

## **Norfolk Minerals and Waste Local Plan**

### **Minerals Site Specific Allocations Plan – Single Issue Silica Sand Review**

#### **Preferred Options Consultation Feedback Report**

January 2016



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**Norfolk** County Council

## **Norfolk Minerals and Waste Local Plan**

Minerals Site Specific Allocations Plan –  
Single Issue Silica Sand Review

Preferred Options Consultation Feedback Report

January 2016

T. McCabe – Executive Director  
Community and Environmental Services  
Norfolk County Council  
Martineau Lane  
Norwich  
NR1 2SG

[www.norfolk.gov.uk](http://www.norfolk.gov.uk)



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## Introduction

This document contains the responses received to the Preferred Options Consultation on the Single Issue Silica Sand Review of the Minerals Site Specific Allocations Plan. The consultation period ran for six weeks from 6 November to 21 December 2015.

We received comments on the Preferred Options Consultation from the following 18 organisations and 11 individuals:

- Highways England
- Historic England
- Natural England
- Environment Agency
- National Grid
- Norfolk County Council – Highway Authority
- Norfolk County Council – Public Health
- Norfolk Coast Partnership
- Norfolk Wildlife Trust
- Anglian Water
- Sibelco UK
- Hillington Parish Council
- Shouldham Parish Council
- Snettisham Parish Council
- King's Lynn and West Norfolk Borough Council
- Worcestershire County Council
- Kent County Council
- Surrey County Council

These responses are listed under each section of the Preferred Options document that they relate to. Some of the responses have been summarised, where it was considered appropriate to do so. For each response received, the County Council has added an officer response, in the right-hand column.

We also received 'no comment' responses from the following eight organisations:

- South Norfolk Council
- Breckland District Council
- Broadland District Council
- Peterborough City Council
- Waveney District Council
- Office of Rail and Road
- Ely Drainage Boards
- Old Catton Parish Council

We received responses to the consultation on the Initial Sustainability Appraisal Report from the following three organisations: Kent County Council, Historic England and Natural England. For each response received, the County Council has added an officer response, in the right-hand column.

We received a response to the consultation on the Habitats Regulations Assessment (Task 1) from Natural England. The County Council has added an officer response, in the right-hand column.

## General Comments on the Silica Sand Review Preferred Options Consultation

Rep ID	Representation Details	Norfolk County Council officer response
90489	<p>Respondent: <b>Highways England (Mr R Chenery) [16426]</b>            Received: <b>09/11/2015 via email</b></p> <p>It is unlikely that the above Preferred Options document will affect the safety and operation of the Strategic Road Network. Specific Extraction site may well require specific comment depending on location, transport route and traffic volume associated with extraction. This detail will come forward as the extraction proposals come forward in the future. Highways England therefore has no further comment to make.</p>	<p>Noted. Highways England will continue to be consulted on the Silica Sand Review as it progresses.</p>
90492	<p>Respondent: <b>Norfolk County Council – Public Health (Dr L Smith) [16262]</b> Received: <b>27/10/2015 via email</b></p> <p>I have no concerns as this is an inert material and any issues would relate to extension of quarry works (noise, traffic etc) rather than from the material itself.</p>	<p>Noted</p>
90502	<p>Respondent: <b>Worcestershire County Council (Ms M Joynes) [16447]</b>            Received: <b>08/12/2015 via email</b></p> <p>As outlined in our response of March 2015 to your Initial Consultation, Worcestershire produces silica sand but this is a "naturally bonded moulding sand" which was historically important for the foundry industry and demand is now very small. We do not have any evidence that the silica sand in Worcestershire is suitable for glass making, and therefore we do not consider that this is a strategic cross-boundary matter which would invoke the Duty to Cooperate between the two authorities.</p>	<p>Noted</p>
90504	<p>Respondent: <b>Kent County Council (Ms S Thompson) [16216]</b>            Received: <b>10/12/2015 via email</b></p> <p>Having looked carefully at the associated documentation that details the Sustainability Appraisal (SA) and Strategic Environmental Assessment (SEA) and the Areas of Search (AOS) that underpin Norfolk County Council's approach in this matter, Kent County Council has no specific comments to make, other than it appears that the methodology being pursued accords with the relevant planning</p>	<p>Noted</p>

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	<p>regulatory framework and National Planning Policy.</p> <p>The predicted shortfall in supply from existing permitted reserves in Norfolk over the period of the adopted Plan is noted and needs to be addressed. Silica sand is a nationally important industrial mineral and where there are recognisable geological resources, of a suitable type, the relevant mineral planning authority has the responsibility to ensure a steady and adequate supply of such minerals. Section 146 of the National Planning Policy Framework (NPPF) sets out the requirements for this mineral type. The approach being taken by Norfolk County Council in assessing the appropriateness of sites through local consultation and SA and SEA assessment is in accordance with planning policy guidance.</p>	
90517	<p>Respondent: <b>Surrey County Council (Mr D Maxwell) [16450]</b> Received: <b>17/12/2015 via Email</b></p> <p>As an authority which shares similar high quality deposits of silica sand, we would support your attempts to make adequate provision as Surrey went through a similar exercise in preparing its Surrey Minerals Plan Core Strategy DPD which was adopted in July 2011. This also covers the period to 2026. Similarly, Surrey allocated one specific site for silica sand extraction at Pendell Farm, Bletchingley (as an extension to the existing working at North Park Quarry, Godstone), and identified two further areas of search for potential silica sand extraction in the longer term.</p> <p>I have looked at the consultation with interest but have no specific comments to make in relation to the Draft Document.</p>	Noted
90513	<p>Respondent: <b>Borough Council of King's Lynn and West Norfolk (Mr A Gomm) [8101]</b> Received: <b>18/12/2015 via Web</b></p> <p>The Borough Council of King's Lynn &amp; West Norfolk notes the need to undertake this review of the Minerals Site Specific Allocation Plan and fully understands the designation of the proposed Specific Site and the Areas of Search which the Mineral Planning Authority have proposed to address the shortfall in the quantity of silica sand extraction sites.</p>	Noted

Rep ID	Representation Details	Norfolk County Council officer response
	<p>The Borough Council of King's Lynn &amp; West Norfolk are not objecting and do not have any adverse comments to the designation of the proposed Specific Site (SIL01 - Mintlyn South) or the ten Areas of Search which the Mineral Planning Authority have included in this review. However, detailed points from the Borough Council of King's Lynn &amp; West Norfolk Environment and Planning department have been made for each of the proposed Areas of Search which have been included in this consultation and should be read in conjunction with this statement.</p> <p>The Conservation officer has further raised concerns regarding the impact of the proposed Areas of Search in areas which have numerous environmental designations and Scheduled Ancient Monuments, with the impact to wildlife and habitats, the impact of machinery and traffic in terms of potential vibration to Grade 1 and 2 Listed Buildings and churches of significance.</p> <p>Issues of access to and from these Areas of Search are of concern. Increased lorries and traffic to and from potential extraction sites will impact negatively on nearby traffic levels. Increased machinery on the roads will add to this issue also. The only existing railhead is located at Bawsey and with no rail infrastructure provided to the other Areas of Search the impact on the surrounding countryside and roads is an issue to consider.</p> <p>We note that a buffer of 200m from residential properties has been generally applied to the areas of search. This is required as a minimum as a part of mitigation against public health impacts. However, local topography, the presence of buildings and tree/vegetation cover will also need to be considered when assessing public health and amenity impacts.</p>	<p>Noted. See separate comments made regarding the specific site and each area of search.</p> <p>Potential impacts on the Historic Environment and Ecology have been assessed in the relevant sections of the Preferred Options Consultation document for the specific site and areas of search. The draft area of search policy contained in the PO Consultation document includes a requirement for any planning application submitted within an area of search to include a Landscape and Visual Impact Assessment, a Heritage Statement and an archaeological assessment.</p> <p>The Highway Authority and Highways England have been consulted on the Preferred Options for the Silica Sand Review. The draft area of search policy contained in the PO Consultation document includes a requirement for any planning application submitted within an area of search to include a Transport Assessment or Transport Statement, which will be assessed in accordance with Policy DM10 of the adopted Minerals and Waste Core Strategy.</p> <p>An area of 250 metres from residential properties has been excluded from the areas of search. Areas of search form locations within which mineral operators could develop extraction proposals for smaller areas to meet the expected shortfall in silica sand. The draft areas of search policy contained in the PO Consultation document includes a requirement for any planning application submitted within an area of search to include mitigation measures to deal appropriately with any amenity impacts, which would be assessed in accordance with Policy DM12 of the adopted Minerals</p>

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		and Waste Core Strategy. The draft AoS policy also includes a requirement for an air quality assessment to be submitted with any planning application.
90512	<p><b>(Object)</b> Respondent: <b>Ms N Etheridge [16449]</b> Received: <b>18/12/2015 via Email</b></p> <p>I'm writing as a concerned citizen about the intention to mine larger quantities of Silica Sand in North Norfolk.</p> <p>There are some areas where mining will occur that are near habitat of people and because of the nature of sand even with all the expected recommendations of distance sand will probably drift. This sand in any quantity can be detrimental to the lungs if breathed in, as Silica dust caused silicosis, which is a fatal disease.</p> <p>Secondly the extent of extra trucks moving this quantity even to the train track or on the roads will increase health problems from everyone who lives along the routes these vehicles will travel.</p> <p>Thirdly there is mention of Aqua channels below areas to be mined. How can they be assured that they won't be infringed on? what plans are there if they were compromised? Do these Aqua area supply North Norfolk?</p> <p>Lastly I would like to say that by giving permission to the industry to mine Silica Sand in Norfolk is opening the gates to the Oil &amp; Gas industry to start Fracking our country. This sand is used in the process of Fracking and much to the contrary of information given by the Oil &amp; Gas industries about safe fracking, there is no safe fracking.</p>	<p>The silica sand resource in Norfolk only occurs within the administrative area of the Borough Council of King's Lynn and West Norfolk, it does not occur within the administrative area of North Norfolk District Council. Silica sand is already being extracted in Norfolk at the quantities being planned for in the Silica Sand Review of 750,000 tonnes per annum.</p> <p>An area of 250 metres from residential properties has been excluded from the areas of search. The draft area of search policy within the Preferred Options Consultation document contains a requirement for any planning application submitted within an area of search to include an air quality impact assessment of the potential for any emissions, including dust together with suitable mitigation measures to address these impacts. Any planning application submitted within an area of search, which would lead to an increase in vehicle movements, will also need to include a Transport Assessment or Transport Statement, which will be assessed in accordance with Policy DM10 of the adopted Minerals and Waste Core Strategy.</p> <p>The Health and Safety Executive states that "No cases of silicosis have been documented among members of the general public in Great Britain, indicating that environmental exposures to silica dust are not sufficiently high to cause this occupational disease".</p> <p>The specific site and areas of search are located on principal and secondary aquifers due to the geology underlying Norfolk. There are no Groundwater Source Protection Zones within any of the areas of search or</p>



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		<p>specific site (SPZs are defined, by the Environment Agency, for groundwater sources used for public drinking water supply). The draft site and area of search policies contained in the Preferred Options Consultation document include a requirement for any planning application submitted in these areas to include a Hydrogeological Risk Assessment.</p> <p>Silica sand is currently extracted in Norfolk and has been extracted since at least the nineteenth century. Whilst silica sand is used in the process of fracking, the purpose of this Silica Sand Review is to provide a supply of sand of a suitable quality for the existing processing plant at Leziate which supplies sand for use in glass manufacture.</p> <p>This consultation is on the Silica Sand Review and is not about fracking.</p>
90552	<p>Respondent: <b>Environment Agency (Ms E Crook) [558]</b> Received: <b>21/12/2015 via Email</b></p> <p>We have assessed each site and made site specific comments with respect to flood risk, fisheries &amp; biodiversity, the Water Framework Directive (WFD) and groundwater (hydrology and site restoration).</p> <p>The majority of our comments are advisory and intended for your information. However, we have made comment about the absence of information relating to WFD assessments, hydrology and flood risk.</p>	<p>Noted</p> <p>The areas of search form locations within which mineral operators could develop extraction proposals for much smaller areas to meet the expected shortfall. Where required, WFD assessments will be carried out to inform the Pre-Submission version of the Silica Sand Review. Chapter 8 of the Preferred Options Consultation document discussed impacts and mitigation measures for changes in water level and water chemistry due to silica sand extraction. The draft area of search policy contained in the PO document includes a requirement for any planning application submitted within an area of search to include a</p>

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	<p>Our comments also include possible opportunities which some of the allocations offer such as improvement of flood defences (AOS_A).</p> <p>Our responses raise serious concerns with site AOS_B. This site, if brought forward in its current form, would cause significant harm to coastal flood defences. However, we note that your Authority currently do not propose to allocate this site.</p> <p>Water Supplies: Please note that although the site and areas of search are outside a source protection zone, there are certain water supplies that do not require a licence and therefore may not be known to the Environment Agency. The locations of private domestic sources may be held by the Local District Council on the register required by the Private Water Supplies Regulations 1991. These water supplies will be given a default 50m protection zone to ensure there will be no impact from potential pollution. Should proposed extraction and restoration plans be within the 50m catchment zone of these supplies, we will then be objecting to the proposals.</p>	<p>Hydrogeological Risk Assessment. Information on flood risk is contained in section 5.2 of the Initial Sustainability Appraisal Report – Part B.</p> <p>Noted</p> <p>Noted. As stated in the Preferred Options Consultation document, Area of Search B is considered unsuitable to be taken forward and will not be included in the Pre-Submission document.</p> <p>Water Supplies: Noted. This would be a matter to be assessed within the detail of any future planning application.</p>

## 1. Introduction

Rep ID	Representation Details	Norfolk County Council officer response
90515	<p>Respondent: <b>Sibelco UK (Mr M Hurley) [8119]</b>                      Received: <b>18/12/2015 via Email</b></p> <p>Paragraph 1.11 - the HRA suggests that Areas of Search A and B are considered unsuitable, not Areas B and C as stated in paragraph 1.11.</p>	<p>The HRA Task 1 Test of Likely Significance concluded that Areas of Search A and B could potentially result in likely significant effects on European and Ramsar designated sites and that a Task 2 Appropriate Assessment was required.</p> <p>The assessment of all planning constraints concluded that Areas of Search B and C were unsuitable to be taken forward as stated in paragraph 1.11.</p>

No comments received on chapters 2 or 3.

## 4. What happens next?

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90516	<p>Respondent: <b>Sibelco UK (Mr M Hurley) [8119]</b>                      Received: <b>18/12/2015 via Email</b></p> <p>Para 4b - Should this refer to Pre-Submission publication in Spring 2016?</p>	<p>Yes. Paragraph 4b should state that the Pre-Submission publication date will be Spring 2016.</p>

No comments received on chapters 5, 6 or 7.

## 8. Potential impacts of silica sand extraction and mitigation

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90553	<p>Respondent: <b>Natural England (Ms L Oliver) [1874]</b>                      Received: <b>21/12/2015 via Email</b></p> <p>We welcome the recognition of potential impacts of silica sand extraction and the potential mitigation measures as outlined in this chapter, and in particular 8.1-8.15 with regard to designated sites; 8.27-8.32 in relation to green infrastructure and functional habitat; and in 8.38- 8.42 with regard to the Norfolk Coast Area of Outstanding Natural Beauty (AONB).</p>	<p>Noted</p>

## Site SIL 01 – Mintlyn South

Rep ID	Representation Details	Norfolk County Council officer response
90498	<p>Respondent: <b>Norfolk County Council - Highway Authority (Ms C Sullivan) [16439]</b> Received: <b>24/11/2015 via Email</b></p> <p>Our comments on the preferred option '<i>Suitable subject to a new haul route onto the B1145 and appropriate junction mitigation</i>' have been taken into consideration and we have no further additional comments to make on this site at this stage.</p>	Noted
90529	<p>Respondent: <b>Borough Council of King's Lynn and West Norfolk (Mr A Gomm) [8101]</b> Received: <b>18/12/2015 via Web</b></p> <p>Appropriateness of the site: No observations Constraints: Residential properties Mitigation: Buffer to protect residential; Dust Management Plan and Noise Management Plan in accordance with the Planning Practice Guidance</p>	These constraints and mitigation measures have been included in the paragraph on Amenity/Environmental Health.
90514	<p>Respondent: <b>Sibelco UK (Mr M Hurley) [8119]</b> Received: <b>18/12/2015 via Email</b></p> <p>The section on Historic Environment (page 32) indicates that the site is an AoS, rather than a proposed specific site.</p> <p>The Ruins of Church of St Michael is to the west, not the east, of SIL01 - Mintlyn South.</p> <p>On page 34 the consultation documents says "The surrounding area has also been historically important and there are a significant number of buildings and features.....". Is this a correct reference to the area surrounding SIL01 - Mintlyn South and, if so, on what basis is this comment made?</p> <p>Ecology Development of SIL01 - Mintlyn South would not, in our view, certainly be expected to adversely affect CWS 416 (70 &amp; 100 Acre Plantations). Only</p>	<p>The Historic Environment section will be corrected to refer to a site instead of an area of search.</p> <p>The Historic Environment section will be corrected to state that the Ruins of the Church of St Michael are to the west of the site.</p> <p>This is a correct reference to the area surrounding SIL01. This comment is made on the basis of the relevant Landscape Character Assessment, a desk-based assessment by the Landscape and Green Infrastructure Officer and the Historic Environment Record.</p> <p>CWS comments noted. If a planning application is made for silica sand extraction at SIL 01, a Biodiversity</p>

