

TO: PLANNING & REGULATORY COMMITTEE
BY: PLANNING DEVELOPMENT MANAGER
DISTRICT(S) WAVERLEY BOROUGH COUNCIL

DATE: 29 JUNE 2020

ELECTORAL DIVISION(S):
Waverley Eastern Villages
Mrs Young
CASE OFFICER:
David Maxwell

PURPOSE: FOR DECISION

GRID REF: 501773 137324

TITLE: MINERALS & WASTE APPLICATION WA/2019/0796

SUMMARY REPORT

Loxley Well Site - Land South of Dunsfold Road and East of High Loxley Road, Dunsfold, Surrey

The construction, operation and decommissioning of a well site for the exploration and appraisal of hydrocarbon minerals from one exploratory borehole (Loxley-1) and one side-track borehole (Loxley-1z) for a temporary period of three years involving the siting of plant and equipment, the construction of a new access track, a new highway junction with High Loxley Road, highway improvements at the junction of High Loxley Road and Dunsfold Road and the erection of a boundary fence and entrance gates with restoration to agriculture.

The application site is located in a rural landscape approximately one mile north-east of the village of Dunsfold and half-a-mile north of Dunsfold Park in an area known as Loxhill. It extends to an area of 2.3 hectares and comprises worked agricultural fields situated in rolling countryside. The proposed well site compound would be situated to the south and west of four established woodland blocks, three of which are the subject of a clear-fell license granted to the Hascombe Estate by the Forestry Commission.

The proposed development is concerned with the exploration and appraisal stages of hydrocarbon development using conventional methods and does not involve hydraulic fracturing. It involves the drilling of a new well (Loxley-1) and one side-track well (Loxley-1z) for the exploration and appraisal of oil and gas for a temporary period of 3 years with restoration to agriculture. The primary target for exploration is gas from the Portland Sandstone Formation within the Godley Bridge Gas Discovery. The secondary target is oil from the deeper Kimmeridge Limestone Formation.

The proposal will be carried out in 4 distinct phases. Phase 1 (Access and Well Site Construction) would last for 14 weeks and include the construction of a new junction within High Loxley Road, the development of the well site compound with an impermeable membrane, the installation of a new access track to connect the new junction with the well site compound and minor highway improvement works on High Loxley Road and at the junction of High Loxley Road and Dunsfold Road.

Phase 2 (Drilling, Testing and Appraisal) would last up to 60 weeks and include the mobilisation and demobilisation of surface plant and machinery, the drilling of the well and side-track well using a drilling rig up to 38 metres in height, subsequent appraisal by initial short-term flow testing and extended well testing which is likely to involve the use of a crane when necessary up to 42 metres in height, and the potential deployment of a rig (up to 35 metres in height) or a coil

tubing unit (up to 25 metres in height) to support any maintenance workover. Drilling, testing and appraisal represent a continuous process and involve 24 hour operations. The need for night time working will be minimised by way of considerate scheduling. Where this cannot be avoided operations are likely to be intermittent and of a temporary nature. If natural gas is encountered flaring would be engaged utilising up to two shrouded ground flares during initial short-term flow testing (likely to be intermittent for 7 days), followed by extended well testing (likely to be intermittent for 90 days using a single flare).

Phase 3 (Well Plugging, Abandonment and Decommissioning) would take place over a period of 5 weeks and include the removal of all surface equipment followed by the plugging and abandonment of the well. Phase 4 (Site Restoration) would take 5 weeks and involving the restoration of the site to its original use subject to a period of aftercare. If commercially exploitable reserves of hydrocarbons are found to be present, then restoration would be delayed pending the submission of a further planning application to retain the site to enable long term production to take place prior to the carrying out of restoration and aftercare.

The site is situated in Countryside beyond the Green Belt and is designated as an Area of Great Landscape Value. The boundary with the Surrey Hills Area of Outstanding Natural Beauty lies approximately 530 metres to the north of the well site compound. The proposal would result in a maximum of up to 20 heavy goods vehicle (HGV) movements per day between 0700 and 1900 hours Monday to Friday and 0900 to 1300 hours on Saturdays. The majority will be scheduled within standard hours of operation (0800 to 1700 Mondays to Fridays and 0900 to 1300 Saturdays). All lorry traffic will be routed via Dunsfold Road and the A281 to the east.

The oil and gas industry is heavily regulated and requires a range of licences, permits and consents from the Oil and Gas Authority (OGA), the Health and Safety Executive (HSE), the Environment Agency (EA), and the Mineral Planning Authority (MPA). In relation to the role of the MPA, the National Planning Policy Framework (NPPF) says that the focus should be on whether the proposed development is an acceptable use of the land, rather than the control of processes or emissions where these are subject to separate pollution control regimes. Planning decisions should assume that these regimes will operate effectively.

Petroleum Exploration and Development Licenses (PEDLs) are issued by the Oil and Gas Authority (OGA) after a competitive process. This follows an assessment of applications for operator competency, financial capability, geotechnical analysis and the proposed work programme. A PEDL comprises a production license which covers all three stages of oil and gas development - exploration, appraisal and production within a defined area or block. They give the licence holder(s) exclusive rights to search, bore for and produce hydrocarbons (oil and gas) subject to necessary drilling / development consents and planning permission. Loxley Well Site would be located within PEDL) 234. This is on the northern flank of the Weald Basin close to the basin centre where the strata are at their thickest and most thermally mature.

In determining this application, it is necessary to consider the proposal against national and development plan policies and to assess any environmental impacts of the development against those policies. The advice provided by statutory and non-statutory consultees and the views expressed by other bodies, groups and individuals will also need to be considered.

The application site is not located within a statutorily designated area for its landscape or nature conservation importance. However it is situated within an Area of Great Landscape Value (AGLV) and within the setting of the Surrey Hills Area of Outstanding Natural Beauty (AONB). The site lies in Flood Zone 1 and is not underlain by any groundwater Source Protection Zone designations. The nearest Air Quality Management Area (AQMA) is located 8.1 km to the north-west in Godalming. There are two Areas of High Archaeological Potential situated around 345 metres to the north and 470 metres to the south of the well site compound. The Dunsfold Conservation Area is situated around a 1.4 km to the south-west and the Multivallate Hillfort, Hascombe Hill County Site of Archaeological Importance (CSAI) is located around 1,890 metres to the north-west.

There are three residential properties lying in extensive grounds located to the north, south and south-west of the proposed well site compound, the nearest of which is Thatched House Farm located approximately 330 metres to the north of the centre of the compound. These three properties contain a total of seven Grade II listed buildings between them. Thatched House Farm and High Billingham Farm to the south also accommodate established local businesses including sheep and organic pig farming, a craft brewery and an annual cancer festival at the former and an events venue hosting up to 50 events annually at the latter. Lydia Park and New Acres are situated around 485 metres east of the centre of the well site compound and comprise a traveller site and mobile home park off Stovolds Hill. A further 4 applications have been permitted for gypsy and traveller accommodation on land to the north and west of Lydia Park, the closest being 420 metres to the north-east.

Prior to the submission of the application, a request for an Environmental Impact Assessment (EIA) Screening Opinion was made to the County Planning Authority (CPA) on behalf of the applicant. The CPA adopted its formal EIA Screening Opinion on 28 February 2019 and recommended that the proposed development did not constitute 'EIA development'

A key consideration is need. Government policy requires planning authorities to give great weight to the benefits of mineral extraction, including to the economy, when determining planning applications. It makes it clear that oil and gas remains an important part of the UK's energy mix. Energy policies recognise the continuing importance of fossil fuels but aim to manage reliance on them, their potential environmental effects and the risks associated with security of supply. While the Government manages the transition to a low carbon energy mix, oil and gas will remain key elements of the energy system for years to come (especially for transport and heating). Government policy also recognises a need to maximise indigenous oil and gas resources both onshore and offshore. Officers consider that there is a demonstrable need to maintain a stable and reliable supply of indigenous energy sources, including onshore oil and gas, into the future and that significant weight should be attributed to this aspect of the proposal which is considered to be in both the national and wider public interest.

The location of the development has been informed by a detailed assessment process outlined in the Site Identification Report which take into account the use of directional drilling to widen the search area in the interests of finding a suitable site where the impacts on the environment and amenity can be minimised. Securing permission from the land owner was also a key factor. It is therefore concluded that the development is justified in this respect.

The Borough Council, local Parish Councils, local action and amenity groups and 84% of representations received have raised objection to the proposal. This is due to a broad range of concerns which include: the proposal being contrary to Government policy; the inadequacy of the EIA screening process; flaws and insufficient information contained in the application; the lack of economic benefits; climate change; the unacceptable impact on local amenity and local businesses; landscape and visual impacts including the impact from the implementation of the clear-felling licence; noise; air quality; highways and traffic including the proposals for traffic management; ecology; lighting; archaeology and heritage; the impact on rights of way; restoration including the need to secure a restoration bond due to the applicant having insufficient funds to meet its restoration commitments; pollution and contamination including the risk to groundwater; waste disposal; health and safety; the method of drilling and extraction; geology; seismicity; aviation safety; cumulative impacts including in relation to traffic and the permitted new settlement at Dunsfold Park; the impact on house prices; the lack of oil reserves; the lack of consultation; the need to take into account the likely acceptability of a future application for hydrocarbon production; and human rights.

The County Highway Authority (CHA) has thoroughly assessed the proposed traffic management arrangements, found these to be acceptable, and has raised no objection to the application on highway safety, capacity or policy grounds. This is subject to a number of planning conditions including a requirement for the details of the Transport Management Plan (TMP), incorporating the detailed arrangements for traffic management, to be submitted for written approval prior to the commencement of the development. Issues relating to highways

and traffic have generated a large volume of objections in recent months particularly in relation to traffic management. In response, the CHA has further reviewed the arrangements for traffic management and advised that a simpler arrangement would be acceptable involving less reliance on traffic signals and greater use of banksmen. The CHA has liaised with the applicant who supports this approach. In practice the traffic control measures to be finalised as part of the TMP, once the final HGV delivery schedule is known, would be applied flexibly using a mixture of traffic signals and banksmen tailored to the specific requirements of each phase of the development.

Of the representations received, 16% have been in support of the development on the grounds of: the economic benefits; environmental benefits (including reduced carbon footprint, low visual presence and access); need; the extraction process; and a belief that the applicant has acted in an ethical and sensitive manner. The application has been carefully reviewed by a number of consultees including those providing specialist technical advice in relation to a broad range of environmental topic areas. Where concerns have been expressed, these have been addressed by the applicant and subsequently found to be capable of being resolved satisfactorily through the provision of mitigation measures and the imposition of planning conditions when considered necessary.

The site would be restored back to agriculture and include a legacy enhancement programme. This would include the replacement of trees and hedgerows removed during construction works, a programme to retain and protect existing trees and hedgerows and a timed programme for the planting of new trees and hedgerows and the creation of new biodiversity habitat. This would be designed to deliver biodiversity and wider environmental net-gain making use of native species and reflecting the historic use of the site as worked agriculture land and forestry. Officers are satisfied that this would represent a suitable after-use and that restoration and aftercare can be carried out to a high standard and at the earliest opportunity.

Taking into account the need for the development in the context of national policy and other relevant policy tests, the advice provided by consultees providing advice on technical matters and the mitigation measures proposed by the applicant, Officers recommend that the application be permitted subject to appropriate conditions to protect the environment and local amenity.

The recommendation is to PERMIT subject to conditions.

APPLICATION DETAILS

Applicant

UKOG (234) Ltd

Date application valid

28 May 2019

Period for Determination

27 August 2019 (Extension of time agreed until 6 July 2020)

Amending Documents

- Letter dated 10 June 2019 entitled, "Clarification Statement in Response to the Written Statement of Secretary of State for the Ministry of Housing, Communities and Local Government 23rd May 2019";
- Email dated 25 July 2019 entitled, "Loxley Well Site - Responding to Consultee Responses";
- Email dated 23 October 2019 entitled, "Re: Loxley - Impact of Vibration (on Listed Buildings) and Noise (on the Gate House)";

- Email dated 23 October 2019 entitled, “RE: Loxley - Impact of Vibration (on Listed Buildings) and Noise (on the Gate House)”;
- Email dated 30 October 2019 entitled, “Loxley Well Site - Wild Bird Seed Mixture”;
- Wild Bird Seed Mixtures Advisory Sheet England submitted on 30 October 2019;
- Email dated 1 November 2019 entitled, “Loxley Well Site Application 2019/0072 - E-mail 1 of 8”;
- Email dated 1 November 2019 entitled, “Loxley Well Site Application 2019/0072 - E-mail 2 of 8 - LANDSCAPE & VISUAL IMPACT”;
- Letter dated 31 October 2019 in response to issues raised by Landscaping, Surrey Hills Area of Outstanding Natural Beauty Management Board and Waverley Borough Council including Appendix A (Photoviewpoint Imagery);
- Email dated 1 November 2019 entitled, “Loxley Well Site Application 2019/0072 - E-mail 2 of 8 - LANDSCAPE & VISUAL IMPACT” containing link to “high-resolution” renditions”;
- Email dated 1 November 2019 entitled, “Loxley Well Site Application 2019/0072 - E-mail 3 of 8 - ECOLOGY”;
- Letter dated 31 October 2019 in response to issues raised by Natural England, Surrey Wildlife Trust, Surrey Hills Area of Outstanding Natural Beauty Management Board, The Woodland Trust, Surrey County Aboriculturalist, Surrey County Ecologist and Waverley Borough Council including Appendix A: Outline Landscape, Environment and Biodiversity Restoration and Enhancement Plan dated October 2019 and Appendix B: Loxley Wells Site Addendum to the Aboricultural Impact Assessment dated October 2019;
- Email dated 1 November 2019 entitled, “Loxley Well Site Application 2019/0072 - E-mail 4 of 8 - AIR QUALITY IMPACT”;
- Letter dated 31 October 2019 in response to issues raised by the Environmental Health Officer;
- Email dated 1 November 2019 entitled, “Loxley Well Site Application 2019/0072 - E-mail 5 of 8 - GEOTECHNICAL & DESIGN”;
- Letter dated 31 October 2019 in response to issues raised by the County Geological / Geotechnical Consultant, Restoration and Enhancement Team, the Environment Agency and the Lead Local Flood Authority including Appendix A: Updated Loxley Well Site Planning Statement & Environmental Report; Appendix 1: Design Statement - Appendix 3 NAUE Geogrid Design dated 19 September 2019 and Appendix B: Extract from the Loxley Well Site Planning Statement & Environmental Report; Appendix 1 Design Statement Appendix 1: Site Investigations (Borehole Location Plan and accompanying logs);
- Email dated 1 November 2019 entitled, “Loxley Well Site Application 2019/0072 - E-mail 6 of 8 - HIGHWAYS”;
- Letter dated 31 October 2019 in response to issues raised by the County Highway Authority including Appendix A: Loxley Well Site Supplementary Transport Statement dated September 2019 and Appendix B: Loxley Well Site Framework Construction Traffic Management Plan dated September 2019;
- Email dated 1 November 2019 entitled, “Loxley Well Site Application 2019/0072 - E-mail 7 of 8 - LIGHTING IMPACTS”;
- Letter dated 31 October 2019 in response to issues raised by the County Lighting Consultant including Appendix A: Exploratory Well Site, Dunsfold, Surrey Lighting Assessment dated November 2019;
- Email dated 1 November 2019 entitled, “Loxley Well Site Application 2019/0072 - E-mail 8 of 8 - NOISE IMPACTS”;
- Letter dated 31 October 2019 in response to issues raised in relation to noise including Appendix A: Addendum to Noise Impact Assessment for hydrocarbon exploration, testing and appraisal accounting for the clear felling of the Burchetts, Thatchedhouse Planted Piece, The Moor and High Loxley Furze dated 6 September 2019 submitted 22 December 2019;
- Clarifying email dated 19 November 2019 entitled, “RE: Loxley Well Site Application 2019/0072 - E-mail 2 of 8 – LANDSCAPE & VISUAL IMPACT”;
- Further clarifying email dated 19 November 2019 entitled, “RE: Loxley Well Site Application 2019/0072 - E-mail 2 of 8 – LANDSCAPE & VISUAL IMPACT”;

- Drawing No. ZG-UKOG-L1-PA-08 Rev 1 Proposed Construction Layout Plan 1 of 4 (Well Site) dated December 2019;
- Drawing No. ZG-UKOG-L1-PA-09 Rev 1 Proposed Construction Layout Plan 2 of 4 (Well Site to Burchetts SW Corner) dated December 2019;
- Drawing No. ZG-UKOG-L1-PA-12 Rev 1 Proposed Construction Sections Plan dated December 2019;
- Drawing No. ZG-UKOG-L1-PA-15 Rev 1 Drilling Mode Layout Plan dated December 2019;
- Drawing No. ZG-UKOG-L1-PA-16 Rev 1 Section Through Drilling Mode Layout Plan (BDF Rig 28 - Height 37M) dated December 2019;
- Drawing No. ZG-UKOG-L1-PA-19 Rev 1 Initial Flow Testing Mode Layout Plan dated December 2019;
- Drawing No. ZG-UKOG-L1-PA-20 Rev 1 Section Through Initial Flow Testing Mode Layout Plan dated December 2019;
- Drawing No. ZG-UKOG-L1-PA-23 Rev 1 Extended Well Testing Mode Layout Plan (With Temporary Noise Mitigation) dated December 2019;
- Drawing No. ZG-UKOG-L1-PA-24 Rev 1 Section Through Extended Well Testing Mode Layout Plan dated December 2019;
- Drawing No. ZG-UKOG-L1-PA-25 Rev 1 Retention Mode Layout Plan dated December 2019;
- Drawing No. ZG-UKOG-L1-PA-26 Rev 1 Section Through Retention Mode Layout Plan dated December 2019;
- Drawing No. ZG-UKOG-L1-PA-27 Rev 1 Proposed Well Site Fencing & Gates Section Plan dated December 2019;
- Groundwater Risk Assessment, Thatched House Farm, Envireau Water dated December 2019.
- Clarifying Email dated 9 January 2020 entitled, "RE: Loxley Well Site: Landscape Consultant Site Visit".
- Email dated 14 January 2020 entitled, "Application SCC Ref: 2019/0072 - Additional Information Consultee Responses 1 - SCC Highways Call for Additional Swept Path Analysis";
- Drawing No. LTP/3134/00/02.01 Rev A 16.5m Articulated Vehicle Swept Path Analysis Sheet 1 of 3 dated 7 January 2020;
- Drawing No. LTP/3134/00/02.02 Rev A 16.5m Articulated Vehicle Swept Path Analysis Sheet 2 of 3 dated 7 January 2020;
- Drawing No. LTP/3134/00/02.03 Rev A 16.5m Articulated Vehicle Swept Path Analysis Sheet 2 of 3 dated 7 January 2020;
- Drawing No. LTP/3134/00/03.01 Rev A 4 Axle Tipper Swept Path Analysis Sheet 1 of 3 dated 7 January 2020;
- Drawing No. LTP/3134/00/03.02 Rev A 4 Axle Tipper Swept Path Analysis Sheet 2 of 3 dated 7 January 2020;
- Drawing No. LTP/3134/00/03.03 Rev A 4 Axle Tipper Swept Path Analysis Sheet 3 of 3 dated 7 January 2020;
- Email dated 17 January 2020 entitled, "RE. Application SCC Ref 2019/0072 - Additional Information Consultee Responses 1";
- Email dated 23 January 2020 entitled, "FW: Loxley Utility Infrastructure: Electricity";
- Email dated 14 February 2020 entitled, "Loxley Well Site - SCC Ref: 2019/0072 - Planning Matters";
- Email dated 19 February 2020 entitled, "Loxley Well Site - SCC Ref: 2019/0072 - Planning Matters";
- Email dated 24 February 2020 entitled, "RE: Loxley: Three further Questions attaching Photo of Southern Boundary of Well Site Host Field and High Billingham Farm and Well Site Profile Slides";
- Email dated 4 March 2020 entitled, "RE: Loxley: Three Further Questions";
- Email dated 16 March 2020 entitled, "RE: Query re Ash Trees Along Northern Boundary";
- Letter dated 6 May 2020 responding to queries regarding the submitted Transport Statement; and

- Email dated 8 May 2020 entitled, “RE: Highways Matters and Pre-Commencement Conditions”.

SUMMARY OF PLANNING ISSUES

This section identifies and summarises the main planning issues in the report. The full text should be considered before the meeting.

	Is this aspect of the proposal in accordance with the development plan?	Paragraphs in the report where this has been discussed
Need for the Development	Yes	152 - 192
Climate Change	Yes	193 - 217
Highways, Traffic and Access	Yes	218 - 293
Landscape and Visual Impact	Yes	300 - 370
Air Quality	Yes	371 - 422
Noise and Vibration	Yes	423 - 468
Lighting	Yes	469 - 483
Water Environment	Yes	484 - 518
Geotechnical Issues	Yes	519 - 546
Ecology and Biodiversity	Yes	547 - 583
Archaeology and Heritage	Yes	584 - 623
Rights of Way	Yes	624 - 636
Cumulative Impacts	Yes	637 - 647
Restoration	Yes	648 - 670

ILLUSTRATIVE MATERIAL

Site Plan

Plan 1 - Site Location and Application Site Area
Plan 2 - Proposed Construction Layout Plan (Well Site)

Aerial Photographs

Aerial 1 - Loxley Well Site, Dunsfold
Aerial 2 - Loxley Well Site, Dunsfold

Site Photographs

Figure 1 - Well Site Host Field Looking North East
Figure 2 - Vehicular Entrance to Well Site Compound Looking North East
Figure 3 - Western Boundary of Well Site Compound Looking South
Figure 4 - Western Boundary of Burchetts Woodland Block Looking North
Figure 5 - View Looking East from High Loxley Road along Route of Proposed New Access
Figure 6 - View Looking North along Eastern Boundary of Well Site Host Field
Figure 7 - View Looking West along Northern Boundary of Well Site Host Field
Figure 8 - View Looking West along Track to the North of the Well Site Compound Host Field
Figure 9 - View Looking South from Southern Boundary of Well Site Host Field towards High Billingham Farm
Figure 10 - View Looking South along High Loxley Road with Site Entrance on the Left
Figure 11 - View Looking East from High Loxley Road towards Thatched House Farm
Figure 12 - View Looking North along High Loxley Road from Proposed Entrance Point
Figure 13 - View Looking West towards Sharp Corner on Dunsfold Road from Junction with High Loxley Road
Figure 14 - View Looking East along Dunsfold Road from Junction with High Loxley Road

Figure 15 - View Looking South of towards High Loxley Road and its junction with Dunsfold Road

Figure 16 - View Looking West along Dunsfold Road with Vegetation Screening on the Left

BACKGROUND

Site Description

1. The application site is located on agricultural land around one mile north-east of the village of Dunsfold and half-a-mile north of Dunsfold Park in an area known as Loxhill. It is situated in Countryside beyond the Green Belt approximately 2 miles south-east of Hascombe, 3 miles south-west of Cranleigh and 2 miles north-west of Alfold Crossways. The application site extends to an area of 2.3 hectares inclusive of the well site compound, the access track and other ancillary development.
2. The well site compound would be developed in a rural area of countryside 500 metres to the south of Dunsfold Road and 300 metres to the east of High Loxley Road which comprises a no through road. Access would be provided from High Loxley Road to the west at a point 180 metres south of the junction between High Loxley Road and Dunsfold Road (known locally as Pratts Corner). A new access track would be developed across agricultural fields to connect the new access on High Loxley Road with the well site compound. The application involves highway safety improvements on High Loxley Road and at Pratts Corner to enable heavy goods vehicles (HGVs) to access the site safely. All lorry traffic accessing and egressing the site will be routed via Dunsfold Road and the A281 to the east which connects Guildford and Horsham.
3. The well site compound would be situated immediately to the south and west of four established woodland blocks which are joined together. These comprise The Burchetts to the north and north-west, Thatchedhouse Planted Piece to the north-east, The Moor to the East and High Loxley Furze to the south-east. This combined woodland block screens the proposed well site compound from the north and east. It also screens views of the northern half of the well site compound from the west. Three of these woodland blocks comprising The Burchetts, The Moor and High Loxley Furze are the subject of a clear fell license granted by the Forestry Commission to the landowner, the Hascombe Estate in October 2019.
4. An established narrow single line of trees and hedgerow along the northern edge of the well site compound host field remain within the control of the applicant. This boundary would be largely retained and enhanced with new planting. However 5 ash trees may need to be replaced with other native species during the lifetime of the development. If The Burchetts were clear-felled, the retained boundary planting would only provide a partial screen from views of the site from the north due to some gaps between the trees and hedgerow situated along this field boundary. A broader and more continuous area of trees and hedgerow along the eastern boundary of the well site compound host field also remains within the applicant's control and would be retained in full and enhanced. This would provide more of an effective screen if the woodland further to the east was felled as part of the clear-fell licence.
5. Views into the wider site including the route of the proposed access track are partly restricted by mature trees and hedgerows along both field boundaries and highway verges as well as the gently undulating nature of the local countryside. Public bridleway 280 is located approximately 100 metres to the south of the well site compound. It connects High Loxley Road to the west with Stovolds Hill to the east and is routed along the southern edge of the well site compound host field.
6. The wider landscape supports isolated residential properties, situated within extensive grounds, and farmsteads. The nearest residential dwellings comprise Thatched House

Farm 330 metres to the north of the centre of the well site compound, High Billingham Farm 390 metres to the south, High Loxley 560 metres to the west and a consented property at Unit 2, High Stovolds Farm 615 metres to the south-east.

7. Thatched House Farm also incorporates a number of businesses including sheep farming, organic pig farming, a craft brewery and an internationally recognised cancer awareness festival which is held every July and is attended by over 1,000 participants. The 2020 festival has been postponed, potentially until September. The festival offers camping retreats and discussion days for participants in the months before and after the festival. High Billingham Farm contains an events venue that is permitted to hold up to 50 weddings, funerals and corporate hospitality functions per year which can be attended by a maximum of 164 guests, unless prior written approval is obtained from the Borough Council.
8. The Burchetts woodland block currently separates the well site compound from Thatched House Farm. High Loxley and High Billingham Farm are accessed by means of High Loxley Road. The nearest residential communities are Lydia Park and New Acres which comprise a traveller site and mobile home park off Stovolds Hill. These are situated around 485 metres to the east of the centre of the well site compound beyond a mature area of woodland, part of which is included within the clear fell licence issued to the Hascombe Estate. A further 4 applications have been granted planning permission for gypsy and traveller accommodation on land to the north and west of Lydia Park. The nearest of these to the application site was permitted on Appeal in August 2018 and comprises accommodation for 3 Romani Gypsy families on land west of Lydia Park approximately 420 metres to the north east of the centre of the well site compound.
9. The nearest major commercial land is situated at Dunsfold Park, approximately 850 metres to the south where planning permission (ref: APP/R3650/V/17/3171287 dated 29 March 2018) exists for the development of a new settlement. This permission includes the development of 1,800 new homes, a new commercial centre, new business units, non-residential institutions, community centre, new primary school, the relocation of an existing school, amenity space and supporting infrastructure. An established solar farm operation situated on land to the south of High Billingham Farm is also accessed via High Loxley Road.
10. The application site is situated within a designated Area of Great Landscape Value (AGLV). Land to the north of Dunsfold Road is situated within the Surrey Hills Area of Outstanding Natural Beauty (AONB). The AONB lies around 530 metres north of the well site compound. Land to the north of the site, adjacent to Dunsfold Road, is designated as an 'Area of High Archaeological Potential'. Part of the southern area of The Burchetts woodland block is designated as ancient semi-natural woodland comprising a Plantation on Ancient Woodland Site (PAWS) where the semi-natural woodland has been replaced with a plantation. This area is included within the Clear Fell Licence area as it is the seedbed rather than the trees themselves that are protected.
11. The Chiddingfold Forest Site of Special Scientific Interest (SSSI) lies some 1.99 kilometres to the south of the proposed development site. The nearest Sites of Nature Conservation Importance (SNCI) to the well site compound comprise Sayers Land, Jewings Hurst and Benbow Rew SNCI approximately 385 metres to the south and south-west, Benbow Rew SNCI and Furtherfits, Dunsfold Aerodrome SNCI around 560 metres to the south and 690 metres to the south-east respectively, Mill Copse SNCI 1,100 metres to the east, Dunsfold Common and Green SNCI 1,200 metres to the west and Hascombe Hill SNCI 1,650 metres to the north-west.
12. The proposed development is located in an area of land classified by the Environment Agency (EA) as Flood Zone 1 which has a low fluvial flood risk (i.e. less than a 1 in 1,000 probability of river or sea flooding in any year). It is not underlain by any groundwater Source Protection Zone designations. A confirmed utilised groundwater source is present

at the nearest residential property, Thatched House Farm. The nearest Air Quality Management Area (AQMA) is located 8.1 km to the north-west in Godalming. This was designated for exceedances of air quality standards for nitrogen dioxide.

13. Two Areas of High Archaeological Potential are situated within the vicinity of the application site. These are located south of Dunsfold Road between High Loxley Road and Thatched House Farm to the east and around 470 metres to the south of the well site compound beyond High Billingham Farm. The Dunsfold Conservation Area is situated around a 1.4 km to the south-west of the well site compound.
14. The nearest listed buildings to the well site compound are all Grade II listed and comprise: Thatched House Farm House, the Barn at Right Angles to the North of Thatched Farm House and the former Granary at Thatched House Farm around 330 metres to the north of the centre of the well site compound; High Billingham Farm House around 390 metres to the south; and High Loxley, the Barn to the North East of High Loxley House, and the Barn to the Front of High Loxley House approximately 560 metres to the west. The Multivallate Hillfort, Hascombe Hill County Site of Archaeological Importance (CSAI) is located around 1,890 metres to the north-west.

Planning History

15. The application site has no planning history. It has an historic agricultural use. Hydrocarbon activity has taken place previously in the surrounding area with wells having been drilled and completed during the 1980s at Godley Bridge-1 to the north-west of Chiddingfold, Alfold-1 to the north-east of Alfold and both Godley Bridge-2 and Godley Bridge-2z to the north-east of Grayswood.
16. The primary objective of all of these wells was to penetrate the Jurassic Portland sandstone, with a secondary objective being to penetrate the Jurassic Great Oolite limestones and Inferior Oolite limestones. These are the same geological formations being targeted by the proposed development.
17. On 1 July 2019, the applicant subsequently submitted an application (ref: WA/2019/1089) for an alternative access to the application site from Dunsfold Road to the north. This application was withdrawn by the applicant in March 2020.

THE PROPOSAL

18. The application is for the construction of a new temporary hydrocarbon well site on land south of Dunsfold Road and east of High Loxley Road. It involves the drilling of a new well (Loxley-1) and one side-track well (Loxley-1z) for the exploration and appraisal of hydrocarbons for a temporary period of 3 years with restoration to agriculture. The primary target for exploration is gas from the Portland Sandstone Formation within the Godley Bridge Gas Discovery. This consists of a hydrocarbon reservoir up to 2km below ground and 2km wide, stretching from Chiddingfold in the west to Alfold Crossways in the east. The secondary target is oil from the deeper Kimmeridge Limestone Formation. For the avoidance of doubt, the development does not include the use of high-volume fracturing.
19. The proposal will comprise 4 distinct phases:

Phase 1: Access and Well Site Construction
20. *Summary: This will comprises minor highway improvement works at the junction of Dunsfold Road and High Loxley Road, the construction of a new junction within High Loxley Road, the installation of up to 1km of new compacted-stone access track, construction of a compacted-stone well site with an impermeable membrane, perimeter*

surface run-off containment ditch and drilling cellar (i.e. concrete chamber within which the exploratory borehole will be drilled) to accommodate a conductor casing (i.e. the outer casing of the well) with security fencing, entrance gates and other ancillary development.

21. A crushed and compacted stone access track will connect the well site to a new temporary tarmac priority junction with the public highway at High Loxley Road. This will require the removal of up to 10 metres of internal field boundary hedgerow which would be reinstated in the first available planting season post construction. The junction will comprise a 30 metre wide bell-mouth leading into the site and a vehicular passing place within the highway verge to allow for the two-way free flow of traffic within High Loxley Road. The installation of the junction and the provision of clear lines of vehicular visibility will require targeted excavation and the removal of up to 55 metres of hedgerow along with the loss of two trees (assessed by the applicant to be of low value and quality) from the eastern side of High Loxley Road.
22. Removal will be kept to a minimum and subject to a detailed Landscape, Environment and Biodiversity Restoration and Enhancement Plan (LEBREP) to compensate for any loss of vegetation with reinstatement proposed in the first available planting season post construction. This would provide for the reinstatement of the lost hedgerow and the planting of 6 new trees with the intention of replacing each tree lost with 3 new trees. The full restoration of lost hedgerows would be undertaken upon completion of the development. This forms part of a broader LEBREP which will seek to deliver new tree and hedgerow planting to enhance existing field boundaries along a section of High Loxley Road, between High Loxley Road and the south-west corner of The Burchetts, and around the northern, eastern and southern boundaries of the well site host field.
23. The carriageway at the junction of High Loxley Road and Dunsfold Road would be extended by up to 0.9 metres on all sides and strengthened to facilitate the turning of vehicles and to protect the verges from rutting. The carriageway along the western side of High Loxley Road would be extended in places by up to 0.9 metres to facilitate HGVs and abnormal loads entering and exiting the site. Localised widening on the east side of High Loxley Road to the south of the proposed site access is also proposed to provide a passing place for vehicles travelling south when vehicles heading north are waiting at the new portable traffic signals proposed to be installed to the south of the site entrance.
24. Highway improvement works are proposed at Pratts Corner consisting of localised widening on the north side of Dunsfold Road opposite the junction and on both the east and west sides of High Loxley Road adjacent to the junction. This is necessary to accommodate the swept paths of HGVs and abnormal loads entering and exiting the site. The maximum amount of widening is 0.91 metres in all cases to ensure that the proposed highway works are within the extents of the adopted public highway. Temporary portable traffic signals will also be introduced at Pratts Corner, comprising the High Loxley Road / Dunsfold Road / Dunsfold Common Road junction to facilitate the movement of HGVs entering and exiting High Loxley Road with a temporary 40 mph speed limit introduced on all approaches to this junction.
25. The temporary signals and associated temporary traffic management could be removed outside of the scheduled 12-hour HGV delivery period on Monday-Friday 0700-1900 and Saturday 0900-1300 and on days when the scheduled vehicles are able to accommodate the junction at Pratts Corner without the use of traffic signals. This would enable Pratts Corner to revert to operating as a priority junction. Recognising the need to minimise delays and queuing the traffic signals would operate flexibly over the 12-hour HGV delivery period to reflect traffic demands on Dunsfold Road and Dunsfold Common Road particularly in the morning and evening traffic peak periods. This would be done by utilising a combination of traffic signal technology to optimise the signal operation and the adoption of an on-site traffic management regime to schedule HGV activity outside of peak periods.

26. Approximately 1 kilometre of internal access track will be installed by stripping the top-soil and storing it in low-level earth bunds (under 1 metre in height) alongside the track to minimise the disturbance of soil structure, avoid tracking over exposed sub-soils and aiding restoration. The track and well site have been placed to avoid ecological habitats and no trees internal to the site would be lost. However, a 10 metre long section of internal hedgerow (assessed by the applicant to be of low value and quality) would be removed to accommodate the track as it navigates the south west corner of The Burchetts Wood. This would be reinstated in the first available planting season post construction.
27. Traffic routeing for HGVs will be via High Loxley Road and the B2130 Dunsfold Road that connects with the A281 at a traffic signal junction some 2.2 km east of the application site. Onward journeys from the A281 will be via connecting Principal 'A' Roads allowing larger delivery vehicles to remain on higher classification roads for a greater proportion of the route. All traffic would therefore avoid The Green and Dunsfold Village (accessed via Dunsfold Common Road) and Loxhill, Hascombe, Busbridge and Godalming (accessed via Dunsfold Road).
28. A level plateau to accommodate the well site will be formed by way of a neutral cut and fill, retaining all excavated soils on-site for future reinstatement. It will be designed to *British Standard (BS EN 1997-2:2007 Eurocode 7. Geotechnical Design. Ground Investigations and Testing)* and UK guidance 'Containment Systems for the Prevention of Pollution' (CIRIA C736: Containment Systems for the Prevention of Pollution - Secondary, Tertiary and other measures for industrial and commercial premises, I L W Walton (SLR Consulting) CIRIA 2014). It will rely upon appropriately designed site investigations performed as part of a geotechnical assessment process managed by suitably qualified engineers.
29. Excavated top-soil will be stripped and retained on-site as an earth bund along the southern boundary of the well site 4 metres in height. The subsoil will be cut and filled appropriately to create a level surface and a 'v-profile' ditch will be excavated around the perimeter of the active area of the site. A drilling cellar (concrete chamber) will be constructed in the middle of the active area using pre-cast concrete rings, within which the exploratory borehole will be drilled.
30. An impermeable high-density polyethylene membrane (HDPE) complete with protective geotextile layers (above and below the HDPE) will then overlay the plateau and perimeter ditch. A stable and flat surface of crushed and compacted stone will overlay the HDPE membrane allowing for the containment and controlled drainage of surface run-off. Upon completion of well site construction, the perimeter containment ditch will either be fitted with a continuous infiltration drainage pipe and enclosed with granular fill or left as an open drainage channel.
31. All container units to be positioned within the well site compound will be up to 2.6 metres in height with some of the larger fluid tanks and staff accommodation cabins being up to 3 metres. Up to 5 lighting towers will be required at a height of 9 metres each. Surface run-off will be tankered off-site for subsequent treatment and/or disposal at an EA permitted waste water treatment works. The discharge of water will be regulated by the EA under the *Environmental Permitting (England and Wales) Regulations 2016 (EPR 2016)*.
32. To protect groundwater and isolate near surface permeable strata, a well consists of concentric casing strings (i.e. steel pipes set within concrete casings). A conductor casing (i.e. the outer casing) will be installed and cemented from surface to provide a stable and watertight foundation for the subsequent drilling and setting of smaller diameter and deeper casing strings. A conductor setting rig with a mast of up to 15 metres in height will be used.
33. The new site junction within High Loxley Road will be secured by 2.5 metre high entrance gates incorporating close mesh panelling and close boarded timber to the front elevation.

Security fencing of the same height and design will enclose a two-way vehicular access enabling HGVs to enter and exit without compromising the free flow of traffic within High Loxley Road. The junction will key into High Loxley Road and will therefore be of the same specification comprising a sub-base of loose fill material with a tarmac carriageway surface sufficient to support the predicted HGV activity and prevent mud leaving the site and being deposited on the surrounding highway network. A 3 metre high modular gatehouse will be placed internal to the site behind the entrance gates to manage vehicular access.

34. The well site, its drainage system and earth bund will be enclosed by 2.5 metre high entrance gates and security fencing incorporating close mesh panelling. The security fencing will extend to a height of 4 metres along the southern and eastern boundaries of the well site and 2.46 metres along the northern and western boundaries. The security fence along the southern and eastern boundaries will be internally clad with netting. This is intended to screen views into the site including from public bridleway 280 and High Billingham Farm to the south.
35. The existing wild bird seed mix planting to the south and east of the well site, which is very durable through the winter, will be retained for the duration of the development. This comprises an area equivalent to the size of the well site. The crop has a maximum height of around 2.1 metres. A mix of manual and natural seeding will maintain the crop yield and its screening potential throughout the year. A 4 metre high screening fence incorporating debris netting will be erected along the northern edge of the well site compound. This will reduce inward visibility from the north in the event that The Burchetts wood is felled by the Hascombe Estate.
36. Low-level and downward facing lighting will be installed centrally within the well site to provide for the health and safety of site workers. Shrouded and directional lighting will be installed along the well site boundary with discrete pole mounted surveillance equipment. A modular gatehouse will manage vehicular access and single-story welfare units will be installed complete with car parking bays to provide on-site offices and worker facilities.

Phase 1 Programme:

37. Approximately twelve construction staff will be required together with between three and six security staff accessing the site via cars and light goods vehicles (LGV's). Plant, machinery and materials will be delivered by HGVs between 0700 and 1900 hours Monday to Friday and 0900 and 1300 hours on Saturdays. The majority of HGV movements will be scheduled within standard hours of operation (i.e. 0800 - 17:00 hours Monday to Friday and 0900 - 1300 hours on Saturdays. Outside of these periods, the flow of HGVs will be controlled by appropriate traffic management measures, where necessary, to avoid any adverse traffic effects and delays.
38. Foul water, sewage and domestic waste will be collected and contained on site for subsequent off-site transfer to an EA permitted waste treatment facility. Timber and packaging waste will be segregated for off-site transfer and recycling. The phase 1 programme comprises:

Table 1: Phase 1 Programme				
Access and Well Site Construction	Hours of Site Operations			Estimated Duration
	Mon - Fri	Sat	Sun / Bank Hols	
1.A: Access and Well Site Construction	0700 - 1900	0900 - 1300	None	14 weeks

Phase 2: Drilling, Testing and Appraisal

39. *Summary: This will include the mobilisation and demobilisation of surface plant and machinery ancillary to the drilling of one borehole (Loxley-1), one side-track borehole (Loxley-1z) and subsequent appraisal by initial and extended well testing.*
40. The drilling programme comprises the following operations:
- mobilisation of the main drilling rig up to 38 metres in height and ancillary equipment to site;
 - drilling an exploratory well (Loxley-1) followed by a side-track well (Loxley-1z) if necessary;
 - temporary storage of drilling mud and rock cuttings for subsequent off-site disposal;
 - shrouded external lighting illuminating the rig mast, rig floor and ancillary infrastructure; and
 - delivery of fuels, equipment, materials, drilling chemicals, steel casing and tubing.

Drilling the Well

41. The target formations for exploration are the Portland sandstones and Kimmeridge limestones. They will be accessed by a well set within the stable and secure surface conductor casing. A drill string will be installed within the conductor casing comprising a drill pipe, a bottom hole assembly and a drill bit. The drill bit sits at the bottom of the drill string below the bottom hole assembly, consisting of drill collars and stabilisers. The stabilisers assist with drilling a straight hole and the drill collars provide the weight on the drilling bit which is designed to drill using a crushing and shearing motion. The drill pipe and collars are around 10 metres each in length and have tapered threads so they can be screwed together. The entire drill string is hollow to allow drilling mud to be circulated while the pipe is rotated during the drilling process. As the borehole gets deeper additional lengths of drill pipe are then added to the drill string.
42. Drilling muds clean and lubricate the hole whilst providing borehole stability. They also propel well cuttings to surface for separation and subsequent removal off-site. At depth, oil-based muds or water-based muds with additives (predominantly polymers to provide gel strength to lift the cuttings from the well) are used to minimise filtration within the drilled formations. When used to facilitate the drilling of near surface geology, freshwater and natural non-organic thickening agents (such as bentonite) are used to minimise the impact on groundwater.
43. The precise specification of the drilling rig will not be known until a contractor has been selected. However a rig similar to the British Drilling and Freezing Company (BDF) Rig 28, the Ideco 'Back in Rambler' (BIR) 5625 would be engaged which has a height of 37 metres. This rig has been deployed at multiple sites across the UK with predictable environmental impacts and effects. The rig floor extends 4 metres above ground level directly supporting a 33 metre high telescopic mast. The rig comes complete with two generators but only one is run at any one time with the other being on standby as the rig is not synchronised for 'dual running'. All ancillary equipment is housed within acoustic enclosures.
44. Should Rig 28 not be available, the likely fall-back would be the BDF Rig 51 Cabot 900. This has a rig floor 7 metres above ground level directly supporting a 31 metre high telescopic mast. This has a height of 38 metres although many other rigs would fit within the proposed specification envelope.
45. All of the major components associated with a drilling rig (i.e. water tanks, pipe store, mud and fuel tanks, generators, office and accommodation facilities) are contained within the drilling compound. Once started, drilling needs to be a 24-hour operation for the following reasons:

- coagulation: if mud circulation is interrupted and the drill cuttings settle this can cause the drill string to become compacted and inoperable; and
 - well integrity: the borehole can cave-in because of swelling clays and porous formations, which means the immediate deployment of casing strings is recommended to provide stability.
46. A 24-hour drilling programme represents the most efficient uses of resources. By limiting the duration of operations, it minimises the scope for adverse environmental effects. This approach has been acceptably adopted at many other UK operational on-shore exploratory sites on the basis that it represents the most sustainable form of development.
47. The need for night time working will be minimised by way of considerate scheduling. Where this cannot be avoided operations are likely to be intermittent and of a temporary nature. When operating at night, the rig, rig floor and ancillary equipment are illuminated by shrouded external lights attached to the rig mast along with mobile and shrouded ground-based lighting columns. Noise emissions would be within standard night time limits.

Well Design

48. As the crest of the discovery structure is south of the site, it is likely that the well(s) would be deviated across 90 degree arcs centred in a south-easterly and south-westerly direction extending up to 2.5km. The well design has been informed by the below ground formation depths and configuration. A conductor setting rig will drill a 24" hole within the impervious Weald Clay to 40ft measured depth (MD)¹ and total vertical depth (TVDss) to accommodate the conductor casing. The main drilling rig would then be mobilised to site to install surface casing to the base of the Weald Clay at a 1,100 ft MD/TVDss. Drilling the hole would use water-based mud with the casing cemented back to surface to isolate the Weald Clay formation.
49. The main drilling rig would then install surface casing to the top of the Portland sandstone at 3,550ft MD (3,050ft TVDss) using either water-based or oil-based mud cementing the casing back to surface to isolate the Lower Cretaceous Beds. A hole will then be drilled to 6,600ft MD (4,750ft TVDss) using either water-based or oil-based mud to accurately locate the base of the Corallian Beds, targeting the shallow primary Portland gas and the deeper secondary Kimmeridge oil.

Side-track Well Design

50. A side-track is the drilling of a new section of hole from the main borehole (Loxley-1) to reposition the bottom of the well in a new area of the target formation. In this case, the side-track well would be known as Loxley-1z and its installation would require the main drilling rig. As the Loxley-1 well would already be in place, the duration of the Loxley-1z side-track drilling operation should be less but it would still necessitate 24-hour working in the interests of well stability and control.
51. As with Loxley-1, the side-track well design has been informed by the below ground formation depths and configuration. Should a side-track be necessary, Loxley-1 would be plugged back and a whipstock kick-off assembly run to between 1,500ft and 2,000ft MD. An 8½" hole would be drilled to land within the target formation at 4,500 ft MD (3,100 ft TVDss). Casing would then be run to enable the drilling of a horizontal hole to enable the

¹ Because wells are not drilled vertically, two depths are provided, namely a) the measured depth (MD): a measure of the path of the borehole, and b) the true vertical depth minus the elevation above mean sea level (TVDss): the absolute vertical distance between the ground level and the base of the borehole. In perfectly vertical wells, the MD equals the TVDss where the well is drilled at datum (e.g. mean sea level), otherwise, the TVDss is less than the MD measured from the same datum point.

recovery of the hydrocarbon resources. The casing would be cemented on the outside in a similar fashion to Loxley-1, to isolate the formations and prevent pathways between strata.

Appraisal and Testing

52. Following the completion of the drilling programme, Loxley-1 would be the subject of well testing, commencing with initial short-term flow testing to confirm the existence of a hydrocarbon reservoir. If successful, a period of extended well testing would then be performed by way of a series of workover operations to determine the productivity and characteristics of the reservoir, estimate its volume and its likely recovery rate.
53. During testing, it is likely that a crane would be used to lower tools into the well on a wire or within a coiled tubing to perforate the target formation(s) and remove debris from within the well, by way of a dilute acetic acid wash (i.e. vinegar) prior to the installation of flow-testing and pumping equipment. When fully extended, the crane could be up to 42 metres in height. However, the times when the crane is fully extended are limited and works are designed to enable the crane to leave the site on a daily basis without being stored overnight.
54. In some circumstances, there may be the need to mobilise a workover rig, which is likely to be either 34 or 35 metres height, or a coil tubing unit (up to 25 metres in height) to perform a maintenance workover should downhole pumps need to be changed, tubing replaced, or formations cleaned. In practice however, it is proving possible to perform maintenance and testing much more quickly with a crane. Only one crane or one rig would be present on site at any one time. (NB: An EA Fact Sheet on 'Acidisation' published in January 2018 explains that operators often use coiled tubing units to ensure that the acid is delivered to the correct location within the well and is spread evenly along the target area. A coiled tubing unit is a specialised piece of equipment consisting of a reel mounted tubing string. The coiled tubing is run inside the well's production tubing to the area to be targeted for treatment. The acid is then pumped down the tubing to the target formation.)
55. Well testing is a continuous process requiring 24-hour working, which introduces noise, air and light impacts outside of the standard hours of operation. However, the need for night time working will be minimised by way of considerate scheduling. Where this cannot be avoided, operations are likely to be intermittent and of a temporary nature. The crane will give rise to noise emissions within standard night time limits and lighting would be mobile, shrouded and directional to minimise the scope for adverse off-site light spill and glare. Plant, machinery and materials will be delivered by HGV's between 07:00 - 19:00 hours Monday-Friday and 09:00 - 13:00 hours on Saturdays engaging appropriate traffic management measures where necessary. However, the majority of HGV movements will be scheduled within standard hours of operation.
56. If natural gas is encountered flaring would be engaged utilising up to two shrouded ground flares (12 metres in height) during initial short-term flow testing. This is likely to involve intermittent flaring for a period of 7 days. This would be followed by extended well testing which is likely to involve intermittent flaring for a period of 90 days using a single flare. Shrouded flares screen the flame from view and its use would be monitored and managed by the EA in accordance with the EPR 2016.

Phase 2 Programme:

57. During the periods of drilling and testing, approximately twenty personnel (working back to back 12-hour shifts) will be required with 3-6 security staff. Accommodation is provided for key staff on-call. Waste will consist of:
 - Extractive waste: drilling muds, rock cuttings, excess cement, spent dilute acid, produced formation water and associated natural gas (which are subject to a mining

waste permit under the EPA 2016). Waste would be collected and contained on-site for off-site transfer to an EPA permitted waste treatment facility: and

- Non-extractive waste: foul water, sewage and domestic waste will be collected and contained on-site for off-site transfer to an EPA permitted waste-water treatment facility. Timber and packaging waste will be segregated for off-site transfer and recycling.

58. Upon completion, appraisal equipment and all other surface machinery will be deconstructed or dismantled, cleaned and removed from site. The phase 2 programme is likely to be:

Table 2: Phase 2 Programme				
Drilling, Testing and Appraisal	Hours of Site Operations			Estimated Duration
	Mon - Fri	Sat	Sun / Bank Hols	
2.A: Drilling: Mobilisation / Demobilisation	0700 - 1900	0900 - 1300	None	3 weeks
2.B: Drilling	24 hours	24 hours	24 hours	12 weeks
2.C: Testing : Mobilisation / Demobilisation	0700 - 1900	0900 - 1300	None	3 weeks
2.D: Testing: Initial and Extended Well Testing	24 hours	24 hours	24 hours	26 weeks
2.E: Side-track Drilling	24 hours	24 hours	24 hours	12 weeks
2.F: Maintenance Workover	24 hours	24 hours	24 hours	4 weeks

Phase 3: Well Plugging, Abandonment and Decommissioning

59. *Summary: This will comprise the removal of all surface equipment followed by the plugging and abandonment of the well. (NB: In the event that commercially viable reserves are found to exist, the well will be suspended, rather than being plugged and abandoned, pending the outcome of the submission of a further temporary planning application proposing the retention of the site to allow longer term hydrocarbon production to take place).*
60. A workover rig will be mobilised to the site along with diesel power generation, pumps and tanks. Cement plugs (barriers) will then be set within the well to ensure that all distinct permeable zones penetrated by the well are isolated from each other and from the surface by a minimum of one permanent barrier. Permeable zones penetrated by the well which are hydrocarbon-bearing or over-pressured and water-bearing will be isolated by two permanent barriers from the surface (the second being a back-up to the first). Once the well is abandoned, the casing within the drilling cellar will be cut 1.5m below ground level and a steel plate welded over the top of the casing to prevent soil from re-entering the borehole.

Phase 3: Programme

61. 24-hour working will be necessary, introducing noise, air and light impacts outside of the standard hours of operation. Plant, machinery and materials will be delivered by HGV's between 0700 - 1900 hours Monday - Friday and 0900 - 1300 hours on Saturdays engaging appropriate traffic management measures where necessary. However, the majority of HGV movements will be scheduled within standard hours of operation. Upon completion, the rig and all other surface machinery will be dismantled, cleaned and removed from the site. 12 personnel will be required with 3-6 security staff. Waste will be the same extractive/non-extractive mix as at phase 2. The phase 3 programme is likely to be:

Table 3: Phase 2 Programme				
Well Plugging, Abandonment and Decommissioning	Hours of Site Operations			Estimated Duration
	Mon - Fri	Sat	Sun / Bank Hols	
3.A: Plugging and Abandonment	24 hours	24 hours	24 hours	3 weeks
3.B. Removal of Surface Equipment	0700 - 1900	0900 – 1300	None	2 weeks

Phase 4: Site Restoration (or Retention)

62. *Summary: This will include the restoration of the site to its original use subject to a period of aftercare. (NB: In the event that commercially viable reserves are found to exist, a further temporary planning application proposing the retention of the site will be submitted to allow hydrocarbon production prior to restoration and aftercare taking place).*
63. All concrete hardstanding and bunded areas will be cleaned prior to dismantling. The concrete chamber (drilling cellar) will be dismantled leaving the lowest pre-cast concrete ring in situ. Surface aggregates will be inspected prior to removal. Areas where contamination is identified will be removed for subsequent off-site treatment and reuse. The remaining surface aggregate will be carefully removed for subsequent off-site reuse.
64. Once the impermeable membrane has been removed, the exposed subsoils will be inspected. In the unlikely event that localised contamination is identified the affected area will be excavated for subsequent off-site treatment and/or disposal at an EA permitted waste facility. Soil samples will be taken, analysed and compared with soil samples taken prior to construction to confirm the absence of contamination. The subsoil will be cultivated to a depth of 600mm after-which the soil will not be traversed by machinery.
65. Topsoil may have degraded during storage so it will be tested prior to replacement to determine what treatments, if any, are required to improve its condition. Treatments will be applied during soil replacement to improve penetration and effectiveness. Topsoil will be back-tipped from the store onto loosened subsoil and graded to its original profile.

Phase 4 Programme

66. Approximately six personnel will be required with 3 to 6 security staff. Plant, machinery and materials will be delivered by HGV's between 0700 - 1900 hours Monday-Friday and 09:00 - 13:00 hours on Saturdays engaging appropriate traffic management measures where necessary. However, the majority of HGV movements will be scheduled within standard hours of operation. Waste generated will be the same as phase 1. The phase 4 programme is likely to be:

Table 4: Phase 4 Programme				
Site Restoration or Retention	Hours of Site Operations			Estimated Duration
	Mon - Fri	Sat	Sun / Bank Hols	
4.A: Site Restoration	0700 - 1900	0900 - 1300	None	5 weeks

Development Programme

67. The phases of development are largely consecutive, adopting a logical progression from well site construction, through drilling and testing to decommissioning, retention or restoration with no material periods of simultaneous operations. Phase progression may be disrupted as a result of equipment constraints, the need for maintenance or adverse

weather conditions. Such periods will not be significant when the development programme is considered as a whole.

Development Traffic and Transport

68. The movement of HGVs associated with each phase of the development will be between 0700 - 1900 hours Monday to Friday and 0900 - 1300 hours on Saturdays. The majority of HGV movements will be scheduled within standard hours of operation (i.e. 0800 - 1700 hours Monday - Friday and 0900 - 1300 hours Saturday) minimising HGV movements outside of these time periods. HGV movements outside of these periods will be controlled by appropriate traffic management measures, where necessary, to avoid any unacceptable residual traffic effects.
69. The daily maximum number of HGV movements generated by the development will vary between 10 and 20 movements per day depending on the particular phase / sub-phase of the development. The applicant has estimated that up to 10 HGV movements per day will be generated for a third of the time and up to 20 HGV movements per day will be generated for two-thirds of the estimated duration of the development. The number of HGV movements will be scheduled to meet the limits set out in Table 5 below.

