, which is not properly assessed in the LVIA
- Location of silt ponds near these properties is of concern as they could present a long term quick sand hazard and any fencing to secure this would be a further visual intrusion
- Floodlighting of the plant site could cause light spillage and sky glow close to properties. This could also impact bats.
- Proposed quarry access in close proximity to access to properties and potential new access to proposed new road and river crossing
- Concerned that the quarry proposals prejudice the route options for the new road, making it the junction closer to properties

- Noise and dust would be worse due to the natural amphitheatre effect of the topography
- Concerned about open ended nature of 'temporary' works for which the noise limit would be raised to 70dB LAeq 1hr
- Concerned about prospect of soil and overburden storage in front of homes for the duration of the works, with visual, noise and dust implications.
- Concerned about noise from reversing beepers and tonal or impulsive factors in the noise from the plant
- No consideration of additional nuisance should the route for the new road and river crossing also pass close to these properties
- If permission is granted, request conditions as set out in the Bachport response.

Representation on behalf of residents of Fullamoor Farmhouse and 1-4 Fullamoor Barns March 2017 consultation

- Particular issues of concern are landscape impact, harm to visual amenity and noise
- Comments in earlier submission still stand
- No winter views have been provided, despite request
- The bunds needed to mitigate noise and dust would be visually intrusive and incongruous in the landscape
- Concerned about the noise levels during temporary works

Representation on behalf of residents of Fullamoor Farmhouse and 1-4 Fullamoor Barns July 2017 consultation

- Principal concerns relate to landscape impact, visual amenity and noise, which are interrelated
- 8 metre bund proposed on length of the Fullamoor properties would be visually intrusive and prone to slumping. Maintenance would be noisy and invade privacy. Visual impact has not been properly assessed
- Visual impact on fencing and signage on silt lagoon has not been assessed
- No winter views have been provided, these were required in the Regulation 22 request.
- Fullamoor Farmhouse is being considered for listing as an historic building and a decision is pending. Impact on this building not adequately considered
- Not convinced that proposed noise mitigation would be effective – properties above the height of bund
- Not demonstrated that it is realistic to complete temporary works within the permitted 8 weeks

- Concerned that the applicant appears reluctant to do proper assessments
- Also support the Bachport submission

Representation on behalf of residents of Fullamoor Farmhouse and 1-4 Fullamoor Barns October 2017 consultation

- Support the Bachport comments
- Previous comments still stand, additional information does not address concerns
- If the purpose of removing the concrete plant was to mitigate visual impacts, the plant site area and bunding should be reduced
- The illumination proposed in the lighting strategy could be highly visible and intrusive to the residences
- Proposed new planting would not screen views into the site from the Fullamoor properties as it would take time to develop
- Continue to have concerns about unnecessary clearance of woodland within the application area. Proposed new planting would lead to unwelcome outcomes.
- Do not agree with the LVIA conclusions on the impacts of additional planting
- Noise impacts of changes to bunding have not been assessed
- A decision is pending for Fullamoor Farmhouse to be added to the list of registered historic buildings, potential harm needs to be addressed, the farmland outlook is key to the setting

There has been no objection from the Environmental Health Officer or Public Health England. It is considered that impacts on residential properties in close proximity to the site could be adequately managed through planning conditions.

Objections from the United Kingdom Atomic Energy Authority (UKAEA)

October 2017:

- Concerns about transport and potential dust impact in previous letters still stand
- Acknowledges that concerns about prematurity in relation to the OMWCS have been superseded by the adoption of that plan
- Consider the proposal premature in relation to the South Oxfordshire Local Plan, the final publication version of which proposes the removal of Culham Science Centre (CSC) from the Green Belt to enable the redevelopment and intensification of the site and the allocation of land west of CSC for approximately 3500 new homes

- The allocation of land adjacent to CSC for housing is predicated on a new Thames crossing, one of the safeguarded routes passes through the proposed quarry site
- The allocation of land adjacent to CSC would also contribute to a Clifton Hampden bypass, which is important to the UKAEA's plans for growth.

The proposed new road crossing is considered in the main report.

April 2017:

- Additional information does not overcome concerns about dust or transport
- Remain concerned about prematurity in relation to OMWCS and also the emerging SODC plan, including the proposal to allocate land for 3500 new homes west of CSC

The EHO is satisfied that dust can be adequately controlled by condition. Transport Development Control has objected to the application and this is considered in the main report. The issue of prematurity is also discussed in the main report.

