

# **Report to Norfolk County Council**

by Jonathan Manning BA (Hons) MA MRTPI

an Inspector appointed by the Secretary of State for Communities and Local Government Date 09 October 2017

Planning and Compulsory Purchase Act 2004

(as amended)

Section 20

# **Report on the Examination of the**

## Norfolk Minerals Site Specific Allocations DPD: Single Issue Silica Sand Review

The Plan was submitted for examination on 6 December 2016

The examination hearings were held on 14 and 15 March 2017

File Ref: PINS/X2600/429/8

# Abbreviations used in this report

AA AoS AWPs DPD DtC HE HES HRA LAA LDS MM NPPF PPG SA	Appropriate Assessment Areas of Search East of England Aggregate Working Parties Development Plan Document Duty to Co-operate Historic England Historic Environment Service Habitats Regulations Assessment Local Aggregates Assessment Local Development Scheme Main Modification National Planning Policy Framework Planning Practice Guidance Sustainability Appraisal
SCI	Statement of Community Involvement
Тра	Tonnes per annum

### **Non-Technical Summary**

This report concludes that the Norfolk Minerals Site Specific Allocations Development Plan Document: Single Issue Silica Sand Review provides an appropriate basis for the planning of the County, provided that a number of main modifications [MMs] are made to it. Norfolk County Council has specifically requested me to recommend any MMs necessary to enable the Plan to be adopted.

The MMs all concern matters that were discussed at the examination hearings or afterwards through written representations. Following this, the Council prepared schedules of the proposed modifications and where necessary carried out sustainability appraisal of them. The MMs were subject to public consultation over a six week period. I have recommended the inclusion of the MMs in the Plan after considering all the representations made in response to the consultation on them. In this regard, I have amended the detailed wording of one MM, which is explained further within the report.

The Main Modifications can be summarised as follows:

- The removal of Area of Search (AoS) D from the Plan.
- To amend the boundary of AoS E.
- Alterations to the text supporting AoS E, including the need for any historic environment assessments to consider the historic landscape character of the wider area, with specific regard to the medieval landscape.
- To bring the Plan up-to-date in terms of need calculations.
- To alter Policy SIL01 and the AoS Policy to be more proportionate in terms of their requirements and to refer to cumulative effects.
- To alter Policy SIL01 and the AoS Policy to comply with national policy in terms of the historic environment.
- To amend the supporting text of AoS F to refer to the presence of a public water main.

# Introduction

- 1. This report contains my assessment of the Norfolk Minerals Site Specific Allocations Development Plan Document (DPD): Single Issue Silica Sand Review (the Plan) in terms of Section 20(5) of the Planning & Compulsory Purchase Act 2004 (as amended) (the 2004 Act). It considers first, whether the Plan's preparation has complied with the Duty to Co-operate (DtC). It then considers whether the Plan is sound and whether it is compliant with the legal requirements. The National Planning Policy Framework (NPPF) (Paragraph 182) makes it clear that in order to be sound, a Plan should be positively prepared, justified, effective and consistent with national policy.
- 2. The starting point for the examination is the assumption that the local planning authority has submitted what it considers to be a sound plan. The Norfolk Minerals Site Specific Allocations DPD: Single Issue Silica Sand Review, submitted in December 2016 is the basis for my examination. It is the same document that was published for consultation in March 2016 and amended by a further consultation in September 2016 (Examination documents A35 and A105 respectively).

### **Main Modifications**

- 3. In accordance with section 20(7C) of the 2004 Act the Council requested that I should recommend any main modifications (MMs) necessary to rectify matters that make the Plan unsound and thus incapable of being adopted. My report explains why the recommended MMs, which relate to matters that were discussed at the examination hearings and, subsequently, through written representations, are necessary. The MMs are referenced in bold in the report in the form: **MM1, MM2, MM3** etc, and are set out in full in Appendix 1 to this report.
- 4. Following the examination hearings, the Council prepared a schedule of proposed MMs and carried out sustainability appraisal of them where necessary. The MM schedule was subject to public consultation for six weeks. I have taken into account the consultation responses in coming to my conclusions in this report and in this light, I have made an amendment to the detailed wording of one main modification. I consider that the amendment does not significantly alter the content of the modification as published for consultation or undermines the participatory processes and sustainability appraisal that has been undertaken. I have highlighted this amendment in the report.