Table 5: Heavy Goods Vehicle Movements			
Phase	Sub-Phase	Estimated Duration	Maximum HGV Movements (in and out)
Phase 1: Access and Well Site Construction	1.A Access and Well Site Construction	14 weeks	20
Phase 2: Drilling, Testing and Appraisal	2.A: Drilling – Mobilisation / Demobilisation	3 weeks	20
	2.B: Drilling	12 weeks	
	2.C: Testing	3 weeks	
	2.D: Testing - Initial and Extended Well Testing	26 weeks	10
	2.E: Side-track Drilling	12 weeks	20
	2.F: Maintenance Workover	4 weeks	
Phase 3: Well Plugging, Abandonment and Decommissioning	3.A: Plugging and Abandonment	3 weeks	20
	3.B: Removal of Surface Equipment	2 weeks	10
Phase 4: Site Restoration	4.A: Site Restoration	5 weeks	20

70. There may be exceptional occasions during the transition between phases and during drilling when these limits may be exceeded in the interests of well integrity and the efficient operation of the Site. These occasions would be exceptional with the majority of HGV movements scheduled within standard hours of operation. Movements would be controlled by bespoke traffic management measures where necessary to avoid any unacceptable residual transport and traffic effects. Adopting this approach would allow the duration of the phases to be reduced and it would limit the time that HGV's spend on the surrounding highway network.
71. Non-HGV traffic would consist of light goods delivery vehicles and the vehicles of site workers (shuttle bus or private cars). During periods of construction and restoration up to 12 staff would be on site within standard working hours. During periods of drilling, side-track drilling, maintenance workovers, well plugging and abandonment, the same quota of up to 12 staff would remain on site permanently (2 x 12hrs shifts), with numbers peaking

for short periods at up to 20. However vehicular movements would be spread across the entire day and would therefore not compromise the free flow of highway traffic within the standard hours of operation. A quota of up to 6 security staff would be permanently stationed on site (2 x 12hrs shifts).

Exploration and Appraisal Methodology

72. The applicant states that the near identical reservoir geology between the Loxley Well Site and the exploration and appraisal sites at Broadford Bridge, West Sussex and Horse Hill, Surrey indicates that the Kimmeridge and Portland reserves may be linked. Therefore, the most important technical goal of the exploration and appraisal work at Loxley is the confirmation of the Kimmeridge/Portland 'Geological Concept', namely the presence of an open and continuous natural network of hydrocarbon deposits capable of flowing to surface without stimulation. The need to 'confirm the nature and extent' of this regional system will be key to the future commercial recovery of deposits across the wider Weald Basin formation.
73. The Planning Statement sets out that flow tests and pressure data from the Broadford Bridge and Horse Hill wells sites have been sub-commercial which is why the 'potential means of recovery' needs to be tested at Loxley. This is precisely why the side-track well (L-1z) forms part of the development proposal. L-1z will allow alternate completion methodology, new completion fluids and the possible use of small-bore radial drilling to be deployed in the search for higher sustainable recovery rates. Knowledge gained at Loxley would be used elsewhere within the PEDL-234 licence area to benefit hydrocarbon recovery.

CONSULTATIONS AND PUBLICITY

District Council

74. Waverley Borough Council

Object on 17 separate grounds relating to: insufficient information on a range of technical issues; lack of an EIA; energy policy and climate change; lack of an economic assessment; transport; visual impact; air quality; noise; ecology; site drainage and impact on groundwater; archaeology and heritage; inadequate assessment of risk of major accidents; contamination and spillage; impact on local business; residential amenity and restoration. Consider that the proposal is contrary to the Borough Council's adopted Climate Change motion and claim that the proposed highway works at Pratts Corner will take place on registered Common Land within their stewardship. Query whether the application is valid as the access may cross Common Land. Suggest that the application should be withdrawn because the Borough Council has not been included on the Certificate of Ownership. The Borough Council's Portfolio Holder for Environment and Sustainability has also responded separately requesting that the application be refused on a range of environmental and safety grounds.

75. Environmental Health

Concerned that proposed noise levels are well above background sound levels, particularly at night and would impact on local residents. Recommends conditions setting noise limits for temporary operations, during the day time and night time periods, and to require the submission of a Noise Mitigation Strategy, Noise Monitoring Plan and Complaints Handling and Liaison Scheme.

Raises issues in relation to air quality, odour, vehicle movements and lighting. Recommends that consideration should be given to the imposition of a number of planning conditions if the application is approved to control the number of HGV movements, provide a dust mitigation plan, a dust management plan, an air quality monitoring plan and an odour assessment, to control lighting and to secure the proposed lighting mitigation

measures. Advises that the Environmental Permit should adequately control any potential emissions to land and appropriate remediation if needed.

Consultees (Statutory and Non-Statutory)

76. Environment Agency

No objection subject to a condition requiring the submission and approval of a scheme to dispose of surface water and trade effluent prior to the development taking place. Also highlight that the proposal will require Environmental Permits which will require additional assessment of the risks to controlled waters.

77. Lead Local Flood Authority

Satisfied with the proposed drainage scheme and content with the development proposed subject to conditions to ensure that the sustainable urban drainage systems (SuDS) scheme is properly implemented and maintained throughout the lifetime of the development.

78. Natural England

No objection subject to appropriate mitigation measures being secured by condition.

79. County Highway Authority

No objection subject to conditions to ensure the development does not prejudice highway safety or cause inconvenience to other highway users.

80. County Noise Consultant

Unable to provide technical advice due to a potential conflict of interest in relation to their involvement with another site nearby. *Refer to Environmental Health response above.*

81. County Air Quality Consultant

The air quality impacts have been assessed using an appropriate methodology and the effects are not considered significant.

82. County Landscaping Consultant

The visual impact on Thatched House Farm, Park Hatch and users of Dunsfold Road resulting from the clear-felling of nearby woodland should be assessed by the applicant stating any mitigation measures to reduce these visual impacts. The adverse visual impact of the rig and crane are unlikely to be significant. Concur with view of the Surrey Hills AONB Planning Adviser that the visual impact from the north and the AONB would be softened by the line of trees within the applicant's control.

83. County Lighting Consultant

A comprehensive report and lighting scheme have been submitted which demonstrate minimum light spillage from the site with light trespass and perceived glare being within acceptable limits at the nearest sensitive receptor.

84. County Geotechnical Consultant

Considers it appropriate for a Stability Assessment Report (SAR) to be submitted prior to determination and recommends the imposition of conditions in respect of restrictions on the use of the unlined area of the drilling compound, the submission of reports covering pre- and post-development geochemical soil testing and platform and foundation stability, and the submission of a Soil Conservation and Management Plan (SCMP) and a Construction Quality Assurance (CQA) Plan.

85. County Ecologist

No objection having also considered the responses submitted by both the Surrey Wildlife Trust and the Woodland Trust. Recommends a condition requiring a final restoration scheme to be submitted taking into account prevailing ecological conditions at that time.

86. **Countryside Access Team (Rights of Way)**
No objection having reviewed the application including information regarding the activity and noise levels.
87. **Surrey Hills AONB Planning Adviser**
The proposal would be a seriously incongruous feature in the AGLV and compensation should be provided if mitigation is insufficient. Not sure that remaining trees along field boundaries to the north-west, north-east and east would provide sufficient screening following clear felling. Proposed new planting would be unlikely to be sufficiently large to provide an effective screen. Considers that it would be difficult to justify refusal of the application because of a significant visual impact of the well site when viewed from the AONB to the north.
88. **County Arboricultural Officer**
Agrees with the initial advice provided by the County Ecologist in relation to T37 ('Veteran' lapsed coppice) that the Root Protection Area should be extended by adjusting the access route.

County Historic Buildings Officer
89. Notes that vibration will be limited to the drill floor. Advises that there is no guidance to support the argument that vibration can cause damage to historic buildings in terms of their foundations although masonry arches could be affected. Considers that the potential for damage to listed buildings from the airborne sound (and ground vibration) can be discounted. Points out that the setting of listed buildings in Surrey tend to be relatively tight given the heavily wooded nature of the County. To prevent roads getting incrementally wider, would supports the inclusion of an informative advising the developer that any highway works should use flush set concrete retainers with a ribbed surface, as upstanding kerbs would be very damaging to the wider character of the area.
90. **County Archaeological Officer**
Recommends a planning condition to secure a programme of test pitting along the access road and trial trench evaluation within the area of the proposed well site compound to enable suitable mitigation measures to be developed.
91. **Environmental Assessment Team**
The proposal is not Environmental Impact Assessment (EIA) development and the proposal would not give rise to likely significant effects alone or in-combination with other development.
92. **County Restoration and Enhancement Team**
Content that the protection of the soil resource and identification of the soils available for restoration can be covered by a SCMP as recommended by the County Geotechnical Consultant and concur with their advice on the issue of geochemical testing. An aftercare scheme should be submitted up front or required by condition.
93. **Surrey Wildlife Trust**
Object due to the impact on climate change and the ecological impact on the natural environment. Consider that proposed biodiversity enhancements do not go far enough.
94. **Public Health England**
Advises that the drilling and operation of hydrocarbon wells is subject to regulation under the Environmental Permit regime, which will further assess potential emissions to air, water and the management of waste as well as consideration of accident management plans. The EA where necessary will consult Public Health England (PHE) as part of the environmental permitting process.
95. **Surrey Gypsy and Travellers Community Forum**

Advises of the presence of Gypsy, Roma and Traveller (GRT) population living nearby at New Acres, Lydia Park and Hilltops. Does not anticipate any heavy traffic passing GRT site entrances on Stovolds Hill, notes proposed limitations on hours of operation and proposed security measures and would not expect noise to be a major issue.

96. **Gatwick Airport**

Has no issues having assessed the proposed drilling rigs and estimated crane heights against their Instrument Flight Procedures and taken the shrouded flares into account.

97. **Health and Safety Executive (HSE)**

Advises that the proposed development site does not currently lie within the consultation distance of a major hazard site or major accident hazard pipeline. Also advises on the role of the HSE in respect of the regulation of onshore oil and gas wells.

98. **Thames Water**

No views received.

99. **SGN**

Infrastructure plans provided indicate that there are no constraints on the development posed by the presence of any gas infrastructure. Leaflets and guidance containing gas safety information and advice have been provided and forwarded to the applicant.

100. **UK Power Networks**

Infrastructure plans indicate the presence of an 11 KV underground cable, an abandoned underground cable and a sub-station within the vicinity of the application site. Fact sheet and leaflet containing electricity safety information and advice have been provided and forwarded to the applicant.

101. **National Grid**

Have checked our records and cannot find any trace of owning any land in this area.

102. **Dunsfold Aerodrome Ltd**

It is not apparent that the application has properly considered the sensitivity of existing and proposed uses at Dunsfold Park including the use of the existing operational airfield. Requests that the proposed structures and gas flaring activities are brought to the attention of the Civil Aviation Authority (CAA).

103. **Civil Aviation Authority**

Refers the County Planning Authority (CPA) to their standing advice on the need to consult the CAA which requires the CAA to be notified of details of proposed flaring activity within the vicinity of an aerodrome. Advise that the condition suggested by the CPA requiring obstacle lights to be placed as close as possible to the top of the rig / crane would be a good mitigation to avoid danger to flying aircraft. Provide link to their publication "Guidance to Crane Operators on Aviation Lighting and Notification". Request that the operator contacts both the CAA's Operations Team and the Military Low Flying Cell once operational dates for the site are established and before site activity takes place. Request that their enclosed "Crane Notification Form" is completed by the operator and submitted to the CAA's Operations Team.

104. **Hascombe Estate**

Object due to: the felling of The Burchetts woodland will fully expose the proposed oil well within the AGLV and from the AONB; environmental assessments should have been undertaken when there were no leaves on the trees; the design for safe surface water drainage is inadequate; the threat to ancient woodland, replanted areas, wildlife and ecology; the impact on local businesses; climate change; noise; the generation of HGV movements; the risks of pollution; the escape of gas; and, earth tremors. If permitted, recommend conditions to provide for adequate waste, chemical and water protocols, a 30

metre buffer between the well site and the woodland boundary and for a restoration bond to be lodged with the Council.

105. The Woodland Trust

Concerned over potential impact on T37 (a veteran ash tree in proximity to the proposed access track) due to encroachment on the Root Protection Area (RPA). A RPA in line with Natural England's Standing Advice should be provided.

106. Forestry Commission

Advised that the clear felling of all three woodland compartments within one felling operation is prohibited, as the restocking at neighbouring compartments needs to have a height of 2 metres before any adjacent areas can be felled. Confirmed that the ancient woodland forms part of the clear fell licence granted to the Hascombe Estate because it is the seeds that are protected as opposed to the actual woodland itself.

Standing advice on ancient woodland and veteran trees has been consulted and a self-assessment carried out in relation to: the dependency of the development's location; the area of ancient woodland affected; the loss of any ancient woodland; the connectivity of the ancient woodland to other vegetation and enhancement opportunities; the impact on ecological diversity of the woodland; impact on the root protection areas; changes to air quality and ground water from risks of pollution; the current and planned function of the woodland; whether there would be any increase in access to the ancient woodland; and the use of native species in landscaping. This assessment concludes that any adverse impact is unlikely.

107. Local County Councillor

Finds it totally unacceptable that the details of the traffic management system are just worked out as a condition post approval of this application given that these details are fundamental to this project and will go a long way towards dealing with the concerns of residents in the area. Questions the safety aspects of the proposal given concerns that details in relation to the proposed 30 mph temporary speed limit and the traffic lights have not been finalised and remain under review. Also queries the legal basis of the temporary speed limit reduction and raises serious questions over procedural matters including the lack of a Members site visit and the adequacy of the drone footage.

108. Waverley Borough Council Conservative Group

Strongly urge that permission should be refused because: the likely presence of an open and continuous network of hydrocarbons capable of flowing without stimulation is not supported by the geology and reports from local wells drilled previously; any gas volumes will not be significant; it is highly likely further stimulation will be needed to produce oil; the risk of encountering hydrogen sulphide has not been addressed by the applicant; energy security benefits seem less than significant compared to the harm; screening of views from Hascombe Hill and well used footpaths in the AONB will be reduced under an approved forestry plan; the location within the AGLV; severe impact on landscape and countryside enjoyment; impact on local residents, gypsy and travellers sites, a farm, brewery, events venue, and listed buildings; High Loxley Road is single carriageway, of limited width and provides access to a solar farm; two bridleways border the site enjoyed by local residents and visitors; the detrimental impact on residents, local businesses and those moving into Dunsfold Park; the traffic impact on Pratts Corner which has been the site of a number of accidents; proposed traffic signals will disrupt traffic; Dunsfold Road is narrow, and traffic will have to cross the centre line to navigate a number of blind bends; the need to remove the centre island at the Elmbridge junction to allow exceptional long vehicles to turn; the unsuitable nature of roads leading to the site; and the applicant's lack of finance to restore the site if the company fails leaving SCC exposed to the costs of remedial work.

109. Waverley Borough Council Liberal Democrat Group

Object and fully endorse the objections put forward by the Borough Council Planning and Economic Development Department and highlight that: a sound, officer-led, technical

planning objection has been put forward by Waverley Borough Council; a listening panel comprised of Waverley residents highlighted almost universal objection to the proposals by residents; the proposal is contrary to the Borough Council's declaration of a Climate Emergency; and it would be hypocritical of Surrey County Council, and the Surrey County Council Conservatives to approve the proposal in view of their own Climate Emergency and other environmental declarations. Also state that Government energy and industrial policy on this matter is deeply hypocritical and we should, as a nation not be encouraging anything other than sustainable energy generation from renewable resources.

Parish/Town Council and Amenity Groups

110. Dunsfold Parish Council

Object because: a significant restoration bond should be secured; a full Environmental Assessment provided; the drilling methodology disclosed; and, request conditions on air quality and noise monitoring if Surrey County Council (SCC) is minded to grant planning permission. Concerned about the impact on the AONB, seismicity, traffic management, the use of Pratts Corner which is a dangerous junction and noise and light pollution. Support both Alfold and Cranleigh parish councils' responses. Consider that implications of a future application for production should be taken into account. Acknowledge that UK energy policies support this application. Also raise procedural issues over the lack of a Members site visit due to COVID 19.

111. Bramley Parish Council

Object as applicant has not acknowledged the presence of hydrogen sulphide (H₂S) which is corrosive and toxic and makes no provision to manage it despite relative proximity of several properties.

112. Alfold Parish Council

Strongly object due to: concerns over the quashing of paragraph 209a of the National Planning Policy Framework (NPPF); seismicity; aviation safety; traffic safety, the high level of recorded traffic collisions, and late revisions to the applicant's traffic report; the impact on the countryside and landscape; SCC's declaration of a climate emergency; and, failure to reflect concerns expressed by the local community. Urge SCC to take into account the impact from protesters. Also raise procedural issues over the lack of a Members site visit due to COVID 19.

113. Hascombe Parish Council

Object due to: the impact on the AGLV and views from Hascombe Hill and a public right of way within the AONB; the industrialisation of a rural landscape; plant, machinery, equipment, the access track and vehicles will cause significant harm; contrary to national and local landscape policies; the proximity of nearby residences; the impact on ground water pollution; the need for hydraulic acidisation; the use of hazardous substances; potential for hydrogen sulphide to exist; the significant environmental effect of drilling; the Environmental Impact Regulations 2011 should ensure there is a remedy to resolve problems; proposal is insufficient to address the impact on archaeology; the impact from crime and disorder; storage of explosives and radioactive substances; light pollution and the impact on dark night skies; the impact of a 37 metre high flashing light on the nearby airfield and the impact on low flying helicopters approaching the airfield from the north; lack of traffic safety analysis; impact of traffic going through Hascombe; damage to the road surface from HGVs and freeze thaw action in winter; sharp bends on Dunsfold Road; impact of minor earthquakes; concern over the operator having the finance to restore the site; and, the need to support the Government's Clean Growth Strategy.

114. Witley Parish Council

Object due to: errors and incomplete information in the application; proposal being contrary to Government policy to be carbon neutral; questions over the viability of the travel plan and subsequent enforcement; and the effect on local water courses. Request a restoration bond if planning permission is granted.

115. Cranleigh Parish Council

Strongly object due to: a lack of consultation on the application; Government commitment to move away from fossil fuels; an Environmental Impact Assessment has not been provided; impact on the countryside and AGLV; visual impact of the drilling rig from the AONB; and concerns over the Travel Plan. Express support for both Alfold and Dunsfold parish councils' responses.

116. Campaign to Protect Rural England (Surrey Branch)

Encourage SCC to refuse the application due to: sprawling industrialisation of the countryside; Green Belt land being able to be redefined as brownfield once blighted; the need for acid fracking, matrix acidisation or nitrogen uplift; the Government's climate change commitments; SCC's declaration of a climate emergency; the potential need for a restoration bond to be secured; and, the need to minimise adverse environmental impacts.

117. Protect Dunsfold Ltd

Strongly object with concerns raised in relation to: the accuracy of the submitted photo montages forming part of the Landscape and Visual Impact Assessment; the visual impact from the felling of the conifers; the deciduous trees in front of the site not fully obscuring the drill site, the rig used may be higher than the 37 metre high rig depicted; the beacon on top of the rig being visible at night; the negative impact on views from Hascombe Hill in the AONB; and the visual impact of high security fencing bordering the access track.

Also object due to concerns over traffic management set out in a technical note prepared by traffic consultants, Paul Mew Associates. This raises concerns regarding: the delays to traffic from the installation and location of the proposed traffic signals; the practicality of removing traffic cones and signage on a daily basis and the resulting delays causing many motorists to use alternative side roads; the inability of some vehicles to access and egress High Loxley Road without straying beyond the highway limit and relying on third party land; the safety implications and potential significant delays to traffic resulting from abnormal load vehicles accessing the site; the temporary speed reduction to 30 mph on a rural road being contrary to best practice and policy; and question whether the County Council has the authority to impose a temporary speed limit for 3 years under the Road Traffic Regulation Act 1984 (RTRA) as the traffic management scheme does not relate to works to the highway itself, does not propose a permanent speed limit reduction and does not propose a speed limit reduction of 18 months or less.

118. Waverley Friends of the Earth

Object on grounds of: traffic safety; the impact on the AONB and local businesses; the level of noise; the insufficient buffer between the well site compound and the ancient woodland having a detrimental impact on biodiversity; the risk of restoration requirements not being met given the precarious financial position of the applicant; and, climate change including SCC's declaration of a climate emergency.

119. Protect Dunsfold Ltd and Waverley Friends of the Earth Combined Response

Strongly object because it appears that matters relating to highway safety and the operation of traffic management have not been fully addressed. Question whether the temporary traffic signals will be removed overnight, request to see the Stage 1 and 2 Road Safety Audit, and query whether the Road Safety Engineering Team have approved the proposed change in the temporary speed limit from 30 to 40 mph. Also raise procedural issues strongly objecting to the lack of a Members site visit as the drone footage does not capture the concerns that have been raised in relation to highway safety.

Summary of publicity undertaken and key issues raised by public

120. The application was publicised by the posting of 4 site notices and an advert was placed in the local newspaper. A total of 14 owner/occupiers of neighbouring properties were directly notified by letter. In November 2019, a further round of publicity was carried out by

the County Planning Authority (CPA). This was undertaken in combination with now withdrawn planning application ref: WA/2019/1089 (for an alternative access to the application site from Dunsfold Road to the north). All those who had previously responded to either application were notified as part of this further round of publicity. This followed the submission of amending and amplifying information by the applicant on 1 November 2019.

121. A total of **623** written representations and 4 petitions have been received to date. In terms of the written representations received, **102** (16%) of these have been in support of the development and **521** (84%) against. The main reasons given in support of this proposal are as follows:

- Economic: development of the vast Weald oil deposit is of national importance and must be expedited in the national interest; onshore hydrocarbon extraction is required in view of diminishing North Sea reserves; benefits not just Surrey but the whole country at a very critical time as minerals have to be shared; supports the wellbeing and economy of the nation through securing energy through its natural resources; creates jobs and increases self-sufficiency post Brexit; supports the balance of payments; provides a buffer against the unreliability of imported fuel; provides additional tax revenue for the local community; and, will contribute to Surrey's local economy.
- Environment: reduces carbon footprint of transportation from importation; clean production of oil on-shore in the UK is better than importation; UKOG has demonstrated at Horse Hill, Horley how to build a hydrocarbon well site with a low visual presence on the landscape; the Dunsfold test track neighbours the site and also contributes to existing noise pollution; roads have been assessed by the planning inspector and the secretary of state; HGV and site traffic on High Loxley Road will barely be visible from Thatched House Farm; UKOG has produced excellent plans in a professional manner and taken all necessary steps to protect the environment; and, surrounding woodland is not in pristine condition with abandoned cars and bikes.
- Need: complies with our need for energy under the NPPF.
- Extraction Process: the application does not involve fracking and must be approved; and, it is for the natural progression of oil extraction.
- Applicant Credentials: UKOG have proceeded responsibly in the development of exploration wells at all times and have an excellent reputation of sensitively operating within the Weald Basin; and, UKOG are an ethical company that will support locals and provide good revenues for councils.

122. The following contains a summary of the main reasons given by those objecting to the application:

- General: the borough council have requested that the application is refused; the borough council's Environmental Health Officer (EHO) has raised serious concerns; refusal could avoid a lot of disruption as there are no large oil reserves in the area; object to oil production; reference to 'Waverley Against Drilling' website set up against the proposal; proposal will lead to a negative impact on house prices; there will be no benefits to the local economy as existing employees will be used; it would harm local businesses contrary to NPPF paragraph 182; query how UKOG's cash contribution pledge to the local community would work in practice; hours of operation should be reduced to 0800 to 1800 Monday to Friday and 0900 to 1200 on Saturdays to take account of outdoor activities at nearby properties; concern over ability of mains water supply to cope; request conditions requiring the applicant to liaise with nearby residents and businesses to ensure impacts are minimised and requiring the availability of a point of contact at all times; the HSE are not sufficiently resourced to monitor the site in the future; the impact of health and safety on the site and environs; permission would

effectively pre-determine in favour of any future application for production; completely agree with response of Hascombe Parish Council; viability is doubtful given the oil price has plummeted; and, an increase in oil supply is inappropriate as supply is likely to exceed demand in future years.

- Planning Application Information: Assessment includes a long list of modelling uncertainties which can't be relied on; Environmental Report summary does not use reassuring definite language; there is a lack of information on extraction processes and how impacts will be mitigated; buffer between the site and local dwellings / businesses is less than those stated; the Landscape and Visual Impact Assessment is based on a 37 metre rig although a 38 metre rig could be used; more information is needed on the volume of water required, how it will be sourced and where contaminated water will be managed; the proposed design would not cater for this being a zero-discharge site as outflow is too low; and, disagree with the assertions made in the Groundwater Risk Assessment for Thatched House Farm.
- Policy: Strong support for onshore hydrocarbon exploration is no longer part of the legal framework following removal of NPPF paragraph 209(a); and, temporary 3 year proposal does not meet Government energy policy because commercial success and long term production would be required.
- Climate Change: fossil fuels are major contributors to greenhouse gas emissions; contradict SCC's climate emergency declaration, climate statement / target and NPPF paragraph 148 which support the transition to a low carbon future, and paragraph 149 in relation to mitigating and adapting to climate change; Intergovernmental Panel on Climate Change reported we have 12 years to avert a complete climate catastrophe; drilling for hydrocarbons is contrary to objectives to reduce the use of fossil fuels (net zero carbon targets and 2008 Climate Change Act); need for new hydrocarbon sources extracted using acidisation is not justified; oil production produces methane, an important contributor to climate change; should look towards green energy; oil exploration is a backwards step; its unnecessary to be dependent on onshore exploration; concern over impact on future generations; the full lifecycle of development and the impact on need for further sites (industrialising rural areas) is unknown; plans for a Heathrow third runway have been ruled illegal by the Court of Appeal; the applicant should withdraw the application and pay for the damage it has caused ('polluter pays' principle).
- Extraction Method: stimulation is required to obtain reserves at commercial rates; concern that proposal involves fracking; concern that experimental techniques will be used with no information on what these are or what the likely impacts will be; the use of acids to erode the rock to free gas and oil is unproven and has a high risk of contamination; and, if permission is granted, conditions should require an outright ban on the use of any acids other than acetic acid.
- Seismicity: acidisation is just as likely to cause earthquakes as fracking; impact of earth tremors has not been assessed despite the site being located on a fault line; there have been a swarm of earth tremors occurring around Horse Hill; the onus of proof to prove that any seismicity is unrelated to the proposal should lie with the operator; extraction would extend beneath the proposed new settlement at the airfield; and request for independent monitoring to take place.
- Amenity: not apparent that the impact on existing and future committed sensitive uses at Dunsfold Aerodrome has been considered; proposal will conflict with objectives of new settlement at Dunsfold; an 850 metre buffer to the nearest dwellings should be provided; a 500 metre buffer is required in Northern Ireland and the United States; proposal will affect the three nearest dwellings; concern over proximity to local GRT sites; taller structures such as portacabins should be placed along the northern

perimeter to reduce noise and lighting impacts on Thatched House Farm following the felling of the woodland; and, peoples' peace and standard of living will be disrupted.

- Noise and Vibration: cannot rely on woodland to provide acoustic attenuation because it will be clear-felled exacerbating noise intrusion; assessment should address BS: 4142 (Environmental Noise); impact of vibration, including on heritage properties with weaker structural foundations, has not been assessed; NPPF paragraph 180 requires: noise to be mitigated / minimised, significant noise impacts to be avoided and tranquil areas to be protected; 24 hour working will cause significant disturbance at night affecting the GRT community the most given the temporary nature of their accommodation; contrary to Surrey Noise Guidelines which recommends working hours of 07:00-19:00 and a noise level of 10dB at night rather than 43dB as proposed; night time noise at High Billingham Farm will be 20dB above background noise level with impacts causing a health risk; noisy activity should not take place when outdoor events are taking place at High Billingham Farm; Waverley's EHO has raised concerns; a resident near Horse Hill, Horley has stated that noise is significant; 3 years of excessive noise is not temporary or acceptable; application could be a precursor to lengthier drilling in the future; noise could have significant health and commercial implications for local communities; the silencing of generators should be mandatory; disagree that the noise baseline should include Gatwick and race cars at Dunsfold Park as former is not noticeable and the latter is infrequent; noise will exceed policy recommendations; noise will seriously impact the annual Trew Fields Cancer Awareness Festival at Thatched House Farm; request for independent monitoring to take place; a noise limit of 48 dB for operations other than temporary should only apply between 0700 and 1800 hours Monday to Friday and 0900 and 1200 on Saturdays and should not exceed 42 dB at all other times; and, no tripping should take place between 1800 and 0800 hours.
- Air Quality: will be worsened by HGV movements (HGVs) and other traffic with negative health impacts for recreational users of roads and footpaths; Waverly's EHO has expressed concerns about emissions and odour; deployment of air quality assessment diffusion tubes on site should be considered, an evacuation protocol established and procedures to protect local residents; concern over presence of highly toxic Hydrogen Sulphide, Nitrogen Dioxide, and/or other gases and potential accelerated corrosion of pipework and plant; will cause an unpleasant odour; concern that adverse impacts of odour could last for 3 years; people and horses have had nose bleeds at Horse Hill; and, request for independent monitoring to take place.
- Landscape and Visual: The Burchetts and other woodland will be harvested and cannot be relied upon to provide visual screening increasing the impacts; reference to a retained mature tree line to provide screening is nonsensical because all Burchett's trees will be felled; concern over proximity of AONB with proposed access road touching the AONB boundary; contrary to NPPF policy; concern over visual impact of the rig from the AONB and Hascombe Hill; rig floor heights of 4 to 7 metres could have further impacts; question ability of 4 metre fence to screen views of tall structures from the public bridleway and High Billingham Farm and it's wedding business; a 4.75 metre security fence along the access track is inappropriate in the AGLV and post and wire fencing with fast growing native hedgerows would be preferable; replacement of the ash tree component along the northern boundary will not have any material benefit on views from Thatched House Farm; ruined landscape will adversely impact on local businesses (wedding venue, craft brewery, Trew Field Cancer Festival, and Horse Riding Surrey at Painshill Farm); the proposal will destroy the approach to the wedding venue along High Loxley Road and views from the venue which is fully booked for 2020; contrary to Local Plan Policy RE3 and paragraph 13.35 given location within the AGLV; images of trees in full leaf does not represent the seasonable impact on views and site exposure; a 38 metre rig rather than a 37 metre rig should have been assessed; security arrangements at the access and lighting and will have an adverse impact on views from Hascombe Hill; and request for temporary planting of mature

coniferous hedging around the site entrance on High Loxley Road and on the southern border of the site to soften the impact of the proposed fencing.

- Highways: will create more heavy traffic on unsuitable roads; network is already at capacity and in a dreadful state and suffers from potholes; HGVs will cause the road to break up; operator has underestimated traffic movements; impacts are unclear as not known where hydrocarbons will be transported to; safety concerns from slow HGVs moving in and out of High Loxley Road and HGVs having to cross the carriageway centre line on Dunsfold Road causing oncoming vehicles to brake; potential for fatal accidents on Dunsfold Road; concerned site traffic will not comply with safety requirements; proposed 30 mph speed limit is unsuitable; lanes are too narrow and bends too sharp for HGVs and abnormal loads; roads are 'hammered' by Dunsfold Park traffic; increased risk of severe accidents involving cyclists, pedestrians and horse riders; Pratts Corner is a dangerous junction on a blind corner with high traffic speeds and 2 to 3 accidents per month resulting in the garden wall at Gate House Cottage being destroyed 6 times; difficulty negotiating junction with the A281; are narrow pinch points on the A281 at Alfold; the additional strain placed on the already overcrowded, inadequate and busy A281; impact of HGVs travelling along A272 has not been assessed; permission for the Craft Brewery restricts employee numbers, working hours and traffic movements to take account of the rural setting; is contrary to NPPF policy on highway safety; is a need to cut into several metres of Common Land; new traffic signals near the site access on High Loxley Road will cause unacceptable delays to traffic associated with the events venue at High Billingham Farm; installation of traffic signals will encourage traffic to find alternative routes; the vertical profile of High Loxley Road, particularly at its junction with Dunsfold Road, creates a risk that vehicles may become grounded; HGV movements should be limited to between 0800 to 1800 Mondays to Fridays and 0900 to 1200 on Saturdays; traffic management measures should be submitted following consultation and agreement with the owners of High Billingham Farm; query whether the temporary traffic lights will be required for 84 weeks; request that the road safety audit and automatic traffic counts are made available; ridiculous SCC Highways has not applied same criteria as Hampshire's Highways officials to UKOG's drilling plans on the Isle of Wight; and, oil should be transported by pipeline.
- Pollution / Contamination: the Hydrogeological and Flood Risk Assessment and the Waste Management Assessment contain deficiencies; proposal is inadequate to contain run-off during extreme weather; risk to surrounding aquifers and private water supplies at Thatched House Farm should be assessed including impact on water well at Thatched House Farm used for animal drinking water, irrigation of vegetables and suitable for human consumption if filtered; pollution will adversely impact on local businesses including the Craft Brewery where a borehole is being sunk to provide water for the brewery; request for independent monitoring of water contamination to take place; the water table and aquifers will be polluted, potentially by toxic run-off; source protection zone is vulnerable to contamination; boreholes will impact on the local environment; increased risk caused by fault lines; contrary to EA guidance (Nov 2012) on protection of groundwater quality; risk of contamination from rupturing of borehole casing and grout seals; impacts of strong chemical 'acid fracturing' are unknown; request a condition for adequate waste, chemical and water management; concern over disposal of contaminated water; use of new completion fluids suggests a substance stronger than vinegar; and, the proposal will poison the area.
- Ecology: proposed buffer between the site and woodland is insufficient to protect woodland and habitat and should be extended to 30 metres; NPPF paragraph 175 gives ancient woodland the highest protection; applicant has not undertaken an environmental survey of The Burchetts; landowner has fenced and trenched the well site host field which could damage several Burchetts trees; clear-felling will be subject to a long-term management plan to provide suitable mitigation; 3 years is not temporary as wildlife migration and habitats are likely to permanently change; Phase 1 habitat

survey was undertaken at a sub-optimal time and may not be entirely accurate or robust; Ecological Impact Assessment excluded farmland and breeding bird surveys; noise and light pollution will have a significant impact on wildlife such as bats which are protected and may not return to roost; query over format for detecting bats; no bat detector maintenance regime information has been provided; adverse impact on sheep rearing and organic pig farming at Thatched House Farm and a number of bee hives in the vicinity; lack of provision for wildlife to access environment around the proposed stock fencing; impact from the introduction of heavy machinery; loss of precious habitat from the removal of trees and hedgerows; and, proximity to Chiddingfold Forest SSSI.

- Lighting: 24 hour working with artificial lighting and flaring of gas is contrary to the Institute of Lighting Professionals sky-guide criteria for the AONB; NPPF paragraph 180 requires the impact of light pollution from artificial light to be limited; application refers to a 2018 ILP publication on obtrusive lighting in residential area, but has not used the methodology recommended therein; no detailed lighting plots in the horizontal and vertical plans have been provided showing contours at 0.2, 0.5, 1, 5, 10 and above lux as required in the latest guidance; is no mention of wider perimeter lighting; the area benefits from dark skies at night; lighting will be visible from Hascombe Hill; and, lighting will cause disturbance to wildlife.
- Archaeology and Heritage: concern raised that the development including the proposed access would take place on an archaeological site; the need for further information to address the poor quality of the submitted assessment has not been provided; and, concern regarding protection of heritage assets with 7 grade II listed buildings nearby.
- Rights of Way: there would be a restriction on the width and partial blocking of an existing public bridleway; public bridleway would be obstructed with barbed wire fencing and wooden bollards; loss of The Burchetts wood will increase the impacts; and, the adverse impact on users of footpaths and the adjacent bridleway are contrary to Minerals Local Plan Policy MC14 and Waverley Local Plan Policy LT11.
- Environmental Assessment: concern raised about: the EIA screening process; and, that an EIA should have been completed in the same way that it would have been if located in an AONB.
- Restoration: No plan has been provided for a replanting scheme for tree removal; UKOG track record is not good for managing the impact on the site and its surroundings; a condition should be imposed requiring a detailed scheme of restoration and aftercare to be submitted to and approved by the Mineral Planning Authority (MPA) prior to any development taking place; the NPPF justifies a requirement to obtain a financial guarantee to cover restoration where a novel approach or technique is to be used or where there is reliable evidence of the likelihood of financial or technical failure, all of which are considered applicable in this case; reliable evidence of the likelihood of financial or technical failure is supported by incontrovertible evidence; the results of previous drilling significantly downgrades the economic potential of this reservoir; the known presence of hydrogen sulphide will add materially to production costs; the applicant had negative shareholder funds of £6m in December 2018; there is no certainty that UKOG 234 will remain a going concern as it is dependent on the support of its parent company; it is difficult to see where the funding will come from; the drilling strategy is based on an unproven hypothesis increasing the likelihood of technical failure; as the Oil and Gas Authority last reviewed the financial resilience of UKOG (234) Ltd in 2017, any reliance by officers on their financial standing is currently out of date; publicly available information makes it clear that the applicant is a loss making, seriously under-capitalised company in an extremely uncertain financial state; request a condition requiring a restoration bond and/or cash deposit to be lodged prior to commencement as UKOG has a record of consecutive annual losses and insufficient finances to restore the site; restoration costs should not fall on the public purse; officers

have misunderstood the law and policy relating to financial security; and, query who is responsible for taking out environmental liability insurance as the applicant states it will not be the oil company.

- Airport Safeguarding: input should be provided from the Civil Aviation Authority (CAA) to ensure the safety of the operational airfield is maintained.
- Human Rights: Article 8 and Protocol 1 of the European Convention of Human rights provide a duty to protect human rights including the peaceful enjoyment of home life and farm diversification businesses.
- Cumulative Impacts: concern over numerous wells being drilled in the countryside and potential further proposal to drill for hydrocarbons near Loxhill; concern that there are already existing permissions for an anaerobic digestion facility and large energy centre at Dunsfold Park; proposal would have an adverse cumulative impact on the road network; and, the impact of development at Dunsfold Park has not been considered.

123. In response to the consultation and publicity undertaken on the application, a number of responses have been received in relation to procedural matters which primarily concern the lack of a Members site visit, the need for Members to be given the opportunity to visit the site individually, the adequacy of the drone footage provided by the applicant, requests to defer determination of the application until concerns about the traffic management scheme have been addressed, the availability of background papers and the necessary processes and procedures not being in place to enable the County Council to hold virtual committee meetings.

PLANNING CONSIDERATIONS

Introduction

124. The guidance on the determination of planning applications contained in the Preamble/Agenda front sheet is expressly incorporated into this report and must be read in conjunction with the following paragraphs.
125. In this case the statutory development plan for consideration of the application consists of the Surrey Minerals Plan Core Strategy Development Plan Document 2011 (SMP CS DPD 2011), the Waverley Borough Local Plan Part 1: Strategic Policies and Sites 2018 (LPP1) and the 'saved' policies contained within the Waverley Borough Local Plan 2002 (WBLP).
126. The Borough Council have started work on the preparation of the Waverley Borough Local Plan Part 2: Site Allocations and Development Management Policies (LPP2) and published its LPP2 Preferred Options for consultation in 2018. However, the LPP2 remains at an early stage of preparation and is not expected to be adopted until May/June 2021 according to the Borough Council's latest Local Development Scheme (LSS) published in January 2020. It is therefore considered that 'little weight' can be attributed to the draft policies contained within the emerging plan. Dunsfold Parish Council have commenced work on the preparation of a Neighbourhood Plan after their application to designate the parish of Dunsfold as a Neighbourhood Area was approved by the Borough Council on 2 August 2017. The parish council have yet to produce a draft Plan for consultation. The application site is located within this Neighbourhood Area in its entirety.
127. In considering this application the acceptability of the proposed development will be assessed against relevant development plan policies and material considerations, this includes the National Planning Policy Framework (NPPF) and National Planning Policy Guidance (NPPG). In assessing the application against development plan policy it will be necessary to determine whether the proposed measures for mitigating any environmental impact of the development are satisfactory. In this case the main planning considerations are: need; climate change; highways, traffic and access; landscape and visual impact; air

quality; noise and vibration; lighting; water environment; geotechnical issues; ecology and biodiversity; archaeology and heritage; rights of way; cumulative impacts; restoration; and aerodrome safeguarding.

Oil and Gas Regulation

128. The oil and gas industry is heavily regulated and requires a range of licences, permits and consents from the Oil and Gas Authority (OGA), the Health and Safety Executive (HSE), the Environment Agency (EA), and the Mineral Planning Authority (MPA). In relation to the role of the MPA in devising planning policies and making decisions, the NPPF says that the focus should be on whether the proposed development is an acceptable use of the land, rather than the control of processes or emissions where these are subject to separate pollution control regimes. Planning decisions should assume that these regimes will operate effectively.

Oil and Gas Authority (OGA)

129. Oil and gas exploration and appraisal requires planning permission but also requires licensing. The Oil and Gas Authority (OGA), which comprises a Government company with the Secretary of State for Business, Energy and Industrial Strategy (BEIS) the sole shareholder, regulates the licensing of the exploration and development of the UK's oil and gas resources. The objective of the licensing regime is to secure the exploration and appraisal of the United Kingdom's (UK's) oil and gas resources and maximise their economic recovery, while aiming to maintain high standards of safety and environmental management through effective asset stewardship.
130. Petroleum Exploration and Development Licenses (PEDLs) are issued by the Oil and Gas Authority (OGA) under powers granted by the Petroleum Act 1998. They are issued after a competitive process following an assessment of applications for operator competency, financial capability, geotechnical analysis and the proposed work programme. A PEDL comprises a production license which covers all three stages of oil and gas development - exploration, appraisal and production within a defined area or block. They give the licence holder(s) exclusive rights to search, bore for and produce hydrocarbons (oil and gas) subject to necessary drilling / development consents and planning permission.
131. The OGA has strict controls in place to ensure that operators manage the risk of induced seismicity from such operations and has a critical role in supporting and influencing the UK's transition to a low carbon economy. The OGA has discretion in the granting of licences. One of the objectives of the regulatory regime for oil and gas exploration and production established under The Petroleum Act 1998 is to protect the taxpayer from any residual liability. All companies on a licence share joint and several liability for obligations and liabilities that arise under it, with each licence taking the form of a deed, which binds the licensee to obey the licence conditions. As an example, these will typically require the avoidance of harmful methods of working through maintaining all apparatus and appliances in good repair and condition and the execution of all operations in a proper and workmanlike manner in accordance with good industry practise.
132. A license does not confer any exemption from other legal/regulatory requirements, such as the need to gain access rights from landowners, health and safety regulations, or planning permission. Once a PEDL has been granted, planning permission must be obtained before the OGA will authorise consent to drill and extended well testing (EWT). The consent to drill and for EWT is obtained from the OGA via the Petroleum Operations Notice (PONS) approval process.

Health and Safety Executive (HSE)

133. All oil and gas wells drilled in the UK 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 from the well. There have been over 350 onshore oil and gas wells drilled in the UK since 2000.

134. The HSE has a regulatory role to play in relation to the proposed development under the Borehole Sites and Operations Regulations 1995 (BSOR). These regulations apply to all onshore oil and gas wells. They 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.
135. The HSE's regulatory regime is long-established and goal-setting. There are general duties under the Health and Safety at Work etc Act 1974 (HSWA). Those who create health and safety risks to workers or the public as part of their undertaking have a duty to manage and control the risks so far as is reasonably practicable. This is supplemented with more specific regulations particular to the extraction of gas and oil through wells.
136. The Offshore Installations and Wells (Design and Construction etc) Regulations 1996 (DCR) include specific requirements for all wells and include well integrity provisions which apply throughout the life of gas or oil wells. They 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.
137. 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.
138. HSE's intervention approach has two main elements: Firstly, specialist well engineers help develop best practice standards for the industry as a whole with Oil and Gas UK and the United Kingdom Onshore Oil and Gas (UKOOG). All members of UKOOG have agreed to comply with the latest standards published in February 2013.
139. Secondly, risk-based interventions are used on particular sites and operators and to ensure they are managing well integrity. HSE uses its team of expert wells engineers who cover all types of hydrocarbon wells. An oil or gas well is a complex engineered construction, most of which is below ground and so not accessible to visual inspection. HSE therefore takes a lifecycle approach to well integrity, using the notifications and weekly well reports as well as meetings with the operator and on-site inspection to ensure the operator is managing the risks appropriately.
140. To comply with the BSOR, the well operator must submit a notification to HSE at least 21 days before work commences. It consists of a broad range of information on the design and construction of the well including the risks identified with the work and how these risks will be managed.
141. A notification is also required for any other activity that could result in an accidental release of fluids from the well. These notifications allow HSE to assess the well design and operations before activity starts. This is a key phase of work where the vast majority of issues likely to have an impact on well integrity will be identified and addressed by the well operator. It includes ensuring that safety features are incorporated into the design. Inspectors will contact the operator if they have any concerns or queries about the information supplied. Further notifications are required if there is a material change to the information previously supplied in a notification and before the well is decommissioned.
142. To comply with DCR, the operator must report to HSE every week during construction of the well and during work to decommission 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 and details of the drill fluid density which allows the inspector to gauge the pressure in the well and identify any stability issues.

143. 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 2013) including a blowout (i.e. an uncontrolled flow of well fluids), 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. Reporting of well incidents enables HSE to investigate those that would have an effect on well integrity and ensures the well operator secures improvements to their operations.

Environment Agency

144. The Environment Agency (EA) is the environmental regulator for onshore oil and gas operations in England. They ensure that oil and gas operations are carried out in a way that protects people and the environment working closely with Public Health England, the HSE, the OGA and MPAs. The EA's role includes assessing any risks to controlled waters including both surface water and groundwater. In order to drill the proposed wells, the applicant will be required to obtain Environmental Permits from the EA where activities include:
- Mining waste activity - this applies in all circumstances;
 - Groundwater activity - this is likely to be required in association with losses / procedures in drilling and well testing;
 - An installation under the Industrial Emissions Directive - this is likely to be dependent on:
 - radioactive substances activity - potentially in association with oil or gas when it is produced due to Naturally Occurring Radioactive Material (NORM) which may be stimulated during operations;
 - water discharge activity - unlikely if no discharge is proposed, but may be if any water is disposed to surface water or groundwater; and
 - Abstraction Licence - in the event that the applicant decides to abstract groundwater from a designated well or borehole on the site and the required volume of water is in excess of 20m³ per day.
145. The applicant is required to notify the EA of their intention to drill a borehole(s) in accordance with section 199 (1) Notice etc. of mining operations which may affect water conservation (Water Resources Act 1991). The applicant is also required to provide additional information on potential risks and safeguards when applying for these permits. The possible presence of hydrogen sulphide is also addressed as part of the determination of the Environmental Permit.
146. Where any impacts to groundwater are noted, appropriate action is required through controls on the Environmental Permit to ensure that any potential receptors are protected. Any additional details of site design, operations, controls and safeguards are also required in association with the Environmental Permit application.
147. The EA take environmental damage extremely seriously. If there is an incident which causes pollution of the environment, environmental damage, or if there is a breach of the environmental permit or non-compliance with environmental legislation, the EA has a range of enforcement powers available to them. Where appropriate, they may also make companies undertake remedial works to rectify environmental damage. Any enforcement action they take will be proportionate to the risks posed to people and the environment and also to the seriousness of the breach of the law.

Environmental Impact Assessment

148. The Town and Country Planning (Environmental Impact Assessment) Regulations 2017 concern the assessment of the effects of certain public and private projects on the environment. Development proposals falling under Schedule 1 of the regulations require an Environmental Impact Assessment (EIA) in every case while those under Schedule 2 only require an EIA where development is likely to have significant environmental effects. Schedule 2 lists mineral extraction amongst the types of development where an EIA may be required. Where any part of the proposal is in a sensitive area, such as an AONB, a SSSI, Special Protection Area (SPA) or Special Area of Conservation (SAC) for example, or exceeds / meets certain thresholds or criteria, then an EIA may be required.
149. Prior to the submission of the current application, a request for an EIA Screening Opinion was made to the CPA on behalf of the applicant. The CPA adopted its formal EIA Screening Opinion on 28 February 2019 and recommended that the proposed development did not constitute 'EIA development' for the following reasons:
- a) The area of land that would be affected by the proposed development is 1.8 hectares, which is below the recommended EIA thresholds of 5 hectares and 10 hectares defined in the national Planning Practice Guidance (nPPG) on EIA for deep drilling operations (Schedule 2, paragraph 2(d)) and surface installations for hydrocarbon extraction (Schedule 2, paragraph 2(e));
 - b) Any volumes of hydrocarbon produced over the course of the exploration and appraisal operations would be small and incidental, and would not exceed the recommended EIA threshold of 100,000 tonnes of petroleum per year defined in the nPPG on EIA for surface installations for hydrocarbon extraction (Schedule 2, paragraph 2(e)); and
 - c) The proposed development site is not situated within any of the categories of sensitive areas listed under Regulation 2 of the EIA Regulations. The proposed development site is located some 0.54 kilometres to the south of the Surrey Hills Area of Outstanding Natural Beauty (AONB), and some 1.85 kilometres to the south of a Scheduled Monument ('Hascombe Camp: a small multivallate hillfort north west of Lodge Farm' (Historic England List ID 1008522)).

It was acknowledged that the presence of the well site on land within the visual envelope of the Surrey Hills AONB and the Scheduled Monument would give rise to short term and temporary impacts that would be adverse in nature, by virtue of the introduction of drilling rigs for short periods of time, and in the case of the Surrey Hills AONB of the small increase in the daily volume of HGV traffic (including occasional abnormal loads) making use of roads adjoining the Surrey Hills AONB.

However given that the operations would be short term, and that temporary permission would be sought for a period of up to 3 years, and the fact that views south from the AONB and the Scheduled Monument towards the proposed development site would be set against the background of the existing Dunsfold Aerodrome and the Dunsfold solar farm, it was concluded that the impacts that would arise would not be significant with reference to the integrity of either the Surrey Hills AONB or the Scheduled Monument or their respective contexts and settings.

150. Waverley Borough Council (WBC), Dunsfold Parish Council and Cranleigh Parish Council have raised objection due to the lack of an EIA. In particular, the Borough Council has stated that a review of the proposed scheme by Hampshire County Council acting for WBC concludes that the requirements of the EIA regulations indicates that the proposal would qualify as a Schedule 2 development and hence a full Environmental Statement (ES) should be required. WBC also question the CPA's decision given the lack of evidence

provided by the applicant for some topic areas. Representations have been received raising concerns about the EIA screening process and stating that an EIA should have been completed in the same way that it would have been if the site was located within the AONB.

151. Paragraph 119 of the Minerals section of the nPPG advises that whilst all applications must be assessed on a case-by-case basis, it is unlikely that an Environmental Impact Assessment will be required for exploratory drilling operations which do not involve hydraulic fracturing. Officers are satisfied that the EIA screening opinion is robust and accords with the relevant legislation contained in the EIA Regulations and the advice set out in the nPPG. Although the EIA regulations state that an EIA may be required where any part of the proposal is in a sensitive area, such as an AONB, this does not extend to local designations such as the ALGV. Further, any third party who disagrees with the Screening Opinion issued by the CPA can request an EIA Screening Direction from the Secretary of State. Officer note that no such Screening Direction has been requested to date.

Need for the Development

Surrey Minerals Plan Core Strategy 2011

Policy MC1: Spatial Strategy - Location of Mineral Development in Surrey

Policy MC12: Oil and Gas Development

National Planning Policy and Guidance

152. One of the key considerations in the determination of this application will be the need for the development. There are three separate phases of oil and gas development: exploration, appraisal and production. Each requires separate planning permission. This application is for the first two phases, exploration and appraisal. When planning for on-shore oil and gas development, paragraph 209 of the NPPF explains that minerals planning authorities (MPA's) should clearly distinguish between, and plan positively for, the three phases of development (exploration, appraisal and production). Government guidance contained in paragraph 094 of the Minerals chapter of the nPPG advises that applications are able to cover more than one phase of extraction.
153. Paragraph 203 of the NPPF states that it is essential that there is a sufficient supply of minerals to provide the infrastructure, buildings, energy and goods that the country needs. NPPF paragraph 205 sets out that when determining planning applications, great weight should be given to the benefits of mineral extraction, including to the economy. Paragraph 001 of the nPPG Minerals chapter advises that mineral resources make an essential contribution to the country's prosperity and quality of life.
154. NPPF paragraph 203 explains that since minerals are a finite natural resource, and can only be worked where they are found, best use needs to be made of them to secure their long-term conservation. Paragraph 001 of the nPPG Minerals chapter advises that minerals can only be worked where they naturally occur, so location options for the viable and environmentally acceptable extraction of minerals may be limited.
155. In relation to hydrocarbon extraction, paragraph 091 of the nPPG Minerals chapter states that hydrocarbon extraction covers both conventional and unconventional hydrocarbons and that conventional hydrocarbons are oil and gas where the reservoir is sandstone or limestone. Unconventional hydrocarbons refers to oil and gas which comes from sources such as shale or coal seams which act as the reservoirs.
156. Paragraph 095 of the nPPG Minerals chapter explains that the exploratory phase seeks to acquire geological data to establish whether hydrocarbons are present. It may involve seismic surveys and exploratory drilling. In respect of duration, paragraph 098 explains that for conventional hydrocarbons, exploration drilling onshore is a short-term, but

intensive, activity and that typically, site construction, drilling and site clearance will take between 12 to 25 weeks. Paragraph 099 adds that the appraisal phase takes place following exploration when the existence of oil or gas has been proved, but the operator needs further information about the extent of the deposit or its production characteristics to establish whether it can be economically exploited.

157. In the determination of applications, paragraph 124 of the nPPG Minerals chapter states that MPA's should take account of government energy policy, which makes it clear that energy supplies should come from a variety of sources. This includes onshore oil and gas, as set out in the government's Annual Energy Statement published in October 2013.

Development Plan Policy

158. SMP CS DPD Policy MC1 states that oil and gas development will be concentrated in the southern half of the county. Paragraph 3.16 of the supporting text explains that the Weald Basin is one of the only two locations in southern England where commercial deposits of hydrocarbons are thought to exist. In Surrey, licences have been issued predominantly to the south of the North Downs.
159. Paragraph 3.17 sets out that since the 1950s exploration and appraisal has occurred fairly widely across the southern part of the county. Paragraph 3.18 adds that further exploration and appraisal activity within the licensed areas is likely as UK offshore resources decline. Whilst it is not possible to identify locations where proposals will be forthcoming, each must be treated on its merits. A number of licensed areas lie wholly or partially within the Surrey Hills AONB, and also include other designated sites of biodiversity or heritage interest. The implications for the conservation of these assets must be set against the need for energy and the effect of proposals for exploration, appraisal or production.
160. Policy MC12 of the SMP CS DPD states that planning applications for the exploration, appraisal or production of oil and gas will be permitted only where the MPA is satisfied that, in the context of the geological structure being investigated, the proposed site has been selected to minimise adverse impacts on the environment and that the use of directional drilling to reduce potential environmental impacts should be assessed. The policy also states that planning applications for drilling to appraise potential oil or gas fields will only be permitted where the need to confirm the nature and extent of the resource, and potential means of recovery, has been established. Paragraph 5.36 of the supporting text recognises that conventional oil and gas development differs from other mineral development in that it involves continuous periods of working with most of this disturbance occurring at the exploration and appraisal stage. However these stages are usually of relatively short duration and may or may not be followed by production.

EU Context

161. The European Commission (EC) has adopted Green Papers and Strategic Energy Reviews to advance the agenda on sustainability, competitiveness and security of supply. A core goal of European energy policy is to ensure safe, secure, sustainable and affordable energy for all and is of fundamental importance to the EU's economy, industry and citizens.
162. The European Council has adopted ambitious energy and climate change objectives for reducing greenhouse gas emissions. To address the challenges of energy security and climate change, the EU's energy and climate goals are incorporated into the Europe 2020 Strategy for smart, sustainable and inclusive growth, which was adopted by the European Council in June 2010, and into its flagship initiative 'Resource Efficient Europe'.
163. The EU Energy Security Strategy (May 2014) sets out that the EU imports more than half of all the energy it consumes. Its import dependency is particularly high for crude oil (more than 90%) and natural gas (66%). The total import bill is more than €1 billion per day.

Energy security has also to be seen in the context of growing energy demand worldwide, which is expected to increase by 27% by 2030, with changes to energy supply and trade flows.

164. To meet the EU's energy and climate targets for 2030, the European Commission stated that EU Member States had to establish a 10 year integrated national energy and climate plan for the period from 2021 to 2030. These plans are to cover energy efficiency, renewables, emissions reduction, interconnections and research and innovation. The UK submitted their plan in December 2018. This document states that the UK is committed to ensuring there are secure supplies for consumers, regardless of the energy mix, and sets actions to enhance energy security by delivering a more diverse and reliable energy mix.