May 2016:

- Effect of wind borne dust on sensitive scientific equipment.
- Implications of the proposed new link road not considered
- Premature in relation to the emerging Oxfordshire Minerals and Waste Local Plan and SOLP
- Would deter businesses from locating in the area, contrary to the SODC's policies
- Culham No 1 identified as a potential site for new housing
- Concern about traffic
- Concern that the EIA does not recognise the importance of CSC

Following this objection, an updated air quality assessment was requested to take into account the potential impact of airborne dust on science and technology businesses located at Culham Science Centre. When consulted on this further information, CSC responded that the ES now recognises the significance and likely sensitivity to dust at CSC, and efforts have been made to assess potential impacts. Although CSC had remaining concerns about the assessment criteria used, they acknowledged an absence of recognised dust assessment criteria and recommended that should permission be granted, a suitable Dust Management and Monitoring Plan (DMMP) should be implemented throughout the life of the site. This can be secured by condition. The SCS representation had proposed that the site access junction be upgraded to a ghost island right turn arrangement. However, this is not proposed by the applicant and Transport Development Control commented that it is not something that could be insisted upon due to the number of turning movements. However, there has subsequently been an objection from Transport Development Control and this is discussed in the main report.

It is considered that the businesses and organisations within the Culham Science Centre will be adequately protected by virtue of the distance between the CSC and this development, and by conditions imposed to protect amenity.

Annex 5 - Sequential Test

Introduction

1. The National Planning Policy Framework (NPPF) paragraph 101 states that a sequential approach should be used in areas known to be at risk from any form of flooding and that the aim of the sequential test is to steer new development to areas with the lowest probability of flooding. Development should not be permitted if there are reasonably available sites appropriate for the proposed development in areas with a lower probability of flooding.
2. NPPF paragraph 103 states that local authorities should only consider development appropriate in areas at risk of flooding where, informed by a specific flood risk assessment following the sequential test, it can be demonstrated that within the site the most vulnerable development is located in the areas of lowest flood risk, unless there are overriding reasons to prefer a different location.
3. OMWCS policy C3 states that development will, wherever possible, take place in areas with the lowest probability of flooding and that where development takes place in an area of identified flood risk this should only be where alternatives in areas of lower flood risk have been explored and discounted, using the sequential test and exception test as necessary and where a flood risk assessment is able to demonstrate that the risk of flooding is not increased from any source.
4. As part of the application site extension area falls within Flood Zones 2 and 3 and the site has not previously been sequentially tested through a development plan allocation, it is necessary to undertake a sequential test exercise to establish whether there is an alternative site in an area of lesser flood risk which could accommodate the proposed development and also to establish whether the most vulnerable development is located in the areas of lowest flood risk within the site.
5. NPPG paragraph 018 (Reference ID: 7-018-20140306) states that, 'planning authorities should apply the sequential approach to the allocation of sites for waste management and, where possible, mineral extraction and processing. It should also be recognised that mineral deposits have to be worked where they are (and sand and

gravel extraction is defined as ‘water-compatible development’ in Table 2, acknowledging that these deposits are often in flood risk areas). However, mineral working should not increase flood risk elsewhere and needs to be designed, worked and restored accordingly. Mineral workings can be large and may afford opportunities for applying the sequential approach at the site level. It may be possible to locate ancillary facilities such as processing plant and offices in areas at lowest flood risk. Sequential working and restoration can be designed to reduce flood risk by providing flood storage and attenuation. This is likely to be most effective at a strategic (county) scale.’

6. The NPPF paragraph 105 indicates that the Local Planning Authority Strategic Flood Risk Assessment (SFRA) will provide the basis for applying the Sequential Test. Oxfordshire County Council Minerals and Waste Level 1 Strategic Flood Risk Assessment was published in August 2015 to support the Oxfordshire Minerals and Waste Local Plan – Core Strategy. In March 2015 an initial assessment of potential minerals and waste sites and broad areas was undertaken in the Initial Assessment Tables.
7. The applicant has provided a sequential test document to provide evidence to allow the minerals planning authority to determine whether the application site passes the sequential test. This concludes that the site passes the sequential test as there are no other reasonably available alternative sites. However, it is the responsibility of the minerals planning authority to conduct their own sequential test and this is set out below.

Potential Alternative Sites

8. Local Plan evidence base documents have been used to identify possible alternative sites. The applicant has provided details of 44 alternative sites taken from the March 2015 Initial Assessment Tables.
9. The proposed quarry would provide approximately 2.4 million tonnes of sand and gravel. Many of the nominated sites have a significant lower estimated yield and therefore would not be capable of providing an alternative to the development proposed at Fullamoor. Therefore, sites containing a significantly (25% or more) lower yield were eliminated at stage 1 of the sequential test. The full list of sand and gravel sites assessed including details of their yield is set out in Table 1.

