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West Sussex and South Downs National Park Proposed Submission Draft Joint Minerals Local Plan Main Modifications SA Addendum

Sustainability Appraisal including Strategic Environmental Assessment

Prepared by LUC
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Design
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Client: West Sussex County Council and South Downs National Park Authority

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Non-Technical Summary

Introduction

- 1.1 In May 2017 West Sussex County Council (WSCC) and the South Downs National Park Authority (SDNPA) submitted the West Sussex Joint Minerals Local Plan (JMLP) for independent examination by a Planning Inspector appointed by the Secretary of State. An integrated Sustainability Appraisal (SA) and Strategic Environmental Assessment (SEA) Report was submitted alongside the Plan.
- 1.2 Public examination hearings were held between Tuesday 19th and Thursday 28th September 2017. Subsequently, the Authorities, in consultation with the Planning Inspector, prepared a list of proposed modifications to the Plan, which have now been published for consultation.

SA Report Addendum

- 1.3 This SA Report Addendum presents an appraisal of the proposed modifications to accompany the consultation on the proposed modifications. In combination with the SA Report submitted alongside the Proposed Submission Local Plan for examination, the addendum represents an appraisal of the JMLP as modified by the proposed modifications, updating the appraisal findings presented within the SA Report which accompanied the examined Proposed Submission JMLP. This is an addendum to the SA Report and should therefore be read together with the SA Report.
- 1.4 Given that reasonable alternatives were appraised up to the submission of the proposed JMLP and the proposed modifications prepared in consultation with the Inspector did not identify any further alternatives, the SA addendum does not consider any alternatives.
- 1.5 An updated plans, policies and programmes review and Plan area baseline review has been undertaken to determine if there have been any significant developments since the previous iteration of SA Report had been prepared. However, no changes were considered to be significant enough as to change the overall trends and key sustainability issues identified in the previous version of the SA Report.

Approach to the Appraisal of the Main Modifications

- 1.6 The SA implications of all the Main Modifications to the previously appraised elements of the JMLP have been considered based on whether any of the Main Modifications change the SA findings submitted for examination alongside the Proposed Submission Draft Local Plan.
- 1.7 The following Main Modifications to the JMLP were considered significant enough to require reappraisal in the Addendum:
 - MM5 – Vision – additional text.
 - MM9 – Strategic Objective 3 – removing and adding text.
 - MM22 – Policy M2: Soft Sand – text deletion and replacement.
 - MM30 – Policy M3: Silica Sand – additional criterion added.
 - MM55 – Policy M11: Strategic Minerals Site Allocations – deletion of Ham Farm, soft sand extraction site allocation.

Summary of Appraisal Findings

- 1.8 Most of the changes in the Main Modifications do not represent a significant change to the Proposed Submission JMLP as they are generally minor in nature and are intended either to correct factual errors or to provide improved clarification. A few of the Main Modifications may have additional positive effects, but the overall SA score from the previous SA reports has not changed.

- 1.9 The modified Proposed Submission JMLP provides well-reasoned proposed policies and a clear guide to minerals development based on sound sustainable development principles. In general, the modified Proposed Submission JMLP has been found to have a wide range of positive effects on the SA objectives, although significant negative and a number of minor negative effects have also been identified (mainly in relation to the potential for adverse effects on the Plan area's landscapes, biodiversity, water resources and flood risk). However, modifications to the Proposed Submission JMLP could increase the likelihood of soft sand mineral extraction within the Plan area, which could reduce reliance on imports of soft sand and consequently reducing the potential for long distance road-based transport of minerals, associated air pollution and greenhouse gas emissions and the significant negative effects these generate.
- 1.10 When the modified Proposed Submission JMLP is considered as a whole, the modified policies it contains work together to reduce the negative effects of minerals development.

Next Steps

- 1.11 The SA Addendum will be available for consultation alongside the proposed modifications to the Proposed Submission Draft JMLP.
- 1.12 Once the JMLP is found to be 'sound', it can be formally adopted by West Sussex County Council and the South Downs National Park Authority. Once the JMLP has been adopted an SA Adoption Statement will be published to report the full plan-making and sustainability appraisal process and the framework for monitoring future effects.

Introduction

- 2.1 In May 2017 West Sussex County Council (WSSCC) and the South Downs National Park Authority (SDNPA) submitted the West Sussex Joint Minerals Local Plan (JMLP) for independent examination by a Planning Inspector appointed by the Secretary of State. An integrated Sustainability Appraisal (SA) and Strategic Environmental Assessment (SEA) Report was submitted alongside the Plan.
- 2.2 Public examination hearings were held between Tuesday 19th and Thursday 28th September 2017. Subsequently, the Authorities, in consultation with the Planning Inspector, prepared a list of proposed modifications to the Plan, which have now been published for consultation.
- 2.3 The proposed Main Modifications take into account:
- the representations submitted on the Proposed Submission Draft West Sussex Joint Minerals Local Plan; and,
 - the matters raised during the examination by the Inspector and participating representors;

The SA addendum focusses on the 'Main Modifications' to the JMLP only. Minor 'additional modifications' have also been prepared to address non substantive matters such as typographical and grammatical errors. These additional modifications are not subject to SA as they do not have the potential to lead to significant effects.

SA Report Addendum

- 2.4 This SA Report Addendum presents an appraisal of the proposed Main Modifications to accompany the consultation on the proposed modifications. In combination with the SA Report submitted alongside the Proposed Submission Local Plan for examination, the addendum represents an appraisal of the JMLP as modified by the proposed modifications, updating the appraisal findings presented within the SA Report which accompanied the examined Proposed Submission JMLP. However, it should be noted that this is an addendum to the SA Report and that the addendum and SA Report should therefore be read together.

Sustainability Appraisal and Strategic Environmental Assessment

- 2.5 The purpose of Sustainability Appraisal is to promote sustainable development by integrating sustainability considerations into the preparation and adoption of plans. Sustainability Appraisal (SA) is a statutory requirement of the Planning and Compulsory Purchase Act 2004. It is designed to ensure that the Plan-making process maximises the contribution that a plan makes to sustainable development and minimises any potential adverse impacts. The SA process appraises the likely social, environmental and economic effects of the strategies and policies within a DPD (in this case the JMLP) from the outset of its development.
- 2.6 Strategic Environmental Assessment (SEA) is also a statutory assessment process, required under the SEA Directive¹, transposed in the UK by the SEA Regulations (Statutory Instrument 2004, No 1633). The SEA Regulations require the formal assessment of plans and programmes which are likely to have significant effects on the environment, and set the framework for future consent of projects requiring Environmental Impact Assessment (EIA)². The purpose of SEA, as defined in Article 1 of the SEA Directive is *'to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans...with a view to promoting sustainable development'*.
- 2.7 SEA and SA are separate processes but have similar aims and objectives. Simply put, SEA focuses only on the likely environmental effects of a plan whilst SA includes a wider range of considerations, extending to social and economic impacts. The Government's Sustainability Appraisal guidance³ outlines how it is possible to satisfy both requirements by undertaking a joint SA/SEA process, and to present an SA report that incorporates the requirements of the SEA Regulations.
- 2.8 Details on how the SA/SEA process has informed the JMLP-making process can be found in the SA Report which accompanied the examined Proposed Submission JMLP.

Reasonable Alternatives

- 2.9 The SA Report which accompanied the examined Proposed Submission JMLP sets out how reasonable alternatives were considered and selected as part of the sustainability appraisal and plan-making process, as required by the Environmental Assessment of Plans and Programmes Regulations (2004).
- 2.10 Given that reasonable alternatives were appraised up to the submission of the proposed JMLP and the proposed modifications prepared in consultation with the Inspector did not identify any further alternatives, the SA addendum does not contain any alternatives.

Reasons for selecting the proposed Main Modifications

- 2.11 The Proposed 'Main Modifications' are shown in a schedule prepared by WSCC and SDNPA. The Authorities' reasons for including each proposed Main Modification to the Proposed Submission Draft Local Plan are included in the schedule.

¹ SEA Directive 2001/42/EC

² Under EU Directives 85/337/EEC and 97/11/EC concerning EIA.

³ DCLG (2014) Planning Practice Guidance. Available at: <http://planningguidance.planningportal.gov.uk/blog/guidance/strategic-environmental-assessment-and-sustainability-appraisal/strategic-environmental-assessment-and-sustainability-appraisal-and-how-does-it-relate-to-strategic-environmental-assessment/>

Appraisal Process

Sustainability Objectives

- 2.12 Each proposed site allocation/draft policy has been assessed against a framework of SA objectives. Development of an SA Framework is not a requirement of the SEA Directive. However, it provides a recognised way in which the likely sustainability effects of a plan can be predicted, described, analysed and compared in a consistent way. Once SA Objectives are developed they provide the basis for testing options and policy formulation of relevant aspects of the JMLP. The objectives derived from this process are the basis for identifying appropriate indicators and targets against which the success of adopted strategies and policies may be judged.
- 2.13 Each SA Objective has a number of subsidiary questions, which help to provide decision-making criteria to use during the identification of potential effects from the JMLP. The SA Framework presented in **Appendix 1** covers the topics required in the SEA Directive. The same SA Framework used to appraise previous iterations of the JMLP has been used to appraise the Main Modifications.
- 2.14 Judgements and scores highlighting the likely effect that each element of the JMLP would have on each SA objective are presented in matrices. **Figure 1.1** sets out the symbols used for each type of effect. **Appendix 2** contains the updated appraisal matrices for the Plan policies significantly affected by the proposed Main Modifications.

Figure 1.1 Key to symbols and colour coding used in the SA

++	The policy is likely to have a significant positive impact on the SA objective(s).
+	The policy is likely to have a minor positive impact on the SA objective(s).
0	The policy is likely to have a negligible or no impact on the SA objective(s).
+/-	The policy is likely to have a mixture of positive and negative impacts on the SA objective(s).
-	The policy is likely to have a minor negative impact on the SA objective(s).
--	The policy is likely to have a significant negative impact on the SA objective(s).
?	It is uncertain what effect the policy will have on the SA objective(s).

Ecosystems Services

- 2.15 While the SEA Regulations and Government guidance on SA do not require the consideration of ecosystem services within the assessment, WSCC and SDNPA are keen to take account of potential impacts on or benefits for ecosystem services in the SA of the JMLP. Therefore, benefits or impacts on particular ecosystem services have also been presented for each site allocation/policy. These have been recorded through the use of letter codes for each of the four main ecosystem services groups, as shown in **Figure 1.2**, along with symbols indicating whether the effect will be positive (+), negative (-) or uncertain (?).

