Explanation Note:

CD12.39 - Secretary of State's (SoS) letter dated 4 April 2019 in relation to an appeal by RJD Ltd and Gowling WLG Trust Corporation Limited for land at Ware Park, Wadesmill Road, Hertford (APP/M1900/W/17/3178839)

Appellant's Note

The Appeal decision is referred to in considering the concept of openness in my proof. The SoS agreed with the Inspector's findings on Green Belt in relation to processing plant equipment, access and activity associated with the mineral extraction. In this context both the SoS and Inspector considered that these developments "would, to some extent, impair the openness of the area, but not enough to exceed the threshold or tipping point for the purposes of applying paragraph 146 of the Framework". However, whilst the Inspector considered that peripheral screen bunds would affect the openness of the Green Belt to an extent that they would be considered inappropriate development, the Secretary of State disagreed and indicated that they would not be inappropriate development (Paragraph 19).

Ministry of Housing, Communities & Local Government

Our ref: APP/M1900/W/17/3178839

Mr Douglas Symes (Agent)
D.K. Symes Associates
Appletree Farmhouse
39 Main Road
Middleton Cheney
Banbury
Oxfordshire
OX17 2ND

4 April 2019

Dear Sir,

TOWN AND COUNTRY PLANNING ACT 1990 – SECTION 78 AND 79
APPEAL MADE BY RJD LTD AND GOWLING WLG TRUST CORPORATION LIMITED
LAND AT WARE PARK, WADESMILL ROAD, HERTFORD
APPLICATION REF: 3/0770-16

1. I am directed by the Secretary of State to say that consideration has been given to the report of John Woolcock BNatRes(Hons) MURP DipLaw MRTPI, who held a public local inquiry on 1-4, 9-11, 18 May and 23-25 October 2018 into your client's appeal against the decision of Hertfordshire County Council (HCC) to refuse your client's application for planning permission for the phased extraction of sand and gravel, mobile dry screening plant, stockpile area, weighbridge, wheel cleaning facilities, ancillary site offices, construction of a new access onto Wadesmill Road with phased restoration to landscaped farmland at a lower level, in accordance with application ref: 3/0770-16, dated 4 March 2016.

2. On 23 February 2018, this appeal was recovered for the Secretary of State's determination, in pursuance of section 79 of, and paragraph 3 of Schedule 6 to, the Town and Country Planning Act 1990.

Inspector's recommendation and summary of the decision

3. The Inspector recommended that the appeal be dismissed and planning permission be refused.

4. The Inspector further recommended that your client's request to determine the appeal on the basis of an alternative 1.25 Mt scheme be declined.

5. For the reasons given below, the Secretary of State agrees with the Inspector's conclusions, except where stated, and agrees with his recommendations. He has decided to dismiss the appeal and refuse planning permission. He also declines your client's request to determine the appeal on the basis of the alternative 1.25 Mt scheme.

Ministry of Housing, Communities & Local Government
Maria Stasiak, Decision Officer
Planning Casework Unit
3rd Floor Fry Building
2 Marsham Street
London SW1P 4DF
Tel: 0303 444 1624
Email: PCC@communities.gsi.gov.uk

A copy of the Inspector's report (IR) is enclosed. All references to paragraph numbers, unless otherwise stated, are to that report.

Environmental Statement

6. In reaching this position, the Secretary of State has taken into account the Environmental Statement which was submitted under the Town and Country Planning (Environmental Impact Assessment) Regulations 2011 and the environmental information submitted before the inquiry opened and during the inquiry (IR5). Having taken account of the Inspector's comments at IR351, the Secretary of State is satisfied that the Environmental Statement and other additional information provided complies with the above Regulations and that sufficient information has been provided for him to assess the environmental impact of the proposal.

Procedural matters

7. As set out by the Inspector at IR2, the original application was for the extraction of 2.6Mt sand and gravel, but this was subsequently changed to 1.75Mt. It is the scheme for the extraction of 1.75Mt which was refused by HCC in determining the application and that is now the appeal scheme.

8. As outlined by the Inspector at IR4, a second scheme proposed by the appellants would omit Phase 4 and the stockpile area from the 1.75Mt scheme, and reduce the tonnage of sand and gravel extracted to 1.25 Mt. The 1.25 Mt scheme was the subject of a separate planning application (Ref.3/2352/17), which was refused by HCC on 26 April 2018. The appellants have requested that the current appeal be decided by the Secretary of State on the basis that the 1.75 Mt scheme be considered first, and if found to be unacceptable, that a condition limiting the scheme to 1.25 Mt be imposed. All the written representations to HCC about the application for the 1.25 Mt scheme were submitted to the Inquiry.

9. A list of representations which have been received since the inquiry is at Annex A. The Secretary of State is satisfied that the issues raised do not affect his decision, and no other new issues were raised in this correspondence to warrant further investigation or necessitate additional referrals back to parties. Copies of these letters may be obtained on written request to the address at the foot of the first page of this letter.

Policy and statutory considerations

10. In reaching his decision, the Secretary of State has had regard to section 38(6) of the Planning and Compulsory Purchase Act 2004 which requires that proposals be determined in accordance with the development plan unless material considerations indicate otherwise.

11. In this case the development plan consists of the East Herts District Plan (EHDP), adopted in October 2018 and the saved policies of the Hertfordshire Minerals Local Plan Review (MLP) 2007. The Secretary of State considers that the development plan policies of most relevance to this case are those set out at IR38-42.

12. Other material considerations which the Secretary of State has taken into account include the National Planning Policy Framework ('the Framework') and associated planning guidance ('the Guidance'), and those other matters set out in IR55-56. The revised National Planning Policy Framework was published on 24 July 2018, and unless

otherwise specified, any references to the Framework in this letter are to the revised Framework.

13. In accordance with section 72(1) of the Planning (Listed Buildings and Conservation Areas) Act 1990 (the LBCA Act), the Secretary of State has paid special attention to the desirability of preserving or enhancing the character or appearance of conservation areas.

Emerging plan

14. Consultation on a review of the Minerals Local Plan (eMLP) was undertaken between December 2017 and February 2018. The consultation draft plan did not include the appeal site as a preferred area for sand and gravel extraction. The Local Mineral Planning Authority intends to submit the plan to the Secretary of State for examination in summer 2019. The Secretary of State considers that the emerging policies of most relevance to this case include draft policies 3, 4, 12, 14, 15 and 16.

15. The Bengeo Neighbourhood Plan is at an early stage of development, and has not yet been submitted to the local planning authority. Bengeo Field is identified in the draft as an area of designated local green space.

16. Paragraph 48 of the Framework states that decision makers may give weight to relevant policies in emerging plans according to: (1) the stage of preparation of the emerging plan; (2) the extent to which there are unresolved objections to relevant policies in the emerging plan; and (3) the degree of consistency of relevant policies to the policies in the Framework. Given the early stages of development, the Secretary of State considers that the eMLP carries limited weight and the emerging Bengeo Neighbourhood Plan carries little weight.

Main issues

Location of site

17. The Secretary of State notes that significant areas of the appeal scheme would be located outside the boundaries of the Preferred Area for mineral extraction. He agrees with the Inspector's analysis at IR441, and agrees that the scheme would not accord with MLP Policy 3.

Green Belt

18. The Secretary of State has considered carefully the Inspector's findings at IR362-374 about the impact of the scheme on the Green Belt. He agrees with the Inspector at IR366 that plant, equipment, access and activity associated with the mineral extraction here would, to some extent, impair the openness of the area, but not enough to exceed the threshold or tipping point for the purposes of applying paragraph 146 of the Framework.

19. He has also considered the Inspector's reasoning at IR366-374 in relation to the effect of the bunds and tree planting on the openness of the Green Belt and the setting of historic Hertford. In reaching his conclusion, the Secretary of State has taken into account that the bunds could exist for up to 10 years, which for GLVIA3 in landscape terms marks a boundary between medium term and long term effects (IR367), and that the adverse effects on openness would be fully reversible in time (IR368). He has also taken into account that there would be no permanent built development impacting on the openness of the Green Belt, and that tree planting does not constitute development and therefore is not inappropriate development in the Green Belt. He does not consider that the tree

planting would be in conflict with the purposes of the Green Belt. Overall the Secretary of State considers that the exception for mineral extraction at paragraph 146 of the Framework does apply, the proposed mineral extraction is therefore not inappropriate development in the Green Belt, and there is no conflict with local or national Green Belt policies.

Character and Appearance

20. The Secretary of State has carefully considered the Inspector's analysis at IR375-388. He agrees with the Inspector that while not subject to any designation given to landscape, the appeal site is a landscape resource and visual amenity of considerable importance because of its proximity to the urban area (IR378), and the fact the appeal site retains its natural landform makes it important in its local context (IR379). For the reasons given in IR375-382, the Secretary of State agrees with the Inspector that the operational development to extract, screen, stockpile and transport sand and gravel would have an adverse effect on the character and appearance of the area of major significance, albeit of a limited duration (IR388).

21. The Secretary of State has gone on to consider impacts following restoration. He agrees with the Inspector for the reasons given in IR384 that the restored landform would give the landscape an artificial crumpled appearance, and that the proposed low-level restoration would not be appropriate in the landscape context which applies here. He further agrees for the reasons given in IR385-388 that that appellants' hedgerow and tree planting would be the wrong landscape strategy for the appeal site (IR385) and that the cumulative impact of the appeal scheme, over time, adds to the overall harm to the landscape resource (IR387). He therefore agrees with the Inspector at IR388 that on restoration the scheme would have an adverse effect of moderate significance. Overall the Secretary of State agrees with the Inspector's conclusions that the appeal scheme would have an adverse effect on the character and appearance of the area of substantial significance (IR388), which carries substantial weight against the proposal (IR433), and would not be accordance with MLP Policies 12 and 18(ii) (IR442).

Amenity and living conditions

22. The Secretary of State has carefully considered the Inspector's reasoning at IR389-402 and agrees with his analysis. Overall the Secretary of State agrees with the Inspector that the appeal scheme would have an adverse effect on the living conditions of residents and on the amenity of the area which carries moderate weight against the proposal and would not accord with MLP Policy 18(viii) or with the aim of the NPSE to avoid significant adverse impacts on the quality of life (IR394, 402, 433, 442).

Hydrogeology

23. For the reasons given at IR406-420, the Secretary of State agrees with the Inspector's analysis of the risks from the development to the hydrogeology, including groundwater pollution, harm to the aquifer and the public water supply. He agrees with the inspector's conclusion at IR419 that the risk of contaminating groundwater would give rise to an adverse effect of moderate significance, which should given substantial weight because of the implications for the public water supply. He further agrees with the Inspector at IR420 that in the absence of an appropriate mechanism and planning condition to safeguard the aquifer, the proposed development would pose an unacceptable risk to groundwater pollution, and so would conflict with MLP Policies 17(iv) and 18(ix), and

would have an unacceptable adverse impact on the natural environment for the purposes of applying paragraph 205(b) of the Framework (IR420).

Benefits of the scheme

24. For the reasons given at IR429-431 and IR435 the Secretary of State considers that the employment and economic benefits, including the contribution of minerals from the appeal site, carries great weight in favour of the proposal. For the reasons given at IR403-405, the Secretary of State agrees with the Inspector at IR437 that the permanent enhancements to the PRoW network carry slight weight in favour of the scheme.

Other matters

25. The Secretary of State agrees with Inspector's reasoning in relation to highway safety, biodiversity and supply of housing (IR421-422, 423-425 and 428 respectively).

26. The Secretary of State agrees with the Inspector at IR 426 that, for the reasons stated, there would be some harm to agricultural land which would be an adverse effect of minor significance. He therefore considers that it carries slight weight against the proposal.

Planning conditions

27. The Secretary of State has given consideration to the Inspector's analysis at IR450-466, the recommended conditions set out at the end of the IR and the reasons for them, and to national policy in paragraph 55 of the Framework and the relevant Guidance. With the exception of the matter flagged up at IR464 he is satisfied that the conditions recommended by the Inspector comply with the policy test set out at paragraph 55 of the Framework. However, as he does not consider that the imposition of these conditions, either as outlined or in revised form, would overcome his reasons for dismissing this appeal and refusing planning permission, he has not referred back to parties on this matter.

Planning obligations

28. The Secretary of State has given consideration to the Inspector's analysis at IR467-470, the planning obligation dated 15 November 2018, paragraph 56 of the Framework, the Guidance and the Community Infrastructure Levy Regulations 2010, as amended. With the exception of the matters flagged up in IR469 and IR470, the Secretary of State agrees with the Inspector's conclusion that the obligation complies with Regulation 122 of the CIL Regulations and the tests at paragraph 56 of the Framework. However, the Secretary of State does not consider that the obligation, either as outlined or in revised form, would overcome his reasons for dismissing this appeal and refusing planning permission. He has therefore not referred back to parties on this matter.

Planning balance and overall conclusion

29. For the reasons given above, the Secretary of State considers that the appeal scheme is not in accordance with development plan policies relating to location, character and appearance, living conditions and amenity, and hydrogeology, and is not in accordance with the development plan overall. He has gone on to consider whether there are material considerations which indicate that the proposal should be determined other than in accordance with the development plan.

30. The Secretary of State considers that the employment and economic benefits, including the contribution of minerals from the appeal site, carries great weight in favour of the proposal, and that the permanent enhancements to the PRoW network carry slight weight in favour of the scheme.

31. The Secretary of State considers that the impact on landscape and character, and hydrogeology each carry substantial weight against the proposal. He considers that the impact on living conditions and amenity of local residents carries moderate weight against the proposal, and the harm to agricultural land carries slight weight against the proposal.

32. The Secretary of State considers that there are no material considerations which indicate the proposal should be determined other than in accordance with the development plan. He therefore concludes that the appeal should be dismissed, and planning permission should be refused.

The 1.25Mt scheme

33. For the reasons given at IR473-480, the Secretary of State agrees with the Inspector's conclusion at IR480 that the likelihood of prejudice arising is such that the Wheatcroft principles are not satisfied and the applicant's request to determine the appeal on the basis of the 1.25 Mt scheme should be declined.

Formal decision

34. Accordingly, for the reasons given above, the Secretary of State agrees with the Inspector's recommendation. He hereby dismisses your client's appeal and refuses planning permission for the phased extraction of sand and gravel, mobile dry screening plant, stockpile area, weighbridge, wheel cleaning facilities, ancillary site offices, construction of a new access onto Wadesmill Road with phased restoration to landscaped farmland at a lower level, in accordance with application ref: 3/0770-16, dated 4 March 2016.

35. For the reasons given above, the Secretary of State further agrees with the Inspector's recommendation on the alternative scheme. He hereby declines your client's request to determine the appeal on the basis of an alternative 1.25 Mt scheme.

Right to challenge the decision

36. A separate note is attached setting out the circumstances in which the validity of the Secretary of State's decision may be challenged. This must be done by making an application to the High Court within 6 weeks from the day after the date of this letter for leave to bring a statutory review under section 288 of the Town and Country Planning Act 1990.

37. A copy of this letter has been sent to Hertfordshire County Council and notification has been sent to others who asked to be informed of the decision.

Yours faithfully,

Maria Stasiak

Authorised by the Secretary of State to sign in that behalf

Annex A Schedule of representations

General representations

Party	Date
Mark Prisk MP	28/11/2019
Sir Oliver Heald QC MP	03/01/2019

The Planning Inspectorate

Report to the Secretary of State for Housing, Communities and Local Government

by John Woolcock BNatRes(Hons) MURP DipLaw MRTPI

an Inspector appointed by the Secretary of State

Date: 3 January 2019

Town and Country Planning Act 1990 Sections 78 and 79

appeal by

RJD Ltd and Gowling WLG Trust Corporation Limited

against the decision of

Hertfordshire County Council

Inquiry held on 1-4, 9-11, 18 May and 23-25 October 2018

Land at Ware Park, Wadesmill Road, Hertford

File Ref: APP/M1900/W/17/3178839

File Ref: APP/M1900/W/17/3178839
Land at Ware Park, Wadesmill Road, Hertford, Hertfordshire

- The appeal is made under section 78 of the Town and Country Planning Act 1990 against a refusal to grant planning permission.
- The appeal is made by RJD Ltd and Gowling WLG Trust Corporation Limited against the decision of Hertfordshire County Council (HCC).
- The Application No:3/0770-16, dated 4 March 2016, was refused by notice dated 24 March 2017.
- The development proposed is phased extraction of sand and gravel, mobile dry screening plant, stockpile area, weighbridge, wheel cleaning facilities, ancillary site offices, construction of a new access onto Wadesmill Road with phased restoration to landscaped farmland at a lower level.

Summary of Recommendation: The appeal be dismissed.

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ABBREVIATIONS

AOD	Above Ordnance Datum
AW	Affinity Water
BAE	BAE Hatfield aerodrome site
BMV	Best and most versatile agricultural land
BNAP	Bengeo Neighbourhood Area Plan
CD	Inquiry Core Document
COPD	Chronic obstructive pulmonary disease
Defra	Department for Environment Food and Rural Affairs
EA	Environment Agency
EHDP	East Herts District Plan 2018
EIA	Environmental Impact Assessment
eMLP	Emerging review of the Minerals Local Plan
ES	Environmental Statement dated March 2016
FEI.1	Further Environmental Information dated December 2016
FEI.1a	Further Environmental Information dated January 2017
FEI.2	Further Environmental Information dated February 2018
FEI.3	Further Environmental Information dated 27 April 2018
Framework	*Revised National Planning Policy Framework 2018*
GLVIA3	*Guidelines for Landscape and Visual Impact Assessment, Third Edition* Landscape Institute
Guidance	*National Planning Practice Guidance*
HCC	Hertfordshire County Council
HGV	Vehicle over 7.5 tonnes
HIA	Health impact assessment
HSE	Health and Safety Executive
ID	Inquiry Document – document submitted at Inquiry
IAQM	Institute of Air Quality Management
LAA	Local Aggregates Assessment
LCA	Landscape Character Area
MLP	Hertfordshire Minerals Local Plan Review 2007
Mt	Million tonnes
NPSE	*Noise Policy Statement for England*
PA2	Preferred Area 2 Rickneys Quarry in MLP
PM	Particulate Matter
PRoW	Public Rights of Way
RCS	Respirable crystalline silica
RQE	Rickneys Quarry Extension
SBQ	Stop Bengeo Quarry Group
section 106	Section 106 of the Town and Country Planning Act 1990
SoC1/SoC2	Statements of Case dated June 2017 and April 2018
SoCG1	Statement of Common Ground 3 October 2018 (ID94)
SoCG2	SoCG re sand and gravel dated 24 April 2018 (ID11)
SoCG3	SoCG re health dated 3 May 2018 (ID20)
SPL	Sound power level
SPZ	Source Protection Zone
VSC	Very special circumstances for Green Belt policy
Wadesmill PS	Wadesmill Road Pumping Station
WHO	World Health Organisation
$\mu g/m^3$	Micrograms per cubic metre

Procedural and background matters

1. The application by RJD Ltd and Gowling WLG Trust Corporation Limited (hereinafter the appellants) was accompanied by an Environmental Statement, dated March 2016, (ES) in accordance with the Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 2011 (hereinafter the EIA Regulations).[1] This included a non-technical summary, and set out the alternatives considered by the appellants, along with a description of the proposed development and environmental impacts.[2]

2. The original application was for the extraction of 2.6 million tonnes (Mt) of sand and gravel.[3] The proposed restored landform was subsequently changed and this reduced the extraction to 1.75 Mt.[4] Further Information 1 was submitted in December 2016, with additional reports on Landscape and Visual, Ecology, Highways and Air Quality (FEI.1). Additional technical data was submitted by the appellants in Further Information 1a, dated January 2017 (FEI.1a). It is this scheme for the extraction of 1.75 Mt that was refused by Hertfordshire County Council (HCC) in determining the application, and that is now the appeal scheme.

3. HCC refused the application on six grounds because the proposal; (1) is in the Green Belt where screening bunds, stockpiling areas, plant and activity would not preserve openness, resulting in inappropriate development, where the very special circumstances of benefits of mineral extraction and potential avoidance of sterilisation do not clearly outweigh the harm to the Green Belt and any other harm, including harm to landscape, rights of way, air quality and health, contrary to Policy GBC1 of the East Herts Local Plan 2007 and the NPPF; (2) would have a significant detrimental impact upon landscape, including from Phase 4, stockpiling areas, plant, site access with associated loss of hedgerow, and the restored landform, contrary to MLP Policies 12, 13, 17 and 18; (3) has not demonstrated that it would not have detrimental impact upon air quality, and this has not been assessed via a Health Impact Assessment (HIA) contrary to MLP Policy 18 and the NPPF; (4) would have a negative impact upon existing rights of way contrary to MLP Policies 3 and 18; (5) includes land outside the Preferred Area contrary to MLP Policy 3; (6) has not demonstrated that noise would not have a detrimental impact upon nearby residential property contrary to MLP Policy 18 and national policy/guidance.

4. A second scheme proposed by the appellants would omit Phase 4 and the stockpile area from the 1.75 Mt scheme, and reduce the tonnage of sand and gravel extracted to 1.25 Mt. The Grounds of Appeal in the appellants' original Statement of Case were based upon the 1.25 Mt scheme, with a projected

[1] The transitional provisions in the Environmental Impact Assessment (EIA) Regulations 2017 mean that the 2011 EIA Regulations continue to apply here.
[2] CD2.
[3] The Composite Operations Plan No.1217/CO/1 is at CD2 document 1 and Restored Landform at ID51.
[4] The revised landform was to reduce the steepness of the western slope and to achieve a gentler gradient. APP10 paragraph 3.2.4.

timescale of 5-7 years (SoC1).[5] Subsequently, Statement of Case 2 was submitted on 5 April 2018 regarding the case for the 1.75 Mt scheme (SoC2). The appellants would like the appeal to be decided by the Secretary of State on the basis that the 1.75 Mt scheme be considered first, and if found to be unacceptable, that a condition limiting the scheme to 1.25 Mt be imposed. The 1.25 Mt scheme was also the subject of a separate planning application (Ref.3/2352/17), which was refused by HCC at a committee meeting held on 26 April 2018.[6] All the written representations to HCC about the application for the 1.25 Mt scheme were submitted to the Inquiry.

5. The appellants were required by letter dated 24 November 2017 to submit Further Environmental Information pursuant to Regulation 22 of the EIA Regulations, to include the risk of soil contamination, cumulative impact, and a revised non-technical summary. These were submitted in February 2018 (FEI.2).[7] The appellants were further required by letter dated 3 April 2018 to submit Further Environmental Information, to include a revised description consistent with the proposal for extraction of 1.75 Mt, along with likely significant effects. This was submitted on 27 April 2018 (FEI.3).[8]

6. On 23 February 2018 the appeal was recovered for decision by the Secretary of State by a direction made under section 79 of the 1990 Act. The reason for the direction was that the appeal involves proposals for significant development in the Green Belt, and major proposals involving the winning and working of minerals.

7. A Pre-Inquiry Note was issued on 20 April 2018 to deal with procedural matters.[9] A Statement of Common Ground (SoCG1) agreed between the appellants and HCC is dated 3 October 2018.[10] I requested an up-to-date agreed written statement by HCC and the appellants about the supply of, and demand for, sand and gravel in the locality (SoCG2).[11] A Statement of Common Ground – Health, by the appellants and HCC, is dated 3 May 2018 (SoCG3).[12]

8. On application, both the Stop Bengeo Quarry Group (abbreviated to SBQ in this report) and Cllr Andrew Stevenson, were granted Rule 6(6) status pursuant to The Town and Country Planning (Inquiries Procedure) (England) Rules 2000. Both participated fully in the Inquiry, opposing the proposed development. SBQ's intervention in the appeal was initially limited to the risk of water pollution posed to the underlying chalk aquifer, or groundwater source, which supplies the Wadesmill Road Pumping Station (Wadesmill PS).

[5] SoC1 paragraph 5.1.3. The amendment was intended to restrict all operations within PA2, and Composite Operations Plan 1217/O/1 v8 was withdrawn, but v8 had been replaced by v9 in FEI.1a (see CD4 paragraph 2.3.1). SoC1 paragraph 5.4.10. Timescale of 5-7 years is at SoC1 paragraph 4.1.3.
[6] CD19.
[7] CD16.
[8] CD40.
[9] CD39.
[10] ID94.
[11] ID11.
[12] ID20.

But this was subsequently extended to include the appellants' HIA and air quality, as set out below.

9. The Inquiry opened on 1 May 2018. An appropriate notification letter about the Inquiry was not sent until 23 April 2018, which was less than two weeks before the Inquiry opened. However, I do not consider that anyone would be prejudiced by this late notification as the Inquiry was not closed until 20 November 2018.

10. The Inquiry overran its scheduled seven days. During an adjournment the parties submitted procedural notes I had requested concerning submissions about considering an amended scheme at the appeal stage.[13] SBQ's note stated that the appellants' submission of new expert evidence, the HIA, at an unacceptably late stage in these Inquiry proceedings had caused material prejudice to SBQ. I invited the views of the parties about whether the submission of the HIA had been prejudicial to the interests of any party or persons, and if so, whether any measures would now be necessary to remedy that situation. After hearing submissions I adjourned the Inquiry.[14] Amended Statements of Case concerning the HIA were submitted by the parties.[15] Provision was made for written representations about the HIA to be received up until 28 August 2018.[16] The Inquiry resumed on 23 October 2018 and sat for a further three days.

11. The Inquiry sat for a total of 11 days. The proceedings were recorded in accordance with an agreed protocol. An accompanied site visit took place on 4 May 2018. I also visited the site and its locality unaccompanied on 8 May and 22 October. The parties were given time to submit a signed planning agreement and to finalise the wording of suggested planning conditions in the event that planning permission was granted. The Inquiry was subsequently closed in writing on 20 November 2018.

12. In response to the Pre-Inquiry Note the appellants indicated on 17 April 2018 that no legal agreement was proposed, subject to any other comments. No final draft of any obligations was submitted by the opening of the Inquiry. However, draft planning obligations were submitted on day 5 of the Inquiry. These were the subject of revision until a signed planning agreement was submitted dated 15 November 2018.[17] The obligations were discussed at the Inquiry, and parties given the opportunity to comment on the final version. In summary, the section 106 obligations include provisions to;
    1) commence the development within three years and to complete restoration within 10 years or such later date as is agreed with HCC,
    2) enter into a section 25 agreement in respect of the construction and dedication of a new byway,
    3) enter into a highways agreement and carry out highway works.

[13] ID75, ID76 and ID77.
[14] My ruling is at Annex A of this report.
[15] ID91.1 to ID91.4.
[16] 156 written representations were submitted and are included at ID93 with a list of those who made representations at Annex B of this report.
[17] ID57, ID83 and ID114.

13. The lead up to the Inquiry was not straightforward, and a chronology of events and submission of documents is included in ID80. The Inquiry heard evidence about both the 1.75 Mt and 1.25 Mt schemes, and this is referred to in the first sections of this report. The Conclusions section then first considers the appeal against the refusal of the 1.75 Mt scheme. If the Secretary of State is minded to allow the appeal then it would not be necessary to consider further the submissions about the 1.25 Mt scheme. In the event that the Secretary of State is minded to dismiss the appeal for the 1.75 Mt scheme, the report then goes on to consider the options open to the Secretary of State concerning consideration of the 1.25 Mt scheme.

The proposed development

14. The appeal scheme would extract 1.75 Mt of sand and gravel over a period of up to 10 years in four phases, with phased restoration to agriculture and woodland thickets, and aftercare for five years. The scheme includes an office, messroom and weighbridge, which would be sited within a floodlit area, along with a fuelling area with tank, wheel cleaning facility and water attenuation area. The application form states that the scheme would be operated by six full-time employees.

15. Bunds would be constructed around excavated and operational areas. Some bunds would be temporary and associated with a particular Phase of the operation, but those around the stockpile and attenuation areas could remain for up to 10 years. The Bund Schedule at ID22 indicates that at any one time there would be between about 500 m and 1,000 m of bunds, mostly 2-3 m high, but including 230 m of Bund 1 at 4 m high. In addition, for the duration of the operation there would be a length of 825 m of bunds, 3 m or more in height, screening the stockpile and attenuation areas. This would include some 335 m about 4 m high for the NE Stockpile Area Bund, and 270 m some 4-7 m high for the SW Stockpile Area Bund.

16. A restricted working zone would be created within 70 m of properties at The Orchard, within which operations would not take place when the wind direction was from the north-eastern quadrant.[18] The screener and loading shovel would not be operated within 250 m of any residential premises. Noise limits are proposed for nearby residential properties.

17. The fuelling area would be sited in an area that is shown on the site geology plan to be underlain by clay.[19] Plant would be refuelled only in a bunded fuel storage area. The stockpile area would be sited on a level platform with a base of about 50 m AOD, with the height of stockpiles no higher than 5 m.[20]

18. Landscaping would include early tree and hedgerow planting in year 1. A 10 m wide undisturbed buffer would be provided between St John's Wood and the proposed northern bund. The restored landform would include agricultural buffer strips, new hedgerow and tree planting, infill planting within existing hedgerows, and wildflower planting around the retained

[18] CD4 paragraph 2.2.3.
[19] Site geology Drawing 1701/HIA/-01/07 CD2 doc2.
[20] CD2 paragraph 4.6.2.

attenuation area.[21] No controlled waste would be imported to the site, so an Extractive Materials Management Statement is not expected to be needed. The only other control may be on the mobile dry screening unit which may fall under Process Guidance Note 3/08(12) – statutory guidance for quarry processes, but this is not normally required for the proposed development.[22] Foul sewage waste water would be taken off-site with no requirement for on-site discharge.

19. Access would be via a new junction on Wadesmill Road, which is part of the B158. This would include visibility splays and a segregated right turn lane for HGVs to wait to turn into the site.[23] HGV movements would be limited to 50 in and 50 out in any working day, and required to use an approved wheel wash. Signs would be erected at the site exit requiring all HGVs to turn left onto the B158 towards the recently improved Anchor Lane roundabout on the A602.

20. The proposed depth of excavation is shown in illustrative cross sections.[24] The appellants also submitted a plan showing the interpolated elevation of the top, or rockhead, of the underlying chalk.[25] These contours were derived from log data from boreholes located within and near to the appeal site. It is proposed that these contours would generate a 3D GPS model that would be used to control the depth of excavation. The undisturbed material that would remain above the chalk, using these contours to determine the position of the chalk rockhead, is shown on Isopachytes Drawings.[26]

21. A restricted Byway (RB1), which becomes a footpath (FP14), traverses the appeal site. This would be diverted for 2 to 3 years in the 1.75 Mt scheme. Permissive paths would be created during the operation, and the section 106 agreement provides for upgrading the part of FP14 within the site to a restricted Byway, along with a new bridleway linking RB1 to the B158. Existing and proposed Public Rights of Way (PRoW) are shown at Appendix 3 of APP5.

22. The amended scheme would extract 1.25 Mt of sand and gravel over a period of up to 7 years in three phases. The scheme includes a load out area at about 57 m AOD that would contain an office, messroom and weighbridge, security area/vehicle parking and soakaway, along with wheel cleaner and wheel bath, linked to the B158 by an access road with a concrete surface.[27] The proposed bund in the south-western part of Phase 1 would be sited more than 100 m from properties at The Orchard. The load out area would be sited in an area that is shown on the site geology plan to be predominantly underlain by sand and gravel. The description of the proposal states that restoration would be to landscaped farmland at a lower level. The submitted drawings include a Landscape Restoration Strategy and the Progressive

[21] Plan No.1217/R/1.
[22] Reply dated 26 April 2018 to Inspector's question.
[23] Access Junction and Right Turn Lane (Vectos) 131124/A/04.1 Rev E.
[24] Plan No.1217/CS/1.
[25] Plan entitled "Topography of Chalk surface" Hafren Water (Drawing 2482/POE/03).
[26] Drawings 1217/1.75/UM/1 and 1217/1.25/UM/1 at ID31.
[27] The soakaway is annotated as "(indicative)".

Operations Plan shows the restored site.[28] No footpath diversion would be necessary in the 1.25 Mt scheme.

23. A summary of the main differences between the 1.75 Mt and 1.25 Mt schemes, submitted by the appellants, is at ID26. Differences in the size of bunds, and for how long they would exist during the respective phased operations, are set out at ID22. Similar planning conditions and controls have been suggested for the schemes. The 1.75 Mt scheme would affect 0.52 ha of agricultural land classified as the best and most versatile (BMV) agricultural land.[29] No BMV land would be affected by the 1.25 Mt scheme.

The site and surroundings

Locality

24. The application site has an area of 36.1 ha, and is situated within the Metropolitan Green Belt. At its nearest point the site is located about 2 km north of Hertford town centre, just beyond the northern edge of the town. The site is in agricultural use as arable land. Adjacent land use includes arable farmland and woodland to the north and east extending to the River Rib, a plant nursery and allotment gardens to the south near to residential properties in Bengeo and a primary school. To the west lies the partially restored Rickneys Quarry.[30]

25. The distances of dwellings and features in the locality from the nearest proposed bunds and operational part of the quarry are set out in ID95. For the 1.75 Mt scheme the nearest dwelling on Sacombe Road would be 10 m from the toe of the nearest proposed bund, and 28 m from the nearest operational part of the quarry. The corresponding distances for the nearest dwelling at The Orchard are 23 m and 43 m. Waterworks Cottage and Glenholm would be, respectively, about 68 m and 215 m from the operational area. St John's Wood would be 10 m from the proposed bund and 21 m from the operational area. Other features in the locality include; Bengeo Nursery (127m to bund/150m to operational area), the Playing Field (146m/167m), the allotments (256m/281m) and Bengeo Primary School (337m/360m).

26. Hertford Conservation Area is centred about the Hertford Castle grounds, but its northern limit extends along Bengeo Street to just north of the junction with Sacombe Road and Wadesmill Road, incorporating the allotments.

Landscape

27. The site lies within National Landscape Character Area 111: Northern Thames Basin, and falls broadly into the Hertfordshire Plateau and River Valleys sub-character area. This is a diverse landscape formed by a wide plateau dissected by a series of broad river valleys with extensive areas of broadleaved woodlands. The landscape has been extensively modified by current and reclaimed gravel pits, landfill sites, river realignments and canals. The site is near to the adjoining South Suffolk and North Essex Clayland

[28] Landscape Restoration Strategy (Liz Lake) 1571 01 H and Progressive Operations Plan 1217/PO/2 v4.
[29] ID92.
[30] An aerial photograph of the locality is at ID79.

Character Area 86, which is an area described as a broadly flat, chalky, boulder clay plateau dissected by undulating river valley topography.

28. In the regional typology of the landscape of the east of England, the site lies within the Wooded Plateau Farmlands, very close to the Settled Chalk Valleys as identified within the typology. The Wooded Plateau Farmlands is described as a settled, early enclosed landscape with frequent ancient woods, associated with a rolling, in places undulating glacial plateau, dissected by numerous shallow valleys. The Settled Chalk Valleys are described as settled, chalk valley landscapes, distinguished by their soft, rounded and sometimes steeply sloping topography.

29. In the *East Herts District Landscape Character Assessment* 2007 the appeal site is located within an interfluve of the rivers Beane and Rib, landscape character area (LCA) '069 Stoney Hills'. The landscape character is described as gently undulating light arable upland and valley slopes, widening to the north, with generally large irregular fields and woodlands on very light soils, with several blocks of ancient woodland in the south, and very rural, with few settlements but many mineral extraction sites.[31]

30. Key characteristics include active, disused and restored mineral extraction sites, with a mix of field sizes and variety of after uses. Distinctive features include an abrupt transition from urban to rural character on the edge of Bengeo, a conspicuous water tower at Tonwell, along with former mineral workings now developing heathland grass species with butterflies and skylarks. The local topography is described as undulating sloping land rising to a small plateau in the north, with a degree of slope from 1 in 30 to 1 in 50. This area of wooded farmland has experienced a high degree of disturbance from mineral extraction. The evaluation section refers to an open area, rising above the river valleys to either side and with wide views over the surrounding landscape, filtered in places by the woodland blocks, and a tranquil area, very clearly demarcated from the urban area to the south.

31. In terms of visual impact, most of the mineral extraction sites in this area are well screened, but there are some views of huge landfill sites on the skyline and evidence throughout the area of former workings, some of which are now restored for nature conservation interest. Reference is made to the extensive footpaths, and in terms of community views, that the area is not regarded as particularly distinctive.

32. Overall the area is judged to be in a poor condition, with high impact of land-use change, and of moderate strength of character, with the impact of landform and land cover considered to be apparent, the area open and locally visible, and unusual in terms of distinctiveness/rarity. The strategy and guidelines for managing change is to improve and restore, by amongst other things; safeguarding existing hedges and increasing hedged field boundaries; replanting and/or improving hedges along historic field boundaries, within arable areas rather than along roadsides, where open verges would reinforce the distinctiveness of this area; encouraging the creation of permanent grass strips around field margins; establishing new woodlands, especially around existing woodlands where this would create additional habitat and protection;

[31] HCC3 Appendix 4.

encouraging the reversal of habitat fragmentation and the creation and improvement of habitat links to create eco-corridors; and ensuring that the restoration of exhausted minerals sites is carried out in accordance with agreed restoration plans, amended where necessary to reflect current best practice in maximising nature conservation potential and to ensure that they reflect and enhance local landscape character and distinctiveness.

33. In the *Landscape Character Assessment, Evaluation and Guidelines for Southern Hertfordshire supplementary report on: The suitability of landscape character areas for mineral extraction* 2001 the landscape strategy for this area is 'improve and restore', reflecting the existing impact of mineral extraction. The site profile suggests that mineral extraction might be possible, but that extreme care would be required to ensure that there was no permanent damage to local landscape character, adding that it might be preferable to keep it within the centre of the plateau rather than on the edges, where it would be more visible and closer to settlements. Areas of ancient woodland should not be disturbed, and adequate buffer zones should be provided to ensure that there would be no detrimental effect from localised lowering of the water table. Restoration to grassland or woodland would both be appropriate after-uses, with the potential to contribute significantly to biodiversity over time. The report notes that it is unlikely that low level restoration would be appropriate.[32]

Hydrogeology

34. The site lies within the Upper Lee Chalk Groundwater Body. The sand and gravel deposits in the Kesgrave formation are classified as a Secondary A aquifer by the Environment Agency (EA). The sand and gravel overly chalk, which is designated as a Principal Aquifer. The chalk aquifer provides a significant source of water for public water supply abstractions in the area. The aquifer is part of a designated Drinking Water Protected Area. Parts of the site lie within a Source Protection Zone (SPZ). Phase 4, Phase 3 and part of Phase 2 of the proposed development are within the SPZ Inner Zone (SPZ1) for the Wadesmill PS, which is operated by Affinity Water (AW), and part of Phase 1 within the SPZ Outer Zone for the Amwell Hill Pumping Station (SPZ2). Nearly all of Phase 4 of the appeal scheme would lie within 300 m of the Wadesmill PS. The eastern extremity of the estimated limit of the sand and gravel proposed to be extracted in the 1.75 Mt scheme lies about 120 m to the west of the Wadesmill PS.[33] There are also private boreholes in the wider locality.