10. The applicant's sequential test eliminated sites with a significantly higher or lower yield (+/-25%). However, it is not considered appropriate to eliminate sites with a significantly higher potential yield as they are considered capable of producing the quantity of sand and gravel proposed at the application site. As the estimated yield of the application site is 2.4 million tonnes, sites with 1.8 million tonnes or more can be taken forward for further assessment, unless the nomination has been withdrawn.

Table 1

Site Name and Location	Site Ref.	Estimated Yield (million tonnes)	Site Status	Is the yield comparable
Land west of A420, Faringdon	SG-01	0.4	Nomination withdrawn	N/A
Land west of Wicklesham and south of A420	SG-02	0.3	Nomination withdrawn	N/A
Land adjacent to Benson Marina	SG-03	0.07	Active nomination	No
Extensions to Sutton Wick	SG-06	0.25	Nomination withdrawn	N/A
Land at Lower Road, Church Hanborough	SG-08	2.5	Active nomination	Yes
Land north of Drayton St Leonard	SG-09	4.5	Active nomination	Yes
Benson Marina	SG-11	0.07	Nomination withdrawn	N/A
Land South of Chazey Wood, Mapledurham,	SG-12	3.0	Active nomination	Yes

PN6

Land at Shillingford	SG-13	5.3	Active nomination	Yes
Stonehenge Farm, Northmoor	SG-14	1.7	Nomination withdrawn	N/A
Dairy Farm, Clanfield	SG-15	5.4	Active nomination	Yes
Land at Culham	SG-17	4	Active nomination	Yes
Bridge Farm, Appleford,	SG-19	0.5	Active nomination	No
Land between Eynsham & Cassington	SG-20	1.5	Active nomination	No
Wharf Farm, Cassington	SG-20a	1.6	Active nomination	No
Land at Eynsham	SG-20b	1.9	Active nomination	Yes
Sutton Farm, Sutton	SG-29	5.0	Active nomination	Yes
New Barn Farm, South of Wallingford	SG-33	4.0	Active nomination	Yes
Land at Friars Farm, Stanton Harcourt	SG-36	0.4	Active nomination	No
Land at Grandpont	SG-37	1.5	Active nomination	No
North of Lower Radley	SG-41	1.5	Active nomination	No
North of Lower Radley	SG-41a	2.3	Not a nominated site	N/A

PN6

Nuneham Courtenay	SG-42	4.4	Not a nominated site	N/A
Land at Marcham	SG-43	8.7	Not a nominated site	N/A
Land at Little Wittenham	SG-44	24.4	Not a nominated site	N/A
Land at Appleford	SG-45	17.7	Not a nominated site	N/A
Land northeast of Cholsey	SG-46	1.5	Not a nominated site	N/A
Land at Wallingford Benson	SG-47	2.5	Not a nominated site	N/A
Land North of Didcot Perimeter Road, Didcot,	SG-53	0.75	Not a nominated site	N/A
Land south of River Thames near Radcot	SG-54a/b	31.0	Not a nominated site	N/A
Thrupp Lane, Radley	SG-56	0.2	Nomination withdrawn	N/A
New Barn Farm, Cholsey	SG-57	0.4	Nomination withdrawn	N/A
Chestlion Farm, Clanfield	SG-58	5.0	Active nomination	Yes
Manor Farm, Clanfield	SG-58a	12.0	Active nomination	Yes
Stadhampton	SG-59	1.0	Active nomination	No

PN6

White Cross Farm, Wallingford	SG-60	0.5	Active nomination	No
Mains Motors, Ewelme	SG-61	Not known	Not known	Not known
Appleford, Didcot,	SG-62	1.1	Active nomination	No

11. As shown in Table 1, following the elimination of sites which could not provide a comparable yield and sites for which the nomination had been withdrawn or not taken forward, there were 11 potential alternative sites remaining:

SG08 Land at Lower Road Church Hanborough
 SG09 Land North of Drayton St Leonard
 SG12 Land South of Chazey Wood
 SG13 Land at Shillingford
 SG15 Dairy Farm
 SG17 Land at Culham
 SG20b Land at Eynsham
 SG29 Sutton Farm
 SG33 New Barn Farm
 SG58 Chestlion Farm
 SG58a Manor Farm Clanfield

12. Flood Risk status was categorised using a Red, Amber, Green (RAG) approach, as used in the Oxfordshire Minerals and Waste Plan Background Paper: Flooding and Minerals, to enable a comparative appraisal of flood risk at different sites. The criteria for the RAG approach was as follows:

- RED: up to 25% deliverable area in Flood Zone 1 (FZ 1) and more than 75% deliverable area in Flood Zone 3 (FZ 3).
- AMBER: 20-50% deliverable area in Flood Zone 1 (FZ 1) and 30-75% deliverable area in Flood Zone 3 (FZ 3).
- GREEN: more than 50% in Flood Zone 1 (FZ 1) and less than 30% in Flood Zone 3 (FZ 3).

