place services

Essex County Council

Essex Replacement Minerals Local Plan: Pre-Submission Draft

Sustainability Appraisal and Strategic Environmental Assessment

Environmental Report: Annex D – Policy Appraisals

November 2012

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1 Introduction

1.1 Background

Essex County Council commissioned the Strategic Environmental Assessment Team of Essex County Council's Place Services to undertake a Sustainability Appraisal, incorporating Strategic Environmental Assessment, on the proposed Replacement Minerals Local Plan: Pre-Submission Draft (MLP).

Place Services are acting as consultants for this work, therefore the content of the Sustainability Appraisal should not be interpreted or otherwise represented as the formal view of Essex County Council.

This Annex presents the appraisals of the policies within the Pre Submission MLP Document.

2 Appraisal Matrices

2.1 The Vision for Essex

(A) Sustainable Development

Minerals development will make a positive contribution to Essex through a plan-led, collaborative approach which promotes the sustainable use, re-use, recycling and extraction of minerals.

Sustainable mineral and mineral-related development will be approved without delay when in accordance with this Plan.

(B) Primary Mineral Provision

Essex will continue to be a major producer and user of sand and gravel, with the majority of that produced being used within the County itself. This will enable the planned growth within district/ borough / city authority plans to occur and facilitate the maintenance of existing infrastructure. A steady and adequate supply of sand and gravel will be provided, having regard to the Local Aggregate Assessment and the targets agreed with the East of England Aggregates Working Party, whilst not over-supplying in order to protect Essex's environment and our finite mineral resources. Plan provision will also be made for silica sand and brick clay.

(C) Co-ordinating Essex's Supply of Minerals

Sources of aggregate, whether primary, secondary or recycled, will be planned to serve the whole of the county and wherever possible located in proximity to the County's main growth centres - Basildon, Chelmsford, Colchester, and Harlow, and the South Essex Thames Gateway,

Haven Gateway and West Essex Alliance (formerly M11 corridor) growth areas, to maintain an appropriate match between mineral supply and demand. The lack of primary aggregate resources in the south and west of the County will be addressed to ensure that planned urban growth can take place without unnecessarily long transport distances. The existing infrastructure of rail depots and marine landing wharves in Essex and neighbouring Thurrock, in particular, will be important in this regard. The long distance importation of aggregates will be maintained to ensure provision of non-indigenous minerals.

(D) Protecting Amenities and Communities

All minerals development will be well-designed to afford protection to local communities and to contribute to the enhancement of the built, natural and historic environment. Mineral developers will engage with communities to create the most appropriate local solutions.

(E) Climate Change

Ensuring all minerals development is located, operated and managed whilst having regard to climate change mitigation and adaptation, so the County plays its part in reducing greenhouse gas emissions and is resilient to potentially more extreme future weather conditions.

(F) Reduce, Re-use and Recycling of Minerals

Minerals previously extracted from the ground will be put to better use. The recycling and reuse of construction, demolition and excavation waste will be maximised, by safeguarding existing Strategic Aggregate Recycling Sites (SARS) and locating new facilities in proximity to the key centres of Basildon, Chelmsford, Colchester and Harlow. The Council promotes sustainable procurement and construction techniques and the use of alternative building materials in accordance with national and local policies.

(G) Protecting Mineral Resources and Facilities

The needless sterilisation of mineral resources by development will be avoided by designating 'Minerals Safeguarding Areas' (MSA's) for sand and gravel, chalk, brick clay and brickearth. Existing, permitted and preferred mineral sites and mineral supply infrastructure will be safeguarded to ensure the effective operation of these sites is not compromised, and to prevent incompatible development taking place close to existing or planned minerals development to the potential detriment of existing or future occupants.

(H) Restoration and After-use

Mineral workings are temporary in nature. Restoration and after-use schemes will continue to be integral to site selection and the consideration of planning applications, with progressive working and restoration schemes expected. The focus of after-use will shift from purely agricultural uses, important though they remain, towards enhancement of the local environment by means of increased provision for biodiversity, geodiversity, climate change adaptation and outdoor recreation, including Public Rights of Way.

(I) Communities

Collaborative working arrangements will forge stronger links with communities, stakeholders and local planning authorities, as well as neighbouring and more distant planning authorities on whom we rely for non-indigenous minerals. Collectively we will address the sustainable long-term supply of primary aggregates and the protection of public amenity.

(J) Economy and Long Term High Quality Environment and Landscape

As well as bringing economic advantage, effective collaborative working will ensure minerals development makes a positive contribution to our environment and biodiversity, through the protection and creation of high quality habitats and landscapes that contribute to a high quality of life for present and future generations.

Table 1: Appraisal of Vision

Sustainability Objectives	Comment	S	M	L
1) To protect and enhance biodiversity throughout Essex	There will be a range of positive impacts on this objective as a result of many of the Vision statements. Statement B – Primary Mineral Provision acknowledges the pressures over-supply will have on the environment, D – Protecting Amenities and Communities is likely to have secondary positive impacts and there will be long term positive impacts resulting from statement H – Restoration and After-use where the focus for after-use will be towards the enhancement of the local environment by means of increased provision for biodiversity. The long term impacts of the vision will be strengthened through statement J – Economy and Long term High Quality Environment and Landscape.	+	+	++
2) To maintain and enhance water resources and quality	There will be no direct impacts on this objective. There will be indirect positive impacts on water resources and quality however in so far as this is covered by statement D – Protecting Amenities and Communities under protection to and enhancement of the natural environment. There may	0	0	0

	also be potential positive impacts resulting from some specific restoration and after-use proposals under statement H – Restoration and After-use and statement J – Economy and Long term High Quality Environment and Landscape.			
3) To minimise the risk of flooding	Statement E – Climate Change touches on issues of flooding where minerals development is to be located, operated and managed in line with making the County more resilient to future more extreme weather conditions. Flooding is specific to locations, and the SA/SEA acknowledges that this is better dealt with within development management criteria (Policy DM1) and in site assessment methodologies rather than be a strategic aim of the plan.	+	+	+
4) To encourage the sustainable use of land and protection of soils, including the best and most versatile agricultural land	The previous SA/SEA of the Preferred Approach Minerals Local plan raised the possible tension between a shift from purely agricultural after-use to those that seek to enhance the local environment in a variety of ways, including those of amenity and public access. In relation to the Spatial Strategy of the Minerals Local Plan focusing sites to support key areas of growth and development, this approach is supported where a range of benefits can be realised across economic, social and environmental criteria and in line with appropriate local solutions. Thus there will be positive impacts on the sustainable use of land in regards to vision statement H - Restoration and After-use. Similarly positive impacts will be realised in the working period of minerals development through the safeguarding of existing sites and the protection of resources.	+	+	+
5) To promote the minerals supply hierarchy and where mineral waste is produced, to promote the movement of minerals waste up the waste management hierarchy	There will be strong positive impact on this objective through statement A – Sustainable Development and a plan-led, collaborative approach which promotes the sustainable use, re-use, recycling and extraction of minerals. Additionally, the majority of the vision statements where relevant support the minerals supply hierarchy within the plan period.	++	++	++
6) To safeguard air quality	In terms of reducing overall transport emissions, an approach where sources of aggregate will located in proximity to the County's main growth centres (vision statement C – Co-ordinating Essex Supply of Minerals) will have a positive impact on this objective. However, air quality (in terms of impacts resulting from the Minerals Local Plan) is specific to locations in so far as is qualitative, and the SA/SEA acknowledges that this is better dealt with within development management criteria (Policy DM1) and in site assessment methodologies.	+	+	+
7) To minimise the net emissions of	In terms of reducing overall transport emissions, an approach where sources of aggregate will located in	+	+	+

greenhouse gases and increase adaptability to climate change	proximity to the County's main growth centres (vision statement C – Co-ordinating Essex Supply of Minerals) will have a positive impact on this objective. Vision statement E – Climate Change will also see positive impacts on this objective where minerals development is located, operated and managed having regard to climate change mitigation and adaptation.			
8) To minimise the impact on the historic environment, both above and below ground	There will be positive impacts on this objective resulting from Vision statement D – Protecting Amenities and Communities where all minerals development will be well-designed to afford protection to local communities and to enhancement of the built, natural and historic environment. Concerning minerals workings, the historic environment is specific to locations, and the SA/SEA acknowledges that this is better dealt with within development management criteria (Policy DM1) and in site assessment methodologies.	+	+	+
9) To protect and enhance the quality and character of the Metropolitan Green belt (and the Essex Landscape)	Vision statement B – Primary Mineral Provision will have positive impacts on this objective where there will not be an over-supply in order to protect Essex's environment. In addition to this, the safeguarding of existing, permitted and preferred sites under vision statement G will decrease the need for more sites to be identified, which will have positive impacts on landscapes on a wider scale. Vision statements H and J will have significantly positive impacts on landscapes in the long term. Vision statement C – Co-ordinating Essex Supply of Minerals states that sources of aggregates will be located in proximity to the County's main growth centres wherever possible, which may increase the likelihood of any negative impacts, or perceived negative impacts on landscape on a site-by-site basis where operations will be visible by a relatively large proportion of the County's population. Despite this however, restoration and after-use proposals as identified in vision statement H, are likely to see significantly positive impacts in the long term to the benefit of these areas.	+	+	++
10) To enable all sections of the community to participate fully at all stages of decision making in the Minerals Local Plan and in determining planning applications	There will be positive impacts on this objective through vision statement D – Protecting Amenities and Communities, where it is stated that minerals developers will be encouraged to engage with communities to create the most appropriate local solutions. This presumably can create positive impacts in the short to long term, through mitigation and beneficial after-use proposals. In addition there will be positive impacts resulting from statement I – Communities.	++	++	++
11) To maximise opportunities for economic development, including jobs, arising from	Vision statement B – Primary Mineral Provision sets out the Plan's strategic economic role as a significant sand and gravel producer in the UK, the South East and East of England. In addition to this, statement C sets out the geographic focus of locations for sources of aggregates corresponding to the County's main growth centres. In combination, statements B and C will cumulatively have a	++	++	+