Rickneys Quarry

35. The location of Rickneys Quarry, operated by Hanson, is shown on the plan attached to ID78, which sets out the planning history of this quarry. An application for an extension along its eastern boundary, Rickneys Quarry Extension (RQE), was permitted in 2009, but was not implemented. Hanson is seeking a redetermination of this 'approval' and an extension of the implementation date to 31 December 2021.[34]

[32] HCC3 Appendix 3.
[33] Drawing 2482/POE/03.
[34] ID13.2, ID16.1-16.3 and ID102.

Biodiversity

36. The site does not contain or include any statutorily designated or non-statutorily notified sites of ecological interest. However, the site is located in close proximity to the Waterford Heath Local Nature Reserve and St John's Wood, a Local Wildlife Site.

Planning policy guidance and statutory requirements

Development plan

37. HCC's reasons for refusal refer to the East Herts Local Plan 2007, but East Herts District Plan (EHDP) was adopted in October 2018. The development plan also includes saved policies of the Hertfordshire Minerals Local Plan Review 2007 (MLP).[35]

38. MLP Policy 1 concerning aggregates supply states that planning permission for the extraction of proven economic mineral reserves will only be granted where it is necessary to ensure that adequate supplies are available to meet the county's agreed apportionment of regional supply. It also provides for the maintenance of an appropriate landbank of sand and gravel reserves. Policy 2 sets out factors to be taken into account in determining proposals for mineral extraction.

39. Specific sites for sand and gravel extraction are included in Policy 3. Land adjoining Rickneys Quarry is Preferred Area 2 (PA2). Mineral working within Preferred Areas will only be permitted when the application satisfactorily fulfils the requirements of the proposals for that area as identified with the inset maps. For PA2 this specifies "Access: Via the existing access from the B158, to/from the north" and "Specific Considerations: Working of this site would be considered as an extension to the existing Rickneys Quarry." It also provides that existing dwellings are in close proximity and that appropriate buffer zones will be required in order to minimise any impact of extraction. The requirements also refer to, amongst other things, additional planting at an early stage to strengthen existing hedgerows to Chapmore End and Rickneys/Rickneys Cottages, safeguarding ancient woodland, and ensuring that the PRoW network is maintained and kept safe at all times. Advice from the EA states that this is a sensitive site in terms of potential pollution of the groundwater resource, that restoration would be to a lower level than existing and that the need for landfill will be resisted.

40. Policy 4 provides that proposals for aggregate extraction outside Preferred Areas would be refused unless; i) the landbank is below the required level and there is a need that cannot be met from the identified areas, and ii) the proposal would not prejudice the timely working of Preferred Areas, or iii) the sterilisation of resources would otherwise occur. Mineral extraction is encouraged by Policy 5 where any significant mineral resource would otherwise be sterilised. Policy 9 concerns the contribution to biodiversity, and seeks long-term overall enhancement to local biodiversity through restoration or by conditions and obligations.

[35] Extracts from the MLP are included in HCC2 Appendix 1.

41. Policy 11 presumes against development that would have an unacceptable cumulative impact on the environment in relation to schemes occurring either concurrently or successively. Policy 12 deals with landscape and provides, amongst other things, that planning applications may be refused where there is significant local landscape intrusion and loss of important landscapes or distinctive landscape features. Policies 13 and 14 deal with reclamation and afteruse, respectively. Mineral development will only be permitted when the provisions for vehicle movement are such that traffic generated would not have an unacceptable impact on highway safety, the effective operation of the road network, residential amenity or the local environment (Policy 16). Criteria for the control and operation of mineral development are set out in Policies 17 and 18. Policy 17(iv) provides that development would not be permitted if it would have a negative quantitative and/or qualitative impact on groundwater resources, unless appropriate measures can be imposed to mitigate any harmful effects. Policy 18(ii) requires a satisfactory restoration landform, which has the appearance of one created naturally, set harmoniously within the surrounding landscape, and consistent with the character of the area. Policy 18(viii) concerns noise intrusion, (ix) air and water quality, and (x) PRoW.

42. EHDP Policy GBR1 provides that planning applications within the Green Belt would be considered in line with the provisions in the *Framework*. Policy HERT4 of the EHDP allocates land to the south of the appeal site for residential development to accommodate a minimum of 150 homes, with around 50 dwellings provided to the north of Sacombe Road by 2022; and, subject to the satisfactory previous phased extraction of mineral deposits on the neighbouring site, around 100 homes to the west of the B158 Wadesmill Road between 2022 and 2027.[36]

43. Consultation on a review of the Minerals Local Plan (eMLP) was undertaken by HCC between December 2017 and February 2018.[37] This consultation draft did not include the appeal site as a Preferred Area for sand and gravel extraction. HCC has considered the results of site selection work and the potential site options, and it is programmed to submit the plan to the Secretary of State in the winter of 2018/2019 and for it to be examined in the spring of 2019.

44. The designated plan area for the Bengeo Neighbourhood Area Plan (BNAP) was approved by East Herts District Council on 27 June 2017. There has been a questionnaire and public consultation. Bengeo Field is identified in a draft as an area of designated local green space.[38]

National policy and guidance

45. Aggregates are defined in the Glossary to the revised *National Planning Policy Framework* 2018 (hereinafter the *Framework*) as minerals of local and national importance, which are necessary to meet society's needs.[39]

[36] ID99.
[37] CD22.
[38] ID71.1, ID96, ID106 and ID107.
[39] This revision was published during the adjournment and the parties were given the opportunity to comment.

Paragraph 203 states that it is essential that there is sufficient supply of minerals to provide the infrastructure, buildings, energy and goods that the country needs. The *Framework* states that planning policies should provide for the extraction of mineral resources of local and national importance, along with setting out criteria or requirements to ensure that operations do not have unacceptable adverse impacts on the natural and historic environment or human health, taking into account cumulative effects of multiple impacts from individual sites and/or a number of sites in a locality (paragraph 204).

46. Mineral planning authorities should plan for a steady and adequate supply of aggregates by, amongst other things, preparing an annual Local Aggregates Assessment (LAA) on a rolling average of 10 years' sales data and other relevant local information, and maintaining a landbank of at least 7 years for sand and gravel, whilst ensuring that capacity to supply is not compromised, but noting that longer periods may be appropriate to account for types of aggregate, locations relative to markets, and the productive capacity of permitted sites (paragraph 207).

47. Paragraph 205 provides that great weight should be given to the benefits of mineral extraction, including to the economy.

48. Paragraphs 133,134,143,144 and 146 of the *Framework* set out relevant policy for Green Belts, which is considered in more detail later in this report.

49. Paragraph 170 provides that decisions should contribute to and enhance the natural environment by, amongst other things; protecting and enhancing valued landscapes, sites of biodiversity, or geological value and soils in a manner commensurate with their statutory status or identified quality in the development plan; recognising the intrinsic character and beauty of the countryside, and the wider benefits from natural capital and ecosystem services – including the economic and other benefits of BMV agricultural land, and of trees and woodland; minimising impacts on and providing net gains for biodiversity; preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by, unacceptable levels of soil, air, water or noise pollution. Development should wherever possible, help to improve local environmental conditions such as air and water quality. Footnote 53 states that where significant development of agricultural land is demonstrated to be necessary, areas of poorer quality land should be preferred to those of a higher quality.

50. The principles for determining applications include refusing permission for development that would result in significant harm to biodiversity that cannot be avoided, adequately mitigated, or, as a last resort compensated for. In addition, paragraph 175 provides that development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland) should be refused, unless there are wholly exceptional reasons.

51. Paragraph 180 provides that decisions should ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development. It adds that potential adverse noise impacts should be mitigated and reduced to a minimum – and should avoid noise giving rise to significant adverse impacts on health and the

quality of life, having regard to the *Noise Policy Statement for England* (NPSE).

52. Planning decisions should, in accordance with paragraph 181, sustain and contribute towards compliance with relevant limit values or national objectives for pollution, taking into account the presence of Air Quality Management Areas and Clean Air Zones, and the cumulative impacts from individual sites in local areas. Paragraph 183 provides that the focus of decisions should be on whether proposed development is an acceptable use of land, rather than the control of processes or emissions (where these are subject to separate pollution control regimes), and that these regimes should be assumed will operate effectively.

53. The *National Planning Practice Guidance* (hereinafter the *Guidance*) sets out guidance on planning for mineral extraction, including assessing environmental impacts, restoration and aftercare. It refers to a noise limit at noise-sensitive properties that does not exceed the background noise level by more than 10 dB(A). Where it would be difficult not to exceed that level without imposing unreasonable burdens on the mineral operator, the limit should be set as near to that level as practicable, and should not exceed 55 dB $L_{Aeq\ 1h}$. It adds that increased temporary daytime noise limits of up to 70 dB $L_{Aeq\ 1h}$ for periods of up to 8 weeks in a year should be considered to facilitate essential site preparation and restoration work and construction of baffle mounds where it is clear that this would bring longer-term environmental benefits.

54. The *Guidance* provides that some areas may have been subjected to successive mineral development (such as aggregate extraction) over a number of years, and the cumulative impact is capable of being a material consideration when determining individual planning applications. It also notes that where working is proposed on BMV agricultural land restoration and aftercare should enable the land to retain its longer term capability.

Other regulations and policy

55. The EA's *Approach to groundwater protection* November 2017 version 1.1 at N8, concerning the physical disturbance of aquifers, states that within SPZ1 the EA will normally object in principle to any planning application for a development that may physically disturb an aquifer.

56. The storage of fuel for mobile plant and machinery is regulated by the Control of Pollution (Oil Storage) (England) Regulations 2001. Fixed tanks and mobile bowsers must include certain design features that are specified in the Regulations.

The case for Hertfordshire County Council (HCC)

The following summary of HCC's case broadly follows HCC's closing submissions to the Inquiry, with additional reference where necessary to the evidence adduced.[40]

Overview [41]

57. On the appeal scheme (1.75 Mt) the appellants' main witness agrees that it is unacceptable.[42] His agreement is fatal to the appeal scheme. Given the lack of evidence in support of the appeal from the appellants' main witness, there is no need to assess it further – and it would be wrong in principle for the Secretary of State to consider granting it when its own promoter cannot support it. The appeal scheme was correctly abandoned in SoC1 and was then resurrected in order to allow the 1.25 Mt scheme to piggy back on it.

58. If this central submission is not accepted, the 1.75 Mt scheme is in plain breach of the key requirements of MLP Policy 3 and PA2, which are compliant with the *Framework*. Those breaches cause significant harm to areas specifically excluded from mineral development, and there are no other material considerations to outweigh the total harm, no very special circumstances (VSC) to justify the inappropriate development in the Green Belt, and the 1.75 Mt scheme should be refused. The same applies to the 1.25 Mt scheme.

59. The justification for the breaches of Policy PA2 in both schemes appears to be only that joint working with Hanson to deliver a PA2 compliant development was, and is, not possible in time consistent with delivery of Policy HERT4. But joint working is being pursued and can deliver a PA2 compliant scheme. Furthermore, there is no sterilisation effect and no timing problem.

Green Belt

60. HCC has correctly applied the judgment in *Samuel Smith* about visual impacts, and the judgment in *Europa Oil* about appropriate development. *Europa Oil* does not say that development which can be appropriate in the Green Belt will maintain its openness – nor does the *Framework*. Mineral extraction alone may not be inappropriate development in the Green Belt depending on its detail.

61. The development outside PA2 by virtue of its location on the slopes does not preserve the openness of the Green Belt. The bunds, the roads, the plant areas and associated activity are inappropriate development and impact openness. The bunds are far more intense and prominent in the 1.75 Mt

[40] ID110 and ID4.
[41] HCC4.
[42] The Inspector's note of the exchange at the Inquiry referred to here is that Mr Symes was asked in cross-examination whether he was saying that the 1.75 Mt scheme was unacceptable. His reply was that this had been made clear from the start and that the 1.25 Mt scheme was proposed to address areas of concern. In re-examination Mr Symes was asked about the planning merits of the larger scheme. He replied that he would not have put in the application if it was not acceptable. He added that the larger scheme would have a greater impact, but is an acceptable scheme.

scheme than would be so in a PA2 compliant scheme. PA2 was carefully redrawn during the progress of the MLP to meet Green Belt and landscape concerns. Bunds greater than 4 m in height would be required for the stockpile area because of the sensitivity of the eastern slopes and the topography. SoC1 makes HCC's case for it on the 1.75 Mt scheme constituting unacceptable inappropriate development here.

62. The only matter here which could conceivably constitute VSC is need. The other "benefits" claimed by the appellants are required from any scheme and do not justify inappropriate development in breach of policy. There can be no VSC because there is no need, no significant risk of sterilisation, no urgency, and/or a policy compliant route is available.

Landscape [43]

63. The landscape harm from the 1.75 Mt scheme is obvious and significantly greater than any PA2 compliant scheme would generate. PA2 was pulled back to within the visually contained plateau.[44] That area could be acceptable, but the eastern slopes were excluded, primarily because of visual impact.

64. Even on the appellants' analysis there would be a substantial moderate adverse impact during the life of the extraction. Phase 4 and the stockpile area would have a major/moderate adverse impact by themselves. In visual impact terms, all the differences between the 1.25 Mt and 1.75 Mt schemes assessed by the appellants are a function of Phase 4 and the stockpile area, heavily influenced by the vastly increased and more prominent bunding, losing long views with the revised contours.[45] The bund schedule is stark as to the quantity of additional bund required outside PA2.[46] This is highly significant, and the fact that it would be temporary does not assist – that will always be the case with mineral extraction.

65. There is the added issue, on restoration, of the permanent unnatural contours – the bowl effect. That has been forced on the appellants by their refusal to amend the red line boundary of the appeal site. When the unnatural contours were highlighted, the appellants proposed smoothing the contours through Phase 4 and further east to "now mimic" the local topography.[47] This would have required some work outside the red line, but the appellants reverted to the unnatural contours to avoid having to resubmit an amended red line. The very fact it proposed a scheme to mitigate the unnatural contours proves HCC's case. In any event, the contour plans make HCC's case for it. It is not possible to revert to the v9 red line by condition, and there is no section 106 obligation on it. Thus the harm to contours and loss of views from the PRoW network is a result of avoiding red line fees.

[43] HCC3.
[44] CD31 paragraph 3.4.99.
[45] 135 m of extra bunds and 605 m of bunds of 4 metres or more in height.
[46] ID22.2.
[47] ID51 and CD3 Plans - Restored Landform No.1217/R/1 V9.

Noise and amenity [48]

66. The appellants have designed bunds and buffer zones to "just meet" the 10 dB increase limit in the *Guidance*. There is no room for the background noise assessment or noise modelling to be even slightly wrong.

67. For both schemes the baseline assessment at Sacombe Road is flawed because the device was in a hedge in windy conditions, where rustling leaves close to the microphone could have affected the results. This is the only realistic explanation as to why the background level there is higher than at The Orchard.

68. The appellants' assessment of the sound power levels (SPL) for plant does not confirm with standards regarding representative time periods for measurement, including a sufficient number of operating cycles during normal operations, and is inconsistent with data from the manufacturers of the plant. The height of the noise source is important to the calculations on propagation. But the dropping of sand and gravel from height, into a lorry at height, appears to have been wrongly modelled.

69. PA2 requires that appropriate buffer zones will be required in order to minimise any impact of extraction. The appellants' evidence is silent on this. The issue in both schemes could be resolved with 100 m buffer zones at Sacombe Road and The Orchard. PA2 already draws a 100 m buffer at The Orchard, but that has not been followed in the 1.75 Mt scheme, and is only 70 m at Sacombe Road.

70. If HCC's reservations about the SPL calculations and background levels are justified, there would be exceedance of the 10 dB level for a policy compliant increase at The Orchard for the 1.75 Mt scheme; and at Sacombe Road for both the 1.75 Mt and 1.25 Mt schemes. The 1.75 Mt scheme is simply too close to The Orchard, and in breach of the PA2 boundary location. The 1.25 Mt scheme is too close at Sacombe Road. The noise implications would be unacceptable. At the lowest, a condition would be required here.

Public Rights of Way

71. The importance of the existing PRoW network in and around the site has been the subject of consistent and overwhelming evidence from the public. The heavy leisure and sporting use of the site is a function of its physicality and ambience. It is the closest recreational resource to the urban area of Bengeo. The Byway and its links are away from roads, with wide and unimpeded vistas. The 1.75 Mt scheme would require a diversion of the Byway. Informal paths on the appeal site are already well used. These would be unavailable during the quarrying operation, or made more difficult and less attractive.

72. The policy requirement under MLP Policy 18(x) was the basis for the endorsement of PA2.[49] This requires that public rights of way are not adversely affected or, where this is not possible, that good quality, safe and convenient temporary alternative provision is made, and that proposals should enhance the public rights of way network through the creation of new

[48] HCC1.
[49] CD31 paragraphs 3.4.100 to 101.

rights of way. It is to be noted that the enhancement is to the PRoW network, which would not be met by the provision of permissive paths.

73. Securing the alleged "enhancements" is not dependent on accepting the significant harm to the PRoW network by breaching PA2, as it would be equally required under a PA2 compliant scheme.

Need

74. The appellants' need case amounts to the following: (i) PA2 was allocated to meet a need; (ii) the appellants' proposals to give effect to that allocation to meet the need are unacceptable; (iii) the appellants have thus failed to play their part in meeting the need here in an appropriate way; (iv) the appellants now rely on the shortfall to which they have contributed and which they can remedy by a PA2 compliant scheme. That approach to need drives a coach and horses through planning policy. Any owner of an allocated site could fail to comply with the terms of the allocation and then argue for a grant of planning permission because it is a needed site. This argument is circular and cannot rationally form the basis for granting planning permission. In any event, the need case is wrong and/or exaggerated.[50]

75. A reliable assessment of the landbank is, and can only be, annual. At the last annual review there was 7.5 years supply on the basis of a apportionment exercise (1.39 Mt pa), and much more on a *Framework*/*Guidance* compliant (10 years sales) approach. Since then Furze Field has been granted.[51] The claim of there being a problem in terms of the current situation is simply wrong. The apportionment approach is far more generous and creates far more flexibility. Fundamentally, that position has been reached without the two main PA sites allocated in 2007 yet coming forward and contributing to the supply. There is ample potential provision – it is just a case of the owners of those PA sites submitting PA compliant schemes (Ware Park), getting an extension of time (RQE) or completing section 106 agreements (BAE site).[52]

76. Even on a mathematical exercise there is no shortfall now and until the end of the year. There is no reason to doubt that RQE (1.24 Mt) will not be granted shortly.[53] The huge release at BAE (which will take supply to 13 years) will occur.[54] The issue is simply timing, as the section 106 on extraction is agreed and the only impediment to a grant is an issue not related to mineral extraction concerning a Country Park.[55]

Policy and planning balance

77. There is no case that MLP Policy 3 and PA2 are out of date in *Framework* terms, and they are broadly consistent with the *Framework*/*Guidance*.[56] MLP Policy 3 only applies within PA2, not outside its boundaries. PA2 requires applications to satisfactorily fulfil requirements for that preferred area as

[50] HCC2.
[51] ID100.
[52] ID18.
[53] ID16.3 and ID102.
[54] ID25.
[55] ID18 and ID21.
[56] Except that the approach to 7 year land supply is not consistent with the *Guidance*.

identified with the inset maps. The ES is plainly correct that developing the application site as an extension to Rickneys Quarry has "many advantages in terms of planning and environmental impacts".[57] The access and extension points are essential attributes of any acceptable development here – as is compliance with the PA2 boundary. Conversely a failure to work as an extension would bring many dis-benefits, including an access road across the eastern slopes, a need for a new hub area, and development of the whole would not be co-ordinated. Thus the failure goes to the heart of the justification for the allocation in the first place.

78. The 1.75 Mt scheme would extend outside PA2 in four respects; Phase 4, the stockpile area, in the south-western corner of the site, and the road. Each of these elements would have to be justified under MLP Policy 4. The only justification for Phase 4 is that it would be sterilised if not extracted as part of this scheme. That was never claimed when the 1.25 Mt scheme was pursued (and is inconsistent with the 1.25 Mt scheme, which would then be in breach of MLP Policies 4 and 5). For the stockpile area, the highest it is put is that it would provide flexibility, but no details are given as to what that means. Furthermore, the 1.25 Mt scheme is promoted without any suggestion of such a need. The working area could be easily and appropriately accommodated within the phases. There is no reason why the existing access road could not be used. On the south-western corner, this area outside PA2 is not included in the 1.25 Mt scheme, so it is not clear what the need is for this breach.

79. Development outside PA2 cannot be justified under MLP Policy 4. There is no shortfall and/or no significant weight can be attached to any minimal shortfall in the context referred to above. There is no evidence that Phase 4 would be sterilised if this permission was not given now. Even if Policy 4 was met (which cannot be the case here) all the other planning issues would still be relevant.

80. The alleged benefits are nothing of the sort – they are policy requirements, which would have to be provided with any PA2 compliant development. The fact that required enhancements are provided can be no basis for justifying a breach of the specific policy governing applications here.

Justification for a non-compliant scheme

81. From the outset, the appellants have assumed that Hanson would not co-operate, but that assumption is wrong. Hanson and the appellants have made it entirely clear that they have an agreement in principle to co-operate to deliver a joint scheme using the existing access. Hanson "are having and continue to have" discussions with the appellants and the issues are resolvable.[58] There is now no possible basis to doubt that absent granting permission for the appeal scheme, the parties will endeavour to deliver a PA2 compliant scheme – as they should have done from the outset.

82. The appellants' new explanation that this is all dependent on the grant of planning permission for RQE is wrong. Since February 2018 there has been nothing to stop the appellants pursuing a joint scheme under the agreement

[57] CD2 paragraph 3.2.7.
[58] ID13.2.

in principle to deliver a PA2 compliant development. All parties have a clear incentive to secure a PA2 compliant joint scheme as soon as possible or the opportunity may be lost with progress of the eMLP.

83. The alleged urgent need to extract to allow HERT4 to come forward has been at the heart of the appellants' case since 2012, when there was a hope of a much larger housing allocation. The only possible sterilisation issue now relates just to the potential for conflict between HERT4 and mineral extraction at the southern boundary of Phase 1. The first attempt to demonstrate this possible sterilisation effect was in ID49, which relies on an arbitrary 100 m separation distance from the red line boundary of the appeal site. But the correct measurement is from the closest façade to the edge of the working on the inside of the bund.

84. The appellants' case is that the 1.75 Mt scheme is acceptable in terms of noise/disturbance/air quality with a separation distance of just 43 m from the nearest house at The Orchard.[59] The residents of HERT4 are not entitled to a greater separation distance than existing residents of The Orchard. On the appellants' own case the correct separation distance can be just 43 m. The 43 m could be achieved just by bunds and the existing masterplan arrangements for the HERT4 site without any sterilisation.[60] ID49 is wrong and misleading.

85. Even if the 70 m separation distance is used (for e.g. noise issues) there is no calculation of the area sterilised or plan showing the area sterilised. In any event, even if any weight could be placed on ID49, the "sterilisation" would amount to 49,000 tonnes, but the appellants are leaving 0.85 Mt in the ground to achieve the restored landform. Furthermore, there would be significant necessary "sterilisation" under the bunds. There is thus no sterilisation case.

86. Policy HERT4 is subject to "satisfactory previous phased extraction on the neighbouring site" before the 100 houses closest to PA2 could come forward between 2022 and 2027. If there were adequate separation distances then that would be satisfactory for the purposes of this policy. Policy HERT4 does not require the full extraction of PA2 or even just Phase 1. There is no case put by the appellants that a PA2 compliant scheme could not be carried out well within that timescale. If there is a requirement to make the new contours fit with the development at HERT4 that simply requires proper planning and would not be undermined by any timing issue. There is no timing problem.

Conclusions

87. The area of PA2 has been specifically and carefully pulled back to avoid intrusion on to the eastern slopes, and drawn to create an appropriate buffer zone to The Orchard, as well as ensuring that well-used PRoW to the east were not crossed or diverted. In doing so, PA2 has determined where mineral extraction may preserve the openness of the Green Belt, and thus conversely where mineral extraction would not preserve openness. Even within that PA2

[59] ID95.1.
[60] APP8 Appendix D.

area, whether mineral extraction should be permitted will depend on the specifics of the application, the impact on openness of the Green Belt and other policy requirements.

88. The 1.75 Mt scheme has the Stockpile, Phase 4, associated bunds and the access road outside the PA2 boundary, with all the consequences for the eastern slopes, the PRoW, the landscape, the Green Belt and character of the area. The 1.25 Mt scheme has a wholly unnecessary access road running straight down the eastern slopes in breach of PA2. There would be significant lorry activity in this countryside setting, a new junction and all the associated activity, with unacceptable impact on the landscape and harm to the openness of the Green Belt. It would be there for many years (even if ultimately removed) and is undoubtedly a significantly urbanising feature. It is inappropriate development in the Green Belt. The proposal also would have unacceptable impacts on the PRoW network. It is thus respectfully impossible for the Secretary of State to find VSC here, or other material considerations to justify a breach of PA2.

The case for Stop Bengeo Quarry Rule 6 party (SBQ)

The following summary of SBQ's case broadly follows SBQ's closing submissions to the Inquiry, with additional reference where necessary to the evidence adduced.[61]

Introduction

89. SBQ objects on two grounds. (1) The appellants acknowledge that, without mitigation, both the 1.75 Mt and 1.25 Mt schemes pose an unacceptably high risk of pollution to a vital groundwater source. But the measures proposed by the appellants to mitigate this risk are inadequate to protect the chalk aquifer. (2) The HIA has not demonstrated that the impact on vulnerable groups within the community as a result of exposure to short-term peak concentrations of particulate matter (PM) would be acceptable in the context of the policy framework.

Water pollution

90. Policy 17(iv) of the MLP and the *Framework* both put the burden on the appellants to prove that mineral extraction would not have a negative quantitative and/or qualitative impact on the water environment, including, groundwater resources, unless appropriate measures can be imposed to mitigate any harmful effects. While the eMLP is not yet part of the development plan, it can be given weight as a material consideration. It emphasises the balance between the need for mineral extraction and the potential impact on the local community and environment.

91. The appellants acknowledge a 'medium' risk, with a significance of impact of 'major', to groundwater quality from increased turbidity if workings mobilised and transported fine materials into the aquifer. Contamination of the aquifer as a result of accidental spillage of oil and fuel is acknowledged as a hydrocarbon 'high' risk, with a significance of impact of 'major'. The appellants' proposed mitigation relies on retaining a protective layer of

[61] ID108.

residual materials above the chalk, and a variety of measures to regulate the storage and use of fuel, along with training and protocols for any spillage.

92. Even if a 5 m protective layer of residual material was sufficient to act as a filter in a range up to 300 m from Wadesmill PS (which SBQ does not accept), there is no evidence to support the contention that a lesser layer would be adequate to perform the same function at greater distances. A purely distance based approach is not appropriate. Flow rates depend on the presence and extent of water-bearing fractures and karstic features in the aquifer.

93. Such features could exist across the whole of the appeal site, so the same thickness of overlay should be left across the entire site. If it is decided not to undertake further investigation of the chalk surface, which SBQ considers is necessary, a condition must be imposed to guarantee the highest level of protection possible.

94. The assumption that the residual thickness mitigation measure would be sufficient is based on inadequate data concerning the chalk including: the contours of its rockhead on which the residual layer would rest and from which its thickness would be measured; and, the location and nature of any fractures and karstic features.[62] The appellants' contours of the rockhead appear to have been created using a smoothing programme to determine its elevation between specific data points. However, due to the way in which the geology of the site was formed, it is unlikely that the rockhead is smooth.

95. Photographs taken in the 1990s during the quarrying at Rickneys show that the chalk had been exposed.[63] The most likely explanation is that this occurred because the chalk rockhead was uneven, which is highly likely to be so for the appeal site.

96. But the appeal scheme proposes using these contours to generate a 3D GPS model to guide excavation of the site. Applying the residual layer mitigation measure on the basis of flawed rockhead contours, with the likelihood of significant irregularities (i.e. up to a few metres high) in the depth of the layer of retained gravel, would negate its alleged protective qualities. This is apparent from the appellants' Isopachyte maps.[64] So this methodology is inappropriate here.

97. Exposure of the chalk would pose a risk of pollution, even if the exposed chalk was not fissured. Furthermore, it would not be sufficient to rely on the operator not wanting to expose the chalk because it would contaminate the aggregate. It is reasonably foreseeable that without further information about the chalk rockhead, accidental and potentially adverse exposure of the chalk would occur if the site was worked.

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[62] SBQ1 Edworthy Report cited in Prof Brassington's suppPoE.
[63] ID54.
[64] ID31.1 and ID31.2. The 1.75 Mt scheme shows the thickness of the retained layer could be anything from 5-4m in places, where at least a 5m protection layer would be required. In the 1.25 Mt scheme the thickness of the retained layer could be anything from 3-2m, in an area of the site which should be leaving at least a 3m protection layer. If there is a peak of up to 2m in the chalk at either of these points, the protective layers would be reduced, and in the 1.25 Mt scheme the protective layer could be rendered non-extant.

98. An appropriate geophysical survey could provide more detailed information concerning the contours and features of the chalk rockhead. But it would be technically difficult to detect and identify the fractures and karstic features within the chalk itself with the accuracy necessary to assess the adequacy or otherwise of the proposed mitigation measures. Due to this difficulty, the precautionary principle should be applied and permission for the development refused.

99. The HIA concludes that accidental spills can be considered to be a reasonably foreseeable consequence of quarrying activity. There is no evidence as to whether, in the event that the chalk aquifer was to be contaminated, AW would be able to source an output equivalent to that of the Wadesmill PS (which produces 60% of the local supply).

100. Various sources of, and pathways for, hydrocarbon and other pollution risks have not been considered. These include the use of a soakaway to an oil interceptor in the load out area in both schemes, where the trapping and temporary storage of oil underground would risk leaks going unnoticed. In the 1.25 Mt scheme, the soakaway would be in an area where the protective layer would be at its thinnest. Furthermore, the use of chemicals in weed control during restoration, boreholes as a potential pathway for pollutants, and the risk from an oil tanker accessing the site on a frequent basis to refill the site's storage tanker, have not been addressed.

101. A major spill would necessitate an immediate response. The standard leaks and spills mitigation measures proposed would be wholly inappropriate in the context of this site. Spill kits, building a bund of sand around a medium spill, or digging a hole in the ground to prevent further spread, would be useless as they would not prevent spilled contaminant from filtering down into the aquifer. The only effective mitigation measure would be immediately excavating the affected sand and gravel and removing it to a containment area from whence it could be securely removed.

102. As it is not possible to assess all development pollution risks at the initial stage, it is prudent to include in conditions a provision regarding hydrogeological impact assessments to be carried out after each phase of the development. This would be necessary to ensure that any new risks arising were assessed and mitigated as soon as possible.

103. Mineral extraction may have taken place at other sites underlain by the chalk aquifer, but no evidence has been provided about the hydrogeological and/or pollution risks assessed for these sites. There is no basis to make any comparison between these and the appeal site. A decision on compliance with MLP Policy 17(iv) must be made on the basis of the specific site and operational programme.

104. Comment by the EA and AW was on the basis of the documents then available about the scheme and its mitigation. The EA commented in November 2017 that it does not have in-house capability and competence to carry out non-intrusive geophysical surveys to estimate the thickness of the top soil layer, relief and heterogeneity of the top of the chalk.[65] The Inquiry

[65] CD13 Doc4.

has now heard more evidence about these matters, which provides cogent and compelling reasons to depart from the EA's advice.[66]

105. A precautionary approach should be taken and planning permission should be refused. Where there are no permitting and/or licensing regimes active on a site, all mitigation has to be dealt with and enforceable within the planning system. Permission should not be granted without highly prescriptive mitigation measures. It is important to be able to review and comment on the appropriateness of mitigation measures and possible conditions. Unfortunately, this cannot be done on the basis of the evidence before the Inquiry, resulting in doubt about the adequacy of the mitigation measures proposed to render the development compliant with MLP Policy 17(iv).

Air quality related health impacts [67]

106. The MLP is silent on the issue of health impacts, although it does state that the quality of the environment plays a key role in both maintaining and enhancing quality of life. The *Framework* requires that minerals extraction should not have any unacceptable adverse impacts on human health. Planning decisions should sustain and contribute to compliance with pollution limit values and objectives, but should also identify opportunities to improve air quality where possible or at the very least mitigate the impacts on air quality.

107. The HIA's evidence in relation to health impacts in the wider population is not in dispute. However, the HIA recognises that health effects are observed in the wider population when it is exposed to higher concentrations of PM, and it acknowledges that there is no lower threshold concentration of PM which is fully protective of human health. SBQ's concern is the extent to which air quality impacts from the proposed operation would be responsible for health effects on people in the local community, in particular on especially vulnerable groups within the site-specific population.

108. The HIA concludes that there will be an adverse impact on vulnerable groups when exposed to short-term peak concentrations of PM, which it categorises as 'minor' and assesses it as 'not significant'. But the HIA, in its treatment of this risk, has been unable to unequivocally demonstrate that there will be no unacceptable adverse health impacts on the vulnerable members of the site-specific community.

109. Health effects can occur even when a project is in compliance with relevant air quality limit values for pollutants. IAQM 2017 guidance comments that the assessment of health impacts is a matter for an HIA, and not an air quality assessment.[68] Whilst it is accepted that the likelihood of health impacts reduces in line with exposure to PM, it is not sufficient to rely on compliance with air quality limit values alone as evidence that there will be no adverse health impact. The fact that a site is compliant with air quality limit values is not determinative of the issue of health impacts. The Government's aspiration in the draft *Clean Air Strategy* is to reduce concentrations of PM

[66] *R.(On the application of Jones) v Mansfield DC* paragraph 54.
[67] SBQ2.
[68] CD35.2 paragraph 7.11.

over the next decade, so small contributions should not be treated as insignificant. This is especially the case in areas like Hertford where the $PM_{2.5}$ baseline is already at or above the WHO guideline of 10 µg/m^3.

110. The HIA does acknowledge the existence of an especially vulnerable sub-set of the site-specific population, but it does not attempt to quantify that population or give consideration as to its baseline health. The exposed population could run to hundreds or thousands of individuals, including many who would fall into the especially vulnerable category. The 496 children currently attending Bengeo School is an important sub-set of this vulnerable category, and the total 'population' of the primary school over the lifetime of the scheme would be much greater.

111. The HIA does not define 'minor', and the difference between 'minor adverse' and 'adverse' is entirely unclear. This uncertainty is important and suggests caution in making pronouncements as to the acceptability or otherwise of health impacts on small groups. There is statistical information available based on which it is possible to quantify the baseline health of even a small population, for the purposes of assessing likely health impacts. The asthma prevalence in the local population is 5.9%. Applying that percentage to the 'population' of Bengeo School would indicate about 30 asthma sufferers. In reality, there are currently 46 children at the school with the diagnosis, which is closer to 10%. There is, therefore, a basis on which to quantify health problems and therefore impacts on a small-scale population.

112. The HIA does not rule out health consequences for individuals with specific illnesses or conditions, and has done nothing to allay parents' distress and fear for their children's future safety, especially where children might be subject to multiple vulnerabilities. Evidence about individuals cannot be disregarded. If the health impacts mentioned in the HIA cannot be ruled out, this would be an unacceptable adverse impact and should preclude permission being granted.

113. The results of the appellants' air quality assessment are accepted uncritically in the HIA. The emission factor used within the ADMS model is based on the whole operational area of each Phase, rather than a smaller percentage of that area reflective of actual hourly quarry activities (such as 1 ha or 100 m^2). This has the effect of 'double-diluting' the pollutant emitted by the quarry. By spreading the PM generated by the site over an unrealistically wide surface area of the quarry, the emission is diluted at source before being diluted further as part of the modelling of the dispersion effects.

114. This inappropriate modification could lead to an underestimation in the figures modelled by at least a factor of 10. This might not be of significance when looking at the annual average concentration, but it could mask any significant short-term peak concentrations. It is these concentrations, rather than the annual average or long-term exposure that pose a risk to health as a result of this development.

115. The emission factors themselves are subject to inherent uncertainty, and the moisture content of the material would be variable, especially in hot weather conditions. It is therefore questionable whether a worst-case scenario has been modelled.

116. The distinction between an annual average and hourly or 24 hours average, in terms of the associated health impacts, is crucial in this context. The health risks identified to especially vulnerable groups arise from the short term averages. However, there is a complete absence of short-term modelling in the appellants' assessment, and no information concerning the very concentration levels on which the HIA confidently concluded a 'minor adverse' and 'not significant' impact.

117. Short-term peak concentrations could be associated with reduced quality of life effects for vulnerable individuals, such as reduced mobility and increased periods of staying indoors due to the need to avoid exposure.[69] Weather conditions producing these peak concentrations are consistent with hot summer days when people want to be outside. Such limitations on mobility would not be consistent with the high quality of life required to be protected by the MLP. This would also not be an acceptable health impact. Again, although this health impact was referred to obliquely in the HIA, the focus was on the actual exacerbation of symptoms and did not give any obvious consideration to this lower scale, but nonetheless unacceptable health impact. There is a wider range of health effects associated with PM exposure that has not been expressly addressed in the HIA.

118. The IAQM 2016 data set, which is one of the few UK data sets for quarry emissions, indicates an underestimation here of the effects of the quarry within a broad envelope of out to 400 m, which is a distance that would include Bengeo School.[70]

119. The appellants' assessment did not quantitatively assess respirable crystalline silica (RCS), nor was it dealt with in the HIA at all, despite the fact that it is agreed between Professor Sokhi and Mr Barrowcliffe that RCS is a hazard to health.

120. No Dust Management Plan was submitted with the applications. It would not be sufficient to produce this later, as it is necessary to determine whether any unacceptable impacts of the development could be rendered acceptable in planning terms by mitigation.

121. The HIA's assessment of significance and Professor Sokhi's conclusion of no material risk are undefined and unquantified, and entirely subjective. Given the lack of a commonly accepted framework, and the consequences of coming to a decision on significance in the planning context, this is not something that should be ascribed by an HIA. An HIA should comment on the magnitude of the risks identified and leave the attribution of significance to the decision maker.

