



9. Planning Statement Addendum

Land adjacent to
Dinnington Road, Woodsetts



Construction of a well site and creation of a new access track, mobilisation of drilling, ancillary equipment and contractor welfare facilities to drill and pressure transient test a vertical hydrocarbon exploratory core well and mobilisation of workover rig, listening well operations, and retention of the site and wellhead assembly gear for a temporary period of 5 years on land adjacent to Dinnington Road, Woodsetts, Rotherham.

June 2018



Planning Application Addendum

Construction of a well site and creation of a new access track, mobilisation of drilling, ancillary equipment and contractor welfare facilities to drill and pressure transient test a vertical hydrocarbon exploratory core well and mobilisation of workover rig, listening well operations, and retention of the site and wellhead assembly gear for a temporary period of 5 years on land adjacent to Dinnington Road, Woodsetts, Rotherham.

PEDL304

June 2018

Turley

Contents

1.	Introduction	1
2.	Documents submitted during the application process	5
3.	New information to address Reasons for Refusal	8
4.	Overview and Conclusions	9
Appendix 1: Officers Report to Board		10
Appendix 2: Minutes of Board meeting		11
Appendix 3: Decision Notice		12
Appendix 4: Appeal Decision		13
Appendix 5: Letter to Highways England 21 December 2017		14
Appendix 6: Letter to RMBC Highways 21 December 2017		15
Appendix 7: Letter to RMBC Planning 21 December 2017		16
Appendix 8: Email response on Drainage matters 3 January 2018		17
Appendix 9: Letter to RMBC Planning 15 January 2018		18
Appendix 10: Swept Path analysis M1, J31, 16 January 2018		19
Appendix 11: Letter to RMBC Planning 23 January 2017		20
Appendix 12: Archaeological Evaluation Report January 2018		21
Appendix 13: Letter to RMBC Planning 8 February 2018		22
Appendix 14: Breeding Bird Survey		23
Appendix 15: Public Consultation Materials		24

Contact

Matthew Sheppard
matthew.sheppard@turley.co.uk

13 Jun 2018

1. Introduction

- 1.1 This report has been prepared to accompany a resubmitted planning application for a vertical well and associated testing for the purpose of geological exploration. The application was originally submitted on 25 October 2017 and sought permission for

Construction of a well site and creation of a new access track, mobilisation of drilling, ancillary equipment and contractor welfare facilities to drill and pressure transient test a vertical hydrocarbon exploratory core well and mobilisation of workover rig, listening well operations, and retention of the site and wellhead assembly gear for a temporary period of 5 years on land adjacent to Dinnington Road, Woodsetts, Rotherham.

- 1.2 The application was reported to the 8 March 2018 Planning Board meeting with an officer recommendation of refusal on the following ground:

The Council considers that the supporting ecological information provided with the application is deficient to determine the application. The application red-edge site area lies approximately 25m from Dewidales Ancient Woodlands (eastern block) and there is significant built development less than 50m of the woodland boundary. The applicant has submitted insufficient evidence to justify this limited buffer protection area. The Council further notes that due to the lack of an adequate bat, badger and breeding bird survey, it cannot fully assess the potential future adverse impact on the adjacent wildlife and local ecology. Accordingly the applicant has not sufficiently demonstrated that the development can satisfactorily mitigate the potential for harm to the ecology of the surrounding rural environment, contrary to paragraph 118 of the National Planning Policy Framework which indicates that if significant harm resulting from a development cannot be avoided then planning permission should be refused.

- 1.3 Members resolved to add a further reason for refusal relating to highway safety and conflicts with other road users, and delegated the detailed wording of that reason to officers. The decision was issued on 9 March 2018 with the additional reason for refusal worded as follows:

The Council consider that the proposed development, which will significantly increase the number of HGV movements through the village of Woodsetts, the surrounding highways and at the junction with the proposed access on Dinnington Road, would give rise to unacceptable highways safety issues, including increased likelihood of conflict with vulnerable road users such as cyclists, equestrians, children and the elderly such that it would be contrary to the National Planning Policy Framework which expects developments to include safe and suitable access for all people.

- 1.4 The Officer's report can be found at Appendix 1 and the Minutes of the Board meeting at Appendix 2. The Decision notice can be found at Appendix 3.

- 1.5 An identical application was submitted on a site off Common Road, near Harthill. Whilst the site is in a different location, the developments are identical and the reasons for refusal put forward at the subsequent appeal were very similar. The Harthill application was the subject of a non-determination appeal. The Council put forward

two reasons for refusal that were later relied on at the Inquiry and then either withdrawn, or attempted to be withdrawn.

- 1.6 The Appeal decision can be found at Appendix 4.

Highways

- 1.7 Immediately prior to the Inquiry, officers recommended removing the highways reason for refusal as the appellant had submitted some clarification on highways information. Members resolved to maintain the reason and subsequently appeared at the Inquiry to defend the reason on their own behalf.

- 1.8 This is relevant to the current application as in both cases there is / was a lack of professionally qualified highways evidence to substantiate the reason for refusal. Indeed, officers for the Woodsetts application confirmed the following at the Planning Board meeting:

The route from the A57 roundabout is capable of satisfactorily accommodating the number and size of vehicles likely to be generated, particularly in view of the infrequency of the movements along this route.

Given the temporary nature of this plan, safe and suitable access to the site can be achieved. The impact in transport terms is unlikely to be severe so we have no objections to the proposal, subject to conditions.¹

- 1.9 This suggests that an Inspector is unlikely to find that there is a severe highways effect and therefore that there is no sustainable highways reason for refusing permission.

- 1.10 The appeal decision for the Harthill site has now been issued by the Planning Inspectorate. The appeal has been allowed and the highways reason for refusal has been over turned.

- 1.11 After noting that officers finally reached a positive recommendation in respect of traffic issues, he notes the grounds which were retained as objections on Members request:

The Council's position is however that the latest information from the appellant does not overcome its concerns in relation to highway safety. Specific concerns include: hedgerow damage; traffic enforcement; forward visibility; cyclists and horse riders; traffic backing up between passing places; and vehicle breakdown. (Para 31)

- 1.12 The Inspector later concluded that:

The Council's technical officers have not raised any objection to the analyses..... The Council's remaining objections to the proposal however include the accuracy of the modelling, but no reasoned evidence has been put forward in support of this position. In view of the lack of any technical objection, I give this element of the Council's objection limited weight. (Para 55)

¹ Taken from a transcript obtained from the webcast of the committee meeting

And

From all of the above points, I am satisfied that there would be no residual, cumulative and severe impacts from the proposal that would make it unacceptable on transport grounds. (Para 64)

I therefore conclude that the proposal would not necessarily have an unacceptable impact on the existing uses of the highways in the surrounding area. I further conclude that it thus would not conflict with the NPPF. (Para 65)

- 1.13 The Inspector has clearly made his decision based on the technical evidence, and has given little weight to the points raised by members, as these were not supported by evidence of any harm. We consider that the same approach would be adopted in respect of the highways reason for refusal proposed by members for the Woodsetts application.
- 1.14 This application has been re-submitted to offer an opportunity to rectify that decision and thus to avoid the potential for a second appeal, and the associated costs claims that may be made in light of the lack of evidence behind the reason for refusal.

Ecology

- 1.15 The ecology reason for refusal has the same basis as the reason put forward for the development at Harthill. The essential issue is that officers did not consider that there is adequate ecological survey information available to conclude that there is not a significant effect. At the Harthill Inquiry, the Council confirmed that the effect was not likely to be significant and subsequently withdrew the ecology reason for refusal.
- 1.16 This is relevant to the current application, as there is an equal amount of survey information available for the Woodsetts site and indeed this has now been supplemented by further information, which is provided in Section 3 of this report. We consider that this addresses the concerns previously held by the Council's ecology officer.
- 1.17 The Inspector in the Harthill case concluded that:
- I accept that the development could have a negative, but not significant, impact on features of biodiversity value for the period of the development. I am however satisfied that impact has been, and would be, minimised through the design, layout, construction and operation of the development and by the incorporation of suitable mitigation measures. These would avoid a residual adverse impact on biodiversity and maintain 'no net loss'. I am also satisfied that the development would not be likely to, directly or indirectly, result in the loss or deterioration of sites, habitat or features that are considered to be irreplaceable due to their age, status, connectivity, rarity or continued presence. (Para 89)*
- 1.18 As the reason for refusal at Woodsetts is founded on the basis of identical concerns, we consider that a similar conclusion would be reached in any future consideration of this point. Given the Council's position under cross examination and the ultimate withdrawal of the reason for refusal at Harthill, we consider it would be professionally

very difficult to seek to defend the same reason as applied to the Woodsetts development.

- 1.19 This application has therefore been resubmitted as we consider that the ecology reason put forward to refuse it can no longer be substantiated. This again offers the Council the opportunity to avoid a future Inquiry and potential claims for costs based on there being no evidence to support the reason for refusal.

The content of this report

- 1.20 This application is a resubmission of the original assessment documents, as well as additional breeding bird survey work which has been undertaken subsequent to the decision being made.
- 1.21 This report draws together the subsequent clarifications and further information that was provided during the course of the application and summarises the findings. That is undertaken in Section 2 of this report.
- 1.22 Section 3 of this report then provides additional ecological survey work which has been undertaken since the original application was refused.

2. Documents submitted during the application process

- 2.1 During the course of the application a number of clarification and consultee response letters were submitted. These supplemented the submitted documentation in response to queries raised by consultees.
- 2.2 This section of the report summarises what was submitted, and directs readers to the relevant Appendix at the end of this report for the full document.

Letter to Highways England 21 December 2017

- 2.3 This letter responded to Highways England's consultation response. It addressed questions about scope and methodology, baseline conditions, environmental effects, routing of abnormal loads, traffic management and asset risk assessment.
- 2.4 The letter is provided at Appendix 5.

Letter to RMBC Highways 21 December 2017

- 2.5 This letter was prepared to address comments and queries raised by the Council's highways department. It clarified the definition of an HGV used in the transport statement; the Council's good practice guide on transport statements; provided an updated Traffic Management Plan (TMP) and Drivers pack; and reviewed 2 bridge structures on the A57 that may have presented a concern for abnormal loads.
- 2.6 The letter is provided at Appendix 6.

Letter to RMBC Planning 21 December 2017

- 2.7 This letter was prepared to address a range of comments made by Statutory Consultees, including Yorkshire Wildlife Trust, Historic England, Firbeck Parish Council, RMBC Rights of Way, RMBC Drainage, RMBC Ecology and Severn Trent. It provided various clarifications on the ecological work that has been undertaken; setting and vibration effects on listed buildings; the need for an archaeological site investigation; visual, landscape, transport and environmental concerns; the need for an on-site speed limit; clarification of the drainage solution; and various clarification points around geology, casing depths, drilling muds, aquifer protection and monitoring processes.
- 2.8 The letter is provided at Appendix 7.

Email response on Drainage matters 3 January 2018

- 2.9 This email cross referenced information in the original submission documents about the drainage system and how it is intended to function. The email is provided at Appendix 8.

Letter to RMBC Planning 15 January 2018

- 2.10 This letter responded to further ecological queries raised by the Yorkshire Wildlife Trust, the Woodland Trust and the Council's Ecologist. It provided further clarification on mapping of designated features, buffer distances, likely direct effects on ancient woodland, queries around the birds likely to be present on site and the approach taken to recording these; ecological enhancements for "full-scale fracking" activities which are not proposed as part of the application; lighting effects on nocturnal wildlife; badger surveys; the approach taken to the Phase 1 habitat survey; the presence of a species list, and; the lack of hedgerow removal.
- 2.11 The letter is provided at Appendix 9.

Swept Path analysis M1, J31, 16 January 2018

- 2.12 This swept path analysis was sent to Highways England by email on 23 January 2018. It shows an 18m long low loader with a 3.5m wide load utilising Junction 31 of the M1. It shows that there are areas where it will not be possible for other vehicles to pass alongside the low loader and proposes that this be addressed by only utilising this junction outside peak hours and, as already required, to utilise an escort vehicle. The drawing and email is provided at Appendix 10.

Letter to RMBC Planning 23 January 2017

- 2.13 This letter responded to comments raised by Woodsetts Against Fracking (WAF). The letter clarified the applicant's position on transport, ecology, landscape and visual, the water environment, ancient woodland, conservation area and local buildings, historic mining and buried pipelines, public health, loss of amenity, noise, land contamination, buffer distances to the woodland, and cumulative effects.
- 2.14 The letter is provided at Appendix 11.

Archaeological Evaluation Report January 2018

- 2.15 Further archaeological investigation was undertaken and reported to South Yorkshire Archaeology Service on 26 January 2018. The report followed earlier geophysical survey which suggested there may be interconnected land division and enclosure structures on and around the site. Trial trenching was undertaken which demonstrated that one of the features was a 19th Century ditch, but none of the other trenches contained any archaeology.
- 2.16 The covering email and report is provided at Appendix 12.

Letter to RMBC Planning 8 February 2018

- 2.17 This letter sought to address further comments from the Council's ecologist. It provided a revised habitat map, discussion on "conservation headlands"; further badger survey work; discussion about bat survey work and effects on ancient woodland.

2.18 The letter is provided at Appendix 13.

3. New information to address Reasons for Refusal

- 3.1 There are two elements of new work which have been undertaken since the application was determined.

Breeding Bird Survey work

- 3.2 Breeding Bird surveys was one of the key issues which the Council's ecologist felt was missing from the original application submission. In order to rectify this, a series of breeding bird surveys have been undertaken. The methodology requires 4 visits to be undertaken. At the time of writing, three of these have been undertaken. An interim report is provided at Appendix 14. The results of the final visit will be reported by letter shortly.
- 3.3 The report shows that there are species of conservation interest using the wider area, but over the three visits only one bird, a skylark, was observed on / over the site. There are also several commonly resident species on the hedges close to the access road. The report concludes that the findings support the assumptions made about breeding birds in the original application.

Public Consultation

- 3.4 INEOS have undertaken a further consultation exercise, which is provided at Appendix 15 of this report. The approach adopted was to send a letter to properties in the area and also to write to Parish Councillors and the MP to inform them of the re-submission. The list of addresses and copy letters are provided at Appendix 15.

4. Overview and Conclusions

- 4.1 This report has been prepared to accompany a resubmitted application for a vertical core well, just off Dinnington Road, near Woodsetts. It provides an overview of what has changed since the original application was submitted, including providing copies of information sent to the Council in response to consultee comments and other work that has been undertaken in response to concerns raised during the application process.
- 4.2 The application is identical to a scheme which has recently been the subject of an appeal, near Harthill. That appeal case was supported by information of the same nature and extent, as provided with this application. The appeal case was defended against reasons for refusal which are almost identical to those which justified the refusal of the Woodsetts application.
- 4.3 That appeal was allowed following the attempted withdrawal of the highways reason for refusal by officers (at Planning Board on 14 April 2018) and the withdrawal of the ecology reason during the Inquiry.
- 4.4 In the case of the Woodsetts application, officers did not recommend that a highways reason for refusal be pursued. Indeed they advised the Planning Board that the proposal is acceptable in highways terms. We consider that this reason for refusal would not stand up to scrutiny at an appeal, should one be lodged.
- 4.5 The ecology reason for refusal is very similar to that suggested for the Harthill appeal. It was founded on the same level of information and approach that was adopted for Harthill. Under cross examination, it became clear that there was not likely to be a significant effect on ecological interests. We consider that the same is the case here, and that the reason for refusal is unlikely to stand up to scrutiny at an appeal, should one be lodged.
- 4.6 This application has been prepared and submitted to offer an opportunity to avoid the expense of a further Inquiry and the associated risks of a costs claim which would go alongside that process. The applicant would therefore welcome further dialogue on the scheme proposals and asks that positive consideration be given to this scheme in the light of the results of the Harthill Inquiry.

Appendix 1: Officers Report to Board

PLANNING REGULATORY BOARD

Date:- Thursday, 8 March 2018 Venue:- Town Hall, Moorgate Street,
Rotherham. S60 2TH

Time:- 10.30 a.m.

Meetings of the Planning Board can all be viewed by live webcast by following this link:-

<https://rotherham.public-i.tv/core/portal/home>

AGENDA

1. To consider whether the press and public should be excluded from the meeting during consideration of any part of the agenda.
2. To determine any items which the Chairman is of the opinion should be considered as a matter of urgency.
3. Apologies for absence (substitution)
4. Declarations of Interest (Page 1)
(A form is attached and spares will be available at the meeting)
5. Minutes of the previous meeting held on 15th February, 2018 (Pages 2 - 3)
6. Deferments/Site Visits (information attached) (Pages 4 - 5)
7. Development Proposals (Pages 6 - 100)
8. Updates
9. Date of next meeting - Thursday 29 March 2018

Membership of the Planning Board 2017/18

Chairman – Councillor Atkin

Vice-Chairman – Councillor Tweed

Councillors Andrews, Bird, D. Cutts, M. S. Elliott, Fenwick-Green, Ireland,
Jarvis, Price, Taylor, R.A.J. Turner, Vjestica, Walsh and Whysall.



SHARON KEMP,
Chief Executive.

ROTHERHAM METROPOLITAN BOROUGH COUNCIL

PLANNING BOARD

MEMBERS' DECLARATION OF INTEREST

Your Name (Please PRINT):-

Meeting at which declaration made:-

Item/Application in which you have an interest:-

Date of Meeting:-

Time Meeting Started:-

Please tick (✓) which type of interest you have in the appropriate box below:-

1. Disclosable Pecuniary

2. Personal

Please give your reason(s) for you Declaring an Interest:-

(Please continue overleaf if necessary)

N.B. It is up to a Member to determine whether to make a Declaration. However, if you should require any assistance, please consult the Legal Adviser or Democratic Services Officer prior to the meeting.

Signed:-

(When you have completed this form, please hand it to the Democratic Services Officer.)

PLANNING BOARD
Thursday, 15th February, 2018

Present:- Councillor Atkin (in the Chair); Councillors Andrews, Bird, D. Cutts, M. S. Elliott, Fenwick-Green, Ireland, Jarvis, Price, Taylor, R.A.J. Turner, Tweed, Vjestica, Walsh and Whysall.

The webcast of the Council Meeting can be viewed at:-
<https://rotherham.public-i.tv/core/portal/home>

62. DECLARATIONS OF INTEREST

There were no Declarations of Interest made at this meeting.

63. MINUTES OF THE TWO PREVIOUS MEETINGS HELD ON 25TH JANUARY, 2018

Resolved:- That the minutes of the previous meetings of the Planning Regulatory Board held on 25th January, 2018, be approved as a correct record for signature by the Chairman.

64. DEFERMENTS/SITE VISITS

There were no site visits nor deferments recommended.

65. DEVELOPMENT PROPOSALS

Resolved:- (1) That, on the development proposals now considered, the requisite notices be issued and be made available on the Council's website and that the time limits specified in Sections 91 and 92 of the Town and Country Planning Act 1990 apply.

In accordance with the right to speak procedure, the following people attended the meeting and spoke about the following applications:-

- Erection of Church and formation of 211 car parking spaces, formation of football facilities including 6 No. pitches, clubhouse, groundsman shed, 120 car parking spaces with means of access, 16 x 18 m floodlights to car parks and landscaping including earth bund and 2.4 m high security fence at land at Common Road, North Anston for Elsworth Acres Ltd. (RB2017/1192)

Mr. R. Percy (Applicant)
Mr. G. Hughes (Supporter)
Mr. J. McDonald (Supporter)
Mr. R. Ball (Supporter)
Mr. J. Leaver (Supporter)
Councillor Watson (Supporter)
Mr. G. Rusling (Supporter)

Councillor Jepson (Objector)
Parish Councillor S. Thornton (Objector)

- Reinstatement of 25 metres of vehicular access at Walkworth Farm, Droppingwell Road, Kimberworth, for Advance Chain Technologies (RB2017/1448)

Ms. U. J. Russell (Applicant)

- Demolition of existing dwellinghouse and erection of 5 No. detached dwellinghouses and 2 No. detached dormer bungalows at 9 and land to rear of Fairleigh Drive, Moorgate for Eton Homes Ltd. (RB2017/1529)

Mr. P. Harris (Applicant)
Mr. M. Halder (Objector)
Mr. R. Edwards (Objector)
Mr. K. Hussain (Objector)
Mr. A. Knowles (Objector)
Ms. R. Alit (Objector)
Councillor Yasseen (Objector)

- Creation of access at Kiveton Hall Farm, Kiveton Lane, Kiveton Park, for Hague Farming Ltd. (RB2017/1559)

Mr. W. Hague (Applicant)
Mr. B. Bowling (Objector)
Parish Councillor Wright (Objector)

(2) That application RB2017/1192 be refused for the reasons adopted by Members at the meeting.

(3) That applications RB2017/1448, RB2017/1529, RB2017/1559 and RB2017/1564 be granted for the reasons adopted by Members at the meeting and subject to the relevant conditions listed in the submitted report.

66. UPDATES

It was reported that Rotherham had been shortlisted for the Royal Town Planning Institute's national award of Local Authority Planning Team of the Year. The award winner would be announced in May.

ROTHERHAM METROPOLITAN BOROUGH COUNCIL**PLANNING BOARD****DEFERMENTS**

- Planning applications which have been reported on the Planning Board Agenda should not be deferred on request without justification.
- Justification for deferring a decision can arise from a number of matters:-
 - (a) Members may require further information which has not previously been obtained.
 - (b) Members may require further discussions between the applicant and officers over a specific issue.
 - (c) Members may require a visit to the site.
 - (d) Members may delegate to the Director of Service the detailed wording of a reason for refusal or a planning condition.
 - (e) Members may wish to ensure that an applicant or objector is not denied the opportunity to exercise the “Right to Speak”.
- Any requests for deferments from Members must be justified in Planning terms and approved by the Board. The reason for deferring must be clearly set out by the Proposing Member and be recorded in the minutes.
- The Director of Planning Regeneration and Culture or the applicant may also request the deferment of an application, which must be justified in planning terms and approved by the Board.

SITE VISITS

- Requests for the Planning Board to visit a site come from a variety of sources:- the applicant, objectors, the Parish Council, local Ward Councillors, Board Members or sometimes from the Director of Planning Regeneration and Culture.
- Site visits should only be considered necessary if the impact of the proposed development is difficult to assess from the application plans and supporting information provided with the officer's written report; if the application is particularly contentious or the application has an element that cannot be adequately expressed in writing by the applicant or objector. Site visits can cause delay and additional cost to a project or development and should only be used where fully justified.
- The reasons why a site visit is called should be specified by the Board and recorded.
- Normally the visit will be programmed by Democratic Services to precede the next Board meeting (i.e. within three weeks) to minimise any delay.
- The visit will normally comprise of the Members of the Planning Board and appropriate officers. Ward Members are notified of visits within their Ward.
- All applicants and representees are notified of the date and approximate time of the visit. As far as possible Members should keep to the schedule of visits set out by Committee Services on the Board meeting agenda.
- Normally the visit will be accessed by coach. Members and officers are required to observe the site directly when making the visit, although the item will be occasioned by a short presentation by officers as an introduction on the coach before alighting. Ward Members present will be invited on the coach for this introduction.
- On site the Chairman and Vice-Chairman will be made known to the applicant and representees and will lead the visit allowing questions, views and discussions. The applicant and representees are free to make points on the nature and impact of the development proposal as well as factual matters in relation to the site, however, the purpose of the visit is not to promote a full debate of all the issues involved with the application. Members must conduct the visit as a group in a manner which is open, impartial and equitable and should endeavour to ensure that they hear all points made by the applicant and representees.
- At the conclusion of the visit the Chairman should explain the next steps. The applicant and representees should be informed that the decision on the application will normally be made later that day at the Board meeting subject to the normal procedure and that they will be welcome to attend and exercise their "Right to Speak" as appropriate.

**REPORT TO THE PLANNING REGULATORY BOARD
TO BE HELD ON THURSDAY 8TH MARCH 2018**

The following applications are submitted for your consideration. It is recommended that decisions under the Town and Country Planning Act 1990 be recorded as indicated.

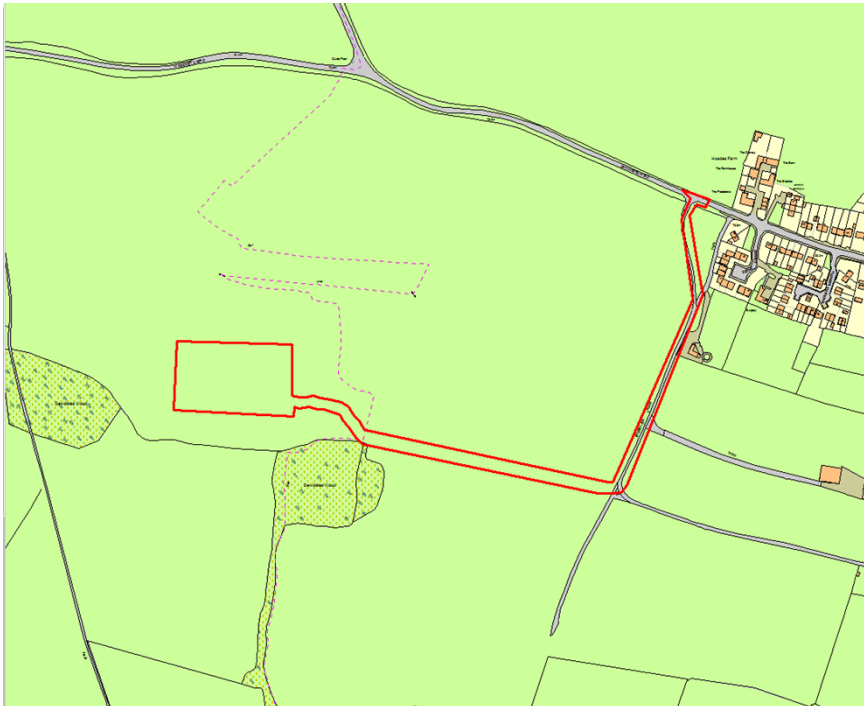
INDEX PAGE

RB2017/1577 Construction of a well site and creation of a new access track, mobilisation of drilling, ancillary equipment and contractor welfare facilities to drill and pressure transient test a vertical hydrocarbon exploratory core well and mobilisation of workover rig, listening well operations, and retention of the site and wellhead assembly gear for a temporary period of 5 years at land adjacent Dinnington Road Woodsetts for INEOS Upstream Limited	Page 7
RB2017/1840 Erection of 58 No. dwellinghouses at land at Bellows Road Rawmarsh for RMBC	Page 82

Application Number	RB2017/1577
Proposal and Location	Construction of a well site including the creation of a new access track, mobilisation of drilling, ancillary equipment and contractor welfare facilities to drill and pressure transient test a vertical hydrocarbon exploratory core well and mobilisation of workover rig, listening well operations, and retention of the site and wellhead assembly gear for a temporary period of 5 years on land adjacent to Dinnington Road, Woodsetts, Rotherham, S81 8RJ.
Recommendation	Refuse

Introduction

No hydraulic fracturing (fracking) is proposed as part of this planning application. This application only seeks permission for an exploratory vertical core well and associated geological testing and logging.



Site Description and Location

The proposed exploratory well site is located in the south of the Rotherham Borough to the west of Woodsetts village (the "site"). The site is approximately 850m west of the centre of the village and 500m from the nearest houses located on Berne Square of Dinnington Road.

The site lies on the southern side of Dinnington Road, a two lane road which connects North Anston with Woodsetts. The site lies to the north of Dewidales Wood which is split into two separate areas of woodland, both of which comprise of Ancient Woodlands. The majority of the eastern block of the woodland is Ancient Woodland with a small section of the eastern section being outside of this category.

The planning application boundary comprises a roughly rectangular area which is approximately 1.86 ha in area and lies to the north-west of the easternmost block of Woodland. Access is proposed to be taken from Cross Lane, a predominantly single lane track which connects to Dinnington Road and is approximately 330m to the south of the main road.

The site lies within the lowest flood risk category (Zone 1) on Environment Agency maps and does not lie within a locally identified surface water flood risk area.

Several public footpaths connect the areas around the site along its southern (Anston Bridleway No. 39) and western (Anston Bridleway No. 23) boundaries.

Background

The site does not have any previous planning history. Applications for a Stable block off the eastern side of Cross Lane were approved in 1989, 1990 and 2016.

The Secretary of State for Energy and Climate Change previously issued Petroleum Exploration and Development Licences (PEDL) for a defined geographical area and specified period of time, although responsibility for this now lies with the Oil and Gas Authority (OGA) as an executive agency sponsored by the newly formed Department for Business, Energy and Industrial Strategy (DBEIS). The licences give exclusive rights for the licensee to “search, bore for and get” petroleum. However, the licences do not in their own right confer on the licensee any consent, permission or authorisation to carry out development activity.

INEOS was awarded PEDL 304 by the Department for Business, Energy & Industrial Strategy (BEIS) (formally the Department of Energy and Climate Change - DECC) following the 14th Licencing Round.

The hydrocarbon extraction process involves three distinct phases:

1. Exploration: Through the drilling of a vertical well. This is the stage proposed by this planning application;

2. Appraisal: Through gas flow testing following horizontal drilling and hydraulic fracturing either from existing core well sites or new sites (3D seismic data will be acquired to enable placement of wells involving hydraulic fracturing).

3. Production: Through drilling of horizontal wells from multi-well pads followed by hydraulic fracturing, production, decommissioning and restoration.

Planning permission is required for each phase, with the cumulative environmental effects of combined applications at different stages being considered each time an application is made.

The applicant (INEOS) has also submitted planning applications for similar exploratory well development:

- Off Common Road, close to Harthill village (reference RB2017/0805). This application is subject to an appeal against non-determination and will be considered by the Planning Inspectorate.

- In Marsh Lane, north east Derbyshire, approximately 15km to the south west of the site. This application is currently undetermined and is being considered by Derbyshire County Council. An appeal against non-determination has also been submitted in respect of that application which will also be considered by the Planning Inspectorate.

Screening Opinion:

Following an initial Screening Request, the Council determined that the planning application at Woodsetts did not represent Environmental Impact Assessment (EIA) development.

The applicant also submitted a Screening Request to the Planning Casework Unit (similar to the Harthill site). However, the PCU declined to determine this request on account that this did not represent an efficient use of resources along with the absence of a challenge from third parties. The Council's Screening Opinion is therefore still considered valid.

The Environment Agency have also confirmed that a Standard Rules Permit has been issued for the site (ref EPR/FB3503KK/A001).

Proposal

The proposal is to drill a vertical core well to a depth of approximately 2,800m and to recover cores of the target geological formations. Subsurface data would be collected during the drilling process and the core samples would be removed from site for testing of the potential to produce hydrocarbons. Testing of the borehole will then be undertaken, including a "Pressure Transient Test" which checks whether the rocks have enough pressure naturally to push gas into the borehole. Once drilled and cored, the well would be suspended for a period of time, for potential later use as a "listening well" during the potential development of other sites in the area.

Planning permission is sought for a temporary period of five years and during this time the proposed development would comprise five phases. These phases can be briefly summarised as follows:

Stage 1: Site development and establishment

Estimated duration: 3 months

Working hours: 7am-7pm Monday-Friday; 7am-1pm Saturday

Operations include:

- Mobilisation– this would involve any necessary pre-commencement surveys, including geotechnical surveys, site investigation surveys, road construction surveys and environmental surveys. Any construction equipment would also be brought to site during mobilisation.
- Access Tracks – formal access construction including visibility splays and geotextile membrane to be covered with aggregate and on-site parking provision.
- Site Clearance – the site would cover 120m by 100m (1.2 hectares). Vegetation clearance and hedge trimming, topsoil/subsoil removal (up to 300mm) would occur.
- Site Development and Lining – impermeable site liner trench and

subsequent appropriate infilling at foot of topsoil bund to be installed immediately around the drill site. The bund would be approximately 2m high on the perimeter of the site created from topsoil from within the site. The bund would assist with visual and noise screening. The site hardstanding area (drill pad) would be constructed within the central site area.

- Development of Drainage – perimeter water storage pipe installation to be fed into from across site to catch any potential surface water runoff. All surface runoff from the core well site would therefore be retained on the site and removed by a licensed waste contractor. Drainage from the central rig area would feed into a separate bunded tank for removal and treatment by a licensed waste contractor.
- Development of Site Accommodation – cabins stacked (up to two high) on top of each other would be placed at the perimeter of the site, to provide further screening.
- Installation of Monitoring Boreholes – groundwater monitoring boreholes installed, in liaison with the Environment Agency (EA), under permitted development rights, not part of this application.
- Construction of Well Cellar – a well cellar (2.5m diameter and 3m deep) would be excavated, from which the well would be drilled. A conductor installation rig up to 10m in height would be set in the top section of the well bore. The conductor rig would be a smaller drilling rig designed to drill to shallower depths. This would also allow for greater flexibility of drilling and reducing the amount of time the main rig is in place.
- Installation of Conductor/ Surface Casing - a Conductor/ Surface drill rig or auger of up to 32 m, would be mobilised to site. This would drill the upper section of the well, and install the upper strings of casing to approximately 610 m (2,000 ft.). This would isolate mine workings in the Westphalian coal measures and aquifers. The rig would be operational for 24 hours a day, for approximately 3 weeks and would then be demobilised.
- Demobilisation – grass seeded geotextile membrane introduced to soil bunds and security measures and lighting installed around site. Demobilisation of construction equipment in preparation for mobilising main drilling rig and equipment.

Stage 2: Drilling, coring and testing

Estimated Duration: 5 months

Working hours: 24-hour for drilling; 7am-7pm Monday-Friday; 7am-1pm Saturday for mobilisation, deliveries and Pressure Transient Test.

Operations:

- Mobilisation of drill rig and associated equipment including temporary mobile lighting (up to 9m in height).
- Drill rig, drill pipe and water and mud pumps brought onto site
- Drilling and Coring- well drilled to a depth of approximately 2,805m with a drill rig up to 60m in height. The well would be logged during drilling and cores would be sent off site for laboratory analysis. No flow testing would be undertaken.
- Pressure Transient Test to establish reservoir properties
- Main rig replaced by 32m workover rig
- Well perforated and packer (a device to seal the borehole) lowered into well

- 10m³ (maximum) potassium chloride solution (2-4%) squeezed into formation at target zone at pressure
- Pressure monitored for two weeks
- Plug removed
- Process repeated in up to two additional target zones
- Workover rig and waste removed
- Demobilisation – drill rig and ancillary equipment would be removed from site including waste from drilling and coring process (drill cuttings and waste drill muds).

INEOS indicates that standard well safety equipment would be present on site during drilling, including a blow-out preventer, vent for emergency venting of gas, and methane monitoring.

Stage 3: Maintenance of the Suspended Well Site

Working hours: 7am-7pm Monday-Friday; 7am-1pm Saturday

Operations:

Once the suspended well is in place, routine visits to the core well site would be made for maintenance. These checks would include:

- Integrity of pipework and site surface;
- Integrity of fencing and security arrangements;
- Site drainage and containment, including tanks;
- Wellhead structure and pressure monitoring;
- The core well site would be unmanned once the well is suspended, but site security including CCTV would remain.

Stage 3a: Possible Workover of the Suspended Well

Up to one month as required. This stage is included as a contingency and would only be required if the well required to be re-entered for maintenance or similar purposes. However, the planning application requests for the potential to undertake these operations to allow a rapid deployment of the drill rig if required.

Stage 4: Undertaking Listening well operations

Estimated duration: 5 weeks

Working hours: 7am-7pm Monday-Friday; 7am-1pm Saturday

This work would be carried out to undertake baseline monitoring.

Activities during Stage 4 would only take place to undertake baseline monitoring or when another well is hydraulically fractured, subject to separate consent for that activity being granted within the period of planning consent for this well. Activities during Phase 4 would include:

Operations:

- Mobilisation of wireline truck or workover rig (maximum 32 m), 30 tonne mobile crane (50m maximum), mast, elevated work platform and temporary welfare facilities
- Placement of geophones (small seismic receivers) on wireline inside reservoir casing
- Demobilisation

Stage 5: Decommissioning and Restoration

Decommissioning of the well would take place on a 24 hour basis for up to two weeks

Restoration estimated duration: 2 months

Working hours: 7am-7pm Monday-Friday; 7am-1pm Saturday

Operations

- Plugging and decommissioning the well. Decommissioning of the well would be undertaken in accordance with Oil and Gas UK Guidelines on Well Abandonment and according to an abandonment plan to be agreed with the Environment Agency, Health and Safety Executive (HSE) and an independent Well Examiner.
- Wellhead removed and casing/cement cut to 2m below ground
- 32m workover rig required for a short period during the 1 month abandonment and restoration stage.
- Removal of site equipment and surfacing. The site would be fenced with temporary Heras fencing to allow the permanent fencing and security fencing to be removed.
- Restoration
 - Soil in bunds levelled across surface
 - Field drainage re-developed if required
 - Site reseeded for agriculture
 - Access tracks and road amendments would also be restored as agreed with the landowner and Highways Authority, or retained for continued use, subject to any necessary further planning consent.
- Aftercare - an aftercare plan would be put in place as a condition of planning consent, to ensure appropriate aftercare of the site as agricultural land. A monitoring plan as agreed with the Environment Agency would be followed

Future Application Proposals:

This application only seeks approval for the drilling, testing, suspension, decommissioning and restoration of the proposed well, including possible use as a listening well. This application would not authorise any other future activities on this site.

Whilst the application proposals are not considered to require a formal Environmental Impact Assessment, it is accompanied by an Environmental Report and this can be summarised into the following main areas:

Noise

- A noise assessment was undertaken to consider the potential impacts of the daytime construction (Stage 1) and drilling and coring (Stage 2) of the well. These stages are representative of the worst case noise emission from all stages of the proposal.
- The nearest residential properties in the vicinity of the site include Woodsetts residential properties on Berne Square (approximately 425 m northeast of the site); Manor Farm residential properties (approximately 670 m east of the site); properties in Rackford Road (approximately 900 km west of the site), the residential properties Nirvana, Wildways and Lofties (approximately 590 m

south of the site and the residential priorities at the south end of Lindrick Road (approximately 960 m southeast of the site).

- The assessment has shown that noise from construction is expected to exceed the assessment criteria at residential properties on Berne Square. However, the works are expected to be of limited duration during the 2-3 week bellmouth and access track construction period, and the effects are not likely to be significant.
- Traffic during the construction period is expected to result in noise impacts which are likely to be imperceptible against the current baseline and therefore the noise impact is considered to be negligible.
- Drilling and coring activities are expected to be below the Planning Practice Guidance (PPG) 42 dB LAeq (free-field) noise limit for night. Daytime noise levels during drilling will also be well below the PPG absolute noise limit of 55 dB LAeq and the limit for daytime and evening based on background plus 10 dB(A). Taking both the temporary change in noise level and absolute noise level assessment into consideration, it is considered that the proposal will not result in a significant adverse impact to quality of life.
- There are no anticipated impacts that would arise due to ground borne vibration resulting directly from the drilling operations. During the construction of the access road there is potential for short term vibration effects at Berne Square. This is likely to be short lived and therefore its effect is not expected to be significant, however, to mitigate potential impacts non-vibratory compaction equipment would be used during road construction in this location.

Traffic and Transport

The applicant has indicated that construction workers will be taken to the site by minibus, so there will be no private parking of vehicles belonging to workers on the site during working shifts.

- The traffic and transport assessment considered the access to the site and the impact of the proposal on traffic flows and highway safety.
- Following a route assessment of the surrounding road network against a range of criteria, a recommended route of approximately 12.5 km from the M1 motorway to the site has been proposed. This route exits the M1 motorway at junction 31 and follows the road network (A57 Worksop Road) between the M1 and Gateford for approximately 9.5 km. The remaining 3 km of the route is undertaken on Woodsetts Lane, Worksop Road and Dinnington Road.
- Access to the site will be provided from Dinnington Road via a priority junction. The speed limit on Dinnington Road is 60 mph in the vicinity of the site; however, vehicles are unlikely to achieve this speed due to fact that they are slowing down for the 30 mph speed to the east of the site access.
- A swept path assessment was also undertaken of constrained junctions and links identified on the recommended route. These showed that whilst traffic management measures will be required along the route, the range of vehicles travelling to the site will be able to gain access along the road network.
- In order to consider the effect of traffic generated by the proposal, baseline traffic data was collected from three points on the local highway network. The traffic analysis assessed the percentage change from baseline due to the peak vehicle movements generated by the project (70 total daily movements

with 60 HGV movements, which occurs for a period during site development and establishment). The assessment concluded that the proposal will not have a material impact on the highway network that will be utilised as part of the route. The maximum impact of the development traffic on the links within the study area is approximately 1% increase over baseline which is below the 10% threshold set out in the Guidelines for the Environmental Assessment of Road Traffic (Institute for Environmental Assessment) for when separate traffic environmental assessments should be undertaken.

- A Route Management Strategy (RMS) and Traffic Management Plan (TMP) will be developed and implemented, following consultation with the Local Highway Authority, to manage vehicle movements to site. A draft TMP has been included with the application.
- Based on the assessment undertaken traffic and transport should not be considered opposing factors in granting planning permission.

Proposed Mitigation:

The proposed mitigation is largely embedded into the design of the proposed development. However, a Draft Traffic Management Plan has been prepared which includes details of the route management, driver behaviour and parking strategies for the site.

An additional addendum to the Transport Appraisal was submitted and can be summarised as follows:

- Clarification of HGV definition. The vehicle classification was based on the number of axles and the wheelbase.
- It has been demonstrated in the Environmental Report that the proposal will generate a maximum of 70 vehicle movements per day. This is equivalent to a maximum of 6 movements per hour based on a 12-hour working day.
- It is not intended to change the speed limit as part of the development proposals. Drawing 65863-06002 shows the visibility splays based on the existing speed limit (60mph) of the road. This shows that the required visibility of 4.5m x 215m is achievable within the adopted highway boundary.
- During the planning of the route, the applicant has tried to avoid sensitive areas such as schools, leisure centres, town centres and areas of congestion.
- A near site assessment of the well location was conducted, assessing any potential transport conflicts incurred from the point of exiting a main road and reaching the site entrance.

Following concerns raised by Highways England, further details on this aspect have been submitted, including Swept Path Analysis.

Ecology

- The site is situated wholly within an arable field, with the nearest area of habitat loss occurring 30 m to the north of Dewidales Wood, which is a Local Wildlife Site and listed on the Ancient Woodland Inventory.
- An ecological assessment (extended Phase 1 habitat survey) of the site and surrounding area was carried out in July 2017, to identify potential ecological constraints, provide initial recommendations for avoidance of impacts and mitigation measures, and to determine whether any further ecological surveys were required.

- The habitat which will be lost from the site is of low botanical value, but could support ground nesting birds, typical of farmland areas, including quail (a protected species). Given the low numbers likely to be affected, and the extent of similar habitat in the surrounding area, significant effects on birds are not predicted. Standard approaches will be adopted to avoid any direct effects on birds during site clearance.
- The nearest habitat of botanical value is Dewidales Wood Local Wildlife Site (an ancient semi-natural woodland), comprising two blocks of woodland and connecting species poor, gappy, hedgerows that could support a range of bird and other fauna species. The woodland and hedgerows will not be directly affected and the site design includes a buffer zone of 30m from the perimeter fence to the wood to reduce the risk of secondary effects (eg from noise, human activities and lights around the site). It is possible that the upper parts of the woodland edge facing the site may be illuminated by the site lights; light levels of a maximum of 2.96 lux at a height of 15 m above ground level have been predicted along the northern aspect of Dewidales Wood.
- A bat activity survey was undertaken in August to cover the summer maternity season, which confirmed low numbers of bats foraging along the northern boundary of Dewidales Wood and associated hedgerow. The presence of light-shy species (such as *Myotis*) which could be roosting within the woodland could be impacted, although only low numbers could be displaced and the effects would be temporary.
- A second activity survey was undertaken in September to cover the autumn transitional period of bats. The September survey supported the findings of the August survey, identifying low numbers of common and soprano pipistrelles using the woodland edge for foraging. Noctule, Leisler's bat, brown long-eared bat and *Myotis* species were also heard but not seen near to the site.
- Alongside the activity surveys, dusk emergence and pre-dawn re-entry surveys were carried out along the northern edge of the east section of Dewidales Wood (ie to the south of the proposed site). These were also undertaken in September. The dusk emergence survey identified an area on the northeast corner of the woodland which supported pipistrelle bats displaying highly social behaviour with social calls recorded. The social behaviour suggests that there could be a hibernation site nearby. This area was also very active during the walked transect.
- A separate dusk emergence survey was undertaken on the eastern side of the west section of Dewidales Wood on 20th September 2017. No roosts were identified but pipistrelles calls were recorded near to sunset suggesting that a roost is nearby.
- The access track is unlit and initially follows an existing track and then passes through the arable field along the remainder of its length. It will not result in any significant effects.
- As a potential enhancement, gaps in the existing hedgerows linking the two sections of Dewidales Wood LWS could be planted with native species of local provenance, including fruit and berry bearing species. This would be subject to landowner agreement.
- Consequently ecology and biodiversity should not be considered opposing factors in granting planning permission.

The applicant has subsequently included Target Notes on the Phase 1 Habitat Map (8th February 2018) at the request of the Council's Ecologist.

Landscape and Visual

- A landscape and visual appraisal was undertaken to assess potential effects of the proposal on the landscape (as a resource in its own right), and on views and visual amenity.
- The site is located within the East Rotherham Limestone Plateau and 750 m to the northwest of the Ryton Farmlands Landscape Character Areas (LCA), as defined within the Rotherham Landscape Character Assessment and Landscape Capacity Study (RLCA, 2010). These LCAs form part of the Southern Magnesian Limestone National Landscape Character Area (NCA), as defined within National Character Area Profile: 30 (2013). The sensitivity of the site, the wider East Rotherham Limestone Plateau LCA, and the neighbouring Ryton Farmlands LCA to the proposal is considered medium.
- During Site Development and Establishment (Stage 1), substantial effects are predicted on the landscape of the site and on the local landscape within approximately 1 km of the site boundary. Beyond this distance, the effect on the wider landscape will be moderate and lowering to minor beyond 1.5 km. This is primarily due to the presence of the conductor / surface rig which will be used during the latter part of Stage 1.
- During drilling and coring and pressure transient testing (Stage 2), the main activity with the potential to affect landscape character will be the erection and 24-hour operation of the drilling rig (up to 60 m high) with 15 m drill sub-structure and associated lighting. Substantial effects are predicted for the site and within the local landscape of the East Rotherham Limestone Plateau LCA, up to 1.5 km of the site boundary with a theoretical visibility of the drilling rig. For areas of the East Rotherham Limestone Plateau LCA that are within the drilling rig ZTVs and beyond 1.5 km of the site boundary, the level of effect will lower to moderate and minor beyond 3 km. Due to the limited amount of visibility of the drilling rig from areas of the Ryton Farmlands LCA, within 1.5 km of the site, substantial effects are considered unlikely.
- During maintenance of the site (Stage 3), the effects on the site will be minor, and effects on the wider landscape will be negligible.
- If a workover rig of up to 32 m high is required during the possible workover of the suspended well (Stage 3a), or during the listening well stage (Stage 4), substantial effects will affect the site and the local landscape within 1 km. This effect will reduce to moderate or negligible beyond 1 km and then minor beyond 1.5 km. These effects, however, will be experienced for a short time period of up to five weeks.
- During the listening well stage (Stage 4), if a workover rig or crane is not required, the effects on the site will be moderate, and effects on the wider landscape will be negligible.
- Decommissioning and restoration (Stage 5) effects are anticipated to be substantial within the site and the local landscape up to 1 km of the site, falling to low or negligible beyond 1.5 km and across the wider LCA. This is primarily due to the presence of a smaller rig used for the decommissioning purposes.
- Based on the viewpoint assessment undertaken, and with regard to the ZTV and the extent of localised screening, moderate or substantial effects on

views may occur during all stages of the proposal. These effects, however, will be experienced only by higher-sensitivity receptors with a clear view towards the site and that are in relatively close range. This will include some residents of houses along the western edge of Woodsetts, a very limited number of residents of houses on the eastern edge of North Anston, and users of a limited number of PRow and National Cycle Route 674 that are within close proximity to the site (i.e. 1 km).

- Substantial visual effects may also be experienced by users of Woodsetts Road, Swinston Road and Dinnington Road that run in close proximity to the north of the site. During the drilling and coring and pressure transient test (Stage 2) operations the effect of the proposal on views will be more widespread. Although the drilling rig is likely to be partially screened by localised screening and woodland, up to substantial visual effects are predicted during daylight and night-time hours.
- At greater distances it is considered likely that only the drilling and coring and pressure transient test stage of the proposal will be noticeable in views due to the presence of the 60 m rig on-site. Due to the level of screening in the landscape, the distribution of receptors, and the temporary nature of the stage, visual effects are not predicted to be greater than minor at distances over 2 km from the site.
- Following the decommissioning and restoration activities no above ground features of the well will remain, and all impacts on visual amenity will cease. The permanent restoration of the site to its original agricultural use is considered to be a neutral effect on views. All the above effects are therefore considered to be temporary.
- On the basis of this assessment, landscape and visual should not be considered opposing factors in granting planning permission.

Surface Water and Flooding

- An assessment of the potential effects on water resources (including water quality) and drainage as a result of the proposal was undertaken.
- The site is not within an area at risk from flooding and is designed to be self-contained with regards to surface water runoff. The nearest surface watercourse, within hydraulic connection of the site, is Owlends Wood Dyke, located approximately 1.1 km east of the site. Anston Brook is technically closer to the site (approximately 820 m to the south); however, this water course is within a separate catchment and is not within hydraulic connection.
- Effects on the surface water quality of watercourses and other sensitive receptors within the surrounding area of the site have been assessed for Stages 1 to 5 of the proposal activities. Given the proposed embedded mitigation measures, the environmental assessment concluded:
 - A neutral effect on the water quality of nearby watercourses.
 - A neutral effect on the biodiversity of the surrounding area, including designated areas, as these are sufficiently distant from the proposal, and are not expected to be affected by the negligible magnitude of impacts to surface watercourses from the proposal.
 - A neutral effect on pressures on water resources in the surrounding area, due to the non-intensive nature of on-site activities.

- A neutral effect on recreational uses within the surrounding area due to these being concentrated in areas greater than 2.1 km distant from the proposal and not within hydraulic connection.
- Flooding, residual and climate change impacts have been assessed as negligible due to Environment Agency flood maps showing the proposal as having a 'Low' risk of flooding from fluvial and pluvial water sources and based on the topography of the site and surrounding area. The proposal is not anticipated to result in any material increase in flood risk elsewhere.
- Surface water and flooding should not be considered opposing factors in granting planning permission.

Hydrogeology and groundwater

- An assessment on the potential hydrogeological effects resulting from the proposal was undertaken. Effects on the groundwater quality of the underlying bedrock aquifers and other sensitive receptors within the surrounding area of the site have been assessed for Stages 1 to 5 of the proposal activities.
- The site is within an area containing the Cadeby Formation Principal Aquifer, Pennine Upper Coal Measures Secondary B Aquifer, and Pennine Middle Coal Measures Secondary A Aquifer.
- There is one groundwater abstraction within the 2 km of the site, located at the Lindrick golf course. The site sits within Source Protection Zone (SPZ) 3, and is located over 3.1 km from the closest SPZ2.
- Environment Agency records identify a historic landfill site approximately 1.7 km west of the site (to the south of Rackford Road), at the site of the current water treatment works, as such landfill gas generation and migration is likely to be a low risk.
- The proposed drilling method has been frequently implemented in the UK and contains barrier mitigation and monitoring approaches to minimise the risk to hydrogeology. Key elements include staged steel casing to seal off aquifer sections and flow paths that may be encountered (such as that caused by former mining sections) and drilling sections of the well with non-hazardous water based fluids.
- Embedded mitigation measures will also be implemented to prevent groundwater pollution from accidental surface spillages and the handling/management of drilling fluids and cuttings. Given the proposed embedded mitigation measures, the environmental assessment concluded:
 - A neutral effect on the shallow groundwater quality of the surrounding area due to the non-intensive nature of the on-site activities.
 - A neutral impact on the groundwater quality, due to the drilling and well design using multiple casing solutions to seal off aquifer sections during drilling and well operation.
 - A neutral effect on groundwater quality due to protection afforded by multiple casing solutions to seal off aquifer sections during well testing activities and the separation distance between the PTT zone and overlying aquifers. The location of the site within an SPZ3 increases the risk to local groundwater quality if a leak were to occur, however, the mitigation proposed is designed to ensure that such an event cannot occur.

- A neutral effect on groundwater resource availability due to the water use being contained within a closed loop.
- A neutral effect on the transport and dilution capability of groundwater aquifers within the local area.
- A neutral effect on the biodiversity of the surrounding area including designated areas. The on-site activities are not expected to affect groundwater availability or quality.
- A neutral impact on pressures on water resources in the surrounding area, due to the non-intensive nature of on-site activities.

On the basis of the assessment, hydrogeology should not be an opposing factor in granting planning permission

Archaeology and Cultural Heritage

- An assessment of potential impacts on cultural heritage assets resulting from the construction and operation of the proposal was undertaken. The assessment considers the potential for significant effects as a result of the proposal on cultural heritage under three sub-topics of 'archaeological remains', 'historic buildings' and 'historic landscape'.
- Based on Historic England guidance presented in Settings and Views of Heritage Assets: Historic Environment Good Practice Advice in Planning Note 3 (Historic England 2017) a study area for archaeological remains and historic building was defined as an area extending 2 km in all directions from the footprint of the site.
- A total of 37 cultural heritage assets have been identified within the study area comprising 22 archaeological remains, nine historic buildings and six historic landscape types. The assets include Woodsetts Conservation Area (Asset 38); designated in 1977, it is characterised by several late 19th century brick built houses, including Woodsetts House, concentrated along the main north-south and east-west roads of the settlement.
- No impacts on identified cultural heritage assets are predicted as a result of construction. While the proposal represents the introduction of a new piece of infrastructure into the setting of four designated assets (Grade II Listed Buildings), the proposal is temporary and, as a result of the distance between the assets and the components of the proposal, is not predicted to result in a significant effect on the assets, this assessment includes consideration of the potential for causing substantial harm as defined within the NPPF.
- As a result of desk-based work, including historic air photograph analysis and historic map regression, this study has identified high potential for unknown buried archaeology within the site and study area. This conclusion is based on the high concentration of archaeological finds from within the ploughsoil of the study area from a number of prehistoric and historic periods. In addition, historic air photographs have demonstrated the possibility for the presence of a late Iron Age, early Roman period enclosure approximately 50 m to the north of the site.
- The possibility of unknown buried archaeology within the proposal footprint has been managed through a non-intrusive geophysical survey covering the area of the extent of surface works. This demonstrated the presence of a number of anomalies of potential archaeological origin, principally comprising linear and curvilinear anomalies falling within the area of the proposal. These

anomalies are indicative of former land divisions and enclosures potentially dating to the Iron Age or Romano-British period. Further investigation of these features would be managed through standard archaeological investigation processes during the planning and construction phases, potentially comprising a watching brief and / or a programme of strip, map and sample.

Emissions to air

- Emissions to air would include vehicle and equipment exhaust fumes, dust and potentially hydrocarbon release (methane) during the drilling period.
- Road traffic associated with the proposal would produce emissions to air during the temporary construction and drilling phases, similar to any construction site. The percentage change against existing traffic flows means the site does not trigger the assessment thresholds in the current guidance for planning (Planning for Air Quality, IAQM 2017).
- On-site generators and the drilling rig (both diesel powered) would produce temporary, localised emissions to air, likely to include NO_x, SO_x, PM₁₀ and 2.5, CO and VOCs. Generators would be sized appropriately for site energy requirements and would be efficient, with emissions reduced as far as possible. These would be similar to generators on construction sites. Emissions from operating the rig would also be reduced through choice of an efficient rig appropriate for the site, with minimal emissions.
- The majority of the required generators would be present on the site for less than 6 months, although a single generator will be required throughout the operating period. The 60 m rig will be on-site for around 3 months during the 5 month Stage 2 operations.
- Dust from site preparation, construction and vehicle passage on access roads will be controlled with standard dust-control measures (as outlined in the Proposal) and is not considered likely to present a nuisance to site neighbours. As the well is only proposed to be cored and subject to a pressure transient test, there is very limited potential for hydrocarbon gas (methane) to be released during the drilling process. Any emissions which do occur will be short-term and very small in volume and are not expected to have a material effect on local air quality.
- The scale of the proposal is such that significant effects to air quality are not anticipated. The site is not within an Air Quality Management Area and so is not close to exceeding any air quality objective levels.

Climate Change

- The potential contribution of the proposal to national greenhouse gas emissions would be negligible. Climate change emissions associated with the proposal are expected to be limited primarily to those from vehicles and drilling equipment which are considered to be generally small and are not considered to be significant. The proposal does not include the extraction of hydrocarbons and as such there is minimal potential for the release of methane to atmosphere. Whilst not the operational expectation, there does remain a possibility of some fugitive hydrocarbons being vented during drilling and coring. These would not be material in relation to national greenhouse gas emissions.

Existing Contamination

- The site is located on and surrounded by arable land. Examination of historical maps shows that there are no potentially contaminative historic land-uses on-site, although there is a historic landfill near to the site which will not be affected by the proposed development.

Human Health

- The proposal is for an exploratory core well only. Low risk activities are recognised by the Environment Agency through “Standard Rules” permits. These permits set out a number of operational controls which INEOS will need to comply with. The proposed activities comply with the operational and locational criteria necessary to qualify for a standard rule environmental permit. On this basis it is considered that the risk to human health is negligible.

Following a detailed objection from Woodsetts Against Fracking (WAF) (a local residents group), the applicant was invited to respond to the content of the objection. The applicant’s response can be summarised as follows:

- *Section 3 Traffic and Transport – No sustainable highways reasons to refuse this application.*
- *Section 4 Ecology Objection - The potential for bats to be affected by site lighting on the proposed development was assessed and stated in the Environmental Report. INEOS has demonstrated that an effective lighting strategy can control light levels, and avoid the risk of significant effects from lighting on any bat species in or around Dewidales Wood, and the connecting hedgerow.*
- *Section 5 Landscape and Visual – The predicted extent of visibility of the 60 m drilling rig is shown in the zone of theoretical visibility (ZTV). The receptors that are likely to be affected are noted, including residents in Woodsetts and North Anston, and users of roads, cycleways and footpaths within 1-2 km of the site. The level of effect is judged to be “up to substantial”. The effects considered to be substantial will occur over short time periods within the 5-year timescale, when drilling rigs are present on site. The longest period when a rig is anticipated to be present is up to five months during Stage 2.*
- *Section 6 Surface Water and Flood Risks – The proposed development would be constructed within the catchment of the Owlands Dike. Figure 3.1 in the Environment Report clearly delineates the surface water catchment of the upper Owland Dike. Although it is correct to state that Owland Dike is a tributary of the River Ryton, as is Anston Brook, for a surface water hydraulic connection to exist between the site and the Anston Brook, would require water to flow up and over the drainage divide.*
- *The self-contained site drainage system, installed to prevent fluids from the site interacting with either ground or surface water, will result in a small reduction in the quantity of water that is able to soak into the underlying aquifer.*
- *Excess water will be removed from the unit as required by a licensed waste contractor. Surface drainage / soakaway from the wheel wash will not be required and the facilities will not increase local flood risk in the area.*

- *Section 8 Cultural Heritage - Vibration issues have been addressed in the Environment Report, Section 2 (Noise and Vibration).*
- *Other issues*
 - 1) *Noise – The highest predicted level from the rig at the nearest noise sensitive receptor (Berne Square) is 39 dB LAeq, and would not result in noise levels above LA90+ 10 dB(A) unless the representative background level was commonly below 30 dB(A).*
 - 2) *Land Contamination - The land contamination incident (burial of cement bonded asbestos roofing) reported at Grange Farm in 2009 was not on land which will be used, or vulnerable from disturbance, by the proposal. Further, the incident was subject to a successful prosecution at Worksop Magistrates Court on 17th February 2011 and waste material was removed from the land in 2011 following action by the Environment Agency.*
 - 3) *Application Plans – The issues raised in relation to the 30 m buffer between the site and Dewidales Wood have been responded to in the applicant's response (dated 14 January 2018) to the Council's Ecology comments.*
 - 4) *Test well application as a stand-alone development WAF's position is noted.*
 - 5) *Cumulative development – INEOS is aware of both of the applications referred to, and both are likely to change the current traffic position on the A57 roundabout. However, as they are significant housing developments, they have been subject to their own highways assessment process and will be providing any necessary mitigation to ensure that there is no significant effect on the junctions that will be shared by INEOS traffic.*

Statement of Community Involvement

A Statement of Community Involvement has also been submitted with the application and this can be summarised as follows:

- In August 2017 the applicant set up a consultation website (<https://www.ineos.com/businesses/ineosshale/our-operations/woodsetts/>). This webpage introduced the scheme, included a list of frequently asked questions, provided copies of relevant information, and publicised details of the forthcoming public consultation events.
- The applicant held a public exhibition event in advance of submitting the planning application at Woodsetts Village Hall. The applicant invited residents to the exhibition through posting two letters directly to residents. These being the residents' information sheet first and the exhibition invite second. Updates were also provided on the applicant's consultation website.
- The exhibition was held on Monday 25 September 2017 (between 2:30pm and 7:30pm). 180 members of the public attended and provided written feedback. The main concerns raised were on the following areas
 - Why are small villages being targeted? If Shale Gas is found, this will cause more disruption to small villages.
 - Existing road system and amenities are not compatible with the intended work.
 - Against the extraction of Shale Gas – mining was considered unsafe.

- The map doesn't show the Bridle Path.
- The proposed development will adversely affect the environment, including increase traffic, pollution in the village, house prices, water and wildlife.
- Providing the licence is fully controlled by INEOS Shale i.e. environment security and health and safety aspects.
- Renewable energy sources should be a priority.
- Concerns over residents with medical conditions, such as dementia.
- Hope that all interpretations heard at the exhibition can be relied on and the views of the public matter
- Woodsetts Parish Council organised a special meeting on 16 August 2017. Lynn Calder, Peter Reilly and Gordon Grant of INEOS were in attendance. Also in attendance were the Parish Councillors, at least two Rotherham Metropolitan Borough Councillors, the local MP (Sir Kevin Barron) and over 100 members of the public.
- Tom Pickering, Peter Reilly and Gordon Grant of INEOS attended a meeting at the home of a Woodsetts resident on 29 August 2017 to discuss forming a Community Liaison Group (CLG). The second CLG meeting met on 16 October 2017.
- INEOS also wrote directly to the local MP (Sir Kevin Barron), Ward Councillors and the Parish Council informing of their forthcoming application.

Development Plan Allocation and Policy

The Core Strategy was adopted by the Council on the 10th September 2014 and forms part of Rotherham's Local Plan together with 'saved' policies from the Unitary Development Plan (UDP) (noted in Appendix B of the Core Strategy). The Rotherham Local Plan 'Publication Sites and Policies' was published in September 2015.

The site is allocated for Green Belt purposes in the UDP and is within an Area of High Landscape Value. Dewidales Wood is within an area of Ancient Woodlands.

The site is also allocated for Green Belt purposes on the Rotherham Local Plan Publication Sites and Policies Map. For the purposes of determining this application the following policies are considered to be of relevance:

Core Strategy policy(s):

CS4 Green Belt
CS20 Biodiversity and Geodiversity
CS21 Landscape
CS25 Dealing with Flood Risk
CS26 Minerals
CS28 Sustainable Design

Unitary Development Plan 'saved' policy(s):

ENV2 'Conserving the Environment'
ENV3 'Borough landscaper'
ENV3.7 'Control of Pollution'

MIN4 'Oil and Gas'

MIN5 'Criteria in the Assessment of all Minerals Extraction Proposals'

T6 'Location and layout of Development'

Sites and Policies Local Plan:

SP2 Development in Green Belt

SP37 Sites Protected for Nature Conservation

SP45 Archaeology and Scheduled Ancient Monuments

SP51 Assessment of Mineral Extraction Proposals

SP53 Exploration and Appraisal of Hydrocarbons

Other Material Considerations

The Water Framework Directive relates to groundwater issues and is monitored by the Environment Agency.

Hedgerow Regulations 1997.

The Offshore Installations and Wells Regulations 1996 (Design and Construction).

National Planning Practice Guidance (NPPG) - On 6 March 2014 the Department for Communities and Local Government (DCLG) launched this planning practice guidance web-based resource. This was accompanied by a Written Ministerial Statement which includes a list of the previous planning practice guidance documents cancelled when this site was launched.

National Planning Policy Framework: The NPPF came into effect on 27th March 2012 and replaced all previous Government Planning Policy Guidance (PPGs) and most of the Planning Policy Statements (PPSs) that existed. It states that "Development that is sustainable should go ahead, without delay" – a presumption in favour of sustainable development that is the basis for every plan, and every decision.

The NPPF notes that for 12 months from the day of publication, decision-takers may continue to give full weight to relevant policies adopted since 2004 even if there is a limited degree of conflict with the Framework. The Rotherham Unitary Development Plan was adopted in June 1999 and the NPPF adds that in such circumstances due weight should be given to relevant policies in existing plans according to their degree of consistency with the Framework (the closer the policies in the plan to the policies in the Framework, the greater the weight that may be given.)

The Core Strategy/Unitary Development Plan/Rotherham Local Plan 'Publication Sites and Policies - September 2015' Policies referred to above are consistent with the NPPF and have been given due weight in the determination of this application.

The emerging Policies within the Sites and Policies document (September 2015) have been drafted in accordance with both the NPPF and the Core Strategy. The weight given to these Policies is dependent on the status of the Local Plan at the time of consideration and on the comments received from the Inspector (dealing with the adoption of the Local Plan) in relation to each specific Policy following the Examination in Public. The Inspector wrote to the Council on 3 November 2017 setting out the Proposed Main Modifications that he considers necessary to make the plan sound. The consultation on the Main Modifications is programmed for 8 January to 19 February 2018. It is expected that the Inspector's final report will be

produced in April or early May 2018, with adoption of the plan by the Council following in July 2018.

Publicity

The application has been publicised by means of 16 site notices (8 November 2017 and again on 2 February 2018) placed around the site and within Woodsetts village, along with press notification (Rotherham Advertiser and Dinnington Guardian, 17 November 2017 and again on 2 February 2018). The Council has received approximately 550 objections to the proposed development (including from Woodsetts, Letwell and Firbeck Parish Councils). One letter has been received in support of the application.