minerals activities	strong positive impact on this objective, through a focus on the economic role minerals development has in the County, its important role supporting growth in the County, and indirectly demonstrating possibilities to provide jobs through its location in such areas. Impacts are however limited in the long term, based on individual restoration schemes and after-use and their economic potential.			
12) To improve the sustainable use of minerals	Vision statements A – Sustainable development, B – Primary Mineral Provision, F – Reduce, Re-use and Recycling of Materials and G – Protecting Mineral Resources and Facilities will all positively contribute to improving the sustainable use of minerals. Of these, statement F actively seeks to do this in line with national, regional and local policies and to the benefit of a number of other sustainability objectives.	++	++	++
13) To achieve beneficial restoration and aftercare of all minerals sites	There will be strong long term positive impacts on this objective through vision statement H – Restoration and After-use through a shift from purely agricultural use to those including biodiversity, outdoor recreation and public rights of way. A less restrictive policy direction for after-use will see wide benefits in the long term, especially in conjunction with statement C, focusing operations around the County's main growth centres. This allows those areas of the largest populations to benefit from amenity from after-use in accordance with local needs as specified in statements D and I.	0	0	++
14) To reduce transportation of minerals and road congestion, and promote sustainable transport	There will be positive impacts on this objective through statement C – Co-ordinating Essex Supply of Minerals. This statement not only seeks to locate workings in proximity to the County's main growth areas, matching supply with demand to reduce transport distances, but also looks to prioritise the existing rail depot infrastructure and marine landing wharves for the importation of non-indigenous minerals.	++	++	++
15) To protect and enhance human health and well being	There will be long term positive impacts on this objective through the flexibility of statement H – restoration and After-use in terms of restoration to amenity and public rights of way. This is supported by the approach of involving communities to deliver restoration and after-uses that benefit localities as specified in statements D and I. Statement D also seeks protection of communities' well-being in the short-medium term by mitigating any negative impacts that may arise on a site by site basis. Indirectly there may also be positive impacts on human health and well being resulting from statement J in terms of the protection and creation of high quality habitats and landscapes that contribute to a high quality of life for present and future generations where after-use schemes are publically accessible.	0	0	++
16) To minimise nuisances and impact on local	There will be long term positive impacts on this objective through the flexibility of statement H – restoration and After-use in terms of restoration to amenity. This is	0	0	++

amenity	supported by the approach of involving communities to deliver restoration and after-uses that benefit localities as specified in statements D and I. Statement D also seeks protection of communities' well-being in the short-medium term by mitigating any negative impacts that may arise on a site by site basis. Indirectly there will also be positive impacts on amenity resulting from statement J in terms of the protection and creation of high quality habitats and landscapes that contribute to a high quality of life for present and future generations where after-use schemes are publically accessible.			

2.2 Aims and Objectives

Aims	Strategic Objectives
1. To promote sustainable development.	1. To ensure sustainable minerals development can be approved without delay in accordance with the presumption in the National Planning Policy Framework. 2. To ensure minerals development supports the proposals for sustainable economic growth, regeneration, and development outlined in adopted Local Plans/ LDFs prepared by Essex district/ borough/city councils. 3. To ensure that minerals development in the County fully promotes sustainable development. 4. To ensure certainty for both developers and the public. (economic, social, and environmental)
2. To promote a reduction in greenhouse gas emissions including carbon, and to ensure that new development is adaptable to changes in climatic conditions.	5. To ensure that minerals and associated development provides for - The minimisation of greenhouse gas emissions during the winning, working and handling of minerals. - Sustainable patterns of minerals transportation - The integration of features which promote climate change mitigation and adaptation into the design of minerals restoration and after-care proposals. (environmental)
3. To promote social inclusion, human health and well-being.	6. To ensure that local communities are consulted and their views considered during the development of minerals proposals and in the determination of planning applications for minerals development. 7. To ensure that the impacts on amenity of those people living in proximity to minerals

	development are rigorously controlled, minimised and mitigated. (social)
4. To promote the efficient use of minerals by using them in a sustainable manner and reducing the need for primary mineral extraction.	8. To reduce reliance on primary mineral resources in Essex, firstly through reducing the demand for minerals and minimising waste, and secondly, by the re-use and use of recycled aggregates. (economic, social, and environmental)
5. To protect and safeguard existing mineral reserves, existing permitted mineral sites and Preferred Sites for mineral extraction, as well as existing and proposed sites for associated mineral development.	9. To identify and safeguard the following mineral resources in Essex: - Sand and gravel, silica sand, brickearth, brick clay, and chalk reserves which have potential future economic and/ or conservation value. Unnecessary sterilisation should be avoided. - Existing and potential secondary processing and aggregate recycling facilities that are of strategic importance for future mineral supply to ensure that these are not compromised by other non-mineral development. (economic, social, and environmental)
6. To provide for a steady and adequate supply of primary minerals to meet future requirements.	10. To provide for a steady and adequate supply of primary aggregates and industrial minerals by, - safeguarding transhipment sites for importing and exporting mineral products; - meeting the mineral provision targets agreed by the East of England Aggregates Working Party, or as indicated by the Local Aggregate Assessment. - identifying suitable mineral extraction sites through site allocations in the Plan; (economic)
7. To promote and enhance the natural, historic and built environment in relation to mineral extraction and associated development.	11. To provide protection from minerals development to designated areas of landscape, biodiversity, geodiversity, cultural and heritage importance, in a manner which is commensurate with their importance. 12. To secure high quality restoration of extraction sites with appropriate after-care to achieve new after-uses which are beneficial and enhance the local environment. 13. To maintain and/or enhance landscape, biodiversity and residential amenity for people living in proximity to minerals development. (environmental, social)

8. To reduce the impact of minerals extraction and associated development on the transport system.	14. To achieve more sustainable patterns of minerals transportation by, - Giving preference to identifying local sources of aggregate as close as reasonably possible to urban growth areas and growth centres. - Optimising how minerals sites obtain access to the strategic highway network. - Mitigating the adverse traffic impacts of mineral extraction and associated development by appropriate traffic management measures. - Increasing the use and availability of rail and water facilities for the long haul movement of mineral products. (economic, social, and environmental)

Table 2: Appraisal of Aims and Objectives

Aims of MLP	1				2	3		4	5	6	7			8
Strategic Objectives of MLP	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1) To protect and enhance biodiversity throughout Essex	0	0	0	0	0	0	0	0	0	/	+	+	+	0
2) To maintain and enhance water resources and quality	0	0	0	0	0	0	+	0	0	0	0	0	0	0
3) To minimise the risk of flooding	0	0	0	0	0	0	+	0	0	0	0	0	0	0
4) To encourage the sustainable use of land and protection of soils, including the best and most versatile agricultural land	0	0	+	0	0	0	+	0	+	0	0	0	0	0
5) To promote the minerals supply hierarchy and where mineral waste is produced, to promote the movement of minerals waste up the waste	0	0	+	0	0	0	0	+	0	+	0	0	0	0

management hierarchy														
6) To safeguard air quality	0	0	0	0	0	0	+	0	0	0	0	0	0	+
7) To minimise the net emissions of greenhouse gases and increase adaptability to climate change	0	0	0	0	+	0	0	0	0	0	0	0	0	0
8) To minimise the impact on the historic environment, both above and below ground	0	0	0	0	0	0	0	0	0	/	+	0	+	0
9) To protect and enhance the quality and character of the Metropolitan Green belt (and the Essex Landscape)	0	0	+	0	/	0	0	+	0	/	0	+	+	0
10) To enable all sections of the community to participate fully at all stages of decision making in the Minerals Local Plan and in determining planning applications	/	0	0	+	0	+	0	0	0	0	0	0	0	0
11) To maximise opportunities for economic development, including jobs, arising from minerals activities	0	0	+	0	0	0	0	0	0	0	0	0	0	+
12) To improve the sustainable use of minerals	+	+	+	+	0	0	0	+	+	+	0	0	0	+
13) To achieve beneficial restoration and aftercare of all minerals sites	0	0	0	0	+	0	0	0	0	0	0	+	0	0
14) To reduce	0	+	0	0	+	0	+	0	0	0	0	0	0	+

transportation of minerals and road congestion, and promote sustainable transport														
15) To protect and enhance human health and well being	0	0	0	0	0	0	+	0	0	/	0	0	+	/
16) To minimise nuisances and impact on local amenity	/	0	0	0	0	+	+	0	0	/	0	0	+	/

Summary

The aims and strategic objectives of the Minerals Local Plan have positive impacts on all of the Sustainability Objectives. Where uncertain impacts are likely to occur, the majority of these will be rectified in other elements of the Local Plan where site specific characteristics and impacts are more relevant, such as site allocation criteria and assessments and development management policies. Similarly, certain objectives and criteria of the Sustainability Framework are more relevant to these elements.

2.3 The Strategy

2.3.1 Policy S1 Presumption in Favour of Sustainable Development

The Minerals Planning Authority will take a positive approach to minerals development that reflects the presumption in favour of sustainable development contained in the National Planning Policy Framework. It will work proactively with applicants to find solutions which mean that proposals can be approved wherever possible, and to secure minerals development that improves the economic, social and environmental conditions in the area.

Planning applications that accord with the site allocations and policies in this Local Plan will be approved without delay, unless material considerations indicate otherwise.