Conditions

122. The absence of the details of specific mitigation relied on by the appellants in assessing risks from the site will be problematic in coming to a decision on the acceptability or otherwise of the proposed development. If permission was granted these details would be required and, given site-specific concerns

[69] SBQ2 Figure 5.2 showing health pyramid of air quality related health impacts.
[70] CD35.1 Appendix 2.

here, it is not unreasonable to expect this information to be available so as to inform the decision-maker and to reassure the local community. The appellants need to show that the risks associated with the site have been properly and comprehensively assessed, that they can be mitigated, and that the mitigation can be put in place by way of planning conditions. On the evidence before the Inquiry, the appellants have failed to do so.

123. SBQ has submitted a proposal for water management conditions and regarding air quality monitoring, which in the event that planning permission is granted should be imposed to afford the groundwater resources and the local community the highest level of protection.

Conclusions

124. The development cannot be permitted unless the appellants can demonstrate that appropriate measures can be imposed to mitigate the impact. The mitigation measures proposed are wholly insufficient to mitigate the serious potential impact of pollution on the chalk aquifer. Planning permission for the proposed development, whether the 1.75 Mt or 1.25 Mt schemes, should therefore be refused. The HIA has been unable to demonstrate that the health impact for vulnerable groups of the local community arising from short term peak concentrations of PM would not be unacceptable for the purposes of the policy framework. On this basis, planning permission should also be refused.

The case for Cllr Stevenson Rule 6 Party

The following summary of case broadly follows Cllr Stevenson's closing submissions to the Inquiry, with additional reference where necessary to the evidence adduced.[71]

Summary

125. The appeal is unsound primarily for the loss of a landscape of outstanding value to the whole community of Hertford, and the absence of any real need for the sand and gravel. Secondary factors concerning the transport system, the risk to water supply and air quality, along with concern about the availability of financial assets to deal with any unforeseen problems, add up to further reasons why the proposal is unsound. It is unsound to locate any quarry so close to any densely populated area without more site specific and quantitative studies of the real risks.

The effect on housing development

126. The driving force for the timing of the application was to avoid an objection to an application for housing development on the HERT4 site due to sterilisation of minerals. It is claimed that the HERT4 allocation is important to the EHDP. But it would only provide 150 dwellings in the context of the 20,000 or so homes in the plan. The contribution from HERT4 would be insignificant in the context of the County wide obligation for 120,000 homes, and would only amount to about 5% of the obligation for Hertford, where infrastructure limitations restrict the allocation for the town. There are also

[71] ID109 and AS1.

landscape issues with the development of the HERT4 site. EHDP simply recognises that if the land were to be subject to mineral extraction, thereby changing the landscape, then it would be suitable for 100 homes. There is no urgency for mineral development so as to meet housing obligations, as this is driven by the larger schemes in the plan, especially Gilston garden town development and Bishops Stortford North.

Landscape significance

127. The landscape at Bengeo Field is of outstanding local significance and a valued resource that is used extensively by Hertford residents, including for health walks. The emerging BNAP recognises the importance of this green space. The appellants' restoration plans have no credibility. The existing gentle hill would become a depression. The open vista from the Byway at its current elevation, which gives the landscape its special appeal, would be permanently destroyed. Turning a convex shape into a concave shape would not restore the land to its previous state.

128. The local community has already lost landscape due to gravel extraction, at what is now Waterford Marsh and at Rickneys. The latter lies abandoned and only partially restored. The cumulative effect on the community over the past 40 years needs to be taken into account. Bengeo Field is the last and best of the sites available for landscape and accessibility, and it is an historic link between the settlements of Hertford and Chapmore End. The special significance of the site makes the proposal especially damaging to the community.

Comparison with BAE Hatfield site

129. There is no comparison between the appeal site and the former BAE Hatfield site in terms of their suitability for mineral extraction. Hatfield aerodrome was part of a heavy industrial complex, from which the public was excluded whilst a military site, and which now needs remediation. It is now unsuitable for any other purpose. It is relatively remote from Hatfield and there have been no similar objections from Hatfield residents to those that have been raised at Bengeo Fields. Plans for a Country Park have broad local approval, and notwithstanding the temporary delays in signing section 106 agreements, the site looks certain to be developed for sand and gravel extraction in due course.

Effect on Bengeo Primary School and neighbouring community playing field

130. The school, along with the nursery, which is used as a drop-off area for the school, and the playing field, are located close to the appeal site. Parents have reported that this long drawn out decision process has already had a negative impact on the school, with a decline in application numbers due to publicity about the threat of the quarry. Parents do not want to put their children at risk.

Impact on local transport

131. There is a recognised need in Hertford for transport schemes to relieve acute traffic congestion. The B158 is heavily congested at peak times, leading to rat-running through residential roads, especially when the A414 is blocked. The 2018 local transport plan includes a major shift towards sustainable

transport.[72] This will change the way HCC considers new development. Its response to the appeal scheme was based on the former local transport plan, which predates more recent increases in traffic volume.

132. The MLP clearly stipulates, for good reason, that the existing access to Rickneys Quarry should be used. The proposed access is unacceptably close to the Sacombe Road roundabout compared with the existing access to Rickneys Quarry. The appellants have, for many years, had the option of commercial negotiations for use of this access. Their inability to do so should not weigh in favour of allowing the appeal.

133. Mixing HGVs with other vehicles worsens road safety. Line of sight for other road users would be impaired by queuing HGVs. There would be nothing to prevent HGVs in convoy during peak hours, which could block the B158 or the A602. Averaging out HGV movements over the working day ignores the fact that the highway impact of an HGV is much greater than that of a passenger vehicle. HGVs should be disallowed into or out of the site during peak hours, and at other times restricted to no more than one vehicle every 15 minutes. The impact of HGV traffic would be severe and would conflict with the sustainable transport aims of the new local transport policy.

134. The Byway is already a sustainable transport route between Chapmore End and Hertford, and it makes no sense to destroy its acceptability.

Quality of public consultation

135. Public consultation has been a bare minimum, and the appellants have sought to blame the community for a lack of engagement. There has been no engagement by the appellants with the BNAP process.

Risks to water supply

136. There is a clear risk to the water supply that serves local farms and a brewery.[73] The perception of the potential risk to the brewery's water quality may affect the continuation of the business. In the longer term there is a risk to the public water supply because of a growing shortage of water in East Anglia, but resultant changes in strategy have yet to be reflected in a new regulatory approach. In the absence of a site specific study the true risks have not been quantified.

Risks to air quality

137. The appellants have followed the industry recommended minimum requirements. But pollutants cause an increase in the rate of loss of lung tissue, which may take years to manifest as a disability. Past experience with other pollutants indicates that it has taken time for legislation to catch up with medical science and to introduce protective measures. Current requirements were designed for smaller quarries in more remote locations, with protection for quarry workers, not neighbouring urban populations.

[72] ID104.
[73] ID85.

138. In the context here, where there are already high levels of pollutants from traffic congestion, it is untenable to claim that the contribution from the quarry would be insignificant. This misunderstands the likely effect on vulnerable groups within a population. SBQ has cited peer reviewed evidence about the medical effects of incremental increases in pollution.

139. No site specific study has been undertaken about the local Kesgrave geological formation, but there is evidence that this formation does produce fine particles when disturbed, which may carry in the air. Wet sand can dry out. There is an unquantified air quality risk to population health, especially within 400 m of the proposed quarry.

Financial bond

140. There is a long track record of HCC being forced to engage in prolonged enforcement battles with quarry operators. The appellants' employees seem to be doing their best to operate responsibly, but the financial resources available as a contingency for restoration have not been clarified. An evasive response to questions about this at the Inquiry adds weight to the likelihood of financial failure, and to the financial risk to the community and HCC. There is very clear evidence that a £2 million bond is justified in this case.

The case for interested persons opposing the scheme

The following persons appeared at the Inquiry objecting to the proposed development, and a summary of their submissions is included below, which in some instances includes extracts from written submissions made in commenting on the HIA. Some of the submissions refer to the health conditions of individuals, but for confidentiality reasons the following summaries omit these particular references, whilst still making the general points about health impacts raised in evidence.

141. Andrew Smith (local resident) [74] Some 40 properties in the Dell at Chapmore End are accessed from the B158 by a drive that is located near to the summit of a hill. Visibility from the drive is restricted by the curved road to the south and by the summit of the hill to the north. The B158 is used by commuters to avoid congestion on the A414. It is a fast and dangerous road. Accident statistics show nine collisions over the past five years along this part of the B158, including a fatality involving a vehicle turning into the drive. Drivers will attempt to overtake slow moving HGVs, especially when they are climbing the long gradual hill from the proposed quarry entrance. They would also spill mud and gravel to add to the risk, as occurs on the A602.

142. Residents of the Dell and Crouchfields have no access to public transport, and the walk along the B158 is dangerous and unpleasant. The north-south Byway is the only pedestrian connection with Hertford for some 200 properties. The Byway is currently a wonderful experience, but that would not be so if it was hemmed in by bunds and crossed by lorry traffic. The permissive path offered along the eastern field boundary would not connect to any footpaths to the north, and so is an empty gesture.

[74] ID61.

143. Aska Pickering (local resident and chairperson of SBQ) [75] Many local residents enjoy this beautiful landscape, with its lonely oak tree and views across to Hertford and the Three Lakes. The footpath is recognised as a community asset. A survey of 269 respondents found that 17% use the footpath three or more times a week, and 85% would find it less attractive with a quarry. The results of the survey are included in ID35. The local community has good reasons to be concerned, given the harmful dust pollution, increased heavy traffic and noise, the risk of pollution to the water supply, and irreversible damage to the beautiful landscape. Nearly 1,500 people signed the two HCC electronic petitions against the applications. Over 1,300 letters and emails were sent during the most recent public consultation. SBQ website has on average 600 visits per month and its Facebook page has an audience of around 4,000 subscribers. HCC has recognised the importance of the appeal site and proposes to remove it from the list of preferred areas in the eMLP.

144. Dr David Adam PhD (local resident and parent governor of Bengeo Primary School) [76] There is concern about the threat to the health of schoolchildren from dust. The HIA assesses this risk as low, but this is based on an environmental impact assessment which argues that fugitive dust emissions would not be significant. The assessment does the minimum suggested by the IAQM, in modelling theoretical particulate emissions in annual mean exposure beyond the site boundary. The schoolchildren next to the site deserve more than this minimum effort. The IAQM also says that other ways of assessing risk should be considered where there is particular sensitivity on neighbouring land.

145. Children at the school would not be exposed to an annual mean amount of dust. The working hours of the quarry would be similar to the school day. When dust was produced it would be breathed in. On hot and dry days, when more dust would be produced, children are more likely to be outside. The assessments do not mention RCS. Industrial activity grinds silica down small enough to be inhaled. This is why the Health and Safety Executive (HSE) requires quarry workers to be issued with protective equipment. RCS is a carcinogen. By definition, any increase in exposure increases the risk of ill-health. RCS comprises tiny fragments which are easily carried on the wind. An advance paper for *Atmospheric Environment* measured RCS in a rural location downwind of four working sand quarries in the UK and found levels 150 times greater than ambient levels. The HIA does not assess the effects of this on schoolchildren. The HSE study found that 6% of the samples contained fugitive ambient concentrations of 10 $\mu g/m^3$ of air. The US Environmental Protection Agency calculates that if 500 people were to breathe in 8 $\mu g/m^3$ for long enough then 12 could develop silicosis. The decision about this quarry is a matter of balancing risk and benefit.

146. Libby Mountford (local resident and school governor for 13 years) [77] The school is 350 m from Phase 1, and The Wick is even closer, with some elderly residents living about 100 m away. The quarry would damage the mental

[75] ID35 includes photographs of the lonely oak tree.
[76] ID44.
[77] ID37.

health of local residents, by reason of irritating and intrusive noise, dust and the loss of the beautiful field with its open views and path to the pub at Chapmore End. Silica dust inhalation is of particular concern, especially for children and those with respiratory diseases. A paediatric consultant recently advised that lung damage in childhood was likely to have a lifelong impact. The youngest children at the playgroup spend much of their time playing out-of-doors. Some 43 of the 500 children suffer from asthma and use inhalers. The quarry would put at risk the safety of these children. The appellants' HIA says that there would be minimal risk, but this is not convincing. The risk is unquantified. Worried parents will vote with their feet.

147. The children have learnt a lot about geology, economics, archaeology and wildlife because of the quarry applications. They are also learning about local democracy and the planning process. Schoolchildren attended the planning committee meetings and saw Members reject the application.

148. Julie Starkiss (head teacher Bengeo Primary School) [78] The school has 61 staff and 496 children. It occupies a large site with three playgrounds and a playing field, and enjoys particular success in outdoor sports. The school is currently oversubscribed.

149. Suzanne Bray (local resident) Expressed concern about the proximity of the school and playing field, allotments and housing. Children would be exposed to dust and pollutants for longer than those operating the quarry. Local residents are scared about the health implications of the proposal. This is open countryside used for recreation and not a site for an urban quarry.

150. Tanya Needham (local resident and governor of Bengeo Primary School) There was persistent noise from Rickneys Quarry when it was operating. Dust was also a real and constant problem. That site is now a blighted landscape, notwithstanding the planned progressive restoration. Restoration is a real issue. There is nothing to indicate that the appellants have the funds to make good on their restoration commitments.

151. Thalia Watson (local resident) [79] There is local concern about the health effects of the quarry on vulnerable children, the elderly and anyone with a respiratory condition. This includes the ability of children to play outside in the summer. Dust and diesel emissions would mean that they would have to move away from the area, the school, family and support networks, and local businesses. Any increase in air pollution, no matter how small, would be of concern.

152. John Howson (local resident) [80] People love this field. It is part of the community. It has a waveform relief with two distinct undulations and a perfect example of rolling Hertfordshire countryside. There is a beautiful vista from the central path across to Ware Park Manor. Views from this central path are not mentioned in any of the landscape documents. A monitoring exercise on 3 December 2017 logged 55 people on a cold and wet day between 1000 and 1500 hours. All the paths are heavily used, many since

[78] ID45.
[79] ID90.
[80] ID34.1.

the 1970s or longer, and so meet the 20 year rule for an application as PRoW. Different groups use the field for walking, cycling and running. ID34 includes a selection of comments from users. This is a landscape worthy of preservation for future generations.

153. The field is home to skylarks. St John's Wood is an important ecological resource. The Woodland Trust says that any quarrying would be likely to alter the hydrology, and introduce dust, changes in land use, along with potentially non-native species. The Trust recommends a 100 m buffer zone.

154. Robert Chandler (local resident) [81] Chairman of a local bicycle club with 25 members. Cyclists generally ride north of Bengeo, across the appeal site, which provides a calming view before heading off on a 20 mile ride. The view is one of the finest in Bengeo. The proposed quarry with its effects on noise, dust, air quality and views would mean that cyclists would no longer be able to enjoy the safe environment and beauty of this area. The quarry would also be a factor for other cycling clubs considering visiting Hertford.

155. The B158 is a narrow road that would be more hazardous for cyclists with HGVs from the quarry. The increase in traffic on Wadesmill Road would lead to vehicles choosing to take Sacombe Road as an alternative route, so making this a hazardous route for cycling. The accident statistics indicate that most cycling casualties are aged either 0-14 years or between 45-49 years, with most fatalities or serious injuries in the 50-59 age groups.

156. Anu Palmer (local resident) [82] Horse riders regularly choose Bengeo field because it is one of the best hacking routes in the area. Cyclists, runners and walkers, with or without dogs, also enjoy the beautiful views all year round. The field has paths that conveniently connect places. An oblique aerial photograph shows the proximity of the school, housing development and the playground in the Wick. The appellants have presented the impacts and risks as minor or insignificant inconveniences with control measures. This ignores the true, detrimental and irreversible impacts of putting a quarry in a wrong place – above a water borehole, next to housing and in the Green Belt.

157. The effects would be immediate. The landscape would become alien. People would not walk through a torn land with dust and noise. Rickneys Quarry is still awaiting restoration after ceasing operation 17 years ago. The attractive entrance to Hertford would become an eyesore. Local residents have concerns about safety from dust and road traffic. The opportunity for schoolchildren to learn and play outdoors would be severely compromised, especially for allergy sufferers. Allowing this development would create stress and worry. The restoration would not leave the area with improved quality as the landscape would be irreversibly changed.

158. Mark Lynch (local resident and chairman of the Bengeo Neighbourhood Area Plan Steering Group) [83] There is local concern about noise and dust, but the true value of the area that would be ruined by this development should be highlighted. Bengeo field is a central feature of the north Hertford landscape.

[81] ID89.
[82] ID36.
[83] ID43.

It is a highly important amenity for many people. The route has been recognised as an Asset of Community Value by the district council. 635 people signed an e-petition asking for protection of rights of way and views. A recent survey for the BNAP rated the importance of protecting Bengeo field from development on a scale of 1-5. The mean response was 4.62 from 735 responses.

159. Should the quarry be permitted the natural rolling landform and openness would be lost forever. While the quarry was operational walkers would have to contend with dust, HGV traffic and industrial noise. The proposed restoration would leave the Byway lined with trees and perched on a rim of a deep, artificial crater with tree covered sides. This would be very different to the open, rolling, natural landscape that local people currently enjoy. The appellants' proposed landscape benefits, in the form of new planting and byways, totally miss the obvious point that the field is open. The hedges would interfere with views.

160. A new western loop byway would run largely behind a screen of trees. The public already use an informal route on this higher ground with some of the best views on the field. A new western route might be beneficial for the less abled, but none of the users would experience the openness and views as they are today. Not many people would use the eastern loop running behind a hedge alongside the B158.

161. The HIA recommends the formation of a community liaison group as a means of mitigating the negative health impacts of the community reaction about the quarry, and to reassure the community about phasing and restoration, so as to avoid the scenario of a medium-to-long-term dormant, unrestored quarry, as has happened at both Waterford Heath and Rickneys. Given the history of these two quarries, the community are unlikely to have much faith that any extraction and restoration at Bengeo field would go to plan. It therefore seems reasonable that some additional mechanism of ensuring compliance with conditions was in place, possibly a bond in escrow.

162. Dr Bryan Lovell OBE CGeol (Senior Research Fellow in Earth Sciences University of Cambridge) [84] Dr Lovell endorses the findings of Professor Brassington. The pumping station is located on the flank of the valley because that is where the chalk is most fractured and the flow of water is greatest. The enhanced fractures in the chalk mean that any pollution entering the groundwater in Bengeo field would travel rapidly to the boreholes. It is critical for safe quarrying to know the route that the water would follow, but at present there is no information about this.

163. The proposed residual protective layer of sand and gravel is based on the unlikely assumption that the upper surface of the chalk aquifer is smooth. Research in southern England has shown that the top-chalk surface is rough, and Dr Lovell is confident that the same applies at Bengeo. Peaks in the rough surface may result in unplanned exposure of the chalk during quarrying, as occurred at Rickneys Quarry in the early 1990s. There are also hollows, which in some cases will mark the surface expression of fissures penetrating deep into the chalk. Significant pollution would travel so rapidly

[84] ID32.

into the aquifer through the largest fissures that even the speediest response at the surface of the quarry would be ineffective.

164. The advice given by the EA and AW is geologically inadequate. Top chalk could be mapped to identify low spots that might indicate major fissures, but no survey has been carried out by the appellants. Assessment of the risk of pollution requires details about the size and orientation of fissures and fractures within the chalk aquifer. But there is little information to decide if quarrying here is even feasible. Quantified risks should be covered by explicit guarantees of financial and technical competence from the operator. There are none here.

165. The sand and gravel resources from Bengeo fields would yield, in each year of operations, a mere 0.1% of the UK onshore supply of aggregate. Whereas some 6 m litres per day of good quality water has been flowing from the Wadesmill PS since 1936. Boreholes would not be drilled in chalk at the edge of a working quarry to supply a town with vital water, so a quarry should not be put by Hertford's boreholes.

166. Peter Norman (Hertford Civic Society, which has 330 members) [85] Neither of the 1.75 Mt scheme or the 1.25 Mt scheme is acceptable in policy terms. The proposals would not be extensions to Rickneys Quarry and would not be accessed via the existing access. There is insufficient proven need/demand to justify working the area, especially given the approval for the Furze Field site. The cumulative impacts of the appeal scheme together with a permitted RQE would be unacceptable. A new quarry should not be opened up before the adjacent previously worked areas have been fully restored. Quarries are often worked on a stop/start basis reflecting market conditions, leading to extended periods of operation, with operators seeking to modify permissions to prolong operations or restoration, resulting in long-term despoliation of land, which is something the MLP seeks to avoid.

167. The history of mining in the area over the past 50 years is shown on a map included at ID39. Hertford is ringed by past and present workings. Each one of which has changed the natural landscape forever, and when in operation resulted in lorry traffic, mud on roads, dust, and damage to hedges, verges and road surfaces. The Civic Society has argued for years that Hertford has already contributed more than its fair share of the County's supply of gravel. The eMLP no longer includes the appeal site or any other area close to Hertford as a Preferred Area. It can no longer be assumed that the reserves north of Bengeo are bound to be worked at some time in the future. The eMLP is at an early stage, but the evidence base which informed the choice of options is a material consideration.

168. John & Carmen Wiggett (local residents) [86] There is concern about the loss of amenity value, especially the footpaths, and the views from the top of the field across to the Three Lakes and Westmill Farm. The footpath across the site is a regular running route. The finished land would be at a lower level and the views would be lost. Rerouting the path around high bunds would mean it was less likely to be used. The potential impact on the health of

[85] ID39.
[86] ID33.

children, especially those with asthma, is of concern as the HIA acknowledges that asthma suffers may experience some exacerbation of their condition.

169. Cllr Steve Cousins (Hertford Town and District Council, Chair of Community Services, which is responsible for allotments) [87] The allotments near the site are well used by people of all ages. The long term effects of dust would be catastrophic. The need for extraction sites outside those proposed by HCC is questioned. The scheme would be inappropriate in the Green Belt, and would result in a major and irreversible loss of amenity space. Both applications have been rejected unanimously by HCC.

170. The B158 is heavily used, particularly at rush hour and school times. There is local concern about noise, dust and safety from lorries and mechanical plant associated with extraction. The B158 drops out of Bengeo to an 'S' bend, then winds to a blind bend near to the existing Rickneys Quarry access, and on up to a blind summit at Chapmore End. The increase in traffic would severely compromise road safety.

171. Terry Mansfield (Chapmore End Association) [88] Chapmore End comprises about 30 houses, and the local residents have been living with the problem of gravel for the past 30 years, when a mega-pit was proposed. Rickneys Quarry could be heard when it was operational, with the loading of gravel sounding like thunder. Conveyor belts made a continuous sound. The noise was horrific and carried on the wind. Residents were told that in 20 years the Rickneys gravel pit would be so beautiful, but it is now a moonscape. The promises have not been fulfilled. The proposal would put at risk the water supply for the area, when AW has indicated an increase in demand for future housing. The appellants have not talked to the local community.

172. Dr Mike Howarth (local resident) [89] A particular concern is the time lag between factual evidence of health issues being acted upon in practice. He referred to asbestos in Rochdale. Silicosis could be the new asbestos dust. The HSE Guidelines say that exposure to RCS over a long period can cause hardening of the lung tissue. Airborne particles are of concern. These are a risk. The very idea of Hertford's urban quarry by a school should be stopped before the silica trouble really starts.

173. The proposed restoration would not be an improvement in landscape and conservation terms. The deep holes left behind would be avoided by wildlife because of easy observation by predators. The holes would be too deep to return to farmland and slopes may be unstable and so retaining topsoil would be difficult. Furthermore, all open views would be destroyed.

174. John Barnes (local resident) [90] It is not fair and reasonable to continue opening new pits when so many old pits have not been restored. Promises given when planning permission was granted have not been fulfilled. For example, at Panshanger a country park was proposed 30 years ago, but the first part only appeared 5 years ago, and no new paths have appeared on the

[87] ID46.
[88] ID47.
[89] ID40.
[90] ID41.

definitive map of PRoW. At Tyttenhanger, paths were left obstructed after mineral extraction. This was discussed with the operators in 1993, but no new paths were created. Legal action has also been taken at Ware Park to keep paths open. It seems that when permission is granted there is no compulsion on the operators to restore the area and its rights of way. HCC is overwhelmed by the work to restore the land ruined by gravel pits, and should be given the chance to catch up with the backlog before any new pits are opened.

175. Alan Burgess (local resident) [91] The noise from heavy machinery at Rickneys Quarry when it was operational was particularly noticeable when the wind was from the north, but it could also be heard on calm days. The machinery was 1.2 miles away and some of it was below ground level. This indicates that noise from the proposed quarry could be a major problem for those nearby, including the school, and a significant nuisance for the wider area.

176. Kelly Martin (local resident) There is concern about the proximity of the school and local housing. The quarry would be a danger for residents 24 hours a day 7 days a week, and for the rest of their lives. Children would not be able play outside or use the playing field. Common sense should see past the financial interests of the appellants.

177. Dan Griffiths (local resident) HCC has not objected on health grounds, but the risk is for the future – there may be none or it may be severe. The risk is unacceptable and avoidable. Local children should not be guinea pigs in a study. The landowners are a trust, it is not known who they are, and their approach to this proposal feels like bullying.

178. Lee Nicholson (local resident) [92] The appellants' HIA, which was submitted at a late stage in the appeal process, says that the air quality effects of the proposal would not be significant to public health. But that would not be so for the vulnerable in the community, such as those with COPD. The British Lung Foundation states that lung disease is one of the biggest killers in the UK, with rates the same as those that existed 10 years ago, whereas heart disease has decreased by 15%. Asthma deaths in the UK are the worst in Europe. Lung disease in children is increasing. The knowledge does not yet exist to say that there is no risk. Mr Nicholson would not use the path across the site while excavation was taking place because the risk would be too much.

179. Alexandra Daar (local resident and chair of East Herts Green Party) [93] The whole walk across this field to Chapmore End is full of interest and charm from the rolling hills and lonely oak, to St John's Wood, and creates a lovely sense of space. The Bengeo Beavers complete this walk as one of their last events of summer term. All sections of the population need easy ways to exercise. There is no good reason to use this local lung for a quarry when it is so close to children in school and to people's homes. The community needs this space right on their doorstep in all its current loveliness, not a noisy, dusty eyesore.

[91] ID38.
[92] ID48.
[93] ID42.

180. Ben Penrose (Chairman Molewood Residents' Association) [94] The association covers some 700 households. There is concern about the impacts to the health and wellbeing of residents by reason of dust, noise, dirt and loss of valuable green space. Parents are already worried about whether Bengeo School will be right for their children. Older residents remember the noise disturbance from Waterford Quarry when it was operational. The proposal is already damaging health and wellbeing, and threatening to cause further impacts on the quality of life of residents. Traffic impacts would put pressure on the road network. There is also concern about the absence of any pro-active consultation with an active and visible residents' association during the planning process.

181. Graham Nickson (local resident) Planning permission should not be granted now because; 1. health impact because of RCS and COPD, 2. the precautionary principle should apply regarding possible contamination of the water supply, 3. the effects of HGVs on am and pm peaks in traffic especially in relation to the school, 4. the effects on the Green Belt adjacent to a nature park with trees close by, 5. there is no need given the supply of sand and gravel available at Hatfield.

182. Veronica Fraser (health walks leader) [95] The field is used for health walks, sometimes twice per week. The benefits of green spaces are important for the health of the community. People travel to the fields from a wide area, and its importance as a much loved area is clear from the emerging BNAP. The quarry would result in the loss of a favourite walk. There would be no beneficial changes as a result of the quarry. Previous quarrying has left a blot on the landscape.

183. Cllr Margaret Eames-Peterson (Hertfordshire County Council and a consultant in public health intelligence) [96] A HIA was requested in 2017, but was not available until Saturday 21 April 2018. There was little time for consideration and consultation prior to HCC's committee meeting on 26 April about the 1.25 Mt scheme application. Air quality issues were raised at the meeting. Air quality could be monitored outside the school, but a desk-based HIA can under-estimate harmful health effects. The HIA states that predicted levels of PM_{10} and NO_2 would be below WHO thresholds, but not so for $PM_{2.5}$, which is more dangerous to children's lungs.

184. At paragraph 9.2.10 the HIA states that the 'without project' scenario already exceeds the WHO guide value and that the predicted increase of up to 0.33 $\mu g/m^3$ suggests that further mitigation is not warranted. But this is not protecting the health of the population. The true effect would depend on wind speed and direction, and so is less predictable, and margins for the peaks of $PM_{2.5}$ and NO_2 should also be estimated. There is an emerging health policy in the eMLP. However, the framework for HIAs for quarries is not yet published. But other hazards to health, including noise, the mental health effects of noise, and the effect of reduced access to green space for physical activity on the mental health of nearby residents should be considered.

[94] ID58.
[95] ID59.
[96] ID60.

185. Cllr Mari Stevenson (East Herts District Council) [97] The Council has developed a plan which acknowledges the need for a small housing development in Bengeo. But it also has a commitment to promote health and wellbeing for its residents. Accessible green space is an important part of that remit. Bengeo field is an important green space asset. The quarry should also be rejected because of an unacceptable increase in an already heavy traffic flow on the B158. HERT4 could be seen as a lower priority in relation to the larger proposed developments in Sele and Mead Lane.

186. Steve Halsey (local resident) [98] Defra and the EU have set a legally enforceable limit on PM_{10} of 40 $\mu g/m^3$ averaged across a full year. But this is of concern because of published articles that state that there is no threshold below which health effects do not occur, that a four-year study found an increase of 4.3% in childhood asthma admissions for every 10 $\mu g/m^3$ increase in PM_{10}, and another found a 2.5% increase in the level of school absenteeism for every 10 $\mu g/m^3$ increase in PM_{10}. In addition, a 2013 WHO report stated that all-cause daily mortality is estimated to increase by 0.2%-0.6% per 10 $\mu g/m^3$ of PM_{10}. A 2014 paper concerning proximity to a cement plant in Italy found epidemiological evidence of the acute health effects of PM_{10} in areas with annual concentrations that are lower than the legal EU limit of 40 $\mu g/m^3$, which supported the need to establish more restrictive legislative standards.

187. The appellants modelling predicted 1.25 $\mu g/m^3$ of PM_{10} for the closest receptor to the proposed quarry. This figure seems to be based on an average across the 20 months that Phase 1 would be in operation, and not the 12 months used by Defra and the EU. It cannot, therefore, be used for comparison with the EU limit of 40 $\mu g/m^3$. The graph in the 2016 IAQM guidance shows a large number of quarries result in between 5-10 $\mu g/m^3$ of PM_{10} and over a range of 0-300 m. Dust emissions from the proposed quarry may not be entirely safe for those attending the school and living close by.

188. Laura Wyer (local resident) [99] The field and footpath are a massively important local amenity. Children walk *en-masse* to school during the Bengeo walk to school week, and on other occasions when the weather is good. The path is an essential link between two communities. The proposal for a path along the B158 is ridiculous, as vehicles sometimes leave the road, and in winter runoff from fields results in ice. A Facebook Opinion Poll started on 5 May found that 96% of the 194 respondents said that they would stop using the footpath. The view is stunning from the existing footpath. The scheme would result in the ugly remains of a quarry as a reminder to residents of the devastation that it brought to Bengeo.

189. Parents now have mixed emotions about accepting a place at the school. The potential for damage to people's health and wellbeing has resulted in over two years of anxiety. The WHO states that health is a state of complete physical, mental and social wellbeing and not merely the absence of disease or infirmity. The HIA refers to mitigation measures, monitoring and

[97] ID62.
[98] ID63.
[99] ID64.

procedures. But residents cannot be sure that these would be correctly followed. The author of the HIA is asking the community to put their faith in the appellants, when they have failed to engage with the community over the past two years.

190. Simon Pickering (local resident) [100] A large part of the past two years has been dominated by the exhausting business of opposing the proposed quarry. The scheme would affect an area of beautiful countryside. Other quarries in Hertfordshire are evident from the tell-tale signs of dust on the road and in the hedgerows, but they are hidden from view, situated away from residences. That would not be so for a quarry at Bengeo field, which is the 'back yard' for this community, and far too close and precious to turn into a gravel pit. The most attractive part of the site is the higher slopes up from the central path towards St John's Wood. It is the part most under threat from the proposal, and the part proposed by HCC to be removed from the preferred areas in the eMLP. Not surprisingly, people do not choose to walk on the lower slopes next to the B158.

191. The Rickneys site is an ugly moonscape, which prior to the Inspector's recent site visit contained decaying and dangerous industrial plant. Local residents are not interested in future benefits and enhancements to the landscape from the proposed excavation at Bengeo because, in the unlikely event that these did materialise, it would be too far into the future to be of any benefit to them. After the experience with Rickneys Quarry local residents do not believe the appellants in this regard.

192. Nadine Cleland (local resident) [101] There has been a lack of good quality public engagement by the appellants. Public participation and consultation are required and good practice. HCC has published its Statement of Community Involvement. Neither of the applications has been accompanied by a dedicated Statement of Community consultation, setting out the public engagement strategy. Reference is made to a drop-in event held on Saturday 28 November 2015 at the Scout Hut. This was advertised in the Parish Magazine, which only prints 350 copies for over 3,000 households in this and the surrounding wards. No further attempt was made to engage with the wider community or SBQ.

193. The HIA refers to environmental change and social change associated with the strong local reaction to the development, e.g. affecting understanding of risks, local pride, community influence and community identity. It adds that both may affect physical health and mental wellbeing, and notes that the extent to which a significant health effect may occur would depend on the future level of information sharing and trust establishment. The HIA also refers to the need for certainty about the timing of Phase 1 and restoration.

194. But the HIA was only submitted a week before the committee date for the 1.25 Mt scheme application, and these recommendations have yet to be taken on board by the appellants. The updated ES September 2017 states that the revised proposals are in accordance with the development plan for

[100] ID65. This includes an oblique aerial photograph showing part of the site in relation to the urban area of Hertford.
[101] ID66.

the area, can be carried out without any unacceptable impacts, are in line with Government policy and should be supported.[102] This is simply incorrect when a number of significant risks remain. To claim that none of the local concerns are justified shows very little, if any, consideration for the community. The appellants have so far failed to fully inform the public, have an open and transparent dialogue, and address all relevant concerns, contrary to the *Framework*, which requires that development should ensure that there are no unacceptable adverse impacts on the natural and historic environment, human health, and take into account the cumulative effect of multiple impacts from individual sites and/or from a number of sites in a locality.

195. Russell Norris (Chapmore End Association) [103] In addition to the technical evidence it is important that sufficient time has been allowed for objectors to formulate their objections without the goal posts being moved during the consultation period. There is a shortage of time for busy people to respond. The appellants have overwhelmed the community by submitting two applications in quick succession, submitting confusing documentation, producing a 90 page HIA three days before the committee meeting, and consultations/meetings have been arranged over three holiday periods. Furthermore, the date for the Public Inquiry has been changed twice.

196. Taken together, these are a strategy to make it as difficult as legally possible for objectors to make a case. This is designed to eclipse the appreciation of the many risks inherent in the proposals. The threats and fears of the community are well founded, because HCC would not have adequate resources to monitor the quarry, the decision would not be taken for the greater good, and this quarry might be one piece in a bigger jigsaw. The community has 30 years of unhappy past experience of the quarry industry.

197. Restoration to farmland would be constrained by the underlying aquifer. Past experience has shown that quarries that cannot be filled with water or turned into nature reserves, are used as refuse tips, or are just neglected.

198. Wheel cleaning plant is never entirely effective and other quarries have resulted in windscreen damage and mud on the road. Lorry movements would be likely to be concentrated at the start of the day rather than averaged over the whole day, and so would conflict with peak traffic flows. Quarry owners are not limited to using their own fleet of lorries and control of free-lance operators could be an issue. Cumulative effects with the re-opening of Rickneys quarry should be considered.

199. Heston Attwell (local resident) [104] HCC should have objected on road safety grounds. It is dangerous to overtake on the B158 because of its topography and screening. Additional lorry movements, with mud, sand and gravel on the road, would at peak times lead to road accidents. Pedestrian safety at the junction of Byway 13 and Wadesmill Road is of concern. This is already dangerous and turning HGVs would make it worse. The farm track between Byway 1 and Byway 13 completes a circular walk through Bengeo field, and

[102] CD15.
[103] ID67.
[104] ID68.

provides a link to Chapmore End. The proposal would ruin this route and split communities.

200. The appellants refer to the need for the mineral, but their real need is to sell the HERT4 site for housing. The site has been left unquarried for years, when it should have been worked earlier in the plan period.

201. Apart from four hours in the Scout Hut two and a half years ago no one has engaged with SBQ or other parts of the community. This is unacceptable. The scheme is unacceptable because of the continuing damage to the mental and physical health of residents due to noise and RCS. It would risk contamination of local drinking water, have a negative impact on the school, and undermine local democracy. This is a beautiful place and the field would never look the same again. It would not be enhanced, as the restoration would leave a crater surrounded by finger-thick tree planting. The open views either side of the footpath would be lost, and people would stop using it. If the quarry goes ahead children would be taken out of the school and families would move away from the area.

202. Amber Waight (local resident) [105] Long term exposure to even modest increases in dust and PM_{10} has been evidenced to have a negative impact on children with breathing difficulties. The IAQM states that dust impacts will occur mainly within 400 m of the operation. There is no safe level for $PM_{2.5}$ silica particles, which are invisible. The potential mental health impact on children is also important. Children are worried about being in a school so close to a risk, and potentially surrounded by dust monitors. Unnecessary stress and anxiety should not be added to children at a vulnerable age. Ecotherapy is being used to treat mental health. This includes taking part in physical activities in green spaces of beauty and woodland. Bengeo School has this on its doorstep. Children should not miss out on this opportunity because of the quarry.

203. Cllr Bob Deering (Hertford County Council, East Herts District Council and Hertford Town Council) There is widespread concern about this proposal across Hertford and outside the town, not just the immediate area. This is apparent from the number, and nature, of representation Cllr Deering has received. Given the use and amenity value of Bengeo fields many are concerned about any disruption. Dust from working the quarry would be coincident with the hours children were at school, therefore calculation of effects based on 24 hour averages are dubious and of great and genuine concern for local residents.

204. Even with professional drivers HGVs on narrow lanes result in damage to kerbs, verges and hedgerows. There is concern that the number of truck movements has been played down by the appellants. There is no overlap of this proposal with residential development of HERT4. They are separate matters and each should be dealt with on its own merits. HERT4 should not predetermine the application for a quarry.

[105] ID69.

205. Nigel Braggins (local resident) [106] Children using Bengeo field for healthy activities is a priceless benefit. Aside from the health and amenity benefits provided by the rolling open landscape, the site is a water catchment area. Such an essential resource should not be put at risk. Children play football at the After School Club everyday on the school playing field.

206. Rickneys Quarry ceased extraction in 2001. Seventeen years later it is an unrestored, scarred and polluted wasteland. The track record for restoration after quarrying is abysmal. The appellants have not convinced local residents about applying high standards and best practice if permission were to be granted for a quarry at Bengeo fields.