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	<p>a very small area of CWS 416 is coincident with the proposed site boundary and mitigation measures can be designed in as appropriate.</p> <p>The adjacent CWS 418 (Haverlesse Manor Plantation) is not likely to be adversely affected by dust deposition since this area has already been subject to mineral extraction.</p> <p>This section again refers to the site as an AoS.</p> <p>Sibelco agrees that site SIL01 (Mintlyn South) is suitable for allocation.</p>	<p>Survey and Report would need to be submitted, as required by Norfolk County Council's Local List for Validation of Planning Applications. The Biodiversity Survey and Report would include an assessment of impacts on the CWSs. Any planning application would be determined in accordance with Policy CS14 and Policy DM1 of the adopted Minerals and Waste Core Strategy which cover Environmental Protection and Nature Conservation.</p> <p>The Ecology section will be corrected to refer to a site instead of an area of search.</p>
90530	<p>Respondent: <b>Norfolk Wildlife Trust (Mr J Hiskett) [508]</b> Received: <b>21/12/2015 via Email</b></p> <p>This site is adjacent to County Wildlife Sites and areas of land not designated as CWS but likely to be of CWS value in Leziate Country Park. Excavation should seek to minimise adverse impacts on adjacent CWS and on the country park and include mitigation proposals. Restoration should be to habitat types similar to adjacent restored mineral workings and should enable the restored area to have the potential to be included within the country park, in future.</p>	<p>The CWSs are discussed in the paragraphs on Ecology within the Preferred Options document.</p> <p>If a planning application is made for silica sand extraction at SIL 01, an Arboricultural Impact Assessment would need to be submitted, if the proposal could potentially affect trees or hedges. A planning application would also need to include a Biodiversity Survey and Report. Both of these documents are required by Norfolk County Council's Local List for Validation of Planning Applications. Any planning application would be determined in accordance with Policy CS14 and Policy DM1 of the adopted Minerals and Waste Core Strategy which cover Environmental Protection and Nature Conservation.</p> <p>The draft specific site policy contained in the Preferred Options Consultation document includes a requirement for a comprehensive working and restoration plan which is compliant with policy DM14 of the adopted Minerals and Waste Core Strategy, in particular considering the opportunities, on restoration, for ecological enhancement and the improvement of public access.</p>
90554	<p>Respondent: <b>Natural England (Ms L Oliver) [1874]</b> Received: <b>21/12/2015 via Email</b></p>	Noted

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	<p>With regard to the one specific site for silica sand extraction at Bawsey (SIL01), from the information in the consultation documents provided, we are satisfied that this allocation should not have an adverse impact on any nearby designated sites, including Roydon Common and Dersingham Bog Special Area of Conservation (SAC), Roydon Ramsar site, or Roydon Site of Special Scientific Interest (SSSI). Most of SIL 01 lies outside the hydrological catchment for Roydon Common SSSI and is down gradient of the sites, with Bawsey Lakes located between the allocation and the designated sites.</p>	
90555	<p>Respondent: <b>Natural England (Ms L Oliver) [1874]</b>  Received: <b>21/12/2015 via Email</b></p> <p>We welcome the Specific Site Allocation Policy SIL01 for this allocation including the requirement for a Hydrogeological Risk Assessment to be undertaken.</p>	Noted
90551	<p>Respondent: <b>Environment Agency (Ms E Crook) [558]</b>  Received: <b>21/12/2015 via Email</b></p> <p>Flood Risk: The site is located within Flood Zone 1 (EA &amp; KLWN SFRA mapping). Accordingly, we have no flood risk concerns. The site is located within an IDB district who should also be consulted.</p> <p>Biodiversity: The following protected habitats and species are present within the site:  CWS 416 (70 &amp; 100 Acre Plantations)  Multiple sites of deciduous woodland: NERC Act (2006) Section 41 habitats of principal importance.  Large-celled Flapwort (<i>Lophozia capitata</i>): Threatened Bryophyte record within Bawsey Country Park.  Slow-worm (<i>Anguis fragilis</i>): The applicant needs to be aware that reptiles may be present on this site. All reptiles are protected under the Wildlife and Countryside Act 1981 (as amended). Therefore, the potential impact of the proposed works on reptiles and their habitat must be assessed and appropriate mitigation measures developed prior to works commencing.</p>	<p>Flood Risk: Noted. The IDB have been consulted and did not respond.</p> <p>Biodiversity: The CWSs are discussed in the paragraphs on Ecology within the Preferred Options document. If a planning application is made for silica sand extraction at SIL 01, an Arboricultural Impact Assessment would need to be submitted, if the proposal could potentially affect trees or hedges. A planning application would also need to include a Biodiversity Survey and Report. Both of these documents are required by Norfolk County Council's Local List for Validation of Planning Applications. Any planning application would be determined in accordance with Policy CS14 and Policy DM1 of the adopted Minerals and Waste Core Strategy which cover</p>

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	<p>The following protected habitat is adjacent to the site: CWS 418 (Haverlesse Manor Plantation).</p> <p>Water Framework Directive: GB105033047670 Mintlyn Stream has previously been impacted by silt entering the watercourse from Mineral abstraction. No WFD assessment apparent for this water body; we would like to see a WFD assessment for this proposal and to ensure that access routes do not become path ways for silt entering the watercourse.</p> <p>Groundwater: The site overlies and Groundwater Vulnerability Zone (Principal Aquifer). Advice provided on groundwater protection, engineering, permitting and risk assessments required in the event that the waste material is used in the restoration of the site.</p> <p>Hydrology We have no objection in principle to this allocation. However, due to very limited information provided with this consultation and given the site is situated on a principal aquifer, a 'Hydrogeological Risk Assessment' (HRA) will be required to address and mitigate any risks to groundwater quality, quantity and groundwater levels in the area around the quarry, to protect any groundwater abstractors and also any ecosystems and surface water features that are reliant of the groundwater in the area of the proposed site. Should there be any dewatering, we would require within the HRA a proposal of mitigation measures to address the impacts upon the above mentioned features.</p>	<p>Environmental Protection and Nature Conservation.</p> <p>Water Framework Directive: The Mintlyn Stream is located approximately 900 metres south of SIL 01. A WFD assessment will be carried out to inform the Pre-Submission version of the Silica Sand Review.</p> <p>Groundwater: Advice noted. This is specific site for future silica sand extraction. There are no proposals for this site to be restored using waste.</p> <p>Hydrology: The draft specific site policy contained in the Preferred Options Consultation document includes a requirement for any planning application submitted for site SIL 01 to include an HRA. The draft specific site policy requires an HRA to address impacts on groundwater dependent environmental designations. The specific site Policy will be amended to require an HRA to address and mitigate any risks to groundwater quality, quantity and groundwater levels; to protect any groundwater abstractions and also any ecosystems and surface water features that are reliant on the groundwater in the area of the proposed site.</p>
90559	<p>Respondent: <b>Historic England (Ms K Wood) [15387]</b> Received: <b>21/12/2015 via Email</b></p> <p>In terms of the proposed site (SIL 01), the grade II* listed building closest to the site is the ruined parish church of St Michael, originally of 12th century and constructed of carstone rubble, some flints and limestone dressings. It is of single cell plan and does not have its roof or all walls. It is of historical and architectural interest, demonstrated by the display of moulding fragments within the King's Lynn Museum. The previous</p>	<p>Information on the setting of the Ruins of the Church of St Michael is noted.</p>

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	<p>railway line, now removed, passed very close to the church. This, along with the existing sand pits to the east, has eroded the quality of the church setting. The substantial tree planting prevents views of the pits from the church. This, in some form, ensures that the church is set within agricultural fields and bounded by tree belts, and therefore has positive qualities that should be preserved.</p> <p>The proposed pit would extend south of the existing excavations and would extend southwards of the existing tree belt to its immediate west. Whilst the image provided for the pit location is at small scale, it would appear that its southern most section would be visible from the church remains. Therefore, the setting of the church would be affected. The position of existing planting mostly prevents the inter-visibility and an adjustment to the southern edge of the pit to move it north would reduce the visual impact and therefore could mitigate any harm in terms of paragraph 132 of the NPPF.</p> <p>In terms of this site and the other proposed sites which emerge from the Areas of Search, it is considered imperative to secure appropriate remediation of the sites upfront and information and details regarding timescale and nature of recovery should be included with any application. We would welcome further information discussion on what type of recovery and remediation of the land would be appropriate to minimise /improve the impact on heritage assets. It would also be considered appropriate to secure funding through a planning obligation as a means to mitigate the impact on local heritage assets, again we would welcome further discussion on which projects in the immediate area would benefit from funding secured.</p> <p>There are a number of findings on the HER database in and surrounding the site. We would advise you seek advice from the County's Archaeological Officers regarding appropriate investigation and mitigation.</p>	<p>The information regarding the potential effect on the setting of the Ruins of the Church of St Michael from silica sand extraction at site SIL 01 is noted.</p> <p>It is considered that a potential alternative to moving the southern edge of site SIL01 to the north would be to extend the existing tree planting further south to screen the site from the church remains.</p> <p>The draft specific site policy contained in the PO Consultation document includes a requirement for a planning application for silica sand extraction at site SIL01 to be accompanied by a Landscape and Visual Impact Assessment and a Heritage Statement. These assessments would identify heritage assets and their settings, assess the potential for impacts and identify suitable mitigation measures. The assessments would need to comply with policies CS14, DM2, DM8 and DM9 in the adopted Minerals and Waste Core Strategy.</p> <p>Restoration: The draft specific site policy contained in the PO Consultation document includes a requirement for planning applications for silica sand extraction at site SIL 01 to include a comprehensive working and restoration plan, which is compliant with Policy DM14 of the adopted Minerals and Waste Core Strategy.</p> <p>The appropriateness of a planning obligation as a means to mitigate the impact of silica sand extraction, from within an area of search, on local heritage assets would be determined on a case-by-case basis at the planning application stage.</p> <p>The County Council's Archaeological Officers have been consulted as part of the Silica Sand Review process and they would also be consulted on any planning application submitted for silica sand extraction at site SIL 01.</p>



Rep ID	Representation Details	Norfolk County Council officer response
90495	<p><b>(Object)</b> Respondent: <b>Ms K Delima [16433]</b> Received: <b>6/11/2015 via Email</b></p> <p>My home is located just north of the Chapel of St Michaels. I am firstly very concerned about Sil01. You say the site is just 700metres from the Leziate processing site and that the sand would be moved there by conveyer. You do not say that that will cut through Bawsey Lakes, which contains SSSIs and well loved foot paths and areas of great beauty that would be spoiled by such a conveyer belt, or through privately owned land. The woodland between and beside the chapel is home to a colony of buzzards and the surrounding area, including my rented land is frequented by adders, grass snake and slow worm, and otter; all rare species who would be greatly disturbed by bringing the quarry even closer to the chapel and my cottage.</p> <p>I am also very concerned about AOS G and H both of which are frequented by Shelduck and Pink Footed Geese, Slow Worms, Adders and Grass Snakes. All of this seems to have been ignored in your reviews on environmental impact. There are lots of references to Roydon Common being close but not too close and even a justification that Bawsey Lakes lies between the AOS and Roydon Common, as if it is acceptable to destroy the wildlife in this area of Bawsey Lakes that contains SSSIs itself so long as Roydon is safe. There is also a beech tree so old its branches have grown to the ground within AOS G or H. It is hard to tell exactly which from your rather vague maps but it lies in woodland to the east of Whitehouse farm, along an access track that belongs to a cattle, sheep and pig farmer who, along with Whitehouse Farm, own most of the land relating to AOS G and H. I may only rent part of it for grazing my horses and the nearby Keepers Cottage in mintlyn woods, but the areas of AOS G and H are a large part of my life too as I exercise my horses here and around some of Bawsey. I have done for 15 years and this is the reason I live where I do. My access to Bawsey is through the track with the ancient tree and could well be ruined by plans to extend the area already quarried.</p> <p>It would break my heart to see that lovely old tree destroyed. It is full of</p>	<p>The location of a conveyer from site SIL 01 to the existing processing plant at Leziate is expected to be to the south of Bawsey Lakes and to follow a previous conveyer route used for the transport of mineral to the processing works. Agreement for the location of the conveyer would be needed from the relevant landowner/s at the planning application stage.</p> <p>Bawsey SSSI is a geological SSSI and the 'impact risk zone' for the SSSI, defined by Natural England, only extends 50 metres from the SSSI boundary. Proposed Site SIL01 is more than 50 metres from Bawsey SSSI and therefore silica sand extraction in this location is not expected to have an adverse effect on Bawsey SSSI. Additionally, any conveyer route from proposed site SIL01 would not come within 50 metres of Bawsey SSSI.</p> <p>I note your concerns regarding existing species and trees. If a planning application is made for silica sand extraction at SIL 01, an Arboricultural Impact Assessment would need to be submitted, if the proposal could potentially affect trees or hedges. A planning application would also need to include a Biodiversity Survey and Report. Both of these documents are required by Norfolk County Council's Local List for Validation of Planning Applications. The findings of the Biodiversity Survey and Report and Arboricultural Impact Assessment may impact on the scheme of working and detail potential mitigation measures and might require planning conditions to be attached to any permission granted. Any planning application would be determined in accordance with Policy CS14 and Policy DM1 of the adopted Minerals and Waste Core Strategy which cover Environmental</p>

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	<p>character. I do not know if a preservation order is upon it or not but there should be.</p> <p>Lastly it is said that the nearest dwelling that would be affected is 280 metres from the proposed site. This is far too close to anyone's house for a quarry. I do not know which property is affected. However, it is not acceptable to me for there to be quarrying near my rented cottage or my landlords own home, Whitehouse farm.</p>	<p>Protection and Nature Conservation.</p> <p>The nearest property to proposed site SIL 01 is White House Farm. The draft policy for SIL 01, contained in the Preferred Options Consultation document, includes a requirement for any planning application submitted for the site to include mitigation measures to deal appropriately with any amenity impacts, which would be assessed in accordance with Policy DM12 of the adopted Minerals and Waste Core Strategy.</p>
90562	<p>Respondent: <b>Anglian Water Services Ltd (Mr S Patience) [16454]</b> Received: <b>16/12/2015 via Email</b></p> <p>We have no comments relating to the proposed allocation site as it appears that there are no Anglian Water assets within the boundary of this site.</p>	Noted

## 10. Areas of Search Process

Rep ID	Representation Details	Norfolk County Council officer response
90558	<p>Respondent: <b>Natural England (Ms L Oliver) [1874]</b> Received: <b>21/12/2015 via Email</b></p> <p>We support the criteria used to exclude or limit the extent of Areas of Search (AOS) and reduce their impacts in relation to sensitive environmental receptors.</p> <p>Natural England has no specific comments to make on the ten individual Areas of Search (AOS) that have been identified in the consultation as they are large areas within which permission for silica sand extraction may be granted on a smaller area of land. We endorse the requirement for a more detailed Habitats Regulations Assessment for those individual AOS (A and B) where one has been identified.</p>	<p>Noted.</p> <p>As stated in the Preferred Options Consultation document, AOS B is considered unsuitable to be taken forward and will not be included in the Pre-Submission document. Therefore a Task 2 Appropriate Assessment will not be carried out on AOS B. A Task 2 Appropriate Assessment will be undertaken on AOS A and the advice provided by Natural England will be taken into account in this assessment.</p>
90560	<p>Respondent: <b>Historic England (Ms K Wood) [15387]</b> Received: <b>21/12/2015 via Email</b></p> <p>In terms of the proposed sites which emerge from the Areas of Search, it is considered imperative to secure appropriate remediation of the sites upfront and information and details regarding timescale and nature of recovery should be included with any application. We would welcome further information discussion on what type of recovery and remediation of the land would be appropriate to minimise /improve the impact on heritage assets. It would also be considered appropriate to secure funding through a planning obligation as a means to mitigate the impact on local heritage assets, again we would welcome further discussion on which projects in the immediate area would benefit from funding secured.</p> <p>In terms of the 10 Areas of Search, we understand that one or two sites are required to be allocated within the 10 wider Areas of Search. As outlined in previous correspondence, it is difficult to assess real impacts on the historic environment over such large areas, where smaller scale development could be achieved successfully in some parts of sites, but not others for example. Where possible, we would advise a reduction in the scale of some of the Areas of Searches where there would be a</p>	<p>Restoration: The areas of search form locations within which mineral operators could develop extraction proposals for much smaller areas to meet the expected shortfall. The draft area of search policy contained in the PO Consultation document includes a requirement for planning applications for silica sand extraction within an area of search to include a comprehensive working and restoration plan, which is compliant with Policy DM14 of the adopted Minerals and Waste Core Strategy.</p> <p>The appropriateness of a planning obligation as a means to mitigate the impact of silica sand extraction, from within an area of search, on local heritage assets would be determined on a case-by-case basis at the planning application stage.</p> <p>Areas of search: For clarification, one or two sites will need to be developed for silica sand extraction from within the defined areas of search and/or the specific site, during the plan period to 2026, to meet the</p>

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	<p>strong conflict with heritage assets, effectively meaning that the specific site within the Area of Search would be undevelopable in terms of impact on the historic environment. We welcome the consideration of our previous comments regarding these sites dated 29 July 2015, within the Preferred Options Consultation Document and can advise that these comments still stand.</p> <p>It should be noted that, due to time and resource constraints we have not been able to assess every Area of Search in great detail. Our comments on the sites have been based mainly on desk-top analysis, and we have not been able to judge the potential impacts more accurately on the ground. This does not mean that there are not issues with sites and we reserve the right to comment further on any site as and when proposals develop. We welcome further consultation on the proposed additional sites as they are brought forward.</p>	<p>identified shortfall. The areas of search form locations within which mineral operators could develop extraction proposals for much smaller areas to meet the expected shortfall and therefore, it is currently expected that six areas of search will be allocated, totalling a significantly larger area than is actually required to be used for silica sand extraction during the plan period.</p> <p>Historic England's comments from July 2015 have been taken into account in the assessment of the defined areas of search and in particular, the boundaries of AOS E and AOS F will be significantly amended to take into account concerns raised regarding impacts on the historic environment. The draft area of search policy contained in the Preferred Options Consultation document includes a requirement for planning applications for silica sand extraction within an area of search to include a 'Landscape and Visual Impact Assessment' and a Heritage Statement.</p> <p>Noted. Historic England will be notified of the next stage in the Silica Sand Review process, which will be a formal representations period on the Pre-Submission version. Developers wanting to extract mineral from land within an area of search allocated through the Silica Sand Review of the Minerals Site Specific Allocations Plan will still need to apply for and be granted planning permission before mineral extraction can take place. Historic England will be consulted on any such planning applications.</p>