Figure 1.2: Key to ecosystem services symbols used in the SA of the Draft JMLP

P	Provisioning ecosystem services
C	Cultural ecosystem services
R	Regulating ecosystem services
S	Supporting ecosystem services

Review of Plans, Policies and Programmes

- 2.16 The JMLP is not being prepared in isolation, being greatly influenced by other plans, policies and programmes and by broader sustainability objectives. It needs to be consistent with international and national guidance and strategic planning policies and should contribute to the goals of a wide range of other programmes and plans, such as the National Park Management Plan and emerging Local Plan and those relating to social policy, culture and heritage. It must also conform to environmental protection legislation and the sustainability objectives established at an international, national and regional level.
- 2.17 A review was undertaken of the plans, policies and programmes that are relevant to the JMLP to understand how they influence the preparation of the JMLP and the SA. An updated plans, policies and programmes review has been undertaken to determine if there have been any significant developments since the previous iteration of SA Report had been prepared.
- 2.18 No significant policy developments of direct relevance to the JMLP were found.

Baseline Information

- 2.19 Baseline information provides the basis for identifying trends, predicting the likely effects of the JMLP and monitoring its outcomes. The baseline data focuses on key indicators which are readily available and can be updated to illustrate the environmental, social and economic issues.
- 2.20 A review of the baseline information used to provide the context for assessing the sustainability of the JMLP prior to the proposed modification was undertaken to determine whether any significant changes have occurred. Minor changes were recorded in relation to socio-economic trends, the quantity of environmental and cultural assets in the County, including the South Downs National Park. In addition, the updated minerals data contained within the Authorities' latest Joint Local Aggregates Assessment (2017) were reviewed and the increases in extraction rates since the 2016 report were noted. However, no changes to the baseline were considered to be significant enough as to change the overall trends and key sustainability issues identified in the previous version of the SA Report.

Approach to the Appraisal of the Main Modifications

- 2.21 LUC has included a schedule of the Main Modifications to previously appraised elements of the JMLP and added a column to record the SA implications (including Ecosystem Services effects) of each Main Modification. The SA implications have been considered based on whether each Main Modification changes the SA findings identified in the previous iteration of SA Report submitted for examination alongside the Proposed Submission Draft Local Plan. The schedule showing the SA implications of the Main Modifications is presented in **Table 1.1** below. Note that the schedule considers the sustainability effects of implementing the full modified vision, strategic objective or policy, not just the Main Modification on its own.
- 2.22 Along with the Vision, the following strategic objectives have been amended or removed:
- Strategic Objective 1 – additional text
 - Strategic Objective 3 – removing and adding text
 - Strategic Objective 4 – removed
- 2.23 The following policies have been amended:
- Policy M1: Sharp Sand & Gravel - amended text
 - Policy M2: Soft Sand - text deletion and replacement
 - Policy M3: Silica Sand - additional criterion added

- Policy M5: Clay - amended text
- Policy M7a: Hydrocarbon development not involving hydraulic fracturing - amended text
- Policy M7b: Mineral processing and ancillary activities at mineral sites - amended text
- Policy M8: Mineral processing and ancillary activities at mineral sites – amended text
- Policy M9: Safeguarding Minerals - amended text
- Policy M10: Safeguarding Minerals Infrastructure - references to inset maps replaced with Policies Map
- Policy M11: Strategic Minerals Site Allocations - deletion of Ham Farm, soft sand extraction site allocation
- Policy M13: Protected Landscape - amended text
- Policy M14: Historic Environment - amended text
- Policy M17: Biodiversity and Geodiversity - amended text
- Policy M19: Flood Risk Management - amended text
- Policy M22: Cumulative Impact - amended text
- Policy M23: Design and Operation of Mineral Developments - amended text

Table 1.1: JMLP Modifications and whether appraised in this SA

Main Modification (MM) Number	Proposed Main Modifications to Vision, Strategic Objectives and Policies in Local Plan	Do the Main Modifications represent a significant change that requires appraisal in the SA?
Modifications to Vision & Strategic Objectives		
MM5	Vision (paragraph 6) addition of the words ' <u>delivers net gains to natural capital</u> '.	Yes – revision ensures that mineral operations deliver 'net gains in natural capital'.
MM6	Strategic Objective 1: SO1 amended to include: "To promote the prudent and efficient production and use of minerals <u>to ensure a steady and adequate supply</u> , having regard to the market demand and constraints on supply in the Plan area."	It is not considered that this Main Modification will change the overall findings of the SA which already reports the positive effects of meeting mineral needs in the Plan Area.
N/A	Strategic Objective 2	No change.
MM9	Strategic Objective 3: amended to include: "To make provision for soft sand, <u>silica sand and sharp sand and gravel</u> , to meet the needs of West Sussex, from outside the South Downs National Park, where possible; and only <u>allow development within the national park in exceptional circumstances and in the public interest</u> make provision for a declining amount of extraction within the SDNP over the Plan period.	Yes – revision increases the potential for mineral extraction within the SDNP.
MM10	Strategic Objective 4 deleted: " To protect the South Downs National Park by only providing for silica sand from within it in exceptional circumstances and when in the public interest. "	It is not considered that the deletion of SO4 needs to be appraised in isolation given the fact that the contents of the now deleted SO4 have been incorporated into the revised SO3 (MM9) and will be reappraised there. Overall, the inclusion of the same text in SO4 into SO3, results in no material change to the Local Plan.

Main Modification (MM) Number	Proposed Main Modifications to Vision, Strategic Objectives and Policies in Local Plan	Do the Main Modifications represent a significant change that requires appraisal in the SA?
N/A	Strategic Objective 5	No change.
N/A	Strategic Objective 6	No change.
N/A	Strategic Objective 7	No change.
N/A	Strategic Objective 8	No change.
N/A	Strategic Objective 9	No change.
N/A	Strategic Objective 10	No change.
N/A	Strategic Objective 11	No change.
N/A	Strategic Objective 12	No change.
N/A	Strategic Objective 13	No change.
N/A	Strategic Objective 14	No change.
Main Modifications to Proposed Submission Draft JMLP Policies		
MM19	Policy M1 amended to read as follows: “(a) the proposal is needed to ensure a steady and adequate supply and to maintain a 7 year landbank, as set out in the latest Local Aggregates Assessment ; and”	It is not considered that this Main Modification will change the overall findings of the SA which already reports the positive effects of meeting mineral needs in the Plan Area.
MM22	Policy M2: text deletion and replacement with: “ Proposals for land won soft sand extraction, including extensions of time and physical extensions to existing sites, will be permitted providing that the proposal is needed to meet the shortfall of soft sand of 2.36 million tonnes (or as calculated in the most	Yes – revision increases the potential for soft sand extraction across the plan area, including in the SDNP.

Main Modification (MM) Number	Proposed Main Modifications to Vision, Strategic Objectives and Policies in Local Plan	Do the Main Modifications represent a significant change that requires appraisal in the SA?
	<p><u>recent Local Aggregates Assessment) over the Plan period and maintain at least a seven year landbank.</u></p> <p><u>The Authorities will commence a single issue soft sand review of this Plan within 6 months of the adoption of this Plan. The Plan Review will be submitted for examination within two years from the commencement of the review and address the shortfall of soft sand at that time (as calculated in the most recent Local Aggregates Assessment). In the event that the reviewed Plan is not submitted within two years then the Plan, in terms of soft sand, will be deemed to be out-of-date.</u></p>	
MM30	Policy M3: additional criterion added " <u>(b) It is demonstrated that the mineral resources will be used efficiently so that high-grade silica sand deposits are reserved for industrial end uses;</u>	Yes – revision increases the potential for high-grade silica sand will be used more efficiently.
N/A	Policy M4	No change.
MM38	Policy M5 amended to read as follows: "Proposals will be permitted for the extraction of brick clay provided that: (i) they would help maintain a landbank <u>stock of permitted reserves</u> of at least 25 years of permitted clay reserves for individual brickworks; and"	It is not considered that this Main Modification will change the overall findings of the SA.
N/A	Policy M6	No change.
MM41	Policy M7a amended to read as follows: "(a-ii)the site selected is <u>represents an acceptable environmental option in comparison to other deliverable alternative sites</u> the least sensitive, deliverable location from which the target reservoir can be accessed, taking into account impacts from on-site activities and off-site activities including HGV movements; (a-iii) any unacceptable impacts including (but not limited to) noise, dust, visual intrusion, transport, and lighting, on both the natural, <u>historic</u> and built environment and local community, including air quality and the water environment, can be minimised, and/or mitigated, to an acceptable level;	It is not considered that this Main Modification will change the overall findings of the SA.

Main Modification (MM) Number	Proposed Main Modifications to Vision, Strategic Objectives and Policies in Local Plan	Do the Main Modifications represent a significant change that requires appraisal in the SA?
	<p>(a-iv) restoration and aftercare of the site to a high quality standard would take place in accordance with Policy M24 whether or not oil or gas is found;</p> <p>(b-iii) the restoration and aftercare of the site to a high quality standard would take place in accordance with Policy M24;</p> <p>(b-iv) No unacceptable impacts would arise from the on-site storage or treatment of hazardous substances and/or contaminated fluids above or below ground.</p> <p>(c) Proposals for exploration, appraisal and production of oil and gas, not involving hydraulic fracturing, will be permitted underneath or in close proximity to designated areas, assets and habitats⁴, which demonstrate that special care will be taken to avoid harming the these areas and the special qualities of the South Downs National Park and/or setting and value of the Chichester Harbour AONB, High Weald AONB and other designated areas, assets and habitats.”</p>	
MM42	<p>Policy M7b amended to read as follows:</p> <p>“(a-i) any surface development is located outside the following areas:</p> <ul style="list-style-type: none"> i. South Downs National Park ii. Chichester Harbour AONB iii. High Weald AONB iv. Groundwater Source Protection Zone 1; v. Sites of Special Scientific Interest (SSSI) iv. Any other area given specific protection from hydraulic fracturing in legislation <p>(a-ii)the site selected is <u>represents an acceptable environmental option in comparison to other deliverable alternative sites</u> the least sensitive, deliverable location from which the target reservoir can be accessed, taking into account impacts</p>	It is not considered that this Main Modification will change the overall findings of the SA.

⁴ Designated areas and habitats include all areas and habitats designated and protected by international and national legislation including South Downs National Park, AONBs, SSSIs, SAC, SPAs, Ramsar sites, NNRs, heritage assets, sites identified under the Nature Conservation Review (NCR) or Geological Conservation Review (GCR), LNRs, ~~SNCIs~~ **LWS** and **RIGSLGS**, Ancient Woodland, Conservation Areas, Scheduled Monuments, Registered Parks and Gardens of Special Historic Interest.