Although a smaller total number of objections in comparison to the Harthill Test Drilling application (RB2017/0805), a very significant number of representations have been received to this application. Members should be aware of the following differences between the objections received in relation to the two applications:

- A much higher proportion of the objections are from within the Rotherham Borough, and particularly from the Woodsetts area.
- The length of the objections is generally longer with a greater level of detail provided within the objections.
- Woodsetts Against Fracking (WAF) have provided a very high level of detail within their objections. These are summarised in more detail in the paragraphs below.

The representations can be broken down into the following main areas:

Standardised tick box letter

Traffic

- Increase in traffic
- Increase in non HGV traffic from the south
- Concerns about introduction of parking restrictions on Worksop and Dinnington Road
- Pedestrian safety and damage to parked cars
- Lack of credibility of INEOS baseline data

Environmental

- Pollution from traffic
- Pollution from on-site generators
- Pollution from emissions from the well
- Light pollution from night working
- Unsightly nature of drilling station
- Risk from old mine workings
- Removal of high quality land from agricultural use
- Increase in greenhouse gas emissions from continued use of fossil fuels

School and Children

- The school is directly downwind of the plant in the prevailing wind direction
- Gas emissions from the well

- Reduction in amenity with the loss of a main bridleway and footpath route

Health

- Stress and poor sleeping patterns from 24/7 noise and light pollution
- Short and long term concerns over emissions from well
- Special concern about the residential area on the east side of the village, including the school

Ecological

- Contamination of water table
- Dangerous gas emissions
- Long term damage to farmland
- Change in the character of the area from rural to industrial
- Risk of faults from natural geology
- Effect on skylark population
- Effect on vulnerable geological features
- Inability of application to sustain potential rectification cost of a significant ecological or environmental incident

Property and district

- Damage to houses from vibration and seismic activity
- Increased cost of home insurance
- Reduction in property values and difficulties in selling
- Potential damage to listed buildings from seismic activity
- Development contrary to aims of the RMBC Core Strategy

Protesters coming into village

- Potential influx of protestors with subsequent adverse publicity for the village
- High police costs of maintaining fracking operations
- Disruption to traffic from protests
- Arrests and incidents in village will affect insurance and credit ratings for residents.

Other

- Concerns over uncertainty that these applications bring
- The process is banned in other countries meaning it must be unsafe
- Fracking proven to be unsafe in the USA
- Conflict between HGVs and other road users, particularly cyclists
- Effect on the future of our grandchildren
- The coal mines should never have been closed
- Loss of flora and fauna
- Fracking will not turn out to be financially viable

Standardised letter template

- Significant increase in heavy traffic
- Increase in volumes of lighter traffic
- Increase in pollution along with noise and disruption from traffic
- Visual blight from the proposed drilling rig
- Increased seismic activity from disturbance of old mine workings

- Loss of agricultural land
- Use of fossil fuels is a retrograde step
- Increased risk that gas released will contain harmful material
- Increase in noise from drilling operations negatively affecting quality of life for residents
- The school is downwind of any gas releases from the site
- Loss of agricultural land
- Negative impact on local skylark population
- Anston Woods includes an area of SSSI
- Will the bill of any potential incident be passed onto taxpayers
- Increased cost of home insurance
- Reduction in property values even before a planning application was submitted with further and difficulties in selling
- Development contrary to aims of the RMBC Core Strategy
- Potential influx of protestors with subsequent adverse publicity and disruption for the village
- The fracking process is banned in France, Germany and Scotland

The individual letters received also cover similar points to those summarised above.

The letter in support of the application can be summarised as follows:

- The benefits outweigh the drawbacks.
- Even exploratory drilling will bring investment to the area, along with jobs, and hopefully in the long run, much needed clean source of natural gas.
- If proper control of traffic ingress and egress routes was established, negative impact on local residents could be minimised.

In addition to comments from the general public, comments have also been received from the following bodies:

Firbeck Parish Council

Objects on the following grounds:

Visual and Landscape

- Change of character from rural to industrial
- Industrialisation of the Green Belt
- Risk from geological faults
- Potential impact on wildlife
- Visual impact of 60m drilling rig
- Operation of a 24hour industrial facility and subsequent noise and light pollution
- Proximity to Woodsetts village

Transport

- Increase in HGV movements, up to 60 per day and subsequent concerns about pedestrian safety, damage to cars and increase in pollution

Environmental

- Impact on air quality, increase in noise and light pollution, risk of pollutants escaping from site and impact on public health
- This is a small community that will be subject to considerable stress
- Conflict with Core Development Strategy 1 to support low carbon industry, development green industry and improve Rotherham as a visitor destination.

Letwell Parish Council

Objects on the following grounds:

- Danger from the increase of heavy vehicles travelling to and from the site day and night.
- Impact on the lives of countless families living within very close proximity to the 60 m high drilling rig which will be operating 24 hours a day seven days a week. Light pollution will be highly damaging too and blight the sky at night.
- Noise from drilling equipment and diesel generators will affect the quality of life for those living nearby.
- Large scale industrialisation of the Green Belt and destruction of the peaceful rural landscape.
- Air pollution from noxious emissions and an increase in diesel particulates which threatens the health of families and children living in the village. The nearby junior school will be directly in the path of the prevailing wind from the drilling site.
- Loss of a large area of highly productive farmland at a time when food production should be prioritised by landowners.
- Vulnerability of listed buildings with no foundations - as they face the threat of possible damage.
- The development is contrary to the aims of RMBC's own Core Development strategy to support low carbon industry and develop green technology.
- The parish council also has concerns about the applicant's involvement in the project - given that the company has no experience of fracking in the UK.

Woodsetts Parish Council

Objects to this proposal on the following grounds:

Highway safety issues:

- Woodsetts is a rural village and not suited to the construction phase traffic or the increase in traffic after construction phase.
- Woodsetts Road is used by parents and children attending the local School and the safety of them should be a major priority for the Borough Council.
- Given the regular excess speed of vehicles in the village the visibility splays onto and from the site are not adequate and the Borough Council / police need to ensure that speed limits are adhered to.
- Proposed Escort vehicles will cause much disruption to residents, through traffic and possible obstructions caused will lead to unnecessary manoeuvres on a busy road.
- This development will exacerbate the traffic problems that have been a serious concern for villagers for many years.

- The development is dangerously close to the Footpath/Bridleway and walkers/children/animals will be put in danger.

Traffic Generation:

- The Parish Council is extremely concerned that the increase in traffic through the village and particularly the size of these vehicles will cause inconvenience to the Emergency Services.
- The proposed Road sweeping will also add to problem traffic in the village.
- Increase in "Road Furniture" in the picturesque village is unwelcome and visually unappealing.
- Public Transport will be adversely affected by the excessive new traffic created.
- The increase in traffic will lead to further damage to already poor road surfaces throughout the village.
- The moving of the 30mph zone and the humps will cause unwelcome inconvenience to local road users.

Loss of outlook to the detriment of residential amenity and loss of important open spaces:

- This proposed site is in the Green Belt and of high visual importance to residents.
- Due to its location it is highly visible, and the proposed development will be to the detriment of an area of high landscape quality.
- Walkers and families who use the Footpath and Bridleway will lose a vast majority of their enjoyment in this area, i.e. quiet, peaceful and visually attractive views which at present increase the quality of life for many local residents.

Noise and disturbance resulting from use during hours of operation:

- The noise and fumes from the diesel generators on site will cause a significant nuisance and health disturbance to local residents.
- In addition, the prevailing wind direction will mean that the school may be affected also. Bernes Square residents are all elderly and some are vulnerable.
- At their time of life they should not be subjected to such a major upheaval and nuisance.
- It has been reported to our Councillors the stress and anguish of this proposed development is already having a detrimental effect on their mental and physical well-being.

Smells and Fumes:

- People who use the footpath and bridleway should have the right to a peaceful and clean enjoyment. The fumes, noise and light pollution from this proposed site will have an adverse effect on home owners and pedestrians in our village.

Possible contamination of mining works and water supplies:

- The village has many unused mines and springs and any contamination of the water supplies and natural springs in Woodsetts is of significant concern.

Effect on trees and wildlife:

- The proposed site is very close to a historic woodland and this woodland and its surrounds house 5 different species of bats, Midwife Toads, hares, deer, partridge, quail and slow worms to name but a few. This proposed development would have a catastrophic effect on all this wildlife.

Inappropriate means of enclosure:

- The proposed enclosure is not in keeping with the surrounding area and would be visually intrusive.

Scale and dominance:

- The proposed development's overall size is not in keeping with the surrounding area and will have an adverse effect on local properties. It will have an overbearing and disproportionate impact on the surrounding area.

Archaeology:

- Woodsetts has 37 Cultural Assets including many pre-historic sites. An iron-age settlement was discovered just 50 m from this proposed site. Any undiscovered history and archaeology present at the proposed site will be lost forever if it goes ahead.

Economic impact and sustainability:

- This site does not offer any more advantages to the developer than one placed in a location away from houses and schools.
- The applicant has not explored fully or to our satisfaction alternative sites.

Overall, Woodsetts Parish Council recommend refusal of the application and request a full Environmental Impact Assessment.

Woodsetts Against Fracking (WAF)

Woodsetts Against Fracking is a residents' community action group that has submitted detailed objections, the main areas of which can be summarised below:

Traffic and Transport:

- The baseline data used to calculate impact are incorrectly applied.
- The route used has not been sufficiently researched resulting in errors and omissions.
- There is non-compliance with the NPPF.
- The development runs counter to aspects of the Rotherham Core Strategy.
- The Traffic Management Plan does not refer to this development and is generic and vague on detail.
- There is no Route Management Strategy outlined.
- The development will have a much greater impact on road users, village residents and the road network than the applicant claims with reference to pollution, noise, safety, severance and intimidation.
- There is a failure to mitigate for some issues.
- The applicant has not taken into account the cumulative effect of other developments on traffic volumes occurring close to the identified route in another planning authority.

- WAF carried out a Traffic Survey within Woodsetts Village on 11th October 2017. This was a visual survey with the data from this survey compared to a comparable day and sample position from the applicant's data.
- WAF data was slightly up on the applicant's data set total transit numbers, but the variance was not significant and it was concluded that the data sets were largely comparable.
- WAF assert that if the correct input figures were used, and the actual tonnage of the vehicles to be operated would show between 300% and 600% increase.

Ecology:

- The submitted environmental report appears to contain a number of inaccuracies and is deficient.
- The surveying ecologists have failed to contact South Yorkshire Bat Group for any records / data that it may hold for the surrounding area relying solely on data from Rotherham biological records centre.
- No bat data post September 2017 has been submitted with the application. As a result, no assessment of the swarming potential / use of the application site in relation to the known hibernacula roosts within a 1km radius has been provided.
- The information submitted within the proposed application fails to correctly consider/ assess potential impacts on bat species other than Pipistrelles.
- Whilst Table 4.4 of the environmental statement states that no birds were recorded on site the survey was undertaken in July 2017, it is likely that some species will have bred and disbanded by the time of the survey.

Landscape and Visual:

- The applicant has sought to downplay the effects of their proposed development on the landscape around Woodsetts and the consequent visual impact:
 - Devaluing the landscape by primarily assessing it in a national context rather than a far more relevant local context.
 - Devaluing the proposed sites AHLV designation.
 - Continually emphasising the temporary nature of the development.
 - Completely dismissing the potential 5+ year impact of this temporary stage. Especially given that the current application is the first stage of a longer plan that has the potential for a further planning application to hydraulically frack.
 - Underplaying the numbers of people significantly affected.
- Users of Swinston Hill Road, Woodsetts Road and Dinnington Road will be significantly impacted on a daily basis (approx. 5,500 per day).
- The proposed site is important for its tranquillity, landscape quality and dark skies. The site remains designated as being within an Area of High Landscape Value.
- Greater weight should be given to the substantial visual impact and effect upon the landscape that will occur for a significant proportion of that time.
- Given that this application for a test core well is inextricably linked to the intention to hydraulically frack, then the period of time that the visual amenity could be affected is potentially as long as 30 years. WAF feel that this should be taken into account at this stage of the planning, even if the next stage of planning has not been submitted.

Cultural Heritage:

- The proposal will directly impact upon the adjacent Ancient Dewidales Woodland, with its industrial structures adversely affecting the use, sustainability and views of the Woodland.
- Fails to meet the Standing Advice provided by Natural England and Forestry Commission (a material Planning consideration) to provide the minimum 50m buffer zone between the Woodland and the development – required when soil will be compacted by machinery.
- Goes against the RMBC Core Strategy CS20, to, as a Priority, conserve and enhance woodland.
- Will contravene RMBC Core Strategy CS21 and detract from the landscape and visual character of the area, as the site falls within an Area of High Landscape Value.
- Fails to meet the guidance provided by Historic England on assessing the heritage value of a view.
- Is non-compliant with NPPF.
- Impacts upon the local Conservation Area and contravenes Rotherham Local Plan SP44.
- Will result in ‘unacceptable’ harm to farmland and open countryside, within the Green Belt; in direct contravention of RMBC Policy SP2.
- Represents an unacceptable loss of fertile Agricultural Land and fails RMBC Core Strategy.
- Fails to acknowledge the existence of key archaeological finds discovered in the proposed site and adjacent Woodlands.
- Fails to follow the full Advice provided by the South Yorkshire Archaeological Society at the pre-planning consultation stage.
- Impacts negatively on Known Assets of Cultural Heritage including nearby Historic Buildings.

Matter 1: Impact on Ancient Woodland

Matter 2: Visual Impact on Heritage Assets, including Landscape & Buildings

Matter 3: Impact on Conservation Area

Matter 4: Unacceptable harm to Green Belt Land

Matter 5: Unacceptable Loss of fertile Agricultural Land

Matter 7: Impact on Known Assets of Cultural Heritage (Historic Buildings) and other buildings

Matter 8: Uncertainty regarding previous Mining extractions and Pipelines on or under the site

Matter 9: Air, Noise, Vibration and Light Pollution: Impact on Known Assets

Matter 10: Loss of Amenities

Matter 11: Legacy

Other Issues

- Noise

- The LAeq exceed 40dB this corresponds with the increase change in wind speed shown on the same graph. This would indicate that the sensor was measuring changes in sound level related to the changing air movements, probably due to fluting and flutter within the windshield used. It should be noted that when the wind level drops to under 2m/s the ambient LAeq drops to under 30dB.

- Land contamination
 - The applicant has not identified a significant land contamination incident at Grange Farm on 19th November 2009. The information below is publically available using the Environment Agency website
- Application Plans
 - The accuracy of a full 30m buffer zone is queried.
 - The buffer zone at the left hand side of the diagram, closest to P1 shows 30 measured but on the same drawing, the buffer zone narrows to 28 and 23 and 21.4 from the wood. The measurements are arbitrary, but are relative to each other and clearly show inconsistencies with the technical drawing buffer zone of 30m, down to 21.4, almost a third variance.
- Test well application as a stand-alone development
 - This represents cumulative development

As summarised within the proposals section, the applicant has provided a further response to this objection.

Finally, WAF have indicated to the Council in additional correspondence the following:

- WAF are disappointed with the lack of communication from INEOS and do not consider that INEOS have fully engaged with them or the local community.
- Insufficient notification periods have been given in advance of intended additional survey work, leading to further confusion in the community.
- The INEOS information website has not been regularly updated and still dates from October 2017 (4 months ago).

Campaign for the Protection of Rural England (CPRE)

Objects on the following grounds:

Impacts of the proposed development on the negative impact on landscape, local amenity, tranquillity, and contrary to local policies in the Development Plan.

The potential benefits do not outweigh the local impacts. Furthermore any claimed benefits of the supply of future shale gas, in terms of energy supply and security, must be discounted as this is only an exploration well. If such benefits fall to be considered, then also should the disbenefits of extracting fossil fuels and the likely failure to meet climate change targets.

The proposed development site will detract from the surroundings.

Yorkshire Wildlife Trust

Objects on the following grounds:

Inadequacies of ecological survey information.

Impacts on protected species – breeding birds. No breeding bird surveys have been undertaken of the site or adjacent areas of ancient woodland. Yorkshire

Wildlife Trust has also been informed that the site supports skylark. Many other farmland bird species may also be on the site such as yellowhammer and linnet. All farmland birds are declining and have been identified as Biodiversity Action Plan (BAP) species. Developments should therefore not result in net declines of farmland birds.

Mitigation and enhancement. Paragraph 4.4.3 of the applicant's Environmental Report indicates that hedgerow enhancements may be possible as part of the scheme. Paragraph 118 of the NPPF states that ecological enhancements should be incorporated into developments. YWT advise that ecological enhancements are delivered as part of the proposed scheme, and secured by an appropriately worded condition in the event of any approval.

Rights to Speak

A total of 7 Right to Speak requests (including from the applicant) have been received as part of the application process.

Consultations

Specific Shale Gas consultees

Oil and Gas Authority (OGA) – The OGA does not offer specific geotechnical advice regarding the planning application. The OGA will only grant consent to drill after all the other regulatory permits and permissions are obtained.

Public Health England (PHE) – No objections subject to informative. The application does not include any horizontal drilling, nor does it include any hydraulic fracturing (fracking). The main issue of potential public health concern is noise. This is most likely to be encountered during stages 1 and 2, with the possibility of some recurrence in stage 3a, if it is required. This response is based on the assumption that the applicant will take all appropriate measures to prevent or control pollution, in accordance with the relevant sector guidance and industry best practice.

British Geological Survey (BGS) – No response received.

Business, Energy and Industrial Strategy (BEIS) – formerly Department for Energy and Climate Change (DECC). Application submission noted, the Department does not comment on individual applications.

Health and Safety Executive (HSE) – No objections subject to informatives.

Environment Agency (EA) – No objections subject to conditions and informatives.

External

Civil Aviation Authority – No response.

Traffic England (Highways Agency) – No objections to revised details, subject to a condition that abnormal loads should only be undertaken between 1000-1600 hours.

Natural England – No formal objection. Raised concerns with the proximity of the proposals with the Dewidales Ancient Woodlands

Historic England – Concerns raised of the potential vibration on listed buildings. Overall, however, no objections.

Coal Authority – No objections subject to informative.

South Yorkshire Mining Advisory Service – No objections.

South Yorkshire Police – Have raised general concerns regarding future potential protest activity. The main forms of protest have been outlined as follows:

- Local Residents/protest groups blockading the entrance to the site.
- A “slow walk” with protestors walking in front of attending vehicles in an effort to publicise their cause.
- Vehicle occupation – where a protestor will climb onto an attending contractor’s vehicle and either lock on with some sort of device or simply refuse to remove them.
- Lock ons – where a protestor secures themselves to entrance gates to the proposed site or anywhere along the route that would prevent access for vehicles.

South Yorkshire Archaeology Society – Overall, no objections

Environment Agency (Flood Risk) – No objections subject to conditions and informatives.

Yorkshire Water – No objections.

Severn Trent Water – No objections following the submission of additional information

Sheffield Airport – No comments received.

RMBC – Internal

Transportation and Highways Design – Overall, no objections to the revised/clarified details, subject to conditions.

Environmental Health – Overall, no objections. The site does have the potential to have a noise impact on the nearest residential properties. No concerns are raised subject to conditions on final noise monitoring details. In respect of air quality there are no objections subject to recommended condition.

Ecologist – Overall the Ecological surveys and assessments are deficient in a large number of areas as explained in the appraisal section and the Ecologist’s responses to the planning department dated 13 December 2017, 5 January 2018 and 23 February 2018.

- The Phase 1 habitat survey should have included Dewidales Wood as well as the application area.

- The distance from the nearest point of the compound to the nearest block of Dewidales Wood is less than 50m with the red-edge site area less than 25m from the woodland, whereas Natural England has issued new guidance (November 2017) recommending 50m buffers to ancient woodland. This has been subject to further modification (January 2018) with a buffer of 15m accepted.
- No information has been provided on the hedgerows.
- Surveys are also recommended where protected species (such as bats, badgers and breeding birds) are likely to be impacted by adjacent developments.
- The lack of survey work on breeding birds, badgers or other wildlife by the applicant within Dewidales Wood means that it is not possible to know what is present and consequently the Council does not know what might be impacted.
- Whilst it is accepted that access to Dewidales Wood was denied to the applicant, signs of badgers could have been recorded from the margins of the woods or by the use of trail cameras, night scopes, on the edge of the woodland.
- The edge of Dewidales Wood and associated hedgerows, in particular, have at least moderate habitat suitability for bats and consequently this would have required monthly activity and automated surveys.
- There is a bat buffer zone just to the south of Dewidales Wood (East). Bat surveys are required within bat buffer zones.
- The applicant stated that access to land was not arranged until late July and this precluded breeding bird surveys. Breeding birds could have easily been recorded from the margins of the wood (from Bridleway No. 38 or from land the applicant had permission to access) using bird song.
- The names of surveyors along with their experience, qualifications, accreditation and licences held are not provided despite this being best practice. These could have been provided to the Council in private and names redacted from the report.

Tree Service Manager – No specific objections to the proposals, subject to a condition to protect existing trees.

Landscape Design – Overall no formal objection. The development will result in substantial adverse landscape and visual effects, albeit experience locally within 1-1.5km of the site and over the short term.

Main Drainage – No objections following additional clarifications from the applicant.

Public Rights of Way – No objections.

Neighbouring Local Authorities

Bassetlaw Council – No comments received.

Bolsover Council – No objections.

Appraisal

Where an application is made to a local planning authority for planning permission, in dealing with such an application the authority shall have regard to -

- (a) the provisions of the development plan, so far as material to the application;
- (b) any local finance considerations, so far as material to the application; and
- (c) any other material considerations. - S.70 (2) TCPA 1990.

If regard is to be had to the development plan for the purpose of any determination to be made under the Planning Acts the determination must be made in accordance with the plan unless material considerations indicate otherwise - S.38 (6) PCPA 2004.

The planning application seeks the development of a hydrocarbon well site which incorporates the drilling of a vertical exploratory well through the use of a drilling rig together with associated ancillary works. The purpose of the proposed development is logging and coring of the shale strata, which would be assessed by the applicant. The assessment is to see whether future flow testing of the well(s) (which may involve well stimulation through hydraulic fracturing – or ‘fracking’) would be worthwhile.

Hydraulic fracturing (fracking) and/or flow testing are not part of this planning application. If either are demonstrated to be worthwhile then a further planning application would be required to be submitted. If the results are negative the site would be decommissioned and restored.

The Regulatory Regimes

Rotherham Council, as Minerals Planning Authority (MPA), is just one of the key Regulators involved in the hydrocarbon development process, each one of which must be satisfied before development can commence. The key Regulators and their involvement summarised as follows:

- a) The Oil and Gas Authority (OGA) – which issues Petroleum Licences, gives consent to drill under the licence once the other permissions and approvals are in place, and have responsibility for assessing risk of and monitoring seismic activity, as well as granting consent for flaring and venting.
- b) The Minerals Planning Authority – which where appropriate grants permission for the location of any wells and well-pads, and imposes conditions to ensure that the impact on the use of the land is acceptable.
- c) The Environment Agency – protects water resources (including groundwater aquifers), ensures appropriate treatment and disposal of mining wastes, emissions to air, and suitable treatment and management of naturally occurring radioactive materials.
- d) Health and Safety Executive – regulates the safety aspects of all phases of extraction, in particular they have responsibility for ensuring the appropriate design and construction of a well casing for any borehole.

There are other bodies which may be involved in the consenting of hydrocarbon development, including:

- a) The Coal Authority – whose permission will be required should drilling through a coal seam take place.
- b) Natural England – who may need to issue European Protected Licences in certain circumstances.
- c) British Geological Society – who need to be notified by licensees of their intention to undertake drilling and, upon completion of drilling, must also receive drilling records and cores.
- d) Hazardous Substances Authorities – who may need to provide hazardous substance consent(s).
- e) Public Health England – are consulted during the planning process and advise on public health matters.

There may also be other additional consents and orders, such as stopping up rights of way or temporary road orders, which may need to be obtained in certain locations.

The main considerations in the determination of the application are as follows:

- Principle of the development in the Green Belt
- Site selection process
- Traffic and transportation
- Public Rights of Way
- Ecological issues and impact on habitats
- Impact on hedges and trees
- Landscaping and visual impact
- Lighting
- Archaeology
- Heritage
- Noise and vibration
- Well design and safety
- Air quality
- Ground contamination, land stability and impact of mining legacy
- Flood risk
- Drainage
- Hydrology and groundwater
- Socio-economic impacts
- Health impacts
- Climate change
- Cumulative impacts
- Restoration and after use
- Other material considerations
- Other issues

Principle of the development in the Green Belt

The Development Plan currently consists of the Core Strategy and the relevant 'saved' Policies in the Unitary Development Plan, although regard should also be had to emerging Policies in the Rotherham Local Plan 'Publication Sites and Policies.'

The site is located within the Green Belt and Core Strategy Policy CS4 'Green Belt' states that land within the Rotherham Green Belt will be protected from inappropriate development as set out in national planning policy.

Core Strategy Policy CS26 'Minerals' adds that: *"Energy Minerals - Proposals for underground coal mine extensions (including colliery spoil disposal) and surface mining in addition to proposals for the exploration, appraisal and production of onshore oil and gas, including the gasification of coal, coal mine methane and coal bed methane will be assessed on their merits against all material planning considerations including national planning policy."*

Policy SP2 'Development in the Green Belt' of the Rotherham Local Plan 'Publication Sites and Policies' (as amended following Examination in Public) states that in considering planning applications for new development, including mineral workings within the Green Belt, and to ensure proposals minimise the impact of the development on the openness of the Green Belt, particular regard will be had to the following factors: the size, scale, volume, height, massing, position, lighting and any proposed enclosures of the proposals.

National Planning Policy Framework (NPPF)

At the heart of the NPPF is a presumption in favour of sustainable development. For decision taking this means approving development proposals that accord with the development plan without delay; and where the development plan is absent, silent or relevant policies are out-of-date, granting planning permission unless any adverse impact of doing so would significantly and demonstrably outweigh the benefits, when assessed against the policies in the Framework taken as a whole or specific policies in the Framework indicate development should be restricted.

Paragraph 90 of the NPPF indicates that certain forms of development, which includes mineral extraction, are not inappropriate in the Green Belt provided they preserve the openness of the Green Belt and do not conflict with the purposes of including land in the Green Belt. An earlier appeal (after initially being dismissed) was subsequently approved in a High Court decision (July 2013) for Europa Oil & Gas at Holmwood, Surrey County Council [*Europa Oil and Gas Ltd v Secretary of State for Communities and Local Government & Ors [2013] EWHC 2643 (Admin), Court of Appeal (June 2014) EWCA Civ 825*]. This was then approved by the Planning Inspectorate in a re-determined appeal APP/B3600/A/11/2166561. The Inspector indicated that:

"This means that exploration and appraisal of a mineral resource are not inappropriate activities by definition, but would only be treated as inappropriate if they adversely affect the openness or any other purposes of the Green Belt designation identified in paragraph 80 of the Framework.... Without exploration and appraisal it would be extremely difficult, if not

impossible, to prove the extent and viability of a mineral resource, the extraction and production of which would not necessarily be inappropriate. As paragraph 90 of the Framework advises, inappropriateness would only arise in circumstances where the openness and/or other purposes of the Green Belt would be compromised. As such, it is necessary to move to ascertain if appeal scheme would be inappropriate development in the Green Belt, by assessing its effect on Green Belt openness, its permanence and the purposes of the Green Belt.”

The principle is therefore not considered to represent “inappropriate development” in the Green Belt. This is still subject to development preserving openness and providing it does not conflict with the purposes of including land in the Green Belt.

It is accepted that the provision of the 60m rig, security fencing and the temporary portacabins, as well as other ancillary equipment, would have an impact on the openness of the Green Belt, though this would be over a relatively short term period, at the end of which the site would be restored with all equipment/fencing/bunding being removed. As such, it is considered that the proposals do not represent inappropriate development in the Green Belt.

In addition, Policy SP53 ‘Exploration and Appraisal of Hydrocarbons’ of the Rotherham Local Plan ‘Publication Sites and Policies’ (as amended following Examination in Public) states:

“Proposals for exploration and appraisal of conventional and unconventional hydrocarbons will be permitted where:

- a. they are supported by an overall scheme which allows for the exploration and appraisal of an oil or gas field together with any other fields in close proximity so far as is reasonable and practicable before production commences. This must include an indication of the extent of the resources and the extent of the area of search within the resource;*
- b. the integrity of the geological structure is demonstrated to be suitable;*
- c. infrastructure and associated facilities are sited in the least sensitive location from which the target resources can be accessed, so as to avoid the environmental and ecological impact of development wherever possible;*
- d. any adverse impacts can be mitigated to an acceptable level, with safeguards to protect environmental and amenity interests put in place as necessary;*
- e. operations are for an agreed, temporary period; and*
- f. sites and associated facilities are restored in line with a scheme to be agreed by the Council at the earliest practicable opportunity if resources are not found in economically viable volumes, or they are developed within a time frame agreed.”*

The explanatory text to the Policy states:

“As an emerging form of energy supply, there is a pressing need to establish – through exploratory drilling – whether or not there are sufficient recoverable quantities of unconventional hydrocarbons such as shale gas and coalbed methane present to facilitate economically viable full scale production.”

Policy SP54 'Hydrocarbon Production Facilities and Ancillary Development' of the Rotherham Local Plan 'Publication Sites and Policies' states:

"Proposals for conventional and unconventional hydrocarbon production and other related ancillary development, will be permitted where:

- a. a full appraisal of the hydrocarbon resource field has been completed and agreed with the Council;*
- b. they form part of a comprehensive scheme for the full development of the hydrocarbon resource within an agreed timescale;*
- c. infrastructure and facilities are justified in terms of their number and extent, sited in the least sensitive location from which the target resources can be accessed, and designed and operated to minimise environmental and amenity impacts;*
- d. any individual and cumulative adverse impacts can be mitigated to an acceptable level;*
- e. existing facilities are used for the development of any additional fields discovered unless the applicant satisfies the Council that this would not be technically feasible and any adverse impacts can be mitigated."*

Paragraph 144 of the NPPF sets out the considerations for local authorities when determining minerals planning applications. The relevant considerations are summarised below:

- Give great weight to the benefits of mineral extraction, including to the economy;
- Ensure in granting planning permission for mineral development, that there are no unacceptable adverse impacts on the natural and historic environment, human health or aviation safety, and take into account the cumulative effect of multiple impacts from individual sites and/or from a number of sites in a locality;
- Ensure that any unavoidable noise, dust and particle emissions and any blasting vibrations are controlled, mitigated or removed at source, and establish appropriate noise limits for extraction in proximity to noise sensitive properties;
- Provide for restoration and aftercare at the earliest opportunity to be carried out to high environmental standards, through the application of appropriate conditions, where necessary. Bonds or other financial guarantees to underpin planning conditions should only be sought in exceptional circumstances;

Given that exploration is one of the phases of extraction, great weight can be given to the benefits of the proposed development in line with Paragraph 144 of the NPPF.

Paragraph 147 has further specific advice for hydrocarbon development stating that when planning for on-shore oil and gas development, including unconventional hydrocarbons, Minerals Planning Authorities should clearly distinguish between the three phases of development (exploration, appraisal and production) and address constraints on production and processing within areas that are licensed for oil and gas exploration or production.

Overall, it is not considered that there would be an adverse effect on the long term permanence of the Green Belt in this area. Any harm to the openness of the Green Belt is considered temporary. Landscape character effects are considered further below. The application is for minerals development which can only be undertaken

where resources are located and the number of sites available for appraisal will be limited in this respect.

National Planning Practice Guidance (NPPG)

The National Planning Practice Guidance identifies a pressing need to establish, through exploratory drilling, whether or not there are sufficient recoverable quantities of unconventional hydrocarbons such as shale gas present to facilitate economically viable full scale production.

The NPPG explains that the exploratory phase of hydrocarbon extraction seeks to acquire geological data to establish whether hydrocarbons are present. It may involve seismic surveys, exploratory drilling and, in the case of shale gas, hydraulic fracturing (fracking), although no fracking would take place as part of the exploratory phase in this instance.

In view of the above it is considered that the temporary use of the site as part of associated mineral extraction, whether at this site or another nearby, is acceptable in principle, and other impacts of the scheme will now be looked assessed.

Future applications

As indicated above, this application only seeks approval for the drilling, testing, suspension, decommissioning and restoration of the proposed well, including possible use as a listening well. This application would not authorise any other future activities on this site.

A number of objectors wish to know whether or not this is likely to lead to a future application for high volume hydraulic fracturing, or “fracking”. The applicant indicates that until the potential commercial viability of the target resource is established through the laboratory analysis of the extracted core of shale rock, the prospect of development being taken forward to the appraisal stage is uncertain, both in respect of the content and timing of any future application.

Therefore, there are a number of possible outcomes that could follow this application. However, the present intention is for this site to be restored. If future appraisal or production proposals were to be brought forward, either on the application site or within the surrounding area, an application for planning permission would be required along with a range of consents from other regulators.

Site selection process

Identifying a suitable exploratory site depends upon a number of factors, including environmental constraints, appropriate mitigation measures and land availability. However, the fundamental and most essential requisite for a new well site is the subsurface geology. As with any other mineral resource, hydrocarbons can only be extracted where they are located. In order for a vertical core well to be worthwhile, the well pad needs to be immediately above the geological formation where existing data has identified potentially hydrocarbon-bearing strata.

It is stated that to achieve these objectives a vertical well would be drilled through each of the geological strata to achieve a full assessment of the strata to be made.

The application is also required to stay within the licence boundaries of PEDL 304.

The applicant has identified that within the search area the choice of location took into account a range of environmental and planning constraints, site availability and logistics. The constraints that were considered include:

Landscape

National Parks
Areas of Outstanding Natural Beauty, and
Country Parks

Ecology

Ramsar Sites
Special Areas of Conservation (Habitats Directive) and candidate SACs
Special Protection Areas (Birds Directive) and potential SPAs
Sites of Special Scientific Interest
Ancient Woodlands
Biosphere Reserves
Core Grassland/Heathland/Mire/Fen/Bog
National Nature Reserves,
Local Nature Reserves

Land use and Access

Agricultural Land Classification
Coastal Paths
Countryside Rights of Way Access Areas
Environmentally Sensitive Areas (agricultural),
National Trails

Cultural Heritage

World Heritage sites
Listed Buildings (by grade)
Scheduled monuments
Heritage Coast,
Conservation Areas

Water

Flood plain
Main rivers,
Groundwater aquifers providing potable water supplies (including Source Protection Zones)

General

Areas with sensitive properties (schools, hospitals and care homes for the elderly),
Air Quality Management Areas

Sites are preferably greater than 400m from residential properties. This broad guiding principle was then reviewed once site specific factors could be taken into account to ensure that the chosen site was not likely to have a significant effect on any nearby receptors.

Whilst the applicant has not identified other potential sites within the supporting detail of this application, it is understood that the selected site meets the criteria set out above. The application is not defined as EIA development and the applicant is not required to list and discount sites in order of their sequential preference in policy terms. The detail of the application will be examined further below.

Traffic and transportation

RMBC's Transportation Unit disagree with the submitted information around classification of HGVs and consider the more appropriate definition of an HGV to be a vehicle with an operating weight exceeding 7.5 tonnes. This would indicate a significant percentage increase in HGV traffic travelling through Woodsetts. However, the actual number of HGV movements would be relatively modest (i.e. a maximum of 60 No. per day on the basis of 30 in and 30 out at an average of 5 No. per hour assuming a 12 hour day). The carriageway width along the C70 between the A57 at Gateford Roundabout and the site varies between 5.5m and 7.3m (approx.), which is considered to be capable of satisfactorily accommodating the additional vehicular traffic anticipated. Furthermore, the route through the village is subject to a 30 mph limit, with traffic calming and separate pedestrian facilities.

The revised draft Traffic Management Plan now confirms the route as being between the Gateford Roundabout along the C70 to the site and lists intended mitigation measures such as signage, escort vehicles (when required), convoy system from staging areas etc.

The traffic and transport objections detailed in the document dated 11th January 2018 submitted by Woodsetts Against Fracking have been considered, indeed some of these issues have already been addressed (see above). The road safety concerns are noted. The research from the Transportation Unit reveals there have been 8 No. personal injury accidents recorded along the C70 between the Worksop Road/Owday Lane junction and the intended site access in the period January 2012 to December 2016. None of these accidents involved a pedestrian or horse rider. Records for 2017 (currently incomplete) reveal 1 No. personal injury accident.

In these circumstances, the Transportation Unit are of the opinion that safe and suitable access to the site can be achieved and the cumulative impact of the development in transport terms is unlikely to be severe. Accordingly, the development can be supported from a highway aspect subject to conditions. These include

1/ Prior to the development being commenced, details of a Traffic Management Plan and Route Management Strategy shall be submitted to and approved by the Local Planning Authority and the approved details shall be implemented throughout the duration of the development.

2/ The development shall not be commenced until a signage scheme for C70 between Gateford Roundabout and the site access has been implemented in accordance with details which shall have been submitted to and approved by the Local Planning Authority.

3/ Details of the surfacing and draining of on-site vehicular areas shall be submitted to and approved by the Local Planning Authority before the development is commenced and the approved details shall be implemented.

4/ Details of on-site parking and turning facilities for staff and construction traffic shall be submitted to and approved by the Local Planning Authority before the development is commenced and the approved facilities shall be retained throughout the duration of the development.

In addition, Highways England were also consulted. Highways England initially raised concerns on the Traffic and Transport plan. However, these were subsequently withdrawn following the submission of additional supporting information to the Traffic Management Plan (TMP) and Route Management Strategy (RMS) to control vehicle movements associated with the proposed development and reduce the traffic impact on the surrounding highway network. The final response from Highways England is to raise no objections to the revised details, subject to conditions that abnormal loads should only be undertaken between 1000-1600 hours and the traffic stages of the development be agreed with Highways England.

Overall, subject to future conditions, both RMBC's Transportation Unit and Highways England have concluded that they are able to support the proposal on road safety grounds.

Public Rights of Way

The proposal does not involve any path closures. The Council's Public Rights of Way (PROW) officer indicates that there are no Definitive Public Rights of Way recorded passing through the site itself, though there are adjacent public bridleways. These routes carry equestrian rights as well as those for walkers and cyclists. Overall, subject to final details of the traffic management plan the Council's PROW department have not raised any objections to the proposals.

Ecological issues and impact on habitats

National policy

Paragraphs 9 and 118 of the NPPF state that "*Pursuing sustainable development involves seeking positive improvements in the quality of the built, natural and historic environment, as well as in people's quality of life, including (but not limited to):...moving from a net loss of bio-diversity to achieving net gains for nature*".

and

"118. When determining planning applications, local planning authorities should aim to conserve and enhance biodiversity by applying the following principles:

- If significant harm resulting from a development cannot be avoided (through locating on an alternative site with less harmful impacts), adequately mitigated, or, as a last resort, compensated for, then planning permission should be refused;"*

Responses from nature conservation organisations

Yorkshire Wildlife Trust (YWT) and the Campaign for the Protection of Rural England (CPRE) have objected to the ecological element of the application and criticise the ecological information submitted as being insufficient.

Natural England have assessed the proposed development with specific regard to the likely future impacts on the nearby SSSI and Dewidales Ancient Woodlands.

Natural England (NE) have indicated that this application is in close proximity to Anston Stones Wood, Lindrick Golf Course and Creswell Crags Sites of Special Scientific Interest (SSSIs). Natural England is satisfied that the proposed development being carried out in strict accordance with the details of the application, as submitted, including the embedded mitigation measures listed, will not damage or destroy the interest features for which the sites have been notified. NE advise the Planning Authority that these SSSI's do not represent a constraint in determining this application.

NE have not assessed this application and associated documents for impacts on protected species. They would expect the Local Planning Authority (LPA) to assess and consider the other possible impacts resulting from this proposal on the following when determining this application:

- local sites (biodiversity and geodiversity)
- local landscape character
- local or national biodiversity priority habitats and species.

Natural England does not hold locally specific information relating to the above and recommend that further information is sought from the appropriate bodies (which may include the local records centre and wildlife trust).

Swinston Hill Woods LWS is 617m to the north-west of the application site and is designated for its neutral/calcareous woodland and ancient woodland. Lindrick Common LWS located 717m to the south-east has been designated on the basis of several mosses, plants, invertebrates, neutral/calcareous grassland, wet grassland, rich fen, ancient woodland, etc. Anston Stones Wood LWS is 777m to the south-west. This important site is designated for its grassland and woodland habitats, local plants, local insects and other infrequent species. The other woodland Local Wildlife Sites could be indirectly impacted unless suitable mitigation was put in place.

The Council's Ecologist retains a number of concerns, which are considered in more detail below.

Potential Impact on Dewidales Wood Ancient Woodland

The development proposal is located approximately 25m from Dewidales Wood, which is an ancient woodland site. Dewidales Wood AW could easily be impacted by the development. NE has issued standing advice on ancient woodland and veteran trees, which provides advice on how ancient woodland and plantations on ancient woodland sites should be considered in the planning process (see <https://www.gov.uk/guidance/ancient-woodland-and-veteran-trees-protection-surveys-licences>). Standing advice is a 'material' planning consideration. This means

you should take it into account when making decisions on relevant planning applications. The Standing Advice as it relates to ancient woodland states:

“You and the developer should identify ways to avoid negative effects on ancient woodland or veteran trees, such as selecting an alternative site for development, or redesigning the scheme. You should decide on the weight given to ancient woodland and veteran trees on a case-by-case basis, taking account of the NPPF and relevant development plan policies. If you decide to grant planning permission, you should use planning conditions or obligations to make sure the developer either:

- *avoids damage*
- *mitigates against damage*
- *compensates for loss or damage (use as a last resort)”*

The Council’s Ecologist is of the opinion that because the applicant did not survey the Dewidales Wood Ancient Woodland, the Council has no baseline against which to assess and monitor the impacts of the development and cannot tailor mitigation for the woodland because due to lack of data.

The NPPF indicates that *“Ancient woodland or veteran trees are irreplaceable....”*

Buffer Zones to Ancient Woodland

In February 2017, the Government indicated its desire to increase protection for ancient woodland under the Housing White Paper. The Woodland Trust has recently provided guidance in deciding on how ancient woodlands should be assessed in planning applications¹, which takes account of Natural England’s Standing Advice, the Housing White Paper mentioned above and other recent initiatives. One result is that the Woodland Trust recommends a buffer of 50m between development and ancient woodland (p. 20 of the document cited in the link).

More recently (November 2017), Natural England issued new guidance recommending 50m buffers to ancient woodland, which – although amended back to 15m (in January 2018) – Indicates that Natural England recognise and would like to recommend wider buffers around ancient woodlands where there are development applications on adjacent land. If the guidance for a 50m buffer had remained extant, then the applicant’s compound would have fallen entirely within this new buffer zone. On the provision of an appropriate buffer, the Council’s Ecologist considers that the applicant should revisit their assessment alongside putting further measures to protect the woodland into place.

When scaled from the applicant’s submitted plan (ref P304-S21-PA-10), the distance from Dewidales Wood is approximately 24m to the red-edge site area, increasing to approximately 28m to the edge of the proposed site bund, 38m from a proposed waste area within the site and 41m from the nearest offices. Overall, there is significant built form along with the bund and fencing within 50m of the ancient woodland.

¹ This is available at: <https://www.woodlandtrust.org.uk/publications/2017/09/planning-for-ancient-woodland/>

Local Wildlife Sites

Dewidales Wood is a Local Wildlife Site and adjoins the south-eastern corner of the site. Dewidales Wood was designated on the basis of its neutral/calcareous woodland types and rich/ancient hedgerow(s). Dewidales Wood could easily be impacted by the development. Natural England's Standing Advice is that Local Wildlife Sites which adjoin planning application sites should be surveyed. This has not been done here and consequently the possible impact of the proposed development on Dewidales Wood LWS cannot be properly assessed.

General comments on protected species

The most likely impacts on protected species are likely to be indirect impacts produced by light pollution, noise and human disturbance.

Natural England's Standing Advice recommends that surveys are conducted in woodlands where protected species (such as bats, badgers and breeding birds) are likely to be impacted by adjacent developments. This has not been done by the applicant. Protected species such as badgers, bats and breeding birds are protected by the Wildlife & Countryside Act 1981 and its amendments. It is illegal to disturb a protected species, its nest/sett/roost or associated structure/shelter. The proposed well site would be separated from Dewidales Wood (East) by a public right of way (Anston Bridleway No.38) but is effectively adjacent to the woodland. The Council's Ecologist considers that a bat, badger and breeding bird survey of Dewidales Wood is essential to assess the impacts of the development.

The lack of such survey work means that it is not clear what is present. Consequently, the Council does not know what might be impacted. A precautionary approach is possible to some extent but is difficult, for example, without specific knowledge of exactly where badger setts or sensitive birds are nesting.

Badger survey

The Council's Ecologist acknowledges that access to Dewidales Wood was denied to the applicant. However, signs of badgers could have been recorded from the margins of the woods or by the use of trail cameras, night scopes, video, etc. The applicant could easily have employed modern technology from outside the wood to try to determine whether badgers are present. Other consultants have recently used such technology for planning applications in Rotherham Borough.

The applicant could also have approached South Yorkshire Badger Group for data on Dewidales Wood but has not, to the Council's knowledge, done this. This would have been prudent given that they could not access Dewidales Wood.

The Council's Ecologist notes that mammal burrows in Dewidales Wood (East) were observed on 1st February 2018 from the PROW. He could not be sure whether these related to deer, fox or badger.

Overall, the Council considers that the supporting information on this aspect of the application was insufficient.

Bat survey

The Council's Ecologist accepts that the track and test well site are likely to be of low habitat value for bats but this is not the case with Dewidales Wood or the hedgerow connecting them. The Ecologist is of the opinion that the edge of Dewidales Wood and associated hedgerows, in particular, have at least moderate habitat suitability for bats and consequently this would have required monthly bat activity and automated surveys. The Bat Conservation Guidelines (Collins 2016) state that for moderate habitat suitability for bats, monthly transects should be undertaken along with monthly automated bat recordings. The applicant has conducted bat surveys in August and September only.

There is a bat constraint zone (as shown on RMBC's Mapper software) just to the south of Dewidales Wood (East). Bat surveys are required within bat buffer zones.

Woodsetts against Fracking (WAF) have added further comments on bats. These comments appear to have been derived from local bat experts. They have added them for completeness and because they appear to be valid criticisms of the bat survey in the opinion of the Council's Ecologist.

"...No reference, or indeed impact analysis, has been made to the documented common pipistrelle maternity roost (some 200 individuals strong), approximately 0.78km to the south east of the proposed application site."

Section 4.4 of the submitted environmental report indicates that bat activity surveys were undertaken in August and September 2017, covering the summer maternity season. It is incorrect to say that these months cover the summer maternity season; surveys commencing the 27 August onwards cannot be classified as covering the main maternity season when, in all reality, breeding roosts will have disbanded. As a result, no consideration has been given to impacts of breeding bats within the adjacent Dewidales wood and to other maternity roosts within the vicinity of the application site.

The executive summary of the submitted bat report states: *"There is also a possibility that the lighting would provide more foraging resources for light tolerant bat species as there would be an increase in insect numbers."* This is a very misleading statement and, whilst some evidence does support this theory, substantial literature highlights that where excessive lighting of habitats occurs this diminishes insects which in turn reduce feeding resources for bat species that are less tolerant to light pollution, including *Plecotus* and *Myotis* species, both of which were recorded during bat surveys of the application site. These species could be at a severe foraging disadvantage should light levels on the proposed application site impact on the species known to be present within the area and potentially within the adjacent Local Wildlife site. This is of particular concern to nursing females as survey data submitted cannot confidently confirm presence/ likely absence of maternity roosts adjacent to the application site.

The Bat Survey report states *"One pass of a Myotis species was recorded one hour after sunset, but the bat was not observed."* Furthermore, the author states that light-shy bat species (*Myotis* species and brown long-eared bat) were recorded in lower numbers in comparison to the light intolerant species, concluding there were no

visual observations of these species during the surveys, and suggesting that they do not frequently use the northern edge of the woodland. Due to the late mean emergence times of light-shy bat species and the fact that they are often not seen during surveys, how can this conclusion be drawn? Brown long-eared bat and some *Myotis* species have a mean emergence time of 55 – 60 minutes post-sunset when it is dark; thus, this assumption is incorrect. WAF have indicated that during a recent court case (CPCA vs The Secretary of State) it was accepted by the courts that a small impact to a secondary commuting route is a disturbance, which may require a licence, as it causes bats to deviate from their normal flight route 4 - 3.

The information submitted within the proposed application fails to correctly consider/ assess potential impacts on bat species other than pipistrelles.

Brown long eared, soprano pipistrelle and noctule bats all of which were recorded during the field survey work feature on the National Biodiversity Action Plan which is not mentioned in the report.

Dewidales Wood and the hedgerow network provide value habitat for bats and as such should be subject to monthly transect and automated bat recordings in line with guidance outlined with the Bat Conservation Guidelines (Collins 2016). The applicant has submitted data from the latter end of the recognised ecological survey period for bats and as such have provided no information to confirm presence/ likely absence of bat roosts within Dewidales Wood within the peak bat activity season. Furthermore, no consideration has been given to the potential impacts of bats striking the drilling rig.

Appendix A of the submitted bat survey report (page 485) records a serotine bat pass at 19:54 on the 19th September 2017. Furthermore, section 2.6.1 of the bat activity assessment, foraging and commuting, paragraph 2 states: static detectors recorded *Nyctalus/Eptesicus* species which could not be identified to species level. The report concluding that due to the location of the application site and previous recorded bat activity the species was most probably noctule or leisler's bat. Whilst the serotine bat is generally regarded as a southern species serotines have been recorded previously "near Rotherham" by respected bat ecologist Michael Thompson (Thompson 1977 in Delaney 1985 Yorkshire Mammals). As a result, the presence of serotine bat would be deemed as a new recent county record for the area and be of county importance. Due to the surveys being undertaken in the latter part of the bat activity survey further surveys should be conducted to ascertain presence/ likely absence of serotine bat on or near the application site.

The applicant could also have approached South Yorkshire Bat Group for data on Dewidales Wood or the wider area but has not done this. This would have been encouraged given that it could not access Dewidales Wood. Overall the Council considers that the supporting information on this aspect of the application was insufficient.

Breeding bird survey

The applicant stated that access to land was not arranged until late July and this precluded breeding bird surveys. The Council is of the opinion that the applicant ought to have carried out a breeding bird survey for spring 2017. Ideally, discussions

should have been going on with the landowner over the winter ready for the new season.

Whilst the Council's Ecologist acknowledges that access to Dewidales Wood was denied to the applicant, breeding birds could have easily been recorded from the margins of the wood (from Bridleway No. 38 or from land the applicant had permission to access) using bird song (the standard method for recording breeding birds) and by visually recording birds active at the edge of the wood, or flying overhead.

Breeding bird surveys should also have been undertaken for the test well site, tracks, adjacent hedgerows and the arable fields shown on the Phase 1 Habitat Survey. Natural England's Standing Advice states that bird surveys should be conducted where there is "floodlighting green space within 50 metres of woodland, water, *hedgerows* [Council Ecologist's italics] or lines of trees connected to woodland or water".

Farmland birds have been declining more than other groups of birds and those that might be expected such as skylark, lapwing, grey partridge, yellowhammer and quail are either Red List (first four) or Amber List (quail) species and consequently of enhanced nature conservation concern. Breeding bird surveys could have been undertaken over three or more visits in spring and this would not have been onerous or expensive in our opinion.

The Council's Ecologist considers it remiss that no birds were recorded on the Phase 1 Habitat Survey. Several species will have been evident when the ecologist(s) did their survey and it is a simple task to note these down and add them to the report.

Table 4.4 in the applicant's Environment Report states "*No birds were observed on the proposed site during the extended Phase 1 habitat survey or during subsequent visits to the site for bat surveys*". The Council's Ecologist considers it unlikely there were no birds whatsoever on any of the surveys.

The three bird species that the applicant mentions might be breeding are skylark, lapwing and possibly quail. Skylark and lapwing are Red List, Species of Principal Importance and UK Biodiversity Action Plan species, whilst quail is Amber List, so, even the applicant believes there are three birds of conservation concern breeding on the well site and yet they did not consider it prudent to undertake a survey. The datasearch conducted by the applicant found records of other birds of conservation concern within 2km of the site including grey partridge, house sparrow, tree sparrow and yellowhammer and these could easily occur on the site. Others such as linnet and twite could easily occur. It is worth adding that a breeding bird survey could have involved as few as three dawn visits and would not have been expensive to undertake.

The development may only cover 1.86ha but it will potentially disturb the entire field and all birds nesting here, as well as the hedgerows alongside the access track and running alongside Dewidales Wood and the Dewidales Wood itself. This is particularly so given that the development will be a tall structure and 24 hour working

during drilling. Sensitive nocturnal species such as owls could easily be disturbed as well as daytime species.

Potential impacts

The Council's Ecologist does not accept the Significance given in Table 4.5. The Impacts on all Items (Receptors) are assessed as 'Not Significant'. With the gaps in survey work, the Ecologist does not consider it reasonable that these conclusions could be reached.

There may be disturbance to protected and other species cause by human activity, by construction and development, by light pollution, vehicle movements and possibly by noise and vibration. It is difficult to know what impact vibrations would have on protected and other species (because there is little published on this). Lighting could very easily impact on bats, badgers, owls and other nocturnal wildlife in Dewidales Wood and the surrounding area which is rural countryside and some distance from other sources of lighting. The Council would suggest a condition would have to be set for lighting which would specify wildlife friendly lighting including the use of cowls and directional lighting aimed at the ground, the well or on buildings but not on Dewidales Wood or the nearby hedgerow. The impacts on nocturnal wildlife will be increased during the period when 24-hour working takes place.

The Council's Ecologist would be concerned if the fencing did not screen activities within the compound from the wood and act as a barrier to noise, light, visible human activity, etc.

The Council's Ecologist is concerned with any lighting above the level of the fencing or single storey temporary buildings around or within the compound or on the rig even if these are cowled or hooded. Lights at height will stand out in particular because of the lack of other illumination here. Consequently, any lights at height could easily illuminate parts of the field and Dewidales Wood and potentially affect bats, owls, badgers, moths and other nocturnal wildlife.

Mitigation

If the applicant considers that it is unable to offer much in the way of mitigation because it does not own land on or near the application site, or is unwilling to purchase land, then the provision of monies to be used in securing nature conservation ends may be appropriate. The Council or third parties such as YWT may be better able to make agreements with the owner of Dewidales Wood (or Lofties Plantation or other sites nearby) for sympathetic habitat management work.

Biological Data

The applicant does not state who they consulted for their previous biological records but Rotherham Biological Records Centre (BRC) was not approached. Had Rotherham BRC been approached they could probably have provided more data. The source of the biological data should be given.

Phase 1 Habitat Survey

The original Phase 1 Habitat map had no target notes. It would normally have been expected to have at least six to ten on a standard Phase 1 Habitat. Target Notes could have been provided at the track entrance, at the defunct hedge 100m south of the entrance, where the track does a 90 degree right bend, one within the test well site itself, two or three for the northern edge of Dewidales Wood and one on the hedge connecting the two woodland blocks. The applicant did provide an amended Phase 1 Habitat Map in February 2018 based on a site visit on 1st February 2018. However, this date is outside the optimum period for Phase 1 Habitat surveys.

No plant list has been provided with the Phase 1 Habitat survey (separate lists could have been provided for the track and well head location, a separate list for the wider Phase 1 Habitat area including the Dewidales Wood margins).

It is noted from aerial photographs, that the arable fields have headlands running around the periphery of the fields. These should lead to greater floristic species richness and diversity of the fields. They could be important to farmland birds within the field in which the application is located.

Hedgerows

No information has been provided on the hedgerows. Although the Council realises that no hedgerows are to be removed, hedgerows run alongside the access track and a significant one runs between the two blocks of Dewidales Wood which is located very close to the test well site. Dewidales Wood was formerly much larger and included the ancient woodland block to the west. The majority of the woodland was removed post 1967 based on historical aerial photos. The hedgerow connecting both fragments of Dewidales Wood is therefore a remnant of the wider ancient woodland that occurred here and has the potential to be a species-rich hedgerow and to support ancient woodland plant species. Since its close proximity (approximately 15m) to the proposed compound; it should therefore have been surveyed and properly assessed. A hedgerow survey of this and the surrounding hedges would have been appropriate and could have been done at the same time as the Phase 1 Habitat Survey and reported at the same time.

Surveyors

The Council considers that the applicant should have provided more information on the surveyor's qualifications, experience and licences held. This could have been done without identifying the surveyor. The provision of details of surveyor's including their names, experience, qualifications, accreditation and licences held, is stated best practice for Preliminary Ecological Assessments (i.e. British Standard on Biodiversity, CIEEM Guidelines on Preliminary Ecological Assessments, Bat Survey Guidelines 2016).

Summary

Overall, the Council's Ecologist considers that the application has a significant lack of supporting data due to lack of, or incomplete surveys and as such the Council cannot adequately assess the submitted details. The Council considers that the

applicant has submitted insufficient evidence of attempts to try alternative methods where access could not be obtained. It is not considered that these issues could be satisfactorily considered and it is therefore recommended that the application is refused on lack of ecological information and in conflict with paragraph 118 of the NPPF.

Landscaping and Visual Impact

The Council's Landscape Team have reviewed the landscape and visual appraisal, and are satisfied that the judgements made in the report in respect of both landscape effects and visual effects are a reasonable representation of the likely worst case effects of the proposed operations included within this development.

The effects are summarised the effects in the table below as there are a number of stages of development, with different levels of effect.

Stage	Max height of elements	Duration	Nature of effect
Stage 1 Development & Establishment	32m surface rig	3 months	Site – Substantial adverse effect Landscape character - Moderate adverse effect Up to 1km Minor adverse effect beyond 1.5km.
Stage 2 Drilling & Core Pressure Transient Test	60m mobile drilling rig & sub-structure up to 15m (including lighting, double stacked containers (5m) 32m workover rig	5 months Up to 2 months after drilling	Site – Substantial adverse effect Landscape character – Moderate adverse effect 1-3km Minor adverse effect beyond 3km
Stage 3 Maintenance of Site	2m high fencing and bund, gatehouse.	Up to 5 years	Site - Minor adverse effect Landscape character – Negligible effect
Stage 3a Possible Workover of Well (the process of pulling and replacing a well completion)	Max 32m	Up to 1 month	Site – Substantial adverse effect Landscape character - Moderate adverse effect up to 1km Minor adverse effect beyond 1.5km
Stage 4 Use of Listening Well	Workover rig 32m, or wireline truck and	5 weeks	Site – Substantial adverse effect

	30tonne crane (up to 35m)		Landscape character - Moderate adverse effect up to 1km Minor adverse effect beyond 1.5km.
Stage 5 Decommissioning & Restoration	Up to 32m initially and reducing to nil	Up to 2 months (aftercare 5 years)	Site - Neutral effect Landscape character – Moderate adverse effect up to 1km Minor adverse effect beyond 1.5km Neutral effect upon completion of restoration stage.

Those elements of the development involving tall structures/ cranes & drill rigs (32m, 35m and 60m respectively) will result in a substantial adverse effect locally (within 1-1.5km of the site). These effects are likely to be experienced over a short period of time of less than 1 year. For the remaining time during operations, when taller structures are not present (up to 15m) the visual effects are considerably reduced and are more likely to be screened by the on-site mitigation bunding or existing woodland blocks. As such, this is likely to result in Moderate to Minor adverse effects again, experienced over a relatively short period of time of up to 5 years.

On rig height, the applicant has further specified a 60m height as this is the highest rig available which can drill to the required depth. This is a worst case scenario as the applicant has not yet determined which drilling rig will be used. The selected rig will also depend on rig availability at the time of drilling. The parameters set allow for a range of rigs to be used. The applicant has indicated that a 36m rig would be operationally inefficient when drilling to this depth and, further, has indicated that:

“....Whilst a 36m rig may be technically capable of reaching the required depth, it may require more time and will therefore take longer to reach the depth than the 60m equivalent. We wish to maintain the drilling period at the 5 month “worst case” maximum we have set. Our preference would be to not increase the time period during which the effects of the operation are occurring. To use a shorter rig for longer would simply extend the period of effects, whilst not removing what is still likely to be temporarily harmful visual effects”.

Policy CS21 states that in areas of High Landscape Value, development will only be permitted *“where it will not detract from the landscape or visual character of the area and where appropriate standards of design and landscape architecture are achieved”*.

Furthermore, Policy CS21 then states:

“Developers will be required to put in place effective landscape management mechanisms including long term landscape maintenance for the lifetime of the development”. Emerging Policy SP35 is also relevant, with the policy requiring consideration of landscape impact.”

Concerns have also been raised that the photos submitted show only existing views, thereby omitting how the proposed development would appear in the landscape (e.g. landscape bunding, site infrastructure, site accommodation).

The findings of the Zone of Theoretical Visibility (ZTV) suggest that the substantial (i.e. significant) landscape and visual effects will only be "*short term and temporary*". Criticism has been made of the evidence supplied and on the conclusions drawn.

The Council's Landscaping Team indicate that the development will result in substantial adverse landscape and visual effects, albeit experience locally within 1-1.5km of the site and over the short term. Whilst soil bunding and site cabins (34no. cabins stacked 2no. high) are referred to as offering screening of the site activities their very presence is incongruous to this rural setting and as such are likely to result in Moderate adverse effects. It should be noted however that these changes and effects will be experienced over a relatively short period of time of up to 5 years.

This will result in a noticeable deterioration in the landscape character of the area and its enjoyment by the local community, as is noted by the strength of local objections raised. However, the Council's Landscaping Team have not raised a formal objection to the proposals on visual amenity grounds due to the temporary nature of the development.

Overall, whilst the development is in a moderately sensitive location with identified, short-term, substantial adverse landscape and visual effects, the Council's Landscaping Team have not raised a formal objection against the development from a visual amenity perspective. On balance, therefore, and taking into account the objections raised, it is not therefore considered that a refusal against the development on visual amenity grounds could be sustained.

Lighting

The applicant indicates that it is proposed for the site to operate for 24 hours a day during drilling activities (Stage 2) and temporary lighting will therefore be installed to ensure that the site can operate safely. This will be for a limited period during the lifetime of the proposed development and the most intensive working periods will be limited in duration to 21 weeks.

The applicant has stated - and conditions could be imposed to ensure - that lighting will be located to avoid direct glare outside the site and will be shielded to direct light to where it is needed. The lighting will be shielded and directed to where it is required. Lighting levels will be minimised to the lowest level possible, there is no potential for direct glare impacts at these properties. The drilling rig will have lighting on its mast, but these are limited in both intensity and number. The lighting will be relatively low level and directed at the rig itself. The applicant goes onto indicate that this is designed for safety of working purposes rather than lighting a wider area. Whilst this will make the rig visible at night, there should be no significant effects such as direct glare to habitable room windows.

Local Airports (Doncaster Robin Hood, Sheffield) as well as the Civil Aviation Authority have raised no objections from a safety aspect and the lighting is not considered to have any adverse impact on flight navigation systems.

On the issue of light, the Council's Environmental Health department note that the site is to have lighting as it will operate 24 hours. This is shown in draft format though no detailed design of the lighting units has been shown, including Lux levels. However, Environmental Health consider that this element could be satisfactory controlled by condition, including the type and intensity of lights, types of masking or baffle at head, as well as the number, height and colour of lighting columns.

Overall from a residential amenity perspective the Environmental Health department have not raised any objections to this aspect of the proposals.

Archaeology

In line with the requirements set out in Paragraphs 128 and 129 of the NPPF the applicant has described the significance of the heritage assets. The level of detail is considered proportionate to understand the assets' importance and the potential impact of the proposal on their significance.

The Environmental Report includes a desk based archaeological assessment and a geophysical survey, which concludes that there should not be a significant effect on built heritage or designated assets. The geophysical survey, along with aerial photography analysis has shown a series of linear features across the site. It is not clear whether these are archaeological or geological in nature. Following comments from the South Yorkshire Archaeologist, further archaeological and trial trenching has been undertaken to inform a detailed programme of mitigation.

Emerging policy SP45 Archaeology and Scheduled Ancient Monuments further notes that the preservation of archaeological remains in situ is the preferred solution, but where this is not justified preservation by record would be acceptable.

The applicant initially indicated that there is potential for non-designated heritage assets to be discovered on the site, but on the basis of the desk based report and investigations available to date, these are unlikely to be significant. Following further discussions with SYAS a more comprehensive Archaeological Evaluation Report was submitted.

The evaluation comprised nine trial trenches (Trenches 1-9), representing a 3% sample of the Site. Each trench measured 30 m by 2 m and targeted geophysical anomalies. The evaluation was undertaken between 15 and 19 January 2018.

No prehistoric remains are known within 1km of the Site, although assemblages of worked stone are known from the wider area.

The archaeological evaluation was executed as designed. Apart from a 19th century boundary ditch, no other archaeological features, deposits or artefacts were encountered. With the exception of the 19th century ditch, anomalies previously identified during geophysical survey did not translate into archaeological features.

The SYAS assessed the report and concluded that there are no significant archaeological features within the proposed development boundary.

Heritage

National Policy seeks positive management of the historic environment. Where there is likely to be an effect on a heritage asset its significance needs to be understood and a proportionate assessment of the effects of the development must be undertaken. Where a development will result in effects on a non-designated heritage asset, policy notes that a balanced judgement must be made having regard to the scale of any loss.

The UDP seeks to protect and enhance the historic environment, whilst supporting appropriate development. The Core Strategy has a similar aim and notes that proposals will be supported which protect the heritage significance and setting of locally identified heritage assets.

The site and immediately surrounding area does not have any listed buildings or scheduled ancient monuments on it and it is not within a conservation area. There will be no direct effects on any surface based heritage assets. There are several listed buildings in Woodsetts and the village centre also lies within a Conservation Area. However, these are all village related structures (houses, church stones, barns, etc) which are located within the village. Whilst there may be some visibility of the drilling rig when that is on site, it is considered that the development would be unlikely to have any direct effect on the structures or their setting.