13. Not all of the sites fit neatly into these three categories. Where a site does not fit any of the definitions exactly the RAG rating has been assigned on the basis of the percentage of land in flood zone 3 and this has been noted.

14. According to the Environment Agency definitions, the application site has 53% of land in flood zone 3, 42% in flood zone 2 and 5% in flood zone 1. Therefore, it is classified as amber on the basis of the percentage in flood zone 3.
15. The applicant's flood risk assessment includes a flood model, which has different flood risk classifications for the site. According to the model 56% of the site is in flood zone 3, 24% in flood zone 2 and 20% in flood zone 1. The site is therefore also classified as amber when the flood risk assessment proportions are used.
16. Potential alternative sites with a flood risk classification of red are considered to have a higher flood risk status than the application extension site and therefore can be eliminated.

Table 2

Site	Site Ref	% FZ1	% FZ2	%FZ3	RAG	Further assessment needed?
Land at Lower Road Church Hanborough	SG-08	66.63	1.91	31.46	Amber (on basis of FZ3)	Yes
Land North of Drayton St Leonard	SG-09	52.24	19.39	28.37	Green	Yes
Land South of Chazey Wood	SG-12	0	8.18	91.83	Red	No
Land at Shillingford	SG-13	42.47	45.59	11.94	Green (on basis of FZ3)	Yes
Dairy Farm	SG-15	40.46	8.71	50.84	Amber	Yes
Land at Culham	SG-17	14.78	47.43	37.8	Amber (on basis of FZ3)	Yes
Land at Eynsham	SG-20b	0	9.37	90.63	Red	No
Sutton Farm	SG-29	43.9	8.33	47.77	Amber	Yes
New Barn Farm	SG-33	76.35	20.44	3.21	Green	Yes
Chestlion Farm	SG-58	94.29	0.67	5.04	Green	Yes
Manor Farm	SG-	65.4	6.16	28.43	Green	Yes

Clanfield	58a					
Application site - Fullamoor	20	24	56	Amber		

17. Following the assessment of potential alternative sites against flood risk status, it can be seen that two sites - Land south of Chazey Wood and Land at Eynsham – have a higher flood risk than the application site and can be eliminated. Therefore, there are nine remaining sites to be taken forward for further assessment.

Further Assessment

18. Constraints on the delivery of these sites were identified by checking for designated or protected sites and with reference to the Preliminary Assessment of Minerals Site Nominations revised in April 2016 undertaken in support of the work done for the Oxfordshire Minerals and Waste Core Strategy. This document only considers sites located within the Strategic Resource Areas identified in the draft Core Strategy policy M3. Three of the nominations (SG-15, SG-58 and SG-58a) are for land near Clanfield, which falls outside these areas, therefore the 2012 revision to the Preliminary Sites Assessment was used for these sites.

19. The potential constraints on the alternative sites are set out below.

20. Alternative 1- Land at Lower Road Church Hanborough SG08 – Part of the site lies within Church Hanborough conservation area and the site adjoins listed buildings and bridges. The site lies less than 1km from Cotswolds AONB and within 5km of the Oxford Meadows SAC.

21. Alternative 2- Land North of Drayton St Leonard SG09 - The southern part of this site is in close proximity to Drayton St Leonard village and Berinsfield and potential impacts arising from this would also need to be assessed. It contains archaeological remains of equivalent value to a scheduled monument. The site comprises best and most versatile agricultural land (grade 2)

