

SECTION C
MINERALS AND WASTE DISPOSAL

Background Documents - the deposited documents, views and representations received as referred to in the reports and included in the development proposals dossier for each case and also as might be additionally indicated.

Item C1

Temporary change of use of agricultural land to allow drilling of an exploratory borehole at land adjacent to A257 Sandwich Road, North of Woodnesborough – KCC/DO/0069/2011 (DO/11/339)

A report by Head of Planning Applications Group to Planning Applications Committee on 6 December 2011.

KCC/DO/0069/2011 - Application by Coastal Oil and Gas Limited for the temporary change of use of agricultural land (approximately 12 weeks) to allow drilling of an exploratory borehole to test the insitu coals, Lower Limestone Shale and associated strata; including provision of a drill rig and associated site compound at land adjacent to the junction of the A257 and A256, north of Woodnesborough, Kent.

Recommendation: Permission be granted, subject to conditions.

Local Member: Mr L. Ridings

Unrestricted

Site description

1. The application site forms an area of approximately 0.18ha contained within the boundaries of an agricultural holding. Located south west of the roundabout at the junction of the A257 Sandwich Road with the A256 Sandwich Bypass, approximately 1km west of Sandwich and 1.25km to the northeast of the village of Woodnesborough. The field is classified as Grade 4 agricultural land, part of which has been used to grow asparagus crop, the remainder is scrub grassland. The application site forms a level disused area of the field; an open drainage ditch is located immediately to the east. An existing agricultural access off the west bound carriageway of the A257 (approximately 60m from the roundabout) allows entry to the site. This access includes a dedicated pull in and hard standing to the front of a gated entrance.
2. Surrounded by flat low-lying farmland, the proposed site is visible within the landscape, particularly from the A257 to the north. A line of trees within the field breaks up views from the A256 to the east. A farm shop is located to the east on Ash Road. The closest residential properties are located to the south off the A265, west within Each End and to the east on the outskirts of Sandwich, please see attached location plan.
3. The application site is designated within the Dover District Local Plan Proposals Map as open countryside and within a Flood Risk Zone 3. The area also falls within a groundwater protection zone which overlies a principal aquifer.

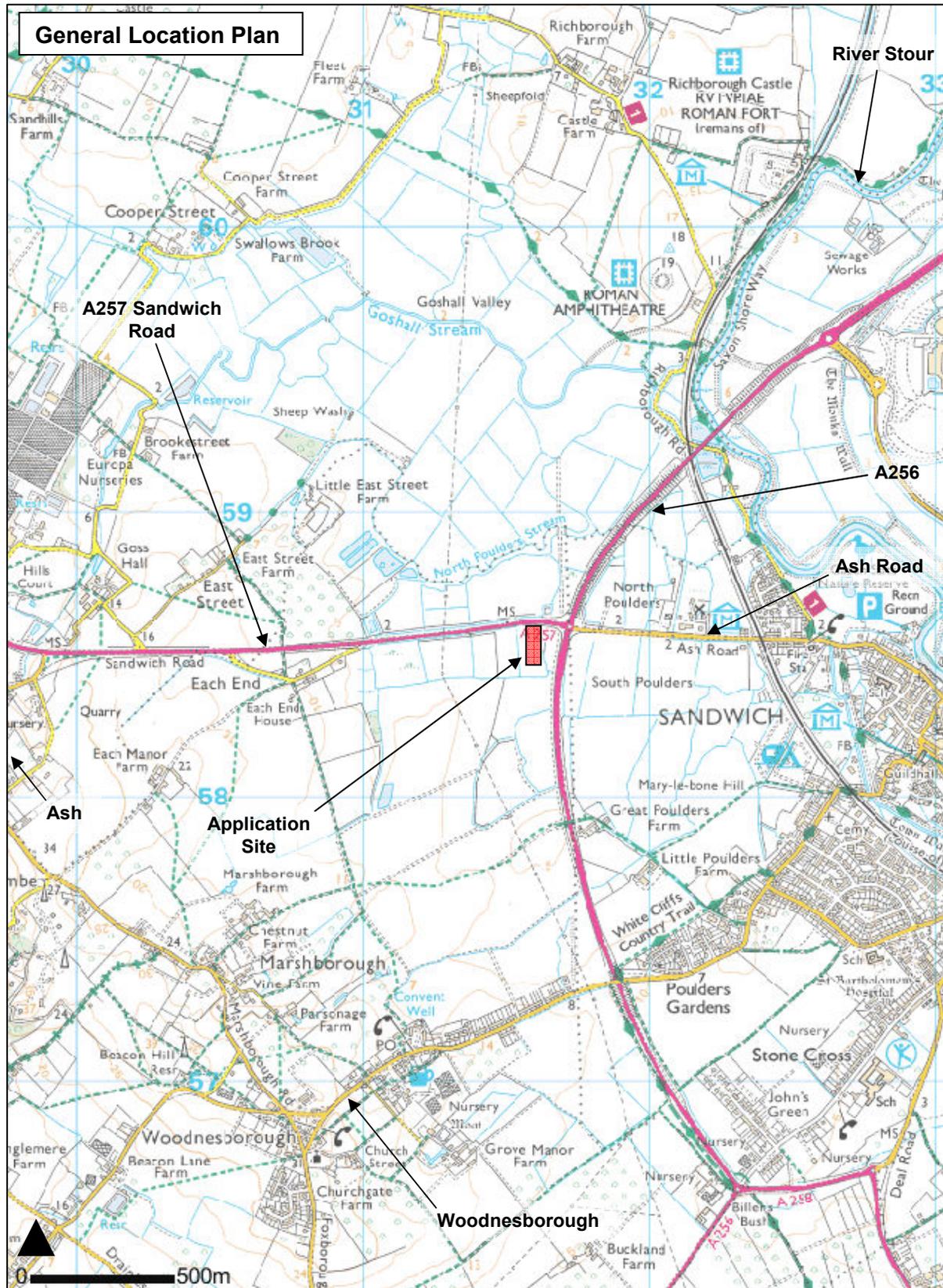
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A number of watercourses, including the River Stour (approximately 800m north east) and a network of drainage ditches, are located close to the site. There are no other site specific designations, although more general development plan policies are set out in paragraph (15) below.