Main Modification (MM) Number	Proposed Main Modifications to Vision, Strategic Objectives and Policies in Local Plan	Do the Main Modifications represent a significant change that requires appraisal in the SA?
	<p>from on-site activities and off-site activities including HGV movements;</p> <p>(a-iii) any unacceptable impacts including (but not limited to) noise, dust, visual intrusion, transport, and lighting, on both the natural, historic and built environment and local community, including air quality and the water environment, can be minimised, and/or mitigated, to an acceptable level;</p> <p>(a-iv) restoration and aftercare of the site to a high quality standard would take place in accordance with Policy M24 whether or not oil or gas is found;</p> <p>(b-iii) the restoration and aftercare of the site to a high quality standard would take place in accordance with Policy M24;</p> <p>(b-iv) No unacceptable impacts would arise from the on-site storage or treatment of hazardous substances and/or contaminated fluids above or below ground.</p> <p>(c) Proposals for exploration, appraisal and production of oil and gas, involving hydraulic fracturing, will be permitted underneath or in close proximity to designated areas, assets and habitats⁵, which will be permitted provided that there will be no demonstrate that special care will be taken to avoid unacceptable harming to the these areas and the special qualities of the South Downs National Park and/or the setting and intrinsic character and value of the Chichester Harbour and High Weald AONBs. Hydraulic fracturing will not be permitted above 1,200 metres underneath National Parks, Areas of Outstanding Natural Beauty, World Heritage Sites, and areas covered by Groundwater Source Protection Zone 1.</p> <p>(d) There is a presumption against Proposals for hydrocarbon development involving hydraulic fracturing in Groundwater Source Protection Zones 1, 2 and 3 will not be permitted unless it is can be demonstrated that there will be no unacceptable impacts on groundwater. Hydraulic fracturing will not be permitted above 1,200</p>	

⁵ Designated areas and habitats include all areas and habitats designated and protected by international and national legislation including South Downs National Park, AONBs, SSSIs, SAC, SPAs, Ramsar sites, NNRs, heritage assets, sites identified under the Nature Conservation Review (NCR) or Geological Conservation Review (GCR), LNRs, ~~SNCs~~ **LWS** and **RGS/LGS**, Ancient Woodland, Conservation Areas, Scheduled Monuments, Registered Parks and Gardens of Special Historic Interest.

Main Modification (MM) Number	Proposed Main Modifications to Vision, Strategic Objectives and Policies in Local Plan	Do the Main Modifications represent a significant change that requires appraisal in the SA?
	<u>metres in Groundwater Protection Zone 1.</u>	
MM44	<p>Policy M8 amended to read as follows:</p> <p>"Mineral processing and ancillary activities at mineral sites</p> <p>Proposals for primary and/or secondary mineral processing and/or ancillary activities will be permitted provided that:</p> <p>(a) the proposed operations:</p> <p>(i) are linked to the existing operations on the site;</p> <p>(ii) will remain ancillary to the principal development at the site;</p> <p>(iii) are of a duration that is tied to that of any primary extraction operation.</p> <p>(b) the overall restoration scheme and progressive restoration of the site is not unduly delayed or prolonged or in some other way jeopardised."</p>	It is not considered that this Modification will change the overall findings of the SA.
MM48	<p>Policy M9 amended to read as follows:</p> <p>(b) Soft sand (including potential silica sand), sharp sand and gravel, brick-making clay, building stone resources and chalk reserves are safeguarded against sterilisation. Proposals for non-mineral development within the Minerals Safeguarded Areas (as shown on the Policies Maps in Appendix E) will not be permitted. unless:...</p>	It is not considered that this Modification will change the overall findings of the SA.
MM49	Policy M10 clause (c) – references to inset maps replaced with Policies Map and revised numbering.	It is not considered that this Main Modification will change the overall findings of the SA.
MM50	Policy M10 clause (e) – references to inset maps replaced with Policies Map and revised numbering.	It is not considered that this Main Modification will change the overall findings of the SA.
MM55	Policy M11: deletion of Ham Farm, soft sand extraction site.	Yes – deletion reduces potential for soft sand mineral extraction at Ham Farm, Steyning.
N/A	Policy M12	No change.

Main Modification (MM) Number	Proposed Main Modifications to Vision, Strategic Objectives and Policies in Local Plan	Do the Main Modifications represent a significant change that requires appraisal in the SA?
MM61	<p>Policy M13 amended to read as follows:</p> <p>(b) Proposals for mineral development located outside protected landscapes will be permitted provided that they do not undermine the objectives purposes of the designation.</p>	It is not considered that this Modification will change the overall findings of the SA.
MM62	<p>Policy M14 amended to read as follows:</p> <p>“(a) known heritage assets, and their settings, features of historic or archaeological importance are conserved and, where possible, enhanced, in a manner appropriate to their significance, unless there are no alternative solutions and there are overriding reasons which outweigh the need to safeguard the value of the heritage assets sites or features;</p> <p>(b) they would not adversely affect currently unknown heritage assets with significant archaeological interest; and</p> <p>(c) (e) where appropriate, the further investigation and recording of any heritage assets to be lost (in whole or in part) is undertaken and the results made publicly available.</p>	It is not considered that this Main Modification will change the overall findings of the SA.
N/A	Policy M15	No change.
N/A	Policy M16	No change.
MM63	<p>Policy M17 amended to read as follows:</p> <p>“(a) The development will: (i) avoid There is no significant harm to wildlife species and habitats, or ii. where significant harm cannot be wholly or partially avoided, ensure that the harm is effectively mitigated where it cannot be avoided, or (iii) (as a last resort) where there is still significant residual harm, ensure there is suitable compensation where there is still significant residual harm; for that harm;</p> <p>(b) the integrity of areas or sites of international biodiversity or geological conservation importance are not adversely affected unless:</p> <p>(i) there are no suitable alternatives; and</p> <p>(ii) imperative reasons of overriding public interest have been demonstrated; and</p>	Significant positive effects are already acknowledged for Policy M17 against SA Objectives 1 (Health & Well Being), 6 (Biodiversity) and 7 (Geodiversity) in acknowledgment of the provisions of the original policy. Although this MM does increase the potential for positive effects against these objectives, it is not considered that this Main Modification will change the overall findings of the SA.

Main Modification (MM) Number	Proposed Main Modifications to Vision, Strategic Objectives and Policies in Local Plan	Do the Main Modifications represent a significant change that requires appraisal in the SA?
	<p><u>(iii) there is adequate compensation to ensure the overall integrity of the site and the wider network of sites is maintained.</u></p> <p>(c) there are no unacceptable impacts on areas or sites of international or national biodiversity or geological conservation importance unless the benefits of the development clearly outweigh both the impact on the objectives of the designation <u>features of interest</u>, and on the wider network of such designated areas or sites</p> <p>(d) there are no unacceptable impacts on areas, sites or features of regional or local biodiversity or geological conservation importance unless the benefits of the development clearly outweigh <u>both</u> the impact on the objectives of the designation <u>features of interest and on the wider network of such designated areas or sites;</u></p> <p><u>(e) there is no loss or deterioration of irreplaceable habitats, including Ancient Woodland and aged or veteran trees, unless the benefits of the development clearly outweigh the loss;</u></p> <p>(f) where appropriate, <u>where possible, there are net gains in biodiversity, including,</u> the creation, enhancement, and management of habitats, ecological networks, geodiversity and ecosystem services shall be secured consistent with wider environmental objectives, including Biodiversity Opportunity Areas and the South Downs Way Ahead Nature Improvement Area; and</p> <p>(g) where necessary, the investigation, evaluation, and recording of important sites, <u>areas</u> and features is undertaken and, where appropriate, representative features <u>examples</u> are preserved.</p>	
N/A	Policy M18	No change.
MM66	Policy M19 amended to read as follows: <u>(b) Proposals for minerals development in 'areas at risk of flooding', taking account of climate change,</u> will not be permitted unless they pass the Sequential Test and, where applicable, the Exception Test set out in national policy.	It is not considered that this Main Modification will change the overall findings of the SA.
N/A	Policy M20	No change.
N/A	Policy M21	No change.
MM69	Policy M22 amended to read as follows:	It is not considered that this Main

Main Modification (MM) Number	Proposed Main Modifications to Vision, Strategic Objectives and Policies in Local Plan	Do the Main Modifications represent a significant change that requires appraisal in the SA?
	<p>"Proposals for minerals development, including the intensification of use, will be permitted provided that an unreasonable level of disturbance to the environment and/or to residents, businesses and visitors will not result, from minerals other development either individually or as a cumulative effect (simultaneously and/or successively) alongside other development and allocations. sites operating simultaneously and/or successively. Planning conditions may be used to co-ordinate working, thereby reducing the cumulative impact."</p>	Modification will change the overall findings of the SA.
MM71	<p>Policy M23 amended to read as follows:</p> <p>"Proposals for minerals development, including ancillary development, will be permitted provided that, where appropriate, the scale, form, and layout (including landscaping) and operations take into account the need to:"</p>	It is not considered that this Main Modification will change the overall findings of the SA.
MM72	<p>Policy M23 amended to read as follows:</p> <p><u>"Proposals for, mineral extraction / processing, and associated activities must be accompanied by a working programme for the proposed operation.</u> Proposals to vary conditions of existing consents to extend the time limit for working and/or final restoration of sites should must demonstrate the need for the development and its acceptability in terms of the other relevant policies of this Plan."</p>	It is not considered that this Modification will change the overall findings of the SA.
N/A	Policy M24	No change.
N/A	Policy M25	No change.
N/A	Policy M26	No change.

Summary of Appraisal Findings

- 2.24 Most of the changes in the Main Modifications do not represent a significant change to the Proposed Submission JMLP as they are generally minor in nature and are intended either to correct factual errors or to provide improved clarification. A few of the Main Modifications may have additional positive effects, but the overall SA score from the previous SA reports has not changed.

Vision modifications

- 2.25 Paragraph 6 of the Vision included in the Proposed Submission Draft JMLP has been amended to include wording that requires the JMLP to deliver net gains to natural capital. Natural capital includes the full range of natural assets within the West Sussex and the South Downs National Park, including their natural landscapes, biodiversity, geodiversity, soil quality, air quality and water quality and quantity. Consequently, this revision has the potential to generate significant positive effects against SA objectives 5, 6, 9, 10 and 11. Cumulatively, these net gains are likely to generate significant positive effects on the health and well being of local residents (SA objective 1). The previous iteration of the Vision was appraised as having minor positive effects (+) against SA objectives 1 (health and well being) and 10 (air quality); these effects have now been changes to significant positive effects (++). Although a minor positive effect is recorded against SA objective 7 (geodiversity), it is not considered that the geodiversity of the District can be improved. Therefore, this positive effect is retained. The previous iteration of the Vision was appraised as having negligible effects (0) against SA objectives 9 (soil) and 11 (water quality and quantity); these effects have now been change to minor positive effects (+).