22. Alternative 3- Land at Shillingford SG13 – This site contains 3 scheduled monuments and other remains considered of being of equivalent value. The presence of valuable archaeological deposits is considered to pose a significant constraint on this site. The site is in close proximity to the North Wessex Downs AONB. Parts of the site are also in close proximity to Shillingford village and potential impacts arising from this would also need to be assessed. The site comprises best and most versatile agricultural land (grades 1 and 2)
23. Alternative 4- Dairy Farm SG-15 – The northern part of the site is in close proximity to Clanfield village.
24. Alternative 5- Land at Culham SG-17 – This site nomination covers a larger area that includes the land in the application site area, encompassing additional land to the west. Although the site nomination area contains a lower percentage of land in FZ3, the application was made on a smaller area than the site nomination due to constraints such the barrow cemetery scheduled monument (scheduled in 2014) and in order to safeguard proposed alignments for the new road and river crossing. Therefore, it is not considered feasible for the proposed development to be provided for in areas of the site nomination area with a lesser flood risk.
25. Alternative 6- Sutton Farm SG-29 –the site adjoins Stanton Harcourt and Sutton conservation area.
26. Alternative 7- New Barn Farm SG-33- This site is subject to a planning application (MW.0094/16) which was submitted in July 2016 and at the time of writing this report, is undetermined. The application for sand and gravel extraction at New Barn Farm proposes the extraction of 2.5 million tonnes of sand and gravel from a 34 hectare site over an 18 year period.
27. Alternative 8- Chestlion Farm SG-58 – This site was precluded from further assessment in the 2012 preliminary site assessment document, on grounds of archaeology advice, distance from lorry network and from markets. The site contains valuable archaeological deposits considered to pose a significant constraint on this site and on the basis of the assessment work which has already been undertaken it seems likely that this site would not be available for mineral working given that constraint. The eastern parts of the site are also in close proximity to Clanfield village and potential impacts arising from this would also need to be assessed.

28. Alternative 9- Manor Farm Clanfield SG-58a –This site was precluded from further assessment in the 2012 preliminary site assessment document, on grounds of archaeology advice, distance from lorry network and from markets.
29. There is no certainty that any of the nine potential alternative sites identified in Table 2 above are capable of being delivered. With the exception of New Barn Farm (SG-33) none of these sites have been the subject of a planning application and so would first have to go through the planning process. It typically takes months to years for an applicant to compile a new planning application and the Environmental Impact Assessment for a large minerals development. Ecological survey work can often only take place at certain times of year and data from a number of years of groundwater monitoring work can be required. It would then typically take a number of months to determine an application of this type after it has been submitted by the applicant. Therefore, with the exception of New Barn Farm, it is considered that the potentially alternative sites would not be capable of providing a genuine alternative to the application site, as they could only be provided on a different timescale.
30. However, the New Barn Farm site could potentially be delivered on the same timescale as the application site, as it is also subject to a planning application. Following the submission of further information and a number of consultation periods, the New Barn Farm application is ready for determination.

Conclusions

31. Having considered the constraints on the potentially available alternative sites, it is concluded that the majority of the alternative extraction sites identified cannot be demonstrated to be capable of delivery within the same timescale as the application site. In addition, further assessment work is needed in each case and should this work be undertaken in the future it is possible it could find the alternative sites to be unsuitable, or significantly reduce the area of the site which could be worked. However, one alternative site, at New Barn Farm is at a similar stage to the application site.
32. The application site cannot pass the sequential test; there is at least one reasonably available site appropriate for the proposed development in areas with a lower probability of flooding, at New Barn Farm, Cholsey.

Annex 6 – European Protected Species

The Local Planning Authority in exercising any of their functions, have a legal duty to have regard to the requirements of the Conservation of Species & Habitats Regulations 2010 which identifies 4 main offences for development affecting European Protected Species (EPS).

1. Deliberate capture or killing or injuring of an EPS
2. Deliberate taking or destroying of EPS eggs
3. Deliberate disturbance of a EPS including in particular any disturbance which is likely
 - a) to impair their ability –

- i) to survive, to breed or reproduce, or to rear or nurture their young, or
 - ii) in the case of animals of a hibernating or migratory species, to hibernate or migrate; or
- b) to affect significantly the local distribution or abundance of the species to which they belong.

4. Damage or destruction of an EPS breeding site or resting place.

Our records, the habitat on and around the proposed development site and ecological survey results indicate that a European Protected Species (otter) is likely to be present.

The mitigation measures detailed within the survey are considered to be convincing and in your officers opinion will secure “offence avoidance” measures.

Our records, the habitat on and around the proposed development site and ecological survey results indicate that a European Protected Species (bat species) may be present.

Your officers would therefore recommend the following conditions to secure the implementation of the offence avoidance measures to ensure that no offence is committed:

- additional surveys in later phases of extraction

Your officers consider that sufficient information has been submitted with the application which demonstrates that measures can be introduced which would ensure that an offence is avoided. The application is therefore not considered to have an adverse impact upon protected species provided that the stated mitigation measures are implemented.