207. There is an objection in principle to the proposal. HCC not only refused the two applications, but was so concerned that it declared its intention to remove this entire area from the Preferred Area for minerals working.

208. The HIA highlights the need for trust, but after two years it is still not known who the applicant is, there is a total lack of transparency, no information sharing and no clear chain of accountability.

209. Dr Laura Horsfall (local resident and Senior Epidemiologist University College London) [107] During the time children spend at school (from 2 to 11 years) their lungs will double in size. This is a critical window of respiratory development, where even small environmental insults, such as chest infections, can have significant short and long-term impacts on health and wellbeing. Dust and particulate matter, including carcinogenic silica would increase as a result of the quarry and there are no known safe levels of these pollutants. The HIA refers to sufficient evidence to establish the potential for the activities to affect health, but the IAQM states that there is little peer-reviewed published literature on the impacts of dust from UK mineral sites. The HIA includes no studies that can guarantee the safety of mineral extraction on the immature lungs of children or vulnerable people. Almost all the data on silicosis is from young physically fit male workers and cannot be generalised.

210. The appellants' modelling suggests that the quarry would be unlikely to breach UK regulatory levels of pollutants. But these rely on meteorological data and point estimates for pollution. There is nothing to show the predictive accuracy of models using real data, which is common practice in evidence-based medicine. The appellants concede that during hot spells dust levels could contribute to health risks in vulnerable groups. One in six children are diagnosed with asthma, others suffer from recurrent chest infections. It is highly plausible that exposure to small average increases or repeated sudden changes in dust/pollution due to unpredictable meteorological events over the course of eight years would negatively impact these children. The appeal site is just one street from the urban area, whereas the IAQM states that air quality objectives are rarely exceeded close to most mineral sites as they are typically located in rural areas.

[106] ID74. This includes photographs of Rickneys Quarry.
[107] ID70.

211. The HIA notes that $PM_{2.5}$ levels already breach WHO guide levels. Both the WHO and Scotland have recently halved their PM_{10} target. Scotland has reduced the permitted number of breaches to 7, as opposed to 35 in the rest of the UK. The quarry would not be permitted this close to an urban community in Scotland. As a high-income democratic country with a political emphasis on the big society, we must not prioritise short-term private profit over the risk to the public health of our most vulnerable members of society.

212. Mark Prisk MP Member of Parliament for Hertford and Stortford highlighted matters raised in his written submissions, which are summarised later in this report. He emphasised three points at the Inquiry. The proposal is strongly opposed because of its likely effects on air quality, the local roads and the natural environment. The site is adjacent to Bengeo Primary School and family housing, and so the scheme is a significant threat. The risk to the local water supply cannot be dismissed. Secondly, the footpaths across the open space of Bengeo fields provide a meeting place for local residents on the top of a hill separate from the town. The loss of these assets to an industrial quarry would be contrary to public health policy. Thirdly, there is no need for the sand and gravel. The landbank exceeds the actual need.

The case for the appellants

The following summary of the appellants' case broadly follows their closing submissions to the Inquiry, with additional reference where necessary to the evidence adduced.[108]

Introduction

213. Some of the operations previously undertaken by RJD Ltd have been taken on by Ingrebourne Valley Ltd. However, RJD Ltd continues to trade and is not a dormant company. Both the appellants named in the appeal documents have legal capacity to lodge an appeal.[109]

214. Groundwater and air quality health considerations are not an issue for HCC.[110] However, the Rule 6 parties raise concerns about the implications of the development on the hydrology of the area, and about potential health impacts as a result of changes to air quality. These concerns are not shared by the statutory experts, the EA and the Director of Public Health.

215. Sand and gravel are minerals of local and national importance, necessary to meet society's needs, to support sustainable economic growth and to support our quality of life. Even where there is a 7 year landbank, the winning and working of those minerals attracts great weight.

Landscape [111]

216. HCC concerns are solely about the landscape impacts of Phase 4 and the stockpiling area during the operational period and the restoration landform. The only GLVIA3-complaint landscape and visual impact assessment before

[108] ID111.
[109] ID77 paragraphs 30 and 31.
[110] SoCG3.
[111] APP8.

the Inquiry is that prepared by the appellants.[112] The appeal site is not part of a designated landscape, and the landscape experts concur that it is not a 'valued landscape' within the meaning of paragraph 170 of the *Framework*.

217. HCC accepts that mineral extraction would be acceptable not just on the plateau, but also on the undulating sloping valley sides that drop down from the plateau in the central and southern sections of the appeal site (Phase 1 and Phase 2). So the north-eastern part of the site should also be acceptable. The stockpile area would be located in the lowest part of the site, and largely screened by the vegetation along Wadesmill Road. New hedgerow and tree planting along the Byway and Wadesmill Road would further screen the area.

218. During operations, the landscape and visual effects would be substantial/moderate adverse, but that would be likely for all mineral sites. Following restoration, the landform proposed in Phase 4 would appear as a gentle undulation in the landscape, not as a contrived "distinct linear mound" along the eastern edge of the Phase 4 area, as claimed by HCC.[113] The appeal site forms part of LCA '69 Stoney Hills', which is characterised by gently undulating land. It is clear from the cross-sections prepared by both HCC and the appellants that it would not read as an alien feature in the landscape, but would sit comfortably within it.[114]

219. HCC has failed to have regard to the significant landscape benefits that would be secured through the proposed restoration scheme. The quality of the landscape in the Stoney Hills LCA is poor, and the strategy is to "improve and restore". The restoration proposals deliver almost all of the measures identified in the LCA. There is no evidence to indicate that those benefits would be secured absent the proposed mineral development. The long-term landscape benefits should be accorded significant weight in the planning balance. They include: The restoration of historic hedgerows, native woodland edge planting with rides and glades, species-rich agricultural buffer strips along field margins, and new wetland areas.

220. New planting would be phased, with much of it implemented at an early stage of the operational period. The landscape management plan would set out an initial 3 to 5 year establishment period for new planting, with a medium-term strategy of mitigation, monitoring and longer-term management. As the proposal is to return the majority of the land to agriculture the need for a detailed agricultural classification was scoped out.[115]

[112] APP8. [Inspector's note: GLVIA3 at paragraph 5.51 on duration states that medium term is 5 to 10 years and long term 10 to 25 years, but adds that there is no fixed rule.]
[113] HCC3 paragraph 5.29.
[114] ID29.
[115] Reply dated 26 April 2018 to Inspector's question.

Green Belt [116]

221. There is a "threshold question" to determine whether development is appropriate or inappropriate in the Green Belt.[117] Given that mineral extraction is capable of being appropriate, the decision-maker must start from the premise that there is nothing inherent in that type of development that would necessarily compromise the openness or purposes of the Green Belt. Were it otherwise, the proviso in paragraph 146 of the *Framework* would always negate the potential appropriateness of mineral extraction.[118]

222. The court found in *Europa Oil* that "structures, engineering works, and associated buildings…generally encountered in mineral extraction" or "the common structural paraphernalia for mineral extractions cannot cause the development to be inappropriate". The elements of development to which HCC objects here are all features that are generally encountered in mineral extraction. They are no more than is necessary to facilitate the extraction of minerals from the site. Furthermore, they are all temporary in duration and the openness of the Green Belt would be restored following the operation, up to 10 years in the 1.75 Mt scheme and up to 8 years in the 1.25 Mt scheme. The temporary nature of development and the restoration of a site to beneficial Green Belt use may well be important to the judgement of whether the development was appropriate or otherwise.

223. Green Belt policy is essentially a long-term policy. A key feature of the Green Belt is its permanence. In fracking cases it has been accepted that with mineral exploration, some degree of operational development has to be expected. Where all of the proposed elements of development would be normal, appropriate to the type of operation and reversible, there will be no harm to openness and the development will be appropriate.[119] The Secretary of State is required to have regard to his own decisions.[120] Consistency is a general axiom of rational behaviour.[121] It would be quite wrong and set a dangerous precedent if the Secretary of State took a different approach in this case from that which he has consistently taken where the mineral under consideration is shale gas.

224. In this case there would be no permanent harm as a result of the proposed development – the long-term openness of the Green Belt would be maintained. Given that the works and structures are no more than those generally associated with mineral development; are proportionate in size and temporary in duration, even those parts outside of PA2 would not constitute inappropriate development in the Green Belt.

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[116] APP10.
[117] *R (Lee Valley Regional Park Authority) v Epping Forest DC* [2016] EWCA Civ 404 per Lindblom LJ at [26].
[118] *Europa Oil and Gas Ltd v SSCLG* [2013] EWHC 2643 (Admin) per Ouseley J at [64], as endorsed by the Court of Appeal in [2014] EWCA Civ 825 at [41]
[119] See, for example, appeal decision APP/U1050/W/17/3190830 for a temporary permission for 5 years for a wellhead assembly; comprising access tracks, bunds and fences, site cabins of 5.5m high and a drill rig of 60m high near the top of a ridge of sloping ground that would be visible from some 10 km from the site.
[120] *DLA Delivery Ltd v Baroness Cumberledge of Newick* [2018] EWCA Civ 1305.
[121] *Matadeen v Pointu* [1999] 1 AC 98.

225. Even if they did, any harm to openness or to Green Belt purposes is justified by VSC sufficient to outweigh any temporary harm to the Green Belt and any other harm. These include; the benefit of mineral extraction; the temporary nature of the works; the long-term landscape and ecological benefits; permanent enhancements to the PRoW network; and the benefits of extracting the minerals to allow the delivery of houses on the northern part of the HERT4 site.

226. The 1.25 Mt scheme falls, with the exception of its temporary access road, entirely within PA2. If the temporary access road was removed following the extraction of minerals, there can be no landscape or visual reason for refusal. The openness of the Green Belt would be restored after 7 years. The access road would be flush to the ground; would occupy a limited spatial area and would be only likely to be visible from the Byway and in fleeting views from vehicles on Wadesmill Road where there is no pavement or provision for pedestrians. The temporary access road would not result in landscape harm sufficient to merit refusing permission, and would not render the scheme inappropriate in the Green Belt. Even if it did, the importance of extracting sand and gravel, and the need to win and work minerals where they lie, would comfortably satisfy the VSC test for inappropriate development in the Green Belt.

Noise [122]

227. Some noisy short-term activities, which may otherwise be regarded as unacceptable, are unavoidable to facilitate mineral extraction. Noise levels below the *Guidance* limits should not be treated as unacceptable or as weighing against a proposed mineral development.

228. The upper working limit of 55 dB(A) would not be exceeded, excepting for work on bunds, at any noise sensitive location at any time during operations, even if the appeal site was worked simultaneously with Rickneys Quarry. However, the noise experts disagree about possible exceedances of the normal working noise limit level of 10 dB above background.

229. The normal working limit at The Orchard should be 48 dB(A). HCC considers that this level would be exceeded by just 1.7 dB(A) under the 1.75 Mt scheme but would not be exceeded at all in the 1.25 Mt scheme. The appellants are satisfied that the noise produced by the operation of the site would not exceed that level in either scheme and is content to accept a noise limit of 48 dB(A) at this location.

230. At Sacombe Road the parties disagree as to the background noise level and therefore the appropriate normal working limit. HCC considers the limit should be set at 48 dB(A); the appellants consider that it should be set at 52 dB(A). If the appeal site and Rickneys Quarry operated simultaneously, the combined noise levels at Sacombe Road could reach 50 dB(A). Notwithstanding its proposed normal working limit of 52 dB(A), the appellants are confident that the site could be operated without exceeding 50 dB(A) and are content to accept a condition to that effect. It would place an unreasonable burden on the operator not to be able to extract minerals in the

[122] APP2.

event that permission is granted for Rickneys Quarry and it is worked for minerals.

231. With a limit on noise of 48 dB(A) at The Orchard and 50 dB(A) at Sacombe Road, there can be no reason to refuse the application on noise grounds. Any breach of the conditions would be picked up in regular monitoring and subject to enforcement. Noise conditions are not impossible to enforce, if that were so there would be no point in ever imposing them. In reality they are imposed on every mineral operator and are recognised by the Secretary of State as serving a worthwhile purpose.

232. The Secretary of State can be satisfied that it is possible for those limits to be met, based on numerous noise levels measured for the type of plant proposed for this site, operating in comparable sand and gravel quarries. Reliance on manufacturer's specifications, which set out the maximum permitted SPLs from static tests on full power under EC Directive 2000/14/EC, is not appropriate. The plant would not operate to its maximum potential with its engine revving at full capacity on site, and so BS 5228 explains that obtaining actual noise measurements of the proposed plant is likely to provide the most accurate prediction of noise levels.

Public Rights of Way

233. In the 1.75 Mt scheme the Byway would be crossed by the access road for a temporary period of 10 years, and for a period of 2 to 3 years temporarily diverted around Phase 4. This would increase walking time by some 2.5 to 3 minutes across the site. The Byway would be crossed by the access road for a temporary period of 7 years in the 1.25 Mt scheme. But the crossings could be made safe.

234. HCC did not recognise any benefits to the PRoW network as a result of the proposed development. The creation of a new, permanent bridleway joining Byway 1 to Byway 13 would be an enhancement to the PRoW network and would facilitate a circular route. The creation of a lawful PRoW to replace an unlawfully used route would be beneficial. So too, would be the creation of two permissive footpaths for the duration of the works, adjacent to Wadesmill Road and Sacombe Road. Upgrading footpath 14 to a bridleway would be an enhancement of the network.

Hydrology [123]

235. An Environmental Permit is not believed to be necessary as the site would be excavated dry without need to dewater or discharge water, and water for wheel washing etc. would be from a private borehole extracting less than 20 m^3 per day, which would be allowed without the need for a permit.[124] The EA is the statutory consultee with responsibility for the protection of groundwater, and does not object subject to the imposition of a number of stringent conditions. The EA was aware of Dr Lovell's concerns as to the roughness of the surface of the chalk aquifer. The view of statutory consultees should be given "great" or "considerable" weight in planning

[123] APP1 and APP4.
[124] Reply dated 26 April 2018 to Inspector's question.

decisions: a departure from those views requires "cogent and compelling reasons", which are absent in this case.[125]

236. The aquifer is vulnerable to contamination due to the presence of the fracture network, which permits very rapid flows. Once contamination enters the chalk matrix it is difficult to remove.[126] However, the risk of hydrocarbon pollution can effectively be addressed through the imposition of prescriptive mitigation measures to deal with any spillage on site, requiring the affected sand and gravel to be excavated following a spill; stored in a safe location and them removed from the site. The risk of turbidity is of less concern. Both could be satisfactorily addressed, such that even on a precautionary basis, the development can safely be allowed to proceed. As the level of standing groundwater is below the base of the sand and gravel, the trees in St John's Wood and on-site are dependent on rainwater, and no adverse impact is indicated by the proposed mineral extraction.[127]

237. AW is the operator of the Wadesmill PS and the body with most to lose from any pollution of the aquifer. It has past experience of a pollution event from a chemical site, and so is likely to be particularly wary of pollution risk, but does not object to the proposed development. It considers the appellants' proposal to leave up to 5 m, 3 m and 1 m of undisturbed material on top of the chalk to be more-than-adequate protection, and accepted much less at Rickneys Quarry, which is also in a SPZ1.

238. There is no evidence of a mineral site ever having polluted a groundwater source. Rickneys Quarry operated without incident and there is no reason to believe that mineral extraction in the appeal site, subject to the EA's conditions, would pose any unacceptable risk to groundwater.

Air quality and health [128]

239. The Director of Public Health agrees that the findings of the HIA are reasonable and that the development would not give rise to any unacceptable health impacts.

240. The HIA proposed, after its conclusions as to likely effects, some recommendations to enhance the position further. But those matters do not affect the conclusions and are not necessary to render the development acceptable. SoCG3 makes it clear that the difference between the proposed separation distances in the two schemes would have no bearing on the likely health impacts of the development.

241. Limit values for PM_{10} are set in international and national law at an annual average of 40 µg/m^3. The *Framework* requires planning decisions to sustain and contribute towards compliance with relevant limit values. There is no risk that those limits would be exceeded as a result of this development. At the worst affected receptor, concentrations of PM_{10} would be below 19 µg/m^3: less than half of the limit values. The vast majority of that PM_{10} is already present

[125] *Shadwell Estates Ltd v Breckland DC* [2013] Env.L.R D2 at [72].
[126] APP1 paragraph 3.13.
[127] APP9 paragraph 3.2.3.
[128] APP3, APP6 and APP11.

in background levels. At the worst affected receptor, the quarry activities would contribute just 2.20 µg/m^3 of PM_{10} to the annual mean. Changes of this magnitude are 'negligible'.[129] For the 1.75 Mt scheme all air quality impacts at sensitive receptors would be negligible, with the exception of one slight impact.[130] For the 1.25 Mt scheme all impacts would be negligible.

242. Air quality impact will often be used as a proxy for assessing effects on health.[131] While it is never possible to demonstrate unequivocally that a development would give rise to no adverse health effects, a negligible air quality impact is likely to equate to a negligible health effect. The HIA concludes that the health impacts on the population in the vicinity of the site would be negligible. During certain weather conditions very short-term elevated air pollution concentrations may pose an increased health risk for particularly vulnerable groups, but given the very minor increase in PM as a result of the development, this would not have a significant effect.

243. The HIA is informed by the findings of the Redmore air quality assessment, which relies on the well-recognised ADMS model. The emission factors selected are taken from the EMEP/EEA air pollutant emission inventory guidebook, which is technical guidance used to prepare national emission inventories. If anything, they are likely to overestimate impacts because they include dust emissions from a variety of mineral sources which generate more dust than the moister sand and gravel that would be excavated from the appeal site.[132] Any change in $PM_{2.5}$ and PM_{10} concentrations would be expected to be exceedingly small and would only be experienced by a relatively small number of people. As such the health risk would be negligible.[133]

244. There are no material risks associated with RCS as a result of this development. RCS is a component of PM_{10}. Increases in PM_{10} concentrations would be exceedingly small and increases of RCS would be even smaller. The Stacey et al paper relied upon by SBQ reveals that for sand extraction sites RCS comprises some 2.6% of PM_{10} concentrations. That means that at worst this development would contribute 0.06 µg/m^3 of RCS and that together with background levels, there would be a maximum RCS concentration of 0.49 µg/m^3. The US Environmental Protection Agency uses a benchmark of 3 µg/m^3 of RCS as a level at which there is little or no risk to the wider populous. The level around the appeal site would be less than 20% of that threshold. In those circumstances there is no unacceptable risk posed by RCS as a result of the proposed development.

[129] CD35.2 at p.25, table 6.3.
[130] Redmore Air Quality Assessment, April 2018, table 53 (p78-80) and table 55 (p84–86).
[131] CD35.2 para 7.10 page 30.
[132] CD35.1 Table A2-6 on page 36, which reveals that many of the minerals sites emit greater PM_{10} levels than sand and gravel sites, which are shown in the table as producing close to zero emissions of PM_{10}.
[133] HCC5 Appendix 3.

Highway safety [134]

245. The Highway Authority does not object to either scheme on highway safety or capacity grounds. There is no reason for refusal relating to highway safety. The Transport Assessment submitted with the planning applications includes detailed analysis of road safety and it did not reveal any cause for concern.

Biodiversity [135]

246. There are no objections from statutory authorities or consultees on ecological grounds. The proposal would result in some minor temporary impacts on the foraging activity of badgers, but any temporary harm would be more than compensated for by the proposed ecological enhancements resulting in a net biodiversity gain.

247. Ecological benefits would include; new and reinforced hedgerows and woodland habitats, hibernacula features and log/brash piles, bat and owl boxes in retained trees, new wetland areas, and small-scale fields bounded by new hedgerows with species-rich buffer strips and woodland planting. The new habitats would be subject to an intensive three year period of establishment maintenance, followed by a regime of routine habitat maintenance for 3 to 10 years, and then longer-term conservation maintenance secured by way of a landscape and nature conservation management plan.

248. There is no reason to believe that these ecological benefits would be delivered by some other means, without the prior extraction of the minerals. This scheme provides an opportunity to secure long-term ecological benefits which accord with the published strategy for the LCA. This is a consideration that weighs in favour of the proposal in the planning balance.

Need [136]

249. If the Government's growth agenda is to be met and the housing crisis is to be resolved, a steady and adequate supply of aggregates is essential. At December 2017 the aggregate landbank in Hertfordshire was 7.5 years. Since that date, one new planning permission has been granted at Furze Field, which equates to just 3.88 months of additional supply. The fact that the LAA shows 7.5 years of supply does not mean than the actual landbank position can be ignored for the rest of the year.

250. With an annual apportionment of 1.39 Mt per year used to calculate the landbank throughout the year the landbank in May 2018 was 7.1 years. At the end of October 2018 the landbank sits at 7.1 years. Absent any further grants of permission, by the time the next LAA is prepared in December 2018 the landbank will be below 6.85 years. If landbanks fall below 7 years at any time, there will be an urgent need for aggregates which cannot be ignored if Government policy is to be given effect.

[134] APP5.
[135] APP9.
[136] APP10.

251. The *Framework* only requires the update of LAAs annually, but the obligation to plan for a steady and adequate supply of aggregates does not end with the preparation of a LAA. In order to maintain a steady and adequate supply of aggregates, landbanks should maintain at least 7 years for sand and gravel or longer, having regard to the productive capacity of permitted sites. In Hertfordshire productive capacity is dwindling as a number of quarries close.[137]

252. HCC claims that the landbank is likely to increase with the grant of permission for the BAE Aerodrome site, but there can be no guarantee. The BAE site is in the Green Belt, would adversely affect PRoW, would result in landscape and visual harm over a 30 year period, and falls to some degree outside the Preferred Area.

253. The appeal proposal provides a concrete opportunity to increase Hertfordshire's perilously low mineral supply and provide the aggregates that are urgently needed. That is a benefit to which very great weight should be given.

Alternatives

254. HCC's case focused not on the alleged harm caused by the scheme, but on comparing the appeal proposal with a theoretical scheme involving the joint working of Rickneys Quarry and the appeal site. That scheme is not before the Secretary of State: indeed it does not exist as a credible alternative and it is not a matter that should carry any weight against the appeal scheme.

255. It is only in exceptional circumstances that an alternative proposal will be relevant. The court has held that consideration of alternative sites would only be relevant to a planning application in exceptional circumstances and that generally; "such circumstances will particularly arise where the proposed development, though desirable in itself, involves on the site proposed such conspicuous adverse effects that the possibility of an alternative site lacking such drawbacks necessarily itself becomes…a relevant planning consideration upon the application in question." [138] For such an alternative to be a candidate for consideration there must at least be a likelihood or real possibility of them eventuating in the foreseeable future.[139]

256. HCC relies on a potential joint working between the Rickneys Site owned by Hanson and the appeal site, as a potential alternative. The only harm of which HCC complains that would be avoided by such working is the temporary access road. There has been no objection to any of the other infrastructure within the PA2 area. The access road would be temporary and it would not be enough to justify a refusal of planning permission. It would not affect the permanence of the Green Belt or indeed its openness because it is a necessary and proportionate element of the mineral extraction. Those are

[137] Excavation ceased in December 2017 at Westmill quarry; at Panshanger around December 2017; at Water Hall Quarry around Autumn 2017; and Pynesfield is shortly to cease.
[138] In *R (oao J (A.Child) v North Warwickshire BC* [2001] PLCR 31, Laws LJ, having reviewed the authorities including *Trusthouse Forte*, said at paragraph [30].
[139] *Mount Cook v Westminster City Council* [2003] EWCA Civ 1346 at [35].

not conspicuously adverse effects. This is not one of the exceptional cases where an alternative scheme is relevant.

257. Hanson and the appellants are working together to promote the allocation of their respective sites in the eMLP, but that does not mean that there is any prospect of them promoting a joint scheme at the present time. Currently neither site is proposed for allocation.

258. Unless Hanson secures planning permission for their Rickneys site, they have no interest in reaching an agreement with the appellants that would allow the use of their access.[140] But it is wholly uncertain whether planning permission will be granted, and without it a PA2 compliant scheme is not possible. There can be no confidence that the working of the appeal site as an extension to Rickneys is a realistic prospect in the foreseeable future. Vague alternative schemes should be given little or no weight, and do not constitute a valid reason for refusing the proposals.

Development plan [141]

259. For the 1.75 Mt scheme Phase 4, the stockpiling area and the temporary access road, a total of about 8 hectares of land, would be outside of PA2. But the vast majority of the site lies within PA2, where MLP Policy 3 provides that permission would be granted if the development contributes to maintaining the county's appropriate contribution to mineral needs, and where the site specific requirements are met.

260. PA2 explains that the access is via the existing access from the B158. However, it is not possible for the appellants to use that access as it falls outside of its ownership and its attempts to reach agreement with Hanson (who themselves are not the landowner but have an exclusive option over the access) had not proved to be fruitful.

261. For the BAE site HCC officers were satisfied that the proposal was 'largely compliant' with MLP Policy 3, notwithstanding the fact that 7.5 ha of land fell outside the PA1 boundary.[142] HCC is required to apply its development plan policies consistently.

262. MLP Policy 4 applies to proposals outside the Preferred Areas, which will only be allowed where the landbank is below the required level and there is a need for the proposal to maintain the county's contribution to need, and it can be demonstrated that the proposals would not prejudice the timely working of the Preferred Areas. There is no suggestion that this scheme would prejudice the timely working of other PAs.

263. Absent any other grants of permission, the landbank will be below 7 years by the next LAA in December 2018 and aggregates extracted from this site would plainly assist the county in making an appropriate contribution to local, regional and national need. Therefore, the appeal proposals comply with Policy 4. Even if they do not, they should be allowed as an exception to that

[140] ID102. Until Hanson has secured planning permission for Rickneys, they are "dead in the water".
[141] APP10.
[142] HCC2 Appendix 5, page 49, paras 10.51 – 10.52.

policy, as were the BAE and Furze Field sites, when the landbank stood in excess of nine years.

264. Given the landscape, ecological and PRoW benefits and the absence of any unacceptable traffic impacts the appeal scheme complies with MLP Policy 9 (biodiversity); Policy 12 (landscape); Policy 13 (reclamation scheme); Policy 14 (afteruse); Policy 16 (transport) and Policy 18 (operational criteria).

265. EHDP Policy HERT4 makes the provision of 100 houses contingent upon the removal of minerals from the appeal site. Without the removal of the minerals, the delivery of the housing is in jeopardy. The potential allocation of HERT4 provided an impetus to extract the adjoining minerals quickly so as to enable that housing development to come forward without interference from quarrying activity. This influenced the timing of the application, but that is not the sole or even the principal justification for the proposed mineral development.[143]

266. Even if there is some limited conflict with MLP Policies 3 and 4, development plan policies often pull in different directions, and given the compliance with a raft of other policies in the MLP, and with Policy HERT4 of the EHDP, the proposal accords with the development plan read as a whole. The *Framework* makes it clear that great weight should be given to the benefits of mineral extraction, including to the economy, and that sustainable development should be allowed. The principle of mineral extraction on the land within PA2 is accepted on the basis that it constitutes sustainable development and HCC does not object to those elements of the scheme within the PA2 area, either on landscape or Green Belt grounds.

267. The 1.25 Mt scheme would have lesser impacts and the appellants would be content to proceed with that scheme. But the evidence about temporary harm to landscape, noise, air quality, water and planning must be weighed against the additional benefits compared to the smaller scheme of extracting more mineral, and would not justify a refusal. The purpose of the Inquiry was not to trick or badger a witness into concessions by repeatedly asking them the same question until they give a different answer. Unfortunately, Mr Symes was subjected to just that.

268. In both schemes noise impacts would be limited in geographical extent, degree and duration and would be well within the *Guidance's* upper limits for mineral working. Air quality impacts would be slight – negligible and would not give rise to any significant health effects, and the chalk aquifer would be adequately protected through the stringent conditions required by the EA. Some temporary harm to PRoW would be inevitable if the PA2 area is to be worked and those harms would be more than compensated for by the long-term benefits to the network. All of the potential harms raised by the parties would be temporary and reversible. The scheme would provide considerable long-term benefits to the PRoW, the local landscape and ecology of the site, and would provide minerals that are so needed to deliver the infrastructure that the country needs.

[143] APP7.

269. The benefits of both schemes, but particularly the 1.25 Mt scheme, clearly outweigh the temporary harms and the planning balance falls decisively in favour of the allowing the development.

Written representations

Pre-application community consultation

270. An insert about the proposal was included in the Parish Magazine in October 2015, and an exhibition held in November at the Bengeo Scout Group HQ. This was attended by about 80 people. A leaflet was provided summarising the scheme. Only a limited number of comment forms were completed. The principal matters raised are summarised in paragraph 7.4 of the ES.[144]

Application stage

271. A petition, dated 25 April 2016, with 806 signatures was submitted to HCC objecting on the grounds that the proposed gravel, sand and mineral extractions would have a profound negative impact on the local community, environment and wildlife. The signatories were concerned about the possible direct health effects of extraction works, and believed that the noise, dust and air pollution would be a nuisance, and almost certainly unavoidable. They strongly rejected any suggestion that there has been any consideration for the impact that lorry movements would have on local roads and infrastructure. Extracting 2.6 Mt of sand and gravel so close to the Wadesmill borehole would have a negative impact on the aquifer and HCC was urged to carry out an independent environmental assessment and hydrogeology study.

272. HCC received over 1,300 written responses objecting to the application for the 1.75 Mt scheme. The main objections are summarised as follows:[145]

- Impact on air quality/dust
- Impact on health
- Impact on highways affecting pedestrian/cycle use of Wadesmill Road
- Adverse impact on landscape and the Green Belt
- Impact on Byway No.1 and loss of recreational area used by the public
- Impact on ecology
- Noise.

273. HCC received over 1,000 written responses objecting to the application for the 1.25 Mt scheme. The main objections are summarised as follows:[146]

- Proximity to existing dwellings and a primary school
- Impact on air quality/dust
- Impact on health
- Impact on highways affecting pedestrian/cycle use of Wadesmill Road/road safety
- Impact on visual amenity/landscape and the Green Belt
- Impact on Byway No.1 footpaths and loss of recreational area used by the public

[144] CD2 document 1.
[145] CD5 paragraph 8.5.
[146] CD18 paragraph 8.2 and 8.7.

- Impact on ecology/habitat destruction
- Noise impact on occupiers of nearest residential properties
- New Minerals Plan does not include the site
- No urgent need to quarry
- Loss of historic value/impact on archaeology
- Concern regarding risk to groundwater and water supply.

274. Two e-petitions were received entitled "Hertford is worth more than gravel – petition against a new quarry in Bengeo Field" and "Protect our public rights of way and views from quarrying on Bengeo Field (Land at Ware Park)".

Written representations submitted prior to the opening of the Inquiry

PINS received five other written representations in the lead up to the Inquiry.[147] The views expressed are summarised as follows.

275. Mark Prisk MP Member of Parliament for Hertford and Stortford supports HCC's refusal of the application. The proposal is opposed by the vast majority of local residents. The scale and location is inappropriate. The impact on the environment and potential risk to the health of local school children is unacceptable. An extra 100 HGV movements a day would have a considerable impact on already congested local roads and road safety at the school, especially if concentrated around working day peak hours. There has been no independent environmental assessment of the impact on local wildlife and ecology. Dust will impact up to 400 m from the site and the *Framework* states that there should be no unacceptable adverse impacts on human health. There is a potential risk to the local water supply and no independent assessment of local geology has been undertaken. There is no need for the gravel as HCC has a current landbank of suitable sites which will provide at least 15 years supply. Upholding this appeal would be irresponsible given the risk to the health of thousands of local people.

276. Rt Hon Sir Oliver Heald QC MP Member of Parliament for North East Hertfordshire fully supports the campaign group, Cllr Stevenson, Cllr Crofton and Cllr McMullen in their objection to this proposed quarry, and would be grateful for these concerns to be taken into account.

277. Watermill Estate Residents' Association restated its opposition to sand and gravel extraction. The association does not believe that the extra information provided by the appellants is sufficient to justify quarrying in this area for the reasons put forward by SBQ. Of utmost importance is the fact that HCC is not recommending this to be a Preferred Area in the eMLP.

278. Roger Bardle (local resident) strongly objects to the appellants' second application. Nothing has changed regarding its total unsuitability as a quarry site due to its proximity to a primary school and housing developments, along with the many other environmental concerns regarding increased lorry traffic on a pleasant rural road, increased all day noise and its proximity to water supplies.

279. Laura Wyer (local resident) by email dated 19 March 2018 sought clarification about which scheme was being considered. She considered the

[147] Appeal file.

matter to be very confusing, especially as it had been re-confirmed that the appeal would be against the original 1.75 Mt scheme. Members of the public will have responded to an appeal against the 1.75 Mt scheme and have not had the chance to respond regarding the amended 1.25 Mt scheme.

Inquiry stage

280. The Planning Inspectorate received more than 500 written representations at the appeal stage objecting to the proposal.[148] In some cases the submissions made it clear whether the objection was to the 1.75 Mt scheme or to the 1.25 Mt scheme, but this was not evident in many cases. Some commented on whether the 1.25 Mt scheme would address the objections to the 1.75 Mt scheme. The views of all those who made submissions are summarised below.

281. The effects on air quality and health were raised by about 90% of the objectors. Many consider that the scheme would have a detrimental impact on air quality and would pose health issues for local residents, especially for children at Bengeo School and using the playing fields. The proposed quarry site is 350 metres away, opposite the primary school with a large staff supporting more than 500 three to eleven year olds. Dust from the quarry would contain tiny crystal particles. Research based on the monitoring of workers in a quarry digging up the same sand and gravel has found it to contain carcinogens. There is an undoubted risk of exposure to fine particles of silica dust. This is a fact that is acknowledged by numerous bodies and is indeed referenced in the consultation document for the eMLP. Inhalation of silica dust is known (UK HSE) to cause health issues, including lung disease, silicosis, chronic obstructive pulmonary disease (COPD) and lung cancer.

282. Damp material will quickly dry out as Hertfordshire is one of the driest parts of the country. Mobile dry-screening at the point of extraction would bring additional risk of airborne dust. Stockpiled supplies would dry out and generate dust on loading. During dry weather the mobile plant, both on-site and leaving the site, would generate dust as it moved around and was loaded. The hazards of quarry dust include respiratory silicosis, COPD, lung cancer, chronic bronchitis and emphysema. While admittedly those at greatest risk would be quarry staff, there is sound risk that vulnerable residents with respiratory issues and children with developing lungs would be affected through airborne disbursement; airborne dust would also have impact on eyes and skin. The precautionary principle should be adopted concerning the effects of $PM_{2.5}$. The appellants have used meteorological data from Luton airport, which does not provide for a local microclimate. Some expressed concerns about the ability of HCC to enforce controls, where the risk zone for dust is 1,000 m according to Technical Guidance.

283. Concern that the main aquifer supplying water to Hertford would be affected was raised by 80% of the objectors. It was considered that the aquifer would be placed at high risk of irreversible contamination should quarrying be permitted at the proposed site. Fractures in the subterranean materials would allow pollution to reach Wadesmill PS swiftly. There is a need to survey the size and orientation of fractures within the chalk. This is not a

[148] Two blue folders.

case for monitoring but for prevention. The risk of damaging a water supply seems too great for a county abundant in sand and gravel.

284. Some 70% of objectors commented on the likely effects of the additional quarry traffic for highway safety. The B158 is a country road that is already congested at peak times by people accessing or leaving Bengeo. There have been deaths and serious accidents on the B158 and queueing lorries, as well as lorries coming and going, would have a serious impact on road safety and the ability of residents to come and go. It would simply be too dangerous to use the B158, and local residents would have no alternative but to drive the opposite way into Hertford, to leave the area, adding to an already congested route at peak times. The right hand turn into the site would be dangerous.

285. About 65% of the representations raised concerns about the loss of amenity and recreation value. Many noted that the Byway that runs through the middle of the proposed quarry is registered as an Asset of Community Value. Local residents want to continue using Bengeo field as a local amenity for families, ramblers, runners and cyclists. Many commented on the walk, or walking their dog, from Bengeo over to Chapmore End/Tonwell through the beautiful countryside. Others recorded that the continuation of Herts health walks is an important consideration for the whole community in Bengeo and Hertford, adding that the scheme would impact on their ability to walk and unwind with family and friends in the area. The loss of this amenity would be further impacted due to the plant operation being adjacent to the footpath. Lorries would have to cross the footpath for site access/egress onto the B158. Quarrying the land in this area would have severe and detrimental effects to residents' health and a notable loss of community, since children would be less likely to ride their bikes, play in the park and spend time outdoors with family and friends, due to the noise, increase in traffic and air pollution.

286. About 60% of objectors referred to the effects of noise from the operation in a quiet local area. Some described this as a semi-rural area and valued its tranquillity. Others added that quarry noise is one of the major complaints in nuisance cases against existing quarries. Investigations for health and safety reasons show that plant work (e.g. gravel) was the second noisiest industry for workers to be involved in. The houses sited within a few metres of the quarry and the school within 500 m would both be seriously affected. It was noted that there is now a newly proposed mobile dry-screening process to add to the original noise damage.

287. Some 50% of objectors raised concerns about the effects of the proposal on the local landscape. Many considered it to be a beautiful and valued landscape, with unique views across the River Rib to Ware Park and to Three Lakes, with views back to the site from the Three Lakes Restaurant. It is the entrance to the historic county town. The quarry would spoil the rural landscape, and it would not be possible to screen the development in any meaningful way because of the contours. The bunds would be ugly, especially if not effectively managed. The bank near to the edge of St John's Wood would affect a local beauty spot and the local hydrology. Many commented on the proposed restored landform, noting the drop in the level of the field. Some considered that it would leave a gigantic hole in the countryside. The landform of the proposed site would be irreversibly

degraded, leaving a landscape irreparably damaged. The site is surrounded by gravel pits that have left a long term scar on the landscape.

288. The eMLP was cited by 40% of the objectors. Some considered the proposal to be premature. The eMLP has already been approved by the HCC Environment Panel and this goes against any quarrying in Bengeo Fields. It recommends that Bengeo Field should not be a Preferred Area for quarrying. This is expected to be approved in 2018.

289. Harm to the Green Belt was cited by about 40% of objectors. Some commented that the buildings, bunds and equipment would impact adversely on the openness of the Green Belt. Others considered that the quarry would destroy a valuable piece of Green Belt land.

290. Some 25% of objectors pointed out that the appellants are proposing to work outside the current Minerals Preferred Area (Phase 4 and stock piling, along with the site area adjoining Sacombe Road, the Wick and The Orchard). This MLP area was agreed as a Preferred Area only as an extension to Rickney's quarry. The appeal is not, therefore, compliant with the current MLP.

291. Others commented on the effect on the Green Belt and impact on the landscape, both of which were considered to be vital to health and wellbeing in modern-day life. Reference was also made to this area enduring years of gravel extraction at Waterford, Stapleford, Rickneys Quarry, Westmill and Panshanger Park, which have all left scars behind. None of this land would be returned to the original farmland for growing food crops. With Brexit agricultural land will be more important to the long term economy.