Proposal

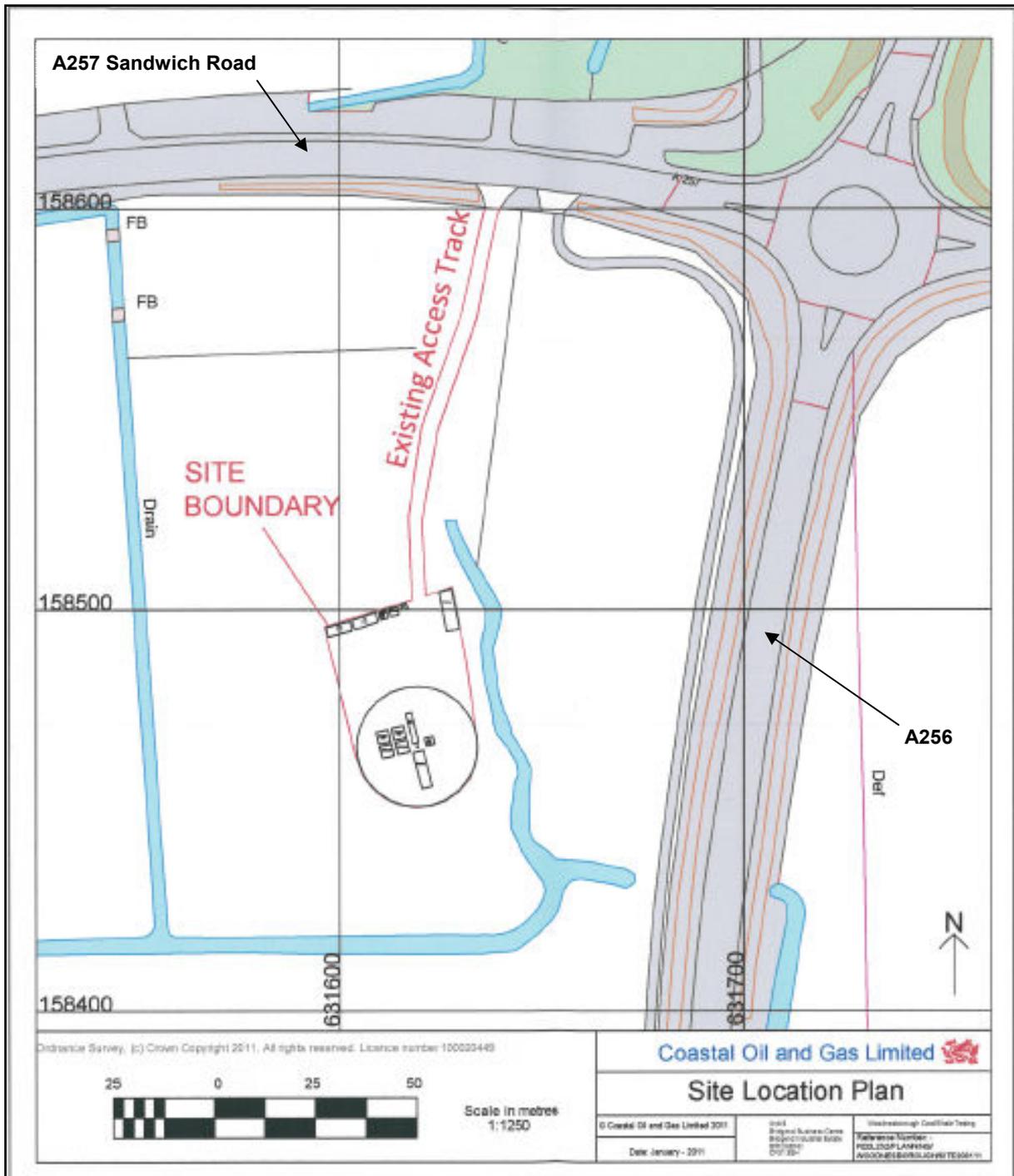
4. The application is being made by Coastal Oil and Gas Limited and seeks a temporary change of use of agricultural land to enable the drilling of an exploratory borehole to collect core samples of the underlying rock strata for laboratory testing. The temporary borehole is being proposed to establish whether local mineral resources contain natural gas in the form of Coal Bed Methane or Shale Gas, both of which are classified as petroleum. The core sampling would be aimed primarily at Shale Coals (the lower, un-worked coal seams) and Lower Limestone Shales; however the upper coal seams would also be tested as part of the proposals.
5. Coastal Oil and Gas Limited currently hold a Petroleum Exploration and Development Licence issued by the Department of Energy and Climate Change (DECC) under the Petroleum Regulations to search for onshore oil and gas in the area. Whilst this licence affords the company the option of exploring the mineral resources, it does not grant an exemption from other legal / regulatory requirements, such as the need to gain access rights from landowners, health and safety regulations or planning permission.
6. The proposed temporary operation would involve the clearance and formation of a site compound (approximately 0.15ha in area) for a period of approximately 12 weeks to enable the drilling of the borehole. The compound would include a drill rig, associated equipment and storage tanks, site storage sheds, temporary office buildings, generator, skips, parking area and external lighting. The application indicates that the drill rig could be between 12 and 23 metres in height depending on the contractor employed to complete the work if permitted.
7. The proposed borehole would be drilled to a depth of between 1000m and 1700m to reach the relevant strata and obtain core samples. The first 10% of the hole would be approximately 30cm in diameter reducing at depth. The drilling would take approximately 7 weeks to complete with a further 3 weeks for laboratory testing. During this period the proposed operations on site would take place 24 hours a day, 7 days a week. 24 hour operations are required due to the drilling method which requires continuously drilling in order to reach the target depth. On completion of laboratory testing on the core samples the application indicates that the borehole would be completely back filled and sealed in accordance with Environment Agency guidance, and the site restored to its former condition as part of the agricultural holding.
8. The upper sections of the borehole (to a depth of approximately 300-330m) would be completely sealed with steel casing cemented into place to protect the main aquifer. The drilling would also be carried out using a closed loop system to ensure fluids/sediment resulting from the operation would not enter nearby surface drains and/or groundwater. All water, fluids and sediment captured would be stored in tanks on site and then removed to an appropriate waste disposal facility within the County.
9. The application documents include: an Ecological Scoping Survey; a Noise Impact Assessment; and a Flood Risk Assessment, in support of the proposed development.

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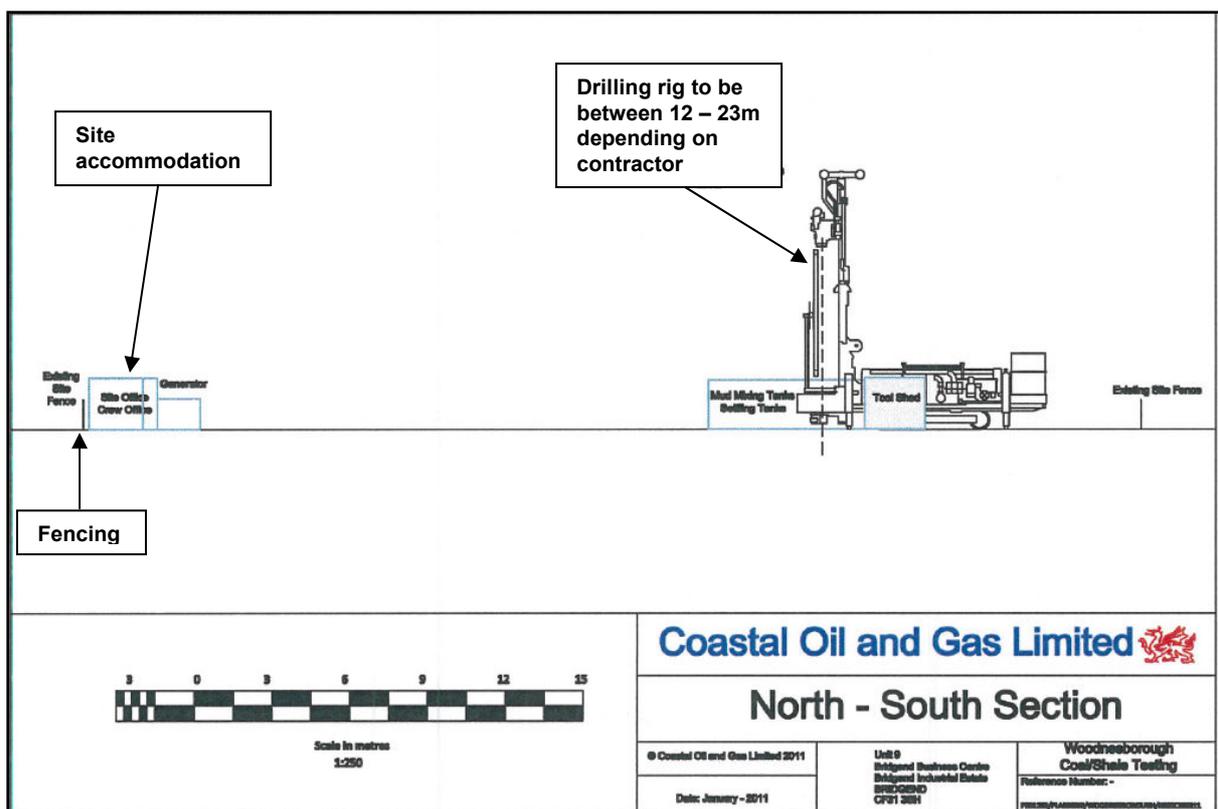
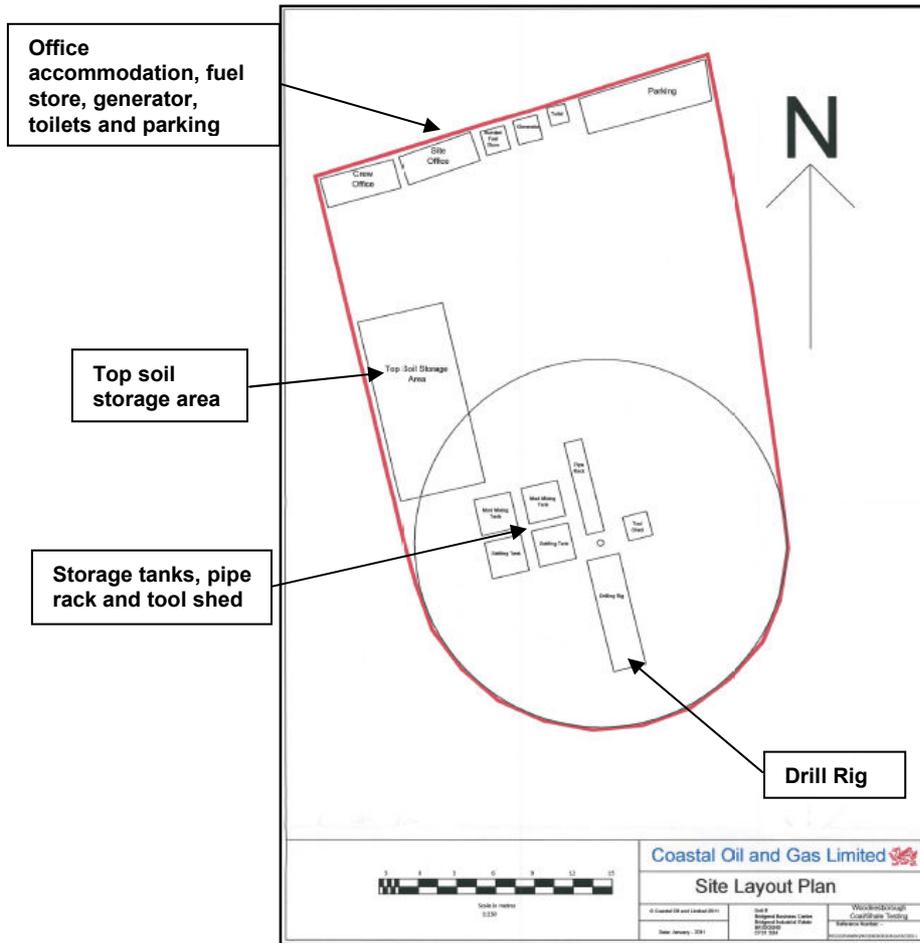
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Technical and Policy Background