Historic England have raised concerns about potential visual impact on listed buildings in the earlier phases as well as the possibility of damage from vibration during the drilling phase. However, no formal objections are raised on this aspect of the proposals. The applicant has covered this within the supporting details within the noise and vibration section of the application and it is not considered that the drilling phase would significantly increase levels of vibration as indicated in the paragraphs below.

A number of the objections also highlight the potential negative impact on the heritage of Woodsetts, along with the potential for negative publicity for the village.

Overall, taking into account the issues raised above along with the site being located in excess of 500m from the nearest heritage asset, it is not considered that the proposal would have any adverse effect on heritage or conservation aspects and it is not considered that a refusal on these grounds could be justified.

Noise and Vibration

The aspect under consideration in this planning application relates primarily due to noise from traffic and access into the site associated with the development. Any noise emissions to air, water or land associated with the regulated activities on the site including noise and vibration, odour and fugitive emissions are regulated under Environmental Permits. The EA are responsible for granting or refusing Environmental Permits and if the former, setting any conditions and ensuring that permit holders comply with these conditions.

The permit issued by the EA seeks to regulate noise and vibration arising from the oil and gas prospecting activities. This relates to noise and vibration generated from

those activities that extract / process material that is classed as waste. Materials that are brought out of the well as a result of these activities are classed as waste.

The mining waste permit has regulatory control over noise and vibration arising from: operations and equipment within the permitted surface operation boundary which is used in the handling / treatment of waste material.

A mining waste permit does **not** have regulatory control over noise and vibration arising from:

- Operations and equipment used for any treatment/movement/use of non-waste materials.
- All operations and equipment not within the permitted surface operation boundary and therefore not engaged in activities regulated by the permit. For example, noise from vehicle movements outside the permitted surface operation boundary.

Paragraph 144 of the NPPF requires decision-makers to ensure that there are no unacceptable adverse impacts upon human health and that they take into account the cumulative effect of impacts from individual sites. The applicant states that the works will conform to the relevant Industry Standards, including the Borehole Sites & Regulations 1995, the Construction (Design & Management) Regulations 2007 and the Offshore Installations & Wells (Design & Construction etc.) Regulations 1996.

The main issue of potential public health concern raised by consultees and the local community has been identified as noise and vibration. This is most likely to be encountered during stages 1 and 2, with the possibility of some recurrence in stage 3a, if it is required. The applicant has considered the potential for noise to arise from the proposed works, and noted the possibility for night time noise from the site.

While it is inevitable that some noise will arise from works of this type, the applicant has considered this potential within the noise report, which concludes that the noise arising from the construction will be lower than the night time noise LAeq, 1hour of 42dB, at 37dB.

The applicant further proposes sympathetic working practices such as bunding and silencers/noise attenuation equipment in order to mitigate any potential for nuisance.

The applicant has highlighted that the most sensitive properties around the site as being:

- Manor Farm along the west site of Lindrick Road (in excess of 670m to the east of the site of the proposed site);
- Berne Square residential properties (approximately 425m northeast of the site and approximately 30 m east of the access track at the closest point);
- The residential properties of Rackford Road (approximately 900 m west of the site);
- The residential properties Nirvana, Wildways, Lofties located along the north side of the private road that connects the south end of Lindrick Road with Workshop road (approximately 590 m south of the site); and
- The residential priorities at the south end of Lindrick Road (approximately 960 m south-east of the site).

Given that noise has also been identified as a potential source of concern by the local community, it would be prudent for the applicant to ensure that the local community is kept up to date with progress on works and to provide advance warning (as far as possible) of any particularly noisy periods.

Overall, Public Health England have raised no significant concerns regarding the risk to the health of the local population from the installation.

In terms of the hours of operation, the applicant has indicated that site preparation, earthworks, site construction and HGV deliveries shall only take place during the hours of 07.00 hours and 19.00 hours Monday to Friday and 07.00 hours and 13.00 hours on Saturdays, unless there is an operational need which has been agreed in writing in advance with the Minerals Planning Authority.

Assembly and demobilisation of the drilling rigs at the wellsite shall only take place during the hours of 07.00 hours and 19.00 hours Monday to Saturday.

In its role as a planning consultee on this application, the EA has raised no objections to the proposal, subject to a recommended condition in case potential ground contamination is discovered. The Environmental Permit will regulate noise and vibration from the oil and gas prospecting activities and the operator will have to abide by the permit.

The Council's Environmental Health department (EHO) would seek to regulate operations and equipment used for any treatment/movement/use of non-waste material and noise from vehicle movements outside the permitted surface operation boundary.

The noise modelling has been carried out using SondPLAN software (v7.4). The model has been run using a receiver height of 5m to represent the noise impact from night-time operations that would be experienced on the top floors (to represent bedroom space). This is to assess any potential noise disturbance that the occupier may experience at the property which may affect sleep. The model can also predict the noise levels at the ground floor whilst calculating the top floor. The model has predicted the noise level to be the same on the ground floor as on the top floor.

The EHO notes that the noise from construction activities has been predicted as being 81 dB LAeq,1h at location NSR2 which is the nearest noise sensitive receiver location. This level exceeds the recommended level in the BS5228 for construction noise and therefore is of some concern as the operator has not submitted any mitigation measures to reduce this level and impact on future residential amenity and has only stated that it will be temporary for 2-3 weeks.

However, the applicant has taken the high levels of noise that will be produced from this activity into consideration and has stated that no construction works will be carried out or undertaken during the evening or night time period. If the working hours for construction work are restricted to daytime only then the predicted level of 81dB LAeq,1hr will only have a significant observed adverse effect level on local residents during the daytime period.

Providing that the working hours for construction work are restricted to daytime only then the Council's Environmental Health department do not consider that there will be any significant or adverse health impact on local residents during the evening or the night time periods.

Road traffic noise is being predicted to be notable as heavy goods vehicles (HGV) will be using Dinnington Road to access the site but the impact from this additional traffic has not been calculated by the applicant since there are no noise sensitive receptors along this route.

In terms of vibration occurring during the drilling stage, the applicant has indicated that the drills are rotary bored only and therefore impart relatively small amounts of energy into the ground, particularly when compared to percussive piling techniques. The applicant goes on to indicate that data available for rigs used during conductor installation suggests that ground borne vibration would be imperceptible at distances of greater than 20 m. Vibration levels from the drilling operations are not expected to be significantly different in magnitude. Consequently, at the nearest receptor ground borne vibration would be considerably lower, and certainly not perceptible.

Based on the above, the Council considers the likely impact from ground borne vibration resulting directly from the drilling rig to be small.

Overall, the Council's Environmental Health department have raised no objections to the application, subject to conditions on noise monitoring. The proposals will potentially have adverse health effects on local residents mainly during the daytime period. However, the noise impact from the drilling will be temporary with a maximum duration of 3 months. It is recommended that a condition detailing rig specifications be incorporated into any future permission as well conditions detailing a noise monitoring strategy and management plan to ensure that noise levels will be at or below the night time (22:00-07:00) level of 37dB and day and evening time (07:00-22:00) levels of 55 dB.

EA Permitting

The EA are responsible for granting or refusing Environmental Permits and if the former, setting any conditions and ensuring that permit holders comply with these conditions. Environmental permitting is the method specific industrial and commercial activities are regulated to protect the environment and people.

The permitting process is completely separate from the planning process. The planning process determines whether the development is an acceptable use of land, taking into account the impact of the proposed use, and considers a broad range of matters such as visual impact, traffic and access, which do not form part of our permit decision-making process. Permits allow sites to operate, within certain environmental constraints, once built.

The EA indicate that a mining waste operation permit is required under EPR 2010 for this activity. It is noted that the proposals at this time include no hydrocarbon production/storage and no hydraulic fracturing activities. Should future development of the site operations intend to include such operations then further permissions under the EPR regulations may be required, potentially including a radioactive

substances activity permit, an installation permit and/or a groundwater activity permit.

The applicant, INEOS Shale Ltd, has applied for a standard rules permit (SR2015 No.1) entitled:

“The management of extractive waste, not including a waste facility, generated from onshore oil and gas prospecting activities including drilling, coring, leak off testing (LOT), acid wash and decommissioning but excluding hydraulic fracturing for the production of oil or gas (using oil and water based drilling mud)”

The EA has indicated that a permit has been approved and conditions are in place requiring controls for the following areas:

- The management of the site
- The drilling operations on the site
- Any emissions to air, water or land associated with the regulated activities on the site including noise and vibration, odour and fugitive emissions
- Monitoring requirements (as specified in the waste management plan) associated with the regulated activities on the site
- Information requirements including record keeping, reporting and actions requiring notification to the Environment Agency

Paragraph 122 of the National Planning Policy Framework states that *“local planning authorities should focus on whether the development itself is an acceptable use of the land, and the impact of the use, rather than the control of processes or emissions themselves where these are subject to approval under pollution control regimes. Local planning authorities should assume that these regimes will operate effectively.”*

The above paragraph makes it clear to planning authorities they should assume that where processes or emissions are subject to approval under pollution control regimes these will be effectively controlled. Accordingly, it is considered that this element of the proposal would be adequately regulated by other environmental legislation.

As indicated in the paragraphs below, the HSE and EA have not raised objections on potential future groundwater contamination. The detailed wellhead design would be subject to separate legation by an independent third party well examiner to ensure wellbore integrity. From a Development Management standpoint there are no objections to this element of the proposals.

Well Design and safety

The detailed design of shale oil and gas wells is not an issue that the Local Planning Authority can assess. An oil or gas well is a complex engineered construction, most of which is below ground and not accessible to visual inspection.

The detailed well design is regulated by the Health and Safety Executive (HSE). The HSE have indicated that wells drilled to explore for shale oil or gas are designed and constructed to the same standards as all other oil and gas wells that have been in operation in UK for a number of years. There have been 350 onshore oil and gas wells drilled in the UK since 2000.

HSE's regulatory approach has two main elements:

1. *Specialist well engineers help develop best practice standards for the industry as a whole.*
2. *The second element is to use risk-based interventions on particular sites and operators to ensure the operator is managing risk to well integrity in the appropriate way.*

All wells must be constructed to recognised industry standards and are cased using steel and cement to ensure the risk of an unplanned leak of fluids is as low as reasonably practicable. Near the surface, where there is nearby groundwater, or an aquifer, there are normally three layers of this steel casing. The operator will conduct a range of checks on the well to test for leaks. Suitable well control equipment must also be provided to protect against the risk of a release of fluids (liquid or gas) from the well.

The Borehole Sites and Operations Regulations 1995 (BSOR) apply to all onshore oil and gas wells. These Regulations require notifications to be sent to HSE about the design, construction and operation of wells, and the development of a health and safety plan which sets out how risks are managed on site.

The Offshore Installations and Wells (Design and Construction etc) Regulations 1996 (DCR) include specific requirements for all wells, whether onshore or offshore, and include well integrity provisions which apply throughout the life of shale gas or oil wells. They also require the well operator to send a weekly report to HSE during the construction of the well so that inspectors can check that work is progressing as described in the notification.

The operator must also appoint an independent well examiner who has an important quality control role in ensuring that the well is designed, constructed operated and abandoned to industry and company standards and that regulatory requirements are met.

This combination of duties ensures that HSE is provided with information at key stages in the lifecycle of a well and allows HSE inspectors to assess whether risks are being adequately controlled and, if not, to take the appropriate regulatory action.

To comply with BSOR, the well operator must submit a notification to HSE at least 21 days before work commences. It consists of information on the design and construction of the well including:

- The design of the well,
- Equipment to be used,
- Programme of work,
- Location, depth and direction of the borehole,
- Its relationship with other wells and mines,
- The geology of the drilling site,
- Risks identified with the work and how these risks will be managed.

In this instance, the HSE have not raised any objections to the proposal at the planning application stage.

Any concerns raised by objectors about the detail of well design and its construction and integrity would be controlled by the Design and Construction Regulations. The operator must report to HSE every week during construction of the well and during work to abandon the well. This provides HSE with assurance that the operator is constructing and operating the well as described in the notification. If they are not, HSE can take the appropriate regulatory action.

The weekly report gives details of all work that has taken place since the previous report including:

- Well integrity tests,
- The depth and diameter of the borehole,
- The depth and diameter of the well casing,
- Details of the drill fluid density which allows the inspector to gauge the pressure in the well and identify any stability issues.

There is also a specific set of occurrences that the well operator must report to HSE under RIDDOR (Reporting of Injuries, Diseases and Dangerous Occurrences Regulations):

- A blowout, i.e. an uncontrolled flow of well fluids,
- The unplanned use of blowout prevention equipment,
- The unexpected detection of H₂S (hydrogen sulphide – an explosive gas),
- Failure to maintain minimum separation distance between wells,
- Mechanical failure of any safety-critical element of a well.

Air Quality

Emissions to air would include vehicle and equipment exhaust fumes, dust and potentially hydrocarbon release (methane) during the drilling period.

Road traffic associated with the proposal would produce emissions to air during the temporary construction and drilling phases. The applicant considers that these are likely to be of a similar scale to any construction site. Dust from site preparation, construction and vehicle passage on access roads will be controlled with standard dust-control measures.

The Council's Air Quality Officer has confirmed that the site is not in an Air Quality Management Area and so is not at risk of exceeding the national objectives for common pollutants. The development is not considered to generate a level of traffic which would suggest that there will be a vehicle emission related air quality issue in this area. The key phase of development when air quality impacts could occur is during construction and particularly during phases 1 and 2. The Environmental Report and Proposals set out a range of industry best practice mitigation measures which will ensure that dust suppression measures are in place. These include selecting and maintaining equipment, as well as simple practices like sheeting lorries which deliver loose materials, damping down any exposed earth in dry and windy conditions, and seeding stored top soil bunds to bind soil.

Rotherham's Community Protection Team have been contacted by members of the public and have started to monitor levels of air pollution in the area. This monitoring will be on-going. Overall, it is considered that a monitoring regime to be carried out during the timeframe of the application should be conditioned. They have concluded

that subject to conditions to ensure mitigation is in place they would have no objection to the development.

Flood Risk

The applicant has undertaken a Flood Risk Assessment (FRA) to support the proposed development. The applicant highlights that the proposed development is located within Flood Zone 3a (risk to the site of a 1 in 100 year fluvial event – 1% Annual Exceedance Probability (AEP)) based on Environment Agency mapping.

The applicant indicates that flooding, residual and climate change impacts have been assessed as negligible due to Environment Agency flood maps showing the proposal as having a ‘Very Low’ risk of flooding from fluvial and pluvial water sources and based on the topography of the site and surrounding area.

The EA have not raised any objections on flood risk grounds and the proposal is not anticipated to result in any material increase in flood risk elsewhere.

The Council’s Drainage Officer has raised no objections to the proposal from a flood risk perspective.

Drainage

The applicant has summarised the proposals to protect groundwater sources and prevent cross-contamination occurring from surface water runoff in the table below. It is considered that the stage 1, followed by stage 2 of the process is the most critical to ensure prevention of surface water runoff becoming contaminated. A number of these issues will also be covered by the permitting process of the EA as well as good well design monitored by the HSE.

Stage 1

Aim	Measures built into Proposal
Prevent pollution of soil, groundwater or surface water from leaks from construction vehicles or on-site tanks	<p>A triple-layered geotextile/ HDPE membrane would be laid between the site surface and soil by a qualified groundwork contractor under a Construction Quality Assurance Plan to make an impermeable site surface.</p> <p>All fuels, oils, lubricants and other chemicals would be stored in double-skinned tanks (or a bunded, impermeable area) to provide appropriate secondary containment</p> <p>All vehicles would be maintained regularly and would be subject to daily inspection at the start of the working day by plant operatives.</p>

	<p>Any equipment maintenance would take place in a designated area within the construction compound where reasonably practicable.</p> <p>Fuel and oil deliveries and any refuelling on-site would only be undertaken in appropriate impermeable areas. Double-skinned fuel tanks (or a bunded, impermeable area) would be used for refuelling trucks and pumps as well as fuel storage.</p> <p>Standing machinery and refuelling points would have drip trays placed underneath to prevent oil and fuel leaks causing pollution.</p> <p>Spill kits would be present on-site, and staff trained in spill response via contingency plans.</p> <p>On-site welfare facilities would be adequately designed and maintained, and all sanitary waste water and sewage would be removed from site by licensed waste contractors</p>
<p>Prevent pollution of soil, groundwater or surface water from runoff from site surface</p>	<p>No water would be discharged from the site to the surrounding environment once the drainage system was in place. All water would be removed from site by a licensed waste contractor.</p> <p>Works would be undertaken in suitable weather conditions to prevent silting of watercourses (especially avoiding periods of high rainfall).</p> <p>Runoff from access tracks would be to the surrounding road / field drainage. Aggregate used on these would ensure sediment laden runoff was not produced.</p>
<p>Prevent pollution from other construction activities</p>	<p>Concrete mixing for the rig pad would be undertaken by a mixer unit, with the components of the concrete enclosed in the unit prior to and during mixing. The mixer would be used on the lined site only.</p>

	<p>Shutters would be used when concrete is poured, and no concrete would be used where there is standing water.</p> <p>Pumps would be used to keep excavations dry if needed.</p> <p>Method statements would be produced for all activities that could pose a risk to the water environment and would clearly state what mitigation measures and monitoring requirements should be in place prior to and while the activity is underway.</p>
Prevention of pollution of soil, groundwater or surface water from installing conductor and monitoring boreholes	<p>Borehole design and operation (for example, fluids to be used) would be approved by Environment Agency (via Environmental Permit), Oil and Gas Authority, HSE, Coal Authority and an accredited Independent Well Examiner prior to drilling.</p> <p>Only air and water based fluids would be used as drilling fluids to install the conductor/ surface casing and monitoring boreholes.</p> <p>Once installed the cellar and conductor/ surface casing would be checked to ensure there are no leaks to the environment.</p>
Prevent pollution of watercourses through engineering works	<p>The Environment Agency permits engineering works in the water environment where required, through Flood Risk Activity permits. The site is located over 100 m from the nearest watercourse, and good practice to prevent silting and dust would prevent harm to the watercourse as a result of engineering works.</p>
Monitoring	<p>The site will be subject to an Environmental Monitoring Plan to be agreed with the Environment Agency. The area around the site (soils, field drains etc.) would be checked daily for visual signs of pollution (e.g. fuel oil, noticeable silting). An Environmental Clerk of Works would be present during Stage 1 to oversee the enabling works and construction and ensure operations proceed in accordance with management</p>

	<p>plans and planning conditions. Mitigation measures put in place (e.g. impermeable membrane, drainage system etc.), would be inspected regularly and suitably maintained to ensure they remain fully operational and effective. Where failures or shortfalls within mitigation measures were noted, these would be recorded, action identified and undertaken within a suitable timeframe.</p>
<p>Stage 2</p>	
<p>Preventing pollution of soil, groundwater or surface water from leaks from construction vehicles or on-site tanks</p>	<p>The geomembrane and “closed loop” drainage system would be maintained to ensure all liquids remained on the site for removal by a licensed waste contractor, and treatment prior to disposal if required.</p> <p>Frequent checking of integrity of site surface and drainage system.</p> <p>Cement mixing for well cement would take place in truck-mounted silos on the concrete hardstanding area.</p> <p>Rigs would be refuelled from dedicated tanks, which would be filled directly from fuel tankers that deliver to the site.</p> <p>This would be undertaken in the hardstanding area to ensure any spillage would drain to the impermeable cellar rather than the perimeter drainage pipe.</p> <p>Drilling fluids (muds) would be stored in a mud tank with a closed-loop system to prevent leakage.</p> <p>Water for the drilling process would be contained within a closed-loop system with any potential excess water from the drilling process being transported off site in suitable tankers by a licensed contractor.</p>
<p>INEOS Safety Health and Environment (SHE) representative will ensure operations proceed in accordance with management plans and planning conditions</p>	<p>The area surrounding the site would be checked daily for visual signs of pollution (e.g. fuel oil, leakage from perimeter, noticeable silting) in accordance with the Environmental Monitoring Plan to be agreed with the Environment Agency.</p>

The applicant has indicated that any water falling onto site would feed into the site perimeter drain and be removed by a licensed waste contractor for treatment and disposal as appropriate. It is intended that all rain falling on the whole of the site for the whole duration of phases 2-4 will either be removed from site by tanker or used on site. The liner passes under the perimeter pipe and then extends up into the face of the surrounding bund, to ensure that the entire system is sealed.

The applicant has confirmed that the access track will not be lined. Run off from the access track will either permeate through the track, or run off to the sides. It is not intended to direct any of this flow into a highway drain. It would all be directed back to the field to soak away.

In terms of discharge from the onsite pumps, the applicant has confirmed that the system is closed and the perimeter ditch will collect water, which will be pumped to an above ground storage tank, which also sits on the lined area of the site. Tankers will come to empty the storage tank as required.

Some concerns were raised regarding the potential for perimeter bunds within the field having the potential to interrupt natural flow paths. The applicant has confirmed that field drainage will be maintained. They go on to indicate that a drainage strategy has been adopted which relies on a combination of (a) natural run off and soaking away at the fringe areas around the well pad and on the access track, to (b) a contained system which drains by gravity to a ditch and sump within the sealed working area.

The applicant goes on to indicate that the site will be levelled and for the most part lined and isolated from the surface water regime, with all water being collected by tanker. There will be areas where the site is not lined (access track and bunds). They anticipate that these will simply soakaway in the same manner as the existing land, so this should leave a neutral effect. On this basis, the applicant has asserted that the direction of the drainage is unlikely to be a material factor.

Regarding a future water supply to the site, Yorkshire Water have confirmed that there are no groundwater abstractions for the public water in the vicinity of the proposed development. The site is remote from the existing water supply network and Yorkshire Water have raised no objections to the proposals.

The Severn Trent Water Authority initially raised some queries regarding abstraction and drill casing details and the composition of drilling muds to be used. However, following the submission of additional information, they have withdrawn these concerns at the Planning Application stage, and will seek further data and observation boreholes in conjunction with the EA under separate legislation. Abstraction licence details are a separate process and are not being considered in this application.

The EA agency have raised no objections to this aspect of the proposal but have indicated that the permit will require an operator to manage the site in accordance with a Waste Management Plan (WMP). A standard WMP has been produced to accompany the standard rules permit which the operator is expected to follow. The WMP sets out measures for the appropriate management of an uncontrolled discharge, as in a 'spill', on site.

After several clarifications, the Council’s Drainage Officer has confirmed that the drainage aspects of the proposal are acceptable, subject to condition.

Hydrology and groundwater

In terms of potential future contamination of groundwater, this would generally be assessed as part of the overall Well Design and would be covered by other regulators, in particular the HSE and the EA.

The main issues relevant to hydrogeology include: the prevention of groundwater pollution from spillages and the handling/management of drilling fluids and cuttings. Prevention of the escape of drilling fluids, gas and formation fluids into groundwater by good well design.

In terms of surface damage, it is understood that site vehicles tracking on bare ground would have appropriate tyres to prevent damage, the use of temporary tracks or peat-boards, minimal works undertaken in periods of high rainfall. Bunding would ensure soils were stored appropriately, and kept separate from other construction activities. Vegetation removal would be minimised and works would be undertaken to minimise the area of soils exposed at any one time.

The applicant has supplied an indication of Environmental Protection Measures during ground restoration works which can be summarised as follows:

Aim	Measures built into Proposal
Prevent soil damage during soil strip prior to laying of membrane/ development of access tracks	<p>Site vehicles tracking on bare ground would have appropriate tyres to prevent damage.</p> <p>If large numbers of vehicle movements are needed on bare ground, temporary tracks or peat-boards would be used.</p> <p>Works would be undertaken in suitable weather conditions to prevent soil damage (especially avoiding periods of high rainfall).</p> <p>Bunding would ensure soils were stored appropriately, and kept separate from other construction activities.</p> <p>Vegetation removal would be minimised and carried out according to good practice. Works would be undertaken to minimise the area of soils exposed at any one time.</p> <p>Barriers and/or netting would be used to prevent vehicle movements in sensitive areas.</p>
Preventing pollution of aquifer during drilling	<p>Appropriate well design would be used. Any potential excess water or mud from the drilling process would be transported off site in suitable tankers.</p> <p>Drilling activities would be designed to ensure that there would be no inputs of pollutants to groundwater.</p>

	<p>Drilling fluids would be used in accordance with good practice as described in the Health and Safety Executive (HSE)'s guidance on 'The Offshore Installations and Wells (Design and Construction etc.) Regulations 1996' (DCR)) (in particular that they would be designed to prevent exchange of fluids between the borehole and any groundwater-bearing formation) and Borehole Sites Operations Regulations 1995.</p> <p>Drilling fluids would exclude hazardous substances as defined in paragraph 4 of Schedule 22 to the EPR 2016</p> <p>If karstic or highly fissured conditions were anticipated, INEOS would gain the Environment Agency's agreement to use any additives other than inert materials.</p> <p>Casing would be installed and cemented into the low permeability formation beneath the groundwater body once that formation was reached. The maximum depth defined for a groundwater body is taken to be 400 m. (the surface casing for this well is anticipated to extend to 470 m (1,550 ft.) to isolate old mine workings).</p>
<p>Preventing pollution of soil, groundwater or surface water from leaks from construction vehicles or on-site tanks</p>	<p>The geomembrane and "closed-loop" drainage system would be maintained to ensure all liquids remained on the site for removal by a licensed waste contractor, and treatment prior to disposal if required.</p> <p>Frequent checking of integrity of site surface and drainage system.</p> <p>Cement mixing for well cement would take place in truck-mounted silos on the hardstanding area. Rigs would be refuelled from dedicated tanks, which would be filled directly from fuel tankers that deliver to the site. This would be undertaken in the hardstanding area to ensure any spillage would drain to the impermeable cellar rather than the perimeter drainage pipe.</p> <p>Drilling fluids (muds) would be stored in a mud tank with a closed-loop system to prevent leakage.</p> <p>Water for the drilling process would be contained within a closed-loop system with any potential excess water from the drilling process being transported off site in suitable tankers by a licensed contractor.</p>
<p>Minimising soil damage during ground restoration works</p>	<p>Once the site surface membrane was removed, care would be taken to avoid pollution of soil, groundwater or surface water from fuel leaks or routine activities during ground restoration.</p> <p>Aggregate and concrete (pad and cellar) would be fully removed from site before the impermeable liner was removed so any residual contamination would not be washed into soil.</p>

Avoid pollution of aquifer during decommissioning	Measures would be taken when decommissioning the vertical core well to ensure there would be no inputs of pollutants to groundwater and that there was no subsequent leakage of groundwater, including any gas or other contaminants that this may contain, into the well or to other geological horizons.
Prevention of leaks of gas or suspension fluid from vertical core well once abandoned	<p>At decommissioning, two permanent barriers would be set within the wellbore to seal the well.</p> <p>The well has been designed in accordance with the Borehole Regulations reviewed by the HSE and by an independent third party well examiner to ensure wellbore integrity.</p> <p>Suspension/ Decommissioning fluid would be brine</p>

The applicant has indicated that the methods in the restoration and aftercare plan would be followed to prevent soil damage. Once the site surface membrane was removed, care would be taken to avoid pollution of soil, groundwater or surface water from fuel leaks or routine activities during ground restoration. Aggregate and concrete (pad and cellar) would be fully removed from site before the impermeable liner was removed so any residual contamination would not be washed into soil.

The applicant has briefly outlined the measures that would be taken when decommissioning the vertical core well to ensure there would be no inputs of pollutants to groundwater and that there was no subsequent leakage of groundwater, including any gas or other contaminants that this may contain, into the well or to other geological horizons.

The applicant indicates that the well has been designed in accordance with the Borehole Regulations reviewed by the HSE and by an independent third party well examiner to ensure wellbore integrity.

The Council acknowledges the above comments, but considers that the potential impact on groundwater sources is not an issue that would be covered within the planning regulatory aspect of the application. This is considered an issue that would be covered by satisfactory well design and is regulated by the Environmental Permit and overseen by the HSE.

Ground contamination, land stability and impact on mining legacy

In terms of land stability and historic subsidence, South Yorkshire Mining Advisory Service (SYMAS) has indicated that the area has been subject to deep coal mining with one coal seam has been worked as follows:

Barnsley depth ~584m worked in the 1950s

SYMAS indicate that the abandonment plan records indicate that the propose drill well will intercept Dinnington Colliery coal seams working at a depth of approximately 584m. There are no mine workings from other coal seams directly beneath the proposed borehole.

SYMAS indicate that deep coal mining subsidence has now ceased and the area can be regarded as stable. They have raised no objections to this aspect and indicate that well design would be subject to approval by other regulators (Oil and Gas Authority, Coal Authority, HSE and EA).

The Coal Authority have indicated that the application site does not fall with the defined Development High Risk Area and is located instead within the defined Development Low Risk Area. There is therefore no requirement under the risk-based approach that has been agreed with the LPA for a Coal Mining Risk Assessment to be submitted. The Coal Authority have therefore not raised any objections to proposal, though they have recommended that The Coal Authority's Standing Advice should be included within the Decision Notice as an informative note to the applicant in the interests of public health and safety.

Specific ground contamination issues

The site has predominantly been used for agricultural purposes since the 1850's and it is therefore unlikely that significant contamination of the land has occurred. There may be some potential for minor contamination to exist within the surface soils from the use of insecticides, pesticides, agricultural machinery, unrecorded deposited wastes and natural sources of contamination.

The Council's Pollution Control Officer has indicated that inert waste poses a low risk of generating leachate which may migrate into shallow surface waters. Embedded mitigation measures in the proposal around groundwater monitoring will provide the opportunity to establish current groundwater quality prior to commencement of the proposal operations.

The vertical exploratory well to be installed will pass through gas bearing stratum and a release of methane gas could occur. The Environmental Report provided by the applicant confirms that gas monitoring is to be undertaken on a continuous basis during the drilling works but is light on any details and how it will be reported. It is suggested that gas venting/flaring will not be required at the site. No information has been provided to suggest that any gas monitoring wells will be installed at the site to assess for any potential migration of methane gas or the impact of gases generated from off-site sources.

The applicant indicates that all surface water that will be generated at the site will be retained on site and then removed by an approved Waste Management Licenced Contractor. It is reported that no water will be discharged from site to the surrounding environment once a drainage system for the site is put in place. However, the site is located on an elevated plateau and any waters/accidental spillages will run towards nearby water courses and surface water features. The Pollution Control Officer indicates that measures to be put in place to ensure the collection and disposal of contaminated waters (flow back waters from the drilling techniques used) produced as part of the exploratory investigations should be deemed to be adequate and sufficient.

The nearest waterbody to the site is Oulands Wood Dyke, a minor watercourse which drains surrounding farmland and flows east, then northeast towards the River Rytton. Other surface water features include two impounded ponds on the Pudding

Dyke at Lindrick Dale, immediately upstream of the confluence with the River Ryton. These waterbodies are located within approximately 1.3 km to the south of the site.

Key elements include staged steel casing to seal off aquifer sections and flow paths that may be encountered (such as that caused by former mining sections). The well plans include an initial conductor (surface casing) to approximately 490 m, which provides a barrier to migration for all currently designated aquifer formations and the suspected coal mining depth zones. Detailed review of mining abandonment plans has been undertaken to understand and design for the depths of former mine workings. This section will be drilled with water-based fluids. A second deeper section would also then be cased (intermediate casing) inside the primary casing. This would seal off to approximately 1,183 m depth and protect any further coal measures horizons prior to encountering the formations of interest (Namurian age). Thus the upper potable units and mine zones will have double cased sealing to protect units. The target zone of interest would be cased to approximately 1,679 m, providing a third sealing structure. The well would then be drilled to a total depth (approximately 2,800 m) and a liner installed. Final depths will be confirmed during detailed well design but will adopt the principles above and be subject to third party review.

The groundwater boreholes to be installed are reported to fall outside the scope of this planning application and will be installed under Permitted Development Rights. However, no details regarding the groundwater monitoring have been provided along with details of any surface water monitoring. An environmental monitoring plan will need to be specified and agreed to in order to ensure that contamination is monitored for prior to construction, during the exploratory works and post demolition/restoration works. Establishing a monitoring regime will help with the understanding of any environmental impacts from the drilling works and the communication of risks to the community of Woodsetts.

The applicant has confirmed however that a range of monitoring data will be collected and reported to the Environment Agency. Little information is reported on the monitoring locations, the long term schedule for monitoring and what is being monitored for, particularly in terms of the groundwater and surface water monitoring. This information is suggested will become available under the Environmental Permit to be issued by the EA. The Council's Pollution Control Officer has also recommended that the Council imposes a planning condition on the proposed monitoring to be undertaken. Details for long term monitoring of exploratory well integrity will also need defining.

The Council's Pollution Control Officer initially raised a concern that the applicant may seek the EA's agreement to use additives other than the inert low-toxic oil based drilling muds currently proposed. This may occur in the event that karstic or highly fissured conditions are encountered (which could be present within the principal aquifer on site of dolomite and limestone bedrock). The concern relates to the potential for future contamination. No specific information has been presented by the applicant as to what would happen in the event of alternative drilling additives being used or issues around potential well failure. However, this is not an issue that can be addressed within the planning element of the proposal. The site works fall under and to be regulated by the EA under an Environmental Permit which stems from the Environmental Permitting Regulations 2016. The EA consider that these

activities are of a 'low risk' operation and therefore only a standard rules permit will be necessary which follow a set of standard rules relating to Waste Management for the site.

Overall, it is considered that the majority of any potential ground contamination issues will be safeguarded through the Permitting Regulations outside of this planning process. Subject to any additional planning conditions, this element of the proposal is acceptable.

Socio-Economic impacts

Paragraph 120 of the Minerals PPG advises that individual applications for the exploratory phase should be considered on their own merits. They should not be assessed by taking account of hypothetical future activities for which consent has not yet been sought.

A number of objections raise the issue that any future jobs created will not necessarily be available to local people, that INEOS are not a local company, as well as querying the economic benefit to the local area. A number of the jobs would be short term since the duration of the construction elements of the site are limited.

The applicant refers to potential wider economic benefits of shale gas production at this exploration stage carry limited weight. Although they also acknowledge that there may be some degree of economic dis-benefit to local residents and local businesses in close proximity to the site, these are indicated that the impacts will be localised and short in duration. Pollution control and potential health impacts can be addressed satisfactorily through planning conditions and other regulatory regimes and these have been discussed in more detail in the paragraphs above.

The numbers of jobs created is not explicitly specified by the applicant and it is not possible to quantify the numbers of jobs. At a regional and national level this is a growing industry and in future years this is likely to contribute to an increasing proportion of the wider UK economy.

Health impacts

Paragraph 144 of the NPPF requires decision-makers to ensure that there are no unacceptable adverse impacts upon human health and that they take into account the cumulative effect of impacts from individual sites. The Health and Well-Being PPG requires these matters to be considered in the planning decision-making process. The main public health impacts have been discussed in more detail in the paragraphs above, in particular on highway safety aspects, noise and vibration, groundwater supply, surface water quality and flood risk and land contamination and pollution control aspects.

The Environment Agency permit supplies conditions, though these conditions only apply directly to the activities specified by the permit, namely, the management of extractive waste. Additionally the conditions only apply to relevant activities inside the permitted area. Operations on site that are not associated with this activity would not be subject to these permit conditions. Activities outside the permitted area, for

example traffic movement on access roads would not be subject to regulation under the permit and need to be considered as part of the planning application.

As indicated within the paragraphs relating to noise and vibration, it is considered that this, along with the volume of construction traffic is likely to have the most impact on public health.

Vibration is separate to seismic activity. Seismic activity is regulated by the Department of Energy and Climate Change (DECC).

As indicated within the noise paragraphs of this appraisal, Public Health England have not raised any objections from a health or noise impact.

The EA along with the Council's Environmental Health department have also not raised any objections on this aspect.

Climate Change

Paragraph 7 of the NPPF highlights the need for the planning system to perform an environmental role, including minimising waste and pollution and mitigating and adapting to climate change including moving to a low carbon economy. Paragraph 93 of the NPPF adds that planning plays a key role in helping to shape places to secure radical reductions in greenhouse gas emissions, minimising vulnerability and providing resilience to the impacts of climate change.

The Written Ministerial Statement, Shale Gas and Oil Policy (dated 16 September 2015, the "WMS") states that there is a national need to explore the UK's shale gas and oil resources. The WMS states that the Government remains fully committed to the development and deployment of renewable technologies for heat and electricity generation but gas is required to support the Government's climate change target by providing flexibility and reducing reliance upon high-carbon coal. The Government therefore supports the exploration for shale gas as part of the UK's response to climate change.

The WMS represents the Government's position in relation to the need for shale gas exploration and the need for gas to support its climate change target. The potential contribution of this proposed construction of an exploratory well to national greenhouse gas emissions is not likely to be large. The proposal is not considered to have any significant impact upon the national planning policy objectives relating to climate change and is therefore consistent with the NPPF.

The applicant indicates that there is relatively little that an exploratory well can do to minimise its impact upon the causes of climate change. The applicant has indicated that the preferred access route for vehicles is the most appropriate route to the A-road network in order to try and minimise vehicle emissions.

The applicant further indicates that exploration emissions are generally small, although little information is available on emissions associated with exploration. Climate change emissions associated with the proposed development are expected to be predominantly to those from vehicles and drilling equipment which are considered to be generally small and are not considered to be significant.

Objections received indicate that the application contains insufficient information regarding fugitive methane emissions, with the risks therefore unknown. No information is provided regarding Air Quality, especially estimated quantities of escaping gas (leakage), nor how this will be dealt with.

The objections also indicate that it is known that methane escapes from onshore oil production processes. Methane is an extremely potent heat trapping greenhouse gas and thus leakage of methane from onshore oil sites should be part of risk assessment.

Whilst this proposed development is for exploration there would not be any well testing which would result in gas releases and there are no plans by the operator to vent methane. Indeed, the conditions of the Mining Waste Permit do not allow any point source emissions from the site. As such, emissions relating to this proposal would primarily be from the vehicle movements associated with the development and the drilling of the exploration well which, as stated in the Committee on Climate Changes report, are likely to be small.

Overall, from a planning standpoint it is not considered that there are any specific objections to this proposal on climate change grounds. With reference to its wider context and the general advice of the NPPF, this proposal is not likely to have more effects that are over and above that which could normally be expected on a development of this size.

Cumulative impacts

Objections on cumulative impacts have been raised. A number of these objections raise the possibility of future hydraulic fracturing taking place on the same of an adjacent site. The objections go onto indicate that this could be a precursor to a longer term development which could last longer than 5 years, once applications to vary restoration conditions and new phase two applications are submitted by Ineos, if phase 1 tests are successful.

The Council is currently considering this site and application on its own merits. There is currently an application at Common Road, Harthill within the borough. However, that application will be determined by the Planning Inspectorate, following an appeal against non-determination. The Council will be resisting the appeal.

Other similar test well drilling applications covered by different PEDL licences have been approved in other local authorities including Mission Springs, Nottinghamshire 2015. There is also an undetermined application by the same operator in Marsh Lane, north east Derbyshire. However, these sites are at least 10km from Dinnington Road.

This application is considered to be a singular project that is a discrete proposal that could proceed independently. There are no wind turbines within 3km of the site. It is noted that the rig would only be on site for a short period of time (up to 5 months). As indicated in the landscaping and visual paragraphs above, this is considered to substantially reduce any long term cumulative impact on the surrounding environment.

Restoration and after use

The applicant states that if the results of the exploration work do not warrant further development, the wells would be made safe by plugging and abandoning in accordance with the relevant regulations and industry best practice.

The application indicates that the well would be plugged and decommissioned in accordance with i) good practice; ii) Oil and Gas UK Guidelines on Well Abandonment; and iii) an abandonment plan to be agreed with the Environment Agency, HSE and an independent Well Examiner. The application indicates that two permanent tested barriers (cement) will be set within the steel casing to seal the wellbore. The casing would then be cut approximately 2m below surface and capped with a steel plate. All on-site structures including any welfare and support buildings, the well cellar and sump-lining would be removed. Any residual waste or materials would be removed from the site along with the site lining. The land would be re-graded and deep scarified in accordance with best agricultural practice. Stored subsoil and top soil would be loose spread over the re-graded ground and subsoil to relieve compaction. The site would be re-contoured and restored to agricultural use.

The site would be fenced with temporary 'Heras fencing' to allow the permanent fencing and security fencing to be removed. The concrete pad and cellar would be broken for removal by a licensed waste contractor, and aggregate, drainage pipework and other infrastructure would be removed from the surface.

Paragraph 144 of the NPPF states that Mineral Planning Authorities should provide for restoration and aftercare at the earliest opportunity, to be carried out to high environmental standards, through the application of appropriate conditions where necessary.

The applicant has applied for a five year planning permission and the supporting statement anticipates that restoration conditions would be used to ensure restoration upon completion of the development. It is considered that this could be adequately controlled by condition.

It is anticipated that the decommissioning and restoration section of the application would require up to two months to carry out the works in full. The applicant indicates that all restoration would be undertaken in appropriate weather conditions to minimise any further disruption and soil erosion. Access tracks and road amendments (junction amendments) would also be restored as agreed with the landowner and Highways Authority, or retained for continued use, subject to any necessary further planning consent.

Other issues

Many of the public representations to this application have objected for reasons linked to fracking, as set out in the publicity section of this report. Fracking forms no part of this application and the proposals have been assessed on their own merits. No further consideration is given to such comments.

Public representations have stated that granting this application would set a precedent for future fracking applications and would inevitably lead to more.

However, any future application(s) would be assessed on their own merits and do not form part of the decision making process of this application.

South Yorkshire Police have raised concerns that the extraction of Shale oil gas is highly contentious and brings with it many challenges to Policing in the form of protest activity. A number of residents have also highlighted potential disruption and cost to the taxpayer of policing future protest. The main forms of protest have been outlined as follows:

- Local Residents/protest groups blockading the entrance to the site.
- A “slow walk” with protestors walking in front of attending vehicles in an effort to publicise their cause.
- Vehicle occupation – where a protestor will climb onto an attending contractors’ vehicles and either lock on with some sort of device or simply refuse to remove themselves.
- Lock ons – where a protestor secures themselves to entrance gates to the proposed site or anywhere along the route that would prevent access for vehicles.

Whilst these issues are noted, they are not considered to represent material planning considerations that can be given weight when determining a planning application.

The potential detrimental impact on house prices has been raised as well as increased insurance premiums along with the negative reputation to the village. As is the case in all planning applications, this is not a material consideration and cannot be afforded any weight.

A number of objections raise concerns that INEOS (nor other operators) have previous experience of drilling in the UK and the industry remains untested. This is acknowledged, though again this cannot be afforded any planning weight.

The behaviour and profit motives of the industry are also not issues that can be afforded any material planning weight in the determination of this planning application.

Conclusion

The applicant seeks temporary permission for a maximum of 5 years, including restoration proposals. The site is in an area of open rural Green Belt. This would involve the temporary introduction of built development, but this is temporary and has also been supported by future restoration proposals. The NPPG identifies a pressing need to establish, through exploratory drilling, whether or not there are sufficient recoverable quantities of unconventional hydrocarbons such as shale gas present to facilitate economically viable full scale production. It is not considered that there would be an adverse effect on the long term permanence of the Green Belt in this area. The proposals are not considered to represent inappropriate development in this Green Belt location and, therefore, the principle of development in this location is considered acceptable.

From a highway safety perspective, the Council’s Transportation Unit along with Highways England have concluded that a safe and suitable access to the site can be

achieved and the cumulative impact of the development in transport terms is unlikely to be severe. Accordingly, the development can be supported from a highway aspect subject to conditions.

In terms of ecology, the red-edge site plan lies less than 30m from the Dewidales Ancient Woodland, eastern section and insufficient justification has been submitted to demonstrate that there will be no adverse impact on the ancient woodland. Overall it is considered that there are a number of deficiencies and omissions within the supporting ecological data, including insufficient surveying work on badgers, bats and breeding birds. The Council's Ecologist acknowledges that the applicant has had restricted access to the ancient woodlands to carry out survey work but considers that the applicant has submitted insufficient evidence of attempts to try alternative methods where access could not be obtained. The omissions are of such significance such that these deficiencies cannot be satisfactorily overcome through the imposition of conditions to potentially mitigate against future detrimental ecological impact. Consequently, the Council is not able to fully assess the proposals against national and local policy and the application cannot be supported on lack of ecological supporting details. It is therefore recommended that the application is refused on lack of ecological information and in conflict with paragraph 118 of the NPPF.

On landscaping and visual amenity, it is acknowledged that the development will result in substantial adverse landscape and visual effects, although these will be from generally within 1.5km of the site and over the short term only. This will also increase the potential for light pollution. The Council's Landscaping Team have not formally objected on visual amenity grounds and it is not considered that there are any formal objections in this regard.

In terms of noise and vibration, no objections have been raised from the principal regulators (the Environment Agency, RMBC Environmental Health or Public Health England). It is considered that noise levels would not be at such an adverse level that would justify a refusal. Subject to recommended conditions including a noise monitoring strategy and management plan, this is considered to safeguard future noise levels would be contained within acceptable parameters.

In terms of heritage and archaeological impacts, the South Yorkshire Archaeology Service indicated that there are significant archaeological features within the proposed development boundary. However, subject to an archaeological condition this is considered to mitigate this concern, the proposal is not considered to have a detrimental impact on the nearest listed buildings within Woodsetts village centre. Likewise, Historic England have not objected on heritage grounds.

The site lies within the lowest flood risk level and is not within a known surface water drainage area. Both the Council's Drainage Officer and the Environment Agency have raised no objections to future drainage, subject to conditions. Likewise, the proposal is not considered to materially increase the potential for future flood risk.

The Council is currently considering this site on its own merits. Whilst there is a similar proposal currently at the Harthill site which is currently subject to appeal, this site is approximately 5km away and it is not considered that there are any significant cumulative impacts arising.

Summarising the issues involving potential future contamination, pollution of ground water and general pollution control issues, as indicated in the appraisal, all issues of well design and construction is considered by the HSE and Environment Agency regulators and is beyond the scope of this planning application. Both regulators have raised no objections to this aspect of the application and there are no planning objections to this element. The Council's Pollution Control Officer has raised no objections, subject to conditions.

A number of other issues have been raised and all representations received have been taken into account. The level of public interest in this application and the volume of objections received from the public is acknowledged, although this does not by itself constitute material grounds for refusal.

Reason for refusal

01

The Council considers that the supporting ecological information provided with the application is deficient to determine the application. The application red-edge site area lies approximately 25m from Dewidales Ancient Woodlands (eastern block) and there is significant built development less than 50m of the woodland boundary. The applicant has submitted insufficient evidence to justify this limited buffer protection area. The Council further notes that due to the lack of an adequate bat, badger and breeding bird survey, it cannot fully assess the potential future adverse impact on the adjacent wildlife and local ecology. Accordingly the applicant has not sufficiently demonstrated that the development can satisfactorily mitigate the potential for harm to the ecology of the surrounding rural environment, contrary to paragraph 118 of the National Planning Policy Framework which indicates that if significant harm resulting from a development cannot be avoided then planning permission should be refused.

POSITIVE AND PROACTIVE STATEMENT

The applicant and the Local Planning Authority engaged in pre application discussions to consider the development before the submission of the planning application. Additional ecological information was submitted during the determination of the panning application, but these did not overcome the concerns of the Planning Authority. It was not considered to be in accordance with the principles of the National Planning Policy Framework and resulted in this refusal.

Appendix 2: Minutes of Board meeting

PLANNING BOARD

8th March, 2018

Present:- Councillor Atkin (in the Chair); Councillors Andrews, Bird, D. Cutts, Fenwick-Green, Ireland, Jarvis, Price, Taylor, Tweed, Vjestica, Walsh and Whysall.

An apology was received from Councillor John Turner.

The webcast of the Council Meeting can be viewed at:-

<https://rotherham.public-i.tv/core/portal/home>

67. DECLARATIONS OF INTEREST

Councillor Walsh declared a personal interest in application RB20171577 on the grounds of being a member of the Energy Institute.

68. MINUTES OF THE PREVIOUS MEETING

Resolved:- That the minutes of the previous meeting of the Planning Regulatory Board held on Thursday, 15th February, 2018, be approved as a correct record for signature by the Chairman.

69. DEFERMENTS/SITE VISITS

There were no deferments or site visits recommended.

70. DEVELOPMENT PROPOSALS

Resolved:- (1) That, on the development proposals now considered, the requisite notices be issued and be made available on the Council's website and that the time limits specified in Sections 91 and 92 of the Town and Country Planning Act 1990 apply.

In accordance with the right to speak procedure, the following people attended the meeting and spoke about the following applications:-

- Construction of a well site and creation of a new access track, mobilisation of drilling, ancillary equipment and contractor welfare facilities to drill and pressure transient test a vertical hydrocarbon exploratory core well and mobilisation of workover rig, listening well operations, and retention of the site and wellhead assembly gear for a temporary period of 5 years at land adjacent Dinnington Road Woodsetts for INEOS Upstream Limited (RB2017/1577)

Mr. Tom Pickering and Mr. Matthew Shepherd (Applicant)
Mr. Richard Scholey, Ms. Christine Burton, Mr. Barry Cartwright,
Ms. Kelly Jennings and Ms. Sue Gildersleve (Woodsetts Against Fracking Action Group)

Councillor Clive Jepson, Ward Councillor, Anston and Woodsetts/Anston Parish Council (Objector)
Mr. Martin Ladbroke, Letwell Parish Council (Objector)
Ms. Wendy Hamilton, Firbeck Parish Council (Objector)
Ms. Monica Carroll, Woodsetts Parish Council (Objector)
Mr. Andy Tickle, C.P.R.E. (Objector)
Mr. Gary Pickering, Resident (Objector)
Mr. Adrian Knight, Resident (Objector)
Mr. Nigel Butler, Resident (Objector)
Mr. Kenneth Goodall, Resident (Objector)
Councillor Yasseen, Chair of the Parish Council Network (Objector)

(2) That application RB2017/1577 be refused for the reason contained within the submitted report along with a further reason for refusal relating to highway safety and the conflict with other road users. The Assistant Director, Planning, Regeneration and Transport, in consultation with the Chair and Vice-Chair of the Planning Board, to be authorised to determine the wording for the additional reason for refusal.

(3) That application RB2017/1840 be granted for the reasons adopted by Members at the meeting and subject to the relevant conditions listed in the submitted report, but with an additional condition/reason below relating to the list of approved plans:-

The permission hereby granted shall relate to the area shown outlined in red on the approved site plan and the development shall only take place in accordance with the submitted details and specifications as shown on the approved plans (as set out below)

Revised Site Plan (received 1 March 2018)
PL001 House Type 1 (Received 7 March 2018)
PL001 House Type 2 (Received 7 March 2018)
PL001 House Type 3 (Received 7 March 2018)
PL001 House Type 4 (Received 7 March 2018)
PL001 Flat Block A (Received 7 March 2018)
PL001 Flat Block B (Received 7 March 2018)
PL002 Flat Block A (Received 7 March 2018)
PL002 Flat Block B (Received 7 March 2018)

Surface Treatment Plan (Received 19 December 2017)
Boundary Treatment Plan (Received 19 December 2017)
Boundary Treatment Detail (Received 19 December 2017)

Reason - To define the permission and for the avoidance of doubt.

71. UPDATES

There was no update information to report.

72. DATE OF NEXT MEETING

Resolved:- That the next meeting of the Planning Board take place on Thursday, 29th March, 2018 at 9.00 a.m.

Appendix 3: Decision Notice

Rotherham Metropolitan Borough Council

Town and Country Planning Act 1990	Reference RB2017/1577
	Decision Date 09 March 2018
Turley Mr M Sheppard 2 Bond Court Leeds LS1 2JZ	
Description and Location Construction of a well site and creation of a new access track, mobilisation of drilling, ancillary equipment and contractor welfare facilities to drill and pressure transient test a vertical hydrocarbon exploratory core well and mobilisation of workover rig, listening well operations, and retention of the site and wellhead assembly gear for a temporary period of 5 years at land adjacent Dinnington Road Woodsetts Rotherham for INEOS Upstream Limited	

You are hereby notified that your application for **Planning Permission** for the above development was **REFUSED** on 09 March 2018.

Reason(s) for Refusal:

01

The Council considers that the supporting ecological information provided with the application is deficient to determine the application. The application red-edge site area lies approximately 25m from Dewidales Ancient Woodlands (eastern block) and there is significant built development less than 50m of the woodland boundary. The applicant has submitted insufficient evidence to justify this limited buffer protection area. The Council further notes that due to the lack of an adequate bat, badger and breeding bird survey, it cannot fully assess the potential future adverse impact on the adjacent wildlife and local ecology. Accordingly the applicant has not sufficiently demonstrated that the development can satisfactorily mitigate the potential for harm to the ecology of the surrounding rural environment, contrary to paragraph 118 of the National Planning Policy Framework which indicates that if significant harm resulting from a development cannot be avoided then planning permission should be refused.

02

The Council consider that the proposed development, which will significantly increase the number of HGV movements through the village of Woodsetts, the surrounding highways and at the junction with the proposed access on Dinnington Road, would give rise to unacceptable highways safety issues, including increased likelihood of conflict with vulnerable road users such as cyclists, equestrians, children and the elderly such that it would be contrary to the National Planning Policy Framework which expects developments to include safe and suitable access for all people.

POSITIVE AND PROACTIVE STATEMENT

The applicant and the Local Planning Authority engaged in pre application discussions to consider the development before the submission of the planning application. Additional ecological information was submitted during the determination of the planning application, but these did not overcome the concerns of the Planning Authority. It was not considered to be in accordance with the principles of the National Planning Policy Framework and resulted in this refusal.

Please read the attached NOTES carefully.

A handwritten signature in black ink that reads "B. Knight". The signature is written in a cursive style with a large initial 'B'.

^{pp}Director of Planning Regeneration & Transport Services

NOTES

1. THIS FORM RELATES TO PLANNING CONTROL ONLY.
Where planning permission is granted and an application has also been made under the Building Regulations a separate communication will be sent to you giving notice of the Council's decision and **WORK MUST NOT BE COMMENCED BEFORE SUCH DECISION HAS BEEN RECEIVED**. Any other statutory consent necessary must be obtained from the Council or other appropriate authority.

Party Wall Act 1996

2. You are advised to take account of the Party Wall Act 1996 insofar as the carrying out of development affecting or in close proximity to the boundary with adjoining property is concerned.
3. **Appeals to the Secretary of State**
 - If you are aggrieved by the decision of your local planning authority to refuse permission for the proposed development or to grant it subject to conditions, then you can appeal to the Secretary of State under section 78 of the Town and Country Planning Act 1990.
 - If this is a decision to refuse planning permission, then you can only appeal within 12 weeks of the date of this notice or **28 days** from the date of this decision if an enforcement notice for this or a similar development was served before the decision was made yet not longer than 2 years before the application was made or **28 days** from the date the enforcement notice was served if served on or after the date this decision was made (unless this extends the appeal period beyond 12 weeks).
 - Appeals can be made online at: <https://www.gov.uk/planning-inspectorate>. If you are unable to access the online appeal form, please contact the Planning Inspectorate to obtain a paper copy of the appeal form on tel: **0303 444 5000**.
 - The Secretary of State can allow a longer period for giving notice of an appeal but will not normally be prepared to use this power unless there are special circumstances which excuse the delay in giving notice of appeal.
 - The Secretary of State need not consider an appeal if it seems to the Secretary of State that the local planning authority could not have granted planning permission for the proposed development or could not have granted it without the conditions they imposed, having regard to the statutory requirements, to the provisions of any development order and to any directions given under a development order.
4. **Purchase Notices**
 - If either the local planning authority or the Secretary of State refuses permission to develop land or grants it subject to conditions, the owner may claim that he can neither put the land to a reasonably beneficial use in its existing state nor render the land capable of a reasonably beneficial use by the carrying out of any development which has been or would be permitted.
 - In these circumstances, the owner may serve a purchase notice on the Council (District Council, London Borough Council or Common Council of the City of London) in whose area the land is situated. This notice will require the Council to purchase his interest in the land in accordance with the provisions of Part VI of the Town and Country Planning Act 1990.

5. If permission to develop land is refused or granted subject to conditions, whether by the Council or by the Secretary of State, and the owner of the land claims that the land has become incapable of reasonably beneficial use in its existing state and cannot be rendered capable of reasonably beneficial use by the carrying out of any development which has been or would be permitted he may serve on the Council a purchase notice requiring the Council to purchase his interest in the land in accordance with the provisions of Part VI of the Town and Country Planning Act 1990.
6. In certain circumstances a claim for compensation may be made against the Council where permission is refused or granted subject to conditions by the Secretary of State on appeal or on a reference of the application to him. The circumstances in which compensation is payable are set out in Part V of the Town and Country Planning Act 1990.

Discharge/compliance of condition

Please note that under new regulation 11(D) of the Town and Country Planning (fees for applications and deemed applications) (amendment) (England) Regulations 2008, a fee is chargeable of £97 per request (or £28 where the related planning permission was for extending or altering a dwelling house) for the discharge and/or compliance with a condition. To avoid any unnecessary cost we would recommend that you submit all the required information for discharge of conditions in one application as the fee is payable per request.

Rotherham Metropolitan Borough Council
Development Management
Planning Regeneration & Transport Services
Riverside House
Main Street
Rotherham S60 1AE Telephone: (01709) 382121



The Coal
Authority

INFORMATIVE NOTE

The proposed development lies within an area that has been defined by the Coal Authority as containing potential hazards arising from former coal mining activity. These hazards can include: mine entries (shafts and adits); shallow coal workings; geological features (fissures and break lines); mine gas and previous surface mining sites. Although such hazards are seldom readily visible, they can often be present and problems can occur in the future, particularly as a result of development taking place.

It is recommended that information outlining how the former mining activities affect the proposed development, along with any mitigation measures required (for example the need for gas protection measures within the foundations), be submitted alongside any subsequent application for Building Regulations approval (if relevant). Any form of development over or within the influencing distance of a mine entry can be dangerous and raises significant safety and engineering risks and exposes all parties to potential financial liabilities. As a general precautionary principle, the Coal Authority considers that the building over or within the influencing distance of a mine entry should wherever possible be avoided. In exceptional circumstance where this is unavoidable, expert advice must be sought to ensure that a suitable engineering design is developed and agreed with regulatory bodies which takes into account of all the relevant safety and environmental risk factors, including gas and mine-water. Your attention is drawn to the Coal Authority Policy in relation to new development and mine entries available at: <https://www.gov.uk/government/publications/building-on-or-within-the-influencing-distance-of-mine-entries>

Any intrusive activities which disturb or enter any coal seams, coal mine workings or coal mine entries (shafts and adits) requires a Coal Authority Permit. Such activities could include site investigation boreholes, digging of foundations, piling activities, other ground works and any subsequent treatment of coal mine workings and coal mine entries for ground stability purposes. Failure to obtain a Coal Authority Permit for such activities is trespass, with the potential for court action.

Property specific summary information on past, current and future coal mining activity can be obtained from: www.groundstability.com or a similar service provider.

If any of the coal mining features are unexpectedly encountered during development, this should be reported immediately to the Coal Authority on 0345 762 6848. Further information is available on the Coal Authority website at: www.gov.uk/government/organisations/the-coal-authority

Appendix 4: Appeal Decision



Appeal Decision

Inquiry Held on 24 to 27 April and 1 to 3 May 2018

Site visit made on 26 April 2018

by Stephen Roscoe BEng MSc CEng MICE

an Inspector appointed by the Secretary of State for Communities and Local Government

Decision date: 7th June 2018

Appeal Ref: APP/P4415/W/17/3190843

Land Adjacent to Common Road, Harthill, Rotherham

- The appeal is made under section 78 of the Town and Country Planning Act 1990 against a failure to give notice within the prescribed period of a decision on an application for planning permission.
 - The appeal is made by UNEOS Upstream Limited against Rotherham Metropolitan Borough Council.
 - The application, Ref RB2017/0805, is dated 30 May 2017.
 - The development proposed is the construction of a well site and the creation of a new access track, mobilisation of drilling, ancillary equipment and contractor welfare facilities to drill and pressure transient test a vertical hydrocarbon exploratory core well and mobilisation of a workover rig, listening well operations, and retention of the site and wellhead assembly gear for a temporary period of 5 years.
-

Procedural Matters

1. Had the Council been in a position to determine the application prior to the opening of the Inquiry, it would have refused it for the following reasons:
 - i) *The Council considers that vehicular access to/egress from the site is intended to be via country lanes which are considered to be unsuitable to cater for the significant increase in commercial vehicular traffic to be generated by the proposal in terms of their limited width, restricted visibility, adverse alignment and lack of separate pedestrian facilities. The development, if implemented, would therefore increase the risk of vehicular conflict with vulnerable road users and other vehicles to the detriment of road safety, contrary to the National Planning Policy Framework (NPPF) which expects developments to include safe and suitable access for all people.*
 - ii) *The Council also considers that the supporting ecological information is deficient with no breeding bird survey details submitted, insufficient bat survey details, and a substandard Phase 1 Habitat Survey carried out in January. Accordingly the applicant has not sufficiently demonstrated that the development can satisfactorily mitigate the potential for harm to the ecology of the surrounding rural environment, contrary to paragraph 118 of the NPPF which indicates that, if significant harm resulting from a development cannot be avoided, then planning permission should be refused.*

2. Following the presentation of the Council's case at the Inquiry, the Council withdrew its objection to the proposal on ecological grounds and the corresponding putative reason for refusal.
3. Shortly before the deadline for the submission of proofs of evidence, the appellant provided a report, to the Council, myself and objectors identified at the Pre-Inquiry Meeting, titled 'AECOM review of Traffic and Transport Matters' [Document IUL1]. It included an Enhanced Traffic Management Plan (ETMP) and had been prepared by Mr Martin, the appellant's traffic witness. The report amounts to some 140 pages and is of a technical nature.
4. The report primarily put forward revisions to the traffic management arrangements proposed and submitted with the planning application and the ETMP. As agreed in the Statement of Common Ground, the ETMP could be subject to Council approval under a condition prior to any development taking place. The revisions included the relocation of the site access route further from the village of Harthill and, to remove the need for a one-way system on local roads, an increase in the number of highway passing places to be provided from 6 to 23. The revisions also included the introduction of two temporary traffic stop and go board controlled sections along the route. These revisions followed discussions between the appellant and Council officers and Mr Martin's proof of evidence is based on the AECOM report.
5. The Council initially objected to the late submission of this report [Document G4]. This was on the basis that the revisions were significant and the Council and interested parties should have sufficient time to consider them and that they represented a revision to the proposal itself as well as to the mitigation measures. In view of the size and technical basis of the report and the nature of the Council's objection, I did not decide whether or not to accept the report, but advised that I would consider the matter after opening the Inquiry, when I could hear evidence as to the extent of, and background to, the revisions as well as giving parties the opportunity to request adjournments and make other applications to me. The Council's proofs were submitted on the basis of the appellant's position prior to the submission of the AECOM report.
6. Prior to the opening of the Inquiry, the Council's relevant officers did in fact consider the AECOM report and recommended to the Council's Planning Board that the Council's putative reason for refusal relating to traffic matters should be withdrawn [Document RC1]. The Council's Planning Board did not however accept this recommendation [Document RC2].
7. The Council's position at the Inquiry on traffic matters was as follows. Whilst it accepts the advice of its officers on the suitability of the traffic measures proposed in themselves, the AECOM report does not satisfy the Council's concerns in relation to highway safety as a whole. Furthermore, the Council stated during the Inquiry that it does not consider that the AECOM report amends the scheme as proposed or that the principles of Wheatcroft would be 'in play' by my accepting the report, although it does have concerns in respect of public consultation.
8. Interested party concerns were put to me, both before and following the opening of the Inquiry, that individuals would be disadvantaged and prejudiced if the report was accepted. An interested party request for an adjournment of four weeks was also made, although the Council did not support this.

Notwithstanding the changed position of the Council in respect of the AECOM report, I agreed to hear representations from interested parties and submissions from the Council and the appellant, prior to giving a ruling on whether the AECOM report should be accepted at the start of the Inquiry. I then gave my ruling as follows.

- i) I am conscious that interested parties are concerned about the lack of consultation in respect of the AECOM report. I can understand the concerns of interested parties when confronted with a document of the size and nature as has been described. Indeed, this was also the Council's initial position. The Council's final position however is that there is no change to the scheme, that the report does not represent scheme evolution, as has been claimed, and that there is no prejudice under the Wheatcroft principles as a result. I give great weight to the Council's position, as it is based on professional advice from within its own organisation, which has a responsibility to represent its locality in terms of its function as Highway Authority.*
 - ii) A purpose of the AECOM report is to show a potential Enhanced Traffic Management Plan (ETMP) which could be subject to approval by the Council under an appropriate condition. There are significant differences between the Traffic Management Plan (TMP) put forward with the application and the ETMP within the AECOM report. These do not however change the proposal or materially alter the nature of the application, they offer an amended option to potentially satisfy a condition, the content of which has been agreed between the two main parties. Moreover, the operative text in the AECOM report amounts to some 9 pages out of the 140 in total.*
 - iii) I am however conscious, as is the Council, of the position of interested parties having not had the benefit of technical expertise to interpret some of the aspects of the report. It would therefore be useful, as suggested, for the appellant to explain the latest draft ETMP and answer factual questions on it, and for representations from interested parties to then be given next week, when interested parties have had the opportunity to consider the explanation that they have been given. I therefore rule that the AECOM report should be accepted in evidence without any adjournment.*
9. I also consider that the appellant chose a poor mechanism by which to put forward the ETMP, notwithstanding that it was said to be done for the sake of completeness and to be helpful. Indeed, the limited number of operative pages within the report could, in my view, have been easily included in an appendix to a proof of evidence, which would have been exchanged and made available for public inspection.
10. It is also of note that my accompanied site visit included walking the entire proposed site access route within the Council's area, with representatives of the Council and the appellant together with those interested parties who wished to attend. Moreover, this took place in advance of statements being made to the Inquiry by interested parties and the opportunity for interested parties to question the appellant's witnesses. I am therefore satisfied that, in addition to the matters raised in my ruling, interested parties had a

sufficient, and indeed good, opportunity to understand the ETMP prior to presenting their statements to the Inquiry.