Strategic objective modifications

- 2.26 Modifications were made to three of the 14 strategic objectives in the Proposed Submission Draft JMLP. The modifications to strategic objective 1 were not considered to change the overall appraisal of this objective in the SA. Similarly, the deletion of strategic objective 4 was not considered to affect the overall effects of the JMLP given the fact that the contents of the now deleted strategic objective 4 have now been incorporated into the revised strategic objective 3 (MM9) and are reappraised there.
- 2.27 Strategic objective 3 in the JMLP has been amended to allow mineral extraction/development in the South Downs National Park in exceptional circumstances and in the public interest, as opposed to the previous iteration of the strategic objective which made provision for a declining amount of mineral extraction within the national park over the Plan period. This main modification has the potential to result in a greater amount of mineral extraction / development in the national park over the Plan period. Consequently, the following five effects changes were generated as a result of MM9:
- SA objective 4 (mineral supply) changed from a mixed minor positive / minor negative (+/-) effect to a mixed significant positive / minor negative (++) effect in acknowledgement of the fact that MM9 increases the likelihood of a greater level of mineral extraction within the Plan area over the Plan period helping to increase the level of supply and reduce the shortfall in soft sand supply over the Plan period.
 - SA objective 5 (landscape) changed from a mixed minor positive / minor negative (+/-) effect to mixed minor positive / significant negative (+/--) effect in acknowledgement of the fact that MM9 increases the likelihood of a greater level of soft sand extraction within the Plan area over the Plan period, including in the SDNP, increasing the likelihood of significant adverse effects on county and national park's natural and cultural landscapes.
 - SA objective 6 (biodiversity) changed from a mixed minor positive / minor negative (+/-) effect to mixed minor positive / significant negative (+/--) effect in acknowledgement of the fact that MM9 increases the likelihood of a greater level of soft sand extraction within the Plan area over the Plan period, including in the SDNP, increasing the likelihood of significant adverse effects on county and national park's protected species and habitats.

- SA objective 7 (geodiversity) changed from a mixed minor positive / minor negative (+/-) effect to mixed minor positive / significant negative (+/--) effect in acknowledgement of the fact that MM9 increases the likelihood of a greater level of soft sand extraction within the Plan area over the Plan period, including in the SDNP where geology makes a significant contribution to the special qualities of the area.
- SA objective 8 (historic environment) changed from a mixed minor positive / minor negative (+/-) effect to mixed minor positive / significant negative (+/--) effect in acknowledgement of the fact that MM9 increases the likelihood of a greater level of soft sand extraction within the Plan area over the Plan period, including in the SDNP, increasing the likelihood of significant adverse effects on county and national park's historic assets.

2.28 It should also be noted that the greater potential for mineral extraction within the SDNP increases the likelihood of importing less soft sand from outside the Plan area, helping reduce traffic and associated poor air quality. However, this has not resulted in changes to the mixed minor negative / minor positive effects recorded for Strategic Objective 3 against SA objectives 10 (Air Quality) and 13 (Transport).

Policy modifications

- 2.29 The Main Modifications were made to 16 of the 26 policies within the Proposed Submission Draft JMLP. However, the Main Modifications to 13 of the 16 modified policies (M1, M5, M7a, M7b, M8, M9, M10, M13, M14, M17, M19, M22 and M23) were not considered to be significant enough to change the findings from the SA of the previous iteration of the policies in the Submission JMLP.
- 2.30 The Main Modifications associated with policies M2, M3 and M11 were considered to be significant enough to result in changes in effects.
- 2.31 Eight of the effects recorded through the SA of the Proposed Submission Draft version of Policy M2: Soft Sand have been changed as a result of Main Modifications to Policy M2. Policy M2 has been rewritten to allow proposals for soft sand extraction that contribute towards meeting the shortfall in soft sand need in the Plan area over the Plan period, removing the requirement in the previous Proposed Submission Draft version of the Policy which required the sites to be located outside of the SDNP and be well-related to the Rail and Water or Lorry Route Network.⁶ In addition, the rewritten policy commits the Authorities to commence a single issue soft sand review of the JMLP within 6 months of the adoption of the JMLP. The Plan Review will address the shortfall of soft sand at that time (as calculated in the most recent Local Aggregates Assessment). These revisions to Policy M2 increase the likelihood of soft sand mineral extraction across the Plan area (including the SDNP) until such time as the Soft Sand Review can be completed and the soft sand allocations defined. The effects changes are as follows:
- SA objective 3 (economy) changed from a minor positive (+) effect to a significant positive (++) effect in acknowledgement of the fact that MM22 increases the likelihood of a greater level of soft sand extraction within the Plan area over the Plan period helping to maintain and enhance the vitality and viability of the local economy.
 - SA objective 4 (mineral supply) changed from a minor positive (+) effect to a significant positive (++) effect in acknowledgement of the fact that MM22 increases the likelihood of a greater level of soft sand extraction within the Plan area over the Plan period helping to increase the level of supply and reduce the shortfall in soft sand supply over the Plan period.
 - SA objective 5 (landscape) changed from a mixed minor positive / minor negative (+/-?) effect with uncertainty to mixed minor positive / significant negative (+/--?) effect with uncertainty in acknowledgement of the fact that MM22 increases the likelihood of a greater level of soft sand extraction within the Plan area over the Plan period, including in the SDNP, increasing the likelihood of significant adverse effects on county and national park's natural and cultural landscapes.

⁶ Policy M13 still requires that applications for development in the SDNP meet the national exceptional circumstances and demonstrate they are in the public interest. Policy M20 still requires that applications for development consider alternatives modes of transportation to the Lorry Route Network.

- SA objective 6 (biodiversity) changed from a mixed minor positive / minor negative (+/-?) effect with uncertainty to mixed minor positive / significant negative (+/--?) effect with uncertainty in acknowledgement of the fact that MM22 increases the likelihood of a greater level of soft sand extraction within the Plan area over the Plan period, including in the SDNP, increasing the likelihood of significant adverse effects on county and national park's protected species and habitats.
- SA objective 7 (geodiversity) changed from a mixed minor positive / minor negative (+/-?) effect with uncertainty to mixed minor positive / significant negative (+/--?) effect with uncertainty in acknowledgement of the fact that MM22 increases the likelihood of a greater level of soft sand extraction within the Plan area over the Plan period, including in the SDNP where geology makes a significant contribution to the special qualities of the area.
- SA objective 8 (historic environment) changed from a mixed minor positive / minor negative (+/-?) effect with uncertainty to mixed minor positive / significant negative (+/--?) effect with uncertainty in acknowledgement of the fact that MM22 increases the likelihood of a greater level of soft sand extraction within the Plan area over the Plan period, including in the SDNP, increasing the likelihood of significant adverse effects on county and national park's historic assets.
- SA objective 10 (air quality) changed from a significant negative (--?) effect with uncertainty to a minor negative effect with uncertainty in acknowledgement of the fact that MM22 increases the likelihood of a greater level of soft sand extraction within the Plan area over the Plan period. Meeting more of the Plan area's soft sand needs within the Plan area will reduce the need to import soft sand from elsewhere, helping to reduce traffic and associated poor air quality.
- SA objective 13 (transport) changed from a significant negative (--?) effect with uncertainty to a minor negative effect with uncertainty in acknowledgement of the fact that MM22 increases the likelihood of a greater level of soft sand extraction within the Plan area over the Plan period. Meeting more of the Plan area's soft sand needs within the Plan area will reduce the need to import soft sand from elsewhere, helping to reduce traffic congestion in the area.

2.32 While MM22 does increase the likelihood of the effects recorded above, it should be acknowledged that the national requirement to demonstrate the exceptional circumstances needed to develop mineral sites in the national parks, as well as the requirement to ensure sites are well-related to the Rail and Water or Lorry Route Network, are still required by other unchanged elements of the JMLP.

2.33 The mixed minor positive / minor negative (+/-) effect recorded against SA objective 4 (mineral supply) for the Proposed Submission Draft version of Policy M3: Silica Sand was changed to a mixed significant positive / minor negative (++/-) effect. This was due to the fact that MM30 added an additional criterion to Policy M3 requiring that new applications for silica sand extraction clearly demonstrate that the resource will be used efficiently so that high-grade silica sand deposits are reserved for industrial end uses.

2.34 Finally, five minor effect changes were made as a result of the Main Modifications to Policy M11: Strategic Minerals Site Allocations. The Proposed Submission Draft version of Policy M11 included two site allocations for mineral extraction – Ham Farm and West Hoathly Brickworks – resulting in various mixed effects against a number of environmental objectives where environmental effects differed between the two sites. MM55 removed the Ham Farm allocation. Consequently, all the effects recorded as a result of sensitivities in and around Ham Farm have been removed, leaving only the effects generated by the remaining mineral extraction allocation at West Hoathly Brickworks. The environmental effects changes are as follows:

- SA objective 7 (geodiversity) changed from a mixed negligible / minor negative (0/-) effect to a minor negative (-) effect.
- SA objective 10 (air quality) changed from a mixed negligible / minor negative (0/-) effect to a negligible (0) effect.
- SA objective 11 (water quality) changed from a mixed negligible / minor negative (0/-) effect to a negligible (0) effect.

- SA objective 12 (flooding) changed from a mixed negligible / minor negative (0/-) effect to a negligible (0) effect.
- SA objective 13 (road transport) changed from a mixed negligible / minor negative (0/-) effect to a mixed minor positive / minor negative (+/-) effect.

2.35 These conclusions hold true for the modified Proposed Submission Plan as a whole.

2.36 The SA matrices prepared during the appraisal of the Strategic Policies and Development Management Policies within the Proposed Submission Draft JMLP have been updated. **Appendix 2** contains the updated appraisal matrices for the Plan policies significantly affected by the proposed Main Modifications, namely Policies M2, M3 and M11.

Conclusions

2.37 The modified Proposed Submission JMLP provides well-reasoned proposed policies and a clear guide to minerals development based on sound sustainable development principles. In general, the modified Proposed Submission JMLP has been found to have a wide range of positive effects on the SA objectives, although significant negative and a number of minor negative effects have also been identified (mainly in relation to the potential for adverse effects on the Plan area's landscapes, biodiversity, water resources and flood risk). The Main Modifications to the Proposed Submission JMLP have increased scope for soft sand mineral extraction within the Plan area, helping to reduce reliance on imports of soft sand and consequently reducing the potential for long distance road-based transport of minerals, associated air pollution and greenhouse gas emissions and the significant negative effects these generate.

2.38 When the modified Proposed Submission JMLP is considered as a whole, the modified policies it contains work together to reduce the negative effects of minerals development.

Monitoring

2.39 The SA Report which accompanied the examined Proposed Submission JMLP sets out indicators for monitoring the effects identified through the appraisal of the JMLP. Having reviewed and appraised all the proposed modifications to the JMLP it is considered that the same monitoring indicators apply.

Next Steps

2.40 The SA Addendum will be available for consultation alongside the proposed modifications to the Proposed Submission Draft JMLP.

2.41 Following the consultation on the proposed modifications to the Proposed Submission JMLP and the SA Addendum, the Inspector will consider the representations raised and report on the modified JMLP's soundness.

2.42 Once the JMLP is found to be 'sound', it can be formally adopted by West Sussex County Council and the South Downs National Park Authority. Once the JMLP has been adopted, an SA Adoption Statement will be published to report the full plan-making and sustainability appraisal process and the framework for monitoring future effects.

LUC

December 2017

Appendix 1

SA Framework

Table A1: Sustainability Appraisal Framework for the JMLP

Sustainability Appraisal Objectives and Subsidiary questions

Social

1. To protect and, where possible, enhance health, well-being and amenity of residents, neighbouring land uses and visitors to West Sussex.