10. By way of background it may be helpful for Members to understand in a little more detail how natural gas is extracted and the UK's current stance on the development of production wells.
11. As indicated above, the application proposes the drilling of a temporary borehole to explore the geology in the Sandwich area. The proposed testing would target coal and shale rock strata looking for natural gas resources held within. These resources include Coalbed Methane, a form of natural methane gas extracted from un-worked coal seams, and Shale Gas produced from formations of organic-rich shale; a sedimentary rock formed from deposits of mud, silt, clay, and organic matter. Only shale with adequate total organic carbon content can be used to produce gas, which leads on to the need to explore and test the available resources.
12. UK based gas production has continued for many years by tapping into natural fractures/voids within source rocks using vertical wells. Recent technological advances in production methods have unlocked opportunities to extract natural gas from more impractical source rocks that do not necessarily benefit from natural fractures. Modern methods include horizontal drilling and/or stimulation techniques that create artificial fractures around well bores. This stimulation technique is referred to as Hydraulic Fracturing or 'Fracking', and involves the introduction of fluids (water including chemical additives) into the source rock at pressure to open or expand fractures. The natural gas stored within the rock then flows from the fracture into the well for extraction.
13. Members maybe aware of recent public concerns over potential impacts to the environment from permitted hydraulic fracturing operations both in the UK and abroad. These concerns include the potential risk to surface / groundwater resources and an alleged link to seismic activity resulting from the process. It is noted that a number of foreign governments have recently suspended hydraulic fracturing until further information on the potential environmental impacts has been collected. Current Government advice is that a moratorium in the UK is not justified or necessary at present. The Department of Energy & Climate Change, supported by the Health and Safety Executive and the Environment Agency are closely monitoring the only permitted UK based shale gas project in Lancashire. The development of this industry in the UK is in the early stages; Central Government is advising that they will continue to assess its position. The Energy Minister Charles Hendry said in a statement of 2nd November 2011 that "the potential for unconventional gas is worth exploring because of the additional security of supply and economic benefits it could provide. But it is important to stress it is very early days for shale gas in the UK- the scale of any possible commercial production is still unknown."
14. The technological advances refered to above have prompted exploration of mineral resources previously considered uneconomic to recover. The current application represents an example of this; however it should be noted that the proposed development is for preliminary research (exploration) purposes only and does not constitute an application to develop a gas production well, or employ hydraulic fracturing techniques, which would have to be subject to a separate planning application.

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Planning Policy Context

15. The Planning Policies summarised below are relevant to consideration of the application:

- i. **National Planning Policy** – the most relevant National Planning Policies are set out within the following documents:

PPS1 (Sustainable Development), PPS7 (Sustainable Development in Rural Areas), PPS9 (Biodiversity and Geological Conservation), PPS23 (Planning and Pollution Control), PPG24 (Planning and Noise), PPS25 (Development and Flood Risk), MPS1 (Planning and Minerals), MPS2 (Controlling and Mitigating the Environmental Effects of Mineral Extraction).

MPS1 (Planning and Minerals) sets out the Government current planning policy on the control of land-based exploration, appraisal, development and extraction of oil and gas. The key messages include:

The Government's short to medium-term aims to: *'maximise the potential of the UK's conventional oil and gas reserves in an environmentally acceptable manner; encourage the development of clean coal technologies; and encourage the capture of methane from coal mines where environmentally acceptable.'*

The policy states that each application to explore oil and gas reserves should *'be considered on its own merits, in accordance with the present guidance, and in relation to Local Development Documents and any other relevant material considerations. These considerations should not include any hypothetical future proposal for development of the oil or gas resource.'*

Draft National Planning Policy Framework (2011)

The draft NPPF consolidates National Planning Policy into a single document. The framework sets out the Government's proposed economic, environmental and social planning policies. Taken together, these policies articulate the Government's vision of sustainable development.

The chapter on minerals requires local planning authorities to give significant weight to the benefits of mineral extraction, including to the economy; ensure that there are no unacceptable adverse impacts on the natural and historic environment, and human health; ensure that any unavoidable noise, dust and particle emissions are controlled, mitigated or removed at source; and establish appropriate noise limits in proximity to noise sensitive properties.

Important note concerning the Draft National Planning Policy Framework:

Members will be aware that the NPPF has recently been published as a draft consultation document and will, therefore, be subject to potential amendment. Nevertheless the Planning Inspectorate is advising that 'the framework gives a clear indication of the Government's 'direction of travel' in planning policy. Therefore, the draft NPPF is capable of being a material consideration, although the weight to be given to it is a matter for the decision maker's judgment in each particular case.'

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- ii. **South East Plan (2009)** – the most relevant policies include: CC1 (Sustainable Development), CC2 (Climate Change), CC3 (Resource Use), CC6 (Sustainable Communities and Character of the Environment), NRM1 (Sustainable Water Resources and Ground Water), NRM2 (Water Environment), NRM4 (Sustainable Flood Risk Management), NRM5 (Conservation and Improvement of Biodiversity), NRM10 (Noise), C4 (Landscape and Countryside Management).

Important note concerning the South East Plan:

Members will already be aware of the relevant South East Plan policy considerations in relation to the proposed development, in that The Plan was revoked and later reinstated pending the enactment of the Localism Bill. Members will also be aware that they have to have regard to the policies in the SEP and the Government's intention to abolish the Regional Spatial Strategies (RSS) as material considerations. However the weight to be accorded is a matter for the decision makers. Members will note that the Localism Bill has now been enacted; however the SEP remains in effect until such time as the Government complete the formal process of revoking the Plan.

- iii. **Kent Minerals Local Plan: Chalk and Clay / Oil and Gas (1997)** – the most relevant saved policies include:

Policy OG2 Supports proposals for exploratory drilling subject to use having regard to the geological structure and being sited to minimise impact on environmental and natural resources.

Policy OG3 Supports proposals for appraisal drilling subject to use having regard to the geological structure and being sited to minimise impact on environmental and natural resources.

Policy OG5 Seeks proposals to minimise impact on neighbouring land uses and amenity in terms of noise, vibration, dust and gas.

Policy OG7 Seeks proposals that safeguard land drainage, flood control and land stability.

Policy OG8 Seeks to safeguard ecological interests.

Policy OG9 Seeks to ensure that the external appearance of all plant, hard surfacing, buildings, lighting and fencing is designed to minimise visual, noise and light intrusion.

Policy OG10 With the exception of drilling hours of operation will be permitted between hours 0700 to 1800 Monday to Friday and 0700 to 1300 on Saturday. Proposals to work outside these hours will be assessed at the nearest noise sensitive property.

Policy OG15 Proposals for oil and gas exploration should be refused if there would be a material adverse affect on highway safety and/or the local environment including dwellings.

Policy OG16 Seeks to ensure mud, dust and debris is not deposited on the public

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highway.

Policy OG18 Seeks to ensure the restoration of land to an appropriate after use following completion of development.

iv. Dover District Local Development Framework Core Strategy (2010) Policies:

Policy DM1 Development outside the urban confines or rural settlements will not be permitted unless justified by other development plan policies, it functionally requires such a location, or is ancillary to an existing use.

Policy DM12 Development involving construction of a new access or the increased use of an existing access onto a trunk or primary road will not be permitted if there would be a significant increase in the risk of crashes or traffic delays unless the proposals can incorporate measures that provide sufficient mitigation.

Policy DM15 Development which would result in the loss of, or adversely affect the character or appearance of the countryside will only be permitted if it is in accordance with the Development Plan Documents, or it cannot be accommodated elsewhere; provided it does not result in the loss of ecological habitats and measures are incorporated to reduce, as far as practicable, any harmful effects on countryside character.