### **Policies Map**

5. The Council must maintain an adopted policies map which illustrates geographically the application of the policies in the adopted development plan. When submitting a local plan for examination, the Council is required to provide a submission policies map showing the changes to the adopted policies map that would result from the proposals in the submitted local plan. In this case, the submission policies map comprises the set of plans identified as Revised Policies Map as set out in Examination Document A40 (Parts A, B and C).

- 6. The policies map is not defined in statute as a development plan document and so I do not have the power to recommend main modifications to it. However, a number of the published MMs to the Plan's policies require further corresponding changes to be made to the policies map. In addition, there are some instances where the geographic illustration of policies on the submission policies map is not justified and changes to the policies map are needed to ensure that the relevant policies are effective. These further changes to the policies map were published for consultation alongside the MMs.
- 7. When the Plan is adopted, in order to comply with the legislation and give effect to the Plan's policies, the Council will need to update the adopted policies map to include all the changes proposed in the Revised Policies Map (Examination Document A40 Parts A, B and C) and the further changes published alongside the MMs.

## **Assessment of Duty to Co-operate**

- 8. Section 20(5)(c) of the 2004 Act requires that I consider whether the Council complied with any duty imposed on it by section 33A in respect of the Plan's preparation.
- 9. The Council has provided as part of its evidence, a document (A75), which identifies how the DtC has been met. This sets out that the Council has periodically consulted Minerals and Waste Authorities in England that have silica sand reserves. Some parties have, however, raised concerns with regard to the level of engagement undertaken by the Council as part of its DtC.
- 10. The South Downs National Park Authority has set out that it has not had any DtC discussions with the Council. Some parties have also questioned how widely the amendments made by the Pre-Submission Addendum Modification September 2016, which included the deletion of Area of Search (AoS) A, were discussed with regard to the DtC. However, the Council is planning on meeting its identified need in full and therefore, I consider there are not any strategic cross-boundary planning issues between the Council and the South Downs National Park Authority. Further, I am of the view that there is not currently a national shortfall of silica sand that could affect the Council's approach, in terms of both provision and sites.
- 11. The Council has engaged with the East of England Aggregate Working Parties (AWPs) throughout the plan-making process and the production of the Council's Local Aggregates Assessment (LAA). This can also be said for other Local Planning Authorities and statutory bodies, through local groups and consultation. It is clear that many of the changes to the Plan that were brought forward by the Council prior to the submission of the Plan were as a result of consultation with the above parties, to address their concerns in a constructive and active manner.
- 12. Overall, I am satisfied that where necessary the Council has engaged constructively, actively and on an on-going basis in the preparation of the Plan and that the DtC has therefore been met.

## **Assessment of Soundness**

### **Main Issues**

13. Taking into account all of the representations, the written evidence and the discussions that took place at the examination hearings, I have identified two main issues upon which the soundness of the Plan depends. Under the following two headings, my report deals with the main matters of soundness rather than responding to every point raised by representors.

### Background

14. It should be made clear at this point that this is a focused review of the Norfolk County Council Minerals Site Specific Allocations DPD (2013) (the Minerals Allocations DPD) in relation to silica sand. Therefore, this silica sand review has not sought to change the Plan period or review the Council's overall need figure for silica sand, which is set out within the Norfolk Minerals and Waste Local Development Framework Core Strategy and Minerals and Waste Development Management Policies (2011) (the Core Strategy). I have examined the Plan on this basis.