Where there are no policies relevant to the application or relevant policies are demonstrably out-of-date at the time of making the decision, the Minerals Planning Authority will grant permission unless material conditions indicate otherwise – taking into account whether:

- Any adverse impacts of granting planning permission would significantly and demonstrably outweigh the benefits, when assessed against the policies in the National Planning Policy Framework taken as a whole; or

- Specific policies in the National Planning Policy Framework indicate that development should be restricted.

Table 3: Appraisal of Policy S1 Presumption in Favour of Sustainable Development

Sustainability Objectives	Comment	S	M	L

1) To protect and enhance biodiversity throughout Essex	There will be no direct impacts on this objective; however there will be positive impacts in accumulation with other policies aligned more closely to specific environmental criteria in the Minerals Local Plan.	0	0	0
2) To maintain and enhance water resources and quality	There will be no direct impacts on this objective; however there will be positive impacts in accumulation with other policies aligned more closely to specific environmental criteria in the Minerals Local Plan.	0	0	0
3) To minimise the risk of flooding	There will be no direct impacts on this objective; however there will be positive impacts in accumulation with other policies aligned more closely to specific environmental criteria in the Minerals Local Plan.	0	0	0
4) To encourage the sustainable use of land and protection of soils, including the best and most versatile agricultural land	There will be no direct impacts on this objective; however there will be positive impacts in accumulation with other policies aligned more closely to specific mineral based and environmental criteria in the Minerals Local Plan.	0	0	0
5) To promote the minerals supply hierarchy and where mineral waste is produced, to promote the movement of minerals waste up the waste management hierarchy	There will be no direct impacts on this objective; however there will be positive impacts in accumulation with other policies aligned more closely to specific mineral based criteria in the Minerals Local Plan.	0	0	0
6) To safeguard air quality	There will be no direct impacts on this objective; however there will be positive impacts in accumulation with other policies aligned more closely to specific environmental criteria in the Minerals Local Plan.	0	0	0
7) To minimise the net emissions of greenhouse gases and increase adaptability to climate change	There will be no direct impacts on this objective; however there will be positive impacts in accumulation with other policies aligned more closely to specific environmental criteria in the Minerals Local Plan.	0	0	0
8) To minimise the impact on the historic environment, both above and below ground	There will be no direct impacts on this objective; however there will be positive impacts in accumulation with other policies aligned more closely to specific environmental criteria in the Minerals Local Plan.	0	0	0
9) To protect and enhance the quality and character of the	There will be no direct impacts on this objective; however there will be positive impacts in accumulation with other policies aligned more closely to specific environmental	0	0	0

Metropolitan Green belt (and the Essex Landscape)	criteria in the Minerals Local Plan.			
10) To enable all sections of the community to participate fully at all stages of decision making in the Minerals Local Plan and in determining planning applications	There will be no direct impacts on this objective.	0	0	0
11) To maximise opportunities for economic development, including jobs, arising from minerals activities	There will be no direct impacts on this objective; however there will be positive impacts in accumulation with other policies aligned more closely to specific mineral based and economic criteria in the Minerals Local Plan.	0	0	0
12) To improve the sustainable use of minerals	There will be no direct impacts on this objective; however there will be positive impacts in accumulation with other policies aligned more closely to specific mineral based criteria in the Minerals Local Plan.	0	0	0
13) To achieve beneficial restoration and aftercare of all minerals sites	There will be no direct impacts on this objective; however there will be positive impacts in accumulation with other policies aligned more closely to specific mineral based, social and environmental criteria in the Minerals Local Plan.	0	0	0
14) To reduce transportation of minerals and road congestion, and promote sustainable transport	There will be no direct impacts on this objective; however there will be positive impacts in accumulation with other policies aligned more closely to specific mineral based, social, economic and environmental criteria in the Minerals Local Plan.	0	0	0
15) To protect and enhance human health and well being	There will be no direct impacts on this objective; however there will be positive impacts in accumulation with other policies aligned more closely to specific social and environmental criteria in the Minerals Local Plan.	0	0	0
16) To minimise nuisances and impact on local amenity	There will be no direct impacts on this objective; however there will be positive impacts in accumulation with other policies aligned more closely to specific social and environmental criteria in the Minerals Local Plan.	0	0	0

2.3.2 The Strategy and Policy S2 Strategic Priorities for Minerals Development

The Strategy of the Plan is:

To provide for the best possible geographic dispersal of sand and gravel across the County, accepting that due to geographic factors the majority of sites will be located in the central and the north eastern parts of the County (to support key areas of growth and development and to minimise mineral miles) with a focus on extending existing extraction sites with primary processing plant, and reducing reliance on restoration by landfill.

Policy S2 Strategic Priorities for Minerals Development:

The strategic priorities for minerals development are focused primarily on meeting the mineral supply needs of Essex whilst achieving sustainable development. The strategy will promote this by:-

1. Ensuring minerals development makes a contribution towards reducing greenhouse gas emissions, is resilient and can demonstrate adaptation to the impacts of climatic change,

2. Ensuring there are no significant adverse impacts arising from proposed minerals development for public health and safety, amenity, quality of life of nearby communities, and the environment,

3. Reducing the quantity of minerals used and waste generated, through appropriate design and procurement, good practices, and encouraging re-use and encouraging the re-use and recycling of construction materials containing minerals,

4. Improving access to, and the quality and quantity of recycled/ secondary aggregates, by developing and safeguarding a well distributed County-wide network of strategic and non-strategic aggregate recycling sites,

5. Safeguarding mineral resources of national and local importance, minerals transhipment sites, Strategic Aggregate Recycling Facilities facilities and coated roadstone plants, so that non-minerals development does not sterilise or compromise mineral resources and mineral supply facilities,

6. Making planned provision through Preferred Site allocations for a steady and adequate supply of aggregates and industrial minerals to meet identified national and local mineral needs in Essex during the plan-period whilst maintaining landbanks at appropriate levels,

7. Providing for the best possible geographic dispersal of sand and gravel across the County to support key areas of growth and development, infrastructure projects and to minimise mineral miles,

8. Ensuring progressive phased working and the high quality restoration of mineral extraction developments so as to:

a) significantly reduce reliance upon the use of landfill materials and,

b) provide beneficial after-use(s) that secure long lasting community and environmental benefits, including biodiversity, and,

c) protect the soils resource for best and most versatile agricultural land.

9. Maintaining and safeguarding transhipment sites within the County to provide appropriate facilities for the importation and exportation of minerals.

Table 4: Appraisal of The Strategy and Policy S2 Strategic Priorities for Minerals Development

Sustainability Objectives	Comment	S	M	L
1) To protect and enhance biodiversity throughout Essex	There will be no impact on biodiversity from minerals development as a result of priority 2, which seeks to mitigate any adverse impacts that may occur. There will be significant positive impacts on this objective through priority 8 in the long term through high quality restoration to provide beneficial after-use and environmental benefits, although it is recognised that restoration to habitats for the purpose of biodiversity may not be the most beneficial after-use in all locations.	0	0	++
2) To maintain and enhance water resources and quality	There will be no impact on water quality (in so far as this is covered by 'the environment') from minerals development as a result of priority 2, which seeks to mitigate any adverse impacts that may occur. It is acknowledged that water quality is a local level issue, and as such is more appropriately covered in development management criteria and site selection methodologies rather than a strategic priority.	0	0	0
3) To minimise the risk of flooding	There will be no impacts on flooding. It is acknowledged that flood risk is a local level issue, and as such is more appropriately covered in development management criteria and site selection methodologies rather than a strategic priority.	0	0	0
4) To encourage the sustainable use of land and protection of soils, including the best and most versatile agricultural land	There will be positive impacts on the sustainable use of land, where the encouragement of the re-use and recycling of construction materials, the non-sterilisation of resources and the identification of preferred site allocations for a steady and adequate supply of minerals all seek to minimise the need for marginal or inappropriate sites to be identified. The protection of soils and the best and most versatile agricultural land in priority 8 also adheres to this objective.	++	++	++
5) To promote the minerals supply hierarchy and where mineral waste is produced, to promote the movement of minerals waste up the waste management hierarchy	Policy S1 and the overall strategy both combine to promote the minerals supply hierarchy and provide sufficient detail on reducing reliance on restoration by landfill required on a strategic level. There will therefore be positive impact on this objective, throughout the short-long term.	++	++	++
6) To safeguard air quality	There would be a positive effect on this objective through adopting a strategic approach to site location. By allocating the majority of sites to support key areas of	+	+	+

	growth and development to reduce mineral miles, this is likely to reduce air quality impacts on a broad level. Finally, the policy direction is for a reduction of primary extraction in favour of material recycling and re-use. This will reduce those emissions associated with primary extraction.			
7) To minimise the net emissions of greenhouse gases and increase adaptability to climate change	There will be a positive effect regarding this objective where minerals development will make a contribution towards reducing greenhouse gas emissions and can demonstrate adaptation to the impacts of climate change. By allocating the majority of sites to support key areas of growth and development to reduce mineral miles, this is likely to reduce air quality impacts on a broad level. Emissions associated with extraction are also typically higher than with re-use and recycling, which is a strategic priority of the plan, so the general direction will also contribute to a reduction in emissions.	++	++	++
8) To minimise the impact on the historic environment, both above and below ground	There will be no impact on the historic environment (in so far as this is covered by 'the environment') from minerals development as a result of priority 2, which seeks to mitigate any adverse impacts that may occur. It is acknowledged that historic environment issues are more relevant at a local level, and as such are more appropriately covered in development management criteria and site selection methodologies rather than a strategic priority.	0	0	0
9) To protect and enhance the quality and character of the Metropolitan Green belt (and the Essex Landscape)	There will be no impact on landscapes (in so far as this is covered by 'the environment') from minerals development as a result of priority 2, which seeks to mitigate any adverse impacts that may occur. It is acknowledged that landscapes are a local level issue, and as such are more appropriately covered in development management criteria and site selection methodologies rather than a strategic priority.	0	0	0
10) To enable all sections of the community to participate fully at all stages of decision making in the Minerals Local Plan and in determining planning applications	There will be no direct impacts on this objective on a strategic level.	0	0	0
11) To maximise opportunities for economic development, including jobs, arising from minerals activities	Whilst it is considered that there would be no effect with respect to job creation, general economic development will be aided by the strategic priorities. The policy seeks to create a network of strategic and non-strategic recycling facilities to cover the spatial extent of Essex. The strategy in relation to distribution of the majority of sites also responds well to the majority of the County's population, creating accessible job creation from minerals development/activities. The impacts in the long term	+	+	/