Written representations about the HIA submitted during the adjournment

The views expressed about the HIA in the 156 written submissions received are summarised as follows.[149]

292. Many considered that the HIA is flawed and discredited because it is based on assumptions, average data or research that is out of date. The desk-based HIA is selective in the examples used in drawing its conclusions and lacks empirical data, especially about the site and its locality. The HIA is based on uncritical acceptance of the ES and the appellants' evidence, and so its impartiality and objectivity are questionable, with some describing it as subjective speculation. By ignoring the evidence from other stakeholders the HIA has ensured that every contributor to it has a commercial interest. There should be reference to the research that underpins the HIA's conclusions. Furthermore, there is ambiguity about whether the HIA is referring to the 1.75 Mt scheme or the 1.25 Mt scheme, particularly with regard to the ES.

293. The HIA was not done at the outset of the project and so was not done as an informative tool, but as a tick-box exercise. It did not invite participation from the people most affected or give weight to local knowledge. Some questioned whether the HIA should be accepted because it was produced for Ingrebourne Valley Ltd and not the appellants. The HIA's conclusion that the quarry "is unlikely to have significant adverse effects on population health" is not reassuring given that 'unlikely' and 'significant' are undefined and the

[149] ID93. Annex B to this report includes a list of those who made the written submissions.

community is concerned not only about population health, but also about sensitive and vulnerable individuals.

294. The air quality model used should not be relied upon because the emission rate is not identified and emission rates were modelled as a point estimate, without any sensitivity analysis to investigate best and worst-case scenarios. The IAQM recommends against quantitative modelling due to a high level of uncertainty over emission rates. Air quality observations should have been taken at similar quarries in the area.

295. The WHO guidelines must be taken into account in dealing with the UK's poor air quality. The HIA acknowledges that local levels already exceed WHO guideline levels, but bafflingly goes on to state that air quality in Bengeo is "generally good". Defra's *Clean Air Strategy* consultation 2018 refers to cutting public exposure to PM levels above WHO guideline levels (10 μg/m^3). Recent studies have associated a loss of brain ability with air pollution. The HIA's assumption that the higher potential for dust in dry conditions is balanced by the supposition that wind speeds are lower in warmer months is ludicrous. Stockpiles would dry out and generate dust on loading, as would mobile plant. The HIA is based on 2017 data, but this is insufficient given the long dry spell of the summer in 2018, where an increase in levels of ground dust was evident.

296. Dust and particulates from diesel vehicles can exacerbate and trigger symptoms for asthmatics. Given the proximity of the school and houses it would be inevitable that there would be cases of respiratory illness attributable to the quarry workings. The 2015 consultation document for the eMLP states that sensitive sites can be affected by dust up to 1 km from the source. The 2005 MPS2 states that PM_{10} may travel 1,000 m or more and is widely recognised as being associated with effects on human health.

297. The WHO Health Effects of Particulate Matter 2013 set out the health effects of inhalable PM due to exposure over both the short term (hours, days) and long term (months, years), including aggravation of asthma, respiratory symptoms and an increase in hospital admissions. It states that exposure to PM affects lung development in children, and added that "There is no evidence of a safe level of exposure or a threshold below which no adverse health effects occur." There is a clear risk to the health of residents and school children from quarry dust, especially those with pre-existing conditions.

298. Vulnerable children would be restricted to their home with all windows closed and not able to enjoy much valuable time outdoors, either in gardens or using local amenities. There is evidence that air pollution results in higher blood pressure, and research at Queen Mary University of London found that even 'safe' levels of air pollution are linked to heart abnormalities similar to those seen in the early stages of heart failure. There is evidence that outdoor particulates may have been shown to infiltrate indoor school environments. It might take years to find out the actual impact on health from irreversible damage, such as silicosis and lung cancer.

299. The HIA applies the UK/EU $PM_{2.5}$ threshold of 25 μg/m^3 which is higher than more recent thresholds established by WHO (10 μg/m^3, 2014) and in other countries. The appellants' modelling shows that sites surrounding the appeal

site exceed 10 µg/m^3 without a quarry. Any increase cannot be justified. Furthermore, there is uncertainty about the projected base line figures derived from Defra's model, and it seems appropriate that actual baselines are determined by monitoring at sensitive sites to inform a more accurate risk assessment. Annual PM figures cannot be used to assess health risks for children attending Bengeo School. This approach hides daily fluctuations in particulate levels, particularly as quarry working hours would mirror times of school attendance. In addition, children are more likely to be outdoors in dry weather when dust risk is higher. The risk assessment should account for the 24 hour variation. The HIA averages emissions across all phases of the project, which would take many years to complete. However, different results would be obtained by calculating the average across the year in which activities would be closest to the nearest receptors.

300. The modelling used in the HIA is not sufficient to give an accurate idea of dust emission rates over time, and key information about how bad dust would be when work is happening close to receptors is missing.[150] Based on 1 in 11 of the UK population having asthma, an estimated 43 children at the school have a diagnosis of asthma. There is evidence that the health of this group would be likely to be compromised by even a small increase in PM.[151] A study has found that for every 10 µg/m^3 increase in PM_{10} the number of asthma cases increased by around 4%. Another study about school absenteeism found that for every such increase there was an increase in absences of 2.5%.

301. IAQM data indicates that properties within 300 m of the quarry could be exposed to between 5-10 µg/m^3 extra PM_{10}.[152] The WHO report confirms that this would have a measurable effect on mortality. The evidence on the health impact of poor air quality is rapidly advancing and even small increases in PM of around 1 µg/m^3 in the long-term average can have a significant health effect. Recent research shows that small short-term increases in $PM_{2.5}$ of around 6 µg/m^3 averaged over three days also has statistically significant and clinically meaningful impact on the health of vulnerable groups. The elderly and children are, depending on the pollutant and health outcome, more susceptible to changes in air quality.[153] Both these groups are over-represented in the population around the appeal site. Despite this the HIA does not attempt to quantify the health risks in relation to the predicted decline in air quality for the general population or vulnerable groups. The WHO has an online tool to perform this calculation (AirQ+). The quarry would further burden the NHS in the long term.

302. There is no reliable evidence on how much silica dust would pollute the air around the quarry. On average it forms 15% of PM_{10} dust for a lot of quarries. Details about the size-distribution and composition of the material in the Kesgrave formation would be needed to do so, but is absent. The HIA should be based on relevant observational science not models and

[150] ID93 (130) provides more details about the modelling method.
[151] ID93 (21) cites 8 peer reviewed studies and (130) includes extracts from WHO and research in New Zealand.
[152] CD35.1 page 35.
[153] ID93 (132) states 3-48 times more sensitive compared to adults.

regulations. Carcinogenic RCS dust is a hazard, but the HIA relies on dust not being generated, which has not been the experience at other sites. Personnel working at the quarry under HSE regulations would need to wear protective clothing, but such stringent rules would not apply to the general public in the locality. It only takes a very small amount of airborne RCS dust to create a health hazard. Some US states have set stringent silica exposure guidelines, which would be exceeded if the proposed quarry resulted in 1.5 $\mu g/m^3$ of silica per 10 $\mu g/m^3$ increase in PM_{10}. The residents of Bengeo should not be exposed to this obvious risk. Site specific observations should have been taken to exclude the risk of exposure to this highly toxic and carcinogenic material. Defra limits do not give a level at which there can be confidence that no health effects would result.

303. The HIA takes no account of previous sand and gravel extraction in the wider area, with its resultant environmental disruption, degradation and breaches of undertakings. The legacy of mistrust remains and the community has no confidence about the undertakings on which the findings of the HIA rely. The late submission of the HIA has not fostered a trusting relationship with the community. Given past experience with the tobacco industry, asbestos, inflammable cladding, illegal engine emissions, and accelerated climate change, the community is unconvinced about reliance on regulations and controls. There are also concerns about the enforcement of dust control measures, such as securing loads and wheel washing. Local people have no confidence that essential and appropriate care would be taken to mitigate the risks. The loss of trust has a significant negative effect on the health and well-being of the community. The local community's legitimate fears are based on knowledge.

304. The long-term risk to Hertford's water supply in the HIA ignores the expert evidence adduced at the Inquiry, and no ground survey has been carried out to assess the roughness of the underlying chalk surface. Without the latter the use of excavators with GPS could not be implemented with any confidence. Removal and disturbance of the existing protective layer would permanently increase the vulnerability of the underlying chalk aquifer. Mapping top chalk techniques have yet to be established with confidence, and so the precautionary principle should apply. Promises cannot prevent equipment failure or human error.

305. Spill kits and notifying relevant authorities would not prevent transmission of pollutants through the highly permeable residual Kesgrave formation. Spraying water to dampen dust would permeate the chalk beneath causing permanent damage to the aquifer. Pollution of the low-permeability chalk lying between the fractures and fissures would be long lasting and very difficult to remove. The HIA contains no long term analysis of the consequences of water pollution during or following the proposed quarrying. The possible serious and irreversible health consequences of pollution of the aquifer and a loss of water supply have not been assessed.

306. There is no reference in the HIA to the Acoustics Associates Noise Assessment.[154] The noise levels at the nearest properties would breach policy

[154] HCC1.

guidelines. Starting at 0700 hours and working on Saturday would cause unacceptable additional noise. The distressing noise level would adversely affect human health.

307. The HIA is misleading about the effects of the proposal on the use of local footpaths. The quarry would not create health benefits for the community as it would have a negative effect on physical activity participation rates. Health walks would not be organised next to a working quarry. The quarry would be a danger for horses and equestrians riding nearby. The proposed permissive paths are already well used by the public because it is a very pleasant open landscape with views across the Rib Valley. The value of new footpaths would be much diminished in a landscape that was no longer as beautiful and safe as it currently is.

308. The proposed eastern footpath loop close to the B158 would not be well used and so would be unlikely to be a significant health benefit. Dust and noise pollution from the quarry could deter use of the allotments and so reduce the health benefits of this recreational activity. The role of countryside, trees and open spaces is becoming recognised to have positive effects on people's health, state of mind and productivity. Overall, the scheme would result in less recreational use of the area, and so would have a negative effect on health and well-being.

309. Some respondents have no faith that the quarry would be put back to agricultural use or renovated at all. There is also concern that it might become a refuse waste site. The HIA recommends that certainty should be provided on the duration of Phase 1. However, extraction would depend upon demand unless a maximum duration was certain and could be enforced with some penalty.

310. The proposal over the last three years has already resulted in stress and anxiety for the local community. The time, resources and mental anguish expended on opposing the quarry has also had an adverse economic impact on the local community. The assertion in the HIA that the project has contributed to community empowerment and self-efficacy with potentially beneficial effects on population health is risible. Not enough weight has been given to the mental impact that a quarry nearby would have on all generations.

311. The HIA recommends a minimum stand-off for dwellings at The Orchard, but ignores the presence of other closer properties.[155] There is no equivalent stand-off recommended for the properties in Sacombe Road, which would be closer to Phase 2 than would The Orchard to Phase 1, or for properties on Wadesmill Road. The HIA focuses on populations, but loses sight of the individual and the fact that some lives might be devastated, especially those living so close that they would be directly affected.

312. The effects of queuing HGVs during the rush hour, and lorry collision data has not been analysed. The baseline for traffic may be too low because of

[155] In paragraph 11.2.3 of the HIA the recommendation for air quality is that the Phase 1 boundary should be revised to ensure a 100 m buffer between the closest residential property and the earth bund.

consented quarries in the locality which are not currently operating. The HIA recommendation that no traffic would enter or leave the site during school opening and closing times is meaningless as it is not part of the proposal. Increased road traffic and noise would take a toll on the health of the community, including deterring cycling, with associated adverse health effects. There are no street lights along this part of the road. Pedestrians using the local footpath already find it difficult to cross the B158 near to the entrance to the proposed quarry access, and additional HGVs would make this worse. Those using the proposed footpath parallel to the B158 would have to cross the quarry access, and those using the Byway would need to cross the haul road, which would be hazardous. Mud and gravel from quarry vehicles on wet roads is a safety hazard. Wheel washing is proposed, but the HIA states that there is no water available for licensing.

313. Many commented that for the reasons set out above, the HIA does not represent a true and complete picture of the likely health impacts of the quarry, and that the scheme is not worth the risk to public health. There is little in the HIA that reassures the residents, other than monitoring, which would be too late. The proposal should only be supported if there was no risk to health. This has not been categorically and clearly demonstrated. The HIA does not meet these requirements.

Written representations from other consultees

The following sets out the views of other consultees, where these are not summarised elsewhere in this report.

314. East Herts District Council raised no objection in principle, but noted that the landscape in part comprised elevated open land, which was publicly accessible in the immediate surroundings of Hertford. The council cited the concerns of local residents and recommended an independent noise assessment. Concern was also expressed about additional HGVs on Wadesmill Road, and that highway safety improvements should be considered.

315. The proposed bunds were considered by the Council to be alien elements in the landscape that should not be permanent features. The impact on the landscape in the longer term was highlighted because the sloping land on the eastern side of the site is the most visually sensitive. Byway 1 offers attractive high-level views eastward over the River Rib valley. The Council suggested possible opportunities to improve the PRoW network in the longer term as part of the restoration.

316. Hertford Town Council objected to the application and considers that the location is completely inappropriate because of concerns about noise, traffic, visual impact and dust. Should the proposal go ahead strict controls would be necessary on hours of working (with no weekend working), vehicle movements (including prevention of vehicle access into Bengeo), monitoring noise, maintenance of road surfaces and drains.

317. Public Health England noted that it is clear that air pollution, from a range of sources, not solely from the proposed quarry, is a potential threat to the health of the wider community. It acknowledged that those with pre-existing respiratory conditions, such as cystic fibrosis and asthma, are considered a sensitive population if exposed to airborne pollutants, such as particulate

matter. Reference was made to the provisions of the *Framework* concerning unacceptable adverse impacts, and that the developer of the quarry would be required to satisfy relevant authorities and the community that its operation would not result in additional emissions which could adversely affect the local community.

318. The Environment Agency (EA) has commented on the 2.6 Mt, 1.75 Mt and 1.25 Mt schemes.[156] In April 2016 the EA stated that the site lies in a highly sensitive groundwater area within a SPZ1. It noted that the proposal would be located very close to a public water supply abstraction, and that it is essential that there is no harm to the water environment as a result of the development. The EA considered that planning permission could be granted subject to the imposition of five planning conditions. These concerned; 1. long-term ground water monitoring in respect of contamination and turbidity, and any necessary contingency action, 2. no importation of waste, 3. a remediation strategy for any contamination, 4. controls on the infiltration of surface water drainage, and 5. a scheme be approved for the disposal of foul water. The EA advised that the effluent discharge rates expected from the development and its location within an SPZ1 means that a non-mains foul drainage solution would require an Environmental Permit.

319. In the same consultation response the EA recommended that conditions be imposed, wherever possible, that would make the development air quality neutral. It added that the site is located in an area of significant concern regarding air quality and that there are already high levels of PM_{10} and NO_2. Robust conditions were recommend to address mineral screening, road sweeping, road surfaces, wheel washing, vehicle and plant emissions, reducing vehicle idling, construction logistic plans, diesel or petrol generators, chutes/conveyors and skips, covering vehicles, along with advice on using dust suppressants.

320. In January 2017 the EA advised that as the amended plans did not alter the groundwater protection measures the EA had no additional comments to make. Following discussion with AW the EA in March 2017 requested an additional condition to repair borehole OBH 1A.

321. The EA in April 2018 reiterated the above response when consulted about the 1.25 Mt scheme, but revised the wording of the condition about boreholes to include approval of a scheme for future maintenance, schedule of repairs and a contingency action plan, along with how redundant boreholes would be decommissioned and those retained secured, protected and inspected. The condition concerning foul drainage was amended to include approval of a scheme to dispose of foul and surface water, and to agree pollution prevention measures for the storage of pollutants in SPZ1.

322. The Lead Local Flood Authority accepted the approach and detail set out in the appellants' Flood Risk Assessment. It has no objection in principle, subject to pre-commencement conditions on drainage details.

323. Hertfordshire Ecology noted that although the site is arable farmland it adjoins Waterford Heath Local Nature reserve and St John's Wood, Rickneys

[156] CD13.

Quarry and Waterford Heath (North and South) Local Wildlife Sites. Adverse effects on these protected areas cannot be ruled out. There is uncertainty about the impact of the depression on surface and sub-surface flows of water. Prevailing winds may increase the threat to the ancient woodland from dust. There is also uncertainty about whether a 20 m buffer would prevent harm to protected sites. The proposals for a calcareous grassland area around the balancing pond are not compelling. The proposed aftercare period would be inadequate to establish semi-natural habitats. An alternative and more appropriate mitigation strategy could provide real and sustainable gains in biodiversity.

324. Herts and Middlesex Wildlife Trust endorsed the comments by Hertfordshire Ecology and the need for more information to demonstrate that the proposal would comply with the aims of the *Framework*.

325. Bengeo Rural Parish Council objected to the proposal raising concerns about highway safety given that the B158 is a fast and dangerous road on which there have been fatalities. Any conditions imposed should be at least in line with, or more stringent than, those imposed for Rickneys Quarry.

326. Affinity Water (AW) stated that after a site visit with the appellants it was agreed that the following would be implemented; "300 m zone of unworked basal layers from the Wadesmill PS of 5 m thickness; 500 m zone of unworked basal layers from the Wadesmill PS of 3 m thickness; rest of site unworked basal layer 1 m thickness". AW proposed that the above be made conditions to ensure that the Wadesmill PS was protected from any potential pollution that could be initiated from the proposal. It was also agreed that borehole 1A should be repaired. AW noted that the construction works may exacerbate any existing pollution and that if pollution was found then appropriate monitoring and remediation works would need to be undertaken.[157]

327. The Woodland Trust objected on the basis of likely damage to St John's Wood because of an inadequate buffer. It is concerned about the cumulative impact of fragmentation as a result of the separation of semi-natural habitats, the proposed development being a source of non-native plants, noise and light pollution, and changes to hydrology. An undisturbed buffer of at least 100 m would be necessary, allowing for a total distance to the ancient woodland edge of 30 m. The ancient woodland is sensitive to dust, particularly epiphytic lichens. Noise would potentially have an adverse effect on woodland species.

328. The Council for the Protection of Rural England (CPRE) objected to the scheme on the grounds that it would not comply with the specific considerations of the adopted plan concerning working of this site as an extension to the existing Rickneys Quarry. Land south of Rickneys cannot be independently worked without major disruption to the use of Byway 1 and that the land to the east of the Byway would be in a much more exposed landscape. The proposed stockpiling, plant storage, and other operational areas of the site heavily used by mobile plant and haulage vehicles, is within the area considered to be vulnerable to potential pollution of a major water

[157] ID103.

supply aquifer. Phase 4 would be within 100 m of the Wadesmill PS. CPRE commented, regarding the emerging plan for housing to the south of the site, that either all the sand and gravel resource identified in the adopted minerals plan should be extracted in accordance with the provisions of the statutory plan or the proposed quarry should not be granted planning permission.

Conditions and obligations

Conditions

329. HCC and the appellants largely agree about the imposition of planning conditions in the event that planning permission was granted for either the 1.75 Mt scheme or the 1.25 Mt scheme, but two issues remain in dispute.[158] These concern; (1) whether permissive rights of way should be available for cyclists and horse riders in addition to walkers, and (2) restrictions on the number of certain plant on-site at any one time, and specifying a maximum SPL for plant. SBQ suggested additional conditions about air quality and hydrology.

330. SBQ suggested that Condition 9 should include an approved routeing plan and/or management scheme to include a booking system for HGVs. SBQ also suggested that Condition 16 should require a stretch of level ground of at least 5 m from the edge of the right of way, and that any steep banks should be fenced. A more detailed condition was advocated by SBQ to deal with the maintenance of boreholes. Concern was expressed by SBQ and others about the proposed hours of operation.

331. SBQ agrees with the need for a comprehensive dust management plan (Condition 34), but considers that the minimum requirements would be inadequate to address SBQ's concerns regarding air quality related health impacts. Measurements of hourly average concentrations of PM_{10}, as opposed to the daily average limit value for PM_{10}, should be the basis for further mitigation and/or cessation of operations in SBQ's submission.

332. SBQ agrees with the need for a comprehensive air quality monitoring scheme (Condition 35), but considers that one monitor would be insufficient. SBQ added that the data should be made available to the public in 'real time', so that vulnerable members of the public in particular could use it to manage their exposure to any heightened short-term concentrations that may arise.

333. Reference to SBQ's involvement in the Community Liaison Group was requested.

334. Condition 41 is agreed in principle by SBQ, but the time period for noise monitoring at three monthly intervals should be extended to cover at least Phases 1 and 2 of the extraction process. Afterwards, there should be a maximum interval of 6 months between each monitoring exercise for the remainder of the development.

335. Cllr Stevenson considers that the true traffic morning peak time in this location is 7.30 am to 9.30 am, and that the restriction on HGV movements to 8 vehicles should apply throughout this time.

[158] ID97.

336. The suggested planning conditions were considered at a without-prejudice discussion about possible planning conditions, which took place towards the end of the Inquiry. In addition, the parties made written representations about revisions to the suggested conditions prior to the close of the Inquiry.[159] The written list of suggested conditions endorsed by the appellants includes pre-commencement conditions.

Obligations

337. The section 106 obligation includes a clause that if the Secretary of State concludes that any of the obligations are not compatible with any of the tests set out in Regulation 122 of the Community Infrastructure Regulations 2010 (CIL Regs) and attaches no weight to that obligation then that obligation shall cease to have any effect and there shall be no obligation to comply with it.

Consideration of an amended scheme at the appeal stage

Interested persons

338. In commenting on the HIA two respondents objected to being denied the opportunity to object to an appeal against the refusal of the 1.25 Mt scheme at a formal inquiry. If the current appeal was to be determined on the basis of the 1.25 Mt scheme this would neutralise and confuse any opportunity for comment or objection to an appeal against the refusal of that scheme, effectively inhibiting objections to any such appeal.[160]

Stop Bengeo Quarry

339. SBQ considered that it is for the appellants to satisfy the Secretary of State that a condition could lawfully be imposed to effect the change from the original to the amended scheme. The 1.75 Mt and 1.25 Mt schemes differ in multiple significant planning aspects beyond the comparative volumes of aggregate proposed to be extracted. For example, the proposed relocation of the load out area would heighten the risk of groundwater pollution. The appellants failed to properly clarify which evidence and which plans/drawings were submitted in respect of each scheme. The appellants' case for consideration of the amended scheme is weak and is not assisted by the lack of clarity in the appellants' conduct of the Inquiry proceedings.[161]

Hertfordshire County Council

340. The legal test here appears to be; (a) is the development in substance that applied for, or instead "substantially or significantly different" or a "fundamental alteration", and whether the procedural requirements have been complied with, without "sidestepping" the rights of others which must be fully protected. This includes principles of procedural fairness.[162] The combination of the fact that the schemes are different, along with the procedural unfairness, which has arisen from the way the appeal has been

[159] ID97, ID98, ID112 and ID113.
[160] ID93.
[161] ID75. This is dated 16 May 2018. SBQ's closing submissions made no reference to this issue.
[162] *Holborn Studios v Hackney LBC*.

dealt with, mean that the Secretary of State should not consider the 1.25 Mt scheme via a substitution by condition.[163]

341. There are no severable or divisible parts of the 1.75 Mt scheme. It is not just a case of omitting the stockpile and Phase 4, because the 1.25 Mt scheme has all different plans for operational phases and restoration, a different ES and supporting reports, different location of plant, different noise impacts, different bunds, along with different buffer zones.

342. The chronology here is confusing because the procedure adopted by the appellants is so out of kilter with any accepted or statutory practice. The 1.75 Mt scheme was refused and appealed before the 1.25 Mt scheme had been submitted to HCC. But SoC1 pursued only the 1.25 Mt scheme, for which at that stage there was no ES. When asked to clarify this the appellants confirmed on 7 March 2018 that permission was sought for the 1.25 Mt scheme, and that all the representations on the 1.75 Mt scheme could be taken into account in considering the 1.25 Mt scheme. But that is no substitution for the ability to make representations to the Secretary of State on the 1.25 Mt scheme in the appeal. There are two stages for public comment and the second stage has been bypassed. The adjournment of the Inquiry to October to enable comment on the HIA has not cured any unfairness, as HCC presented its evidence in May and the resumed Inquiry was not an opportunity to go over that ground.

343. The 1.75 Mt scheme was abandoned in SoC1, but was resurrected in order to allow the 1.25 Mt scheme to piggy back on it, causing a procedural morass. This is unacceptable in principle and the Secretary of State should not countenance or endorse this approach, which would be contrary to the Planning Inspectorate's guidance.[164] This guidance provides that the appeal process should not be used to evolve a scheme, and that what is considered should essentially be what was considered by the local planning authority, on which interested people's views were sought. It adds that where exceptionally amendments are proposed they would have to comply with the *Wheatcroft* principles. The 1.25 Mt scheme should not be substituted. The appellants should be required to go through the normal appeal process for the 1.25 Mt scheme.[165]

Appellants

344. The Planning Inspectorate's Procedural Guidance refers to the *Wheatcroft* principles. The power to amend a scheme in this way is subject to two constraints: one substantive and one procedural. Neither applies here. Permission should not be granted for a development that would be substantially different (when viewed in context) from that which the application envisaged. It is in the public interest to adopt a liberal approach to this consideration as it may enable permission to be granted without the need for a further application, delay and additional cost to those involved.[166]

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[163] ID76.
[164] *Planning appeals: procedural guide*, Annexe M, last updated 26 September 2018, Planning Inspectorate.
[165] ID72, ID76, ID4 paragraphs 28, 34 and 40; and ID110 paragraph 2b.
[166] *Holborn Studios v Hackney LBC*.

In the context here, the 1.25 Mt scheme is not substantially different to the 1.75 Mt scheme. HCC did not consider the 1.75 Mt scheme to be substantially different from the original 2.6 Mt scheme. The differences set out in ID26 relate to the removal of Phase 4 and the stockpiling area, along with a revised landform following restoration. There are no procedural constraints to granting permission for the 1.25 Mt scheme as it has been subject to consultation by HCC and all the representations are before the Inquiry. Both schemes have been subject to EIA.[167]

345. No real prejudice has been identified. No new issues arise in the 1.25 Mt scheme. None of the witnesses to the Inquiry identified any matter upon which they would have given evidence had they been allowed more time, or suggested that there was uncertainty arising from the changes. It is entirely unsurprising that the amended scheme relied on different supporting documents. No fee was payable for the planning application for the 1.25 Mt scheme, so HCC must have concluded that the 'character and description' of the amended scheme was the same. Unfairness under the *Holborn Studios* procedural test cannot possibly have arisen because the 1.25 Mt scheme was subject to consultation by HCC, and a substantial proportion of Inquiry time was given to hearing evidence from the public.[168]

[167] ID77.
[168] ID88.

Conclusions

Preliminary matters

346. The following conclusions are based on the written submissions, the evidence given by those who appeared at the Inquiry, and inspections of the site and its surroundings. In this section the figures in parenthesis [ ] at the end of paragraphs indicate source paragraphs from this report. [11]

347. The application was for the extraction of 2.6 Mt of sand and gravel, but Hertfordshire County Council (HCC) considered a revised scheme for the extraction of 1.75 Mt. This is the appeal scheme. HCC refused the application on six grounds. Reason (3) concerning impact upon air quality, and the absence of a Health Impact Assessment (HIA), was subsequently the subject of a statement of common ground, and these matters were not pursued by HCC at the Inquiry. [2,3,7,147]

348. The appeal scheme would extract 1.75 Mt of sand and gravel over a period of up to 10 years in four phases, with phased restoration to agriculture and woodland thickets, and aftercare for five years. It includes an office, messroom and weighbridge, along with a fuelling area with tank, wheel cleaning facility and water attenuation area. Bunds would be constructed around excavated and operational areas. Access would be via a new junction on Wadesmill Road (B158), with visibility splays and a segregated right turn lane, which would replace an existing field entrance. HGV movements would be limited to 50 in and 50 out in any working day. A restricted Byway that traverses the appeal site would be diverted for 2 to 3 years, and other provisions made for local footpaths. The application form states that the scheme would be operated by six full-time employees. [14-21]

349. The appellants proposed a second scheme, which would omit Phase 4 and the stockpile area from the 1.75 Mt scheme, and reduce the tonnage of sand and gravel extracted to 1.25 Mt over a period of up to 7 years. The scheme includes a load out area containing an office, messroom and weighbridge, security area/vehicle parking and soakaway, along with wheel cleaner and wheel bath, linked to the B158 by an access road with a concrete surface. The proposed bund in the south-western part of Phase 1 would be sited more than 100 m from properties at The Orchard. No footpath diversion would be necessary in the 1.25 Mt scheme. ID26 is a summary of the main differences between the 1.75 Mt and 1.25 Mt schemes. The 1.25 Mt scheme was the subject of a separate planning application, which was refused by HCC at a committee meeting held in April 2018. [4,22-23]

350. The appellants would like the appeal to be decided on the basis that the 1.75 Mt scheme be considered first, and if found to be unacceptable, that a condition limiting the scheme to 1.25 Mt be imposed. [4]

351. There is some criticism about the way the appellants dealt with EIA for the 1.25 Mt scheme. The approach here may have been confusing to some. However, at the end of the Inquiry process, I am satisfied that the ES and FEI submitted for the 1.75 Mt and 1.25 Mt schemes, which were available for comment during the appeal proceedings, reasonably comply with the requirements of the EIA Regulations. In considering the appeal, and in making my recommendation, I have taken into account the Environmental

Information, which includes all the evidence adduced at the Inquiry. In doing so I have come to a different view about the significance of, and weight to be given to, some environmental effects from that set out in the ES and FEI. [1,2,5]

352. Some of the operations previously undertaken by RJD Ltd have been taken on by Ingrebourne Valley Ltd, but both the appellants named in the appeal documents have legal capacity to lodge an appeal. The appeal should therefore continue in the name of the applicants. [213,293]

353. There is local concern about the identity of the appellants, but this should not be an influential factor in determining the appeal. It was made explicit throughout the Inquiry that any planning permission granted would not be a personal permission, and so would run with the land. [177,208]

354. Some objectors commented on what they considered to be inadequate consultation about the proposal, and a lack of engagement by the appellants. But even if this was a relevant consideration it is not a matter that should be given much weight in determining the appeal on its planning merits. [135,180,189,192-194,201,270,271,274]

355. The Inquiry was advised, and proceeded on the basis, that the proposed development would not require any permit or licensing under the pollution control regime, and so all necessary controls would need to be imposed via the planning system. [18,105,235,318]

356. HCC's case draws comparisons between the appeal scheme and a "PA2 compliant development", which would need to be worked up jointly with the operators of Rickneys Quarry. However, there is no indication what an acceptable PA2 compliant scheme might look like, especially concerning the requirement for appropriate buffer zones in order to minimise any impact of extraction on the existing dwellings in close proximity. Furthermore, there is insufficient evidence to show that if such a scheme did exist that there is a real possibility of it coming to fruition in the foreseeable future. This is not a case where consideration of a less harmful alternative development becomes a material planning consideration. I do not consider that comparing the appeal scheme to a notional PA2 compliant scheme is very helpful in determining this appeal on its planning merits. [39,59,81,82,254-258,260]

357. Exchanges at the Inquiry resulted in a submission by the appellants about tricking or badgering a witness into concessions. However, Mr Symes is an experienced mineral planning consultant, and I do not consider that HCC's line of questioning was unreasonable given the appellants' case as set out in SoC1. Irrespective of any concessions which may, or may not, have been made at the Inquiry, the appeal should be determined on its planning merits having regard to all the relevant evidence adduced. [4,57,240,267]

Main considerations

358. The Secretary of State's reasons for recovering the appeal state that it involves proposals for significant development in the Green Belt, and major proposals involving the winning and working of minerals. However, the direction did not include details about any matters about which the Secretary of State particularly wishes to be informed for the purposes of considering this appeal. The evidence indicates that the main considerations here are as follows. [6]

(1) The effects of the proposed development on the openness of the Green Belt and upon the purposes of including land within it, and whether the development conflicts with policy to protect the Green Belt.
(2) The effects of the proposed development on the character and appearance of the area, including cumulative effects.
(3) The effects of the proposed development on the local amenity of the area and the living conditions of nearby residents, with particular reference to noise, dust, air quality and health.
(4) The effects of the proposed development on Public Rights of Way.
(5) The effects of the proposed development on hydrogeology.
(6) The effects of the proposed development on highway safety.
(7) The effects of the proposed development on biodiversity.
(8) The effects of the proposed development on agricultural land.
(9) The effects of the proposed development on employment and the economy.
(10) The effects of the proposed development on the supply of housing in East Herts District Council.
(11) The need for sand and gravel, having regard to likely future demand for, and supply of, these minerals.
(12) The planning balance.
(13) The extent to which the proposed development would be in accordance with the development plan for the area.
(14) The extent to which the proposed development would be in accordance with the revised National Planning Policy Framework (the *Framework*) and the National Planning Practice Guidance (the *Guidance*).
(15) Whether any permission should be subject to any planning conditions or obligations and, if so, the form that these should take.

359. The remainder of this report addresses the matters outlined above, using the following approach. For each of the main considerations 1-11 above the report considers the likely effects of the proposed development. Impacts are described and significance assessed, taking into account the nature and duration of operations, along with restoration and aftercare. This analysis takes into account, where appropriate, necessary planning conditions and obligations.

360. The significance of effects is a matter of judgement, and for consistency a rating scale is used for negative and positive effects (harm and benefits), increasing from negligible, minor, moderate, substantial and finally major significance. In considering the relative weight to be given to various considerations a scale is used increasing from negligible (little or no weight),

slight, moderate, substantial, and finally great weight. However, there is scope within these bands for varying degrees of fit, and reference to these categories implies no mathematical or objective basis for analysis across the range of considerations involved in this case.

361. My recommendation is based on these findings.

(1) Green Belt

362. The appeal site lies within the Green Belt as defined in the development plan for the area. The *Framework* states that the Government attaches great importance to Green Belts. It adds that the essential characteristics of Green Belts are their openness and their permanence. Paragraph 141 provides that in planning positively to enhance the beneficial use of the Green Belt authorities should look for opportunities to provide access and sport/recreation, and to retain and enhance landscapes, visual amenity and biodiversity. [48]

363. When located in the Green Belt inappropriate development is, by definition, harmful to the Green Belt and should not be approved except in very special circumstances (VSC). The *Framework* provides that substantial weight should be given to any harm to the Green Belt, and that VSC will not exist unless the potential harm to the Green Belt by reason of inappropriateness, and any other harm resulting from the proposal, is clearly outweighed by other considerations. Paragraph 146 provides that mineral extraction and engineering operations are not inappropriate development in the Green Belt provided that they preserve its openness and do not conflict with the purposes of including land within it. These purposes include; to assist in safeguarding the countryside from encroachment, and to preserve the setting and special character of historic towns.

364. The proposal for the site; including the facilities, plant, access and bunds, are part and parcel of the proposed mineral extraction here for the purposes of applying Green Belt policy. If there is any doubt about the bunds, these would be engineered structures, and their construction would be an engineering operation in applying Paragraph 146 of the *Framework*. This paragraph must mean that some level of operational development for mineral extraction in the Green Belt would preserve its openness and would not conflict with its purposes, and that beyond that level the development would become inappropriate in the Green Belt, and so the exception would no longer apply. Determining the tipping point would depend upon the particular circumstances, as a matter of fact and degree, but relevant considerations could include the siting, nature and scale of the operational development in its local context, along with its visual effects, duration and the reversibility of any adverse impact upon the openness and purposes of the Green Belt. This approach would accord with the judgments in *Europa Oil* and *Samuel Smith*. [60,221,222]

365. In terms of openness the appeal site comprises open agricultural fields, which offer expansive views from elevated vantage points over the River Rib valley. Openness as a feature of this part of the Green Belt is apparent from the local description of the one tree located towards the centre of the site as "the lonely oak". Within the site there are only three other trees, which are located near to its western boundary. The openness of the area was cited in

many representations to the Inquiry, as an important element of this part of the Green Belt, and a factor that contributed significantly to the appreciation and enjoyment of the area. [127,143,146,149,159,160,173,179,185,201,205,272,273,289,314]

366. Plant, equipment, access and activity associated with mineral extraction here would, to some extent, impair the openness of the area. But not enough in my view to exceed the threshold or tipping point for the purposes of applying paragraph 146. However, the proposed bunds would have a greater adverse impact on the openness of the Green Belt. The scheme would include substantial lengths of bunds up to 3 m high to screen views of the operational phases of mineral extraction. These would be constructed and removed as required for each phase, but at times the engineered structures would truncate open views from PRoW within this part of the Green Belt. [61]

367. The bunding around the stockpile and attenuation area would have a greater impact on openness because it would be between 4 m to 7 m high, and could exist for up to 10 years. This is a significant period, which for GLVIA3 in landscape terms, marks a boundary between medium term and long term effects. The bunds would surround a stockpile area that could provide for up to 50,000 m^3 of sand and gravel stored up to 5 m high. These bunds and stockpiles would be located on the eastern slopes of the valley facing towards a busy road. The bunds would be prominent structures in close up views from the B158, especially where roadside vegetation was removed to provide the visibility splays for the access junction. Replacement planting would take time to provide some screening, and views would remain through the widened access. [14,15,61,216,272,273,289]

368. The adverse effects of the bunds on openness would be fully reversible in time. Nevertheless, the harm for up to 10 years could be considered as a long term effect. In my judgement, bunds of the length, height and duration proposed in such an open area would have a substantial adverse effect on the openness of the Green Belt.

369. Furthermore, screen planting as it matured would foreshorten views across the site, and so would diminish the openness of this part of the Green Belt. Additional planting is proposed on restoration of the site. Overall, the planting would have a long-term effect by closing off views of the wider open countryside, creating enclosure that would harm the openness of the Green Belt. In those circumstances the tree in the centre of site could no longer be described as "the lonely oak". [159,169,173,181,222,224]

370. Taking into account the temporary effect of the bunds, along with the long-term impact of tree planting, I consider that the proposed development would exceed the paragraph 146 threshold for mineral extraction/engineering operations concerning the preservation of the openness of the Green Belt.