# Main issue 1: whether appropriate provision is made for the steady and adequate supply of silica sand

- 15. The overall need for silica sand within Norfolk is set out by Policy CS1 'Minerals Extraction' of the Core Strategy. This identifies that 12 million tonnes (750,000 tonnes per annum) of silica sand will need to be delivered over the Plan period. The LAA sets out information on the sale of silica sand extracted in Norfolk. The 10 year sales average of silica sand in Norfolk (2007-2016) was 681,900 tonnes per annum (tpa), whereas the 3 year sales average (2014-2016) was some 785,000 tpa. This indicates that the Core Strategy requirement of 750,000 tpa remains a reasonable figure, but there is evidence of an increase in demand over the past few years. A level of flexibility will therefore be necessary over the remaining Plan period should demand continue to increase.
- 16. The latest calculation on the future need for silica sand was in January 2017, when information from the sole silica sand operator Sibelco was provided. Based on the Core Strategy requirement, between 2017 and the end of the Plan period, a total provision of 7.5 million tonnes of silica sand will be required. The latest information also sets out that existing reserves stand at 2.62 million tonnes. In addition, the Minerals Allocation DPD allocates one site (MIN40) for the provision of 3 million tonnes. I see no reason to believe that the site will not come forward as planned. The Plan allocates a further site (SIL01) for the provision of 1.2 million tonnes. Taking all of this into account, this leaves a need for 0.68 million tonnes of silica sand to be delivered over the remaining Plan period. A change to the Plan is needed to take into account this updated information, in order for it to be justified and effective (MM2). The Council consider that to meet the need for an additional 0.68 million tonnes, a site in the region of 20 hectares of land is likely to be required.

- 17. To address this, the Plan identifies a number of Areas of Search (AoS). These, when taking into account my findings below on AoS D and AoS E, cover an area of some 946 hectares. Whilst the AoS cover an area significantly larger than that which is likely to be needed, I consider that this is an appropriate approach for a number of reasons. Firstly, at the beginning of the preparation of the Plan, a call for sites was undertaken by the Council. Only one site (SIL01) was promoted and has subsequently been put forward as a site allocation. Secondly, the extent and quality of the silica sand resource within the AoS are at this time very uncertain. Thirdly, and as set out above, there is evidence to suggest that demand has and could well continue to increase above the Core Strategy requirement of 750,000 tpa. Flexibility to accommodate such a need is therefore required. Lastly, some of the AoS are large, particular AoS E, and do have some constraints that will require further work to be undertaken at the planning application stage to demonstrate that they can come forward without any unacceptable harm.
- 18. Having regard to the above matters, particularly in relation to the knowledge of resources, and the guidance provided in the Government's Planning Practice Guidance<sup>1</sup> (PPG), I consider that the Council are not in a position to be able to allocate preferred areas and that the identification of AoS is an appropriate approach.
- 19. Some criticism has been made that the site selection methodology criteria were too strict and unnecessarily ruled out some areas of land. However, I am mindful that the Plan has identified 946 hectares of land within the AoS, which I consider provides a suitable level of provision, given the uncertainties involved and the need for some flexibility should the future need for silica sand increase. Overall, I consider that the site selection methodology is sound.

#### Main issue conclusion

20. The Plan, when considered with the recommended changes, provides an appropriate basis to secure a steady and adequate supply of silica sand.

# Main issue 2: whether the allocated site and areas of search are acceptable in environmental terms and in all other regards

Area of Search D

21. AoS D covers an area of some 85 hectares. A large proportion of AoS D (53 hectares) is a public open access area, as dedicated under the Countryside and Rights of Way Act (2000). It was evident from my site visit that the public open access area is very well used by the local community and its value to them is clearly important. I consider that it is unlikely that a site of some 20 hectares could come forward within AoS D without causing considerable harm to the public open access area, which would run contrary to Paragraph 75 of the NPPF, which states '*Planning policies should protect and enhance public rights of way and access*'.

<sup>&</sup>lt;sup>1</sup> Paragraph: 008 Reference ID: 27-008-20140306.