UK Energy Supply and Demand

165. Oil and gas form an integral part of the UK's energy and generation mix maintaining energy security, affordability and decreasing carbon emissions in the UK. The Annual Energy Statement 2014 (paragraph 39) explains that the Government is undertaking activities in a number of areas to enhance energy security whilst also delivering wider energy goals. This includes measures to: incentivise deployment of flexible gas and low carbon generation; maximise economic production of domestic oil and gas reserves; and prevent possible disruptions to UK energy supply.
166. A Ministerial Statement on Shale Gas dated 17 May 2018 set out details of the importance of domestic onshore gas supplies in the UK. Although related to shale gas, this Statement recognises that the UK has a diverse range of energy sources, which includes natural gas, and that gas makes up around a third of the current energy usage. The Ministerial Statement recognises that the UK must have safe, secure and affordable supplies of energy with carbon emission levels that are consistent with carbon budgets defined in the Climate Change Act. However, despite improvements in efficiencies in off-shore oil and gas production, the UK has gone from being a net exporter to a net importer, importing over half (53%) of gas supplies in 2017. Estimates suggest that the UK could be importing 72% of its gas by 2030. Although the UK's current import mix, via pipelines from Norway and Continental Europe and Liquefied Natural Gas (LNG) terminals that can source gas from around the world, provides it with stable and secure supplies, the Government believes "it is right to utilise our domestic gas resources to the maximum extent".
167. National policy with regard to energy is set out in the White Paper 'Meeting the Energy Challenge' published in May 2007 (2007 Energy White Paper) and incorporates EU objectives towards energy and climate. The 2007 Energy White Paper recognises that 'energy is essential in almost every aspect of our lives, as well as for the success of our economy'. The 2007 Energy White Paper sets out the Government's response to the long-term energy challenges posed by the need to tackle climate change and reducing carbon dioxide emissions, and ensuring that the country has secure, clean and affordable energy supplies. The four energy policy goals in the White Paper are to:
 - cut emissions by some 60% by about 2050, with real progress by 2020;
 - maintain the reliability of energy supplies;
 - promote competitive markets in the UK and beyond; and
 - ensure that every home is adequately and affordably heated.
168. The Energy White Paper explains that while the UK has benefitted from indigenous reserves of oil and gas for many years, as the North Sea matures, the UK will become increasingly dependent on imported energy, and therefore needs to be confident that the market for fossil fuels continues to ensure reliable supplies of these fuels at competitive prices; and that fossil fuels will be relied upon for the foreseeable future.
169. The Energy Act 2008 implemented the legislative aspects of the 2007 White Paper and reflected the changing requirements for security of supply infrastructure and adequate

protection for the environment and the UK's population, as the energy market changes. The Energy Act 2011 has three principle objectives: to tackle barriers to investment in energy efficiency; enhance energy security; and enable investment in low carbon energy supplies.

170. The Climate Change Act 2008 established a legally binding target to reduce the UK's greenhouse gas emissions by at least 80% below base year levels by 2050, to be achieved through action at home and abroad. To drive progress and set the UK on a pathway towards this target, the Act introduced a system of carbon budgets which provide legally binding limits on the amount of emissions that may be produced in successive five year periods. In 2019, this target was strengthened through the Climate Change Act 2008 (2050 Target Amendment) Order 2019, to commit the UK to reaching net zero greenhouse gas emissions by 2050.
171. The Government introduced the 'The Carbon Plan: Delivering our low carbon future' in December 2011. The Plan sets out how the UK will achieve decarbonisation within the framework of our energy policy: to make the transition to a low carbon economy while maintaining energy security, and minimising costs to consumers, particularly those in poorer households.
172. The Government states through its Gas Generation Strategy (2012) that it is determined to ensure that the UK maximises its indigenous oil and gas resources as any overreliance on gas or any energy source, could put the UK at risk of disruption in supply. The Gas Generation Strategy states that the most energy-efficient way of using gas is to convert it into power and heat simultaneously as this reduces the amount of energy rejected as waste heat relative to the amount generated.
173. The Government's Energy Security Strategy 2012 explains the exploitation of our North Sea oil and gas reserves has brought significant energy security as well as commercial benefits. Although UK production still provided the equivalent of 72 per cent of our oil use (including bunkers) and 55 per cent of our net gas use, the UK continental shelf (UKCS) is on a downward trend. By 2020 it expects the UK will be net importers of 43 per cent of the UK oil demand and 53 per cent of gas demand.
174. The Annual Energy Statement 2010 recognises that encouraging the necessary investment in oil and gas production is an important component of the transition towards a low carbon economy. The Annual Energy Statement 2013 states that with oil and gas remaining key elements of the energy system for years to come (especially for transport and heating), the Government is committed to maximising indigenous resources, onshore and offshore, where it is cost-effective and in line with safety and environmental regulations to help ensure security of supply.
175. The most recent Annual Energy Statement 2014 explains that the Government is undertaking activities in a number of areas to enhance energy security whilst also delivering wider energy goals. This includes measures to: incentivise deployment of flexible gas and low carbon generation; maximise economic production of domestic oil and gas reserves; and prevent possible disruptions to UK energy supply. The statement advocates a balanced approach towards securing a reduction in energy consumption. This includes husbanding domestic supplies to reduce the reliance on imports, in combination with bringing forward cost effective renewables as part of a balanced, low carbon and secure energy mix. Nevertheless, the UK's energy and climate change policy is influenced by decisions taken in Europe and as the importation of oil and gas increases, so does the influence of international issues.
176. The British Geological Survey (BGS) Mineral Planning Factsheet "Onshore Oil and Gas" (April 2011) states that the UK economy is highly dependent on oil and gas as primary sources of energy play an important role for generating electricity and domestic heating; and being essential fuels for transport on land, sea and in the air alongside their use in

millions of products made from chemical processing. The Factsheet states that “whilst onshore oil production, and particularly gas, is small there will be a ready market and continuing need for these minerals for the foreseeable future”.

Assessment

177. The applicant is proposing to investigate the geological structures of the gas-bearing Portland Sandstone and the oil-bearing Kimmeridge Limestone formations of the Weald Basin. Paragraph 091 of the nPPG Minerals chapter describes resources found in these geological formations as conventional hydrocarbons. The proposed development is situated in the southern half of the county where SMP CS DPD Policy MC1 anticipates that oil and gas development will be concentrated.
178. The applicant states that the application site is on the northern flank of the Weald, close to the basin centre where the strata are at their thickest and most thermally mature (i.e. conditions most likely to support the presence of hydrocarbon reserves). Historic exploration at the Godley Bridge and Alfold well sites and more recent results from the Broadford Bridge well site, West Sussex and the Horse Hill well site, Surrey, identify the prime prospective area to be the Godley Bridge Gas Discovery; a hydrocarbon reservoir up to 2km below ground and 2km wide stretching from Chiddingfold to Alfold Crossways.
179. The near identical reservoir geology between the proposed well site and the exploration and appraisal sites at Broadford Bridge and Horse Hill indicates that the Kimmeridge and Portland reserves may be linked. Therefore, the most important technical goal of the exploration and appraisal work at Loxley is the confirmation of the Kimmeridge/Portland ‘Geological Concept’, namely the presence of an open and continuous natural network of hydrocarbon deposits capable of flowing to surface without stimulation.
180. Flow tests and pressure data from Broadford Bridge and Horse Hill have been sub-commercial which is why the ‘potential means of recovery’ needs to be tested at Loxley. The proposed side-track well (L-1z) will assist in this process by allowing alternate completion methodology, new completion fluids and the possible use of small-bore radial drilling to be deployed in the search for higher sustainable recovery rates. Knowledge gained at Loxley would then be used elsewhere within the PEDL-234 Petroleum Licence area to benefit hydrocarbon recovery.
181. Whilst minerals can only be worked where they are found, in relation to hydrocarbon extraction, Officers recognise that the potential to use directional drilling provides greater flexibility in terms of the siting of the well site compound. Despite this, drilling sites still need to be relatively proximate to potential reserves. The applicant points out that directional drilling enables a search area to extend up to 1km beyond the footprint of the below ground gas discovery. Accordingly, the defined search area for a new well site was confined to land to the east of Dunsfold and south west of Cranleigh.
182. The location of oil and gas development raises distinct issues. Geological and operational factors as well as environmental and landownership issues limit the locations available for oil and gas development. In support of the application, the applicant has submitted a Site Identification Report which outlines how site identification is influenced by technical constraints, direct constraints and indirect constraints. Directional drilling was engaged to maximise the search area in the interests of minimising the scope for adverse impacts.
183. In terms of technical constraints, the applicant explains that the search area is defined by the extent of the below ground discovery, the above ground Petroleum Licence area in which the discovery falls (PEDL 234) and the degree to which a pathway between both is compromised by local geological considerations. Further, accessibility from the surrounding road network is material together with slope, load bearing capacity and potential for localised flooding. The applicant refers to direct constraints as being the physical encroachment of the proposal upon the landscape and its natural and built

heritage assets, the loss or degradation of natural resources and development plan allocations or policies applying to the area of the proposal. Indirect constraints are recognised as relating to impacts on amenity, the setting of natural and built heritage assets and cumulative impacts.

184. The applicant acknowledges that striking an appropriate balance between the national need for hydrocarbons and the capacity of the local environment to accommodate the development requires careful consideration. Having applied the identified constraints across the search area, the applicant found that there were no locations free from designations or constraints with some locations hosting a mix. The selection of any site would therefore engage at least one planning policy or environmental designation constraint giving rise to a degree of conflict.
185. Despite this 23 sites of least constraint were identified of which 17 were discounted following a detailed assessment of their environmental impact. Of the six remaining sites, only two remained following the search for landowner consent. These comprised Location 4: Land at High Loxley Road (West) and Location 15: Land at High Loxley Road (East). Despite being 350 metres to the north of the discovery footprint, Location 15 was considered more environmentally acceptable as it would have less of a visual impact from the AONB, a lower impact on a nearby SNCI, and the environmental impact of access provision would be lower.
186. The applicant states that by making use of the world's latest oil and gas technologies, they are endeavouring to turn potential discoveries into environmentally acceptable and commercially viable solutions for the benefit of Surrey and the UK. The site identification process has been based on the principles of minimising the impact of operational development on local communities and the local environment.
187. Dunsfold Parish Council has acknowledged that UK energy policies support this application. A number of representations have been received in support of the application arguing that the proposal is of national importance, supports economic wellbeing and energy security with North Sea reserves diminishing and complies with energy policy set out in the NPPF.
188. Waverley Borough Council have raised objection stating that the application is in breach of energy safeguarding policies and that no economic assessment of benefits arising from the proposal has been provided. They also state that the proposal is contrary to the emerging government policy agenda where dependency on fossil fuels will be phased out and refer to the quashing of NPPF paragraph 209(a) due to the public consultation exercise being flawed. The Waverley Borough Council Conservative Group object to the application arguing that the energy security benefits seem less than significant compared to the harm. Hascombe Parish Council has raised objection due to the need to support the Government's Clean Growth Strategy.
189. Objections have also been received due to: the damage to the climate; the quashing of NPPF paragraph 209(a); the proposal being contrary to the Government's carbon neutral policy stance and its commitment to move away from fossil fuels; the proposal contradicting policy supporting the transition to a low carbon future; dependency on onshore exploration being unnecessary; there being no large oil reserves in the area; the lack of any local employment benefits; and the need for the applicant to withdraw the application and pay for the damage it has been causing in line with the 'polluter pays' principle.
190. Paragraph 209(a) of the previous version of the NPPF stated that MPAs should recognise the benefits of on-shore oil and gas development, including unconventional hydrocarbons, for the security of energy supplies and supporting the transition to a low-carbon economy; and put in place policies to facilitate their exploration and extraction. Despite the court

order to quash this paragraph, a Written Ministerial Statement made on 23 May 2019 set out that:

- a) the remainder of the NPPF policies including Chapter 17 on Facilitating the Sustainable Use of Minerals remain unchanged and extant;
- b) for the purposes of the NPPF, hydrocarbon development are considered to be a mineral resource;
- c) specific policy on planning considerations associated with hydrocarbon development is set out at paragraphs 203-205 and the remainder of 209 of the NPPF; and
- d) in particular, paragraph 204(a) of the NPPF states that planning policies should provide for the extraction of mineral resources of local and national importance with paragraph 205 stating that when determining planning applications, great weight should be given to the benefits of mineral extraction, including to the economy.

191. In view of the clarification provided in this ministerial statement, the quashing of paragraph 209(a) is not considered to change Government planning policy in support of making provision for the extraction of hydrocarbons. Further, the review of Government policy set out above demonstrates that hydrocarbon development remains necessary and is in the national and wider public interest considering that fossil fuels will be relied upon for the foreseeable future and the need for the UK to utilise its domestic gas resources to the maximum extent. Hydrocarbon development is also required to help contribute towards and husband domestic energy supplies, provide energy security, prevent possible disruptions to energy supply, reduce reliance on imports, and support the transition to a low-carbon future. The application would enable the extent of hydrocarbon reserves within the area to be determined and is considered likely to support local employment through the construction and decommissioning phases of the development.

Conclusion

192. Officers are satisfied that the proposal is in accordance with national energy and planning policy and that the applicant has established the need to confirm the nature and extent of the resource, and potential means of its recovery. Officers consider that there is a demonstrable need to maintain a stable and reliable supply of indigenous energy sources, including onshore oil and gas, into the future and that significant weight should be attributed to this aspect of the proposal. Such potential indigenous supplies of natural gas and oil, regardless of their quantity, should be investigated in the interests of maximising the energy recovery of domestic supplies and contributing to the energy mix. The location of the development has been informed by a detailed assessment process outlined in the Site Identification Report which take into account the use of directional drilling to widen the search area in the interests of finding a suitable site where the impacts on the environment and amenity can be minimised. It is therefore concluded that the need for the proposal has been established, the development is in the national and wider public interest and that the location of the development has been justified in accordance with the development plan.

Climate Change

Waverley Local Plan Part 1 2018

Policy CC1: Climate Change

193. Paragraph 1.43 of the SMP CS DPD recognises the importance of climate change stating that the county council is committed through its Climate Change Strategy 2008 to helping communities and businesses in Surrey to act on climate change in their own work and lives. However, the SMP CS DPD recognises that the plan is specific to the single subject matter of minerals and consequently may only make a limited contribution to this critical objective. Paragraph 1.43 recognises that transport emissions are a key issue in Surrey as most minerals are moved by road. This states that the choice of locations readily accessible to the market and by the same token a spread of locations, is likely to lead overall to lower vehicle kilometres and emissions. Operators' vehicle fleets may also

assist, both through regular maintenance and timely replacement with fuel efficient and/or low emission vehicles, although the plan has no direct control here.

194. LPP1 Policy CC1 supports development where it contributes to mitigating and adapting to the impacts of climate change, including measures that: (i) use renewable and low carbon energy; (ii) provide appropriate flood storage capacity; (iii) address issues of flood risk; and (iv) provide high standards of sustainable design and construction with built-in resilience to climate change; and (v) use green infrastructure and SuDS to help absorb heat, reduce surface water run-off and support habitat networks.
195. NPPF paragraph 148 states that the planning system should support the transition to a low carbon future in a changing climate, taking full account of flood risk and coastal change. It should help to: shape places in ways that contribute to radical reductions in greenhouse gas emissions, minimise vulnerability and improve resilience; encourage the reuse of existing resources, including the conversion of existing buildings; and support renewable and low carbon energy and associated infrastructure.
196. The NPPF does not specifically set out how the consideration of greenhouse gas emissions from a proposal should be balanced in the decision making process and instead looks to new development to be designed in a way that is resistant to climate change and to incorporate renewable or low carbon energy.
197. The United Nations and the international scientific community have made clear the potentially severe global human, environmental and economic impacts anthropogenic climate change poses. In 2018, the UN Intergovernmental Panel on Climate Change (IPCC) released a landmark report highlighting that even half a degree rise in global temperatures beyond 1.5°C would significantly worsen the risks of drought, floods, extreme heat and poverty for hundreds of millions of people.
198. The Climate Change Act 2008 established the context for government action, incorporating a requirement to undertake climate change risk assessments and to develop a National Adaptation Programme to address the opportunities and risks from climate change. The Act also established a legally binding target to reduce the UK's greenhouse gas emissions by at least 80% in 2050 from 1990 levels. In 2019, this target was strengthened through the Climate Change Act 2008 (2050 Target Amendment) Order 2019, to commit the UK to reaching net zero greenhouse gas emissions by 2050. The nPPG states that every area will have different challenges and opportunities for reducing carbon emissions from new development such as energy related development.
199. Following the Government's announcement in June 2019 that the UK would be net zero carbon by 2050, the following month, in July 2019, SCC declared a climate change emergency and made a commitment that the County would be net zero carbon by 2050, in line with the Government's target. Surrey's district and borough authorities have also recognised the severe and imminent threat that climate change poses, and have declared a number of their own climate emergencies and emissions reduction targets.
200. The public declaration of a net zero carbon target commits all local authorities in Surrey to tackling climate change across every aspect of their assets and service provision in conjunction with partners, residents, businesses and Government to support a reduction in the carbon emissions produced in Surrey. This ambition is not only considered necessary to tackle the climate emergency for current and future generations but also offers a significant opportunity to increase energy efficiency, improve resilience and deliver a greener, healthier society.
201. In April 2020, SCC's Cabinet endorsed Surrey's Climate Change Strategy and approved its associated actions. This sets out the intended approach to delivering these ambitions over the next thirty years. It provides a joint framework for collaborative action across Surrey's 12 local authorities to reduce emissions to net zero between now and 2050. The

Strategy specifically commits SCC to reducing carbon emissions from its own corporate estate to net zero by 2030. This target, although challenging, can be achieved as these emissions fall completely within the Council's control, and would demonstrate the Council's commitment to this agenda. At the time of the Strategy's publication, nine of the eleven boroughs and districts in Surrey had adopted net zero carbon organisational emissions targets.

202. Surrey's carbon emissions have fallen by 35% since 2005, due largely to the decarbonisation of the national grid. Currently, Surrey is estimated to produce 6 million tonnes of carbon a year, of which 46% comes from the transport sector, with housing then responsible for 28% of emissions, public & commercial buildings for 15% and industry 11%. The Strategy sets out strategic priorities, the actions required to deliver them as well as a series of emissions reduction targets.
203. Whilst the Strategy requires the action of many partners across the County, SCC itself has a significant role to play in several sectors - as Local Highway Authority in reducing transport emissions, for instance, and in respect of SCC's own organisational emissions, where there is the opportunity to lead by example in the delivery of emissions reductions across SCC's own estate, assets and services.
204. Critical to all sectors is the way in which energy used is generated in the first place. In order to meet its net zero carbon target, Surrey needs to contribute to the national agenda of decarbonised heating and electricity, and SCC's priorities commit the Council to expanding renewable energy generation capacity across Surrey, as well as developing more localised smart energy systems to reduce losses in the network. However, it is acknowledged that whilst local partners will be able to make a significant impact through their collective actions, Government intervention will be vital to enable the County to achieve the delivery of a fully net zero carbon target by 2050. The Strategy clarifies where such intervention is needed, principally in respect of policy change and investment.
205. Waverley Borough Council has raised objection to the development stating that it is in breach of climate safeguarding policies and that the impacts, and any identified output, should be assessed on factors such as climate change. They also state that the application is contrary to the principles promoted in the County Council's approved motion to declare a climate emergency as well as the intentions of the climate emergency ambition adopted by the Borough Council in September 2019. The Waverley Borough Council Liberal Democrat Group has also objected as they consider the proposal to be contrary to the Borough Council's declaration of a Climate Emergency and they believe that it would be hypocritical of Surrey County Council, and the Surrey County Council Conservatives, to approve the proposal in view of their own Climate Emergency and other environmental declarations.
206. Witley Parish Council, Cranleigh Parish Council, the Surrey branch of the Campaign to Protect Rural England (CPRE) and Waverley Friends of the Earth (FoE) have all objected on a range of related matters including the proposal being contrary to Government commitments on climate change and moving away from fossil fuels, the Government's carbon neutral policy stance and the County Council's declaration of a climate emergency. Alfold Parish Council has stated that further exploitation of non-renewable energy would be inconsistent with the Council's Climate Emergency declaration.
207. Representations have been received in support of the proposal due to the higher carbon footprint of imported hydrocarbons when transportation is taken into account and clean production of oil onshore being considered preferable to importation. Concerns have been raised regarding how the proposal aligns with the Government's commitment to tackling climate change. A large number of representations have raised objection on climate change grounds for a broad range of reasons including the contribution to greenhouse gas emissions, the proposal being contrary to objectives aiming to reduce fossil fuels and support the transition to a low carbon economy, the need to look towards green energy

and plans for a Heathrow third runway having been ruled illegal by the Court of Appeal. Further, the Borough Council's Portfolio Holder for Environment and Sustainability has requested that the application be refused because SCC's declaration of a climate emergency is completely incompatible with the proposed development.

208. Climate change and energy policies are interlinked, and the Government recognises that the way we produce and use energy plays a major part in meeting the challenge of climate change and emissions targets and policies are in place intended to support a transition towards a low carbon energy mix. The Government is undertaking activities in a number of areas to enhance energy security whilst also delivering wider energy goals, which includes measures to maximise economic production of domestic oil and gas reserves; and prevent possible disruptions to the UK energy supply. An assessment of the compatibility of the development with LPP1 Policy CC1, as well as other relevant development plan policies, in respect of surface water management and ecology is addressed below under the sections dealing with the Water Environment and Ecology and Biodiversity.
209. On 24 December 2019, the High Court refused permission for the Claimant to apply for judicial review (CO Ref: CO/4441/2019) of Surrey County Council's decision on 27 September 2019 to grant planning permission for the retention and extension of an existing well site at Horse Hill. This permission allowed the drilling of four new hydrocarbon wells to enable hydrocarbon production from six wells for a period of 25 years. A renewed application for permission to apply for judicial review was refused on 13 February 2020.
210. The first ground of challenge was that Surrey County Council (SCC) did not comply with the obligations imposed by the EIA Directive and by the EIA Regulations because it failed: (i) to assess the indirect impact of greenhouse gases from the combustion of the oil produced by the wells; and (ii) to take into account the urgent need to address the climate crisis and the requirement to reduce the emissions of greenhouse gases by at least 100% below the 1990 baseline.
211. The judge found that neither limb of ground one is arguable because SCC cannot influence, still less, control, downstream impacts and that SCC was entitled rationally to decide not to assess those impacts. The judge referred to the fact that SCC is a MPA which has declared a climate emergency and stated that the view that there is still a need to maximise domestic extraction of hydrocarbons is rationally tenable. The judge also sets out that a requirement to take a material consideration into account does not entail an obligation to give that consideration decisive weight.
212. The second ground of challenge claimed that SCC failed to take into account a material consideration and/or erred in law by failing to consider the development's impact on climate change in the light of the obligation in the Climate Change Act 2008 to reduce emissions to zero. The judge found that this was another way of putting the second limb of ground one and was not arguable either. The Order dated 13 February 2020 may still be appealed.
213. The judgement handed down by the Court of Appeal in February 2020 relating to proposals for the construction of a third runway at Heathrow Airport did not find that the development was incompatible with Government policy on climate change. Instead, the Appeal succeeded on one ground with the Court concluding that the Airports National Policy Statement (ANPS) supporting this project was not legally compliant because it's preparation did not take into account the Paris Agreement on climate change. The Court also emphasised that the Secretary of State was not required to follow or act in accordance with government policy. Instead, the Secretary of State is only required to explain how it has taken government policy into account. On 7 May 2020, the Supreme Court granted Heathrow Airport and the developer the right to appeal against the decision.
214. Further, Government planning policy contained in paragraph 183 of the NPPF states that the focus of planning policies and decisions should be on whether proposed development

is an acceptable use of land, rather than the control of processes or emissions (where these are subject to separate pollution control regimes). Officers consider that the High Court decision on 24 December 2019 demonstrates that emissions arising from the future use of whatever is produced by the development is a separate matter, notwithstanding the fact that this application is for exploration and appraisal as opposed to production.

215. The climate emergency declaration is concerned with what action can be taken locally to facilitate the 2050 target with the aim of identifying and implementing measures to help to achieve this target as early as possible. The Borough Council's declaration of a climate emergency regards climate change as a serious threat that requires urgent action to reduce carbon emissions and conserve biodiversity. This sets out the Borough Council's aim to become carbon-neutral by 2030. To help achieve this target, the Borough Council will accelerate its efforts by introducing greener buildings, transportation and energy.
216. In this respect, it is considered that the need for hydrocarbons to support a diverse energy mix, provide energy security, reduce reliance on imports by increasing domestic sources of energy, which are considered more sustainable to transport, and support the transition to a low carbon economy form a key element of Government policy. Therefore, these objectives remain relevant in the context of both SCC's and the Borough Council's declaration of a climate emergency. The main tension is likely to be centred on how soon the 2050 target can be met. Officers also note that Surrey's Climate Change Strategy acknowledges that Government policy intervention will be vital to enable its net zero carbon target by 2050 to be met.

Conclusion

217. In view of the above considerations and the UK Government's current policy, Officers consider that, on balance, and as part of the transition to a low carbon future, the proposed development would not be in conflict with the climate change policy agenda or the aims of LPP1 Policy CC1.

Highways, Traffic and Access

Surrey Minerals Plan Core Strategy 2011

Policy MC15: Transport for Minerals

Waverley Local Plan Part 1 2018

Policy ST1: Sustainable Transport

Policy ICS1: Infrastructure and Community Facilities

Waverley Local Plan 2002

'Saved' Policy D1 Environmental Implications of Development

'Saved' Policy M13: Heavy Goods Vehicles

218. SMP CS DPD 2011 paragraph 7.1 recognises that lorry traffic is one of the most significant impacts of mineral working in Surrey, and the one that usually causes the most public concern. This is because they are usually noisier and more intimidating than ordinary traffic. Paragraph 7.7 explains that it is important that mineral development does not compromise highway safety and to consider the needs of pedestrians, cyclists, horse riders and other vulnerable road users. Paragraph 7.9 refers to the need to ensure that the effects of mineral traffic on local communities, the environment and the local road network, are carefully considered. Paragraph 7.10 recognises the need to consider the routing of vehicles between the proposed development and the motorway and primary route network including the use of lorry routing agreements where appropriate.
219. Policy MC15 states that applications for mineral development should include a transport assessment of potential impacts on highway safety, congestion and demand management and explore how movement of minerals within and outside the site will address issues of emissions control, energy efficiency and amenity. Mineral development involving transportation by road will be permitted only where:

- i) there is no practicable alternative to the use of road based transport that would have a lower impact on communities and the environment;
 - ii) the highway network is of an appropriate standard for use by the traffic generated by the development or can be suitably improved; and
 - iii) arrangements for site access and the traffic generated by the development would not have any significant adverse impacts on highway safety, air quality, residential amenity, the environment or the effective operation of the highway network.
220. LPP1 Policy ST1 states, relevant to this proposal, that the Council will work in partnership with key stakeholders to ensure that development schemes: are located where opportunities for sustainable transport modes can be maximised; make the necessary contributions to the provision of new transport schemes that improve accessibility and give priority to the needs of pedestrians and cyclists; require the submission of Transport Assessments for new developments that generate significant traffic volumes; contribute to transport infrastructure improvements, where appropriate and viable; are consistent with the objectives and actions within the Air Quality Action Plan; and make appropriate provision for car parking. Policy ICS1 of the LPP1 requires infrastructure considered necessary to support new development to be provided either on- or off-site either as a requirement of planning conditions or by the payment of financial contributions through planning obligations, and/or the Community Infrastructure Levy.
221. 'Saved' WBLP Policy D1 states that development will not be permitted where it would result in material detriment to the environment by virtue of levels of traffic which are incompatible with the local highway network. 'Saved' WBLP Policy M13 seek to minimise the adverse impact of lorry traffic by: (a) seeking to locate developments which are likely to generate HGV movements where the highway infrastructure is capable of accommodating those movements; and, (b) in appropriate circumstances, require development proposals to be supported by a Transport Assessment and a Travel Plan.
222. NPPF paragraph 111 states that all developments that will generate significant amounts of movement should be supported by a transport statement or transport assessment so that the likely impacts of the proposal can be assessed. Paragraph 103 explains that opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making. NPPF paragraph 109 states that development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.
223. The Site Identification Report found that the nearest railway line was 7 km west of the search area and that the nearest railway sidings were at Dorking, Redhill and Salfords. Given the separation distances from the search area to the nearest rail line and siding, the applicant determined that there was no practical alternative to a road-based transport solution that would have a lower impact on communities and the environment.
224. The application site will be accessed from High Loxley Road at a point approximately 180 metres to the south of the junction with Dunsfold Road (known locally as Pratts Corner). High Loxley Road comprises a narrow rural lane with a single carriageway and is a no through road. It is derestricted in terms of speed limit and there is no footway. The road serves two residences comprising High Loxley and High Billingham Farm, as well as an established solar farm, all of which are situated to the south and east of the proposed new site entrance. High Billingham Farm incorporates an events venue which can hold up to 50 weddings, funerals and corporate hospitality functions per year.
225. Pratts Corner also comprises a junction with Dunsfold Common Road approximately 40 metres to the west of the junction with High Loxley Road. Dunsfold Common Road connects Pratts Corner with Dunsfold Village approximately 1.5 km to the south-west.

Pratts Corner is on a blind bend where Dunsfold Road turns sharply in a north westerly direction towards Hascombe and Godalming.

226. Dunsfold Road is currently derestricted in terms of speed limit with vehicles permitted to travel at 60 mph. However, the speed limit is limited to 40 mph between Thatched House Farm and the A281 (Horsham Road) to the east as this section contains a number of relatively sharp bends. The lack of a footway on Dunsfold Road greatly discourages pedestrians from using this road given the danger from the high speed of passing traffic.
227. The movement of HGVs associated with each phase of the development will be between 0700 - 1900 hours Monday to Friday and 0900 - 1300 hours on Saturdays. The majority of HGV movements will be scheduled within standard hours of operation (i.e. 0800 - 1700 hours Monday - Friday and 0900 - 1300 hours Saturday) minimising HGV movements outside of these time periods. All lorry traffic accessing and egressing the site will be routed via Dunsfold Road and the A281 to the east which connects Guildford to the north with Horsham to the south-east.

Vehicle movements

228. The applicant has assessed traffic volumes on High Loxley Road to be very low equating to between 2 and 3 movements per hour although this would be when there are no events taking place at High Billingham Farm. Traffic survey data indicates that average daily traffic flows on Dunsfold Road between 0700 and 1900 hours Monday to Friday are 6,159 vehicles comprising 5,380 (87.4%) cars and vans (< 3.5 tonnes) and 779 (12.6%) heavy vehicles (> 3.5 tonnes). On Saturdays, the daily traffic flow is 1,505 vehicles between 0900 and 1300 hours comprising 1,380 (91.7%) cars and vans and 125 (8.3%) heavy vehicles.
229. The proposal would generate a maximum of 72 vehicle movements per day during the 34 week drilling, testing and appraisal stage of Phase 2. These would comprise 52 workers vehicles and light commercial vans and 20 HGVs. This would equate to an average of 4.3 workers vehicles and light commercial vehicle movements per hour and 1.7 HGV movements per hour between 0700 and 1900 Monday to Friday. The applicant has stated that non-HGV traffic movements would be spread across the entire day and would therefore not compromise the free flow of highway traffic within the standard hours of operation. If all HGV movements were scheduled within standard hours, then this would equate to an average of 2.2 vehicle movements per hour between 0800 and 1700 hours Monday to Friday. This compares with an average of 65 heavy vehicle movements per hour already using Dunsfold Road between 0700 and 1900 hours Monday to Friday. These numbers of additional vehicle movements are not considered to be significant in transportation terms and would add a small amount of additional traffic to existing traffic flows on Dunsfold Road.
230. This suggests that the cumulative impact of the proposal on traffic associated with both existing and permitted uses at Dunsfold Park is likely to be limited. This is given the small amount of additional traffic generated, traffic movements being spread throughout the day and the bulk of HGV traffic movements being scheduled to avoid peak periods. Further in terms of air quality, the application site is not located within an AQMA and the volume of additional traffic proposed is below the threshold requiring an assessment to be undertaken as explained in the section on Air Quality below. Consequently the impact of vehicle emissions on air quality is considered acceptable.

Proposed Site Access and Highway Safety Improvements

231. The proposed access to the site onto High Loxley Road comprises:
- the formation of a priority junction between High Loxley Road and the proposed access route into the site incorporating a 30 metre wide bell-mouth leading into the site;

- localised widening on the west side of High Loxley Road north of the proposed access to facilitate the swept paths of HGVs and Abnormal Load Vehicles entering and exiting the site;
 - localised widening on the east side of High Loxley Road south of the proposed access to provide a passing place for vehicles travelling to properties south of the proposed highway access when vehicles travelling north on High Loxley Road are waiting at the proposed portable traffic signals; and
 - the removal / reduction of a limited section of the existing hedgerow on the east side of High Loxley Road to allow both the construction of the proposed site access and to accommodate required visibility sightlines.
232. The proposed site access has been provided with 2.4 metres x 70 metres visibility splays, which can be provided either within land under the applicant's control or land classified as public highway. These visibility splays are commensurate with an 85th percentile speed of 40mph. The County Highway Authority (CHA) is satisfied that vehicle speeds on High Loxley Road do not exceed 40mph, due to the natural alignment and width of the carriageway, and therefore considers visibility splays of 2.4 metres x 70 metres to be acceptable. The new junction will be connected to the well site compound through the installation of a new crushed and compacted stone access track approximately 1km in length.
233. Highway safety improvements are proposed at Pratts Corner in order to enable development related traffic to safely negotiate this junction. The submitted traffic management scheme at this junction between High Loxley Road, Dunsfold Road, and Dunsfold Common Road proposes:
- selected carriageway widening up to a maximum of 0.91 metres within the extent of the adopted public highway;
 - the introduction of portable traffic signal control equipment to separately control Dunsfold Road (East), Dunsfold Road (West), Dunsfold Common Road, High Loxley Road south of the proposed site access and the proposed site access itself;
 - the use of temporary traffic management to facilitate the operation of the temporary traffic signals; and
 - the introduction of high friction anti-skid resistance surfacing on the approach to the temporary traffic signals on Dunsfold Road (East), Dunsfold Road (West) and Dunsfold Common Road.
234. The CHA has explained that the submitted traffic management scheme was subject to a Stage 1 and 2 Road Safety Audit (RSA). The purpose of the RSA is to highlight potential safety issues and provide recommendations on how these can be addressed for the applicant's transport consultant to consider and formulate a response. The RSA recommended providing a reduced speed limit on the approaches to the proposed traffic signal installations for the duration of the proposed works and concluded that the proposed traffic management measures would not detriment highway safety. In response, the applicant's transport consultant proposed a reduction of the speed limit on the approaches to the junction to 30mph.
235. A representation has been received objecting to the proposal and is supported by a letter prepared by a transport consultant. This raises concern over the adequacy of the temporary portable traffic signals and associated temporary speed limit given the evidence of high approach speeds within Dunsfold Road. Protect Dunsfold Ltd has objected to the proposed reduction in the speed limit from 60 to 30mph on a rural road which is claimed to be contrary to policy and best practice.
236. In response, the CHA has confirmed that the speed limit reduction (from 60mph) would be temporary, and only in force when the associated temporary traffic signals and traffic management are in use.

237. The CHA has reviewed the 30mph temporary speed limit proposed by the applicant against the requirements set out in the County Council's 'Setting Local Speed Limits' policy. The policy advises that a signed only speed limit reduction from 60mph to 40mph would only be appropriate in this instance, as long as measured mean speeds are 46mph or less. The applicant's speed survey data confirms that mean speeds on Dunsfold Road are 39.5mph northbound and 40.9mph southbound. The CHA has therefore advised that the introduction of a temporary 40mph speed limit on the approaches to the temporary signal installation should be provided in order to accord with this policy.
238. Otherwise, the CHA is satisfied that the applicant's transport consultant has addressed all of the recommendations contained in the RSA. The 40mph speed limit would be introduced through Temporary Traffic Regulation Orders (TTROs), which would allow for the 40mph speed limit reduction to be removed during phases of the development when the traffic management and temporary signals are not in use.
239. The lengths of the temporary speed restrictions have been determined pursuant to guidance provided in the DfT Circular 01/2013 that recommends that the minimum length of speed restriction is 600 metres. Further, the proposed start/end points for the speed restrictions on each road have been determined on the basis of the availability of suitable locations within the verge to provide the required traffic signs.
240. Dunsfold Parish Council has expressed concern in relation to the proposals for traffic management and the local County Councillor has raised concerns regarding the safety aspects of the traffic management scheme as it seems to be predicated on the basis of a temporary speed reduction of 30 mph as opposed to 40 mph. However as outlined above, although the RSA recommended providing a reduced speed limit, it did not recommend a reduced speed limit of 30 mph. The CHA considers that the applicant has satisfactorily addressed the safety issues raised in the RSA and the exact details of traffic management can be secured by condition and will therefore be subject to further assessment when they are submitted by the applicant prior to the commencement of the development.
241. Protect Dunsfold and Waverley Friends of the Earth have queried whether the Road Safety Engineering Team have approved the proposed change in the temporary speed limit from 30 to 40 mph and have requested to see the RSA. The CHA's assessment has been informed by liaison with a number of teams within the County Council including the Road Safety Engineering Team. The CHA has assessed the speed survey data for this section of Dunsfold Road and is satisfied that reducing the speed limit to 40 mph accords with SCC policy on setting local speed limits. The RSA is a technical document used by the CHA to inform their assessment of the proposal. It does not comprise a background document and is therefore not made available for public inspection.
242. Protect Dunsfold Ltd and the local County Councillor have questioned the legal basis of the temporary speed limit reduction for 3 years on the understanding that it can only be in place for 18 months plus a 6 month extension. Protect Dunsfold Ltd has also queried the legal basis given that the traffic management scheme does not propose a permanent speed limit reduction. Officers consider that although the development would last longer than 18 months, a Temporary Traffic Regulation Order (TTRO) would be possible in this case. Section 15(2) of the Road Traffic Regulation Act 1984 (RTRA) permits that the time-limit of eighteen months shall not apply if the authority making it are satisfied, and it is stated in the Order that they are satisfied, that the execution of the works in question will take longer; but in any such case the authority shall revoke the order as soon as the works are completed. The CHA has pointed out that, in any event, an alternative option is available. This would be to reduce the speed limit using a permanent TRO, which is then revoked once the 3 years of operations on the site have elapsed.
243. Protect Dunsfold Ltd has raised concerns that while the portable lights are in operation, the applicant's traffic statement confirms there will be delays to all vehicles driving east/west on the B2130 and on Dunsfold Common Road where none are currently

experienced. The CHA has responded saying that whilst there will be delays at peak times, the modelling assessment shows that the signals operate within capacity on all arms, including Dunsfold Road and Dunsfold Common Road. The maximum delays at the temporary signals will be largely confined to the am and pm assessment periods and the modelling results show that delays will be uniform (i.e. traffic will pass through the signals on the first green phase). This means that although journey times will be increased the reliability of journeys will remain the same.

Traffic Signal Modelling Results

244. A LinSig model has been developed utilising traffic data obtained from a 12-hour classified junction turning count undertaken at Pratts Corner on Wednesday 26th September 2018. Modelling scenarios have been created for the three assessment hours between 08:30 and 17:00 over which time it is proposed HGV movements to and from the site will take place. The assessment periods are:
- 08:30 to 09:30 - AM Peak Hour;
 - 12:00 to 13:00 - Typical Inter-Peak Hour;
 - 16:00 to 17:00 - PM Peak Hour.
245. In addition, TEMPRO growth factors have been added to the survey data to reflect an assessment year of 2019. The maximum number of HGV movements to and from the development is estimated to be 20 two-way (10 in and 10 out) movements per day. In addition, it is estimated that the proposed development would generate up to 52 two-way (26 in and 26 out) car and light vehicle movements per day.
246. The CHA has audited the LinSig model and is satisfied that the proposed temporary signal arrangements will operate within capacity over the proposed 12-hour HGV delivery period. The operation of traffic signals would be optimised using detector technology and Vehicle Actuation (VA) to minimise the cycle times. The scope for delays would be reduced further by the scheduling of HGV movements outside peak periods and non-HGV traffic movements being spread across the entire day.

HGV Swept Path Analysis

247. The Transport Assessment includes a Swept Path assessment for an articulated HGV and an Abnormal Load Vehicle (ALV) for the route between the site and the A281. This is the only route that vehicles associated with the proposed development would be permitted to follow. The CHA has noted the following results from this assessment:
- a) Bend No.1: Painshill Farm Corner - incoming articulated HGVs cross the centre line at apex of the bend, outgoing HGVs cross the centre line on exit of the bend. However there is residual lane width sufficient to enable a cars and light vehicles to pass a HGV;
 - b) Bend No.2: Stovolds Hill Corner - incoming and outgoing articulated HGVs cross the centre line on exit of the bend only. However there is residual lane width sufficient to enable a car and a light vehicle to pass a HGV;
 - c) Bend No.3: A281 Signalised Junction - no crossing of the centre line occurs.
248. The CHA considers that the movement of HGVs associated with the proposed development between the site and the A281 would not prejudice highway safety. The traffic survey data shows that existing HGV flows between High Loxley Road and the A281 (October 2019 Automatic Traffic Count records 32 HGVs eastbound and 28 westbound) do not compromise road safety. Given the low level of HGV flows introduced by the proposed development (10 eastbound and 10 westbound per day), the CHA considers that larger vehicles would continue to manage speeds and avoid conflict.

249. Temporary traffic signage would be implemented as part of a Transport Management Plan (TMP) which the CHA has recommended should be secured by planning condition. The condition would require the TMP to be submitted for written approval prior to the commencement of the development. This signage would alert drivers to the presence of construction / operational traffic along this section of the B2130 Dunsfold Road.
250. Protect Dunsfold Ltd has raised concerns that the need for ALVs to do a three-point turn with a reversing manoeuvre into Dunsfold Common Road before turning west to access High Loxley Road presents a serious road safety issue and may cause significant delays to other vehicles.
251. The CHA has considered the highway safety implications of an ALV, which would be required to access the site on a very limited number of occasions. A swept-path assessment has been undertaken for an ALV, which demonstrates that this vehicle could access the site under traffic managed conditions. As is often the case with an ALV, temporary works would be required at the Nanhurst Crossroads signalised junction with the A281, to accommodate this size of vehicle. This would comprise:
- North-west end of the existing traffic island on the southern arm of the A281: temporarily disconnect and demount the secondary traffic signal head / pole and keep the left bollard and provide temporary protection of traffic island to allow over-run by the ALV; and
 - Eastern footway of A218 Horsham Road south of Elmbridge Road: provision of temporary protection of footway to allow over-run by the ALV.
252. The impacts of ALVs would be further reduced by mitigation measures including: (i) movements being supported by escort vehicles as necessary to ensure ALV movements are managed safely with banksmen available at all times to assist with traffic management; and (ii) movements being arranged outside peak periods to minimise traffic impacts. Details of these temporary traffic management measures would form part of the TMP. An ALV movement would only be required on two occasion, to deliver and then remove the rig or crane. The CHA therefore consider that, subject to the above temporary highway works, an ALV would be capable of safely accessing and egressing the site.
253. The representation received supported by a letter prepared by a transport consultant raises concern that the submitted Transport Statement fails to demonstrate that HGVs can adequately access the site via High Loxley Road. Protect Dunsfold Ltd has claimed that the swept path analysis highlights that the body of a semi low loader vehicle will not be able to turn at the junction of High Loxley Road within the available public highway margins on Loxley Road and Dunsfold Road without relying on third party land. No information has been provided on whether access over third party land has been secured or whether there are any physical obstructions that would have to be removed.
254. The CHA has advised that swept-path assessments have been submitted by the applicant for all types of HGVs that will require access to the site. The CHA has reviewed the submitted swept-path drawings and confirm that all turning wheel bases can navigate the High Loxley Road junction with Dunsfold Road within the limits of the public highway.
255. However, the CHA has confirmed that the body of a semi low loader does extend beyond the limits of the public highway on both sides of High Loxley Road by 0.6 metres, over an area of grass verge classified as Common Land. The semi low loader is required to transport a mud tank to the site. The swept-path assessment shows that the mud tank itself would overhang beyond the limit of the public highway by 0.6 metres on the north side of Dunsfold Road and by 0.5 metres on both sides of High Loxley Road, again over grass verge classified as Common Land. The CHA has found that there are no physical obstructions on the area of Common Land to prevent the safe movement of the semi low loader. The CHA has therefore stated that they are satisfied that safe access to and from

High Loxley Road can be achieved and that the movement of HGVs would not have an unacceptable impact on highway safety.

256. A representation has been submitted objecting to the application because the vertical profile of High Loxley Road has not been assessed, particularly at its junction with Dunsfold Road where a very material change in levels is known to exist. It is claimed that this vertical alignment creates a risk that vehicles may become grounded within High Loxley Road. The CHA has checked the gradient on High Loxley Road next to the junction with Dunsfold Road and found that it is at its steepest over the first 9 metres. The gradient over this distance is 9.4%. This is considered acceptable as the maximum gradient normally allowed on single carriageway roads is 10%. The CHA has therefore advised that the gradient complies with technical guidance and is acceptable in highway safety terms.

Road Casualty Appraisal

257. The CHA has assessed Personal Injury Collision (PIC) data for the highway network local to the site for the most recent available five-year study period (1 January 2014 to 31 December 2018). A total of 30 collisions occurred within the study area, which includes High Loxley Road, Dunsfold Road, Barrihurst Lane, and the signalised junction at Nanhurst Crossroads. The data shows that the majority of collisions occurred at the relatively sharp bends on Dunsfold Road between the A281 and Pratts Corner, which occurred as a result of reckless driving and failing to break in time. It is acknowledged that one fatality occurred during the study period on Dunsfold Road, involving three motorcyclists. This collision occurred away from any junction or bend in the road. The CHA does not consider this collision is indicative of any existing road safety issues within the vicinity of the site.
258. The CHA note that concerns have been raised in representations about the highway safety implications of additional HGV traffic on Dunsfold Road. However it should be noted that no casualties have been recorded for collisions involving larger vehicles. Given that the proposed development would only result in a small increase in HGV traffic per day, the CHA does not consider that the HGV movements generated by the proposed development would prejudice highway safety on the route between the site and the A281.
259. Access to the site is via the High Loxley Road junction with Dunsfold Road, which is in close proximity to the junction between Dunsfold Common Road and Dunsfold Road. Two collisions have occurred within the vicinity of these two junctions, both located at a bend on Dunsfold Road. The CHA is satisfied that the proposed traffic management measures including the installation of temporary signals and a reduction in the speed limit to 40mph will ensure safe access to the site for all vehicles associated with the development.

Impact of the Events Venue at High Billingham Farm

260. The CHA are aware that High Billingham Farm, located to the south and east of the proposed well site compound and accessed from High Loxley Road, has obtained planning permission for the change of use of one of their barns to provide an events venue together with the provision of associated parking. The planning consent allows them to hold weddings, funerals and corporate hospitality functions, with a maximum of 50 events held in a year.
261. The representation received supported by a letter prepared by a transport consultant raises concerns over excessive delays occurring if vehicle traffic associated with the events venue at High Billingham Farm is factored into the LinSig3 assessment. It is claimed that this would be likely to encourage non-compliance with the traffic signals.
262. The CHA has reviewed the Transport Assessment submitted in support of planning application ref: WA/2020/0220 approved on 26 March 2020 to increase the number of events held from 30 to 50. The assessment looks at the worst case trip generation

scenario for events (typically weddings) in terms of the number of vehicular movements and periods of the day when these movements occur. It also states that events usually take place on a Saturday, with some set up activities occurring usually one or two days before and clear up activities taking place one or two days after the event. Events usually start from about 2.00 pm when guests start to arrive and typically finish by 12.00 pm. Guest arrival is typically focused during the afternoon/early evening (for arrivals) whilst departures are typically spread out and occur between 9.00 pm and 1.00 am during the evening / early morning. The assessment also assumes that with peak travel (to and from events) generally occurring over the weekend, the traffic impacts associated with the events venue do not coincide with peak travel on the adjacent highway network, or the peak number of vehicular movements associated with the proposed hydrocarbon well site.

263. The assessment shows that a typical event would generate 120 two-way vehicular movements, with 90% of vehicular movements occurring after 2pm. Given that the proposed well site would operate from 0900 - 1300 hours on a Saturday and will not operate on a Sunday, there will be minimal interaction between event traffic associated with High Billingham Farm and traffic associated with the well site.
264. Notwithstanding this, the CHA note that the applicant has advised that vehicle movements associated with the well site operation will be very minimal on a Saturday, and they would be willing to liaise with High Billingham Farm so that the traffic signals can be removed at weekends when events are taking place. On the small number of occasions when events are taking place on a weekday, the applicant has advised that as part of the TMP to be secured by condition, they would be willing to consult High Billingham Farm on the submission of traffic management measures, by phase, to address the cumulative traffic flows generated by the proposed well site and High Billingham Farm when an event is taking place.
265. The CHA are satisfied that this can be addressed by inserting a clause into the proposed pre-commencement condition requiring the submission of a TMP for written approval. The CHA has advised that they are content that this requirement will ensure that the cumulative impact of traffic associated with the proposed well site and events taking place at High Billingham Farm, during the main operating hours of the well site, can be robustly managed by the applicant to ensure that there would not be an unacceptable impact on highway safety. Officers have also proposed an informative advising the applicant to have particular regard for the residents and businesses that neighbour the site, including High Billingham Farm. This advises the applicant to liaise with neighbours to ensure the impacts of the development are minimised and maintained at acceptable levels. The applicant has agreed to this request to address the concerns of High Billingham Farm.
266. Further, the proposed temporary signal junction arrangement includes a dedicated signal head for traffic on High Loxley Road south of the proposed site access (i.e. coming from High Billingham Farm towards Dunsfold Road), which will ensure that the movement of traffic associated with High Billingham Farm will not conflict with the movement of traffic associated with the proposed well site. The CHA is therefore satisfied that the proposed access arrangements for the well site, including the proposed traffic management measures and temporary signals, will provide safe access for vehicles travelling to events at High Billingham Farm.

County Highway Authority Response

267. Having assessed the proposal on highway safety, capacity and policy grounds, the CHA has raised no objection to the development. They have recommended the imposition of a number of conditions to ensure that the development does not prejudice highway safety or cause inconvenience to other highway users. These aim to ensure: the submission of a TMP incorporating details of HGV routeing amongst other matters; no operations associated with the well site compound take place prior to the construction of the new access track, the new junction on High Loxley Road and the highway improvement works

at the junction of High Loxley Road and Dunsfold Road; the provision of facilities to prevent dangerous conditions for road users; space is laid out for the parking, loading, unloading and turning of vehicles before the development is brought into use; a limit on the number of HGV movements; and, that the site access is permanently closed, the kerbs and verges reinstated, and the temporary highway works at Pratts Corner are removed and the highway is reinstated within 3 months following the decommissioning of the well site.

Matters Raised During Consultation and Publicity

268. Waverley Borough Council (WBC) has raised objection due to the lack of technical information in a number of areas including transport. To inform their response, WBC commissioned MK Transport Planning to review the transport implications and carry out a critique of the Transport Statement. WBC has requested planning conditions requiring: the installation CCTV to monitor vehicle movements; a qualified banksman to be available on site; a regime to ensure traffic signals always work to their optimum with a person being available at short notice to address any issues; and the removal of traffic signals outside the operational period of the site. WBC has queried whether the grass verge area on High Loxley Road, over which the new access is proposed, is Common Land. They have also stated that the roadside strips of land at Pratts Corner required to undertake highway works to enable vehicle turning in relation to the Loxley well site appear to be registered as Common Land which is in the stewardship of WBC and given WBC's strong objection to the proposal, permission to use the Common Land for the works is unlikely to be granted meaning that safe access to the site is unlikely to be achievable.
269. WBC's Environmental Health Officer (EHO) has pointed out that HGV movements have the potential to impact on noise and air quality and recommend that the limits on HGV movements proposed by the applicant are controlled by condition. The Portfolio Holder for Environment and Sustainability at WBC has requested that the application be refused due to concerns over local traffic and the rural lanes being unsuitable and unsafe for HGVs.
270. The Hascombe Estate has raised objection due to the generation of HGV movements. Local parish councils and Waverley Friends of the Earth have objected due to traffic safety concerns, with parish councils' also objecting due to the use of Pratts Corner which is a dangerous junction and the viability of the travel plan and subsequent enforcement. The Waverley Borough Council Conservative Group has also objected due to the number of accidents at Pratts Corner.
271. Representations submitted in support of the application claim that roads have been assessed by the planning inspector and the secretary of state and that HGV and site traffic on High Loxley Road will barely be visible from Thatched House Farm. Objections have been received from members of the public on grounds of: the additional heavy traffic; unsuitable nature of local roads, the network already being at capacity; it being unclear where the mineral will be transported to; highway safety; the 30 mph speed limit being unsuitable; damage to the highway; risk to vulnerable road users; narrow pinch points on the A281; planning permission for the Craft Brewery Company placing a restriction on employee numbers; the loss of Common Land; the traffic impact on a rural setting; the need to restrict HGV movements to between 0800 to 1800 hours Mondays to Fridays and 0900 to 1200 hours on Saturdays; the need for traffic management measures to be agreed with the owner of High Billingham Farm prior to being submitted for approval; a request for the automatic traffic counts to be made available; the need for oil to be transported by pipeline; query why SCC Highways has not applied the same criteria as Hampshire to UKOG's proposal on the Isle of Wight; and, the adverse cumulative traffic impact.
272. The CHA has reviewed the application on highway safety, capacity and policy grounds and found the application to be acceptable in transportation terms subject to the imposition of a number of planning conditions as referred to above. Given the low number of HGV movements generated by the development relative to the existing number on the local

highway network, the need to install CCTV to monitor lorry movements is not considered to be justified. However, the CHA has recommended a planning condition limiting the number of HGV movements and requiring the operator to keep detailed records of the number of daily HGV movements and to make these available to the CPA on request. The application proposes that banksmen should be available at all times to assist with traffic management in connection with the movement of abnormal loads and that would form part of the TMP to be secured by condition. Consideration of the TMP will provide an opportunity to extend this for other HGVs should the CHA consider this necessary.

273. With regard to the temporary portable traffic signals, the submitted Transport Assessment states that these would operate when required during the scheduled HGV delivery times in recognition of the need to minimise delays. Outside these periods and on days when scheduled vehicles are able to access the site without the use of traffic signals, these could be removed and the junction revert to operating as a Priority Junction.
274. Further, the representation received supported by a letter prepared by a transport consultant raises additional concerns over: the significant delays resulting to all users of the Pratts Corner road junction due to the significant length of High Loxley Road that would be subject to traffic signal control; and the LinSig3 assessment of the operation of the temporary portable traffic signals being flawed as it assumes just 2-3 vehicles emerging from High Loxley Road per hour (during peak periods).
275. In terms of the delays resulting to all users of Pratts Corner, the CHA has advised that the operation of the temporary traffic signals has been modelled using Linsig3 and audited by SCC's modelling team. The model results demonstrate the proposed traffic signals will operate within capacity over the proposed 12-hour HGV delivery period. For the inter-peak and pm peak periods, the higher practical reserve capacity demonstrates there is potential to further reduce the cycle time thereby providing an additional reduction in vehicle delays and/or additional opportunities for vehicles to exit High Loxley Road.
276. With regard to the concern that the LinSig3 assessment of the operation of the temporary portable traffic signals is flawed, the CHA has explained that the assessment models the operation of the temporary traffic signals during normal peak period traffic conditions, when traffic flows on High Loxley Road are very low (3 vehicles on High Loxley Road northbound in the am peak hour). The junction has been modelled to maximise green time on Dunsfold Road and Dunsfold Common Road which experience far higher traffic flows than High Loxley Road.
277. The average delays on High Loxley Road are a worst case scenario based on an absence of any mitigation and would not apply in practice. In reality the operation of traffic signals would be optimised using detector technology and vehicle actuation (VA) to minimise the cycle times and the scope for delays. Delays would be reduced further by the scheduling of movements outside peak periods. Furthermore, the temporary traffic signals would be supervised at all times when in operation and a qualified banksman would be located at the site access to safely manage the movement of traffic where the site access meets High Loxley Road. In view of these considerations, the CHA are satisfied that the potential level of delay to northbound traffic in normal traffic conditions on High Loxley Road would not have an unacceptable impact on highway safety.
278. The traffic management scheme and proposed temporary signal arrangements have been assessed by the CHA and considered to be satisfactory subject to the introduction of a temporary 40mph speed limit on the approach to the proposed traffic signalised junction at Pratts Corner. Details of the traffic management scheme will form part of the TMP to be secured by planning condition.
279. The request to restrict the operational hours for HGVs is not supported. This is due to the very low number of HGV movements meaning numbers will be very few during the early morning and evening periods, as well as the operator's commitment to schedule the

majority of HGV movements within 'standard' hours of operation. Further, a condition is proposed requiring a TMP to be submitted for prior approval which will include details of HGV deliveries and hours of operation. The TMP would also require the applicant to consult High Billingham Farm prior to the submission of traffic management measures by phase. The suggestion that these measures should be subject to the agreement of High Billingham Farm prior to submission is considered unreasonable. This is because the agreement of the measures is a matter for the CPA in consultation with the CHA.