	however are uncertain, and depend greatly on specific proposals' restoration schemes and after-uses.			
12) To improve the sustainable use of minerals	The strategic priorities directly accord with this objective. They seek to promote the use of recycled aggregates and encourage the re-use and recycling of construction materials, thereby increasing the amount than can be substituted for primary aggregate.	++	++	++
13) To achieve beneficial restoration and aftercare of all minerals sites	Strategic Priority 8 seeks to significantly reduce future reliance upon the use of landfill materials, provide beneficial after-use for a wide range of benefits and protect soils where appropriate. This flexible approach allows for a local context to be applied whilst acknowledging the strategic significance of restoration and thus has positive impacts in the long term; directly adhering to this sustainability objective.	0	0	++
14) To reduce transportation of minerals and road congestion, and promote sustainable transport	The strategic priorities directly accord with this sustainability objective. This approach calls for the strategic location of sites to ensure that transportation distances are minimised where the majority of sites will be located to support key areas of growth and development.	++	++	++
15) To protect and enhance human health and well being	Although it is unlikely that the operation of minerals development will enhance well being, there will be a positive impact on this objective where the strategy ensures there are no significant adverse impacts arising from proposed minerals development for public health and safety, amenity and quality of life of nearby communities. Although such impacts are often very localised and relevant to development management criteria and site methodologies, the significance of the potential issue is recognised as a strategic one considering all or a number of sites in accumulation. Restoration proposals to benefit communities, amenity and the environment has long term positive impacts.	+	+	++
16) To minimise nuisances and impact on local amenity	There will be positive impact on this objective where the strategy minimises nuisances and impact on amenity where there will be no significant adverse impacts arising from proposed minerals development for public health and safety, amenity and quality of life of nearby communities. Although such impacts are often very localised and relevant to development management criteria and site methodologies, the significance of the potential issue is recognised as a strategic one considering all or a number of sites in accumulation.	++	++	++

2.3.3 Policy S3 Climate Change

Applications for minerals development shall demonstrate how they have incorporated effective measures to minimise greenhouse gas emissions and to ensure effective adaptation and resilience to future climatic changes, having regard to:

1. Siting, location, design and transport arrangements,

2. On-site renewable and low carbon energy generation, where feasible and viable,

3. National and local principles/ design standards for Sustainable Drainage Systems, including measures to enhance on-site water efficiency and minimise flood impacts both on-site and in relation to adjacent land and 'downstream' land-uses,

4. On-site resilience to unexpected climatic events,

5. The implications of coastal change, where relevant, and,

6. The potential benefits from site restoration and after-use schemes for biodiversity and habitat creation, flood alleviation, and provision of living carbon sinks.

Table 5: Appraisal of Policy S3 Climate Change

Sustainability Objectives	Comment	S	M	L
1) To protect and enhance biodiversity throughout Essex	There will be positive impacts on this objective in the long term where applications will have to demonstrate how they have incorporated effective measures to minimise greenhouse gas emissions and to ensure effective adaptation and resilience to future climatic changes having regard to the potential benefits from site restoration and after-use schemes for biodiversity and habitat creation. Indirect positive impacts on this objective will be realised in the short and medium term through the minimisation of flood risk, which will have secondary impacts on habitats in cases of unexpected climatic events or where such amenity is a downstream land-use or on adjacent land.	0	0	+
2) To maintain and enhance water resources and quality	There will be no direct impacts on the water quality element of this objective; however water resources and efficiency criteria are met where applications should include measures to enhance on-site water efficiency. In conjunction with after-use proposals specified in point 6, these measures are required post minerals working and in the long term.	+	+	+
3) To minimise the risk of flooding	This policy directly adheres to this objective through requiring applications to include details on climate change adaptation, sustainable drainage systems, measures to minimise flood impact on and off (as a result of) the site, resilience to unexpected climatic events, the implications of coastal change and flood alleviation.	++	++	++
4) To encourage the sustainable use of	There will be indirect positive impact on this objective my minimising the flood impacts in relation to downstream	0	0	0

land and protection of soils, including the best and most versatile agricultural land	land-uses and adjacent land, in so far as this is relevant to high quality agricultural land in specific circumstances.			
5) To promote the minerals supply hierarchy and where mineral waste is produced, to promote the movement of minerals waste up the waste management hierarchy	There will be no direct impact on this objective	0	0	0
6) To safeguard air quality	There will be positive impact on this objective where applications will have to demonstrate how they have incorporated effective measures to minimise greenhouse emissions, and also in regard siting, location, design and transport arrangements. The impacts are limited where this objective is relevant to transport emissions only in this instance.	+	+	+
7) To minimise the net emissions of greenhouse gases and increase adaptability to climate change	There will be positive impact on this objective where applications will have to demonstrate how they have incorporated effective measures to minimise greenhouse emissions, and also in regard siting, location, design and transport arrangements. This is in addition to the further resilience conditions, adaptation to climatic change and the possible incorporation of on-site renewable and low carbon energy generation.	++	++	++
8) To minimise the impact on the historic environment, both above and below ground	There will be no direct impact on this objective.	0	0	0
9) To protect and enhance the quality and character of the Metropolitan Green belt (and the Essex Landscape)	There will be no impact on this objective. Potential tensions between landscapes and minerals allocations in terms of potential on-site renewable generation methods will not occur where renewables will only be sought where feasible and viable.	0	0	0
10) To enable all sections of the community to participate fully at all stages of decision making in the Minerals Local Plan and in determining	There will be no direct impact on this objective.	0	0	0

planning applications				
11) To maximise opportunities for economic development, including jobs, arising from minerals activities	There will be no direct impact on this objective.	0	0	0
12) To improve the sustainable use of minerals	There will be no direct impact on this objective.	0	0	0
13) To achieve beneficial restoration and aftercare of all minerals sites	There will be positive impacts on this objective where climate change adaptation schemes and their viability and incorporation will have regard to the potential benefits from site restoration and after-use schemes	+	+	+
14) To reduce transportation of minerals and road congestion, and promote sustainable transport	There will be positive impact on this objective where applications will have to demonstrate how they have incorporated effective measures to minimise greenhouse emissions in regard to siting, location and transport arrangements.	+	+	+
15) To protect and enhance human health and well being	There will be no direct impacts on this objective. Indirect positive impacts on this objective will be realised through the minimisation of transport emissions and flood risk, which will have secondary impacts on health and well being in cases of unexpected climatic events or where housing is a downstream land-use or on adjacent land.	0	0	0
16) To minimise nuisances and impact on local amenity	There will be no direct impacts on this objective. Indirect positive impacts on this objective will be realised through the minimisation of transport emissions and flood risk, which will have secondary impacts on local amenity in cases of unexpected climatic events or where such amenity is a downstream land-use or on adjacent land.	0	0	0

2.3.4 Policy S4 Reducing the Use of Mineral Resources

All development proposals shall ensure that mineral waste is minimised and that minerals on development/ redevelopment sites are re-used and recycled, in order to reduce the need for primary minerals and the amount of construction, demolition, and excavation wastes going to landfill. This will be supported by joint working with strategic partners to ensure:

1. The use of best practice in the extraction, processing and transportation of primary minerals to minimise mineral waste,

2. The application of national and local standards for sustainable design and construction in proposed development,

3. The application of procurement policies which promote sustainable design and construction in proposed development, and

4. The maximum possible recovery of minerals from construction, demolition and excavation wastes produced at development or redevelopment sites. This will be promoted by on-site re-use/ recycling, or if not environmentally acceptable to do so, through re-use/ recycling at other nearby aggregate recycling facilities in proximity to the site.