- 22. Whilst such harm would be temporary, this would still be for a considerable period of time (in the region of 5 years). Further, there are no guarantees that following restoration, a suitable or equivalent level of public open access space could be achieved, given that in most cases, sites in the area are restored to water bodies.
- 23. The Council suggested that even if the public open access area was removed from AoS D there would still be over 20 hectares of land in which a site could feasibly come forward. However, this would result in an isolated parcel of land without any direct access onto a local highway. Given this, I consider that it is unlikely to be attractive to a potential operator and I am not convinced that there is a reasonable likelihood that the remaining part of the site would be deliverable.
- 24. I have identified above that when taking into account all of my findings, the AoS would cover an area of 946 hectares and that this is a suitable level of provision, given the uncertainties involved and the need for some flexibility should the future need for silica sand increase. Consequently, at the present time, there is simply no need to allocate AoS D, which would result in demonstrable harm to the public open access area.
- 25. For all of the above reasons, I conclude that AoS D is unsound as it is contrary to national policy. Changes are needed to remove AoS D from the Plan in order for it to comply with national policy (MM1, MM3, MM4, MM8 and MM15). The deletion of AoS D will also need to be reflected on the Policies Map, in order for this part of the Plan to be sound.

#### Area of Search E

- 26. AoS E covers a large area of land at some 815 hectares, which is centred around Shouldham Warren. The land within AoS E has a significant level of historic interest due to its monastic medieval landscape and its high archaeological potential, as well as the presence of five Listed Buildings and four Scheduled Ancient Monuments nearby. The extraction of silica sand has considerable potential to affect the historic significance of the landscape. Historic England (HE) maintain that AoS E should not be allocated until a full Heritage Impact Assessment and Historic Landscape Characterisation study has been undertaken and it can be demonstrated that areas of land within AoS E can be secured for silica sand extraction that would not result in harm to the historic landscape or that parts of or all of the landscape, is not of significant historic value.
- 27. The Council's Historic Environment Service (HES) has brought my attention to a study undertaken between 2004 and 2009 by Norfolk Landscape Archaeology (as HES was formerly known). This undertook a Historic Landscape Characterisation of the whole of Norfolk, published jointly with English Heritage (now HE). Using data produced by this project, a Historic Landscape Characterisation map has been provided for AoS E (within Examination Document G100). This shows large areas of the historic landscape being 18-20<sup>th</sup> century woodland plantation (much of which is 20<sup>th</sup> century Forestry Commission plantations) and 18-20<sup>th</sup> century agriculture (including 20<sup>th</sup> century enclosure, boundary loss and parliamentary enclosure). Although it can be seen that elements of the medieval landscape do survive,

the majority of the wider landscape reflects post medieval and modern landuse. Whilst the Historic Landscape Characterisation study is high-level, it is sufficient to establish that an area of some 20 hectares has the potential to come forward within the AoS boundary without resulting in unacceptable harm to the historic landscape.