280. In relation to the automatic traffic counters, a summary of the data is presented in the submitted Transport Assessment. However, as the survey data is provided in a technical document produced for the CHA to inform their assessment of the proposal, it does not comprise a background document and is therefore not made available for public inspection. The suggestion that oil should be transported by pipeline is not supported as the application does not propose oil production and it is not known whether commercially viable reserves exist. The suggestion that the CHA should draw the same conclusions as Hampshire in assessing UKOG's proposals on the Isle of Wight are not accepted because each application should be treated on its merits.
281. Protect Dunsfold Ltd has expressed concerns that there will be very long and unacceptable delays to vehicles exiting from High Loxley Road at peak periods, due to the proposal to install five-way temporary traffic signals and the fact that the lights will be set back at a distance of 200 metres and will only turn green on alternative cycles. The response also raises concerns over the need for multiple cones to channel traffic in both directions on the B2130; the need for road signage required on all approaches to Pratts Corner; the practicality of the traffic management proposals; the inevitable delays caused to users of the highway network if the temporary traffic management measures are removed after 1900 hours every evening and replaced before 0700 hours every morning over a period of 96 weeks resulting in many drivers using alternative side roads; and questions the likelihood of the applicant deploying vehicles and staff to move these cones and signs. Protect Dunsfold and Waverley Friends of the Earth have queried whether the temporary traffic signals will be removed overnight.
282. In response, the CHA has advised that traffic surveys establish flows within High Loxley Road to be 3 vehicles per hour (when events are not taking place at High Billingham Farm). If unmitigated, this low flow could give rise to wait times of up to 12 minutes but in reality, the signals will be demand-driven to service vehicles upon arrival triggering an average wait time of 1 minute (i.e. half the cycle) or a worse case 2 minutes (i.e. waiting for the cycle to return back around. The timing and duration of use for the proposed portable traffic signals would be informed by the TMP that will include a bespoke strategy for each of the four development phases referenced in the applicant's Transport Statement. The expectation for the TMP proposals would be that the use of proposed portable traffic signals would be minimised and only used when daily HGV movements are likely to be at the higher end of the anticipated daily 2-way vehicle movements as indicated in Table 2 of the Transport Statement, which in the case of HGVs is 10 per day.
283. Where proposed HGV movements are lower, access and egress to the site could be facilitated through the use of banksmen. With reference to Table 2, HGV movements are anticipated to be 5 or less during sub-phase 2D, 3B and 4B which constitute 54 weeks or approximately 50% of the proposed 110 week development programme. For other periods there is a likelihood that HGV movements across some of the days/weeks within the sub-phases will be none or low during which time the access arrangements could be operated without the use of the portable traffic signals. Again, this would be identified within the detail of the TMP and in this way the use of the portable traffic signals is minimised.
284. The public highway at Pratts Corner, together with Dunsfold Road to the east and the extreme northern section of High Loxley Road are all surrounded by an area of registered Common Land (CL 162 Dunsfold Common and Dunsfold Green). The undeveloped 3 foot wide verges have previously been removed from CL 162 following a Commons

Commissioner's hearing and are now included within the extent of the public maintainable highway. Contrary to the views expressed by the Borough Council, Officers consider that the proposed highway improvements at Pratts Corner are within the extent of the public highway and are therefore outside the Common Land boundary. Further, where the proposed new site access on High Loxley Road is to be constructed 180 metres to the south of Pratts Corner, previously registered Common Land (CL 161 Manorial Waste of the Parish of Dunsfold) has been revoked and the extent of the public maintainable highway extended beyond the road surface to include the 3 feet wide verges. The status of the land within the highway corridor is therefore now public highway. The site access has been purposefully proposed in this location to avoid any unnecessary loss of registered Common Land.

285. The CHA has assessed the proposals and found that subject to the implementation of the proposed highway improvements, development related traffic could be accommodated satisfactorily without compromising highway safety. As part of the TMP to be secured by condition, the CHA has recommended that this should include: a programme of works for each phase; HGV deliveries and hours of operation; measures for traffic management by phase at Pratts Corner; measures to prevent the deposit of materials on the highway; before and after construction condition surveys of the highway in proximity to the site and a commitment to fund the repair of any damage caused; an abnormal load traffic management plan; a requirement for the applicant to consult High Billingham Farm on the submission of traffic management measures to reduce the potential for any cumulative traffic impacts; and details of HGV routeing. The CHA has also recommended a condition requiring the submission of a scheme for approval to prevent the creation of dangerous conditions for road users on the public highway. The purpose of these conditions is to ensure that the development does not prejudice highway safety or cause inconvenience to other highway users.
286. The risk of material being deposited on or damaging the highway from uncleaned wheels or badly loaded vehicles or in any other way is covered under the Highways Act 1980. Nevertheless the CHA will seek, wherever possible, to recover any expenses incurred in clearing, cleaning or repairing highway surfaces and prosecute persistent offenders. The proposal is not considered likely to have any cumulative traffic impacts as the number of additional vehicle movements is not considered significant and will be spread out throughout the day. In addition, the applicant has agreed to communicate with High Billingham Farm to ensure that there is no conflict when events are taking place within the main operational hours of the well site. This should ensure that the free flow of traffic is not compromised by the proposal. The applicant also states that the scope for any adverse impact will be further reduced by scheduling the bulk of HGV movements to avoid peak hour traffic.
287. Protect Dunsfold and Waverley Friends of the Earth strongly object to the application because it appears that matters relating to highway safety and the operation of traffic management have not been fully addressed. The local County Councillor is opposed to the details of the traffic management system including traffic signalling being just worked out as a condition post 'approval' of the application given that these details are fundamental to this project, have not yet been finalised and will go a long way towards dealing with the concerns of residents in the area. Alfold Parish Council has also expressed concerns over late revisions to the applicant's traffic report.
288. In view of the issues raised by the technical objections submitted in recent months in relation to the proposals for traffic management, the CHA has undertaken a further detailed review of the arrangements for traffic management in liaison with the Road Safety Engineering Team and Area Highway Manager. The CHA has also been in discussion with the applicant in order to share their findings with them.
289. Following this further review, the CHA has subsequently advised that the details for traffic management which will form part of the Transport Management Plan to be secured by

condition could be amended. The CHA are satisfied that a simpler arrangement would be acceptable to facilitate the safe access and egress for HGVs and positively address the concerns that have been raised.

290. The amendments would comprise:

- a simplified temporary traffic signals and associated traffic management set-up involving the removal of the proposed traffic signals from High Loxley Road and their replacement with the use of qualified banksman (both at the site access and at the High Loxley Road junction with Dunsfold Road) using two-way radios to safely manage the movement of HGVs on High Loxley Road, with priority given to vehicles entering High Loxley Road from Dunsfold Road;
- in conjunction with the above, it would only be a requirement to operate temporary traffic signals and associated traffic management on Dunsfold Road and Dunsfold Common Road for the larger HGVs requiring access, which due to their size and slow speed when turning at the junction, will require a greater degree of traffic control; and
- at all other times the use Stop/Go boards on Dunsfold Road, in conjunction with the use of the Banksman on High Loxley Road, to facilitate HGV access.

291. The CHA has also explained that the signal deployment, operation, removal and maintenance will be undertaken by a specialist traffic management company using battery/solar powered LED traffic signal heads, wireless communications and demountable traffic signage. Proposed condition 9 secures a signal method statement for approval by the CPA prior to the commencement of the development. This will provide final details of:

- signal / signage deployment, operation, removal and maintenance;
- short-term periods of inactivity: signal / signage will be turned away from oncoming traffic or covered); and
- longer term periods of inactivity: signal / signage will be removed and stored off-site (during such times the removal / redeployment will be undertaken over-night or during periods of low traffic flow).

292. In practice the traffic control measures comprising the use of a mixture of traffic signals and banksmen would be applied flexibly and tailored to the specific requirements of each phase of the development. The CHA has liaised with the applicant who has confirmed that they would support this approach pointing out that the submitted Transport Statement already proposes banksmen being available at all times to assist with traffic management. The details would be worked up and submitted as part of the final Transport Management Plan to be submitted pursuant to Condition 9, once the final HGV delivery schedule is known and prior to the commencement of the development.

Conclusion

293. The proposal has been assessed by the CHA and found to be acceptable on highway safety, capacity and policy grounds. A number of planning conditions are proposed, which includes the submission and approval of a Transport Management Plan incorporating detailed measures for traffic management prior to commencement, to ensure that the development does not prejudice highway safety or cause inconvenience to other highway users. The proposals for traffic management have been reviewed to address a number of technical concerns submitted in recent months and a simpler arrangement has been devised which responds positively to the concerns of residents living in the locality. In view of the above, Officers are satisfied that development related traffic would not have an unacceptable impact on highway safety, air quality, residential amenity, the environment, the effective operation of the highway network or have a severe residual cumulative

impact on the road network. The proposal is therefore considered to be in accordance with the requirements of the development plan in respect of highways, traffic and access.

Environment & Amenity

Surrey Minerals Plan Core Strategy 2011

Policy MC2: Spatial Strategy - Protection of Key Environmental Interests in Surrey

Policy MC12: Oil and Gas Development

Policy MC14: Reducing the Adverse Impacts of Mineral Development

Policy MC17 Restoring Mineral Workings

Policy MC18 Restoration and Enhancement

Waverley Local Plan Part 1 2018

Policy SP1: Presumption in Favour of Sustainable Development

Policy SP2: Spatial Strategy

Policy RE1: Countryside beyond the Green Belt

Policy RE3: Landscape Character

Policy HA1: Protection of Heritage Assets

Policy NE1: Biodiversity and Geological Conservation

Policy NE2: Green and Blue Infrastructure

Policy CC4: Flood Risk Management

Waverley Local Plan 2002 (Saved Policies)

Policy D1: Environmental Implications of Development

Policy D2: Compatibility of Uses

Policy D4: Design and Layout

Policy D7: Trees, Hedgerows and Development

Policy C6: Landscape Enhancement

Policy C7: Trees, Woodlands and Hedgerows

Policy HE3: Development Affecting Listed Buildings or their Setting

Policy HE13: Scheduled Ancient Monuments and County Sites of Archaeological Importance

Policy HE14: Sites and Areas of High Archaeological Potential

Policy HE15: Unidentified Archaeological Sites

Policy LT11: Walking, Cycling and Horseriding

Policy RD8: Farm Diversification

Policy RD9: Agricultural Land

Introduction

294. There can be a wide range of potential environmental impacts associated with mineral development. Policy MC14 of the SMP CS DPD states that mineral development will be permitted only where a need has been demonstrated and the applicant has provided information sufficient for the mineral planning authority to be satisfied that there would be no significant adverse impacts arising from the development. The policy sets out a number of criteria which, when determining a planning application for minerals development, should be considered in terms of any potential impacts.
295. The criteria in the policy relevant to this planning application are: i) noise, dust, fumes, vibration, illumination; ii) flood risk, water quality and land drainage; iii) the appearance, quality and character of the landscape and any features that contribute to its distinctiveness; iv) the natural environment and biodiversity; v) sites of archaeological interest and structures of historic interest and their settings; vi) the rights of way network; vii) the use of land and soil resources and land stability; viii) the need to manage the risk of bird strike to aircraft; and ix) cumulative impacts arising from the interactions between mineral developments, and between mineral and other forms of development.
296. With regards to oil and gas development, paragraph 5.37 of the SMP CS DPD recognises there are three separate phases of development, comprising exploration, appraisal and production. Applications for exploratory wells will need to consider locating sites to minimise intrusion and control noise and light emissions from drilling rigs, especially during

night-time operations. These issues are then expected to be considered afresh under subsequent appraisals.

297. SMP CS DPD Policy MC12 states that planning applications for drilling to appraise potential oil or gas fields will only be permitted where the need to confirm the nature and extent of the resource, and potential means of its recovery, has been established. Well sites, including the re-use of wellheads used at the exploratory stage, should be located such that there are no significant adverse impacts.
298. LPP1 Policy SP1 states that when considering development proposals, the Council will take a positive approach that reflects the presumption in favour of sustainable development contained in the National Planning Policy Framework (NPPF). It will always work proactively with applicants to find solutions so proposals can be approved wherever possible, and to secure development that improves the economic, social and environmental conditions in the area. Policy SP2 seeks to avoid major development on land of the highest amenity and landscape value, such as the Surrey Hills Area of Outstanding Natural Beauty, and to safeguard the Green Belt to maintain Waverley's character whilst ensuring that development needs are met in a sustainable manner.
299. The NPPF paragraph 205 states that in determining applications for mineral extraction, mineral planning authorities should ensure 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.

Landscape and Visual Impact

300. NPPF paragraph 170 states that planning decisions should contribute to and enhance the natural and local environment by: protecting and enhancing valued landscapes and recognising the intrinsic character and beauty of the countryside. Paragraph 172 of the NPPF requires great weight to be given to conserving and enhancing landscape and scenic beauty in the AONB which, alongside National Parks and the Broads, has the highest status of protection.
301. The Natural Environment chapter of the nPPG advises at paragraph 42 that land within the setting of AONBs often makes an important contribution to maintaining their natural beauty, and where poorly located or designed development can do significant harm. This is especially the case where long views from or to the designated landscape are identified as important, or where the landscape character of land within and adjoining the designated area is complementary. Development within the settings of these areas will therefore need sensitive handling that takes these potential impacts into account.
302. Paragraph 005 of the nPPG Natural Environment chapter recognises the importance of green infrastructure in providing enhanced biodiversity and landscapes. Paragraph 006 explains how green infrastructure can help to conserve and enhance the natural environment by facilitating biodiversity net gain and nature recovery networks. Paragraph 020 advises that net-gain in planning describes an approach to development that leaves the natural environment in a measurably better state than it was beforehand. Further, the aim of wider environmental net-gain is to reduce pressure on and achieve overall improvements in natural capital, ecosystem services and the benefits they deliver (paragraph 028)
303. SMP CS DPD Policy MC2 only allows development having a direct or indirect significant adverse impact on an AONB to be permitted if it has been demonstrated to be in the public interest and the applicant can establish that development and restoration can be carried out to the highest standards and in a manner consistent with safeguarding the AONB. Policy MC14 seeks to protect the appearance, quality and character of the landscape.

304. LPP1 Policy SP2 seeks to avoid major development on land of the highest amenity and landscape value, such as the AONB. Policy RE1 of the LPP1 aims to recognise and safeguard the intrinsic character and beauty of the countryside. LPP1 Policy RE3 requires new development to respect and where appropriate, enhance the distinctive character of the landscape in which it is located. The policy states that the setting of the AONB will be protected where development outside its boundaries harm public views from or into the AONB. It also requires the same principles for protecting the AONB to be applied to the AGLV pending a review of the Surrey Hills AONB boundary.
305. 'Saved' WBLP Policy D1 states that development will not be permitted where it would result in material detriment to the environment by virtue of the loss or damage to important environmental assets including landscape and harm to the visual character and distinctiveness of a locality, particularly in respect of the design and scale of the development and its relationship to its surroundings. WBLP 'saved' Policy D4 seeks to ensure that development is appropriate to the site in terms of its scale, height, form and appearance and does not significantly harm the amenities of occupiers of neighbouring properties by way of overbearing appearance or other adverse environmental impacts. 'Saved' WBLP Policy C6 seeks to secure improvements to the landscape within the Borough.
306. The Surrey Hills AONB Management Plan 2020-2025 aims to ensure that new development enhances local character and the environmental quality of its nationally important setting. Policy P6 states that development that would spoil the setting of the AONB by harming public views into or from the AONB will be resisted.
307. SCC's Landscape Character Assessment (2015) identifies 21 generic landscape character types across the county. These are split into 140 locally related and named landscape character areas. The application site is located within generic landscape character area WW Wooded Low Weald. This comprises predominantly lowland, undulating between roughly 50m AOD and 100m AOD, and rising up to meet the greensand hills to the north. The area is scattered with woodland blocks and includes significant amounts of tree cover, including ancient woodland, tree belts, shaws, hangers and large mature hedgerow trees such as Oaks.
308. The application site lies in WW5: Grafham to Dunsfold Wooded Low Weald local character area. Key characteristics are: that it consists of medium scale arable fields and smaller areas of pasture, the majority of the fields are bounded by hedges and tree belts, along with dispersed blocks of mostly broadleaved woodland, which includes some areas of ancient woodland within the northern part of the character area; and that it comprises a rural tranquil landscape, due to woodland and limited impact from settlement and roads.
309. Public bridleway 280 runs along the southern boundary of the well site host field and lies at a height of 70 metres above ordnance datum (AOD). This field contains a ridge at 72 metres (AOD) which runs east to west across the centre. From the crest of this ridge, the field slopes downhill towards its northern and southern boundaries. The well site compound would be situated in the northern half of this field and would be developed on a level platform. In view of the slope, it would be constructed through cut and fill at a height of 68 metres AOD.
310. The well site compound will be surrounded by a 2.46 metre high 'V' mesh security fence around its western and northern boundaries and a 4 metre high 'V' mesh security fence around its eastern and southern boundaries. Inside the security fence along the northern boundary, a 4 metre high 'V' mesh screening fence is proposed. To help screen views into the site, the security fence along the eastern and southern boundaries and the screening fence inside the northern boundary will all incorporate debris / camouflage netting to reduce inward visibility into the site. Inside the security fence along the southern boundary of the site, a 4 metre high topsoil storage bund will also be developed comprising material derived from the cut and fill works. Vehicular access gates 2.5 metres in height will be

installed approximately halfway along the security fence on the western boundary of the well site compound.

311. The Forestry Commission has said that the clear felling of all three woodland compartments within one felling operation is prohibited, as the restocking at neighbouring compartments needs to have a height of 2 metres before any adjacent areas can be felled. If the clear-fell licence is implemented and the nearby woodland blocks are removed, a combination of boundary and bespoke acoustic screening are proposed during Phase 2 (Testing and Appraisal). This would require the installation of a 4 metre high acoustic boundary screen along sections of the northern and eastern boundaries of the well site compound as well as 5 metre high bespoke acoustic screening around three sides (north, east and south) of the flare(s) which would be situated in the south-east corner of the well site compound. As a crane is quieter to operate than a workover rig, in the event that a crane is deployed as opposed to a rig, acoustic boundary screening could be reduced and possibly removed during extended well testing. This would be subject to the provision of bespoke screening for individual plant and equipment components.
312. Within the well site compound itself, all container units will be up to 2.6 metres in height with some of the larger fluid tanks and staff accommodation cabins being up to 3 metres tall. The highest structures would comprise a crane which could be up to 42 metres in height when fully extended, a rig up to 38 metres in height, a coil tubing unit up to 25 metres high, up to two shrouded flares 12 metres in height and up to five lighting columns 9 metres high.
313. The most likely scenario is that a 37 metre rig would be deployed on site during initial flow testing. Only one rig would be used on site at any one time. As well maintenance and testing can be performed more efficiently using a crane, a crane is more likely to be used than a workover rig during extended well testing. Only one crane or one rig would be deployed on site at any one time and they would only be required for a limited period. This is estimated to be 28 to 30 weeks during Phase 2 (Drilling, Testing and Appraisal). A rig would also need to be deployed during Phase 3 (Well Plugging, Abandonment and Decommissioning) although this phase is only estimated to last for 5 weeks. Further, the time when a crane is fully extended would be limited and the works would be designed to enable the crane to leave the site on a daily basis preventing the need for overnight storage or deployment.
314. The coil tubing unit may be required during testing and would only need to be deployed for a temporary period. Likewise, the deployment of up to two shrouded flares will only be required when the site is in testing mode which is estimated to last for 26 weeks. During this period, two shrouded flares will be required for initial testing involving their intermittent use for a period of 7 days. One flare will then be required for extended well testing for a period of 90 days.
315. As part of the proposal, an area of the well site host field equivalent to the area of the well site will be set-a-side for the duration of the development. This currently contains a wild bird seed mix plantation which will be retained and enhanced for the duration of the development. The wild bird seed mix would grow to a height of 2 metres to the south and east of the proposed well site compound including along the top of the ridge. The plant is very durable throughout the winter and is topped up during the spring through manual re-seeding to encourage new growth and flowering which stimulates natural re-seeding to bulk- out the crop. This mix of manual / natural re-seeding maintains the crop yield and its screening potential across the year.
316. A crushed and compacted stone access track is proposed to connect the well site to a new temporary junction with the public highway on High Loxley Road. This will require the removal of up to 10 metres of internal field boundary hedgerow which the applicant proposes to reinstate in the first available planting season post construction. The junction will comprise a 30 metre wide bell-mouth leading into the site and a vehicular passing

place within the highway verge to allow for the two-way free flow of traffic within High Loxley Road. The installation of the junction and the provision of clear lines of vehicular visibility will require targeted excavation and the removal of up to 55 metres of hedgerow along with the loss of two trees (assessed by the applicant to be of low value and quality) from the eastern side of High Loxley Road.

317. Removal will be kept to a minimum and subject to a detailed Tree and Hedgerow Management Plan to compensate for any loss of vegetation with reinstatement proposed in the first available planting season post construction. In accordance with the submitted Outline Landscape, Environment and Biodiversity Restoration and Enhancement Plan (LEBREP), this would provide for the reinstatement of the lost hedgerow and the planting of 6 new trees with the intention of replacing each tree lost with 3 new trees. The full restoration of lost hedgerows including additional planting to compensate for the temporary loss would be undertaken upon completion of the development.
318. The new site junction within High Loxley Road will be secured by 2.5m high entrance gates incorporating close mesh panelling and close boarded timber to the front elevation. 'V' mesh security fencing 2.46 metres in height will enclose a two-way vehicular access. A modular gatehouse will be placed internal to the site behind the entrance gates to manage vehicular access. This will be 3 metres in height, 5.98 metres in length and 3.03 metres wide. Minor highway improvements are proposed at Pratts Corner on the boundary of the AONB. This includes selective highway widening on both sides of High Loxley Road and Dunsfold Road of up to 0.91 metres within the extent of the adopted public highway. New temporary portable traffic signals will be installed in association with the new junction on High Loxley Road and the highway improvement works at Pratts Corner.
319. The applicant has submitted a Landscape and Visual Impact Assessment (LVIA) in support of the proposal which has assessed the impact of the proposal on visual amenity, the landscape resource, the AONB and the AGLV and found this to be acceptable. The outline LEBREP proposes to mitigate the loss of vegetation and provide compensation in the form of biodiversity 'net-gain' which will enhance the landscape in the longer term. This is intended to comply with government guidance contained in the Natural Environment chapter of the nPPG and covers High Loxley Road, the internal field boundary between High Loxley Road and the south-west corner of the Burchetts, the northern, eastern and southern boundaries of the well site host field and the well site host field itself.
320. The outline LEBREP includes: an initial replacement programme in year 1 to avoid a net loss of habitat, hedgerow and trees as a result of the construction process; targeted strategic new tree and hedgerow planting in year 1 to improve the filtration of views to and from the application site from all vantage points within the surrounding landscape; and additional planting in year 3 as part of a site reinstatement plan. The applicant proposes to submit an initial LEBREP for written approval prior to the start of the development. This would include the replacement of trees and hedgerows removed during construction works, a programme to retain and protect existing trees and hedgerows and a timed programme for the planting of new trees and hedgerows. A final LEBREP would be submitted within 1 year of the start of development or prior to decommissioning, whichever is the sooner. This would deliver wider environmental net-gain making use of native species and reflecting the historic use of the site as worked agriculture land and forestry.
321. An established narrow single line of trees and hedgerow along the northern edge of the well site compound host field remain within the control of the applicant. These trees are estimated to be 16 metres in height. This boundary, containing a mix of common oak, ash, hazel and hawthorn, would be largely retained and enhanced with new planting. It is likely that 5 ash trees will need to be replaced with other native species during the lifetime of the development including 1 ash tree on the eastern part of the northern boundary and 4 ash trees on the western section. Approximately 55 trees (i.e. 95% of the baseline) would be retained along the central section of the northern boundary which would help to screen the central section of well site compound comprising the main focus for operational activity.

322. If the Burchetts were clear-felled, the largely retained boundary vegetation would only provide a partial screen from views into the site from the north due to gaps between the trees and hedgerow situated along this field boundary. A broader and more continuous area of trees, around 18 metres in height, and hedgerow along the eastern boundary of the well site compound host field also remain within the applicant's control. These would be retained in full and enhanced and provide a more effective screen if woodland further to the east was cleared as part of the clear-fell licence.
323. The Surrey Hills AONB Planning Adviser objects to the development unless enforceable measures are introduced to ensure that neighbouring country lanes through the AONB are not used by HGVs. The AONB Planning Adviser acknowledges that the thin line of trees to be largely retained and enhanced along the northern site boundary has gaps between them, will lose their leaves in winter and that the proposed new planting would be unlikely to be sufficiently large to provide an effective screen during the lifetime of the development. Despite this, the AONB Planning Adviser states that they would have a visually softening benefit when viewed in the distance from the AONB to the north. Consequently, the AONB Planning Adviser considers that it would be difficult to justify refusal of the application because of a significant visual impact of the well site when viewed from the AONB to the north. In terms of the AGLV, the AONB Planning Adviser considers that the proposal would be a seriously incongruous feature in the AGLV and compensation should be provided if mitigation is insufficient.
324. The County Landscape Consultant (CLC) has advised that the implementation of the clear-felling license would open up views around the proposed well site - particularly views from the north-west, north and to the south-east which would potentially make the proposed development more visible from the surrounding area. The impact of the new fencing will introduce a new feature into this rural landscape.
325. The thin strips of what appear to be mainly deciduous trees on the southern edge of the Burchetts and the western edge of High Loxley Furze, which are proposed to be largely retained and enhanced, will provide a degree of screening and filtering of views particularly from visual receptors to the north including elevated positions within the AONB. The CLC concurs with the advice provided by the Surrey Hills AONB Planning Adviser regarding the visual impacts from the north and the AONB, specifically Hascombe Hill which reaches a height of 205 metres.
326. In response to concerns raised by the CLC and others bodies about the LVIA being informed by views taken in spring when trees were at full leaf, the applicant commented that allowance had been made in the assessment for the fact that the viewpoint photos were taken in summer conditions. However to clarify the findings of the LVIA, the applicant submitted additional wireframe photomontages to clarify the LVIA findings. The CLC has advised that the wireframe photomontages are welcomed and help to understand the potential visual impacts of the proposed development as a worst case.
327. The CLC has advised that visual receptors most affected by clear felling of the woodland blocks would be Thatched House Farm, Park Hatch and road receptors including Dunsfold Road, whilst accepting that the latter are less sensitive than residential receptors and that any impacts would be temporary. The CLC points out that the LVIA acknowledges the major / moderate visual impact on High Billingham Farm. Regarding the proposed highway improvements at Pratts Corner on the edge of the AONB, the CLC has advised that the visual impact is not likely to be significant. In terms of the rig and crane, these are likely to be visible above the remaining thin line of existing boundary trees although the CLC advises that the magnitude of change is unlikely to be sufficiently high to result in a significant adverse effect, especially as the change is for a relatively short time period.

328. Natural England has raised no objection to the application subject to a final LEBREP being agreed with SCC, all traffic being routed to avoid sensitive roads through the AONB and lighting controls being put in place as recommended in the revised Lighting Assessment.
329. The Hascombe Estate has commented that most of the Burchetts is comprised of conifers (a timber crop), with a few deciduous trees (mainly ash) interspersed. The Burchetts conifers have now reached maturity. Having been granted a clear-fell licence valid until 2024, the conifers will be felled with the area replanted with native deciduous trees which will take at least 30 years to reach maturity. Consequently the Burchetts woodland will not provide screening from the north and the development will be fully exposed within AGLV and from the AONB. They state that the removal of timber would be via the drive to Thatched Farm Barns. Officers understand that this relates to the private access to Thatched House Farm from Dunsfold Road. The Hascombe Estate add that the belt of ancient woodland within the Burchetts, to the north of the proposed well site compound, will remain standing but will not provide screening of the oil well site within the AGLV or from the AONB. In a further response, they indicate that they will walk the woods in detail and see any areas suggested as ancient woodland before deciding which trees to fell.
330. The Forestry Commission has confirmed that the clear fell licence has been granted for clear felling all three compartments and restocking the area within 2 years after felling with 2,500 stems per hectare (80% Douglas fir and 20% broadleaves). Further, the clear felling of all three compartments within one felling operation is prohibited, as the restocking at neighbouring compartments needs to have a height of 2 metres before any adjacent areas can be felled. They also confirmed that the ancient woodland forms part of the clear fell licence because it is the seeds that are protected as opposed to the actual woodland itself.
331. Protect Dunsfold strongly object to the application raising concerns in relation to the accuracy of the submitted photo montages forming part of the Landscape and Visual Impact Assessment; the visual impact from the felling of the conifers; the deciduous trees in front of the site not fully obscuring the drill site, the possibility that the rig used may be higher than the 37 metre high rig depicted; the beacon on top of the rig being visible at night; the negative impact on views from Hascombe Hill in the AONB.
332. The AONB is located approximately 530 metres to the north of the well site compound on the opposite side of Dunsfold Road. Dunsfold Road is enclosed by vegetation including trees and hedgerows on either side of the carriageway restricting views towards the south from the lowest sections of the AONB.
333. The AONB climbs northwards towards Hascombe Hill. Any views of the application site from elevated sections of the AONB, including from public footpaths 279 (at a height of 130 metres) and 533 (at a height of 200 metres), will be from a considerable distance. At this distance, the site would be difficult to make out given the extent of the panoramic view available from these more elevated parts of the AONB, filtering provided by the line of single trees and hedgerows to be largely retained and enhanced along the northern boundary of the well site compound host field, the presence of the proposed 4 metre screening fence incorporating camouflage netting along the northern edge of the well site compound and the backdrop of the solar farm and Dunsfold Park beyond.
334. Further, any parts of the development that are visible such as the crane, workover rig or coil tubing unit would only be visible for a temporary period and any HGVs visible whilst travelling across the access track would be relatively few in number. The CLC, Natural England and the Surrey Hills AONB Planning Adviser have not objected to the proposal due to the impact on the AONB. However, in relation to the advice provided by both Natural England and the Surrey Hills AONB Planning Adviser, this is conditional on the introduction of a planning condition / enforceable measures to ensure that neighbouring country lanes through the AONB are not used by HGVs and this matter is addressed below. As a consequence, Officers concur with this advice and are satisfied that the proposal would not have a significant adverse impact on the AONB or its setting.

335. The impact of the development on the AGLV would be greater given that the proposal is located within this local landscape designation. The wild bird seed mix plantation will enhance the screening of the development from the south softening its impact on the AGLV designation. The proposed security, screening and acoustic fences will have some adverse impact by their own existence. However, this would be outweighed by their visual screening benefits in terms of restricting views of cabins, plant, machinery and equipment within the well site compound with the exception of the tallest components. This would help to reduce the industrialised feel that the development would have on its locality.
336. Officers agree with the applicant's assessment of the impact on users of Dunsfold Road. Any adverse visual impact of the proposal on Dunsfold Road is not considered to be significant. This is considering the presence of existing vegetation screening, the 500 metre separation distance between the road and the proposed well site, the lack of provision for pedestrian movement on Dunsfold Road and passing vehicles will be travelling at up to 60mph. Where views are possible, a distinct turn of the head would be required to see the well site as it would not be in the peripheral vision of road users. Further, views from Pratts Corner to the north-west would be around 700 metres distant and largely filtered by a combination of vegetation and topography.
337. The proposal would have an adverse visual impact on users of High Loxley Road with access gates, security fences, a modular gatehouse, selective road widening, vegetation removal and the introduction of HGVs bringing a more industrialised feel to the northern section of this road. However, the proposed 2.5 metre high entrance gates fronting High Loxley Road have been purposefully designed in a manner that is sympathetic to the rural character of the area. The design comprises a 'close boarded timber' finish which would be similar to the design of gates fronting the larger residential properties in the area. As a consequence, the access would not have the appearance of the entrance to a well site and anyone travelling along High Loxley Road would be unlikely to recognise the access as an entrance to a well site. This will help to mitigate the impact of the development on users of High Loxley Road.
338. In view of the temporary nature of the development; High Loxley Road being a no through road serving only two residential properties and a solar farm; the small amount of traffic carried by this road for the vast majority of the time (with the exception being when events are taking place at High Billingham Farm on up to 50 occasions a year); the sympathetic design of the site entrance; the applicant's commitments to replace lost vegetation during the first available planting season following construction and provide enhancements to vegetation planting in the medium to longer term which can be secured by condition; and the need for the development which is considered to be in the national and wider public interest, Officers consider that, on balance, the adverse impacts would be moderate rather than significant, and outweighed by other wider public benefits of the proposal and therefore acceptable in planning terms.
339. The applicant proposes to reinstate 55 metres of lost hedgerow on High Loxley Road within the first available planting season post construction and replace two lost trees with 6 new ones. In year 3, a further 55 metres of new hedgerow would be planted together with an additional 6 trees resulting in an enhancement to the existing vegetation on this road in the medium to longer term. In view of these factors, Officers consider that the adverse impact on the AGLV would be temporary and less than significant and that the proposal would provide local environmental enhancements following restoration resulting from the implementation of the LEBREP which can be secured by condition.
340. Further, if the same principles for protecting the AONB are applied to the AGLV as required under LLP1 Policy RE3, Officers consider that the proposal meets the tests set out in SMP CS DPD Policy MC2. In this respect, the proposal has been demonstrated to be in the wider public interest and the final LEBREP will ensure that restoration is carried

out to the highest standards resulting in the intrinsic character and beauty of the countryside being safeguarded in the medium to longer term.

341. Public bridleway 280 is located approximately 100 metres to the south of the well site compound. It connects High Loxley Road to the west with Stovolds Hill to the east and is routed along the southern edge of the well site compound host field. During two previous site visits undertaken in September and October 2019, Officers noted that no persons were seen using the route. However, representations received have stated that it is heavily used. The southern boundary of the well site compound would be screened by a 4 metres earth bund and a 4 metres security fence with camouflage netting. Paragraph 6.15 of SMP CS DPD acknowledges that whilst temporary landscape works such as bunds or earth mounds can affect the appearance of an area, they may be positive in terms of reducing local visual impacts.
342. Views of the well site from the bridleway would be mostly screened by the ridge between the well site and the bridleway, and the wild bird seed mix planting growing on the southern and eastern parts of the well site host field, including along the crest of the ridge. Only the tallest components of the plant and equipment would be visible from the bridleway. Officers consider that any adverse impacts on users of the bridleway would not be significant taking into account the proposed mitigation measures, the temporary nature of the development and that users of the bridleway would be transient.
343. Public footpath 281 and public bridleway 282 connect High Loxley Road to Dunsfold Common Road to the west. The former is approximately 540 metres to the west of the proposed well site compound at its nearest point and the latter around 735 metres to the south-south-west. At these separation distances, any adverse impacts are not considered significant given the existing vegetation screening on High Loxley Road, the temporary nature of the development and the transient nature of rights of way users.
344. To help mitigate the impact of the clear felling of the woodland to the north, the applicant has proposed to erect a 4 metre high screening fence along the northern boundary of the well site and a 4 metre high security fence along the eastern boundary, both with camouflage netting. On the advice of the CLC, the applicant reassessed the impact of clear-felling the woodland blocks on the residences of Thatched House Farm to the north and Park Hatch north of Dunsfold Road. Officers concur with the main aspects of this assessment. Thatched House Farm is the nearest sensitive receptor to the proposed well site compound. The house itself and its curtilage is around 330 metres to the north of the centre of the well site compound and its ground level is 4 metres below that of the well site compound.
345. Views of the well site compound would be partly filtered by the single line of trees (95% of which would be retained) and hedgerows which are to be enhanced, albeit with gaps in-between, along the northern boundary of the well site compound host field. Screening of the central section of the well site compound, this being the main focus for operational activity, would be more effective.
346. Consequently, where views are possible, they would largely be peripheral and centred on the 4 metre high screening fence with dark green camouflage netting. This would screen views of the majority of the cabins, plant, machinery and equipment with the exception of the tallest components. These would comprise the rig or crane, coil tubing unit if deployed, flare stack(s) and lighting columns. Views would be limited to the upper sections of these structures and would be temporary with some structures partly filtered by the largely retained tree-line. The only uninterrupted views would be of the top section of the rig or crane. However these views would be limited to those sections above the tree line. Further the rig or crane would occupy a small and oblique portion of the view. The impact on the Romani Gypsy site west of Lydia Park would be lower than the impact on Thatched House Farm as it is further away being some 420 metres to the north-east of the centre of the proposed well site compound.

347. In terms of the impact on Park Hatch House and Park Hatch Farm to the north of Dunsfold Road, Officers agree with the applicant's assessment. Although any views of the well site would be from a vantage point 10 metres higher, these would be temporary and from a separation distance of around 1km. Any views of the well site possible through the largely retained single tree line along the northern boundary of the well site compound host field, albeit with some gaps in-between, would be limited and hard to discern at this distance.
348. Officers also requested the applicant to provide a more detailed assessment of the impact on High Billingham Farm. The farm house is located approximately 390 metres to the south of the centre of the proposed well site compound and sits 2 metres higher at 70 metres AOD. The well site compound lies at 68 metres AOD. The crest of the ridge across the centre of the well site host field to the south of the well site compound is at 72 metres AOD. The wild bird seed mix planting on top of the ridge would be retained and enhanced. This would grow to a height of 2 metres on top of the ridge creating a visual screen of 74 metres AOD, 6 metres above the floor of the well site.
349. The 4 metre security fence with camouflage netting along the southern boundary of the well site compound would be installed to the south of the earth bund at 70 metres AOD. This would create a visual screen of 74 metres AOD, similar to that of the wild bird seed mix planted on top of the ridge. Further, the southern boundary of the well site host field contains a line of trees which will be retained and subject to new planting although any new planting is unlikely to provide any significant screening benefit within the lifetime of the development. The existing trees are predominantly mature oak and 12 to 16 metres in height. They would not provide a complete screen given the gaps in-between but would help to filter views of the tallest components within the well site. The visual impacts would therefore be similar to those experienced from the main house at Thatched House Farm, albeit from a larger separation distance. The impact on the consented property at Unit 2, High Stovolds Farm would be lower than the impact on High Billingham Farm as it is further away being some 615 metres to the south-east of the centre of the proposed well site compound.
350. The impact on High Loxley approximately 560 metres to the west of the centre of the well site compound would be limited by the extent of the separation distance and existing vegetation boundaries. Any visual impacts on GRT sites west of Stovolds Hill will be very limited or non-existent. This is due to the extent of the separation distance and the existence of woodland screening which does not form part of the clear-felling licence granted to the Hascombe Estate. In view of the mitigation measures proposed by the applicant, Officers conclude that any adverse impacts on nearby residential sensitive receptors will be temporary and not significant in planning terms.
351. Natural England and the Surrey Hills AONB Planning Adviser have requested the imposition of a planning condition and enforceable measures to control the routing of vehicles to ensure that rural roads through the AONB are avoided. However as HGVs using the site are not within the applicant's control, such a condition would not be enforceable. The application states that vehicles would be routed via Dunsfold Road and the A281. Appendix 1 of the submitted Transport Statement includes two plans showing wider vehicle access routes. These would be to and from the M25 to the north via the A24 (Leatherhead), the A281 (Broadbridge Heath, Horsham), and the B2130 Dunsfold Road. To the south, vehicles would be routed via the M27 / A27 (near Havant) the A3(M) and A3 (Petersfield), the A272 (Billingshurst), the A29, A281 and B2130 Dunsfold Road. Further the CHA has recommended the imposition of a planning condition requiring the submission of a TMP to include details of HGV routing and an informative has been included explaining that all HGVs should access the site to and from the east via the B2130 signalised junction with the A281 in accordance with the terms of the application submitted.

352. The Borough Council has raised objection requesting more information on landscape and visual impacts. This includes the visual impacts of lighting, an assessment of winter views from key viewpoints and the impact of HGVs on landscape character, the provision of a compensatory planting scheme during the site preparation phase, and screening of the southern site boundary. They also object to the unacceptable impact on thriving businesses adjoining the site and the lack of safeguards to protect the amenity of adjoining properties. The Borough Council's Portfolio Holder for Environment and Sustainability has requested that the application be refused due to the inadequate assessment of the impacts on landscape and the AONB and the harm caused to local businesses potentially resulting in job losses.
353. Protect Dunsfold have raised concerns over the visual impact of the security fence bordering the access track. Dunsfold, Alfold and Cranleigh Parish Councils have all raised objection due to concerns about the impact on the AONB, the AGLV, the countryside and landscape. The Surrey branch of the CPRE oppose the sprawling industrialisation of the countryside and stress the need to minimise adverse environmental impacts. The Hascombe Estate have objected due to the impact on local businesses. Waverley Friends of the Earth have objected due to the impact on the AONB and local businesses.
354. Representation have been received expressing concerns over: the harm to local businesses contrary to the NPPF; the buffer between the site and local residences being overstated; the need for a 850 metre buffer; the LVIA being based on a 37 metre rather than a 38 metre rig; the visual impact would be increased by the clear-felling; proximity to the AONB and the location within the AGLV; the visual impact from Hascombe Hill; the inadequacy of the 4 metre fence to screen views to the south; security fence along access track being inappropriate in the AGLV; images of trees in full leaf does not paint a worst case scenario for the basis of assessment in the LVIA; the impact on High Loxley Road; and, the need for the temporary planting of mature coniferous hedging around the site entrance on High Loxley Road and on the southern border of the site to soften the impact of the proposed fencing. A representation in support of the development claims that the operator has demonstrated at Horse Hill, Horley how to build a hydrocarbon well site with a low visual presence on the landscape.
355. The need for the planting of mature coniferous hedging is not considered necessary as the application site is well screened from the south and the entrance on High Loxley Road has been purposefully designed to fit in with the character of the local area as explained above. Further, users of High Loxley Road will be transient in nature. Most of the other concerns raised have been addressed above. However, there has been widespread concern about the impact of the proposal on local businesses including the events venue at High Billingham Farm, the Trew Field Cancer Festival and Craft Brewery Company at Thatched House Farm and Horse Riding Surrey at Painshill Farm.
356. NPPF paragraph 182 states that planning policies and decisions should ensure that new development can be integrated effectively with existing businesses. Existing businesses and facilities should not have unreasonable restrictions placed on them as a result of development permitted after they were established.
357. One of the barns at High Billingham Farm, which is set in 65 acres of countryside, has been converted and extended into an events venue to initially hold up to 30 weddings, funerals and corporate hospitality functions a year. In March 2020, the Borough Council permitted a planning application to increase the number of annual events from 30 to 50. Its quiet rural location is claimed to be a unique selling point with views across the surrounding countryside towards the Surrey Hills to the north. The curtilage provides numerous outdoor spaces which are used by the public for wedding purposes. Concern has been raised that the use of the building and its surroundings by the general public, which depends on its tranquil and rural nature with far reaching views towards the Surrey Hills to the north, would be destroyed by the proposed development and the business

could potentially collapse. Imagery has been submitted showing the outdoor space lined with rows of seats angled to be facing north-west towards Hascombe Hill.

358. The nearest outdoor seating to the centre of the well site compound would be around 320 metres distant. However, the majority of the view towards the well site would be screened out by mature trees along the southern boundary of the well site host field. The rig or crane would be visible towards the right hand side of the main field of view. Other taller components of plant and equipment such as the flare stacks and lighting columns would be less obvious as they would be significantly lower in height compared to the crane or rig.
359. It is acknowledged that there would be some adverse visual impact on guests looking out towards Hascombe Hill. However, Officers consider that the impact would be reduced by a number of factors. These include: the temporary nature of the development; the majority of events take place on Saturday afternoons and evenings outside of the main hours of operation of the well site when there would be no HGV traffic movements except in the case of an emergency; the extent of remaining unspoilt northerly and north-westerly views available from High Billingham Farm; the screening benefits provided by the 4 metre high security fence with camouflage netting, the crest of the ridge covered in wild bird seed mix planting; and, the filtering effect of the tree belt along the southern boundary of the well site compound host field.
360. Representations have been received raising concerns about the impact of the proposal on the Trew Fields Cancer Festival at Thatched House Farm. This comprises an annual cancer awareness festival which attracts domestic and international practitioners of all disciplines, who deliver lectures to over 900 participants, many of whom are cancer sufferers, their carers, families and medical practitioners. The response states that follow-up camping retreats are also organised and hosted throughout the year, offering cancer sufferers natural respite in the fresh air. Images submitted in a representation to the CPA show tents erected on the southern boundary of Thatched House Farm along the northern edge of The Burchetts.
361. The closest part of the field hosting the Trew Fields Cancer Festival to the centre of the proposed well site is approximately 175 metres. The representation states that the two sites are only 93 metres apart at their nearest point although Officers consider that the distance is greater at approximately 130 metres. It also states that it is unlikely that the Festival will be able to continue in such close proximity to an oil well, depriving Thatched House Farm of vital income and threatening the livelihood of several local people.
362. The Trew Fields Festival has a fairly comprehensive website. This states that this is a weekend event and Season 4 was scheduled to take place from 3 to 5 July 2020 with gates opening at 6pm on Friday 3 July and the Festival closing at 7pm on Sunday 5 July. However due to the COVID 19 pandemic, the website now states that the festival has been postponed although the organisers are keeping open the possibility of moving the festival to the weekend of 19th/20th of September. The website explains that there is plenty of space to pitch a tent on the farm and that local air B & B's are an option for those not wishing to camp. The timing of the festival appears to be mostly outside the main operational hours of the well site with the exception of between 0900 and 1300 hours on Saturday.
363. If the woodland separating the Festival from the well site is felled, views of the well site would be partly filtered by the single line of trees / hedgerows to be largely retained and enhanced along the northern boundary of the well site compound host field, albeit with some gaps in-between. Most of the cabins, plant, equipment and machinery would be screened from view by the 4 metre screening fence with camouflage netting and only the upper sections of the tallest structures would be visible. Enhancements to screening along this boundary would increase vegetation coverage over time although not significantly during the lifetime of the proposed development. Whilst the proposal would have some adverse visual impact on the setting of the Festival, the visual and landscape impact is not

considered to be significant in planning terms taking account of the mitigation measures proposed by the applicant. Further, the Festival website explains that the event takes place on one weekend per year.

364. The Craft Brewery at Thatched House Farm is located between the main residence at Thatched House Farm and Dunsfold Road to the north. It is an estimated 450 metres to the north of the centre of the proposed well site compound. In view of the findings of the above assessment of the visual impact of the proposal on the main dwelling house which is closer to the application site, any visual impact on the Craft Brewery is not considered to be significant in planning terms as it is located around 120 metres further away with views likely to be partly screened by nearby trees growing in the vicinity of the brewery. Horse Riding Surrey is located at Painshill Farm on the north side of Dunsfold Road over 1km to the north of the application site. Any adverse visual impacts are not considered to be significant given the extent of the separation distance between the farm and the application site and the presence of vegetation screening on either side of Dunsfold Road.
365. Officers acknowledge that the proposal would have some adverse landscape and visual impacts on existing businesses within the vicinity of the site although these are not considered to be significant in planning terms. At the same time, Officers are mindful of the significant weight attributed to the need for the proposed development which is considered to be in the national and wider public interest. Officers have liaised with the applicant with regard to these concerns. In response, the applicant has confirmed that they would be willing to have particular regard for the residents and businesses that neighbour the site, particularly Thatched House Farm to the north and High Billingham Farm to the south. In this respect, the applicant accepts the need to liaise with neighbours to ensure the impacts of the development are minimised and maintained at acceptable levels. Officers therefore propose to include an informative to this effect.
366. In terms of the other remaining points, as explained in the section on lighting below, the assessment of the impact on lighting is based on a worst case scenario of no woodland screening. This assessment also identifies a number of mitigation measures necessary to ensure that the residual effects of the proposed development on the nearest residential receptors can be made acceptable.
367. The measurements set out in this report are approximate and based on the distance between the centre of the well site compound and the nearest sensitive receptors unless stated otherwise. Some of the nearest neighbours argue that the distance measured for the purposes of assessment should be the shortest distance between the application site boundary and the boundary of their land or property. Officers do not consider that this approach represents the most realistic basis for assessing the impact on residential amenity. The nearest properties are set within substantial grounds extending a considerable distance outwards from the main dwelling house. Further, the main operational activities will take place within the centre of the well site compound. From a planning perspective, it is more appropriate to assess the effects on residential amenity based on the impact on the main dwelling house and its curtilage, this representing the primary living space. Further, Officers do not consider that a minimum buffer of 850 metres is necessary in order to make the development acceptable in planning terms.
368. The LVIA has been based on a rig with a height of 37 metres as this represents the most likely scenario. Whilst it is accepted that this does not represent the worst case scenario, the fall-back position of using a 38 metre high rig with a height difference of 1 metre is considered unlikely to be discernible. In relation to security fencing, Officers can confirm that no fencing is proposed alongside the length of the proposed access track.

Conclusion

369. The application site is situated within a sensitive landscape in a rural area of countryside. It is designated as an AGLV with the well site compound situated approximately 530

metres to the south of the AONB. The adverse impact of the proposal on landscape and visual amenity including on the AGLV and the setting of the AONB would be exacerbated by the clear-felling of woodland to the north and east. However, the impacts overall would be mitigated by a combination of factors including existing vegetation screening, screening around the well site compound, the wild bird seed mix plantation, topography, the temporary nature of the development, the restoration of the site to a high standard and to a lesser extent, given the time it would take to establish, new tree and hedgerow planting along High Loxley Road and internal and existing field boundaries which would provide visual and landscape enhancements in the medium to longer term. The replacement of lost vegetation, restoration and enhancement can be secured by condition requiring the submission of both an initial and a final LEBREP for written approval.

370. The proposal would have an adverse landscape and visual impact through the creation of a more industrialised feel on the northern section of High Loxley Road. However given the temporary nature of the development, this being a no through road serving only two residential properties, the road being very lightly used by traffic except when events are taking place at High Billingham Farm, the proposals to replace lost vegetation at an early in the development, the proposed enhancements to vegetation planting, and the wider benefits of the proposal in relation to need, on balance, the adverse impacts are considered to be acceptable in planning terms. Further, Officers consider that the proposal would not result in unreasonable restrictions being placed on local businesses given the mitigation measures proposed. In view of the above considerations, whilst some adverse visual and landscape impacts are acknowledged, Officers are satisfied that the development would not have a significant adverse impact on landscape and visual amenity and therefore complies with development plan requirements in this respect.

Air Quality

371. The primary driver for air quality management is the protection of human health but it can also have implications for the natural environment in relation to wildlife habitats and vegetation. Dust and air quality are material considerations and should be taken into account when considering planning applications.
372. The NPPF at paragraph 170 states that planning decisions should contribute to and enhance the natural and local environment by preventing both new and existing development from contributing to or being put at unacceptable risk from air pollution. Paragraph 180 adds that decisions should ensure new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development.
373. NPPF paragraph 183 states that the focus of planning policies and decisions should be on whether proposed development is an acceptable use of land, rather than the control of processes or emissions (where these are subject to separate pollution control regimes). Planning decisions should assume that these regimes will operate effectively.
374. The nPPG provides guidance on how planning can take account of the impacts of new development on air quality. Paragraph 005 of the nPPG Air Quality chapter states that whether or not air quality is relevant to a planning decision will depend on the proposed development and its location. Concerns could arise if the development is likely to generate an air quality impact in an area where air quality is known to be poor. They could also arise where the development is likely to adversely impact upon the implementation of air quality strategies and action plans or breach EU legislation.
375. The UK's objectives for air quality are set out in The Air Quality Strategy (Defra, 2007). This provides air quality standards and objectives for key air pollutants which are designed to protect human health and the environment. The Air Quality Strategy establishes limit values for concentrations in outdoor air of major pollutants harmful to public health and the

environment including particulate matter (PM₁₀ and PM_{2.5}) and nitrogen dioxide (NO₂). The UK's established limit values are numerically identical to the EU Air Quality Directive. For the protection of habitats and species the EU's Habitats Directive is transposed into English Law in the 'The Conservation of Habitats and Species Regulations 2010' (as amended) and 'Wildlife and Countryside Act 1981' (as amended) and 'Rights of Way Act 2000.'

376. SMP CS DPD Policy MC14 seeks to ensure that minerals development does not give rise to a significant adverse impact in terms of fumes and dust including that related to traffic generated by the development. 'Saved' WBLP Policy D1 states that development will not be permitted where it would result in material detriment to the environment by virtue of potential pollution of air, land or water. WBLP 'saved' Policy D2 seeks to ensure that proposed and existing land uses are compatible and that development which may have a materially detrimental impact on sensitive uses with regard to environmental disturbance or pollution will not be permitted.
377. The Environmental Protection UK / Institute of Air Quality Management's (EPUK/IAQM) "Land Use Planning and Development Control: Planning for Air Quality" (2017) recognises that all new development will have associated emissions and therefore has the potential to have associated adverse impacts. It is these impacts that require quantification and evaluation in the form of an Air Quality Assessment (AQA) alongside the ability to assess the significance of those impacts. Paragraph 6.2 of this document advises that where a development requires an AQA, this should be undertaken using an approach that is robust and appropriate to the scale of the likely impacts.
378. The application site is not located within an Air Quality Management Area (AQMA) with the nearest AQMA being located 8.1 km to the north-west in Godalming. This was designated for exceedances of air quality standards for nitrogen dioxide. This reduces the likelihood of the proposal having an adverse cumulative impact on health, living conditions and the natural environment. Further, the prevailing south-westerly wind direction will carry emissions just beyond the well site boundary towards the north-east and away from Dunsfold Park, which is located around half-a-mile to the south at its nearest point.
379. The applicant has submitted an AQA in support of the proposal. This assesses the dispersion of releases to atmosphere associated with the proposed operations to determine their impact on ambient concentrations of important pollutants around the local area. The AQA recognises the particular need to assess the impact of permanent human habitation and sensitive nature conservation sites in the context of attainment of applicable environmental standards.
380. According to the AQA, the main sources of pollutant releases during site operations will be from the use of diesel fuel in on-site stationary engines and construction and transport vehicles and from the disposal by flaring of produced natural gas. The assessment has considered releases of nitrogen oxides, carbon monoxide, volatile organic compounds, sulphur dioxide and particulate matter using the UK ADMS 5.2 modelling system.
381. The AQA advises that the drilling and appraisal phases are the most energy intensive and result in the greatest pollutant releases. Depending on commencement date, the project will span up to three years with air quality standards based on assessment over a calendar year. In order to capture worst case combinations of releases and meteorological conditions, long term air quality impact was assessed with a project schedule which accommodated the drilling and testing phases in one calendar year. Short term air quality impacts were based on year-round operation of the project phases which provided the greatest release rate for each pollutant.
382. In practice it is expected that this worst case will be significantly mitigated by scheduling and breaks between project phases which will result in the execution of the drilling and testing over more than one calendar year. As a consequence, the AQA considers that the

necessary assumptions made to undertake the modelling has the effect of substantially overestimating the process contribution to ambient concentrations. The predicted process impacts are therefore considered to be a conservative assessment with the conclusions reached incorporating a reasonable margin of comfort.

383. Maximum pollutant process contributions from the site operations are localised and occur just beyond the well site boundary to the north east on open farmland. Beyond this location, process contributions reduce significantly with distance. The AQA does not consider that statutory air quality standards with respect to human health would be applicable around the area of maximum impact due to the infrequency of human exposure.
384. The AQA identifies a number of receptors within the vicinity of the site for the purposes of the assessment. These include existing residential locations extending as far as properties to the north of Dunsfold Road and east of Stovalds Hill, future permitted residential development including traveller accommodation on land to the north-west of Lydia Park, the public bridleway along the southern boundary of the well site host field and nature conservation sites.
385. At neighbouring locations of existing and planned future residential occupation, where long term human exposure might be expected, the AQA considers it unlikely that pollutant process contributions over the duration of the project would pose any significant threat to continued attainment of environmental standards in relation to human health. The AQA finds that in process pollutant contributions would be unlikely to compromise attainment of the applicable short-term environmental standards along the neighbouring footpath where short term environmental standards might be expected to apply. At local conservation sites sensitive to nitrogen and acid deposition, the AQA considers that the maximum process contributions are unlikely to pose any threat to or have any substantial influence on the attainment of critical levels and critical loads in practice.
386. In relation to the impact of dust from construction activities, the AQA finds that whilst construction activities will give rise to dust emissions, albeit temporary in nature and largely restricted to the areas close to the construction site. Based on the IAQM methodology, the AQA finds that the risk of dust impact from all project operations will be 'negligible' with adequate mitigation measures in place. Mitigation measures adhering to industry best practice, specific to the control of dust during construction have been incorporated into the design of the development. These comprise:
 - a construction environmental management plan (CEMP), incorporating best practices, will be employed during the construction phase;
 - material deliveries and stock piles on site will be sheeted to prevent windblown dust releases;
 - loads entering and leaving the site will be sheeted, where appropriate, to prevent windblown dust releases;
 - in dry periods a bowser will be available to dampen any dry and dusty road surfaces to minimise entrainment of dust; and
 - vehicle wheel washing facilities will be available to minimise the transfer of site dust on to the road network.
387. The AQA states that it is expected that with these mitigation measures in place and bearing in mind the conservative approach to the assessment before mitigation, the risk of dust impact from all operations will reduce to 'negligible' for all activities and for all impacts.
388. The County Air Quality Consultant (AQC) has advised that the applicant's Construction Dust Risk Assessment undertaken using IAQM (2014) Guidance on the Assessment of Dust from Demolition and Construction determines that the risks at properties and human-health receptors before mitigation is low. An assessment of impacts on ecological receptors was screened out based on the distance from the site boundary and

construction vehicle routes to any ecological receptors. The County AQC considers that the applicant has used the correct assessment method, agrees with the findings and advises that the effect is not likely to be significant and the implementation of some mitigation measures to control dust is not critical.