Would the option/policy/site:

- Have harmful effects on human health and be sited close to sensitive receptor(s)?
- Affect amenity through dust and noise (e.g. through blasting/traffic) or vibration?
- Affect road safety?
- Have the potential to create land use conflict issues?
- Provide opportunities for improvements to health, well-being and amenity through enhancements?
- Create cumulative effects in terms of adverse impacts on environmental quality, social cohesion and inclusion or economic potential?

2. To protect and, where possible, enhance recreation opportunities for all, including access to and enjoyment of the countryside, open spaces and Public Rights of Way (PROW).

Would the option/policy/site:

- Be likely to affect the amenity of users on PROW, recreation areas/open spaces or other users of the countryside in the area, or affect views and/or tranquillity of these areas?
- Provide restoration opportunities for recreation?

Economic

3. To protect, sustain, and where possible, enhance the vitality and viability of the local economy.

Would the option/policy/site:

- Help the local economy, for example by generating new jobs, and how might implementing the policy impact on local businesses?
- Encourage the provision of more locally based skills and facilities?
- Affect tourists' decisions to visit an area?
- Compromise safe operating of commercial aerodromes (i.e. be near to an airfield and through restoration likely to attract large numbers

Sustainability Appraisal Objectives and Subsidiary questions

of birds and increase the chance of bird strike)?

4. To conserve minerals resources from inappropriate development whilst providing for the supply of aggregates and other minerals sufficient for the needs of society.

Would the option/policy/site:

- Reduce the extraction of virgin materials?
- Avoid sterilising mineral resources by preventing unnecessary development on or near to mineral resources?
- Require prior extraction if development that would sterilise mineral resources were to go ahead?

Environmental

5. To protect, and where possible, enhance the landscape, local distinctiveness and landscape character in West Sussex.

Would the option/policy/site:

- Help enable the protection of landscape (particularly AONBs and SDNP) and townscape character?
- Contribute to the restoration of minerals sites, maximising after-use potential for beneficial use (e.g. agriculture, nature conservation, recreation, amenity, water storage, flood management) as appropriate?
- Facilitate the supply and use of local building materials to protect local character?
- Affect dark skies from light pollution?
- Protect and enhance the tranquillity of West Sussex including the SDNP and AONBs (e.g. by minimising noise arising from minerals facilities and transport)?
- Encourage landscape improvement?

6. To protect, conserve and enhance biodiversity including natural habitats and protected species.

Would the option/policy/site:

- Have an adverse effect on biodiversity, including the protection of designated sites (e.g. Special Protection Areas, Special Areas of Conservation, Ramsars, Sites of Special Scientific Interest, National Nature Reserves and Ancient Woodland)?
- Have an adverse effect on locally designated sites which form part of a network of ecosystems?
- Have an adverse effect on wider habitat networks (including BAP habitats) and land used by protected species?
- Provide opportunities for enhancing biodiversity and achieving net gains as part of the development or restoration?

Sustainability Appraisal Objectives and Subsidiary questions

7. To protect and conserve geodiversity.

Would the option/policy/site:

- Have an adverse effect on geodiversity, including the protection of geological features or sites (e.g. Sites of Special Scientific Interest, and Local Geological Sites, formally RIGS)?
- Create new geological exposures of education interest?
- Provide opportunities for geodiversity as part of the development or restoration?

8. To conserve, and where possible, enhance the historic environment.

Would the option/policy/site:

- Help enable the conservation of features of archaeological and other historic interest in the county, such as conservation areas, listed buildings, scheduled ancient monuments and areas of archaeological potential?

9. To protect and, where possible, enhance soil quality, and minimise the loss of best and most versatile land.

Would the option/policy/site:

- Minimise the loss of the best and most versatile agricultural land?
- Improve the soil quality?

10. To reduce air pollution and to protect and, where possible, enhance air quality.

Would the option/policy/site:

- Lead to a change in local air quality?
- Cause further deterioration of air quality in Air Quality Management Areas?
- Cause an increase in deposition of pollutants on sensitive designated nature conservation sites?

11. To protect and, where possible, enhance water resources, water quality and the function of the water environment.

Would the option/policy/site:

- Affect the quality of surface and/or groundwater bodies?
- Interfere with the flows of water bodies?

Sustainability Appraisal Objectives and Subsidiary questions

12. To reduce vulnerability to flooding, in particular preventing inappropriate development in the floodplain.

Would the option/policy/site:

- Affect the likelihood of flooding or lead to inappropriate development in a flood risk zone (e.g. Flood Zones 2 or 3) contrary to national policy on flooding?
- Impact on flood defences?
- Provide opportunities for flood alleviation/mitigation?

13. To minimise transport of minerals by roads. Where road use is necessary, to reduce the impact by promoting use of the Lorry Route Network.

Would the option/policy/site:

- Have the potential for rail or water-based access to and from mineral sites?
- Lead to the production of traffic-derived pollutants, including CO₂, NO₂ and PM₁₀ due to road transport to and from minerals sites?
- Optimise the use of the Lorry Route Network and reduce the use of rural roads thus reducing the disruption and pollutants caused by HGVs?

14. To reduce the emissions of greenhouse gases.

Would the policy/option/site:

- Lead to the production of carbon dioxide or other greenhouse gases from on-site vehicles and machinery?
- Reductions in transport distances by supporting the location of mineral extraction sites in proximity to surrounding markets for minerals and to serve local needs?
- Encourage the use of renewable or lower carbon energy sources on-site (e.g. through the use of small on-site renewable energy sources, i.e. wind turbines, solar panels)?

Appendix 2

SA Matrices for Policies affected by Main Modifications

Policy M2 – Soft Sand

SA Objective	SA Score	Will achievement of the SA objective have a benefit or impact on particular ecosystem services?	Justification
1. To protect and, where possible, enhance health, well-being and amenity of residents, neighbouring land uses and visitors to West Sussex.	-?	N/A	<p>Policy M2 allows proposals for soft sand extraction that contribute towards meeting the shortfall in soft sand need in the Plan area.. This may therefore affect the local amenity and the wellbeing of residents, neighbouring land uses and visitors to West Sussex and the SDNP due to impacts such as dust, noise, vibration and traffic associated with mineral workings.</p> <p>However, effects will be uncertain as the potential for effects will depend on the exact nature and design of any sites that come forward, which would not be known until the planning application stage.</p> <p>Protection of health and well-being would be supported by all four of the categories of ecosystem services, but this policy is unlikely to have a particular impact or benefit on the ecosystem services.</p> <p>The findings and effects of the Soft Sand Review to commence once the JMLP is adopted will be considered as part of the soft sand review process.</p>
2. To protect and, where possible, enhance recreation opportunities for all, including access to the countryside, open spaces and Public Rights of Way (PROW).	+/-?	C +/-?	<p>Policy M2 could have minor negative effects on this SA objective as site allocations that could come forward under this policy to contribute towards meeting the shortfall in soft sand need in the Plan area could impact upon the amenity of users of PROW or others users of the countryside in the area. Conversely, recreational areas could be enhanced in the long term through the restoration of new mineral sites and so a minor positive effect is also identified. Therefore, this policy is likely to have mixed, minor positive and minor negative effects on this SA objective. However, the effects would be uncertain as the potential for effects will depend on the exact nature and design of any site that comes forward, which would not be known until the planning application stage.</p> <p>Policy M2 could have mixed minor positive and minor negative uncertain effects on Cultural ecosystem services.</p>

SA Objective	SA Score	Will achievement of the SA objective have a benefit or impact on particular ecosystem services?	Justification
			The findings and effects of the Soft Sand Review to commence once the JMLP is adopted will be considered as part of the soft sand review process.
3. To protect, sustain, and where possible, enhance the vitality and viability of the local economy.	++?	N/A	<p>Policy M2 is likely to have significant positive effects on this SA objective. This is because the policy states that proposals for land won soft sand extraction, including extensions of time and physical extensions to existing sites, will be permitted providing that the proposal is needed to meet the shortfall of soft sand of 2.36 million tonnes over the Plan period and maintain at least a seven year landbank. Helping to maintain soft sand supply within the Plan Area will help to sustain and enhance the vitality and viability of the local economy.</p> <p>However, until the Soft Sand Review is completed following the adoption of the JMLP it is uncertain whether soft sand supply will be maintained in the short to medium term.</p> <p>Protection of the local economy would be supported in particular by Provisioning ecosystem services, but is unlikely to have a particular impact or benefit on the ecosystem service.</p> <p>The findings and effects of the Soft Sand Review to commence once the JMLP is adopted will be considered as part of the soft sand review process.</p>
4. To conserve minerals resources from inappropriate development whilst providing for the supply of aggregates and other minerals sufficient for the needs of society.	++/-?	S -	<p>Policy M2 is likely to have significant positive effects on this SA objective. This is because the policy states that proposals for land won soft sand extraction, including extensions of time and physical extensions to existing sites, will be permitted providing that the proposal is needed to meet the shortfall of soft sand of 2.36 million tonnes over the Plan period and maintain at least a seven year landbank.</p> <p>However, until the Soft Sand Review is completed following the adoption of the JMLP it is uncertain whether soft sand supply will be maintained in the short to medium term.</p> <p>A minor negative effects are also likely as continued extraction from existing permitted reserves or from new permitted sites within the county and SDNP will not reduce the extraction of virgin materials. Therefore, the policy is likely to have mixed, significant positive and minor negative effects on this SA objective, with some uncertainty.</p>

SA Objective	SA Score	Will achievement of the SA objective have a benefit or impact on particular ecosystem services?	Justification
			<p>Conserving minerals from inappropriate development to ensure sufficient minerals supply could have a negative impact on the Supporting ecosystem services, as minerals contribute to soil formation and nutrient cycling.</p> <p>The findings and effects of the Soft Sand Review to commence once the JMLP is adopted will be considered as part of the soft sand review process.</p>
<p>5. To protect, and where possible, enhance the landscape, local distinctiveness and landscape character in West Sussex.</p>	<p>+/--?</p>	<p>C +/--?</p>	<p>Policy M2 is likely to have minor positive effects on this SA objective in the long term due to the potential for the restoration of sites to lead to positive effects on landscape character. However, significant negative effects are also likely as continued extraction in the short term/long term at existing sites and future sites could result in continued and new impacts on the landscape. This is particularly applicable within the SDNP, which is designated for its natural beauty. However, due to the location of the resource in the SDNP, the exceptional circumstances and public interest tests as set out in paragraph 116 of the NPPF would have to be applied to any applications that came forward for development.</p> <p>The effects would be uncertain as the potential for effects will depend on the exact nature and design of any sites that come forward, which would not be known until the planning application stage.</p> <p>Mixed minor positive and significant negative uncertain effects are likely for this policy in relation to Cultural ecosystem services.</p> <p>The findings and effects of the Soft Sand Review to commence once the JMLP is adopted will be considered as part of the soft sand review process.</p>
<p>6. To protect, conserve and enhance biodiversity including natural habitats and protected species.</p>	<p>+/--?</p>	<p>P +/--? R +/--? C +/--?</p>	<p>Policy M2 is likely to have minor positive effects on this SA objective as the maintenance of supply from existing permitted reserves and working of any new sites that may come forward may have the potential to achieve net gains for biodiversity during working or restoration via biodiversity enhancement opportunities that may exist. However, significant negative effects are also possible due to the impacts site operations may have on designated sites, protected species or habitats. This is particularly applicable within the</p>