11. The Secretary of State for Business, Energy and Industrial Strategy made a Written Statement to Parliament on Energy Policy, which refers to the exploration and development of our onshore shale gas resources, on 17 May 2018. In view of its relevance to this appeal, the main parties were invited to make comments on the Statement, and the Statement and these comments have been taken into account in this decision.
12. Following the closure of the Inquiry, I was made aware that, due to an apparent error on the Council's part, Bondhay Golf Club and Monition Ltd had not been notified in respect of the appeal. They were therefore invited to make a written statement in relation to the appeal, and the main parties were invited to comment on this statement. Both the statement and the comments received have been taken into account in this decision.

Decision

13. The appeal is allowed and planning permission granted for the construction of a well site and the creation of a new access track, mobilisation of drilling, ancillary equipment and contractor welfare facilities to drill and pressure transient test a vertical hydrocarbon exploratory core well and mobilisation of a workover rig, listening well operations, and retention of the site and wellhead assembly gear for a temporary period of 5 years at Land Adjacent to Common Road, Harthill, Rotherham in accordance with the terms of the application Ref RB2017/0805, dated 30 May 2017, and subject to the conditions listed at the end of this decision.

Reasons

14. I consider the main issues in this case to be:
 - i) whether the proposal would represent inappropriate development in the Green Belt having regard to the NPPF; and
 - ii) the effect of the proposal on the existing uses of the highways in the surrounding area.

Green Belt

15. The appeal site lies within the South Yorkshire Green Belt. The proposed development would be associated with mineral extraction, which in itself is not inappropriate development in the Green Belt. The development would include plant, site buildings and minor topsoil storage and environmental bunding which would be in place for up to five years. The site would be returned to its existing condition following this period. In view of the extent and temporary nature of the development, which would not be unusually longer than other construction or mineral extraction operations, the development would preserve the openness and the purposes of including land in the Green Belt. It would therefore not represent inappropriate development and would not be harmful to the Green Belt under paragraph 90 of the NPPF. It would also satisfy national guidance in accordance with the element of the Council's emerging Sites and Policies Document¹ (DPD) Policy SP2 in relation to mineral workings

¹ Rotherham Local Plan: Proposed Main Modifications to the Publication Sites and Policies Document: January 2018

to which I give great weight. This is due to the generic nature of this element of the policy and its progress towards adoption. In this regard, the emerging DPD has been found sound following an examination in public, subject to a number of modifications, and is anticipated to be adopted in July 2018.

Highways

16. The proposed public highway access route for the development includes the A619, which gives a good standard of access to the M1 motorway. From the A619 to the site, the route follows just over 2km of Bondhay Lane. The lane is single track in places and gives access to residential properties at its junction with the A619 and to the south of Packman Lane. The lane also gives access to the Bondhay Golf Club Complex and Monition Ltd and to a farmstead. The southern section of the lane is relatively straight in terms of its horizontal and vertical alignments. The northern section is however quite tortuous in its alignments and narrow in width.
17. The access route then proceeds onto some 1.5km of the single track Packman Lane. The southern section of the lane has a poor alignment and limited width, including the section between residential properties and farm complexes at Loscar and Honeysykes Farms. Its northern section has straighter alignments, although some crests in the lane have restricted forward visibility. The route then turns onto the single track Common Road, which has relatively straight alignments along the length to be used of some 0.5km. It does not serve any residential properties but does serve an animal rescue centre.
18. The appellant has prepared forecasts for traffic associated with the development. The forecasts were prepared by a consultant employed by the appellant and then reviewed by a further consultant, also employed by the appellant. There is a difference in opinion between the consultants on whether maximum or average traffic flows should be used in assessing impact, and I have therefore considered both in this decision. Traffic generation figures for the proposal were uncontested, and I can see no reason to doubt that they represent the best estimate at the present time.
19. Traffic flows in connection with the development are split into HGV and non HGV categories. The non-HGV flows are low, even in comparison with the background flows, and I do not consider that they would have any material impact on the local highway network.
20. The stages of the development prior to the maintenance period are forecast to last 46 weeks. The most intensive periods of HGV site access traffic would be during the construction period, of 12 weeks, and during the drilling period, of 20 weeks.
21. During construction, using figures from the appellant's evidence, there would be less than 10 movements/day in either direction, or less than an average of one HGV every 60 minutes over a 10 hour working day. This would be the case for much of the time. On up to 40 days of this construction period, there would be more than 10 movements/day, and for three weeks there would be between 52 and 60 movements/day, which is between 5 and 6 movements/hour, or one HGV every 10 to 12 minutes. Over these three weeks however, I consider that it would be likely that HGV convoys would be used, which I will consider shortly.

22. During drilling, there would also be less than 10 movements/day in either direction for the majority of the time, except for periods at the beginning and the end of drilling. During these periods, there would be between 20 and 42 movements/day, which is between 2 and 5 movements/hour, or one HGV in 12 to 30 minutes. Over these periods however, I again consider that it would be likely that HGV convoys would be used. Each of these HGV movements between the A619 and the site and vice versa is forecast to take some 8 minutes plus time added for stops or delays.
23. The above figures relate to an HGV travelling alone, but the appellant considers that the vast majority of HGVs would travel in convoys of between 2 and 8 vehicles. The above figures, and particularly the maximum intensity, would therefore be very much a worst case in terms of the frequency of movements. This is because, if 60 movements were to take place in a single day, then convoys would be likely to be used with a far lesser frequency than set out above.
24. It also is of note that the purpose of these figures is not to define the number of HGVs that would be on the route at a particular time. It is however to indicate potential scenarios, in order that impact can be assessed in a reasoned manner. The total number of forecast HGV movements would not change over the duration of the development, as there is generally only a set level of work to be carried out on the site. This means that a day carried out at this maximum intensity could result in a day without any HGV movements at another time.
25. I now turn to consider convoys. The ETMP limits these to 8 HGVs and the appellant suggests that the average number of HGVs in a convoy would be five. Over the intensive traffic period of three weeks during construction, the maximum number of forecast 8-HGV convoy movements, in either direction, is between 7 and 8 movements/day. Over a 10 hour working day, these represent one convoy movement every 75 to 85 minutes. The maximum number of forecast 5-HGV convoy movements, in either direction, is between 11 and 12 movements/day. Over a 10 hour working day, these represent one movement in 50 to 65 minutes.
26. Over the intensive traffic periods during drilling, the maximum number of forecast 8-HGV convoy movements, in either direction, is between 3 and 6 movements/day. Over a 10 hour working day, these represent one movement every 100 to 200 minutes. The maximum number of forecast 5-HGV convoy movements, in either direction, is between 4 and 9 movements/day. Over a 10 hour working day, these represent one movement every 70 to 150 minutes.
27. The development would also require the use of the access route by abnormal loads. These would primarily access the site over the construction, drilling and decommissioning phases. Over the construction phase of 12 weeks, there is forecast to be 42 abnormal load movements in either direction. These would be spread over a period of 10 days within this phase, with a maximum of 8 movements in a single day. This maximum would represent one movement every 75 minutes.
28. Over the drilling phase of 20 weeks, there is forecast to be 44 abnormal load movements in either direction. These would be spread over a period of 18 days within this phase, with a maximum of 6 movements in a single day. This maximum would represent one movement every 100 minutes. During the

decommissioning phase of 6 weeks, abnormal load movements would be slightly less than the forecast for the construction phase. Each of these movements between the A619 and the site and vice versa is forecast to take 33 minutes plus time added for stops or delays.

29. In summary therefore, when single HGVs would be likely to be used, their average frequency would be likely to be one movement every 60 minutes. With 5-HGV convoys, movements would be likely to take place every 50 to 150 minutes over a period of some 3 weeks during construction, at the beginning and end of drilling and probably at some stage during decommissioning. If 8-HGV convoys were used, movements would be likely to take place every 75 to 200 minutes over these periods. In terms of abnormal load movements, these are forecast to take place over a period of 28 days plus decommissioning at a maximum of one every 75 to 100 minutes. I would however repeat that these are averages and forecast maximums and, in practice, some days would be more and some less.
30. The Council's position on highway matters has been made notwithstanding its officers' final positive recommendation in respect of the application. The recommendation concluded that the additional passing places would significantly reduce the risk of conflict with vehicles and other road users. It also concluded that the two temporary traffic stop and go board sections on Packman Lane and Bondhay Lane would be acceptable in principle.
31. The Council's position is however that the latest information from the appellant does not overcome its concerns in relation to highway safety. Specific concerns include: hedgerow damage; traffic enforcement; forward visibility; cyclists and horse riders; traffic backing up between passing places; and vehicle breakdown.
32. Considering firstly other vehicles, the appellant has undertaken existing traffic surveys. These indicate 40 vehicle movements/day on Common Road, which equates on average to one every 15 minutes in either direction, or one every 30 minutes in one direction. In terms of conflict with site access traffic, an HGV or convoy would take approximately one minute to travel along Common Road. This would take place at some 100 to 400 minute (1.7 to 6.7 hr) intervals in one direction, assuming that convoys are used during the more intensive traffic periods. An abnormal load would take approximately 4 minutes to travel along Common Road. I therefore consider that paths would cross infrequently. This would also be the case, even if single HGVs were used to access the site throughout the development.
33. On Packman Lane, the indicated 221 vehicle movements/day would be on average one every five minutes in one direction. In terms of conflict with site access traffic an HGV or convoy would take approximately three minutes to travel along the lane, and this would take place at some 100 to 400 minute intervals in one direction. An abnormal load would take some 12 minutes to travel along the lane. I therefore consider that paths would cross frequently, but only up to 5% of existing vehicles would be likely to meet single HGVs or convoys. This would be potentially once in each HGV or convoy trip or twice with an abnormal load.
34. On Bondhay Lane, the indicated 512 vehicle movements/day would be on average one every two minutes in one direction. In terms of conflict with site access traffic, an HGV or convoy would take approximately four minutes to

travel along the lane, and this would take place at some 100 to 400 minute intervals in one direction. An abnormal load would take some 17 minutes to travel along the lane. I therefore consider that paths would cross frequently, but only up to 4% of existing vehicles would be likely to meet single HGVs or convoys. This would be potentially twice in each HGV or convoy trip or nine times with an abnormal load. In view of the low level of paths crossing on the route as a whole, I do not consider that traffic regulation would be problematic.

35. The ETMP includes two sections where temporary traffic stop and go boards would be used. Banksmen in a front escort vehicle would hold approaching traffic in these sections of Packman Lane and Bondhay Lane until the HGV, convoy or abnormal load had passed through the section. These two sections are where alignments are tortuous and land widths narrow, thus preventing forward visibility. The travel time of HGVs, convoys and indeed abnormal loads through these sections would however be limited, as can be seen from the times to travel the sections along each lane. This, and the low frequency of movements, would result in the numbers of vehicles held being limited, and I thus do not consider that traffic regulation would be problematic. Moreover, the section of Bondhay Lane which would be subject to this control would lie beyond the length of the lane which is used by traffic accessing the Bondhay Golf Club Complex and Monition Ltd from the A619. It would therefore be subject to a lower level of traffic flow than the lane as a whole.
36. There is some criticism of the timing of the traffic counts, which were undertaken when some of the schools in the locality were within a holiday period. Traffic levels on Common Road and Packman Lane are however low, and I have taken into account that they could be subject to some variation in coming to my decision. In considering both average and maximum traffic flows, I have also taken into account views expressed in the Inquiry on the period over which averages should be undertaken.
37. HGVs, convoys and abnormal loads would travel at lower speeds than is usual for the access route. In view of the level of existing traffic flows on the lanes however, the numbers of vehicles delayed behind those accessing the site would be minimal.
38. It is not unusual to have to reverse back to an existing passing place when currently driving along the lanes, and indeed I had to reverse a number of times when on my unaccompanied site visits. The provision of passing places, which would be inter-visible apart from those areas covered by the traffic stop and go boards at some times, would improve this situation a great deal, including during any breakdown of existing or proposed traffic. Whilst this improvement would not outweigh the adverse impact that would result from the additional use of the lanes, it would materially offset this impact. Moreover, if the Council decided to retain the passing places after the completion of the development, then this would represent a benefit into the future.
39. In view of the level of existing and proposed traffic flows on the lanes, I am satisfied that the circumstances encountered by general agricultural vehicles would be similar to those for other traffic. There are however situations where the agricultural use of the lanes for specific operations would be more intensive and urgent than the general case. Such operations could require changes to

the traffic management regime in terms of the priority given to certain types of vehicles over certain sections of the lanes.

40. These matters have been raised during the Inquiry and on the detailed route inspection with interested parties, and I am of the opinion that the Council is more aware of these matters than it may have been previously. It would be for the Council to ensure that these matters are addressed in any final approved TMP. I have previously identified the Council's position in terms of representing local people and protecting their interests. There has been criticism of the Council's previous performance in this regard during the Inquiry. It is now for the Council to ensure that detailed matters, such as agricultural access, are fully taken into account when the final TMP is approved.
41. Bondhay Lane has previously been used as a site access for a windfarm development adjacent to Packman Lane. Packman Lane was considered to be unsuitable as an access for the windfarm development, which used an off-highway access instead. It has been suggested that this adds weight in support of dismissing the appeal. There is no evidence before me however to suggest that a traffic management plan or additional laybys were proposed as a part of the windfarm scheme. I therefore consider that the windfarm access does not add any weight in support of dismissing the appeal.
42. Concerns have been expressed about the enforceability of the TMP. This has to be the role of the Council as Local Planning Authority and Highway Authority. In this regard, various planning enforcement and highway regulation procedures may be available to the Council, including for example the serving of a planning enforcement stop notice.
43. A number of the proposed passing bays could be sited at field entrances, although they would remain within the highway. The work to construct any layby would be carried out under the regulation of the Highway Authority, who I am satisfied would be accustomed to accommodating the reasonable requirements of private accesses. I therefore do not consider that any such passing places would be likely to restrict or unreasonably change the suitability of any field access.
44. Bondhay Lane, just to the north of its junction with the A619, includes an informal layby which is used by nearby residents for parking. Indeed, I used it at one of my unaccompanied site visits. The location of the current layby is the location for one of the proposed passing places. The location appears to be within the boundary of the public highway, and the use and future use of this area should thus be under the control of the Highway Authority. Should the authority decide that the informal layby should be retained for the residents, I am satisfied that an alternative location for a passing place associated with the proposed development could be provided a little further along Bondhay Lane.
45. In coming to my opinion, I have taken into account that the traffic management proposals are a potential mechanism for site access. With this in mind, and in view of all of the above points, I do not consider that the proposal would be likely to have an unacceptable adverse effect on the use of these lanes by other vehicles.

46. I now turn to consider pedestrians. From my site visits, the presence of verge side seats, a leaflet on Harthill with Woodall Parish Walks and the proximity of the village of Harthill, it appears to me that pedestrian use of Common Road and the nearest parts of Packman Lane is greater than that along Packman Lane generally. The western section of Common Road which is nearest the village does not form part of the site access route. The eastern section of Common Road, which is part of the site access route, has better forward visibility and more open verges than the western section, as does the nearest section of Packman Lane. Other sections of Packman Lane, further to the south of the Common Road junction, are more enclosed and have crests where forward visibility is restricted.
47. It is therefore the case that the areas of Common Road and Packman Lane to the east of the site and on the site access route are better suited to the presence of pedestrians and site related vehicles than other lanes nearby. It would also be the case that the front escort vehicle of a single HGV, convoy or abnormal load would not have the same purpose as existing vehicles travelling on the lane. The primary duty of the escort vehicle would be to look out for, and advise, pedestrians and others of oncoming vehicles.
48. For pedestrians walking the length of Common Road and then Packman Lane to its junction with Bondhay Lane, as I did with various parties at the accompanied site visit, I would anticipate that a pedestrian, on average, could encounter one or two single HGVs or one convoy during the site access hours of use of these lanes. I anticipate that a pedestrian would be unlikely to encounter an abnormal load. Pedestrians would however encounter a far greater number of vehicles not associated with the proposed development. Furthermore, I am of the opinion that the use of these lanes by pedestrians would show some bias towards weekends and evenings, part of which would be outside of the permitted hours of use by site access traffic.
49. Many representations referred to the loss of hedgerows, and consequential ecological and amenity harm, along the site access route. The acceptability of passing places to the Council's officers was not based on a general approach or on judgement, but on the agreement at each location of on-site measurements relevant to the size of that particular passing place. I therefore take confidence from this that they could be accommodated within the highway and without unacceptable impact on hedgerows. I accept however that there would be some impact on the visual amenity of the route with the imposition of surfaced passing places.
50. In view of all of the above points, I consider that there would be some inconveniences to pedestrian users together with some loss of amenity. This would not however be unacceptable in terms of highway safety and amenity.
51. The lanes are also used by horse riders. Riders have the benefit of higher sight lines and would be able to make use of the additional passing places. These passing places would be 2.4m wide and inter-visible, and I would anticipate that site related vehicles would pass riders at a slower speed than is the case with vehicles currently. Again, the impact on horse riders should be seen in the context of the forecast level of use of the lanes, against the level of existing use and the times of the use of these lanes. I recognise that the

- proportion of HGVs would significantly increase, but I do not consider that the impact on horse riders would be unacceptable.
52. My attention has been drawn to the use of the lanes by sport cyclists as well as leisure cycle uses. The lanes are near to, but not part of, the National Cycle Network. The proposed use of the lanes could well make them less attractive to sports cyclists and much inconvenience could result. I am not however satisfied that this is the only location that such an activity could take place, and I doubt that the majority of the sports cyclists are from the immediate area around the lanes. I therefore give less weight to the inconvenience caused than that given to other more locally based users of the lanes. I do however consider that leisure cyclists would benefit from the provision of additional passing places. I thus do not consider that the impact on cyclists would be unacceptable.
53. The appellant has prepared vehicle swept path analyses for articulated HGVs and abnormal load vehicles. The analyses indicate that these vehicles can negotiate the junctions between the A619 and Bondhay Lane and between Packman Lane and Common Road together with the narrower sections of Packman Lane between Loscar Farm and Harthill Field Road and between Loscar and Honeysykes Farms.
54. The use of the junction between Packman Lane and Common Road would require vehicles to track over the grass verges around the junction. The appellant would be required to repair any, and indeed the likely, damage caused on the basis of a dilapidation survey, and the regulation of this could be secured by the use of an appropriate condition. Some manoeuvres would also require the temporary removal of highway signage, but this would need to be carried out with the consent of the Highway Authority.
55. The Council's technical officers have not raised any objection to the analyses and have had the opportunity to assess the situation by means of video modelling techniques. The Council's remaining objections to the proposal however include the accuracy of the modelling, but no reasoned evidence has been put forward in support of this position. In view of the lack of any technical objection, I give this element of the Council's objection limited weight.
56. The use of the junction from the A619 into Bondhay Lane would require some vehicles to cross onto the opposing carriageway of the A619 for some manoeuvres. Whilst this is not unusual for some large load vehicles, the junction is close to a bend on the A619, and I have some concern as to the acceptability of such a manoeuvre. The appellant has considered the use of this junction with the relevant Highway Authority, and it would be for the authority to introduce, in consultation with the Council, any matters into the final TMP if they need to do so. I am however satisfied that, if the junction is found to be unsuitable for any manoeuvres into Bondhay Lane from the west, then there is a roundabout to the east on the A619. This would allow associated vehicles to approach the junction from the east along the A619, and this matter thus does not weigh against the appeal.
57. HGV traffic using Bondhay Lane at this junction would increase as a result of the development. The maximum daily increase would be from 30 to 90 HGV movements, over a three week period, and on average, HGV movements would generally double. This would result in some loss of amenity to nearby

residents, although there are already some 500 daily vehicle movements along Bondhay Lane at this point. I therefore consider that the additional movements, for the periods proposed, would not be unacceptable in terms of amenity or safety of nearby residents or the structural integrity of their properties.

58. The nature of the accompanied site visit necessitated the use of high visibility clothing and special attention to the approach of vehicles from either direction along Common Road and Packman Lane. This matter has been put to me as evidence in support of dismissing the appeal. It is right that special attention was paid to safety on the site visit, and I recognise that currently care has to be exercised when walking along these roads. I would however return to the point that an escort vehicle would be used in advance of any HGV using the route, with a specific responsibility to advise other road users of the approaching vehicles and managing an appropriate means of their passing. This would be very different to the current situation, where I feel that some drivers may not necessarily expect the road to be occupied by pedestrians, horse riders or cyclists. The circumstances of the site visit do not therefore weigh against the appeal.
59. My attention has been drawn to other investigation proposals relating to future shale gas extraction in the surrounding area. I am satisfied that their access arrangements would not use the lanes between the appeal site and the A619. I am also satisfied that the A619 is of a sufficient standard to be likely to be able to adequately accommodate any cumulative traffic impact.
60. Concerns have been raised about the impact of the development on traffic in South Anston. The proposed site access route is some distance from South Anston and traffic between the motorway network and South Anston would have to use a different motorway junction to that proposed. I therefore do not consider that the development would increase traffic levels in South Anston.
61. The proposal includes the formation of a community liaison group, to be approved by the Council, and I anticipate that this would include lines of communication between local residents and the appellant and the Council. There has been sufficient publicity around this proposal and the details of access to lead me to the view that any breaches of the conditions would be quickly brought to the attention of the appellant and the Council. The ETMP also requires that all vehicles accessing the site would need permission before they do so for safety and security reasons. All of this indicates to me that any abuse of the proposed traffic routes could be quickly investigated and corrected, and that traffic impacts through Harthill would be satisfactorily regulated.
62. There may however be short periods of time where non-site related traffic would prefer alternative routes to that used for site access. This would be difficult to regulate. Such traffic displacement would however be likely to occur during the periods of maximum usage of the route, the times of which would be limited. I therefore do not consider that traffic displacement, through Harthill or other areas, should weigh against the appeal.
63. I recognise that there is a problem of fly-tipping along the lanes proposed for the site access route, and that the suggested laybys would provide further opportunities for such tipping. The laybys would however be covered under a

section 278 agreement, under the 1980 Highways Act, with the relevant Highway Authority and I can see no reason why the clearance of any tipped debris on the laybys and around them could not be included in any such agreement. Moreover, the laybys would need to be clear of debris for them to be used in any event.

64. From all of the above points, I am satisfied that there would be no residual, cumulative and severe impacts from the proposal that would make it unacceptable on transport grounds.
65. I therefore conclude that the proposal would not necessarily have an unacceptable impact on the existing uses of the highways in the surrounding area. I further conclude that it thus would not conflict with the NPPF.

Other Matters

Hydraulic Fracturing

66. Various concerns have been raised that the proposed development would include hydraulic fracturing, or fracking. Within the appellant's evidence and during the Inquiry, it was clearly explained that the development would not include the hydraulic fracturing of underground strata as part of the investigation. The pressure applied during the transient testing proposed would be less than that required to hydraulically fracture the strata, and there would be no injection of sand or gas extraction. The other investigation processes within the development would involve the taking of samples and non-intrusive testing.
67. The development requires an Environmental Permit from the Environment Agency (EA). Such a permit has been granted for the management of extractive waste at the appeal site. The permit specifically does not cover well stimulation of any type, including hydraulic fracturing and/or hydrocarbon extraction and/or production (including appraisal and extended well testing).
68. The development would take place under a Petroleum Exploration and Development Licence from the Department for Business, Energy and Industrial Strategy. There is thus a presumption that investigations, if they are acceptable in planning and other consent terms, should be progressed in licensed areas, including this one. This is in order that proper judgements can be made on the most suitable locations for any future extraction processes.
69. I recognise that well stimulation would be likely to be a crucial part of further exploration under the licence. It is however not integral to the pressure transient testing proposed at this site under this application and well stimulation is not a matter for consideration in this appeal. The proposal before me is thus as described in the application and would not include hydraulic fracturing. It would be further constrained by the exclusions in the associated permit, which would be appropriately regulated under the permit regime. I am therefore satisfied that the development would not include hydraulic fracturing.
70. It has been suggested that the development could result in seismic effects or structural damage to properties in the surrounding area and that this could have an effect on householders' insurance policies. From the evidence provided, there is no apparent linkage between the development proposed and

such effects, and I therefore give these matters limited weight in my decision. Moreover, I can see no evidence that the appellant should be required to insure against such an eventuality. Furthermore, the matter of property values is not a matter that I can take into account in this planning appeal in any event. This is on the basis that planning is concerned with land use in the public interest, and thus the protection of purely private interests such as the impact of a development on the value of properties cannot be a material consideration.

71. From the investigation process described, I am satisfied that there would be no materially adverse geological effect. Shale gas is not generally mobile, and the well would be capped in any event so that there would be minimal risk of long term gas leakage. Moreover, I have not seen any evidence to suggest that there would be any risk from the escape of radon contaminated groundwater.
72. The design and operation of the proposed well would be regulated by the Health and Safety Executive, in addition to matters covered under the Environmental Permit. I am satisfied that the presence of these independent regulators at various stages during the proposed development would secure an appropriate level of safety, together with comprehensive emergency procedures, at the site.
73. The area around the appeal site includes many underground mine workings. The investigation proposed however would have a limited horizontal extent, and would not include any horizontal drilling. The Coal Authority has also confirmed that the site does not fall within any defined Development High Risk Area in relation to coal mining. It has also confirmed that all ground movement relating to past mining activities should have stopped. Whilst mine abandonment data has been examined, in order that voids and loose material could be avoided, they have been routinely penetrated safely by coal, oil and gas drilling in nearby locations for many years. In view of all of this and all of the above points, I do not agree with the public safety concerns raised in respect of this appeal.
74. The Government's 16 September 2015 Written Statement to Parliament on Shale and Oil Gas Policy advised that the supply of natural gas is a key requirement for years to come if the UK is to successfully transition to a low-carbon economy. Since 2004, the UK has been a net importer of gas due to the rapid decline of production from the UK Continental Shelf. The Government's 17 May 2018 Written Statement to Parliament on Energy Policy advised that the proportion of imports was continuing to increase. Developing home-grown shale resources could reduce our dependency on such imports. The Government therefore considers that shale gas development is of national importance and that there is a clear need to explore and test our shale potential.
75. The Government expects Mineral Planning Authorities to give great weight to the benefits of mineral extraction, and this includes shale gas exploration. The national importance of the development proposed is therefore a matter to which I attach great weight and it represents a benefit against which any harm from the development should be balanced.
76. It has been suggested that there are better sources of energy, and that the development would represent poor value for money. Given the Government's position on this type of development and the granting of the exploration

licence, these generic concerns in respect of the appropriateness of this type of investigation are not matters to be addressed at this Inquiry. The Inquiry is to determine, in land use planning terms, the acceptability of this particular operation on this particular site. In a similar manner, it has been suggested that better locations may exist for this operation. This may or may not be the case but again the assessment of other locations is outside the scope of this Inquiry. It has also been suggested that 'mission creep' may result if the appeal is allowed. This however needs to be controlled by the conditions imposed and not by refusing permission in the first place.

77. I therefore consider that, whilst the development would not include hydraulic fracturing, the benefits from the investigation proposed in terms of future energy supplies should be given great weight in accordance with Government policy.

Ecology

78. The appeal site lies within the Loscar Common Local Wildlife Site (LWS). Natural England (NE) has raised no objection to the development. The nearest protected sites are Sites of Special Scientific Interest (SSSIs), at Ginny Spring, Whitewell Wood and Crabtree Wood, which are some 1.8 and 2.2km from the appeal site. In view of the evidence given to the Inquiry and these separation distances, I am satisfied that the development would not be likely to have an adverse effect on any SSSI or other protected sites.
79. Prior to the planning application being made, the appellant requested a screening opinion from the Council. This concluded that the development was not likely to have a significant effect on the environment in terms of the Environmental Impact Assessment (EIA) Regulations and that the development did not require an EIA. The Secretary of State's corresponding direction confirmed that the development was not EIA development.
80. Loscar Common qualifies for LWS status due to its woodland habitat and corn bunting breeding bird populations. Loscar Wood Plantation, part of which is adjacent to the field in which the appeal site is located, is potentially re-planted ancient woodland, with the planting of broad-leafed species dominated by sycamore. The appeal site is located to leave a 30m buffer zone to the woodland, against an NE advised minimum of 15m. I agree with the main parties that the development would have no direct impact on the woodland itself.
81. Corn bunting is on the Birds of Conservation Concern - 4: Red List. This is the highest level of conservation concern and priority. The appellant undertook an extended Phase 1 Habitat Survey following a data search. This identified records of ground nesting birds in the area of the site, but not corn bunting.
82. The field in which the site is located is currently in arable winter wheat production. The site, which has an area of some 1.4ha, is focused towards the centre of the field which has a grassy margin. Whilst the margin is of limited quality, a very limited area of the margin would be lost as a result of the development. As a result of all of these factors, I agree with the appellant's findings that there would be limited temporary disturbance and displacement of breeding birds and that this would not be significant. There has been no pre-application breeding bird survey. During the Inquiry, the Council withdrew its ecological objection to the appeal. I thus consider the

Council to be satisfied with this approach, subject to the imposition of a pre-commencement protected species survey condition.

83. The development would include floodlighting within 50m of the nearby woodland. The extended Phase 1 Habitat Survey identified features that bats tend to use in the woodland, and a bat survey was undertaken in August and September in accordance with NE guidelines. The arable nature of the field in which the appeal site is situated is of negligible value for bat commuting or foraging and is likely to only provide access to the nearby woodland. I therefore consider that the survey level was proportionate and appropriate.
84. The bat survey recorded at least five species, two of which are light sensitive although they were recorded in low numbers and thought to use the site occasionally. Furthermore, the lighting on the site would be kept below the Bat Conservation Trust Guidelines and would be subject to Council approval. Moreover, any impact would be along a single edge of the woodland. I am therefore satisfied that the development would not be reasonably expected to have an adverse effect on the conservation status of bats and that there would be no conflict with Core Strategy² (CS) Policy CS20.
85. I am satisfied that the limited duration of construction and decommissioning noise, together with the more constant nature of noise associated with drilling would not have a significant effect on protected species. A 16m length of hedgerow on Common Road would be removed to provide a highway visibility splay for the site access. The hedgerow, following an assessment in accordance with the Hedgerow Regulations 1997, is species rich, has less than 10% gaps, is more than 30 years old and forms part of a field system that pre-dates the enclosure Act. As a number of the relevant criteria are met, the hedgerow qualifies as being important under the regulations. There is however no evidence of nesting birds and the hedgerow itself is very thin at the location to be removed. I therefore consider that its removal and replacement would not be unacceptable, as this would give an opportunity for it to be replaced in a denser form with a maintenance period regulated under a condition.
86. The site access route is bounded by hedgerows. These would not be physically impacted by the construction of the proposed passing places. There would however be a limited increase in the frequency of traffic noise events on Packman and Bondhay Lanes. On Common Road, where there would be a material increase in this frequency, the hedgerows are generally set further back from the carriageway. I am therefore satisfied that additional traffic noise would not have a significant effect on hedgerow ecology.
87. The field in which the appeal site is situated is bounded by Public Rights of Way (PRoWs) and Common Road on three sides. The PRoWs form part of an identified parish walk and Common Road is used by local residents and other walkers. The development would affect interaction between walkers and nature on these routes.
88. The lengths affected would however represent a small part of the parish walk and not the majority of Common Road, both of which are almost entirely within the LWS. Furthermore, the appeal site forms a very small proportion of the area of the LWS. I am therefore satisfied that the development would not

² Rotherham Local Plan: Core Strategy: September 2014

significantly undermine the intrinsic interest of the LWS or the opportunity it provides for contact with and the enjoyment of nature.

89. I accept that the development could have a negative, but not significant, impact on features of biodiversity value for the period of the development. I am however satisfied that impact has been, and would be, minimised through the design, layout, construction and operation of the development and by the incorporation of suitable mitigation measures. These would avoid a residual adverse impact on biodiversity and maintain 'no net loss'. I am also satisfied that the development would not be likely to, directly or indirectly, result in the loss or deterioration of sites, habitat or features that are considered to be irreplaceable due to their age, status, connectivity, rarity or continued presence. I therefore consider that the development would accord with emerging DPD Policy SP36 and paragraph 118 of the NPPF. I give this emerging policy substantial weight on the basis that it reflects national policy and guidance.

Character and Appearance

90. The appeal site lies within an area which the Council has designated as being of High Landscape Value under CS Policy CS21, although the Council has suggested that this designation is to be removed. The planning application included a Landscape and Visual Impact Assessment (LVIA). The development itself would be screened by 2-3m high bunds around the perimeter of the site.
91. The LVIA predicts that substantial landscape effects would occur immediately around the site and to the south west during the construction, drilling, workover and decommissioning stages of the development. These substantial landscape effects would be present for some 46 weeks, with a rig of 60m high being present for 20 weeks and potentially a rig of 32m high for five weeks. Substantial visual effects are predicted to occur along the eastern edge of Harthill village and along Common Road and Harthill Field Road to the south and west of the site, and these effects would be present for a similar period.
92. From the zone of theoretical visibility provided with the LVIA, the areas of woodland around the site would greatly restrict the visibility of the development at lower levels. These restrictions would reduce the numbers of affected residential properties on the eastern edge of Harthill, and indeed it would only be the properties on the edge of the village which would be affected in any event. It is of note that development within the eastern part of the village is quite dense, with boundary properties that would protect those further into the village, where the topography also generally slopes away from the site.
93. Some limited restriction to visibility immediately adjacent to the site would also be provided by the perimeter bunds. PRowS pass alongside the field in which the site is situated to the north and to the east between the field and the adjacent Loscar Woodland Plantation. Common Road runs in close proximity to the south of the site.
94. The development would be very visible in views from these PRowS and when travelling eastwards along Common Road towards the site, which is a walking route used by local residents. I agree that it would industrialise these views and could be overbearing in close proximity affecting the amenity of those with views to the site. The views however would only be present over a short

length of the parish walk identified on a parish leaflet, and in one direction when travelling along the majority of Common Road to the west of the site. Furthermore, the proposed defined period for the development and the Council control of restoration arrangements, including those for any passing places, would minimise the adverse landscape impacts from the development.

95. Views of the upper sections of rigs used on the site would be available over the woodlands and therefore present over a wider area. They would however comprise a single structure, in place for a period of some 25 weeks, and be seen in many views alongside the nearby wind turbines. Whilst the turbines are relevant in terms of cumulative effect, their rotors gain a greater height than would be the case at the top of the drilling rig. I am therefore of the opinion that this, and their movement, would tend to draw the eye away from the rig, thus reducing its impact. In terms of assessment, the presence of the turbines and their known height has also negated much of the need for photomontages of the proposed development.
96. The development would be lit at night although such lighting would be kept to a minimum, primarily for ecological reasons, and would be subject to Council approval. Lighting at and just above ground level would be somewhat screened from properties in Harthill and elsewhere by the woodland around the site. I visited the area after dark, and the level of ambient light was low. Site lighting could therefore be visible through some of the woodland, particularly during winter although there are of course fewer outdoor activities over this period. I am satisfied however that site lighting would not be at a level sufficient to cause unacceptable nuisance. I anticipate that a rig would need to have navigational lights at its highest point, in a similar manner to the wind turbines. This light however would neither be unusual for the area nor intrusive.
97. Notwithstanding the above points, which would reduce any impact, I consider that the development would detract from, and be harmful to, the landscape and visual character of the surrounding area in conflict with CS Policy CS21 and emerging DPD Policy SP35. I only give this emerging policy moderate weight in this decision due to the doubt over its future applicability to the area around the appeal site. This harm or conflict would not however be sufficient reason to dismiss the appeal when balanced against the benefits of the development in terms of potential future energy supplies.

Living Conditions

98. I will firstly consider noise and vibration. During the day within the construction period of 12 weeks, the forecast noise level at the nearest noise sensitive receptor would be 54dB LA_{eq 1hr}. Whilst this would be audible, it would be less than the guideline limit of 55dB LA_{eq 1hr} in Planning Practice Guidance (PPG).
99. The forecast is however based on a worst case scenario, with all site plant operating at the same time. I consider that this would be infrequent, if not unlikely, and that this worst case forecast would off-set other factors such as noise reflecting meteorology. Furthermore, the agreed condition set at 55dB LA_{eq 1hr} would include other noise sources, and would thus trigger a non-compliance below 54dB LA_{eq 1hr} from the site itself.

100. At night, the drilling rig is forecast to generate a sound level of 37dB LA_{eq 1hr} (free field) at the nearest noise sensitive receptor. This would be well below the PPG guidance level of 42dB LA_{eq 1hr}. The ambient night time background levels are between 24 and 46dB LA₉₀ and, at some times, the rig could be audible outside the nearest noise sensitive receptor. This however would not be unacceptable, or result in harmful sleep disturbance, based on PPG and the World Health Organisation standards of 40dB L_{night}, which is an average over 12 months.
101. The site access route along Packman Lane passes between the residential properties at Loscar and Honeysykes Farms. The site traffic would increase noise levels at these properties. Its character would however be short spikes, somewhat similar to agricultural and other vehicles passing. This, combined with the lower frequency of forecast site movements than is the case with existing vehicles, would not be unacceptable in terms of its impact on occupiers.
102. In terms of other vibration, the drilling would be of a bored and not percussion type. I am satisfied that ground borne vibration from this operation would be imperceptible at locations over 20m from the rig, and it is of note that the nearest sensitive receptor would be some 500m from the rig.
103. I now turn to consider air quality. The development would create fumes from diesel plant and vehicles. The site is not within an Air Quality Management Area (AQMA) and plant and vehicles would comply with current emission standards. The HGV site access route does however pass through the Barlborough AQMA, and the development would increase emissions in this AQMA. The AQMA however comprises the busy roundabout junction between the A616 and the A619, and I am satisfied that the additional HGV movements would be well below the trigger levels which would require further assessment.
104. The well would include a number of casings over its depth, with some of the casings separated by the addition of cementitious lining. The potential for the release of hydrocarbon or indeed other gases would be limited in any event, but the casings and linings would further reduce the risk of any escape. In view of the separation distances between the site and sensitive receptors and also the presence of woodland around the site, I do not consider that there would be any harm from fugitive dust emissions.
105. I therefore consider that the development would not have an unacceptable adverse impact on the living conditions of nearby occupiers.

Historic Environment

106. From the LVIA, I am not convinced that there would be any intervisibility between All Hallows Church, Harthill and the Church of St Peter, Thorpe Salvin, which are both Grade I listed buildings, and the development. This would include any rig on the site, and they would not be likely to be seen in the same view as any such rig. Furthermore, their separation distances approach 1.5km from the site, and they exist within settlements that generally form their setting. I therefore do not consider that the development would have a harmful effect on the settings of these churches.

107. The ruins of Thorpe Salvin Hall and its gatehouse are Grade II* listed structures. They are some 1.5km from the appeal site and are separated from the site by two substantial blocks of woodland. The development would be for a temporary period, during which the woodland would be very unlikely to be felled. I am not aware of anywhere where the ground level development and the hall ruins and gatehouse would be seen in the same view. I suspect there may be some locations where the rig top and the hall ruins and gatehouse could be seen in the same view. The hall ruins and gatehouse exist however in the context of the adjacent village and the rig top would exist in the context of the open countryside and woodland blocks, together with the nearby turbines. I therefore do not consider that the proposal would have a harmful effect on the setting of the hall ruins and gatehouse.
108. There are a number of other designated heritage assets generally within Harthill and Thorpe Salvin. The circumstances and visibility relating to their settings are similar to those of the churches, and I similarly do not consider that there would be any harm to their settings.
109. The appeal site and the upper part of any rig would be visible from some very limited parts of the Harthill Conservation Area (CA). As a result of this very limited intervisibility, the separation distance of some 1km and the village environment of the CA, I am satisfied that there would be no harm to its significance or setting. A similar situation would exist in respect of the Thorpe Salvin CA except that the separation distance would be some 1.5km and only the upper parts of a rig would be visible over the areas of woodland around the appeal site.
110. Packman Lane is a non-designated heritage asset, said to be of pre-historic origin. Whilst the development could result in the removal of verge material at a number of locations along the lane, this would not result in the removal of the hedgerow boundaries. Any removal of material would be subject to a s278 agreement with the Council as Highway Authority and, if the Council thought necessary, I am of the view that an archaeological requirement could be included in the agreement. Furthermore, I am satisfied that, should anything of historical interest be found, sufficient flexibility would exist within the TMP approval mechanism to make amendments to the passing places.
111. I therefore consider that the development would not have a harmful effect on the significance of any heritage assets and would preserve their settings and the character and appearance of the CAs identified in terms of their settings. In coming to these opinions, I have paid special attention to the desirability of preserving these assets and settings, and these are matters to which I have attached considerable importance and weight.

Aquifers

112. The ground below the appeal site includes aquifers which feed Harthill Ponds and the many springs in the area as well as generally providing water supplies for the region. The development would not include any horizontal drilling and would have a limited effect outside of the immediate area around the well. Furthermore, there would be multiple casings, as described in the Inquiry by the appellant, to protect the interface between the drilling and the aquifers. Moreover, exploratory drilling through the aquifers is not unusual for this area.

113. The drilling would be assisted by water and oil based drilling fluids. The use of these fluids would be regulated by the EA under the Environmental Permit for the development, and the EA has granted the permit and made no objection to the planning application or this appeal. Water based drilling fluids would be used to a depth below the identified primary and secondary aquifers. These fluids would include polymers, which would be of drinking water quality.
114. Oil based drilling fluids, of low toxicity, would be used where necessary below the aquifers, and spent fluids would be returned to the supplier for disposal. Shallow groundwater monitoring, required by the Environmental Permit, would also be undertaken in sentinel wells. I therefore do not consider that the development would have an adverse effect on water quality within the identified aquifers.

Human Rights

115. Representations were made to the effect that the rights of local residents under the Human Rights Act 1998, Article 1 of the First Protocol and Article 8, would be violated if the appeal were allowed. I do not consider this argument to be well-founded, because I have found that the proposed development would not cause unacceptable harm to living conditions. The degree of interference that would be caused would be insufficient to give rise to a violation of rights under Article 1 of the First Protocol and Article 8 of the European Convention on Human Rights. Furthermore, I do not consider Article 2 of the First Protocol to be engaged.

Agricultural Land

116. The appeal site comprises Grade 2 agricultural land. The loss of this land for agricultural purposes would be for a defined period of time, and a restoration and maintenance plan, to be approved by the Council, would be undertaken to return the site to agricultural use. I therefore do not consider that the loss of this land for the period of the development weighs against the appeal.

Climate Change

117. I have already considered the very limited potential for gas escape, including fugitive methane emissions and vehicular and plant emissions in terms of air quality. I am also satisfied that the temporary site offices would not represent development that was of an unsustainable nature. I therefore consider that the development would minimise greenhouse gas emissions in terms of climate change.

Cumulative Impact

118. I have assessed this exploration of onshore gas on merits against all material considerations and national planning policy in accordance with CS Policy CS26. My attention has however been drawn to other similar applications in the surrounding area. These include Woodsetts and Marsh Lane, Eckington. They are separated from the appeal site by some 5 and 11km. From the evidence given at this appeal, I am satisfied that the effects identified from the development would not extend sufficiently towards these other sites in order for there to be a cumulative effect. This is notwithstanding that there could be some intervisibility from ground level to rig top. As a result, I am also satisfied that the status of the appeal development as non-EIA

development is still valid. Any further applications would, of course, need to be considered on their own merits.

119. Emerging DPD Policies SP51 and SP53 set out various requirements for the exploration of unconventional hydrocarbons and mineral workings. These emerging policies have been found to be sound, subject to minor modification following an examination in public. I therefore give them great weight, and I am satisfied that the development would accord, and that my assessment has accorded, with their requirements.
120. I have considered all representations, including those by Rt Hon Sir Kevin Barron MP and Mr J Mann MP, in addition to those covered above. None however, either individually or cumulatively, carry sufficient weight to lead me to the view that the appeal should be dismissed.

Conditions

121. I consider that conditions in relation to passing places, a traffic management plan, a dilapidation survey, highway debris, access visibility, site surfacing, HGV movements, the site access gradient and site parking and turning facilities would be necessary in respect of highway safety.
122. It was agreed in the Inquiry that the condition relating to passing places would operate as a Grampian type condition, requiring the provision to be made before any development takes place. Any work itself would be carried out under a s278 agreement with the relevant Highway Authority. The Council has already expressed its satisfaction with the proposed passing places on Common Road and Packman Lane. There is therefore a reasonable prospect that passing places could be provided within an appropriate timetable for the development. I recognise that passing places could be regulated under an approved TMP, but I consider that this may not sufficiently accommodate the Grampian nature of the condition, and I would therefore impose the condition.
123. Any passing places on Bondhay Lane would require a s278 agreement with Derbyshire County Council (DCC) as Highway Authority. DCC has not voiced any objection to the planning application or to the use of Bondhay Lane as the appeal site access. A joint site visit with DCC officers has also taken place, including the future operation of the junction of Bondhay Lane with the A619. I am therefore satisfied that there is a reasonable prospect of any necessary places being provided on Bondhay Lane within the time-limit imposed by the permission. I therefore consider that the condition would be an acceptable solution in this particular context. It would also be necessary that the regulation under the condition itself is under the control of the Council. This would be in order that the development could be made acceptable in planning terms by the provision of any necessary passing places between the site and the A619.
124. During the Inquiry, the Council agreed that highway dilapidation due to appeal site access traffic could be remedied under a future s278 agreement. Whilst this may be the case, I am not convinced that such an agreement would be put in place for the lengths of highway between the passing places that would be the subject of the agreement and indeed the separate condition. I therefore consider that a dilapidation survey condition would be necessary, to accommodate the eventuality that the s278 agreement does

not include the entire highway. I also consider that 14 days would be a reasonable time in which to prepare a scheme to respond to damage, bearing in mind that other response times in conditions suggested by the main parties are 7 days.

125. The appellant has explained that all vehicles accessing the appeal site would require the permission of the logistics manager before entering Bondhay Lane for safety and security reasons. Furthermore, transport would be provided for staff to and from the site. I am therefore satisfied that there would not be pressure on the existing parking bays on Common Road, and that to have the parking bays on the site provided before the commencement of drilling would be an appropriate control. I am concerned that the condition suggested by the appellant and the Council to prevent parking on the carriageway of Common Road and Packman Lane could be unenforceable as it stands and could unreasonably restrict use of the highway by others. I therefore consider that it would fail the necessary tests.
126. Local residents have expressed concern over the Council's lack of action in protecting their environment, particularly in relation to traffic and environmental matters. I consider however that the Council's technical officers have acted appropriately and responsibly in first rejecting and then accepting revised draft proposals in relation to traffic management for the appeal site access. I therefore have no doubt that this approach would continue. I could therefore rely on them to protect local interests in relation to submissions that would be made under the traffic management conditions suggested by the appellant and agreed by the Council. I therefore do not give any appreciable weight to concerns expressed in this regard.
127. There is no suggested condition which would protect hedgerows along the site access route. The appellant has suggested that no hedgerows would be affected by the construction of any of the agreed passing places, and there is no objection from the Council in this regard. Furthermore, any highway boundary hedgerows are under the ownership of the Highway Authority or the adjacent landowner. I therefore consider that such a condition would be unnecessary.
128. Conditions relating to a noise management plan, a dust management plan, a community liaison group, hours of work, noise levels, reversing warning alarms and drilling rig details would be required to protect the living conditions of nearby occupiers.
129. It has been suggested that, in view of the types of plant to be used, tonal noise limits should be set for the development, and I accept that tonal noise should be regulated if appropriate. The Noise Management Plan would require data from manufacturers' noise tests to be approved by the Council, before any development takes place, for each item of noise emitting plant to be used on the appeal site. It would also require the submission and approval of methods to determine whether noise is free from tonal, intermittent or impulsive characteristics before any development takes place. Moreover, the plan would also include a mechanism for the setting of any necessary noise limits and tonal weighting together with mitigation.
130. The assessment and any Council approval of mechanisms for the regulation of tonal noise would therefore take place when the associated risks are better understood. Moreover, the Council's environmental health officers would

have the opportunity to address this matter with the maximum pre-commencement knowledge of matters relating to noise generation, rather than the alternative and separate condition as suggested by the parties. During the Inquiry, the parties also agreed that a condition to require site based vehicles and plant to have 'white noise' or similar low intrusion reversing warning alarms could be imposed.

131. In the Inquiry, the appellant agreed to the coverage of Common Road, Packman Lane and Bondhay Lane by the access time condition. This would mean that all HGVs accessing the appeal site would need to have left these highways by 19.00 on weekdays and 13.00 on Saturdays. Moreover, work on the site, apart from drilling operations, could not take place after these times. The effect of these conditions would be to require HGVs to have loaded or unloaded in advance of the site closure time in order that they could leave the surrounding area in accordance with the access time condition.
132. I have considered whether the access time condition should be brought forward from 19.00 or 13.00. This would however result in less working time on the site, and the potential for specific operations taking longer than currently planned as suggested by the appellant. On balance therefore, I am satisfied that the 19.00 and 13.00 condition suggested by the appellant and the Council would represent a reasonable balance.
133. Conditions in respect of species verification surveys, repeat ecological impact surveys, hedgerow work restrictions, the submitted ecological report, external lighting and hedgerow maintenance would also be necessary in the interests of biodiversity.
134. To protect the character and appearance of the surrounding area, conditions in relation to site restoration and aftercare would be required. The restoration condition suggested by the appellant and the Council would require the Council to confirm that the restoration works had been completed when this had taken place. This condition cannot bind the Council to a particular course of action, and I would therefore amend that element of the condition. In relation to the historic environment and public safety, conditions in respect of archaeology and contamination would also be necessary.
135. It would be necessary that the development should be undertaken in accordance with the approved plans and duration for the avoidance of doubt and in the interests of proper planning. Conditions would therefore be required to define the approved plans and development duration. I would also amend the conditions suggested by the main parties in the interests of precision and enforceability.

Conclusion

136. I have found that the development could have a negative, but not significant, impact on features of biodiversity value for the period of the development. I have also found that the development would detract from, and be harmful to, the landscape and visual character of the surrounding area. These matters would not however outweigh the benefits from the investigation proposed in terms of future energy supplies, to which I give great weight.

137. Having taken into account all other matters raised, including cumulative effects, none carry sufficient weight to alter the decision. My conclusion is based on the evidence before me, including the environmental report submitted with the planning application and in terms of policy as a whole. Moreover, I am satisfied that my amended conditions would make the development environmentally acceptable and that it would constitute safe and sustainable development in the light of the NPPF. For the reasons given above, I conclude that the appeal should be allowed.

Stephen Roscoe

INSPECTOR

APPEARANCES

FOR THE LOCAL PLANNING AUTHORITY:

Mr J Darby of Counsel	Instructed by Ms S Shabir, Rotherham Metropolitan Borough Council
He called	
Mr I Ferguson BSc MCIHT	Case Officer, Highways Development Control Section, Rotherham Metropolitan Borough Council
Mr A Lowe BSc MSc	Planning Officer, Rotherham Metropolitan Borough Council
Mr A Godfrey BSc MSc DipTP MCIEEM	Ecological Development Officer, Rotherham Metropolitan Borough Council

FOR THE APPELLANT:

Mr G Steele QC (Scotland)	Instructed by Mr S Telfer, DLA Piper
He called	
Dr A Buroni BSc MSc PhD FRSM FRSPH	Technical Director of Health, RPS
Mr D Goold BSc MSc	Geologist, INEOS Shale Ltd
Mr A Sloan BEng MSc CEng MIMMM	Independent Well Engineering and Operations Consultant
Dr C Hazell-Marshall BSc PhD MIAQM	Principal Consultant, ERM
Mr D Russell BSc MSc FGS CGeol	Technical Director, ERM
Mr S Fraser BSc MPhil MIOA CEnv	Consultant
Mr L Prazsky BSc MSc MCIWM	Technical Director, Wardell Armstrong LLP Consulting Engineers
Mr P Macrae MA CMLI	Associate Landscape Planner, LUC
Mr K Martin BEng CEng MICE	Director, AECOM Consulting Engineers
Mr T Pickering	Operations Director, INEOS Upstream Ltd

Ms S Olds BSc MCIEEM	Principal Consultant, ERM
Mr M Sheppard BSc MA MRTPI	Planning Director, Turley

INTERESTED PERSONS:

Ms D Gibson	Local Resident
Dr A Tickle BSc PhD DIC FRSA	Director, Campaign to Protect Rural England – South Yorkshire
Mr L Barlow	Local Resident
Mr M Gallie MSc MRTPI	Planner, Friends of the Earth (England, Wales and Northern Ireland)
Cllr J Vjestica	Planning Board Member, Rotherham Metropolitan Borough Council
Cllr J Whysall	Planning Board and Local Ward Member, Rotherham Metropolitan Borough Council
Rt Hon Sir Kevin Barron MP	Local Member of Parliament
Mr L Marston	Local Resident Representing Harthill Against Fracking
Dr I Dupère PhD	Reader, Aero-acoustics University of Manchester
Mr R Lonsdale	Local Resident
Cllr D Beck	Local Ward Member, Rotherham Metropolitan Borough Council
Cllr I Lloyd	Chairman, Harthill with Woodall Parish Council
Cllr F Raspin	Whitwell Parish Council
Cllr I Daines	Thorpe Salvin Parish Council
Mrs H Wilks	Local Resident
Mr C Brookes	Local Resident
Mr D Cunliffe	Local Resident
Dr G Kinghorn OBE MD FRCP	Local Resident
Mr J Burgess	Local Resident

Mrs C Whiting	Local Resident
Mr J Drake	Local Resident
Mr P Joynes	Local Resident
Mrs Y Bramall	Local Resident
Ms A Mosley	Local Resident
Ms L Widdowson	Local Resident
Ms S Kelly	Local Resident
Mrs T Wright	Local Resident
Ms E Biggin Marshall	Local Resident
Mr T Johnson	Local Resident
Mrs J Johnson	Local Resident
Mr G Littler	Local Resident
Ms M Havard	Local Resident

DOCUMENTS

General

- G1 Letter of Notification of the Inquiry
- G2 Communications from Interested Persons
- G3 Email from the appellant to the Council dated 23 March 2018 attaching the AECOM report.
- G4 Council email response to the appellant dated 26 March 2018

Core Documents

Application Documents

- CD1.1 Document 1 Covering Letter
- CD1.2 Document 2 Application Forms and Checklist
- CD1.3 Document 3 Our Proposals Explained
- CD1.4 Document 4 The Proposal (May 2017)
- CD1.5 Document 5 Application Drawings
- CD1.6 Document 6 Planning Statement
- CD1.7 Document 7 Environmental Report
- CD1.8 Document 8 Statement of Community Involvement

National Legislation, Policy Documents and Guidance

- CD2.1 National Planning Policy Framework (March 2012)
- CD2.2 Landscape Institute (2013) *Guidelines for Landscape and Visual Impact Assessment*. 3rd Edition. Routledge. Extract pages 84 – 85 and 152 – 155
- CD2.3 National Heritage List for England: Barlborough Hall <https://historicengland.org.uk/listing/the-list/list-entry/1001365> and Shireoaks Hall <https://historicengland.org.uk/listing/the-list/list-entry/1000367>
- CD2.4 Bat Conservation Ireland (2010). *Bats & Lighting, Guidance Notes for: Planners, Engineers, Architects and Developers*
- CD2.5 Bat Conservation Trust and Institute of Lighting Engineers (2009). *Bats and Lighting in the UK. Bats and the Built Environmental Series*

- CD2.6 British Standards Institution (2013). *BS 42020:2013 Biodiversity – Code of Practice for Planning and Development*. British Standards Institution (BSI), London. Extract pages 9 – 12
- CD2.7 Wood White Factsheet. Butterfly Conservation. <https://butterfly-conservation.org/50-603/wood-white.html>
- CD2.8 Collins, J (ed) (2016). *Bat Surveys for Professional Ecologists: Good Practice Guidelines (3rd ed)*. The Bat Conservation Trust. Extract pages 14 – 23; 32 – 37; 44 – 49
- CD2.9 DEFRA (2007). *Hedgerow Survey Handbook: A standard procedure for local surveys in the UK. 2nd Edition*
- CD2.10 English Nature (2002). *Badgers and Development*
- CD2.11 Gilbert *et al.* (1998) *The Shortened BTO Common Birds Census (CBC) methodology*. Extract pages 386 – 388
- CD2.12 Institute of Environmental Assessment (1995). *Guidelines for Baseline Ecological Assessment*. Spon, London. Extract pages 9 – 27
- CD2.13 Institution of Lighting Professionals, 2011 *Guidance notes for the Reduction of Obtrusive Light GN01.2011*
- CD2.14 Joint Nature Conservation Committee (JNCC) (2010) *Handbook for Phase 1 habitat survey – a technique for environmental audit*
- CD2.15 Mitchell-Jones A.J. (2004) *Bat Mitigation Guidelines*. Peterborough: Joint Nature Conservation Committee (JNCC)
- CD2.16 Natural England (2014) (last updated 4/01/2018). *Ancient woodland and veteran trees: protecting them from development*
- CD2.17 Natural England (2015). *Standing advice for local planning authorities to assess impacts of development on bats*
- CD2.18 DEFRA and Natural England, August 2016, Protected sites and how to review applications that might affect protected sites and areas. <https://www.gov.uk/guidance/protected-sites-and-areas-how-to-review-planning-applications>
- CD2.19 Joint Nature Conservation Committee UK BAP Priority terrestrial mammal species <http://jncc.defra.gov.uk/page-5170>
- CD2.20 Hayhow, D.B. *et al* 2017. The State of the UK's Birds. British Trust for Ornithology <https://www.bto.org/research-data-services/publications/state-uk-birds/2017/state-uk-birds-2017>
- CD2.21 Eaton, M.A. *et al.* (2015) Birds of Conservation Concern 4. RSPB http://ww2.rspb.org.uk/Images/birdsofconservationconcern4_tcm

9-410743.pdf

- CD2.22 Natural Environment and Rural Communities Act (2006). Section 41: Species of Principal Importance in England.
<http://www.legislation.gov.uk/ukpga/2006/16/section/41>
- CD2.23 Planning Practice Guidance on Minerals (Minerals PPG) 17 October 2014 <https://www.gov.uk/guidance/minerals>
- CD2.24 Written Ministerial Statement on Shale Gas and Oil Policy HCWS202, 16 September 2015
- CD2.25 World Health Organization (WHO) (1999) *Guidelines for Community Noise*
- CD2.26 World Health Organization (WHO) (2009) Night Noise Guidelines for Europe
- CD2.27 The British Standards Institution (2014) BSI Standards Publication BS 4142:2014 Methods for rating and assessing industrial and commercial sound
- CD2.28 The British Standards Institution (2008) BSI Standards Publication BS 5228-1:2009 Code of practice for noise and vibration control on construction and open sites – Part 1: Noise
- CD2.29 DEFRA (2010) Noise Policy Statement for England
- CD2.30 International Organization for Standardization (ISO) International Standard ISO 9613-2 Acoustics – Attenuation of sound during propagation outdoors – Part 2: General method of calculation. First Edition 1996-12-15
- CD2.31 Department for Transport (2007) Manual for Streets. Extracts pages 74; 79; 91
- CD2.32 The Chartered Institution of Highways and Transportation (2010) Manual for Streets 2. Extract page 75
- CD2.33 The Road Traffic Regulation Act 1984
- CD2.34 Chartered Institute of Ecology and Environmental Management (CIEEM) (2017) Guidelines for Preliminary Ecological Appraisal. Second Edition
- CD2.35 Chartered Institute of Ecology and Environmental Management (2017) Guidelines for Ecological Report Writing. Second Edition
- CD2.36 Chartered Institute of Ecology and Environmental Management (2016) Guidelines for Ecological Impact Assessment in the UK & Ireland. Terrestrial, Freshwater & Coastal. Second Edition
- CD2.37 DEFRA (2014) Protected Species: how to review planning

applications. Last updated August 2016

Development Plan and Evidence Base

- CD3.1 Rotherham Unitary Development Plan (June 1999)
- CD3.2 Rotherham Local Plan Core Strategy (10 September 2014)
- CD3.3 Rotherham Publication Draft Sites and Policies Document (2015)
- CD3.4 Rotherham Landscape Character Assessment and Landscape Capacity Study (2010)

Correspondence with LPA (including additional information submitted)

- CD4.1 Archaeological Trial Trenching Evaluation Report (2 August 2017)
- CD4.2 Traffic Management Plan Addendum (21 August 2017)
- CD4.3 Hedgerow Survey Report (September 2017)
- CD4.4 Rotherham Metropolitan Borough Council Landscape Officer Memorandum (22 September 2017)
- CD4.5 Bat Report (19 October 2017)
- CD4.6 Passing Place Dimensions Plan (20 November 2017)
- CD4.7 Abnormal Load Swept Path (20 November 2017)
- CD4.8 Harthill Field Road-Common Road Swept Path Analysis (20 November 2017)
- CD4.9 Traffic Management Plan Addendum (2) (1 December 2017)
- CD4.10 Lighting Report (1 December 2017)
- CD4.11 Response to further ecology comments (23 November 2017)
- CD4.12 Letter of response to ecology, trees, landscape, PROW and Bolsover DC (issued to RMBC on 21 August 2017)
- CD4.13 Letter of response to pollution control issues (issued to RMBC on 01 September 2017)
- CD4.14 Letter of response to RMBC on noise and ecology (issued to RMBC on 19 October 2017)
- CD4.15 Letter of response to RMBC on ecology, lighting, highways and public objections (issued to RMBC on 1 December 2017)
- CD4.16 Secretary of State Screening Direction (12 July 2017)

CD4.17 Rotherham Metropolitan Borough Council Screening Opinion Letter (18 May 2017)

CD4.18 Rotherham Metropolitan Borough Council Environmental Health Officer Memorandum (3 October 2017)

Inquiry Documents

CD5.1 Statement of Common Ground between Appellant and Rotherham Metropolitan Borough Council

CD5.2 Rotherham Metropolitan Borough Council Statement of Case

CD5.3 INEOS Statement of Case

Consultation Responses

CD6.1 Natural England response letter of (26 July 2017)

CD6.2 Third Party Letter from Leigh Day on behalf of Harthill Against Fracking (7 Feb 2018)

CD6.3 Third Party Letter from Friends of the Earth (21 July 2017)

CD6.4 Third Party Letter from Harthill with Woodall Parish Council (21 July 2017)

CD6.5 Third Party Letter from Leigh Day on behalf of Harthill Against Fracking (22 Dec 2017)

Other Points of Reference

CD7.1 Environmental Permit (17 July 2017)

CD7.2 Officer Report to Planning Board (25 January 2018)

CD7.3 CON29M Non-Residential Mining Report (YO18FW23), The Coal Authority

CD7.4 (1) Samuel Smith Old Brewery (Tadcaster) (2) Oxton Farm V (1) North Yorkshire Council (2) Darrington Quarries Ltd [2018] EWCA Civ 489

CD7.5 Appeal Decision: Land off Bath Road, Leonard Stanley Appeal Ref APP/C1625/A/13/2207324 (21 July 2014)

CD7.6 Appeal decision: Land west of Enifer Downs Farm and east of Archers Court Road and Little Pineham Farm, Langdon Appeal Ref APP/X2220/A/08/20718801(6 March 2009)

CD7.7 Adams, Rick A; Pedersen, Scott C (2000). Ontogeny, Functional Ecology, and Evolution of Bats. Cambridge University Press pp 139-140 ISBN 0521626323. Extract pages 136 – 143.