389. In terms of road traffic impacts, the impact from increases in road traffic have been assessed to have a neutral impact on air quality based on the Institute of Air Quality Management (IAQM) / Highways Agency (now Highways England) Design Manual for Roads and Bridges (DMRB) guidance. The County AQC agrees that there is no necessity to undertake an assessment of vehicle-related emissions as the threshold criteria provided by the DMRB guidance for the number of vehicles trips generated by the different construction and operational phases of the development are not exceeded.
390. Whilst operations on site will give rise to releases of greenhouse gases, an assessment of the worst case operation finds greenhouse gas releases to be largely insignificant in relation to the UK's current inventory and future budgets.
391. The County AQC has advised that they are satisfied with the baseline NO₂ concentration used in the assessment of emissions from engines, generators, HGVs and flares. They agree that pollutant releases will in practice pose no substantial threat to the continued attainment of ambient air quality directive limits at the nearest locations of human exposure, and taking into account the highly conservative assessment approach, agree that the results of the modelling indicate that the air quality impacts at ecological sites are not likely to have significant effects. The County AQC therefore concludes overall that the air quality impacts have been assessed using an appropriate methodology and that the effects are not considered significant.
392. Waverley Borough Council has raised objection due to the need for: the further assessment of the impacts from hydrogen sulphide; the provision of more information on mitigation or monitoring for air quality and odour including a Construction Environment Management Plan (CEMP); the modelling to be re-run with more realistic operational parameters and better data to provide more certainty on the impacts; and further assessment of the potential effects of the proposed Dunsfold Aerodrome development on baseline air quality. Further, the Borough Council's Portfolio Holder for Environment and Sustainability has requested that the application be refused due to concerns over the impact of air pollution on nearby residents including those moving into the new garden village at Dunsfold Park.
393. The Borough Council's Environmental Health Officer (EHO) has advised that: a cumulative impact on planned housing at Dunsfold Park has not been undertaken; the conclusions reached in the AQA are questionable; consideration should be given to whether the predicted impact is acceptable as the proposal will have a noticeable moderate impact on air quality; impacts on the Chiddingfold Forrest Special Site of Scientific Interest (SSSI) and two Sites of Nature Conservation Importance (SNCI), Sayers Land, Jewings Hurst and Benbow Rew SNCI and Benbow Rew SNCI, should be referred to the Wildlife Trust for their comments as process contributions of nitrogen oxides will be significant on the SSSI and exceed the critical level on the SNCIs; the proposed dust mitigation measures should be required by condition; consideration should be given to the imposition of conditions requiring an air quality monitoring plan, a dust management plan and an odour assessment given concerns raised about hydrogen sulphide.
394. Natural England has advised that: the AQA does not trigger the threshold for having impacts alone on any nearby European designated sites; the potential for contributing to in-combination effects on such sites from air pollution also needs to be considered; the CPA needs to be satisfied that they agree with the submitted assessment where it implies that any planned and current developments within 10km have been screened for contributions.

395. Public Health England (PHE) has raised no objection to the application on the understanding that the applicant will ensure that the assessment methodologies are correctly applied throughout, and that calculation methods and modelling are properly validated. They have advised that the development is subject to regulation under the Environmental Permitting regime, which will further assess potential emissions to air, water and the management of waste as well as consideration of accident management plans. The EA where necessary will consult PHE as part of the environmental permitting process.
396. Dunsfold Parish Council has raised objection and expressed concern about the release of 'sour gas' and has requested a condition to ensure that air quality is monitored if planning permission is granted. Bramley Parish Council has objected to the application raising concerns about the presence of hydrogen sulphide given its corrosive and toxic properties and that the AQA does not mention elevated levels of hydrogen sulphide. Hascombe Parish Council and the Waverley Borough Council Conservative Group have also objected due to concerns in relation to the potential presence of hydrogen sulphide.
397. A large number of representations have been received objecting to the proposal on air quality grounds. The main reasons relate to: the contribution to greenhouse gas emissions; the negative health impact from HGV emissions; the possible presence of hydrogen sulphide given that this was previously found at a local well drilled to appraise a 1983 gas discovery made at Godley Bridge; the need to deploy air quality assessment diffusion tubes on site; the need for an evacuation protocol for local residents; the presence of Nitrogen Dioxide, and/or other gases and potential corrosion of pipework and plant; nose bleeds experienced at Horse Hill; a request for independent monitoring to take place; and the adverse impact on local businesses.
398. The possible presence of hydrogen sulphide is a matter addressed by other regulators including the EA and the HSE. Harmful gas is not present in all wells but in some circumstances pockets of gas can be present. Flares have the ability to destroy hydrogen sulphide and non-methane organic chemicals in an efficient manner in order to ensure that toxic gas emissions odour is not released. The EA has been made aware of local concerns over the possible presence of hydrogen sulphide at the application site. They have confirmed that this matter will be addressed as part of the determination of the Environmental Permit application and that they are likely to issue a request for information from the applicant in order to address this. The applicant submitted their Environmental Permit application to the EA in December 2019. This has been the subject of consultation and is currently in the process of being determined.
399. As explained above, the unexpected detection of hydrogen sulphide is one of a number of specific occurrences that must be reported to the HSE under the Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013. Further, the Borehole Site and Operation Regulations (BSOR) 1995 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. In particular the BSOR require that no borehole operation shall be commenced at a borehole site unless the operator has ensured that a health and safety document has been prepared, which includes where appropriate, "in the case of a borehole site where hydrogen sulphide or other harmful gases are or may be present, a plan for the detection and control of such gases and for the protection of employees from them" (paragraph 7, section 2, subsection d).
400. Public Health England has been consulted on the proposal and raised no objection. Matters of health and safety and fire risk are enforced by the HSE and would have to meet the strict safety code of the Borehole Site and Operation Regulations (BSOR) 1995 and other regulatory regimes of the EA and the OGA.
401. Additionally, as outlined above, there are general duties under the Health and Safety at Work etc. Act 1974 (HSWA). Those who create health and safety risks to workers or the

public as part of their undertaking have a duty to manage and control the risks so far as is reasonably practicable. This is supplemented with more specific regulations particular to the extraction of gas and oil through wells.

402. The applicant states that no material odour impacts as a result of release of volatile organic compounds from site operations are anticipated. The nearest residential dwelling is around 330 metres from the centre of the well site compound and would not be expected to experience any substantial odour impact from low level releases during site operations. The applicant has advised that this finding is consistent with permissions issued for other hydrocarbon sites within the country and suggests that the absence of any material odour effects post-commencement of development corroborates this finding. Officers are aware that odour is covered under the Environmental Permitting process. Where considered necessary, a standard odour condition is imposed by the EA usually requiring the operator to submit an Odour Management Plan to the EA for approval in the event that the operator is notified by the EA that the activities are giving rise to pollution outside the site.
403. The County AQC has not recommended the need for the submission of an air quality monitoring plan, further mitigation measures or for the modelling to be re-run, having advised that the AQA uses an appropriate methodology and that the effects are not considered significant. Therefore the request for independent monitoring to take place is not considered to be justified. Officers note that the prevailing wind direction will carry emissions towards the north-east and away from Dunsfold Park, which is located around half-a-mile to the south, and the County AQC is satisfied that there will be no substantial threat to the attainment of ambient air directive limits at the nearest locations of human exposure.
404. The applicant has stated that a cumulative assessment of the Dunsfold Park development, inclusive of the proposed energy centre, has not been included within the AQA because a review of the Dunsfold Park Environmental Statement (ES) indicated that the expected combined impact of road traffic and the energy centre resulting from the development on nitrogen dioxide concentrations in the vicinity of Loxley well site is insignificant. The applicant therefore considers that the increase in background concentrations of nitrogen dioxide arising from the development has no material impact on the findings of the Loxley well site AQA. As a consequence, the applicant does not consider it necessary to amend the AQA to include a cumulative assessment of the proposal with Dunsfold Park.
405. The County Ecologist has advised that no further information is required in relation to the impact on the closest SSSI. This is because Chiddingfold Forest SSSI is in a favourable condition and being located to the south of the application site, is not affected by the prevailing wind direction. Further, woodland is much less susceptible to nitrogen deposition than heathland or grassland for example. In relation to the two closest SNCIs at Sayers Land, Jewings Hurst and Benbow Rew SNCI and Benbow Rew SNCI, the County Ecologist has acknowledged that although these are non-statutory sites, they are of considerable importance for biodiversity. As large parts of Sayers Land, Jewings Hurst and Benbow Rew SNCI and a part of Benbow Rew SNCI are ancient semi-natural woodland, the County Ecologist would expect the habitat to be very similar to parts of the Chiddingfold Forest SSSI and have the same level of susceptibility to nitrogen deposition.
406. Therefore, if an adverse impact on Chiddingfold Forest SSSI is discounted, the County Ecologist considers that it is highly likely that the same would apply to the two SNCIs, whilst acknowledging that the SNCIs are not subject to the same level of survey and monitoring as SSSIs and it is therefore necessary to make some broad assumptions. In this case, the County Ecologist considers that there is sufficient information to discount an adverse impact on both SNCIs. Further, both SNCIs are to the south of the site and even less likely to be impacted by air pollution as winds are generally in a south-westerly direction.

407. The applicant has stated that mitigation measures, adhering to industry best practice, specific to the control of dust during construction have been incorporated into the design of the development. The following measures will further reduce the dust impact risk determined in this assessment:
- A Construction Environment Management Plan (CEMP), incorporating best practices, will be employed during the construction phase;
 - Material deliveries and stock piles on site will be sheeted to prevent windblown dust releases;
 - Loads entering and leaving the site will be sheeted, where appropriate, to prevent windblown dust releases;
 - In dry periods a bowser will be available to dampen any dry and dusty road surfaces to minimise entrainment of dust;
 - Vehicle wheel washing facilities will be available to minimise the transfer of site dust on to the road network.
408. The applicant expects that with these mitigation measures in place and bearing in mind the conservative approach to the assessment before mitigation, the risk of dust impacts from all operations will reduce to 'negligible' for all activities and for all impacts. As the County AQC has commented that the provision of such mitigation measures is not critical, Officers do not consider it necessary to impose a condition to secure the dust mitigation measures proposed by the applicant.
409. The AQA has modelled the predicted impact of the proposal on a number of sensitive environmental receptors, including three European sites: (i) the Ebernoe Common Special Area of Conservation (SAC) in West Sussex (9.3 km to the south-west of the application site); (ii) the Thursley, Hankley & Frensham Commons (Wealden Heaths Phase 1) Special Protection Area (SPA) in Waverley (8.2 km to the north-west of the application site); and, (iii) the part of the Thursley, Ash, Pirbright & Chobham SAC (the Thursley, Hankley & Frensham Commons SSSI component) that is located in Waverley (8.2 km to the north-west of the application site).
410. The habitats covered by both the SAC designations and the habitats of the bird species for which the SPA designation was made are sensitive to the deposition of nutrient nitrogen, which can give rise to changes in the composition and structure of the habitats. For both SACs and the SPA, the worst case air quality modelling reported in the AQA (Table 4.7, p.48) indicates that the proposed temporary well site could result in the deposition of nutrient nitrogen equivalent to 0.1% of the site relevant critical load for the habitats of the Thursley, Ash, Pirbright & Chobham SAC, and equivalent to 0.2% of the site relevant critical load for the habitats of the Ebernoe Common SAC and the Thursley, Hankley & Frensham Commons (Wealden Heaths Phase 1) SPA.
411. Natural England's guidance on the assessment of the likely significant effects of road traffic on habitats as a consequence of nitrogen emissions indicates that a process contribution of less than 1% of the relevant critical load would have an imperceptible impact on the condition of a designated habitat or its dependent species. In isolation it can therefore be concluded that the proposed scheme would not give rise to likely significant effects on either of the SACs or on the SPA.
412. The submitted AQA addresses the question of cumulative or in-combination impacts in section 4.10. It reports that a review of relevant planning authority on-line registers and the EA's register of permits issued and applications made returned no results for other development for which applications have been submitted or approved within the last two years that could act in-combination with the proposed temporary well site. Natural England however have queried the extent to which that information adequately captures and reflects the potential for in-combination effects.

413. Officers have reviewed the CPAs records and can confirm that it is not currently in receipt of any applications for developments that would be potentially significant sources of emissions (e.g. energy from waste facilities, etc.) and that would be located within 10 km of the Ebernoe Common SAC, the relevant component of the Thursley, Ash, Pirbright & Chobham SAC or the Thursley, Hankley & Frensham Commons (Wealden Heaths Phase 1) SPA. A single application for development involving the use of incineration technology to dispose of waste materials (animal carcasses) is currently lodged with the CPA, but relates to an established pet crematorium on a site in Chobham, which is more than 10 kilometres from either of the SACs or the SPA covered by the AQA.
414. The closest major minerals development to the Ebernoe Common SAC, for which an application is currently lodged with the CPA, would be the proposed continued extraction of brick clay and associated continued manufacture of bricks and tiles at Ewhurst Brickworks near Walliswood, some 16 km to the north-east of that SAC and more than 20 km from the Thursley, Ash, Pirbright & Chobham SAC or the Thursley, Hankley & Frensham Commons (Wealden Heaths Phase 1) SPA.
415. In terms of non-minerals and waste development, the potential for other forms of residential and industrial / commercial development to contribute to nutrient nitrogen deposition would be limited to emissions from vehicles travelling along roads that pass through or within 200 metres of the SACs or the SPA. The single largest development that Officers are currently aware of that could be expected to come forward during the lifetime of the proposed temporary well site in the area covered by the submitted AQA would be the construction of the proposed Dunsfold Park scheme, which was granted outline permission on Appeal in March 2018.
416. Chapter 13 (Air Quality) of the Environmental Statement submitted in support of the Dunsfold Park application (ref: APP/R3650/V/17/3171287 dated 29 March 2018) included an assessment of the impact of traffic emissions from the development on the Chiddingfold Forest SSSI (0.6 km to the south of Dunsfold Park) and the Wey Valley Meadows SSSI (8.9 km to the north of Dunsfold Park but connected to the development by the A281 main road), but did not cover the more distant European Sites discussed above which are dissected by highways links not readily accessible from the Dunsfold Park site.
417. The scope of that assessment was agreed in consultation with Natural England and the question of impacts on European sites was not raised in their consultation response to that application prior to its determination and the grant of outline permission. A number of associated further permissions have been granted relating to land at Dunsfold Park subsequent to the original grant of consent (planning permission ref: WA/2018/2032 for the Gordon Murray Design Headquarters building on land within the Dunsfold Park site, and planning permission ref: WA/2019/1278 for the new access road linking Dunsfold Park to the A281). As for the main Dunsfold Park consent, the question of impacts on European sites as a consequence of traffic emissions was not raised during consultation prior to the grants of permission.
418. On balance, and taking account of the short term and temporary nature of the proposed well site and the intermittent nature of the emissions that would arise during its lifetime, the distance that separates the application site from the closest European sites, the fact that the highway links that pass through or within 200 metres of the European sites are not on the route by which the application site would be accessed, and the limited contributions that the predicted wellsite emissions would make to the critical loads of the identified European sites, Officers conclude that the proposed development would not give rise to likely significant effects alone or in-combination with other development.
419. Risk management procedures are incorporated into The Health and Safety Plan required by the HSE under The BSOR 1995. Where appropriate, this requires: an escape plan with a view to providing employees with adequate opportunities for leaving work places

promptly and safely in the event of danger and an associated rescue plan with a view to providing assistance where necessary; and a plan for the prevention of fire and explosions including in particular provisions for preventing blowouts and any uncontrolled escape of flammable gases and for detecting the presence of flammable atmospheres (paragraph 7, section 2, sub-sections a and b). Hence, evacuation procedures are covered by the HSE and do not fall within the remit of the CPA.

420. Further, the AQA explains that fugitive releases of natural gas, principally methane, are considered unlikely to be significant. Leakages from associated transport pipework on the site are likely to be minimal as the necessary surface pipework during the flow testing phase will be a temporary construction which will be pressure tested prior to use. Deterioration of the integrity of the pipework over the relatively short period of operation (maximum 26 weeks) is considered unlikely to be significant and as such fugitive releases have not been considered within the assessment.
421. The nearest business to the application site is the annual Trew Fields Cancer Festival which takes place on one weekend in July each year. However the 2020 Festival that was scheduled to take place on 3-5 July has been postponed, potentially until 19th/20th September. Officers consider that there may be potential for any adverse impacts to be managed by providing the operator with advance notice of when the Festival is scheduled to take place so as to enable them to limit activity levels during this time. Officers have liaised with the applicant who has confirmed that they would be willing to have particular regard for the residents and businesses that neighbour the site including Thatched House Farm to the north. In this respect, the applicant accepts the need to liaise with neighbours to ensure the impacts of the development are minimised and maintained at acceptable levels. Officers therefore propose to include an informative to this effect.

Conclusion

422. In view of the above considerations, with regard to dust emissions from the construction and operational phase, and air quality emissions from HGVs accessing / egressing the site and air quality emissions from the processes on site on both human and ecological receptors, Officers are satisfied that the proposed development is acceptable and would not give rise to an unacceptable level of pollution on health, living conditions or the natural environment, either in isolation or cumulatively. Consequently, the application would not have a significant adverse impact on air quality and is therefore considered to be in accordance with the development plan in this respect.

Noise and Vibration

423. Unwanted sound may have an adverse effect on the environment and on the quality of life enjoyed by individuals and communities. NPPF paragraph 170 states that planning decisions should contribute to and enhance the natural and local environment by preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by unacceptable levels of noise pollution.
424. Paragraph 180 of the NPPF adds that planning decisions should ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development. In doing so they should: mitigate and reduce to a minimum potential adverse impacts resulting from noise from new development and avoid noise giving rise to significant adverse impacts on health and the quality of life; and identify and protect tranquil areas which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason.
425. NPPF paragraph 182 requires planning decisions to ensure that new development can be integrated effectively with existing businesses. Existing businesses and facilities should

not have unreasonable restrictions placed on them as a result of development permitted after they were established.

426. Paragraph 019 of the nPPG Minerals chapter states that those making mineral development proposals should carry out a noise impact assessment which should identify all sources of noise and, for each source, take account of the noise emission, its characteristics, the proposed operating locations, procedures, schedules and duration of work for the life of the operation and its likely impact on the surrounding neighbourhood.
427. Paragraph 021 sets out the appropriate noise standard for normal mineral operations at a noise sensitive property. This comprises a noise limit that does not exceed the background noise level (LA90, 1h) by more than 10dB(A) during normal working hours (0700-1900). Where it will be difficult not to exceed the background level by more than 10dB(A) without imposing unreasonable burdens on the mineral operator, the limit should be set as near to that level as practicable. In any event the total noise from the operations should not exceed 55 dB(A) LAeq, 1h (free field). For operations during the evening (1900-2200 hours) the noise limits should not exceed the background noise level (LA90,1h) by more than 10dB(A) and should not exceed 55dB(A) LAeq, 1h (free field). For night time noise (2200-0700 hours), these limits should be set so as to reduce to a minimum any adverse impacts, without imposing unreasonable burdens on the mineral operator, and should not exceed 42dB (A) LAeq, 1h (free field) at a noise sensitive property.
428. At Paragraph 022, the nPPG Minerals chapter recognises that there may be particularly noisy short term activities during site preparation and restoration work such as soil stripping, the construction and removal of soil storage mounds and aspects of site road construction and maintenance. In these cases, a temporary daytime noise limit of 70dB(A) LAeq 1h (free field) should be considered for periods of up to 8 weeks in a year at specified noise-sensitive properties to facilitate essential site preparation and restoration work.
429. SMP CS DPD Policy MC14 seeks to ensure that mineral development does not give rise to a significant adverse impact in terms of noise. Paragraph 6.10 of the supporting text recognises that factors such as proximity of the proposed development to housing, schools or other sensitive land uses and the topography of the site and surrounding area alongside the location of plant on site, should be taken into account. Paragraph 6.15 acknowledges that whilst temporary landscape works such as bunds or earth mounds can affect the appearance of an area, they may be positive in terms of reducing local noise impacts.
430. 'Saved' WBLP Policy D1 states that development will not be permitted where it would result in material detriment to the environment by virtue of loss of general amenity, including disturbance resulting from the emission of noise or vibration. WBLP 'saved' Policy D2 seeks to ensure that proposed and existing land uses are compatible and that development which may have a materially detrimental impact on sensitive uses with regard to environmental disturbance or pollution will not be permitted.
431. Surrey has produced its own 'Guidelines for Noise and Vibration Assessment and Control (the Surrey Noise Guidelines 2020). These Guidelines echo the approach set out in the NPPF and nPPG. The Guidelines include specific sections on oil and gas related development and recognises the three stages of onshore hydrocarbon development, exploration, appraisal and production. In relation to exploration and appraisal, (including site investigation, preparation, construction, drilling, extraction, processing, flaring, maintenance, de-commissioning and restoration), the Guidelines state at paragraph 3.27 that the criteria provided in Tables A.1 and A.2 of Appendix A would apply.
432. Table A.1 (Daytime Working Hours and Noise Limits for Temporary Minerals Operations) recognises the noise limit of 70dB(A) LAeq 1h (free field) for temporary daytime operations contained in the nPPG. However, it advises that: (i) increased temporary daytime noise

limits for periods of up to eight weeks in a year at specified noise sensitive properties should be considered to facilitate essential site preparation, restoration works and construction of baffle mounds where it is clear it will bring longer term environmental benefits; (ii) where work is likely to take longer than eight weeks, lower limits over a longer period should be considered; and (iii) in some wholly exceptional cases, where there is no viable alternative, a higher limit for a very limited period may be appropriate in order to attain the environmental benefits. Table A.2 summarises the noise limits during the day and night set out in the nPPG for normal minerals site operations at noise sensitive properties.

433. The nearest residential dwellings comprise Thatched House Farm 330 metres to the north of the centre of the well site compound, High Billingham Farm 390 metres to the south, High Loxley 560 metres to the west and the consented residential dwelling at Unit 2, High Stovolds Farm 615 metres to the south-east. Thatched House Farm also incorporates a number of businesses including sheep farming, organic pig farming, a craft brewery and an annual cancer awareness festival held in one weekend in July. However the 2020 festival has been postponed, potentially until 19th/20th September. Thatched House Farm is separated from the proposed well site by 'The Burchetts', a woodland block which is the subject of a clear-felling licence granted to the landowner. High Billingham Farm contains an events venue which is permitted to hold up to 50 weddings, funerals and corporate hospitality functions per year.
434. The nearest residential communities are Lydia Park and New Acres which comprise a traveller site and mobile home park off Stovolds Hill. These are situated around 485 metres to the east of the centre of the well site compound beyond a mature area of woodland, part of which is included within the clear-fell licence. A further 4 applications have been permitted for gypsy and traveller accommodation on land to the north and west of Lydia Park, the closest being 420 metres to the north-east. The nearest major commercial land is situated at Dunsfold Park, approximately 850 metres to the south where planning permission exists for the development of a new settlement including 1,800 new homes including business, educational and community uses.
435. The applicant has submitted a Noise Impact Assessment (NIA) which takes into account the potential loss of acoustic attenuation provided by the area of woodland subject to a clear-fell licence. Baseline noise sample measurements, covering both critical daytime, evening and night time periods, were undertaken over a period of 3 days in April 2018 at four locations representative of the nearest noise sensitive receptors (NSRs) to the proposed well site. These comprise noise monitoring location (NML) 1: Bridleway north of High Billingham Farm; NML 2: near High Loxley; NML 3: land west of Thatched House Farm on boundary of adjacent farmland and NML 4: Bridleway south of New Acres Caravan Park. The survey was carried out to establish both the background (LA90) sound levels, where the values represent those that would be observed over a typical long term period, and residual (LAeq) sound levels which are considered to represent a realistic long term average.
436. During the day time (0700-1900 hrs), the highest mean background sound level was found at NML 3 where a sound level of 41 LA90(dB) was recorded. The lowest day time sound level of 36 LA90(dB) were recorded at both NMLs 1 and 2. During the evening (1900-2200 hrs), the highest mean background sound level was found at NML 1 where a sound level of 32 LA90(dB) was recorded. The lowest evening sound level of 29 LA90(dB) was recorded at both NMLs 3 and 4. During the night time, the highest mean background sound level was found at NML 4 where a sound level of 25 LA90(dB) was recorded. The lowest night time sound level of 22 LA90(dB) was recorded at both NMLs 2 and 3.
437. The highest log average residual sound level during the day time was found at NMLs 3 and 4 where a sound level of 47 LAeq(dB) was recorded. The lowest day time average residual sound level of 43 LAeq(dB) was recorded at NML 1. During the evening, the highest average residual sound level was found at NML 4 where a sound level of 44

LAeq(dB) was recorded. The lowest evening average residual sound level of 42 LAeq(dB) was recorded at both NMLs 1 and 2. During the night time, the highest average residual sound level was found at NML 3 where a sound level of 33 LAeq(dB) was recorded. The lowest night time average residual sound level of 30 LAeq(dB) was recorded at NML 2.

438. In terms of background noise, the NIA finds that noise levels across the site are typically controlled by distant road traffic and commercial aircraft, particularly those related to Gatwick Airport to the east. Activity from race cars at the Top Gear track at Dunsfold Park to the south of the site are audible during the daytime period. During the night there are reduced road traffic and commercial aircraft activities, although these are still generally present. Bird calls and barking dogs become more significant during this period.
439. The NIA is based on a worst case scenario and takes into account: (i) construction noise with related activities taking place during the daytime only; (ii) noise from drilling, workover, testing and appraisal with related activities taking place over a 24 hour period with the night time period therefore being critical to the assessment of noise from these activities; and, (iii) the increase in road traffic noise during the daytime period. The nearest sensitive receptors assessed in the NIA comprise Thatched House Farm, Lydia Park, High Billingham Farm, High Loxley, the consented Romani Gypsy site on land west of Lydia Park and the consented residential dwelling at Unit 2, High Stovolds Farm.
440. During the access and well site construction (Phase 1), the nearest noise sensitive receptor (NSR) to the site entrance would be the two houses on the north side of Dunsfold Road, which would typically be as close as 220 metres from the acoustic centre of construction activity during this phase. The results, based on a worst case scenario, indicate that construction noise levels would be up to LAeq,T 49dB during the daytime period. This is comfortably within the daytime noise limit for temporary operations of 70 dB as well as the daytime and evening noise limit of 55 dB set out in the nPPG and the Surrey Noise Guidelines and can be controlled by condition. As no construction activities are proposed during night time hours, there would be no construction related noise during the night time period.
441. The noise level results during Drilling, Testing and Appraisal (Phase 2) have been assessed against the night time assessment criteria. As drilling is a 24 hour activity, where predicted noise levels are acceptable during the night time period, when assessment thresholds are lower (more onerous), they will be acceptable during the day. The NIA states that the predicted noise levels at night time from drilling would be 42 dB at Thatched House Farm, 39 dB at both High Billingham Farm and the consented Romani Gypsy site on land west of Lydia Park, 37 dB at Lydia Park itself, 36 dB at High Loxley and 33 dB at the consented residential dwelling at Unit 2, High Stovolds Farm. These noise levels are based on a worst case scenario and are in accordance with the night time noise limit set out within the nPPG and the Surrey Noise Guidelines and can be controlled by condition.
442. During Testing and Appraisal, the modelling includes additional mitigation in the form of temporary acoustic screening within the well site compound and around its boundary. This would comprise either an EchoBarrier screen or a Soundex curtain to balance the loss of acoustic attenuation that would be lost from the clear-felling of the woodland. The screening would include boundary screening in the form of a 4 metre high acoustic screen installed on sections of the northern and eastern boundary and bespoke screening in the form of a 5 metre high acoustic screen installed around 3 sides of the flare(s).
443. Testing will require the use of either a workover rig, coil tubing unit, or a crane. The boundary screening would primarily attenuate the noise emissions of the workover rig, the use of which is likely to be restricted to initial flow testing. Extended well testing is likely to be performed using a crane with reduced noise emissions compared to a workover rig or a coil tubing unit. Accordingly, it is likely that the need for boundary screening would be reduced and possibly removed during extended well testing. This would be subject to the need to provide bespoke screening for individual plant and equipment components.

444. Further, the NIA considers that the workover rig would only be operating under full power whilst raising and lowering equipment into the well, which would typically occur for up to 15 minutes in every hour at night time. It also assumes the installation of noise control mitigation to the workover rig or coil tubing unit and diesel driven generators. Further, a noise mitigation strategy will be adopted to reduce noise from the flare. These measures can be secured by condition.
445. The NIA states that the predicted noise levels at night time from Testing and Appraisal would be 42 dB at Thatched House Farm, 41 dB at High Billingham Farm and High Loxley, 39 dB at Lydia Park and the consented Romani Gypsy site on land west of Lydia Park, and 37 dB at the consented residential dwelling at Unit 2, High Stovolds Farm. Again, these noise levels are based on a worst case scenario and meets the night time noise limits set out within the nPPG and the Surrey Noise Guidelines and can be controlled by condition.
446. The highest number of road traffic movements, including the highest number of HGVs, would be generated during Phase 2 (Drilling, Testing and Appraisal). This would comprise a total of 72 vehicle movements per day comprising 20 HGVs and 52 workers vehicles and light commercial vehicle movements. Comparing the baseline and future predicted total road traffic flows, the NIA finds that there would be a negligible change in road traffic noise levels on Dunsfold Road as a result of the development.
447. The County Noise Consultant was unable to provide technical advice due to a potential conflict of interest in relation to their involvement with another site in the vicinity. The Borough Council have objected to the application in relation to noise stating that construction and operational noise impacts will arise and suitable mitigation has not been provided. They also object to the lack of technical information provided on noise suggesting that an additional noise survey is required for properties on High Loxley Road or Dunsfold Road that are likely to be affected by the proposed junction works. The Borough Council's Portfolio Holder for Environment and Sustainability has requested that the application be refused due to concerns over the impact of noise on nearby residents and those expected to move into 1,800 new homes in Dunsfold Park.
448. The Borough Council's EHO has raised concerns that proposed noise levels are well above background sound levels, particularly at night and would impact on local residents. The EHO has recommended the imposition of a condition setting noise limits during Phase 1 (Access and Well Site Construction) of 65 dB LAeq 30 minutes during the daytime and 55 dB during the evening. During Phase 2 (Drilling, Testing and Appraisal), the EHO has recommended a condition limiting noise levels to those set out in Table A.2 of the Surrey Noise Guidelines, which reflect those contained in the nPPG. These comprise a noise limit of 55 dB during the daytime and evening and 42 dB at night time.
449. The EHO advises that operations should be limited to a specified number of weeks (or days) during the 3 year period to limit the impact on residents, such as the period specified in the application documents. Further, the EHO has also recommended the imposition of conditions requiring the submission of a Noise Mitigation Strategy, a Noise Monitoring Plan and a Complaints Handling and Liaison Scheme for written approval prior to the commencement of the development.
450. The Surrey Gypsy and Travellers Community Forum has advised that they would not expect noise to be a major issue on the Gypsy, Roma and Traveller (GRT) population living nearby at New Acres and Lydia Park. The Hascombe Estate has raised objection on numerous grounds including noise. Dunsfold Parish Council and Waverley Friends of the Earth have objected to the application raising concerns in relation to noise with the former requesting a noise monitoring condition if the CPA is minded to grant planning permission.

451. A representation received in support of the application has pointed out that the Dunsfold (Top Gear) test track neighbours the application site and contributes to local noise pollution. This point is acknowledged in the submitted NIA. Representations opposed to the application have generally expressed concerns in relation to: the insufficient buffer between the site and the nearest dwellings; the proximity to local GRT sites and the impact on sensitive uses at Dunsfold Park including the permitted new settlement; taller structures including portacabins needing to be placed along the northern perimeter to reduce noise on Thatched House Farm following the felling of the woodland which cannot be relied upon to provide acoustic attenuation; the need for the NIA to consider British Standard BS: 4142 (Method for Rating and Assessing Industrial and Commercial Sound); the impact of vibration, including on local heritage properties with weaker structural foundations, not being assessed; noise having a greater impact on the GRT community as static caravans have lower noise insulation; the need for a condition requiring the availability of a point of contact at all times; noisy activity should not take place when outdoor events are taking place at High Billingham Farm; the silencing of generators should be mandatory; the need for independent monitoring to take place; a noise limit of 48 dB for operations other than temporary should only apply between 0700 and 1800 hours Monday to Friday and 0900 and 1200 on Saturdays and should not exceed 42 dB at all other times; and, no tripping should take place between 1800 and 0800 hours. (NB: Tripping refers to the process of removing and replacing pipe from the well when it is necessary to change the bit or other piece of the drill string, or when preparing to run certain tests in the well bore.)
452. The applicant has stated that the noise modelling assumes a worst case scenario of a drilling duration of 12 weeks for each well with 24 hour operations and a testing duration of 26 weeks and 24 hour operations inclusive of continuous flaring. This represents a very cautious approach and experience from Horse Hill and other well sites has established that operations are not continuous in time or duration. In addition, activity is intermittent and machinery is not always deployed at full capacity / load and flaring is infrequent. Further the likely rig to be used will be the BDF 28 (as used at Horse Hill) with the fall back being the BDF Rig 51. Only BDF Rig 51 has the option of a 'top-drive' which would represent the noisiest component on site. However, as a worst case, the modelling assumes continuous use of a top drive when in reality, this is unlikely.
453. Officers accept that the results of the NIA are based on a worst case scenario and are still able to demonstrate that with the proposed mitigation measures in place, noise levels will remain within acceptable limits as recommended by the Surrey Noise Guidelines. To provide greater confidence that the noise limits can be met, the applicant is willing to accept conditions requiring a Scheme of Noise Mitigation and a Noise Monitoring Plan to be submitted and approved in writing prior to the commencement of the development.
454. As outlined above, the submitted NIA addresses the noise impact of the highway improvement works on the nearest noise sensitive receptors and has found these to be within acceptable limits. The applicant has stated that the highway improvements works necessary at Pratts Corner would be undertaken under a Highway Act Section 278 Agreement and implemented by a highway contractor approved by Surrey County Council. They amount to the temporary widening of the road surface by up to 0.9 metres. They are considered to be minor by the applicant who has advised that the works would take less than two days to complete. Consequently, the amenity impact of the works on Gate House Cottage which lies on the north side of this junction, would not be significant and are considered negligible by the applicant. This impact is considered to be acceptable by Officers given the short duration of the works.
455. Paragraph 021 of the nPPG Minerals chapter recognises that it will not always be possible for noise from mineral operations to not exceed the background noise level by more than 10 dB(A) during normal working hours (0700-1900) without imposing unreasonable burdens on the mineral operator. The Surrey Noise Guidelines advise that at night time,

noise limits should be set to reduce to a minimum any adverse impacts, without imposing unreasonable burdens on the mineral operator.

456. The EHO's recommendations to impose a condition limiting noise during temporary operations (0700 hours - 1900 hours) during access and well site construction (Phase 1) to 65 dB LAeq 30 minutes and noise during the night time to 42 dB meet the guidelines contained in the nPPG and are accepted by Officers. The EHO's recommended noise limit for Phase 1 during the evening (1900 hours - 2200 hours) of 55 dB LAeq 30 minutes is considered unnecessary because the applicant is not proposing to carry out such works during the evening period. In relation to operations other than temporary, including drilling, testing and appraisal (Phase 2), in view of the predicted noise levels set out within the submitted NIA, Officers consider that a lower daytime and evening noise limit of 48 dB LAeq, 30 minutes would be more appropriate compared to that suggested by the EHO, and are confident that such a lower limit could be imposed without placing an unreasonable burden on the mineral operator. The applicant has confirmed that these proposed noise limits are acceptable.
457. Officers consider that it is unnecessary to impose a noise condition limiting the duration of noise from Drilling, Testing and Appraisal. This is because as the estimated duration of activities contained in the application represents a worst case scenario, such a condition would be unlikely to serve any beneficial purpose. For example, although the application proposes a combined period of 24 weeks for the drilling of both the well and the side-track well, the applicant has subsequently advised Officers that this very much represents a worst case and would be unlikely to occur. To demonstrate this, the applicant has referred Officers to a similar scenario at Horse Hill, Horley where it only took a total of 9 weeks to drill two wells. However, the actual duration of drilling activities at the application site will depend upon the characteristics of the underlying geology. Officers accept that it would be sensible to impose conditions requiring the submission of a Noise Mitigation Strategy and a Noise Monitoring Plan prior to the commencement of the development. This is given that the NIA advises that the noise impact from flaring can be quite variable. However, Officers believe that complaints handling and the provision of a point of contact can be addressed more appropriately through the inclusion of an informative.
458. As the impact on the nearest sensitive receptors has been assessed as being acceptable in terms of noise and based on a worst case scenario, any impacts on other GRT sites and sensitive uses at Dunsfold Park which are located further away from the well site compound would be lower and therefore satisfactory in planning terms. The applicant has advised that in the event that the woodland is clear-felled, they would place benign and static site cabins, storage and service facilities (i.e. non-operational plant) along the north-west and north-east boundary to act as an additional acoustic and visual barrier to ensure that the effects on Thatched House Farm are made acceptable. In relation to British Standard 4142:2014: Methods for rating and assessing industrial and commercial sound, paragraph 3.11 of the Surrey Noise Guidelines 2020 advises that the criteria is only appropriate to assess the noise impacts for sites that do not include mineral extraction. However, the proposed development would need to extract gas and/or oil to enable testing to take place.
459. Part 4.3 of the applicant's submitted Screening Request records that activities with the potential to cause significant noise and vibration effects are limited to construction (phase 1) and drilling, testing and appraisal works (phase 2). Vibration will be contained within the well site surface layers during construction enabling rapid dissipation. During drilling, vibration arising from a drill bit as it travels through the near-surface geology can occasionally be detected on the drill floor (transmission up the drill string) but none of this will pass through the ground beyond the confines of the well site. Accordingly, the effects of vibration are not expected to give rise to significant adverse impacts.
460. The submitted Planning Statement states at Appendix 4 that it is considered that no adverse effects as a result of vibration would result from the above activities and,

therefore, this element has not been assessed further. Consequently the applicant has found no evidence to indicate any adverse environmental effects derived from vibration.

461. Paragraph 3.27 of the Surrey Noise Guidelines 2020 advise that off-site vibration effects associated with onshore oil and gas developments are expected to be minimal and further consideration should only be necessary if particular sources with high vibration levels may be required as for some seismic equipment. Officers have consulted the County Historic Buildings Officer (CHBO) who notes that vibration will be limited to the drill floor. The CHBO has advised that there is no guidance to support the argument that vibration can cause damage to historic buildings in terms of their foundations although masonry arches could be affected. The CHBO therefore considers that the potential for damage to listed buildings from the airborne sound (and ground vibration) can be discounted. As a consequence, Officers do not consider that the imposition of a condition requiring vibration impacts to be monitored would be justifiable in this case.
462. It is not accepted that the GRT community would be disproportionately affected in terms of noise due to their accommodation being less well insulated. This is because the NIA is based on properties having their windows open at night in accordance with World Health Organisation (WHO) guidelines. The assumed sound insulation performance of a standard house would therefore be comparable to that of a mobile home / static caravan regardless of any perceived difference in the specification of sound insulation. Further, the NIA has appropriately attributed equal sensitivity to all residential dwellings regardless of their type.
463. The Craft Brewery at Thatched House Farm is situated to the north of the main house. It is therefore further away from the well site compound than the main house and closer to Dunsfold Road where background noise levels would be expected to be greater. As the noise impact on the main house has been found to be acceptable subject to mitigation measures, the same is therefore considered to hold true for the Craft Brewery.
464. The annual Trew Fields Cancer Festival would take place on one weekend a year and was scheduled to take place between 6pm on Friday 3 July and 7pm on Sunday 5 July 2020 until being postponed, potentially until 19th/20th September, due to the COVID 19 pandemic. It involves some guests camping out over-night in the southern part of the grounds close to the northern boundary of The Burchetts woodland. The Festival's website refers to the availability of local air 'B&Bs for those not wishing to camp although it is considered unlikely that sufficient accommodation would be available locally to accommodate all of the visitors. The timing of the Festival is mostly outside the main operational hours of the well site with the exception of between 0900 to 1300 hours on Saturdays. However, it could potentially coincide with the drilling, testing and appraisal phase, most of which comprises a 24 hour operation including Sunday and Bank Holidays. The operator may have scope to limit disturbance during this period if sufficient prior notice is provided.
465. The original planning application for the events venue at High Billingham Farm was supported by an acoustic assessment to ensure that music playing within the converted barn would not have an unacceptable noise impact on the amenity of the nearest sensitive receptors. It is therefore considered that the venue is likely to provide a high degree of noise insulation which would limit potential disturbance from outside external noise sources. The events venue is also situated close to the main house where, based on a worst case scenario, the noise impact has been demonstrated to be acceptable subject to mitigation.
466. Officers acknowledge that the proposal would have some adverse noise impacts on existing businesses within the vicinity of the site. At the same time, Officers are mindful of the significant weight attributed to the need for the proposed development which is considered to be in the national and wider public interest. Officers have liaised with the applicant with regard to these concerns. In response, the applicant has confirmed that they would be willing to have particular regard for the residents and businesses that neighbour

the site, particularly Thatched House Farm to the north and High Billingham Farm to the south. In this respect, the applicant accepts the need to liaise with neighbours to ensure the impacts of the development are minimised and maintained at acceptable levels. Officers therefore propose to include an informative to this effect and are satisfied that this is sufficient to address the concern in relation to the impact of noisy activity when outdoor events are taking place at High Billingham Farm.

467. In terms of the need to ensure that the silencing of generators is mandatory, a condition is proposed requiring that all plant and machinery is adequately maintained and silenced at all times in accordance with the manufacturer's recommendations. In relation to the request for independent monitoring, monitoring details including the methodology for undertaking noise surveys are subject to a proposed condition requiring a noise monitoring plan to be submitted and approved prior to the commencement of the development. Officers do not support a change in the hours in which the proposed noise limits for operations other than temporary would occur because these are in accordance with the Surrey Noise Guidelines and are therefore considered acceptable. Finally, although a request has been received to extend the hours when tripping is prohibited from 1900 to 0700 hours to 1800 to 0800 hours, Officers consider that the proposed condition allowing tripping between 0700 and 1900 hours is acceptable and that the request for a further restriction would inhibit drilling activity and prolong the operations.

Conclusion

468. The submitted NIA demonstrates that assuming a worst case scenario, and subject to the provision of mitigation measures, noise levels at the nearest sensitive receptors can be kept within recommended limits as set out in the nPPG and the Surrey Noise Guidelines 2020 during the day time, evening and night time. This is based on an assessment of noise levels at the six nearest sensitive receptors resulting from road traffic, access and well site construction (Phase 1) and drilling, testing and appraisal (Phase 2). Appropriate noise limits can be secured by condition. The applicant has made a commitment to submit a Noise Mitigation Strategy and a Noise Monitoring Plan for written approval prior to the commencement of the development to provide confidence that the noise limits will be met. Officers acknowledge that the proposal will result in some adverse noise impacts, including on local businesses, given the relatively low levels of background noise in the locality. However subject to the proposed mitigation measures and the imposition of conditions, Officers are satisfied that the development will be able to operate within the recommended noise limits and would not give rise to a significant adverse noise impact. For these reasons, Officers consider that the development complies with the relevant development plan requirements.

Lighting

469. NPPF paragraph 180 states that planning policies and decisions should ensure that new development is appropriate for its location taking into account the likely effects of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development. In doing so they should limit the impact of pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation.
470. The Light Pollution chapter of the nPPG states at paragraph 002 that where necessary, development proposed in the vicinity of existing activities may need to put suitable mitigation measures in place to avoid those activities having a significant adverse effect on residents or users of the proposed scheme. Paragraph 003 explains that light intrusion occurs when the light 'spills' beyond the boundary of the area being lit. For example, light spill can result in safety impacts related to the impairment or distraction of people (e.g. when driving vehicles), health impacts arising from impaired sleep, cause annoyance to people, compromise an existing dark landscape and/or adversely affect natural systems

including plants, animals, insects and aquatic life. However, these adverse effects can usually be avoided with careful lamp and luminaire selection and positioning.

471. SMP CS DPD Policy MC14 seeks to ensure that minerals development does not give rise to a significant adverse impact in terms of illumination. 'Saved' WBLP Policy D1 states that development will not be permitted where it would result in material detriment to the environment by virtue of loss of general amenity, including disturbance resulting from the emission of light and potential pollution of air land and water including that arising from light pollution. WBLP 'saved' Policy D2 seeks to ensure that proposed and existing land uses are compatible and that development which may have a materially detrimental impact on sensitive uses with regard to environmental disturbance or pollution will not be permitted.
472. The applicant has submitted a Lighting Assessment in support of the application. This is based on the drilling phase of the development in order to represent the worst case scenario. It is during this phase that the effects from lighting would be at their greatest due to: a) the 24 hour nature of operations during this phase; b) this phase would involve lighting of the tallest structure that would be present during the development; and c) the number of luminaires will be at their maximum.
473. The assessment has been informed by the carrying out of detailed pre- and post-mitigation 3D modelling of the proposed lighting scheme and calculations of pre- and post-mitigation light trespass and glare at 7 residential receptors, 'sky-glow' for the lighting installation and light spill at ecological receptors. Further, both the pre- and post-mitigation light levels at residential receptors and light spill levels at ecological receptors have been compared with national guideline levels and the adopted criteria respectively.
474. The assessment states that it has been demonstrated that the proposed development will be compliant with the Institute of Lighting Professionals (ILP) 2011 Guidance Notes for the Reduction of Obtrusive Light for Residential Receptors. Specifically, the levels of obtrusive light are compliant with the criteria as set out for ILP Environmental Zone E2 for residential receptors outside the AONB and for ILP Environmental Zone E1 for residential receptors within the AONB. It also states that it has been demonstrated that the proposed development will be compliant with the proposed ecological lighting criteria within the formed 'dark corridor'. Specifically, the levels of light spill to the 'dark corridor' are compliant with the proposed 1 lux (average) and 3 lux (maximum) criteria.
475. In order to achieve both the ILP obtrusive light criteria and the ecological light spill criteria, the assessment states that it will be necessary to implement the following mitigation measures:
 - rotate all derrick luminaires orientated in the vertical plane, such that they become orientated in the horizontal plane;
 - aim all derrick luminaires downwards and not 'inwards/outwards';
 - change the uplift angle of lighting tower luminaires to 0° generally and -2.5° for specific luminaires affecting residential receptor RES-07 (Grubbins Farm);
 - change the aim angle of specific lighting tower luminaires affecting RES-07;
 - replace the dome luminaires with LED low bay luminaires;
 - reduce the uplift angle of cabin-mounted floodlights to 30° generally and 0° for specific luminaires affecting RES-07;
 - replace the 2 x 36 W fluorescent linear luminaires with LED equivalents with a suitable downwards light distribution;
 - install 1000 x 1350 mm galvanised sheet steel hoods over all linear luminaires. Where the linear luminaire is fixed up against a vertical surface then the dimensions of the hood may be reduced down to 500 x 1350 mm; and
 - aim the luminaires associated with the floodlight tower to the north-east corner of the well site compound away from the woodland boundary i.e. rotated away from the north.

476. The Lighting Assessment has found that provided the mitigation measures as set out in this report are adopted across all work phases where applicable, then compliance with national guidelines for the control of obtrusive light will be achieved. The assessment also includes both pre- and post-mitigation lighting layout plans which includes a schedule of the luminaires used and a plan showing their location, the type of luminaire used, their height and uplift angle.
477. The County Lighting Consultant has advised that: a comprehensive report and lighting scheme have been submitted with calculations and rendered images; the lux contour lines demonstrate minimum light spillage from the designed lighting scheme; the calculations demonstrate light trespass and perceived glare to be within acceptable limits to the neighbouring Thatched House Farm; and that as the lighting calculation package cannot model the obstructive nature of the woodland, the calculations represent a worst case scenario of no screening.
478. Waverley Borough Council has raised objection due to a requirement for a more detailed assessment of the potential visual impacts of lighting to be provided including further information from a lighting engineer on the effects of different types of lighting in mitigating any effects. Further the Borough Council's Portfolio Holder for Environment and Sustainability has requested that the application be refused due to concerns over the impact of light on nearby residents and those expected to move into 1,800 new homes in Dunsfold Park. The Borough Council EHO has recommended a planning condition to control lighting and both the EHO and Natural England have advised that that the proposed mitigation measures be secured by condition.
479. Dunsfold Parish Council has objected to the development expressing concern that the impact of light on the traveller site in Stovolds Hill does not appear to have been considered. Alfold Parish Council has raised objection to the proposal stating that light pollution contravenes NPPF paragraph 180(c) in respect of visibility and intrusion into a protected landscape in an area that residents value for its dark skies. Hascombe Parish Council object to the impact of light pollution on dark skies and Cranleigh Parish Council strongly object due to the impact of light pollution.
480. Representations objecting to the proposal have raised concerns over: the significant impact of light pollution on wildlife such as bats; 24 hour working with artificial lighting and flaring of gas being contrary to the ILP sky-guide criteria for the AONB; NPPF paragraph 180 requiring the impact of light pollution from artificial light to be limited; the area benefiting from dark skies at night; and the need for taller structures such as portacabins to be placed along the northern perimeter to reduce lighting impacts on Thatched House Farm following the felling of the woodland.
481. Officers note that the County Lighting Consultant has found the submitted Lighting Assessment to be acceptable, including the impact on Thatched House Farm. This demonstrates that subject to mitigation, the impact of glare on sensitive receptors including gypsy and traveller sites can be suitably controlled. In addition, the gas flares will be shrouded preventing any impacts from light pollution. The Lighting Assessment acknowledges the requirements of Government Policy set out in NPPF paragraph 180 in relation to local amenity, intrinsically dark landscapes and nature conservation. Subject to proposed mitigation, the assessment finds the impact on residential receptors, both within and outside the AONB, and 'sky-glow' to be compliant with the relevant criteria contained in the ILP Guidance Notes. In terms of the impact of light spill on ecological receptors, the Lighting Assessment has found this to be compliant with the adopted criteria with the proposed mitigation measures in place.
482. Under the circumstances, Officers consider that it would be prudent to ensure that the proposed mitigation measures are secured by condition. Further in order to control the impact of lighting, Officers consider that an additional condition should be imposed

requiring operational lighting to be installed in accordance with the submitted Post-Mitigation Scheme of Lighting Layout Plan, all lighting required for operations and maintenance to be locally switched and manually operated on an 'as required' basis, and, luminaires over the cabin/stores doors to be controlled by 'presence detection'.

Conclusion

483. The applicant has submitted a detailed Lighting Assessment which has been found to be acceptable by the County Lighting Consultant. Subject to the imposition of conditions to secure the implementation of the proposed mitigation measures listed in the assessment, and to control the installation and use of operational lighting, Officers are satisfied that the proposal would not have a significant adverse impact in terms of light trespass or glare on residential receptors, the level of 'sky-glow' or light spill on ecological receptors. As a consequence, the proposed lighting scheme would not have a significant adverse impact and complies with the relevant development plan policies relating to illumination.

Water Environment

484. With regard to surface water management, the main principle with regard to policies on flood protection is that inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at high risk. At paragraph 163 the NPPF states that when determining planning applications, local planning authorities should ensure that flood-risk is not increased elsewhere. All sites in Flood Zone 1 over one hectare should be supported by a Flood Risk Assessment (FRA). Development should only be allowed in areas at risk of flooding where, in the light of this assessment (applying the sequential and exceptions tests as applicable), it can be demonstrated that: within the site the most vulnerable development is located in areas of lowest flood risk: the development is appropriately flood resistant and resilient; it incorporates sustainable drainage systems, unless there is clear evidence this would be inappropriate; any residual risk can be safely managed; and, safe access and escape routes are included where appropriate.
485. In terms of groundwater NPPF paragraph 170 states that planning decisions should contribute to and enhance the natural and local environment by preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by unacceptable levels of water pollution. Wherever possible, development should help to improve local environmental conditions such as water quality taking into account relevant information such as river basin management plans.
486. NPPF paragraph 183 states that the focus of planning policies and decisions should be on whether proposed development is an acceptable use of land, rather than the control of processes or emissions (where these are subject to separate pollution control regimes). Planning decisions should assume that these regimes will operate effectively.
487. SMP CS DPD Policy MC14 seeks to ensure that minerals development does not give rise to a significant adverse impact in terms of flood risk, water quality and land drainage. In relation to mitigating and adapting to the impacts of climate change, LPP1 Policy CC1 supports development that includes measures to provide appropriate flood storage capacity, address issues of flood risk and use sustainable drainage systems (SuDS) to help reduce surface water run-off. Policy CC4 of the LPP1 aims to reduce the overall and local risk of flooding by ensuring development is located, designed and laid out to ensure that it is safe; that the risk from flooding is minimised whilst not increasing the risk of flooding elsewhere; and that residual risks are safely managed. The policy requires SuDS for major developments and encourages them for smaller schemes. It also requires no increase in the volume or rate of surface water run-off leaving the site and no property or highway flooding, off-site, for up to the 1 in 100 year storm return period, including an allowance for climate change.

488. 'Saved' WBLP Policy D1 states that development will not be permitted where it would result in material detriment to the environment by virtue of loss or damage to important environmental assets such as local watercourses and potential pollution of water. To limit environmental impacts, the Policy explains that the Council may include the submission of a flood-risk / run-off assessment to determine the potential flood risk to the development, the likely effects of the development on flood risk to others, whether mitigation is necessary, and if so, whether it is likely to be effective and acceptable.

Surface Water Management

489. The well site is located in Flood Zone 1 (very low probability of flooding). As the site is greater than 1 hectare, the submission of an FRA is required. The well site will comprise two areas: a contained well pad area where the drilling and testing of the exploratory well will take place and an area for car parking and cabins/offices.
490. The well pad area will incorporate a surface water containment and drainage system with a very low permeability high density polyethylene (HDPE) liner, granular working platform and surface water drainage system. The HDPE liner forms a tertiary containment system to ensure surface water at the site can be appropriately managed and that groundwater is protected. The surface water drainage system will be designed to manage and contain surface water run-off generated on the well pad. Surface water containment at the well pad area has been designed to accommodate a 1 in 100 year storm event plus 40% for climate change. The drainage system will be subject to a maintenance plan including daily and weekly inspections of all drainage elements.
491. The well pad area will act as a closed 'hydrologically contained area' whereby rainfall will drain through the compacted stone surface of the granular working platform and run along the HDPE liner into the covered containment drain. As part of the well site design, there will be no drainage outfall from the well pad drainage system to the surrounding environment; all surface water run-off from the well pad will be collected in the containment drain and removed off-site by road tankers to an approved waste disposal/treatment facility. The operational procedure at the sealed well pad will be to keep the containment drain and platform area empty (dry). All run-off will be contained within the well pad by a 160 mm high containment kerb located around the edge of the platform and the HDPE liner system will be tied into the rear of this kerb. The surface area of the platform to the crest of the containment kerb provides a storage capacity of approximately 944 m³.
492. Within the hardstanding or 'unsealed' area of the well site (low risk of contamination), surface water will run-off to the ground adjacent to the well site given that the unsealed area is small and run-off will be low. The access track will have a crossfall in one direction so that surface run-off is directed to the adjacent ground. Surface run-off draining to the edges of the track from the surrounding farmland up-gradient will be captured by a filter trench/drain which will run along the 'high side' of the track. Run-off collected within the filter drain will be discharged via 300 mm diameter pipes to the 'low side' of the track to allow run-off to pass downstream. From these points, run-off will drain following the existing pathways; eventually reaching local watercourses.
493. The applicant has submitted a Flood Risk Assessment (FRA) in support of the application which takes account of Government policy and guidance set out in the NPPF and nPPG. The well site is situated wholly within Flood Zone 1 (less than a 1 in 1,000 year [0.1%] annual chance of flooding from rivers and the sea). The proposal is classified as 'less vulnerable' development, in accordance with paragraph 066 (Table 2: Flood risk vulnerability classification) of the nPPG Flood Risk and Coastal Change Chapter, with its activities focused on the exploration and appraisal of gas and oil with associated infrastructure and facilities. The nPPG explains that 'less vulnerable' development is appropriate within Flood Zone 1.

494. Waverley Borough Council's Strategic Flood Risk Assessment (SFRA) indicates that the site has not been impacted by flooding in the past. The application site is located on relatively high ground and does not lie in a zone of flood risk or where previous flooding has occurred from the River Wey and its tributaries. Further, the FRA explains that the EA Flood Map for Surface Water shows the site to be generally at very low risk from surface water flooding. Although there are two small depressions in the north-eastern half of the site which have a high risk of surface water flooding, the proposal will create a level working platform that will prevent surface water ponding from occurring. Consequently, the FRA finds that the risk of flooding from surface water is low and surface water run-off will be managed in accordance with the proposed drainage scheme. Water collected in the lined well pad area will be removed from the site by tanker to an approved disposal facility.
495. The FRA also finds that there is no risk of tidal flooding, the overall risk from pluvial flooding to and from the site as well as flooding from public sewers and roads is low, the existing risk of groundwater flooding is very low, there is no risk of flooding from artificial water bodies, the risk of flooding from well site activity is mitigated by the storage available in the containment drain on the well site and the risk of flooding post-restoration is the same as that pre-development.