- 28. Notwithstanding this, I am mindful that the AoS Policy requires that a Heritage Statement, Archaeological Assessment and Landscape and Visual Impact Assessment are undertaken as part of any planning application for silica sand extraction within the AoS. There are also other development plan policies, namely Policies CS14 'Environmental Protection', DM8 'Design, Local Landscape and Townscape Character' and DM9 'Archaeological Sites' of the Core Strategy, which all seek to protect the historic environment from unacceptable harm. However, I consider that a change is necessary to the supporting text of AoS E to ensure that suitable regard is had to the historic landscape character of the wider area, to an extent agreed appropriate with the Council/HES (MM12). Having regard to the responses received to the MM consultation, I consider that MM12 should also include a reference to the medieval landscape, for clarity and for the Plan to be effective. I have therefore amended MM12.
- 29. In addition, as part of the MM consultation it has been suggested that the third bullet point of the AoS Policy, which relates to Landscape and Visual Impact Assessments, should be amended to include reference to the group value and wider historic landscape of heritage assets. However, I consider that these matters would be suitably considered through the requirements of the AoS Policy. Further, in terms of AoS E, I consider that the supporting text, along with MM12 provides suitable clarity on the issues that will need to be considered. Consequently, I am not of the view that such a change is necessary for soundness.
- 30. I consider that with the above changes, the AoS Policy, the supporting text to AoS E and the other development plan policies set out above, would ensure that the historic landscape character of the area and the interrelationships between individual historic elements, both designated and non-designated, would be suitably considered as part of any future planning application for silica sand extraction within AoS E. I am not of the view that this would potentially omit the characterisation of the wider area, as the study area would need to be agreed with the Council/HES. I also consider all other aspects of the historic environment would be suitably considered by the requirements set out above.
- 31. Turning briefly to archaeological potential, HE acknowledge that this does not necessarily conflict with the allocation of an AoS. However, I agree with HE that it is an important factor when considering the significance and likely historic value of locations within the AOS. This matter would be suitably considered through the requirements of the AoS Policy, which requires an archaeological assessment in consultation with the Council/HES. This may include field surveys and trial trenching where deemed necessary. Notwithstanding this, the Council has suggested that the protection of archaeological interests could be strengthened, in accordance with national policy, by a change to the AoS Policy to set out that the results of the archaeological assessment will be used by the Council/HES to agree

appropriate mitigation measures with the developer (**MM17**), rather than simply relying on mitigation measures suggested by the developer. I consider this to be an appropriate course of action.

- 32. Concern has been raised that should AoS E be allocated that it would be difficult to refuse permission for a silica sand extraction site within its boundary. However, AoS E is an area of search rather than a preferred area, as there is uncertainty in relation to the quantity and quality of the silica sand resources. It identifies an area that could have the potential to be suitable for silica sand extraction. Any proposed silica sand extraction within the AoS boundaries will be subject to a planning application, which will need to demonstrate that it would not result in any unacceptable harm (in all regards), in accordance with national policy and the development plan, in order to secure permission. I consider that the AoS Policy will ensure that matters such as the historic environment are fully considered at the planning application stage and the Plan is therefore sound in this regard.
- 33. It has been suggested that undue development pressure from developers may be placed on areas within AoS E that are the most visual and archaeologically sensitive, given that some areas of land are within Flood Zones 2 and 3. However, I am mindful that the extraction of silica sand is a water compatible development. It is therefore unlikely that this would be an obstacle to a silica sand extraction site being delivered within such an area within AoS E.
- 34. Given all of the above and from the evidence that has been placed before me, it is my judgement that it would be premature at this stage to rule out the potential for a suitable site of some 20 hectares to come forward within the boundaries of AoS E for silica sand extraction that would not result in unacceptable harm to the historic environment, subject to appropriate assessments and mitigation. This is particularly the case given that silica sand is a resource of national importance and the size of AoS E. I consider that it is therefore appropriate to leave the full and detailed assessment of the historic environment to the planning application stage, where the full details of a scheme and its location within AoS E would be known.
- 35. Turning to other related matters, the Council has proposed changes (**MM9** and **MM10**) to revise the boundary of AoS E to remove the remaining part of the site of Fairstead Medieval Market, which is an area that is particularly recognised for its high potential for important archaeological features. This would result in the removal of 1 hectare of land from the AoS. I consider that this is necessary for the Plan to be effective.
- 36. The northern boundary of AOS E was moved south of Wormegay after the Preferred Options Consultation. The Council has proposed numerous changes to the supporting text of AoS E (**MM11**) to more accurately reflect the northern boundary of AOS E in relation to the historic environment. I consider that in order for the Plan to be effective, the suggested changes are necessary.
- 37. There are public water mains within the boundary of AoS E. In order for the Plan to be effective, this matter should be referenced in the supporting text (MM13), to ensure that any future proposals for silica sand extraction within AoS E have regard to this matter.

### Area of Search F

38. There is a public water main within the boundary of AoS F. In order for the Plan to be effective, this should be referenced in the supporting text (**MM14**). This will ensure that any future proposals for silica sand extraction within AoS F will have regard to this matter.