Table 6: Appraisal of Policy S4 Reducing the Use of Mineral Resources

Sustainability Objectives	Comment	S	M	L
1) To protect and enhance biodiversity throughout Essex	There may be indirect positive impacts on biodiversity through a reduced need to allocate new sites for primary minerals. In addition to this, environmental impacts are minimised where re-use and recycling will not be allowed on site where they are likely.	0	0	0
2) To maintain and enhance water resources and quality	There may be indirect positive impacts on water quality through a reduced need to allocate new sites for primary minerals. In addition to this, environmental impacts are minimised where re-use and recycling will not be allowed on site where they are likely.	0	0	0
3) To minimise the risk of flooding	There may be indirect positive impacts on minimising flood risk through a reduced need to allocate new sites for primary minerals. In addition to this, environmental impacts are minimised where re-use and recycling will not be allowed on site where they are likely.	0	0	0
4) To encourage the sustainable use of land and protection of soils, including the best and most versatile agricultural land	There will be positive impacts on this objective where the maximum possible recovery of minerals from construction, demolition, and excavation waste produced at development or re-development sites are promoted by on-site re-use and recycling.	+	+	0
5) To promote the minerals supply hierarchy and where mineral waste is produced, to promote the movement of minerals waste up the waste management hierarchy	There will be significant positive impacts on this objective through the entire policy, in reducing the use of minerals resources and promoting and making conditions for re-use and recycling.	++	++	++
6) To safeguard air quality	There will be positive impacts on this objective through on-site re-use and recycling where possible and a general policy direction of reducing minerals miles. This reduces associated transport emissions.	+	+	0

7) To minimise the net emissions of greenhouse gases and increase adaptability to climate change	There will be positive impacts on this objective through on-site re-use and recycling where possible and a general policy direction of reducing minerals miles. This reduces associated transport emissions. Also, the emissions associated with extraction are typically higher than with material recycling and re-use so the general policy direction will also contribute to a reduction in emissions.	+	+	0
8) To minimise the impact on the historic environment, both above and below ground	There may be indirect positive impacts on the historic environment through a reduced need to allocate new sites for primary minerals. In addition to this, environmental impacts are minimised where re-use and recycling will not be allowed on site where they are likely.	0	0	0
9) To protect and enhance the quality and character of the Metropolitan Green belt (and the Essex Landscape)	There may be uncertain long term impacts on landscapes in those instances where certain levels of inert (i.e. Construction and Demolition) mineral waste may be needed to restore landscapes to desired levels post working. This may not be possible with increased re-use and recycling, however it is acknowledged that the Plan should not be considering this, and the restoration hierarchy of low-level in the first instance (Policy S12) deals with this issue in a sustainable manner. There may be indirect positive impacts on landscapes through a reduced need to allocate new sites for primary minerals. In addition to this, environmental impacts are minimised where re-use and recycling will not be allowed on site where they are likely.	0	0	/
10) To enable all sections of the community to participate fully at all stages of decision making in the Minerals Local Plan and in determining planning applications	There will be no impact on this objective.	0	0	0
11) To maximise opportunities for economic development, including jobs, arising from minerals activities	In a broad sense, the jobs created in re-use, recovery and recycling can be seen to replace those lost to the equivalent primary extraction. Thus although there will be a certain degree of job creation in the County, no impact on this objective has been predicted.	0	0	0
12) To improve the sustainable use of minerals	There will be significant positive impacts on this objective through the entire policy, in reducing the use of minerals resources, primary extraction and promoting and making conditions for re-use and recycling.	++	++	++

13) To achieve beneficial restoration and aftercare of all minerals sites	There may be uncertain long term impacts on landscapes in those instances where certain levels of inert (i.e. Construction and Demolition) mineral waste may be needed to restore landscapes to desired levels post working. This may not be possible with increased re-use and recycling, however it is acknowledged that the Plan should not be considering this, and the restoration hierarchy of low-level in the first instance (Policy S12) deals with this issue in a sustainable manner.	0	0	/
14) To reduce transportation of minerals and road congestion, and promote sustainable transport	There will be positive impacts on this objective through on-site re-use and recycling where possible and a general policy direction of reducing minerals miles.	+	+	0
15) To protect and enhance human health and well being	There will be no direct impact on this objective.	0	0	0
16) To minimise nuisances and impact on local amenity	There will be no direct impact on this objective.	0	0	0

2.3.5 Policy S5 Creating and Safeguarding a Network of Aggregate Recycling Facilities

The increased production and supply of recycled/secondary aggregates in the County is supported to reduce reliance on land-won and marine-won primary aggregates. The County's existing network of aggregate recycling facilities shall be maintained and expanded, wherever appropriate. In addition:

1. Existing Strategic Aggregate Recycling Sites (SARS) identified on the Policies Map and defined in the map in Appendix 9 will be safeguarded from development that might result in their closure earlier than their permission. There is a general presumption that existing SARS should remain in operation for the life of the permission.

2. The Local Planning Authority shall consult the Minerals Planning Authority for its views and take them into account before determining development proposals that would compromise the continued operation and potential of an existing SARS.

3. Proposals for new aggregate recycling facilities, whether non-strategic or in the form of SARS, should be located on the main highway network in proximity to the Key Centres of Basildon, Chelmsford, Colchester, and Harlow. Such proposals shall be permitted in the following preferred locations, provided they do not cause unacceptable highway harm, are environmentally acceptable and in accordance with other policies in the Development Plan for Essex :

a) on major demolition and construction sites (on a temporary basis),

b) within permanent waste management sites,

c) in commercial areas used for general industrial or storage purposes, subject to compatibility with neighbouring land-uses,

d) on appropriate previously developed land,

e) on current mineral workings and landfill sites provided the development does not unduly prejudice the agreed restoration timescale for the site and the use ceases prior to the completion of the site, and,

f) within major allocated or permitted development areas (as set out in the Development Plan for Essex).

Table 7: Appraisal of Policy S5 Creating and Safeguarding a Network of Aggregate Recycling Facilities

Sustainability Objectives	Comment	S	M	L
1) To protect and enhance biodiversity throughout Essex	There will be no impact on this objective where proposals will have to be environmentally acceptable. The criteria for this are more relevant to Policy DM1.	0	0	0
2) To maintain and enhance water resources and quality	There will be no impact on this objective where proposals will have to be environmentally acceptable. The criteria for this are more relevant to Policy DM1.	0	0	0
3) To minimise the risk of flooding	There will be no impact on this objective where proposals will have to be environmentally acceptable. The criteria for this are more relevant to Policy DM1.	0	0	0
4) To encourage the sustainable use of land and protection of soils, including the best and most versatile agricultural land	There will be positive impacts on this objective through the safeguarding of existing facilities, the expansion of them where required and the general presumption that existing SARS should remain in operation for the life of the permission. In regards to high quality agricultural land there will be no impact on this element of the objective where proposals will have to be environmentally acceptable. There will be a long term positive impact on this objective. It is noted that proposals for new aggregate recycling facilities will be permitted where they do not unduly prejudice the agreed restoration timescale for the site and the use ceases prior to the completion of the site.	+	+	+
5) To promote the minerals supply hierarchy and where mineral waste is produced, to promote the movement of minerals waste up the waste management hierarchy	The strategic approach to aggregate recycling directly accords with this objective. In addition to this, it is noted that proposals for new aggregate recycling facilities, whether non-strategic or in the form of SARS are consistent with the corresponding policy detail in the emerging Waste Local Plan, and subsequent related policies throughout both the Minerals and Waste Local Plans.	++	++	++

6) To safeguard air quality	There will be no direct impact on this objective where proposals will have to be environmentally acceptable. The criteria for this are more relevant to Policy DM1. Indirect positive impacts are associated with reducing mineral miles, transport distances and thus vehicle emissions.	0	0	0
7) To minimise the net emissions of greenhouse gases and increase adaptability to climate change	There will be no direct impact on this objective. Indirect positive impacts are associated with reducing mineral miles, transport distances and thus vehicle emissions.	0	0	0
8) To minimise the impact on the historic environment, both above and below ground	There will be no direct impact on this objective where proposals will have to be environmentally acceptable. The criteria for this are more relevant to Policy DM1. Indirect positive impacts are associated with reducing mineral miles, transport distances and thus vehicle emissions.	0	0	0
9) To protect and enhance the quality and character of the Metropolitan Green belt (and the Essex Landscape)	There will be no direct impact on this objective where proposals will have to be environmentally acceptable. The criteria for this are more relevant to Policy DM1. Indirect positive impacts are associated with reducing mineral miles, transport distances and thus vehicle emissions.	0	0	0
10) To enable all sections of the community to participate fully at all stages of decision making in the Minerals Local Plan and in determining planning applications	There will be no impact on this objective	0	0	0
11) To maximise opportunities for economic development, including jobs, arising from minerals activities	Proposals for new aggregate recycling facilities, located in proximity to the key centres of Basildon, Chelmsford, Colchester and Harlow respond well to planned growth and large centres of population. There will therefore be positive impacts on this objective.	+	+	0
12) To improve the sustainable use of minerals	The strategic approach to aggregate recycling directly accords with this objective. In addition to this, it is noted that proposals for new aggregate recycling facilities, whether non-strategic or in the form of SARS are consistent with the corresponding policy detail in the emerging Waste Local Plan, and subsequent related policies throughout both the Minerals and Waste Local Plans.	++	++	++

13) To achieve beneficial restoration and aftercare of all minerals sites	There will be a long term positive impact on this objective. It is noted that proposals for new aggregate recycling facilities will be permitted where they do not unduly prejudice the agreed restoration timescale for the site and the use ceases prior to the completion of the site. There are also synergistic impacts with Policy S12.	0	0	+
14) To reduce transportation of minerals and road congestion, and promote sustainable transport	The network of aggregate recycling facilities and the proposals for new facilities to correspond to the main highway network and key centres of growth and population in the County, respond well to this objective and reducing mineral miles.	+	+	0
15) To protect and enhance human health and well being	There will be no direct impact on this objective. Indirect positive impacts exist where although proposals for new facilities will correspond to large centres of population in the County, the preferred location criteria responds well to distance new facilities away from expected housing areas.	0	0	0
16) To minimise nuisances and impact on local amenity	There may be associated indirect positive impacts in certain proposals where new aggregate recycling facilities will be permitted where they do not unduly prejudice the agreed restoration timescale for the site and the use ceases prior to the completion of the site, in those cases where the after-use is to amenity.	0	0	0

2.3.6 Policy S6 Provision for Sand and Gravel Extraction

The Mineral Planning Authority shall endeavour to ensure reserves of land won sand and gravel are available, sufficient for at least 7 years extraction or such other period as set out in national policy, taking into account the local annual supply requirement for Essex. This requirement will be periodically assessed.

The Plan identifies sufficient provision through Preferred Sites allocations (listed in Table 5) until 2029 and will be subject to periodic review to enable the maintenance of at least a seven year landbank.