Policy DM16 Seeks to preserve the character of the landscape.

Consultations

16. Dover District Council – no objection, the comments received can be summarised as follows:

The District Council's Environment Health Officer (EHO) has commented on the application, and notes that the background noise survey completed establishes that the minimum average levels as 31dB during the night. The EHO considers that noise ought not to be a barrier to the application, as any issue could be engineered out through mitigation. He recommends a condition ensuring that the cumulative noise level arising from operations, measured or predicted at the nearest noise sensitive property shall not exceed 5dB below the background noise level, and that the mitigation proposed by the applicant be put in place as an initial operation on site rather than waiting to see if there are any noise complaints.

The District Council also recommends conditions including: the measures set out within the Ecological Survey; the drilling to cease no later than seven weeks after commencement; all operations to cease within twelve weeks; and within two weeks of operations ceasing all structures and materials be removed, the borehole sealed and the site restored to its condition before the development took place, including the replacement of any topsoil, any seeding and replanting.

17. Woodnesborough Parish Council – no objection to the proposal.

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18. **Sandwich Town Council** – no objection to the proposal, subject to the land being restored to its current condition.
19. **Environment Agency** – no objection to the proposed exploratory drilling work. The Agency requests that the applicant contact it in advance of any permitted operations commencing on site to discuss best practice and pollution prevention guidance. The comments received also request that the applicant contacts the Agency concerning any spillages and leaks of oils or fuels on site with details of appropriate investigation and remediation.

The Agency's response notes that the site overlies an important principle aquifer that supports large abstractions and provides base flow to rivers and surface water systems. On receipt of a drilling methodology supplied by the applicant, the Agency advise that the proposed method of working adequately addresses the sealing and protection of the chalk aquifer from contamination, and from water ingress during these works.

The Agency confirms it has no flood risk concerns associated with this application and recommends that the applicant be advised that waste materials removed from site must be properly consigned and taken to an authorised facility. The comments received draw the applicant's attention to the Agency's pollution prevention guidance.

The Agency notes that Shale may contain naturally occurring radioactive elements which may need to be considered when evaluating handling and disposal options. The Agency's Radioactive Substances Regulation Team has advised the applicant directly that the generation and handling of naturally occurring radioactive material from the drilling of exploratory wells in undisturbed rock strata will not require an Environmental Permit. Should the wells be used in any way for the production of gas or oil then the operation may need a radioactive substances environmental permit. *(The Applicant has confirmed that the proposed well would not be used for anything other than exploration.)*

The Agency also draws attention to the potential for gas migration from the rock strata through the borehole, so that the applicant can consider the risks to human health; however the comments confirm that this falls outside their remit.

Please note: subsequent to the Agency's initial comments on the proposals, in particular the gas migration point, I revisited the consultations previously carried out and sought further comments/views from Southern Water, the Department of Energy & Climate Change, the Health & Safety Executive and the British Geological Survey on the issues raised (please see the details of the responses below). The views received from these consultees were provided to the Environment Agency to enable their final views (summarised above) to take account of the information received.

Further to the Agency's request, Coastal Oil and Gas have formally responded confirming that they would welcome the opportunity to engage in Best Practice discussions with the EA should planning permission be granted.

20. **Southern Water** – no objection, subject to a condition being placed any consent ensuring that the borehole is backfilled and sealed according to Environment Agency guidelines.

Initially Southern Water had sought a full Hydrological Risk Assessment for the

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operation on the assumption that, if permitted, the borehole could potentially be used as a future production well (as opposed to investigation only). On confirmation from the applicant that the proposed exploratory borehole would not be used for production purposes and would be backfilled and sealed in accordance with EA guidance, Southern Water withdrew the request raising no objections subject to the above condition.

Following our further consultation, Southern Water also advises that during the lifetime of the coalfield no problems with gas migration were reported. Advising that due to the depth of the coal measures, there would be significant cover between the coal bearing strata and the shallower aquifer and therefore a reduced risk of gas migration. Southern Water consider it imperative that any well is sealed (in accordance with the Environment Agency's requirements) to prevent any cross contamination of the Aquifer from deep ground water or the surface. They also note the importance of disposal of any liquid or solid waste to an appropriate facility off site.

21. **River Stour Internal Drainage Board** – no objection to the application, subject to the applicant ensuring that access is maintained to the nearby South Pounders Main Stream and associated side drains, and the implementation of appropriate pollution prevention control measures agreed by the Environment Agency.
22. **The Department of Energy & Climate Change (DECC)** – confirms that DECC would receive a request for drilling consent should planning permission be granted which will hold the operator to exploratory drilling only. The comments confirm that borehole integrity is a matter for the HSE and should planning permission be granted the well design would be reviewed before any operations could begin on site. If the design is deemed to be inadequate DECC and HSE would take appropriate action.
23. **Health and Safety Executive (HSE)** – no objection to the application, the HSE notes that should planning permission be granted a HSE Well Operations Inspector would assess the well design and construction under the Borehole Sites and Operations Regulations 1995.

At my request the HSE also commented on specific technical issues raised by other consultees. On the potential for gas migration from the proposed well the HSE indicate the risk would be extremely low. *'The proposal is to core and test coal seams and a shale play [resource]. In both cases there would be fluid [mud] in the hole which produces a hydrostatic over balance to any formation pressure. Although there will be gas present in these formations they are contained in what is called a tight formation in the case of shale which generally needs stimulation to produce gas. To produce gas either formation would need to be de-watered by a pumping system'*.

'On completion of the drilling and testing operations the well would be completely filled with cement - There are standards issued by "UK Oil and Gas" for abandonment of wells and the well operator would have to comply with them'.

On concerns about the potential for subsidence the HSE comment as follows. *'The proposed well is a vertical well for testing of coals and a shale section. The well is designed with a number of concentric pipes extending to depth and cemented in place. The top pipes are there for structural stability and are normally cemented deep enough to support any loose unconsolidated formations. It would be unusual for there to be local subsidence if the well is designed and constructed correctly. On completion of*

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operations the well would be filled with cement which would prevent collapse’.

24. **The British Geological Survey** – comments that they ‘*are not aware of any specific factual information on the potential contamination of aquifers due to drilling that is not already in the public domain (e.g. from the Environment Agency). Whilst drilling of exploratory boreholes has inherent risks associated with it, these can be reduced to acceptable levels through effective design, construction, maintenance and eventual abandonment and through appropriate risk assessment and management procedures’.*
25. **The Coal Authority** – no specific comments on the application. The Coal Authority confirm that the application site falls within the defined coalfield area, and that to drill a borehole the applicant will require the following consents in addition to planning permission:
- An interest in the associated Petroleum Licence for the area; *Coastal Oil and Gas Limited is the current holder of PEDL252 Petroleum Licence issued by the Department of Energy and Climate Change; and*
 - A Coal Bed Methane Access Agreement from The Coal Authority; *Coastal Oil and Gas Limited will apply in due course for the Agreement.*
26. **Kent County Council Highways and Transportation** – no objection to the application, subject to conditions including maintenance of sight lines at the access with the A257, provision of vehicle parking, and the provision of wheel washing facilities.

Highways and Transportation recommend that all plant traffic uses the A256 from Thanet or Dover to gain access to the site, rather than moving along A257 via Wingham, and a restriction on deliveries to avoid a conflict in the peak travel time of between 7.30am-9.30am and 3.30-6.30pm.

The comments received are based on a temporary use of the site for 12 weeks; if an application for a permanent operation were to be submitted the highway requirements would potentially be more onerous.

27. **Kent International Airport, Manston** – no objection to the application.
28. **Natural England** – standing advice recommends: proceeding with application, subject to securing mitigation proposals through conditions.
29. **The County Council’s Biodiversity Projects Officer** – no objection subject to the implementation of the recommendations set out within the Ecological Scoping and Phase 1 Habitat Survey received with the application; including the maintenance of a 6m buffer alongside the drainage ditches.

In addition the Biodiversity Officer makes a number of recommendations concerning the clearance of the site to ensure that any animals disperse into the most suitable surrounding habitat, and a recommendation that the access track is cleared to an appropriate width to ensure that no refuge areas that remain are driven over. The recommendations confirm that it is essential that, once cut, the short vegetation on the access track and works compound is maintained for the duration of the works.

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30. **The County Council's Noise Consultant** – no objection to the application. Comments as follows:

'The Noise Impact Assessment predicts a noise level of 27 dB(A) at the closest sensitive premises which is circa 600 metres away from the operation site. This falls below the lowest measured background noise level representative of these sensitive premises. In fact, our own indicative predictions suggest that the drilling noise level will be significantly less than this, in the order of 19 dB. It is therefore anticipated that noise emissions during drilling operations would not result in adverse impact upon the closest sensitive premises.'