371. Turning next to the purposes of the Green Belt, the proposed development would not be of a type and scale that would conflict with the Green Belt's purpose to assist in safeguarding the countryside from encroachment. However, the southern and eastern parts of the site are near to the northern boundary of Hertford Conservation Area. The local topography provides for views from this area towards historic parts of Hertford. The proposed high bunds and tree planting would adversely affect this relationship from some

vantage points. The bunds would be temporary, but the proposed tree planting would be more enduring. Even allowing for the intervening development at the nursery, along with the proposed housing on the HERT4 site, the proposed mineral extraction would, to some extent, harm the setting of historic Hertford. The proposal would, therefore, conflict with one of the purposes of the Green Belt. [26,157,221,287]

372. The appeal decision cited by the appellants for a well site is not directly comparable to this scheme for the extraction of sand and gravel. In particular, the wellhead assembly was permitted for a temporary period of five years, which is half the duration of the proposed 1.75 Mt scheme. [223]

373. For these reasons, the appeal scheme would not preserve the openness of the Green Belt. It would also conflict with one of the purposes of including land within the Green Belt. So the exception for mineral extraction would not apply. Therefore, the proposal would be inappropriate development in the Green Belt, which is by definition harmful to the Green Belt. The following sections of this report consider whether the proposal would result in any other harm, and then has regard to other considerations, so that the Secretary of State can undertake a balancing exercise to determine whether VSC exist.

374. However, if the Secretary of State were to find that the proposed mineral extraction was not inappropriate development in the Green Belt, then the proposal would not result in harm to the Green Belt, and there would be no conflict with local or national Green Belt policy. In this scenario, the planning balancing exercise would be a straightforward weighing of the benefits and the harm, having regard to relevant policy considerations. This is considered in more detail in section (12) of these conclusions.

(2) Character and appearance

375. The 36.1 ha appeal site is located just beyond the northern edge of Hertford. It is arable land. Adjacent land use includes farmland and woodland to the north and east extending to the River Rib, a plant nursery and allotment gardens to the south near to residential properties in Bengeo and a primary school. To the west lies the partially restored Rickneys Quarry. The site lies within National Landscape Character Area 111: Northern Thames Basin, and falls broadly into the Hertfordshire Plateau and River Valleys sub-character area. This is a diverse landscape formed by a wide plateau dissected by a series of broad river valleys with extensive areas of broadleaved woodlands. [24,27,28]

376. In the *East Herts District Landscape Character Assessment* 2007 the appeal site is located within an interfluve of the rivers Beane and Rib, area '069 Stoney Hills'. The landscape character is described as gently undulating light arable upland and valley slopes, with key characteristics including active, disused and restored mineral extraction sites, with a mix of field sizes and variety of after uses, along with an abrupt transition from urban to rural character on the edge of Bengeo. Overall the area is judged to be in a poor condition, with high impact of land-use change, and of moderate strength of character, with the impact of landform and land cover considered to be apparent, the area open and locally visible, and unusual in terms of distinctiveness/rarity. [29-32]

377. In the *Landscape Character Assessment, Evaluation and Guidelines for Southern Hertfordshire supplementary report on: The suitability of landscape character areas for mineral extraction* 2001 the landscape strategy for this area is 'improve and restore', reflecting the existing impact of mineral extraction. The site profile suggests that mineral extraction might be possible, but that extreme care would be required to ensure that there was no permanent damage to local landscape character, adding that it might be preferable to keep it within the centre of the plateau rather than on the edges, where it would be more visible and closer to settlements. The report notes that it is unlikely that low level restoration would be appropriate. [33,219]

378. The appeal site is not the subject of any of the designations given to landscapes whose character and appearance justifies either a statutory status or recognition of their quality in the development plan. But neither is a large part of the English countryside, which is nonetheless much appreciated for its open views and the sense of space it provides. These landscapes are especially important as a foil to urban settlements. There is considerable anecdotal evidence about the role the appeal site plays in this regard, which is borne out by the evidence about the actual use of the formal and informal footpath network. I consider that the appeal site is a landscape resource and visual amenity of considerable importance because of its proximity to the urban area.
[127,146,152,154,156-159,168,179,180,185,188,190,205,216,272,273,285,287]

379. Previous mineral extraction, including the partially restored Rickneys Quarry, which adjoins the appeal site, is a strong influence on the overall character and appearance of the area. But the fact that the appeal site retains its natural landform makes it important in its local context. It is more difficult here to sustain an argument that the altered configuration of the landscape in the wider area is a factor that presumes in favour of more extraction and restored landform. On the contrary, the local context bolsters the case in favour of retaining what is becoming something of a scarce resource around Hertford. [35,128]

380. On this basis, I consider that during the operation the proposed development would have a harmful effect on the landscape character of the area. But during this time its visual impact would be more significant. The bunds would, to some extent, screen views into the working area of the quarry, but it is unlikely that they would obscure all activity within the operational area because of the site contours. However, they would themselves be intrusive features in this attractive open countryside. The bunds would be prominent features from public vantage points because of their siting, length and height. [15,64,287,315,316]

381. The stockpile area would be sited on a level platform with a base of about 50 m AOD, with stockpiles up to 5 m high, behind bunds some 4 m to 7 m high. The access would be located at a low point along Wadesmill Road, at below 48 m AOD. So the stockpile area and surrounding bunds would be prominent in views from the road, whether from passing vehicles or those emerging from the public footpath opposite to the proposed junction. This would be especially so where roadside vegetation was removed to provide visibility splays, and before screen planting matured. The bunds and

stockpile area would be incongruous features within these eastern slopes down from the plateau. [17,63,217,315,328]

382. During the operation of the site, for up to 10 years, I consider that the proposed development would have an adverse effect on the visual amenity of the area of major significance.

383. The proposal to restore the site to primarily agricultural land would not be out of keeping with the character of its surrounds. However, the restored landform and tree planting would have important consequences for the visual amenity of the area.

384. The Restored Landform (Plan No.1217/R/1) indicates that in the northern part of the appeal site the restored ground level would in places be a considerable distance below the existing level. The way in which the excavated land would join up with the existing contours along the eastern side of Phase 4 would create a long shallow ridge line cutting across the natural fall of the land down to the road. Such a feature would sit uncomfortably with the existing slopes down this side of the valley. I consider that the restored landform would give the landscape an artificial crumpled appearance. This is apparent from the submitted cross-sections, and would appear as a jarring feature in the rounded hill sides on the edge of this valley. The proposed low-level restoration would not be appropriate in the landscape context which applies here.
[33,65,127,159,168,173,188,191,201,218,287,309,315]

385. The proposed tree planting for screening and restoration, would gain some support from the 'improve and restore' strategy and guidelines for managing change in the *East Herts District Landscape Character Assessment* 2007. The measures specified might generally be appropriate for the '069 Stoney Hills' area. But these are guidelines, which should be applied having regard to the particular site circumstances. I consider that the appellants' hedgerow and tree planting would be the wrong landscape strategy for the appeal site. There is considerable evidence that the site is appreciated for its open views over the Rib Valley. An appropriate restoration strategy should aim to maximise this as a feature in the restored landscape. Not only would the proposed restored landform conflict with this aim, but planting trees and vegetation would also screen out distant views.
[32,127,143,152,168,197,201,217,219]

386. Given the local topography and separation distances, I concur with the appellants' assessment that the appeal scheme would be unlikely to have any significant adverse cumulative landscape effects with other quarries operating in the area at the same time. However, the sand and gravel formations around Hertford have been quarried extensively over many years. The *Guidance* provides that in areas subjected to successive aggregate extraction over a number of years the cumulative impact is capable of being a material consideration when determining individual planning applications. [54]

387. The appellants' landscape assessment does not give this adequate consideration. It seems to me that repeated extraction/restoration on different sites around Hertford over time has a temporal cumulative adverse impact on the local landscape. Any proposed scheme should be assessed in that context, and not just on the harm attributable to each incremental

addition to the process of landscape change over time. I find that the cumulative impact of the appeal scheme, over time, should be taken into account, and adds to the overall harm to the landscape resource. [128,166,167,174,191,196,206,287,291]

388. The operational development to extract, screen, stockpile and transport sand and gravel would have an adverse effect on the character and appearance of the area of major significance, albeit for a limited duration. On restoration, I consider that the scheme, by reason of the restored landform and tree planting, would have an adverse effect of moderate significance. It would not accord with the 2001 guidelines for *The suitability of landscape character areas for mineral extraction* because large bunds would be sited on the edge of the plateau, and the proposed low level restoration would not be appropriate here. Given the history of mineral extraction in the area, cumulative landscape harm over time is also a relevant consideration. Overall, I find that the appeal scheme would have an adverse effect on the character and appearance of the area of substantial significance.

(3) Local amenity and living conditions

389. There is considerable local concern about noise, dust, air quality, and the associated effects on the health of those living in the area, attending the school, and using the allotments or local footpaths. The nearest dwelling on Sacombe Road would be 10 m from the toe of the nearest proposed bund, and 28 m from the nearest operational part of the quarry. The corresponding distances for the nearest dwelling at The Orchard are 23 m and 43 m. Waterworks Cottage and Glenholm would be, respectively, about 68 m and 215 m from the operational area. Bengeo Nursery would be 150 m from the operational area, the playing field 167 m, the allotments 281 m and Bengeo Primary School 360 m. [8,25,143,146,148,150,151,154,169,171,175-177,179-185,272,273,275,276,281,282,286,313,314,316]

390. The submission of the HIA enabled HCC in SoCG3 to agree with the appellants that the potential for a significant adverse population health effect would be unlikely provided that the mitigation, monitoring and response mechanisms described in the appellants' revised air quality assessment were secured by conditions and adhered to, including an appropriate dust management plan. However, HCC disputes the appellants' noise assessment. [7,240]

391. A restricted working zone would be created within 70 m of properties at The Orchard, within which operations would not take place when the wind direction was from the north-eastern quadrant. The screener and loading shovel would not be operated within 250 m of any residential premises. Noise limits are proposed for nearby residential properties, but not agreed by the parties. The upper working limit in the *Guidance* of 55 dB(A) would not be exceeded, excepting for work on bunds, at any noise sensitive location at any time during operations, even if the appeal site was worked simultaneously with Rickneys Quarry. However, the noise experts disagree about possible exceedances of the normal working noise limit level of 10 dB above the background level. Nevertheless, the appellants are satisfied that the noise produced by the operation of the site would not exceed 48 dB(A) at The Orchard, and are content to accept this as a noise limit. [16,227-229]

392. HCC considers the limit at Sacombe Road should be set at 48 dB(A); the appellants consider that it should be 52 dB(A), but are confident that the site could be operated without exceeding 50 dB(A), and are content to accept a condition to that effect. The disagreement arises from differences in recorded background levels from which the limit is derived. I share HCC's concern about the appellants' L_{A90} measurements. Background levels are not affected by raised sound levels for short durations. So it is difficult to explain the difference between the appellants' L_{A90} measurements for The Orchard and Sacombe Road, unless it was affected by the positioning of the microphone close to a hedge with rustling leaves. I concur with HCC that any noise condition imposed should specify a limit of 48 dB(A) at Sacombe Road. This could be exceeded if the appeal site was worked at the same time as Rickneys Quarry. [67,230,311]

393. The noise experts also disagree about the assessment of the sound power levels for plant likely to be used in the minerals operation. But irrespective of whose analysis is preferred, the evidence indicates that at times the operation would be likely to generate noise levels close to the acceptable limits set out in the *Guidance*. In certain weather conditions noise could exceed acceptable limits for short periods. In addition, the character of noise emitted by operational development would be distinctive. If this resulted in complaints, these could take time to monitor, and to devise and implement mitigation measures. During such times noise could be intrusive for local residents, especially given the proximity of dwellings at Sacombe Road. [66,231,232]

394. I am not convinced, given the separation distances between the proposed excavation and nearby dwellings that there would be sufficient headroom here, between likely noise levels from the operation and acceptable noise limits, to be confident that the proposed development would not, at times, result in an adverse noise impact that would harm the living conditions of nearby occupiers and the amenity of the area. On the available evidence, I am unable to find that the proposal would accord with MLP Policy 18(viii) or with the aim of the NPSE to avoid significant adverse impacts on the quality of life. I find in these circumstances that noise is a consideration which weighs against granting planning permission. [68-70,231,306]

395. Air quality and health is not an issue for HCC, but is a major concern for residents and for parents of children attending the school, and particularly so for vulnerable members of the local community. This was an issue raised by objectors with HCC during consultation on the application, and in many written and oral submissions to the Inquiry. The findings of the HIA were accepted by HCC, but vigorously contested in the 156 written submissions received during the adjournment, and by expert evidence adduced at the Inquiry. SBQ's concern is the extent to which air quality impacts from the proposed operation would be responsible for health effects on people in the local community, in particular on especially vulnerable groups within the site-specific population. [10,107-112,138,168,178,190,194,203,209-212,239]

396. Local fear and anxiety about air quality and health effects is not irrational. The concerns of residents and parents is understandable given that the EA, when consulted about the 2.6 Mt scheme in April 2016, recommended that conditions be imposed, wherever possible, that would make the development air quality neutral. The EA added that the site is located in an area of

significant concern regarding air quality and that there are already high levels of PM_{10} and NO_2. Robust conditions were recommend to address mineral screening, road sweeping, road surfaces, wheel washing, vehicle and plant emissions, reducing vehicle idling, construction logistic plans, diesel or petrol generators, chutes/conveyors and skips, covering vehicles, along with advice on using dust suppressants. In addition, Public Health England advised that air pollution, from a range of sources, not solely from the proposed quarry, is a potential threat to the health of the wider community, and acknowledged that those with pre-existing respiratory conditions, such as cystic fibrosis and asthma, are considered a sensitive population if exposed to airborne pollutants, such as particulate matter (PM). Published articles also state that there is no threshold below which health effects do not occur. [137,144,145,149,177,186,189,201,292,297,298,310,317,319]

397. Visible dust and the heavier airborne emissions from the operation would settle out quickly, and so would largely be contained within the site or by the vegetated bunds around the excavated area. Measures that could be included in an approved dust management plan were discussed at the Inquiry. Properly implemented, these would ensure that dust leaving the site would not put existing development at an unacceptable risk from the larger airborne emissions from the minerals operation. This is a matter that could be adequately addressed by the imposition of a planning condition.[169] [120]

398. Smaller particulate matter, PM_{10} and $PM_{2.5}$, would be more widely dispersed. These would include particulate emissions from diesel vehicles and plant operating on the site. IAQM data indicates that properties within 300 m of quarries could be exposed to between 5-10 $\mu g/m^3$ extra PM_{10}. However, this was for all the mineral types surveyed, and the limited data available for sand and gravel quarries does not indicate significant additional PM_{10} at any of the distances surveyed. [118,139,202,296,299,301]

399. The appellants' air quality assessment follows accepted practice. But as with all modelling, the outcome must necessarily reflect its underlying assumptions and limitations, some of which were challenged by SBQ. Nevertheless, the modelling provides some confidence about likely compliance with national air quality objectives/limit values for suspended PM, with respect to 24 hour and annual averaging periods. However, it is not able to allay the fears of local residents about the likely occurrence of short-term peak concentrations of air pollution, and the resultant impact on vulnerable receptors. Epidemiological studies focus on health effects for populations, and so it is often difficult to draw meaningful conclusions about the likely effects on vulnerable people, such as the young, old, those with asthma, COPD or other respiratory conditions. Concern for particular individuals and vulnerable groups within the local population, in these circumstances, is not unreasonable.
[113-117,121,137,151,183,184,186,187,209-211,241-243,293-296, 299,300,310,311,313]

400. The HIA applies the UK/EU $PM_{2.5}$ threshold of 25 $\mu g/m^3$ which is higher than more recent thresholds established by WHO (10 $\mu g/m^3$, 2014) and

[169] Suggested Condition 34.

applied in other countries. Objectors argue that the appellants' modelling shows that in areas surrounding the appeal site $PM_{2.5}$ exceeds 10 μg/m^3 without a quarry, and so any increase cannot be justified. This should not be a decisive consideration because it has not been demonstrated here that any increase in $PM_{2.5}$, irrespective of its size, would result in an unacceptable level of air pollution. Nevertheless, the WHO threshold adds to local consternation about the health implications of the appeal scheme. [109,202,299]

401. A proportion of PM_{10} emitted from the proposed development could comprise respirable crystalline silica (RCS), which is a known carcinogen. There is no evidence about what proportion this might be, or how likely working the Kesgrave formation would be to generate RCS emissions. There is evidence that RCS risk is increased where a source material is crushed, whereas the appeal scheme only proposes screening. However, RCS is a recognised hazard for personnel working at quarries, and an emotive issue for worried parents of children who live in the area or attend the local school. The lack of reliable data here about RCS fuels the local community's legitimate fears about adverse health outcomes in the long term. [119,130,139,151,172,202,244,298,302,303]

402. I consider that dust could be controlled by condition, but noise would be likely to be intrusive at times because of the proximity of dwellings. In addition, there is considerable local fear and anxiety about air pollution and health risks from PM and RSC, which is sufficient here to be a material planning consideration in its own right. Taking all the above into account, I consider that the appeal scheme would have an adverse effect on the living conditions of residents and on the amenity of the area of moderate significance.

(4) Public Rights of Way

403. The route across the site has been recognised as an Asset of Community Value, which is used for health walks. The proposed temporary diversion of the PRoW around Phase 4 and the provision of permissive paths would be necessary mitigation during the operation. Even so, the scheme would render the local PRoW network less attractive whilst the site was being worked. I consider that for the duration of the operation the proposed development would have an adverse effect on the PRoW network of minor significance. [21,71,142,143,156,158,160,168,178,182,188,233,273,285,]

404. Proposed additions to the PRoW network following restoration would be beneficial in terms of providing some more routes for users. However, the restored landscape would not be as open as it currently is, and so it might not be used in the same way as it is today. The advantage of additional routes in those circumstances may not result in more people using and benefitting from the local footpath network. This would be especially so for those seeking open countryside outside the urban area. [134,152,158,188,201,234,307,308]

405. Nevertheless, the additions to the PRoW network would be permanent, and so of some advantage in the long term. Overall, I find that the scheme would, in terms of PRoW, offer a benefit of minor significance, which should be given some slight weight in the planning balance. In this regard the proposal would gain some support from MLP Policy 18(x). [72,73,234,315]

(5) Hydrogeology

406. The risk of groundwater pollution was not cited by HCC as a reason for refusal, but potential harm to the aquifer and to the public water supply is of great concern to local residents, and was an issue taken up by the Rule 6 parties at the Inquiry. [89,136,143,162,171,181,201,205,212,214,273,275,276,278,283,304,328]

407. The sand and gravel overlie chalk, designated as a principal aquifer, which provides a significant source of water for public supply abstractions in the area. Phase 4, Phase 3 and part of Phase 2 of the proposed development are within the Inner Source Protection Zone (SPZ1) for the Wadesmill Road Pumping Station (PS), which is operated by Affinity Water (AW). [34,99]

408. If the proposed operation mobilised and transported fine materials to the aquifer there would be a risk to groundwater quality from increased turbidity. Accidental spillage of oil and fuel would result in a higher risk to water quality. Hydrocarbon pollution of the aquifer would result in an adverse impact of major significance. The proposed mitigation relies on retaining a protective layer of residual materials above the chalk, measures to regulate the storage and use of fuel, along with training and protocols for any spillage. The fuelling area would be sited in an area that is shown on the site geology plan to be underlain by clay. Plant would be refuelled only in a bunded fuel storage area, and there are regulations which control fuel storage. These are relevant factors in assessing the likely risk of groundwater pollution. [17,56,92,236]

409. In accordance with its adopted policy, the EA would normally object in principle to any planning application for a development that may physically disturb an aquifer. The EA notes that the appeal site lies in a highly sensitive groundwater area, very close to an abstraction for a public water supply, and that it is essential that there is no harm to the water environment as a result of the development. The EA was aware of local concerns about the roughness of the chalk surface, but concluded that planning permission could be granted subject to the imposition of planning conditions. These included groundwater monitoring in respect of contamination and turbidity, along with any necessary contingency action. [55,104,235,318,320,321]

410. This condition would detect pollution after it had occurred, and provide for some remediation. But neither this condition, nor any of the others suggested by the EA, would provide an appropriate safeguard for the aquifer by preventing or minimising the likelihood of groundwater contamination before it occurred. This is particularly important here where it is accepted that the aquifer is vulnerable to contamination due to the presence of the fracture network, which permits very rapid flows, and that if contamination entered the chalk matrix it would be difficult to remove. [55,91,97,136,235,236,318,320]

411. To ensure that the Wadesmill PS was protected from any potential pollution that could be initiated from the appeal scheme, AW proposed a condition requiring; "300 m zone of unworked basal layers from the Wadesmill PS of 5 m thickness; 500 m zone of unworked basal layers from the Wadesmill PS of 3 m thickness; rest of site unworked basal layer 1 m thickness". Nearly all of Phase 4 of the appeal scheme would lie within 300 m

of the Wadesmill PS. Reliance on a distance based approach was challenged by SBQ on the grounds that flow rates and routes within the chalk aquifer should also be taken into consideration. These would depend upon the presence and extent of water-bearing fractures and karstic features in the aquifer. [34,92,93,162,237,326]

412. The effectiveness and enforceability of the condition suggested by AW would require a method for determining the thickness of the unworked basal layer. The thickness of the basal layer would depend upon the height of the underlying chalk. This would need to be known with some accuracy so as to be able to determine whether the condition had been breached or not. If the methodology was not reliable, this would call into question whether the condition complied with the legal and policy tests for planning conditions.

413. In this matter the appellants rely on the plan entitled "Topography of Chalk surface" Hafren Water (Drawing 2482/POE/03) showing the interpolated elevation of the top of the chalk from borehole data from bores located within and near to the appeal site. These contours would be used to generate a 3D GPS model that would control the depth of excavation. The undisturbed material that would remain above the chalk, using these contours to determine the position of the chalk rockhead, is shown on Isopachytes Drawings. [20,96]

414. However, for large parts of the site this interpolation is from boreholes that are widely separated, with considerable height differences reported in the elevations of the top of the chalk. The contours are derived on the assumption of a smooth gradation of this elevational difference between the boreholes. But there is no convincing evidence that this assumption is correct. The EA is not able to provide any assistance in this regard as it does not have the in-house capability and competence to carry out non-intrusive geophysical surveys to estimate the thickness of the top soil layer, relief and heterogeneity of the top of the chalk. [94,104,164,]

415. Research in other parts of southern England has shown that the top-chalk surface is rough. The photographic evidence of exposed chalk in Rickneys Quarry in the 1990s is not conclusive, but raises the possibility that peaks in the chalk rockhead might exist in the appeal site. Given uncertainty about the rockhead surface, it would not be reasonable to rely on the interpolated elevation of the top of the chalk shown on Drawing 2482/POE/03 as the basis for assessing compliance with AW's suggested condition. [95,163]

416. Furthermore, this is not a case where it would be reasonable to rely on standard leaks and spills mitigation measures. These would not prevent spilled contaminant from filtering down into the aquifer. Significant pollution could travel so rapidly through fissures that even a speedy response to a pollution incident at the surface would be ineffective. The only effective mitigation measure would be to immediately excavate the affected sand and gravel and to securely transport it to a containment area so that it could be safely removed from the site. Whether this would be practical in all potential pollution scenarios is doubtful. [101,163,236,305]

417. I have considered whether the potential contamination of the aquifer is a matter that could be dealt with by the imposition of the conditions suggested

by the parties.[170] In the absence of more details about what methodology would provide a reliable safeguard, it seems to me that the condition suggested by HCC and the appellants might unreasonably impact on the deliverability of the development. Especially so for parts of Phase 3 and Phase 4, where the available Isopachyte data indicates that the protective basal layer would be likely to be at its thinnest. SBQ's suggested condition would provide a greater safety margin. But it would be considerably more onerous, and would suffer from the same defect as the condition suggested by HCC/appellants. If SBQ's suggested Hydrogeological Impact Assessment precluded safe mineral extraction that would be an indication that planning permission should have been refused. The suggested conditions would just defer consideration of this issue to a later application for approval to discharge the condition. I consider that safeguarding the aquifer is an important matter that would need to be satisfactorily dealt with in deciding whether planning permission should be granted. [96,98,102]

418. Conditions in a similar form to that suggested by AW have been applied in other consented sand and gravel mineral sites located in SPZs, and no evidence was adduced at the Inquiry that these have proved to be inadequate safeguards. However, it is not clear what the evidential basis was for the imposition of these conditions, or whether the circumstances that applied in those cases were directly comparable to those that apply here, in terms of the local geology, the proximity of abstraction bores, and the overall risk to groundwater supplies in both the short and long term. [103,238]

419. I do not consider that it would be possible on the information currently available to devise a condition that would appropriately address this matter. Taking into account the intended pollution control measures dealing with fuel storage and refuelling plant in a contained area, I consider that the risk of contaminating groundwater would give rise to an adverse effect of moderate significance, which should be given substantial weight because of the implications for a public water supply. [17,56,99,100,136]

420. In the absence of an appropriate mechanism and planning condition to safeguard the aquifer, I find that the proposed development would pose an unacceptable risk to groundwater pollution, and so would conflict with MLP Policy 17(iv) and Policy 18(ix), and would have an unacceptable adverse impact on the natural environment for the purposes of applying paragraph 205 b) of the *Framework*.

(6) Highway safety

421. There is local concern about the effects of additional HGVs using the road network, but no objection from the highway authority. The scheme could add up to 50 HGV movements in, and 50 out, in any working day. A suggested planning condition would specify no more than 8 HGV lorry movements (4 in / 4 out) entering/leaving the access/egress onto Wadesmill Road during the peak hours.[171] Signs would be erected at the site exit requiring all HGVs to turn left onto the B158 towards the recently improved Anchor Lane roundabout on the A602. Notwithstanding its vertical and horizontal

[170] These are included as Condition 42 in the Schedule of Conditions.
[171] Suggested Condition 9.

alignment, the accident record does not indicate any significant underlying safety problem along this part of the B158. With appropriate visibility splays and a segregated right turn lane for HGVs to wait to turn into the site, I am satisfied that the scheme would provide safe and suitable access. Other objections to the scheme on safety grounds, about footpaths crossing the access or haul roads, and ensuring that the highway was kept clean of tracked out mud and gravel, are matters that could be addressed by enforceable planning conditions. [19,131-133,141-143,155,170,181,185,198,199,204,233,245,272,273,275, 276,278,284,312,314,325]

422. Additional HGVs on the B158 and using the Anchor roundabout would have some effect on other road users, especially vulnerable cyclists and pedestrians. But given the number of vehicles involved and the proposed conditions/obligations, I do not consider that any adverse effect would be of more than negligible significance. Residual cumulative impacts on the road network would not be severe, and any increased risk to highway safety would fall far short of an unacceptable impact that would, in accordance with the *Framework*, justify preventing the development on highway grounds. Local apprehension about additional HGV movements is understandable, but I do not consider that any resultant harm to highway safety should weigh significantly against the proposal. I find no conflict with MLP Policy 16.

(7) Biodiversity

423. The appeal site is not subject to any wildlife designations, but adjoins St John's Wood local wildlife site. There are no objections from statutory authorities on ecological grounds, but this was a concern raised by some objectors. [36,246,272,273,275]

424. Local wildlife groups expressed concern about a threat to St John's Wood from the impact of the depression on surface and sub-surface flows of water, and prevailing winds increasing dust. But there is no evidence to dispute that the trees in St John's Wood are dependent on rainwater, rather than standing groundwater, and so a significant adverse impact from the proposed mineral extraction would be unlikely. The Woodland Trust recommends a 100 m buffer for St John's Wood, noting that ancient woodland is particularly sensitive to dust. However, measures required by an approved dust management plan would reasonably safeguard nearby woodland from dust emissions from the appeal scheme. [33,153,236,287,323,324,327]

425. The appeal site is arable land, but used by some wildlife, including brown hare, skylarks and foraging badgers. During the 10 years of the operation some wildlife would be displaced or disrupted, but on restoration the planting and management proposed would be advantageous for biodiversity. However, there is no guarantee that these beneficial features would be retained beyond the after-care period. Local wildlife groups consider that the proposed after-care period would be inadequate to establish semi-natural habitats, and that an alternative and more appropriate mitigation strategy could provide real and sustainable gains in biodiversity. The likelihood of any long-term ecological benefits might only be sufficient to compensate for the harm to biodiversity during the extraction operation. For these reasons, I find

that the proposal would, overall, have a neutral effect on biodiversity. [173,247,248,323]

(8) Agricultural land

426. The scheme proposes restoring most of the site back to agricultural use. However, some BMV agricultural land would be permanently lost for the proposed water attenuation area. Furthermore, it could take many years for the restored agricultural land to return to its current productive capacity. The proposal would not, therefore, accord with the provisions in the *Framework* concerning the protection of soils. There would be some harm to agricultural land, which I consider would be an adverse effect of minor significance, but nonetheless should be given some slight weight in the planning balance. [23,49,220,291]

(9) Employment and the economy

427. The addition of six full-time employees to the workforce for up to 10 years would make a modest contribution to the local economy. The enterprise would have some secondary or multiplier economic effects, which again would be modest, but nonetheless beneficial. Given the nature and scale of the proposed operation, I consider that the likely effect on the economy would be a benefit of minor significance. This is a consideration which should, in accordance with the *Framework*, be combined with the need for minerals from the appeal site, and the resultant benefits of their extraction, to give a single weighting in the planning balance. [14,47]

(10) Supply of housing

428. Policy HERT4 of the EHDP allocates land to the south of the appeal site for residential development to accommodate a minimum of 150 homes, with around 50 dwellings provided to the north of Sacombe Road by 2022; and, subject to the satisfactory previous phased extraction of mineral deposits on the neighbouring site, around 100 homes to the west of the B158 Wadesmill Road between 2022 and 2027. Compliance with this policy could be achieved by planning controls on the phasing of mineral extraction and housing development over the period up to 2027. There is considerable time to devise and implement a programme that would achieve a satisfactory planning outcome. There is no convincing evidence that implementation of the appeal scheme is necessary to enable future housing development to comply with Policy HERT4. I find that dismissing this appeal would not be likely to have any material effect on the future supply of housing in East Herts. [42,59,83-86,126,185,200,204,265]

(11) Demand for and supply of sand and gravel

429. At the last annual review there was 7.5 years supply of sand and gravel on the basis of an apportionment exercise with a requirement of 1.39 Mt pa. Since then planning permission has been granted for 0.45 Mt at Furze Field. The release of additional land at the BAE Aerodrome site would significantly increase the supply. The BAE site benefits from a resolution to grant planning permission subject to finalising legal agreements. This resolution took into account the matters raised by the appellants concerning the BAE site's Green Belt location, and the fact that it falls partially outside the designated

Preferred Area. The Inquiry was advised that the only outstanding matter delaying the grant of planning permission concerns legal provision for a Country Park. No evidence was submitted to dispute this. The available evidence indicates the likelihood that the BAE site will make a substantial contribution to the landbank in the near future. [46,75,76,129,181,212,215,249,250,252]

430. The evidence does not indicate any compelling local need for sand and gravel from the appeal site. In coming to this finding I have had regard to the criteria set out in the *Guidance* for the grant of permission even if it is considered that the landbank is adequate. There is no convincing evidence of significant future increases in demand that can be forecast with reasonable certainty, or that the location of consented reserves is inappropriate. Furthermore, there is nothing to indicate that the output from consented reserves would be limited by constraints. Given my findings about the relationship between the appeal scheme and housing development of the HERT4 site, the likelihood of sterilisation of resources is not a consideration which weighs in favour of allowing the appeal.

431. Nevertheless, there is evidence that Hertfordshire's productive capacity is dwindling with a number of quarries closing, and in providing a steady and adequate supply of aggregates there would be advantage in having productive sites available in a variety of locations so as to minimise transport impact. In the circumstances that apply here, I find that the contribution that the appeal scheme would make to the supply of sand and gravel is a consideration of moderate significance in favour of the proposal. [74,165,251,253,275]

(12) Planning balance

432. If the Secretary of State finds that the proposed development is inappropriate in the Green Belt, the planning balance is whether the harm by reason of inappropriateness, and any other harm, is clearly outweighed by other considerations, so as to amount to the VSC necessary to justify the development.

433. The harm I have identified to the Green Belt should, by definition, be given substantial weight. In addition, I have found that the proposal would have an adverse effect on the character and appearance of the area, which should be given substantial weight. The harm to the amenity of the area should attract moderate weight. In the absence of an effective mechanism and planning condition to safeguard the aquifer, I consider that the risk of water pollution should be given substantial weight. Some slight weight should be given to the loss of agricultural land. Any increased risk to highway safety would be negligible, and so should not weigh in the planning balance. For the reasons set out above, the appeal scheme would have a neutral effect on biodiversity.

434. Other considerations cited by the appellants to weigh in the VSC balance include; the benefits of mineral extraction; the temporary nature of the works; the long-term landscape and ecological benefits; permanent enhancements to the PRoW network; and the benefits of extracting the minerals to allow the delivery of houses on the northern part of the HERT4 site. HCC argues that the only matter here which could conceivably constitute VSC is need. [62,225]

435. Given the landbank and measures HCC are taking to increase the supply of sand and gravel, I have found that the contribution of minerals from the appeal site would be a benefit of moderate significance. The six full time jobs and other operational aspects of the development would make a modest contribution to economy. These benefits should be awarded great weight, as required by the *Framework*.

436. The temporary nature of the works should not be given much weight as that is the nature of mineral extraction. It is a consideration in determining the quantum of any harm, but cannot also be used as a factor to weigh in favour of a proposal in assessing whether VSC exist. I have found that the proposal would result in long-term landscape harm, and that the likelihood of any long-term ecological benefits might only be sufficient to compensate for the harm to biodiversity during the extraction operation. Neither of these weighs significantly in favour of the proposal.

437. The scheme would result in permanent enhancements to the PRoW network, which is a benefit that should be given some slight weight. The delivery of houses on the northern part of the HERT4 site is not dependent upon the implementation of the appeal scheme. Contrary to the appellants' submission, this is a consideration that should attract little or no weight.

438. In this inappropriate development scenario, I consider that the other considerations, comprising the benefits of the proposed sand and gravel extraction and the contribution the scheme would make to the economy, which attract great weight, and the benefits to the PRoW network, would not outweigh the harm to the Green Belt along with the harm to the character, appearance and amenity of the area. The increased risks to the aquifer in the absence of an appropriate safeguarding mechanism and condition, along with the loss of agricultural land, would tip the balance even further against the proposal. In my judgement, the harm by reason of inappropriateness, and any other harm, is not clearly outweighed by other considerations, and the VSC necessary to justify the development do not exist. In this scenario, the proposed development would conflict with EHDP Policy GBR1, and would be contrary to national policy concerning the Green Belt. [88,268,269]

439. If the Secretary of State finds that the proposed mineral extraction is not inappropriate development in the Green Belt, then the planning balancing exercise should weigh the benefits against the harm, giving great weight to the benefits of mineral extraction, including to the economy. In this scenario, I consider that the overall harm identified to the character, appearance and amenity of the area, would outweigh the benefits of the proposed sand and gravel extraction and the contribution the scheme would make to the economy and to the PRoW network. The increased risks to the aquifer in the absence of an appropriate safeguarding mechanism and condition, along with the loss of agricultural land, would tip the balance even further against the proposal.

(13) Development Plan

440. The Secretary of State is required to decide this appeal having regard to the development plan, and to make the determination in accordance with it, unless material considerations indicate otherwise. HCC's reasons for refusal refer to the East Herts Local Plan 2007, but East Herts District Plan (EHDP) was adopted in October 2018. The development plan also includes saved policies of the Hertfordshire Minerals Local Plan Review 2007 (MLP). [37-42]

441. Significant areas of the appeal scheme would be located outside the boundaries specified in PA2. The proposal would not be an extension to Rickneys Quarry, nor would it use its existing access from the B158. Furthermore, given my findings about the effects of the proposal on the living conditions of residents and the amenity of the area, I am not satisfied that the scheme would provide appropriate buffer zones. For all these reasons, the proposed development would not accord with MLP Policy 3. [58,77,78,80,87,88,259,261,290]

442. Working outside the Preferred Area is not justified on the grounds of the current landbank, prejudice to the timely working of preferred areas, or the likely sterilisation of resources. So the appeal scheme would not gain material support from MLP Policies 4 and 5. With an overall neutral effect on biodiversity the proposal would not gain support from MLP Policy 9. The restored landform and tree planting would result in a loss of openness, which is a distinctive landscape feature of the appeal site, and so the proposal would not accord with MLP Policies 12 and 18(ii). Considered successively with past mineral extraction in the wider area, the scheme would be at odds with the underlying objectives of MLP Policy 11. On the available evidence, I am unable to find that the proposal would accord with MLP Policy 18(viii) concerning noise. In the absence of an appropriate mechanism and condition to safeguard the aquifer which feeds an important public water supply, I am unable to find that the scheme would comply with MLP Policies 17(iv) and 18(ix). However, it would gain some support from MLP Policy 18(x) concerning PRoW. [79,90,106,260,262-264,266]

443. If the Secretary of State finds that the development would be inappropriate in the Green Belt and concurs that VSC do not exist, then the proposed development would conflict with EHDP Policy GBR1.

444. Taking all the above into account, I find that the proposal would conflict with the development plan when taken as a whole.

445. HCC is in the process of reviewing the Minerals Local Plan, and a Consultation Draft (eMLP) has been the subject of public consultation. The eMLP was cited by many objectors because it recommends that Bengeo Field should not be a "preferred area" for quarrying. Some considered the proposal to be premature because the eMLP has already been approved by the HCC Environment Panel. However, objections to the plan have yet to be heard at examination. Given the stage the eMLP has reached it cannot be given much weight in determining this appeal. [43,90,167,207,277,288]

446. The appeal site lies within the area designated for the Bengeo Neighbourhood Area Plan (BNAP), but this plan is at an early stage of preparation and its draft provisions can be given little weight at this stage. [44,182]

(14) Framework and Guidance

447. In terms of compliance with the *Framework* the scheme would gain support from the great weight to be given to the benefits of mineral extraction, including to the economy. However, it would be at odds with policy about enhancing the natural and local environment and recognising the intrinsic character and beauty of the countryside, and the economic and other benefits of BMV agricultural land. On the available evidence, I am unable to find that the proposal would accord with the aim of the NPSE to avoid significant adverse impacts on quality of life. Where all necessary controls would need to be imposed by the planning system, I am unable to conclude in the absence of an appropriate mechanism and conditions to safeguard groundwater that the appeal scheme would not result in an unacceptable risk of water pollution. [45,47,49,50,51,52,106]

448. If the Secretary of State finds that the development would be inappropriate in the Green Belt and concurs that VSC do not exist, then the proposed development would conflict with national policy concerning the Green Belt. But irrespective of whether the proposal is inappropriate or 'appropriate' development in the Green Belt, I consider for the reasons set out above, that the scheme would be at odds with the policy in the *Framework* when considered as a whole.