SA Objective	SA Score	Will achievement of the SA objective have a benefit or impact on particular ecosystem services?	Justification
			<p>SDNP, which is designated for its natural and cultural assets, including wildlife and their habitats.</p> <p>The policy is likely to have mixed, minor positive and significant negative effects on this SA objective. The effects would be uncertain as the potential for effects will depend on the exact nature and design of any sites that come forward, which would not be known until the planning application stage.</p> <p>Mixed significant negative and minor positive uncertain effects are considered likely for this policy in relation to Provisioning, Regulatory and Cultural ecosystem services.</p> <p>The findings and effects of the Soft Sand Review to commence once the JMLP is adopted will be considered as part of the soft sand review process.</p>
7. To protect and conserve geodiversity.	+/--?	C +/-?	<p>Policy M2 may lead to significant negative effects as the continued extraction of existing permitted reserves and/or working of new permitted sites may uncover and harm geological interests. The SDNP website notes that "<i>the geology of the South Downs underpins so much of what makes up the special qualities of the area</i>"⁷ and so the establishment of working new permitted reserves could adversely affect these special qualities.</p> <p>However, sites may also potentially contribute to geodiversity by preserving and conserving geological features or making them visible and available for learning opportunities.</p> <p>The policy is likely to have mixed, minor positive and significant negative effects on this SA objective. However, the effects would be uncertain as the potential for effects will depend on the exact nature and design of any sites that come forward, which would not be known until the planning application stage.</p> <p>Mixed minor negative and minor positive uncertain effects are considered likely for this policy in relation to Cultural ecosystem services.</p>

⁷ South Downs National Park Authority (2017) Wildlife & Habitats: <https://www.southdowns.gov.uk/communicating-south-downs/wildlife-habitats/>

SA Objective	SA Score	Will achievement of the SA objective have a benefit or impact on particular ecosystem services?	Justification
			The findings and effects of the Soft Sand Review to commence once the JMLP is adopted will be considered as part of the soft sand review process.
8. To conserve, and where possible, enhance the historic environment.	+/--?	C +/-?	<p>Policy M2 is likely to have significant negative effects on this SA objective, as the maintenance of supply from permitted reserves and/or working of permitted new sites could negatively affect the historic environment (e.g. archaeology), heritage assets and their setting as a result of associated mineral activities. This is particularly applicable within the SDNP, which is designated for its natural and cultural assets, including historic character and landscapes.</p> <p>However, sites may be able to preserve any uncovered findings and therefore benefit our understanding of the local archaeology or contribute towards the local vernacular. The policy is likely to have mixed, minor positive and significant negative effects on this SA objective. However, the effects would be uncertain as the potential for effects will depend on the exact nature and design of any sites that come forward, which would not be known until the planning application stage.</p> <p>Mixed minor positive and minor negative uncertain effects are considered likely this policy in relation to Cultural ecosystem services.</p> <p>The findings and effects of the Soft Sand Review to commence once the JMLP is adopted will be considered as part of the soft sand review process.</p>
9. To protect and, where possible, enhance soil quality, and minimise the loss of best and most versatile land.	-?	R -?	It is unlikely that sites containing permitted reserves would affect this SA objective as they are unlikely to result in any additional negative impacts as the permitted reserves are located within the active sites and therefore any effects or potential enhancements on soil quality would have already been appropriately dealt during the determination of the relevant planning application, as would the aim of minimising the loss of best and most versatile land. However, via support to additional proposals that contribute towards meeting the shortfall in soft sand need in the Plan area, this policy may result in the loss of best and most versatile land.

SA Objective	SA Score	Will achievement of the SA objective have a benefit or impact on particular ecosystem services?	Justification
			<p>However, the exact location and grade of agricultural land that might be lost and whether improvements to soil quality through site restoration are possible, will not be known until the planning application stage, therefore effects on this SA Objective are likely to be minor negative uncertain.</p> <p>Minor negative uncertain effects are considered likely for this policy in relation to Regulating ecosystem services.</p> <p>The findings and effects of the Soft Sand Review to commence once the JMLP is adopted will be considered as part of the soft sand review process.</p>
10. To reduce air pollution and to protect and, where possible, enhance air quality.	-?	R-?	<p>Policy M2 supports the supply of soft sand from permitted reserves and potential site proposals that may come forward within the county and the SDNP, if exceptional circumstances are demonstrated. Therefore, this policy is likely to have negative impacts on this SA objective due to activities (e.g. lorry traffic) that may negatively affect air quality due to the proximity of sensitive receptors and the distance mineral related traffic has to travel before reaching the Advisory Lorry Route, especially if transportation by rail or water is not viable.</p> <p>However, meeting soft sand needs within the Plan area could reduce the need to import soft sand from outside, helping to reduce traffic and associated air quality issues. Therefore, overall, a minor negative effect is anticipated. This policy is considered likely to have similar minor negative uncertain effects in relation to Regulating ecosystem services.</p> <p>The findings and effects of the Soft Sand Review to commence once the JMLP is adopted will be considered as part of the soft sand review process.</p>
11. To protect and, where possible, enhance water resources, water quality and the	?	R ?	<p>Policy M2 allows proposals for soft sand extraction that contribute towards meeting the shortfall in soft sand need in the Plan area, which may lead to sites coming forward which may affect the water resources, water quality or the function of the water environment in West Sussex and the SDNP. At this stage in the planning process it is not possible to determine the impacts of the policy on water quality (surface or groundwater) or water use</p>

SA Objective	SA Score	Will achievement of the SA objective have a benefit or impact on particular ecosystem services?	Justification
function of the water environment.			<p>and efficiency as it will very much depend on site proposals (location, design, method of working etc.), which would be assessed at the planning application stage.</p> <p>Effects of this policy on Regulating ecosystem services are uncertain at this stage.</p> <p>The findings and effects of the Soft Sand Review to commence once the JMLP is adopted will be considered as part of the soft sand review process.</p>
12. To reduce vulnerability to flooding, in particular preventing inappropriate development in the floodplain.	+?	R +?	<p>Policy M2 relates to soft sand extraction and is therefore not expected to have an effect on this SA objective, as sand and gravel workings are classed as water-compatible development and are potentially suitable for all flood zones including 3b, the functional floodplain. However, this also means any sites may have the potential to increase flood capacity and have minor positive effects on this SA objective, although effects would be uncertain as the potential for effects will depend on the exact nature and design, and location of any site that comes forward, which would not be known until the planning application stage. Therefore, a minor positive uncertain effect is likely on this SA objective.</p> <p>Minor positive uncertain effects are considered likely for this policy in relation to Regulating ecosystem services.</p> <p>The findings and effects of the Soft Sand Review to commence once the JMLP is adopted will be considered as part of the soft sand review process.</p>
13. To minimise transport of minerals by roads. Where road use is necessary, to reduce the impact by promoting use of the Lorry Route Network.	-?	R -?	<p>Policy M2 supports the supply of soft sand from permitted reserves and potential sites that may come forward within West Sussex and the SDNP, if exceptional circumstances are demonstrated. Therefore, existing primary extraction sites will continue to operate, transporting extracted material by road, and any sites that come forward will be likely to increase lorry traffic especially given that within West Sussex, materials are mainly transported by road, and to a lesser extent rail. However, meeting soft sand needs within the Plan area will reduce the need to import soft sand from outside, reducing the distance the minerals need to travel from source to end use and minimising traffic congestion.</p>

SA Objective	SA Score	Will achievement of the SA objective have a benefit or impact on particular ecosystem services?	Justification
			<p>Therefore, overall, a minor negative effect is anticipated.</p> <p>This policy is also considered likely to have minor negative effects in relation to Regulating ecosystem services. The findings and effects of the Soft Sand Review to commence once the JMLP is adopted will be considered as part of the soft sand review process.</p>
14. To reduce the emissions of greenhouse gases.	+/-	R +/-	<p>Policy M2 supports the supply of soft sand from permitted reserves and potential site allocations and/or areas of search that may come forward within West Sussex and the SDNP, if exceptional circumstances are demonstrated. The provision of local sources of soft sand is likely to help reduce greenhouse gas emissions with minor positive effects against this objective. Therefore, a minor positive effect is recorded.</p> <p>Imports may be required from further afield to meet requirements which cannot be met from indigenous supplies. These imports are likely to increase rates of lorry traffic, increasing greenhouse gas emissions. Therefore a minor negative effect is recorded.</p> <p>Mixed minor positive and minor negative uncertain effects are considered likely for this policy in relation to Regulating ecosystem services.</p> <p>The findings and effects of the Soft Sand Review to commence once the JMLP is adopted will be considered as part of the soft sand review process.</p>

Policy M3 – Silica Sand

SA Objective	SA Score	Will achievement of the SA objective have a benefit or impact on particular ecosystem services?	Justification
1. To protect and, where possible, enhance health, well-being and amenity of residents, neighbouring land uses and visitors to West Sussex.	-?	N/A	<p>Policy M3 is likely to have minor negative effects on this SA objective due to sites that may be permitted resulting in negatives effects associated with mineral operations (e.g. dust, noise, and traffic levels), potentially affecting the health, well-being and amenity of people living and working in, and visiting West Sussex. Furthermore, the approach of not identifying sites provides less certainty to communities. Therefore, a minor negative effect is expected for this SA objective. The effects would be uncertain as the potential for effects will depend on the exact nature and design of sites, which would not be known until the planning application stage.</p> <p>Protection of health and well-being would be supported by all four of the categories of ecosystem services, but this policy is unlikely to have a particular impact or benefit on the ecosystem services.</p>
2. To protect and, where possible, enhance recreation opportunities for all, including access to the countryside, open spaces and Public Rights of Way (PROW).	+/-?	C +/-?	<p>Policy M3 may permit sites which could have potential negative effects on recreation opportunities (e.g. Public Rights of Way) by restricting access to or affecting the amenity of users. However, sites considered against this policy could provide positive effects through restoration opportunities for recreation. Therefore, Policy M3 is likely to have mixed, minor positive and minor negative effects on this SA objective. The effects would be uncertain as the potential for effects will depend on the exact nature and design of sites, which would not be known until the planning application stage.</p> <p>The policy could have mixed minor positive and minor negative uncertain effects on Cultural ecosystem services.</p>
3. To protect, sustain, and where possible, enhance the vitality and viability of the local economy.	+	N/A	<p>Policy M3 provides support to unallocated 'windfall' sites where they accord with the criteria-based policy, thereby making a positive contribution to the local economy via new jobs that may be created. Additionally, the policy states that sites which require significant infrastructure will need to ensure that have permitted reserves of at least 15 years (opposed to the normal 10 years) to ensure the site and its associated plant are financially viable. Furthermore, the policy</p>