Proposals for mineral extraction on non-Preferred Sites will be resisted by the Mineral Planning Authority unless the applicant can demonstrate:

a) An overriding justification and/ or overriding benefit for the proposed extraction, and,

b) The scale of the extraction is no more than the minimum essential for the key purpose of the proposal, and,

c) The proposal is environmentally suitable, sustainable, and consistent with the relevant policies set out in the Development Plan.

Table 8: Appraisal of Policy S6 Provision for Sand and Gravel Extraction

Sustainability Objectives	Comment	S	M	L

1) To protect and enhance biodiversity throughout Essex	There will be no direct impacts on this objective. It is possible that the apportionment figure will increase the amount of sites for primary extraction above alternative figures which could have negative environmental impacts in comparison, however at this point, and with periodical assessment, it is not definite whether sites identified in the landbank will actually be brought forward for extraction. There will be positive synergistic impacts on biodiversity in conjunction with Policy S12.	0	0	0
2) To maintain and enhance water resources and quality	There will be no direct impacts on this objective. It is possible that the apportionment figure will increase the amount of sites for primary extraction above alternative figures which could have negative environmental impacts in comparison, however at this point, and with periodical assessment, it is not definite whether sites identified in the landbank will actually be brought forward for extraction.	0	0	0
3) To minimise the risk of flooding	There will be no direct impacts on this objective. It is possible that the apportionment figure will increase the amount of sites for primary extraction above alternative figures which could have negative environmental impacts in comparison, however at this point, and with periodical assessment, it is not definite whether sites identified in the landbank will actually be brought forward for extraction.	0	0	0
4) To encourage the sustainable use of land and protection of soils, including the best and most versatile agricultural land	There will be positive impacts on the sustainable use of land where the landbank allows for future mineral resources to be identified at this stage for a best case economic scenario. There will be no direct impacts on the best and most versatile agricultural land element of this objective. It is possible that the apportionment figure will increase the amount of sites for primary extraction above alternative figures which could have negative environmental impacts in comparison, however at this point, and with periodical assessment, it is not definite whether sites identified in the landbank will actually be brought forward for extraction.	+	+	+
5) To promote the minerals supply hierarchy and where mineral waste is produced, to promote the movement of minerals waste up the waste management hierarchy	Maintaining land banks and committing to a periodical assessment of the MLP directly accords with this objective. A properly maintained landbank secures and maintains mineral supplies, and the approach of the MLP allows for flexibility in preparing for a best case economic scenario. This is in conformity of the overarching goal of the Minerals Supply Hierarchy which is stated as the ensuring of a steady and adequate supply of minerals through the plan period. The wider programme of periodical assessment stipulated in the policy would have the effect of assuring that economic changes both within the County and London are not negatively impacting on a variety of economic, social and environmental factors in the County, and these factors are considered at the plan preparation stage. Although it is possible that there will be future cumulative impacts on Policy S8 from Policy IMR1 in regards to this objective, at this stage it is impossible to determine whether these will be positive, negative or changeable from the	++	++	++

	current direction and methodology regarding the sand and gravel apportionment and landbank.			
6) To safeguard air quality	There will be no direct impacts on this objective. It is possible that the apportionment figure will increase the amount of sites for primary extraction above alternative figures which could have negative environmental impacts in comparison, however at this point, and with periodical assessment, it is not definite whether sites identified in the landbank will actually be brought forward for extraction.	0	0	0
7) To minimise the net emissions of greenhouse gases and increase adaptability to climate change	There will be no direct impacts on this objective. It is possible that the apportionment figure will increase the amount of sites for primary extraction above alternative figures which could have negative environmental impacts in comparison, however at this point, and with periodical assessment, it is not definite whether sites identified in the landbank will actually be brought forward for extraction.	0	0	0
8) To minimise the impact on the historic environment, both above and below ground	There will be no direct impacts on this objective. It is possible that the apportionment figure will increase the amount of sites for primary extraction above alternative figures which could have negative environmental impacts in comparison, however at this point, and with periodical assessment, it is not definite whether sites identified in the landbank will actually be brought forward for extraction.	0	0	0
9) To protect and enhance the quality and character of the Metropolitan Green belt (and the Essex Landscape)	There will be no direct impacts on this objective. It is possible that the apportionment figure will increase the amount of sites for primary extraction above alternative figures which could have negative environmental impacts in comparison, however at this point, and with periodical assessment, it is not definite whether sites identified in the landbank will actually be brought forward for extraction.	0	0	0
10) To enable all sections of the community to participate fully at all stages of decision making in the Minerals Local Plan and in determining planning applications	There will be no direct impacts on this objective.	0	0	0
11) To maximise opportunities for economic development, including jobs, arising from minerals activities	The policy will have significant positive impacts on this objective. In ensuring reserves for sand and gravel are based on a 7 year apportionment as specified in the LAA and consistent with previous sub-national apportionments, there will be a supply of minerals that surpasses that based on a rolling average of 10 years sales data by approximately 0.75mtpa. This approach supports economic growth by allowing for and supporting any economic upturn in the County and London. Review periods in which to reassess apportionments relevant to identified needs and changing situations allows a flexible approach and can	++	++	++

	respond to any significant oversupply or undersupply in land banks / apportionments should they be apparent. Although it is possible that there will be future cumulative impacts on Policy S8 from Policy IMR1 in regards to this objective, at this stage it is impossible to determine whether these will be positive, negative or changeable from the current direction and methodology regarding the sand and gravel apportionment and landbank.			
12) To improve the sustainable use of minerals	Maintaining land banks and committing to a periodical assessment of the MLP directly accords with this objective. A properly maintained landbank secures and maintains mineral supplies, and the approach of the MLP allows for flexibility in preparing for a best case economic scenario. This is in conformity of the overarching goal of the Minerals Supply Hierarchy which is stated as the ensuring of a steady and adequate supply of minerals through the plan period. The wider programme of periodical assessment stipulated in the policy would have the effect of assuring that economic changes both within the County and London are not negatively impacting on a variety of economic, social and environmental factors in the County, and these factors are considered at the plan preparation stage. Although it is possible that there will be future cumulative impacts on Policy S8 from Policy IMR1 in regards to this objective, at this stage it is impossible to determine whether these will be positive, negative or changeable from the current direction and methodology regarding the sand and gravel apportionment and landbank.	++	++	++
13) To achieve beneficial restoration and aftercare of all minerals sites	There will be no direct impacts on this objective. There will be positive synergistic impacts in conjunction with Policy S12.	0	0	0
14) To reduce transportation of minerals and road congestion, and promote sustainable transport	There will be no direct impact on this objective.	0	0	0
15) To protect and enhance human health and well being	There will be no direct impacts on this objective. It is possible that the apportionment figure will increase the amount of sites for primary extraction above alternative figures which could have negative well-being impacts in comparison, however at this point, and with periodical assessment, it is not definite whether sites identified in the landbank will actually be brought forward for extraction.	0	0	0
16) To minimise nuisances and impact on local amenity	There will be no direct impacts on this objective. It is possible that the apportionment figure will increase the amount of sites for primary extraction above alternative figures which could have negative amenity impacts in comparison, however at this point, and with periodical	0	0	0

	assessment, it is not definite whether sites identified in the landbank will actually be brought forward for extraction. There will be positive synergistic impacts on amenity in conjunction with Policy S12.			

2.3.7 Policy S7 Provision for Industrial Minerals

Any proposals for industrial minerals in the County will be considered as follows:-

Silica Sand Extraction:

Provision is made for a site extension at Martells Quarry, Ardleigh to maintain an appropriate minerals landbank for silica sand of at least ten years during the plan-period as defined in policy P2.

Brick Clay Extraction:

A minerals landbank of at least 25 years of brick-making clay will be maintained at the following brickworks:-

- Marks Tey and Bulmer through the extraction of remaining permitted reserves.

The extracted brick-making clay from Bulmer Brickworks and Marks Tey respectively should be used to support the brickworks in that locality only, as defined on the Policies Map.

Chalk Extraction:

The small-scale extraction of chalk will only be supported for agricultural and pharmaceutical uses at Newport Quarry as identified within the Policies Map. Extraction of chalk for other uses, such as aggregate, fill material or for engineering will not be supported.

Proposals for the extraction of industrial minerals on non-Preferred Sites will be permitted where:

- The reserves comprising the landbank are insufficient and/ or there is some other over-riding justification or benefit for the release of the site, and

- The proposal would be environmentally acceptable.