In response to Dover District Council's comments the County Council's Noise Consultant comments as follows:

'I do not anticipate that the proposed work will result in adverse impact. However, as a precaution you may wish to apply the following standard condition:

'The rating noise level emanating from the facility at nearby residential premises when assessed in accordance with BS 4142 shall not exceed the existing background noise level.'

It shall be noted that this condition is not as stringent as Dover DC's (by 5 dB); however, the condition is considered to provide protection to local residents without being unduly restrictive on the Applicant.'

31. **The County Council's Dust & Odour Consultant** – no objection to the application. Comments as follows:

'Given a separation distance of circa 600m, there would be no dust or odour issues relating to the Application.'

32. **The County Council's Minerals Technical Adviser** – no objection, comments as follows:

'The drilling of a deep cored borehole for geological exploration is generally a safe operation with little risk unless oil or gas under pressure is encountered which could result in a blow out at the well head. There have been a number of deep boreholes drilled for oil and gas in West Kent with no reports of problems arising at the time. Modern drilling rigs with well head control and fixed blow out protectors ensure that this is normally a safe operation.'

The Applicants have confirmed the use of the above features and they have also elaborated on their means of safely isolating the chalk aquifer. I am therefore satisfied that this operation could be undertaken with little to no risk to the environment.

*I have also checked on the nature of the drilling mud to be used: - a cream powder produced from Xanthan Gum. Xanthan gum is produced by the fermentation of glucose, sucrose, or lactose by the *Xanthomonas campestris* bacterium. It is not harmful to the environment.*

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The concern over the risk of subsidence caused by exploratory drilling is normally unfounded. The Applicants have advised that the hole would be lined to at least the depth of the Chalk. I am also satisfied that the measures proposed to seal the borehole post drilling are satisfactory and would meet the terms of their drilling licence that the drilling company require to undertake this type of development..

I am also pleased that the Applicants are prepared to make available the geological results to this Authority should the borehole be granted planning permission. This information would enable the Authority to assess any future application for exploratory and or development wells that may arise in East Kent from the findings of this borehole. The Applicants are agreeable to a condition to this effect'.

Publicity and Representations

33. The application has been publicised by a site notice and newspaper advertisement. 1 commercial property within a 250m buffer was notified. 42 letters of representation objecting to the application have been received. The following points summarise views received from the Kent Green Party and The Campaign to Protect Rural England (CPRE) Protect Kent:

- The Kent Green Party – objects to the application. The objection is on the grounds that the development, *'could lead to a highly polluting form of industrial activity likely to contaminate groundwater supplies', amongst other concerns.* The Green Party urges Members *'to consider hydraulic fracturing very carefully, as it is an energy-intensive highly polluting form of mining. The Kent Green Party doubts that hydraulic fracturing could ever be contemplated in Kent, due to its dependence on ground water supplies which are very scarce in East Kent already. Considers there is no point in permitting this application as any subsequent application would arouse immense and fully justifiable public opposition'.*
- The CPRE Protect Kent – raise no objection to this application, *'as it is for a simple and straightforward borehole.'* The CPRE are *'extremely concerned about the consequences should commercially exploitable levels of coal, shale or other fossil fuel gases be found.'* The CPRE note that there are a number of reports in the national and international media about the dangers of Hydraulic Fracturing, the unpredictable damage that can be caused to property and the current lack of effective regulation. CPRE are calling for an embargo against the practice until there is a better understanding of its impact and relevant controls are in place. Notes that should the investigation prove fruitful any further application for exploitation would be vigorously opposed. Drawing Members attention to permitted operations in the Bowland basin near Blackpool, where Cuadrilla Resources have been prevented from drilling over fear that Fracking may have caused an earth tremor.

The following points summarise the key objections and comments raised within all letters received in response to the publicity that specifically relate to the proposed application for temporary exploratory drilling of a borehole to obtain core samples:

- concerns about the proximity of the proposed drilling to residential property;
- concerns about noise generated by proposed drilling 7 days a week, 24 hours a day, along with associated noise generated by other site operations and traffic delivering materials and servicing the site;

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- concerns about the loss of agricultural land;
- concerns about the potential impact on human health;
- considers alternate locations would be more acceptable for this type of operation, like the former Richborough Power Station with its road, water and grid infrastructure;
- raises concern about the close proximity of the River Stour;
- raises concern about the potential impacts on local ecology;
- raises concern about the visual impact of the proposed drill rig in the landscape and the potential industrialisation of the countryside;
- concerns about the impact of the proposed drilling on groundwater;
- concerns that the applicant has declined to complete a full hydrological risk assessment before the proposed test drilling;
- notes that under the Water Resources Act 1991 and the Environmental Protection Act 1990 it is a criminal offence to cause or knowingly permit pollution of controlled waters;
- considers that a legal agreement should be in place to ensure any financial liability of damage caused by the proposed exploratory drilling will fall to the applicant;
- concerns about flood risk and the validity of the assessment completed by the applicant;
- concerns over gas monitoring and the potential risk of gas exploding blowing out the well;
- concerns that the test drilling could trigger seismic activity and effect ground stability, particularly in relation to the adjacent highway network and nearby residential property;
- concerns that the proposal would impact on tourism during the proposed 3 month operation;
- concerns about the increase in traffic that would be generated in terms of noise, vibration and congestion caused by HGV and other vehicle movements;
- concerns about the potential for subsequent applications to drill elsewhere within the local area; and
- concerns that the investigation and development of fossil fuels diverts resources away from renewable energy sources, including wind, wave, tidal and solar power.

Notwithstanding the exploratory nature of the current application, the following points summarise representations received from local residents that draw attention to concerns over the potential impact of Hydraulic Fracturing. These concerns include:

- the potential for contamination of groundwater by means of the chemicals used in the process, including concerns about the potential knock on impact of this on human health;
- concerns over the potential for Hydraulic Fracturing to trigger seismic activity and impact on ground stability (reference to earth quakes allegedly triggered by Hydraulic Fracturing in Lancashire);
- concerns over the environmental impact of release of methane gas to the atmosphere;
- concerns about the potential for increased levels of methane gas entering local water supplies;
- concerns about the volume of water required to facilitate the mining process and the impact this would have on the limited resources available in East Kent;
- considers the practice to be unsustainable;

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- concerns that the practice of Hydraulic Fracturing has been prohibited in France, South Africa and a number of States in the US;
- notes that the US Environmental Protection Agency is currently undertaking an extensive study (*to be concluded in 2012*);
- considers that a moratorium should be placed on onshore and offshore exploration, development and production of coal bed methane, shale oil and shale gas until the publication of a detailed environmental impact assessment into the practice;
- welcomes drilling for research, however raises concern about the potential environmental impacts of any future hydraulic fracturing;
- considers that Kent is too densely populated to allow this type of extraction;
- considers this type of mining would deter investment in East Kent;
- concerns about the potential impact on tourism as a result of this type of mining activity; and
- concerns about whether this type of mining would have any benefit to local economy.

Local Member

34. The Local County Member for Sandwich, Mr L. Ridings, was notified of the application on 21 April 2011.

Discussion

35. The development plan context and determining issues are given in paragraphs 39 and 40 below. Before entering into those, it is important to confirm to Members what is actually before them at this Committee.

36. A number of the representations received for the local community raise strong objections over the potential environmental impact of 'Hydraulic Fracturing', a drilling technique that can be used to extract methane gas from reserves like coal beds or shale rock. It should be emphasised that the current application proposes the exploration and appraisal of any gas reserves as opposed to an application to develop of a facility to extract / produce gas. The application only comprises the drilling of a temporary borehole to obtain core samples for laboratory testing, following which the borehole would be backfilled and the site restored to its former condition and use. On this basis extraction techniques like hydraulic fracturing could not be employed without further planning permission.

37. Any future proposals to develop production wells (i.e. to exploit any gas reserves that may be identified during the testing process) would require the submission of a fresh planning application. Although such an application could potentially be at or near the same location, it is understood that such facilities are more usually established as close as practicable to end users (e.g. industrial facilities) or large electrical sub stations / gas pumping stations which would be able to utilise the gas extracted. Any application for production (as opposed to exploration and appraisal) would require significant additional work and would be likely to need a formal Environmental Impact Assessment. If such an application were ever submitted, it would need to be subject to extensive consultation, be considered and determined in the usual way, and would only be permitted if it were found to be acceptable in terms of its potential environmental and other impacts.