Groundwater

496. The applicant has submitted a Hydrogeological Risk Assessment (HRA) in support of the application. This identifies a number of hazards including: flushing of contaminated soils during construction and restoration works; spillage of fuels and lubricants used by plant and equipment; creation of vertical pathways during construction of well cellars, ratholes² and mouseholes³, groundwater monitoring boreholes and underground storage tanks; loss of drilling muds, additives, cement grout and well treatment fluids during drilling and workover operations, spillage / leakage of recovered hydrocarbons, produced water containing Naturally Occurring Radioactive Materials (NORM), chemicals stored at or transported to/from the site; migration of natural gases, hydrocarbons and produced water containing NORM from deep formations; well casing failure and leakage of well treatment fluids, natural gases and hydrocarbons produced containing NORM water from the wellbore; and spillage / leakage of foul water and sewage from staff facilities.
497. The assessment identifies a number of receptors that have the potential to be impacted on from these hazards including drainage channels to the north of the site, streams to the east of the site, secondary aquifers, potential local unregistered private water supplies and Jurassic strata containing formation water with no resource value. Source Pathway Receptor (SPR) linkages have been assessed with potential pollutant linkages being shown to exist with all of these receptors. Where pathways are not considered to exist, these have been justified in the HRA.
498. The HRA includes a risk assessment based on each of the identified hazards. This considers the significance of a hazard occurring, based on receptor sensitivity and magnitude of impact. The likelihood of a hazard occurring has been assigned taking account of the embedded mitigation within the proposal. Each phase of the development incorporates specific mitigation features designed to either break the pathway between potential sources of pollution and receptors and/or reduce the likelihood of occurrence of hazards occurring. Mitigation measures will be prescribed through the environmental permitting process and the effectiveness of the mitigation will be demonstrated through a scheme of groundwater and surface water monitoring that will be agreed with the EA as part of that process.

² A hole in the rig floor.

³ A mousehole is a hole 7-10cm in diameter located near the rotary table on the V door side of the drill floor. It stored a vertical joint of drill pipe until needed.

499. The results of the risk assessment are summarised in Table 8 of the HRA. The results find that all the risks reduce to low, very low or none and that risks can be further reduced to very low or none through the application of 26 additional mitigation measures set out in Table 7 of the HRA. Further, all of the water bearing formations beneath the site are considered to be at low risk. These findings reflect the high level of embedded mitigation that is incorporated into the design of the well site and the construction and management of the wells.
500. The applicant has also submitted a Groundwater Risk Assessment for Thatched House Farm. This assesses the risk posed to a water well situated around 325 metres to the north of the centre of the well site compound. The water well is currently used for the irrigation of garden produce and livestock watering at the farm. A qualitative risk analysis undertaken by the applicant shows that all risks to the private water supply at Thatched House Farm from the proposed development are very low or none when the embedded mitigation in the site design and operation is considered. Further the applicant states that additional mitigation measures presented in Table 2 of the report will be considered to reduce the risks to the lowest possible level.
501. The EA have reviewed the application with respect to the risk to controlled waters (surface and groundwater) and have raised no objection subject to the imposition of a condition requiring a scheme to dispose of surface water and trade effluent to be submitted for approval prior to the commencement of the development. The EA have advised that the site is located on weald clay formation which is primarily designated as unproductive strata. This formation contains bands of more permeable sandstone which are classed as secondary A aquifer. Though not of strategic significance, they may support base flow in local watercourses or be utilised for small scale abstraction.
502. The EA agree with the identification of the head waters which eventually flow into the River Wey as being at potentially the highest risk with respect to shallow controlled waters. They advise that these would need sufficient protection with respect to surface water management. Nevertheless the EA accept that no principal aquifers, widespread secondary aquifers or source protection zones are present. They add that environmental permits will be required involving additional assessments of the risks to controlled waters (including deep underground waterbodies) and the detailed design of issues.
503. In relation to the submitted HRA, the EA have made a number of observations which will require resolution at the environmental permitting stage. This will require the provision of further evidence, assessment work, design details and clarification in order to address the detailed points outlined in their response.
504. In terms of the submitted Groundwater Risk Assessment for Thatched House Farm, the EA has advised that they are satisfied that sufficient information has been provided to confirm that there are no inherently unacceptable risks. They also state that any residual risks to local abstractions will be controlled through the Environmental Permit.
505. The County Geotechnical Consultant (CGC) has provided detailed advice in respect of: (i) environmental protection and pollution control with regard to liner inspection; (ii) groundwater protection in relation to additives used during the workover operations, private water supplies, shallow aquifers and groundwater monitoring wells; and, (iii) flood risk and drainage in terms of the access track, the non-sealed hardstanding area (for parking etc.) and the sealed drilling platform. The advice includes the imposition of a number of suggested planning conditions. The advice provided by the CGC has been shared with both the EA and the Lead Local Flood Authority (LLFA). The EA has confirmed that most of the issues raised by the CGC will be addressed as part of the environmental permitting process. These include the issues raised by the CGC in respect of liner inspection and all matters raised in relation to groundwater protection.

506. As a consequence, the CGC considers that the HFRA provides an objective and balanced assessment of the risk to groundwater / hydrogeology, and if the mitigation measures are adopted as described, then any residual risk should be negligible, or at an acceptably low level. Therefore, in line with government policy contained in the NPPF, Officers are satisfied that there is no need to duplicate those matters covered by other regulators, such as the EA in this case, as part of the planning process.
507. The Lead Local Flood Authority (LLFA) has reviewed the surface water drainage strategy and assessed it against the requirements of the NPPF, its accompanying nPPG and the Non-Statutory Technical Standards for sustainable drainage systems (SuDS). They are satisfied that the proposed drainage scheme meets the requirements set out within these documents and are content with the development proposed subject to the imposition of two planning conditions to ensure that the SuDS Scheme is properly implemented and maintained throughout the lifetime of the development.
508. These two conditions would require the submission of details of the design of a surface water drainage scheme prior to the commencement of the development and the submission of a verification report prior to the commencement of drilling, testing and appraisal to ensure that the drainage system has been constructed as per the agreed scheme. Officers are satisfied that these measures can be secured by condition and note that these requirements would adequately address the condition recommended by the EA requiring the submission of a scheme to dispose of surface water and trade effluent. In terms of the CGC's advice on flood risk and drainage, the LLFA has subsequently confirmed that they would agree with the advice provided and have stated that their recommended planning conditions will pick up on the points raised. The CGC has seen the LLFA's recommended planning conditions and advised that these are suitable to cover the aspects they have advised on.
509. No views have been received from Thames Water. Waverley Borough Council has raised objection to the application due to the lack of sufficient technical information on major accidents including spillage and contamination, and hydrogeology. They have stated that consideration should be given to upgrading the drainage system outside the main compound area to an impermeable surface and that there should be more consideration of the potential impacts on shallow groundwater present and the connectivity to an identified spring 1 km from the site. They also object due to the need to consider site drainage and impacts of operations on ground water and provision for mitigation. The Borough Council's Portfolio Holder for Environment and Sustainability has requested that the application be refused due to the inadequate assessment of the impacts on hydrology including the disposal of waste water and potential run-off.
510. Witley Parish Council has objected to the proposal due to concerns about the effect on local water courses. The Hascombe Estate has raised objection to the proposal stating that the design for safe surface water drainage is inadequate and recommend a planning condition to provide adequate water protocols in the event that planning permission is granted.
511. A large number of representations have been received objecting to the development due to concerns over the impact on the water environment. These relate to: the need to address the risk to surrounding aquifers and private water supplies at Thatched House Farm; the impact on the well at Thatched House Farm used for animal drinking water, irrigation of vegetables, and suitable for human consumption if filtered; the impact on a borehole in the process of being sunk to provide water for the craft brewery business at Thatched House Farm; challenges to the assertions made in the Groundwater Risk Assessment for Thatched House Farm; the pollution caused to the water table and aquifers; the impact of boreholes on the environment; the proposal being contrary to EA guidance on the protection of groundwater; contamination caused by rupturing of borehole casing and grout seals; run-off will not be contained during extreme weather; toxic run-off into local water table; the contamination of a source protect zone; the need for a condition

for adequate water management; deficiencies in the Hydrogeological and Flood Risk Assessment; concern over the ability of the mains water supply to cope and the disposal of contaminated water; need for more information on volume of water required, how it will be sourced and where contaminated water will be managed; and the proposed design not being able to cater for this being a zero-discharge site as outflow is too low. Further, a request has been received for a condition requiring the independent monitoring of water contamination to take place to provide peace of mind to those residents in the immediate vicinity.

512. The applicant has submitted a detailed Hydrogeological and Flood Risk Assessment in support of the proposal. The FRA reflects national planning policy and guidance contained in the NPPF and nPPG and finds that the risks from the various types of flooding are either low, very low, none, will be mitigated or are capable of being managed. The HRA identifies a number of potential hazards and receptors that have the potential to be impacted by pollution and contamination. Each potential hazard has been separately risk assessed taking embedded mitigation into account and the risks have been found to be low, very low or none. The FRA and HRA have been independently assessed by the EA, the LLFA and the CGC and found to be acceptable subject to the imposition of conditions. In addition, further mitigation measures will be prescribed through the environmental permitting process and the effectiveness of the mitigation will be demonstrated through a scheme of groundwater and surface water monitoring to be agreed with the EA. In relation to the request for independent monitoring of water contamination, this would fall within the remit of the EA and government guidance advises against the duplication of processes covered by other regulatory regimes.
513. A representation has been received supported by a Hydrogeological Report prepared by Graham Warren which contests the acceptability of the application in respect of the impact on the water environment. The report, and fault line diagram contained within it, casts doubt on the environmental impact of the proposed drilling operation which is a cause of considerable concern to residents of surrounding properties given the 'potentially disastrous and irreversible implications'. The report has been shared with the EA. They have advised that the report relates to shale gas exploration by fracturing under high pressure rather than conventional exploration as is being proposed by the applicant. The report is also focused on the risk to principal aquifers such as the chalk, and greensand that in many cases will overly the Weald Clay. However, the EA confirms that these aquifers are not present at Loxley, or anywhere in the vicinity. As such, the EA concludes that the report does not really have any bearing on this application.
514. The same representation raises concern over the impact on groundwater and water returning to the surface possibly including excessive levels of naturally occurring radioactive material (NORM). The EA has advised that Section 4.1.4 of the applicant's submitted Waste Management Plan refers to an exclusion that can be applied for the use of a dilute acid wash at depth within a borehole to remove small quantities of debris. The EA has stated that this is quite a common practice after a borehole has been drilled and that the operator may seek to do this at depth in the borehole. As a result, nothing will be discharged to the environment at the surface. Further, Section 4.1.5 refers to water returned to the surface from the deep aquifers, which may contain elevated chemicals and NORMS. The EA has explained that this water, as with other water returned to the surface, will be tankered away and will not be discharged to the local environment. As a consequence the EA has confirmed that this does not affect their response to the application.
515. The representation also raises concern that the HRA demonstrates that the land slopes towards the north, draining into the Burchett's woodland and towards Thatched House Farm, thus subjecting the existing and future wells, existing ponds and future borehole to the threat of contamination. The EA has responded saying that they recognise that surface water will drain toward the north and that water from site operations will be tankered away rather than disposed to the local environment. The EA has stated that they are seeking

robust reassurances from the applicant regarding any pollution controls, and safeguards to demonstrate adherence to these controls and have again clarified that this does not affect their overall response.

516. The EA has also advised that monitoring of shallow groundwater is likely to be required as part of the environmental permit to verify that there will be no impact to any nearby surface sandstone bands present beneath the site. The details and design of the monitoring will be set out and agreed through the environmental permit. Monitoring points would need to be located and designed to capture any potential plausible groundwater receptors. If any impact to groundwater was noted, appropriate action would be required through controls on the environmental permit to ensure that any potential receptors were protected. Any additional details of site design, operations, controls and safeguards will also be required in association with the environmental permit application.
517. In relation to a further representation received supported by a 'second' Hydrogeological Report to challenge the findings of the applicant's submitted Groundwater Risk Assessment for Thatched House Farm, the EA has reviewed the information provided and confirmed that this does not alter their position on the planning application. They add that it is important to note that the presence of a groundwater body, which has associated utilisation, will not automatically preclude an oil and gas development. However, they would need to be satisfied that sufficient safeguards were in place to manage any risks and this will be addressed through the environmental permitting process.

Conclusion

518. The submitted FRA and HRA has found the application to be acceptable concluding that the impacts on surface water management and groundwater are low, very low or none, will be mitigated or are capable of being managed. The EA, LLFA and CGC have assessed the reports and found the impacts to be acceptable in planning terms subject to the imposition of conditions for the protection of groundwater and surface water. The EA has also confirmed that additional measures to safeguard the water environment will be included as part of the environmental permitting process. Officers consider that subject to the imposition of conditions, the impacts on the water environment are satisfactory and will not result in a significant adverse impact and accord with the relevant development plan policies in this respect.

Geotechnical Issues

519. NPPF paragraph 170 states that planning decisions should contribute to and enhance the natural and local environment by protecting and enhancing soils and preventing new and existing development from contributing to, being put at unacceptable risk from, or being adversely affected by unacceptable levels of soil pollution or land instability. Paragraph 178 requires planning policies and decisions to ensure that: (a) a site is suitable for its proposed use taking account of ground conditions and any risks arising from land instability and contamination. This includes risks arising from natural hazards or former activities such as mining, and any proposals for mitigation including land remediation (as well as potential impacts on the natural environment arising from that remediation); (b) after remediation, as a minimum, land should not be capable of being determined as contaminated land under Part IIA of the Environmental Protection Act 1990; and, (c) adequate site investigation information, prepared by a competent person is available to inform these assessments. NPPF paragraph 179 states that where a site is affected by contamination or land stability issues, responsibility for securing a safe development rests with the developer and/or landowner.
520. SMP CS DPD Policy MC14 seeks to ensure that minerals development does not give rise to a significant adverse impact in terms of the use, quality and integrity of land and soil resources and land stability. 'Saved' WBLP Policy D1 states that development will not be permitted where it would result in material detriment to the environment by virtue of

potential pollution of air, land or water, including that arising from the storage and use of hazardous substances. 'Saved' Policy RD9 of the WBLP states that development will not be permitted on all grades of agricultural land which would result in the fragmentation of agricultural or horticultural holdings so as to seriously undermine the economic viability of the remaining holding.

521. The applicant has submitted a Civil Engineering Design Statement in support of the development. This includes a Geotechnical Site Investigation Report which has assessed ground conditions (topsoil), groundwater, the chemical testing of soils and the geochemical testing of soils. In relation to civil engineering, the design philosophy adopted seeks to avoid adverse impacts where practicable, maximise economic benefits and minimise residual harm.
522. The design and construction make-up of the well site platform takes into account the anticipated traffic / vehicle loads and well site equipment loads proposed by the applicant. The platform design includes both the platform and hardstanding areas where the drilling rig / equipment and cabin equipment / car parking / site access is located as well as the access track to the wellsite. The well site area itself includes a 'sealed' area where the drilling rig and equipment is located and an 'unsealed' hardstanding area where the cabin equipment, car parking and site access is located.
523. The width of the access track is 4.1 metres wide with widened corners and 3 passing bays. The first is near the north-western end with the other 2 near the bends along the length of the track. For all of the proposed access track and platform construction, if any archaeological works are undertaken, all backfilling to trenching works will be suitably compacted. Ongoing vehicle loads on either the access track or platform shall be distributed over a larger area thus reducing any impacts on potential archaeological findings.
524. The liner system shall be installed fully in accordance with the guidelines contained in the EA document LFE4 - Earthworks in Landfill Engineering and specifically Chapter 6 - Construction Quality Assurance (CQA). The largest differences from general civil engineering practice in this document is that a more rigorous independent verification scheme known as Construction Quality Assurance (CQA) has to be used. This is required for aspects of construction for which failure could cause a significant increase in environmental risk. The lining system must be robust and will be constructed to the highest engineering standards to provide short, medium and long term environmental protection.
525. The County Geotechnical Consultant (CGC) has provided detailed advice in respect of: (i) environmental protection and pollution control with regard to the containment membrane, pre- and post-development geochemical testing and liner inspection; (ii) groundwater protection; (iii) flood risk and drainage; (iv) land stability in relation to the earthwork slopes and foundation and platform stability; (v) soil resources; (vi) waste management; and, (vii) construction quality assurance (CQA). The advice recommends the imposition of a number of planning conditions. Issues concerning the advice relating to liner inspection, groundwater protection and flood risk and drainage are addressed in the above section on the Water Environment.
526. In terms of the containment membrane, the CGC has advised that about $\frac{1}{6}$ th of the area of the drilling compound is not lined with the impermeable containment system and that this is satisfactory provided the unlined area is only use for car parking and cabins as shown on submitted drawing ref: ZG-UKOG-L1-PA-08 Rev 1 dated December 2019. The CGC has recommended the imposition of a planning condition to ensure that there is no HGV parking, storage of consumables, fuel, process chemicals and no mechanical or electrical plant is located within this area. The EA has advised that they agree and support this position. Officers are satisfied that this can be addressed through the imposition of a suitably worded planning condition.

527. The CGC has advised that the submitted Civil Engineering Design Statement (Appendix 1) contains the results of ground investigation and geochemical soil testing with the aim of establishing the pre-development geochemical baseline against which any post-development pollution may be assessed and dealt with before restoration of the site. The CGC has identified a number of limitations with the work undertaken to establish the baseline and has advised that this should be addressed by a suitably worded planning condition similar to those imposed on other similar permissions for hydrocarbon well sites elsewhere in the county. The EA has advised that this recommendation is reasonable. Officers are satisfied that this can be addressed through the imposition of conditions requiring the submission to the CPA for written approval of a Pre-development Baseline Geochemical Testing Report prior to the commencement of the development, and a Post-development Geochemical Inspection and Testing Report, prior to the commencement of restoration works. Should any soil contamination be identified at the decommissioning stage, the Post-development Geochemical Inspection and Testing Report would require a plan to be submitted setting out how this would be remediated.
528. In relation to land stability and the new cut and fill earthwork slopes to be created to provide a level working platform, the CGC has advised that there has been no consideration of the stability of such slopes. Instability could affect the integrity of the impermeable membrane liner and give rise to a health and safety hazard. The CGC has therefore recommended the imposition of a condition requiring the submission of a Stability Assessment Report (SAR), prior to the application being determined, which should also address the stability of the restored landform after restoration. For the earth fill slopes, the CGC has advised that the applicant will need to consider the compaction properties and earthworks specification for the new fill to enable the characteristic values of geotechnical parameters to be derived and to enable slope design and assessment to be undertaken. Consideration will also need to be given to the characteristic value of groundwater level used in the analysis.
529. With regard to foundation and platform stability, the CGC has advised that the applicant has not considered the occasional fully saturated condition of the granular sub-base of the working platform, settlement, or that the compound will be constructed partly on natural undisturbed ground and partly on fill. In relation to the saturation of the sub-base and the effect on stability, whilst the applicant has stated that the integrity of the Type 1 granular sub-base material used to create load bearing surfaces is not compromised during periods of saturation, the CGC has stated that no justification or analysis has been provided to support this. The CGC therefore considers that a further geotechnical submission on Platform and Foundation Stability is required, including the effect of saturation of the sub-base, settlement, and the platform being part constructed on undisturbed ground and part constructed on new fill, and that this could be addressed through a suitably worded pre-commencement condition.
530. Officers have reviewed the advice provided by the CGC and consider that the requirements for both a SAR and additional technical information on foundation and platform stability should form part of a Construction Environment Management Plan (CEMP). Officers are satisfied that this can be secured by the imposition of a condition requiring the submission of a CEMP to the CPA for written approval prior to the commencement of the development.
531. In relation to soil resources, the CGC has advised that their management and protection is necessary to ensure that the soils that will be stripped and ultimately replaced are not harmed by inappropriate methods of excavation, transportation, temporary storage, or replacement during restoration. The basic soil structure, organic content and drainage properties etc. of the various topsoil and subsoil types present should be conserved without detriment or mixing. The CGC has pointed out that the assessment of topsoils and subsoils during the ground investigations was not undertaken by a soil scientist or agronomist qualified and capable of providing an appropriate assessment. To address this, the CGC has recommended the imposition of a pre-commencement condition

requiring a Soil Conservation and Management Plan (SCMP) to be submitted to the CPA for written approval to ensure that an appropriate level of investigation and assessment of the site soil is undertaken and that the objectives of safeguarding the soil resources are met. Officers consider that the requirement for a SCMP should form part of the CEMP to be secured by a pre-commencement condition.

532. The CGC has advised that environmental protection and land stability for the duration of operations rely on construction of the engineered components of the works such as the bunding, the containment membrane, the drainage system, the groundwater monitoring wells, and the cut and fill earthworks etc. Whilst design can be reviewed and checked in advance, the CGC states that it is essential that an appropriate level of diligence and workmanship is adopted during construction so it can be demonstrated that the works have been built as designed. The CGC has therefore recommended a planning condition requiring the submission of a detailed CQA Plan to the CPA for written approval prior to the commencement of the development. This should make provision for the inspection and verification of the works in accordance with the approved CQA Plan during construction and require the submission of a CQA Verification Report on completion for written approval by the CPA.
533. Officers consider that this can be addressed by including a requirement for both a CQA Plan and a Construction Quality Monitoring Plan to be submitted as part of the CEMP to be secured by planning condition and the imposition of a condition requiring the submission of a CEMP Verification Report for written approval prior to the commencement of drilling, testing and appraisal. This should include a requirement for the applicant to provide details that demonstrate compliance with the CEMP and justification for any changes.
534. The applicant has submitted a Waste Management Assessment. This sets out that the applicant will aim to prevent waste streams where possible by ensuring that products are calculated and not over ordered, re-used and recycled where practical. It outlines how each waste stream, including all forms of waste water and natural gas, will be managed for the proposed development in line with the Waste Hierarchy as described in the Waste Framework Directive. The assessment states that the well site and the proposed development have been designed so as to ensure that in the event of a spillage, it would be contained and prevent the contamination of the neighbouring environmental receptors. Further, the management techniques adopted by the applicant during the proposed operations will ensure that the likelihood of a spillage or incident is 'low' and that any incident which did occur would be minimal due to the mitigation measures which will be engaged during the lifetime of the development.
535. The Assessment also sets out that in the event that a spillage on-site occurs, it would be contained within the well site and remediated as soon as practicable. During the well site restoration, it is reasonable to assume that small amounts of waste, such as stone aggregate, cement and the HDPE liner will become contaminated. In the event this is the case, contaminated waste will be segregated from uncontaminated waste and will be subject to separate transportation and treatment at a permitted waste facility. In some instances, it may not be possible to treat or recycle contaminated waste and therefore it would be disposed of at a hazardous landfill site, however the quantities involved would be negligible.
536. The CGC has reviewed the submitted Waste Management Assessment and advised that the application to the EA for an environmental permit will include a Waste Management Plan. The CGC states that this plan should prevent pollution of the ground and the natural environment from any of the wastes generated by the proposed development.
537. The County Restoration and Enhancement Team has advised that they are satisfied that the protection of the soil resource and the identification of the soils available for restoration can be covered by a SCMP as recommended by the CGC and to be secured by condition.

They also concur with the CGC's advice on the issue of geochemical soil testing. In relation to land contamination, the Borough Council's EHO has advised that the environmental permit from the EA should adequately control any potential emissions to land and appropriate remediation if needed.

538. Waverley Borough Council has raised objection due to the need for further details to be provided on how contamination and spillage on site will be dealt with. The Borough Council's Portfolio Holder for Environment and Sustainability has requested that the application be refused due to the inadequate assessment of the impacts on the disposal of waste water. The Hascombe Estate has raised objection due to the risks of pollution and the escape of gas and has requested a condition for adequate waste and chemical protocols if planning permission is granted.
539. A large number of representations have been received raising objection due to concerns in relation to pollution and contamination. These comprise: the need for more information on where contaminated water will be managed and the impact of its disposal; the direct impact on the local environment; contamination caused by the rupturing of borehole casing and grout seals; the unknown impact of strong chemicals from 'acid fracturing'; concern over deficiencies in the Waste Management Assessment; and that the use of new completion fluids suggest that a substance stronger than vinegar will be used.
540. In terms of the risks of contamination and pollution, as set out in the above section on the Water Environment, the submitted FRA and HRA have been assessed by the EA, LLFA and CGC and found to be acceptable in planning terms subject to the imposition of conditions. In particular, the HRA has assessed the impacts from: the spilling / leakage of fuels, lubricants, well treatment fluids, recovered hydrocarbons, foul water and sewage; the use of additives, cement grout and well treatment fluids; chemicals stored at or transported to / from the site; the migration of natural gases; and well casing failure.
541. The submitted Waste Management Assessment produced in April 2019 confirms that the applicant is currently preparing an environmental permit application to the EA for the management of extractive waste at the Loxley Well Site. Officers understand that this application was submitted in December 2019. The Waste Management Assessment states that the EA will assess the permit application put forward by the applicant, which will include a revised Waste Management Plan, to ensure that the techniques for the management of extractive waste are suitable.
542. The Waste Management Assessment addresses the management of natural gas and the disposal of waste water. It explains that as the characteristics of the gas are relatively unknown, the utilisation of the gas cannot be considered at this stage. As a consequence, in the event that natural gas is flowed from the well, it will be diverted via pipework to a flare where it will be combusted in accordance with the requirements of the applicant's environmental permit.
543. The assessment also sets out that surface run-off and foul effluent, which is to be stored in a sealed waste water tank, will be tankered off-site for subsequent treatment and / or disposal at an EA permitted waste water treatment works and the discharge of water will be regulated by the EA under the EPR 2016. Further, the EA has confirmed that water returned to the surface from the deep aquifers, which may contain elevated chemicals and NORMS, as with other waters returned to the surface, will be tankered away and will not be discharged to the local environment. As explained above, the CGC has reviewed the assessment, and is satisfied that is adequate to prevent pollution from any generated waste.
544. The oil and gas industry is heavily regulated in order to maintain health and safety and minimise any risk of environmental pollution. Paragraph 112 of the Minerals Chapter of the nPPG states that a number of issues exist which are covered by other regulatory regimes

and MPAs should assume that these regimes will operate effectively. In particular, this explains that:

- the HSE are responsible for enforcement of legislation concerning well design and construction. Before design and construction, operators must assess and take account of the geological strata, and fluids within them, as well as any hazards that the strata may contain;
- under health and safety legislation the integrity of the well is subject to examination by independent qualified experts throughout its operation, from design through construction and until final plugging at the end of operation;
- the actual operation of the site's surface equipment on the well pad should not be of concern to MPAs as these are controlled by the EA and the HSE;
- the EA is responsible for ensuring that extractive wastes do not harm human health and the environment. An environmental permit is required for phases of hydrocarbon extraction and this will require the operator to produce and implement a waste management plan;
- the flaring or venting of any gas produced as part of the exploratory phase will be subject to Department of Energy and Climate Change (DECC) controls and will be regulated by the EA. (NB: In July 2016, DECC became part of the Government Department for Business, Energy and Industrial Strategy (BEIS); and,
- following exploration, the well is likely to be suspended and decommissioned / abandoned for a period of time. Health and Safety legislation requires its design and construction to ensure that, so far as reasonably practicable, there is no unplanned escape of fluids from it.

545. nPPG paragraph 112 also provides guidance on the role of other regulators in relation to the use of chemicals on site and the management of water that comes back to the surface, albeit this advice is in respect of hydraulic fracturing. However, Officers understand that the guidance equally applies to conventional on-shore oil and gas exploration and appraisal in respect of the need to inform the EA of all chemicals that may be used (based on information set out in an 'Acidisation' Factsheet published by the EA in January 2018), and the EA responsibility to ensure the final treatment / disposal of water returning to the surface at suitable treatment facilities (based on the requirements of the EPR 2016).

Conclusion

546. In view of the above considerations, Officers are satisfied that subject to the imposition of a number of planning conditions, the applicant has demonstrated that the proposal would not give rise to a significant adverse impact in terms of the use, quality and integrity of land and soil resources and land stability. The application is therefore considered to be in accordance with the development plan in this respect.

Ecology and Biodiversity

547. NPPF paragraph 170 states that planning decisions should contribute to and enhance the natural and local environment by: protecting and enhancing sites of biodiversity value in a manner commensurate with their statutory status or identified quality in the development plan; recognising the wider benefits from natural capital and ecosystem services - including trees and woodland; and, minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures.
548. Paragraph 175 of the NPPF states that when determining planning applications, local planning authorities should apply the following principles:
- a) if significant harm to biodiversity 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;

- b) development on land within or outside a Site of Special Scientific Interest (SSSI), and which is likely to have an adverse effect on it (either individually or in combination with other developments), should not normally be permitted;
- c) development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and ancient or veteran trees) should be refused, unless there are wholly exceptional reasons and a suitable compensation strategy exists; and
- d) development whose primary objective is to conserve or enhance biodiversity should be supported; while opportunities to incorporate biodiversity improvements in and around developments should be encouraged, especially where this can secure measurable net gains for biodiversity.

549. Paragraph 176 of the NPPF sets out that the following should be given the same protection as habitats sites:

- a) potential Special Protection Areas and possible Special Areas of Conservation;
- b) listed or proposed Ramsar sites; and
- c) sites identified, or required, as compensatory measures for adverse effects on habitats sites, potential Special Protection Areas, possible Special Areas of Conservation, and listed or proposed Ramsar sites.

550. Paragraph 176 adds that the presumption in favour of sustainable development does not apply where the plan or project is likely to have a significant effect on a habitats site (either alone or in combination with other plans or projects), unless an appropriate assessment has concluded that the plan or project will not adversely affect the integrity of the habitats site.

551. Species conservation protection is provided for in legislation both at the European and national level and there are various levels of protection afforded to a range of species. The presence of a protected species is a material consideration in determining planning applications. The Habitats Directive is transposed into national law in England by means of the Conservation of Habitats and Species Regulations 2010 (as amended) and the Wildlife and Countryside Act 1981 (as amended) that implements the Birds Directive (1979) and the Bern Convention (1979). Under the Act, the law protects all wild birds, their nests and eggs, with some rare species afforded special protection. Although originally protection was developed to prevent egg stealing and cruelty to wild birds, its modern interpretation also relates to the activities of land managers and developers.

552. SMP CS DPD Policy MC14 seeks to ensure that minerals development does not give rise to a significant adverse impact in terms of biodiversity interests. In relation to mitigating and adapting to the impacts of climate change, LPP1 Policy CC1 supports development that includes measures that use green infrastructure to support habitat networks. Policy NE1 of the LPP1 seeks to conserve and enhance biodiversity by permitting development that retains, protects and enhances features of biodiversity interest and ensures any adverse impacts are avoided, or if unavoidable, are appropriately mitigated. LPP1 Policy NE2 states that new development should make a positive contribution to biodiversity by creating or reinforcing habitat linkages between designated sites to achieve a connected ecological network of wildlife corridors and green infrastructure. The policy also aims to maintain and enhance existing trees, woodland and hedgerows where appropriate. 'Saved' WBLP Policy D1 states that development will not be permitted where it would result in material detriment to the environment by virtue of loss or damage to important environmental assets, such as areas of ecological value.

553. 'Saved' WBLP Policy D7 aims to ensure that: development proposals on sites which contain, or are close to, important trees, groups of trees or hedgerows provide for their long-term retention; proposals resulting in a loss of such assets are not permitted; trees or hedgerows to be retained are adequately protected during construction; adequate separation between important trees or hedgerows and the proposed development is provided; and new trees and other vegetation are planted where appropriate. WBLP 'saved' Policy C7 seeks to ensure that the extent of tree cover in the Borough is maintained and in particular resist the loss or seek to replace trees woodlands and hedgerows in areas which contain features that are characteristic or make a significant contribution to the appearance of the landscape. Where there are hedgerows on a development site, the Policy states that opportunities for improving the hedgerows through landscape management will be sought.
554. The application is supported by a number of ecological reports submitted by the applicant. The Preliminary Ecological Appraisal (PEA) identified protected species that may be present in the locality including great crested newt, reptiles, breeding birds, bats, hazel dormouse, water vole and badger. The PEA recommended that with the exception of breeding birds and their habitats, on which the impacts of the development were likely to be limited, these species should be subject to further survey. Survey reports covering each of these species have been submitted separately in support of the application and used to inform an Ecological Impact Assessment undertaken by the applicant.
555. The Ecological Impact Assessment finds that the development would have no significant effects on two statutory designated sites within approximately 10 km of the proposal: Thursley, Hankley and Frensham Commons SPA and Thursley, Ash, Pirbright and Chobham SAC. The assessment also concludes that there would be no significant adverse effects on the nearby locally designated SNCIs.
556. The proposal will result in the loss of approximately 1.8 ha of arable farmland to construct the well site compound and two sections of hedgerow for the construction of an access track to the well site. Provision of the access track will require the removal of up to 10 metres of internal field boundary hedgerow. The construction of the new junction and the provision of clear lines of vehicular visibility will require up to 55 metres of hedgerow to be removed along with the loss of two trees from the eastern side of High Loxley Road (assessed as low value and quality by the applicant). The assessment has found that this will not result in significant effects on fauna such as breeding birds and foraging bats.
557. The well site is located to the south of, and adjacent to, an area of broad-leaved plantation woodland referred to as The Burchetts. Part of the woodland is designated as 'ancient semi-natural woodland' on the Ancient Woodland Inventory. This comprises a Plantation on Ancient Woodland Site (PAWS) where the semi-natural woodland has been replaced with a plantation.
558. The ancient woodland is included within the area of the clear-felling licence granted by the Forestry Commission to the Hascombe Estate who propose to fell the woodland block in the next few years. However, in terms of the ancient woodland component, it is the seedbed rather than the trees themselves that are protected. Further, the designated area of ancient woodland is set back around 14 metres from the southern boundary of The Burchetts and is around 24 metres north of the boundary of the proposed well site compound.
559. Embedded mitigation in the design of the well site has incorporated a 10 metre undeveloped buffer zone along the northern side of the well pad area, to protect the tree roots and to maintain the woodland edge habitat, which is used by foraging and commuting bats. The access track has been aligned to ensure that it would not compromise the root protection area of any trees and the design accounts for the tracking of the longest transport vehicle. Although artificial lighting is needed to satisfy security,

health and safety requirements during periods of darkness, lighting will also be designed to direct light onto the well pad only, and away from the woodland edge, to minimise any potential for lighting disturbance.

560. In terms of habitats in the wider survey area, the assessment has found that these support great crested newt, grass snake and common lizard (and possibly dormouse), although the risk of these species being present on the application site has been assessed as very low. As a precaution, a Great Crested Newt (GCN) and reptile Precautionary Working Method Statement (PWMS) for the construction phase will be implemented to mitigate for the low risk of killing/ injury to these species during site clearance activities. This will adopt precautionary measures for the removal of hedgerows and grassland within the footprint of the proposed development. With this mitigation in place, the assessment finds that there will be a negligible residual effect on these species.
561. To comply with the Wildlife and Countryside Act (1981) as amended, and the requirements of the PWMS for GCN and reptiles, hedgerow sections and trees / scrub to be removed will be cut to ground level outside the breeding bird season where possible prior to the commencement of works (March to August inclusive). This will prevent nests from becoming established within vegetation to be removed. Unless harvested prior to the commencement of works, the arable field sections within the footprint of the development will be topsoil stripped outside the breeding bird season. Where crops have been harvested prior to the commencement of works inside this period, no mitigation for breeding birds is required because the habitats would be unsuitable, and it is reasonable to conclude that breeding birds would not be present.
562. If the well site is to be cleared between March and August inclusive, an ecologist will be required to confirm the absence of active bird nests immediately prior to works commencing to avoid a breach of legislation. If a nest is discovered, clearance or other construction works should be stopped immediately within a species specific exclusion zone, for most birds a general 5 metre exclusion zone around the nest will suffice. The exclusion zone will be demarcated appropriately. The nest will subsequently be monitored, typically on a weekly basis, by a suitably qualified ecologist. Once it is confirmed that all fledglings have flown and ceased to return to the nest, and that no other nests are in use within the exclusion zone, the vegetation can be removed.
563. Although considered likely to be absent from the habitats to be impacted by the proposal, the precautionary hedgerow clearance methods to be adopted for GCN and reptiles will address any low residual risk that this species is present but has not been detected by the surveys. This clearance method will avoid impacts on hibernating dormouse in the winter months (when they are most vulnerable to disturbance) should the species be present in the base of the hedgerows by leaving the stumps in situ until spring.
564. Where hedgerows are to be removed outside the winter period (i.e. overlapping with the bird nesting season), pre-clearance checks of the hedgerows by a suitably qualified ecologist would also identify any dormouse nests (or suspected dormouse nests). In this case, works would be suspended and advice sought in respect of the need for a dormouse licence. However, given the short sections of hedgerow affected, it is considered unlikely that the works would meet the threshold for licensing.
565. To mitigate for the loss of 65 metres of hedgerow and 2 trees, the applicant proposes to replant a total of 130 metres of hedgerow and six individual trees over a three year period. The application is supported by an outline Landscape, Environment and Biodiversity Restoration and Enhancement Plan (LEBREP). The plan seeks to provide mitigation and deliver landscape 'net-gain'. This is intended to comply with government guidance contained in the Natural Environment chapter of the nPPG. It covers High Loxley Road, the internal field boundary between High Loxley Road and the south-west corner of the Burchetts, the northern, eastern and southern boundaries of the well site host field and the well site host field itself. The outline LEBREP includes:

- Year 1 - Initial Replacement Programme: restoring habitat, hedgerow and trees in the first planting season following the commencement of Phase 1 to avoid a net loss of natural assets in Year 1 as a result of the construction process;
 - Year 1 - Strategic Planting: new tree and hedgerow planting targeting areas identified as having low or weak hedgerow growth and scattered mature tree growth; a detailed Tree & Hedgerow Enhancement Plan will be designed to enhance growth at the existing canopy level, within new sub-canopy levels and at ground level to improve the filtration of views to and from the proposed development from all vantage points within the surrounding landscape;
 - Year 3 - Reinstatement Plan: restoring the site to its previous agricultural appearance with additional planting and habitat creation as part of a Legacy Enhancement Programme designed to deliver an environmental and biodiversity “net-gain” consistent with government guidance;
 - Year 3 - The installation of 5 bat boxes on mature trees between 3 and 5 metres above ground level in uncluttered locations over 50 metres from the well site;
 - Year 3 - The installation of 5 bird nest boxes on mature trees over 50 metres from the well site suitable for farmland birds to provide new opportunities for nesting birds;
 - Year 3 - Felled material from any mature trees / large shrubs to be removed will be retained on site as log piles to create refuges for terrestrial invertebrates, and will be stacked in loose piles in the base of hedgerows and away from the cultivated field margin; and,
 - Year 3 - The set-a-side of land together with a wild bird seed mix plantation management and maintenance strategy creating new natural habitat and restoring lost biodiversity.
566. An initial LEBREP would be submitted for approval prior to the commencement of the development. This would comprise a Year 1 Environmental Reinstatement and Enhancement Plan and a PWMS for GCN and reptiles. It would include the replacement of trees and hedgerows removed during construction works, a programme to retain and protect existing trees and hedgerows and a timed programme for the planting of new trees and hedgerows and the creation of new biodiversity habitat. A final LEBREP would be submitted within 1 year of the start of development or prior to decommissioning, whichever is the sooner. This would be designed to deliver biodiversity and wider environmental net gain making use of native species and reflecting the historic use of the site as worked agriculture land and forestry. These measures can be secured by condition.
567. The three closest European sites to the proposal comprise: (i) the Ebernoe Common Special Area of Conservation (SAC) in West Sussex (9.3 km to the south-west of the application site); (ii) the Thursley, Hankley & Frensham Commons (Wealden Heaths Phase 1) Special Protection Area (SPA) in Waverley (8.2 km to the north-west of the application site); and, (iii) the part of the Thursley, Ash, Pirbright & Chobham SAC (the Thursley, Hankley & Frensham Commons SSSI component) that is located in Waverley (8.2 km to the north-west of the application site).
568. Chiddingfold Forest SSSI lies 1.99 km to the south of the proposed well site. The nearest Sites of Nature Conservation Importance (SNCI) to the well site compound comprise Sayers Land, Jewings Hurst and Benbow Rew SNCI approximately 385 metres to the south and south-west, Benbow Rew SNCI and Furtherfits, Dunsfold Aerodrome SNCI around 560 metres to the south and 690 metres to the south-east respectively, Mill Copse SNCI 1,100 metres to the east, Dunsfold Common and Green SNCI 1,200 metres to the west and Hascombe Hill SNCI 1,650 metres to the north-west.
569. The County Ecologist has advised that the application is supported by a Preliminary Ecological Assessment and an Ecological Impact Assessment which includes sufficient ecological information to assess the impact of the application on biodiversity. The County Ecologist has also reviewed the formal responses provided by the Surrey Wildlife Trust and the Woodland Trust outlined below. Having reviewed the application, the County

Ecologist has no objection to the proposal and is satisfied that the applicant has made sufficient efforts to avoid adverse impacts on biodiversity. However, the County Ecologist recommends that in the survey season prior to decommissioning, the ecological surveys are repeated to inform the restoration and to ensure that there are no adverse impacts on habitats and species. As a consequence, a final restoration scheme can be covered by a condition requiring the scheme to take account of the prevailing ecological conditions of the time.

570. The ecological impact of the proposal on 2 SAC designations, 1 SPA designation, SSSIs and SNCIs has been assessed in detail in the Air Quality section above and found to be acceptable. In terms of the European designated sites, Officers conclude that on balance, the proposed development would not give rise to likely significant effects alone or in-combination with other development.
571. In relation to the ecological impact on SSSIs, the County Ecologist has advised that no further information is required in relation to the impact on the closest SSSI, this being Chiddingfold Forest SSSI which is considered to be in a favourable condition. Further, with regard to the two closest SNCIs at Sayers Land and Benbow Rew, the County Ecologist considers that there is sufficient information to discount an adverse impact on both SNCIs.
572. The County Ecologist raised initial concerns about the access track being in close proximity to the hedgerows and woodlands. While a 10 metre buffer is proposed, the County Ecologist advised that several trees may be adversely impacted by the trackway. Further, both the County Arboricultural Officer and the Woodland Trust have advised that the route of the access track should be adjusted to enable the route protection area (RPA) around Tree 37 ('Veteran' lapsed coppice) to be extended. Since the application was originally submitted, the applicant has amended the alignment of the access track to ensure no overlay of the RPAs for Trees 36, 37 and 38. As a consequence, the access track has been routed outside the RPAs consistent with BS: 5837:2012 - Trees in Relation to Design, Demolition and Construction.
573. Natural England has raised no objection to the proposal subject to appropriate mitigation measures being secured by condition including a final LEBREP. They have advised that landscape enhancements should be implemented at the start of the works rather than just during restoration. They also advise that net gains need to be calculated via an appropriate metric in order for them to be recorded and reported properly and that applications also need to consider the potential for contributing to in-combination effects on sites from air pollution. The County Lighting Consultant is satisfied that the submitted Lighting Assessment is comprehensive and demonstrates that the impact of light spill on ecological receptors is acceptable with the proposed mitigation measures in place. Officers propose that these mitigation measures to control lighting be secured by condition. The Environmental Assessment Team has assessed the proposal and advised that the proposal would not give rise to likely significant effects alone or in-combination with other development.
574. The Borough Council has raised objection to the development due to a lack of technical information on ecology to enable proper consideration of the application. In particular they have stated that there should be: additional dormouse, GCN and bat surveys; an assessment of potential noise impacts on roosting bats; further mitigation measures to compensate for any loss of habitat; mitigation provided up front to address the loss of hedgerows and trees; a 15 metre buffer between the site and the replanted ancient woodland; and an updated Arboricultural Impact Assessment addressing deficiencies in the current assessment in respect of a tree removal plan and the implementation of tree protection measures. The Borough Council's Portfolio Holder for Environment and Sustainability has requested that the application be refused due to the inadequate assessment of the impacts on ecology including the loss of ancient woodland and the adverse impact on wildlife such as red listed bird species (lawplings and skylarks) and other protected species (bats, badgers and reptiles).

575. The Surrey Wildlife Trust object to the proposal due to the ecological impact of the proposal on the natural environment and that biodiversity enhancements do not go far enough. The Hascombe Estate has raised objection due to the threat to ancient woodland, replanted areas, wildlife and ecology. They have requested that a 30 metres buffer be provided between the site and the woodland boundary in the event that planning permission is granted. Waverley Friends of the Earth has raised objection due to the insufficient buffer between the well site compound and the ancient woodland having a detrimental impact on biodiversity.
576. Officers have consulted the Forestry Commission's standing advice on ancient woodland and veteran trees and undertaken a self-assessment which concludes that any adverse impact is unlikely. This advice relates to: the dependency of the development's location; the area of ancient woodland affected; the loss of any ancient woodland; the connectivity of the ancient woodland to other vegetation and enhancement opportunities; the impact on ecological diversity of the woodland; impact on the root protection areas; changes to air quality and ground water from risks of pollution; the current and planned function of the woodland; whether there would be any increase in access to the ancient woodland; and the use of native species in landscaping.
577. A representation received in support of the proposal claims that the surrounding woodland is not in pristine condition with abandoned cars and bikes. A large number of representations have been received raising a number of ecological concerns. These include: the insufficient buffer between the site and the woodland which should be extended to protect woodland and habitat; NPPF paragraph 175 giving ancient woodland the highest protection; the lack of an environmental survey of The Burchetts; the landowner having fenced and trenched the well site host field which could damage several Burchetts trees; 3 years not being considered as temporary as wildlife migration and habitats are likely to permanently change; the Phase 1 habitat survey being undertaken at a sub-optimal time; the Ecological Impact Assessment excluding farmland and breeding bird surveys; the significant impact of noise and light pollution on wildlife; the impact on sheep, pigs and bees; the lack of provision for wildlife to access the environment around the proposed stock fencing; and the impact of the introduction of heavy machinery.
578. The County Ecologist has advised that the impact on sheep, pigs and bees is not considered to be significant in view of the temporary nature of the development, and the ability of pigs and sheep to adapt to changing circumstances. Cattle are often found living alongside busy main roads and motorways where they are exposed to higher concentrations of noise and air pollution and the County Ecologist has pointed out that bees seem to thrive in urban areas where pollution levels are generally higher. The County Ecologist has assessed the proposal and raised no objection subject to the imposition of a planning condition requiring a final restoration scheme to be submitted which takes into account prevailing ecological conditions at that time. Officers are satisfied that this measure can be secured by condition.
579. Officers are satisfied that the requirement for an initial LEBREP can be secured by a pre-commencement condition to bring forward the implementation of new replacement planting and that a final LEBREP can be secured by a standard condition. The initial LEBREP will compensate for any loss of vegetation in the first available growing season after the construction of the proposed development. The final LEBREP will incorporate measures for biodiversity net-gain. Officers are conscious that given the temporary nature of the proposal and the possibility that no commercially exploitable reserves of hydrocarbons will be found, any requirements for biodiversity net-gain need to be proportionate.
580. In terms of the suggested need to measure biodiversity net-gain, the County Ecologist has advised that this should be considered as part of every application, as required by paragraph 170(d) of the NPPF. Although this does not specify a number or percentage

amount for net-gain, the current assumption is 10%. Justification for requiring net-gain is also contained in Section 40 of the Natural Environment and Rural Communities Act 2006. This places a duty on all public authorities in England and Wales to have regard, in the exercise of their functions, to the purpose of conserving biodiversity. A key purpose of this duty is to embed consideration of biodiversity as an integral part of policy and decision making throughout the public sector, which should be seeking to make a significant contribution to the achievement of the commitments made by Government in its 25 Year Environment Plan.

581. The County Ecologist favours securing net-gain as part of the site restoration and has advised that the Defra metric, which relates to the extent and condition of habitats, should be used as the basis for the calculation. In this respect, the County Ecologist is satisfied that the wording of proposed condition 32 is sufficient to address this.
582. In-combination effects have been addressed above in the section on Air Quality where Officers conclude that the proposed development would not give rise to likely significant effects alone or in-combination with other development. The County Ecologist has not advised that there is a need for further surveys of protected species or further mitigation measures. Neither the County Ecologist nor the County Arboricultural Officer have suggested a need for the submitted Arboricultural Impact Assessment to be updated. The proposal will not damage the RPAs of any trees within the designated area of ancient woodland as this is situated around 24 metres to the north of the boundary of the proposed well site compound. Further, the area of ancient woodland is included as part of the clear felling licence granted to the Hascombe Estate. As a consequence, the proposal will not compromise the status of the ancient woodland.

Conclusion

583. In view of the above considerations, Officers are satisfied that subject to the imposition of planning conditions requiring the submission of both an initial and final LEBREP to replace any lost vegetation at the earliest opportunity and secure the provision of biodiversity 'net-gain', and to ensure that the final restoration scheme takes into account the prevailing ecological conditions at that time, the proposal would not have a significant adverse impact on ecology and biodiversity. The proposal is therefore considered to be in accordance with the relevant development plan policies in this respect.

Archaeology and Heritage

584. NPPF paragraph 189 requires that where a site has the potential to include heritage assets with an archaeological interest, a desk based assessment should be submitted and, where necessary, a field evaluation. Paragraph 189 also states that local planning authorities should require an applicant to describe the significance of any heritage assets affected, including any contribution made by their setting. The NPPF recognises that such a description should be proportionate to the assets' importance and no more than is sufficient to understand the potential impact of the proposal on their significance.
585. Paragraph 190 of the NPPF requires local planning authorities to identify and assess the particular significance of any heritage asset that may be affected by a proposal including the potential to affect its setting, taking account of the available evidence and necessary expertise. This assessment should then be taken into account when considering the impact of a proposal on a heritage asset to avoid or minimise conflict between the heritage asset's conservation and any aspect of the proposal.
586. Paragraph 193 of the NPPF goes on to state that when considering the impact of a proposed development on the significance of a designated heritage asset, great weight should be given to the asset's conservation (and the more important the asset, the greater the weight should be). This is irrespective of whether any potential harm amounts to substantial harm, total loss or less than substantial harm to its significance. Paragraph 194

goes on to state that harm or loss should require clear and convincing justification. In particular, substantial harm or loss of a grade II listed building, or grade II registered park or garden should be exceptional and substantial harm or loss of designated heritage assets of the highest significance should be wholly exceptional.

587. NPPF Paragraph explains that where a proposed development will lead to substantial harm to or total loss of significant of a designated heritage asset, planning permission should be refused. Paragraph 196 of the NPPF outlines that where a development proposal will lead to less than substantial harm to the significance of a designated heritage asset, this harm should be weighed against the public benefits of the proposal. Paragraph 197 of the NPPF deals with the significance of an application on non-designated heritage assets and states that these should be taken into account in determining the application. In weighing applications that directly or indirectly affect non-designated heritage assets, a balanced judgement will be required having regard to the scale of any harm or loss and the significance of the heritage asset.
588. The Historic Environment chapter of the nPPG provides guidance on the assessment of heritage assets when considering planning applications. Para 007 states that heritage assets may be affected by direct physical change or by change in their setting. Being able to properly assess the nature, extent and importance of the significant of a heritage asset, and the contribution of its setting, is very important to understanding the potential impact and acceptability of development proposals. Para 018 states that what matters in assessing if a proposal causes substantial harm is the impact on the significance of the heritage asset which derives not just from its physical presence but also its setting. The paragraph goes on to state that it is the degree of harm to the asset's significance rather than the scale of the development that is to be assessed.
589. Sections 66(2) and 66(1) of the Planning (Listed Buildings and Conservation Areas) Act 1990 require Local Planning Authorities, in considering whether to grant planning permission for development which affects a listed building or its setting, to have special regard to the desirability of preserving the building or its setting or any features of special architectural or historic interest which it possesses. With regards to conservation areas, Section 72 of the 1990 Act requires special attention to be paid to the desirability of preserving or enhancing the character or appearance of that area.
590. SMP CS DPD Policy MC14 seeks to ensure that minerals development does not give rise to a significant adverse impact in terms of the historic landscape, sites or structures of archaeological and historic interest and their settings and sites of existing or potential archaeological interest or their settings. LPP1 Policy HA1 seeks to ensure that the significance of Waverley's heritage assets are conserved or enhanced to ensure the continued protection and enjoyment of the historic environment by safeguarding and managing heritage assets and their setting and understanding and respecting the significance of the assets. 'Saved' WBLP Policy D1 states that development will not be permitted where it would result in material detriment to the environment by virtue of loss or damage to important environmental assets, such as buildings of historical or architectural interest, important archaeological sites and monuments and areas of conservation.
591. 'Saved' Policy HE3 of the WBLP seeks to provide high design standards where proposed development affects a listed or a locally listed building or its setting. This is to ensure that new development is appropriate and compatible in terms of siting, style, scale, density, height, massing, colour, materials, archaeological features and detailing. Proposals will not be permitted if they would harm the building or its setting. WBLP 'saved' Policy HE13 states that there will be a presumption in favour of preserving county sites of archaeological importance or their setting. Development which adversely affects the archaeological value and interest of these sites will not be permitted. 'Saved' Policy HE14 of the WBLP requires, where appropriate, an initial assessment of the archaeological value of the site be submitted as part of any planning application and field evaluation to be carried out prior to determination where archaeological remains are considered to exist.

WBLP 'saved' Policy HE15 states that where proposals are made for large scale developments (over 0.4 hectares) not in an area already defined as of High Archaeological Potential, the Council will require that an archaeological assessment is provided as part of the application.

592. Historic England has published a series of good practice advice notes to assist in the determination of planning applications that could have an impact on heritage assets. These are Good Practice Advice in Planning: 2 Managing Significance in Decision-Taking in the Historic Environment and Good Practice Advice in Planning: 3 The Setting of Heritage Assets.
593. Advice note 2 outlines that the first step is to understand the significance of any affected heritage asset and, if relevant, the contribution of its setting to its significance. The significance of a heritage asset is the sum of its archaeological, architectural, historic and artistic interest. Advice note 3 recognises the extent of a setting cannot have a fixed boundary and may alter over time due to changes in circumstance. It also recognises that views can contribute to setting of heritage assets e.g. viewing points or where a view is a fundamental aspect of the design of the asset or where assets were meant to be seen by one another for aesthetic, functional, ceremonial or religious reasons.
594. There are two Areas of High Archaeological Potential situated within the vicinity of the application site. These are located south of Dunsfold Road between High Loxley Road and Thatched House Farm and around 470 metres to the south of the well site compound beyond High Billingham Farm. The Dunsfold Conservation Area is situated around a 1.4 km to the south-west of the well site compound.
595. Hascombe Camp (small multivallate hillfort north-west of Lodge Farm) is a Scheduled Monument situated around 1,890 metres to the north-west of the application site on Hascombe Hill. This is also a County Site of Archaeological Importance. Small multivallate hillforts date to the Iron Age and are defined as fortified enclosures of varying shape, generally between 1 and 5 hectares in size and located on hilltops. In view of the rarity of small multivallate hillforts and their importance in understanding the nature of settlement and social organisation within the Iron Age period, all examples with surviving archaeological remains are believed to be of national importance.
596. Hascombe Camp itself includes a small multivallate hillfort of Iron Age date, situated on the south west tip of a ridge of sandstone. It is roughly rectangular in shape and aligned south west to north east. The hillfort has earthen rampart defences which enclose an area of approximately 2.5 hectares. To the south-east, south-west and north-west, a bank and outer ditch follow the crest of the natural slope. The north-eastern ramparts have been found to be stone-revetted, including the out-turned banks of the entrance. Excluded from the scheduling are all fences, gates and posts but the ground beneath all these features is included. The site of the monument includes a 2 metre boundary around the archaeological features, considered to be essential for the monument's support and preservation.
597. The nearest listed buildings to the centre of the well site compound are all Grade II listed and comprise: Thatched House Farm House, the Barn at Right Angles to the North of Thatched Farm House and the former Granary at Thatched House Farm around 330 metres to the north of the centre of the well site compound; High Billingham Farm House around 390 metres to the south; and High Loxley, the Barn to the North East of High Loxley House, and the Barn to the Front of High Loxley House approximately 560 metres to the west. Further to the east, there are two Grade II listed building on either side of Stovolds Hill. Hawkins Farm House and the Barn at Hawkins Farm House to South East of House are located on the eastern side of the road and Stovolds Hill and the Barn to the North East of Stovolds Hill are located on the western side.