Table 9: Appraisal of Policy S7 Provision for Industrial Minerals

Sustainability Objectives	Comment	S	M	L
1) To protect and enhance biodiversity throughout Essex	There will be no impact on this objective through the identification of existing sites to meet the required landbanks for industrial materials. Any impacts related to the site extension at Martells Quarry, Ardleigh will be highlighted in the relevant site appraisal (B1) documented in this Environmental Report and summarised in the appraisal of Policy P2.	0	0	0
2) To maintain and enhance water	There will be no impact on this objective through the identification of existing sites to meet the required	0	0	0

resources and quality	landbanks for industrial materials. Any impacts related to the site extension at Martells Quarry, Ardleigh will be highlighted in the relevant site appraisal (B1) documented in this Environmental Report and summarised in the appraisal of Policy P2.			
3) To minimise the risk of flooding	There will be no impact on this objective through the identification of existing sites to meet the required landbanks for industrial materials. Any impacts related to the site extension at Martells Quarry, Ardleigh will be highlighted in the relevant site appraisal (B1) documented in this Environmental Report and summarised in the appraisal of Policy P2.	0	0	0
4) To encourage the sustainable use of land and protection of soils, including the best and most versatile agricultural land	There will be positive impacts on this objective where sites for industrial extraction have already been identified and/or have already received permission. In addition to this, proposals for the extraction of non-preferred sites will be permitted where reserves comprising the landbank are insufficient and/or there is some other overriding justification or benefit for the release of the site and the proposal would be environmentally acceptable. There will be no impact on the best and most versatile agricultural land element of this objective through the identification of existing sites to meet the required landbanks for industrial materials. Any impacts related to the site extension at Martells Quarry, Ardleigh will be highlighted in the relevant site appraisal (B1) documented in this Environmental Report and summarised in the appraisal of Policy P2. There will be cumulative positive impacts where existing and preferred sites will be safeguarded through the MSA and 250m MCA consultation zone as specified in Policy S6.	+	+	+
5) To promote the minerals supply hierarchy and where mineral waste is produced, to promote the movement of minerals waste up the waste management hierarchy	Maintaining adequate landbanks for 10 years of silica sand and 25 years of brick clay extraction directly accords with this objective. A properly maintained landbank secures and maintains mineral supplies. This is in conformity of the overarching goal of the Minerals Supply Hierarchy which is stated as the ensuring of a steady and adequate supply of minerals through the plan period.	++	++	++
6) To safeguard air quality	There will be no impact on this objective through the identification of existing sites to meet the required landbanks for industrial materials. Any impacts related to the site extension at Martells Quarry, Ardleigh will be highlighted in the relevant site appraisal (B1) documented in this Environmental Report and summarised in the appraisal of Policy P2.	0	0	0
7) To minimise the	There will be no impact on this objective through the	0	0	0

net emissions of greenhouse gases and increase adaptability to climate change	identification of existing sites to meet the required landbanks for industrial materials. Any impacts related to the site extension at Martells Quarry, Ardleigh will be highlighted in the relevant site appraisal (B1) documented in this Environmental Report and summarised in the appraisal of Policy P2.			
8) To minimise the impact on the historic environment, both above and below ground	There will be no impact on this objective through the identification of existing sites to meet the required landbanks for industrial materials. Any impacts related to the site extension at Martells Quarry, Ardleigh will be highlighted in the relevant site appraisal (B1) documented in this Environmental Report and summarised in the appraisal of Policy P2.	0	0	0
9) To protect and enhance the quality and character of the Metropolitan Green belt (and the Essex Landscape)	There will be no impact on this objective through the identification of existing sites to meet the required landbanks for industrial materials. Any impacts related to the site extension at Martells Quarry, Ardleigh will be highlighted in the relevant site appraisal (B1) documented in this Environmental Report and summarised in the appraisal of Policy P2.	0	0	0
10) To enable all sections of the community to participate fully at all stages of decision making in the Minerals Local Plan and in determining planning applications	There will be no direct impact on this objective.	0	0	0
11) To maximise opportunities for economic development, including jobs, arising from minerals activities	There will be no significant additional impacts in regards to job creation as all preferred industrial minerals sites are existing sites, except for the site extension at Martells Quarry, Ardleigh (B1). Despite this the maintenance of the landbanks will ensure that there is an adequate supply of industrial materials to support economic growth in the County, affording positive effects. In addition to this, proposals for the extraction of non-preferred sites will be permitted where reserves comprising the landbank are insufficient and/or there is some other overriding justification or benefit for the release of the site and the proposal would be environmentally acceptable.	+	+	+
12) To improve the sustainable use of minerals	Maintaining adequate landbanks for 10 years of silica sand and 25 years of brick clay extraction directly accords with this objective. A properly maintained landbank secures and maintains mineral supplies. In addition to this, proposals for the extraction of non-preferred sites will be permitted where reserves comprising the landbank are insufficient and/or there is some other overriding justification or benefit for the release of the site and the proposal would be environmentally acceptable.	++	++	++

13) To achieve beneficial restoration and aftercare of all minerals sites	There will be no direct impact on this objective.	0	0	0
14) To reduce transportation of minerals and road congestion, and promote sustainable transport	There will be no direct impact on this objective.	0	0	0
15) To protect and enhance human health and well being	There will be no impacts on this objective where sites for industrial extraction have already been identified and/or have already received permission. Any impacts related to the site extension at Martells Quarry, Ardleigh will be highlighted in the relevant site appraisal (B1) documented in this Environmental Report and summarised in the appraisal of Policy P2. Any non-preferred sites that come forward will have to demonstrate conformity with the various development management criteria in Policy DM1.	0	0	0
16) To minimise nuisances and impact on local amenity	There will be no impacts on this objective where sites for industrial extraction have already been identified and/or have already received permission. Any impacts related to the site extension at Martells Quarry, Ardleigh will be highlighted in the relevant site appraisal (B1) documented in this Environmental Report and summarised in the appraisal of Policy P2. Any non-preferred sites that come forward will have to demonstrate conformity with the various development management criteria in Policy DM1.	0	0	0

2.3.8 Policy S8 Safeguarding Mineral Resources and Mineral Reserves

By applying Mineral Safeguarding Areas (MSAs) and/ or Mineral Consultation Areas (MCAs), the Mineral Planning Authority will safeguard mineral resources of national and local importance from surface development that would sterilise a significant economic resource or prejudice the effective working of a permitted mineral reserve or Preferred Site allocation within the Minerals Local Plan. The Minerals Planning Authority shall be consulted, and its views taken into account, on proposed developments within MSAs and MCAs except for the excluded development identified in Appendix 9.

Mineral Safeguarding Areas

Mineral Safeguarding Areas are designated for mineral deposits of sand and gravel, silica sand, chalk, brickearth and brick clay considered to be of national and local importance, as defined on the MSAs Policies Map in Appendix 10.

The Mineral Planning Authority shall be consulted on:

a) all planning applications for development on a site located within an MSA that is 5ha or more for sand and gravel, 3ha or more for chalk and greater than 1 dwelling for brickearth or brick clay; and

b) any land-use policy, proposal or allocation relating to land within an MSA being considered by the Local Planning Authority for possible development as part of preparing a Local Plan (with regard to the above thresholds).

Non Mineral proposals that exceed these thresholds shall be supported by a minerals resource assessment to establish the existence or otherwise of a mineral resource of economic importance.

If, in the opinion of the Local Planning Authority, surface development should be permitted, consideration shall be given to the prior extraction of existing minerals.

Mineral Consultation Areas

MCAs are designated within and up to an area of 250 metres from each safeguarded permitted minerals development and Preferred Site allocation as shown on the Policies Map and defined on the maps in Appendix 10. The Mineral Planning Authority shall be consulted on:

a) Any planning application for development on a site located within an MCA except for the excluded development identified in Appendix 9,

b) Any land-use policy, proposal or allocation relating to land within an MCA that is being considered as part of preparing a Local Plan.

Proposals which would unnecessarily sterilise mineral resources or conflict with the effective workings of permitted minerals development or Preferred Mineral Site allocation shall be opposed.

Table 10: Appraisal of Policy S8 Safeguarding Mineral Resources and Mineral Reserves

Sustainability Objectives	Comment	S	M	L
1) To protect and enhance biodiversity throughout Essex	There will be no impact on this objective. Indirect positive impacts may occur on all environmental objectives where minerals saved from sterilisation will contribute to the county landbank and reduce the need for primary extraction in other more marginal localities which may require environmental considerations.	0	0	0
2) To maintain and enhance water resources and quality	There will be no impact on this objective. Indirect positive impacts may occur on all environmental objectives where minerals saved from sterilisation will contribute to the county landbank and reduce the need for primary extraction in other more marginal localities which may require environmental considerations.	0	0	0
3) To minimise the risk of flooding	There will be no impact on this objective. Indirect positive impacts may occur on all environmental objectives where minerals saved from sterilisation will contribute to the county landbank and reduce the need for primary extraction in other more marginal localities which may require environmental considerations.	0	0	0
4) To encourage the sustainable use of land and protection of soils, including the best and most	There will be positive impacts on this objective where the policy ensures the non-sterilisation of minerals. Such an approach would increase the overall land bank in conformity with apportionment figures and secure minerals that would otherwise be lost. The policy works on a	++	++	++

versatile agricultural land	strategic level, but also specifically to localities where MCAs require consultation from the MPA in specific circumstances. This approach, also corresponds to a need for flexibility, subject as it is, to updates from monitoring arrangements.			
5) To promote the minerals supply hierarchy and where mineral waste is produced, to promote the movement of minerals waste up the waste management hierarchy	This policy directly accords with the notion of safeguarding mineral resources. Minerals saved from sterilisation will contribute to the county landbank and reduce the need for primary extraction in other more marginal localities should they be required to reflect future relevant economic changes and planned growth.	++	++	++
6) To safeguard air quality	There will be no impact on this objective. Indirect positive impacts may occur on all environmental objectives where minerals saved from sterilisation will contribute to the county landbank and reduce the need for primary extraction in other more marginal localities which may require environmental considerations.	0	0	0
7) To minimise the net emissions of greenhouse gases and increase adaptability to climate change	There will be no impact on this objective. Indirect positive impacts may occur on all environmental objectives where minerals saved from sterilisation will contribute to the county landbank and reduce the need for primary extraction in other more marginal localities which may require environmental considerations.	0	0	0
8) To minimise the impact on the historic environment, both above and below ground	There will be no impact on this objective. Indirect positive impacts may occur on all environmental objectives where minerals saved from sterilisation will contribute to the county landbank and reduce the need for primary extraction in other more marginal localities which may require environmental considerations.	0	0	0
9) To protect and enhance the quality and character of the Metropolitan Green belt (and the Essex Landscape)	There will be no impact on this objective. Indirect positive impacts may occur on all environmental objectives where minerals saved from sterilisation will contribute to the county landbank and reduce the need for primary extraction in other more marginal localities which may require environmental considerations.	0	0	0
10) To enable all sections of the community to participate fully at all stages of decision making in the Minerals Local Plan and in determining planning applications	There will be no impact on this objective. Despite this an effective way of disseminating information would be required to ensure that the public is aware of any potential extraction at non preferred sites.	0	0	0