### Site Allocation Policy SIL01 and the Area of Search Policy

- 39. Site Allocation Policy SIL01 and the AoS Policy contain a number of criteria that will need to be addressed by any future planning applications to extract silica sand within the boundaries of the site allocation and the AoS. As currently drafted, both policies require any future proposal to address all of the listed matters. However, in some cases each of the requirements of the policies may not be relevant or necessary and it would place an overly onerous task on any future operators. Consequently, I consider that in order for the Plan to be effective, an alteration to both policies is required to emphasise that each of the requirements should be addressed where it is appropriate (**MMS and MM16**). The scope of any future planning application and supporting assessment would be agreed with the Council.
- 40. In addition, concerns have been raised that the policies do not refer to the need to consider cumulative impacts. Whilst this matter is dealt with by Policy DM15 of the Core Strategy, I consider that a change to both policies is required, in order for the Plan to be effective, to ensure that the need to consider cumulative impacts in accordance with Policy DM15 is explicit (**MM7 and MM18**).
- 41. As already set out above in relation to AoS E, the Council has suggested that the protection of archaeological interests should be strengthened, in accordance with national policy, by a change to the AoS Policy, to set out that the results of the archaeological assessment will be used by the Council/HES to agree appropriate mitigation measures with the developer (MM17). I consider the same change to Policy SIL01 (MM6) is necessary to ensure archaeological interests are suitably considered and mitigated, in accordance with national policy. HE, as part of the MM consultation, has suggested changes to MM6 and MM17, along with additional changes to the AoS Policy, as it is of the view that they do not take into account that an assessment may identify harm which cannot be mitigated. However, if an assessment found that there would be harm caused to the historic environment that could not be suitably mitigated the development is very unlikely to be acceptable and it would conflict with the relevant policies of the Plan and those in the wider development plan. I am content that such matters would be fully considered as part of the normal development management process. Therefore, I consider that there is no need for the changes suggested by HE to MM6 and MM17, along with the additional changes put forward to the AoS Policy, for soundness purposes.
- 42. The matters to be considered as part of the Landscape and Visual Impact Assessment required under the AoS Policy, includes non-designated heritage assets of archaeological interest. Paragraph 135 of the NPPF states that '*The effect of an application on the significance of a non-designated heritage asset*

should be taken into account in determining the application'. As a result, I consider that the inclusion of non-designated heritage assets of archaeological interest within the AoS Policy is necessary and consistent with national policy.

- 43. Site Allocation SIL01 was considered within the Habitat Regulation Assessment (HRA) screening report and it was determined that the site would not have any likely significant effects. Further, Natural England has not raised any concerns with regards to the findings of the HRA screening report. Therefore, I am not of the view that it is necessary to amend the supporting text to Site Allocation Policy SIL01 to set out that it will be necessary to undertake a site specific HRA, in order for the Plan to be sound.
- 44. Overall, I consider that Site Allocation Policy SIL01 and the AoS Policy, when considered with the recommended changes and alongside the existing development management policies within the Core Strategy, provide a sound basis to consider any future planning applications within such areas.

### Main issue conclusion

45. I consider that site allocation SIL01, the AoS and their associated policies, when considered with the recommended changes, are acceptable in all regards.

## **Assessment of Legal Compliance**

46. My examination of the compliance of the Plan with the legal requirements is summarised in the table below. I conclude that the Plan meets them all.

LEGAL REQUIREMENTS	
Local Development Scheme (LDS)	The Norfolk County Council Minerals Site Specific Allocations DPD: Single Issue Silica Sand Review has been prepared in accordance with the Council's LDS March 2017.
Statement of Community Involvement (SCI) and relevant regulations	The SCI was adopted in April 2012. Consultation on the Norfolk County Council Minerals Site Specific Allocations DPD: Single Issue Silica Sand Review and the MMs have complied with its requirements.
Sustainability Appraisal (SA)	SA has been carried out and is adequate.
Habitats Regulations Assessment (HRA)	The Habitats Regulations Appropriate Assessment (AA) Screening Report, September 2015 set out at the time that the Plan by virtue of AoS A and AoS B may have had some negative impacts and an appropriate assessment was undertaken in February 2016. However, neither AoS A nor AoS B form part of the Plan. The Plan would not have any significant effects. Natural England support this conclusion.