## AOS A – land west of Snettisham, Ingoldisthorpe and Dersingham

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90479	<p>Respondent: <b>Norfolk County Council - Highway Authority (Ms C Sullivan) [16439]</b> Received: <b>24/11/2015 via Email</b></p> <p>Our comments on AOS A 'Beach Road is unsuitable for haulage access. Access could be made onto the A149 subject to junction mitigation and highway network improvements' have been taken into consideration and we have no further additional comments to make on this site at this stage.</p> <p>From the B1145 the preferred access to the Leziat processing plant would be an off-road route turning right off the B1145 before Bawsey and utilising the existing track and/or conveyor route through the existing mineral workings at Mintlyn to access Station Road and the processing plant south of Brow of the Hill. A right turn lane at the junction with the B1145 to provide a suitable junction would be a suitable alternative and acceptable to the Highway Authority.</p>	Noted
90506	<p><b>(Object)</b> Respondent: <b>Snettisham parish council (Mr S Bower) [1320]</b> Received: <b>14/12/2015 via Email</b></p> <p>Our main concern is AOS_A, a large area between the main body of the Village and the Beach. I will deal with the issue under appropriate headings:</p> <p>General Environment: The area relies principally on tourism, and the peace and quiet afforded in North West Norfolk is a main contributor to this. There are wildlife sites, designated areas, Commons, footpaths with views over open landscapes etc., all of which draw people to the area. There is repeated reference in the documentation to a distance of 250m as an implied proximity delineator; that may be acceptable in urban, hilly or developed areas, but when a principal feature of the whole area under consideration is its flat, open aspect, this is nonsense. Mitigating features would have as much impact as the development itself. It appears that Historic England concur with this view. This is especially the case since</p>	<p>The concerns raised about the potential impacts of silica sand extraction within AOS A are noted.</p> <p>General Environment: The boundary of AOS A will be drawn 1km away from the coast. The boundary of AOS A will also be drawn away from the AONB to both the north and the south. It is considered that it would be possible for a silica sand extraction site to be located within the remaining area of AOS A which will be located further from these key landscape constraints. The draft area of search policy contained in the PO Consultation document includes a requirement for any planning application submitted within an area of search</p>

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	<p>the required extraction area would consist of more than 7% of AOS_A - in fact well over 10% by the time anomalies in the boundaries are redrawn.</p> <p>The documentation acknowledges that there will be dust and noise; the comments above regarding mitigation apply equally here.</p> <p>There is an irony, not lost on Council, in the claim that development, and subsequent restoration, would aid the Norfolk Coastal Path Trail. It is due to our efforts and expenditure over several years that a public footpath actually exists along the Beach. Any development would not therefore help this, but rather detract from it, as the view from the footpath is from a point higher than any of the land in AOS_A. There is already much access across the area, even where not on recognised PRoWs; again this would be limited by development.</p> <p>Wildlife and Heritage: There is a huge variety of wildlife in the area, from large mammals downwards, and a world-renowned bird reserve on the western edge of the AOS. One of the most extraordinary natural history spectacles in Britain is the overflying by vast flocks of birds over the whole area - any disturbance of this would be of great concern. The birds are not restricted to the RSPB site itself. "Likely significant effects" is how this is described; Council believes that is too great a risk.</p>	<p>to include a Landscape and Visual Impact Assessment. After the boundary of AOS A has been drawn away from the coast and the AONB, it will be further away from the proposed Norfolk Coastal Path Trail. The remaining area of AOS A will therefore be closer to the A149 which is less tranquil due to existing traffic noise. Whilst the eastern boundary of AOS A is approximately 250 metres from Snettisham, Dersingham and Ingoldisthorpe, these settlements are on the opposite side of the A149 and views across are limited by roadside vegetation and enclosed fields.</p> <p>Wildlife: The boundary of AOS A will be drawn back from the coast. If a planning application is made for silica sand extraction within AOS A, Biodiversity Survey and Report would need to be submitted as required by Norfolk County Council's Local List for Validation of Planning Applications. Any planning application would be determined in accordance with Policy CS14 and Policy DM1 of the adopted Minerals and Waste Core Strategy which cover Environmental Protection and Nature Conservation.</p> <p>The Wash and North Norfolk Coast internationally designated sites are discussed in the Habitats Regulations Assessment (HRA) section of the Preferred Options Consultation document and a Task 1 HRA has been carried out. As stated in the PO Consultation document, a Task 2 HRA will be carried out on AOS A to assess the potential impacts of silica sand extraction within this AoS and propose appropriate mitigation measures. If the Task 2 HRA concludes that mineral extraction within this AoS would have likely significant effects on the qualifying features of The Wash and North Norfolk Coast, then the area of search could not</p>

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	<p>It states in the document that there is a considerable amount of interesting archaeological features - prehistoric, Roman and later - across the area; indeed the entire area is of note due to the movement of the coastline westwards. This is not adequately addressed.</p> <p>Transport &amp; Access: We note that Beach Rd is ruled out for access, a view with which we strongly concur. As to the A149 itself, and any "junction mitigation", Council has many concerns over the increasing interruptions to traffic flow which are occurring along this entire route, this being the one remaining open stretch of road between Lynn and the Coast. There is a curious use of the word "improvement" applied to the effects on highways, when what is actually meant is interruption and additional loading. Further, should the site be developed nearer the sea, there will be a large use of land for access roads across the open area of the site, with far wider effects than simply the site itself.</p> <p>Flooding: It is acknowledged that AOS_A is in Flood Risk Area 3. What is not stated is that this is an area whose entire future has been put in jeopardy by recent changes to the funding of sea defences. Residents are now being asked to fund the sea defences themselves. There would naturally be fury should a site be placed here and defended, showing people and nature having a lower priority. There is prohibition on new build allowed in the area.</p> <p>Concern has also been expressed over the effects that digging behind sea defences would have on weakening them; speed of flow in the event of a breach would clearly be higher were there holes into which flood water could flow. We are gratified that "areas in lower flood zones would be sequentially preferable"; on that basis, as the site at highest risk, this</p>	<p>be allocated for future mineral extraction.</p> <p>Archaeology: The boundary of AOS A will be drawn back from the coast and therefore will exclude the duck decoy and majority of the historic sea defences. The draft AOS policy in the Preferred Options Consultation document requires an archaeological assessment and Heritage Statement to be submitted with any planning application for silica sand extraction within an area of search.</p> <p>Transport and Access: Norfolk County Council, as the Highway Authority, were consulted on the Silica Sand Review and stated that acceptable access could be achieved onto the A149 via existing side roads (except Beach Road) subject to junction mitigation and highway network improvements. The boundary of the AOS will be drawn back from the coast and therefore a site would not be expected to be developed near the sea.</p> <p>Flooding: It is recognised that AOS A is at high risk of flooding and in a flood Hazard Zone. Silica sand extraction is considered to be water compatible development in the NPPG; however, a sequential approach will be taken to the selection and development of areas of search. If a planning application is made for silica sand extraction within AOS A, a site specific FRA would need to be submitted in accordance with Policy DM4 of the adopted Minerals and Waste Core Strategy and the NPPF. The FRA would need to demonstrate that extraction of minerals in this location would not exacerbate flood risk. Ensuring that a mineral extraction site is suitable in flood risk terms would be the responsibility of the applicant.</p>

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	<p>is clearly the one which should be avoided at all costs.</p> <p>In conclusion, we are totally opposed to any inclusion of AOS_A in the Allocations Plan. We believe it to have no positive aspects at all. On the contrary we feel its certain impact on the local population, wildlife and general environment would be catastrophic, and its probable impact on the economy, transport, access, flooding and a range of other concerns make this the most unsuitable site for a large industrial development.</p>	<p>In their consultation response, the Environment Agency suggests that it may be possible that spoil material from silica sand extraction could be used to raise the existing flood defences in future. They also suggest that spoil from excavations could be deposited to deflect potential flooding (due to a breach) away from the properties to the North and East of AOS A. This potential would be considered if a planning application is made for silica sand extraction within AOS A.</p>
90511	<p><b>(Object)</b> Respondent: <b>Norfolk Coast Partnership (Mr T Venes) [518]</b> Received: <b>18/12/2015 via Email</b></p> <p>The following comments relate to proposed areas of search with potential implications for the Norfolk Coast Area of Outstanding Natural Beauty (AONB).</p> <p>Although AOS A is a large AOS, over double the size of AOS B, it shares the constraints of AOS B. It is very difficult to see how a large scale industrial site of tens of hectares could be accommodated in this area without significant impacts on several receptors.</p> <p>The landscape character of AOS A, situated between two parts of the AONB, is very similar to that of AOS B and it would be similarly problematic to identify a site for extraction that did not impact the setting of the AONB, which as a nationally designated landscape has the same landscape status and protection as a national park.</p> <p>Potential impacts on European sites and features (SAC, SPA) are stated as uncertain or likely, which raises concerns, but even if it would be possible to avoid impacts on sites and features of national and international nature conservation importance, the public has a right to expect to enjoy these sites in a high quality landscape context.</p> <p>The same consideration applies to the England Coast Path in this area, which is currently under development. There are also potential impacts on the historic environment and archaeology, on geomorphology, and through the proximity of significant settlements. These qualities, along</p>	<p>The concerns raised about the potential impacts of silica sand extraction within AOS A are noted.</p> <p>Landscape: The boundary of AOS A will be drawn 1km away from the coast. The boundary of AOS A will also be drawn away from the AONB to both the north and the south. It is considered that it would be possible for a silica sand extraction site to be located within the remaining area of AOS A which will be further from these key landscape constraints. The draft area of search policy contained in the PO Consultation document includes a requirement for any planning application submitted within an area of search to include a Landscape and Visual Impact Assessment.</p> <p>After the boundary of AOS A has been drawn away from the coast and the AONB, it will be further away from the proposed England Coast Path. The remaining area of AOS A will therefore be closer to the A149 which is less tranquil due to existing traffic noise.</p> <p>European sites: The Wash and North Norfolk Coast internationally designated sites are discussed in the Habitats Regulations Assessment (HRA) section of the PO Consultation document and a Task 1 HRA has</p>



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	<p>with tranquillity, are all part of the natural capital of the area that makes it attractive to visitors, providing the basis for a significant part of the local economy.</p> <p>Overall, this results in an area of great sensitivity which despite its relatively large size would present significant difficulties and involve considerable, and probably abortive, time and expense in trying to identify suitable sites for extraction through individual applications - for both potential developers and the minerals planning authority.</p> <p>I therefore disagree with the conclusion for AOS A and consider this area unsuitable for allocation. Given that only 40 ha of land is required to meet the resource need, I suggest that it should be possible to meet this from the other seven AOS (D-J).</p>	<p>been carried out. As stated in the PO Consultation document, a Task 2 HRA will be carried out on AOS A to assess the potential impacts of silica sand extraction within this AoS and propose appropriate mitigation measures. If the Task 2 HRA concludes that mineral extraction within this AoS would have likely significant effects on the qualifying features of The Wash and North Norfolk Coast, then the area of search could not be allocated for future mineral extraction. However, a HRA does not consider the quality of the landscape context for the designated sites.</p> <p>Potential impacts on the historic environment, archaeology, geomorphology and nearby settlements have been assessed in the Preferred Options document. The draft area of search policy contained in the PO Consultation document and the adopted Core Strategy and Development Management policies include requirements to assess and mitigate any adverse impacts.</p>
90531	<p>Respondent: <b>Norfolk Wildlife Trust (Mr J Hiskett) [508]</b> Received: <b>21/12/2015 via Email</b></p> <p>We are pleased to see that it is proposed to amend the boundary of the AoS in order to avoid impacts on CWS at Shepherds Port Meadow and Life Wood. These two CWS are on edges of AoS and exclusion would have minimal impact on the AoS.</p>	<p>Noted. As stated in the Preferred Options document, the boundary of the area of search will be amended to exclude CWS 475, CWS 476 and CWS 473 which were all on the edges of AOS A.</p>
90528	<p>Respondent: <b>Borough Council of King's Lynn and West Norfolk (Mr A Gomm) [8101]</b> Received: <b>18/12/2015 via Web</b></p> <p>Appropriateness of the AOS: Potential conflict with leisure/tourism Constraints: flood defence, surface water drainage, caravan park within 200 metres Mitigation: Buffer to protect residential/caravans; Dust Management Plan and Noise Management Plan in accordance with the Planning Practice</p>	<p>The King's Lynn IDB was consulted on the Preferred Options, but did not respond. The boundary of AOS A will be drawn back from the coast and back from the existing flood defences. (Also see response to the following Environment Agency comments) The residential constraints and mitigation measures</p>

Rep ID	Representation Details	Norfolk County Council officer response
	Guidance; Drainage plan; restoration to take account of flooding	have been included in the paragraph on Amenity/ Environmental Health. As stated in the Preferred Options Consultation document, the boundary of the AoS will be drawn at least 250 metres away from the caravan parks.
90550	<p>Respondent: <b>Environment Agency (Ms E Crook) [558]</b>  Received: <b>21/12/2015 via Email</b></p> <p>Flood Risk: This site is located in an area which is at high risk of flooding from the sea. As such the Borough Council of King's Lynn and West Norfolk Local Plan and SFRA have identified the area as a flood Hazard Zone; an area at risk of rapid inundation by flood water should flood defences breach or overtop. It will be necessary to demonstrate that extraction of minerals at this location would not exacerbate flood risk. It may be possible that spoil from excavations could be deposited to deflect flooding (due to a breach) away from the properties to the North and East of the site; we would wish to explore this matter further with the applicant. In the future we will also look to raise the flood defences significantly in this area. This may be an opportunity to utilise any spoil material from this site to achieve this (depending upon timeframes). We would wish to discuss this matter further with the applicant. King's Lynn IDB are in the process of redeveloping the pumping station at the outfall of the Wolferton creek. This proposal would have significant impact upon their system. We would strongly recommend that they are consulted on this allocation as it could impact their activities. Appropriate evacuation measures should be in place to ensure the safety of any workers if a storm surge impacts the area and a breach occurs in the defences.</p> <p>Biodiversity: The following protected habitats and species are present within the AoS:  CWS 473 (Life Wood and Ingoldisthorpe Common), CWS 475 (Shepherd's Port Meadow) and CWS 476 (Snettisham Common).  Multiple sites of deciduous broadleaved woodland: NERC Act (2006) Section 41 habitats of principal importance.</p>	<p>Flood Risk: Silica sand extraction is considered to be water compatible development in the NPPG; however, a sequential approach will be taken to the selection and development of areas of search. The percentage of the area of search within each flood risk zone is detailed in section 5.2 of the Initial Sustainability Appraisal Report – Part B. Information on the flood Hazard Zone is noted. If a planning application is made for silica sand extraction within AOS A, a site specific FRA would need to be submitted in accordance with Policy DM4 of the adopted Minerals and Waste Core Strategy and the NPPF. A site specific FRA would need to include evacuation measures. The potential for the use of spoil material from silica sand extraction in flood defences, or to reduce flood risk to properties due to a breach in flood defences would be more appropriately considered at the planning application stage.</p> <p>Information provided about the redevelopment of the pumping station outfall at Wolferton Creek is noted. King's Lynn IDB was consulted on the Preferred Options and did not respond.</p> <p>Biodiversity: As stated in the Ecology section of the Preferred Options document, the boundary of AOS A will be amended to exclude CWS 475, CWS 476 and CWS 473 which were all on the edges of AOS A. If a planning application is made for silica sand extraction within AOS A, an Arboricultural Impact</p>

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	<p>Water voles: The applicant needs to be aware that the Ingol watercourse may be used by protected species such as water voles. Water voles are now afforded full protection under the Wildlife and Countryside Act 1981 (as amended). The applicant therefore needs to check for the presence of protected species before undertaking the work. If present, the potential impact of the proposed works on the water vole and their habitat must be assessed, and appropriate mitigation measures put in place prior to the commencement of works.</p> <p>Coastal and floodplain grazing marsh: NERC Act (2006) Section 41 habitats of principal importance.</p> <p>European eel (<i>Anguilla Anguilla</i>) protected fish migratory route, the Eels (England and Wales) Regulations (2009)</p> <p>The following protected habitats are adjacent to the AoS: The Wash SSSI, The Wash SPA, The Wash and North Norfolk Coast SAC, The Wash Ramsar. The application will be subject to the provisions of the Wildlife and Countryside Act 1981 (as amended by the CRoW Act 2000).</p> <p>Water Framework Directive: A WFD Watercourse runs through the site - Ingol GB105033053470 - No WFD assessment apparent for this water body; we would like to see a WFD assessment for this proposal. We would also wish to discuss any opportunities for improving this watercourse with the applicant.</p> <p>Groundwater: The site overlies a Groundwater Vulnerability Zone (Principal Aquifer). Advice provided on groundwater protection, engineering, permitting and risk assessments required in the event that the waste material is used in the restoration of the site.</p> <p>Hydrology: We have no objection in principle to this allocation. However,</p>	<p>Assessment would need to be submitted, if the proposal could potentially affect trees or hedges. A planning application would also need to include a Biodiversity Survey and Report. Both of these documents are required by Norfolk County Council's Local List for Validation of Planning Applications. Any planning application would be determined in accordance with Policy CS14 and Policy DM1 of the adopted Minerals and Waste Core Strategy which cover Environmental Protection and Nature Conservation. The Wash and North Norfolk Coast internationally designated sites are discussed in the Habitats Regulations Assessment section of the Preferred Options Consultation document and a Task 1 HRA has been carried out. As stated in the PO Consultation document, a Task 2 Habitats Regulations Assessment will be carried out on AOS A to assess the potential impacts of silica sand extraction within this AoS and proposed appropriate mitigation measures.</p> <p>Water Framework Directive: The Ingol runs through the northern part of AOS A. A WFD assessment will be carried out to inform the Pre-Submission version of the Silica Sand Review. It is not intended that the whole of the AoS would come forward for silica sand extraction. The areas of search form locations within which mineral operators could develop extraction proposals for much smaller areas to meet the expected shortfall.</p> <p>Groundwater: Advice noted. This is an area of search for future silica sand extraction. There are no proposals for any mineral extraction site within the AoS to be restored using waste.</p>