449. Relevant provisions of the *Guidance* have been taken into account in assessing the appeal scheme. [53,54]

(15) Planning conditions and obligations

Conditions

450. Suggested conditions, in the event that planning permission was granted, were the subject of a round-table without-prejudice discussion at the Inquiry. The written list of conditions submitted by the appellants includes pre-commencement conditions. In the following paragraphs the Condition numbers are as they appear in the Schedule of Conditions attached to this report. [122-124,329,336]

451. A commencement period of three years would be appropriate here, and to effectively enforce conditions, notification of the dates of commencement of mineral extraction, and completion of site restoration, would be necessary (Conditions 1, 2 and 3). Otherwise than as set out in the decision and conditions, it would be necessary that the development was carried out in accordance with the approved plans, to ensure that it was in accordance with the scheme considered at the Inquiry (Condition 4). Given the level of detail contained in the submitted documents, subsequent approval would be required for the matters set out in Condition 5 concerning plant, structures and buildings.

452. Details for each Phase would be required to ensure that the development was carried out in an orderly manner, and restored without unnecessary delay (Conditions 6 and 7). Conditions 8-11 and 17 concerning access, number of HGVs, crossing for the haul road, and off-site highway works would be necessary in the interests of safety. There is no evidence to indicate that the true morning peak time in this location is 7.30 am to 9.30 am, and suggested

Condition 9(b) accords with the peak hours specified by the Highway Authority. A condition could not require a routeing plan where vehicles were using the public highway. There would be no need to specify a particular distance of level ground where footpaths were near to roads as such details would be matters for approval in discharging the conditions suggested by HCC and the appellants. [330,335]

453. Wheel cleaning facilities would be required to control the track-out of material onto the highway for pollution reasons (Conditions 12 and 13). Details would need to be approved of the stockpile and fuel storage areas (Conditions 14 and 15) for similar reasons. It would be necessary to limit the height of stockpiles to 5 m so as to minimise the visual impact of the development and to accord with the information in the ES.

454. There may be advantage in permissive rights of way being available for walkers, cyclists and horse riders, but it does not seem to me that this would be a reasonable requirement necessary to mitigate harm to those who currently use the area. I concur with the appellants that the condition should refer only to walkers (Condition 16). [329]

455. An archaeological scheme and recording would be necessary in the interests of local heritage (Condition 18).

456. No waste should be imported, surface and ground water drainage controlled, boreholes maintained, groundwater monitored and measures required to deal with any land contamination, so as to safeguard groundwater (Conditions 19-24). However, it would not be necessary to specify works for borehole OBH 1A as this has been repaired. SBQ's detailed suggestion for boreholes might preclude more appropriate measures. This is a matter of detail that could be better dealt with by the approval of details in discharging conditions. [330,322]

457. Landscaping for the site access and haul road, along with advance planting, would need to be approved in the interests of the appearance of the area (Conditions 25-27). Lighting and boundary treatment would need to be controlled for similar reasons (Conditions 28 and 29). Soil handling would need to accord with Defra guidance to provide for successful restoration (Condition 30).

458. The appellants' closing submissions refer to proposed ecological enhancements and maintenance for 10 years with longer-term conservation maintenance secured by way of a "landscape and nature conservation management plan" (ID111). But the reference to ecology in earlier versions of the suggested conditions (ID82.1) was omitted in subsequent versions. Ecological considerations are part of the appellants' case and so should be included in the details to be approved. This could be added to suggested Condition 31 for a landscape and ecological restoration scheme for each Phase. Details would need to be approved for a landscape and ecological restoration scheme in the interests of the appearance of the area and biodiversity (Condition 31).

459. A condition regarding completion and aftercare would be necessary to ensure compliance with Schedule 5 of the 1990 Act concerning the required standard of restoration (Condition 32).

460. The hours of working would need to be controlled in the interests of the amenity of the area (Condition 33). Some objectors considered that starting at 0700 hours and working on Saturday would cause unacceptable additional noise. However, the hours suggested by HCC/appellants are those normally accepted for working quarries. With other conditions to control adverse impact there are no good grounds for imposing more restrictive working hours. [306,316,330]

461. Dust control would be needed for health and amenity reasons (Condition 34). It would be reasonable in doing so to follow IAQM guidance. A scheme for air quality monitoring would need to be approved for health reasons (Condition 35). SBQ's air quality monitoring condition should be preferred because it would record hourly average concentration of PM_{10} which could draw attention to any short term peaks exceeding 100 $\mu g/m^3$, so providing a trigger for further investigation. This would be necessary to inform the local community about potential health risks, especially for vulnerable members of the community. Three monitoring sites would be necessary to determine, in varying weather conditions, whether the quarry was responsible for any changes in air quality. [331,332]

462. A condition concerning a community liaison group would be necessary to establish an effective complaints procedure regarding the operation of the quarry, but would not need to specify who should participate (Condition 36). [333]

463. Controls on noise emissions would be required in the interest of the amenity of nearby residents (Conditions 37,39-41). However, it would not be necessary to restrict the number of specific plant on site, or to specify their sound power levels, as this would impair operational flexibility, and in any event other noise controls would apply. If more frequent monitoring was considered necessary this could be required under Condition 41(d). [334]

464. A condition would be necessary to safeguard groundwater from pollution (Condition 42). The suggested condition by HCC and the appellants, along with the alternative suggestion by SBQ, are set out in the Schedule of Conditions. However, for the reasons given above in section (5) of this report, neither is recommended. If the Secretary of State is minded to allow the appeal and to grant planning permission then it would be necessary to go back to the parties to devise the terms of a condition that would achieve the required safeguarding of the aquifer by means of a planning condition that passed the relevant tests.

465. A condition would be necessary to give effect to the intention to restrict working within 70 m of properties at The Orchard, so that operations would not take place when the wind direction was from the north-eastern quadrant (Condition 44). [16]

466. It would not be necessary to impose any other conditions. Some minor changes to the wording of conditions suggested by the parties are necessary so as to ensure that a permitted scheme would accord with the details of the proposal that was considered at the Inquiry, and to ensure that conditions were precise and enforceable.

Obligations

467. If section 106 obligations are not material considerations, or for other reasons would not satisfy the requirements of CIL Regulation 122, they would be matters on which it would be unlawful for the Secretary of State to place any weight in granting planning permission. However, if an obligation was material and complied with CIL Regulation 122 because it was required mitigation that would not necessarily preclude it from also being considered a benefit in the overall planning balance. Whether it would do so, and what weight it should attract, would depend upon the particular circumstances.

468. Provisions in the section 106 agreement for the timing of the commencement and completion of the development would be necessary to ensure that the operation was in accord with the duration of impacts assessed at the Inquiry. The new byways would be required to mitigate the harm to the PRoW network during the operation and after restoration. Off-site highway works would be necessary for highway safety reasons during the operation, but on completion of the scheme, would need to be removed, and the accessway restored, in the interests of the long term character and appearance of the area. These obligations would be necessary to make the development acceptable in planning terms, are directly related to the proposed development, and would fairly and reasonably relate to it in scale and kind. The new byways would be permanent additions to the PRoW network and so would be beneficial. [12,337]

469. However, I have reservations about the provisions in the agreement for highway restoration, which I queried when the draft was discussed at the Inquiry. The signed version of the agreement defines "Highway Restoration", but does not thereafter use the term.[172] The intent appears to be that the removal of the highway works and restoration of the accessway would be provisions in the Highways Agreement. However, there is nothing in the obligation to require such a provision in the Highways Agreement. In addition, Clause 4.1 of Schedule 1 requires the highway works to be completed prior to the commencement of extraction. That would not make provision for any removal of the highway works and restoration of the accessway after the completion of extraction. The accessway might be dealt with in the restoration scheme for the site, but that would not deal with off-site highway works. It is not certain that the suggested conditions or the obligations would achieve the appellants' intent about removing the junction and accessway on restoration. If the Secretary of State is minded to allow the appeal then this is a matter that would have to be referred back to the parties.

470. In the section 106 agreement "Restoration of the Development" is defined as "the restoration of the Application Site in accordance with the Progressive Operations Plan annexed at Schedule 5 and the Landscape Restoration Plan and the Restoration Scheme and the Planning Permission." However, the plan at Schedule 5, Plan No.1217/PO/2, relates to the 1.25 Mt scheme, and so would not be appropriate for the 1.75 Mt scheme. Again, if the Secretary

[172] ""Highway Restoration" means the removal of the Highway Works in accordance with the Highways Agreement together with the restoration of the Accessway to the condition required by the County Council as the highway authority for Hertfordshire."

of State is minded to allow the appeal then the obligation would need to be amended.

Financial Bond

471. There is local concern about the restoration of the site. It is understandable that some of this arises from past experience with quarrying in the locality, especially how the situation has unfolded at Rickneys Quarry. However, progressive reclamation would be a practicable option for the appeal scheme, and no novel approach or technique is proposed to be used. Furthermore, there is no reliable evidence of the likelihood of either financial or technical failure. I am therefore satisfied that concerns about the funding of site restoration could be reasonably addressed here through appropriately worded planning conditions. This is not an exceptional case that would justify a financial guarantee or bond to cover restoration and aftercare costs. [140,150,161]

Overall conclusions for 1.75 Mt scheme

472. The proposed development would harm the character and appearance of the area. It would be too close to nearby residential properties, resulting in harm to living conditions and the amenity of the area. In the absence of an appropriate mechanism and planning condition to safeguard the aquifer, the appeal scheme would pose an unacceptable risk to an important public water supply. On these grounds, it would conflict with relevant development plan policies and would not accord with national policy. If the Secretary of State finds that the scheme is inappropriate development in the Green Belt and that VSC do not exist, then it would also conflict with local and national policy concerning the Green Belt. I find no other material considerations to indicate that the determination should be made other than in accordance with the development plan. For the reasons given above and having regard to all other matters raised in evidence, I conclude that the appeal should be dismissed. [87,88,124,125,213-215,268,269]

Consideration of the 1.25 Mt scheme

473. If the Secretary of State is minded to agree with my recommendation for the 1.75 Mt scheme, then consideration should also be given to the appellants' submissions about substituting the 1.25 Mt scheme, along with the representations about this by other parties and interested persons. [4,13,226,338-345]

474. In this event, the appellants requested that a condition limiting the scheme to 1.25 Mt be imposed. However, the description of the proposal, as set out in the application and appeal forms, includes a "stockpile area". A condition that precluded development of a stockpile area would, in effect, contradict part of the permission, and so would be unreasonable. Substituting the 1.25 Mt scheme in determining this appeal could not, therefore, be achieved just by the imposition of conditions. The description of the development would, as acknowledged by the appellants, also need to be amended.[173]

[173] APP10 paragraph 3.3.6.

475. Consideration should, therefore, be given to whether the appeal could be properly determined on the basis of an amended scheme, which included deletion of the reference to the "stockpile area" from the description. To do so the Secretary of State would need to find that the *Wheatcroft* principles are satisfied.[174] The *Wheatcroft* judgment referred to whether the development is so changed that to grant it would be to deprive those who should have been consulted on the changed development of the opportunity of consultation. Consideration therefore needs to be given to whether the scheme would be a substantially different scheme from that which was before HCC when it determined the application, and whether anyone would be likely to be prejudiced by dealing with the amended scheme at the appeal stage.

476. There are some significant differences between the 1.75 Mt and 1.25 Mt schemes. These are intended by the appellants to address some of the concerns about the proposal raised by HCC and objectors. However, they include alterations that could result in different outcomes, about which other parties or interested persons might wish to comment. These differences include the following:

(1) Siting of the 'load out area' further within the site on higher ground and closer to residential properties on Sacombe Road, with different bunds and road layout, and with the loading and refuelling area sited over more vulnerable geology in terms of the risk of water pollution and contamination of the underlying aquifer, albeit slightly further away from the Wadesmill Road PS.
(2) Siting of the access road and haul roads within the site, with different arrangements for screening bunds.
(3) Removal of Bund 3 and the Subsoil store from Phase 1.
(4) Restoration details, including additional woodland thicket planting and tree & hedgerow planting near the southern boundary of Phase 1, different siting and size for the proposed attenuation area, additional tree & hedgerow planting across the Phase 3 part of site, along with different contours for finished ground levels, especially in the northern part of the site.

477. I consider that these are significant differences, notwithstanding the fact that HCC found the schemes were of the same character in applying the Fees Regulations. The description of the scheme was not the same because it deleted reference to the "stockpile area". HCC's decision about fees should not be determinative for the purposes of considering whether the *Wheatcroft* principles apply here. HCC did not consider the 1.75 Mt scheme to be substantially different from the original 2.6 Mt scheme. But the revision primarily concerned the restored landform, with most other features of the 1.75 Mt proposal substantially unchanged from the 2.6 Mt scheme. [4]

478. I turn next to procedural fairness, having regard to the *Holborn Studios* judgment. A separate application for the 1.25 Mt scheme has been the subject of public consultation, and there has been considerable involvement by interested persons in the Inquiry, at which evidence was presented about the 1.25 Mt scheme. Many people took these opportunities to make representations about the 1.25 Mt scheme. But this does not rule out the

[174] *Bernard Wheatcroft Ltd v SoSE.*

possibility here of someone being prejudiced because they were deprived of such an opportunity. Many local residents commented on the confusion about the process and relevant documents. This is understandable given the chronology of events in this case. It is not possible to say that the manner in which the applications and the appeal progressed did not, for some people, result in misunderstandings about how and when to comment on the 1.25 Mt scheme, at both the application and appeal stages. [13,195,196,279,280,292]

479. Some objectors thought that dealing with the 1.25 Mt scheme as part of this appeal would neutralise and confuse any opportunity for comment or objection to any appeal against the refusal of that scheme. HCC also objects to consideration of the amended scheme because a step in the appeal process would be bypassed. There is statutory provision for two opportunities to make representations, for which there are specific public notice provisions at the application and appeal stages. The original public notice about the Inquiry, and the subsequent notice about its resumption, both correctly quoted the description of the proposed development from the application form, which included the "stockpile area", and so some readers might have reasonably assumed that the Inquiry was dealing solely with the 1.75 Mt scheme.

480. The adjournment of the Inquiry would not have remedied any procedural fairness defect regarding consideration of the 1.25 Mt scheme, as the adjournment was required to provide an opportunity for public comment on the HIA. In my judgement, the 1.25 Mt scheme is substantially different from the 1.75 Mt scheme, and for the reasons set out above, I do not believe that the likelihood of prejudice arising here is low enough to feel confident about dealing properly with the appeal on the basis of the 1.25 Mt scheme. I find that the *Wheatcroft* principles are not satisfied here, and I consider that the Secretary of State should decline the request to determine the appeal on the basis of the 1.25 Mt scheme.

481. However, in the event that the Secretary of State disagrees with this recommendation, and concurs with the appellants' view that the *Wheatcroft* principles would be met, evidence was presented to the Inquiry about both schemes, and so an addendum report about the 1.25 Mt scheme could be submitted. If the Secretary of State gives written notice that he is both minded to refuse the appeal for the 1.75 Mt scheme, and considers that it would be appropriate in the circumstances that apply here to determine the appeal on the basis of the amended scheme for the extraction of 1.25 Mt of sand and gravel, then a separate addendum report will be submitted setting out the planning merits of the 1.25 Mt scheme. This would include a recommendation as to whether the amended scheme should, or should not, be granted planning permission, along with any planning conditions considered to be necessary were the appeal to succeed on that basis.

Recommendations

482. I recommend that the appeal for the 1.75 Mt scheme should be dismissed for the reasons set out above. However, if the Secretary of State is minded to disagree with my recommendation, and to allow the appeal and to grant planning permission, then the conditions considered necessary to be imposed are set out in the Schedule of Conditions attached to this report. A revised section 106 agreement would also be necessary to ensure that an appropriate mechanism existed for highway restoration.

483. For the reasons set out above, I recommend that the Secretary of State declines the request to determine the appeal on the basis of the 1.25 Mt scheme.

John Woolcock
Inspector

APPEARANCES

FOR HERTFORDSHIRE COUNTY COUNCIL:

David Forsdick QC	Instructed by the County Solicitor
He called	
Stephen Marshall MIOA MIDiagE	Acoustic Consultant Acoustic Associates
Julie Greaves BSc(Hons) MSc	Team Leader Minerals and Waste Planning and Policy
Jennifer Clarke BA(Hons) Dip Landscape	County Landscape Officer
Felicity Hart BSc(Hons) DipTP FRTPI	Principal Planning Officer
Chay Dempster BSc(Hons) MA TP	Principal Planning Officer

FOR THE APPELLANTS:

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She called	
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Les Jephson BEng(Hons) MIOA	LF Acoustics Ltd
Jethro Redmore BEng MSc CEnv MIAQM MIEnvSc PIEMA	Redmore Environmental
James Sutton BSc Tech Member IoQ	Ingrebourne Valley Ltd
Ian Dix BSc(Hons) MSc MCIT MCIHT	Vectos
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Robert Sellwood BA(Hons) DipTP MRTPI FRICS	Sellwood Planning
Mark Flatman BA(Hons) Dip LA CMLI	Liz Lake Associates
Susan Deakin BSc(Hons) MSc CMLI	Liz Lake Associates
Professor Ranjeet S Sokhi PhD	Director of the Centre for Atmospheric and Climate Physics Research University of Hertfordshire acting on behalf of ReScientia Ltd

Douglas Symes BSc(Hons) ARSM CEng FGS MIMM FIQ FRGS	DK Symes Associates

FOR RULE 6(6) PARTY: STOP BENGEO QUARRY (SBQ)

Katharine Elliot of counsel	Instructed by Attwaters Jameson Hill and SBQ

She called

Professor Brassington BSc(Hons) MSc FGS MICE FCIWEM
Roger Barrowcliffe BSc(Hons) IAQM CSci CMet Director Clear Air Thinking Ltd

FOR RULE 6(6) PARTY: Dr Andrew Stevenson BSc(Hons) MSc PhD
County Councillor for Hertford All Saints
Vice Chairman Environment Planning and Transport Hertfordshire

INTERESTED PERSONS:

Andrew Smith	Local resident
Aska Pickering	Local resident and Chairperson of SBQ
Dr David Adam PhD Env Sci	Local resident and Parent Governor of Bengeo Primary School
Libby Mountford	Local resident
Julie Starkiss	Head teacher Bengeo Primary School
Suzanne Bray	Local resident
Tanya Needham	Local resident and Governor of Bengeo Primary School
Thalia Watson	Local resident
John Howson	Local resident
Robert Chandler	Local resident
Anu Palmer	Local resident
Mark Lynch	Local resident and Chairman of the Bengeo Neighbourhood Plan Steering Group
Dr Bryan Lovell OBE CGeol	Senior Research Fellow in Earth Sciences University of Cambridge
Peter Norman	Hertford Civic Society
John Wiggett	Local resident
Cllr Steve Cousins	Hertford Town and District Council
Terry Mansfield	Chapmore End Association
Dr Mike Howarth	Local resident
John Barnes	Local resident
Alan Burgess	Local resident
Kelly Martin	Local resident
Dan Griffiths	Local resident
Lee Nicholson	Local resident
Alexandra Daar	Local resident
Ben Penrose	Chairman Molewood Residents' Association
Graham Nickson	Local resident
Veronica Fraser	Health Walks Leader

Cllr Margaret Eames-Peterson FSS FRSPH MSc DLSHTM PGCE BSc	Hertfordshire County Council
Cllr Mari Stevenson	East Herts District Council
Steve Halsey	Local resident
Laura Wyer	Local resident
Simon Pickering	Local resident
Nadine Cleland	Local resident
Russell Norris	Chapmore End Association
Heston Attwell	Local resident
Amber Waight	Local resident
Cllr Bob Deering	Hertford County Council East Herts District Council and Hertford Town Council
Nigel Braggins	Local resident
Dr Laura Horsfall	Senior Epidemiologist University College London
Mark Prisk MP	Member of Parliament for Hertford and Stortford

PROOFS OF EVIDENCE and WRITTEN REPRESENTATIONS

Appellants

APP1	Christopher Leake Proof of Evidence, Appendices A1-A6.
APP2	Les Jephson Proof of Evidence, Appendices A and B.
APP3	Jethro Redmore Proof of Evidence, Appendices 1-5.
APP4	James Sutton Proof of Evidence, Appendices 1-5.
APP5	Ian Dix Proof of Evidence, Appendices 1-3.
APP6	Ben Cave Health Impact Assessment.
APP7	Robert Sellwood Proof of Evidence, Appendices 1-9.
APP8	Mark Flatman Proof of Evidence, Appendices A-D, Rebuttal ID2.
APP9	Susan Deakin Proof of Evidence, Appendices A and B.
APP10	Douglas Symes Proof of Evidence, Appendices 1-11.
APP11	Professor Ranjeet S Sokhi Proof of Evidence September 2018.

Hertfordshire County Council

HCC1	Stephen Marshall Proof of Evidence, Noise Assessment March 2018, Review March 2017, Rebuttal ID7.
HCC2	Julie Greaves Proof of Evidence, Appendices 1-15, Rebuttal ID8.
HCC3	Jennifer Clarke Proof of Evidence, Appendices 1-4.
HCC4	Felicity Hart Proof of Evidence, Appendices 1-3.
HCC5	Professor Jim McManus Written Representation, Appendices 1-3.

Stop Bengeo Quarry Rule 6 Party

SBQ1	Professor Brassington Proof of Evidence, Appendices 1 and 2, Supplementary Proof April 2018.
SBQ2	Roger Barrowcliffe Proof of Evidence, Appendices A and B.

Cllr Andrew Stevenson Rule 6 Party

AS1	Statement and Attachments

SCHEDULE OF PLANS AND DRAWINGS FOR 1.75 Mt SCHEME

Plans and drawings upon which any determination for the 1.75 Mt scheme should be made i.e. excluding drawings or figures submitted within the planning application for illustrative or information purposes, are set out in ID97 and listed as follows:

Location Plan 1217/L v4 dated 25/09/2015
Application Plan 1217/A/1 v7 dated 06/09/2017
Site Context 1217/SC/2 v2 dated 24/11/2015
Composite Operations Plan 1217/CO/1 v9 dated 19/12/2016
Progressive Operations Plan 1217/PO/1 v9 dated 19/12/2016
Stockpile Area 1217/SP/1/ v3 dated 01/02/2016
Restored Landform 1217/R/1 v10 dated 16/01/2017
Drilling Survey for Sand and Gravel 1217/DS/1 v2 dated 20/05/2013

SCHEDULE OF PLANS AND DRAWINGS FOR 1.25 Mt SCHEME

Plans and drawings upon which any determination for the 1.25 Mt scheme should be made i.e. excluding drawings or figures submitted within the planning application for illustrative or information purposes, are set out in ID97 and listed as follows:

Location Plan 1217/L v4
Application Plan 1217/A/1 v7
Site Context 1217/SC/2 v2
Drilling Survey for Sand and Gravel 1217/DS/1 v2
Operations Plan – Phase 1 1217/O/1 v4
Operations Plan – Phase 2 1217/O/2 v4
Operations Plan – Phase 3 1217/O/3 v4
Progressive Operations Plan 1217/PO/2 v4
Landscape Restoration Strategy (Liz Lake) 1571 01 H
Access Junction and Right Turn Lane (Vectos) 131124/A/04.1 Rev E

ANNEX A – RULING RE ADJOURNMENT

"I have considered the written notes and submissions this morning about the HIA. I do not consider that the appellants' Statement of Case, either SoC1 or SoC2, made it sufficiently clear what was the appellants 'full particulars of case' [175] insofar as the HIA was concerned, particularly as reference to an HIA was included in HCC's reasons for refusal. If the appellants intended to refer to an HIA it would have been better to have said so in the SoC, especially given the date SoC2 was submitted. It seems to me that the appellants are, in effect, adding to their SoC by now relying on an HIA. I will allow this, but in accordance with Inquiry Rule 15(10) shall give those appearing at the Inquiry an adequate opportunity of considering the document.

SBQ considers that proceeding without that opportunity would be prejudicial to their case. I make no ruling about this. But I cannot be certain that there are not interested persons, members of the public, who, had the HIA been cited in a SoC or made available for consultation earlier, would have wanted to give evidence about it, and so would be prejudiced by the way the matter has been dealt with so far.

My ruling is that I propose to give time for those who wish to do so to consider the HIA and to make submissions to the Inquiry about it. This will require an adjournment. I will ask the parties to consider, in a break, how long they consider will be necessary."

John Woolcock
Inspector
18 May 2018

[175] 2000 Inquiry Rules Interpretation states that 'statement of case' means, and is comprised of, a written statement which contains full particulars of the case which a person proposes to put forward at an inquiry and a list of any documents which that person intends to refer to or put in evidence.

ANNEX B Written representations about HIA submitted during adjournment

Natalie Adam (115)
Fay Adams (82)
John and Penny Andrew (63)
Mr and Mrs BJ Archer (79)
Neil and Pauline Atkins (42)
Heston Attwell (139)
Victoria Attwell (135)
Miss KJ Ayres (78)
Roger and Patricia Bardle (120)
Frank and Mary Baynes (140)
Jo Beatty (16)
Anthony Beck (6)
Clare Blackman (150)
Nigel Braggins (95)
Matt Bray (133)
Suzanne Bray (153)
Alan Cain (32)
Nicola Camp (148)
Andrew Cannon (116)
Emma Chiew (50)
Laura Church (17)
Sandra Church (18)
Peter Collins (54)
Hannah Cope (123)
Geoffrey Cordingley (152)
Paul Cox (104)
Rebecca Cox (12)
David Cramphorn (137)
Mr TE Creasey (76)
Robert and Janet Cunneen (81)
Denise Culverhouse and John Morgan (145)
Alex Daar [East Herts Green Party] (86)
Diana Davies (5)
MH Davis (113)
Sue Dear (70)
Desiree de Silva-Power (127)
Graham Dial (4)
Chris Dixon (11)
Thomas Dunklin (84)
Nick Egginton (30)
Paul Eldred (29)
Elaine Elliot (106)
CA and AA Etheridge (3)
Mike and Brenda Excell (90)
Mrs Foot (146)
Mr RJ Fradley (138)
Carole Luck (22)
Gillian Lynch (143)
Mark Lynch (8)
Ian Lyon [Chapmore End Association] (73)
Alison Madge (28)
Eliza Mary Mann (92)
Kathy Mann PhD FRCPath (21)
Mr and Mrs Martin (144)
Diane and Allan Mattick (23)
Lynda McKenzie (124)
Catherine McMenamin (24)
Nikki McMurray (154)
Steve McMurray (19)
Denise Mitchell (111)
Peter Moore (77)
Sam Mountford (2)
Iris Needham (43)
T Needham (41)
Dr M Newman MB BS (51)
Mr M Newman (52)
Graham Nickson (34)
RF Norris (117)
Colin Nunn (64)
Pamela D'Ampney Nunn (80)
Wendy Oakins BHSAI (33)
Anu Palmer (134)
Terry and Sally Paque (56)
Ben Penrose [Molewood Residents' Association] (129)
Aska Pickering (102)
Simon Pickering (55)
James Power (126)
Jane A Rainbow (89)
Anne Ramsden (47)
Carolyn Redfern (114)
Marilyn Reynolds (59)
Katharine Richardson (151)
Alan Scarisbrook (121)
Karen Seaborne-Lasmi (122)
Alison Sheldrick (99)
Robert Sheldrick (100)
Marcus Silversides (105)
Jo Spiers (72)
Elizabeth Staley (74)
Anna Stanton (27)
Paul Stanton (44)
Stop Bengeo Quarry (132)

Veronica Fraser (46) Edward Fuller (36) Gunilla Fuller (37) Peter Fuller (83) Nancy Gensini (147) Janet Guilbride (96) Michael Guilbride (97) Brian G Guildea (14) Paul and Lyn Groves (53) Ken and Yvonne Hall (85) Stephen Halsey (130) Gemma Harris (15) Clare and Richard Haworth (61) Mr and Mrs Heard (20) Louise Henderson-Lea (26) Brenda Heninghem (48) Jenny Herbert (58) Christine Holyfield (156) Dr Laura J Horsfall (119) Dr Mike Howarth (109) Ann Hutton (62) Frank Iddiols (93) Paula Iddiols (38) Duncan Jauncey (9) Victoria Jauncey (10) Veronica Jesson (103) Ross Jones (155) Barbara Kiln (60) Peter and Nicola King (57) Beatrice Leigh (68) Samantha and Victoria Levy (107) Paul Lloyd (118) Dr Bryan Lovell CGeol (75)	Deborah and Barry Sumby [Watermill Estate Residents' Association] (91) A J E and M Taylor (69) Robin and Celia Tesselment (45) Llinos Thomas (136) Miss CA Thompson (125) Dorothy MF Toyn (35) Amber Waight (13) Elizabeth Walden (88) Fran Wallis (142) Brian Warrington (67) Bridget Webb (65) Pete Webb (66) Thalia Weston (101) Juliet Whitehead (110) Richard Whiting (131) Linda Whiting (128) John and Carmen Wiggett (71) R M C A and B Wiles (7) Rachel Williams (149) Frances Wilson (25) Susan Wilson (87) Kathy Winsor (49) James Wiseman (31) Dr Katy Wright (39) Timothy Wright (40) Pasco and Dellen Wright (94) Laura Wyer (1) Greg Yeoman (112) Vicky Yeoman (141) Anthony Yoxall (98) Sue Yoxall (108)

SCHEDULE OF PLANNING CONDITIONS for 1.75 Mt scheme (Conditions 1-43)

If planning permission is granted for phased extraction of sand and gravel, mobile dry screening plant, stockpile area, weighbridge, wheel cleaning facilities, ancillary site offices, construction of a new access onto Wadesmill Road with phased restoration to landscaped farmland at a lower level at Land at Ware Park, Wadesmill Road, Hertford, Hertfordshire in accordance with the terms of the application No:3/0770-16, dated 4 March 2016, as amended, it is recommended that the permission be subject to the following conditions:

1) The development hereby permitted shall begin not later than three years from the date of this decision.

2) The Mineral Operator shall give not less than 21 days written notice to the Mineral Planning Authority in advance of commencement of the development and shall confirm in writing to the Mineral Planning Authority the actual date of commencement within seven days of the event occurring. The Mineral Operator shall give written notice to the Mineral Planning Authority of the date of commencement of mineral extraction within seven days of the event occurring.

3) (a) All mineral extraction shall be completed, in accordance with the approved plans, not later than 10 years from the date that mineral extraction commenced.

(b) The Mineral Operator shall give not less than 21 days written notice to the Mineral Planning Authority prior to the completion of extraction of each Phase. The Mineral Operator shall give written notice to the Mineral Planning Authority of the actual date of completion of extraction of each Phase within seven days of the event occurring.

(c) If operations are terminated or suspended part way through extraction of any Phase then the Operator shall inform the Mineral Planning authority in writing within 21 days of the termination/suspension occurring.

4) The development hereby permitted shall be carried out in accordance with the following approved plans and drawings.

Location Plan 1217/L v4 dated 25/09/2015
Application Plan 1217/A/1 v7 dated 06/09/2017
Site Context 1217/SC/2 v2 dated 24/11/2015
Composite Operations Plan 1217/CO/1 v9 dated 19/12/2016
Progressive Operations Plan 1217/PO/1 v9 dated 19/12/2016
Stockpile Area 1217/SP/1/ v3 dated 01/02/2016
Restored Landform 1217/R/1 v10 dated 16/01/2017
Drilling Survey for Sand and Gravel 1217/DS/1 v2 dated 20/05/2013

5) Prior to commencement of development, full details of all plant, structures and buildings to be placed on site, shall be submitted to the Mineral Planning Authority for approval. No development shall take place until the written approval of the Mineral Planning Authority has been obtained. All plant, structures and buildings shall be in accordance with the approved details and shall thereafter be retained until the last Phase has been restored unless the Mineral Planning Authority gives prior approval in writing.

6) Prior to the commencement of development in each Phase, a detailed Working Plan/Scheme shall be submitted to the Mineral Planning Authority to show:
(a) The precise extent of the extraction area.
(b) The precise location and height of screen bunds.
(c) All working including soil stripping, overburdens stripping, mineral extraction and restoration.
(d) The location of any stockpiles/storage area together with a methodology for handling soils.

No development shall take place until the details referred to above have been approved in writing by the Mineral Planning Authority. All working of the site (to include extraction and restoration) shall take place in accordance with the approved detailed Working Plan/Scheme. The detailed restoration works shall be commenced within three months of the completion date of gravel extraction in each Phase in accordance with the approved Working Plan/Scheme.

7) In the event that operations are terminated or suspended for a period in excess of 12 months, in any Phase, the excavated area and all other disturbed land shall be restored in accordance with the restoration elements of the Working Plan/Scheme approved in writing by the Mineral Planning Authority. In these circumstances, restoration shall be completed within 12 months of the date on which the Mineral Planning Authority notified the operator in writing that operations are considered to have been terminated or suspended for 12 months.

8) Prior to commencement of development, full details of the proposed access off the B158 Wadesmill Road, as shown in principle on Drawing No.131124/A/04.1E, shall be submitted to the Mineral Planning Authority for approval in writing. The access and associated road improvements shall be constructed in accordance with the approved details prior to the commencement of work on the first Phase of extraction. No other vehicular access shall be made available to the site.

9) (a) There shall be no more than 100 lorry (HGV vehicles over 7.5 tonnes) movements (50 in, 50 out) entering/leaving the access/egress onto the Wadesmill Road in any one working day. Written records of all HGVs entering and leaving the site shall be kept by the Mineral Operator and made available for inspection by the Mineral Planning Authority upon request.

(b) There shall be no more than 8 HGV lorry movements (4 in / 4 out) entering/leaving the access/egress onto Wadesmill Road during the hours of 08.00-09.00 (AM peak) and 16.00-17.00 (PM peak) in any one working day.

10) No HGVs shall turn right when exiting the site unless instructed to do so by the Police. Prior to the commencement of development details of signage requiring all HGVs to turn left onto the B158 Wadesmill Road, along with the siting of the signage close to the site exit, and a programme for its installation, shall be submitted to and approved in writing by the Mineral Planning Authority. The signage shall be erected

in accordance with the approved details and thereafter shall be retained until the last Phase has been restored.

11) Prior to the commencement of development, full details of any fencing, gates or barriers proposed to be erected at the entrance to the site in connection with the formation of the new haul road, shall be submitted to the Mineral Planning Authority for approval in writing. Any gates, fencing or barriers shall be erected in accordance with the approved details and thereafter shall be retained until the last Phase has been restored.

12) Prior to commencement of development, full details of the wheel wash, together with water supply, water storage, recycling and disposal shall be submitted to the Mineral Planning Authority for approval in writing. The wheel wash shall be implemented and operated in accordance with the approved details.

13) No vehicles shall enter the public highway from the site unless their wheels and chassis have been cleaned in the wheel wash to prevent material being deposited on the highway.

14) Prior to commencement of development, full details of the construction of the stockpile area to include cross sections, finished levels, surfacing, drainage and pollution measures shall be submitted to the Mineral Planning Authority for approval in writing. Construction shall take place in accordance with the approved details before the first use of the stockpile area, which shall thereafter be retained in accordance with the approved details. The height of stockpiles within this area shall not exceed 5 m above its finished ground level.

15) Full details of the proposed bunded fuel storage area shall be submitted to the Mineral Planning Authority for approval in writing. The bunded fuel storage area shall be constructed and used in accordance with the approved details. Plant shall only be refuelled in the bunded fuel storage area.

16) Prior to the commencement of development details of all proposed temporary permissive paths shown on Composite Operations Plan 1217/CO/1 v9 dated 19/12/2016, including the standard of construction and width of paths, shall be submitted to the Mineral Planning Authority for approval in writing. The permissive paths shall be created in accordance with the approved details and made available for public use by walkers prior to the commencement of mineral extraction, and thereafter shall be retained until the Certificate of Completion under the Section 25 Agreement has been issued and the Definitive Map routes have been dedicated.

17) Prior to commencement of development, a detailed scheme for the safe crossing by the public over the haul road of any rights of way, shall be submitted to the Mineral Planning Authority for approval in writing. The crossings shall be implemented in accordance with the approved details and made available prior to the first use of the haul road by any HGVs, and thereafter shall be retained until the last Phase has been restored.

18) (a) The development hereby permitted shall not commence until an Archaeological Written Scheme of Investigation has been submitted to

and approved in writing by the Mineral Planning Authority. The scheme shall include the following: (1) A programme and methodology of site investigation and recording. (2) A programme for post-investigation assessment. (3) Provision to be made for analysis of the site investigation and recording. (4) Provision to be made for publication and dissemination of the analysis and records of the site investigation. (5) Provision to be made for archive deposition of the analysis and records of the site investigation. (6) Nomination of a competent person or persons/organisation to undertake the works set out within the Archaeological Written Scheme of Investigation.

(b) The development hereby permitted shall be carried out in accordance with the approved programme of archaeological works set out in the Written Scheme of Investigation.

(c) The site investigation and post-investigation assessment shall be completed in accordance with the programme set out in the approved Written Scheme of Investigation, and the provision made for analysis and publication where appropriate.

19) The development hereby permitted shall not be commenced until such time as a scheme for Groundwater Monitoring has been submitted to, and approved in writing by, the Mineral Planning Authority. The scheme shall include the following: (1) A groundwater monitoring programme to cover the whole time period of mineral extraction at the site (including a maintenance plan for the groundwater boreholes) in respect of contamination and turbidity, including a timetable for monitoring and the submission of reports to the Mineral Planning Authority. (2) Provision for monitoring reports, which should include details of any necessary contingency action arising from the monitoring, to be submitted to the Mineral Planning Authority for approval in writing. Any necessary contingency measures required shall be carried out in accordance with the approved timetable as set out in the approved reports. The Groundwater Monitoring scheme shall be implemented as approved.

20) No Controlled Waste defined by *The Controlled Waste Regulations 2012* or Mining Waste defined by *The Environmental Permitting Regulations 2016* (as amended) shall be imported to the site for reuse, processing, recovery or disposal or for any other purpose.

21) If, during development, contamination not previously identified is found to be present at the site then no further development (unless otherwise approved in writing by the Mineral Planning Authority) shall be carried out until the developer has submitted a remediation strategy to the Mineral Planning Authority detailing how this unsuspected contamination shall be dealt with and obtained written approval from the Mineral Planning Authority. The remediation strategy shall be implemented as approved.

22) There shall be no drainage from the site by means of infiltration unless a detailed scheme has been submitted to and approved in writing by the Mineral Planning Authority setting out all pollution control measures and details for management and monitoring. The scheme shall be implemented in accordance with an approved timetable.

23) The development hereby permitted shall not commence until such time as a scheme for drainage and pollution control has been submitted to and approved in writing by the Mineral Planning Authority. The scheme shall include all measures for the disposal of foul and storage water, along with pollution prevention measures for the storage and handling of pollutants on the site.