598. The Historic England website confirms that all of these listed buildings have been listed under the Planning (Listed Buildings and Conservation Areas) Act 1990 (as amended) for their special architectural or historic interest. The website provides information on each of these buildings which has been reviewed. For example, it describes the nearest listed building to the well site compound, Thatched House Farm House, as follows: "House. Late C16. Timber framed, exposed to rear, with red brick plinth, red and blue brick cladding to front; plain tiled roof, hipped with gablet to right. Two storeys, with basement to front, where ground drops away. End stack to rear. Four C2O casements on first floor, three cambered head windows to ground floor, now blocked. Door to rear right of centre. Galleted sandstone pentice roof extension to left end with fishscale tile hanging. Unoccupied at time of re-survey."
599. The development would not result in any direct physical change to Hascombe Camp being located around 1,890 metres away. Its setting extends beyond the immediate area in which it is located given its elevated position for defensive purposes resulting in far reaching views into the distance. Given its elevated location, views are considered to contribute towards its setting.
600. It is considered that the impact of the development would cause no harm to Hascombe Camp or its setting. This is given the lack of any direct physical change, and the separation distance which would ensure that any views of the application site will be from a considerable distance. As a result, the proposed development would be difficult to make out given the extent of the panoramic view available from this elevated position, filtering provided by the line of single trees and hedgerows to be largely retained and enhanced along the northern boundary of the well site compound host field, the presence of the proposed 4 metre screening fence incorporating dark green camouflage netting along the northern edge of the well site compound, the relatively small number of HGVs that may be visible in the distance whilst travelling along the access track, any distant views of taller structures deployed on site being temporary and the backdrop of the solar farm and Dunsfold Park beyond.
601. There is a considerable separation distance between the application site and the Dunsfold Conservation Area which is situated around 1,400 metres to the south-west with any views filtered by a number of field boundaries containing a mix of trees and hedgerows. The Dunsfold Conservation Area is also situated at a lower level than the well site compound which helps to restrict the potential for any distant views of the well site. Further the HGV access route to and from the site is via Dunsfold Road and the A281 to the east and does not take development related traffic through the village. Consequently, the impact of the development is not considered to result in any harm to the conservation area.
602. The development would not result in any direct physical change to any listed buildings which might harm their special architectural or historic interest, with the nearest listed building being situated around 330 metres to the north of the centre of the well site compound, or approximately 265 metres to the north of the well site's northern boundary. The County Historic Buildings Officer (CHBO) has advised that the setting of listed buildings in Surrey tend to be relatively tight given the heavily wooded nature of the County.
603. It is acknowledged that some of the surrounding listed buildings are set within extensive grounds which form part of their setting and this contributes towards their significance. This brings their setting noticeably closer to the application site, particularly in the case of Thatched House Farm to the north and High Billingham Farm to the south. The setting of the seven closest listed buildings to the application site are therefore partly defined by the boundaries that surround the large estates in which they are situated. These boundaries largely comprise a mix of woodland and hedgerow planting. However distant views towards Hascombe Hill to the north-west are widely available and these views extend the setting of these listed buildings well beyond the boundary of the estates in which they lie.

604. The upper sections of the tallest structures would appear within the edge of the view from parts of High Billingham Farm House and its setting looking out towards Hascombe Hill. However they would not appear centrally within the main line of sight, would make up a small fraction of the overall view and views would be screened or filtered by trees from some locations. Views of the well site from the three listed buildings within High Loxley including their setting would be more distant and towards the east and filtered by tree and hedgerow planting around the boundary of the estate and along High Loxley Road.
605. The clear-felling of The Burchetts woodland would extend the setting of the three listed buildings at Thatched House Farm southwards and much closer to the application site. This would extend their setting as far as the access track and single lines of trees and hedgerows, to be largely retained and enhanced, along the northern boundary of the well site compound host field. It would open up limited views of the application site where there are gaps in the vegetation coverage along this boundary although views would be limited and confined to the security fence, screening fence with dark green camouflage netting and the upper sections of the tallest structures. Although screening and security fences will cause some harm by their presence, they will help to screen out views of ground based cabins, plant, machinery and equipment which would otherwise result in a more significant impact and greater harm.
606. It is likely that 5 ash trees will need to be replaced along the northern boundary of the well site compound host field with other native species during the lifetime of the development, including 1 ash tree on the eastern part of the northern boundary and 4 ash trees on the western section. However, approximately 55 trees (i.e. 95% of the baseline) would be retained along the central section of the northern boundary which would help to screen the central section of well site compound comprising the main focus for operational activity.
607. The proposed access arrangements would create a more industrial feel to the northernmost section of High Loxley Road and introduce additional traffic including HGV traffic to the northern section of this road. Being a no-through road, this forms the approach road to three listed buildings at High Loxley and one at High Billingham Farm. The quiet rural nature of this narrow, winding, undulating and lightly trafficked road contributes to the wider setting of these four listed buildings. The proposal would therefore result in harm to the wider setting of these 4 listed buildings, albeit for a temporary period of 3 years.
608. However the harm caused to the significance of these heritage assets is reduced by the extent of the separation distance and lack of any direct views between the proposed site entrance and any of these listed buildings. Further, the proposed 2.5 metre high entrance gates fronting High Loxley Road have been purposefully designed in a manner that is sympathetic to the rural character of the area. The design comprises a 'close boarded timber' finish which would be similar to the design of gates fronting the larger residential properties in the area. As a consequence, the access would not have the appearance of the entrance to a well site and anyone travelling along High Loxley Road would be unlikely to recognise the access as an entrance to a well site. These factors help to reduce the conflict between the conservation of the heritage assets and the proposed development.
609. Lighting may be apparent in the distance from some locations at night time, although the impact on the setting of the seven nearest listed buildings would be reduced through a number of factors. These include distance, albeit to a varying degree, the presence of partial vegetation screening, the lights being shrouded to prevent light spillage and the imposition of planning conditions intended to control lighting and ensure lights are directed inwards towards the well site compound. Noise, including from drilling, testing and appraisal, would be audible for extended periods of time although noise levels would be controlled to acceptable levels by conditions.
610. The proposal is not considered to have any impact on the significance of the listed buildings or their setting on either side of Stovolds Hill given the extent of the separation

distance and the lack of direct views of the application site. The wooded area along the eastern boundary of the well site compound host field would help to screen any views of the tallest structures in the event that both The Moor and High Loxley Furze woodland blocks were clear-felled. The only potential views would be during winter when the trees have lost their leaves although any such views would be largely filtered and from a considerable distance. Any harm caused by lighting and noise would be greatly limited at this distance.

611. The proposed development would therefore have some impact on the significance of the listed buildings within the vicinity of the application site in terms of its presence but this impact is considered to be less than substantial largely due to the separation distance between the listed buildings and the application site and the extent of partial vegetation screening, as well as the additional screening proposed by the applicant. The harm caused to the setting of these listed buildings is considered to be greater given the reduced separation distance, increased visual impact, and impacts in terms of noise and to lesser extent lighting. However, the resulting harm is considered to be less than substantial given the extent of partial vegetation screening and the mitigation measures proposed. This assumes that the clear-felling license is implemented in full and takes into account a number of factors.
612. This conclusion takes into account: the extent of the separation distance between the application site and the listed buildings; screening provided by existing field boundaries and woodland cover to the east of the well site compound host field; the filtering of views from the partial field boundaries along the northern and southern boundaries of the well site compound host field and around the boundary of High Loxley and High Loxley Road; the screening benefits provided by both the natural contours of the land and the wild bird seed mix plantation restricting views from the south; proposed mitigation in the form of 4 metre high security or screening fencing incorporating camouflage debris netting around the northern, eastern and southern boundaries of the well site compound, which would result in some harm by their presence but reduce the visual harm that would otherwise be caused by views into the interior of the well site compound; the sympathetic design of the site entrance on High Loxley Road; the low number of HGV movements; the proposed mitigation measures and planning conditions to control the impact of noise and lighting to an acceptable level; and the imposition of other planning conditions intended to control the impacts of the development to a satisfactory degree.
613. In relation to the proposed highway works, the CHBO has advised that one of the beauties of the Waverley country lanes is the fact there are no kerbstones. To prevent roads getting incrementally wider, the CHBO would support the inclusion of an informative advising the developer that any highway works should use flush set concrete retainers with a ribbed surface, as upstanding kerbs would be very damaging to the wider character of the area. This suggestion is accepted by Officers.
614. Taking into account the finding outlined in the section on Need for the Development above, which considers the development to be in the national and wider public interest, Officers consider that, on balance, the temporary less than substantial harm caused to the significance of heritage assets and their settings is outweighed by the public benefits of the proposal.
615. The applicant has submitted an Archaeological and Cultural Heritage Assessment in support of the application. This was informed by data gathered from a range of primary and secondary sources including a search of the Surrey County Council Historic Environment Record, the Surrey History Centre, appropriate online sources and a site visit. This states that medieval activity has been identified within the study area, including within the site itself, in the form of ridge and furrow earthworks, indicating that the site lies in an agricultural hinterland, with settlement focussed around Dunsfold to the southwest. The potential for encountering medieval activity within the site is considered to be high, but it will likely be agricultural features of low local significance.

616. In relation to evidence of post-medieval activity within the search area, the assessment states that this is dominated by several isolated farmsteads, clustered around Thatched House Farm, High Loxley and Park Hatch. High Loxley farmstead lies to the south-west of the site. Historic mapping has demonstrated that there has been little change in either the site or the wider area since the post-medieval period with the exception of the removal of some of the field boundaries in the northern part of the site to create the large field which is still extant today. Therefore, the potential for encountering post medieval activity within the site is low and is limited to the remains of these former field boundaries.
617. The assessment finds that the proximity of the site to known areas of archaeological potential indicates that any activity could extend into the areas of construction, including the access track for the Loxley Well Site. Consequently, the assessment advises that archaeological mitigation, in the form of a geophysical survey and trial trenching, is undertaken prior to the construction phase and that field walking across the wider fields could also be an option.
618. The County Archaeological Officer has advised that the application site is over the 0.4 hectares which is recommended for archaeological assessment and possibly evaluation under 'saved' Policy HE15 of the WBLP, and is close to an area identified as being of High Archaeological Potential. The application is therefore supported by a desk based archaeological assessment. The response confirms that the assessment has consulted all currently available sources including the Surrey Historic Environment Record in order to characterise the archaeological potential of the site and concludes that the site has a moderate archaeological potential for the Mesolithic Neolithic, medieval and post medieval periods, with a lower potential for other periods.
619. As there is potential for archaeology to be present within the site, the report suggests that further archaeological works are required in order to properly assess the nature and extent of any archaeology that may be present. The County Archaeological Officer agrees with this conclusion and advises that in the first instance, this should comprise of a programme of test pitting along the access road, which is close to an area where Mesolithic material has been previously recorded, with trial trench evaluation carried out within the area of the proposed compound. The results of the work will enable suitable mitigation measures to be developed.
620. Given that the assessment does not suggest that remains of national importance will be present, the County Archaeological Officer does not consider that it is necessary for the archaeological work to be undertaken in advance of any planning permission; but securing the archaeological work as a condition of any planning permission is an acceptable and proportionate response. To ensure the required archaeological work is secured satisfactorily, the County Archaeological Officer has recommended a planning condition requiring the applicant to implement a programme of archaeological work in accordance with a Written Scheme of Investigation prior to the development taking place.
621. Waverley Borough Council has raised objection to the proposal due to the need for a further assessment of the impacts on archaeology and adjoining listed buildings and their setting. Cranleigh Parish Council strongly object to the application due to the archaeological potential of the site given its proximity to an Area of High Archaeological Potential. The Hascombe Estate has raised objection because following clear-felling, the application site and access roads will be highly visible from Hascombe Hill and its heritage properties. Representations have been submitted objecting to the proposed development due to concerns that the proposal would take place on an archaeological site, the need for further information to address the poor quality of the submitted assessment has not been provided and the impact on the seven Grade II listed buildings nearby. A representation has also raised concern about the impacts of vibration on nearby heritage properties given that their foundations are not as robust as they are on modern buildings.

622. The County Archaeological Officer has raised no objection to the application subject to the imposition of a planning condition. The impact of the proposal on heritage properties and their setting has been assessed. Whilst some harm is acknowledged, this is considered to be temporary and less than substantial and on balance, outweighed by other public benefits in relation to the need for the development which is considered to be in the national and wider public interest. The issue of vibration has been addressed in the above section on Noise and Vibration. This refers to the advice provided by the CHBO who considers that the potential for damage to listed buildings from the airborne sound (and ground vibration) can be discounted.

Conclusion

623. The application is supported by an Archaeological and Cultural Heritage Assessment which has been reviewed by Officers. The County Archaeological Officer has advised that the application is acceptable subject to a condition requiring a programme of architectural works to be implemented in accordance with a Written Scheme of Investigation to be submitted to and approved in writing by the CPA prior to the commencement of the development. The CHBO supports the inclusion of an informative requesting that any highway works use flush set concrete retainers with a ribbed surface as opposed to upstanding kerbs. The impact of the development on Hascombe Camp and its setting and the Dunsfold Conservation Area is not considered to result in any harm. The impact on the significance of listed buildings and their setting within the vicinity of the site has been assessed and the harm to both the significance of the listed buildings themselves and their settings has been found to be less than substantial. On balance, Officers consider that this temporary harm is outweighed by other public benefits including the need for the development, which is considered to be in the national and wider public interest. For these reasons, Officers are therefore satisfied that the proposal complies with the relevant development plan policies in respect of archaeology and heritage.

Rights of Way

624. SMP CS DPD Policy MC14 seeks to ensure that minerals development does not give rise to a significant adverse impact in terms of the rights of way network. 'Saved' WBLP Policy LT11 seeks to ensure that designated rights of way are safeguarded, protected and enhanced to encourage their use by walkers, cyclists and horse riders. NPPF paragraph 98 states that planning policies and decisions should protect and enhance public rights of way and access, including taking opportunities to provide better facilities for users, for example by adding links to existing rights of way networks including national trails.
625. Public bridleway 280 is located approximately 100 metres to the south of the well site compound. It connects High Loxley Road to the west with Stovolds Hill to the east and is routed along the southern edge of the well site compound host field. The bridleway lies at a height of 70 metres above ordnance datum (AOD). This field contains a ridge at 72 metres (AOD) which runs east to west across the centre. From the crest of this ridge, the field slopes downhill towards its northern and southern boundaries. The well site compound would be situated in the northern half of this field and would be developed on a level platform. In view of the slope, it would be constructed through cut and fill at a height of 68 metres AOD.
626. Views of the proposed development from the public bridleway would be largely screened by a combination of the ridge, a 4 metre high topsoil storage bund to the south of the well site compound and a 4 metre high 'V' mesh security fence around the southern and eastern boundaries of the compound incorporating debris / camouflage netting to reduce inward visibility into the site. Paragraph 6.15 of SMP CS DPD acknowledges that whilst temporary landscape works such as bunds or earth mounds can affect the appearance of an area, they may be positive in terms of reducing local visual impacts.

627. Further, a wild bird seed mix plantation growing on the southern and eastern parts of the well site host field, including along the crest of the ridge will provide additional screening benefits. This planting is noted to be very durable through the winter and will be retained for the duration of the development. It will comprise an area equivalent to the size of the well site and the crop has a maximum height of around 2.1 metres. A mix of manual and natural seeding will maintain the crop yield and its screening potential throughout the year. As a consequence of the proposed screening, only the tallest components of the plant and equipment would be visible from the bridleway.
628. The impacts of the proposal on noise and air quality have been found to be acceptable. In terms of air quality, the greatest impact on air quality was found to be on an area of land just beyond the north-east corner of the well site compound reflecting the prevailing wind direction. The County AQC has concluded overall that the air quality impacts have been assessed using an appropriate methodology and that the effects are not considered significant. In relation to noise, the impacts have been found to be acceptable subject to the imposition of a number of conditions to ensure that noise levels are kept within an acceptable level. Further, users of the public bridleway will be transient in nature and therefore affected less than those living or working in a permanent structure.
629. Public footpath 281 and public bridleway 282 connect High Loxley Road to Dunsfold Common Road to the west. The former is approximately 540 metres to the west of the proposed well site compound at its nearest point and the latter around 735 metres to the south-south-west. A 2.46 metre high 'V' mesh security fence will be erected along the western boundary of the well site compound. Security entrance gates measuring 2.5 metres in height and 6 metres wide will be installed towards the centre of the western boundary. At distances of at least 540 metres, any adverse impacts on users of these public rights of way are not considered significant given existing vegetation screening on High Loxley Road, the temporary nature of the development, the significant separation distance between the well site and these rights of way and the transient nature of users of the footpath and bridleway.
630. The land to the north of Dunsfold Road climbs northwards towards Hascombe Hill which reaches a height of 205 metres. Public footpaths 279 (at a height of 130 metres) and 533 (at a height of 200 metres) are located to the north of Dunsfold Road at a more considerable distance from the proposed well site. A 2.46 metre high 'V' mesh security fence will be erected along the northern boundary of the well site compound. Inside the security fence alongside the northern boundary of the well pad, a 4 metre high 'V' mesh screening fence is proposed incorporating debris / camouflage netting to reduce inward visibility into the site. A field boundary containing a single line of trees and hedgerows with some gaps in between runs along the northern boundary of the well site host field on land within the applicant's control. With the likely exception of 5 ash trees that would be replaced with native species, the field boundary will be retained and enhanced as part of the proposed development. However, it is acknowledged that the proposed additional planting will not mature sufficiently to provide any significant additional screening benefits within the lifetime of the proposed development.
631. Any views of the proposed development from public footpaths 279 and 533 will be from a considerable height and distance. As a result, the well site would be difficult to make out given the extent of the panoramic view available from these more elevated vantage points, the filtering provided by the tree line to be largely retained along the northern boundary of the well site compound host field, the screening fence with dark green camouflage netting proposed along the northern boundary of the well pad and the backdrop of the solar farm and Dunsfold Park beyond. Further, any parts of the development that are visible such as the crane, workover rig or coil tubing unit would only be visible for a temporary period and any HGVs visible whilst traveling across the access track would be relatively few in number.

632. The Countryside Access Team (Rights of Way) has advised that horses can react to noise, sudden movements and shadows. They note that the application site will be approximately 90 metre north of Public Bridleway 280. In relation to the rig, they have stated that its location to the north should mean that the shadow it casts should be minimal. Having reviewed the application including information regarding the activity and noise levels, they have raised no objection to this application.
633. The Surrey Hills AONB Planning Adviser has raised concerns that the development would have a significant adverse visual impact on the public bridleway to the south. Cranleigh Parish Council has raised objection to the proposal claiming that the impact on public bridleway 280 will detract from the enjoyment of users and the noise will scare horses and endanger the life of equestrians.
634. Representations objecting to the proposal have raised concerns over: the ability of the security fence to screen views of tall structures from the public bridleway; the proposal restricting the width and partially blocking an existing public bridleway, the public bridleway being obstructed with barbed wire fencing and wooden bollards; the increased impact resulting from the clear felling of The Burchetts woodland block; and the adverse impact on users of footpaths and the adjacent bridleway being contrary to SMP CS DPD Policy MC14 and 'saved' WBLP Policy LT11.
635. The Countryside Access team has raised no objection to the proposal. The development would not result in any restriction in width or the blocking of any public right of way. The visual impact of the proposal has been assessed in detail and found to be acceptable with the proposed mitigation measures in place. It is acknowledged that a combination of the ridge, wild bird seed mix planting and security fence would screen the ground based plant, machinery and buildings from the public bridleway and part of the taller structures. However the upper sections of these structures would be visible albeit only for a temporary period. Further, the felling of The Burchetts woodland block has been assessed and would not result in a significant adverse impact on public footpaths to the north of Dunsfold Road.

Conclusion

636. In view of the above considerations, Officers are satisfied that the proposed development would not result in a significant adverse impact on the rights of way network and is in accordance with the development plan in this respect.

Cumulative Impacts

637. NPPF paragraph 180 states that planning policies and decisions should ensure that new development is appropriate for its location taking into account the likely effects (including cumulative effects) of pollution on health, living conditions and the natural environment, as well as the potential sensitivity of the site or the wider area to impacts that could arise from the development. In doing so they should:
- a) mitigate and reduce to a minimum potential adverse impacts resulting from noise from new development - and avoid noise giving rise to significant adverse impacts on health and the quality of life;
 - b) identify and protect tranquil areas which have remained relatively undisturbed by noise and are prized for their recreational and amenity value for this reason; and
 - c) limit the impact of light pollution from artificial light on local amenity, intrinsically dark landscapes and nature conservation.
638. Paragraph 181 of the NPPF requires that planning decisions should sustain and contribute towards compliance with relevant limit values or national objectives for pollutants, taking into account the presence of Air Quality Management Areas and Clean Air Zones, and the cumulative impacts from individual sites in local areas. Opportunities to improve air quality

or mitigate impacts should be identified, such as through traffic and travel management, and green infrastructure provision and enhancement.

639. NPPF paragraph 205 states that in considering proposals for mineral extraction, minerals planning authorities should ensure 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. SMP CS DPD Policy MC14 seeks to ensure that minerals development does not give rise to a significant adverse impact in terms of cumulative impacts arising from the interactions between mineral developments, and between mineral and other forms of development.
640. There are no significant mineral sites within the vicinity of the proposal. The nearest major commercial land is situated at Dunsfold Park, approximately 850 metres to the south where planning permission exists for the development of a new settlement. This permission includes the development of 1,800 new homes, a new commercial centre, new business units, non-residential institutions, community centre, new primary school, the relocation of an existing school, amenity space and supporting infrastructure. Dunsfold Park also accommodates an existing anaerobic digestion facility located on Stovolds Hill. The Gordon Murray Design buildings, which amount to 14,000 sq m, are in the process of being developed and are expected to open in 2021. Further, there is an events venue at High Billingham Farm and an established solar farm operation situated on land to the south of High Billingham Farm which is accessed via High Loxley Road.
641. The main potential for cumulative impacts to arise from the proposed development are in relation to traffic, air quality and ecology. These matters have already been assessed in the relevant sections above and found to be acceptable. In terms of traffic, concerns have been raised over the impact of the proposed new traffic signals on the events venue at High Billingham Farm given the potential delays to people attending the venue. This has been discussed in the section on Highways, Traffic and Access above where the CHA has assessed the proposal and found it to be acceptable subject to the imposition of conditions. As a consequence, the development is not considered likely to have any cumulative traffic impacts as the number of additional vehicle movements is not considered significant and will be spread out throughout the day. This should ensure that there is no significant adverse impact on the free flow of traffic. Additionally, the applicant proposes to utilise a combination of traffic signal technology to optimise the signal operation and the adoption of an on-site traffic management regime to schedule HGV activity outside of peak periods. Details of HGV deliveries and hours of operation will form part of the TMP to be secured as part of a pre-commencement condition.
642. In relation to any cumulative impact on air quality resulting from the development of Dunsfold Park, the applicant has stated that a cumulative assessment of the Dunsfold Park development, inclusive of the proposed energy centre, was not included within the submitted Air Quality Assessment (AQA) because a review of the Dunsfold Park Environmental Statement (ES) indicated that the expected combined impact of road traffic and the energy centre resulting from the development on nitrogen dioxide concentrations in the vicinity of Loxley well site was insignificant. The applicant therefore considers that the increase in background concentrations arising from the development have no material impact on the findings of the Loxley well site AQA. Having reviewed the submitted AQA, the County Air Quality Consultant has found the impact of the proposal to be acceptable. Further Public Health England has raised no objection to the proposal.
643. With regard to ecology, the impact on the nearest SSSIs and SNClIs have been assessed and considered to be acceptable. The nearest European sites (8.2km to the north-west and 9.3km to the south-west) have also been identified and the impact assessed with Officers concluding that on balance, and taking account of the short term and temporary nature of the proposed well site and the intermittent nature of the emissions that would arise during its lifetime, the distance that separates the application site from the closest

European sites, the fact that the highway links that pass through or within 200 metres of the European sites are not on the proposed route by which the application site would be accessed, and the limited contributions that the predicted well site emissions would make to the critical loads of the identified European sites, the proposed development would not give rise to likely significant effects alone or in-combination with other development.

644. The Borough Council EHO has stated that a cumulative assessment of the Dunsfold Park development has not been carried out by the applicant to inform background air quality concentrations. Cranleigh Parish Council has raised objection to the cumulative impact of the proposal in view of the combined impacts with the local plan strategic development sites which make provision for 3,097 dwellings.
645. Representations opposed to the development have raised concerns over: the impact on the new settlement at Dunsfold Park, the potential need for numerous wells to be drilled across the countryside and a potential further proposal to drill for hydrocarbons near Loxhill; the existing planning permissions for an anaerobic digestion facility and large energy centre at Dunsfold Park; and, the adverse cumulative impact on the road network.
646. The proposed development is for a temporary period of three years. The cumulative impacts of the proposal in combination with other potential development on allocated sites cannot be assessed and taken into account as there is no certainty that planning applications will be submitted and granted planning permission in future. Further the impacts of any potential future developments are currently unknown. Officers consider that the impacts of the proposal on traffic, air quality and ecology are insignificant in comparison to those resulting from the new settlement at Dunsfold Park which is likely to take a significant period of time to complete. As a consequence, the cumulative impact of the proposal combined with the development at Dunsfold Park is not considered to be significant. In addition, the cumulative impacts of the proposal in relation to traffic, air quality and ecology have been assessed and considered to be acceptable.

Conclusion

647. Having considered the cumulative impacts of the proposal in relation to traffic, air quality and ecology, Officers consider that the proposal would not give rise to a significant adverse impact in terms of cumulative impacts arising from the interactions between the proposed well site and both mineral developments and other forms of development. For these reasons, the proposal is in accordance with the development plan in this respect.

Restoration

648. NPPF paragraph 204 states that planning policies should ensure that worked land is reclaimed at the earliest opportunity, taking account of aviation safety, and that high quality restoration and aftercare of mineral sites takes place. Paragraph 205 of the NPPF requires that in considering proposals for mineral extraction, minerals 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. Bonds or other financial guarantees to underpin planning conditions should only be sought in exceptional circumstances.
649. SMP CS DPD Policy MC14 seeks to ensure that minerals development does not give rise to a significant adverse impact in terms of the risk of birds striking aircraft. Policy MC17 of the SMP CS DPD states that mineral working will be permitted only where the MPA is satisfied that the site can be restored and managed to a high standard. Restored sites should be sympathetic to the character and setting of the wider area; and capable of sustaining an appropriate after-use. Restoration of mineral workings should be completed at the earliest opportunity and the applicant will be expected to agree a scheme with the MPA detailing how the land will be restored and managed before, during and after working. Policy MC18 of the SMP CS DPD states that the MPA will encourage and work

with mineral operators and landowners to deliver benefits such as enhancement of biodiversity interests, improved public access and provision of climate change mitigation.

650. LPP1 Policy NE1 states that new development should make a positive contribution to biodiversity in the Borough. Policy NE2 sets out that new development should make a positive contribution to biodiversity by creating or reinforcing habitat linkages between designated sites, in order to achieve a connected local and regional ecological network of wildlife corridors and green infrastructure. The Council will seek, where appropriate, to maintain and enhance existing trees, woodland and hedgerows within the Borough.
651. Proposals for environmental enhancement in the form of biodiversity net-gain need to be proportionate, taking into account that the proposed development is for a temporary period of 3 years and may or may not result in commercially viable reserves of hydrocarbons, which are capable of being extracted, being found. The applicant proposes to restore the site back to agriculture within three years and has submitted an outline Landscape, Environment and Biodiversity Restoration and Enhancement Plan (LEBREP) in support of the proposal. This states that restoration would commence upon the completion of Phase 3 decommissioning along with the implementation of a Legacy Enhancement Programme.
652. An initial LEBREP would be submitted for approval prior to the commencement of the development. This would comprise a Year 1 Environmental Reinstatement and Enhancement Plan and a Precautionary Working Method Statement (PWMS) for Great Crested Newts and reptiles. It would include the replacement of trees and hedgerows removed during construction works, a programme to retain and protect existing trees and hedgerows and a timed programme for the planting of new trees and hedgerows and the creation of new biodiversity habitat. A final LEBREP would be submitted within 1 year of the start of development or prior to decommissioning, whichever is the sooner. This would be designed to deliver biodiversity and wider environmental net-gain making use of native species and reflecting the historic use of the site as worked agriculture land and forestry. These measures can be secured by condition.
653. The Outline LEBREP sets out that the proposed restoration and enhancement programme to be delivered in Year 3 will, amongst other things, provide for:

High Loxley Road

- The replacement of up to 55 metres of hedgerow lost as part of the junction construction in Year 1. When added to the 55 metres of hedgerow reinstated in Year 1, a combined total of 110 metres of new hedgerow will be planted on High Loxley Road; and
- The introduction of 6 trees. When added to the 6 trees reinstated in Year 1, a combined total of 12 new trees will be planted on High Loxley Road.

Internal Field Boundary Hedge between High Loxley Road and the South-west Corner of the Burchetts Woodland Block

- The replacement of up to 10 metres of hedgerow removed to facilitate access track construction. When added to the 10 metres of hedgerow reinstated in Year 1, a combined total of 20 metres of new hedgerow will be planted along this field boundary.

Well Site Compound Host Field Boundary (North-east and North-west) and Well Site Compound Host Field Boundary (South)

- New tree and hedgerow planting targeting areas identified as having low or weak hedgerow growth and scattered mature tree growth.

Well Site Compound Host Field

- The set-a-side of land together with a wild bird seed mix plantation management and maintenance strategy creating new natural habitat, restoring lost biodiversity and enhancing the landscape character and appearance of the development site sufficient to achieve an overall environmental net-gain.
- 654. The County Restoration and Enhancement Team has raised no objection to the proposal subject to an aftercare scheme being submitted or required by condition. The County Ecologist has advised that a final restoration scheme should be covered by condition to take account of the prevailing ecological conditions at that time. The County Restoration and Enhancement Team, Gatwick Airport and the operator of Dunsfold Aerodrome have not raised any concerns in relation to the risk of birds striking aircraft.
- 655. Natural England has raised no objection subject to conditions requiring: landscape enhancements, which should include native hedgerow planting along the route of the proposed access to screen views from the AONB, to be implemented at the start of the works rather than just during restoration; and a final LEBREP being agreed with the CPA and secured for delivery. Natural England also advise that the CPA has a duty to have regard to conserving biodiversity as part of decision making which can also include restoration or enhancement to a population or habitat.
- 656. The Surrey Wildlife Trust has raised objection as they consider that the proposals for site restoration and biodiversity enhancement represent a missed opportunity to realise a far more significant and measurable biodiversity net-gain, by way of an eventual priority habitat creation project (rather than restoration to agricultural use). They have also commented that should the exploratory drilling prove that full production is economically feasible, the eventual restoration of the site may well be delayed further than three years.
- 657. Waverley Borough Council, the Borough Council portfolio holder for Environment and Sustainability, Dunsfold, Witley and Cranleigh Parish Councils', the Hascombe Estate and Waverley Friends of the Earth object to the proposal due to the need for a significant restoration bond. This emanates from a concern shared by Hascombe Parish Council that the operator may not have the necessary financial security to meet its restoration commitments.
- 658. Representations received against the proposal have expressed concerns due to: the need for a condition requiring a restoration bond and / or cash deposit to be lodged prior to commencement due to the operator recording consecutive annual losses, concerns that evidence demonstrates that the operator does not have the financial reserves to restore the site and that there is an increased likelihood of technical failure resulting from the techniques being proposed; no plan being provided for a replanting scheme for tree removal; it being unclear who is responsible for taking out environmental liability insurance; and the operator not having a good track record for managing the impact on the site and its surroundings.
- 659. Officers are satisfied that the restoration and aftercare of the application site including the proposed landscape enhancement and measures for the provision of biodiversity net-gain can be carried out to a high standard and secured by condition. This will include the submission of an initial LEBREP for approval by the CPA prior to the commencement of the development including a commitment for the replacement planting of lost vegetation to be provided in the first available planting season following construction, and the submission of a final LEBREP for approval within 12 months of the implementation of this permission, or prior to well site decommissioning (whichever is the sooner).
- 660. The need for hedgerow planting along the access track to screen views from the AONB to the north is not considered necessary. This is given the extent of the separation distance between the application site and elevated sections of the AONB and the number of vehicle

movements not being considered to be significant. Officers consider that the return of the land to agricultural use with woodland planting would provide for a suitable after-use. It should be noted that as the application site is not within the ownership of the applicant, the proposed after-use must be acceptable to the landowner.

661. It is acknowledged that restoration would be delayed in the event that commercially viable hydrocarbon reserves are found to be present. However, any delay to restoration to enable the site to be retained for hydrocarbon production in the longer term would be subject to a further planning application that would have to be considered on its merits. Therefore, this is not a matter that can be considered in the determination of this application.
662. One of the objectives of the regulatory regime for oil and gas exploration and production established under The Petroleum Act 1998 is to protect the taxpayer from any residual liability. All companies on a licence share joint and several liability for obligations and liabilities that arise under it, with each licence taking the form of a deed, which binds the licensee to obey the licence conditions.
663. With regard to requests for a restoration bond / cash deposit to be lodged to meet the costs of restoration in the event that the application is permitted, the NPPF and nPPG provide planning policy and guidance respectively on this subject. As outlined above, paragraph 205 of the NPPF states that in considering proposals for mineral extraction, MPA's should provide for restoration and aftercare at the earliest opportunity, to be carried out to high environmental standards, through the application of appropriate conditions. Bonds or other financial guarantees to underpin planning conditions should only be sought in exceptional circumstances.
664. Paragraph 036 of the Minerals chapter of the nPPG states that responsibility for the restoration and aftercare of mineral sites, including financial responsibility, lies with the minerals operator and, in the case of default, with the landowner. Further, paragraph 048 explains that a financial guarantee to cover restoration and aftercare costs will normally only be justified in exceptional cases. Such cases, include:
- very long-term new projects where progressive reclamation is not practicable, such as an extremely large limestone quarry;
 - where a novel approach or technique is to be used, but the minerals planning authority considers it is justifiable to give permission for the development; and
 - where there is reliable evidence of the likelihood of either financial or technical failure, but these concerns are not such as to justify refusal of permission.'
665. Both the NPPF and nPPG are material considerations, which the CPA will have regard to in determining the above planning applications. However, Government guidance relating to restoration of mineral workings looks to planning authorities to put in place policies in plans to ensure land where mineral working has taken place is restored at the earliest opportunity and to a high standard. SMP CS DPD Policy MC17 states that mineral working will only be permitted where the County Council is satisfied that the site can be restored and managed to a high standard and requires sites to be restored progressively where appropriate, and for restoration to be completed at the earliest opportunity. In addition, to facilitate the objective of achieving a high standard of restoration and bringing land back into use, the Minerals Site Restoration Supplementary Planning Document (SPD) 2011 provides best practice advice.
666. As the application is for conventional hydrocarbon exploration and appraisal, Officers do not believe that a novel approach or technique is to be used which may increase the risk of technical failure. For every operator, the OGA examines the operator's competency, their financial viability and financial capacity and will require them to provide evidence of sufficient funds to meet the drilling costs and the plugging and abandonment of the well. In addition, the consideration of the risk of technical failures fall within the remit of the HSE

as outlined in paragraph 112 of the minerals chapter of the nPPG and is therefore not a matter for SCC to resolve. In this respect, the above sub-section on Oil and Gas Regulation sets out the key aspects of the HSE's regulatory role in ensuring the risks of technical failure are minimised.

667. Further, paragraph 112 of the nPPG minerals chapter states that the HSE are responsible for enforcement of legislation concerning well design and construction. In particular, before design and construction, operators must assess and take account of the geological strata, and fluids within them, as well as any hazards that the strata may contain. Under health and safety legislation, the integrity of the well is subject to examination by independent qualified experts throughout its operation, from design through construction and until final plugging at the end of operation. In terms of the operation of surface equipment on the well site compound, this paragraph sets out that whilst planning conditions may be imposed to prevent run-off of any liquid from the pad, and to control any impact on local amenity (such as noise), the actual operation of the site's equipment should not be of concern to mineral planning authorities as these are controlled by the EA and the HSE. In addition, in relation to mining waste, paragraph 112 explains that the EA is responsible for ensuring that extractive wastes do not harm human health and the environment. An environmental permit is required for phases of hydrocarbon extraction and this will require the operator to produce and implement a waste management plan.
668. Further, NPPF paragraph 183 states that the focus of planning policies and decisions should be on whether proposed development is an acceptable use of land, rather than the control of processes or emissions (where these are subject to separate pollution control regimes). Planning decisions should assume that these regimes will operate effectively.
669. In the context of restoring mineral sites, it should be noted that hydrocarbon development occupies a much smaller footprint than more traditional and more extensive forms of mineral working, such as those associated with the extraction of sharp sand and gravel or soft sand, which occupy a much greater area. Hence, the financial burden of securing restoration is significantly less in comparison. In view of these considerations, Officers do not consider that there are exceptional circumstances to warrant the need for a bond or security deposit. This approach is consistent with all other existing hydrocarbon developments in Surrey. For these reasons, in the event that planning permission is granted, Officers are satisfied that provision for the restoration of the site can be dealt with by condition requiring the submission of a detailed scheme for approval, and that there is no justification to require a financial bond in this case.

Conclusion

670. Officers are satisfied that the proposal to return the land to agricultural use with woodland planting represents a suitable after-use and that the restoration and aftercare of the site can be secured by condition. Further, Officers are conscious that the proposal is temporary for a period of 3 years and that proposals for enhancement in the form of biodiversity net-gain need to be proportionate. In this respect, Officers consider that the proposed enhancement measures are acceptable and would result in local environmental improvements in the medium and longer term. As a consequence, Officers are satisfied that the site can be restored and managed to a high standard and at the earliest opportunity, in a manner that is sympathetic to the character and setting of the wider area and capable of sustaining an appropriate after-use. Further, the proposal would deliver benefits in terms of enhancements to biodiversity interests. For these reasons, the proposal is considered to meet the relevant development plan policy requirements.

Other Issues

Airport Safeguarding

671. NPPF paragraph 204 states that planning policies should ensure that worked land is reclaimed at the earliest opportunity, taking account of aviation safety. Paragraph 205 of the NPPF requires MPAs to ensure that there are no unacceptable adverse impacts on aviation safety when considering proposals for minerals extraction. SMP CS DPD Policy MC14 seeks to ensure that minerals development does not give rise to a significant adverse impact in terms of illumination and the risk of birds striking aircraft.
672. The application site is located outside the airport safeguarding zone for Gatwick Airport and approximately 850 metres north of Dunsfold Park, which contains Dunsfold Aerodrome. The applicant has submitted a Major Accident and / or Disaster Risk Assessment in support of the application. This considers the vulnerability, exposure and resilience of the proposed development to the likelihood of a major accident and / or disaster from sources beyond the boundary of the site or outside the control of the applicant. The assessment identifies land-use hazards as those derived from the proximity of the site to potentially hazardous installations and operations which includes flight activity associated with Dunsfold Aerodrome, approximately 800 metres to the south-east.
673. This assessment finds that the risk of an air disaster is low in view of current mitigation and preparedness and that normal on-site operating procedures and control measures should significantly reduce the vulnerability of the development. It goes on to conclude that the site is sufficiently remote from land-use hazards to render any risks of disaster unlikely or not major. The site is distant from Dunsfold Aerodrome's main flightpaths and the operation of the aerodrome and surrounding industrial processes are subject to a framework of health and safety regulations that ensure safe working practices and acceptable environmental impacts. With regard to natural hazards, the assessment considers that a combination of sensible site selection, design mitigation and appropriate on-site regulations is sufficient to manage any external hazard and make any residual risk unlikely, not major and acceptable in planning terms.
674. Gatwick Airport were notified of the proposed development and advised that they had no issues having assessed the proposed drilling rigs and estimated crane heights against their Instrument Flight Procedures and taken the shrouded flares into account. Dunsfold Park were consulted on the application and in their response, advised that it was not apparent that the applicant had properly considered the sensitivity of existing uses at Dunsfold Park including the use of the operational airfield. They also requested that the proposed tall structures and gas flaring activities were brought to the attention of the Civil Aviation Authority (CAA).
675. Alfold Parish Council, supported by both Dunsfold and Cranleigh Parish Councils', has raised objection due to the impact on aviation safety. Hascombe Parish Council have raised concerns regarding the impact of a 37 metre high flashing light on the nearby airfield and the impact on low flying helicopters approaching the airfield from the north. A representation submitted in response to the application has stated that input should be provided from the CAA to ensure the safety of the operational airfield is maintained.
676. The CAA has referred the CPA to their standing advice which provides planning guidance on the need to consult the CAA. This requires the CAA to be notified of details of proposed flaring activity within the vicinity of an aerodrome. The CPA has subsequently informed the CAA of details of the proposed flaring activity and forwarded copies of the relevant plans.
677. The CPA has provided the CAA with the wording of a suggested condition requiring obstacle lights to be placed as close as possible to the top of the drilling and workover rigs and any crane deployed. The CAA's response advises that although Dunsfold Aerodrome is not licenced, to avoid danger to aircraft flying in the vicinity in darkness or poor visibility, any structure or erection in the vicinity of an aerodrome should safeguard those aircraft with provisions, whether by lighting or otherwise, for giving such aircraft warning of their presence. They also advise that Article 240 of the Air Navigation Order 2016 makes it an offence to endanger the safety of an aircraft. Consequently if obstacles are erected this

close to an aerodrome with insufficient safeguards, the CAA has confirmed that they could deem this as endangering an aircraft. In relation to the proposed condition, the CAA has advised that this is acceptable stating that this would be a good mitigation.

678. The CAA has referred to their publication “Guidance to Crane Operators on Aviation Lighting and Notification”. This provides the construction industry with a summary of existing regulation, duty of care expectations placed upon crane users and recommended best practice. They request that the operator contacts both the CAA’s Operations Team and the Military Low Flying Cell once operational dates for the site are established and before site activity takes place. They also requested that their “Crane Notification Form” is completed by the operator and submitted to the CAA’s Operations Team.
679. This information has been passed onto the applicant. In response, the applicant has confirmed that UKOG (234) Ltd are familiar with the “Guidance to Crane Operators on Aviation Lighting and Notification” as a result of the operational activity at Horse Hill and its proximity to Gatwick Airport. Further, the applicant has confirmed that the information and advice contained in the CAA’s response has been passed directly to UKOG (234) Ltd.
680. As set out in the restoration section above, the County Restoration and Enhancement Team, Gatwick Airport and the operator of Dunsfold Aerodrome have not raised concerns in relation to the risk of birds striking aircraft.

Drilling Methodology

681. The submitted Planning Statement sets out that flow tests and pressure data from the Broadford Bridge and Horse Hill well sites have been sub-commercial which is why the ‘potential means of recovery’ needs to be tested at Loxley in compliance with SMP Policy MC12. This is precisely why the side-track well (L-1z) forms part of the development proposal. Side-track well L-1z will allow alternate completion methodology, new completion fluids and the possible use of small-bore radial drilling to be deployed in the search for higher sustainable recovery rates. Knowledge gained at Loxley would be used elsewhere within the PEDL-234 licence area to benefit hydrocarbon recovery.
682. The Borough Council Portfolio Holder for Environment and Sustainability has requested that the application be refused due to the lack of clarity about the method of drilling proposed. The Waverley Borough Council Conservative Group object to the application because the likely presence of an open and continuous network of hydrocarbons capable of flowing without stimulation is not supported by the geology and reports from local wells drilled previously and they consider it highly likely further stimulation will be needed to produce oil. Dunsfold Parish Council has objected to the application stating that SCC must require UKOG to fully disclose the “alternate completion methodology, new completion fluids and the possible use of small-bore radial drilling” that they are proposing to use. The Surrey Branch of the CPRE has raised objection due to the need for acid fracturing, matrix acidisation or nitrogen uplift.
683. A representation received in support of the application has stated that the application does not involve ‘fracking’ and must be approved as it is for the natural progression of oil extraction. A number of representations opposed to the application have raised concerns in relation to the drilling methodology. These relate to: the impacts of strong chemical ‘acid fracturing’ being unknown; the use of new completion fluids suggests that a substance stronger than vinegar will be used; a lack of information on extraction processes and how impacts will be mitigated; stimulation being required to obtain reserves at commercial rates; concern that the proposal involves ‘fracking’; and the impacts of strong chemical ‘acid fracturing’ being unknown.
684. The oil and gas industry is heavily regulated and requires a range of licences, permits and consents from the OGA, HSE, EA, and the MPA. In relation to the role of the MPA in devising planning policies and making decisions, paragraph 183 of the NPPF says that the

focus should be on whether the proposed development is an acceptable use of the land, rather than the control of processes or emissions where these are subject to separate pollution control regimes. Planning decisions should assume that these regimes will operate effectively. Hence, the CPA is primarily concerned with whether or not the development and use of the land on the surface is acceptable in planning terms and whether any adverse impacts can be suitably mitigated.

685. The drilling methodology to be used relates to sub-surface operations and any concerns about this aspect of the development is not considered to be a matter for the CPA to resolve, control or monitor. The OGA has responsibility for authorising the consent to drill and extended well testing (EWT). Further, the operator is required to send notifications about the design, construction and operation of the well, and any potential for the accidental release of fluids, to the HSE. This is to enable them to assess the well design and operations before activity starts, so that issues likely to impact on well integrity can be identified and addressed. However, the relevant licensing regime associated with the drilling methodology is operated by the EA with controls put in place through the environmental permitting process.
686. Due to the number of queries about the use of a group of techniques known as 'acidisation' at conventional oil and gas exploration and production sites, particularly in the Weald Basin, the EA published a factsheet on 'acidisation' in January 2018. This explains how acidisation is a common technique carried out to clean and develop wells and is widely used in both the water industry and the oil and gas industry. It confirms that the EA takes any environmental risks associated with oil and gas exploration and production very seriously and are committed to ensuring that people and the environment are protected. Oil and gas companies must obtain the necessary environmental permits, unless the activity is exempt from the need for a permit. If the proposed activity poses an unacceptable risk to the environment it will not be permitted. If for any reason there is a breach of a permit condition or environmental legislation, the Environment Agency has a range of enforcement powers available including warnings, notices and prosecution. Any enforcement action is taken in line with the Environment Agency's Enforcement and Sanctions guidance.
687. The fact sheet explains that acidisation is a term used in the oil and gas industry for different activities using diluted acid. It involves pumping acid into a drilled well or geological formation that is capable of producing oil and / or gas. This is commonly referred to as a target formation. The purpose of acidisation is to clean out the well following drilling and to improve the productivity of the well. The term acidisation can include acid washes, matrix acidisation and fracture acidisation. Other terms that are frequently used to cover matrix acidisation and fracture acidisation include "acid squeezes" and "stimulation" respectively.
688. The document states that it is important that the EA has a clear understanding of the type of acidisation activities that are proposed at a site. The information provided is used to make a regulatory decision with respect to whether the activity is acceptable or not, and whether an environmental permit can be granted or whether an exclusion applies. Further the type(s) of geology present determines the type(s) of acid necessary to carry out the treatment. The most commonly used acid is hydrochloric acid. It is usually used at a concentration of 15% or less. It is used to dissolve carbonate rocks, such as limestone or dolomite, or to dissolve calcite cement. Very occasionally hydrofluoric acid may be required to dissolve quartz or silica based rocks, such as sandstone or clay.
689. The factsheet goes on to explain that additional chemicals and fluids may be added to protect the integrity of the well. These include inhibitors to prevent the acid damaging the steel casing in the well and sequestering agents to prevent the formation of gels or the precipitation of naturally occurring iron in the well. The acid introduced to the particular geological formation in the well reacts with the alkaline carbonate based rocks and creates

a chloride salt solution, carbon dioxide gas and water. Once acid has been used and has reacted with the rocks, it is referred to as “spent acid”.

690. When an activity involving acid is carried out on the well the spent acid is circulated back to the surface. Most of the acid is used up during the chemical reaction, as it reacts with the rocks. If the fluid coming to the surface is still acidic it is neutralised with soda ash. Any carbon dioxide gas produced will be controlled at the site surface, at the well head with valves and pressure release technology. If the well is being used for oil or gas production the spent acid is produced along with the oil, gas and water in the geological formation. The rate that the hydrochloric acid reacts with the carbonate rocks depends on several factors, including the temperature, the concentration of the acid and the surface area of the carbonate rock available. The type of treatment to be carried out and the permeability of the geological rock formation determines the pressure required for pumping the acid in to the well. The factsheet confirms that in relation to the different types of ‘acidisation’, the EA does not consider an acid wash, matrix acidisation or fracture acidisation / acid fracturing to be a form of well stimulation.
691. When considering any proposal for acid use, the EA assess the type, concentration and quantity of acid to be used, along with details of any other chemicals (such as inhibitors or sequestering agents) on a site specific basis. They assess each of the chemicals to see if they are considered to be hazardous or non-hazardous, as defined by the Water Framework Directive (2000/60/EC) and the Groundwater Daughter Directive (2006/118/EC). To do this they check the chemical details against the list, or the methodology, provided by Joint Agencies Groundwater Directive Advisory Group (JAGDAG).
692. The EA check the predicted natural geological sequence and the predicted characteristics of the rocks at the specific site. For oil and gas exploration or production sites the target formations are deep below ground. The EA check that the target formation is naturally more permeable than the layers of rocks above and below it and that the permeability of the layers of rocks above and below it provide a natural seal to prevent migration of fluids. This ensures that there is adequate separation between any groundwater in aquifers near the ground surface and the target formation and that the acid will stay in the target formation and not migrate in to other formations.
693. To regulate the use of acids to protect groundwater, the EA may request confirmation of the proposed treatment activity (i.e. an acid wash, matrix acidisation or fracture acidisation or sometimes “acid squeeze”; the type, volume, concentration and quantity of acid to be used; details (including concentrations and quantities) of any other chemicals that are to be used including chemicals used to neutralise any spent fluid that will be returned to the surface (such as soda ash); how any waste products produced will be disposed of; and the specification of the well and target formation(s) in which acidisation will be used.
694. The well specification will be to a standard to prevent any migration of acid in to other geological formations. If the EA have any concerns relating to this they would work with the operator and the HSE to investigate. The operator will also provide information on how they will seal the well so that they only use acid in the particular section of the target formation that they wish to work on.

Seismicity

695. A number of concerns have been raised over the potential for the application to result in earthquakes or tremors. Waverley Borough Council has raised objection due to the lack of information submitted on a range of technical information including in relation to major accidents including tremors. The Borough Council Portfolio Holder for Environment and Sustainability has requested that the application be refused due to the lack of assessment of potential seismic impacts. Dunsfold, Alfold and Cranleigh Parish Councils’ along with the Hascombe Estate, have also objected to the development raising similar concerns. A

number of representations have also been received raising concerns about this matter. Some have referred to the presence of fault lines in the geology beneath the site, and other concerns have been expressed that extraction would extend beneath the proposed new settlement at the airfield and that the proposal is just as likely to cause earthquakes as fracking. A request has also been received for independent monitoring to take place to provide peace of mind for residents in the vicinity.

696. The oil and gas industry is heavily regulated by a number of agencies including the MPA. However, the risk of earthquakes is not a matter for the MPA to resolve as part of the consideration of this application. Paragraph 112 of the Minerals Chapter of the nPPG states that a number of issues exist which are covered by other regulatory regimes and MPA's should assume that these regimes will operate effectively. Whilst these issues may be put before MPAs, they should not need to carry out their own assessment as they can rely on the assessment of other regulatory bodies.
697. This explains that the Department of Energy and Climate Change (DECC) has responsibility for assessing the risk of and monitoring seismic activity. Further in terms of what hydrocarbon issues MPAs can leave to other regulatory regimes, paragraph 112 of the nPPG Minerals Chapters adds that DECC is responsible for controls, usually through the licence consent regime, to mitigate seismic risks.
698. In July 2016, DECC became part of the Government Department for Business, Energy and Industrial Strategy (BEIS). It is now the OGA, which comprises a Government company with the Secretary of State for BEIS the sole shareholder, which has strict controls in place to ensure that operators manage the risk of induced seismicity resulting from the exploration, appraisal and production of hydrocarbons.
699. On 24 December 2019, the High Court refused permission for the Claimant to apply for judicial review (CO Ref: CO/4441/2019) of Surrey County Council's decision on 27 September 2019 to grant planning permission for the retention and extension of an existing well site at Horse Hill. This permission allowed the drilling of four new hydrocarbon wells to enable hydrocarbon production from six wells for a period of 25 years. A renewed application for permission to apply for judicial review was refused on 13 February 2020.
700. The third ground of challenge was that SCC failed to take into account a material consideration and / or erred in law by failing to consider the risk of earthquakes from the development. The judge found that SCC did not conclude that the risk of earthquakes was not material to its decision about planning permission, but, rather, that any dispute about such a risk was not for SCC to resolve, or make any recommendations about to the OGA. The judge stated that the relevant licensing regime is operated not by SCC, but by the OGA; in particular, the OGA can impose monitoring requirements, and can also stop development. The judge went on to conclude that SCC's approach to this question was consistent with national policy and guidance. The Order dated 13 February 2020 may still be appealed.

Health and Safety

701. Waverley Borough Council has raised objection to the development due to concerns that the assessment of major accidents should be extended to consider the impacts of the proposed development on any identified output on factors such as climate change, fires, winds, spillage / contamination, flight paths and acts of terrorism / protest. The Borough Council Portfolio Holder for Environment and Sustainability has requested that the application be refused due to the lack of clarity about chemicals to be used and storage and use of explosives. Alfold and Cranleigh Parish Councils' have strongly objected to the application and urged the County Council to take into account the impact from protesters. A representation has been received claiming that the HSE is not sufficiently resourced to monitor the site in the future.

702. Matters of health and safety and fire risk are enforced by the Health and Safety Executive (HSE) and would have to meet the strict safety code of the Borehole Site and Operation Regulations (BSOR) 1995 and other regulatory regimes of the EA and OGA.
703. A Major Accident and / or Disaster Risk Assessment has been submitted in support of the application. This considers the vulnerability, exposure and resilience of the proposed development to the likelihood of a major accident and / or disaster from sources beyond the boundary of the site or outside the control of the applicant.
704. This states that the site is sufficiently remote from land-use hazards to render any risks of disaster unlikely or not major. The site is distant from Dunsfold Aerodrome's main flightpaths and the operation of the aerodrome and surrounding industrial processes are subject to a framework of health and safety regulations that ensure safe working practices and acceptable environmental impacts.
705. It also explains that with regard to natural hazards, there will be no increase in the site's vulnerability given that the same considerate construction and drilling practices employed to date for previous sites will be engaged again. Work during extreme weather events will be stopped to break the pathway from any external hazard. All plant and machinery will be certified, securely installed and operated consistent with relevant EA permits and other relevant regulations. Further, the assessment considers that a combination of sensible site selection, design mitigation and appropriate on-site regulations is sufficient to manage any external hazard and make any residual risk unlikely, not major and acceptable in planning terms.
706. Paragraph 112 of the Minerals Chapter of the nPPG states that a number of issues exist which are covered by other regulatory regimes and MPAs should assume that these regimes will operate effectively. Whilst these issues may be put before MPAs, they should not need to carry out their own assessment as they can rely on the assessment of other regulatory bodies.
707. This paragraph goes on to explain that the HSE are responsible for enforcement of legislation concerning well design and construction. Before design and construction, operators must assess and take account of the geological strata, and fluids within them, as well as any hazards that the strata may contain. Under health and safety legislation, the integrity of the well is subject to examination by independent qualified experts throughout its operation, from design through construction and until final plugging at the end of operation.
708. In terms of the operation of surface equipment on the well pad, paragraph 112 states that whilst planning conditions may be imposed to prevent run-off of any liquid from the pad, and to control any impact on local amenity, the actual operation of the site's equipment should not be of concern to MPAs as these are controlled by the Environment Agency and the Health and Safety Executive. Further, with regard to well decommissioning / abandonment following exploration, the well is likely to be suspended and abandoned for a period of time. Health and Safety legislation requires design and construction to be carried out in such a way that, so far as reasonably practicable, there is no unplanned escape of fluids from it.
709. The HSE has been consulted on the application and has responded by advising that the proposed development site does not lie within the consultation distance of a major hazard site or major accident hazard pipeline. The HSE has also provided detailed information on their role in respect of the regulation of onshore oil and gas wells as set out in the 'Planning Considerations' section above. This confirms that risk management procedures are incorporated into The Health and Safety Plan required by the HSE under the BSOR Regulations 1995. Where appropriate, this requires: an escape plan and a plan for the prevention of fire and explosions including in particular provisions for preventing blowouts

and any uncontrolled escape of flammable gases and for detecting the presence of flammable atmospheres.

710. In relation to the risk of protester activity and terrorism, these are not considered to be matters for the CPA to resolve. The CPA has liaised with the County Council's Emergency Planning Team with regard to this application who are themselves in contact with Surrey Police.

House Prices

711. Representations have been received objecting to the application due to, amongst other matters, the negative impact on house prices that will result from the proposed development. This is not a matter that the CPA can take into consideration during the determination of planning applications.

Lack of Hydrocarbon Reserves

712. The Waverley Borough Council Conservative Group has raised objection to the application because any gas volumes will not be significant. A representation has been received objecting to the proposal stating that refusal could avoid a lot of disruption as there are no large oil reserves in the area. The primary target of the proposed development is gas. The secondary target is oil. The purpose of the application is to ascertain whether or not commercial volumes of gas and/or oil are present which are capable of being exploited. This can only be ascertained following the exploration and appraisal process.