Rep ID	Representation Details	Norfolk County Council officer response
	<p>due to very limited information provided with this consultation and given the site is situated on a principal aquifer, a 'Hydrogeological Risk Assessment' (HRA) will be required to address and mitigate any risks to groundwater quality, quantity and groundwater levels in the area around the quarry, to protect any groundwater abstractors and also any ecosystems and surface water features that are reliant of the groundwater in the area of the proposed site. Should there be any dewatering, we would require within the HRA a proposal of mitigation measures to address the impacts upon the above mentioned features. We note a number of drains that surround the proposed site, surface water features to the south, as well as a surface water abstraction to the north-east. These features need to be taken into consideration when assessing the risks.</p>	<p>Hydrology: The draft area of search policy contained in the Preferred Options Consultation document includes a requirement for any planning application submitted within an area of search to include an HRA. The draft area of search policy requires an HRA to address impacts on groundwater dependent environmental designations. The Area of Search Policy will be amended to require an HRA to address and mitigate any risks to groundwater quality, quantity and groundwater levels; to protect any groundwater abstractors and also any ecosystems and surface water features that are reliant on the groundwater in the area of the proposed site.</p>
90563	<p>Respondent: <b>Anglian Water Services Ltd (Mr S Patience) [16454]</b> Received: <b>16/12/2015 via Email</b></p> <p>There are no Anglian Water sewerage assets within the boundary of the AOS to the west of the A149. There is a foul sewer within a small section of AOS A to the east of the A149. (refer to supplied map WW3).</p> <p>There is an Anglian Water mains water pipeline at the north of AOS A, along Beach Road. There are no other AW water assets within the boundary of AOS A to the west of the A149. There is a mains water pipeline within a small section of AOS A to the east of the A149 (refer to supplied map Water22).</p> <p>Anglian Water would require the standard protected easement widths for these assets and for any requests for alteration or removal to be conducted in accordance with the Water Industry Act 1991. Within the easement strips there should be no building over or restriction of access (required for routine maintenance and emergency repairs). The maximum standard easement width requirements are 6 metres either side of the medial line of any relevant pipe where the diameter of the pipe exceeds 750 millimetres.</p>	<p>Noted. The boundary of AOS A will be amended so that there are no areas of AOS A to the east of the A149. The boundary of AOS A will be amended to the south of Beach Road. Following these boundary amendments there will not be any Anglian Water assets within AOS A.</p>

## AOS B – land south of Heacham

Rep ID	Representation Details	Norfolk County Council officer response
90480	<p>Respondent: <b>Norfolk County Council - Highway Authority (Ms C Sullivan) [16439]</b> Received: <b>24/11/2015 via Email</b></p> <p>The Preferred Options document has taken into consideration that the Highway authority has identified 'significant highway network issues. Unsuitable for haulage traffic. Route is used for beach access. Unacceptable for allocation.'</p> <p>From the B1145 the preferred access to the Leziat processing plant would be an off-road route turning right off the B1145 before Bawsey and utilising the existing track and/or conveyor route through the existing mineral workings at Mintlyn to access Station Road and the processing plant south of Brow of the Hill. A right turn lane at the junction with the B1145 to provide a suitable junction would be a suitable alternative and acceptable to the Highway Authority.</p>	<p>Noted. As stated in the Preferred Options Consultation document, Area of Search B is considered unsuitable to be taken forward and will not be included in the Pre-Submission document.</p>
90507	<p><b>(Object)</b> Respondent: <b>Snettisham parish council (Mr S Bower) [1320]</b> Received: <b>14/12/2015 via Email</b></p> <p>We note that AOS_B is "currently considered unsuitable" and would strongly echo that. Should this be brought back into consideration we would wish to comment further at that time.</p>	<p>Noted. As stated in the Preferred Options Consultation document, Area of Search B is considered unsuitable to be taken forward and will not be included in the Pre-Submission document.</p>
90509	<p><b>(Object)</b> Respondent: <b>Norfolk Coast Partnership (Mr T Venes) [518]</b> Received: <b>18/12/2015 via Email</b></p> <p>The following comments relate to proposed areas of search with potential implications for the Norfolk Coast Area of Outstanding Natural Beauty (AONB).</p> <p>I agree with the conclusion in the consultation document that AOS B would be unsuitable for allocation. Its constrained geography between the AONB and the coast and its landscape character mean that it would be difficult to avoid impacts on the setting of the AONB. Environmental sensitivities relating to wildlife designations, particularly the proximity of SAC and SPA designated areas and features, but also national and local wildlife designations, plus sensitivities of the historic environment, add significantly to the environmental constraints. Overall, this would mean it</p>	<p>Noted. As stated in the Preferred Options Consultation document, Area of Search B is considered unsuitable to be taken forward and will not be included in the Pre-Submission document.</p>

Rep ID	Representation Details	Norfolk County Council officer response
	would be very unlikely that a suitable site of sufficient size could be identified within the AOS.	
90527	<p>Respondent: <b>Borough Council of King's Lynn and West Norfolk (Mr A Gomm) [8101]</b>  Received: <b>18/12/2015 via Web</b></p> <p>Appropriateness of the AOS: Potential conflict with leisure/tourism  Constraints: flood defence, surface water drainage, sewage treatment works  Mitigation: Buffer to protect residential; Dust Management Plan and Noise Management Plan in accordance with the Planning Practice Guidance; Drainage plan; restoration to take account of flooding</p>	Noted. As stated in the Preferred Options Consultation document, Area of Search B is considered unsuitable to be taken forward and will not be included in the Pre-Submission document.
90532	<p>Respondent: <b>Norfolk Wildlife Trust (Mr J Hiskett) [508]</b>  Received: <b>21/12/2015 via Email</b></p> <p>We support the conclusion that this AOS is not suitable for allocation. Much of the area of search lies within CWS, which are dominated by coastal habitats and by floodplain grazing marsh. Excavation within these sites is likely to have a severe adverse impact on these habitats and restoration of the habitats currently on site is unlikely to be achieved.</p>	Noted. As stated in the Preferred Options Consultation document, Area of Search B is considered unsuitable to be taken forward and will not be included in the Pre-Submission document.
90549	<p>Respondent: <b>Environment Agency (Ms E Crook) [558]</b>  Received: <b>21/12/2015 via Email</b></p> <p>Flood Risk: This site is located in an area which is at high risk of flooding from the sea. As such the Borough Council of King's Lynn and West Norfolk Local Plan and SFRA have identified the area as a flood Hazard Zone; an area at risk of rapid inundation by flood water should flood defences breach or overtop.  We have serious concerns with proposed site AOS_B. The site is directly adjacent to and over our flood defences. The proposal, in its current form, would significantly increase flood risk in this area and would be unacceptable. We may accept an amended proposal as long as it can be demonstrated that the site would have no adverse impact on flood risk or the standard of protection offered by our flood defences at this location. If redesigned the proposal could be utilised to enhance the flood defences</p>	Flood Risk: As stated in the Preferred Options Consultation document, Area of Search B is considered unsuitable to be taken forward and will not be included in the Pre-Submission document.

Rep ID	Representation Details	Norfolk County Council officer response
	<p>in the area.</p> <p>Biodiversity: The following protected habitats and species are present within the AoS: CWS 477 (Coast near Snettisham) and CWS 478 (Coast near Snettisham)</p> <p>Otters and water voles: The applicant needs to be aware that the Heacham and adjacent watercourses may be used by protected species such as otters and water voles. Both of these mammals are fully protected under the Wildlife and Countryside Act 1981 (as amended) and otters are also protected under the Habitats and Species Regulations 2010 (as amended). If either species are present, the potential impact of the proposed works on the species' and their habitat must be assessed and appropriate mitigation measures in place prior to the commencement of works.</p> <p>Coastal and floodplain grazing marsh: NERC Act (2006) Section 41 habitats of principal importance.</p> <p>Multiple sites of deciduous broadleaved woodland: NERC Act (2006) Section 41 habitats of principal importance.</p> <p>The following protected habitats are adjacent to AOS B: The Wash SSSI, The Wash SPA, The Wash and North Norfolk Coast SAC, The Wash Ramsar. The application will be subject to the provisions of the Wildlife and Countryside Act 1981 (as amended by the CRoW Act 2000).</p> <p>Water Framework Directive: WFD Watercourse runs through the site - Heacham River GB105033053480 - No WFD assessment apparent for this water body; we would like to see a WFD assessment for this proposal. We would also wish to discuss any opportunities for improving this watercourse with the applicant.</p> <p>Groundwater: The site overlies a Groundwater Vulnerability Zone (Principal Aquifer). Advice provided on groundwater protection, engineering, permitting and</p>	<p><b>Biodiversity</b> The CWS, SSSI, SPA and SAC are discussed in the paragraphs on Ecology and Habitats Regulations Assessment in the Preferred Options Consultation Document. That document concluded that Area of Search B is considered unsuitable to be taken forward and it will not be included in the Pre-Submission document.</p> <p><b>Water Framework Directive:</b> As stated in the Preferred Options Consultation document, Area of Search B is considered unsuitable to be taken forward and will not be included in the Pre-Submission document.</p> <p><b>Groundwater:</b> As stated in the Preferred Options Consultation document, Area of Search B is considered unsuitable to be taken forward and will not be included</p>

Rep ID	Representation Details	Norfolk County Council officer response
	<p>risk assessments required in the event that the waste material is used in the restoration of the site.</p> <p>Hydrology: We have no objection in principle to this allocation. However, due to very limited information provided with this consultation and given the site is situated on a principal aquifer, a 'Hydrogeological Risk Assessment' (HRA) will be required to address and mitigate any risks to groundwater quality, quantity and groundwater levels in the area around the quarry, to protect any groundwater abstractors and also any ecosystems and surface water features that are reliant of the groundwater in the area of the proposed site. Should there be any dewatering, we would require within the HRA a proposal of mitigation measures to address the impacts upon the above mentioned features. We note a number of drains and surface water features surrounding the proposed site. These features need to be taken into consideration in the risk assessment.</p>	<p>in the Pre-Submission document.</p> <p>Hydrology: As stated in the Preferred Options Consultation document, Area of Search B is considered unsuitable to be taken forward and will not be included in the Pre-Submission document.</p>
90564	<p>Respondent: <b>Anglian Water Services Ltd (Mr S Patience) [16454]</b> Received: <b>16/12/2015 via Email</b></p> <p>There are no Anglian Water water assets within the boundary of AOS B. There is a mains water pipeline at the south of AOS B, along Beach Road.</p> <p>There is a foul sewer within the boundary of AOS B. There is a WWTW and a terminal sewerage pumping station within the boundary of AOS B (refer to supplied map WW3).</p> <p>Anglian Water would require the standard protected easement widths for these assets and for any requests for alteration or removal to be conducted in accordance with the Water Industry Act 1991. Within the easement strips there should be no building over or restriction of access (required for routine maintenance and emergency repairs). The maximum standard easement width requirements are 6 metres either side of the medial line of any relevant pipe where the diameter of the pipe exceeds 750 millimetres.</p>	<p>Noted. As stated in the Preferred Options Consultation document, Area of Search B is considered unsuitable to be taken forward and will not be included in the Pre-Submission document.</p>



## AOS C – land west of Hillington

Rep ID	Representation Details	Norfolk County Council officer response
90481	<p>Respondent: <b>Norfolk County Council - Highway Authority (Ms C Sullivan) [16439]</b> Received: <b>24/11/2015 via Email</b></p> <p>Our comments on AOS C 'Access could be made onto the B1440 via the track to the east subject to improvements to bring up to a vehicular access and suitable junction improvements' have been taken into consideration and we have no further additional comments to make on this site at this stage.</p> <p>From the B1145 the preferred access to the Leziat processing plant would be an off-road route turning right off the B1145 before Bawsey and utilising the existing track and/or conveyor route through the existing mineral workings at Mintlyn to access Station Road and the processing plant south of Brow of the Hill. A right turn lane at the junction with the B1145 to provide a suitable junction would be a suitable alternative and acceptable to the Highway Authority.</p>	<p>Noted. As stated in the Preferred Options Consultation document, Area of Search C is considered unsuitable to be taken forward and will not be included in the Pre-Submission document.</p>
90499	<p><b>(Object)</b> Respondent: <b>Hillington Parish Council (Mrs M Duggan) [16443]</b> Received: <b>2/12/2015 via Web</b></p> <p>With regard to the issues raised in this document Hillington Parish Council supports the conclusion that 'based on the information currently available, it is considered that AoS C is not suitable for allocation'.</p>	<p>Noted. As stated in the Preferred Options Consultation document, Area of Search C is considered unsuitable to be taken forward and will not be included in the Pre-Submission document.</p>
90510	<p><b>(Object)</b> Respondent: <b>Norfolk Coast Partnership (Mr T Venes) [518]</b> Received: <b>18/12/2015 via Email</b></p> <p>The following comments relate to proposed areas of search with potential implications for the Norfolk Coast Area of Outstanding Natural Beauty (AONB).</p> <p>I agree with the conclusion in the consultation document that AOS C would be unsuitable for allocation. As the consultation document identifies, the need to avoid impacts on the valley of the Babingley River severely constrain the effective size of what is already a relatively small</p>	<p>Noted. As stated in the Preferred Options Consultation document, Area of Search C is considered unsuitable to be taken forward and will not be included in the Pre-Submission document.</p>

Rep ID	Representation Details	Norfolk County Council officer response
	<p>AOS. Further constraints on the remaining area resulting from potential impacts on the setting of the AONB mean that it would not be possible to identify a suitable site for extraction.</p>	
90526	<p>Respondent: <b>Borough Council of King's Lynn and West Norfolk (Mr A Gomm) [8101]</b>  Received: <b>18/12/2015 via Web</b></p> <p>Appropriateness of the AOS: potential conflict with tourism/leisure  Constraints: Gatton Waters caravans and fishery  Mitigation: Buffer to protect residential/leisure; Dust Management Plan and Noise Management Plan in accordance with the Planning Practice Guidance</p>	<p>These issues are discussed in the paragraph on Amenity and Environmental Health in the Preferred Options Consultation Document. That document concluded that Area of Search C is considered unsuitable to be taken forward and it will not be included in the Pre-Submission document.</p>
90533	<p>Respondent: <b>Norfolk Wildlife Trust (Mr J Hiskett) [508]</b>  Received: <b>21/12/2015 via Email</b></p> <p>We support the conclusion that the Babingley River Valley should be removed for the AOS. Parts of the river upstream of the AOS are designated as County Wildlife Site and the river has been subject to ecological restoration in recent years, which should lead to improved wildlife value throughout the river.</p>	<p>Noted. As stated in the Preferred Options Consultation document, Area of Search C is considered unsuitable to be taken forward and will not be included in the Pre-Submission document.</p>
90458	<p>Respondent: <b>Environment Agency (Ms E Crook) [558]</b>  Received: <b>21/12/2015 via Email</b></p> <p>Flood Risk: The site crosses Babingley River (chalk stream). Babingley River is now an IDB Watercourse; the IDB should be consulted on these proposals.</p> <p>The site is located within Flood Zones 1 (low risk) and 3 (high risk) of our maps. The KLWN SFRA indicates that the site is located within Flood Categories 2 (medium risk) and 3 (high risk). To develop this site the applicant will likely have to produce detailed and site specific flood modelling to demonstrate that the works will not increase flood risk. A sequential approach should be taken when locating the services associated with the works.</p> <p>Biodiversity: The following protected species are present within the AoS:</p>	<p>Flood Risk: The IDB have been consulted and did not respond. As stated in the Preferred Options Consultation document, Area of Search C is considered unsuitable to be taken forward and will not be included in the Pre-Submission document.</p> <p>Biodiversity: As stated in the Preferred Options Consultation document, Area of Search C is considered</p>

Rep ID	Representation Details	Norfolk County Council officer response
	<p>Otters and water voles: The applicant needs to be aware that the Babingley is used by protected species such as otters and water voles. Both of these mammals are fully protected under the Wildlife and Countryside Act 1981 (as amended) and otters are also protected under the Habitats and Species Regulations 2010 (as amended). If either species are present, the potential impact of the proposed works on the species' and their habitat must be assessed and appropriate mitigation measures in place prior to the commencement of works.</p> <p>European eel (<i>Anguilla anguilla</i>): protected fish migratory route , the Eels (England and Wales) Regulations 2009.</p> <p>Brown/Sea Trout (<i>Salmo Trutta</i>): UK BAP priority fish species</p> <p>CWS 563 (Babingley Meadow) is adjacent to AOS C.</p> <p>Water Framework Directive: WFD Watercourse runs through the site - Babingley River GB105033047620 - No WFD assessment apparent for this water body; we would like to see a WFD assessment for this proposal. We would also wish to discuss any opportunities for improving this watercourse with the applicant.</p> <p>Groundwater: The site overlies a Groundwater Vulnerability Zone (Principal Aquifer).</p> <p>Advice provided on groundwater protection, engineering, permitting and risk assessments required in the event that the waste material is used in the restoration of the site.</p> <p>Hydrology: The site overlies a principal aquifer and appears to cross the Babingley River (chalk stream); the information submitted is not sufficient to determine if the site is suitable.</p> <p>We note at least three surface water abstractions surrounding the proposed site. These abstractions need to be taken into consideration during any further assessment of the risks. Additionally, the risk to Babingley River needs to be further assessed.</p>	<p>unsuitable to be taken forward and will not be included in the Pre-Submission document.</p> <p>Water Framework Directive: As stated in the Preferred Options Consultation document, Area of Search C is considered unsuitable to be taken forward and will not be included in the Pre-Submission document.</p> <p>Groundwater: As stated in the Preferred Options Consultation document, Area of Search C is considered unsuitable to be taken forward and will not be included in the Pre-Submission document.</p> <p>Hydrology: As stated in the Preferred Options Consultation document, Area of Search C is considered unsuitable to be taken forward and will not be included in the Pre-Submission document.</p>
90565	<p>Respondent: <b>Anglian Water Services Ltd (Mr S Patience) [16454]</b>  Received: <b>16/12/2015 via Email</b></p>	