National Policy	The Norfolk County Council Minerals Site Specific Allocations DPD: Single Issue Silica Sand Review complies with national policy except where indicated and MMs are recommended.
2004 Act (as amended) and 2012 Regulations.	The Norfolk County Council Minerals Site Specific Allocations DPD: Single Issue Silica Sand Review complies with the Act and the Regulations.

## **Overall Conclusion and Recommendation**

- 47. The Plan has a number of deficiencies in respect of soundness for the reasons set out above, which mean that I recommend non-adoption of it as submitted, in accordance with Section 20(7A) of the 2004 Act. These deficiencies have been explored in the main issues set out above.
- 48. The Council has requested that I recommend MMs to make the Plan sound and capable of adoption. I conclude that with the recommended main modifications set out in Appendix 1, the Norfolk County Council Minerals Site Specific Allocations DPD: Single Issue Silica Sand Review satisfies the requirements of Section 20(5) of the 2004 Act and meets the criteria for soundness in the NPPF.

Jonathan Manning

INSPECTOR

This report is accompanied by Appendix 1: Schedule of Main Modifications.

## **Appendix 1 – Schedule of Main Modifications**

Reference	Policy/ Paragraph	Change to be made
MM1	Paragraph 1.4 of the Minerals SSA DPD	Amend the table of allocated sites and areas of search in King's Lynn and West Norfolk to remove AOS D.
MM2	Paragraph 2.7 of the Minerals Site Specific Allocations DPD	Amend paragraph 2.7 as follows: No new silica sand planning permissions were granted in 2010, 2011 or 2012 from 2010 to <u>2016</u> and therefore the landbank of reserves has reduced accordingly (the latest confirmed landbank figure is 4.9 2.62 million tonnes) as at 31 December <del>2012</del> 2016). Therefore, the quantity of additional silica sand resource needed over the plan period is <del>5.6</del> 4.88 million tonnes. However, due to the Habitats Regulations Assessment findings, it has been possible to allocate only one silica sand site (MIN 40), totalling 3 million tonnes. The two allocated silica sand sites are estimated to contain 4.2 million tonnes of silica sand. All other silica sand sites put forward are concluded to have either likely significant effects or an uncertain impact on Roydon Common SSSI (part of Roydon Common and Dersingham Bog SAC) and in line with the precautionary principal they cannot be allocated. This leaves a shortfall of <del>2.6</del> 0.68 million tonnes in the quantity of silica sand allocated. However, this shortfall in allocated resources would only occur towards the end of the Plan period (about <del>2023/4</del> 2025).
MM3	Paragraph 2.7 of the Minerals Site Specific Allocations DPD	Delete the remaining four paragraphs in 2.7 (from "To address this shortfall a single issue review" to " is being considered, planned or determined.") and replace with the following new text: <u>To address this shortfall four areas of search for silica sand extraction have been allocated, covering 946 hectares of land, within which planning permission may be granted, particularly if there is a potential shortfall in supply. Planning applications for the extraction of silica sand are therefore directed to the allocated specific sites and Areas of Search and would be determined in accordance with the relevant specific site or Areas of Search Policy and the relevant policies of the Local Plan.</u>