- CD7.8 Newton, I (2017). *Farming and Birds*. William Collins
- CD7.9 Wray S, Well, D, Long E & Mitchell-Jones T (2010). *Valuing Bats in Ecological Impact Assessment*. In Practice, Edition 70, December 2010. Extract pages 23 – 25
- CD.7.10 Official Journal of the European Communities (25 June 2002) *Directive 2002/49/EC of the European Parliament and of the Council of 25 June 2002 relating to the assessment and management of environmental noise*
- CD7.11 URS (October 2014) *Evidence and Usage of LOAEL, SOAEL etc.* Prepared for DEFRA
- CD7.12 Harris, et al (1989) *Surveying badgers*. Mammal Society Occ. Publication. No. 9
- CD7.13 RSPB. Land Management for Wildlife. Corn Bunting (*Emberiza Calandra*)
- CD7.14 Stone, E.L. (2014) *Bats and Lighting. Overview of current evidence & mitigation guidance*. University of Bristol

Documents Submitted by the Council

- RC/IF/1 Mr I Ferguson: Proof of Evidence
- RC/AL/1 Mr A Lowe: Proof of Evidence
- RC/AG/1 Mr A Godfrey: Proof of Evidence

Submitted During the Inquiry

- RC1 Urgent Item Report for Planning Board on 19 April 2018
- RC2 Supplementary Statement of RMBC (20 April 2018)
- RC3 Opening Statement
- RC4 Traffic Management Plan Addendum 1 (15 September 2017)
- RC5 Rotherham Candidate Wildlife Sites as of April 2018
- RC6 Closing Submissions

Submitted Following the Inquiry

- RC7 Email from Mr C Wilkins (25 May 2018) relating to the 17 May 2018 Energy Policy Written Statement

Documents Submitted by the Appellant

IUL/AB/1	Dr A Buroni: Proof of Evidence
IUL/AB/2	Dr A Buroni: Summary Proof of Evidence
IUL/DG/1	Mr D Goold: Proof of Evidence
IUL/DG/2	Mr D Goold: Summary Proof of Evidence
IUL/DG/3	Mr D Goold: Appendices
IUL/AS/1	Mr A Sloan: Proof of Evidence
IUL/AS/2	Mr A Sloan: Summary Proof of Evidence
IUL/CH/1	Dr C Hazell-Marshall: Proof of Evidence
IUL/DR/1	Mr D Russell: Proof of Evidence
IUL/SF/1	Mr S Fraser: Proof of Evidence
IUL/SF/2	Mr S Fraser: Summary Proof of Evidence
IUL/LP/1	Mr L Prazsky: Proof of Evidence
IUL/LP/2	Mr L Prazsky: Summary Proof of Evidence
IUL/LP/3	Mr L Prazsky: Appendices
IUL/PM/1	Mr P Macrae: Proof of Evidence
IUL/PM/2	Mr P Macrae: Summary Proof of Evidence
IUL/KM/1	Mr K Martin: Proof of Evidence
IUL/KM/2	Mr K Martin: Summary Proof of Evidence
IUL/TP/1	Mr T Pickering: Proof of Evidence
IUL/TP/2	Mr T Pickering: Summary Proof of Evidence
IUL/SO/1	Ms S Olds: Proof of Evidence
IUL/SO/2	Ms S Olds: Summary Proof of Evidence
IUL/SO/3	Ms S Olds: Appendices
IUL/MS/1	Mr M Sheppard: Proof of Evidence
IUL/MS/2	Mr M Sheppard: Summary Proof of Evidence

IUL/MS/3	Mr M Sheppard: Appendices
IUL/AT/1	Mr A Tilley: Proof of Evidence - Not Called
IUL/AT/3	Mr A Tilley: Summary Proof of Evidence - Not Called

Submitted During the Inquiry

IUL1	AECOM Review of Traffic and Transport Matters (22 March 2018)
IUL2	Opening Statement
IUL3	Email from Mr Lowe to Mr Sheppard (18 October 2017)
IUL4	Curtins' Swept Path Analyses
IUL5	Updated Planning Conditions
IUL6	Closing Submissions

Submitted Following the Inquiry

IUL7	Email from Mr Sheppard (17 May 2018) relating to the Bondhay Golf Club Complex and Monition Ltd
IUL8	Email from Ms O Carr (25 May 2018) relating to the 17 May 2018 Energy Policy Written Statement

Documents Submitted at the Inquiry by Interested Persons

IP1	Email from Ms D Allison (20 April 2018)
IP2	Email from Mr G Littler (17 April 2018)
IP3	Statement of Harthill with Woodall Parish Council
IP4	Statement of Harthill Against Fracking Group
IP5	Statement of Whitwell Parish Council
IP6	List of Residents and Other People Wishing to Speak
IP7	Updated Statement of Harthill Against Fracking Group
IP8	Statement of Dr I Dupère
IP9	Email from Mr N White (25 April 2018)
IP10	Statement and Documents of Rt Hon Sir Kevin Barron MP
IP11	High Court Citation: [2017] EWHC 1456 (Admin) - Steer

IP12	Statement of Mr L Barlow
IP13	Statement of Mrs H Wilks
IP14	Statement of the Campaign to Protect Rural England
IP15	Supplementary Statement of Mr L Barlow
IP16	Statement of Mr C Brookes
IP17	Statement of Mr D Cunliffe
IP18	Statement of Dr G Kinghorn OBE MD FRCP
IP19	Statement of the Friends of the Earth (England, Wales and Northern Ireland)
IP20	Statement of Ms D Gibson
IP21	Statement of Mrs C Whiting
IP22	Statement of Mr J Drake
IP23	Statement of Mr P Joynes
IP24	Statement of Mrs Y Bramall
IP25	Statement of Ms A Mosley
IP26	Statement of Ms L Widdowson
IP27	Statement of Mrs T Wright
IP28	Statement of Ms E Biggin Marshall
IP29	Statement of Mr T Johnson
IP30	Statement of Mrs J Johnson
IP31	Statement of Mr L Marston
IP32	Statement of Mr G Littler
IP33	Statement of Ms M Havard
IP34	Statement of Mr J Burgess
IP35	Statement of Mr D Wigg
IP36	Email from Mr P Rowland (3 May 2018)

Submitted Following the Inquiry

IP37

Email from Bondhay Golf Club (9 May 2018)

CONDITIONS

- 1) The development hereby permitted shall begin not later than three years from the date of this decision. The local planning authority shall be notified in writing of the date of commencement at least 7 days prior to that date.
- 2) The development hereby permitted shall be carried out in accordance with the following approved plans:
 - P304-S2-PA-00 Rev A Strategic Location Plan
 - P304-S2 -PA-01 Rev G Application Site Plan
 - P304-S2-PA-04 Rev C Existing Ground Plan
 - P304-S2-PA-05 Rev B Proposed Site Entrance & Highway Works
 - P304-S2-PA-06 Rev C Proposed Site Layout Plan - Construction
 - P304-S2-PA-07 Rev F Proposed Site Layout Plan - Drilling Stage
 - P304-S2-PA-08 Rev B Proposed Site Layout Plan - Listening Stage
 - P304-S2-PA-09 Rev B Proposed Site Restoration
 - P304-S2-PA-10 Rev B Proposed Lighting Plan - Drilling & Coring
 - P304-S2-PA-11 Rev B Proposed Drainage Plan
 - P304-S2-PA-12 Rev B Proposed Site Layout Plan - Suspension
 - P304-S2-PA-13 Rev B Proposed Internal Access Plan
 - P304-S2-PA-16 Rev A Proposed Sections & Details
 - P304-S2-PA-17 Rev B Proposed Site Layout Plan - Possible Workover
 - P304-S2-PA-21 Rev A Parameter Sections - Develop. & Establish
 - P304-S2-PA-22 Rev A Parameter Sections - Drilling & Coring
 - P304-S2-PA-23 Rev A Parameter Sections - Suspension
 - P304-S2-PA-24 Rev A Parameter Sections - Workover of Well
 - P304-S2-PA-25 Rev A Parameter Sections - Listening Stage
 - P304-S2-PA-26 Rev A Parameter Sections - Abandonment
 - P304-S2-PA-30 Rev A Heras Fence Details
 - P304-S2-PA-31 Lighting Examples
- 3) A copy of these conditions, together with the approved plans and any details or schemes subsequently approved pursuant to this permission, shall be kept at the site office for the development at all times, and the terms and contents thereof shall be made known to the supervising staff on the site.
- 4) The development hereby permitted shall be for a limited period, being the period of five years from the date of commencement,

as notified under condition 1. The site shall thereafter be cleared of all plant, buildings, machinery and equipment and the land restored in accordance with condition 28.

- 5) No development shall take place until passing places have been provided on Common Road, Packman Lane and Bondhay Lane between the A619 and the site access in accordance with details that have been submitted to, and approved in writing by, the local planning authority.
- 6) No development shall take place until a Traffic Management Plan has been submitted to, and approved in writing by, the local planning authority. Development shall be carried out in accordance with the approved plan.
- 7) No development shall take place until details of a photographic dilapidation survey of the sections of Packman Lane and Common Road to be used by development traffic has been undertaken and submitted to, and approved in writing by, the local planning authority. A scheme for the repair of any damage incurred as a direct result of site traffic using Packman Lane and Common Road, which shall include a delivery mechanism and programme for the works, shall be submitted to the local planning authority, for approval in writing, within 14 days of being requested. The approved scheme shall thereafter be implemented in full.
- 8) No development shall take place until a Noise Management Plan has been submitted to, and approved in writing by, the local planning authority. The plan shall include:
 - i) data from the relevant manufacturers' noise tests for each item of noise-emitting plant to be used on site, to establish whether noise emissions are likely to be compliant with the noise limits set out in condition 20;
 - ii) if noise-emitting plant is not likely to be compliant, details of what mitigation would be introduced and timescales for mitigation implementation;
 - iii) procedures for addressing any complaints received;
 - iv) details of a Noise Monitoring Scheme, including a mechanism to address any non-compliance with the noise limits set out in condition 20;
 - v) management responsibilities including operator training, compliance response and investigation, and routine environmental noise monitoring and reporting; and
 - vi) methods to determine whether noise is free from tonal, intermittent or impulsive characteristics, the incorporation of these methods in the Noise Monitoring Scheme and a mechanism for the setting of any necessary noise limits and weighting together with any mitigation, including approval in writing by the local planning authority.

Development shall be carried out in accordance with the approved plan.

- 9) No development shall take place until details of the measures to prevent the deposit of mud, clay and other deleterious materials upon the public

highway have been submitted to, and approved in writing by, the local planning authority. The measures shall include as appropriate:

- i) the sweeping and cleaning of internal access roads;
- ii) the provision and use of wheel-cleaning facilities;
- iii) the provision and use of lorry sheeting;
- iv) the use of a mechanically propelled road sweeper on the public highway; and
- v) a timetable for providing the above.

Development shall be carried out in accordance with the approved measures. In the event that the measures do not adequately prevent the deposit of mud, clay and other deleterious materials upon the public highway then, within 7 days of a written request from the local planning authority, a scheme of revised and timetabled additional measures to be taken in order to prevent the deposit of materials upon the public highway shall be submitted to the local planning authority for its approval in writing. Following any approval, development shall thereafter be carried out in accordance with the approved revised and timetabled additional measures.

- 10) No development, apart from that required to provide site access sight lines, shall take place until sight lines have been provided, in accordance with drawing no. P304-S2-PA-05 Rev B. The areas within the sight lines shall be cleared and be kept clear of all obstructions to visibility in excess of 900mm in height measured above the nearside carriageway channel level.
- 11) No development shall take place until verification surveys for the presence of protected species on the site, and within the 30m buffer area, have been undertaken and the results submitted to, and approved in writing by, the local planning authority. If protected species are found on the site and buffer area which would be likely to be affected by the development, no development shall take place until mitigation measures have been submitted to, and approved in writing by, the local planning authority. Development shall thereafter be carried out in accordance with the approved mitigation measures.
- 12) No development shall take place until a Dust Management Plan, detailing a programme of measures to minimise the spread of airborne dust from the site during the development, have been submitted to, and approved in writing by, the local planning authority. Development shall be carried out in accordance with the approved plan.
- 13) Notwithstanding condition 2, no development shall take place until details of the surfacing and drainage of on-site vehicular areas have been submitted to, and approved in writing by, the local planning authority. Development shall be carried out in accordance with the approved details.
- 14) No development, including any groundwork, shall take place until the applicant, or their agent or successor in title, has submitted a Written Scheme of Investigation (WSI) to the local planning authority which has subsequently been approved in writing. The WSI shall set out a strategy for archaeological investigation to include:

- i) a programme and method of site investigation and recording;
- ii) a requirement to seek the preservation in situ of identified features of importance;
- iii) a programme for post-investigation assessment;
- iv) provision for analysis and reporting;
- v) provision for the publication and dissemination of results;
- vi) provision for the deposition of the archive created;
- vii) nomination of a competent person, persons or organisation to undertake the works; and
- viii) a timetable for completion of all site investigation and post-investigation works.

No development, including any groundworks but excluding any work associated with the approved WSI, shall take place until the local planning authority has confirmed in writing that the relevant pre-commencement requirements of the WSI have been fulfilled. The development shall be undertaken in accordance with the approved WSI.

- 15) No development shall take place until a scheme to convene and operate a Community Liaison Group has been submitted to, and approved in writing by, the local planning authority. The scheme shall include measures to seek membership from the local planning authority and the local community. The scheme shall be implemented as approved and as far as practicable, unless otherwise approved in writing by the local planning authority.
- 16) If the development hereby permitted does not commence (or, having commenced, is suspended for more than 12 months) within 2 years from the date of this decision, the approved ecological measures secured through Condition 23 shall be reviewed and, where necessary, amended and updated. The review shall be informed by further ecological surveys commissioned to establish if there have been any changes in the presence and/or abundance of protected species and identify any likely new ecological impacts that might arise from any changes. Where the survey results indicate that changes have occurred that would be likely to result in ecological impacts not previously addressed in the approved scheme, the original approved ecological measures shall be revised and new or amended measures, together with a timetable for their implementation, shall be submitted to, and approved in writing by, the local planning authority prior to the commencement or re-commencement of the development. The development shall thereafter be carried out in accordance with the approved new or amended ecological measures and timetable.
- 17) The development hereby permitted shall take place only between the following hours, except in the case of an emergency.

Non-Drilling Works

Monday to Friday – 07.00 to 19.00

Saturdays – 07.00 to 13.00

Sundays, Public and Bank Holidays – Not at any time

Drilling Works - including the assembly and demobilisation of the drilling rigs

Monday to Friday - 24 hours

Saturdays - 24 hours

Sundays, Public and Bank Holidays - 24 hours

- 18) HGV movements accessing and leaving the site along Common Road, Packman Lane and Bondhay Lane shall only take place between 07.00 and 19.00 Monday to Friday and 07.00 to 13.00 on Saturdays and not at any time on Sundays or on Bank or Public Holidays, except in the case of an emergency.
- 19) No hedgerows shall be trimmed, laid or removed and no vegetation shall be removed during the bird-breeding season between 1 March and 31 August inclusive, unless they have been previously checked and found clear of nesting birds in accordance with Natural England guidance. If appropriate, an exclusion zone shall be set up around any vegetation to be protected. No work shall be undertaken within the exclusion zone until birds and any dependant young have vacated the area.
- 20) The level of noise during the construction set-up and restoration activities hereby permitted, as measured at any noise sensitive receptor, shall not exceed 55dB LA_{eq 1hr} (free field) between 07.00 and 19.00hrs, 44dB LA_{eq 1hr} (free field) between 19.00 and 22.00hrs and 42dB LA_{eq 1hr} (free field) at any other time. The level of noise during any other activities hereby permitted, as measured at any noise sensitive receptor, shall not exceed 50 dB LA_{eq 1hr} (free field) between 07.00 and 19.00hrs, 44dB LA_{eq 1hr} (free field) between 19.00 and 22.00hrs and 42dB LA_{eq 1hr} (free field) at any other time. The local planning authority shall be notified in writing of the dates of completion of the construction set-up activities, within 7 days of that date, and the commencement of restoration activities, at least 7 days prior to that date.
- 21) All reversing warning alarms fitted to vehicles and plant based at the site shall be of a 'white noise' or similar low intrusion type.
- 22) Any contamination that is found during the course of the development hereby permitted that was not previously identified shall be reported to the local planning authority as soon as is reasonably possible. Development shall be suspended and a risk assessment carried out and submitted to, and approved in writing by, the local planning authority before the development is resumed, unless otherwise approved in writing by the local planning authority. Where unacceptable risks are found, a remediation strategy shall be submitted to, and approved in writing by, the local planning authority. The approved strategy shall be implemented before the development is resumed.
- 23) The development hereby permitted shall be carried out in accordance with the recommendations of the ecology report contained in the Environmental Report submitted with the application and any subsequent assessment work undertaken.
- 24) Notwithstanding condition 2, the gradient of the site access from Common Road shall be no steeper than 1 in 15 for the first 10m

measured from the nearside highway boundary. Drainage measures shall be implemented, retained and maintained during the development to prevent the flow of surface water from the access onto the adjacent highway.

- 25) Notwithstanding condition 2, no external lighting shall be utilised in respect of any phase of the development hereby permitted until details of all external lighting for that phase have been submitted to, and approved in writing by, the local planning authority. The submitted details shall substantially accord with the lighting report submitted with the planning application. The submitted details shall also have regard to the "Guidance Notes for the Reduction of Obtrusive Light GN01:2011" produced by the Institution of Lighting Professionals and "Bats and Lighting in the UK", the Bat Conservation Trust & Institute of Lighting Engineers (2009), Bats and the Built Environment Series BCT. The approved lighting details for any phase shall be implemented in full before the lighting for that phase is first used, and the approved lighting shall be retained for the duration of that phase, unless otherwise approved in writing by the local planning authority.
- 26) No drilling operations shall take place until details of the make, model and technical noise specification for the drilling rigs to be used in the development hereby permitted have been submitted to, and approved in writing by, the local planning authority. Development shall be carried out in accordance with the approved details, unless otherwise approved in writing by the local planning authority.
- 27) No drilling operations shall take place until space has been laid out within the site, in accordance with drawing no. P304-S2-PA-13 Rev B, for vehicular parking and turning facilities, and that space shall thereafter be kept available for parking and turning for the duration of the permission.
- 28) Notwithstanding condition 2, no restoration shall take place until a detailed Restoration Plan has, within the period of this permission, been submitted to the local planning authority for approval in writing. The plan shall substantially accord with the measures set out in the Proposal document, submitted to the local planning authority on 30 May 2017 and drawing no. P304-S2-PA-09 Rev B and shall include a timetable for implementation. The approved plan shall thereafter be implemented in full. The local planning authority shall be notified within 7 days of when the restoration works are complete, to allow the local planning authority to issue written confirmation that the restoration has been completed satisfactorily.
- 29) Any replacement hedgerow planted as part of the approved Restoration Plan shall thereafter be maintained for a period of five years including weed control, replacement of dead and dying trees and maintenance of planting protection measures.
- 30) Within three months of the issue of the local planning authority confirmation of the completion of the restoration works, a scheme for the aftercare of the site for a period of five years, to promote the agricultural after-use of the site, shall be submitted to the local planning authority for

approval in writing. The approved scheme shall thereafter be implemented in full.

**Appendix 5: Letter to Highways England 21
December 2017**

Our Reference: 065863/304_21

21st December 2017

Ms Elisa Atkinson
Highways England
Lateral
8 City Walk
Leeds
LS11 9AT

Dear Elisa

RE – LAND AT DINNINGTON ROAD, WOODSETTS – APPLICATION RB20171577

Following receipt of your consultation response issued to Anthony Lowe at Rotherham MBC dated 23rd November 2017 and our subsequent telephone conversation, please find below additional information/clarification to address your outstanding concerns.

As you will be aware, the planning application is supported by an Environmental Report which includes a comprehensive Traffic and Transport chapter. The report sets out scope and methodology adopted to determine the traffic and transportation impacts of the development proposals on the surrounding area and local highway network.

In addition to the Environmental Report, a Traffic Management Plan (TMP) and Route Management Strategy (RMS) has been submitted which will control vehicle movements associated with the proposed development and reduce the traffic impact on the surrounding highway network.

Based on the level of information submitted in support of the planning application it is concluded that the proposals to drill a vertical core well on land at Dinnington Road in Woodsetts would not result in a severe impact on the highway network.

Notwithstanding the above, you have requested further clarification and additional information to inform Highways England, as the Strategic Highway Authority.

For ease of reference, we have adopted the same headings as your consultation response and provide further commentary/information as required.

Scope and Methodology

As noted, automatic traffic count (ATC) surveys have been undertaken at four locations on the local highway network between Tuesday 11th and Monday 17th July 2017. The 7 day survey period provides a greater understanding of the daily variations of traffic flows throughout the week and assists in deriving an average daily traffic profile as the basis of our traffic impact assessments.

It is also noted that the school summer holidays in the Rotherham area did not start until w/c 24th July 2017. The traffic surveys were therefore undertaken within school term times and are considered suitable for assessment purposes.

Baseline Conditions

It is acknowledged that no consideration of the Strategic Road Network (SRN) has been provided as part of the planning submission.

The extent of the study area has been determined based on the anticipated traffic flows generated by the proposed development, the location of the site, proximity/distance to the surrounding built up areas and the intended routing of vehicles to/from the site.

A summary of the **maximum** daily traffic movements associated with each stage of the proposed development is provided within the Environment Report and reproduced below for ease of reference.

For the purposes of this assessment the working day is defined as 7am to 7pm.

Stage	Activity	Duration	Daily Vehicle Movements	Light Vehicles (<7.5 tonnes)	HGVs
1	Site development and establishment	11 Weeks	70	10	60
2	Drilling, coring and PTT	20 Weeks	62	16	46
3	Maintenance of site	Annual figures	32 (Annual Figures)	26	6
3a	Possible workover of the well	Up to 3 Weeks	60	8	52
4	Use of well as listening well	5 Weeks	60	8	52
5	Decommissioning and restoration	6 Weeks	62	8	54

The table above presents the maximum daily vehicle “movements” for each stage and represent both an inbound and outbound movement generated by the site.

It is evident that the most traffic intensive stage would be during the site development and establishment (Stage 1) which would generate a maximum of 70 movements per day (35 inbound and 35 outbound) over an 11 week period. The average number of vehicle movements generated during Stage 1 would be approximately 28 movements per day.

As a worst case scenario, the proposed development could generate approximately 6 movements per hour throughout the day (3 arrivals and 3 departures) or one additional vehicle every 10 minutes. This maximum increase in traffic flow is negligible, would be imperceptible to existing road users and will result in little or no impact on the local and strategic highway network.

Given the anticipated traffic impact, no detailed capacity assessments have been undertaken and the study area was not extended to include the SRN where background traffic flows would be notably higher and the traffic impact would be significantly less. Given the level of traffic flow on the SRN, this small addition would not be likely to have a material effect on the network.

Environmental Assessment

It is confirmed that the traffic impact of the proposed development has been assessed on a worst case basis with the maximum daily traffic flows adopted. The traffic impact is assessed in detail within the Traffic and Transport chapter of the Environmental Report.

The number of vehicles generated during each stage of the development have been derived by INEOS as part of a comprehensive delivery program and developed to maximise the efficiency of the site throughout the temporary application period.

The maximum number of daily movements have been derived using a number of factors although the primary influence is the ability of the site to physically accommodate the specified number of vehicles within a working day.

Anticipated vehicle movements have been derived for each day during the various stages of the development and are not a product of simply dividing the total movements across a set number of weeks. This level of programming allows INEOS to control the movement of vehicles in accordance with the TMP and ensure the daily traffic flows are kept within the defined levels.

Each stage includes typical daily requirements such as crew transport and welfare services and stage specific requirements such as aggregate delivery during Stage 1 and Rig equipment during Stage 2.

Each stage is completely separate with no overrun.

Routing

It is noted that the A57 forms part of the local road network and is not part of the SRN.

The transport of any abnormal loads will be undertaken in accordance with current guidance and standard practice with the required notification provided in advance of transport depending on the nature of the load.

All abnormal loads would be supported by escort vehicles to ensure that the route is clear and capable of accommodating the vehicle movement at that time.

Detailed swept path analysis has been undertaken along the defined route at more constrained locations on the local highway network. The route has been determined to be of sufficient standard to accommodate the maximum anticipated abnormal load.

The largest load will be c.3.5m wide and whilst this would need an escort vehicle and due care and attention, we don't envisage any locations where there would be likely to be conflicts arising as a result of the load. The developer will follow the usual notification procedures for abnormal loads intending to utilize the motorway. The SRN is considered to provide sufficient infrastructure to accommodate the anticipated loads and will be managed appropriately.

Draft Traffic Management Plan

The TMP is considered to be a working document that would continually evolve during the operation of the site. The draft TMP has been prepared to identify the key principle which will be adopted.

Based on the anticipated maximum daily vehicle movements generated by the proposed development (35 arrivals and 35 departures) the scheme is not anticipated to have a severe traffic impact on the local or strategic highway network. On this basis, it is not considered that a suspension of vehicle movements during peak hour periods is required at this stage.

It is however noted that vehicle movements to/from the site will be tightly managed as part of the TMP and if it is determined that peak hour congestion is resulting in significant delays there will be opportunities to program vehicle movements more efficiently outside of peak hour periods. The TMP would be subject to the agreement of both the Local and Strategic Highway Authority with Rotherham MBC and Highways England consulted throughout.

There is no intention to provide specific signage on the Strategic Highway Network. Any signage would be localised to the proposed site to ensure site related traffic avoids built up areas where possible and adheres to the defined access route.

In order to maintain an element of flexibility and ensure locally appointed suppliers are not adversely affected by the TMP, the site access route is defined as the 3km route between the proposed site access on Dinnington Road to the A57/B6041 roundabout. This ensures local suppliers are not dictated to travel greater distances and route via the M1.

As noted, an off-site staging area will be provided at a key location on the highway network. The exact location has not yet been determined and we are therefore unable to provide any additional information at this stage. Highways England will be notified once additional information is available.

Drivers Pack

The reference to junction of the M1 within the submitted driver's pack is provided in error and will be updated as part of a future draft document.

Geotechnical Issues

We have noted your position geotechnical risk. We do not consider there to be any risk to your assets as a result of this application. Further planning applications for appraisal or production in this location, if pursued, would also need to be subject to consultation with Highways England so issues surrounding effects on assets can be discussed at that stage.

I trust that the additional information and clarifications which are contained within this document provide sufficient comfort that the proposed application will not result in a severe impact on the operation of the Strategic Highway Network.

I would therefore request that the holding objection is lifted and Rotherham MBC are informed accordingly,

If you have any further queries or require any additional information please do not hesitate to contact me.

Your Sincerely,

A handwritten signature in black ink that reads 'a Tilley'.

Aaron Tilley
Associate
For and on behalf of **Curtins**

Traffic Management Plan

INEOS Shale
Traffic Management Plan
PEDL 304
Woodsetts

This document provides a Draft Traffic Management Plan and includes initial route management risks and mitigation options which will be developed in consultation with Highways Authority to form the proposed Route Management Strategy.

DRAFT

Contents

1. Traffic Management Approach
2. Site Access Route
3. Access Route Risk Assessment
4. Escort Vehicle Operations
5. Site Traffic Management Layout
6. General Rules
7. Enforcement

1.0 Traffic Management Approach

The management for traffic movement is a key consideration for INEOS. INEOS has used a four phase approach to traffic management policy.



During the Evaluate stage, a desktop study was undertaken to identify all possible access routes to the site. This was followed by a physical assessment of the routes to identify suitability for use by the vehicles required to get to the site, including aspects such as:

- road cambers,
- bends,
- gradients,
- cables,
- hedgerows or trees (from a visibility perspective),
- passing places,
- road conditions such as mud from farming and condition of road surfaces.
- Use of the road network by sensitive users such as horse riders, cyclists or pedestrians.
- low bridges,
- narrow roads and weight restricted routes, and
- Other road users such as distribution centres, industrial estates and quarries.

Any unsuitable routes were ruled out at this stage. A second survey of routes and the surrounding area was also carried out by a specialist traffic planning consultant to validate the initial findings, undertake more detail assessment of baseline traffic flows and environmental aspects and complete swept path analysis for potentially constrained sections of the route.

Once a preferred route was identified, a designated route management plan was developed for access and egress by all traffic. This included consideration of the potential hazards identified and the suitable preventative measures to mitigate or manage these elements. Some element of mitigation to be implemented are focused on good logistics management principles such as minimising the equipment brought to site, utilising a staging area where small loads are consolidated and reducing waste generation and disposal where possible.

During the planning of the route INEOS has tried to avoid sensitive areas such as schools, leisure centres, town centres and areas of congestion. Where avoidance has not been possible then mitigation measures, such as the suspension of traffic movements during school drop off and collection times or peak traffic periods could be incorporated into the TMP.

Some hazards identified during the evaluation phase will require physical control measures to be implemented. These will be set out in detail and agreed in the Route Management Strategy with the Highways Authority. The control measures which have been considered include the use of banksman and escort vehicles, speed humps, traffic barriers, signage, temporary traffic lights, temporary parking restrictions and escort vehicles. The likely options to be implemented have been outlined in Section 3.0.

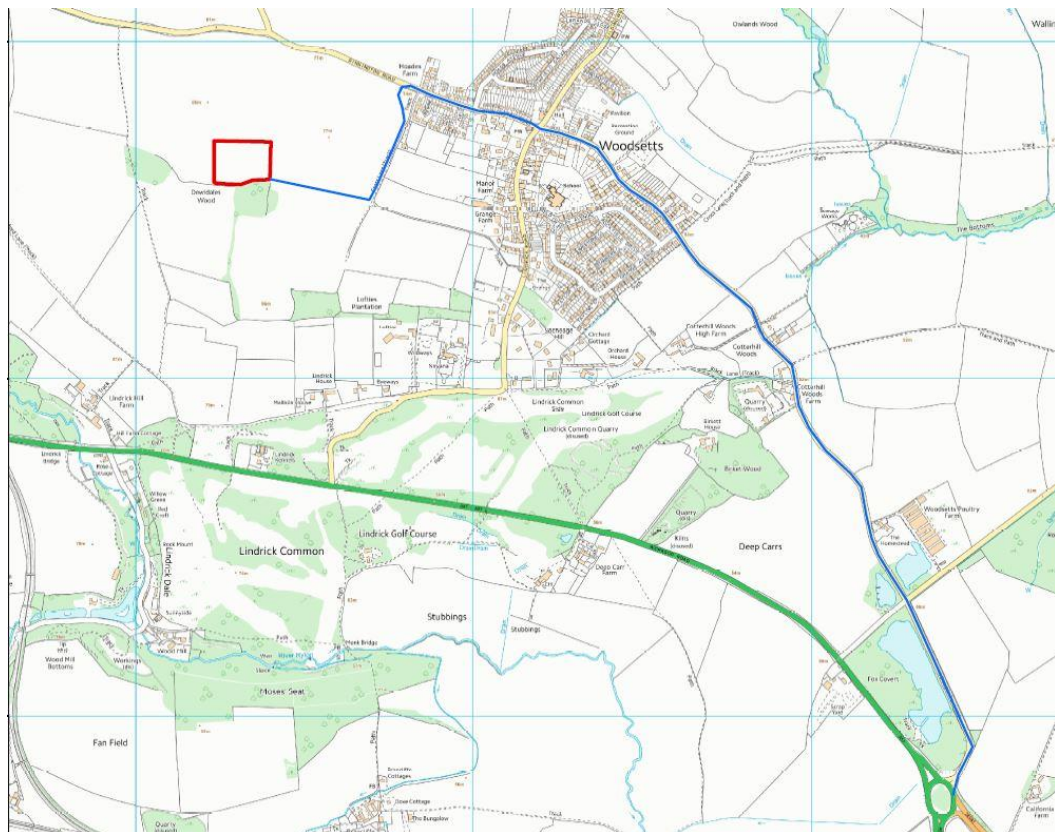
In order to maintain compliance once activities are under way, all drivers will be issued with the Drivers Pack (draft available in Appendix 2) which will include maps and a copy of the TMP to ensure that procedures and plans are followed. The access route to site will be clearly signposted

to avoid vehicles taking incorrect routes. Training session with all INEOS personal and contractors will be carried out to ensure all personal understand importance of the TMP and the control measures that have been put in place.

2.0 Site Access Route

The site access route(s) set out below are the principle route options for Heavy Goods Vehicles (HGVs, over 7.5 tonnes) from the site to the Motorway network. Much of this route is part of the strategic road network (A roads). The control measures and requirements of the Route Management Strategy will be applied to the section of the route from A57 to the site (as shown in the map below).

The project may utilise the use of local suppliers. This may require local delivery route to be utilised. However, **all** site traffic will be required to join the site access route at the junction between the A57 and Woodsetts Lane. This applies to all traffic leaving the site as well.



Directions

- At the roundabout take the exit onto Woodsetts lane towards Woodsetts
- Continue on Woodsetts Lane through Woodsetts.
- At the site entrance turn left.

3.0 Access Route Risk Assessment

A near site assessment of the well location was conducted, assessing any potential transport conflicts incurred from the point of exiting a main road and reaching the site entrance. There are some risks outlined in the table below, along with control measures which should be implemented to mitigate the risks

Risk	Mitigation
On Woodsetts Lane the road becomes narrow.	<p>Install signage to warn other road users of potential presence of site traffic.</p> <p>Where required for larger loads utilise the escort vehicle and traffic management personnel to ensure trucks can navigate Woodsetts lane safely.</p>
The above mentioned roadway should provide no issue for the majority of vehicle movements. However during operations, particularly where there is the movement of STGO loads or large convoys, the Escort Vehicle Operator should monitor the situation.	<ol style="list-style-type: none"> 1. Where appropriate to maintain road safety the escort vehicle should turn onto Woodsetts Lane with site traffic and escort along Woodsetts lane, through Woodsetts and to site. Driving at a moderate speed to ensure there is enough time for larger loads to egress safely. 2. Signage should be placed on the verges of Woodsetts Lane to warn other road users of the approaching site entrance throughout the operation.
<p>There are Z bends on Woodsetts Lane and whilst they are not severe their angle and incline means they still present some risks:</p> <ol style="list-style-type: none"> 1. The bends are tight and present low visibility for drivers 2. Potential for trucks to encounter cars whilst navigating the bends causing issue 3. Potential for trucks to become stuck if they encounter any unexpected or fast opposing traffic whilst passing through the bends 	Utilise the escort vehicle and traffic management personnel to ensure trucks can navigate the bends unimpeded. Distribute leaflets to all homes in the surrounding area with details of potentially slow moving vehicles and escort vehicles on the roadways controlling traffic.
Traffic will be passing through Woodsetts village	Utilise the escort vehicle and traffic management personnel to ensure trucks can navigate through Woodsetts unimpeded.
There may be informal parking along Woodsetts lane in Woodsetts .	Ensure sufficient signage for pedestrians and vehicles is in place to warn all road users of changes in traffic volume and type.
Dinnington Road is narrow at the proposed site entrance and as such does not suit a 90 degree turn when entering and egressing the location. This may also cause excessive wear and tear on road surfaces and vehicles.	The site design should consider this and angle the site entrance in a manner that mitigates the requirement for a 90 degree turn whilst still providing drivers with the correct angle for maximum visibility.
There is a potential for trucks to approach location at a point which is not appropriate	<ul style="list-style-type: none"> - This can be mitigated by utilising external staging areas, where trucks are required to stage and call ahead to request an escort to location if required. There should be an appropriate staging to both the north and south of the motorway junction to prevent trucks being required to drive unnecessary miles. Staging areas must be previously agreed and have enough capacity to stage at least the maximum number of trucks expected at location on any day. - Drivers will also be provided details of the abort route, which will be invoked where local circumstances change between leaving the staging point and getting to the site area. - There should be a consolidation point where trucks who have become separated en route from the staging area can again be safely entered into convoy before approaching the location. NOTE: this must not be used as a staging area

Further to the above noted mitigation measures, some general INEOS Shale traffic management operating principles should be applied:

- Where required an escort vehicle should be utilised, as described in Section 4.0 of this document
- Road sweeping services should be contracted to sweep the road from the site entrance to the Dinnington Road on a weekly basis. This should be increased to daily during the construction and mobilisation phases
- Gritting services should be privately contracted to ensure the Dinnington Road remains safe for site vehicles in wintry conditions. This will also increase road safety for other road users
- Separate staging areas will be utilised to control traffic approaching site. Vehicles, materials and other supplies can be staged here until an appropriate ingress slot is available. The location of these staging areas will be close to the major road network and not impact the proposed route to site.

4.0 Escort Vehicle Operations

The escort vehicle and traffic management operatives are the fundamental part of the TMP and as such they must:

- Ensure escort vehicle operatives are trained in the traffic management plan and any sensitivities around it.
- Have sufficient personnel to ensure escort vehicles are available at all times, including when more than one may be required
- Ensure there are other traffic management operatives with adequate competencies and equipment available to cover other road junctions mentioned above

In order to reduce the times when the local road network is impacted and facilitate escort vehicle operations, vehicles and in particular trucks will approach and leave the location in appropriate sized small batches. The size of these batches will depend on a number of factors including time of day, operational stage, space on location and be agreed by the escort vehicle operatives.

Escort vehicles will also act as convoy vehicles during certain parts of the journey and control the speed of vehicles approaching and or leaving the location.

There may be periods during site construction, mobilisation and demobilisation of drilling equipment where more than one escort vehicle is required to facilitate safe and efficient operations.

5.0 Site Traffic Management Layout

Traffic management for the location will require signage and other traffic management equipment to be placed at strategic points along the route. Please see Appendix 1.

6.0 General Site Rules

- All abnormal loads, wide vehicles, low loaders and cranes **MUST** be escorted from the holding area.
- A reverse parking policy will be imposed on site.
- Deliveries will only be booked and accepted between 07:30 hours and 18:30 hours. Drivers attempting to deliver out of these hours will be turned away.
- Signs will be erected at the holding area instructing **ALL** vehicles to stop, telephone site

- logistics personnel and wait until called forward to site.
- Vehicles waiting in the holding area or on site will be instructed to switch off engines to reduce noise and air pollution.

7.0 Enforcement

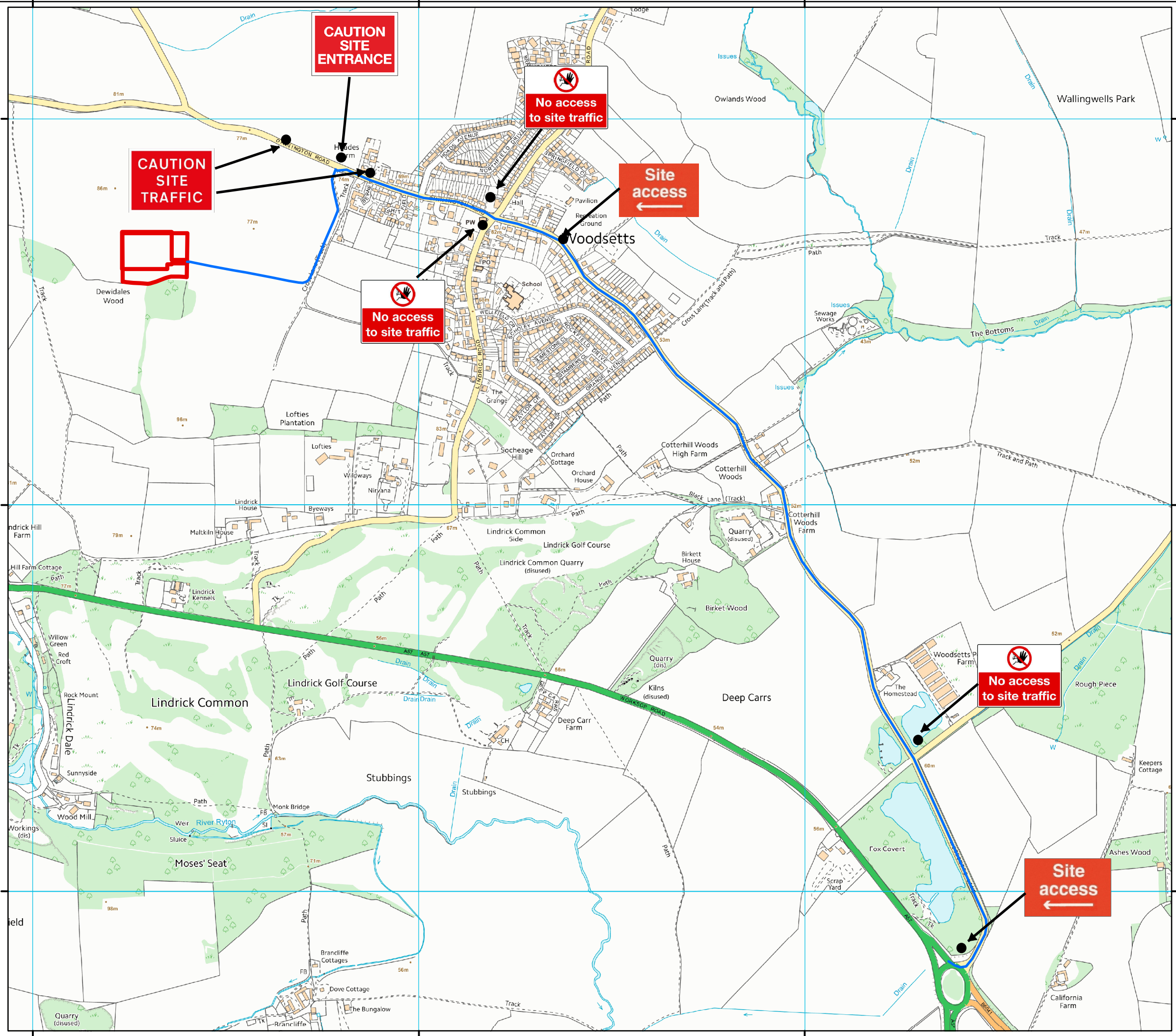
Traffic management planning success relies on the proper implementation and adherence of the plan by INEOS Shale and the supply chain. Ensuring this requires the following:

- Wherever possible INEOS Shale should control logistics to and from the location
- Where there is a requirement for suppliers to control transport they must:
 - Provide TMP awareness and compliance training to all personnel attending location.
 - Ensure all drivers have a copy of the Drivers Pack.
 - Have TMP specific KPI's in their contract with INEOS Shale including financial penalties for non-compliance.

8.0 Site Contacts

- Wellsite Logistics Operative - 07X XXX XXX
- Duty Toolpusher (Site Supervisor) - 07X XXX XXX
- Logistics Manager - 07X XXX XXX
- INEOS Office – XXX XXXXXXX

Appendix 1 – Traffic Management Layout.



— Indicative Access Route
 □ Site Location

N
 0 95 190 285 380 Metres

INEOS Shale
 INEOS Shale
 38 Hans Crescent, Knightsbridge
 London, SW1X 0LZ
 www.ineosshale.com

Project:	PEDL 304/21 - East Midlands	
Title:	Site Access Traffic Control Plan	
Date:	21/12/2017	Scale: 1:10,000 @A3
Drawn By:	JM	Checked By: LC
Plan No:	P304-021	

© Crown copyright and database rights 2016 Ordnance Survey 0100031673

Appendix 2 – Drivers Pack

INEOS Shale
Traffic Management Plan
Woodsetts
PEDL 304
Drivers Pack

Contents

1. Introduction
2. Attending Site
3. Travelling to Location
4. Leaving Location
5. Contact Numbers
6. Maps

1.0 Introduction

INEOS Shale develops and implements a Traffic Management Plan (TMP) to reduce the risk of transport operations in areas surrounding our operational locations and minimise the impact on local communities.

Drivers not complying with the TMP or Traffic Management Personnel will be subject to sanction in accordance with the INEOS Shale Supplier TMP Compliance System, as discussed during the driver TMP awareness training.

2.0 Attending Staging Area

Drivers attending site **Must** adhere to the following:

- **NO** vehicles of any size must attend location without prior agreement
 - Drivers will be instructed which staging area to report to and the arrival time
- **All** vehicles must report to the Staging areas outlined in Map 1
- Drivers **Must** read, understand and plan for travelling to the staging area before starting their journey. Drivers observed attempting to read maps whilst in motion will be subject to action in line with the INEOS Shale Supplier TMP Compliance System
- When arriving at the Staging Area, drivers **Must** report to the Wellsite Logistics Operative
- Where applicable drivers **Must** plan their journey to ensure any rest breaks required are taken in advance of the stipulated arrival time at the staging point. Due to location size, INEOS Shale cannot guarantee drivers the ability to take rest breaks on location.

3.0 Travelling to Location

When leaving the staging area to travel to location, vehicles will travel in small batches to minimise disruption to other road users. Where required **Some** vehicles travelling to location will be escorted by an escort vehicle. The Escort Vehicle Operator will brief drivers regarding the route, how relevant sections are to be approached and any day to day issues regarding access.

Drivers **Must**:

- Follow the escort vehicle, utilising the prescribed access route as clearly marked in Map 2
- Obey the instructions of the Escort Vehicle Operative
- Report immediately if they become separated from the convoy
- Follow instructions of traffic management personnel (who will be clearly identified)

Where circumstances change at location after the convoy has joined A57 and the Wellsite Logistics Operator or the Escort Vehicle Operator decide the journey should be aborted, this will be done prior to entering Woodsetts Lane. In these circumstances, all vehicles will continue along

the A57 to the roundabout, turn and head back along the A57 to their destination along the prescribed route.

4.0 Leaving Location

When leaving location **All** vehicles must follow the prescribed route and if they are being escorted vehicle they must remain in convoy until reaching the A57, where the prescribed route must be followed. Where larger loads are required to remain under escort beyond the A57, the Escort Vehicle Operative will advise accordingly.

5.0 Contact Numbers

The following contact numbers should be used at all times during the operation:

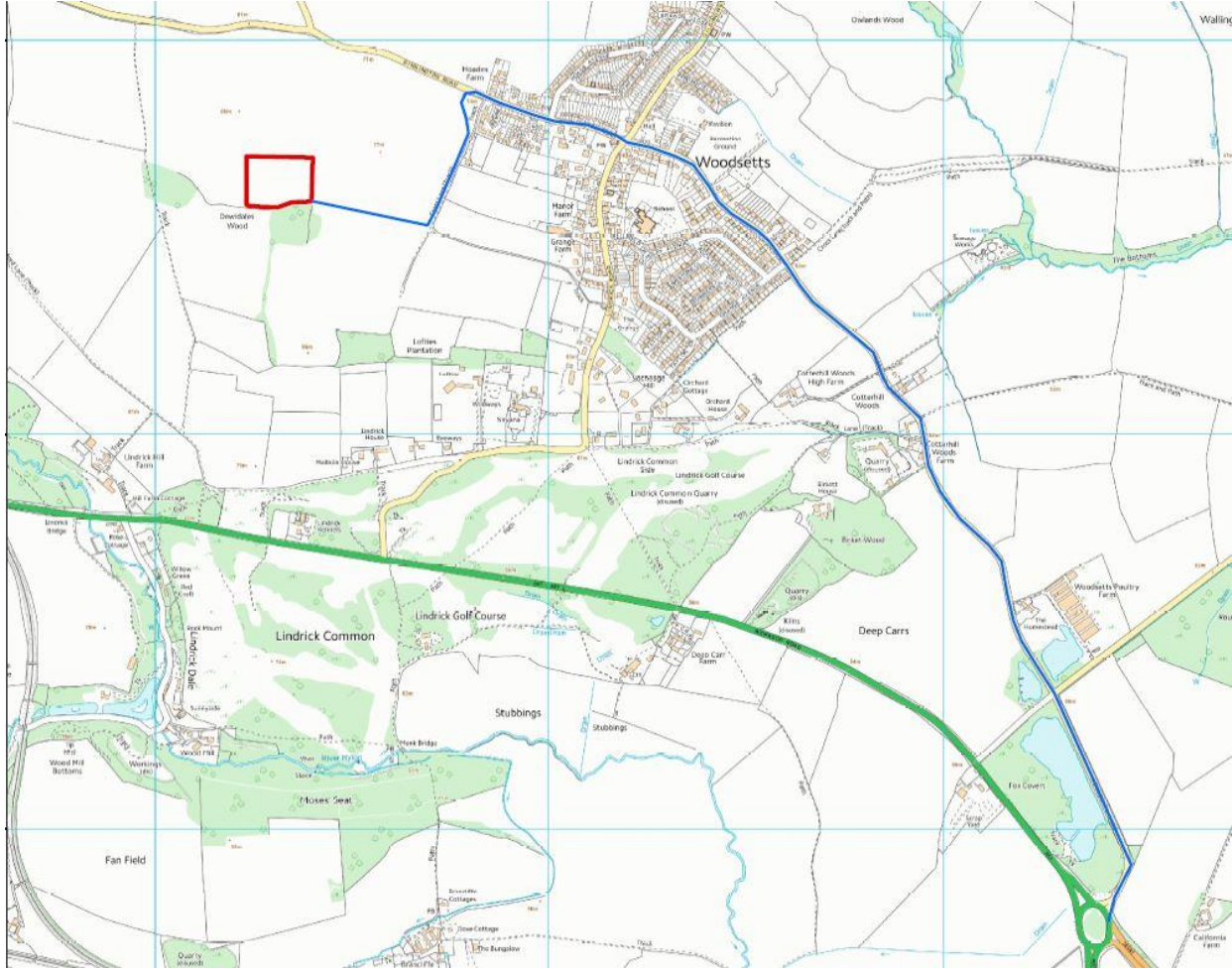
Contact	Contact Number
Arranging deliveries to location	XXX XXX XXX XXX
Location Contact (Primary)	XXX XXX XXX XXX
Location Contact (Secondary)	XXX XXX XXX XXX
Escort Vehicle Operator	XXX XXX XXX XXX

6.0 Maps

Map 1 – Staging Areas

Insert map of staging areas

Map 2 – Prescribed Route



Our Locations

Birmingham

2 The Wharf
Bridge Street
Birmingham B1 2JS
T. 0121 643 4694
birmingham@curtins.com

Bristol

3/8 Redcliffe Parade West
Bristol
BS1 6SP
T. 0117 925 2825
bristol@curtins.com

Cardiff

3 Cwrt-y-Parc
Earlswood Road
Cardiff
CF14 5GH
T. 029 2068 0900
cardiff@curtins.com

Douglas

Varley House
29-31 Duke Street
Douglas Isle of Man
IM1 2AZ
T. 01624 624 585
douglas@curtins.com

Edinburgh

35 Manor Place
Edinburgh
EH3 7DD
T. 0131 225 2175
edinburgh@curtins.com

Kendal

28 Lower Street
Kendal
Cumbria LA9 4DH
T. 01539 724 823
kendal@curtins.com

Leeds

Rose Wharf
Ground Floor
78-80 East Street
Leeds
LS9 8EE

Liverpool

Curtin House
Columbus Quay
Riverside Drive
Liverpool L3 4DB
T. 0151 726 2000
liverpool@curtins.com

London

Units 5/6
40 Compton Street
London
EC1V 0BD
T. 020 73242240
london@curtins.com

Manchester

Merchant Exchange
17-19 Whitworth Street West
Manchester
M1 5WG
T. 0161 236 2394
manchester@curtins.com

Nottingham

7 College Street
Nottingham
NG1 5AQ
T. 0115 941 5551
nottingham@curtins.com

**Appendix 6: Letter to RMBC Highways 21
December 2017**

Our Reference: 065863/304_21

21st December 2017

FAO Ian Ferguson,
Senior Highways Development Control Officer
Transportation and Highways Design
Rotherham Metropolitan Borough Council

Dear Ian

RE – LAND AT DINNINGTON ROAD, WOODSETTS – APPLICATION RB20171577

Further to your consultation response dated 15th November 2017, please find below additional information/clarification to address your concerns.

The Environmental Report submitted in support of the application includes a comprehensive Traffic and Transport chapter. The report sets out the methodology adopted to determine the traffic and transportation impacts of the development proposals on the surrounding area and local highway network.

In addition to the Environmental Report, a Traffic Management Plan (TMP) and Route Management Strategy (RMS) has been submitted which will control vehicle movements associated with the proposed development and reduce the traffic impact on the surrounding highway network.

Based on the level of information submitted in support of the planning application it is concluded that the proposals to drill a vertical core well on land at Dinnington Road in Woodsetts would not result in a severe impact on the highway network.

Following your review of the above documents, you have requested further clarification and additional information to inform Rotherham Metropolitan Borough Council (RMBC), the Local Highway Authority.

For ease of reference, we have provided in your comments in bold and provide our response below.

However, it is not explained what is considered to be an HGV. The Transportation Unit considers an HGV to be a goods vehicle which has an operating weight exceeding 7.5 tonnes (this being the definition in the Road Traffic Regulation Act 1984). When the existing flows are interrogated using this definition, a significantly lower number of HGV's would be revealed and consequently a higher percentage increase in HGV activity resulting from the development.

Survey data, provided by an independent survey company (under the instruction of Curtins), has been used to derive the baseline HGV percentages. The vehicle classification was based on the number of axles and the wheelbase. See enclosed vehicle classification as provided by the survey company. Vehicle class 4, TB2 (two axle truck or bus) upwards) has been classified as HGV.

For the purposes of the assessment traffic it has been considered that all vehicles below 7.5tonnes are classified as light vehicles and vehicles above 7.5tonne classified as HGV. It is important to note that majority of the 3.5tonne to 7.5tonne traffic movements shown in the development trip generation relates to the movement of staff/crew. It is anticipated that the transport of staff/crew members would be undertaken with minibuses and therefore these cannot be classified as buses/HGVs

The report considers the impact of the development traffic using Guidelines for the Environmental Assessment of Road Traffic (Institute for Environmental Assessment). The Transportation Unit does not use these guidelines when considering the traffic impact of a development and I would refer the agents to the Council's adopted guide, "Transport Assessments, Travel Plans and Parking Standards – Good Practice Guidance" when preparing the addendum referred to above.

Curtins has undertaken a detailed traffic and transport impact assessment to demonstrate that the exploration proposals can be undertaken in accordance with local and national planning policy. It has been demonstrated that the number of vehicle movements generated by the scheme during the temporary planning application

period is minimal and can be suitably accommodated by the site access and will not have a severe impact on local highway network in terms of safety, capacity and transport related environmental considerations.

It has also been demonstrated that any impact on existing and future users of the road can be suitably mitigated against as part of the agreed Traffic Management Plan.

Curtins has reviewed the RMBC document, “*Transport Assessments, Travel Plans and Parking Standards – Good Practice Guidance*”, however this document does not provide any thresholds regarding the level of impact. Page 26 of the document provides a table which highlights the threshold for traffic generation at which Transport Assessments may be required. The relevant traffic thresholds within the Table are highlighted below:

- Any development generating 30 or more two-way vehicle movements per hour; and
- Any development generating 100 or more two-way vehicle movements per day etc.

It has been demonstrated in the Environmental Report that the proposal will generate a maximum of 70 vehicle movements per day. This is equivalent to a maximum of 6 movements per hour based on a 12-hour working day.

Given the proposals do not achieve the above highlighted thresholds, it is considered that the IEMA guidance for impact assessment is the most appropriate method to assess the impact of the development on the highway network.

The submitted “Draft Traffic Management Plan” in Appendix 3-3 of Section 7 does not relate to the highway network around Woodsetts and should be revised.

An updated TMP, including revised Drivers Pack, is enclosed with this letter.

It is stated that it is intended to relocate the 30 mph speed limit to the west of the site access. However, the existing limit is appropriately located ie. on the edge of the built-up area and we would not agree to a relocation. Accordingly, the suitability of the access in terms of visibility and speed of traffic travelling along this part of Dinnington Road should be assessed on the basis of the existing situation.

This statement reflects our earlier intention to relocate the speed limit, which was changed following pre-application consultation with the Council. RMBC Highways were of the view that the change in speed limit was not be required. This was left in the report in error. It is not intended to change the speed limit as part of the development proposals. Drawing 65863-06002 enclosed shows the visibility splays based on the existing speed limit (60mph) of the road. This shows that the required visibility of 4.5m x 215m is achievable within the adopted highway boundary.

The route along the A57 between Anston Crossroads and Gateford Roundabout involves crossing 2 No. structures which may present issues for abnormal loads. This should be discussed with my colleague Fairuz Mitchell in due course (01709-822974)

It is noted that the preferred Access Route travels along the Anston Brook bridge and the bridge over the Shireoaks railway line. Curtins undertook a site visit on Friday 21st July 2017 to observe the existing highway infrastructure in the vicinity of the site and to assess any existing constraints that may impact on the ability to access the site along the preferred Access Route. This review did not indicate any weight restrictions on the structures identified above with 16m Articulated Vehicles observed using these structures. Notwithstanding this, Curtins will consult with the appropriate team within RMBC to discuss any potential impact of abnormal loads.

I trust that the above clarifications provide further evidence that the impact of the proposed development will not have a severe impact on the local highway network.












Your Sincerely,



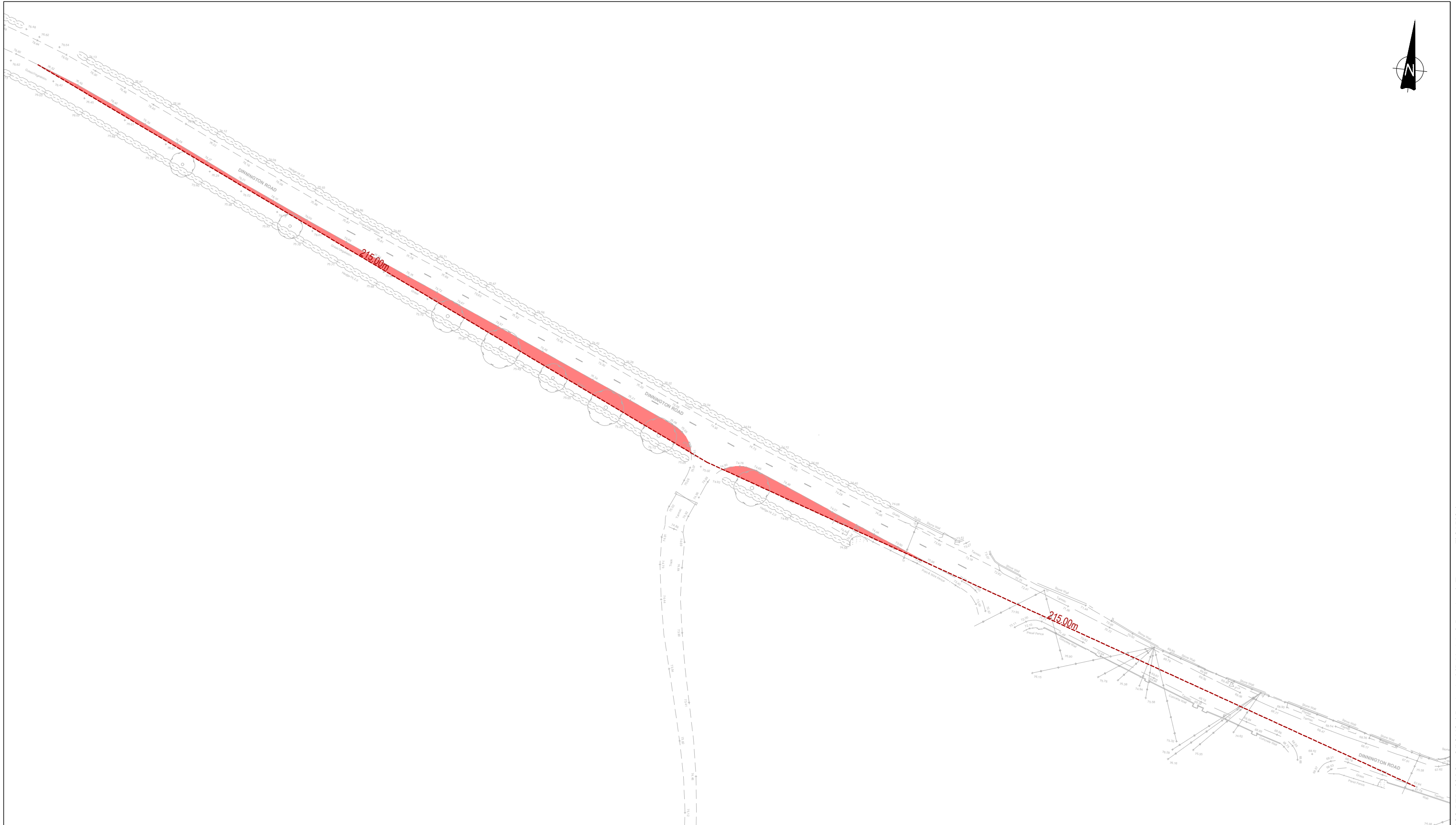
Aaron Tilley
Associate
For and on behalf of **Curtins**

Vehicle Classification

ATC VEHICLE CATEGORIES

Axles	Groups	Description	Class		Parameters	Dominant Vehicle	Aggregate
2	1 or 2	Very Short - Bicycle or Motorcycle	MC	1	$d(1) < 1.7\text{m}$ & axles=2		
2	1 or 2	Short - Sedan, Wagon, 4WD, Utility, Light Van	SV	2	$d(1) \geq 1.7\text{m}$, $d(1) \leq 3.2\text{m}$ & axles=2		
3, 4 or 5	3	Short Towing - Trailer, Caravan, Boat, etc.	SVT	3	groups=3, $d(1) \geq 2.1\text{m}$, $d(1) \leq 3.2\text{m}$, $d(2) \geq 2.1\text{m}$ & axles=3,4,5		1 (Light)
2	2	Two axle truck or Bus	TB2	4	$d(1) > 3.2\text{m}$ & axles=2		2 (Medium)
3	2	Three axle truck or Bus	TB3	5	axles=3 & groups=2		
>3	2	Four axle truck	T4	6	axles>3 & groups=2		
3	3	Three axle articulated vehicle or Rigid vehicle and trailer	ART3	7	$d(1) > 3.2\text{m}$, axles=3 & groups=3		3 (Heavy)
4	>2	Four axle articulated vehicle or Rigid vehicle and trailer	ART4	8	$d(2) < 2.1\text{m}$ or $d(1) < 2.1\text{m}$ or $d(1) > 3.2\text{m}$ axles = 4 & groups>2		
5	>2	Five axle articulated vehicle or Rigid vehicle and trailer	ART5	9	$d(2) < 2.1\text{m}$ or $d(1) < 2.1\text{m}$ or $d(1) > 3.2\text{m}$ axles=5 & groups>2		
>=6	>2	Six (or more) axle articulated vehicle or Rigid vehicle and trailer	ART6	10	axles=6 & groups>2 or axles>6 & groups=3		
>6	4	B-Double or Heavy truck and trailer	BD	11	groups=4 & axles>6		
>6	>=5	Double or triple road train or Heavy truck and two (or more) trailers	DRT	12	groups>=5 & axles>6		

Site Access Visibility



KEY: 4.50x215.00m VISIBILITY SPLAYS (ADJUSTED TO BONNET LENGTH)
 [Red shaded area] AREA TO BE KEPT CLEAR OF VEGETATION/BRANCHES

GENERAL NOTES:

P03	Visibility Splays for 60 mph	27/09/17	DD
P02	Vertical signs added	12/09/17	DD
Rev:	Description:	Date:	By:



Merchant Exchange, 17-19 Whitworth Street, West Manchester M1 5WG
 0161 236 2394
 manchester@curtins.com
 www.curtins.com

Civils & Structures • Transport Planning • Environmental • Infrastructure • Geotechnical • Conservation & Heritage • Principal Designer
 Birmingham • Bristol • Cambridge • Cardiff • Douglas • Dublin • Edinburgh • Glasgow • Kendal • Leeds • Liverpool • London • Manchester • Nottingham

Project: INEOS - PEDL 304/21		Status: PRELIMINARY	
Drg Title: SITE ACCESS VISIBILITY SPLAYS		Drawn By: DD	Checked By: FF
		Designed By: DD	Date: 18/08/17
		Scale: 1:500	
Project No:	Originator:	Zone:	Level:
65863	CUR	00	XX
DR	TP	06002	P03

Traffic Management Plan

INEOS Shale
Traffic Management Plan
PEDL 304
Woodsetts

This document provides a Draft Traffic Management Plan and includes initial route management risks and mitigation options which will be developed in consultation with Highways Authority to form the proposed Route Management Strategy.

DRAFT

Contents

1. Traffic Management Approach
2. Site Access Route
3. Access Route Risk Assessment
4. Escort Vehicle Operations
5. Site Traffic Management Layout
6. General Rules
7. Enforcement

1.0 Traffic Management Approach

The management for traffic movement is a key consideration for INEOS. INEOS has used a four phase approach to traffic management policy.



During the Evaluate stage, a desktop study was undertaken to identify all possible access routes to the site. This was followed by a physical assessment of the routes to identify suitability for use by the vehicles required to get to the site, including aspects such as:

- road cambers,
- bends,
- gradients,
- cables,
- hedgerows or trees (from a visibility perspective),
- passing places,
- road conditions such as mud from farming and condition of road surfaces.
- Use of the road network by sensitive users such as horse riders, cyclists or pedestrians.
- low bridges,
- narrow roads and weight restricted routes, and
- Other road users such as distribution centres, industrial estates and quarries.

Any unsuitable routes were ruled out at this stage. A second survey of routes and the surrounding area was also carried out by a specialist traffic planning consultant to validate the initial findings, undertake more detail assessment of baseline traffic flows and environmental aspects and complete swept path analysis for potentially constrained sections of the route.

Once a preferred route was identified, a designated route management plan was developed for access and egress by all traffic. This included consideration of the potential hazards identified and the suitable preventative measures to mitigate or manage these elements. Some element of mitigation to be implemented are focused on good logistics management principles such as minimising the equipment brought to site, utilising a staging area where small loads are consolidated and reducing waste generation and disposal where possible.

During the planning of the route INEOS has tried to avoid sensitive areas such as schools, leisure centres, town centres and areas of congestion. Where avoidance has not been possible then mitigation measures, such as the suspension of traffic movements during school drop off and collection times or peak traffic periods could be incorporated into the TMP.

Some hazards identified during the evaluation phase will require physical control measures to be implemented. These will be set out in detail and agreed in the Route Management Strategy with the Highways Authority. The control measures which have been considered include the use of banksman and escort vehicles, speed humps, traffic barriers, signage, temporary traffic lights, temporary parking restrictions and escort vehicles. The likely options to be implemented have been outlined in Section 3.0.

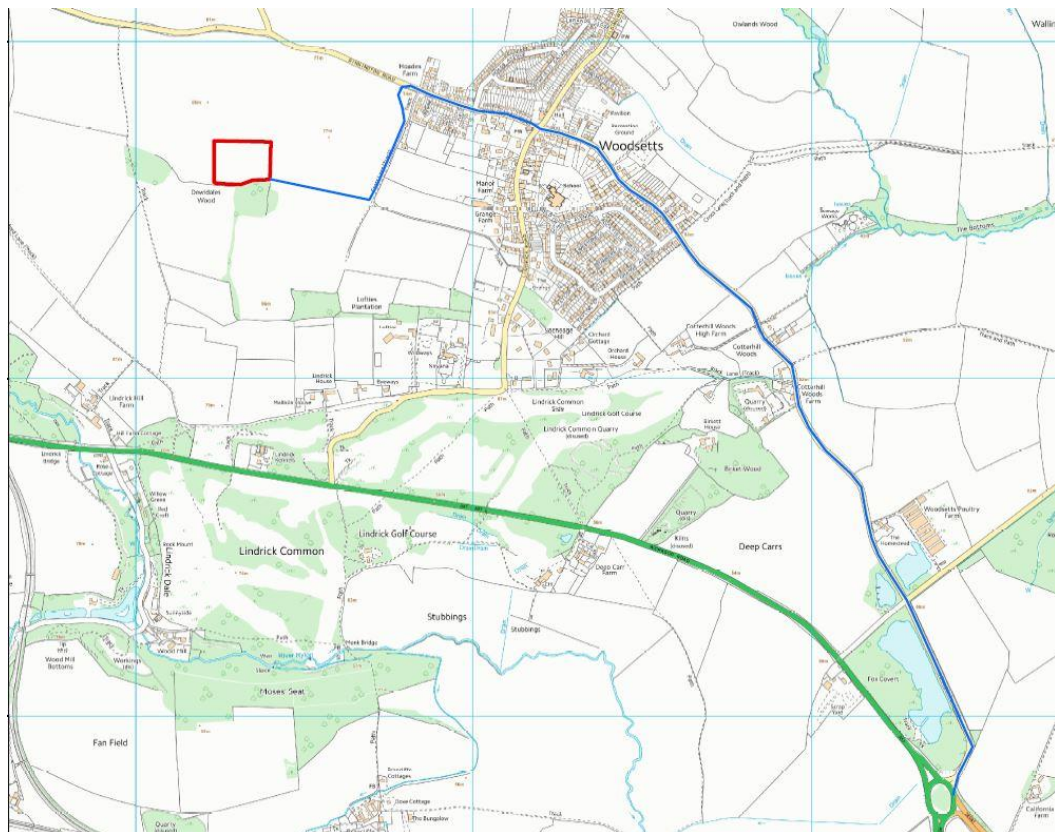
In order to maintain compliance once activities are under way, all drivers will be issued with the Drivers Pack (draft available in Appendix 2) which will include maps and a copy of the TMP to ensure that procedures and plans are followed. The access route to site will be clearly signposted

to avoid vehicles taking incorrect routes. Training session with all INEOS personal and contractors will be carried out to ensure all personal understand importance of the TMP and the control measures that have been put in place.