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38. The current application therefore needs to be considered on the basis of the temporary exploratory drilling proposed. Government Policy set out in Minerals Policy Statement 1 – Planning and Minerals (MPS1) states that planning permission for exploration and appraisal does not carry with it any presumption that long-term production from those wells, or that the development of further wells, will be permitted.
39. The application seeks planning permission for the temporary change of use of agricultural land (for approximately 12 weeks) to allow drilling of an exploratory borehole to test the insitu coals, Lower Limestone Shale and associated strata; including provision of a drill-rig and associated site compound. The exploration is proposed to establish the presence, extent and viability of any natural gas reserves. The application is being reported to the Planning Applications Committee as a result of 42 letters of objection, received primarily from residents of East Kent; please see paragraph (33) for details of the concerns raised. It should be noted that subject to appropriate conditions, the various statutory consultees raise no objection to the application (paragraphs 16 – 32).
40. I shall now turn to consider the specific proposals contained within this planning application. Section 38(6) of the Planning and Compulsory Purchase Act (2004) requires that applications are determined in accordance with the development plan unless material considerations indicate otherwise. Therefore, this proposal needs to be considered in the context of National Planning Policy, the Development Plan Policies, Government Guidance and other material planning considerations arising during the consideration of the application. In considering this proposal the planning policies outlined in paragraphs (15) above are particularly relevant.
41. In my opinion, the main determining issues relate to the following points:
- policy context;
 - location and landscape considerations;
 - water environment (hydrology / groundwater impacts);
 - local amenity impacts, including noise and dust;
 - highway considerations; and
 - other issues raised.
42. It is worth noting that Part 22 of The Town and Country Planning (General Permitted Development) Order allows for temporary development on land for the drilling of boreholes and carrying out seismic surveys for the purposes of mineral exploration without the need for express planning permission. These permitted development rights do not apply in this instance as the operations proposed would go beyond the conditions set out within the Order, including the targeting of petroleum / hydrocarbons, the depth of the proposed borehole, the length of time on site and the proposed 24hour working.

Policy Context

43. Planning Policy Statement 1 – Delivering Sustainable Development (PPS1) sets out the Government's overarching planning policies on the delivery of sustainable development through the planning system. The four aims for sustainable development are:
- social progress which recognises the needs of everyone;
 - effective protection of the environment;

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- the prudent use of natural resources; and
 - the maintenance of high and stable levels of economic growth and employment.
44. According to PPS1 the prudent use of natural resources means enabling more sustainable consumption and production and using non-renewable resources in ways that do not endanger the resource or cause serious damage or pollution. Furthermore, the broad aim should be to ensure that outputs are maximised whilst resource use is minimised, whilst encouraging the use of renewable resources.
45. MPS1 aims to ensure that the adequate and steady supply of minerals needed by society and the economy is provided in accordance with the principles of sustainable development.
46. The introductory paragraph to MPS1 recognises that minerals are essential to the nation's prosperity and quality of life. It goes on to state that *'in order to secure the long-term conservation of minerals it is necessary to make the best use of them'*. It also acknowledges that *'Minerals development is different from other forms of development because minerals can only be worked where they naturally occur. Potential conflict can therefore arise between the benefits to society that minerals bring and impacts arising from their extraction and supply.'*
47. National policies encourage energy efficiency and use of renewable energy, the Government also recognises that fossil fuels will be part of the energy mix for the short to medium term. MPS1 acknowledges that conventional domestic oil and gas production will decline significantly over coming years and the UK is likely to be importing around three quarters of its primary energy needs. National policy identifies the importance of gas supply infrastructure in maintaining the reliability of our energy supplies.
48. The concerns raised by local residents that this application could divert resources away from the development of renewable energy are noted. Government Policy clearly prioritises renewable energy as vital to facilitating the delivery of its commitments on climate change. However, Government's overarching energy policies seek a mix of resources to ensure security of supply. This would come from an increasing contribution from renewable energy supplies (targeting up to 20% by 2020) twinned with prudent use of natural resources, including fossil fuels. The Government's short to medium term aims set out in MPS1 include *'maximising the potential of the UK's conventional oil and gas reserves in an environmentally acceptable manner'*. To make best use of available reserves, it is necessary to fully investigate potential resources to ascertain the presence, extent or quality of any mineral deposit.
49. MPS1 clearly states that *'applications for the exploration of oil and gas resources should be considered on their own merits, in accordance with the Development Plan and any other material considerations, and should not take account of any hypothetical future proposal for development of the oil or gas resource.'* The guidance indicates that *'subject to the effects on the environment being appropriately addressed and mitigated, and a satisfactory restoration and aftercare plan prepared, applications for exploration may be favourably considered'*.
50. In line with national policy, the South East Plan 2009 Policy CC1 sets out the sustainable development priorities for the South East as:

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- *achieving sustainable levels of resource use*
- *ensuring the physical and natural environment of the South East is conserved and enhanced*
- *reducing greenhouse gas emissions associated with the region*
- *ensuring that the South East is prepared for the inevitable impacts of climate change*
- *achieving safe, secure and socially inclusive communities across the region....’.*

51. The South East Plan provides regional policies relating to energy efficiency and renewable energy but no specific regional policies regarding natural gas development. The Plan highlights the need for careful use and creation of energy supplies as a key challenge for the region.

52. The Kent Minerals Local Plan: Chalk and Clay / Oil and Gas (1997) includes saved policies that specifically refer to oil and gas development. The Minerals Plan recognises the need to establish the extent of available reserves in the context of growing national need. Policy OG2 supports proposals for exploratory drilling subject to proposals having regard to the geological structure and being sited to minimise impact on environmental and natural resources.

53. To reiterate, Government policy makes it clear that oil and gas remains an important part of the UK’s energy supply. The guidance recognises the continuing importance of fossil fuels but aims to manage reliance on them, their potential environmental effects, and the risks associated with security of supply. Exploratory drilling is one step in the process of being able to determine the potential of a likely oil or gas resource. Given that the development is for the exploration of gas reserves only it would not directly conflict Government policy on sustainable development or climate change. Once the proposed testing and evaluation is concluded the site would be cleared and restored to its former use. MPS1 gives considerable weight to the need to maximise the potential of the UK’s oil and gas reserves. The Minerals Local Plan adds weight to the need to establish the extent of reserves, supporting exploratory drilling subject to minimising any resulting impact on the environment. I therefore consider that both national planning policy and the development plan establish support and a national need for the exploration of natural gas resources, subject to the proposal being acceptable in terms of its environmental and local amenity impacts. This is considered further under individual issues below.

Location and landscape considerations

54. The application site falls within a rural location, outside the confines of the urban area as defined by the Dover District Local Plan Proposals Map. The site is an open field to the north of Woodnesborough and west of Sandwich, bordered to the north and east by public highways. The field is categorized under the Agricultural Land Classification as Grade 4, part of which is used to grow asparagus; the remainder consists of disused scrub grassland. Any application in the open countryside is subject to a number of Development Plan Policies that seek to protect the character of the countryside for its own sake.

55. The National Plan Policies including: PPS1 (Delivering Sustainable Development); PPS7 (Sustainable Development in Rural Areas); MPS1 (Planning and Minerals); and Development Plan Policies including South East Plan Policies CC1, CC6, C4, and Dover

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District Local Development Framework Policies DM1 and DM16, all seek to protect the countryside from unnecessary development and preserve the character of its landscape, subject to a number of limited circumstances and justifications.

56. Planning Policy Statement 7 – Sustainable Development in Rural Areas (PPS7) seeks to ensure that the quality and character of the wider countryside, its natural resources and biodiversity are protected, whilst supporting the rural economy. MPS1 seek to protect and enhance the character of surrounding rural and urban areas by careful planning and design of any proposals for minerals development, including the need to locate sites to minimise visual intrusion. The document goes on to state that *‘Minerals development is different from other forms of development because minerals can only be worked where they naturally occur’*. Local Development Framework Policy DM1 presumes against development in the countryside unless its functionality requires such a location. Minerals Local Plan Policies OG2, OG9 and OG15 specifically require proposals for oil exploration to be sited and designed to minimise any adverse impacts on the local environment.
57. Due to the flat landscape the proposed site is visible from the surrounding countryside. At up to 23 metres in height the drilling-rig would be the main element of the proposal visible from a distance. The site compound, which in addition to the drill-rig would include a number of single storey site cabins, storage tanks, pipe racks, temporary construction fencing and other ancillary facilities, would only be visible at a local level, predominantly from the A257 immediately to the north. Intermittent planting around the boundaries, within the field, and within adjoining fields would help to break up and screen views of the site compound and rig within the wider landscape. The drill-rig’s slender lattice construction would help to minimise its visual impact and would make it more difficult to discern from a distance. It is noted that the maximum height of the drill-rig would be less than the electricity pylons that pass through the landscape.
58. The application includes temporary external lighting for site security reasons and to assist night-time working during operations on site. Impact from artificial lighting on the night sky is an issue in rural areas, although it should be noted that the adjacent stretch of highway is lit. The nearest residential property is over 600 metres away so there would not be a material impact on residential amenity from any lights. However, to ensure the lighting is not excessive and would not extend beyond the area of land that has to be lit, should planning permission be granted I recommend a condition requiring details of the lighting be submitted for prior approval.
59. Government policy set out in PPS7 confirms the importance of protecting natural resources in delivering sustainable development. In relation to agricultural land PPS7 states that little weight in agricultural terms should be given to the loss of agricultural land in grades 3b, 4 and 5. Given that the field is classified as Grade 4 agricultural land, the application site forms part of a disused area of the field and that the application proposes a temporary use for 12 weeks only, I am satisfied that the works would not materially affect the availability of agricultural land in the local area.
60. To ensure that the site is adequately restored following completion of drilling operations, I recommend a condition be placed on any planning permission requiring the prior approval of a scheme to reinstate the site. This scheme should include details of the timing of the restoration, soil handling and placement, and the re-seeding of the ground to ensure the restoration of the land.