Rep ID	Representation Details	Norfolk County Council officer response
	<p>There are no Anglian Water sewerage assets within the boundary of the AOS.</p> <p>There are no Anglian Water water assets within the boundary of the AOS. There is a mains water pipeline along West Newton Road.</p> <p>Anglian Water would require the standard protected easement widths for this asset and for any requests for alteration or removal to be conducted in accordance with the Water Industry Act 1991. Within the easement strips there should be no building over or restriction of access (required for routine maintenance and emergency repairs). The maximum standard easement width requirements are 6 metres either side of the medial line of any relevant pipe where the diameter of the pipe exceeds 750 millimetres.</p>	<p>Noted. As stated in the Preferred Options Consultation document, Area of Search C is considered unsuitable to be taken forward and will not be included in the Pre-Submission document.</p>

## AOS D – land in the vicinity of West Bilney Wood

Rep ID	Representation Details	Norfolk County Council officer response
90482	<p>Respondent: <b>Norfolk County Council - Highway Authority (Ms C Sullivan) [16439]</b> Received: <b>24/11/2015 via Email</b></p> <p>Our comments on AOS D 'The preferred route access onto the A47 to the north. Junction improvements are likely. Consult with Highways England. Consultation required with Highways England on access auditability via the A47.' have been taken into consideration and we have no further additional comments to make on this site at this stage.</p> <p>From the B1145 the preferred access to the Leziat processing plant would be an off-road route turning right off the B1145 before Bawsey and utilising the existing track and/or conveyor route through the existing mineral workings at Mintlyn to access Station Road and the processing plant south of Brow of the Hill. A right turn lane at the junction with the B1145 to provide a suitable junction would be a suitable alternative and acceptable to the Highway Authority.</p>	Noted
90501	<p><b>(Object)</b> Respondent: <b>Mr B and Mrs C Paton [2605]</b> Received: <b>7/12/2015 via Email</b></p> <p>It is noted that all movements of traffic from AOS D will be via Common Road to the A47.</p> <p>We have been residents of the area for over 40 years, living at our home The Old Lodge, Common Road, West Bilney PE32 1JY for that time. Over the years the increase in all kinds of traffic using the road has increased enormously, particularly with agriculture, mineral extraction and processing and also with the development of the Pentney Lakes site with many dwellings and other uses there. Not only has the volume of traffic increased, but also the size of many of the vehicles has grown and the Lane has seen the erosion of verges, the break up of the surface, etc.</p> <p>The access onto the A47 is very poor and has seen numerous accidents. We feel strongly that any consultation should recommend the site as</p>	<p>Norfolk County Council, as the Highway Authority, have been consulted on the Silica Sand Review and stated that the preferred access from AOS D would be onto the A47 to the north along Common Road, which is a designated highway route in the Norfolk route hierarchy. The Highway Authority considers that, if a planning application is made for silica sand extraction within AOS D, then junction improvements to the A47 are likely to be required. Highways England did not make any specific comments regarding AOS D. Alternatively, it may also be possible to pipe or conveyor the sand to the processing plant at Leziat.</p> <p>The landscape assessment of the site considered that bunding and screen planting could provide successful mitigation if it is well designed. If a planning application</p>

Rep ID	Representation Details	Norfolk County Council officer response
	<p>unsuitable due to appalling access.</p> <p>Further the proposals will lead to a detrimental effect on the landscape and particularly on the wildlife in the vicinity.</p>	<p>is made for silica sand extraction within AOS D, a 'Biodiversity Survey and Report' and a 'Landscape and Visual Impact Assessment' would need to be submitted (as required by Norfolk County Council's Local List for Validation of Planning Applications). Any planning application would be determined in accordance with Policy CS14, Policy DM1 and Policy DM8 of the adopted Minerals and Waste Core Strategy which cover Environmental Protection, Nature Conservation and Landscape.</p>
90573	<p><b>(Object)</b> Respondent: <b>Ms H Steele [4848]</b> Received: <b>29/12/2015 via Email</b></p> <p>We believe that these points should be considered re extraction in East Winch and Bilney Woods.</p> <p>1. The woods are wildlife havens. Birds include nightjar, hobby, native woodcock, buzzard. Insects: glowworm, white admiral butterfly, tiger beetle, dragonfly on which the hobbies feed. Mammals include at least 2 species of bat.</p> <p>It will not be sufficient protection to set aside a small area of the forest as many of these animals required different habitats. Nightjars need recently felled areas rich in moths; white admirals areas where honeysuckle grows, tiger beetles sunny and sandy places, for example.</p> <p>2. The plan proposes that the sand is taken by lorry to the Sibelco site at Leziate via Common Road and the A47 through East Winch and Middleton. This is unrealistic. To move the projected 750,000 tonnes per annum would entail 21,000 lorry movements p.a. or 42,000 both coming and going. That's 120 lorries per day approximately, using a narrow country lane with some sharp bends. The road surface is totally inadequate for that. Even now, the lorries and agricultural vehicles cut away at the verges, to the distress of the people who own them.</p> <p>Common Road is also used by walkers, especially the part within East Winch. There is already danger from large or fast vehicles, and no</p>	<p>1. I note your concerns regarding existing species. If a planning application is made for silica sand extraction within AOS D, a Biodiversity Survey and Report would need to be submitted (as required by Norfolk County Council's Local List for Validation of Planning Applications). Any planning application would be determined in accordance with Policy CS14 and Policy DM1 of the adopted Minerals and Waste Core Strategy which cover Environmental Protection and Nature Conservation.</p> <p>2. Whilst 750,000 tonnes per annum of silica sand is planned to be extracted in Norfolk to supply the existing processing plant at Leziate, this quantity of silica sand does not have to all be extracted from only one site. If a planning application is made for silica sand extraction from within AOS D, then a Transport Assessment or Statement would need to be submitted along with the planning application. The Highway Authority and Highways England (due to the need to access the A47) would assess the application regarding the suitability and capacity of the roads and junctions to be used to</p>

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	<p>pavement. Then there's the question of how safe it will be if that extra volume of traffic turns off and onto the A47, and what effect it will have on the residents of East Winch and Middleton. Sibelco personnel suggest it might be possible to pipe the sand away, but the distance between the proposed excavation site and the processing site might make that impossible too.</p> <p>3. The proposal mentions the moated area on the farm near Church Lane, East Winch, remarking that its archaeological value is unknown. However, that may be, its historical value is of importance to East Winch as it was the home of Sir William Howard from 1277. He was the ancestor of the Dukes of Norfolk. The family were the most important benefactors of East Winch church. The site should therefore be treated with the greatest respect.</p>	<p>access the extraction site. Planning permission would not be granted if the number of vehicle movements proposed was unacceptable to the Highway Authority and Highways England.</p> <p>Norfolk County Council, as the Highway Authority, have been consulted on the Silica Sand Review and stated that the preferred access from AOS D would be onto the A47 to the north along Common Road, which is a designated highway route in the Norfolk route hierarchy. The Highway Authority considers that, if a planning application is made for silica sand extraction within AOS D, then junction improvements to the A47 are likely to be required. Highways England did not make any specific comments regarding AOS D. As stated in the Highways section of the Preferred Options Consultation document, HGVs would travel west along the A47 before turning onto the A149 and heading northwards until they turn east onto the B1145. From the B1145 the preferred access to the Leziate processing plant would be an off-road route turning right off the B1145 before Bawsey. Utilising an off-road haul route would avoid lorries accessing the processing plant via Middleton or East Winch.</p> <p>Alternatively, it may also be possible to pipe or conveyor the sand to the processing plant at Leziate.</p> <p>3. The 'Moated site of Crancourt Manor, 430m south east of Manor Farm' referred to in this consultation response is a Scheduled Monument located 635 metres away from AOS D. The 'uninvestigated potential moated site within the northern part of the AoS ' mentioned in the Historic Environment section of the Preferred Options Consultation document is a different historic environment feature and is not the Scheduled</p>

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		Monument. The AoS boundary will be amended to exclude the potential moated site.
90525	<p>Respondent: <b>Borough Council of King's Lynn and West Norfolk (Mr A Gomm) [8101]</b>  Received: <b>18/12/2015 via Web</b></p> <p>Appropriateness of the AOS: Cumulative effects with AOS E  Constraints: Residential properties  Mitigation: Buffer to protect residential; Dust Management Plan and Noise Management Plan in accordance with the Planning Practice Guidance</p>	<p>Cumulative effects: A number of areas of search have been defined for inclusion in the plan that together cover a significantly larger area than required for silica sand extraction in the plan period to 2026. Therefore, silica sand extraction will not take place on all areas of search during this period. Policy DM15 of the adopted Core Strategy will be used to assess the cumulative impacts of relevant planning applications. These constraints and mitigation measures have been included in the paragraph on Amenity/Environmental Health.</p>
90534	<p>Respondent: <b>Norfolk Wildlife Trust (Mr J Hiskett) [508]</b>  Received: <b>21/12/2015 via Email</b></p> <p>The northern section of the AoS is within 500m of East Winch Common SSSI, which includes sensitive wetland habitats. The consultation document recognises this in the ecology section but does not flag up in the conclusion. Any application would need to ensure no adverse impact on the SSSI, particularly with regard to hydrological impacts. River Nar SSSI is also within close vicinity to the south.</p> <p>CWS 429 (south of West Bilney Wood) lies within this AoS and there are a number of adjacent CWS including CWS 532 (Pentney Lakes). Any allocation should seek to avoid impacts on CWS 429 and avoid damaging adjacent CWS.</p> <p>Owing to the range of potential ecological impacts we are of the view that this allocation is likely to be unsuitable given the current boundaries of the AOS</p>	<p>As you have noted, East Winch Common SSSI and the River Nar SSSI are discussed in the paragraphs on Ecology within the Preferred Options document. The draft area of search policy contained in the Preferred Options Consultation document includes a requirement for any planning application submitted within an area of search to include a Hydrogeological Risk Assessment (HRA). The draft area of search policy requires an HRA to address impacts on groundwater dependent environmental designations. The Area of Search Policy will be amended to require an HRA to address and mitigate any risks to groundwater quality, quantity and groundwater levels; to protect any groundwater abstractions and also any ecosystems and surface water features that are reliant on the groundwater in the area of the proposed site.</p> <p>The CWSs are discussed in the paragraphs on Ecology within the Preferred Options document. As stated in the PO document, the eastern boundary of AOS D will be moved to the east of Common Road. Therefore AOS D is no longer adjacent to CWS 532 'Pentney</p>



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		<p>lakes’.</p> <p>Your concerns regarding CWS 429 are noted. If a planning application is made for silica sand extraction within AOS D, an Arboricultural Impact Assessment would need to be submitted, if the proposal could potentially affect trees or hedges. A planning application would also need to include a Biodiversity Survey and Report. Both of these documents are required by Norfolk County Council’s Local List for Validation of Planning Applications. Any planning application would be determined in accordance with Policy CS14 and Policy DM1 of the adopted Minerals and Waste Core Strategy which cover Environmental Protection and Nature Conservation.</p>
90547	<p>Respondent: <b>Environment Agency (Ms E Crook) [558]</b>  Received: <b>21/12/2015 via Email</b></p> <p>Flood Risk: The site is located partially within Flood Zone 3 (high risk) of our flood maps and the KLWN SFRA. A Flood Risk Assessment will need to be submitted as part of any forthcoming proposal. This will need to demonstrate that the proposal will not increase flood risk.  Please note that our flood map for planning (Rivers and Sea) is due to be updated with the new River Nar Model (2015).</p> <p>Biodiversity: CWS 429 (south of West Bilney Warren) is within AOS D. The following protected habitats and species are adjacent to the search area:  River Nar SSSI: An application in this AoS will be subject to the provisions of the Wildlife and Countryside Act 1981 (as amended by the CRoW Act 2000).  CWS 431 (Valetta Meadow) and CWS 532 (Pentney Lakes).  Water Voles and Otters: The applicant needs to be aware that the Nar and Trout Stream watercourses may be used by protected species such as otters and water voles. Both of these mammals are fully protected</p>	<p>Flood Risk: The percentage of the area of search within each flood risk zone is detailed in section 5.2 of the Initial Sustainability Appraisal Report – Part B. If a planning application is made for silica sand extraction within AOS D, a site specific FRA would need to be submitted in accordance with Policy DM4 of the adopted Minerals and Waste Core Strategy and the NPPF.</p> <p>Biodiversity: The CWSs and River Nar SSSI are discussed in the paragraphs on Ecology within the Preferred Options Consultation document. The draft area of search policy contained in the Preferred Options Consultation document includes a requirement for any planning application submitted within an area of search to include a Hydrogeological Risk Assessment. The draft area of search policy requires an HRA to address impacts on groundwater dependent environmental designations.</p>

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	<p>under the Wildlife and Countryside Act 1981 (as amended) and otters are also protected under the Habitats and Species Regulations 2010 (as amended). If either species are present, the potential impact of the proposed works on the species' and their habitat must be assessed and appropriate mitigation measures in place prior to the commencement of works.</p> <p>Spined Loach (<i>Cobitis taenia</i>): UK Bap priority fish species  Brown/Sea Trout (<i>Salmo Trutta</i>): UK BAP priority species  Brook Lamprey (<i>Lampetra planeri</i>): Protected fish species</p> <p>Water Framework Directive: WFD Watercourse runs through the site - County Drain GB105033047770 - No WFD assessment apparent for this water body; we would like to see a WFD assessment for this proposal. We would also wish to discuss any opportunities for improving this watercourse with the applicant.</p> <p>Groundwater:</p> <ul style="list-style-type: none"> <li>- The site overlies a Groundwater Vulnerability Zone (Principal Aquifer).</li> <li>- River Nar (chalk stream) SSSI - close to southern edge of site.</li> <li>- County drain (secondary river) - site crosses this.</li> <li>- Trout Stream (primary river) - close to northern edge of site.</li> </ul> <p>Advice provided on groundwater protection, engineering, permitting and risk assessments required in the event that the waste material is used in the restoration of the site.</p> <p>Hydrology: The site overlies a principal aquifer and is close to the River Nar. The information submitted is not sufficient to determine if the site is suitable. Please note the site is situated immediately to the north of the River Nar and the Country Drain with a number of surface water and ground water abstractions surrounding the site which needs to be taken into consideration in any further assessment.</p>	<p>If a planning application is made for silica sand extraction within AOS D, a Biodiversity Survey and Report would need to be submitted (as required by Norfolk County Council's Local List for Validation of Planning Applications). Any planning application would be determined in accordance with Policy CS14 and Policy DM1 of the adopted Minerals and Waste Core Strategy which cover Environmental Protection and Nature Conservation.</p> <p>Water Framework Directive: County Drain runs through the south of AOS D. A WFD assessment will be carried out to inform the Pre-Submission version of the Silica Sand Review.</p> <p>Groundwater: Advice noted. This is an area of search for future silica sand extraction. As stated in the Preferred Options Consultation document, it is not intended that the whole of the AoS would come forward for silica sand extraction. The areas of search form locations within which mineral operators could develop extraction proposals for much smaller areas to meet the expected shortfall. There are no proposals for any mineral extraction site within the AoS to be restored using waste.</p> <p>Hydrology: The draft area of search policy contained in the Preferred Options Consultation document includes a requirement for any planning application submitted within an area of search to include an HRA. The draft area of search policy requires an HRA to address impacts on groundwater dependent environmental designations. The Area of Search Policy will be amended to require an HRA to address and mitigate any risks to groundwater quality, quantity and groundwater levels; to protect any groundwater</p>

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		abstractions and also any ecosystems and surface water features that are reliant on the groundwater in the area of the proposed site.
90566	<p>Respondent: <b>Anglian Water Services Ltd (Mr S Patience) [16454]</b>  Received: <b>16/12/2015 via Email</b></p> <p>There are no Anglian Water sewerage assets within the boundary of the AOS. There is an Anglian Water mains water pipeline within the boundary of AOS D, along Common Road (refer to supplied map Water 22). Anglian Water would require the standard protected easement widths for this asset and for any requests for alteration or removal to be conducted in accordance with the Water Industry Act 1991. Within the easement strips there should be no building over or restriction of access (required for routine maintenance and emergency repairs). The maximum standard easement width requirements are 6 metres either side of the medial line of any relevant pipe where the diameter of the pipe exceeds 750 millimetres.</p>	Noted
90575	<p>Agent: <b>Amec Foster Wheeler E&amp;I UK (Mr R Deanwood) [16041]</b>  Respondent: <b>National Grid [611]</b> Received: <b>14/12/2015 via Email</b></p> <p>AOS D has been identified as being crossed by or within close proximity to Gas Transmission apparatus (see map)  Our underground pipelines are protected by permanent agreements with landowners or have been laid in the public highway under our licence. These grant us legal rights that enable us to achieve efficient and reliable operation, maintenance, repair and refurbishment of our gas transmission network. Hence we require that no permanent structures are built over or under pipelines or within the zone specified in the agreements, materials or soil are not stacked or stored on top of the pipeline route and that unrestricted and safe access to any of our pipeline(s) must be maintained at all times.</p> <p>Local authorities have a statutory duty to consider applications for development in the vicinity of high pressure (above 7 bar) pipelines and to advise the developer on whether the development should be allowed on safety grounds on rules provided by HSE. This advice is provided by</p>	Advice noted. The gas transmission pipeline is located over 750 metres north the boundary of AOS D.