2.0 Site Access Route

The site access route(s) set out below are the principle route options for Heavy Goods Vehicles (HGVs, over 7.5 tonnes) from the site to the Motorway network. Much of this route is part of the strategic road network (A roads). The control measures and requirements of the Route Management Strategy will be applied to the section of the route from A57 to the site (as shown in the map below).

The project may utilise the use of local suppliers. This may require local delivery route to be utilised. However, **all** site traffic will be required to join the site access route at the junction between the A57 and Woodsetts Lane. This applies to all traffic leaving the site as well.



Directions

- At the roundabout take the exit onto Woodsetts lane towards Woodsetts
- Continue on Woodsetts Lane through Woodsetts.
- At the site entrance turn left.

3.0 Access Route Risk Assessment

A near site assessment of the well location was conducted, assessing any potential transport conflicts incurred from the point of exiting a main road and reaching the site entrance. There are some risks outlined in the table below, along with control measures which should be implemented to mitigate the risks

Risk	Mitigation
On Woodsetts Lane the road becomes narrow.	<p>Install signage to warn other road users of potential presence of site traffic.</p> <p>Where required for larger loads utilise the escort vehicle and traffic management personnel to ensure trucks can navigate Woodsetts lane safely.</p>
The above mentioned roadway should provide no issue for the majority of vehicle movements. However during operations, particularly where there is the movement of STGO loads or large convoys, the Escort Vehicle Operator should monitor the situation.	<ol style="list-style-type: none"> 1. Where appropriate to maintain road safety the escort vehicle should turn onto Woodsetts Lane with site traffic and escort along Woodsetts lane, through Woodsetts and to site. Driving at a moderate speed to ensure there is enough time for larger loads to egress safely. 2. Signage should be placed on the verges of Woodsetts Lane to warn other road users of the approaching site entrance throughout the operation.
<p>There are Z bends on Woodsetts Lane and whilst they are not severe their angle and incline means they still present some risks:</p> <ol style="list-style-type: none"> 1. The bends are tight and present low visibility for drivers 2. Potential for trucks to encounter cars whilst navigating the bends causing issue 3. Potential for trucks to become stuck if they encounter any unexpected or fast opposing traffic whilst passing through the bends 	<p>Utilise the escort vehicle and traffic management personnel to ensure trucks can navigate the bends unimpeded. Distribute leaflets to all homes in the surrounding area with details of potentially slow moving vehicles and escort vehicles on the roadways controlling traffic.</p>
Traffic will be passing through Woodsetts village	<p>Utilise the escort vehicle and traffic management personnel to ensure trucks can navigate through Woodsetts unimpeded.</p>
There may be informal parking along Woodsetts lane in Woodsetts .	<p>Ensure sufficient signage for pedestrians and vehicles is in place to warn all road users of changes in traffic volume and type.</p>
Dinnington Road is narrow at the proposed site entrance and as such does not suit a 90 degree turn when entering and egressing the location. This may also cause excessive wear and tear on road surfaces and vehicles.	<p>The site design should consider this and angle the site entrance in a manner that mitigates the requirement for a 90 degree turn whilst still providing drivers with the correct angle for maximum visibility.</p>
There is a potential for trucks to approach location at a point which is not appropriate	<ul style="list-style-type: none"> - This can be mitigated by utilising external staging areas, where trucks are required to stage and call ahead to request an escort to location if required. There should be an appropriate staging to both the north and south of the motorway junction to prevent trucks being required to drive unnecessary miles. Staging areas must be previously agreed and have enough capacity to stage at least the maximum number of trucks expected at location on any day. - Drivers will also be provided details of the abort route, which will be invoked where local circumstances change between leaving the staging point and getting to the site area. - There should be a consolidation point where trucks who have become separated en route from the staging area can again be safely entered into convoy before approaching the location. NOTE: this must not be used as a staging area

Further to the above noted mitigation measures, some general INEOS Shale traffic management operating principles should be applied:

- Where required an escort vehicle should be utilised, as described in Section 4.0 of this document
- Road sweeping services should be contracted to sweep the road from the site entrance to the Dinnington Road on a weekly basis. This should be increased to daily during the construction and mobilisation phases
- Gritting services should be privately contracted to ensure the Dinnington Road remains safe for site vehicles in wintry conditions. This will also increase road safety for other road users
- Separate staging areas will be utilised to control traffic approaching site. Vehicles, materials and other supplies can be staged here until an appropriate ingress slot is available. The location of these staging areas will be close to the major road network and not impact the proposed route to site.

4.0 Escort Vehicle Operations

The escort vehicle and traffic management operatives are the fundamental part of the TMP and as such they must:

- Ensure escort vehicle operatives are trained in the traffic management plan and any sensitivities around it.
- Have sufficient personnel to ensure escort vehicles are available at all times, including when more than one may be required
- Ensure there are other traffic management operatives with adequate competencies and equipment available to cover other road junctions mentioned above

In order to reduce the times when the local road network is impacted and facilitate escort vehicle operations, vehicles and in particular trucks will approach and leave the location in appropriate sized small batches. The size of these batches will depend on a number of factors including time of day, operational stage, space on location and be agreed by the escort vehicle operatives.

Escort vehicles will also act as convoy vehicles during certain parts of the journey and control the speed of vehicles approaching and or leaving the location.

There may be periods during site construction, mobilisation and demobilisation of drilling equipment where more than one escort vehicle is required to facilitate safe and efficient operations.

5.0 Site Traffic Management Layout

Traffic management for the location will require signage and other traffic management equipment to be placed at strategic points along the route. Please see Appendix 1.

6.0 General Site Rules

- All abnormal loads, wide vehicles, low loaders and cranes **MUST** be escorted from the holding area.
- A reverse parking policy will be imposed on site.
- Deliveries will only be booked and accepted between 07:30 hours and 18:30 hours. Drivers attempting to deliver out of these hours will be turned away.
- Signs will be erected at the holding area instructing **ALL** vehicles to stop, telephone site

- logistics personnel and wait until called forward to site.
- Vehicles waiting in the holding area or on site will be instructed to switch off engines to reduce noise and air pollution.

7.0 Enforcement

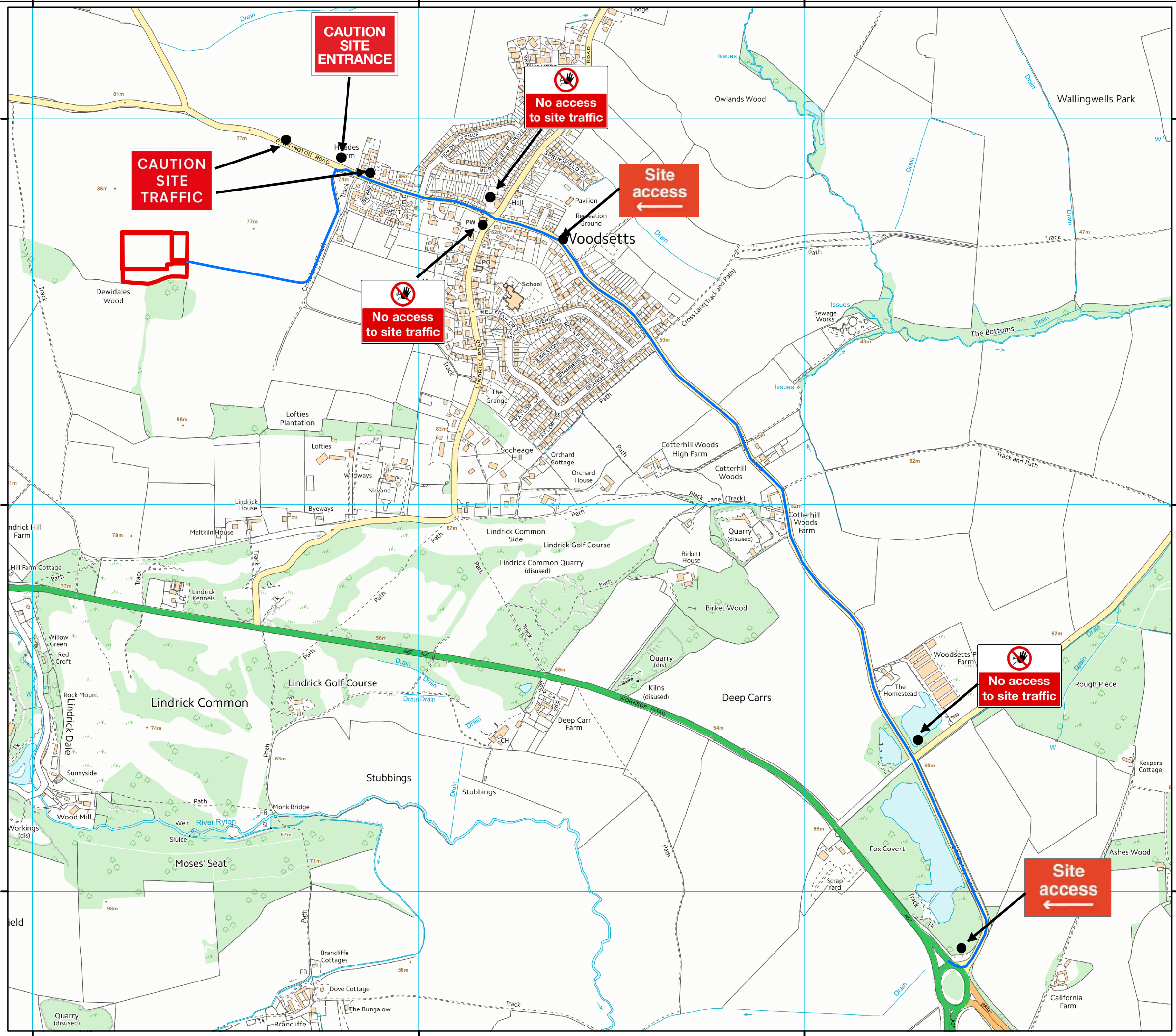
Traffic management planning success relies on the proper implementation and adherence of the plan by INEOS Shale and the supply chain. Ensuring this requires the following:



- Wherever possible INEOS Shale should control logistics to and from the location
- Where there is a requirement for suppliers to control transport they must:
 - Provide TMP awareness and compliance training to all personnel attending location.
 - Ensure all drivers have a copy of the Drivers Pack.
 - Have TMP specific KPI's in their contract with INEOS Shale including financial penalties for non-compliance.

8.0 Site Contacts

- Wellsite Logistics Operative - 07X XXX XXX
- Duty Toolpusher (Site Supervisor) - 07X XXX XXX
- Logistics Manager - 07X XXX XXX
- INEOS Office – XXX XXXXXXX

Appendix 1 – Traffic Management Layout.



-  Indicative Access Route
-  Site Location

N

0 95 190 285 380 Metres

INEOS Shale

INEOS Shale
38 Hans Crescent, Knightsbridge
London, SW1X 0LZ
www.ineosshale.com

Project:	PEDL 304/21 - East Midlands	
Title:	Site Access Traffic Control Plan	
Date: 21/12/2017	Scale: 1:10,000 @A3	CRS: BNG
Drawn By: JM	Checked By: LC	Rev:
Plan No:	P304-021	

Appendix 2 – Drivers Pack

INEOS Shale
Traffic Management Plan
Woodsetts
PEDL 304
Drivers Pack

Contents

1. Introduction
2. Attending Site
3. Travelling to Location
4. Leaving Location
5. Contact Numbers
6. Maps

1.0 Introduction

INEOS Shale develops and implements a Traffic Management Plan (TMP) to reduce the risk of transport operations in areas surrounding our operational locations and minimise the impact on local communities.

Drivers not complying with the TMP or Traffic Management Personnel will be subject to sanction in accordance with the INEOS Shale Supplier TMP Compliance System, as discussed during the driver TMP awareness training.

2.0 Attending Staging Area

Drivers attending site **Must** adhere to the following:

- **NO** vehicles of any size must attend location without prior agreement
 - Drivers will be instructed which staging area to report to and the arrival time
- **All** vehicles must report to the Staging areas outlined in Map 1
- Drivers **Must** read, understand and plan for travelling to the staging area before starting their journey. Drivers observed attempting to read maps whilst in motion will be subject to action in line with the INEOS Shale Supplier TMP Compliance System
- When arriving at the Staging Area, drivers **Must** report to the Wellsite Logistics Operative
- Where applicable drivers **Must** plan their journey to ensure any rest breaks required are taken in advance of the stipulated arrival time at the staging point. Due to location size, INEOS Shale cannot guarantee drivers the ability to take rest breaks on location.

3.0 Travelling to Location

When leaving the staging area to travel to location, vehicles will travel in small batches to minimise disruption to other road users. Where required **Some** vehicles travelling to location will be escorted by an escort vehicle. The Escort Vehicle Operator will brief drivers regarding the route, how relevant sections are to be approached and any day to day issues regarding access.

Drivers **Must**:

- Follow the escort vehicle, utilising the prescribed access route as clearly marked in Map 2
- Obey the instructions of the Escort Vehicle Operative
- Report immediately if they become separated from the convoy
- Follow instructions of traffic management personnel (who will be clearly identified)

Where circumstances change at location after the convoy has joined A57 and the Wellsite Logistics Operator or the Escort Vehicle Operator decide the journey should be aborted, this will be done prior to entering Woodsetts Lane. In these circumstances, all vehicles will continue along

the A57 to the roundabout, turn and head back along the A57 to their destination along the prescribed route.

4.0 Leaving Location

When leaving location **All** vehicles must follow the prescribed route and if they are being escorted vehicle they must remain in convoy until reaching the A57, where the prescribed route must be followed. Where larger loads are required to remain under escort beyond the A57, the Escort Vehicle Operative will advise accordingly.

5.0 Contact Numbers

The following contact numbers should be used at all times during the operation:

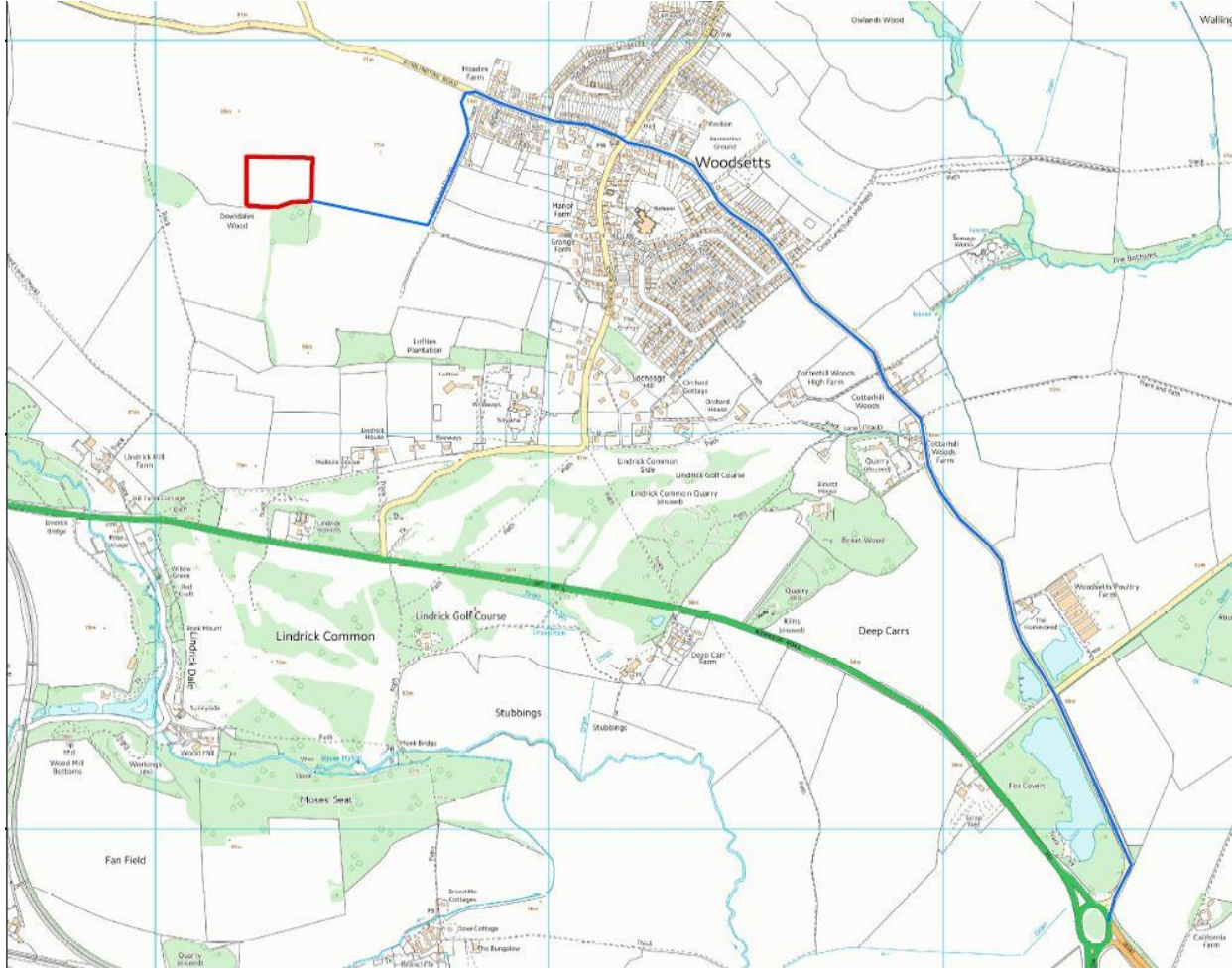
Contact	Contact Number
Arranging deliveries to location	XXX XXX XXX XXX
Location Contact (Primary)	XXX XXX XXX XXX
Location Contact (Secondary)	XXX XXX XXX XXX
Escort Vehicle Operator	XXX XXX XXX XXX

6.0 Maps

Map 1 – Staging Areas

Insert map of staging areas

Map 2 – Prescribed Route



Our Locations

Birmingham

2 The Wharf
Bridge Street
Birmingham B1 2JS
T. 0121 643 4694
birmingham@curtins.com

Bristol

3/8 Redcliffe Parade West
Bristol
BS1 6SP
T. 0117 925 2825
bristol@curtins.com

Cardiff

3 Cwrt-y-Parc
Earlswood Road
Cardiff
CF14 5GH
T. 029 2068 0900
cardiff@curtins.com

Douglas

Varley House
29-31 Duke Street
Douglas Isle of Man
IM1 2AZ
T. 01624 624 585
douglas@curtins.com

Edinburgh

35 Manor Place
Edinburgh
EH3 7DD
T. 0131 225 2175
edinburgh@curtins.com

Kendal

28 Lower Street
Kendal
Cumbria LA9 4DH
T. 01539 724 823
kendal@curtins.com

Leeds

Rose Wharf
Ground Floor
78-80 East Street
Leeds
LS9 8EE

Liverpool

Curtin House
Columbus Quay
Riverside Drive
Liverpool L3 4DB
T. 0151 726 2000
liverpool@curtins.com

London

Units 5/6
40 Compton Street
London
EC1V 0BD
T. 020 73242240
london@curtins.com

Manchester

Merchant Exchange
17-19 Whitworth Street West
Manchester
M1 5WG
T. 0161 236 2394
manchester@curtins.com

Nottingham

7 College Street
Nottingham
NG1 5AQ
T. 0115 941 5551
nottingham@curtins.com

**Appendix 7: Letter to RMBC Planning 21
December 2017**

21 December 2017

Delivered by email

Anthony Lowe
 Planning Regeneration and Transport Service
 Rotherham Metropolitan Borough Council
 Riverside House
 Main Street
 Rotherham
 S60 1AE

Ref: INEM3011

Dear Anthony

RB2017/1577: CONSTRUCTION OF A WELL SITE AND CREATION OF A NEW ACCESS TRACK, MOBILISATION OF DRILLING, ANCILLARY EQUIPMENT AND CONTRACTOR WELFARE FACILITIES TO DRILL AND PRESSURE TRANSIENT TEST A VERTICAL HYDROCARBON EXPLORATORY CORE WELL AND MOBILISATION OF WORKOVER RIG, LISTENING WELL OPERATIONS, AND RETENTION OF THE SITE AND WELLHEAD ASSEMBLY GEAR FOR A TEMPORARY PERIOD OF 5 YEARS ON LAND ADJACENT TO DINNINGTON ROAD, WOODSETTS, ROTHERHAM

There are a number of consultee comments now available on the Council's website, and we thought it would be helpful to provide you with our response to the issues raised.

Comment	INEOS Response
Yorkshire Wildlife Trust (YWT) - Phase 1 habitats map	
<p>The areas of ancient woodland habitats detailed in the Phase 1 habitats map (Figure 4.1 in the Environmental Report) appear to be incorrect. The Ancient Woodland Inventory (taken from Magic Map (http://www.natureonthemap.naturalengland.org.uk/MagicMap.aspx) clearly shows two areas of ancient woodland habitat which will be adjacent to the site. The Applicant has however only mapped one area of ancient woodland adjacent to the site.</p> <p>It is therefore unclear as to whether the impacts on both pieces of ancient woodland have been fully assessed.</p>	<p>The section of the Dewidales Wood Local Wildlife Site (LWS) to the west of the site was not identified with a coloured polygon on the Phase 1 habitats map (Figure 4.1) to represent the JNCC Habitat Code (A1.1.1 - Broadleaved woodland - semi-natural). We acknowledge that this should have been done. However, we can confirm that the assessment has addressed potential impacts from the proposal on both 'wooded' areas of the Dewidales Wood LWS / ancient woodland. As such the site description section (4.3.1) states:</p> <p><i>'There is an ancient semi-natural woodland (Dewidales Wood) to the south of the site (approximately 30 m away from the application boundary) and another small block</i></p>

1 New York Street
 Manchester
 M1 4HD

T 0161 233 7676 turley.co.uk

Comment	INEOS Response
	<p><i>of ancient semi-natural woodland over 100 m to the west of the site. These two woodlands are connected by a defunct species-poor hedgerow which supports tree stands located to the south of the site. The two woodlands and the hedgerow collectively make up Dewidales Wood Local Wildlife Site'.</i></p> <p>Additionally the bat survey report (Appendix 4-1 of the Environmental Report) figures illustrate that both parts of the woodland have been included in the fieldwork undertaken for the assessment.</p> <p>Discussion of potential impacts on the woodland habitat features of the LWS are predominantly focussed on the area to the south of the site, being the closer of the two (approximately 70 m closer to the site than the area of woodland to the west).</p>
<p>We also note that the distance of the site to Dewidales Woods Local Wildlife Site and Ancient Woodland in Table 4.1 is also incorrect. Table 4.1 states that the distance of the site to the ancient woodland is 0.3km (300m), when it is in fact 30m.</p>	<p>The separation distance between the site and the Dewidales Woods Local Wildlife Site and Ancient Woodland has been reported in error in Table 4.1 of the Environmental Report as 0.3 km, instead of 0.03 km. The separation distance of 30 m is correctly reported throughout the remainder of the Ecology chapter and Executive Summary of the report. We can also confirm that the 30 m separation distance forms the basis of the assessment as submitted.</p>
<p>The proposed development has the potential to impact the ancient woodland through increased noise, disturbance and lighting. We therefore advise that such impacts are assessed for both sections of ancient woodland</p>	<p>We can confirm that the assessment has considered the potential impacts to both sections of the Dewidales Wood LWS ancient woodland habitat.</p>
<p>YWT - breeding bird surveys</p>	
<p>We note that Table 4.4 in the Environmental Statement states that no birds were observed on the site. We would like to highlight that this does not mean that the site is not used by breeding birds. The Phase 1 habitat survey was conducted in July 2017. As the breeding season starts in March/ April many young birds of species likely to use the site (lapwing and skylark in particular) will have already fledged by the date of the Phase 1 survey.</p>	<p>It is noted that the planning application was supported with an Environmental Report as it was confirmed through Screening that a full EIA and ES was not required.</p> <p>Table 4.4 of the Environmental Report reflects the outcomes of the Phase 1 habitat survey. It also goes on to recognise that breeding birds (including the species mentioned) may utilise the proposal site.</p>
<p>We note the mitigation measures proposed by</p>	<p>With respect to the suggested offsite enhancement</p>

Comment	INEOS Response
<p>the applicant to reduce impacts on breeding birds. Whilst we welcome the steps to be taken to discourage breeding birds from the site, in particular farmland birds, there will still be a net loss of 1.86ha of breeding bird habitat as a result of the scheme, in addition to the displacement of birds in the adjacent areas. We therefore advise that offsite enhancement measures are undertaken in areas of the adjacent fields, away from the site, to compensate for the loss of available breeding habitat. Skylark and lapwing are both listed as Priority Species in the UK Biodiversity Action Plan, therefore development should not be permitted if it will lead to net losses in their habitat.</p>	<p>measures in areas of the adjacent fields, away from the site, to compensate for the loss of available breeding habitat, the applicant is unable to commit to activities on land over which it has no control. Therefore the applicant has sought to reduce the project footprint as much as possible. We consider that the loss of 1.86ha of habitat, in the context of the remaining field system under the same management regime and the temporary nature of the development, does not represent a significant enough loss to warrant requiring specific enhancement proposals for breeding birds. As noted below, the development does seek to offer ecological enhancement in other forms where this is possible.</p>
<p>YWT - Ecological enhancements</p>	
<p>Paragraph 4.4.3 indicates that hedgerow enhancements may be possible as part of the scheme. Paragraph 118 of the NPPF states that ecological enhancements should be incorporated into developments. In addition, Paragraph 5.3.4 of the Overarching National Policy Statement for Energy (EN-1) also states that Applicant's should enhance biodiversity:</p> <p><i>'The applicant should show how the project has taken advantage of opportunities to conserve and enhance biodiversity and geological conservation interests.'</i></p> <p>We therefore advise that ecological enhancements are delivered as part of the proposed scheme, and secured by an appropriately worded condition.</p>	<p>We note that Para 118 of the NPPF is not explicit in saying that enhancements should be required. Rather, it asks the LPA's should aim to enhance biodiversity by applying a series of principles, which includes <u>encouraging</u> the incorporation of biodiversity in and around developments. Where there is <u>significant</u> harm that cannot be avoided, mitigated or compensated for the permission should be refused. We also note that as the application is not a nationally significant infrastructure project, EN-1 is not directly applicable in this case. As outlined within the application, the ecological enhancements identified would be subject to landowner approval. The landownership of the hedgerow would need to be confirmed and landowner agreement to the enhancement measure obtained, which are aspects beyond the applicant's control and therefore should not be subject to a planning condition. The applicant is willing to attempt to secure these enhancements, but securing enhancements is not a policy requirement, and we do not consider that the development results in significant effect that warrant significant compensation efforts to be made.</p>
<p>Woodland Trust – Buffer Zones</p>	
<p>The applicant has proposed a 30 m buffer between the proposed well site and the ancient woodland. However, Natural England's standing advice (recently updated) specifies that a buffer</p>	<p>It is noted that Natural England's standing advice on ancient woodland was updated following the submission of the proposal application. The standing advice is not a clear requirement for a 50m buffer, It states that</p>

Comment	INEOS Response
<p>of 50 m is required to protect ancient woodland from disturbance and pollution. The Standing advice is a 'material' planning consideration. This means that the Planning Authority should take it into account when making decisions on relevant planning applications. It replaces the need for Natural England to give an individual response to planning consultations, but it has the same authority as an individual response</p>	<p>mitigation measures “could” include “(depending on the scale and impact of development)” a buffer of at least 50m for “pollution or trampling”. We do not consider that there will be any pollution or trampling as a result of this development.</p> <p>The application clearly identifies the mitigation measures embedded to prevent and minimise offsite pollution and disturbance, based on the provision of a 30 m buffer. As identified in the Environmental Report, no significant effects (such as loss or deterioration of ancient woodland or any of the direct and indirect impacts included within the standing advice) were predicted on the ancient woodland with a 30 m buffer.</p> <p>This includes the provision of a 'self-contained' drainage design to capture any potentially contaminated surface run-off for offsite treatment and disposal.</p> <p>No impacts to Dewidales Wood are predicted from changes in surface water run-off patterns from the proposal. Changes in infiltration of rainwater are expected to be minor due to the small area of the site and the availability of surrounding permeable land surfaces. In addition, the existing topography of the site is such that surface water is expected to drain to the northeast away from the woodland (evidenced by field drain feature – See Environmental Report Appendix 8-1 Historic Air Photograph Analysis, plate 2).</p> <p>Impacts to bat species using the edge of the woodland and adjacent woodland have also been assessed, considering the results of a site light spill model which predicted that the proposal site may illuminate the northern edge of the east section of Dewidales Wood at height, largely over a five month period in Stage 2 of the works, with light levels of a maximum of 2.96 lux at a height of 15 m above ground level. Guidance from the Bat Conservation Trust ⁽¹⁾ suggests that low level lighting should be as directional as possible and be below 3 Lux at ground level. Guidance from Bat Conservation Ireland ⁽²⁾ also suggests levels of 3 Lux, or less, should be sought for flood lighting. The assessment concluded that even without any controls/ mitigation the impacts</p>

(1) Bat Conservation Trust & Institute of Lighting Engineers (2009) Bats and Lighting in the UK, *Bats and the Built Environment Series* BCT.

(2) Bat Conservation Ireland (2010) *Bats & Lighting, Guidance Notes for: Planners, Engineers, Architects and Developers*. BCI

Comment	INEOS Response
	<p>would be highly localised and would not be reasonably expected to adversely affect the conservation status of bats, even if a small number were temporarily disrupted from foraging along the woodland edge because of light spillage from the site.</p> <p>In terms of the potential impacts of development on ancient woodland, which is set out in the report, we consider that the following applies:</p> <ul style="list-style-type: none"> • damaging or destroying all or part of them (including their soils, ground flora, or fungi). This is not relevant as the development is not in the woodland to create direct disturbance. • damaging roots and understorey. This is not relevant as the development is outside Root Protection Zone (RPZ) and not amongst understorey. • damaging or compacting soil around the tree roots This is not relevant as the development is outside the RPZ of the trees in the woodland. • polluting the ground around them This is not relevant as the scheme design includes measures to prevent materials and surface water from going off site. The site is self contained.. • changing the water table or drainage of woodland or individual trees This is not relevant as the surrounding field drainage will be unchanged and measures will be in place to isolate the core well from the water table and minimise the in-flow of water to the well. • damaging archaeological features or heritage assets The ER includes archaeological assessment work and it is likely that further investigation will be undertaken under condition. There is currently no significant known archaeological constraint. • breaking up or destroying connections between woodlands and veteran trees

Comment	INEOS Response
	<p>There will be no loss of trees/ hedges related that could affect connectivity to the ancient woodland. The site is in the middle of an agricultural field and there will be no hedgerow loss as an existing access point will be used.</p> <ul style="list-style-type: none"> reducing the amount of semi-natural habitats next to ancient woodland <p>Due to the 30m buffer, the development will result in the temporary loss of agricultural land only.</p> <ul style="list-style-type: none"> increasing the amount of pollution, including dust <p>This will be minimised through dust control/ screening measures and other pollution will be controlled through site design measures, including the impermeable membrane.</p> <ul style="list-style-type: none"> increasing disturbance to wildlife from additional traffic and visitors <p>The site has a 30m buffer distance and there will be minimal night-time work with lighting designed to not affect species using the woodland, controls on traffic, and the site will be screened. The site will be securely fenced and no site traffic or visitors will be utilising the PROW network near the woodland, or the woodland itself.</p> <ul style="list-style-type: none"> increasing light pollution <p>The full site lighting design will only be required during the drilling period and this will be designed to meet the Bat Conservation Trust guidelines. Lighting during other periods such as construction would be notably less and only used when required during working hours.</p> <ul style="list-style-type: none"> increasing damaging activities like fly-tipping and the impact of domestic pets <p>This is not relevant.</p> <ul style="list-style-type: none"> changing the landscape character of the area <p>Changes to landscape character will be temporary and reversible.</p> <p>On this basis we do not consider that the development will affect the ancient woodland, and that the mitigation already embedded within the design as submitted</p>

Comment	INEOS Response
	protects and avoids potential impacts. Therefore changing the design to incorporate the guidance regarding a 50m buffer is not justified in this case.
The application is to drill an exploratory well and the applicant stresses that the proposed activity is temporary. However, it is clear from the application that the proposed operation of the exploratory well will be 24 hours a day, 7 days a week and that activities may be taking place on the site for up to five years.	As identified in Section 4 (<i>The Proposal</i>) the application allows for a 24/7 operations during drilling activities in Stage 1 (for up to 3 weeks) and Stage 2 (for up to 23 weeks) of the proposals. These stages are both within the first year of the five year proposal period.
The Trust is concerned that the proposed location of the test well appears to have been chosen in part because the applicant believes that the ancient woodland adjacent to the site will act as a natural barrier between the proposed activities and the human inhabitants of neighbouring villages. This use of naturally occurring features as a buffer does not take into account that the ancient woodland is not an inert feature, but a biologically complex irreplaceable ecosystem that will also be negatively affected by the proposed works at this site.	The site selection considers multiple constraints and the need to be located above suitable geology. The design of the proposals has responded to site specific features such as the ancient woodland (hence the inclusion of the 30 m buffer). The screening benefit of the woodland, as identified in the Planning Statement, is relevant when considering the effects of the proposals on surrounding receptors. It is therefore appropriate to identify this when considering the visual effects of the proposals. As noted above, where we consider the applicability of the 50m buffer, we do not consider there to be harm to the ancient woodland for the reasons listed above.
The developer is also keen to stress that the application does not relate to commercial operation of the site and that the assessment of the impacts should be confined to the exploratory well only. However, The Trust does not consider it unreasonable to assume that the applicant has chosen this site because they believe it has significant potential to become a commercially viable operation. If permission is granted to locate the exploratory well at this location and the applicant subsequently discovers that it is potentially viable on a commercial scale then it will be very difficult for the planning authority to refuse permission for the site to extract on a long-term basis.	Any potential development beyond that included within this application would be subject to a further planning approval process. Those proposals would need to be further considered and assessed at that time. It is not feasible or necessary to consider a future application which may never materialise.
In summary, the close proximity of the proposed test well to an ancient woodland could result in indirect impacts that irreparably damage an irreplaceable habitat. A buffer of at least 50m is required between the woodland and the proposed development.	See response above.

Comment	INEOS Response
Historic England – Setting	
<p>The Environmental Report does not assess the contribution that setting makes to the significance of the listed buildings and conservation area. It is therefore difficult to substantiate the conclusion that there will be no impact on this significance. Given the height of the structures involved, we consider there is potential for an impact on at least the Grade II listed Hoades Farm and the setting of the Conservation Area. The impact of increased traffic movement and the proposed access road should also be considered.</p>	<p>The contribution made by setting to the significance of identified designated built heritage assets and the designated Woodsetts Conservation Area has been considered as part the cultural heritage assessment and is addressed in Sections 8.3 (methodology) and 8.6 (impact assessment) of the Environmental Report. The assessment of setting was informed by the ZTV (Appendix 5-1 of the Environmental report). This recognises that the presence of the drill rig is a temporary aspect of the proposal (with a proposed duration of up to five months) and that the application is for a total period of five years. As a result of the distance between identified designated built heritage assets, the Woodsetts Conservation area and the components of the proposal, no significant impacts are predicted on these assets. The assessment included consideration of the potential for causing substantial harm as defined within the NPPF.</p> <p>Traffic analysis presented in Section 3 of the Environmental Report assessed the percentage change from baseline resulting from peak vehicle movements generated by the project comprising 70 total daily movements with 60 HGV movements, occurring for a period including site development and establishment. The assessment concluded that the proposal will not have a material impact on the highway network utilised as part of the proposal. The maximum impact of development traffic on links within the study area is predicted to comprise an approximate 1% increase over baseline. This is below the 10% threshold set out in <i>Guidelines for the Environmental Assessment of Road Traffic</i> (Institute for Environmental Assessment).</p> <p>The access route already exists and the development will not result in a significant increase in traffic that has the potential to affect its setting. We also note that the development is temporary and that the component which has greatest potential to cause an effect on setting (the drill rig) will only be in place for up to 5 months. This is a temporary and reversible proposal.</p>
Historic England - Vibration	
The issue of vibration and its impact on the	Section 2 of the Environmental Report has considered

Comment	INEOS Response
<p>significance of designated and undesignated heritage assets, particularly standing structures, has not been addressed in the Environmental Report. Paragraph 8.7 of the report concludes that the “proposal is not predicted to result in any significant effects / impacts on cultural heritage”, however, the potential impact of vibration has been discussed in the report. Historic England has provided advice on similar proposals elsewhere in Yorkshire, in relation to vibration monitoring on surrounding listed buildings and would be happy to provide further advice if that would be helpful.</p>	<p>the potential impacts of noise and vibration. This section concluded that there are no anticipated significant impacts that would arise as a result of ground-borne vibration resulting directly from the proposal. Data available for rigs used during conductor installation suggests that ground-borne vibration would be imperceptible at distances of greater than 20 m. Vibration levels from the drilling operations are not expected to be significantly different in magnitude. The well will be drilled using rotary drilling, not percussive drilling. Consequently, at the nearest designated built heritage asset (Hoades Farmhouse, located approximately 600 m to the northeast of the core well site) ground-borne vibration is not predicted to be perceptible.</p> <p>During the construction of the access road there is potential for short-term vibration effects at Berne Square residences, which are not part of the cultural heritage baseline, which are located approximately 25 m from the proposed access road at the closest point. This short-term impact is not predicted to be significant. Proposed mitigation measures, comprising the use of non-vibratory compaction equipment, would further reduce the effects of vibration. Hoades Farmhouse, the nearest designated built heritage asset to the access track, is located approximately 80 m from the access road construction works. This short-term impact is not predicted to be significant at Hoades Farmhouse given the increased separation distance between the construction activity and the asset. As a result, identified non-designated and designated built heritage assets are not predicted to experience a significant impact as a result of vibration.</p>
<p>Historic England – Site Investigation Prior to Determination</p>	
<p>Given that the report indicates there is a “high potential” for buried archaeology within the development site, Historic England would recommend further investigation prior to determination. We recommend you consult the South Yorkshire Archaeology Service for further advice.</p>	<p>The applicant will consult with South Yorkshire Archaeology Service. The applicant’s consideration of the geophysical and desk-based evidence for this application is that a suitable condition requiring the agreement and implementation of a strip map and sample WSI focused on the anomalies within the geophysical survey would be appropriate to the findings, likely significance of the anomalies and the nature of development.</p>

Comment	INEOS Response
Highways England	
Holding recommendation and various technical concerns.	INEOS has responded directly to HE and a copy of that letter is included with this letter.
RMBC Highways	
A number of inconsistencies and errors in the submitted transport work.	INEOS has responded directly to the Highways team and a copy of that letter is included with this letter.
Firbeck Parish Council	
Visual and landscape: Change in character from rural to industrial; large scale industrialisation of the Green Belt, Risks from geological faults; effects on wildlife; visual impact of drilling rig; operational hours; proximity to Woodsetts	The majority of these concerns are directly addressed in the submitted application pack, including the embedded mitigation in the scheme. However, we also note that RMBC landscape, South Yorkshire Mining Advisory Service and Environment Agency have no objection to this scheme. Comments from Yorkshire Wildlife Trust are addressed above.
Transport: Increase in HGV movements; pedestrian safety; damage to parked cars; pollution from HGV's	Highways comments are addressed in the letters accompanying this letter. However, we do note that RMBC Highways have only raised concerns about minor inconsistencies, rather than the principles of the development. Pollution concerns are addressed in the application documents.
Environmental: Impacts on air quality; noise and light pollution; risk of pollutants escaping; direct health risks from operations.	These concerns are directly addressed in the submitted application pack, including the embedded mitigation in the scheme. However, we also note that Environment Agency, which regulates the majority of these topics, have no objection to this scheme.
RMBC Rights of Way	
Wish to see site speed limits to ensure safety of adjacent PROW users	There will be an approximate 10m stand-off between site traffic using the access road and users on the PROW network. The site will be 30m away. We consider there to be adequate stand-off distances to ensure that there are no adverse effects, for example startling horses. The vehicles using the access road will be travelling single file and their speed will be controlled due to the nature of the vehicles and the nature and width of the road (a single file track of compacted aggregate surface) which will naturally discourage fast driving. However, if there is significant concern, INEOS would be willing to provide for a site based speed limit of 10mph, as this is likely to be close to the practical operating speed of most

Comment	INEOS Response
	vehicles when using the access road.
RMBC Drainage	
<p>Contradictions in documents, including between the application forms and submitted documents.</p>	<p>Unfortunately, the application forms do not have options which are wholly suited to the drainage solution for this scheme. The intention is to collect all water that lands or is brought to the sealed well pad area, and either re-use the water on site where appropriate or dispose of it by tankers taking it to an appropriately licensed facility. However, the areas outside of the sealed well pad area will not be lined and therefore any rainwater landing on these areas will be allowed to naturally soakaway.</p> <p>This system will apply across all development stages when the sealed well pad area exists. When the site is first being constructed, and when the restoration is in its latter stages and the liner has been removed, water will be allowed to soakaway and work will be avoided in adverse weather conditions to avoid any significant risk of silting of watercourses.</p>
RMBC Ecology	
<p>The Phase 1 Habitat survey was conducted within the optimum time of year (April – September). The Phase 1 Habitat map has no target notes; I would expect half a dozen at least, on a standard Phase 1 Habitat. Target Notes could have been provided at the track entrance, at the defunct hedge 100 m south of the entrance, where the track does a 90 degree right bend, one within the test well site itself, two or three for the northern edge of Dewidales Wood and one on the hedge connecting the two woodland blocks. No plant list has been provided with the Phase 1 Habitat survey (separate lists could have been provided for the track and well head location, a separate list for the wider Phase 1 Habitat area including the Dewidales Wood margins.</p>	<p>The Project site and its access road are within a single arable field and utilises an existing field entrance, and the habitats and plant species present are described in Section 4.3.3. Target notes would only have repeated the information in Section 4.3.3.</p>
<p>No information has been provided on the ages or any of the other details of the hedgerows. I realise that no hedgerows are to be removed but defunct hedges run alongside the access track and between the two blocks of Dewidales Wood and this is located very close to the test</p>	<p>The hedgerows are described in Section 4.3.3. The age of the hedgerows was not considered relevant as no hedgerows are to be removed (or directly affected) and therefore the status of the hedgerows in relation to the Hedgerow Regulations 1997 is not relevant.</p>

Comment	INEOS Response
well site. Notes on these could have been provided in the Phase 1 Habitat Survey.	
Local Nature Reserves are referred to as a non-statutory designation in the report which is incorrect (Table 4.1 Anston Stones Wood). The Tropical Butterfly House has grassland as well as woodland and was partly notified for local flora (sainfoin).	This is an omission in the table, and the LNR should have been described as a statutory site.
Natural England's Standing Advice suggests that various surveys should be undertaken where woodland is adjacent to application sites. Whilst there is a narrow strip of arable land between the application sites and Dewidales Wood (East), I would regard the latter as effectively being adjacent to the application site. Since Dewidales Wood is ancient woodland and a Local Wildlife Site, I would have considered that a bat, badger and breeding survey of the site would have been necessary. Whilst I accept that access to Dewidales Wood was denied to the applicant, breeding birds could have been recorded from the margins of the wood using birdsong (the standard method for recording breeding birds), whilst badgers could have been recorded by trail cameras, night scopes, etc without entering the woodland. I accept that the track and test well site are likely to be of low habitat value for bats but this is not the case with Dewidales Wood or the hedgerow connecting them. The Bat Conservation Guidelines (Collins 2016) state that for moderate habitat suitability for bats, monthly transects should be undertaken along with monthly automated bat recordings. The applicant has conducted bat surveys in August and September only and may be criticised for this.	<p>See Woodland Trust response above with regards comments around Natural England's revised Standing Advice on offsets from ancient woodland and the assessed effects to Dewidales Woodland and/or the species utilising its habitat.</p> <p>With regards the surveys:</p> <ul style="list-style-type: none"> • Bat surveys were undertaken in August and September (optimal months for bat activity surveys) following the July Phase 1 Habitat survey. • As documented in Table 4.4 of the Environmental Report, the Phase 1 Habitat survey did not record any evidence of badgers across the survey area, including along the northern edge of Dewidales Wood. Badger surveys were not undertaken in Dewidales Wood due to access restrictions. An assumption of presence was made for the assessment of potential ecological impacts of the proposals following anecdotal reports of badgers using the wood. • Breeding bird surveys were not undertaken as discussed below as site access for the surveys in mid-July was too late in the year to gather breeding bird data in 2017.
Breeding bird surveys should also have been undertaken for the test well site, tracks, adjacent hedgerows and the arable fields shown on the Phase 1 Habitat Survey. Farmland birds have been declining more than other groups of birds and those that might be expected such as skylark, lapwing, grey partridge, yellowhammer and quail are either Red List (first four) or	The Phase 1 Habitat survey was undertaken in mid-July due to the timing of access to the land. This is late in the breeding season to confirm the presence of ground nesting species such as lapwing and skylark. Hence no breeding bird survey was possible in 2017.

Comment	INEOS Response
<p>Amber List (quail) species and consequently of enhanced nature conservation concern. Breeding bird surveys could have been undertaken over three or more visits in spring and this would not have been onerous or expensive in my opinion.</p>	
<p>Conditions that should be imposed if the application is granted, are as follows:</p> <ul style="list-style-type: none"> • Lights should be cowled or hooded, not be on long poles, be directed inwards and downwards and use suitable lighting so as to have the lowest possible impact on bats and other nocturnal wildlife. • Enhancement of the hedgerow between the two blocks of Dewidales Wood LWS as described in the Ecology Enhancements should be conducted (subject to the approval of the landowner). • If possible works are scheduled to avoid the autumn mating season for bats and would ideally occur November to March. • Habitat clearance works on the proposed site, that could affect habitat of ground nesting species, will be carried out during winter months (preferably January / February), to avoid the bird breeding season (March – August inclusive) and reduce the duration of soil exposure and of extent run-off. If clearance has to occur during the breeding season, a pre-clearance check for nesting birds will be conducted in the proposal site boundary, and mitigation measures developed if necessary depending on the findings. A check survey prior to work commencing will be undertaken, to confirm that there are no nesting protected raptor species along the edge of Dewidales Wood which could be affected by the works. • A complete walkover will be undertaken immediately prior to commencement of site works in order to confirm that there are no protected species using the site. Should any signs be found, appropriate 	<p>The Applicant will consult on the appropriate wording of conditions.</p> <p>The Applicant would agree to a condition on the lighting design, in line with the lighting modelling provided in the application and requiring the lighting design and layout to be agreed with the MPA in advance of works. More suitable wording for such a condition would be :</p> <p><i>'Before the commencement of works in any phase of the development which requires external lighting, details of the external lighting scheme for that phase of works shall be submitted to and approved in writing by the Mineral Planning Authority. The approved scheme shall have regard to the "Guidance Notes for the Reduction of Obtrusive Light GN01:2011" produced by the Institution of Lighting Professionals and Bats and Lighting in the UK, Bats and the Built Environment Series BCT produced by Bat Conservation Trust & Institute of Lighting Engineers (2009) and Bats & Lighting, Guidance Notes for: Planners, Engineers, Architects and Developers. BCI Bat Conservation Ireland (2010) The approved lighting scheme shall be implemented in full before the lighting is first used, and shall be retained thereafter. Any material changes to any element of the lighting scheme shall be submitted to and approved in writing prior to any changes taking place.</i></p> <p>The Applicant also accepts the other proposed conditions which are in line with the proposed approach set out in the application documents. However, as documented in the application, a specific period of the year cannot be confirmed for implementing the proposals. As such the times of the year when ecological receptors may be more sensitive will try to be avoided, however if this is not possible, mitigation measures will be implemented to avoid adverse impacts to them.</p>

Comment	INEOS Response
mitigation will be developed.	
Severn Trent Water	
<p>In Box 4 (of 'Doc 4 The Proposal') it appears that INEOS have a base depth of 79 ft (24 m) for the Permian strata. We believe the base of the Cadby Formation is deeper than this.</p>	<p>Severn Trent implies that the base of the Cadeby Formation lies closer to 500 ft BGL than the 79 ft BGL which appears in INEOS' stratigraphical prognosis.</p> <p>INEOS prognosis is based on the closest reliable drilling records that are in the public domain. These are not necessarily oil and gas wells - normally, in this area, they will be very detailed records arising from coal exploration drilling by the National Coal Board. There are also details from private water wells and civil engineering site investigation boreholes. The detailed descriptions for this drilling are available from the British Geological Survey.</p> <p>In the table below are details of the five closest boreholes to the proposed site for which reliable geological details are documented. The depth below ground level to the base Cadeby Formation is shown for each borehole in the rightmost column. These boreholes surround the site in all directions. INEOS' depth prognoses are based on modelling this data (accounting for variations in ground level elevation above Ordnance Datum). However, even a quick average of the base Cadeby Formation depths indicates that the base Cadeby Formation is unlikely to occur as deep as 500 ft BGL within the area of the offset boreholes and the site.</p> <p>However, Severn Trent may have additional data - in bullet 3, an "abstraction borehole" is mentioned and it would be helpful for INEOS to have details of its name, its location and depths to geological formations encountered. It would also be helpful to know the BGS Reference ID for the borehole so that INEOS can examine the drilling records. However, based on dataset from very close to the site, if this abstraction borehole has the Cadeby Formation at 500 ft BGL, then INEOS would expect it to be quite some distance to the east of the site.</p>
<p>In Box 4 (of 'Doc 4 The Proposal') there appears to be an additional upper casing string shown to +/- 500ft (152 m). This is not mentioned in the text and it is therefore unclear</p>	<p>The additional 24" casing string, noted in the diagram in Box 4 of the submission, is the conductor string. The aim of this casing string, as it states in the table, is the isolation of the groundwater. The setting depth of this</p>

Comment	INEOS Response
<p>whether this forms part of the proposal design or not. It is also not clear what the depth is based upon, although it broadly aligns with the base of the Cadeby Formation, and our abstraction borehole. We expect that as this is a Principal Aquifer, the uppermost casing string should screen out the full saturated thickness of the Cadeby Formation. This would also provide additional mitigation and control should INEOS encounter any difficulties with the old mine workings, and prevent any pollution pathways from the coal measures to the aquifer.</p>	<p>casing string has some flexibility as it will be dependent on the formations encountered, i.e. once INEOS have confirmed that they are into the Westphalian, and therefore below the aquifer, INEOS will be able to set the casing. The 500 ft depth is designed to take into account possible variations in formation tops, and to allow isolation of the aquifer before drilling ahead into the Westphalian formation.</p>
<p>We seek clarification on what drilling muds will be used whilst drilling through the aquifer. INEOS state in Box 5 that this will be 'Fresh water with minimal additives – when drilling through upper strata'; but there is insufficient detail to understand what the 'additives' might be. We would seek confirmation that INEOS will have gained the Environment Agency's approval for the muds for drilling through a Principal Aquifer and in SPZ3.</p>	<p>INEOS plan to perform drilling activities under a Standard Rules Permit as issued by the EA in addition to the WR11 Notice and HSE Well Notification. A Water Based Mud (WBM) system will be used through groundwater bearing formations. Only non-hazardous substances to groundwater, as defined in paragraph 4 of Schedule 22 of the EPR 2010 and guidance by the Joint Agencies Groundwater Directive Advisory Group will be used.</p>
<p>Whilst this application concerns the exploratory borehole, and a separate application would be required if INEOS wished to develop the site in the future to a production site, we would need reassurance that the construction of the existing exploratory core well is adequate to ensure protection of the Cadeby Formation, Principal Aquifer.</p>	<p>It is unclear whether this relates to the present application or any potential future application. Regardless, it is considered sufficient detail is contained within the application with regard to protection.</p>
<p>INEOS propose installation of groundwater monitoring boreholes to be installed towards the edge of the core well site, in locations and to depths to be agreed with the Environment Agency. We would like consideration of groundwater flow directions to be taken into account and an installation between the site and our groundwater abstraction site at Worksop.</p>	<p>This can be confirmed through Environment Agency approvals.</p>
<p>We would like confirmation that these are drilled prior to the main exploration well and that baseline water quality data will be collected.</p>	<p>This is correct.</p>
<p>We would want visibility of the monitoring results to demonstrate there has been no</p>	<p>INEOS will contact Severn Trent when the monitoring regime and protocols are prepared to discuss the</p>

Comment	INEOS Response
change from baseline conditions and water quality in the aquifer from the core well drilling activity, and we would like confirmation of what contingency and communication plans would be in place with us, and the Environment Agency, in the event of a change in water quality.	disclosure of information and to ensure concerns are addressed.

Table referred to in respect of the Severn Trent response above:

Borehole Name	BGS Reference ID	OSGB National Grid Location		Distance from Proposed Well Site (km)	Depth to Base Cadeby Fm (ft BGL)
		Easting (m)	Northing (m)		
NCB Dewidales BH	SK58SW17	454131	382793	0.87	113
Harry Crofts BH 1	SK58SW59	452380	382500	2.24	43
NCB Brands Farm BH 5	SK58SE15	455239	384451	1.23	99
NCB Anston Stones BH	SK58SW21	452427	383479	1.89	61
NCB Lindrick Common BH	SK58SE80	455000	383140	0.84	84

We trust this letter and the attached schedule provides clarity on INEOS' position and assists in the determination of the application.

Yours sincerely



Matthew Sheppard
Director

matthew.sheppard@turley.co.uk

Appendix 8: Email response on Drainage matters 3 January 2018

Matthew Sheppard

From: Matthew Sheppard
Sent: 03 January 2018 11:55
To: 'Lowe, Anthony'; Stephen Bell
Cc: Olivia Carr; Campbell, Lynne; Wilkins, Chris
Subject: RE: RB2017/1577 INEOS Woodsetts
Attachments: PEDL 304 21 Doc 5 Application Plans PRINT.pdf

Thanks Anthony

Happy new year. I hope you had a good break.

I've attached a copy of the submitted plans pack, which includes the drainage drawing. Hopefully this will address the first outstanding point. In terms of the tables in The Proposal document:

Stage 2: The relevant "sub-heading" in Table 2, under **Water and Soil**, is "Preventing pollution of soil, groundwater or surface water from leaks from construction vehicles or on site tanks". This notes that the "closed-loop" drainage system will be maintained and all liquids will be treated and / or removed.

Stage 3: See para 2.3.1, third "+" symbol, which notes that there will be monthly visits from a drainage contractor for removal of water from the drainage system.

Stage 3a: See 2.4.2 which notes that the environmental protection measures for stage 2 would be applied during any workover.

Stage 4: See 2.5.2 which notes that the environmental protection measures for stage 2 would be applied during any listening operations.

Stage 5: See 2.6.1, under subheading "Removal of residual site equipment and site surfacing" which references the need to empty the drainage system of water before dismantling, and removal of that water by a licensed contractor.

I hope that helps clarify where the application pack refers to drainage matters during each stage of the process.

Thanks
Matthew

From: Lowe, Anthony [mailto:Anthony.Lowe@rotherham.gov.uk]
Sent: 02 January 2018 13:59
To: Stephen Bell
Cc: Matthew Sheppard; Olivia Carr; Campbell, Lynne; Wilkins, Chris
Subject: FW: RB2017/1577 INEOS Woodsetts

Good afternoon Stephen and a Happy New Year to you

Please find enclosed below the comments from the Council's Drainage Officer. Is this something that you provide additional details on?

Regards

Anthony Lowe
Development Management Officer
Planning, Regeneration and Transport Service

**Regeneration and Environment Service
Rotherham Metropolitan Borough Council**

Tel: 01709 823840

Email: anthony.lowe@rotherham.gov.uk

Visit our website: <http://www.rotherham.gov.uk>

Apply for planning permission online

Visit www.planningportal.co.uk/applications

Before printing, think about the environment

Rotherham Building Control Consultancy

Have you considered your Building Regulation needs? We can help you realise a quick and easy passage towards achieving a Building Regulation approval and Completion Certificate for the project. We have the expertise to guide you through the process. Contact 01709 823847 or 01709 254740 or 01709 823841 Email building.control@rotherham.gov.uk



From: Lister, Stephen
Sent: 02 January 2018 11:22
To: Lowe, Anthony
Subject: RE: RB2017/1577 INEOS Woodsetts

Anthony

The response does not answer all my queries. See comments below.

*The application form states that surface water disposal is to be via soakaway and interceptor ditch and sumps. Other documents say that all surface water runoff will be removed from site by a licenced waste contractor. **Answered***

Annex 1 of Document 1, Covering Letter

Lists drawings, including P304-S21-PA-11 Proposed Drainage Plan, which has not been submitted.

This drawing has still not been provided. This is fundamental to me assessing the proposed drainage. However it would not be unusual for this to be conditioned.

Document 4, The Proposal.

Table 1 states that all surface water will be removed by a licenced waste contractor during stage 1. Subsequent tables for subsequent stages are silent on surface water disposal.

Ideally this document should be updated to be consistent with the response and other documents.

Document 7 Environmental Report

Table 6.7 No water will be discharged from site, then says works to be undertaken in suitable weather conditions to prevent silting of watercourses.

These mitigation measures are listed for stage 1, but are not repeated for subsequent stages.

Answered

Regards
Steve

Steve Lister
Engineer
Network Management, Drainage Section
Regeneration & Environment Services

Tel 01709 822152

Email stephen.lister@rotherham.gov.uk

From: Stephen Bell [<mailto:stephen.bell@turley.co.uk>]

Sent: 21 December 2017 15:17

To: Lowe, Anthony

Cc: Matthew Sheppard; Campbell, Lynne; Olivia Carr; Peter Rowe; Frederick Frempong; Aaron Tilley; William Hazell

Subject: RB2017/1577

Good afternoon Anthony,

Further to your recent emails to Matthew, I attach correspondence which provides a response to the following:

- Highways England
- RMBC Highways
- Yorkshire Wildlife Trust
- Historic England
- Firbeck Parish Council
- RMBC PRow
- RMBC Drainage
- RMBC Ecology
- Severn Trent Water

I trust this assists in preparing your recommendation for Committee.

Kind regards,

Steve

Stephen Bell
Senior Director, Head of Planning North

Turley

1 New York Street
Manchester M1 4HD
T 0161 233 7676
M 07880 200 867
D 0161 233 7645

turley.co.uk

[Twitter](#)

[LinkedIn](#)

Think of the environment, please do not print unnecessarily

This e-mail is intended for the above named only, is strictly confidential and may also be legally privileged. If you are not the intended recipient please do not read, print, re-transmit, store or act in reliance on it or any attachments. Instead, please notify the sender and then immediately and permanently delete it. Turley is a trading name of Turley Associates Ltd, registered in England and Wales Registered No 2235387 Registered Office 1 New York Street, Manchester, M1 4HD.
Terms and Conditions

The information in this e-mail is confidential and intended solely for the use of the individual to whom it was addressed. If you are not the intended recipient, be advised that you have received this e-mail in error and that any use, dissemination, forwarding, printing or copying of this e-mail is strictly prohibited. If you have received this e-mail in error, please advise the sender by using the reply facility in your e-mail software, and then delete it from your system. Rotherham MBC may monitor the content of the e-mails sent and received via its network for the purposes of ensuring compliance with the law and with RMBC policies. Any views or opinions presented are only those of the author and not those of Rotherham MBC. The copyright in all documentation is the property of Rotherham Metropolitan Borough Council and this email and any documentation must not be copied or used other than as strictly necessary for the purpose of this email, without prior written consent which may be subject to conditions.

**Appendix 9: Letter to RMBC Planning 15 January
2018**

15 January 2018

Delivered by email

Ref: INEM3011

Anthony Lowe
 Planning Regeneration and Transport Service
 Rotherham Metropolitan Borough Council
 Riverside House
 Main Street
 Rotherham
 S60 1AE

Dear Anthony

RB2017/1577: CONSTRUCTION OF A WELL SITE AND CREATION OF A NEW ACCESS TRACK, MOBILISATION OF DRILLING, ANCILLARY EQUIPMENT AND CONTRACTOR WELFARE FACILITIES TO DRILL AND PRESSURE TRANSIENT TEST A VERTICAL HYDROCARBON EXPLORATORY CORE WELL AND MOBILISATION OF WORKOVER RIG, LISTENING WELL OPERATIONS, AND RETENTION OF THE SITE AND WELLHEAD ASSEMBLY GEAR FOR A TEMPORARY PERIOD OF 5 YEARS ON LAND ADJACENT TO DINNINGTON ROAD, WOODSETTS, ROTHERHAM

Thank you for sending on further ecological comments on this application. We thought it would be helpful to provide you with our response to the issues raised.