24) The development hereby permitted shall not commence until such time as a scheme for managing any borehole installed for the investigation (including monitoring) of soils, or for groundwater or geotechnical purposes has been submitted to and approved in writing by the Mineral Planning Authority. The scheme shall, where necessary, be supported by detailed calculations and include a programme for future maintenance, schedule for repairs and a contingency action plan. The scheme shall be fully implemented and subsequently maintained, in accordance with the timing / phasing arrangements embodied within the scheme, or any details as may subsequently be approved, in writing, by the Mineral Planning Authority. The scheme shall provide details of how redundant boreholes are to be decommissioned and how any boreholes which need to be retained, post-development, for monitoring purposes will be secured, protected and inspected.

25) Prior to the commencement of development, full details of the new access and haul road off Wadesmill Road shall be submitted to the Mineral Planning Authority for approval in writing, to include the following: (1) Details of the location of existing vegetation to be removed. (2) Location and detailed design/specifications of new native tree and hedgerow planting along the haul road together with a timetable for planting. (3) Location and detailed design/specifications of the concrete surfacing and kerb/edge treatments. (4) Location and detailed design/specifications of proposed fencing, gates and signs. (5) Details of the haul road.

The new access and haul road shall be constructed in accordance with the approved details and shall be used as the sole access for HGVs in connection with the proposed mineral extraction. Any hedge/plant which has been planted and subsequently dies or is removed within five years of the date of first planting shall be replaced with an equivalent specimen in accordance with the approved details.

26) Prior to the commencement of the development, a tree survey and protection plan shall be submitted, in line with BS5837:2012 *Trees in relation to design, demolition and construction – recommendations*, to the Mineral Planning Authority for approval in writing. The plan shall include details regarding the layout and depth of construction exclusion zones and ecological buffers, and detailed design/specifications of bunds and any fencing, to protect the following features from the adverse effects of operational and restoration activities: (1) St John's Wood. (2) Existing vegetation and proposed advanced planting along the site boundaries, the restricted byway, and the haul road. (3) The three existing individual field trees to be retained adjacent to Sacombe Road. (4) The one existing field tree to be retained along the restricted byway.

The tree protection measures shall be implemented in accordance with the approved details, and where relevant be removed on completion of the operational works and implementation of the restoration scheme.

27) Prior to the commencement of the development, a detailed advanced planting scheme covering each Phase and any other areas of development shall be submitted to the Mineral Planning Authority for approval in writing. The scheme shall include the location and detailed design/specifications of advanced native hedgerow and tree planting along the site boundaries, the restricted byway, the haul road, and Wadesmill Road. The approved planting scheme shall be carried out in the first available planting season after completion of extraction of each Phase. Any plants which die or are removed shall be replaced within the first five years.

28) No lights or flood lights shall be erected or used on site until their location, orientation and luminosity and hours of use have been submitted to the Mineral Planning Authority for approval in writing. Any lights used on the site shall only be used in accordance with the approved details.

29) Prior to commencement of development, details of any fencing and gates required in connection with this development (other than those submitted under other Conditions of this permission) shall be submitted to the Mineral Planning Authority for approval in writing. All approved fences and gates shall be erected in accordance with the approved details, and thereafter shall be retained until the last Phase has been restored.

30) Soil handling and placement shall take place in accordance with the *Good Practice Guide for Soil Handling* produced by Defra and only when the soils are dry and friable and in dry ground conditions. The soil bunds within the site boundary shall be used for the final restoration. No soils shall be imported to the site for any purpose.

31) Within 12 months of the date of this permission a detailed landscape and ecological restoration scheme covering the working Phases shall be submitted to the Mineral Planning Authority for approval in writing. This shall include details of the location, size, species and density of new native planting, along with the following: (1) Woodland thicket planting. (2) Woodland edge rides and glades. (3) Trees. (4) Hedgerows. (5) Species rich grassland buffer strips. (6) Wildflower planting. (7) Other ecological measures including habitat maintenance for 3-10 years and longer-term conservation maintenance. (8) Arable crop areas.

The scheme shall also include details of the proposed species rich grassland and wildflower seed mix, planting specifications and protection measures for all new planting, along with a programme for the implementation of the proposed planting, and a five year programme of management of planting, maintenance and replanting of any trees or shrubs which die, become diseased or are damaged.

The haul road shall be removed and a scheme for the restoration of that land shall also be submitted to the Mineral Planning Authority for written approval within 12 months of the date of this permission and the scheme shall be implemented as approved.

The approved landscape and ecological restoration scheme shall be implemented for each working Phase in accordance with the approved phased restoration programme, and in the first available planting season on completion of mineral extraction.

32) A scheme of agricultural aftercare shall be submitted for the written approval of the Mineral Planning Authority at least 12 months prior to the anticipated completion date for each Phase identified in Condition 3. The approved scheme shall specify the steps required to achieve and maintain a good quality standard of land for agricultural use and shall include the following matters: (1) Remedial treatments. (2) Weed control. (3) Provision for site meetings on at least an annual basis with officers of the Mineral Planning Authority and any relevant consultee in order to assess the progress to date, any remedial action required, and the management of the restored areas for the following year. The approved scheme shall be carried out during the period of five years following the first cultivation of each Phase of the restoration.

33) No operational activity shall take place on the site outside of the following hours: 07:00 – 18:00 hours Mondays to Fridays; and 07:00 – 13:00 hours Saturdays. There shall be no working on Sundays or Bank Holidays.

34) A Dust Management Plan (DMP) shall be submitted prior to the commencement of development. The DMP shall: (1) Follow the recommendations in Appendix 6 of the Institute of IAQM *Guidance on the Assessment of Mineral Dust Impacts for Planning* (2016). (2) Set out and require compliance with the good practice mitigation measures set out in Tables 4 and 5 of the IAQM *Guidance* for both site design and planning and operational control. (3) Be reviewed every six months and updated accordingly in light of good practice and developing evidence. (4) Provide mitigation measures for exceedance of PM_{10} 24 hour mean average and implement these mitigation measures in the event of an exceedance. In the event of daily exceedance of limit values for PM_{10}, and that these are attributable to activity at the site, and the mitigation measures are not having the effect of removing the exceedance, site operations shall cease until acceptable conditions are restored. In the event of annual $PM_{2.5}$ limit values being exceeded, and these being attributable to activity at the site, the Mineral Operator shall be required to review mitigation measures in line with current best practice and evidence and implement them accordingly. The approved DMP shall be carried out in full until the last Phase has been restored.

35) *HCC and appellants' suggested Condition 35*

Prior to the commencement of development details of a scheme for the monitoring of air quality shall be submitted to the Mineral Planning Authority for approval in writing. The scheme shall provide that monitoring commences at least three months prior to commencement of the development to allow as much of a baseline as possible to be developed. The Mineral Operator shall be responsible for equipment maintenance and securing monitoring equipment to avoid tampering and/or wilful destruction. Monitoring shall be continuous until the last Phase has been restored and data shall be made available online. The details of how the data will be made publicly available in an accessible

format (spreadsheet or similar) shall be approved in writing by the Mineral Planning Authority. The data for PM_{10} shall be provided with averaging periods and including EU PM_{10} limit values of 50 µg/m^3 in a 24 hour period. The data for $PM_{2.5}$ shall be provided with averaging periods and including EU $PM_{2.5}$ annual limit values of 25 µg/m^3. One monitor shall be appropriately located on the southern point boundary closest to sensitive receptors and the position shall be indicated on a plan approved in writing by the Mineral Planning Authority. Monitoring shall take place before commencement of development as provided above and the approved air quality monitoring scheme, including measures for publicity, shall be implemented until the last Phase has been restored.

SBQ's suggested Condition 35

(1) The proposed development shall not take place until a scheme for the design and operation of a monitoring network of instruments capable of measuring concentrations of airborne particulate matter (PM) has been submitted to and approved in writing by the Mineral Planning Authority. (2) This network shall be funded by the Mineral Operator and implemented by a third party contractor, selected and approved in writing by the Mineral Planning Authority. This third party contractor shall be responsible for the maintenance and calibration of the monitoring network and shall rectify any faults or instrument breakdowns immediately. (3) The network shall be in place and fully operational for the entire period of quarrying operations, or until from an earlier date approved in writing by the Mineral Planning Authority. (4) The network shall consist of a minimum of three sites around the quarry where public exposure might occur, at locations to be approved in writing by the Mineral Planning Authority. (5) The monitoring instruments shall be capable of measuring, as a minimum, concentrations of PM_{10} and shall record these concentrations continuously, so that a record is made of these concentrations at all times and such that the results can be expressed as 15 minute or hourly average concentrations. The instruments shall be certified according to the Environment Agency's MCERTS scheme. Continuous measurements shall also be made of wind speed and direction. (6) The monitoring network shall be designed and operated so that measurements are available in 'real time' through the use of software and telecommunications, or, as a minimum, made available with a time lag of no more than one week. (7) In the event that an hourly average concentration of PM_{10} exceeds 100 µg/m^3, the Mineral Operator shall investigate the circumstances prevailing at the time of this event, including the wind direction and the readings from all three instruments. (8) Should the frequency of events where the hourly averaged concentration of PM_{10} exceeds 100 µg/m^3 (and the wind direction is consistent with the quarry being the cause of this elevated concentration) be greater than six events in six months, then the quarrying operations shall cease until improved mitigation measures are implemented, having been submitted in writing to and approved in writing by the Mineral Planning Authority. The approved air quality

monitoring scheme, including measures for publicity, shall be implemented until the last Phase has been restored.

Inspector's note – SBQ's suggestions should be preferred

36) Prior to commencement of the development the Mineral Operator shall contact the Mineral Planning Authority to set up a Community Liaison Group which will run until the last Phase has been restored. The Community Liaison Group's purpose is to communicate matters regarding quarrying activities to the public and to establish a community complaints procedure that would be advertised widely with clear timescales within which response and resolution methods would be understood. The display of emissions on a website would be discussed at the meetings.

37) In terms of operational mechanical equipment, the screener and loading shovel shall never be operated within 250 m of any residential premises.

38) [not used]

39) All plant on site shall be maintained with particular attention given to any defect that generates any tonal or impulsive noise emissions.

40) Non-tonal reversing signals, which are background noise tracking, shall be installed on all mobile plant.

41) (a) Noise monitoring shall take place at three monthly intervals for the first 12 months of excavation operations at the following assessment locations; Sacombe Road, The Orchard / The Wick, Glenholm and Waterworks Cottage. The precise siting of monitoring equipment at these locations shall be approved in advance by the Mineral Planning Authority in writing. A minimum of two 15-minute noise measurements shall be taken at these locations during periods when the site is fully operational and the screener and loading shovel are being used, and when Rickneys Quarry is operating normally if both sites are operational. A Class 1 or 2 sound level meter and calibrator shall be used to carry out the monitoring. After the first 12 months the Mineral Planning Authority may decide to alter the frequency of testing and the Mineral Operator shall be informed in writing of the new frequency.

(b) The results of the monitoring exercise shall be compared to the following operating limits: Sacombe Road 48 dB $L_{Aeq,\ 1\ hour}$; The Orchard / The Wick 48 dB $L_{Aeq,\ 1\ hour}$; Glenholm 53 dB $L_{Aeq,\ 1\ hour}$; Waterworks Cottage 55 dB $L_{Aeq,\ 1\ hour}$. The results of the noise monitoring must be submitted to the Mineral Planning Authority within two weeks of the measurements being taken. If the above limits are exceeded, then immediate action must be taken to reduce noise levels to below the permitted limits.

(c) Additional noise monitoring shall take place during the construction of the proposed perimeter bunding when at its closest to residential properties on Sacombe Road and The Orchard / The Wick to ensure that a temporary working limit of 70 dB $L_{Aeq,\ 1\ hour}$ is not exceeded. Affected residents should be notified in writing by the Mineral Operator about the location and duration of these operations.

(d) If, following a complaint, the Mineral Planning Authority decides that further noise monitoring is required, written notice shall be given to the Mineral Operator specifying the required monitoring. The further monitoring shall be undertaken by the Mineral Operator and the results submitted in writing to the Mineral Planning Authority within four weeks of the request.

42) *HCC and appellants' suggested Condition 42*

The development hereby permitted shall not be commenced until a methodology for retaining; (1) 5 m of in-situ mineral or equivalent protection over the chalk surface within 300 m of the Wadesmill Road Pumping Station, (2) 3 m of in-situ mineral or equivalent protection over the chalk surface within 500 m of the Wadesmill Road Pumping Station, (3) 1 m of in-situ mineral or equivalent material over the chalk surface on the rest of the site, has been submitted to and approved in writing by the Mineral Planning Authority. The methodology shall specify how notification of any breach of the above requirements would be detected and notified to the Mineral Planning Authority. The site shall be worked in accordance with the approved methodology.

SBQ's suggested Condition 42

(a) The development hereby permitted shall not be commenced until such time as geophysical mapping of the Chalk has been undertaken, using both seismic refraction and resistivity tomography or other appropriate techniques approved in writing by the Mineral Planning Authority that will provide sufficient information on the fractures, fissures and karst features such as swallow holes and on the main inflow paths to the boreholes which supply the Wadesmill Road pumping station. (1) A Hydrogeological Impact Assessment (HydroIA) is to be carried out to assess the results of the geophysical mapping and to expressly consider whether or not, on the basis of those results, the geology of the site precludes safe minerals extraction, and whether, if the geology of the site can be shown not to preclude safe minerals extraction, a further scheme of mitigation measures is required to address potential contamination from operations on the site. (2) For the purposes of (a), safe minerals extraction refers to development which has no negative quantitative and/or qualitative impact on groundwater resources. (3) The HydroIA is to be submitted in writing to the Mineral Planning Authority, together with any proposed scheme of further mitigation measures, to be approved in writing by the Mineral Planning Authority. The approved scheme shall be implemented in full.

(b) Mineral extraction shall not take place below a residual layer of sand and gravel which is to be not less than 5 m above the surface of the Chalk as defined by the geophysical mapping in (a).

(c) Prior to the commencement of the development, plans shall be provided to the Mineral Planning Authority showing the contours of the surface of the Chalk underlying the sand and gravel (in metres Above Ordnance Datum (mAOD), as mapped under (a), and the contours of the upper surface of the in-situ layer of sand and gravel (in mAOD) that

is to be retained in the base of the quarry excavation. The plans will show that 5 m of in-situ sand and gravel is retained in the base of the excavation. Where the in-situ layer of sand is naturally less than 5 m in thickness no quarrying shall take place although the thickness shall be increased to 5 m by placing materials derived from within the planning application site only over this part of the site.

(d) Prior to the start of restoration infilling in each Phase, a survey shall be provided to the Mineral Planning Authority confirming that the contours of the sand and gravel (in mAOD) retained at the base of the quarry excavation is the same as the pre-commencement plan for that Phase provided under (c).

(e) The development hereby permitted shall not be commenced until such time as a scheme to dispose of foul and surface water has been submitted to and approved in writing by the Mineral Planning Authority. The scheme shall be implemented in full as approved. (1) Provision shall be made for the collection, treatment and disposal of all water entering or arising on the site to ensure that there shall be no discharge of contaminated or polluted drainage to groundwaters or surface waters. This condition shall also apply to the runoff from the hard standing and bunded areas where hydrocarbon materials are stored and refuelling takes place. (2) All foul drainage shall be discharged to a sealed tank and the contents of the tank shall be removed from the site completely.

(f) There shall be no discharge of foul or contaminated drainage from the site into either groundwater or surface water, whether direct or via soakaways. This condition shall also apply to the runoff from the hard standing and bunded areas where hydrocarbon materials are stored and refuelling takes place.

(g) Fuels shall only be stored within the bunded fuel store in the location shown in principle on Drawing No.1217/SP/1. For the avoidance of doubt any facilities for the storage of oils, fuels or chemicals shall be sited on impervious bases and surrounded by impervious bund walls. The size of the bunded compound shall be at least equivalent to the capacity of the tank plus 10% or, if there is more than one container within the system, of not less than 110% of the largest container's storage capacity or 25% of their aggregate storage capacity, whichever is the greater. All filling points, vents, and sight glasses must be located within the bund. There must be no drain through the bund floor or walls.

(h) Repair, maintenance and fuelling of plant and machinery shall only take place on an impervious surface drained to a sealed interceptor and the contents of the interceptor shall be removed from the site.

(i) No Controlled Waste, as defined by *The Controlled Waste Regulations 2012*, or Extractive Waste, as defined by *The Environmental Permitting Regulations 2016 (as amended)* shall be imported to the site for reuse, processing, recover, or disposal.

(j) Prior to the start of quarrying in each phase, an HydroIA is to be carried out expressly considering whether a further scheme of mitigation measures is necessary to address operational changes arising since the grant of planning permission. The HydroIA, and any further mitigation scheme, is to be provided in writing to and approved in writing by the Mineral Planning Authority. The proposed scheme shall be implemented in full as approved.

(k) The development hereby permitted shall not be commenced until such time as a scheme for the storage and transport of potential contaminants and for the mitigation measures to be implemented in the event of any spillage of the same has been submitted to and approved in writing by the Mineral Planning Authority. The approved scheme shall be implemented in full as approved. (1) In addition to the mitigation measures identified in these conditions, the scheme is to include as a minimum the mitigation measures identified in the Hafren Water *Hydrogeological Impact Assessment in support of gravel extraction at Ware Park, Hertford, Hertfordshire* July 2014, the *Addendum to Hydrogeological Impact Assessment Ware Park, Hertford* July 2017, and the Proof of Evidence of Christopher Leake April 2018. (2) The scheme shall also include the following mitigation measure: in the event of any spillage of a potential contaminant anywhere on the site of the development hereby permitted, the affected sand and gravel shall immediately be extracted by authorised persons and removed for secure disposal off-site. This condition shall also apply to spillages that may occur during the delivery of fuel, oils and other hydrocarbons to the site or during the emptying of the storage tank or tanks of contaminated water.

(l) Should any spillage of potential pollutants in excess of 50 litres occur at the site all works at the development hereby permitted are to cease immediately and shall not resume until a scheme of mitigation and/or any remedial works required are submitted in writing to and approved in writing by the Mineral Planning Authority. The proposed scheme shall be implemented in full as approved.

(m) The development hereby permitted shall not be commenced until such time as a scheme for the following in each of the phases of the development (including an implementation timetable), has been submitted in writing to and approved in writing by the Mineral Planning Authority. The proposed scheme shall be implemented in full as approved. (1) A long-term groundwater monitoring scheme (including a maintenance plan for the groundwater boreholes) in respect of contamination and turbidity, and any potential sources of the same, including a timetable of monitoring and submission of reports to the Mineral Planning Authority. (2) The scheme shall include identification of trigger levels for monitoring sites where contingency measures would be required should those trigger levels be reached. The scheme shall also include identification of the contingency measures needed should the trigger levels be reached. (3) No development shall take place until any water monitoring devices relied upon by the approved scheme are

provided in their entirety and are operational. (4) Groundwater monitoring reports as specified in the approved scheme shall be submitted no less than annually. (5) Should results of the groundwater monitoring scheme prove a negative impact on any groundwater or surface water sources, all works at the development hereby permitted are to cease immediately and should not resume until mitigation and/or any remedial works required are submitted in writing to and approved in writing by the Mineral Planning Authority and are implemented in full as approved.

(n) The Mineral Planning Authority shall be advised in writing of any changes to the operational plan of the site which have the potential to affect groundwater quality or quantity. (1) Following the proposal of such a change, an HydroIA is to be carried out, expressly considering whether a further scheme of mitigation measures is necessary to address the change. (2) The HydroIA, and any further mitigation scheme, is to be provided in writing to and approved in writing by the Mineral Planning Authority. The proposed scheme shall be implemented in full.

(o) The development hereby permitted may not commence until such time as a scheme for managing any borehole installed for the investigation (including monitoring) of soils, groundwater or geotechnical purposes has been submitted to and approved in writing by the Mineral Planning Authority. (1) The scheme shall be supported by detailed calculations and include a programme for future maintenance, schedule for repairs and a contingency action plan. (2) The scheme shall be fully implemented and subsequently maintained, in accordance with the timing/phasing arrangements embodied within the scheme, or any details as may subsequently be approved in writing by the Mineral Planning Authority. (3) The scheme shall provide details of how redundant boreholes are to be decommissioned and how any boreholes which need to be retained, post-development, for monitoring purposes will be secured, protected and inspected. The scheme shall include the provision that all redundant boreholes are to be backfilled with a bentonite-cement grout that is mixed using 1 kg of bentonite per 25 kg bag of ordinary Portland cement with the bentonite added after the cement has been mixed with water. The volume of water should be limited to 15.5 litres per bag of cement. (4) The development hereby permitted may not commence until such time as a scheme for the repair of borehole OBH 1A has been submitted to and approved in writing by the Mineral Planning Authority.

(p) If, during development, contamination not previously identified is found to be present at the site then no further development shall be carried out until the developer has submitted in writing a remediation strategy to the Mineral Planning Authority detailing how this unsuspected contamination shall be dealt with and obtained written approval from the Mineral Planning Authority. The remediation strategy shall be implemented in full as approved.

(q) Upon completion of the proposed development, a final report demonstrating that any unacceptable impacts to the aquifer have been mitigated, and documenting the decision to cease monitoring, shall be submitted in writing to and approved in writing by the Mineral Planning Authority.

Inspector's note – Neither of the above conditions is recommended. If the Secretary of State is minded to allow the appeal and to grant planning permission then it would be necessary to go back to the parties to devise the terms of a planning condition that would achieve the required safeguarding of the aquifer by means of planning conditions that passed the relevant tests.

43) A restricted working zone shall be created within 70 m of properties at The Orchard within which operations shall not take place when the wind direction is from the north-eastern quadrant.

DOCUMENTS SUBMITTED AT THE INQUIRY (ID)

ID1	Joint noise statement by Les Jephson and Stephen Marshall
ID2	Rebuttal by Mark Flatman
ID3	Opening statement on behalf of the appellants
ID4	Opening comments for Hertfordshire County Council
ID5	Opening submissions on behalf of Stop Bengeo Quarry
ID6	Opening summary by Cllr Stevenson
ID7	Rebuttal by Stephen Marshall
ID8	Rebuttal by Julie Greaves
ID9	Letter dated 30 April 2018 from Mark Prisk FRICS MP
ID10	Note on EHDC involvement regarding the appeal site submitted by Cllr Stevenson
ID11	Agreed Statement of Common Ground between HCC and DK Symes: Position on Existing and Future Supply of Sand and Gravel dated 24 April 2018 [requested by Inspector]
ID12	Email dated 26 April 2018 from Les Jephson to Stephen Marshall concerning monitoring Volvo EC380 excavator Volvo L350 loading shovel and CAT 730C ADT
ID13.1	Email dated 20 March 2018 from HCC to Hanson concerning Rickneys Quarry
ID13.2	Emails between HCC and Hanson dated 20 March 2018 and 23 August 2018 concerning Rickneys Quarry
ID14	Stanstead and Luton Airports Weather data 17,18,19 and 21 October 2013
ID15	Extracts from BS4142 [requested by Inspector]
ID16.1	Minutes Development Control Committee 29 May 2007 re Rickneys Quarry extension
ID16.2	Decision Notice 23 December 2009 re Rickneys Quarry extension
ID16.3	Minutes Development Control Committee 27 February 2014 re Rickneys Quarry extension
ID17	Minutes Development Control Committee 22 March 2017 re appeal scheme
ID18	Minutes Development Control Committee 25 January 2017 re former Hatfield aerodrome (BAE site)
ID19	[number not used]
ID20	Statement of Common Ground – Health dated 3 May 2018
ID21	HCC note re progress towards issuing planning permission for; Land at Furze Field (Hatfield Quarry) and Land at former Hatfield Aerodrome
ID22.1	Bund Schedule 1.25 Mt scheme [requested by Inspector]
ID22.2	Bund Schedule 1.75 Mt scheme [requested by Inspector]
ID23	*East Herts Green Belt Review*, Peter Brett Associates 2015
ID24	*The Battle for Breath – the impact of lung disease in the UK* British Lung Foundation
ID25	Application Site Layout plan for Hatfield Aerodrome site
ID26	Differences between 1.75 Mt and 1.25 Mt schemes [requested by Inspector]
ID27.1	HCC suggested planning conditions for 1.75 Mt scheme

ID27.2	HCC suggested planning conditions for 1.25 Mt scheme
ID28.1	Consultation responses from County Landscape Officer dated 27 February 2017
ID28.2	Consultation responses from County Landscape Officer dated 21 June 2016
ID29	Cross sections [requested by Inspector]
ID30.1	Schedule of relevant plans and documents 1.75 Mt scheme
ID30.2	Schedule of relevant plans and documents 1.25 Mt scheme
ID31.1	Drawing 1217/1.75/UM/1 Isopachytes 1.75 Mt scheme (undisturbed material above chalk)
ID31.2	Drawing 1217/1.25/UM/1 Isopachytes 1.25 Mt scheme (undisturbed material above chalk)
ID31.3	Drawing 1217/1.75 and 1.25/EM/1 Isopachytes (existing ground level above chalk) [requested by Inspector]
ID32	Statement and attachments by Dr Bryan Lovell
ID33	Statement by John Wiggett
ID34.1	Statement by John Howson
ID34.2	Response to Framework on behalf of Bengeo Neighbourhood Plan dated 8 October 2018
ID35	Statement by Aska Pickering
ID36	Statement by Anu Palmer
ID37	Statement by Libby Mountford
ID38	Statement by Alan Burgess
ID39	Statement by Peter Norman
ID40	Statement by Dr Mike Howarth
ID41	Statement by John Barnes
ID42	Statement by Alexandra Daar
ID43	Statement by Mark Lynch
ID44	Statement by Dr David Adam
ID45	Statement by Julie Starkiss
ID46	Statement by Cllr Cousins
ID47	Statement by Terry Mansfield
ID48	Statement by Lee Nicholson
ID49	HERT4 Sterilisation Note
ID50.1	Weather History February and March 2018
ID50.2	Plant noise monitored by L Jephson
ID51	Plan No.1217/R/1 Restored Landform (for 2.6 Mt scheme)
ID52	Beaufort Scale for Land Areas
ID53.1	Draft conditions produced by SBQ
ID53.2	Draft conditions v2 produced by SBQ
ID53.3	SBQ comments on conditions suggested by HCC
ID54	Correspondence concerning photograph of Rickneys Quarry
ID55	Bundle of documents submitted by Cllr Stevenson
ID56	Dimensions of Volvo L350
ID57.1	Draft unilateral undertaking
ID57.2	Revised draft unilateral undertaking
ID58	Statement by Ben Penrose
ID59	Attachment to Statement by Veronica Fraser
ID60	Statement by Cllr Margaret Eames-Petersen
ID61	Statement by Andrew Smith
ID62	Statement by Cllr Mari Stevenson

ID63	Statement by Steve Halsey
ID64	Statement by Laura Wyer
ID65	Statement by Simon Pickering
ID66	Statement by Nadine Cleland
ID67	Statement by Russell Norris
ID68	Statement by Heston Attwell
ID69	Statement by Amber Waight
ID70	Statement by Dr Laura Horsfall
ID71.1	Note concerning Bengeo Neighbourhood Plan and EHDC committee report dated 27 June 2017 [requested by Inspector]
ID71.2	Planning trajectory for HERT4 submitted by Cllr Stevenson
ID71.3	Assets of Community Value Register
ID72	HCC bundle of emails relating to Chronology
ID73	Note from appellants concerning procedure at the Inquiry
ID74	Statement and photographs by Nigel Braggins
ID75	Note re consideration of amended scheme by SBQ
ID76	Note re consideration of amended scheme by HCC
ID77	Note re consideration of amended scheme by appellants
ID78	Note re planning status of Rickneys Quarry with Site Context Plan [requested by Inspector]
ID79	Plan showing photo location numbers and LVIA viewpoints [requested by Inspector]
ID80	Chronology
ID81	HCC RoW Good Practice Guide
ID82.1	Draft conditions by appellants
ID82.2	Summary of Generic Conditions based on appellants numbers
ID82.3	Draft conditions by appellants for 1.75 Mt scheme
ID82.4	Draft conditions by appellants for 1.25 Mt scheme
ID82.5	Comment on Conditions by SBQ and appellants
ID82.6	Comment on Generic Conditions by appellants
ID83.1	Draft section 25 agreement including Plan 1 and Plan2
ID83.2	Draft obligation by way of unilateral undertaking
ID84	Bundle of emails to councillors from local residents
ID85	Extract from local newspaper concerning brewery
ID86	Note and photo concerning Pynes Field Quarry
ID87	Emails concerning mud on road at HS2 site/Pynes Field Quarry
ID88	Appellants' response to ID75 and ID76
ID89	Statement by Robert Chandler including Hertfordshire Road Casualty Facts 2017
ID90	Statement by Thalia Weston
ID91	Amended Statements of Case re HIA
91.1	Cllr Stevenson dated 25 July 2018
91.2	Stop Bengeo Quarry dated 23 July 2018
91.3	Hertfordshire County Council dated 24 July 2018
91.4	Appellants dated 20 July 2018
ID92	Agreed position concerning BMV agricultural land email dated 12 June 2018

ID93	Written representations about HIA submitted during adjournment (in blue folder with list of those who submitted comments at Annex B of this report)
ID94	Statement of Common Ground by HCC and appellants dated 3 October 2018
ID95.1	Plan and schedule of distances to properties/features for 1.75 Mt scheme by HCC and appellants [requested by Inspector]
ID95.2	Plan and schedule of distances to properties/features for 1.25 Mt scheme by HCC and appellants [requested by Inspector]
ID96	Update on Bengeo Neighbourhood Area Plan (BNAP) by Cllr Stevenson dated 3 October 2018
ID97	Updated suggested planning conditions indicating matters agreed and those remaining in dispute between HCC and appellants – including revisions submitted on 5 and 8 November 2018
ID98.1	Comments on updated conditions on behalf of SBQ with 12 November 2018 update
ID98.2	Suggested water management conditions by SBQ with 12 November 2018 update
ID99	Extract from East Herts District Plan adopted 23 October 2018 Policy HERT4
ID100	Decision Notice Furze Field dated 19 October 2018
ID101	Hertfordshire Minerals Local Plan – Comparative Evaluation of Sites Final Site Summary AFS 11
ID102	Correspondence between Hanson UK and Ingrebourne Valley Limited dated 14 July 2015 13 July 2016 15 August 2017 and 29 August 2017
ID103	Letter to HCC from Affinity Water dated 2 November 2017
ID104	Hertfordshire's Local Transport Plan May 2018
ID105	Note by Cllr Stevenson – Summary of health impact 24 October 2018
ID106	Extract draft BNAP Natural Environment and Green Spaces
ID107	Bengeo Neighbourhood Area Plan chronology
ID108	Closing submissions on behalf of SBQ
ID109	Closing submissions by Cllr Stevenson
ID110	Closing speech on behalf of HCC
ID111	Closing submissions on behalf of the appellants
ID112.1	Email from Cllr Stevenson regarding AM peak time condition for HGV movements dated 6 November 2018
ID112.2	Response by appellants dated 9 November 2018
ID113	HCC comments dated 15 November 2018 on SBQ updated note about conditions
ID114	Section 106 deed of agreement dated 15 November 2018

CORE DOCUMENTS

CD1	CD1 – Doc 1 Proposed Strategy (Dec 2012)
CD2	CD2 – Doc 1 Planning Application 1 – 2.6 Million tonnes (Mar 2016) CD2 – Doc 2 Volume 1 CD2 – Doc 3 Volume 2 CD2 – Doc 4 NTS
CD3	Further Information 1 (Dec 2016)
CD4	Further Information 1a (Jan 2017)
CD5	Committee Report (Revised) (Mar 2017)
CD6	Refusal Notice (Mar 2017)
CD7	CD7 – Doc 1 Statement of Case 1 – Appellant CD7 – Doc 2 Statement of Case 2 – Appellant
CD8	Statement of Case – Herts CC
CD9 CD9a	Rule 6 – Bengeo Statement of Case (excluding Academic Papers) Rule 6 – Bengeo Statement of Case Academic Papers (on cd only)
CD10	Rule 6 – Stevenson Statement of Case
CD11	Professor Rick Brassington – PoE and Supplementary etc.
CD12 CD12a	Mark Prisk MP – Correspondence Rt Hon Sir Oliver Heald QC MP - Correspondence
CD13	EA Correspondence – Doc 1, Doc 2, Doc 3, Doc 4, Doc 5, Doc 6
CD14	Herts CC Director of Public Health letter (Mar 2017)
CD15	CD15 – Doc 1 Planning Application 2 – 1.25 Million tonnes (Sept 2017) Volume 1 CD15 – Doc 2a Volume 2 - (First ring binder) 1. Landscape and Visual 2. Ecology 3. Hydrogeology 4. Flood Risk CD15 – Doc 2b Volume 2 – (Second ring binder) 5. Transport 6. Archaeology 7. Noise 8. Air Quality CD15 – Doc 3 NTS
CD16	Further Information 2 and Updated NTS Addendum 1 (Feb 2018) CD16 – Doc 1 Further Information 2 CD16 – Doc 2 Updated NTS Addendum 1
CD17	Consultee Replies (1.25 Mt scheme)

CD18 CD18a	Committee Report - (April 2018) Committee Report Plan
CD19	CD19 – Doc 1 Decision - Refusal Notice April 2018 [1.25 Mt scheme] CD19 – Doc 2 Addendum Report to DCC April 2018
CD20	Minerals Local Plan Review 2002 – 2016 – Adopted March 2007
CD21	Herts CC Cabinet Panel – Item 7 Sites to be identified in the Draft MLP (Sept 2017)
CD22	Minerals Local Plan Consultation draft - December 2017
CD23	~~East Herts Local Plan Second Review - Adopted April 2007~~ *No longer a Core Document*
CD24	East Herts District Plan – Pre-Submission Consultation (Nov 2016) (Extract of Chapters 4 & 7)
CD25	East Herts District Plan Main Mods Consultation Feb 15 – March 29 2018
CD26	Guidance for Landscape and Visual Impact Assessment Third Edition
CD27	East of England Landscape Framework
CD28	Extract of the MLPCS003 Site Selection Report - Ware Park (Nov 2017)
CD29	Extracts of the 111: Northern Thames Basin Landscape Character Assessments
CD30	East Herts District LCA
CD31	Inspectors Report for Herts CC MLP Review 2005 *(*Extract of Inspectors Report for Preferred Area 2)
CD32	Noise Metres Calibration Certificates and LAB 23
CD33	BS5228 Code of Practice for noise & vibration control on construction & open sites
CD34	Control of Dust & Emissions During Construction & Demolition - SPG Mayor of London
CD35.1	Guidance on the Assessment of Mineral Dust Impacts for Planning - IAQM
CD35.2	Land-Use Planning & Development Control: Planning for Air Quality - IAQM
CD36	The Environment Agency's Approach to Groundwater Protection
CD37	~~Landscape Partnership Report Suitability of Landscape Character Areas for Mineral Extraction 2001~~ *No longer a Core Document*
CD38	East Herts Landscape Character Assessment – SPD Adopted Sept 2007
CD39	Pre Inquiry Note dated 20.4.18
CD40	Response to Request for Further Information - from PINS dated 03 April 2018
CD41	Plan showing residential development in locality
CD42	Agricultural Land Classification May 1997

JUDGMENTS

Bernard Wheatcroft Ltd v SoSE (1982) 43 P.&C.R. 233
Blewett v Derbyshire CC [2003] EWHC 2775 (Admin)
DLA Delivery Ltd and Baroness Cumberlege of Newick [2018] EWCA Cv 1305
Europa Oil and Gas Ltd v SSCLG [2013] EWHC 2643 (Admin)
Europa Oil and Gas Ltd v SSCLG [2014] EWCA Civ 825
Gladman Developments Ltd v SoS CLG [2017] EWHC 2768 (Admin)
Holborn Studios Ltd and LB Hackney [2017] EWHC 2823 (Admin)
J v North Warwickshire BC [2001] EWCA CIV 315
Linda Davies v SoSCLG [2008] EWHC 2223 (Admin)
Mount Cook Ltd v Westminster CC [2003] EWCA Civ 1346
R (On the application of Jones) v Mansfield DC [2003] EWCA Civ 1408
Samuel Smith Old Brewery and North Yorkshire CC [2018] EWCA Civ 489
Shadwell Estates Ltd and Breckland District Council [2013] EWHC 12 (Admin)

APPEAL DECISION

Land adjacent to Bramleymoor Lane Appeal Ref:APP/U1050/W/17/3190838 dated 16 August 2018

Department for
Communities and
Local Government

RIGHT TO CHALLENGE THE DECISION IN THE HIGH COURT

These notes are provided for guidance only and apply only to challenges under the legislation specified. If you require further advice on making any High Court challenge, or making an application for Judicial Review, you should consult a solicitor or other advisor or contact the Crown Office at the Royal Courts of Justice, Queens Bench Division, Strand, London, WC2 2LL (0207 947 6000).

The attached decision is final unless it is successfully challenged in the Courts. The Secretary of State cannot amend or interpret the decision. It may be redetermined by the Secretary of State only if the decision is quashed by the Courts. However, if it is redetermined, it does not necessarily follow that the original decision will be reversed.

SECTION 1: PLANNING APPEALS AND CALLED-IN PLANNING APPLICATIONS

The decision may be challenged by making an application for permission to the High Court under section 288 of the Town and Country Planning Act 1990 (the TCP Act).

Challenges under Section 288 of the TCP Act

With the permission of the High Court under section 288 of the TCP Act, decisions on called-in applications under section 77 of the TCP Act (planning), appeals under section 78 (planning) may be challenged. Any person aggrieved by the decision may question the validity of the decision on the grounds that it is not within the powers of the Act or that any of the relevant requirements have not been complied with in relation to the decision. An application for leave under this section must be made within six weeks from the day after the date of the decision.

SECTION 2: ENFORCEMENT APPEALS

Challenges under Section 289 of the TCP Act

Decisions on recovered enforcement appeals under all grounds can be challenged under section 289 of the TCP Act. To challenge the enforcement decision, permission must first be obtained from the Court. If the Court does not consider that there is an arguable case, it may refuse permission. Application for leave to make a challenge must be received by the Administrative Court within 28 days of the decision, unless the Court extends this period.

SECTION 3: AWARDS OF COSTS

A challenge to the decision on an application for an award of costs which is connected with a decision under section 77 or 78 of the TCP Act can be made under section 288 of the TCP Act if permission of the High Court is granted.

SECTION 4: INSPECTION OF DOCUMENTS

Where an inquiry or hearing has been held any person who is entitled to be notified of the decision has a statutory right to view the documents, photographs and plans listed in the appendix to the Inspector's report of the inquiry or hearing within 6 weeks of the day after the date of the decision. If you are such a person and you wish to view the documents you should get in touch with the office at the address from which the decision was issued, as shown on the letterhead on the decision letter, quoting the reference number and stating the day and time you wish to visit. At least 3 days notice should be given, if possible.