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	<p>the HSE Planning Advice for Development near to Hazardous Installations (PADHI) process. The relevant HSE guidance can be accessed via the following link:  <a href="http://www.hse.gov.uk/landuseplanning/padhi.pdf">http://www.hse.gov.uk/landuseplanning/padhi.pdf</a>            In order to ensure that National Grid's pipelines are protected from uncontrolled development in the vicinity of the pipeline please also read the following guidance prepared by National Grid:            Specification for Safe Working in the Vicinity of National Grid High Pressure Gas Pipelines and Associated Installations - Requirements for Third Parties  <a href="http://www.nationalgrid.com/NR/rdonlyres/50ACAC0A-ED26-41A7-91FA-83163A98270F/23790/TSPSSW22_J537_Rev0807.pdf">http://www.nationalgrid.com/NR/rdonlyres/50ACAC0A-ED26-41A7-91FA-83163A98270F/23790/TSPSSW22_J537_Rev0807.pdf</a>            Gas Transmission Underground Pipelines – Guidance  <a href="http://www.nationalgrid.com/NR/rdonlyres/446009BF-ABB5-42E1-B9FE-44E90D577DD5/18653/APTGasGuidance_2_.pdf">http://www.nationalgrid.com/NR/rdonlyres/446009BF-ABB5-42E1-B9FE-44E90D577DD5/18653/APTGasGuidance_2_.pdf</a>            Should these sites be taken forward as development sites in the future, the developers should be made aware of the above issues.</p>	
90576	<p>Agent: <b>Amec Foster Wheeler E&amp;I UK (Mr R Deanwood) [16041]</b>            Respondent: <b>National Grid [611]</b> Received: <b>14/12/2015 via Email</b></p> <p>Electricity Transmission            National Grid does not own the land over which the overhead lines cross, and it obtains the rights from individual landowners to place our equipment on their land. Potential developers of the sites should be aware that it is National Grid policy to retain our existing overhead lines in-situ. Because of the scale, bulk and cost of the transmission equipment required to operate at 400kV National Grid only supports proposals for the relocation of existing high voltage overhead lines where such proposals directly facilitate a major development or infrastructure project of national importance which has been identified as such by central government. Therefore we advise developers and planning authorities to take into account the location and nature of existing electricity transmission equipment when planning developments.            The statutory safety clearances between overhead lines, the ground, and built structures must not be infringed. To comply with statutory safety</p>	<p>Advice noted. The overhead electricity lines and towers cross AOS D at the south. As stated in the Preferred Options Consultation document, it is not intended that the whole of the AoS would come forward for silica sand extraction. The areas of search form locations within which mineral operators could develop extraction proposals for much smaller areas to meet the expected shortfall.</p>

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	<p>clearances the live electricity conductors of National Grid's overhead power lines are designed to be a minimum height above ground. Where changes are proposed to ground levels beneath an existing line then it is important that changes in ground levels do not result in safety clearances being infringed.</p> <p>National Grid seeks to encourage high quality and well planned development in the vicinity of its high voltage overhead lines. Land beneath and adjacent to the overhead line route should be used to make a positive contribution to the development of the site and can for example be used for nature conservation, open space, landscaping areas or used as a parking court. National Grid, in association with David Lock Associates has produced 'A Sense of Place' guidelines, which look at how to create high quality development near overhead lines and offers practical solutions which can assist in avoiding the unnecessary sterilisation of land in the vicinity of high voltage overhead lines.</p>	

## AOS E – land to the north of Shouldham

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90494	<p>Respondent: <b>Shouldham parish council (Mrs V F Negus) [1563]</b> Received: <b>23/11/2015 via Email</b></p> <p>The Parish Council would like to make the following comments regarding the area of Shouldham Warren Reference AOS E: Shouldham Warren is an area well used by the public for many leisure activities not only by individuals but also more recently by organisations for sporting events and this should be taken into consideration when making a decision on site suitability. In the event that the site is chosen for extraction, access to Shouldham Warren for the resulting vehicles should be gained via the A134 and not through Shouldham village.</p>	<p>Comments noted. As stated in the Amenity/ Environmental Health section of the Preferred Options Consultation document, it is not intended that the whole of the AoS would come forward for silica sand extraction. The areas of search form locations within which mineral operators could develop extraction proposals for much smaller areas to meet the expected shortfall. If a planning application is submitted for mineral extraction within AOS E, highways access via Shouldham village would not be acceptable.</p>
90483	<p>Respondent: <b>Norfolk County Council - Highway Authority (Ms C Sullivan) [16439]</b> Received: <b>24/11/2015 via Email</b></p> <p>Our comments on AOS E 'Access via west bridge lodge unsuitable. Preferred access would be via the A134. Existing access should be used subject mitigation and junction improvements' have been taken into consideration and we have no further additional comments to make on this site at this stage.</p> <p>From the B1145 the preferred access to the Leziate processing plant would be an off-road route turning right off the B1145 before Bawsey and utilising the existing track and/or conveyor route through the existing mineral workings at Mintlyn to access Station Road and the processing plant south of Brow of the Hill. A right turn lane at the junction with the B1145 to provide a suitable junction would be a suitable alternative and acceptable to the Highway Authority.</p>	Noted
90524	<p>Respondent: <b>Borough Council of King's Lynn and West Norfolk (Mr A Gomm) [8101]</b> Received: <b>18/12/2015 via Web</b></p> <p>Appropriateness of the AOS: Cumulative effects with AOS D and AOS J. A number of residential properties potentially surrounded by extraction</p>	<p>Cumulative effects: A number of areas of search have been defined for inclusion in the plan that together cover a significantly larger area than required for silica sand extraction in the plan period to 2026. Therefore, silica sand extraction will not take place on all areas of</p>

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	<p>activities            Constraints: Residential properties            Mitigation: Buffer to protect residential; Dust Management Plan and Noise Management Plan in accordance with the Planning Practice Guidance</p>	<p>search during this period. Policy DM15 of the adopted Core Strategy will be used to assess the cumulative impacts of relevant planning applications.            As stated in the conclusion for AOS E in the Preferred Options Consultation document, the northern boundary of AOS E will be moved south of the village of Wormegay. Therefore Wormegay is no longer surrounded by the area of search. As stated in the Amenity/Environmental Health section of the Preferred Options Consultation document, it is not intended that the whole of the AoS would come forward for silica sand extraction. The areas of search form locations within which mineral operators could develop extraction proposals for much smaller areas to meet the expected shortfall. Therefore it is very unlikely that residential properties would be surrounded by extraction activities. These constraints and mitigation measures have been included in the paragraph on Amenity/Environmental Health.</p>
90535	<p>Respondent: <b>Norfolk Wildlife Trust (Mr J Hiskett) [508]</b>            Received: <b>21/12/2015 via Email</b></p> <p>We are pleased to see that it is proposed to CWS 424 and 323 will be removed from the AOS. We can understand the rationale for still including CWS 425 within the AOS as this would fragment the AOS. However, it is acknowledged that this is a large AOS and in our view there should be strong presumption to avoid damage to this site.</p>	<p>As stated in the PO document, I confirm that the boundary of AOS E will be amended to exclude CWS 424 and CWS 323 from the AoS.            Your concerns regarding CWS 425 are noted. If a planning application is made for silica sand extraction within AOS E, an Arboricultural Impact Assessment would need to be submitted, if the proposal could potentially affect trees or hedges. A planning application would also need to include a Biodiversity Survey and Report. Both of these documents are required by Norfolk County Council's Local List for Validation of Planning Applications. Any planning application would be determined in accordance with Policy CS14 and Policy DM1 of the adopted Minerals and Waste Core Strategy which cover Environmental</p>

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90546	<p>Respondent: <b>Environment Agency (Ms E Crook) [558]</b> Received: <b>21/12/2015 via Email</b></p> <p>Flood Risk: The site is located partially within Flood Zone 3 (high risk) of our flood maps and the KLWN SFRA. The SFRA also indicates that the site falls within a flood Hazard Zone; at risk of rapid inundation should flood defences breach or overtop. Accordingly, a Flood Risk Assessment will need to be submitted as part of any forthcoming proposal. This will need to demonstrate that the proposal will not increase flood risk. Please note that our flood map for planning (Rivers and Sea) is due to be updated with the new River Nar Model (2015). AOS E is located within an IDB district who should also be consulted.</p> <p>Biodiversity: The following protected habitats and species are present within AOS E: CWS 423 (Craven Lane Meadows), CWS 424 (Westbrigg's Wood), CWS 425 (Mow Fen) and CWS 373 (Adams Plantation). Eurasian Badger: Record of badgers present within the AOS. Protected under the Protection of Badgers Act (1992). Slow -worm (<i>Anguis fragilis</i>): The applicant needs to be aware that reptiles may be present on this site. All reptiles are protected under the Wildlife and Countryside Act 1981 (as amended). Therefore, the potential impact of the proposed works on reptiles and their habitat must be assessed and appropriate mitigation measures developed prior to works commencing.</p> <p>The following protected habitats and species are adjacent to AOS E: River Nar SSSI: An application in this AoS will be subject to the provisions of the Wildlife and Countryside Act 1981 (as amended by the CRoW Act 2000). Water voles and otters: The applicant needs to be aware that the Nar watercourse is used by protected species such as otters and water voles. Both of these mammals are fully protected under the Wildlife and</p>	<p>Protection and Nature Conservation.</p> <p>Flood Risk: Silica sand extraction is considered to be water compatible development in the NPPG; however, a sequential approach will be taken to the selection and development of areas of search. The percentage of the area of search within each flood risk zone is detailed in section 5.2 of the Initial Sustainability Appraisal Report – Part B. If a planning application is made for silica sand extraction within AOS E, a site specific FRA would need to be submitted in accordance with Policy DM4 of the adopted Minerals and Waste Core Strategy and the NPPF. The IDB have been consulted and did not respond.</p> <p>Biodiversity: The CWSs are discussed in the paragraphs on Ecology within the Preferred Options Consultation document. As stated in the PO Consultation document, the boundary of AOS E will be amended to exclude CWS 424 and CWS 373 from the area of search. The River Nar SSSI is discussed in the paragraphs on Ecology within the Preferred Options Consultation document. The draft area of search policy contained in the PO Consultation document includes a requirement for any planning application submitted within an area of search to include a Hydrogeological Risk Assessment. The draft area of search policy requires an HRA to address impacts on groundwater dependent environmental designations. If a planning application is made for silica sand extraction within AOS E, a Biodiversity Survey and Report would need to be submitted (as required by Norfolk County Council's Local List for Validation of</p>



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	<p>Countryside Act 1981 (as amended) and otters are also protected under the Habitats and Species Regulations 2010 (as amended). If either species are present, the potential impact of the proposed works on the species' and their habitat must be assessed and appropriate mitigation measures in place prior to the commencement of works.</p> <p>Spined Loach (<i>Cobitis taenia</i>): protected fish species  Brown/Sea Trout (<i>Salmo Trutta</i>): UK BAP priority fish species  Brook Lamprey (<i>Lampeta planeri</i>): Protected fish species</p> <p>Water Framework Directive (WFD): WFD Watercourse runs through the site - Nar downstream of Abbey Farm GB105033047792 - No WFD assessment apparent for this water body; we would like to see a WFD assessment for this proposal. We would also wish to discuss any opportunities for improving this watercourse with the applicant.</p> <p>Groundwater: - The site overlies a Groundwater Vulnerability Zone (Principal Aquifer)  - River Nar (chalk stream) SSSI - close to northern edge of site.  - Dunstalls Drain - site crosses this secondary river.  - Sandy Drain- site crosses this secondary river.  - Historic Landfill Site (records indicate this to be Farm waste) TF6704911878.</p> <p>Advice provided on groundwater protection, engineering, permitting and risk assessments required in the event that the waste material is used in the restoration of the site.</p> <p>Hydrology: The site overlies a principal aquifer and is close to the River Nar. The information submitted is not sufficient to determine if the site is suitable. SSSI designation of the River Nar to the north west is likely to be the key constraint for suitability of the proposed locations. A number of surface water abstractions are present within and surrounding the proposed site.</p>	<p>Planning Applications). Any planning application would be determined in accordance with Policy CS14 and Policy DM1 of the adopted Minerals and Waste Core Strategy which cover Environmental Protection and Nature Conservation.</p> <p>Water Framework Directive: The River Nar is located 250 meters north of the northern-eastern boundary of AOS E. A WFD assessment will be carried out to inform the Pre-Submission version of the Silica Sand Review.</p> <p>Groundwater: Advice noted. This is an area of search for future silica sand extraction. As stated in the Preferred Options Consultation document, it is not intended that the whole of the AoS would come forward for silica sand extraction. The areas of search form locations within which mineral operators could develop extraction proposals for much smaller areas to meet the expected shortfall. There are no proposals for any mineral extraction site within the AoS to be restored using waste.</p> <p>Hydrology: The draft area of search policy contained in the Preferred Options Consultation document includes a requirement for any planning application submitted within an area of search to include an HRA. The draft area of search policy requires an HRA to address impacts on groundwater dependent environmental designations. The Area of Search Policy will be amended to require an HRA to address and mitigate</p>

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		any risks to groundwater quality, quantity and groundwater levels; to protect any groundwater abstractions and also any ecosystems and surface water features that are reliant on the groundwater in the area of the proposed site.
90567	<p>Respondent: <b>Anglian Water Services Ltd (Mr S Patience) [16454]</b>  Received: <b>16/12/2015 via Email</b></p> <p>There are no Anglian Water sewerage assets within the boundary of the AOS. However, there is a WWTW and an in-line sewerage pumping station close to the southern edge of AOS E. There is a WWTW close to the north western part of the AOS. (refer to supplied map WW3).  There are a number of Anglian Water mains water pipelines within the boundary of AOS E (refer to supplied map Water 22).  Anglian Water would require the standard protected easement widths for these assets and for any requests for alteration or removal to be conducted in accordance with the Water Industry Act 1991. Within the easement strips there should be no building over or restriction of access (required for routine maintenance and emergency repairs). The maximum standard easement width requirements are 6 metres either side of the medial line of any relevant pipe where the diameter of the pipe exceeds 750 millimetres.</p>	Noted
90574	<p>Agent: <b>Amec Foster Wheeler E&amp;I UK (Mr R Deanwood) [16041]</b>  Respondent: <b>National Grid [611]</b> Received: <b>14/12/2015 via Email</b></p> <p>AOS E has been identified as being crossed by or within close proximity to Intermediate Pressure/ High Pressure apparatus (see map).  National Grid Gas Distribution would like to take this opportunity to advise prospective land developers and the local authority of the following:  Crossing of assets: Construction traffic should only cross the pipeline at locations agreed with National Grid. To facilitate these crossings protection or diversion may be required; depending on site condition and pipe parameters.  Cable Crossings: For all assets, the contractor / developer will need to consider the clearance and necessary protection measures. The crossing</p>	Advice noted. The gas distribution pipeline is located across the southern-western part of AOS E. As stated in the Preferred Options Consultation document, it is not intended that the whole of the AoS would come forward for silica sand extraction. The areas of search form locations within which mineral operators could develop extraction proposals for much smaller areas to meet the expected shortfall.

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	<p>must be perpendicular to the asset. The crossing may require a deed of consent to be agreed prior to work commencing.</p> <p>Piling: No piling should take place within 15m of gas distribution assets without prior agreement from a National Grid Representative.</p> <p>Pipeline Safety: National Grid will need to ensure that access to the pipelines is maintained during and after construction.</p> <p>Our HP/IP pipelines are normally buried to a depth cover of 1.1 metres, however; actual depth and position must be confirmed on site by trial hole investigation to be monitored by a National Grid representative.</p> <p>Ground cover above gas distribution mains should not be reduced or increased. Our MP/LP mains will not be as deep as the pipelines.</p> <p>A National Grid representative may be required to monitor any excavations or any embankment or dredging works within 3 metres of a HP/IP pipeline or within 10 metres of an Above Ground Installations (AGI). Monitoring of works in relation to MP/LP assets may be required by a National Grid representative.</p> <p>National Grid steel pipelines are cathodically protected to prevent corrosion to the pipeline. For further information please refer to SSW/22 (see further advice section below).</p> <p>If you require any further information in relation to the above please contact National Grid's Plant Protection team.</p>	

## AOS F – land to the north of Stow Bardolph

Rep ID	Representation Details	Norfolk County Council officer response
90484	<p>Respondent: <b>Norfolk County Council - Highway Authority (Ms C Sullivan) [16439]</b>  Received: <b>24/11/2015 via Email</b></p> <p>Our comments on AOS F 'Suitable subject to improvements to the junction onto the A10 from Runcton Road.' have been taken into consideration and we have no further additional comments to make on this site at this stage.</p> <p>From the B1145 the preferred access to the Leziate processing plant would be an off-road route turning right off the B1145 before Bawsey and utilising the existing track and/or conveyor route through the existing mineral workings at Mintlyn to access Station Road and the processing plant south of Brow of the Hill. A right turn lane at the junction with the B1145 to provide a suitable junction would be a suitable alternative and acceptable to the Highway Authority.</p>	Noted
90523	<p>Respondent: <b>Borough Council of King's Lynn and West Norfolk (Mr A Gomm) [8101]</b>  Received: <b>18/12/2015 via Web</b></p> <p>Appropriateness of the AOS: Cumulative effects with AOS I  Constraints: Residential properties  Mitigation: Buffer to protect residential; Dust Management Plan and Noise Management Plan in accordance with the Planning Practice Guidance</p>	<p>Cumulative effects: A number of areas of search have been defined for inclusion in the plan that together cover a significantly larger area than required for silica sand extraction in the plan period to 2026. Therefore, silica sand extraction will not take place on all areas of search during this period. Policy DM15 of the adopted Minerals and Waste Core Strategy will be used to assess the cumulative impacts of relevant planning applications.</p> <p>These constraints and mitigation measures have been included in the paragraph on Amenity/Environmental Health.</p>
90536	<p>Respondent: <b>Norfolk Wildlife Trust (Mr J Hiskett) [508]</b>  Received: <b>21/12/2015 via Email</b></p> <p>We support the proposal to remove CWS 365, which forms part of a complex of woodlands, from the AOS, owing to this CWS also being in</p>	Noted. I confirm that CWS 365 will be removed from AOS F.