Comment	INEOS Response
YWT - Phase 1 Habitats Map	
<p>YWT are correct – the westernmost block of Dewidales Wood is ancient woodland and should have been depicted as such on the Phase 1 Habitat Plan. This is acknowledged in the INEOS response. There are other areas of ancient woodland present within the area covered by the Phase 1 Habitat Survey Plan that are not indicated by the applicant. These include Lofties Plantation (to the south-west of the arable field that includes Dewidales Wood (East). Old Ordnance Survey maps show that the western block of Dewidales Wood is now a small fragment of what was a much larger area that appears to have been clear-felled and is now intensive farmland.</p>	<p>The woodland should have been shown on the Phase 1 map, as previously acknowledged, but even if it had been shown on the Phase 1 map, it would have been show as “<i>broadleaved woodland - semi-natural</i>”, not ancient woodland. A Phase 1 map shows the broad habitat types on and adjacent to a site. It does not show designated areas, or listed sites, such as ancient woodlands. These were listed in Table 4.1 of the Ecology section of the Environmental Report. The assessment was in any event based on this western part of Dewidales Wood being ancient woodland, and on the area which currently exists.</p> <p>The information we have received to date from</p>

1 New York Street
 Manchester
 M1 4HD

T 0161 233 7676 turley.co.uk

Comment	INEOS Response
	<p>the records centre, and the latest ancient woodland inventory published by Natural England (dated 28 November 2017) do not identify Lofties Planation as ancient woodland, hence why it was not included in Table 4.1 of the Environmental Report submitted.</p>
<p>YWT are correct in pointing out that the distance to the nearest block of Dewidales Wood is 30m not 300m as stated by INEOS. INEOS acknowledge the mistake. I attempted to measure the distance using RMBC's Mapper software and I got 19m as the nearest point of the compound to Dewidales Wood. I had to estimate where the compound would be and there will be a built in inaccuracy using the measurement tool in Mapper but it would seem that the proximity of Dewidales Wood to the compound could be as near as 20m or so.</p>	<p>In light of this comment, the applicant has re-evaluated the 30 m buffer. The buffer as defined on the planning drawings is offset 30m from the OS 10K ancient woodland dataset polygon for Dewidales Wood. This dataset, whilst an appropriate digitisation approach, does not correlate with the woodland edge. The implications and differentials of this variation are minimal and clearly demonstrated in Figure 1, provided at the end of this letter.</p> <p>The closest point of the redline boundary in this small area affected by this variation is approximately 25 m from the woodland edge. As demonstrated in Figure 1 the only aspect of the proposals within 30 m as a result of this variation is earth bunding and heras fencing. No element of the core well area is within 30 m. The closest point to of the access track is 22 m. The scale of the access track is not considered to be an aspect with potential to disturb Dewisdale Wood.</p> <p>As documented in the consultation response letter dated 21/12/17 (Ref: INEM3011), in terms of the potential impacts of development on the ancient woodland we consider that the application as submitted:</p> <ul style="list-style-type: none"> • Will not result in damaging roots and understorey (it is outside Root Protection Zone (RPZ) and not amongst understorey). • Will not damage or compact soil around the tree roots. • Will not result in pollution to the ground around them as the scheme design includes measures to prevent materials and surface water from going off site. • Will not change the water table or

Comment	INEOS Response
	<p>drainage of woodland or individual trees as the surrounding field drainage will be unchanged and measures will be in place to isolate the core well from the water table and minimise the in-flow of water to the well.</p> <ul style="list-style-type: none"> • Will not break up or destroy connections between woodlands and veteran trees. • Will not reducing the amount of semi-natural habitats next to ancient woodland as the development will result in the temporary loss of agricultural land only. • Will include measures to minimise dust (dust control / screening measures) and other pollution will be controlled through site design measures, including the impermeable membrane. • increasing disturbance to wildlife from additional traffic and visitors will be mitigated by the ecological buffer; there will be minimal night-time work with lighting designed to not affect species using the woodland; controls will be placed on traffic movements; and the site will be screened. • The full site lighting design will only be required during the drilling period and this will be designed to meet the Bat Conservation Trust guidelines. Lighting during other periods such as construction would be notably less and only used when required during working hours. <p>On this basis we do not consider that the development will affect the ancient woodland, and that the mitigation already embedded within the design as submitted protects and avoids potential impacts.</p>
<p>I concur with YWT's comments that the proposed development has the potential to impact on the ancient woodland through increased human activity, vehicle movements, noise, vibration, lighting,</p>	<p>The guidance on having a 50 m buffer to ancient woodland was amended on 4 January 2018, to remove this reference. Link to the new guidance</p>

Comment	INEOS Response
<p>construction, etc. Given (a) the new guidance recommending 50m buffers to ancient woodland and (b) the fact that the development may be as near as 20m to the woodland, INEOS should revisit their assessment. It would appear to me that further measures to protect the woodland should be put in place.</p>	<p>below for information.</p> <p>https://www.gov.uk/guidance/ancient-woodland-and-veteran-trees-protection-surveys-licences</p> <p>On this basis, we consider that the assessment of effects on the woodland should revert to the approach we set out in our letter of 21 December 2017. We do not propose to change the application boundary as we consider that the development is acceptable without this change.</p>
<p>YWT - Breeding Bird Surveys</p>	
<p>I consider it remiss that no birds were recorded on the Phase 1 Habitat Survey. Several species will have been evident when the ecologist(s) did their survey and it is a simple task to note these down and add them to the report. INEOS response that “a full EIA and ES was not required” as a result of the Screening exercise is nonsensical since noting the birds present on the day of the Phase 1 Habitat Survey or undertaking a breeding bird survey do not constitute an EIA or ES.</p>	<p>The clarification in relation to the Environmental Report was provided as YWT made reference to an Environmental Statement in the original response.</p> <p>At the time of the Phase 1 habitat survey (in late July) and bat surveys (in August / September), no breeding birds were observed within the arable crops. This is not surprising given that they were at the end / after the breeding season, and that by July the crop was at a height which is not favoured by ground nesting species such as skylark and lapwing. Access to the land prior to this was not possible.</p>
<p>Table 4.4 states “No birds were observed on the proposed site during the extended Phase 1 habitat survey or during subsequent visits to the site for bat surveys”. It is impossible to believe that there were no birds whatsoever on any of the surveys”. Statements like this do not help the applicant. The three bird species that the applicant mentions might be breeding are skylark, lapwing and possibly quail. Skylark and lapwing are both Red List, Species of Principal Importance and UK Biodiversity Action Plan species, whilst quail is Amber List, so, even INEOS think there are three birds of conservation concern on the well site and yet they did not consider it prudent to undertake a survey. The datasearch conducted by the applicant found records of other birds of conservation concern within 2km of the site including grey partridge, house sparrow, tree sparrow and yellowhammer and these could easily occur on the site. Others such as linnet and twite could easily occur. It is worth adding that a breeding bird survey could have involved as few as three dawn visits and</p>	<p>The assessment assumed that species such as lapwing, skylark and quail could utilise the arable habitats (within which the project lies) for nesting, because late access prevented a breeding bird survey from being undertaken. Such a survey would have been undertaken if access had been available.</p>

Comment	INEOS Response
<p>would not have been expensive to undertake.</p>	
<p>The development may only cover 1.86ha but it will potentially disturb the entire field and all birds nesting here, as well as the hedgerows alongside the access track and running alongside Dewidales Wood and the Dewidales Wood itself. This is particularly so given that the development will be a tall structure presumably involving lighting at the top of the rig and 24 hour working during drilling. Consequently nocturnal species such as owls could easily be disturbed as well as daytime species.</p> <p>I concur with YWT's comments regarding offsite enhancement.</p>	<p>If construction works are undertaken during the breeding bird season some temporary disturbance to nesting birds in parts of the arable field, and along the northern edge of Dewidales Wood surrounding the site may occur.</p> <p>Once the site has been constructed the project design includes a range of measures to reduce the risk of disturbance including:</p> <ul style="list-style-type: none"> • bunds and cabins around the perimeter of the site to reduce the risk of noise effects; • a lighting strategy to reduce light spillage and associated effects around the works, including on the northern extremities of Dewidales Wood; • staff will not routinely walk outside the Heras fencing; • controls on night time traffic movements (<i>ie</i> site deliveries between 7am and 7pm). <p>The access track utilises an existing entrance and runs parallel to an existing public right of way (PRoW). This PRoW runs through the arable field. Large stretches of the access route have no hedgerows adjacent to them. The footprint of the access track deviates away from Dewidales Wood as it approaches the core well site.</p>
<p>YWT - Ecological Enhancements</p>	
<p>The applicant appears to use the fact that it leases rather than buys land as a reason why it is constrained regarding mitigation or off-setting (this argument was used for the Harthill test well application RB2017/0805 as well). Whilst I am prepared to accept that significant mitigation or offsetting <i>may</i> not be required for a test well, this would definitely not be the case for full-scale fracking. If the applicant is unable to offer much in the way of mitigation because it does not own land on or near the application site, or is unwilling to purchase land, then the provision of monies to be used in securing nature conservation ends may be appropriate. RMBC or third parties such as YWT may be better able to make agreements with the owner of Dewidales Wood (or Lofties Plantation or other sites nearby) for</p>	<p>As noted below, any application requiring hydraulic fracturing would be subject to a separate planning process. This would include the assessment of potential impacts associated with such a development. Mitigation measures would then be defined in accordance with the mitigation hierarchy.</p>

Comment	INEOS Response
sympathetic habitat management work.	
Woodland Trust - Buffer Zones	
<p>I concur with YWT's viewpoint and have provided some further comment here. In February 2017, the Government indicated its desire to increase protection for ancient woodland under the Housing White Paper. The Woodland Trust has recently provided a document for planners on guidance in deciding on how ancient woodlands should be assessed in planning applications. This is available at: https://www.woodlandtrust.org.uk/publications/2017/09/planning-for-ancient-woodland/.</p> <p>This guidance takes account of Natural England's Standing Advice, the Housing White Paper mentioned above and other recent initiatives. One result is that the Woodland Trust recommends a buffer of 50m between development and ancient woodland (p. 20 of the document cited in the link).</p>	Addressed above.
<p>I also provided some remarks on the proximity of Dewidales Wood above which affect the extent of buffer zones. As I mentioned, I am not convinced that the development will be 30m from the edge of Dewidales Wood so a buffer of this width may not be possible. I haven't checked the nature of the fencing around the southern perimeter of the compound but I would be unhappy if this did not screen activities within the compound from the wood and act as a barrier to noise, light, visible human activity, etc.</p>	Clarification on separation distances between the site and Dewidales Wood has been provided above as have details on the embedded mitigation to avoid disturbance to the wood.
<p>I'm personally not happy with any lighting above the level of the fencing or single storey temporary buildings around or within the compound even if these are cowled or hooded. Lights at height will stand out in particular because of the lack of other illumination here. Consequently, any lights at height could easily illuminate parts of the field and Dewidales Wood and potentially affect bats, owls, badgers, moths and other nocturnal wildlife.</p>	Site lighting has been designed to comply with relevant H&S and standards for safe working, however a strategy to reduce light spill to ecological receptors (surrounding habitats and species) has been drawn up to control the effects of light-spill. Detailed design of the lighting scheme is expected to be subject to a condition in any future approval.
<p>The lack of survey work on breeding birds, badgers or other wildlife by the applicant within Dewidales Wood means that we don't know what is present and consequently we don't know what might be impacted. A precautionary approach is possible to some extent but, for example, without knowledge of where badger</p>	The Phase 1 Habitat Survey found no evidence of badgers along the northern edge of Dewidales Wood, where it adjoins the track. The project design includes the buffer zone from the woodland and other measures (see above) to reduce the risk of disturbance from noise,

Comment	INEOS Response
setts are (if present), this is difficult.	<p>light, traffic and human presence.</p> <p>As species such as badgers are highly mobile, pre-construction check surveys will be undertaken to make sure that they have not moved into the development site. If there is evidence, mitigation will be implemented to protect species as necessary. .</p>
<p>I can confirm (in response to Yorkshire Water's last Comment on p. 7 of their submission) that, if an application for fracking is submitted at some later stage, we would consider it as a wholly separate application and we would expect detailed ecological surveys, coupled with regular checking/monitoring and significant mitigation possibly including offsetting or 106 agreements. The protection of Dewidales Wood would be a priority.</p>	<p>This is agreed and understood.</p>
<p>RMBC Ecology</p>	
<p>I think my comments on Target Notes are valid. I cannot recall ever having seen a Phase 1 Habitat Plan without target notes. Section 4.3.3 could have incorporated the target notes i.e. TN1 could have been the well site in the arable field, TN2 could have been located on the edge of Dewidales Wood, TN3 could have been located on the hedgerow, TN4 & TN5 on the access track, etc.</p>	<p>The information identified as potential Target Notes is all provided in the main text of the Environmental Report.</p>
<p>Most Phase 1 Habitat Surveys are accompanied by a plant list. The survey was undertaken within the optimum time of year and a reasonable number of plants were recorded, so it would not have involved much more effort to add to these and put them into a list in the report. There is a conservation headland or buffer around the arable field which has not been noted by the applicant and consequently no plants have been recorded from this. This area could be useful for birds, small mammals, etc and will add to the biodiversity of the arable field.</p>	<p>A species list is included in Table 4.3 of the Environmental Report. The site and access route is within a single uniform arable field, and the crop was planted to the margins of the field / access track (see Plate 1 at the end of this letter). Where the access track crosses west it cuts across the arable field (see Plate 2 at the end of this letter).</p>
<p>I regard the age of the hedgerows to be relevant (I believe I checked with the RMBC Tree Manager who has responsibility for hedges and he concurred with my views). The age of the hedgerows can be important, for example, in terms of their value to nature conservation (along with whether they are species-rich or not) and might influence what type of</p>	<p>No removal of hedgerow is required.</p>

Comment	INEOS Response
<p>mitigation would be appropriate if it was being considered.</p>	
<p>I consider my comments on bat surveys are valid because they follow the Bat Conservation Guidelines (Collins 2016). I think the edge of Dewidales Wood and associated hedgerows, in particular, have moderate habitat suitability for bats and consequently this would have required monthly activity and automated surveys. The applicant has collected some bat data however, so I will accept what they have collected on this occasion but request that they follow the Bat Conservation Guidelines published in 2016 in future. Whilst I accept that the applicant did not have permission to enter Dewidales Wood, I would have thought they could have used trail cameras, night vision or video could have been used on the public right of way to confirm whether badgers are present (use of such technology is fairly standard for bats). Breeding bird surveys rely on recording birdsong and so much of Dewidales Wood could have been easily covered (from the public right of way and from areas where the applicant had access) without the need to enter the woodland.</p>	<p>We note the acceptance of bat data collected and the wider comments in relation to alternative survey techniques.</p>
<p>If access to the land was not arranged until late July, then this would have precluded breeding bird surveys. The applicant must have been planning to submit an application months before the Phase 1 Habitat survey took place in July, so I consider it bad organisation that they could not sort out a breeding bird survey for spring 2017. Ideally, discussions should have been going on with the landowner over the winter ready for the new season</p>	<p>Site access was not granted until into July 2017.</p>
<p>I am of the opinion that a breeding bird survey should have been conducted. Part of the justification has been provided in my previous Memorandum to the LPA, in Yorkshire Water's response to the LPA and in my comments above. These include (a) Natural England's Standing Advice suggests a breeding bird survey should have been conducted, (b) the fast decline in farmland birds, (c) Birds of Conservation Concern (such as skylark and lapwing and possibly quail which INEOS admitted might breed on the well-head site), (d) the fact we know other Birds of Conservation Concern occur within 2km radius of the site, (e) the presence of adjoining ancient woodland, (f) the presence of an adjoining Local Wildlife Site, etc.</p>	<p>This aspect has been addressed above.</p>

We trust this letter and the attached schedule provides clarity on INEOS' position and assists in the determination of the application.

Yours sincerely

A handwritten signature in black ink, appearing to read 'M Sheppard', written in a cursive style.

Matthew Sheppard
Director

matthew.sheppard@turley.co.uk

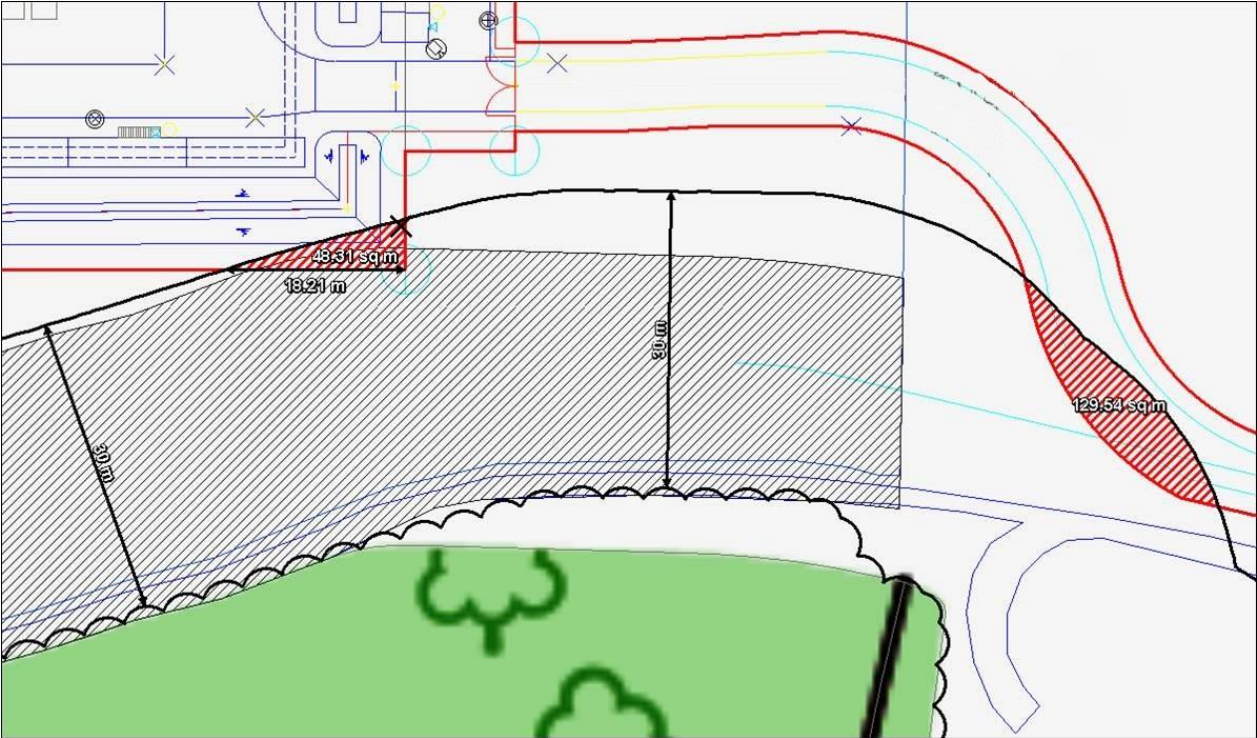
Plate 1



Plate 2



Figure 1



**Appendix 10: Swept Path analysis M1, J31, 16
January 2018**

Matthew Sheppard

From: Frederick Frempong <Frederick.Frempong@curtins.com>
Sent: 23 January 2018 16:52
To: elisa.atkinson@highwaysengland.co.uk
Cc: Aaron Tilley; Matthew Sheppard
Subject: Shale Gas Site, Dinnington – RB2017/1577
Attachments: TPMA1529-151-A_304-2_SPA_LOW_3.5LOAD_M1-J31.pdf

Dear Elisa

Thanks for your letter dated 12 January 2018 regarding the above planning application. Following a review of your comments, please see attached the swept path assessment for M1 Junction 31 with a 3.5m wide load as requested.

The swept paths have been undertaken using an 18m low loader with a 3.5m wide load and a large car travelling in the adjacent lane. It is evident from the drawing that there is the possibility of conflicts with adjacent traffic on the slip roads.

On the above basis, it is proposed that all abnormal loads related to the proposed development will be transported in the off peak period between 1000-1600 an in addition, escort vehicles with flashing lights will be employed to prevent traffic from overtaking/travelling alongside the abnormal loads in adjacent lanes, to minimise any potential conflicts.

Once the staging area has been confirmed, HE will be informed of this.

I trust that this addresses your concerns.

Kind Regards

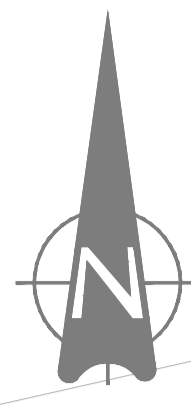
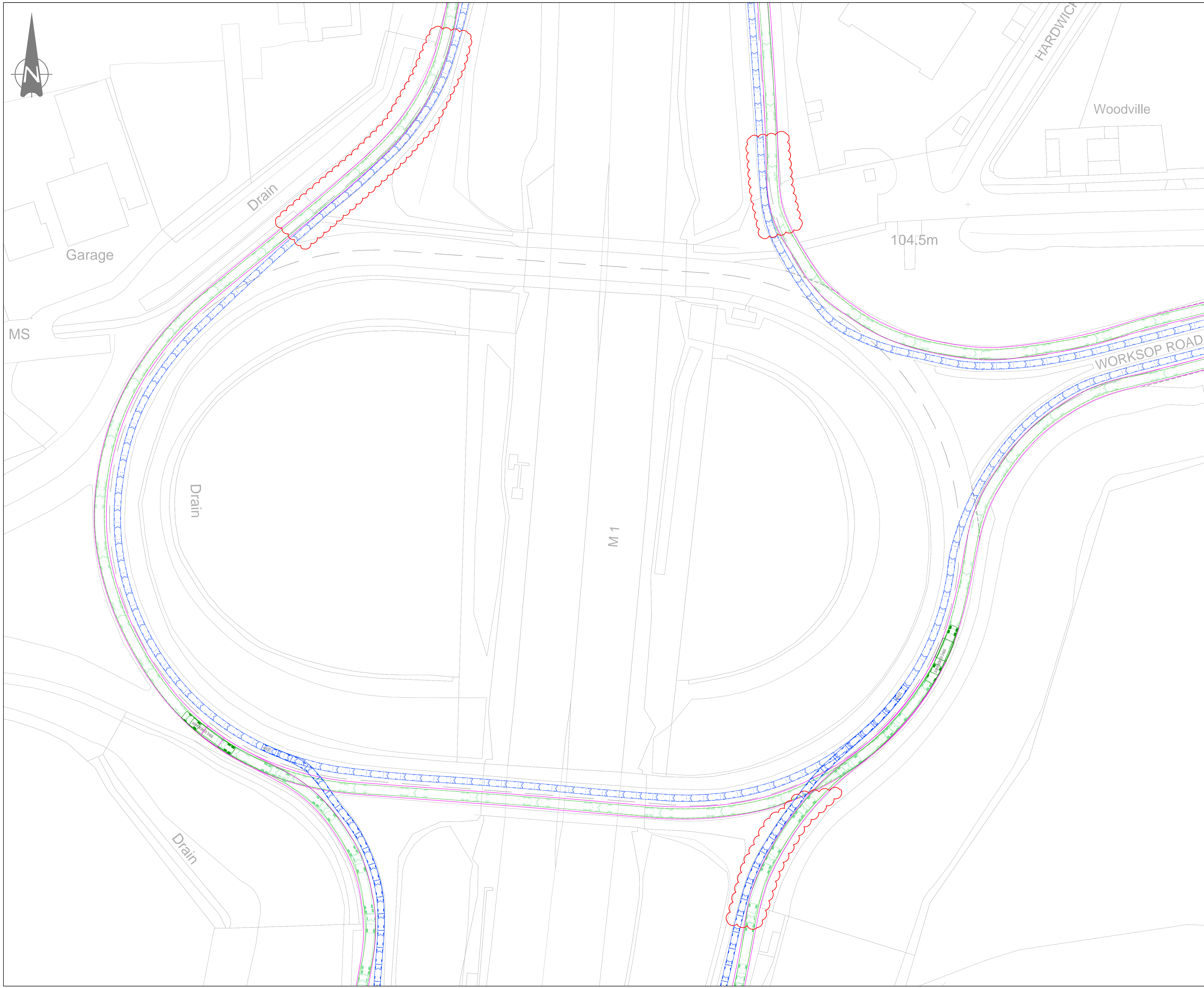
Fred

Frederick Frempong
Senior Transport Planner
T. 0161 236 2394
frederick.frempong@curtins.com

Merchant Exchange
17-19 Whitworth Street West
Manchester M1 5WG

CIVILS & STRUCTURES • TRANSPORT PLANNING • ENVIRONMENTAL • INFRASTRUCTURE • GEOTECHNICAL • CONSERVATION & HERITAGE • PRINCIPAL
Birmingham • Bristol • Cambridge • Cardiff • Douglas • Dublin • Edinburgh • Glasgow • Kendal • Leeds • Liverpool • London • Manchester • Not

Follow us on Twitter www.curtins.com



NOTES

KEY:

- 18m LOW LOADER
- LOAD OUTLINE
- LARGE CAR
- - - POTENTIAL CLASHING AREAS

VEHICLE PROFILE:

Low Loader with Trailer Steering 118.0m - 3.5m wide load

- Overall Length: 17.910m
- Overall Width: 3.500m
- Overall Body Height: 3.000m
- Min Body Ground Clearance: 0.330m
- Max Track Width: 2.500m
- Lock to Top Hubs: 1.000m
- Kerb to Kerb Turning Radius: 8.300m

Auto AG 08171

- Overall Length: 4.930m
- Overall Width: 1.850m
- Overall Body Height: 1.530m
- Min Body Ground Clearance: 0.230m
- Max Track Width: 1.600m
- Lock to Top Hubs: 0.700m
- Kerb to Kerb Turning Radius: 3.900m

A	Tracking extended	22/01/18	DD	FF
Rev:	Description:	Date:	By:	Chkd:

Curtins Consulting Ltd,
 Merchant Exchange, 17-19 Whitworth St West, Manchester, M1 5WG
 t: 0161 236 2394
 e: manchester@curtins.com
 www.curtins.com

Structures - Civils - Environmental - Infrastructure - Transport Planning - Sustainability - Expert Advisory Services
 Birmingham - Bristol - Cardiff - Douglas - Edinburgh - Kendal - Leeds - Liverpool - London - Manchester - Nottingham

Status: **PRELIMINARY**

Project: **INEOS UPSTREAM
 PEDL 304/2**

Dwg Title: **SWEPT PATH ANALYSIS
 18m LOW LOADER - 3.5m WIDE LOAD
 M1 - JUNCTION 31**

Scale:	Size:	First Issue:	Drawn:	Checked:
1:500	A1	16/01/18	DD	FF

Dwg No:	Rev:
TPMA1529-151	A

**Appendix 11: Letter to RMBC Planning 23 January
2017**

23 January 2018

Delivered by email

Anthony Lowe
Planning Regeneration and Transport Service
Rotherham Metropolitan Borough Council
Riverside House
Main Street
Rotherham
S60 1AE

Ref: INEM3011

Dear Anthony

RB2017/1577: CONSTRUCTION OF A WELL SITE AND CREATION OF A NEW ACCESS TRACK, MOBILISATION OF DRILLING, ANCILLARY EQUIPMENT AND CONTRACTOR WELFARE FACILITIES TO DRILL AND PRESSURE TRANSIENT TEST A VERTICAL HYDROCARBON EXPLORATORY CORE WELL AND MOBILISATION OF WORKOVER RIG, LISTENING WELL OPERATIONS, AND RETENTION OF THE SITE AND WELLHEAD ASSEMBLY GEAR FOR A TEMPORARY PERIOD OF 5 YEARS ON LAND ADJACENT TO DINNINGTON ROAD, WOODSETTS, ROTHERHAM

Thank you for sending on the Woodsetts Against Fracking (WAF) comments on this application. Although it is the role of the planning authority to consider the content of the WAF letter and decide if there are any points we have not addressed through the submitted planning application, we thought it would be helpful to assist you by providing you with our response to the issues raised.

Section 3 Traffic and Transport

We note that the basis of the objection relates to the information presented within the Traffic and Transport section of the Environmental Report submitted in support of the planning application.

The Senior Highway Development Control Officer at Rotherham MBC submitted a memorandum dated 15th November 2017 which made a number of observations related to the planning submission which are consistent with some of the points raised in the objection.

A response was prepared on 21st December 2018, and is attached to this letter for ease of reference, which provided additional information and clarifications to address the Officers concerns. This included further details on the assessment of HGV impact, consideration of the traffic impact and an updated Traffic Management Plan.

Following receipt of this objection, the Senior Highway Development Control Officer at Rotherham MBC submitted a second response to the application dated 17th January 2018 confirming conditional support of the development proposals from a highways perspective, stating that safe and suitable access to the site is achievable and the cumulative impact of the development is unlikely to be severe.

The highways department position is that;

1 New York Street
Manchester
M1 4HD

T 0161 233 7676 turley.co.uk

“the actual number of HGV movements would be relatively modest ie. a maximum of 60 No. per day ie. 30 in and 30 out, an average of 5 No. per hour assuming a 12 hour day. The carriageway width along the C70 between the A57 at Gateford Roundabout and the site varies between 5.5m and 7.3m (approx.). which is considered to be capable of satisfactorily accommodating the additional vehicular traffic anticipated. Furthermore, the route through the village is subject to a 30 mph limit, with traffic calming and separate pedestrian facilities.”

We therefore consider that there are no sustainable highways reasons to refuse this application.

Section 4 Ecology Objection

We note the concerns raised by WAF about bats and any effects that the proposed development may have on them. The potential for bats to be affected by site lighting on the proposed development was assessed and stated in the Environmental Report. This assessment has resulted in the embedded mitigation within the site lighting design and an expectation that the final lighting design will be the subject of a planning condition on any future approval. INEOS has demonstrated that an effective lighting strategy can control light levels, and avoid the risk of significant effects from lighting on any bat species in or around Dewidales Wood, and the connecting hedgerow to the woodland further to the west south of the works.

Section 5 Landscape and Visual

With regards to the landscape and visual aspects within the WAF submission, the following response is provided.

The local value placed on the site is acknowledged in line with the assessment methodology (Environment Report Section 5.2.3), and the landscape of the site is judged to have medium value based on locally important tranquillity and landscape features (Environment Report Section 5.5.1).

The presence of the Area of High Landscape Value (AHLV) designation is also acknowledged in the assessment of the sensitivity of the local landscape (Environment Report Section 5.5.1).

The predicted extent of visibility of the 60 m drilling rig is shown in the zone of theoretical visibility (ZTV) Figure 5-1 (Environment Report Appendix 5-1) and the potential impacts within this ZTV are set out in the Environment Report Section 5.7. The receptors that are likely to be affected are noted, including residents in Woodsetts and North Anston, and users of roads, cycleways and footpaths within 1-2 km of the site. The level of effect is judged to be “up to substantial”.

The effects considered to be substantial will occur over short time periods within the 5-year timescale, when drilling rigs are present on site. The longest period when a rig is anticipated to be present is up to five months during Stage 2. On completion of the Proposal the site will be fully restored to its original condition, therefore all landscape and visual impacts of the Proposal will be temporary in nature.

Section 6 Surface Water and Flood Risks

The proposed development would be constructed within the catchment of the Owlands Dike. Figure 3.1 in the Environment Report clearly delineates the surface water catchment of the upper Owland Dike. Although it is correct to state that Owland Dike is a tributary of the River Ryton, as is Anston Brook, for a surface water hydraulic connection to exist between the site and the Anston Brook, would require water to flow up and over the drainage divide.

With regards to any potential hydraulic groundwater connection between the site and Anston Brook, in the vast majority of cases, groundwater flow is in the direction of surface water flow. However this is not always the case and groundwater can flow against surface topography, particularly where subsurface geology may be fractured or faulted. As stated in Section 7.3.6 of the Environmental Report ‘*There is no faulting shown within the site on published Geologic Survey maps*’. Nevertheless, Section 6.4 of the

Environmental Report describes the embedded mitigation that will be installed as part of the scheme, including a triple-layered geotextile / HDPE membrane which will form an impermeable site surface. As such, even in the event of a pollution event at the surface, there will be no pathway along which pollutants would be able to enter groundwater and make their way towards Anston Brook.

The flood risk assessment presented in Section 6.6 of the Environmental Report is the complete Flood Risk Assessment. Figure 3-1 presents a plan showing rivers, streams, ponds and other geographical features relevant to the assessment.

Environment Agency guidance states that volumes of surface water run-off should be estimated so that an assessment of the potential impact of any increase in run-off, and any change in surface water flow paths can be assessed. However, in the case of the proposal, as stated in Table 6.7 of the Environment Report *'no water would be discharged from the site to the surrounding environment once the drainage system was in place. All water would be removed from the site by a licenced waste contractor'*. Volumes of run-off have not been presented in the assessment as there will not be any surface water run-off from the site, and as such, no increase in surface water flooding risk to offsite areas.

It is inaccurate to describe the site as a natural soak-away; for this to be true the site would need to be within a topographically low area (compared to the surrounding topography) where surface water would drain before ponding on the surface and infiltrating into the ground. A review of the topographic data shows that the site is located towards the top of the surface water catchment, and that land levels fall towards the northeast.

With regards to the disturbance of the natural drainage of the field, embedded mitigation includes the maintenance of existing field drainage systems around the site. In practice during scheme construction, overland flow will be diverted around the site to ensure continuity of flow and prevent ponding.

The self-contained site drainage system, installed to prevent fluids from the site interacting with either ground or surface water, will result in a small reduction in the quantity of water that is able to soak into the underlying aquifer. The quantum of this reduction, in the context of the aquifer used for water resource extraction, considered to be so minor, it was not considered necessary to calculate the exact volumes.

Similarly, the proposals self-contained drainage system and offsite disposal of collected water will reduce the amount of surface water run-off from the site. Although the volume will be minor on a catchment scale, this will reduce flood risk from site surface water run-off to areas downstream. As such, it is not necessary to consider any in combination or cumulative effects associated with run-off from these other developments.

A temporary wheel wash, such as the one which will be used on-site, typically comprise a system of ramps for vehicles to access a self-contained wash platform fitted with high pressure (low volume) water spray bars. The wheel wash systems include a water recycling tank (ie water is collected and re-used for wheel washing following solids removal). Excess water will be removed from the unit as required by a licensed waste contractor. Surface drainage / soakaway from the wheel wash will not be required and the facilities will not increase local flood risk in the area.

Section 8 Cultural Heritage

Issues connected to the Ancient Woodland (Matter 1 in the WAF letter) have been covered in the Environment Report, Section 4 (Ecology) as Ancient Woodland is an ecological designation.

Visual impacts of the proposals (Matter 2 in the WAF letter) have also likewise been addressed in the Environment Report, Section 5 (Landscape and Visual).

The 2 km study area is based upon professional judgement with reference to The Setting of Heritage Assets - Historic Environment Good Practice Advice in Planning Note 3.

.Historic England does not identify views as part of the designation of historic buildings identified on the National Heritage List (or as part of the corresponding GIS files). The latest Historic England guidance defines views contributing to the significance of an asset as:

- those where relationships between the asset and other heritage assets or natural features or phenomena such as solar or lunar events are particularly relevant;
- those with historical associations, including viewing points and the topography of battlefields; and
- those where the composition within the view was a fundamental aspect of the design or function of the heritage asset.

In the professional judgement of the assessor no assets within the baseline include views corresponding to the site location that fall within these criteria.

With regards to the Woodsetts Conservation Area (CA) (Matter 3 in the WAF letter), the assessors consulted with RMBC and were provided with a map of the conservation area boundary. The RMBC response stated 'adequate appraisals have not been done' of the CA. While it is possible that the proposal may be visible from some parts of the CA, the question is whether this would have a significant adverse effect (and therefore have legislative or policy implications) on the CA. It is the professional judgement of the assessor that this is not the case.

St Georges Church is neither nationally designated nor locally listed. As such, it has not been assessed as part of the cultural heritage baseline. Current legislation and policy does not allow for the inclusion of War Graves in the cultural heritage baseline.

Matter 4 (Loss of Green Belt Land) and 5 (Loss of fertile Agricultural Land) in the WAF letter have been addressed within the Planning Statement (Section 7.6 and 7.8.3 respectively).

In relation to Matter 6: Impact on Known Assets of Cultural Heritage (Archaeological Remains), the applicant can confirm that a programme of pre-determination trial trenching, in consultation with South Yorkshire Archaeological Service, commenced on the 15th January 2018.

In relation to Matter 8: Uncertainty regarding previous mining extractions and pipelines on or under the site, Section 7.8.5 of the Planning Statement addresses ground instability concerns including examination of mine abandonment plans and Coal Authority Risk Maps. The site has been subject to both a geophysical site survey and underground services clearance exercise to facilitate a safe trial trenching programme and no evidence of underground pipelines or other services was evident within the application boundary.

Matter 9 (Air, Noise, Vibration and Light Pollution: Impact on known Assets). The WAF objections within this section mainly focus on public health concerns; these are discussed in Section 8.2 of the Planning Statement. Vibration issues have been addressed in the Environment Report, Section 2 (Noise and Vibration).

Matter 10 (Loss of Amenities) pertains to the use of the Public Rights of Way adjacent to the proposals. As detailed in the Planning Statement, the proposed access track to the site will be offset from the Public Right of Way network so as to avoid direct impacts. Impacts on the users of these Public Right of Ways (i.e. their amenity) would be reduced by the bunds and cabins at the site boundary and managed through standard procedures.

Section 9 Other Issues

In response to the other issues raised in Section 9 of the WAF letter the following information is provided.

1) Noise

Section 2.3.4 of the Environmental Report explains how the effects of high wind and adverse weather have been considered and the data which has been analysed has been limited to those values which were robust. The limitation on wind speed of 5 m/s has been used as this is commonly referenced in noise assessment standards such as BS4142.

The highest predicted level from the rig at the nearest noise sensitive receptor (Berne Square) is 39 dB L_{Aeq} , and would not result in noise levels above $L_{A90} + 10$ dB(A) unless the representative background level was commonly below 30 dB(A). It is not the intention of the assessment to identify the lowest background noise levels, but rather a level which represents conditions that will occur over a representative time. This is why the statistical value has been adopted. The 50th percentile and the modal value both indicate that background noise does not appear to be commonly lower than those adopted in this assessment, which is much higher than 30 dB(A).

The assessment is not carried out using BS 4142, as more appropriate guidance exists for this type of activity as described in the assessment as explained in the Environmental Report. The method used does not include a requirement to include a penalty for distinctive acoustic features. Noise from any such features will be controlled as far as practicable through the noise management plan.

Section 2.2.5 of the Environment Report explains that “predictions of drilling noise have been carried out using ISO 9613-21. It is noted that the predictions are based on meteorological conditions that are favourable to noise propagations, and therefore are a worst-case approach.” The specific variation of wind speed has not been taken into account, but it was noted that the wind direction for baseline measurements was relevant to winds with a westerly component (SW, WSW, W).

2) Land Contamination

The land contamination incident (burial of cement bonded asbestos roofing) reported at Grange Farm in 2009 was not on land which will be used, or vulnerable from disturbance, by the proposal. Further, the incident was subject to a successful prosecution at Worksop Magistrates Court on 17th February 2011¹ and waste material was removed from the land in 2011 following action by the Environment Agency².

3) Application Plans

The issues raised in relation to the 30 m buffer between the site and Dewidales Wood have been responded to in the applicant's response (dated 14 January 2018) to RMBC Ecology comments.

4) Test well application as a stand-alone development

WAF's position is noted.

5) Cumulative development

INEOS is aware of both of the applications referred to, and both are likely to change the current traffic position on the A57 roundabout. However, as they are significant housing developments, they have been subject to their own highways assessment process and will be providing any necessary mitigation to ensure that there is no significant effect on the junctions that will be shared by INEOS traffic.

¹ Envirocheck Report 29/6/17

² <https://www.edie.net/news/3/Fine-for-asbestos-buried-on-farm-land/19442/>

INEOS's traffic generation will still be at low levels and will be a small proportion of the total traffic volume at these junctions. The junctions will not need any physical alterations in order to make them suitable for use by INEOS' traffic.

We trust this letter and the attached schedule provides clarity on INEOS' position and assists in the determination of the application.

Yours sincerely

A handwritten signature in black ink, appearing to read 'M Sheppard', written in a cursive style.

Matthew Sheppard
Director

matthew.sheppard@turley.co.uk

**Appendix 12: Archaeological Evaluation Report
January 2018**

Matthew Sheppard

From: William Hazell <William.Hazell@erm.com>
Sent: 26 January 2018 12:11
To: McNeil Jim; Chris.Wilkins@rotherham.gov.uk; anthony.lowe@rotherham.gov.uk
Cc: Jim Mower; 'm.rajic@wessexarch.co.uk'; Matthew Sheppard; Olivia Carr; Michael Cobb
Subject: Woodsetts archaeological evaluation report
Attachments: 201560 Woodsetts evaluation report_ISSUE.pdf

Dear Jim,

Please find a copy of the trial trenching report attached for your information following the work undertaken last week by Wessex Archaeology.

We trust the report accords with your understanding of the survey programme following your engagement with Mill during the site work.

Thank you for your engagement during this process.

Kind regards

Will

William Hazell
Partner

ERM

23 Albert Street | Aberdeen | AB25 1XX

T +44 1224 562023 | M +44 7921 230847

E william.hazell@erm.com | W www.erm.com



ERM *The business of sustainability*

This email and any files transmitted with it are confidential. It is for the intended recipient only. If you have received the email in error please notify the author by replying to this email. If you are not the intended recipient, you must not disclose, distribute, copy, print, or rely on this email. Any views expressed by an individual within this email which do not constitute or record professional advice relating to the business of the ERM companies, do not necessarily reflect the views of those companies. Environmental Resources Management Limited (company number 01014622) and ERM Europe Limited (company number 02137137) are both incorporated in England, with their registered address at 2nd Floor Exchequer Court, 33 St Mary Axe, London EC3A 8AA.



Woodsetts, Rotherham South Yorkshire

Archaeological Evaluation



Planning Ref:
RB2017/1577
Ref: 201560.03
January 2018



© Wessex Archaeology Ltd 2018, all rights reserved.

Unit R6
Sheaf Bank Business Park
Prospect Road
Sheffield
S2 3EN

www.wessexarch.co.uk

Wessex Archaeology Ltd is a Registered Charity no. 287786 (England & Wales) and SC042630 (Scotland)

Disclaimer

The material contained in this report was designed as an integral part of a report to an individual client and was prepared solely for the benefit of that client. The material contained in this report does not necessarily stand on its own and is not intended to nor should it be relied upon by any third party. To the fullest extent permitted by law Wessex Archaeology will not be liable by reason of breach of contract negligence or otherwise for any loss or damage (whether direct indirect or consequential) occasioned to any person acting or omitting to act or refraining from acting in reliance upon the material contained in this report arising from or connected with any error or omission in the material contained in the report. Loss or damage as referred to above shall be deemed to include, but is not limited to, any loss of profits or anticipated profits damage to reputation or goodwill loss of business or anticipated business damages costs expenses incurred or payable to any third party (in all cases whether direct indirect or consequential) or any other direct indirect or consequential loss or damage.

Document Information

Document title Woodsetts, Rotherham, South Yorkshire
Document subtitle Archaeological Evaluation
Document reference 201560.03
Client name ERM
Address Eaton House, Wallbrook Court
North Hinksey Lane
Oxford
Oxfordshire
OX2 0QS

On behalf of INEOS
Site location Woodsetts, Rotherham, South Yorkshire
County South Yorkshire
National grid reference (NGR) 454631 383811
Statutory designations None
Planning authority Rotherham Metropolitan Borough Council
Planning reference RB2017/1577
Museum name Clifton Park Museum
Museum accession code TBC
WA project code(s) 201560
Date(s) of fieldwork 15-19 January 2018
Fieldwork directed by Simon Brown
Project management by Milica Rajic
Document compiled by Milica Rajic
Graphics by Ian Atkins

Quality Assurance

Issue number & date	Status	Author	Approved by
1	Draft submitted to client	MR	
2	Final	MR	Client



Contents

Summary	iii
Acknowledgements	iii
1 INTRODUCTION	1
1.1 Project background	1
1.2 Scope of the report	1
1.3 Location, topography and geology	1
2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND.....	2
2.1 Introduction.....	2
2.2 Previous investigations related to the proposed development.....	2
2.3 Prehistoric/Romano-British	2
2.4 Medieval	2
2.5 Post-medieval.....	2
3 AIMS AND OBJECTIVES.....	3
3.1 General aims	3
3.2 General objectives	3
3.3 Site-specific objectives.....	3
4 METHODS.....	4
4.1 Introduction.....	4
4.2 Fieldwork methods.....	4
4.3 Monitoring.....	5
5 ARCHAEOLOGICAL RESULTS	5
5.1 Introduction.....	5
5.2 General stratigraphy	5
5.3 Ditch 904	5
5.4 Negative results	5
6 CONCLUSIONS	5
6.1 Discussion	5
7 ARCHIVE STORAGE AND CURATION.....	6
7.1 Museum.....	6
7.2 Preparation of the archive.....	6
7.3 Selection policy.....	6
7.4 Security copy	6
7.5 OASIS	6
8 COPYRIGHT	6
8.1 Archive and report copyright	6
8.2 Third party data copyright	7
REFERENCES	8
APPENDICES	9
Appendix 1 Trench summaries	9
Appendix 2 OASIS form.....	11



List of Figures

- Figure 1** Site location
Figure 2 Trench locations
Figure 3 Trench locations and geophysics results overlaying the 1892 Ordnance Survey map
Figure 4 Plan of Trench 9 and field boundary ditch (904) section

List of Plates

- Plate 1** General view, looking west
Plate 2 Trench 1, looking north-east
Plate 3 Trench 2, looking south-east
Plate 4 Trench 3, looking east
Plate 5 Trench 4, looking west
Plate 6 Trench 5, looking south
Plate 7 Trench 6, looking north-east
Plate 8 Trench 7, looking east
Plate 9 Trench 8, looking east
Plate 10 Trench 9, looking south
Plate 11 Trench 1, geological feature, looking north
Plate 12 Trench 8, geological feature, looking north
Plate 13 Trench 6, representative section, looking south-east
Plate 14 Trench 7, representative section, looking north
Plate 15 Stratigraphy in Trench 5
Plate 16 Ground water in Trench 9



Summary

Wessex Archaeology was commissioned by ERM, on behalf of INEOS, to undertake archaeological evaluation of a parcel of land located off Dinnington Road in Woodsetts, Rotherham, South Yorkshire centred on National Grid Reference 454631 383811 (Figure 1). The evaluation forms part of a programme of archaeological works being undertaken in order to fulfil planning requirements to a proposed development.

A previous detailed, gradiometer survey of the Site had demonstrated the presence of a number of anomalies, following which a programme of archaeological evaluation trial trenching was requested by SYAS.

The archaeological excavation was executed as designed. The trenching results indicated the anomalies were geological in origin with only one archaeological feature identified (a 19th century field boundary in Trench 9). The lack of archaeology suggests that the Site lay at a distance from any settlement. The Site may have been used agriculturally for some time.

The archive is currently held at the offices of Wessex Archaeology in Sheffield under the project code 201560. The archive will be offered to Clifton Park Museum in due course. An accession number may be issued following mid-project review if deposition of the archive with the museum is deemed appropriate. A digital copy of the archive will be held on Wessex Archaeology's computer system. An OASIS record, wessexar-1-306943, has been completed for this work and will be finalised at the time of deposition.

Acknowledgements

The archaeological evaluation was commissioned by ERM on behalf of INEOS. Thanks are extended to William Hazel and Jim Mower of ERM and to Jim McNeil of SYAS who provided curatorial support and guidance.

The fieldwork was directed by Simon Brown, assisted by Heather Tamminen, Otis Gilbert, Stuart Pierson and Max Higgins. This report was written by Milica Rajic, with illustrations by Ian Atkins.

The project was managed for Wessex Archaeology by Milica Rajic.



Woodsetts, Rotherham, South Yorkshire

Archaeological Evaluation

1 INTRODUCTION

1.1 Project background

1.1.1 Wessex Archaeology was commissioned by ERM on behalf of INEOS to undertake an archaeological evaluation of a 1.8 ha parcel of land located off Dinnington Road, Woodsetts, Rotherham, South Yorkshire (hereafter 'the Site'), centred on NGR 454631 383811 (Figure 1). The evaluation forms part of a programme of archaeological works being undertaken in order to fulfil planning requirements attached to a proposed development.

1.1.2 The Site was previously subject to geophysical survey by Wessex Archaeology (Wessex Archaeology 2017a). Following on from this, a programme of archaeological evaluation trial trenching was required by South Yorkshire Archaeological Service (SYAS); archaeological advisors to the Local Planning Authority (LPA).

1.1.3 All works were undertaken in accordance with a written scheme of investigation (WSI) which detailed the aims, methodologies and standards to be employed in order to undertake the evaluation (Wessex Archaeology 2018). Jim McNeil (SYAS) approved the WSI on behalf of the LPA prior to fieldwork commencing.

1.1.4 The evaluation comprised nine trial trenches (Trenches 1-9), representing a 3% sample of the Site. Each trench measured 30 m by 2 m and targeted geophysical anomalies (Figure 2). The evaluation was undertaken between 15 and 19 January 2018.

1.2 Scope of the report

1.2.1 The purpose of this report is to provide a detailed description of the results of the evaluation, to interpret the results within a local, regional or wider archaeological context and assess whether the aims of the evaluation have been met.

1.2.2 The presented results will provide further information in regard to the archaeological resource that may be impacted by the proposed development and facilitate an informed decision in regard to the requirement for, and methods of, any further archaeological mitigation.

1.3 Location, topography and geology

1.3.1 Evaluation trenches were located within a single arable field planted with oilseed rape. The field is bounded by Dinnington Road to the north, residential properties and agricultural land to the east, and with open boundaries leading to agricultural land to the west and south. An access track runs parallel to the eastern boundary of the field. Dewidales Wood, a small copse, is located to the south of the Site (Plate 1).

1.3.2 The evaluation area was located on a broadly north-east facing slope falling from approximately 82 m above Ordnance Datum (aOD) at the western edge into a significant dip and then rising up to approximately 75 m aOD at the north-east and eastern edge.



- 1.3.3 The underlying geology comprises Dolostone of the Cadeby Formation. Generally, no overlying superficial deposits are recorded. There is a small band of glaciofluvial deposits of sands and gravel noted to the north of the evaluation area; a small part of this protrudes onto the Site (British Geological Survey online viewer).

2 ARCHAEOLOGICAL AND HISTORICAL BACKGROUND

2.1 Introduction

- 2.1.1 The following section is summarised from an Environmental Report (INEOS, October 2017) submitted with the planning application which contained an assessment of the archaeological and historic background of the Site.

2.2 Previous investigations related to the proposed development

- 2.2.1 Geophysical survey of an 11.5 ha area included the Site (Wessex Archaeology 2017) and has demonstrated the presence of a number of anomalies of potentially archaeological origin. These are predominantly located to the west of the survey area, consisting of sizable linear and curvilinear anomalies as well as a network of interconnected rectilinear anomalies indicative of former land divisions and enclosures. Additionally, the geophysical survey detected anomalies consistent with the historical pattern of land division as well as agricultural activity, with former field boundaries and possible ridge and furrow prevalent across the survey area. Areas of increased magnetic response and further evidence of localised superficial geological variation are also noted, as well as the presence of field drains and a modern service.

2.3 Prehistoric/Romano-British

- 2.3.1 No prehistoric remains are known within 1km of the Site, although assemblages of worked stone are known from the wider area.
- 2.3.2 Two brooches dating to AD 200–300 and a lead spindle whorl were recovered from inside a Romano-British enclosure at Swinston Wood, 850 m to the north of the Site. In addition, a bronze torc dating to the Late Iron Age / early Roman period was recovered approximately 1.2 km to the north of the Site.

2.4 Medieval

- 2.4.1 A jetton hoard was recovered from Lindrick Dale approximately 850 m to the south-west of the Site. Two Anglo-Danish girdle ends dating to 9th century, a copper styca (coin) of Aethelred II of Northumbria (AD 841 - 844), and a gilded bronze strap-end (with buckle attached) were also found nearby. Agricultural ridge and furrow ploughing activity dating to the medieval period is evident to the north of the site at Guildingwells.

2.5 Post-medieval

- 2.5.1 The land surrounding the Site was enclosed during the 18th and 19th centuries, resulting in the creation of large rectilinear fields. These are interspersed with areas of mature woodland evident on early Ordnance Survey maps, including Dewidales Wood. The site appears to have been in arable cultivation from at least the late 19th century, however, internal boundaries have changed over time.
- 2.5.2 Three Grade II Listed buildings are recorded within 1 km of the Site. The nearest of these is Hoades Farmhouse; an 18th century building located approximately 60 m to the north-east.



- 2.5.3 Local industry during the 19th century comprised agriculture and limestone quarrying. Magnesian limestone is widely used in local buildings, from small cottages to country mansions, with small limestone quarries opening in areas such as Lindrick and South Anston. A quarry at Lindrick Common (approximately 1.2 km to the south-east of the Site) appears to have been in use from the Roman period to the industrial period. The quarry at Woodsetts (approximately 1.5 km to the south-east of the site) was operational from approximately 1920 to 1950.

3 AIMS AND OBJECTIVES

3.1 General aims

- 3.1.1 The general aims of the evaluation, as stated in the WSI (Wessex Archaeology 2018) and in compliance with the ClfA *Standard and guidance for archaeological field evaluation* (ClfA 2014a), were:

- *to provide information about the archaeological potential of the site; and*
- *to inform either the scope and nature of any further archaeological work that may be required; or the formation of a mitigation strategy (to offset the impact of the development on the archaeological resource); or a management strategy.*

3.2 General objectives

- 3.2.1 In order to achieve the above aims, the general objectives of the evaluation were:

- *to determine the presence or absence of archaeological features, deposits, structures, artefacts or ecofacts within the specified area;*
- *to establish, within the constraints of the evaluation, the extent, character, date, condition and quality of any surviving archaeological remains;*
- *to place any identified archaeological remains within a wider historical and archaeological context in order to assess their significance; and*
- *to make available information about the archaeological resource within the site by reporting on the results of the evaluation.*

3.3 Site-specific objectives

- 3.3.1 Following consideration of the archaeological potential of the site, the site-specific objectives defined in the WSI (Wessex Archaeology 2018) were:

- *to determine the extent, condition, character, significance and date of any archaeological deposits encountered that will be removed or disturbed by groundworks;*
- *to investigate the anomalies and responses on the Site identified by the geophysical survey;*
- *to accurately record the location and stratigraphy of areas excavated;*
- *to prepare a comprehensive record and report of any archaeological deposits or structures or artefacts identified;*



- to gain an understanding of the development of the Site;
- to put the results of the excavation in context by comparing it with similar/related Sites within the local area as well as its regional and national contexts; and,
- to enable development of a suitable mitigation strategy, should archaeological deposits be encountered.

4 METHODS

4.1 Introduction

4.1.1 All works were undertaken in accordance with the detailed methods set out within the WSI (Wessex Archaeology 2018) and in general compliance with the standards outlined in ClfA guidance (ClfA 2014a). The methods employed are summarised below.

4.2 Fieldwork methods

General

- 4.2.1 The trench locations were set out using a Global Positioning System (GPS), in the approximate positions proposed in the WSI. (Figure 2).
- 4.2.2 Before excavation, the evaluation area was walked over and visually inspected to identify, where possible, the location of any below/above-ground services. All trial trench locations were scanned before excavation with a Cable Avoidance Tool (CAT) in order to verify the absence of any live underground services. No underground services were found.
- 4.2.3 Nine trial trenches (Plates 2-10), each measuring 30 m long and 2 m wide, were excavated in level spits using a JCB excavator equipped with a toothless bucket, under the constant supervision and instruction of the monitoring archaeologist.
- 4.2.4 In all but one trench (Trench 9), the absence of any archaeological horizon was adequately demonstrated and the trenches were machine excavated down to the level of natural geology.
- 4.2.5 Surfaces were cleaned by hand to allow inspection and to define presence of any archaeological features.
- 4.2.6 On several occasions, geological features were tested (hand excavated) and their natural origin was confirmed (Plates 11 & 12).
- 4.2.7 The bases of the trenches and the spoil derived from machine stripping was visually scanned and metal detected for the purposes of finds retrieval. No artefacts were found.
- 4.2.8 Trenches completed to the satisfaction of the project team and Jim McNeil (SYAS) were backfilled using excavated materials in the reverse order in which they were excavated, and left level on completion. No other reinstatement or surface treatment was undertaken.

Recording

4.2.9 All exposed deposits were recorded using Wessex Archaeology's *pro forma* recording system. A complete drawn record of excavated features and deposits was made including both plans and sections drawn to appropriate scales (generally 1:20 or 1:50 for plans and 1:10 for sections), and tied to the Ordnance Survey (OS) National Grid. The Ordnance



Datum (OD: Newlyn) heights of all principal features were calculated, and levels added to plans and section drawings.

- 4.2.10 A Leica GNSS connected to Leica's SmartNet service surveyed the location of archaeological features. All survey data is recorded in OS National Grid coordinates and heights above OD (Newlyn), as defined by OSGM15 and OSTN15, with a three-dimensional accuracy of at least 50 mm.
- 4.2.11 A full photographic record was made using black and white and colour slide film. Digital cameras equipped with an image sensor of not less than 10 megapixels were used as supplementary record. Digital images have been subject to managed quality control and curation processes.

4.3 Monitoring

- 4.3.1 Jim McNeil (SYAS), on behalf of the LPA, monitored the evaluation.

5 ARCHAEOLOGICAL RESULTS

5.1 Introduction

- 5.1.1 The following section provides a summary of the information held in the Site archive. A list of context numbers and context descriptions within each trench is presented in Appendix 1.

5.2 General stratigraphy

- 5.2.1 Topsoil and subsoil were removed and the natural geology exposed in all trenches. The topsoil was a dark brown silty clay, up to 0.40 m deep overlying 0.10–0.80 m of light brown sandy clay (Plates 13 & 14). In Trench 5 a layer of dark brown sandy clay colluvium 0.20 m thick was present (Plate 15). Natural pale and degraded limestone was recorded from 0.33 m below ground level.

5.3 Ditch 904

- 5.3.1 In Trench 9 an east-west oriented ditch (904) was unearthed. The ditch was 2.36 m wide, 0.18 m deep and filled with light orange brown silty clay (905) (Figure 4). This feature correlates with the field boundary depicted on an 1892 OS map (Figure 3). No artefacts were found in Trench 9. Recording of ditch 904 was hampered by rising groundwater (Plate 16).

5.4 Negative results

- 5.4.1 No archaeological features, deposits or artefacts were found in Trenches 1-8.

6 CONCLUSIONS

6.1 Discussion

- 6.1.1 The archaeological evaluation was executed as designed. Apart from a 19th century boundary ditch, no other archaeological features, deposits or artefacts were encountered. With the exception of the 19th century ditch, anomalies previously identified during geophysical survey did not translate into archaeological features. The site may have been used agriculturally for some time.



7 ARCHIVE STORAGE AND CURATION

7.1 Museum

7.1.1 The archive resulting from the evaluation is currently held at the offices of Wessex Archaeology in Sheffield. Clifton Park Museum has agreed in principle to accept the archive on completion of the project. The archive will be offered to the museum in due course. An accession number may be issued following mid-project review if deposition of the archive with the museum is deemed appropriate. A digital copy of the archive will be held on Wessex Archaeology's computer system.

7.2 Preparation of the archive

7.2.1 The archive, which includes paper records, graphics, photo slides and digital data, will be prepared following nationally recommended guidelines (SMA 1995; ClfA 2014c; Brown 2011; ADS 2013) and the guidelines of Clifton Park Museum as appropriate to the destination of the archive.

7.3 Selection policy

7.3.1 Wessex Archaeology follows the guidelines set out in Selection, Retention and Dispersal of Archaeological Collections (SMA 1993), which allows for the discard of selected artefact and ecofact categories which are not considered to warrant any future analysis. However, in this instance, there were no finds and no ecofacts.

7.4 Security copy

7.4.1 In line with current best practice (e.g. Brown 2011), on completion of the project a security copy of the written records will be prepared, in the form of a digital PDF/A file. PDF/A is an ISO-standardised version of the Portable Document Format (PDF) designed for the digital preservation of electronic documents through omission of features ill-suited to long-term archiving.

7.5 OASIS

7.5.1 An OASIS online record (<http://oasis.ac.uk/pages/wiki/Main>) has been initiated, with key fields and a .pdf version of the final report submitted. Subject to any contractual requirements on confidentiality, copies of the OASIS record will be integrated into the relevant local and national records and published through the Archaeology Data Service ArchSearch catalogue.

8 COPYRIGHT

8.1 Archive and report copyright

8.1.1 The full copyright of the written/illustrative/digital archive relating to the project will be retained by Wessex Archaeology under the *Copyright, Designs and Patents Act 1988* with all rights reserved. The client will be licenced to use each report for the purposes that it was produced in relation to the project as described in the specification. The museum, however, will be granted an exclusive licence for the use of the archive for educational purposes, including academic research, providing that such use conforms to the *Copyright and Related Rights Regulations 2003*. In some instances, certain regional museums may require absolute transfer of copyright, rather than a licence; this should be dealt with on a case-by-case basis.



- 8.1.2 Information relating to the project will be deposited with the Historic Environment Record (HER) where it can be freely copied without reference to Wessex Archaeology for the purposes of archaeological research or development control within the planning process.

8.2 Third party data copyright

- 8.2.1 This document and the project archive may contain material that is non-Wessex Archaeology copyright (e.g. Ordnance Survey, British Geological Survey, Crown Copyright), or the intellectual property of third parties, which Wessex Archaeology are able to provide for limited reproduction under the terms of our own copyright licences, but for which copyright itself is non-transferable by Wessex Archaeology. Users remain bound by the conditions of the *Copyright, Designs and Patents Act 1988* with regard to multiple copying and electronic dissemination of such material.



REFERENCES

- ADS 2013 *Caring for Digital Data in Archaeology: a guide to good practice*. Archaeology Data Service and Digital Antiquity Guides to Good Practice
- British Geological Survey online viewer <http://mapapps.bgs.ac.uk/geologyofbritain/home.html> (accessed January 2018)
- Brown, D H, 2011 *Archaeological Archives: a guide to best practice in creation, compilation, transfer and curation* (revised edition). Archaeological Archives Forum
- English Heritage 2011 *Environmental Archaeology: a guide to theory and practice of methods, from sampling and recovery to post-excavation*. Swindon, Centre for Archaeology Guidelines
- CIfA 2014a *Standard and Guidance for Archaeological Field Evaluation*. Reading, Chartered Institute for Archaeologists
- CIfA 2014b *Standard and Guidance for the Collection, Documentation, Conservation and Research of Archaeological Materials*. Reading, Chartered Institute for Archaeologists
- CIfA 2014c *Standard and Guidance for the Creation, Compilation, Transfer and Deposition of Archaeological Archives*. Reading, Chartered Institute for Archaeologists
- INEOS Shale 2017 Environmental Report, Application to Drill a Vertical Core Well, Land adjacent to Dinnington Road, Woodsetts, Rotherham. October 2017
- SMA 1993 *Selection, Retention and Dispersal of Archaeological Collections*. Society of Museum Archaeologists
- SMA 1995 *Towards an Accessible Archaeological Archive*. Society of Museum Archaeologists
- Wessex Archaeology 2017 *Detailed Gradiometer Survey Report*. Unpublished report ref 118460.03
- Wessex Archaeology 2018 *Written Scheme of Investigation for Archaeological Evaluation* Unpublished report ref 201560.01



APPENDICES

Appendix 1 Trench summaries

NGR coordinates and OD heights taken at centre of each trench; depth bgl = below ground level

Trench 1	30 m x 2 m		NGR: 454245, 383676	82.15m OD
Context	Interpretation	Fill of	Description	Depth bgl (m)
101	Topsoil		Ploughsoil: dark brown silty clay	0.00–0.40
102	Subsoil		Subsoil: light brown sandy clay	0.40–0.75
103	Natural		Natural: Limestone, pale and degraded	0.75

Trench 2	30 m x 2 m		NGR: 454278, 383689	82.16m OD
Context	Interpretation	Fill of	Description	Depth bgl (m)
201	Topsoil		Ploughsoil: dark brown silty clay	0.00–0.30
202	Subsoil		Subsoil: light brown sandy clay	0.30–0.50
203	Natural		Natural: Limestone, pale and degraded	0.50

Trench 3	30 m x 2 m		NGR: 454328, 383695	80.86m OD
Context	Interpretation	Fill of	Description	Depth bgl (m)
301	Topsoil		Ploughsoil: dark brown silty clay	0.00–0.25
302	Subsoil		Subsoil: light brown sandy clay	0.25–0.65
303	Natural		Natural: Limestone, pale and degraded	0.65

Trench 4	30m x 2 m		NGR: 454254, 383640	81.75m OD
Context	Interpretation	Fill of	Description	Depth bgl (m)
401	Topsoil		Ploughsoil: dark brown silty clay	0.00–0.35
402	Subsoil		Subsoil: light brown sandy clay	0.35–0.90
403	Natural		Natural: Limestone, pale and degraded	0.90

Trench 5	30 m x 2 m		NGR: 454306, 383638	80.76m OD
Context	Interpretation	Fill of	Description	Depth bgl (m)
501	Topsoil		Ploughsoil: dark brown silty clay	0.00–0.30
502	Subsoil		Subsoil: light brown sandy clay	0.30–0.90
503	Subsoil		Colluvium: dark brown sandy clay	0.90–1.10
504	Natural		Natural: Limestone, pale and degraded	1.10

Trench 6	30 m x 2 m		NGR: 454354, 383625	80.59m OD
Context	Interpretation	Fill of	Description	Depth bgl (m)
601	Topsoil		Ploughsoil: dark brown silty clay	0.00–0.40
602	Subsoil		Subsoil: light brown sandy clay	0.40–1.2
603	Natural		Natural: Limestone, pale and degraded	1.2

Trench 7	30 m x 2 m		NGR: 454442, 383588	81.33m OD
Context	Interpretation	Fill of	Description	Depth bgl (m)
701	Topsoil		Ploughsoil: dark brown silty clay	0.00–0.27
702	Subsoil		Subsoil: light brown sandy clay	0.27–0.40
703	Natural		Natural: Limestone, pale and degraded	0.40



Trench 8	30 m x 2 m		NGR: 454569, 383558	80.77m OD
Context	Interpretation	Fill of	Description	Depth bgl (m)
801	Topsoil		Ploughsoil: dark brown silty clay	0.00–0.35
802	Subsoil		Subsoil: light brown sandy clay	0.35-0.45
803			Natural: Limestone, pale and degraded	0.45

Trench 9	30 m x 2 m		NGR: 454741, 383640	77.83m OD
Context	Interpretation	Fill of	Description	Depth bgl (m)
901	Topsoil		Ploughsoil: dark greyish brown silty loam with common inclusions of flint and chalk	0.00–0.24
902	Subsoil		Subsoil: light brown sandy clay	0.24-0.33
903	Natural		Natural: Limestone, pale and degraded	0.33
904	Cut		Cut of 19th C field boundary ditch, 2.36m wide, 0.18m deep	0.37-0.50
905	Fill	904	Fill of 904. Light orange brown silty clay	0.37-0.50



Appendix 2 OASIS form

OASIS ID: wessexar1-306943

Project details

Project name	Woodsetts, Rotherham, South Yorkshire
Short description of the project	<p>Wessex Archaeology was commissioned by ERM, on behalf of INEOS, to undertake archaeological evaluation of a parcel of land located off Dinnington Road in Woodsetts, Rotherham, South Yorkshire centred on National Grid Reference 454631 383811. The evaluation forms part of an ongoing programme of archaeological works being undertaken in order to fulfil planning constraints to an upcoming development. A previous detailed gradiometer survey of the Site had demonstrated the presence of a number of anomalies, following which a programme of archaeological evaluation trial trenching was requested by SYAS. The archaeological excavation was executed as designed. The trenching results indicated the anomalies were geological in origin with only one archaeological feature identified (a 19th century field boundary in Trench 9). The lack of archaeology suggests that the site lay at a distance from any settlement. The site may have been used agriculturally for some time. The archive is currently held at the offices of Wessex Archaeology in Sheffield under the project code 201560. The archive will be offered to Clifton Park Museum in due course. An accession number may be issued following mid-project review if deposition of the archive with the museum is deemed appropriate. A digital copy of the archive will be held on Wessex Archaeology's computer system.</p>
Project dates	Start: 15-01-2018 End: 19-01-2018
Previous/future work	Yes / Not known
Any associated project reference codes	297279 - OASIS form ID
Any associated project reference codes	201560 - Contracting Unit No.
Type of project	Field evaluation
Site status	None
Current Land use	Cultivated Land 3 - Operations to a depth more than 0.25m
Monument type	FIELD BOUNDARY Post Medieval
Significant Finds	NONE None
Methods & techniques	"Targeted Trenches"
Development type	Mineral extraction (e.g. sand, gravel, stone, coal, ore, etc.)
Prompt	Planning condition
Position in the planning process	Not known / Not recorded

Project location

Country	England
Site location	SOUTH YORKSHIRE ROTHERHAM WOODSETTS Woodsetts Evaluation, Rotherham
Postcode	S81 8RG



Study area	1.8 Hectares
Site coordinates	SK 54631 83811 53.348097013385 -1.179250118531 53 20 53 N 001 10 45 W Point
Height OD / Depth	Min: 75m Max: 82m

Project creators

Name of Organisation	Wessex Archaeology
Project brief originator	Wessex Archaeology
Project design originator	Wessex archaeology
Project director/manager	Milica Rajic
Project supervisor	Simon Brown
Type of sponsor/funding body	Developer
Name of sponsor/funding body	INEOS

Project archives

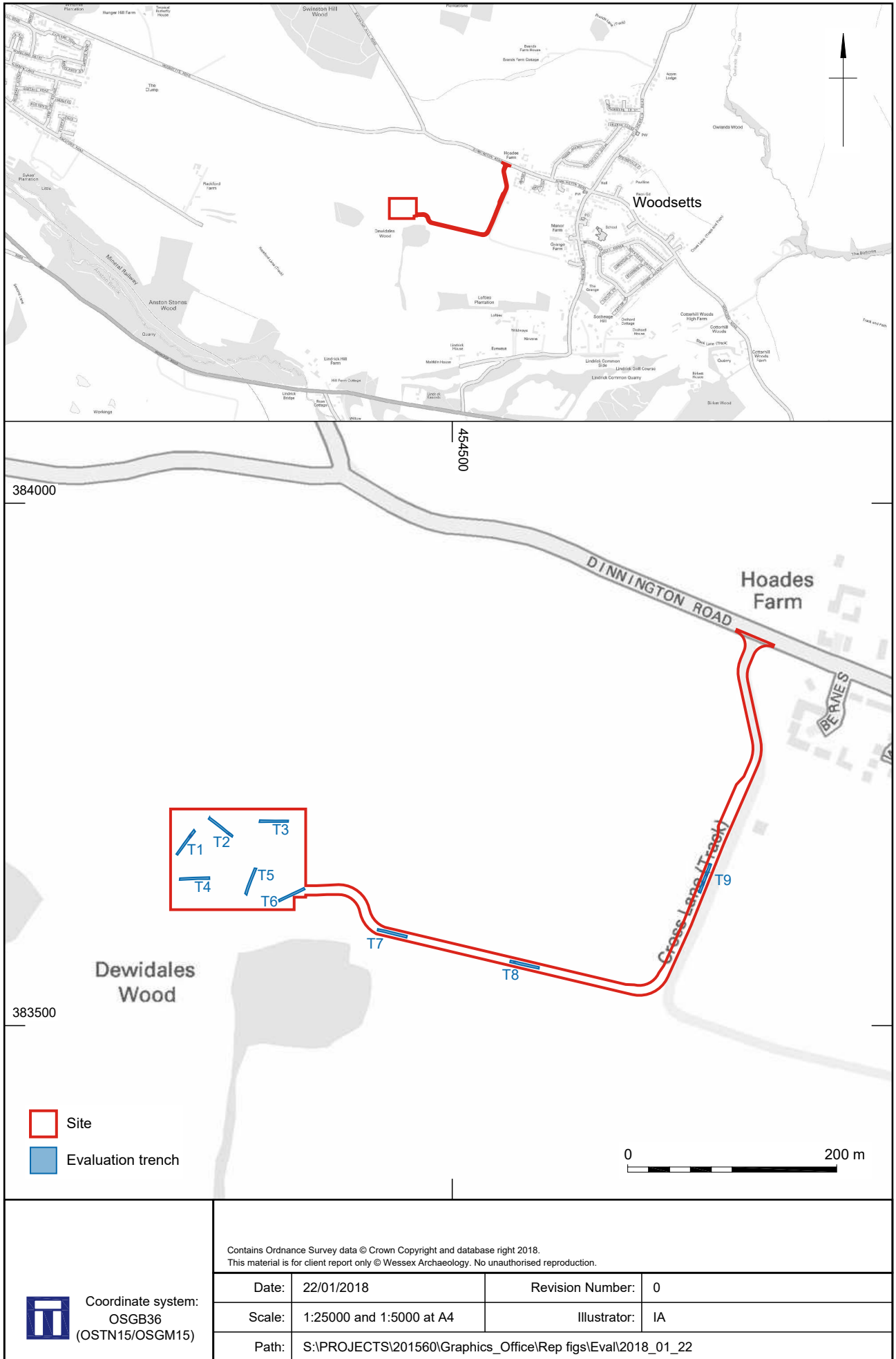
Physical Archive Exists?	No
Digital Archive recipient	Clifton Park Museum, Rotherham
Digital Contents	"none"
Digital Media available	"Images raster / digital photography", "Text"
Paper Archive recipient	Clifton Park Museum, Rotherham
Paper Contents	"none"
Paper Media available	"Context sheet", "Diary", "Plan", "Report", "Section", "Unpublished Text"

Project bibliography 1

Publication type	Grey literature (unpublished document/manuscript)
Title	Woodsetts, Rotherham, South Yorkshire, Archaeological Evaluation Report
Author(s)/Editor(s)	Rajic, M.
Issuer or publisher	Wessex Archaeology
Place of issue or publication	Sheffield
Description	A4 comb bound report



Entered by jess tibber (j.tibber@wessexarch.co.uk)
Entered on 24 January 2018



Site location

Figure 1

- Site
- Evaluation trench
- Archaeological feature
- Geological feature
- Geophysical survey area
- Geophysical anomaly

454500



383500



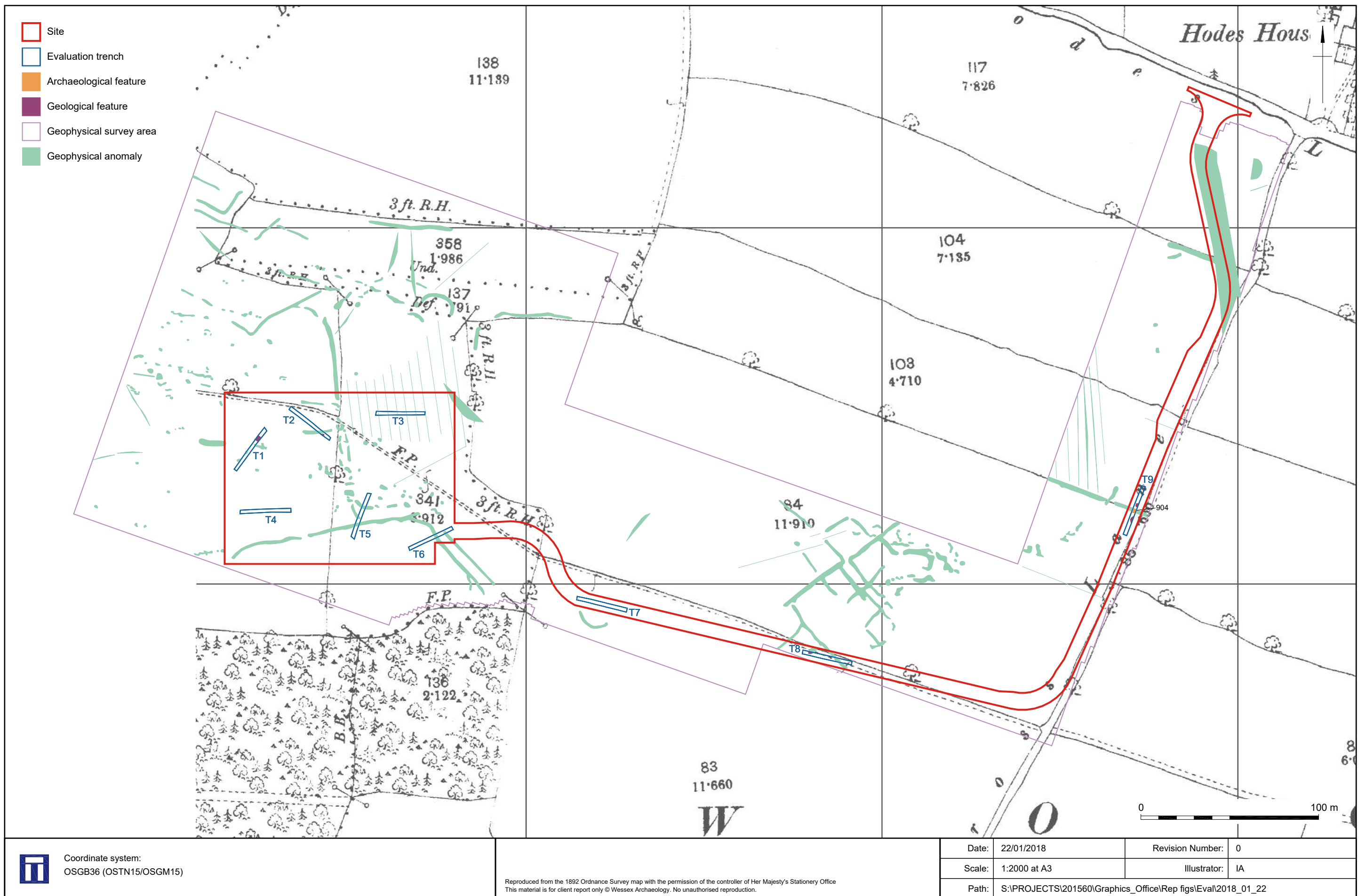
Coordinate system:
OSGB36 (OSTN15/OSGM15)

This material is for client report only © Wessex Archaeology. No unauthorised reproduction.