SA Objective	SA Score	Will achievement of the SA objective have a benefit or impact on particular ecosystem services?	Justification
			<p>specifies that that high-grade silica sand deposits must be reserved for industrial end uses thereby ensuring that high-grade silica sand will be used more efficiently. Therefore a minor positive effect is expected on this SA objective.</p> <p>Protection of the local economy would be supported in particular by Provisioning ecosystem services, but this policy is unlikely to have a particular impact or benefit on the ecosystem service.</p>
<p>4. To conserve minerals resources from inappropriate development whilst providing for the supply of aggregates and other minerals sufficient for the needs of society.</p>	<p>++/-</p>	<p>S -</p>	<p>Policy M3 is likely to have significant positive effects on this SA objective as unallocated silica sand sites permitted under this policy will not be classed as inappropriate development, as they are contributing to the extraction and supply of mineral resources for the needs of society, not limiting the ability to extract resources. Furthermore, the policy specifies that that high-grade silica sand deposits are reserved for industrial end uses thereby ensuring that high-grade silica sand will be used more efficiently. However, minor negative effects are also likely as sites permitted under a criteria-based policy will not reduce the extraction of virgin materials. Therefore, the policy is likely to have mixed, significant positive and minor negative effects on this SA objective.</p> <p>Conserving minerals from inappropriate development to ensure sufficient minerals supply could have a negative impact on the Supporting ecosystem services, as minerals contribute to soil formation and nutrient cycling.</p>
<p>5. To protect, and where possible, enhance the landscape, local distinctiveness and landscape character in West Sussex.</p>	<p>+/--?</p>	<p>C +/--?</p>	<p>Policy M3 could potentially lead to significant negative effects for landscape character, as unallocated sites are likely to be located within the SDNP due to the location of the resource, thereby negatively impacting on this nationally important landscape designation. This is particularly applicable within the SDNP, which is designated for its natural beauty. However, due to the location of the resource in the SDNP, the exceptional circumstances and public interest tests as set out in paragraph 116 of the NPPF would have to be applied to any applications that came forward for development. Sites may also have minor positive effects in the long term as the restoration of sites could lead to positive effects for the landscape. Therefore, this policy is</p>

SA Objective	SA Score	Will achievement of the SA objective have a benefit or impact on particular ecosystem services?	Justification
			likely to have mixed, minor positive and significant negative effects on this SA objective. The effects would be uncertain as the potential for effects will depend on the exact nature and design of the sites, which would not be known until the planning application stage. Mixed, minor positive and significant negative uncertain effects are considered likely for this policy in relation to Cultural ecosystem services.
6. To protect, conserve and enhance biodiversity including natural habitats and protected species.	-?	P -? R -? C -?	Policy M3 could potentially lead to negative effects for biodiversity, as proposals for unallocated sites could have potential impacts on designated sites, protected species or habitats. Therefore, a minor negative effect is expected for this SA objective. The effects would be uncertain as the potential for effects will depend on the exact nature and design of sites, which would not be known until the planning application stage. Minor negative uncertain effects are considered likely for this policy in relation to Provisioning, Regulatory and Cultural ecosystem services.
7. To protect and conserve geodiversity.	+/-?	C +/-?	Policy M3 may lead to minor negative effects as proposals for unallocated sites may uncover and harm geological interests. However, sites may also potentially contribute to geodiversity by preserving and conserving geological features or making them visible and available for learning opportunities. Therefore, a mixed minor negative and positive effect is expected for this SA objective. However, the effects would be uncertain as the potential for effects will depend on the exact nature and design, and location of sites, which would not be known until the planning application stage. Mixed minor positive and negative uncertain effects are considered likely for this policy in relation to Cultural ecosystem services.
8. To conserve, and where possible, enhance the historic environment.	+/-?	C +/-?	Policy M3 provides support to the development of unallocated sites via a criteria-based policy. Sites permitted by the policy may be able to preserve findings and therefore benefit our understanding of the local archaeology. However, the proposed policy may also have minor negative effects on this SA objective, as some sites may involve activities that could negatively

SA Objective	SA Score	Will achievement of the SA objective have a benefit or impact on particular ecosystem services?	Justification
			<p>affect the historic environment (e.g. archaeology), heritage assets and their setting due to transport, noise or vibration, or extraction methods. Therefore, the policy is likely to have uncertain, mixed minor positive/minor negative effects on this SA objective. Also, the effects would be uncertain as the potential for effects will depend on the exact nature and design, and location of sites, which will not be known until the planning application stage.</p> <p>Mixed, significant positive and minor negative uncertain effects are considered likely for this policy in relation to Cultural ecosystem services.</p>
9. To protect and, where possible, enhance soil quality, and minimise the loss of best and most versatile land.	-?	R -?	<p>Policy M3 with its criteria-based approach is likely to permit sites that may result in the loss of best and most versatile land, although this will depend on the criteria included in the policy. Furthermore, the exact land take and grade of agricultural land quality, and whether improvements to soil quality through site restoration are possible, will not be known until the planning application stage, therefore effects on this SA Objective are likely to be minor negative uncertain.</p> <p>Minor negative uncertain effects are considered likely for this policy in relation to Regulating ecosystem services.</p>
10. To reduce air pollution and to protect and, where possible, enhance air quality.	-?	R -?	<p>Unallocated silica sand sites are likely to be predominantly located in rural locations, thereby increasing the mileage of associated traffic movements and their associated emissions. Therefore, this policy is likely to have minor negative effects on this SA objective. However, the exact location of proposals and levels of emissions will not be known until the planning application stage, and the policy states that the proposal needs to be well connected to the Lorry Route Network therefore these effects are uncertain.</p> <p>Minor negative uncertain effects are considered likely for this policy in relation to Regulating ecosystem services.</p>
11. To protect and,	?	R ?	<p>While Policy M3 with a criteria-based approach may affect the water resources, water quality or</p>

SA Objective	SA Score	Will achievement of the SA objective have a benefit or impact on particular ecosystem services?	Justification
where possible, enhance water resources, water quality and the function of the water environment.			<p>the function of the water environment in West Sussex, at this stage in the planning process it is not possible to determine the impacts of this policy on water quality (surface or groundwater) or water use and efficiency as it will very much depend on the site proposal (location, design, method of working etc.), which would be assessed at the planning application stage.</p> <p>Effects of this policy on Regulating ecosystem services are uncertain at this stage.</p>
12. To reduce vulnerability to flooding, in particular preventing inappropriate development in the floodplain.	+?	R +?	<p>Policy M3 could result in extraction of new silica sand sites. Therefore, the policy is not expected to have an effect on this SA objective, as sand and gravel workings (including silica sand) are classed as water-compatible development and are potentially suitable for all flood zones including 3b, the functional floodplain. However, this also means that any silica sand sites that come forward may have the potential to increase flood capacity and have minor positive effects on this SA objective, although effects would be uncertain as the potential for effects will depend on the exact nature and design, and location of the sites, which would not be known until the planning application stage. Therefore, a minor positive uncertain affect is likely on this SA objective.</p> <p>Minor positive uncertain effects are considered likely for this policy in relation to Regulating ecosystem services.</p>
13. To minimise transport of minerals by roads. Where road use is necessary, to reduce the impact by promoting use of the Lorry Route Network.	-?	R -?	<p>Proposals for new silica sand sites are likely to be predominantly located in rural locations, thereby increasing the mileage of associated lorry traffic movements as rail and water modes of transportation are unlikely to be viable. Therefore, this policy is likely to have minor negative effects on this SA objective. However, the exact location of proposals, traffic levels, lorry routing and access arrangements will not be known until the planning application stage, and the policy states that the proposal needs to be well connected to the Lorry Route Network therefore these effects are uncertain.</p> <p>This policy is considered likely to have minor negative uncertain effects in relation to Regulating</p>

SA Objective	SA Score	Will achievement of the SA objective have a benefit or impact on particular ecosystem services?	Justification
			ecosystem services.
14. To reduce the emissions of greenhouse gases.	+?	R +?	<p>Policy M3 will have minor positive effects on reducing the emission of greenhouse gases as it encourages the use of rail and water transportation where viable and supports new sites that will work local silica sand, potentially reducing the need for the importation of silica sand into West Sussex. However, to what degree this will reduce the need for imported material is uncertain. Furthermore, at this stage in the planning process it is not possible to determine the impacts of policy options on their ability to help reduce emissions of greenhouse gases as it will depend on the proposals that come forward and how successfully they are implemented, which would not be known until the planning application stage.</p> <p>Minor positive uncertain effects are considered likely for this policy in relation to Regulating ecosystem services.</p>

Policy M11 – Strategic Minerals Site Allocations

SA Objective	SA Score	Will achievement of the SA objective have a benefit or impact on particular ecosystem services?	Justification
<p>1. To protect and, where possible, enhance health, well-being and amenity of residents, neighbouring land uses and visitors to West Sussex.</p>	-	N/A	<p>The extraction of minerals at the allocated site within Policy M11 (West Hoathly Brickworks for brick clay) could have a minor negative impact on amenity for local residents and visitors. The site is within 100m of residential properties. Therefore, there is potential for development at this site to have a minor negative effect on health due to the potential for dust (PM10) and minor negative effects on amenity. These effects are likely to be localised due to the fact that the allocation is not within 100m of any areas allocated for new residential development in Mid Sussex Local Plans or existing mineral or waste site in West Sussex Waste Local Plan.</p> <p>The impact upon health at the West Hoathly allocation will be dependent on local circumstances and the policy seeks to ensure that these are addressed through specific development principles set out for the site, e.g. Screening, an assessment of the impact on the amenity of dwellings nearby and implementation of measures to ensure that services and utilities are avoided.</p> <p>The policy also safeguards the allocated site from development on or adjoining the site that would prejudice its development. This will be important at West Hoathly Brickworks, where it has been identified that land to the south west of the site could be utilised for housing development (West Hoathly Neighbourhood Plan 2014-2031 Submission Document, September, 2014). Overall, an uncertain minor negative effect is therefore likely as the policy is likely to impact upon health and well-being of local residents and visitors to West Sussex.</p> <p>Protection of health and well-being would be supported by all ecosystem services, but is unlikely to have a particular impact or benefit on the ecosystem services.</p>
<p>2. To protect and, where possible, enhance recreation opportunities for all, including</p>	-	C -	<p>The allocation at West Hoathly Brickworks is within the High Weald AONB. In addition, the site includes recreational facilities such as the Bluebell Railway, a heritage railway line which uses steam trains. Therefore, there is potential for a</p>