Community Benefits

713. A representation has queried how the operator's cash contribution to the local community would work in practice. The provision of community benefits is at the discretion of the operator and would only be considered if commercially exploitable volumes of hydrocarbons are found to be present enabling a subsequent planning application for production in the longer term to be submitted. No community benefits are proposed during the exploration and appraisal stages which are the subject of this application.

Future Application for Production

714. In the determination of this application, Dunsfold Parish Council has urged the County Council to consider the likely next steps and subsequent applications since many local residents consider that the consequences are so adverse that the County Council should conclude that the site is not fit for even a limited exploratory operation. This is because if commercially viable reserves were to be found, it would be very difficult to reject the subsequent development proposal. In carrying out its duties including the determination of planning applications, the CPA is required to treat each application on its merits. For this reason, the implications of a potential future planning application for hydrocarbon production in the longer term cannot be taken into consideration during the determination of this application.

Lack of Consultation

715. Cranleigh Parish Council strongly object to the application due to a lack of consultation amongst other matters. A representation has been received requesting that the determination of the application be delayed to facilitate proper publicity and public engagement over the proposed access via Pratts Corner following the 'late' withdrawal of application WA/2019/1089 for an alternative access from Dunsfold Road to the north. The application has been made publicly available since 14 June 2019. Whilst additional documentation and information has been submitted by the applicant and made publicly available since this time, Officers consider that this has allowed ample time for any interested persons to submit representations on the proposal and make their views known.

Hours of Operation

716. A representation has been received requesting that the hours of operation be reduced to 0800 - 1800 Monday to Friday and 0900 - 1200 on Saturdays to take account of outdoor activities at nearby properties. Officers are satisfied that the proposed hours of operation are acceptable in relation to noise and proposed Informative 20 advises the applicant to have particular regard for the residents and businesses that neighbour the site and to liaise with them to ensure that the impacts of the development are minimised and maintained at acceptable levels.

Liaison with Local residents

717. A representation has been received requesting the imposition of a planning condition requiring the applicant to liaise with nearby residents and businesses to ensure impacts are minimised. This matter is addressed by proposed Informative 20 which Officers consider to be sufficient to address this concern.

Utility Information

718. The National Grid has no record of owning any infrastructure in the vicinity of the application site. In an automated response to an online query, the HSE has advised that the proposed development site does not currently lie within the consultation distance of a major hazard site or major accident hazard pipeline. An automated response to an online enquiry has confirmed that SGN does not have any gas utility infrastructure within the vicinity of the application site. To err on the side of caution, in the event that planning permission is granted, and in case any gas utility infrastructure is found, a number of guidance documents and safety information supplied by SGN have been sent to the applicant. These comprise: SGN's response letter; 'Know What's Below: Protecting You and Your Family'; relevant SGN infrastructure plans; 'Safety Advice - Valves'; and, 'Dig Safely: Measures to Avoid Injury and Damage to Gas Pipes'. The applicant has been requested to forward this information onto the site operator so that this information can be brought to the attention of their contractors in the event that planning permission is granted.
719. In an automated response to an online query, UK Power Networks has indicated the presence of an 11 KV underground cable in the vicinity of Dunsfold Road, Pratts Corner and High Loxley Road, an abandoned underground cable crossing High Loxley Road and a sub-station west of High Loxley Road. Again, safety information and guidance documents have been provided by UK Power Networks and passed onto the applicant and operator to bring to the attention of their contractors in the event that planning permission is granted. These comprise: the covering letter from UK Power Networks; the relevant utility infrastructure plans; and 'Think before you Dig under Ground'.
720. The applicant has advised that once they select a site as being a possible host for hydrocarbon development, one of the first acts performed by the construction manager is to ensure that there would be no unacceptable infrastructure constraints including in relation to gas, electricity, water and drainage networks. The applicant has advised that these matters have been carefully considered.

Procedural Matters

721. Waverley Borough Council has expressed concern that in relation to the application form and red-line plan, this does not immediately make it clear that works at Pratts Corner are required as part of the proposed works. The Borough Council do not believe the correct notice was served as only Mr Ward and SCC were identified as owners and appropriate notice served on them. As the Common Land interest has not been identified and the Estates Team at Waverley Borough Council has not been informed, the Borough Council

believe the validity of the application is called into question and that the application should be withdrawn.

722. Officers consider that the Borough Council has not relied on the most up to date documentation in order to inform their view of the area of land that comprises registered Common Land. As a consequence, the observations contained in their response are considered to be unreliable. As explained in the above section on Highways, Traffic and Access, the proposed highway works are considered to be within highway land. They are therefore considered to fall outside of the stewardship of the Borough Council. As a consequence, Officers consider that the landowner notification procedures recorded within the submitted forms are accurate and complete.

HUMAN RIGHTS IMPLICATIONS

723. The Human Rights Act Guidance for Interpretation, contained in the Preamble to the Agenda is expressly incorporated into this report and must be read in conjunction with the following paragraph.
724. It is recognised that there would be some slight to modest temporary adverse impacts largely in terms of landscape, and amenity in relation to visual, noise, air quality, traffic and lighting disturbance, from the drilling, testing and appraisal, and future maintenance, at the site over a temporary period of 3 years. The impacts during construction, site preparation and restoration are considered to be negligible to slight. Nevertheless, it is the view of Officers that the scale of any potential impacts are not considered sufficient to engage Article 8 or Article 1 of the Convention and that the potential impacts will not be significant and can be mitigated by planning conditions to an acceptable degree. As a consequence, this proposal is not considered to interfere with any Convention right.

CONCLUSION

725. This application is for the first and second stages of onshore oil and gas development, namely exploration and appraisal, and is for a temporary period of three years. It involves the construction of a new well site compound and access track, a new highway junction with High Loxley Road, highway safety improvements along High Loxley Road and at the junction between High Loxley Road and Dunsfold Road, the erection of a boundary fence and entrance gates followed by the installation of plant and machinery, the drilling of one exploratory well (Loxley-1) and one side-track well (Loxley-1z) and the appraisal and testing of hydrocarbon minerals with restoration to agriculture.
726. The primary target for exploration is gas from the Portland Sandstone Formation within the Godley Bridge Gas Discovery. This consists of a hydrocarbon reservoir up to 2km below ground and 2km wide, stretching from Chiddingfold in the west to Alfold Crossways in the east. The secondary target is oil from the deeper Kimmeridge Limestone Formation. The proposal will comprise 4 distinct phases: Phase 1: Access and Well Site Construction; Phase 2: Drilling, Testing and Appraisal; Phase 3: Well Plugging, Abandonment and Decommissioning; and Phase 4: Site Restoration.
727. The application site is situated around 1 mile north-east of Dunsfold on an agricultural field in countryside beyond the green belt. The site is designated as AGLV and is situated within the setting of the AONB which is located approximately 530 metres to the north of the well site compound. All lorry traffic accessing and egressing the site is proposed to be routed via Dunsfold Road and the A281 to the east which connects Guildford and Horsham with details to be provided as part of a Transport Management Plan to be secured by condition prior to the commencement of the development.

728. The oil and gas industry is heavily regulated and requires a range of licences, permits and consents from the OGA, the HSE, the EA, and the MPA. In terms of the role of the MPA, the NPPF says that the focus should be on whether the proposed development is an acceptable use of the land, rather than the control of processes or emissions where these are subject to separate pollution control regimes. Planning decisions should assume that these regimes will operate effectively.
729. The CPA's adopted EIA Screening Opinion recommends that the proposal does not constitute 'EIA development'. This is given the small area of land affected, the low volumes of any hydrocarbons that would be extracted, and the site not being located within any sensitive areas as defined within the relevant guidance and regulations. Officers are satisfied that the proposal accords with national energy and planning policy and consider that there is a demonstrable need to maintain a stable and reliable supply of indigenous energy sources into the future, by maximising the recovery of domestic supplies and contributing to the energy mix. Officers attribute significant weight to this aspect of the proposal and conclude that the development is in the national and wider public interest.
730. Officers conclude that the proposal would not conflict with the climate change agenda and acknowledge that climate change and energy policies are interlinked with the Government recognising that both the way we produce and use energy plays a major part in meeting the challenge of climate change. Officers therefore consider that the need for hydrocarbons to support a diverse energy mix, provide energy security, reduce reliance on imports by increasing domestic sources of supply and support the transition to a low carbon economy remain relevant despite recent declarations of a climate emergency and the recent publication of Surrey's Climate Change Strategy.
731. The proposal has been found to be acceptable on highway safety, capacity and policy grounds subject to the imposition of a number of planning conditions to ensure that the development does not prejudice highway safety or cause inconvenience to other highway users. Whilst it is acknowledged that the site is situated in a sensitive landscape, the impact would be exacerbated by the clear-felling of woodland to the north, east and south-east and that the proposal would create a more industrialised feel along the northern section of High Loxley Road, Officers conclude that as these impacts would be mitigated by a combination of factors, there would be no significant adverse impact on landscape and visual amenity. Whilst it would not be possible to screen the uppermost sections of the tallest structures comprising the crane or drilling rig, and potentially to a lesser extent, a coil tubing unit and two shrouded flares, proposed fencing with camouflage netting will help to screen views of ground based cabins, plant, machinery and equipment. Further, views from all except the nearest locations, which would include the public bridleway running along the southern boundary of the well site host field, would be largely filtered by existing vegetation around field boundaries and along road side verges reducing the impact to an acceptable level.
732. The application site is not located within an AQMA. An assessment of the proposal in relation to construction dust, in- combination effects and emissions from road traffic, engines, generators, HGVs and flares at the nearest locations of human exposure and ecological sites demonstrate that there will be no substantial threat to the attainment of ambient air directive limits. Officers therefore conclude that the impact on air quality is not likely to be significant. Subject to the provision of mitigation measures and the imposition of conditions, Officers are satisfied that the development would not give rise to a significant adverse impact on noise, either from temporary operations or during the day time and night time periods, or light trespass or glare on residential receptors, the level of 'sky-glow' or light spill on ecological receptors.
733. The impacts of the proposal on surface water management, groundwater and the use, quality and integrity of land and soil resources and land stability have been assessed and found to be acceptable in planning terms subject to the imposition of conditions. Further,

the EA has confirmed that additional measures to safeguard the water environment will be included as part of the environmental permitting process. Additionally, subject to the imposition of conditions requiring the submission of both an initial and final LEBREP to replace any lost vegetation at the earliest opportunity, secure the provision of biodiversity 'net-gain' and to ensure that the final restoration scheme takes into account the prevailing ecological conditions at that time, the proposal would not have a significant adverse impact on ecology and biodiversity.

734. The application has been found acceptable on archaeological grounds subject to a condition requiring the prior approval of a Written Scheme of Investigation detailing a programme of architectural works to be undertaken. With regard to heritage assets and their setting, Officers conclude that the impacts of the development would not result in any harm to Hascombe Camp and Dunsfold Conservation Area or their respective settings although it would result in less than substantial harm to a number of listed buildings in the vicinity of the site as well as their settings. However the harm is reduced by partial vegetation screening and the mitigation measures proposed by the applicant. In view of the need for the development, which is considered to be in the national and wider public interest, Officers consider that the temporary less than substantial harm is outweighed by other public benefits. In addition, Officers have found that the proposal would not have a significant adverse impact on the rights of way network or in relation to cumulative impacts in terms of traffic, air quality and ecology.
735. Finally, in terms of restoration, Officers are satisfied that the proposal to return the land to agricultural use with woodland planting represents a suitable after-use and that the restoration and aftercare of the site can be secured by condition. Further, the proposed enhancement measures would result in local environmental improvements in the medium and longer term. Consequently, Officers believe that the site can be restored and managed to a high standard and at the earliest opportunity, in a manner that is sympathetic to the character and setting of the wider area and which is capable of sustaining an appropriate after-use.
736. Consultees providing specialist technical advice have found the proposal to be acceptable subject to the imposition of planning conditions where stated. Waverley Borough Council has raised objection to the proposal on 17 grounds and a number of local parish councils and amenity groups have objected strongly to the proposal. A large number of representations have been received of which 84% object to the proposal for a wide range of reasons. The reasons for these objections have been carefully considered. Officers acknowledge the concerns raised and that the proposal would give rise to some temporary impacts on amenity, especially given the rural nature of the locality. However mineral working is a temporary activity and in this case the proposal would last for up to three years.
737. In conclusion, on the basis of the specialist advice received from consultees on technical matters, the assessment of both relevant national and local development plan policies and the demonstrable need for the development which is considered to be in the national and wider public interest, Officers consider that on balance, with proposed mitigation measures in place and the imposition of a number of planning conditions, the proposed development would not give rise to any significant adverse environmental or amenity impacts and meets the relevant development plan policy requirements. For these reasons, the planning application may therefore be permitted.

RECOMMENDATION

The recommendation is to **PERMIT** application WA/2019/0796 subject to the following conditions:

**IMPORTANT - CONDITION NOs 9, 13, 14, 22, 25, 27, 30 and 31
MUST BE DISCHARGED PRIOR TO THE COMMENCEMENT OF THE DEVELOPMENT**

**THERE ARE OTHER CONDITIONS REQUIRING SCHEMES TO BE APPROVED PRIOR TO
THE COMMENCEMENT OF CERTAIN OPERATIONS**

CONDITIONS:

Approved Plans and Drawings

1. The development hereby permitted shall be carried out in all respects in accordance with the following plans/drawings:

Drawing No	Rev	Title	Date
ZG-UKOG-L1-PA-01	0	Site Location Plan	March 2019
ZG-UKOG-L1-PA-02	0	Location Plan	March 2019
ZG-UKOG-L1-PA-03	0	Existing Site Plan (Composite)	March 2019
ZG-UKOG-L1-PA-04	0	Existing Site Plan 1 of 3 (Well Site to Burchetts SW Corner)	March 2019
ZG-UKOG-L1-PA-05	0	Existing Site Plan 2 of 3 (Burchetts SW Corner to Burchetts NW Corner)	March 2019
ZG-UKOG-L1-PA-06	0	Existing Site Plan 3 of 3 (Burchetts NW Corner to High Loxley Road)	March 2019
ZG-UKOG-L1-PA-07	0	Existing Sections Plan (Well Site)	March 2019
ZG-UKOG-L1-PA-08	1	Proposed Construction Layout Plan 1 of 4 (Well Site)	December 2019
ZG-UKOG-L1-PA-09	1	Proposed Construction Layout Plan 2 of 4 (Well Site to Burchetts SW Corner)	December 2019
ZG-UKOG-L1-PA-10	0	Proposed Construction Layout Plan 3 of 4 (Burchetts SW Corner to Burchetts NW Corner)	March 2019
ZG-UKOG-L1-PA-11	0	Proposed Construction Layout Plan 4 of 4 (Burchetts NW Corner to High Loxley Road)	March 2019
ZG-UKOG-L1-PA-12	1	Proposed Construction Sections Plan	December 2019
ZG-UKOG-L1-PA-13	0	Proposed Access Layout Plan - High Loxley Road	March 2019
ZG-UKOG-L1-PA-14	0	Proposed Access Layout Plan - Pratts Corner	March 2019
ZG-UKOG-L1-PA-15	1	Drilling Mode Layout Plan	December 2019
ZG-UKOG-L1-PA-16	1	Section Through Drilling Mode Layout Plan (BDF Rig 28 - Height 37m)	December 2019
ZG-UKOG-L1-PA-17	0	Section Through BDF Rig 28 Drilling Rig (Height 37m)	March 2019
ZG-UKOG-L1-PA-18	0	Section Through BDF Rig 51 Drilling Rig (Height 38m)	March 2019
ZG-UKOG-L1-PA-19	1	Initial Flow Testing Mode Layout Plan	December 2019
ZG-UKOG-L1-PA-20	1	Section Through Initial Flow Testing Mode Layout Plan	December 2019
ZG-UKOG-L1-PA-21	1	Section Through PWWS MOOR 475 Workover Rig (Height 35m)	May 2019
ZG-UKOG-L1-PA-	0	Section Through PWWS IDECO BIR H35	March

Drawing No	Rev	Title	Date
22		Workover Rig (Height 34m)	2019
ZG-UKOG-L1-PA-23	1	Extended Well Testing Mode Layout Plan (with Temporary Noise Mitigation)	December 2019
ZG-UKOG-L1-PA-24	1	Section Through Extended Well Testing Mode Layout Plan	December 2019
ZG-UKOG-L1-PA-25	1	Retention Mode Layout Plan	December 2019
ZG-UKOG-L1-PA-26	1	Section Through Retention Mode Layout Plan	December 2019
ZG-UKOG-L1-PA-27	1	Proposed Well Site Fencing & Gates Section Plan	December 2019
ZG-UKOG-L1-PA-28	0	Proposed Entrance Fencing, Gates & Security Cabin Section Plan	March 2019
ZG-UKOG-L1-PA-29	0	Proposed Restoration Layout Plan 1 of 5 (Well Site)	March 2019
ZG-UKOG-L1-PA-30	0	Proposed Restoration Layout Plan 2 of 5 (Well Site to Burchetts SW Corner)	March 2019
ZG-UKOG-L1-PA-31	0	Proposed Restoration Layout Plan 3 of 5 (Burchetts SW Corner to Burchetts NW Corner)	March 2019
ZG-UKOG-L1-PA-32	0	Proposed Restoration Layout Plan 4 of 5 (Burchetts NW Corner to High Loxley Road)	March 2019
ZG-UKOG-L1-PA-33	0	Proposed Restoration Sections Plan 5 of 5 (Well Site)	March 2019
6033.504	A	Wellsite Construction Details Sheet 2	13 February 2019
SK-04	B	Post-mitigation Scheme of Lighting Layout	1 November 2019

- From the date that any works commence in association with the development hereby permitted until the cessation of the development/completion of the operations to which it refers, a copy of this permission including all documents hereby approved and any documents subsequently approved in accordance with this permission, shall be available to the site manager, and shall be made available to any person(s) given the responsibility for the management or control of operations.

Commencement

- The development hereby permitted shall be implemented before the expiration of 3 years from the date of this permission. The developer shall notify the County Planning Authority in writing within seven working days of the commencement of the implementation of the planning permission.

Time Limits

- The development hereby permitted shall be for a limited period only, expiring 3 years from the date of the implementation of the planning permission referred to in Condition 3. By this date, all buildings, plant and machinery (both fixed and otherwise) and any engineering works connected therewith, on or related to the application site (including any hard surface constructed for any purpose), shall be removed from the application site and the site shall be reinstated in accordance with the restoration details set out in Condition 32. Notwithstanding this, any plant or equipment required to make the site safe in accordance with the Oil & Gas Authority general arrangement requirements at the time and agreed with the County Planning Authority may remain in position.

5. Prior written notification of the date of commencement for each phase of development works hereby permitted (Phases 1-4 as described at Section 3 of the Planning Statement and Environmental Report, including workovers and side-tracks) shall be sent in writing to the County Planning Authority not less than seven days before such commencement.

Hours of Operation

6. With the exception of drilling, workovers, extended well tests and short-term testing, no lights shall be illuminated nor shall any operations or activities authorised or required by this permission, take place other than during the hours of:

07:00 to 19:00 hours on Monday to Friday;
09:00 to 13:00 hours on Saturday.

Apart from the exceptions referred to above, there shall be no working at any time on Sundays, Bank Holidays, Public or National Holidays.

Highways, Traffic and Access

7. No operations associated with the well site compound shall take place unless and until the proposed access road within the site including its junction with High Loxley Road and any highway works at the junction of High Loxley Road and Dunsfold Road have been constructed. The junction of the site and High Loxley Road shall be provided with 2.4m x 70m visibility splays in both the leading and trailing traffic directions in accordance with the approved plans and, thereafter, the visibility splays shall be kept permanently clear of any obstruction above 0.6m high. No other development shall begin before the junction works and the new access road within the site have been completed.
8. Within 3 months of the well site decommissioning, the site access onto High Loxley Road shall be permanently closed, any kerbs and verges fully reinstated and the highway works at the junction of High Loxley Road and Dunsfold Road shall be removed and the highway fully reinstated.
9. **Prior to the commencement of the development** hereby permitted, a Transport Management Plan, in accordance with the submitted Framework Construction Transport Management Plan (dated September 2019), shall be submitted to and approved in writing by the County Planning Authority. The plan shall cover all phases of the development and include:
 - (a) Parking for vehicles of site personnel, operatives and visitors;
 - (b) Loading and unloading of plant and materials;
 - (c) Storage of plant and materials;
 - (d) Programme of works for each phase;
 - (e) Provision of boundary hoarding behind any visibility zones;
 - (f) HGV deliveries and hours of operation;
 - (g) HGV routeing;
 - (h) Measures to prevent the deposit of materials on the highway;
 - (i) The carrying out of a 'Pre' construction condition survey of the highway with subsequent 'Post' construction condition surveys to be undertaken once every 6 months after the development has commenced: i) between the site entrance on High

Loxley Road and the junction between High Loxley Road and Dunsfold Road; and ii) the section of Dunsfold Road situated 50 metres either side of the junction between High Loxley Road and Dunsfold Road;

- (j) On-site turning for construction vehicles;
- (k) Abnormal Load Traffic Management Plan;
- (l) Having consulted with High Billingham Farm the submission of traffic management measures, by phase, for the cumulative traffic flows generated by the development hereby permitted and High Billingham Farm during an 'event' (as defined by Waverley Borough Council Decision Notice WA/2020/0220 dated 26th March 2020). The measures shall be designed to minimise the use of traffic signals or optimise signal operation in the interests of the free flow of traffic within High Loxley Road;
- (m) Measures for traffic management by phase at the High Loxley Road/Dunsfold Common Road/Dunsfold Road junctions;
- (n) Measures for traffic management by phase at the junction of the site access track and High Loxley Road; and
- (o) Final details of the placement, specification and design of all road traffic signage by phase. Only the approved details shall thereafter be implemented, retained and used by each phase whenever operations are undertaken.

Only the approved details shall be implemented as part of the development.

10. No operations involving the bulk movement of materials to or from the development site shall commence unless and until facilities have been provided in accordance with a scheme to be submitted to and approved in writing by the County Planning Authority so far as is reasonably practicable to prevent the creation of dangerous conditions for road users on the public highway. The approved scheme shall thereafter be implemented, retained and used whenever the said operations are undertaken.
11. The development hereby permitted shall not be first brought into use unless and until space has been laid out within the site in accordance with a scheme to be submitted to and approved in writing by the County Planning Authority for HGV parking, loading, unloading and on-site turning (so that they may enter and leave the site in a forward gear). Thereafter the parking, loading, unloading and turning areas shall be retained and maintained for the designated purposes.
12. There shall be:
 - (a) no more than 20 two-way (10 in - 10 out) HGV movements to or from the site in any one day. The site operator shall maintain accurate records of the number of HGV's accessing and egressing the site daily and shall make these available to the County Planning Authority on request; and
 - (b) no HGV movements to or from the site taking place outside of the hours of 07:00 to 19:00 Monday-Friday, 09:00-13:00 on Saturdays and all day on Sundays and Bank Holidays.

HGV movements outside these time-limits will only be allowed in exceptional circumstance (i.e. Phase transition or rig mobilisation/demobilisation). The County Planning Authority shall be given 14 days prior written notification of the time, date and duration of any such HGV movements.

Noise and Vibration

13. **Prior to the commencement of the development** hereby permitted, a scheme of noise mitigation shall be submitted to and approved in writing by the County Planning Authority. The mitigation measures will ensure that the noise levels set out in Conditions 15 and 16 are met. Mitigation shall be put in place prior to any operations taking place and shall be retained and maintained for the duration of the works.
14. **Prior to the commencement of the development** hereby permitted, a noise monitoring plan (NMP) shall be submitted to and approved in writing by the County Planning Authority, taking into account the noise limits set out in Conditions 15 and 16. The NMP shall include a methodology for undertaking noise surveys, with the results of the monitoring reported to the County Planning Authority within 14 days of monitoring. Should the site fail to comply with the noise limits, within 14 days of notification of any breach of the noise limits, the applicant shall submit a scheme for the approval in writing by the County Planning Authority to attenuate noise levels to the required level which shall be implemented within 7 days of the County Planning Authority issuing approval for the scheme, or the source of noise shall cease until such a scheme is in place. Noise monitoring shall only be undertaken by those competent to do so (i.e. Member of Associate grade of the Institute of Acoustics).
15. For temporary operations such as site preparation and reinstatement, the level of noise arising from any operation, plant or machinery on the site, when measured at, or recalculated as at, a height of 1.2 metres above ground level and 3.5 metres from the façade of a residential property or other noise sensitive building that faces the site shall not exceed 65 dB LAeq during any 30 minute period between the hours of 0700 to 1900 Monday to Friday and 0900 to 1300 hours on a Saturday and at no other time. No work causing audible noise at any noise sensitive receptor is permitted at any other time including Sunday, Bank Holiday or National Holiday.
16. For operations other than temporary, including drilling, testing and appraisal, maintenance workover and flaring, the daytime and evening noise levels (0700 hours to 2200 hours Monday to Friday and 0900 hours to 1300 hours Saturdays) shall not exceed 48 dB LAeq, 30 minutes. At all other times, the noise levels shall not exceed 42 dB LAeq, 30 minutes. These noise limits apply 3.5 metres from the façade of any affected property.
17. Between the hours of 19:00 to 07:00 inclusive, no tripping shall be undertaken, nor shall casing be cemented except in cases of emergency.
18. All plant and machinery shall be adequately maintained and silenced in accordance with the manufacturer's recommendations at all times.

Lighting

19. The development hereby permitted shall be undertaken in accordance with the measures for mitigating the impact of lighting outlined in Section 7.1 of the submitted Lighting Assessment dated November 2019.
20. Operational lighting shall be installed in accordance with Drawing No SK-04 Rev B Post-mitigation Scheme of Lighting Layout dated 1st November 2019. All lighting required for operations and maintenance will be locally switched and manually operated on an 'as required' basis and luminaires over the cabins/stores doors will be controlled by 'presence detection' with a manual override.
21. Obstacle lights shall be placed as close as possible to the top of the drilling rig and workover rig (and any crane deployed in workover activity outside of daylight hours). These obstacle lights must be steady red lights with a minimum intensity of 200 candelas. Lights must be visible from all directions and illuminated at all times. Unserviceable lamps must be replaced as soon as possible after failure and in any event within 24 hours.

Water Environment

22. **Prior to the commencement of the development** hereby permitted, details of the design of a surface water drainage scheme shall be submitted to and approved in writing by the County Planning Authority. The design must satisfy the SuDS Hierarchy and be compliant with the national Non-Statutory Technical Standards for SuDS, National Planning Policy Framework and Ministerial Statement on SuDS. The required drainage details shall include:
- (a) Detailed drainage design drawings and calculations to include: a finalised drainage layout detailing the location of drainage elements, pipe diameters, levels, and long and cross sections of each element including details of any flow restrictions and maintenance/risk reducing features including the proposed High Density Polyethylene membrane to be incorporated into the construction of the well site, silt traps and inspection chambers;
 - (b) Details of how the drainage system will be protected during construction and how run-off (including any pollutants) from the development site will be managed before the drainage system is operational;
 - (c) Details of how surface water levels within the well site will be monitored and how operations will be managed during periods of saturation;
 - (d) Details of drainage management responsibilities and maintenance regimes for the drainage system; and
 - (e) A plan showing exceedance flows (i.e. during rainfall greater than design events or during blockage) and how property on and off-site will be protected.
23. Prior to the commencement of drilling, testing and appraisal, a verification report carried out by a qualified drainage engineer must be submitted to and approved in writing by the County Planning Authority. This must demonstrate that the drainage system has been constructed as per the agreed scheme (or detail any minor variations), provide the details of any management company and state the national grid reference of any key drainage elements including surface water attenuation devices/areas, flow restriction devices and outfalls.

Geotechnical Issues

24. The 'Area of hardstanding for access, cabins and car parking' shown on Drawing No: ZG-UKOG-L1-PA-08 Rev 1 Proposed Construction Layout Plan 1 of 4 (Well Site) dated December 2019, shall be retained and maintained for these designated purposes and no HGV parking or storage of consumables, fuel, process chemicals and/or mechanical/electrical plant is permitted in this area.
25. **Prior to the commencement of the development** hereby permitted, a Construction Environment Management Plan (CEMP) shall be submitted to and approved in writing by the County Planning Authority. The plan shall include:
- (a) Soil Conservation and Management Plan, for the protection and conservation of excavated material supported by design methodology inclusive of the means of extraction, methods of storage and maintenance of soils in accordance with guidance provided by the Defra 'Code of practice for the sustainable use of soils on construction sites' and the measures adopted for reinstatement and restoration;

- (b) Slope Stability Assurance Plan, for the level working platform and the integrity of the impermeable membrane liner supported by methodology inclusive of a timed programme of ground investigations to inform the geotechnical and hydrogeological parameters used in the final design and construction of the proposed earthworks;
 - (c) Construction Quality Assurance Plan, for the construction of retaining structures (i.e. perimeter bunding and earthworks) and containing structures (i.e. perimeter ditches and the impermeable membrane) inclusive of final design details and methods of membrane sealing (i.e. with drilling cellars, 'rathole' or 'mousehole', pavements, floor slabs and foundations) supported by design methodology and details of any further geotechnical assessments to be performed; and
 - (d) Construction Quality Monitoring Plan, for the testing, inspection and maintenance of retaining and containing structures together with details of the placement and design of any groundwater monitoring wells to be installed.
26. Prior to the commencement of drilling, testing and appraisal, a Construction Environment Management Plan (CEMP) Verification Report shall be submitted to and approved in writing by the County Planning Authority. The verification report should include:
- (a) Details that demonstrate compliance with the CEMP;
 - (b) Justification for any changes or deviations from the agreed CEMP;
 - (c) The results and location plans of all field and laboratory testing, including certificates of compliance, and inspection records;
 - (d) Post-construction load testing to demonstrate the stability of retaining structures, containing structures and earthworks;
 - (e) Any other site-specific information considered relevant to proving the integrity of the construction works; and
 - (f) Provision of details of any changes including 'as-built' plans and sections of the approved CEMP, as identified under (b) above
27. **Prior to the commencement of the development** hereby permitted, a Pre-development Baseline Geochemical Testing Report shall be submitted to and approved in writing by the County Planning Authority. The testing methodology shall comprise as a minimum the following:
- (a) The collection of soil samples on the exposed soil formation after the well site and access track have been excavated to the final formation level. Sampling of the well site compound will adopt a grid pattern (not greater than 20m spacing) and sampling shall be carried out prior to the laying of the membrane and placement of any crushed rock hardstanding, slabs or foundations;
 - (b) The locations and elevations of the sampling locations shall be recorded accurately;
 - (c) The methodology shall set out the range of potential contaminants to be tested for, relevant to the proposed works, test methods, and limits of detection; and
 - (d) Details of the testing laboratory to be used and the accreditation status for each test.
28. Prior to the commencement of restoration works a Post-Development Geochemical Inspection and Testing Report shall be submitted to and approved in writing by the County Planning Authority. The report shall present details of:

- (a) The results of geochemical analysis of soil samples collected from the exposed soil formations adjacent to the sampling point locations adopted for the Pre-Development Baseline Geochemical Testing Report approved pursuant to Condition 27 after removal of the infrastructure and before the replacement of any restoration soils to allow for independent verification and site inspection prior to restoration if necessary;
 - (b) Comparison of the laboratory results for the 'Pre' and 'Post' development phases; and
 - (c) If contamination is identified, a Contaminated Land Risk Assessment Report inclusive of a strategy for the design and implementation of any remediation required.
29. All excavated topsoil and subsoil shall be permanently retained on the site for subsequent use in restoration. No soils or soil making material for use in the restoration shall be brought onto the site, unless required by an approved site remediation scheme.

Ecology and Biodiversity

30. **Prior to the commencement of the development** hereby permitted, an initial Landscape, Environment and Biodiversity Restoration and Enhancement Plan shall be submitted to and approved in writing by the County Planning Authority. The plan shall include:
- (a) Year 1: Environmental Reinstatement and Enhancement Plan, as recorded within the Loxley Well Site Landscape, Environment and Biodiversity Restoration and Enhancement Plan (Section 2, EDP Report 4788_r002c dated October 2019) inclusive of the replacement of trees and hedgerows removed during construction works, a programme to retain and protect existing trees and hedgerows and a timed programme for the planting of new trees and hedgerows and the creation of new biodiversity habitat; and
 - (b) Precautionary Method Working Statements for great crested newts and reptiles, as recorded within the Loxley Well Site Ecological Impact Assessment (Chapter 6: Mitigation, Aecom Project No. 60555556 dated December 2018).

The approved plan shall be implemented in full and those protection measures that are required to be retained shall be maintained in a functional condition for the duration of the development and any agreed aftercare period.

Archaeology and Heritage

31. **Prior to the commencement of the development** hereby permitted, a programme of archaeological work in accordance with a Written Scheme of Investigation shall be submitted to and approved in writing by the County Planning Authority.

Restoration

32. Within 12 months of the implementation of this permission or prior to well site decommissioning (whichever is the sooner) a Final Landscape, Environment and Biodiversity Restoration and Enhancement Plan shall be submitted to the County Planning Authority for approval in writing. The plan shall include:
- (a) Year 3: Landscape Restoration, Biodiversity and Environmental Enhancement, as recorded within the Loxley Well Site Landscape, Environment and Biodiversity Restoration and Enhancement Plan (Section 2, EDP Report 4788_r002c dated October 2019) designed to deliver biodiversity and wider environmental net-gain

making use of native species and reflecting the historic use of the site as worked agriculture land and forestry;

- (b) The ecological surveys performed to support the Loxley Well Site Ecological Impact Assessment (Aecom Project No. 60555556 dated December 2018) shall be repeated to establish the ecological baseline required to inform the plan and ensure that there are no adverse impacts on habitats and species;
- (c) Slope Restoration Plan supported by methodology inclusive of any further ground investigations required to inform the geotechnical and hydrogeological parameters used in the final design and construction of the earthworks required to restore the site to its pre-development state; and
- (d) Soil Restoration Plan: inclusive of measures to cultivate and improve the soils prior to re-spreading and restoration and measures to ensure aftercare for a period of 5 years post development completion.

The plan as approved shall be carried out in full and all planting implemented pursuant to this permission shall be maintained in good, healthy condition and be protected from damage for five years from the completion of site restoration. During that period any trees or shrubs which die, or are severely damaged or diseased shall be replaced in the next available planting season with others of a similar size and species.

- 33. The restored land shall be brought to the required standard for agricultural and woodland use. The applicant shall notify the County Planning Authority in writing within seven days once the planting or seeding has been completed and within one year from the date of notification a meeting shall take place, to be attended by representatives of the applicant, the landowners (or their successors in title) and the County Planning Authority, to monitor the success of the aftercare. Annual meetings will then be arranged and held within the period of five years from the commencement of aftercare.

REASONS FOR IMPOSING CONDITIONS:

- 1. For the avoidance of doubt and in the interests of proper planning.
- 2. To ensure that site operatives are conversant with the terms of the planning permission in the interests of the local environment and amenity to accord with Surrey Minerals Plan 2011 Core Strategy Policy MC14.
- 3. To comply with Section 91(1)(b) of the Town and Country Planning Act 1990 as amended by Section 5(1) of the Planning and Compulsory Purchase Act 2004.
- 4. To enable the County Planning Authority to exercise planning control over the operation so as to minimise the impact on local amenity and to ensure the prompt and effective restoration to comply with Schedule 5 paragraph 1 of the Town and Country Planning Act 1990 and Surrey Minerals Plan 2011 Core Strategy Policy MC17.
- 5. To enable the County Planning Authority to exercise planning control over the operation so as to minimise the impact on local amenity to comply with Surrey Minerals Plan 2011 Core Strategy Policy MC14.
- 6. To enable the County Planning Authority to exercise planning control over the operation so as to minimise the impact on local amenity to comply with Surrey Minerals Plan 2011 Core Strategy Policy MC14.
- 7. In order that the development should not prejudice highway safety nor cause inconvenience to other highway users, in accordance with Policy MC15 of the Surrey

Minerals Plan 2011 Core Strategy, Waverley Borough Local Plan Part 1: Strategic Policies and Sites (2018) Policy ST1 and Waverley Borough Local Plan (2002) 'saved' Policy D1.

8. In order that the development should not prejudice highway safety nor cause inconvenience to other highway users, in accordance with Policy MC15 of the Surrey Minerals Plan 2011 Core Strategy, Waverley Borough Local Plan Part 1: Strategic Policies and Sites (2018) Policy ST1 and Waverley Borough Local Plan (2002) 'saved' Policy D1.
9. In order that the development should not prejudice highway safety nor cause inconvenience to other highway users in accordance with Surrey Minerals Plan 2011 Core Strategy Policy MC15, Waverley Borough Local Plan Part 1: Strategic Policies and Sites (2018) Policy ST1 and Waverley Borough Local Plan (2002) 'saved' Policy D1.. The imposition of a pre-commencement condition for a Transport Management Plan is recommended by the County Highway Authority to secure the submission of a revised and updated Transport and Traffic Management Plan to safeguard highway safety, the environment and local amenity in terms of traffic and highways.
10. In order that the development should not prejudice highway safety nor cause inconvenience to other highway users, in accordance with Policy MC15 of the Surrey Minerals Plan 2011 Core Strategy, Waverley Borough Local Plan Part 1: Strategic Policies and Sites (2018) Policy ST1 and Waverley Borough Local Plan (2002) 'saved' Policy D1.
11. In order that the development should not prejudice highway safety nor cause inconvenience to other highway users, in accordance with Policy MC15 of the Surrey Minerals Plan 2011 Core Strategy, Waverley Borough Local Plan Part 1: Strategic Policies and Sites (2018) Policy ST1 and Waverley Borough Local Plan (2002) 'saved' Policy D1.
12. In order that the development should not prejudice highway safety nor cause inconvenience to other highway users, in accordance with Policy MC15 of the Surrey Minerals Plan 2011 Core Strategy, Waverley Borough Local Plan Part 1: Strategic Policies and Sites (2018) Policy ST1 and Waverley Borough Local Plan (2002) 'saved' Policy D1.
13. To ensure minimum disturbance and avoid nuisance to the locality in accordance with Surrey Minerals Plan 2011 Core Strategy Policy MC14. The imposition of a pre-commencement condition for a scheme of noise mitigation is recommended by the Borough Council's Environmental Health Officer to provide appropriate noise control to ensure there would be no significant adverse impact from noise nuisance on nearby receptors.
14. To ensure minimum disturbance and avoid nuisance to the locality in accordance with Surrey Minerals Plan 2011 Core Strategy Policy MC14. The imposition of a pre-commencement condition for a noise monitoring plan is recommended by the Borough Council's Environmental Health Officer to provide appropriate noise control to ensure there would be no significant adverse impact from noise nuisance on nearby receptors.
15. To ensure minimum disturbance and avoid nuisance to the locality to comply with the Surrey Minerals Plan 2011 Core Strategy Policy MC14.
16. To ensure minimum disturbance and avoid nuisance to the locality to comply with the Surrey Minerals Plan 2011 Core Strategy Policy MC14.
17. To ensure minimum disturbance and avoid nuisance to the locality to comply with the Surrey Minerals Plan 2011 Core Strategy Policy MC14.
18. To ensure minimum disturbance and avoid nuisance to the locality to comply with the Surrey Minerals Plan 2011 Core Strategy Policy MC14.

19. To ensure minimum disturbance and avoid nuisance to the locality to comply with the Surrey Minerals Plan 2011 Core Strategy Policy MC14.
20. To ensure minimum disturbance and avoid nuisance to the locality to comply with the Surrey Minerals Plan 2011 Core Strategy Policy MC14.
21. To avoid endangering the safe movement of aircraft and operation at Dunsfold Aerodrome, and in the interest of residential amenity and the local environment and to comply with Surrey Minerals Plan 2011 Core Strategy Policy MC14.
22. To ensure the design meets the national Non-Statutory Technical Standards for SuDS and the final drainage design does not increase flood risk on or off-site, and to ensure protection of groundwater and surface water from activities at the site in accordance with Surrey Minerals Plan 2011 Core Strategy Policy MC14. The imposition of a pre-commencement condition for a surface water drainage scheme is recommended by the Environment Agency to ensure protection of groundwater and surface water from the activities at the site and the Lead Local Flood Authority to ensure that the development is compliant with SuDS as required by the NPPF, its technical standards and governmental ministerial statement for SuDS.
23. To ensure the design meets the national Non-Statutory Technical Standards for SuDS and the final drainage design does not increase flood risk on or off-site, and to ensure protection of groundwater and surface water from activities at the site, in accordance with the Surrey Minerals Plan 2011 Core Strategy Policy MC14.
24. To safeguard the environment and protect the amenities of the locality in accordance with the terms of the Surrey Minerals Plan 2011 Core Strategy Policies MC12 and MC14.
25. To ensure there would be no significant adverse impact from pollution on groundwater, land and the environment, and for land stability in accordance with the Surrey Minerals Plan 2011 Core Strategy Policy MC12 and MC14 and the NPPF (2019) paragraphs 170, 178 and 179. The imposition of a pre-commencement condition to secure the submission of a construction environment management plan which includes a soil conservation and management plan, a slope stability assessment, further information on platform and foundation stability and a construction quality assurance plan is recommended by the County Geotechnical Consultant and the County Planning Authority to ensure there would be no significant adverse impact from pollution on groundwater, land and the environment, and for land stability in accordance with the development plan policies and the NPPF.
26. To ensure that the works are constructed as designed and maintain the required level of environmental protection and land stability. To safeguard the environment and protect the amenities of the locality in accordance with the terms of the Surrey Minerals Plan 2011 Core Strategy Policies MC12 and MC14.
27. To safeguard the environment and protect the amenities of the locality in accordance with the terms of the Surrey Minerals Plan 2011 Core Strategy Policies MC12 and MC14. The imposition of a pre-commencement condition for a pre-development baseline geotechnical testing report is recommended by the County Geotechnical Consultant to ensure there would be no significant adverse impact from pollution on groundwater, land and the environment.
28. To demonstrate that there has been no long-term contamination of the near surface natural soils at the site as a result of the development and to ensure the site can be suitably restored in accordance with the terms of the Surrey Minerals Plan 2011 Core Strategy Policies MC12 and MC14.
29. To prevent loss or damage of soil and to ensure that the land is restored to a condition capable of beneficial after-use to comply with the Surrey Minerals Plan 2011 Core

Strategy Policies MC14 and MC17 and Waverley Borough Local Plan (2002) 'saved' Policy RD9.

30. To comply with the requirements of the Conservation Habitat and Species Regulations 2017 and to protect species of conservation importance in accordance with Surrey Minerals Plan 2011 Core Strategy Policy MC14, Waverley Borough Local Plan Part 1: Strategic Policies and Sites (2018) Policy NE1 and Waverley Borough Local Plan (2002) 'saved' Policy D7. The imposition of a pre-commencement condition for an initial landscape, environment and biodiversity restoration and enhancement plan is recommended by Natural England to ensure that landscape enhancements are implemented at the start of the works rather than just during restoration.
31. To prevent loss or damage of any buried archaeological assets in accordance with Surrey Minerals Plan 2011 Core Strategy Policy MC14, Waverley Borough Local Plan Part 1: Strategic Policies and Sites (2018) Policy HA1 and Waverley Borough Local Plan (2002) 'saved' Policies HE14 and HE15.. The imposition of a pre-commencement condition for a programme of archaeological work in accordance with a written scheme of investigation is recommended by the County Archaeological Officer to ensure there would be no significant adverse impact on built heritage of special interest.
32. To secure restoration to the required standard and for protecting and enhancing biodiversity and to assist in absorbing the site back into the local landscape in compliance with Schedule 5 paragraph 2 of the Town and Country Planning Act 1990 and Surrey Minerals Plan 2011 Core Strategy Policies MC17 and MC18 and NPPF paragraph 205(e).
33. To secure aftercare to the required standard and assist in absorbing the site back into the local landscape in compliance with Schedule 5 paragraph 2 of the Town and Country Planning Act 1990 and Surrey Minerals Plan 2011 Core Strategy Policy MC17 and NPPF paragraph 205(e).

INFORMATIVES

1. Details of the highway requirements necessary for inclusion in any application seeking approval of reserved matters may be obtained from the Transportation Development Planning Division of Surrey County Council.
2. Notwithstanding any permission granted under the Planning Acts, no signs, devices or other apparatus may be erected within the limits of the highway without the express approval of the Highway Authority. It is not the policy of the Highway Authority to approve the erection of signs or other devices of a non-statutory nature within the limits of the highway.
3. The permission hereby granted shall not be construed as authority to obstruct the public highway by the erection of scaffolding, hoarding or any other device or apparatus for which a licence must be sought from the Highway Authority Local Transportation Service.
4. The developer is reminded that it is an offence to allow materials to be carried from the site and deposited on or damage the highway from uncleaned wheels or badly loaded vehicles. The Highway Authority will seek, wherever possible, to recover any expenses incurred in clearing, cleaning or repairing highway surfaces and prosecutes persistent offenders. (Highways Act 1980 Sections 131, 148, 149).
5. The permission hereby granted shall not be construed as authority to carry out any works (including Stats connections/diversions required by the development itself or the associated highway works) on the highway or any works that may affect a drainage channel/culvert or water course. The applicant is advised that a permit and, potentially, a Section 278 agreement must be obtained from the Highway Authority before any works are carried out on any footway, footpath, carriageway, verge or other land forming part of

the highway. The developers attention is drawn to the advice provided by the County Historic Buildings Officer that flush-set concrete retainers (incorporating a ribbed surface) should be used to demarcate the edge of the carriageway (as opposed to raised kerbstones). All works (including Stats connections/diversions required by the development itself or the associated highway works) on the highway will require a permit and an application will need to be submitted to the County Council's Street Works Team up to 3 months in advance of the intended start date, depending on the scale of the works proposed and the classification of the road. Please see: <http://www.surreycc.gov.uk/roads-and-transport/road-permits-and-licences/the-traffic-management-permit-scheme>. The applicant is also advised that consent may be required under Section 23 of the Land Drainage Act 1991. Please see: www.surreycc.gov.uk/people-and-community/emergency-planning-and-community-safety/floodingadvice.

6. Section 59 of the Highways Act permits the Highway Authority to charge developers for damage caused by excessive weight and movements of vehicles to and from a site. The Highway Authority will pass on the cost of any excess repairs compared to normal maintenance costs to the applicant/organisation responsible for the damage.
7. The site operator must provide advanced notification to the Highway Authority of an abnormal load movement. Further details can be found at the following link <https://www.surreycc.gov.uk/roads-and-transport/traffic-and-travel-information/large-goods-vehicles/abnormal-loads>. The site operator will be charged for the removal and reinstatement of any highway furniture.
8. The site operator should instruct all HGV drivers associated with the development not to lay up or wait within the highway network within the vicinity of the site at any time.
9. All heavy goods vehicles should access the site to/from the east via the B2130 signalised junction with the A281 in accordance with the terms of section 4.1.2.3 of the 'updated' Planning Statement and Environmental Report (19 April 2019) submitted on 21 May 2019.
10. Façade and free-field apply to the positions for either noise measurement or prediction. A façade position is one that effectively represents sound levels at a building but is conventionally taken at a position 1 metre from the building; this includes reflections from the building. A free-field position is one that is at least 3.5 metres from a building where reflection effects are not significant. The difference between a sound level measured at a façade position and a free-field position, assuming that there is a specific sound source that causes reflections, is that levels are around 3 dB higher at the façade, due to the reflection effects.
11. If proposed site works affect an Ordinary Watercourse, Surrey County Council as the Lead Local Flood Authority should be contacted to obtain prior written consent. More details are available on the Surrey County Council website. (www.surreycc.gov.uk)
12. If proposed works result in infiltration of surface water to ground within a Source Protection Zone the Environment Agency will require proof of surface water treatment to achieve water quality standards. (www.gov.uk/government/organisations/environmentagency)
13. The Borehole Sites and Operations Regulations 1995 (BSOR) apply to all onshore oil and gas wells. These Regulations require notifications to be sent to the 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.
14. 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 gas or oil wells. They also require the well operator to send a weekly report to the HSE during the construction of the well so that inspectors can check that work is progressing as described in the notification.

15. The applicant is reminded that, under the Wildlife and Countryside Act 1981, as amended (Section 1), it is an offence to remove, damage or destroy the nest of any wild bird while that nest is in use or is being built. Planning consent for a development does not provide a defence against prosecution under this Act. Trees and scrub are likely to contain nesting birds between 1 March and 31 August inclusive. Trees and scrub are present on the application site and are assumed to contain nesting birds between the above dates, unless a recent survey has been undertaken by a competent ecologist to assess the nesting bird activity during this period and shown it is absolutely certain that nesting birds are not present.
16. Given the nature of the proposed development it is possible that a crane may be required during its construction. The applicant's attention is drawn to the requirement within the British Standard Code of Practice for the safe use of Cranes for crane operators to consult the aerodrome before erecting a crane in close proximity to an aerodrome. The crane process is explained further in Advice Note 4, 'Cranes and Other Construction Issues', (available from <http://www.aoa.org.uk/policy-campaigns/operations-safety/>).
17. As Article 240 of the Air Navigation Order 2016 makes it an offence to endanger the safety of an aircraft, the applicant's attention is drawn to the Civil Aviation Authority publication, "Guidance to Crane Operators on Aviation Lighting and Notification" which provides the construction industry with a summary of existing regulation, duty of care expectations placed upon crane users and recommended best practice.
18. The site operator's attention is drawn to the Civil Aviation Authority's request that they contact both the Civil Aviation Authority's Operations Team and the Military Low Flying Cell once operational dates for the site are established and before site activity takes place and they complete and submit the "Crane Notification Form" to the CAA's Operations Team.
19. Attention is drawn to the requirements of Sections 7 and 8A of the Chronically Sick and Disabled Persons Act 1970 and to the Code of Practice for Access of the Disabled to Buildings (British Standards Institution Code of Practice BS 8300:2009) or any prescribed document replacing that code.
20. The applicant is advised that regular community engagement in respect of this site be undertaken, and this may include the setting up of a local liaison group, which would provide a forum for discussing operational issues between the operator, the County Council (as County Planning Authority), interested parties and representatives of the local community. Emergency contact details for the receipt and handling of any complaints should be provided. The applicant is advised to have particular regard for the residents and businesses that neighbour the site, particularly Thatched House Farm to the north and High Billingham Farm to the south. The applicant is advised to liaise with neighbours to ensure the impacts of the development hereby approved are minimised and maintained at acceptable levels.
21. The applicant's attention is drawn to the advice, guidance and safety information provided by SGN and UK Power Networks in relation to gas and electricity infrastructure, copies of which have been provided to the applicant or can be obtained from the County Planning Authority.
22. The National Grid has no record of owning any infrastructure in the vicinity of the application site. In an automated response to an online query, the HSE has advised that the proposed development site does not currently lie within the consultation distance of a major hazard site or major accident hazard pipeline. An automated response to an online enquiry has confirmed that SGN does not have any gas utility infrastructure within the vicinity of the application site. To err on the side of caution, in the event that planning permission is granted, and in case any gas utility infrastructure is found, a number of

guidance documents and safety information supplied by SGN have been sent to the applicant. These comprise: SGN's response letter; 'Know What's Below: Protecting You and Your Family'; relevant SGN infrastructure plans; 'Safety Advice - Valves'; and, 'Dig Safely: Measures to Avoid Injury and Damage to Gas Pipes'. The applicant has been requested to forward this information onto the site operator so that this information can be brought to the attention of their contractors in the event the permission is granted and the development proceeds.

23. In an automated response to an online query, UK Power Networks has indicated the presence of an 11 KV underground cable in the vicinity of Dunsfold Road, Pratts Corner and High Loxley Road, and abandoned underground cable crossing High Loxley Road and a sub-station west of High Loxley Road. Again, a safety information and guidance number supplied by UK Power Networks has been passed on to applicant and operator to bring to the attention of their contractors in the event that planning permission is granted and the development proceeds. This comprises: the covering letter from UK Power Networks; the relevant utility infrastructure plans; and 'Think before you Dig under Ground'.
24. In determining this application the County Planning Authority has worked positively and proactively with the applicant by: entering into pre-application discussions; assessing the proposals against relevant Development Plan policies and the National Planning Policy Framework including its associated planning practice guidance and European Regulations, providing feedback to the applicant where appropriate. Further, the County Planning Authority has: identified all material considerations; forwarded consultation responses to the applicant; considered representations from interested parties; liaised with consultees and the applicant to resolve identified issues and determined the application within the timeframe agreed with the applicant. Issues have been raised with the applicant including impacts of traffic, landscape and visual impact, air quality, noise and vibration, lighting, groundwater, geotechnical matters, ecology and biodiversity and restoration and aftercare and addressed through negotiation and acceptable amendments to the proposals. The applicant has also been given advance sight of the draft planning conditions. This approach has been in accordance with the requirements of paragraph 38 of the National Planning Policy Framework 2019.

CONTACT

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BACKGROUND PAPERS

The deposited application documents and plans, including those amending or clarifying the proposal, and responses to consultations and representations received, as referred to in the report and included in the application file.

For this application the deposited application documents and plans, and responses to consultations, are available to view on [our online planning register](#). The representations received are publicly available to view on the district/borough planning register. The Waverley Borough Council planning register entry for this application can be found under [Land South of Dunsfold Road](#).

OTHER DOCUMENTS

The following documents were also referred to in the preparation of this report:

Government Guidance

[National Planning Policy Framework](#)
[Planning Practice Guidance](#)

The Development Plan

Surrey Minerals Plan Core Strategy Development Plan Document (DPD) 2011
Surrey Minerals Plan Site Restoration Supplementary Planning Document (SPD) 2011
Waverley Borough Local Plan Part 1: Strategic Policies and Sites 2018
Waverley Borough Local Plan 2002 (saved policies)

Other Documents

Waverley Borough Council Local Development Scheme January 2020
 Borehole Sites and Operations Regulations 1995
 Health and Safety at Work etc Act 1974
 Offshore Installations and Wells (Design and Construction etc) Regulations 1996
 Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013
 Environmental Permitting (England and Wales) Regulations 2016
 Water Resources Act 1991
 The Town and Country Planning (Environmental Impact Assessment) Regulations 2017
 Europe 2020 Strategy
 EU Energy Security Strategy May 2014
 The Annual Energy Statement 2014
 Ministerial Statement on Shale Gas 17 May 2018
 Climate Change Act 2008
 Climate Change Act 2008 (2050 Target Amendment) Order 2019
 Surrey's Climate Change Strategy
 Energy White Paper 2007 (Meeting the Energy Challenge)
 Energy Act 2008
 Energy Act 2011
 The Carbon Plan: Delivering our Low Carbon Future December 2011
 Gas Generation Strategy December 2012
 Energy Security Strategy 2012
 The Annual Energy Statement 2010
 The Annual Energy Statement 2013
 Annual Energy Statement 2014
 Mineral Planning Factsheet "Onshore Oil and Gas", British Geological Survey, April 2011
 High Court Notification (CO Ref: CO/4441/2019): Sarah Finch v Surrey County Council;
 Applications for Permission to Apply for Judicial Review 24 December 2019 (Re-served on 3 January 2020)
 R (Heathrow Hub Ltd) v Secretary of State for Transport [2020] EWCA Civ 213 (Court of Appeal Decision on Heathrow Third Runway 27 February 2020)
 Airports National Policy Statement, Department for Transport, June 2018
 DfT Circular 01/2013
 Road Traffic Regulation Act 1984
 The Air Quality Strategy for England, Scotland, Wales and Northern Ireland 2007
 EU Air Quality Directive
 EU's Habitats Directive
 Conservation of Habitats and Species Regulations 2010 (as amended)
 Wildlife and Countryside Act 1981 (as amended)
 Natural Environment and Rural Communities Act 2006
 Rights of Way Act 2000
 Land Use Planning and Development Control: Planning for Air Quality, EPUK/IAQM, 2017
 Guidance on the Assessment of Dust from Demolition and Construction, IAQM, 2014
 Design Manual for Roads and Bridges, Highways England
 British Standard 4142:2014: Methods for rating and assessing industrial and commercial sound
 Guidelines for Noise and Vibration Assessment and Control, RPS, January 2020
 Guidance Notes for the Reduction of Obtrusive Light for Residential Receptors, Institute of Lighting Professionals, 2011
 Waverley Strategic Flood Risk Assessment

LFE4 - Earthworks in Landfill Engineering, Environment Agency
Waste Framework Directive
BS: 5837:2012 - Trees in Relation to Design, Demolition and Construction
Planning (Listed Buildings and Conservation Areas) Act 1990
Good Practice Advice in Planning: 2 Managing Significance in Decision-Taking in the Historic Environment, English Heritage
Good Practice Advice in Planning: 3 The Setting of Heritage Assets, English Heritage
Air Navigation Order 2016
Guidance to Crane Operators on Aviation Lighting and Notification, CAA
'Acidisation' Factsheet, Environment Agency, January 2018
Water Framework Directive (2000/60/EC)
Groundwater Daughter Directive (2006/118/EC)