Rep ID	Representation Details	Norfolk County Council officer response
	the vicinity of parkland.	
90545	<p>Respondent: <b>Environment Agency (Ms E Crook) [558]</b> Received: <b>21/12/2015 via Email</b></p> <p>Flood Risk: The site is located partially within Flood Zone 3 (high risk) of our flood maps. The KLWN SFRA identifies the site as falling within Flood Category 2 (medium risk). A detailed FRA will be needed, potentially including detailed modelling of the watercourse that runs through the site. A sequential approach should be taken to the development of this site.</p> <p>Biodiversity: CWS 365 (Broad Meadow Plantation) is present within AOS F. CWS 361 (North-east of Wallington Hall) and CWS 357 (Chiswick's Wood) are adjacent to AOS F.</p> <p>Water Framework Directive: No comment</p> <p>Groundwater: The site overlies a Groundwater Vulnerability Zone (Principal Aquifer). Advice provided on groundwater protection, engineering, permitting and risk assessments required in the event that the waste material is used in the restoration of the site.</p> <p>Hydrology: We have no objection in principle to this allocation. However, due to very limited information provided with this consultation and given the site is situated on a principal aquifer, a 'Hydrogeological Risk Assessment' (HRA) will be required to address and mitigate any risks to groundwater quality, quantity and groundwater levels in the area around the quarry, to protect any groundwater abstractors and also any ecosystems and surface water features that are reliant of the groundwater in the area of the proposed site. Should there be any dewatering, we would require within the HRA a proposal of mitigation measures to address the impacts upon the above mentioned features.</p>	<p>Flood Risk: The percentage of the area of search within each flood risk zone is detailed in section 5.2 of the Initial Sustainability Appraisal Report – Part B. If a planning application is made for silica sand extraction within AOS F, a site specific FRA would need to be submitted in accordance with Policy DM4 of the adopted Minerals and Waste Core Strategy and the NPPF.</p> <p>Biodiversity: These CWSs are discussed in the paragraphs on Ecology within the Preferred Options document.</p> <p>Water Framework Directive: Noted</p> <p>Groundwater: Advice noted. This is an area of search for future silica sand extraction. There are no proposals for any mineral extraction site within the AoS to be restored using waste.</p> <p>Hydrology: The draft area of search policy contained in the Preferred Options Consultation document includes a requirement for any planning application submitted within an area of search to include an HRA. The draft area of search policy requires an HRA to address impacts on groundwater dependent environmental designations. The Area of Search Policy will be amended to require an HRA to address and mitigate any risks to groundwater quality, quantity and groundwater levels; to protect any groundwater abstractors and also any ecosystems and surface water features that are reliant on the groundwater in the</p>

Rep ID	Representation Details	Norfolk County Council officer response
	We note the site will be crossing the drain, this needs to be taken into consideration when assessing the risks.	area of the proposed site.
90568	<p>Respondent: <b>Anglian Water Services Ltd (Mr S Patience) [16454]</b>  Received: <b>16/12/2015 via Email</b></p> <p>There are no Anglian Water sewerage assets within the boundary of the AOS.</p> <p>There are a number of Anglian Water mains water pipelines within the boundary of AOS F (refer to supplied map Water 22).</p> <p>Anglian Water would require the standard protected easement widths for these assets and for any requests for alteration or removal to be conducted in accordance with the Water Industry Act 1991. Within the easement strips there should be no building over or restriction of access (required for routine maintenance and emergency repairs). The maximum standard easement width requirements are 6 metres either side of the medial line of any relevant pipe where the diameter of the pipe exceeds 750 millimetres.</p>	Noted

## AOS G – land at Mintlyn Wood

Rep ID	Representation Details	Norfolk County Council officer response
90485	<p>Respondent: <b>Norfolk County Council - Highway Authority (Ms C Sullivan) [16439]</b>  Received: <b>24/11/2015 via Email</b></p> <p>Our comments on AOS G 'Suitable subject to a new haul route onto the B1145 and appropriate junction mitigation' have been taken into consideration and we have no further additional comments to make on this site at this stage.</p>	Noted
90496	<p><b>(Object)</b> Respondent: <b>Ms K Delima [16433]</b>  Received: <b>6/11/2015 via Email</b></p> <p>My home is located just north of the Chapel of St Michaels. I am firstly very concerned about Sil01. You say the site is just 700metres from the Leziat processing site and that the sand would be moved there by conveyer. You do not say that that will cut through Bawsey Lakes, which contains SSSIs and well-loved foot paths and areas of great beauty that would be spoiled by such a conveyer belt, or through privately owned land. The woodland between and beside the chapel is home to a colony of buzzards and the surrounding area, including my rented land is frequented by adders, grass snake and slow worm, and otter; all rare species who would be greatly disturbed by bringing the quarry even closer to the chapel and my cottage.</p> <p>I am also very concerned about AOS G and H both of which are frequented by Shelduck and Pink Footed Geese, Slow Worms, Adders and Grass Snakes. All of this seems to have been ignored in your reviews on environmental impact. There are lots of references to Roydon Common being close but not too close and even a justification that Bawsey Lakes lies between the AOS and Roydon Common, as if it is acceptable to destroy the wildlife in this area of Bawsey Lakes that contains SSSIs itself so long as Roydon is safe. There is also a beech tree so old its branches have grown to the ground within AOS G or H. It is hard to tell exactly which from your rather vague maps but it lies in</p>	<p>An existing permitted silica sand extraction site is located within part of AOS G. Once the land within the existing mineral working has been removed from AOS G, the remaining proportion of AOS G is only 13 hectares. In the process used to define all the areas of search in the Preferred Options Consultation document, the minimum size that is considered to be a deliverable area of search is 20 hectares. Therefore, as the remaining portion of AOS G is below 20 hectares, AOS G will not be included in the Pre-Submission document.</p>

Rep ID	Representation Details	Norfolk County Council officer response
	<p>woodland to the east of Whitehouse farm, along an access track that belongs to a cattle, sheep and pig farmer who, along with Whitehouse Farm, own most of the land relating to AOS G AND H. I may only rent part of it for grazing my horses and the nearby Keepers Cottage in mintlyn woods, but the areas of AOSG AND H are a large part of my life too as I exercise my horses here and around some of Bawsey . I have done for 15 years and this is the reason I live where I do. My access to Bawsey is through the track with the ancient tree and could well be ruined by plans to extend the area already quarried.</p> <p>It would break my heart to see that lovely old tree destroyed. It is full of character. I do not know if a preservation order is upon it or not but there should be.</p> <p>Lastly it is said that the nearest dwelling that would be affected is 280 metres from the proposed site. This is far too close to anyone's house for a quarry. I do not know which property is affected. However, it is not acceptable to me for there to be quarrying near my rented cottage or my landlords own home, Whitehouse farm.</p>	
90522	<p>Respondent: <b>Borough Council of King's Lynn and West Norfolk (Mr A Gomm) [8101]</b>  Received: <b>18/12/2015 via Web</b></p> <p>Appropriateness of the AOS: Cumulative effects with AOS H  Constraints: Residential properties  Mitigation: Buffer to protect residential; Dust Management Plan and Noise Management Plan in accordance with the Planning Practice Guidance</p>	<p>Cumulative effects: An existing permitted silica sand extraction site is located within part of AOS G. Once the land within the existing mineral working has been removed from AOS G, the remaining proportion of AOS G is only 13 hectares. In the process used to define all the areas of search in the Preferred Options Consultation document, the minimum size that is considered to be a deliverable area of search is 20 hectares. Therefore, as the remaining portion of AOS G is below 20 hectares, AOS G will not be included in the Pre-Submission document.</p> <p>These constraints and mitigation measures were included in the paragraph on Amenity/Environmental Health.</p>
90537	<p>Respondent: <b>Norfolk Wildlife Trust (Mr J Hiskett) [508]</b>  Received: <b>21/12/2015 via Email</b></p>	<p>An existing permitted silica sand extraction site is located within part of AOS G. Once the land within the</p>



Rep ID	Representation Details	Norfolk County Council officer response
	<p>CWS 418 lies within this AoS. This CWS includes a variety of habitats including areas that were formerly quarried. The priority should be to avoid allocating CWS. However, if this area were to be allocated, restoration should be to similar habitat types and should enable the restored area to have the potential to be included in future within the adjacent country park.</p>	<p>existing mineral working has been removed from AOS G, the remaining proportion of AOS G is only 13 hectares. In the process used to define all the areas of search in the Preferred Options Consultation document, the minimum size that is considered to be a deliverable area of search is 20 hectares. Therefore, as the remaining portion of AOS G is below 20 hectares, AOS G will not be included in the Pre-Submission document.</p>
90544	<p>Respondent: <b>Environment Agency (Ms E Crook) [558]</b> Received: <b>21/12/2015 via Email</b></p> <p>Flood Risk: The site is located within Flood Zone 1 (low risk) of our flood maps and the KLWN SFRA. Accordingly, we have no flood risk concerns. AOS G is located within an IDB district who should also be consulted.</p> <p>Biodiversity: The following habitats and protected species are present within AOS G: CWS 418 (Haverlesse Manor Plantation). Multiple sites of deciduous broadleaved woodland: NERC Act (2006) Section 41 habitats of principle importance.</p> <p>Slow-worm (<i>Anguis fragilis</i>): The applicant needs to be aware that reptiles may be present on this site. All reptiles are protected under the Wildlife and Countryside Act 1981 (as amended). Therefore, the potential impact of the proposed works on reptiles and their habitat must be assessed and appropriate mitigation measures developed prior to works commencing.</p> <p>Large-celled Flapwort (<i>Lophozia capitata</i>) threatened bryophyte record with Bawsey country park/ AOS H.</p> <p>Water Framework Directive: GB105033047670 Mintlyn Stream has previously been impacted by silt entering the watercourse from Mineral abstraction. We would like to see a WFD assessment and ensure that access routes do not become path ways for silt entering the watercourse.</p> <p>Groundwater: The site overlays a Groundwater Vulnerability Zone</p>	<p>Flood Risk: Noted. The IDB has been consulted and did not respond.</p> <p>Biodiversity, Water Framework Directive, Groundwater and Hydrology: An existing permitted silica sand extraction site is located within part of AOS G. Once the land within the existing mineral working has been removed from AOS G, the remaining proportion of AOS G is only 13 hectares. In the process used to define all the areas of search in the Preferred Options Consultation document, the minimum size that is considered to be a deliverable area of search is 20 hectares. Therefore, as the remaining portion of AOS G is below 20 hectares, AOS G will not be included in the Pre-Submission document.</p>

Rep ID	Representation Details	Norfolk County Council officer response
	<p>(Principal Aquifer). Advice provided on groundwater protection, engineering, permitting and risk assessments required in the event that the waste material is used in the restoration of the site.</p> <p>Hydrology: We have no objection in principle to this allocation. However, due to very limited information provided with this consultation and given the site is situated on a principal aquifer, a 'Hydrogeological Risk Assessment' (HRA) will be required to address and mitigate any risks to groundwater quality, quantity and groundwater levels in the area around the quarry, to protect any groundwater abstractors and also any ecosystems and surface water features that are reliant of the groundwater in the area of the proposed site. Should there be any dewatering, we would require within the HRA a proposal of mitigation measures to address the impacts upon the above mentioned features. Middleton Stop Drain is situated to the south.</p>	
90569	<p>Respondent: <b>Anglian Water Services Ltd (Mr S Patience) [16454]</b> Received: <b>16/12/2015 via Email</b></p> <p>There are no Anglian Water sewerage assets within the boundary of the AOS.</p> <p>There is an Anglian Water mains water pipeline within the boundary of AOS G (refer to supplied map Water 22).</p> <p>Anglian Water would require the standard protected easement widths for this asset and for any requests for alteration or removal to be conducted in accordance with the Water Industry Act 1991. Within the easement strips there should be no building over or restriction of access (required for routine maintenance and emergency repairs). The maximum standard easement width requirements are 6 metres either side of the medial line of any relevant pipe where the diameter of the pipe exceeds 750 millimetres.</p>	Noted

## AOS H – land west of 70 Acre Plantation

Rep ID	Representation Details	Norfolk County Council officer response
90486	<p>Respondent: <b>Norfolk County Council - Highway Authority (Ms C Sullivan) [16439]</b>  Received: <b>24/11/2015 via Email</b></p> <p>Our comments on AOS H 'Suitable subject to a new haul route onto the B1145 and appropriate junction mitigation' have been taken into consideration and we have no further additional comments to make on this site at this stage.</p>	Noted
90497	<p><b>(Object)</b> Respondent: <b>Ms K Delima [16433]</b>  Received: <b>6/11/2015 via Email</b></p> <p>My home is located just north of the Chapel of St Michaels. I am firstly very concerned about Sil01. You say the site is just 700metres from the Leziat processing site and that the sand would be moved there by conveyer. You do not say that that will cut through Bawsey Lakes, which contains SSSIs and well loved foot paths and areas of great beauty that would be spoiled by such a conveyer belt, or through privately owned land. The woodland between and beside the chapel is home to a colony of buzzards and the surrounding area, including my rented land is frequented by adders, grass snake and slow worm, and otter; all rare species who would be greatly disturbed by bringing the quarry even closer to the chapel and my cottage.</p> <p>I am also very concerned about AOS G and H both of which are frequented by Shelduck and Pink Footed Geese, Slow Worms, Adders and Grass Snakes. All of this seems to have been ignored in your reviews on environmental impact. There are lots of references to Roydon Common being close but not too close and even a justification that Bawsey Lakes lies between the AOS and Roydon Common, as if it is acceptable to destroy the wildlife in this area of Bawsey Lakes that contains SSSIs itself so long as Roydon is safe. There is also a beech tree so old its branches have grown to the ground within AOS G or H. It is hard to tell exactly which from your rather vague maps but it lies in</p>	<p>Site SIL 01 is located over a portion of AOS H. Once the land within SIL 01 has been removed from AOS H, the remaining proportion of AOS H is only 16 hectares. In the process used to define all the areas of search in the Preferred Options Consultation document, the minimum size that is considered to be a deliverable area of search is 20 hectares. Therefore, as the remaining portion of AOS H is below 20 hectares, AOS H will not be included in the Pre-Submission document.</p>

Rep ID	Representation Details	Norfolk County Council officer response
	<p>woodland to the east of Whitehouse farm, along an access track that belongs to a cattle, sheep and pig farmer who, along with Whitehouse Farm, own most of the land relating to AOS G AND H. I may only rent part of it for grazing my horses and the nearby Keepers Cottage in Mintlyn woods, but the areas of AOSG AND H are a large part of my life too as I exercise my horses here and around some of Bawsey . I have done for 15 years and this is the reason I live where I do. My access to Bawsey is through the track with the ancient tree and could well be ruined by plans to extend the area already quarried.</p> <p>It would break my heart to see that lovely old tree destroyed. It is full of character. I do not know if a preservation order is upon it or not but there should be.</p> <p>Lastly it is said that the nearest dwelling that would be affected is 280 metres from the proposed site. This is far too close to anyone's house for a quarry. I do not know which property is affected. However, it is not acceptable to me for there to be quarrying near my rented cottage or my landlords own home, Whitehouse farm.</p>	
90521	<p>Respondent: <b>Borough Council of King's Lynn and West Norfolk (Mr A Gomm) [8101]</b>  Received: <b>18/12/2015 via Web</b></p> <p>Appropriateness of the AOS: Cumulative effects with AOS G  Constraints: Residential properties  Mitigation: Buffer to protect residential; Dust Management Plan and Noise Management Plan in accordance with the Planning Practice Guidance</p>	<p>Cumulative effects: Site SIL 01 is located over a portion of AOS H. Once the land within SIL 01 has been removed from AOS H, the remaining proportion of AOS H is only 16 hectares. In the process used to define all the areas of search in the Preferred Options Consultation document, the minimum size that is considered to be a deliverable area of search is 20 hectares. Therefore, as the remaining portion of AOS H is below 20 hectares, AOS H will not be included in the Pre-Submission document.</p> <p>These constraints and mitigation measures were included in the paragraph on Amenity/Environmental Health.</p>
90538	<p>Respondent: <b>Norfolk Wildlife Trust (Mr J Hiskett) [508]</b>  Received: <b>21/12/2015 via Email</b></p> <p>CWS 416 lies partly within this AoS. The CWS includes a variety of</p>	<p>The CWSs are discussed in the paragraphs on Ecology within the Preferred Options document.</p> <p>Site SIL 01 is located over a portion of AOS H. Once</p>

Rep ID	Representation Details	Norfolk County Council officer response
	habitats including areas that were formerly quarried. The priority should be to avoid allocating CWS. However, if this area were to be allocated, restoration should be to similar habitat types and should enable the restored area to have the potential to be included in future within the adjacent country park.	the land within SIL 01 has been removed from AOS H, the remaining proportion of AOS H is only 16 hectares. In the process used to define all the areas of search in the Preferred Options Consultation document, the minimum size that is considered to be a deliverable area of search is 20 hectares. Therefore, as the remaining portion of AOS H is below 20 hectares, AOS H will not be included in the Pre-Submission document.
90543	<p>Respondent: <b>Environment Agency (Ms E Crook) [558]</b> Received: <b>21/12/2015 via Email</b></p> <p>Flood Risk: The site is located within Flood Zone 1 (low risk) of our flood maps and the KLWN SFRA. Accordingly, we have no flood risk concerns.</p> <p>Biodiversity: The following habitats and protected species are present within AOS H:</p> <p>CWS 416 (70 and 100 Acre Plantations) and CWS 422 (The Holt). Multiple sites of deciduous broadleaved woodland: NERC Act (2006) Section 41 habitats of principle importance.</p> <p>Slow-worm (<i>Anguis fragilis</i>): The applicant needs to be aware that reptiles may be present on this site. All reptiles are protected under the Wildlife and Countryside Act 1981 (as amended). Therefore, the potential impact of the proposed works on reptiles and their habitat must be assessed and appropriate mitigation measures developed prior to works commencing.</p> <p>Large-celled Flapwort (<i>Lophozia capitata</i>) threatened bryophyte record with Bawsey country park/ AOS H.</p> <p>CWS 418 (Haverlesse Manor Plantation) is adjacent to AOS H.</p> <p>Water Framework Directive: GB105033047670 Mintlyn Stream has previously been impacted by silt entering the watercourse from Mineral abstraction. We would like to see a WFD assessment and ensure that access routes do not become path ways for silt entering the watercourse.</p> <p>Groundwater: The site overlays a Groundwater Vulnerability Zone (Principal Aquifer).</p>	<p>Flood Risk: Noted</p> <p>Biodiversity: The CWSs are discussed in the paragraphs on Ecology within the Preferred Options document. Site SIL 01 is located over a portion of AOS H. Once the land within SIL 01 has been removed from AOS H, the remaining proportion of AOS H is only 16 hectares. In the process used to define all the areas of search in the Preferred Options Consultation document, the minimum size that is considered to be a deliverable area of search is 20 hectares. Therefore, as the remaining portion of AOS H is below 20 hectares, AOS H will not be included in the Pre-Submission document.</p> <p>Water Framework Directive, Groundwater and Hydrology: Site SIL 01 is located over a portion of AOS H. Once the land within SIL 01 has been removed from AOS H, the remaining proportion of AOS H is only 16 hectares. In the process used to define all the areas of search in the Preferred Options Consultation document, the minimum size that is considered to be a deliverable area of search is 20 hectares. Therefore, as the remaining portion of AOS H is below 20 hectares, AOS</p>