SA Objective	SA Score	Will achievement of the SA objective have a benefit or impact on particular ecosystem services?	Justification
access to the countryside, open spaces and Public Rights of Way (PROW).			<p>minor negative effect from the site allocation supported by Policy M11.</p> <p>The policy includes specific site related development principles, which proposals at West Hoathly Brickworks will need to include at the planning stage which includes an assessment of the visual intrusion.</p> <p>Overall, development at the site could have a minor negative effect on the local recreational facilities and users of the countryside and AONB, although some of these effects may be able to be mitigated through adherence to the site development principles.</p> <p>The policy is likely to have minor negative effects on Cultural ecosystem services.</p>
3. To protect, sustain, and where possible, enhance the vitality and viability of the local economy.	+	N/A	<p>The West Hoathly Brickworks mineral site allocated in Policy M11 could have a direct and indirect positive effect on increasing employment levels during site preparation, operation and restoration, as they are likely to result in a small amount of job creation for local people in both rural and urban areas, thereby encouraging the provision of more local based skills. However, job creation is not expected to be significant within the West Sussex economy; and given that the overall number of mineral sites likely to be developed in the County will not be a large number each year, the total numbers of new employment opportunities likely to be provided within the County is not considered to be significant. Furthermore, as the site is an extension to an existing site, there may not be a net increase in employment but a continuation in employment.</p>
4. To conserve minerals resources from inappropriate development whilst providing for the supply of aggregates and other minerals sufficient for the needs of society.	+	S -	<p>New potential mineral sites (such as the West Hoathly Brickworks allocated by Policy M11) are not classed as inappropriate development with respect to sterilisation of mineral resources, as the allocation of this potential mineral site would have a positive effect on this objective as it would provide a degree of protection to minerals resources from inappropriate non-mineral development, and would contribute to the supply of aggregates to meet the needs of society.</p>

SA Objective	SA Score	Will achievement of the SA objective have a benefit or impact on particular ecosystem services?	Justification
			Conserving minerals from inappropriate development to ensure sufficient minerals supply could have a negative impact on the Supporting ecosystem services, as minerals contribute to soil formation and nutrient cycling.
5. To protect, and where possible, enhance the landscape, local distinctiveness and landscape character in West Sussex.	--	C --	<p>There are two Areas of Outstanding Natural Beauty (AONBs) in the County, as well as the South Downs National Park (SDNP) and other important Landscape Character Areas. Therefore the impact of minerals working is an important factor to consider. The West Hoathly allocation is within the High Weald AONB.</p> <p>The allocation at West Hoathly Brickworks was assessed as having a medium to high sensitivity impact, with the east of the site of higher sensitivity due to the proximity of the village of Sharpthorne, the Historic Park and Garden to the south and the higher visual sensitivity of the area. Subtle complexity of the landscape structure reduces the capacity of the site to accommodate development without some erosion of the character value of the surrounding area. However, the low-lying topography allows scope for the mitigation of visual intrusion by planting to reduce visibility from the hills to the northwest. The site specific development principles for this site include mitigation measures to be provided such as screening and protection of existing hedgerows and the phasing of extraction activities to limit the visual impact. Adherence to these development principles is likely to reduce the potential for unacceptable impact on the character, distinctiveness or sense of place of West Sussex and the AONB. The policy further supports this by stating how specific mineral development should mitigate against any potential negative impact on the character of the local amenity.</p> <p>The West Hoathly Brickworks allocation is likely to affect a designated landscape and local landscape characters within the County and therefore the potential for a significant negative effect is likely.</p> <p>The policy is considered likely to have significant negative effect on Supporting ecosystem services.</p>
6. To protect, conserve and enhance biodiversity including	--?	P --?	West Hoathly Brickworks is adjacent to Ancient Woodland (Front Wood to the

SA Objective	SA Score	Will achievement of the SA objective have a benefit or impact on particular ecosystem services?	Justification
natural habitats and protected species.		<p>R --?</p> <p>C --?</p>	<p>north east, Blackwood Wood and Cookhams Shaw to the west); West Hoathly SSSI is approximately 310m west of the site. In relation to international sites, Ashdown Forest SPA/SAC is approximately 1.5km east of the allocation. In addition, this site also includes a small waterway which feeds into a number of tributaries which eventually reach the Medway Estuary and Marshes SPA/Ramsar. The site was 'screened in' to the HRA, which concluded that there would not be significant effects on the integrity of European designated sites.</p> <p>Suitable mitigation has been provided through the site-specific development principles in the supporting text to Policy M11, including assessment of nearby woodland and the protection of local vegetation.</p> <p>Nonetheless, the West Hoathly Brickworks is in close proximity to a local biodiversity site or habitat and as such, there is potential for significant negative effects on this SA objective.</p> <p>The policy is considered likely to have significant negative effects on Provisioning, Regulating and Cultural ecosystem services.</p>
7. To protect and conserve geodiversity.	-	C -	<p>The West Hoathly Brickworks site allocation is approximately 310m east of the West Hoathly Brickworks SSSI and 140m from the LGS at West Hoathly Brickworks, Sharpthorne.</p> <p>Therefore, this policy is expected to result in a minor negative effect for this SA objective.</p> <p>The policy is considered to have a minor negative effect on Cultural ecosystem services</p>
8. To conserve, and where possible, enhance the historic environment.	-?	C -?	<p>The West Hoathly Brickworks site allocated through Policy M11 are within 1km of several historic assets. At West Hoathly Brickworks, Courtlands West Hoathly Historic Parkscape is located to the south of Top Road. Also to the south is Northwood House Historic Parkscape 880m away and Aldern House Grade II Listed Building. In addition, there are two other Listed Buildings to the north;</p>

SA Objective	SA Score	Will achievement of the SA objective have a benefit or impact on particular ecosystem services?	Justification
			<p>Old Coombe House, 861m away and Blackland Farmhouse 930m away.</p> <p>This site may also contain archaeological remains and artefacts.</p> <p>These historic assets could therefore be affected by minerals extraction at West Hoathly Brickworks, however the supporting text to Policy M11 incorporates development principles, which aim to protect specific heritage assets. For example, an assessment of the impact on nearby listed buildings (Aldern House, Old Coombe House and Blackland Farmhouse) and the Historic Parkscapes (Courtlands and Horthwood House). In addition, a Lidar survey and mitigation will also be required at the West Hoathly Brickworks site.</p> <p>Therefore, although the policy ensures that some historic designations are conserved, overall a minor negative effect on this SA objective is likely.</p> <p>The policy is considered likely to have a minor negative effect on Cultural ecosystem services.</p>
9. To protect and, where possible, enhance soil quality, and minimise the loss of best and most versatile land.	-	R -	<p>The allocation at West Hoathly Brickworks is entirely on grade 3 agricultural land. Therefore, Policy M11 could have a minor negative effect on protecting or enhancing soil/land quality.</p> <p>The policy is likely to have a minor negative effect on regulating ecosystem services.</p>
10. To reduce air pollution and to protect and, where possible, enhance air quality.	0	R 0	<p>The West Hoathly Brickworks allocation identified in Policy M11 is over 1km from an Air Quality Management Area (AQMA). A negligible effect on air pollution is identified for the West Hoathly Brickworks site.</p> <p>Suitable mitigation has been incorporated into the supporting text to Policy M11 through the design and development principles including requiring an assessment of the cumulative impact, which includes transport considerations.</p> <p>Overall, this policy is considered likely to have a negligible effect on protecting</p>

SA Objective	SA Score	Will achievement of the SA objective have a benefit or impact on particular ecosystem services?	Justification
			<p>air quality for human sensitive receptors. Although this impact is very dependent on the type of mineral site, likely routes to be taken by HGVs, the scale of the operations and the potential mitigation measures proposed, which would need to be incorporated in planning application proposals.</p> <p>The policy is considered to have a negligible effect on Regulating ecosystem services.</p>
<p>11. To protect and, where possible, enhance water resources, water quality and the function of the water environment.</p>	<p>0?</p>	<p>R 0?</p>	<p>The West Hoathly Brickworks site allocation identified in Policy M11 does not lie within SPZ1.</p> <p>Suitable mitigation has been incorporated into the supporting text to Policy M11 through the development principles, which will require the developer to ensure that buffers are created and retained around water courses on the West Hoathly Brickworks site.</p> <p>Overall, a negligible effect is likely for this objective.</p> <p>The policy is considered to have a negligible effect on Regulating ecosystem services.</p>
<p>12. To reduce vulnerability to flooding, in particular preventing inappropriate development in the floodplain.</p>	<p>0?</p>	<p>R 0?</p>	<p>The West Hoathly Brickworks allocation identified in Policy M11 lies within Flood Zone 1.</p> <p>According to the SFRA Update and Sequential Test of Mineral Sites (July 2015) the allocation at West Hoathly Brickworks was found to have no effect (green) on most of the flooding sources, with the exception to surface water where a low risk (yellow) was identified for a small part of the site (10%). Therefore, development is considered to have a negligible effect on flood-risk areas.</p> <p>Suitable mitigation has been incorporated into the supporting text to Policy M11 through the development principles for planning proposals on the West Hoathly Brickworks allocation, which will need to ensure that buffers are created and retained around water courses. Overall, a negligible effect is likely for this</p>

SA Objective	SA Score	Will achievement of the SA objective have a benefit or impact on particular ecosystem services?	Justification
			<p>objective.</p> <p>The policy is considered to have a negligible effect on Regulating ecosystem services.</p>
<p>13. To minimise transport of minerals by roads. Where road use is necessary, to reduce the impact by promoting use of the Lorry Route Network.</p>	+/-	R +/-	<p>The allocation of a clay extraction site at West Hoathly would enable the brickworks to continue to be supplied from an adjacent site, which would minimise clay transport distances with minor positive effects.</p> <p>According to The West Sussex Minerals Local Plan: Transport Assessment (2015) the West Hoathly Brickworks allocation in Policy M11 has a 'High' acceptability rating. However, this site is unlikely to have opportunities for non-road based transport, therefore leading to minor negative effects on this objective.</p> <p>This policy includes appropriate development principles for planning proposals for the West Hoathly Brickworks allocation with transport route and access arrangements to avoid cumulative impacts.</p> <p>Therefore, overall, a mixed minor positive/minor negative effect is likely.</p> <p>The policy could have mixed minor positive/minor negative effects on regulating ecosystem services.</p>
<p>14. To reduce the emissions of greenhouse gases.</p>	+/-	R +/-	<p>The allocation of a clay extraction site at West Hoathly would enable the brickworks to continue to be supplied from an adjacent site, which would reduce clay transport distances.</p> <p>However, the West Hoathly Brickworks allocation identified within Policy M11 could lead to the production of carbon dioxide or other greenhouse gases from on-site vehicles and machinery, although sand and gravel sites, and clay sites (such as this site) are likely to be less intensive than crushed rock sites thus having lower effects. Therefore, this site is likely to have minor negative effects on the production of greenhouse gases from on-site vehicles and machinery.</p>

SA Objective	SA Score	Will achievement of the SA objective have a benefit or impact on particular ecosystem services?	Justification
			<p>Therefore, overall, a mixed minor positive/minor negative effect is likely.</p> <p>The policy could have mixed minor positive/minor negative effects on regulating ecosystem services.</p>