Reference	Policy/ Paragraph	Change to be made
MM4	Paragraph 3.7 of the Minerals SSA DPD	Text to be amended to refer to four areas of search as follows:
		"This DPD contains policies for <del>28-29</del> allocated sites and four areas of search."
MM5	Specific Site Allocation policy	Amend the second sentence of the policy as follows:
	SIL01	"will require any planning application to address, in particular as appropriate, the requirements below:"
MM6	Specific Site Allocation policy	Amend the fourth bullet point of the policy as follows:
	SIL01	"An appropriate archaeological assessment must be prepared; this may initially be desk- based but may need to be followed up with field surveys and trial trenching. The archaeological assessment will <del>suggest appropriate mitigation measures, and</del> be compliant with Policy DM9 <u>and will be used by Norfolk County Council/Historic Environment Service to</u> <u>agree appropriate mitigation measures</u> ;"
MM7	Specific Site Allocation policy	Add a new bullet point as follows:
	SIL01	"Information demonstrating how proposals comply with Policy DM15"
MM8	Section AOS D of the Silica Sand Review	Delete the title, map, all text within the areas of search characteristics and Paragraphs D.1 to D.12.
MM9	Map of AOS E	Amend the southern boundary of AOS E to exclude the site of Fairstead Medieval Market from the area of search (AOS E would be reduced by approximately 1 hectare).
MM10	AOS E Area of Search	Amend the first bullet point as follows:
	Characteristics	"The area of search covers 816 815 hectares within the parishes of Wormegay, Shouldham, Marham and Shouldham Thorpe."

Reference	Policy/ Paragraph	Change to be made
MM11	Paragraph E.4	Amend the wording of paragraph E.4 as follows:
		"AOS E includes is adjacent to a large area of fen edge, parts of which were studied as part of the Fenland Survey. The Fenland Survey recorded evidence of prehistoric and later land use and occupation across the fen within close to the AoS, including a probable Iron Age settlement and some significant palaeoenvironmental deposits. Also within the AOS are the remains of The northern edge of the AoS contains the southern fringe of the early medieval settlement at Wormegay, a Bronze Age barrow, the site of a former windmill, several finds of metalworking remains and several isolated instances of human skeletal remains. The place-name Shouldham Warren suggests that Eearthworks along the north edge could be remnants of Shouldham Warren suggest that it was, indeed, a medieval warren, although no definitive research has been carried out; and so the there is potential for the area to contain further earthworks cannot be ruled out. Shouldham Warren was used as a military training area in the Second World War, and there are surviving earthworks relating to this period."
MM12	Paragraph E.5	Inert the following additional text at the end of existing paragraph E.5, as follows:
		"In addition, the relevant assessments in support of any planning application will need to have regard to the historic landscape character of the wider area, with specific regard to the medieval landscape, to an extent agreed with Norfolk County Council/Historic Environment Service."
MM13	Section AOS E – insert new	Insert a new paragraph as follows:
	paragraph before existing paragraph E.16	"There are public water mains within the boundary of AOS E. Anglian Water would require the standard protected easement widths for the water mains and for any requests for alteration or removal to be conducted in accordance with the Water Industry Act 1991."
MM14	Section AOS F – insert new	Insert a new paragraph as follows:
	paragraph before existing paragraph F.9	"There is a public water main within the boundary of AOS F. Anglian Water would require the standard protected easement widths for the water main and for any requests for alteration or removal to be conducted in accordance with the Water Industry Act 1991."

Reference	Policy/ Paragraph	Change to be made
MM15	Areas of Search Policy	Delete AOS D from the first line of the policy, as follows:
		"AOS D, AOS E, AOS F, AOS I and AOS J are allocated as areas of search for silica sand extraction."
MM16	Areas of Search Policy	Amend the third sentence of the policy as follows:
		"will require any planning application within the Area of Search to address, in particular as appropriate, the requirements below:"
	Areas of Search Policy	Amend the fifth bullet point of the policy as follows:
		"An appropriate archaeological assessment must be prepared in consultation with Norfolk County Council; this may initially be desk-based but may need to be followed up with field surveys and trial trenching. The archaeological assessment will <del>suggest appropriate</del> mitigation measures, and be compliant with Policy DM9 and will be used by Norfolk County Council/Historic Environment Service to agree appropriate mitigation measures;"
MM18	Areas of Search Policy	Add a new bullet point as follows:
		"Information demonstrating how proposals comply with Policy DM15"