Rep ID	Representation Details	Norfolk County Council officer response
	<p>Advice provided on groundwater protection, engineering, permitting and risk assessments required in the event that the waste material is used in the restoration of the site.</p> <p>Hydrology: We have no objection in principle to this allocation. However, due to very limited information provided with this consultation and given the site is situated on a principal aquifer, a 'Hydrogeological Risk Assessment' (HRA) will be required to address and mitigate any risks to groundwater quality, quantity and groundwater levels in the area around the quarry, to protect any groundwater abstractors and also any ecosystems and surface water features that are reliant of the groundwater in the area of the proposed site. Should there be any dewatering, we would require within the HRA a proposal of mitigation measures to address the impacts upon the above mentioned features. Middleton Stop Drain is situated to the south.</p>	<p>H will not be included in the Pre-Submission document.</p>
90570	<p>Respondent: <b>Anglian Water Services Ltd (Mr S Patience) [16454]</b> Received: <b>16/12/2015 via Email</b></p> <p>There are no Anglian Water sewerage assets within the boundary of the AOS.</p> <p>There is an Anglian Water mains water pipeline within the boundary of AOS H (refer to supplied map Water 22).</p> <p>Anglian Water would require the standard protected easement widths for this asset and for any requests for alteration or removal to be conducted in accordance with the Water Industry Act 1991. Within the easement strips there should be no building over or restriction of access (required for routine maintenance and emergency repairs). The maximum standard easement width requirements are 6 metres either side of the medial line of any relevant pipe where the diameter of the pipe exceeds 750 millimetres.</p>	<p>Noted</p>

## AOS I – land to the east of South Runcton

Rep ID	Representation Details	Norfolk County Council officer response
90487	<p>Respondent: <b>Norfolk County Council - Highway Authority (Ms C Sullivan) [16439]</b>  Received: <b>24/11/2015 via Email</b></p> <p>Our comments on AOS I 'Suitable subject to a new haul route onto the B1145 and appropriate junction mitigation' have been taken into consideration and we have no further additional comments to make on this site at this stage.</p> <p>From the B1145 the preferred access to the Leziate processing plant would be an off-road route turning right off the B1145 before Bawsey and utilising the existing track and/or conveyor route through the existing mineral workings at Mintlyn to access Station Road and the processing plant south of Brow of the Hill. A right turn lane at the junction with the B1145 to provide a suitable junction would be a suitable alternative and acceptable to the Highway Authority.</p>	Noted
90520	<p>Respondent: <b>Borough Council of King's Lynn and West Norfolk (Mr A Gomm) [8101]</b>  Received: <b>18/12/2015 via Web</b></p> <p>Appropriateness of the AOS: Cumulative effects with AOS F  Constraints: Residential properties  Mitigation: Buffer to protect residential; Dust Management Plan and Noise Management Plan in accordance with the Planning Practice Guidance</p>	<p>Cumulative effects: A number of areas of search have been defined for inclusion in the plan that together cover a significantly larger area than required for silica sand extraction in the plan period to 2026. Therefore, silica sand extraction will not take place on all areas of search during this period. Policy DM15 of the adopted Core Strategy will be used to assess the cumulative impacts of relevant planning applications.</p> <p>These constraints and mitigation measures have been included in the paragraph on Amenity/Environmental Health.</p>
90539	<p>Respondent: <b>Norfolk Wildlife Trust (Mr J Hiskett) [508]</b>  Received: <b>21/12/2015 via Email</b></p> <p>We do not have any information on the ecological value of this area</p>	Noted
90542	Respondent: <b>Environment Agency (Ms E Crook) [558]</b>	Flood Risk: Noted

Rep ID	Representation Details	Norfolk County Council officer response
	<p>Received: <b>21/12/2015 via Email</b></p> <p>Flood Risk: The site is located within Flood Zone 1 (low risk) of our flood maps and the KLWN SFRA. Accordingly, we have no flood risk concerns.</p> <p>Biodiversity: There are multiple sites of deciduous broadleaved woodland present within AOS I: NERC Act (2006) Section 41 habitats of principal importance. No records of any protected species within the search area.</p> <p>Water Framework Directive: no comment</p> <p>Groundwater: The site overlays a Groundwater Vulnerability Zone (Principal Aquifer). Advice provided on groundwater protection, engineering, permitting and risk assessments required in the event that the waste material is used in the restoration of the site.</p> <p>Hydrology: We have no objection in principle to this allocation. However, due to very limited information provided with this consultation and given the site is situated on a principal aquifer, a 'Hydrogeological Risk Assessment' (HRA) will be required to address and mitigate any risks to groundwater quality, quantity and groundwater levels in the area around the quarry, to protect any groundwater abstractors and also any ecosystems and surface water features that are reliant of the groundwater in the area of the proposed site. Should there be any dewatering, we would require within the HRA a proposal of mitigation measures to address the impacts upon the above mentioned features. We not at least groundwater abstractions to the south of the proposed site.</p>	<p>Biodiversity: Noted. If a planning application is made for silica sand extraction within AOS I, an Arboricultural Impact Assessment would need to be submitted, if the proposal could potentially affect trees or hedges (as required by Norfolk County Council's Local List for Validation of Planning Applications). Any planning application would be determined in accordance with Policy CS14 and Policy DM1 of the adopted Minerals and Waste Core Strategy which cover Environmental Protection and Nature Conservation.</p> <p>Water Framework Directive: Noted</p> <p>Groundwater: Advice noted. This is an area of search for future silica sand extraction. There are no proposals for any mineral extraction site within the AoS to be restored using waste.</p> <p>Hydrology: The draft area of search policy contained in the Preferred Options Consultation document includes a requirement for any planning application submitted within an area of search to include an HRA. The draft area of search policy requires an HRA to address impacts on groundwater dependent environmental designations. The Area of Search Policy will be amended to require an HRA to address and mitigate any risks to groundwater quality, quantity and groundwater levels; to protect any groundwater abstractors and also any ecosystems and surface water features that are reliant on the groundwater in the area of the proposed site.</p>
90571	<p>Respondent: <b>Anglian Water Services Ltd (Mr S Patience) [16454]</b> Received: <b>16/12/2015 via Email</b></p> <p>There are no Anglian Water sewerage assets within the boundary of the AOS.</p>	Noted



Rep ID	Representation Details	Norfolk County Council officer response
	<p>There is an Anglian Water mains water pipeline within the boundary of AOS I, along Runcton Road (refer to supplied map Water 22). Anglian Water would require the standard protected easement widths for this asset and for any requests for alteration or removal to be conducted in accordance with the Water Industry Act 1991. Within the easement strips there should be no building over or restriction of access (required for routine maintenance and emergency repairs). The maximum standard easement width requirements are 6 metres either side of the medial line of any relevant pipe where the diameter of the pipe exceeds 750 millimetres.</p>	

## AOS J – land to the east of Tottenhill

Rep ID	Representation Details	Norfolk County Council officer response
90488	<p>Respondent: <b>Norfolk County Council - Highway Authority (Ms C Sullivan) [16439]</b>            Received: <b>24/11/2015 via Email</b></p> <p>Our comments on AOS J 'Access via south track onto the A134 subject to junction improvements. Could also access A10 and A134 to the east and west with junction improvements to the existing network. Acceptable subject to highway improvements.' have been taken into consideration and we have no further additional comments to make on this site at this stage.</p> <p>From the B1145 the preferred access to the Leziate processing plant would be an off-road route turning right off the B1145 before Bawsey and utilising the existing track and/or conveyor route through the existing mineral workings at Mintlyn to access Station Road and the processing plant south of Brow of the Hill. A right turn lane at the junction with the B1145 to provide a suitable junction would be a suitable alternative and acceptable to the Highway Authority.</p>	Noted
90519	<p>Respondent: <b>Borough Council of King's Lynn and West Norfolk (Mr A Gomm) [8101]</b>            Received: <b>18/12/2015 via Web</b></p> <p>Appropriateness of the AOS: No observations            Constraints: Residential properties            Mitigation: Buffer to protect residential; Dust Management Plan and Noise Management Plan in accordance with the Planning Practice Guidance</p>	These constraints and mitigation measures have been included in the paragraph on Amenity/Environmental Health.
90540	<p>Respondent: <b>Norfolk Wildlife Trust (Mr J Hiskett) [508]</b>            Received: <b>21/12/2015 via Email</b></p> <p>We do not have any information on the ecological value of this area. Excavation should ensure no adverse impact on hydrology of CWS 385.</p>	Potential impacts on CWS 385 are discussed in the Ecology section for AOS J, in the Preferred Options Consultation document. The draft area of search policy in the Preferred Options Consultation document includes a requirement for any planning application submitted within an area of search to include a Hydrological Risk Assessment. The HRA would identify

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		potential impacts to groundwater dependent environmental designations and include mitigation measures.
90541	<p>Respondent: <b>Environment Agency (Ms E Crook) [558]</b> Received: <b>21/12/2015 via Email</b></p> <p>Flood Risk: The site is located within Flood Zone 1 (low risk) of our flood maps and the KLWN SFRA. Accordingly, we have no flood risk concerns.</p> <p>Biodiversity: There are multiple sites of deciduous broadleaved woodland within AOS J: NERC Act (2006) Section 41 habitats of principal importance. No records of any protected species within the search area.</p> <p>Water Framework Directive: No comment</p> <p>Groundwater: The site overlays a Groundwater Vulnerability Zone (Principle Aquifer) Advice provided on groundwater protection, engineering, permitting and risk assessments required in the event that the waste material is used in the restoration of the site.</p> <p>Hydrology: We have no objection in principle to this allocation. However, due to very limited information provided with this consultation and given the site is situated on a principal aquifer, a 'Hydrogeological Risk Assessment' (HRA) will be required to address and mitigate any risks to groundwater quality, quantity and groundwater levels in the area around the quarry, to protect any groundwater abstractors and also any ecosystems and surface water features that are reliant of the groundwater in the area of the proposed site. Should there be any dewatering, we would require within the HRA a proposal of mitigation measures to address the impacts upon the above mentioned features. We note a number of drains and water features which surround the site and should be included in the risk assessment.</p>	<p>Flood Risk: Noted</p> <p>Biodiversity: Noted. If a planning application is made for silica sand extraction within AOS J, an Arboricultural Impact Assessment would need to be submitted, if the proposal could potentially affect trees or hedges (as required by Norfolk County Council's Local List for Validation of Planning Applications). Any planning application would be determined in accordance with Policy CS14 and Policy DM1 of the adopted Minerals and Waste Core Strategy which cover Environmental Protection and Nature Conservation.</p> <p>Water Framework Directive: Noted</p> <p>Groundwater: Advice noted. This is an area of search for future silica sand extraction. There are no proposals for any mineral extraction site within the AoS to be restored using waste.</p> <p>Hydrology: The draft area of search policy contained in the Preferred Options Consultation document includes a requirement for any planning application submitted within an area of search to include an HRA. The draft area of search policy requires an HRA to address impacts on groundwater dependent environmental designations. The Area of Search Policy will be amended to require an HRA to address and mitigate any risks to groundwater quality, quantity and groundwater levels; to protect any groundwater abstractors and also any ecosystems and surface water features that are reliant on the groundwater in the area of the proposed site.</p>

Rep ID	Representation Details	Norfolk County Council officer response
90572	<p>Respondent: <b>Anglian Water Services Ltd (Mr S Patience) [16454]</b>  Received: <b>16/12/2015 via Email</b></p> <p>There are no Anglian Water sewerage assets within the boundary of the AOS.</p> <p>There is an Anglian Water mains water pipeline within the boundary of AOS J, along the A134 (refer to supplied map Water 22).</p> <p>Anglian Water would require the standard protected easement widths for this asset and for any requests for alteration or removal to be conducted in accordance with the Water Industry Act 1991. Within the easement strips there should be no building over or restriction of access (required for routine maintenance and emergency repairs). The maximum standard easement width requirements are 6 metres either side of the medial line of any relevant pipe where the diameter of the pipe exceeds 750 millimetres.</p>	Noted

**No comments were received on the Area of Search Policy**

## Initial Sustainability Appraisal Report

Rep ID	Representation Details	Norfolk County Council officer response
90505	<p>Respondent: <b>Kent County Council (Ms S Thompson) [16216]</b>            Received: <b>10/12/2015 via email</b></p> <p>Having looked carefully at the associated documentation that details the Sustainability Appraisal (SA) and Strategic Environmental Assessment (SEA) and the Areas of Search (AOS) that underpin Norfolk County Council's approach in this matter, Kent County Council has no specific comments to make, other than it appears that the methodology being pursued accords with the relevant planning regulatory framework and National Planning Policy.</p> <p>The approach being taken by Norfolk County Council in assessing the appropriateness of sites through local consultation and SA and SEA assessment is in accordance with planning policy guidance.</p>	Noted
90556	<p>Respondent: <b>Natural England (Ms L Oliver) [1874]</b>            Received: <b>21/12/2015 via Email</b></p> <p>This is a detailed report and we agree with the identified sustainability appraisal objectives and how they have been scored in the report.</p>	Noted
90561	<p>Respondent: <b>Historic England (Ms K Wood) [15387]</b>            Received: <b>21/12/2015 via Email</b></p> <p>Turning to the sustainability appraisal scoping report, we acknowledge this consultation follows a previous consultation and our comments dated 28 April 2015. We acknowledge that our previous comments have been taken on board and the report adapted to accommodate the comments where appropriate, which is welcomed. I can advise we have no further comments on the Scoping Report at this stage.</p>	Noted

## Habitats Regulations Assessment (Task 1)

Rep ID	Representation Details	Norfolk County Council officer response
90557	<p>Respondent: <b>Natural England (Ms L Oliver) [1874]</b>  Received: <b>21/12/2015 via Email</b></p> <p>Natural England notes that your authority, as competent authority under the provisions of the Habitats Regulations, has screened the proposal to check for the likelihood of significant effects. We agree with the conclusion of no likely significant effect from any of the AOS on Roydon Common &amp; Dersingham Bog SAC &amp; Ramsar sites.</p> <p>Your assessment concludes that your authority cannot rule out the likelihood of significant effects arising from the AOS A and AOS B, either alone or in-combination in relation to The Wash and North Norfolk SAC, The Wash Ramsar and The Wash Special Protection Area (SPA). On the basis of information provided, Natural England concurs with this view and notes that it mainly relates to disturbance to birds (which are designated features) using agricultural land outside the designated sites.</p> <p>We note that an Appropriate Assessment will now be undertaken, in order to assess the implications of these AOS for the European sites, in view of the site conservation objectives. Natural England is a statutory consultee at the Appropriate Assessment stage of the Habitats Regulations Assessment process. The following advice is provided to support the conclusions drawn and to assist your authority to undertake an Appropriate Assessment. The Appropriate Assessment must contain clear conclusions, and clear recommendations in relation to bird disturbance about how the plan should change in terms of the AOS allocations and/or mitigation measures. It needs to demonstrate how any necessary measures that have been identified have been incorporated into the plan to be in a position to conclude no likely significant effect or no adverse effect on integrity.</p>	<p>Noted.</p> <p>As stated in the Preferred Options Consultation document, AOS B is considered unsuitable to be taken forward and will not be included in the Pre-Submission document. Therefore a Task 2 Appropriate Assessment will not be carried out on AOS B.</p> <p>A Task 2 Appropriate Assessment will be undertaken on AOS A and the advice provided by Natural England will be taken into account in this assessment.</p>

**'No comment' responses received**

<b>Rep ID</b>	<b>Representation Details</b>	
90490	Respondent: <b>Ely Internal Drainage Board (Mr A Newton) [16441]</b> No comment	Received: <b>27/10/2015 via email</b>
90491	Respondent: <b>Office of Rail Regulation (Ms A Harrison) [16415]</b> No comment	Received: <b>28/10/2015 via email</b>
90493	Respondent: <b>South Norfolk District Council (Ms C Baker) [16423]</b> No comment	Received: <b>19/11/2015 via email</b>
90500	Respondent: <b>Broadland District Council (Mrs I Appelyard) [7992]</b> No comment	Received: <b>04/12/2015 via email</b>
90503	Respondent: <b>Waveney District Council (Mr I Johns) [16445]</b> No comment	Received: <b>08/12/2015 via email</b>
90508	Respondent: <b>Old Catton parish council (Mrs M Eversfield) [16280]</b> No comment	Received: <b>18/12/2015 via Email</b>
90518	Respondent: <b>Peterborough City Council (Mr C Stanek) [16452]</b> No comment	Received: <b>21/12/2015 via Email</b>
90577	Agent: <b>Capita (Mr N Campbell) [16459]</b> Respondent: <b>Breckland District Council [7978]</b> No comment	Received: <b>22/12/2015 via Email</b>