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61. The development would take approximately 12 weeks from start to restoration and has to be undertaken in this general location in order to target a particular geological feature. Whilst there would be some landscape impacts, they would be limited and of a relatively short duration. Given the temporary nature and the degree of impact, provided that conditions are imposed regarding the restoration of the site, I do not consider the proposal would have a significant impact on the landscape or open countryside and would be acceptable in terms of its visual impact and related planning policy.

Water environment (hydrology / groundwater impacts)

62. The application site falls within a Flood Risk Zone as defined by the Environment Agency and is identified as being at risk of flooding from both the nearby river, and from the sea. In accordance with the requirements of PPS25 (Development and Flood Risk) a Flood Risk Assessment (FRA) has been prepared for the site. The FRA received indicates that there is a 0.5% (1 in 200) or less chance of flooding each year, which takes account of flood defences that protect the area. The FRA concludes that the application would not increase the potential risk of flooding or decrease flood storage capacity. PPS25 indicates that the proposed temporary development is considered to be less vulnerable to flooding and would therefore be an acceptable use within the flood zone. It is noted that the Environment Agency raise no flood risk concerns associated with this application; I therefore consider the application to be acceptable in terms of any potential flood risk.

63. MPS1 seeks careful consideration of applications for mineral exploration in order to avoid or minimise any resultant adverse impacts on the environment. The Policy states *'particular care should be taken about siting all types of oil and gas wells close to water supply wells or boreholes. If aquifers are to be breached it will be necessary to discuss well-casing details and the composition of drilling muds with the Environment Agency'*. South East Plan Policies NRM1 and NRM2 seek to ensure that water quality and ground water supplies are maintained and enhanced.

64. The application site overlies a principal aquifer that supports large abstractions and provides base flow to rivers and surface water systems in the area. The aquifer is held within the upper chalk formation at an expected depth of approximately 330 metres in this location.

65. To prevent contamination of the water environment and isolate the aquifer the application proposes to completely seal the upper section of the borehole as it passes through the water-bearing stratum. This would be achieved by steel casing concreted into place and pressure tested to prevent ingress of water into the borehole. The application includes details of the drilling muds that would be used (Xanthan Gum), which is not considered to be harmful to the environment. Furthermore, the drilling would take place using a closed loop system that would capture all fluids and sediment from the operation. The water, drilling fluid and sediment captured would be stored in tanks, to be disposed of off site at licensed wastewater treatment works within Kent. On completion of the drilling, at the end of the 12 week period, the application proposes to restore the site to its former condition. This would include the borehole and steel casing being completely backfilled with cement to seal the hole and prevent the vertical migration of groundwater, in accordance with Environment Agency guidelines on 'Decommissioning Redundant Boreholes and Wells'.

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66. During the processing of the application the applicant has provided additional technical information concerning the proposed drilling methodology in response to consultees. The Environment Agency, Southern Water, the Health & Safety Executive and the County's Minerals Technical Adviser were all consulted on the application and subsequent information and have raised no objection. Nearby residents have raised concern that Southern Water had initially requested a full hydrological risk assessment, however Members will note from paragraph (20) above that this request was based on the assumption that the proposed borehole could be subsequently developed for extraction of gas. On confirmation from the applicant that the proposal would not be used for production purposes and would be backfilled and sealed in accordance with EA guidance on completion of the sampling, Southern Water withdrew the request, raising no objections subject to the borehole being completely sealed on completion of any permitted operation.
67. Taking into account the views of the above statutory consultees and the mitigation measures incorporated into the proposed development, it is not considered that the development would pose any significant risk of pollution to the water environment. I therefore consider that the proposal satisfies the requirements of MPS1, PPS25 and the appropriate development plan policies.

Local amenity impacts including noise and dust

68. MPS1 requires careful consideration of environmental factors including '*controlling noise and dust emissions from drilling rigs with particular reference to night-time operations*'. The guidance suggests that 'in most cases it will be appropriate to attach conditions to planning permissions to ensure that any adverse impact of the operation on the environment and local residents is kept to a minimum.' Minerals Planning Policy 2 – Controlling and Mitigating the Environmental Effects of Mineral Extraction in England states 'any adverse effects on local communities, environmental damage or loss of amenity must be kept to an acceptable minimum through the design of the proposals'. This includes considering all reasonable options to minimise noise at source to safeguard noise sensitive properties.
69. The nearest residential properties include a farmstead located to the south off the A256 and residential properties located to the east and west at a distance of approximately 600m. It should be noted that both the roads that border the site are classified A-roads and are likely to carry proportionately higher levels of traffic both during the day and night.
70. The County Council's Dust and Odour consultant has assessed the proposals and advised that given the separation of the site from sensitive properties, there would be no material dust or odour issues relating to the application.
71. The proposed drilling operations would be undertaken 24 hours / 7 days per week over a period of up to 12 weeks, due to the need to drill continuously. A noise assessment submitted with the application defines the lowest night-time background noise level at 31dB. The report predicts that the noise level of the drill-rig at the nearest noise sensitive property would be 27dB(A) L_{Aeq} in line with the existing night-time background noise climate.

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72. Dover District Council's Environmental Health Officer has raised no objections to the application in principle. The EHO considers that noise ought not to be a barrier to the application, as any issue could be engineered out through mitigation. He recommends a condition ensuring that the cumulative noise level arising from operations shall not exceed 5dB below the background noise level at the closest noise sensitive property. In his opinion the mitigation measures proposed by the applicant should be put in place as an initial operation on site rather than waiting to see if there are any noise complaints.
73. The County Council's Noise Consultant notes that the predicted night-time noise level falls below the lowest measured background noise level. His own calculations suggest that the noise level generated by the drilling operation at the closest noise sensitive property could be significantly less than that predicted in the report received from the applicant, in the order of 19dB. On this basis he advises that there would be no adverse impact on the closest noise sensitive properties as result of the development. In response to Dover District Council's comments the County Council's Noise Consultant recommends a condition ensuring noise levels should not exceed the existing background noise level at the closest sensitive property. This would not be as stringent as Dover District Council's recommendations (5dB below background noise levels); however it is considered to provide adequate protection to local amenities without being unduly restrictive on the applicant.
74. In response to the District Council's views, as an additional precautionary measure to ensure that there would be no unacceptable impact on the closest noise sensitive property, the applicant has confirmed that noise reduction panels would be deployed on the site fencing before any drilling is commenced on site. These panels would be maintained for the duration of operations on site.
75. Subject to the above conditions and additional controls, it is considered that all reasonable options to minimise noise at source to safeguard sensitive properties would be deployed. The proposal would accord with MPS1, MPS2 and the aforementioned development plan policies and would be acceptable in terms of the potential impact on residential amenities.

Highway considerations

76. The site would be accessed from A257 Sandwich Road, approximately 60 metres west of the roundabout with the junction with the A256. The field is served by a formal pull in that allows vehicles to access the site without stopping on the public highway. An existing overgrown track would be used within the field to access the proposed site. This would be cleared along with the proposed compound area during the initial site setup. The application states that there would be a limited number of heavy goods vehicles during the set up / decommissioning of the compound (approximately 16 vehicles each time). These movements would deliver the drill-rig, associated equipment and temporary buildings to site. During the on-going temporary operations its is estimated that there would be approximately 4 lorry movements per week to remove foul sewage, skips and deliver supplies, and a further 2/3 cars/vans per 12 hour shift to cover the general operation of the site. The application confirms that suitable on-site vehicle parking would be made available along with appropriate wheel cleaning facilities to prevent mud and debris being tracked on to the highway.
77. Kent Highways and Transportation has raised no objection on the basis that the

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proposal is for a temporary use only, subject to the imposition of conditions including the maintenance of the sight lines at the access with the A257, provision of vehicle parking, a restriction on the timing of deliveries to avoid peak travel times (between 7.30am-9.30am and 3.30-6.30pm), and the provision of wheel washing facilities. Kent Highways and Transportation has recommended that all plant traffic is routed via the A256.