Date:	22/01/2018	Revision Number:	0
Scale:	1:2000 at A3	Illustrator:	IA
Path:	S:\PROJECTS\201560\Graphics_Office\Rep figs\Eval\2018_01_22		

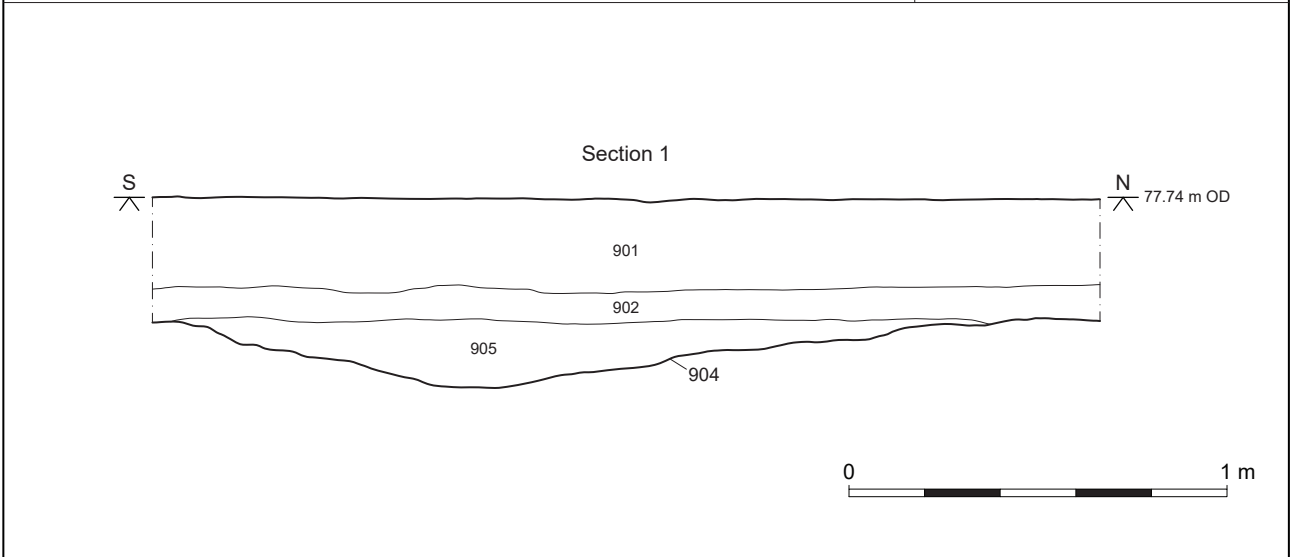
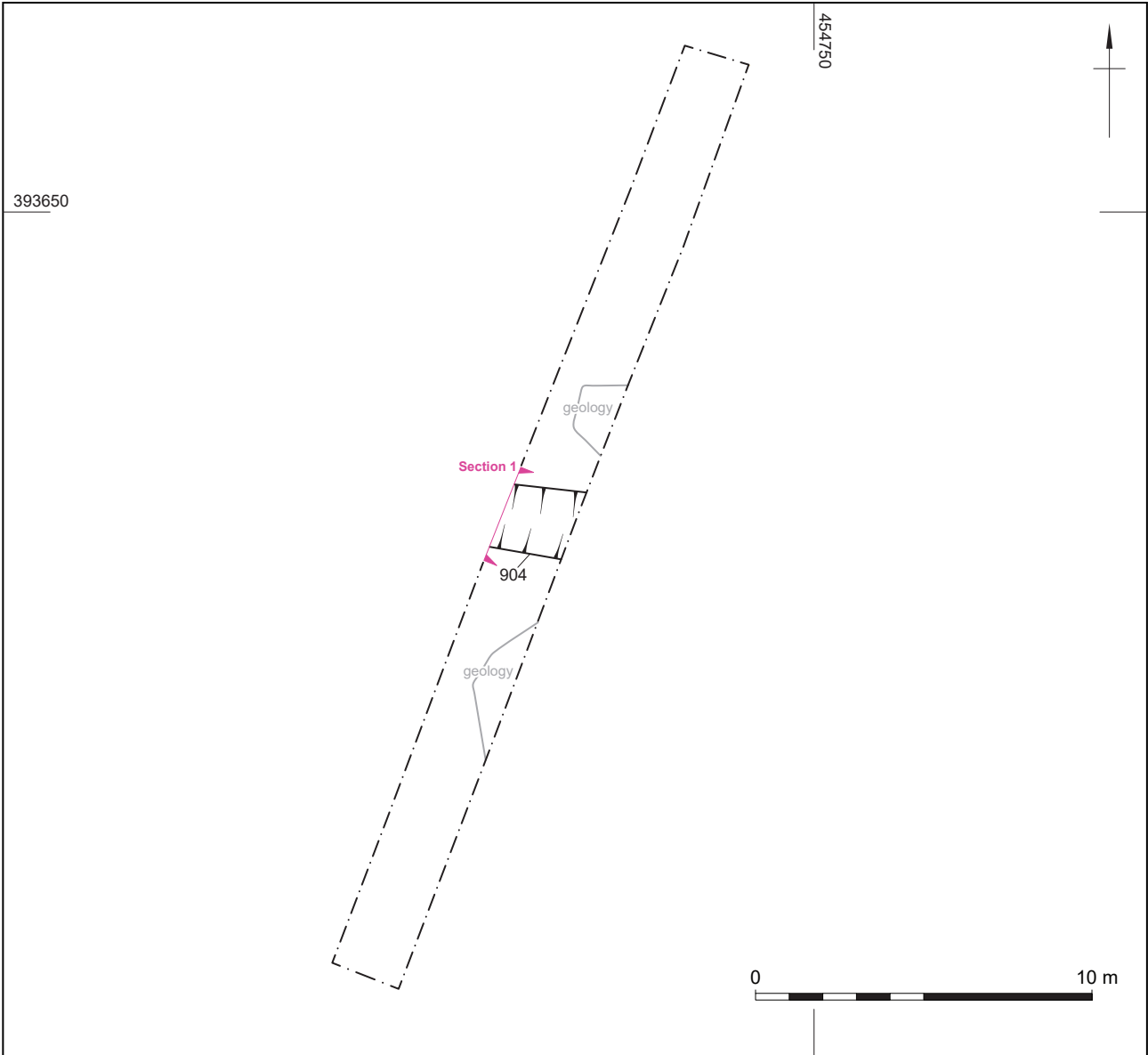
Trench locations


Figure 2



Trench locations and geophysics results overlaying the 1892 Ordnance Survey map

Figure 3



	This material is for client report only © Wessex Archaeology. No unauthorised reproduction.			
	Date:	22/01/2018	Revision Number:	0
	Scale:	1:200 and 1:20 at A4	Illustrator:	IA
	Path:	S:\PROJECTS\201560\Graphics_Office\Rep figs\Eval\2018_01_22		

Plan of Trench 9 and field boundary ditch (904) section

Figure 4



Plate 1: General view, looking west



Plate 2: Trench 1, looking north-east


	This material is for client report only © Wessex Archaeology. No unauthorised reproduction.		
	Date:	22/01/2018	Revision Number: 0
	Scale:	Not to scale	Illustrator: IA
	Path:	S:\PROJECTS\201560\Graphics_Office\Rep figs\Eval\2018_01_22	



Plate 3: Trench 2, looking south-east



Plate 4: Trench 3, looking east


	This material is for client report only © Wessex Archaeology. No unauthorised reproduction.		
	Date:	22/01/2018	Revision Number: 0
	Scale:	Not to scale	Illustrator: IA
	Path:	S:\PROJECTS\201560\Graphics_Office\Rep figs\Eval\2018_01_22	



Plate 5: Trench 4, looking west



Plate 6: Trench 5, looking south


	This material is for client report only © Wessex Archaeology. No unauthorised reproduction.		
	Date:	22/01/2018	Revision Number: 0
	Scale:	Not to scale	Illustrator: IA
	Path:	S:\PROJECTS\201560\Graphics_Office\Rep figs\Eval\2018_01_22	



Plate 7: Trench 6, looking north-east



Plate 8: Trench 7, looking east


	This material is for client report only © Wessex Archaeology. No unauthorised reproduction.		
	Date:	22/01/2018	Revision Number: 0
	Scale:	Not to scale	Illustrator: IA
	Path:	S:\PROJECTS\201560\Graphics_Office\Rep figs\Eval\2018_01_22	



Plate 9: Trench 8, looking east



Plate 10: Trench 9, looking south


	This material is for client report only © Wessex Archaeology. No unauthorised reproduction.		
	Date:	22/01/2018	Revision Number: 0
	Scale:	Not to scale	Illustrator: IA
	Path:	S:\PROJECTS\201560\Graphics_Office\Rep figs\Eval\2018_01_22	



Plate 11: Trench 1, geological feature, looking north



Plate 12: Trench 8, geological feature, looking north


	This material is for client report only © Wessex Archaeology. No unauthorised reproduction.			
	Date:	22/01/2018	Revision Number:	0
	Scale:	Not to scale	Illustrator:	IA
	Path:	S:\PROJECTS\201560\Graphics_Office\Rep figs\Eval\2018_01_22		



Plate 13: Trench 6, representative section, looking south-east



Plate 14: Trench 7, representative section, looking north



	This material is for client report only © Wessex Archaeology. No unauthorised reproduction.		
	Date:	22/01/2018	Revision Number: 0
	Scale:	Not to scale	Illustrator: IA
	Path:	S:\PROJECTS\201560\Graphics_Office\Rep figs\Eval\2018_01_22	



Plate 15: Stratigraphy in Trench 5



Plate 16: Ground water in Trench 9

	This material is for client report only © Wessex Archaeology. No unauthorised reproduction.			
	Date:	22/01/2018	Revision Number:	0
	Scale:	Not to scale	Illustrator:	IA
	Path:	S:\PROJECTS\201560\Graphics_Office\Rep figs\Eval\2018_01_22		



Wessex Archaeology Ltd registered office Portway House, Old Sarum Park, Salisbury, Wiltshire SP4 6EB
Tel: 01722 326867 Fax: 01722 337562 info@wessexarch.co.uk www.wessexarch.co.uk



**Appendix 13: Letter to RMBC Planning 8 February
2018**

8 February 2018

Delivered by email

Anthony Lowe
Planning Regeneration and Transport Service
Rotherham Metropolitan Borough Council
Riverside House
Main Street
Rotherham
S60 1AE

Dear Anthony

RB2017/1577: CONSTRUCTION OF A WELL SITE AND CREATION OF A NEW ACCESS TRACK, MOBILISATION OF DRILLING, ANCILLARY EQUIPMENT AND CONTRACTOR WELFARE FACILITIES TO DRILL AND PRESSURE TRANSIENT TEST A VERTICAL HYDROCARBON EXPLORATORY CORE WELL AND MOBILISATION OF WORKOVER RIG, LISTENING WELL OPERATIONS, AND RETENTION OF THE SITE AND WELLHEAD ASSEMBLY GEAR FOR A TEMPORARY PERIOD OF 5 YEARS ON LAND ADJACENT TO DINNINGTON ROAD, WOODSETTS, ROTHERHAM

Further to the latest comments from your ecology officer, I am pleased to set out the findings of further work that we have undertaken in order to address the concerns raised.

Background

Discussions are ongoing with Rotherham Metropolitan Borough Council (RMBC), about the Planning Application for exploratory work on Land Adjacent to Dinnington Road, Woodsetts. As part of those discussions, RMBC's Ecologist (Mr Andrew Godfrey) has commented further (see e-mail from the RMBC Development Management Office on 30th January 2018) as follows:

"Phase 1 Survey. Target notes with comments should be added and show the conservation headland on the Phase 1 map without going out into the field. The survey was done within the optimum time of year but writing up could have been done better. A plant list to accompany a Phase 1 Habitat survey is not essential but is undertaken by many and usually by the more professional companies. A plant list would really need to be drawn up from April onwards during the optimum period for Phase 1 Habitat surveys. The conservation headlands can be seen from aerial photos (although these might vary in width between the years).

Badger surveys can be done from February onwards – they get more active as the season progresses so a cold spell in February wouldn't be ideal either. Active bat surveys can be done from April onwards.

2 Bond Court
Leeds
LS1 2JZ

T 0113 386 3800 turley.co.uk

The application is close to ancient woodland. Potentially the development will indirectly impact on the ancient woodland particularly in terms of light pollution, but also noise, human disturbance, vehicle movements, etc. This is particularly the case given that during the drilling, the operation will be 24 hours/day. I do not consider that the applicants have obtained sufficient ecological data on the ancient woodland and consequently the impacts are difficult to predict.”

This note provides some further clarifications around these issues, including some additional survey work for badgers, based on a site visit undertaken on Thursday 1st February 2018, by two ERM surveyors (both Associate members of CIEEM). The visit was undertaken in breezy conditions (13 mph wind from NW, with intermittent rain and a temperature of 6°C).

These survey findings continue to support the findings and assessment made in the Environmental Report.

Phase 1 Habitat Map and Headlands

We understand the preference expressed for a Phase 1 habitat survey map with extensive target notes on, however, it is important to consider the context of the proposed development site. As described in the Environmental Report (ER), it is located entirely within a single arable field, which at the time of the survey in July 2017 was planted with a uniform barley crop across the field (see *Table 4.3* of the ER).

Information on adjacent habitats (*eg* the hedgerows, and the eastern part of Dewidales Wood), including lists of the main plant species present, was provided in the main text of the Environmental Report (see *Table 4.3* of the ER). Access to Dewidales Wood was not available at the time of the surveys in July 2017, or in February 2018, and hence the species listings provided, were made from the Public Right of Way (PRoW). A target note with this information on the Phase 1 map was felt to duplicate the information already available in *Table 4.3* of the ER.

The site was visited on 1 February 2018, and the field was found to have been planted with oil seed rape, that was sown in the autumn of 2017. This change of crop is part of an ongoing annual rotational cropping regime which over the last six years has included wheat, barley, sugar beet and oil seed rape. It is understood, from consultation with the landowner, that such rotational cropping will continue in the years ahead. The current oil seed rape crop has been planted across the field to its margins, or up to the grassy strips, where these occur (see below and *Target Notes 11-13, 15, and 21-23* on the attached Phase 1 habitat map), continuing the practice which has been adopted in previous years. Whilst not all the crops in recent years have been autumn sown (*eg* the barley crop in 2017 was spring sown), autumn sown crops like the current oil seed rape crop are relatively tall by spring, are unlikely to be favoured by ground nesting bird species such as lapwing and skylark. The applicant understands that the landowner has not recorded lapwing, or skylark, nesting in this field. The mitigation set out in the Environmental Report, and reiterated in subsequent correspondence remains appropriate to prevent direct effects on bird species.

An updated Phase 1 habitat map is attached with accompanying target notes from the survey on 1 February, and geo-referenced photographs where appropriate.

There is reference by the RMBC Ecologist to the presence of conservation headlands around the field margins. Conservation headlands are the “..outer margins of cereal crops (usually 6 – 24 m wide) which are sown with the crop like the rest of the field but not receive insecticides or broad-spectrum herbicides after mid-March” (Newton, 2017 ⁽¹⁾). This lack of spraying encourages broad-leaved weeds to develop. The site visit in July 2017 did not record such “conservation headlands”, and the applicant has since confirmed that the barley crop in 2017 was sprayed to its margins with either the field edge, or the grassy strips that are present around the margins of some parts of the arable field. The grassy strips, which are a “greening” component of the agricultural Basic Payment Scheme (BPS), are approximately 2 m wide (see *Target Notes 4 and 5*). These grassy strips are also predominantly along the

(1) Newton I (2017) *Farming and Birds*. William Collins.

hedgerow that forms the northern border of the field (approximately 290 m from the development site at its closest point). There are no grassy strips around the southern margins of the fields next to Dewidales Wood, or along the access track running east-west across the field (see *Figures 1.1* and *1.2*). The only area where a grassy strip may be directly affected by the proposals, is a narrow and short stretch (approximately 120 m) adjacent to the western side of the gappy hedgerow that runs along the existing access road (see *Figure 1.3*). The vast majority of the grassy strips will remain unaffected by the proposals.

Figure.1 **Looking South along the Site Entrance from Dinnington Road**



Figure.2 Access Route Looking East across Field



Figure.3 Access Route Looking North Towards Dinnington Road



Badgers and Bats

The surveys undertaken in July 2017, reported no evidence of badger signs on the site, along the access route, or entering the crop field from Dewidales Wood (see *Table 4.4* of the ER). February is a good time of year for seeing signs of badger activity, and hence a further survey was undertaken. This survey confirmed the previous findings reported in the ER, that there were no signs of badger activity along the woodland edges (as viewed from the PRoW as no access to the woodland was available), the interconnecting hedgerow, or leading from the Dewidales Wood blocks into the crop field. There were also no signs evident along the proposed access road. The applicant also understands that the landowner has not observed badgers in this field. Signs of badgers were, however, recorded in the wider area, close to permanent grassland fields, approximately 200 m south-east of the proposed site access route at its closest point (see *Target Note 19*).

It was not possible to undertake any additional bat surveys at the time of the site visit in February 2018, given it is still the hibernation period for bats. However, the only potential effect on bats was identified to be that from light spill from the working site on the northern edge of the eastern block of Dewidales Wood. The light levels at Dewidales Wood, based on predictive modelling, are below levels regarded as of concern for commuting and foraging bats, as described in the Bat Survey Report dated 12 October 2017 that has been submitted to RMBC. In correspondence to RMBC on the 21st December 2017 (ref INEM3011), the applicant has already committed to agreeing the lighting strategy with RMBC to achieve these predicted levels. As a result, additional surveys are not considered necessary as measures will be implemented to avoid significant effects on bats using Dewidales Wood. It was the applicant's understanding that additional surveys were not required on this occasion also by RMBC, based on previous comments made by the RMBC Ecologist as follows (see Memo from Andrew Godfrey to Anthony Lowe of 5th January 2018):

"The applicant has collected some bat data however, so I will accept what they have collected on this occasion but request that they follow the Bat Conservation Guidelines published in 2016 in future."

Ancient Woodland

The applicant still has no permission to access Dewidales Wood, and hence it has still not been possible to survey within the woodland at an appropriate time of year.

The site visit in February confirmed that the Public Right of Way (PRoW) along the northern edges of the two blocks of ancient woodland and through the western block (see *Figures 4 and 5* and *Target Notes 8 - 12*) are well used by walkers, often with dogs which were sometimes not on leads. Hence there is already a level of regular human related activity (and possible disturbance), and in much closer proximity to the ancient woodland than the proposed main works site.

Measures that have been proposed already to avoid significant effects on light sensitive species such as bats, and the surveys have found no evidence of badger activity along the northern edge of the woodland.

The period when drilling will be operating 24/7 are not predicted to result in significant effects on ecological interests for the following reasons:

- human activity will remain within the bunded area and delivery traffic into and out of the site will be restricted to working hours;
- the proposed site access used by traffic will pass solely through the arable field with only a short stretch of approximately 120 m of defunct hedgerow adjoining it, and this hedgerow already runs parallel with the existing access track from Dinnington Road;
- the drilling top drive will be a continuous noise source, rather than the infrequent high level type noise sources which are considered more likely to illicit responses from wildlife, especially birds;

- the noise sources at ground level up to 5 m within the works area will be screened by the bunds and portacabins helping to reduce the levels in surrounding areas;
 - the drilling methods will be rotational rather than percussive / hammer driven type which reduces vibration;
- and
- a buffer of 30 m has been maintained between the edge of Dewidales Wood and the works area to avoid effects on noise sensitive species such as badgers (albeit no signs of this species have been found along the northern edge of the wood).

The site visit also identified signs of previous human activities along the eastern edge of the woodland (outside the ancient woodland boundary) (see *Figure 1.6* and *Target Note 14*).

Additional surveys may gather more data about the ecological interests in the woodland. However, they are unlikely to have a material influence on the proposals given the scheme design and the measures already committed to by the applicant to control noise and light pollution in particular.

Figure.4 Edges of the Ancient Woodland, Interconnecting Hedgerow and Public Right of Way



Figure.5 Public Right of Way through Western Block of Ancient Woodland



Figure.6 Eastern Part of Eastern Block of Ancient Woodland



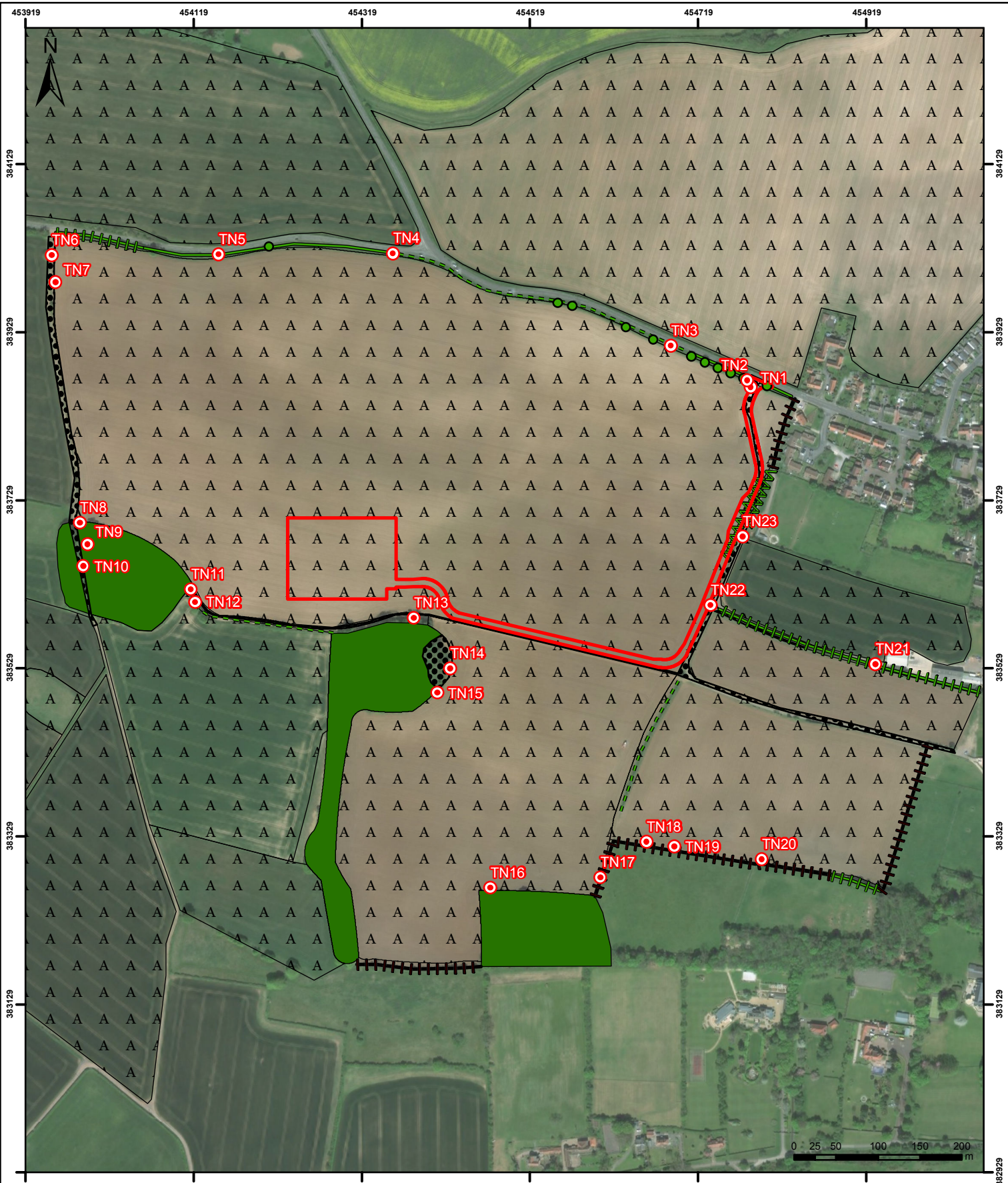
We trust that this letter assists in the determination of the application. If you have any further queries on this, please let me know.

Yours sincerely

A handwritten signature in black ink, appearing to read 'M Sheppard', written in a cursive style.

Matthew Sheppard
Director

matthew.sheppard@turley.co.uk



Project:	Land adjacent to Dinnington Road, Woodsetts, Rotherham		
Title:	Phase 1 Habitat Survey Plan		
Date: 07/02/2018	Scale: 1:6,000	CRS: BNG	
Drawn: ERM	Checked: BG	Rev: 4	
Figure No:	4-1		

Legend:

Extent of Surface Works

Habitat Code - Name:

● A3.1 - Broadleaved parkland/scattered trees	 A1.1.1 - Broadleaved woodland - semi-natural
 J2.1.2 - Intact hedge - species-poor	 J1.1 - Cultivated/disturbed land - arable
 J2.2.1 - Defunct hedge - native species-rich	 J4 - Bare ground
 J2.2.2 - Defunct hedge - species-poor	 Target Note
 J2.3.2 - Hedge with trees - species-poor	
 J2.4 - Fence	

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

INEOS Shale
 INEOS Shale
 38 Hans Crescent
 London, SW 1X 0LZ
 www.ineosshale.com

Target Notes	Time	X	Y	Photo (Y/N)	Notes
1	13:16	454782	383863	Y	Defunct blackthorn <i>Prunus spinosa</i> hedge alongside Dinnington Rd; fairly young/recent planting - relatively narrow trunks and not thick/bushy growth. Six individual trees alongside hedgerow (outside of field/property boundary) which were a mix of sycamore <i>Acer pseudoplatanus</i> and field maple (<i>Acer campestre</i>). Main road on other side of field with small verge; regular traffic during survey visit. Spp list: Cleavers (<i>Galium Sp.</i>); Lady's bedstraw (<i>Galium verum</i>); Common bent (<i>Agrostis capillaris</i>); Perennial ryegrass (<i>Lolium perenne</i>); Bramble (<i>Rubus fruticosus agg</i>); Forget-me-not (<i>Myosotis scorpioides</i>); Common ivy (<i>Hedera helix</i>); Yarrow (<i>Achillea millefolium</i>).
2	13:17	454778	383871	Y	Gated site entrance showing Public Right of Way (PRoW) and arable crop planted up to PRoW edge.
3	13:37	454687	383912	Y	Example of a gap in the hedgerow.
4	13:28	454356	384022	Y	Grassy strip along the northern border of the field along Dinnington Road and Woodsetts Road. Spp list: False Oat-grass (<i>Arrhenatherum elatius</i>); Hogweed (<i>Heracleum sphondylium</i>); Common bent (<i>Agrostis capillaris</i>); Common nettle (<i>Urtica dioica</i>); Common ivy (<i>Hedera helix</i>); Spear thistle (<i>Cirsium vulgare</i>); Wild carrot (<i>Daucus carota</i>).
5	13:50	454149	384021	Y	Hedge changes to a much older and denser hedge comprising of dense blackthorn with sections of common ivy entwined.
6	13:59	453950	384020	Y	Fly tipping at field access gates and track.
7	13:58	453955	383988	Y	Public Right of Way (PRoW) track leading to Dewidales Woodland. Two isolated Sycamore (<i>Acer pseudoplatanus</i>) trees present along track. Rough grassland along both edges of access track leading to Dewidales Woodland. Spp list: Broad-leaved Dock (<i>Rumex obtusifolius</i>); Common bent (<i>Agrostis capillaris</i>); Wild carrot (<i>Daucus carota</i>); Dandelion (<i>Taraxacum spp.</i>); False oat-grass (<i>Arrhenatherum elatius</i>); Cock's-foot (<i>Dactylis glomerata</i>).
8	14:55	453984	383701	Y	Edge of western block of Dewidales Woodland ancient woodland with PRoW running through the western section of the woodland. PRoW consists of a wide access track - hardcore base, smooth gravel / mud surface. No access and therefore species list viewed from PRoW: Western hemlock (<i>Tsuga heterophylla</i>); Oak (<i>Quercus sp.</i>); Beech (<i>Fagus sylvatica</i>).
9	14:12	453993	383676	Y	Western block of Dewidales Woodland ancient woodland. Widespread beach and oak leaf litter present on woodland floor. Spp list: Bracken (<i>Pteridium aquilinum</i>); Bramble (<i>Rubus fruticosus agg.</i>); Common Ivy (<i>Hedera helix</i>); Dog's mercury (<i>Mercurialis perennis</i>).
10	14:48	453988	383650	Y	Western block of Dewidales Woodland ancient woodland: Bare under-carpet, mounds of earth and stones; bridleway runs through woodland. No access and therefore species list viewed from PRoW: Western hemlock (<i>Tsuga heterophylla</i>); Beech (<i>Fagus sylvatica</i>); Oak (<i>Quercus spp.</i>).
11	15:00	454116	383622	Y	Defunct hedgerow with occasional trees linking the two blocks of ancient woodland. Spp. list: Hawthorn (<i>Crataegus monogyna</i>); Sycamore (<i>Acer pseudoplatanus</i>).
12	14:59	454121	383607	Y	PRoW running along the northern borders of ancient woodlands and along connecting hedgerow showing arable crop planted up to PRoW edge.
13	15:13	454381	383588	Y	Image showing where PRoW transects arable field in a westerly direction towards memorial tree.
14	15:13	454424	383528	Y	Area of bare ground resulting from clearing activities at the eastern edge of woodland and consists of stones, rubbish and mounds of earth.
15	15:14	454409	383499	Y	Eastern edge of the eastern block of Dewidales Woodland showing arable crop planted up to PRoW edge.
16	15:39	454472	383267	Y	Windblown tree on the northern section of the woodland (no access to confirm species).
17	15:42	454603	383279	Y	Post and rail fence.
18	15:42	454658	383322	Y	Continuation of post and rail fence with a holly bush (<i>Ilex aquifolium</i>) present showing arable crop planted up to PRoW edge.
19	15:48	454691	383316	Y	Badger latrine.
20	15:51	454795	383301	Y	Change in fence from post and rail to concrete post and small gauge (1") wire mesh and barbed wire showing arable crop planted up to PRoW edge.
21	16:04	454930	383533	Y	Hawthorn (<i>Crataegus monogyna</i>) hedgerow with solid (dense) holly (<i>Ilex aquifolium</i>).
22	16:12	454734	383603	Y	Defunct hedgerow consisting of hawthorn (<i>Crataegus monogyna</i>); Field maple (<i>Acer campestre</i>); Hazel (<i>Corylus avellana</i>); Dog-rose (<i>Rosa canina</i>) and Common ivy (<i>Hedera helix</i>). Existing access track adjacent to existing oilseed rape field.
23	14:11	454772	383685	Y	PRoW consists of a wide access track - hardcore base, smooth gravel / mud surface.

TARGET NOTE PHOTO REFERENCE

Target Note 1



Target Note 2



Target Note 3



Target Note 4



Target Note 5



Target Note 6



Target Note 7



Target Note 8



Target Note 9



Target Note 10



Target Note 11



Target Note 12



Target Note 13



Target Note 14



Target Note 15



Target Note 16



Target Note 17



Target Note 18



Target Note 19



Target Note 20



Target Note 21







Appendix 14: Breeding Bird Survey

1 *LAND ADJACENT TO DINNINGTON ROAD, WOODSETTS - BREEDING BIRD SURVEY 2018*

1.1 *INTRODUCTION*

This document reports interim findings of breeding bird survey work undertaken between March and May 2018 in order to provide additional evidence in relation to a resubmitted planning application for an exploratory core well on land adjacent to Dinnington Road, Woodsetts.

It contains summary information of the three visits completed to date, including a list of the bird species recorded on each survey visit, and their mapped locations and numbers. An updated report will be submitted to Rotherham Metropolitan Borough Council (RMBC) during the determination period of the application, following completion of the fourth and final survey visit.

1.2 *SURVEY METHODS*

1.2.1 *Survey Approach and Area*

The survey approach comprised a scaled down Common Birds Census (CBC), and used standard British Trust for Ornithology (BTO) species and behaviour codes (Gilbert *et al*, 1998 ⁽¹⁾; Marchant, 1983 ⁽²⁾). The survey area, and Application site boundary are shown on the attached figures. The surveyors also recorded any evidence of birds in habitats beyond the survey area, based on sound, or visual observations.

1.2.2 *Survey Dates*

Three surveys have been completed, all in suitable weather conditions, on the following dates:

- **Visit 1** – 26th March 2018;
- **Visit 2** – 11th April 2018; and
- **Visit 3** – 14th May 2018.

Two surveyors undertook the survey work on each visit and all are experienced (minimum of over 3 years) and are members of the Chartered Institute of Ecology and Environmental Management (CIEEM). The lead surveyor was consistent on all visits and has over 13 years' experience as an ecologist.

(1) Gilbert G, Gibbons D W & Evans J (1998) *Bird Monitoring Methods*. RSPB, Bedfordshire.

(2) Marchant J (1983) *Common Birds Census Instructions*, BTO. Maund & Irving Ltd, Tring, Herts.

The surveys recorded few bird species within, or adjacent to the Application site (see *Figure 1 - 3*). A single skylark singing on one of the three visits, was the only bird observed on / over the well pad site. Birds recorded in the hedgerows adjacent to the access track comprised several common resident species in Derbyshire ⁽¹⁾ (dunnock, robin, blackbird and chaffinch). A single reed bunting, a fairly common resident species, was observed in song on the hedgerow adjoining the access track during Visit 3 (see *Figure 3*).

A range of other predominantly common, or fairly common, breeding species were recorded in habitats surrounding the Application site (see *Table 1.1* that also includes the species conservation concern status ⁽²⁾, and *Figures 1 - 3*). Many of the records were from woodlands and hedgerows in the areas surrounding the Application surrounding area. Other skylarks were recorded singing overhead to the north of the Application site in the same field, and where the field extends to the south of the access road.

The findings of the surveys to date support the assumptions made about the bird baseline in the Environmental Report submitted with the planning application in 2017.

Table 1.1 *Species Recorded on Survey Visits (March, April, May 2018)*

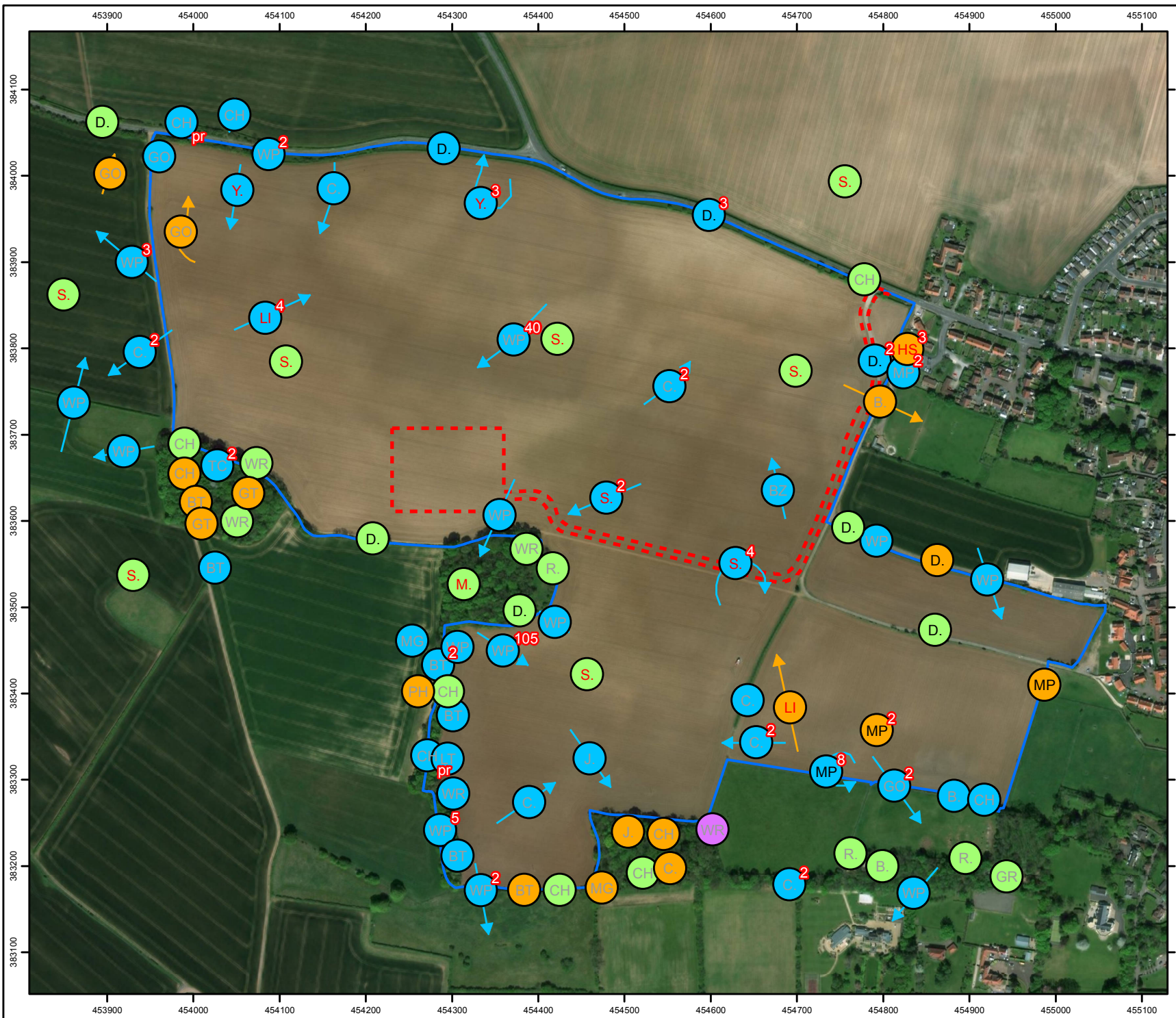
Species (Alphabetical Order)	Visit Number on which Species Recorded			Breeding Status in Derbyshire (Frost & Shaw, 2013)
	1	2	3	
Blackbird	✓	✓	✓	• Abundant resident
Blackcap	-	-	✓	• Fairly common summer visitor
Blue tit	✓	✓	✓	• Abundant resident
Buzzard	✓	-	-	• Fairly common and increasing resident
Carrion crow	✓	✓	✓	• Common resident
Chaffinch	✓	✓	✓	• Common resident
Coat tit	-	✓	-	• Common resident
Dunnock	✓	✓	✓	• Abundant resident
Goldfinch	✓	✓	✓	• Increasingly common resident and summer visitor
Greenfinch	✓	-	✓	• Common resident
Great tit	✓	✓	✓	• Common resident
Great spotted woodpecker	-	✓	✓	• Fairly common or common resident
Grey heron	-	-	✓	• Fairly common resident
Grey partridge	-	-	✓	• Fairly common resident
House sparrow	✓	-	✓	• Common but decreasing resident
Jackdaw	-	-	✓	• Common resident
Jay	✓	✓	✓	• Fairly common resident
Linnet	✓	-	✓	• Common resident
Long-tailed tit	✓	-	-	• Fairly common resident

(1) Frost R & Shaw S (Eds) *The Birds of Derbyshire* (Derbyshire Ornithological Society). Liverpool University Press.

(2) https://www.bto.org/sites/default/files/shared_documents/publications/birds-conservation-concern/birds-of-conservation-concern-4-leaflet.pdf

<i>Species (Alphabetical Order)</i>	<i>Visit Number on which Species Recorded</i>			<i>Breeding Status in Derbyshire (Frost & Shaw, 2013)</i>
Magpie	✓	✓	✓	• Common or abundant resident
Meadow pipit	✓	✓	-	• Common summer visitor
Mistle thrush	✓	-	-	• Common resident
Pheasant	✓	✓	-	• Fairly common resident
Reed bunting	-	-	✓	• Fairly common resident
Robin	✓	✓	✓	• Common resident
Rook	-	-	✓	• Common but possibly declining resident
Skylark	✓	✓	✓	• Common resident
Starling	-	-	✓	• Common or abundant resident
Swallow	-	-	✓	• Common summer visitor
Treecreeper	✓	-	-	• Fairly common resident
Whitethroat	-	-	✓	• Fairly common summer visitor
Willow warbler	-	-	✓	• Common summer visitor
Woodpigeon	✓	✓	✓	• Abundant resident
Wren	✓	✓	✓	• Abundant resident
Yellowhammer	✓	-	✓	• Common resident

Conservation Concerns Status - Red, Amber, Green



- Surface Works Area
- Land within applicant control
- Bird Sighting
- Bird Singing
- Bird Calling
- Bird - Alarm Call
- ➔ Bird Sighting
- ➔ Bird Singing
- ➔ Bird Calling
- ➔ Bird - Alarm Call

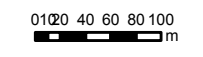
Additional Information:
 Letter codes within each circle refer to the corresponding BTO reference code and coloured according to their status:

pr = pair, juv = juvenile, fd = food

Where more than one bird is observed then the size of the flock is indicated in red text alongside the record.

- | | |
|--------------------|----------------------|
| Red | Green |
| HS - House Sparrow | B. - Blackbird |
| LI - Linnnet | BT - Blue Tit |
| M. - Mistle Thrush | BZ - Buzzard |
| S. - Skylark | C. - Carrion Crow |
| Y. - Yellowhammer | CH - Chaffinch |
| | GO - Goldfinch |
| | GR - Greenfinch |
| | GT - Great Tit |
| | J. - Jay |
| | LT - Long-tailed Tit |
| | MG - Magpie |
| | PH - Pheasant |
| | R. - Robin |
| | TC - Treecreeper |
| | WP - Wood Pigeon |
| | WR - Wren |

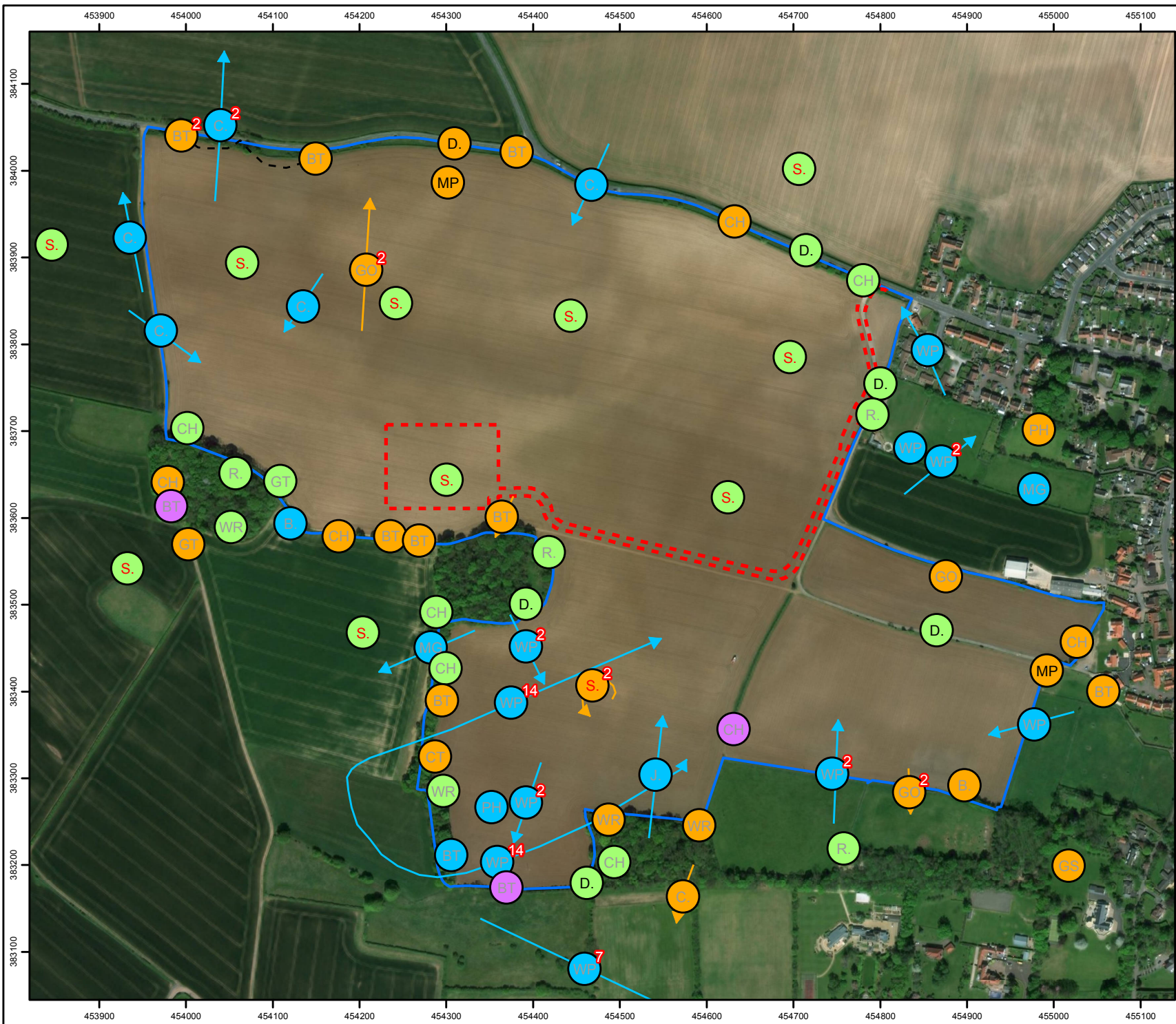
- Amber**
- D. - Dunnock
 - MP - Meadow Pipit



INEOS Shale
 INEOS Shale
 38 Hans Crescent
 London, SW1X 0LZ
 www.ineosshale.com

Project:	PEDL 304/21	
Title:	Breeding Bird Survey (Visit 1 - 26/03/18)	
Date: 12/06/2018	Scale: 1:5,500	CRS: BNG
Drawn: ERM	Checked: BP	Rev: 1
Figure No:	1.0	

Source: © Crown copyright and database rights 2017 Ordnance Survey 0100031673



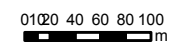
- Surface Works Area
- Land within applicant control
- Bird Sighting
- Bird Singing
- Bird Calling
- Bird - Alarm Call
- ➔ Bird Sighting
- ➔ Bird Singing
- ➔ Bird Calling
- ➔ Bird - Alarm Call

Additional Information:
 Letter codes within each circle refer to the corresponding BTO reference code and coloured according to their status:

pr = pair, juv = juvenile, fd = food

Where more than one bird is observed then the size of the flock is indicated in red text alongside the record.

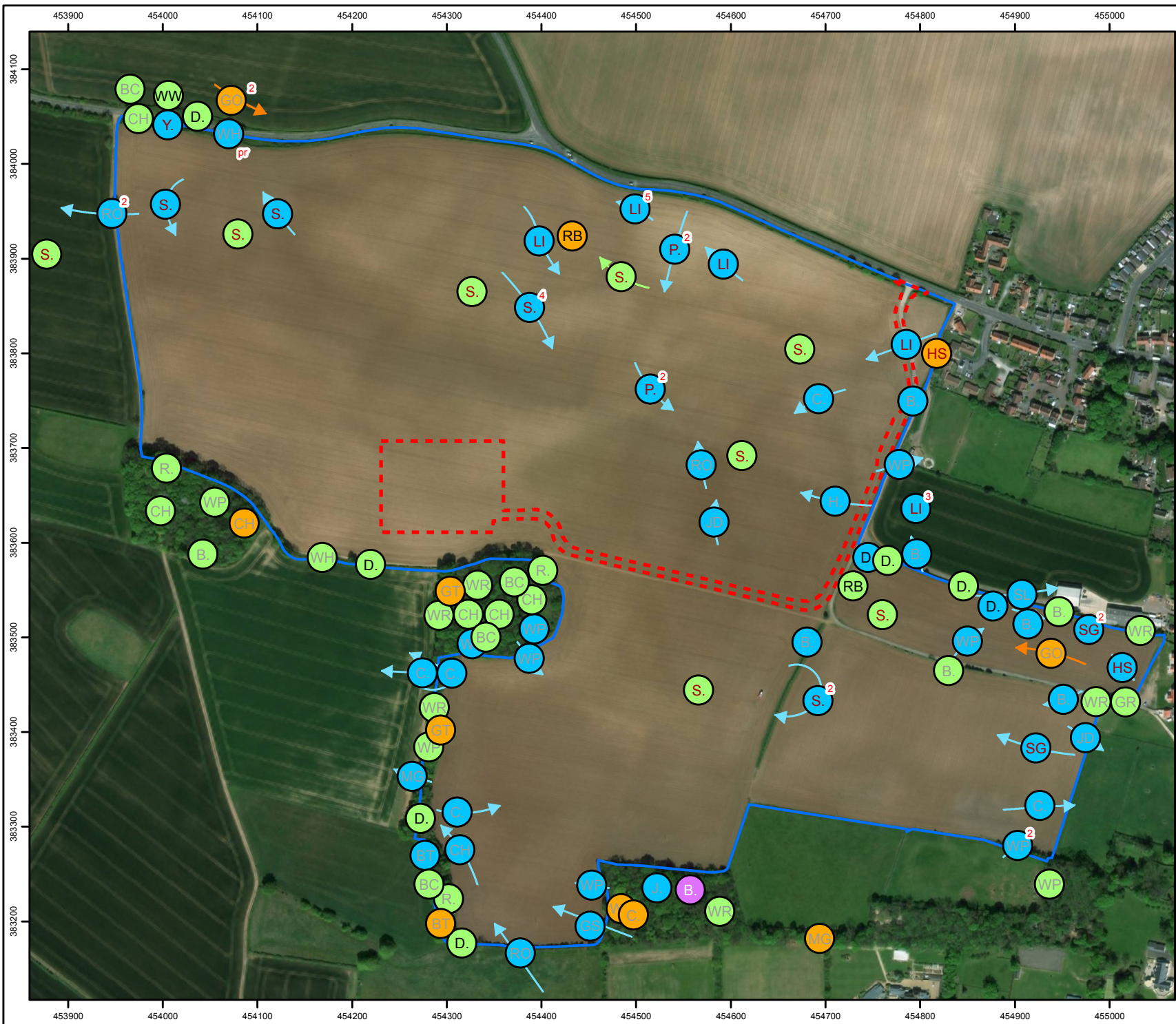
- | | |
|--|--|
| <p>Red</p> <ul style="list-style-type: none"> S. - Skylark <p>Amber</p> <ul style="list-style-type: none"> D. - Dunnock MP - Meadow Pipit | <p>Green</p> <ul style="list-style-type: none"> B. - Blackbird BT - Blue Tit C. - Carrion Crow CH - Chaffinch GO - Goldfinch GS - Great Spotted Woodpecker GT - Great Tit J. - Jay MG - Magpie PH - Pheasant R. - Robin WP - Wood Pigeon WR - Wren |
|--|--|



INEOS Shale
 INEOS Shale
 38 Hans Crescent
 London, SW1X 0LZ
 www.ineosshale.com

Project:	PEDL 304/21	
Title:	Breeding Bird Survey (Visit 2 - 11/04/18)	
Date:	Scale:	CRS:
12/06/2018	1:6,000	BNG
Drawn:	Checked:	Rev:
ERM	BP	1
Figure No:	2.0	

Source: © Crown copyright and database rights 2017 Ordnance Survey 0100031673



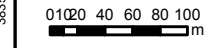
- Surface Works Area
- Land within applicant control
- Bird Sighting
- Bird Singing
- Bird Calling
- Bird - Alarm Call
- ➔ Bird Sighting
- ➔ Bird Singing
- ➔ Bird Calling
- ➔ Bird - Alarm Call

Additional Information:
 Letter codes within each circle refer to the corresponding BTO reference code and coloured according to their status:

pr = pair, juv = juvenile, fd = food

Where more than one bird is observed then the size of the flock is indicated in red text alongside the record.

- | | | | |
|---------------------|--------------------|-------------------------------|-------------------|
| Red | HS - House Sparrow | Green | B. - Blackbird |
| LI - Linnet | BC - Blackcap | BT - Blue Tit | C. - Carrion Crow |
| P. - Grey Partridge | S. - Skylark | SG. - Starling | CH - Chaffinch |
| Y. - Yellowhammer | | GO - Goldfinch | GR - Greenfinch |
| | | GS - Great Spotted Woodpecker | |
| Amber | D. - Dunnock | GT - Great Tit | J. - Jay |
| RB - Reed Bunting | WP - Wood Pigeon | WD - Woodpecker | WD - Woodpecker |
| WW - Willow Warbler | | WH - Whitethroat | WR - Wren |
| | | WJ - Jackdaw | |
| | | MG - Magpie | |
| | | R. - Robin | |
| | | RO - Rock | |
| | | SL - Swallow | |
| | | WP - Wood Pigeon | |
| | | WR - Wren | |



INEOS Shale
 INEOS Shale
 38 Hans Crescent
 London, SW1X 0LZ
 www.ineosshale.com

Project:	PEDL 304/21	
Title:	Breeding Bird Survey (Visit 3 - 14/05/18)	
Date: 13/06/2018	Scale: 1:5,500	CRS: BNG
Drawn: ERM	Checked: BP	Rev: 2
Figure No:	3.0	

Source: © Crown copyright and database rights 2017 Ordnance Survey 0100031673

Appendix 15: Public Consultation Materials

Chair of Woodsetts Parish Council
The Pavillion
Gildingwells Road
Woodsetts
S81 8A

13 June 2018

Dear Councillor,

I write to update you on our plans to drill an exploratory well on land to the South of Dinnington Road.

As you know, our original application was recommended for refusal by planning officers on ecology grounds, and was subsequently refused at a meeting of the Planning Board due to potential impacts on ecology, along with transport concerns.

You may be aware, the council used the same two reasons as their objection at the appeal for our Harthill application. Before the Inquiry, officers asked members to withdraw the highways reason for refusal, but the reason was maintained against officer advice. During the appeal, the Council dropped their objection on ecology, following cross examination of their case.

As the two applications use the same methodology, we feel that having been tested at by an independent Inspector, our approach is now better understood by officers and that we have a good case for resubmitting the Woodsetts application, which we have done today.

This is not unusual in planning terms. Our alternative option would be to appeal the decision and go through the appeal process again on the same grounds. However, we would prefer to try and resolve these outstanding issues locally if at all possible to avoid unnecessary costs for the Council tax payer and ourselves. It should be remembered that the majority of statutory consultees either had no issues with the application, or felt that any issues could be controlled through the use of conditions.

The details of the application are largely unchanged, with all clarifications and amendments made during the consultation process summarised into one document for ease of reference. It remains solely for a technically straightforward core well to assess the geology, no hydraulic fracturing is being sought.

It will now be for the Council to determine how they wish to progress the application and consult with interested parties, we will however write to residents of Woodsetts and provide them with an update.

Finally, since the decision to resubmit our Woodsetts application was made, the Planning Inspector has determined the Harthill appeal and granted planning permission. It is disappointing how much time and Council tax-payers' money was spent on what should have been a straight-forward project to drill a core well to gain scientific knowledge, which has been agreed by many councils many times in the past to support the coal industry across the region. Ultimately, we are pleased that science has prevailed but hope that future applications can be dealt with in a more timely and reasonable fashion.

As always, if you would like further information please do not hesitate to contact me.

Yours sincerely

Gordon Grant
Regional Community Relations Manager: INEOS Shale
07584 144129
gordon.grant@ineos.com

Dear Resident,

Update on our plans to drill an exploratory well on land to the South of Dinnington Road.

Earlier this year, our application was recommended for refusal by planning officers on ecology grounds and was subsequently refused at a meeting of the Planning Board due to potential impacts on ecology, along with concerns over transport.

The council used the same two reasons as their objection at an appeal for another of our sites near Harthill. Before the Inquiry, officers asked members to withdraw the highways reason for refusal, but the reason was maintained against officer advice. During that appeal, the Council dropped their objection on ecology following cross examination of their case.

As the two applications are very similar, we feel that, having been tested by an independent Inspector at the Harthill appeal, our approach is now better understood by officers. We have therefore decided to ask the council to look again at our application for Woodsetts to see whether we can reach agreement on the few remaining issues to avoid unnecessary costs for the Council tax payer and ourselves.

This is not unusual when going through the planning system. Our alternative option would be to appeal the decision and go through the appeal process, however we would prefer to try and resolve these outstanding issues locally if at all possible. It should be remembered that the majority of statutory consultees either had no issues with the application, or felt that any issues could be controlled through the use of conditions.

The details of the application are largely unchanged, with all clarifications and amendments made during the consultation process summarised into one document for ease of reference. This document is available on our website for your information.

It will now be for the Council to determine how they wish to progress the application and consult with interested parties.

These test drilling applications allow for the drilling of a single vertical core bore well to gain scientific knowledge of what is below the surface, which has been agreed by many Councils many times in the past to support the coal industry.

Over 95% of people living in Rotherham are connected to the Nations gas supply network. Shale gas is a resource that is of strategic importance to the UK and issues of energy security always have to be factored in. Shale gas is offering us the potential to have our own native natural gas industry, strengthening our security of supply and making us less reliant on Russia and the Middle East.

Rotherham also relies on manufacturing jobs at places such as at Liberty Steel, but these are not secured or created without investment and there is precious little investment in the North of England in manufacturing at the moment.

Shale gas could bring jobs and investment to the area, however we first need to understand what lies beneath our feet. This application is an important part of trying to scientifically do just that.

If you would like further information please do not hesitate to contact us.

INEOS Shale

INEOS Upstream Limited

38 Hans Crescent
Knightsbridge
London
SW1X 0LZ

Tel: +44 (0) 23 8028 7075
Fax: +44 (0) 23 8028 7069

Sir Kevin Barron MP
Rother Valley Constituency
9 Lordens Hill,
Dinnington,
Sheffield,
S25 2QE

8 June 2018

Dear Sir Kevin,

I write to update you on our plans to drill an exploratory well near Woodsetts within your Constituency.

As you may recall, our original application was recommended for refusal by the planning officers on ecology grounds and was subsequently refused at a meeting of the planning committee on the impacts of ecology along with transport concerns.

The council used the same two reasons as their objection at the appeal for our Harthill application which you are familiar with. I am sure you will remember that during the appeal the council dropped their objection on ecology following cross examination of their case.

As the two application use the same methodology, we feel that having gone through the appeal process our approach is now better understood and that we have a good case for resubmitting the Woodsetts application.

This is not unusual in planning terms. Our alternative option would be to appeal the decision and go through the appeal process again on the same grounds, however we would prefer to try and resolve these outstanding issues locally if at all possible. It should be remembered that most statutory consultees either had no issues with the application, or felt any issues could be controlled through the use of conditions. This application is for a core well only, the type of which you, with your coal mining pedigree, will be well familiar with as being used to examine geological attributes.

It is currently our intention to resubmit the application on or around 13 June 2018, after which the Council will undertake consultation with interested parties. We will write to the residents of Woodsetts and to councillors and the Parish Council to keep them informed.

Finally, since the decision to resubmit our Woodsetts application was made, the Planning Inspector has determined the Harthill appeal and granted planning permission. It is disappointing how much time and council tax-payers' money was spent on what should have been a straight-forward project to drill a core well to gain scientific knowledge, which has been agreed by many Councils many times in the past to support the coal industry across the region. Ultimately, we are pleased that science has prevailed but hope that future applications can be dealt with in a more timely and reasonable fashion.

As always, I am more than willing to meet with you at a time of your convenience to discuss this in more detail.

Yours sincerely



Tom Pickering
Operations Director, INEOS Shale

Recipients of consultation materials

Sir Kevin Barron MP
Rother Valley Constituency
9 Lordens Hill,
Dinnington,
Sheffield,
S25 2QE

Woodsetts Parish Council
The Pavillion
Gildingwells Road
Woodsetts
S81 8AS

Councillor Simon Tweed
'simon.tweed@rotherham.gov.uk'

Councillor Clive Jepson
'clive.jepson@rotherham.gov.uk'

Councillor Jonathan Ireland
'jonathan.ireland@rotherham.gov.uk'

Councillor Katherine Wilson
'katherine.wilson@rotherham.gov.uk'

786 local residents

Turley Office
2 Bond Court
Leeds
LS1 2JZ

T 0113 386 3800

Turley