78. The applicant has confirmed that the recommended highways conditions are achievable, and that, during the brief site setup and decommissioning of the temporary operations, large delivery vehicles can be routed via the A265 outside the peak travel times identified. On this basis I am satisfied that conditions can be placed on any planning permission to preserve highway safety, and that an appropriately worded informative would draw the applicants attention to the agreed routing for HGV's during set up / decommissioning of the compound.
79. It is acknowledged that the development would generate an increase in volume of traffic but this would be limited to a relatively small number of movements during a short development, operation and restoration period. The local highway network is considered to be capable of accommodating the increase in vehicle numbers and subject to the conditions and informative recommended above there would be no specific highway safety concerns.

Other Issues

80. The application documents received include an ecological scoping survey that assesses the site in terms of its ecological interest and makes recommendations in light of the proposal to limit the potential impacts. These recommendations include maintenance of a 6 metre buffer zone around the drains within the site to safeguard water vole burrows, along with measures to be undertaken during the clearance and operation of the site to safeguard against risk to reptiles and breeding birds.
81. It is noted that the County Council's Biodiversity Officer raises no objection to the application subject to the implementation of the recommendations set out within the scoping survey; including the maintenance of heras-type fencing around the recommended 6m buffer zone. I am satisfied that, subject to conditions securing the above recommendations, the proposal would not give rise to a significant impact on local ecology and complies with the requirements of PPS9 and the relevant development plan policies.
82. The Environment Agency has commented that Shale rock may contain naturally occurring radioactive elements. However, it considers the expected levels of radioactivity to be low, such that the Agency would not even require an Environmental Permit. It is for the Environment Agency to determine if an Environmental Permit is required under environmental legislation. Guidance set out in PPS23 indicates that *'The planning system should focus on whether the development itself is an acceptable use of the land, and the impacts of those uses, rather than the control of processes or emissions themselves. Planning authorities should work on the assumption that the relevant pollution control regime will be properly applied and enforced'*.
83. Representations received from the general public also raise concerns over gas monitoring and the potential risk of any gas exploding blowing out the well head. In response to this point the applicant has provided further details on the monitoring

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equipment that would be installed on site as a statutory requirement to ensure safety. Members should note that this is an aspect of the operations that would be controlled under the Health and Safety Regulations and is a separate issue to the consideration of the planning application. The HSE has confirmed that under Borehole Sites and Operations Regulations 1995 a thorough appraisal of the borehole design and construction would be carried out by a Well Operations Inspector. Should there be legitimate concerns over the operations the HSE would take enforcement action.

84. On the issue of potential gas migration raised by the EA and those making representations, I note the HSE indicate that the risk would be extremely low due to nature of the rock strata which holds gas reserves tightly within the formation, and the hydrostatic over balance produced by fluid within the hole preventing gas formation. The HSE advise that the proposed back filling of the entire borehole with cement on completion of the operations would prevent any issues occurring after any borehole was abandoned.
85. The potential for the proposed development to impact on human health has been raised as a concern by local residents. Given the conclusions drawn within the sections on the water environment, local amenity impacts and above, I am satisfied that there would be low health risks as a result of the proposal. I also note that should planning permission be granted the HSE would consider the borehole design in detail as part of the Borehole Regulations.
86. One representation received from a local resident raises concerns about the potential for the drilling operation to impact of ground stability, including the risk of subsidence, and in particular that the operations would undermine the adjacent public highway and nearby residential property. The County Council's Minerals Technical Adviser and the Health & Safety Executive have considered the application in light of these concerns and raise no objections to the proposed operation. The HSE advice received states that *'it would be unusual for there to be local subsidence if the well is designed and constructed correctly and on completion of operations the well is filled with cement which prevents the collapse of the well'*. The application proposes to case the borehole as it is drilled at least to a depth below the chalk strata (approximately 330 metres below ground). As well as isolating the aquifer, the casing would also support any loose unconsolidated formations preventing the surrounding strata from subsiding. On the basis of the technical advice received, I am satisfied that the proposal would be acceptable in terms of ground stability.
87. Representations received from a local resident raises the question of the need for a legal agreement to ensure that financial liability resulting from any damaged caused falls to the applicant. As indicated above, I am satisfied that the HSE would scrutinise the borehole design for safety under a separate regulatory regime that would properly control operational activities in this instance.
88. Concerns over the potential impact of the development on tourism in the Sandwich area have been expressed within correspondence received from the public. It is noted that the application is proposed for a temporary period of 12 weeks and on completion would seek to restore the site to its former condition. I am satisfied that the proposed operation would have no material impact on the tourist industry should the application be permitted.

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89. It is worth noting that planning permission is one of a number of other licences, permissions and regulatory agreements that would need to be in place before exploratory drilling from natural gas can be commenced. These include (in sequence): a Petroleum Exploration and Development Licence issued by the Department of Energy and Climate Change (DECC); Planning Permission; Coal Access Agreement; Notification to the British Geological Survey; a Well Operation Notice (permission from DECC to drill a borehole); Notification under the Borehole Sites and Operation Regulations to the Health and Safety Executive (to be assessed by a Well Operations Inspector); a Well Examination Scheme completed by an independent well examiner (covering all aspects of well design through to final abandonment); and utility clearances with water, power, telecoms and sewage companies.

Conclusion

90. The development proposes the drilling of an exploration borehole to assess the potential of local geological formations to contain natural gas reserves. Government policy sets out that it is in the national interest to maximise the recovery of all economic hydrocarbon reserves in an environmentally acceptable way. The development would be of a temporary nature and includes adequate environmental information that demonstrates that there would be no unacceptable impacts from the proposals in terms of the environment or local amenity. The appropriate technical consultants, including the Environment Agency, have accepted that the design of the borehole and restoration measures, which would ensure the protection of ground and surface water. Any impacts relating to noise, traffic, light pollution and visual impact could be controlled to acceptable levels by way of the conditions recommended below.

91. Members will note that if as a result of the proposed exploration viable reserves are found any proposals to exploit the resource would be subject to a requirement for a new planning application which would be likely to include a formal Environmental Impact Assessment. It should be noted that any planning permission granted at the exploration and appraisal stage does not carry with it a presumption that long-term production from those wells, or that the development of further wells, will be permitted

92. On this basis, I consider that the application accords with National and Regional Policy and the relevant policies of the Minerals Local Plan and Local Development Framework referred to above. I therefore recommend that, subject to the imposition of appropriate conditions, planning permission should be granted.

Recommendation

93. I RECOMMEND that PERMISSION BE GRANTED, SUBJECT TO the imposition of conditions including (amongst other matters) the following:-

- the development being carried out in accordance with the submitted plans and any approved pursuant to the conditions set out below;
- operations to be commenced within 5 years;
- the applicant to provide written confirmation of the start date on site;
- the temporary use once commenced on site to cease within 12 weeks, unless otherwise agreed in writing by the County Planning Authority;
- use of the borehole be restricted to obtaining core samples only;

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- within two weeks of operations ceasing all structures and materials to be removed from site,
- the prior submission and approval of a scheme and timetable for the reinstatement of the site, including the replacement of any topsoil and re-seeding;
- the prior submission and approval of external lighting details;
- the implementation of the recommendations set out within the Ecological Scoping and Phase 1 Habitat Survey
- a control on night-time noise to ensure it does not exceed the background noise levels;
- all liquid and solid waste generated by the proposed operation shall be captured and stored until it can be disposed of within an appropriately licensed waste disposal facility;
- the maintenance of sight lines at access with the A257;
- the provision of vehicle parking on site;
- a restriction on HGV movements to avoid peak travel times;
- provision of measures to ensure mud and debris is not tracked onto the highway;
- the borehole to be drilled in accordance with the principles of the methodology received;
- the borehole to be completely backfilled and sealed in accordance with the principles of the methodology received;
- geological survey information obtained from the core samples, excluding any commercially sensitive data, be made available to the County Planning Authority; and
- copy of decision and approved documents to be available on site.

I FURTHER RECOMMEND that the applicant be advised by way of INFORMATIVES (amongst other matters) the following:

- the applicant be advised of the views of the Environment Agency and the Health and Safety Executive;
- during the setup and decommissioning of the site the applicant is recommended to route large delivery vehicles via the A265 outside the peak travel times identified, as agreed.

Case Officer: James Bickle

Tel. no. 01622 221068

Background Documents: see section heading.
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