11) To maximise opportunities for economic development, including jobs, arising from minerals activities	There will be economic benefits from this policy where minerals saved from sterilisation will contribute to the county landbank and can reflect future relevant economic changes and any planned growth. Flexibility is also a positive impact under the criterion regarding monitoring updates.	+	+	+
12) To improve the sustainable use of minerals	The policy directly accords with this Sustainability Objective as it states that prior extraction would be considered should a deposit be at risk of sterilisation. This would make maximum use of those minerals available in the county and the consultation arrangements surrounding MCAs affords a flexible approach.	++	++	++
13) To achieve beneficial restoration and aftercare of all minerals sites	There will be no impact on this objective.	0	0	0
14) To reduce transportation of minerals and road congestion, and promote sustainable transport	There will be no direct impact on this objective.	0	0	0
15) To protect and enhance human health and well being	There may be indirect positive impacts on human health and well being through the prior safeguarding of deposits, and the element of MCAs that seeks to protect resources from inappropriate development within 250m. Whilst MCAs are predominantly concerned with the non-sterilisation of resources, it may also have the indirect benefits of mutually separating inappropriate land uses, including those associated with nuisance and transport arrangements.	0	0	0
16) To minimise nuisances and impact on local amenity	There may be indirect positive impacts on human health and well being through the prior safeguarding of deposits, and the element of MCAs that seeks to protect resources from inappropriate development within 250m. Whilst MCAs are predominantly concerned with the non-sterilisation of resources, it may also have the indirect benefits of mutually separating inappropriate land uses, including those associated with nuisance and transport arrangements.	0	0	0

2.3.9 Policy S9 Safeguarding Mineral Transhipment Sites and Secondary Processing Facilities

The following mineral facilities identified on the Policies Map are of strategic importance and shall be safeguarded from development which would compromise their continued operation.

Safeguarded Transhipment Sites:

a. Chelmsford Rail Depot

b. Harlow Mill Rail Station

c. Marks Tey Rail depot

d. Ballast Quay, Fingringhoe (safeguarding to apply only up to the end of mineral extraction at the nearby Fingringhoe Quarry)

e. Parkeston Quay East, Harwich (potential operation)

Safeguarded Coated Stone Plant:

f. Suttons Wharf, Rochford

g. Stanway, Colchester

h. Wivenhoe Quarry

i. Bulls Lodge, Chelmsford

j. Essex Regiment Way, Chelmsford

k. Harlow Mill Rail Station

The Local Planning Authority shall consult the Mineral Planning Authority and take account of its views before making planning decisions on all developments within 250 metres of the above facilities as defined in the maps in Appendices 8 and 10. Where planning permission is granted for new rail or marine transhipment sites and coated stone plant of strategic importance, those sites will also be safeguarded so that their operation is not compromised. The safeguarding of a strategic plant is for the life of the planning permission or where located in a mineral working, until completion of extraction.

The Local Planning Authority shall consult the Mineral Planning Authority for its views and take them into account on proposals for development within the Mineral Consultation Area surrounding each of these safeguarded sites, as identified on the Policies Map, before making planning decisions on such proposals.

Table 11: Appraisal of Policy S9 Safeguarding Mineral Transhipment Sites and Coated Stone Plant

Sustainability Objectives	Comment	S	M	L
1) To protect and enhance biodiversity throughout Essex	There will be no direct impact on this objective.	0	0	0
2) To maintain and enhance water resources and quality	There will be no direct impact on this objective.	0	0	0
3) To minimise the risk of flooding	There will be no direct impact on this objective.	0	0	0

4) To encourage the sustainable use of land and protection of soils, including the best and most versatile agricultural land	There will be positive impacts on this objective where safeguarded sites are on existing sites, or in the case of Ballast Quay, Fingringhoe use shared infrastructure with and shall only be safeguarded until, the end of the mineral extraction at the nearby Fingringhoe Quarry. This corresponds to a sustainable use of land.	++	++	0
5) To promote the minerals supply hierarchy and where mineral waste is produced, to promote the movement of minerals waste up the waste management hierarchy	There will be no impact on this objective.	0	0	0
6) To safeguard air quality	The effect on air quality would be positive. The protection of transhipment sites would allow for the continued transport of minerals by rail and sea. Such forms of transport produce relatively smaller amounts of fine particulates and emissions than road transport for an equivalent weight carried. There is the recognition that making provision for further transhipment facilities could be required along with the need to safeguard existing facilities. Such a stance would have a positive effect on air quality relative to relying solely on the road network or, in the case of a lack of safeguarding, increasing this reliance. There will be positive cumulative impacts in conjunction with Policy S11.	++	++	0
7) To minimise the net emissions of greenhouse gases and increase adaptability to climate change	The effect on minimising emissions from minerals activities would be positive. The protection of transhipment sites would allow for the continued transport of minerals by rail and sea. Such forms of transport produce relatively smaller amounts of fine particulates and emissions than road transport for an equivalent weight carried. There is the recognition that making provision for further transhipment facilities could be required along with the need to safeguard existing facilities. Such a stance would have a positive effect on air quality relative to relying solely on the road network or, in the case of a lack of safeguarding, increasing this reliance. There will be positive cumulative impacts in conjunction with Policy S11.	++	++	0
8) To minimise the impact on the historic environment, both above and below ground	There will be no direct impact on this objective.	0	0	0
9) To protect and enhance the quality	There will be no direct impact on this objective.	0	0	0

and character of the Metropolitan Green belt (and the Essex Landscape)				
10) To enable all sections of the community to participate fully at all stages of decision making in the Minerals Local Plan and in determining planning applications	There will be no direct impact on this objective.	0	0	0
11) To maximise opportunities for economic development, including jobs, arising from minerals activities	There is a positive effect to safeguarding transhipment sites on this Sustainability Objective. Whilst the impact on employment would be minimal, transhipment sites are imperative for facilitating wider economic goals and rail and sea transportation will have beneficiary effects of economies of scale. Essex is an exporter of aggregate and uses existing transhipment sites to some extent in moving extracted material to London and other markets. The recognised need to safeguard existing sites as well as recognise a potential for further sites accords a strongly positive assessment on this Sustainability Objective. In addition to this the safeguarding of coated stone plants responds directly to national policy to support planned and future growth in the County.	++	++	0
12) To improve the sustainable use of minerals	The safeguarding of coated stone plants responds directly to national policy to support planned and future growth in the County.	+	+	0
13) To achieve beneficial restoration and aftercare of all minerals sites	There will be no direct impact on this objective.	0	0	0
14) To reduce transportation of minerals and road congestion, and promote sustainable transport	The effect on promoting sustainable transport use would be positive. The protection of transhipment sites would allow for the continued transport of minerals by rail and sea. There is also the recognition that making provision for further transhipment facilities could be required along with the need to safeguard existing facilities. Such a stance would have a positive effect on this objective relative to relying solely on the road network or, in the case of a lack of safeguarding, increasing this reliance. There will be positive cumulative impacts in conjunction with Policy S11.	++	++	0
15) To protect and enhance human health and well being	There will be no direct impact on this objective.	0	0	0

16) To minimise nuisances and impact on local amenity	There will be no direct impact on this objective.	0	0	0

2.3.10 Policy S10 Protecting and Enhancing the Environment and Local Amenity

Applications for minerals development shall demonstrate that:

a) Appropriate consideration has been given to public health and safety, amenity, quality of life of nearby communities, and the natural, built, and historic environment,

b) Appropriate mitigation measures shall be included in the proposed scheme of development, and

c) No unacceptable adverse impacts would arise, and,

d) Opportunities have been taken to improve/ enhance the environment and amenity.

Table 12: Appraisal of Policy S10 Protecting and Enhancing the Environment and Local Amenity

Sustainability Objectives	Comment	S	M	L
1) To protect and enhance biodiversity throughout Essex	There will be positive impacts on this objective through appropriate consideration to the environment, appropriate mitigation measures where these do occur and opportunities have been taken to improve/enhance the environment. There will be a cumulative and long term strengthening of this policy in conjunction with restoration and after-use proposals in Policy S12.	+	+	+
2) To maintain and enhance water resources and quality	There will be positive impacts on this objective through appropriate consideration to the environment, appropriate mitigation measures where these do occur and opportunities have been taken to improve/enhance the environment. There may be a cumulative and long term strengthening of this policy in conjunction with restoration and after-use proposals in Policy S12.	+	+	+
3) To minimise the risk of flooding	There will be positive impacts on this objective through appropriate consideration to the environment, appropriate mitigation measures where these do occur and opportunities have been taken to improve/enhance the environment. There will be a cumulative and long term strengthening of this policy in conjunction with restoration and after-use proposals in Policy S12.	+	+	+
4) To encourage the sustainable use of land and protection of soils, including the best and most	There will be positive impacts on this objective through appropriate consideration to the environment, appropriate mitigation measures where these do occur and opportunities have been taken to improve/enhance the environment. There will be a cumulative and long term	+	+	+

versatile agricultural land	strengthening of this policy in conjunction with restoration and after-use proposals in Policy S12.			
5) To promote the minerals supply hierarchy and where mineral waste is produced, to promote the movement of minerals waste up the waste management hierarchy	There will be no direct impact on this objective.	0	0	0
6) To safeguard air quality	There will be positive impacts on this objective through appropriate consideration to the environment in terms of traffic impacts and associated emissions and appropriate mitigation measures where these do occur.	+	+	0
7) To minimise the net emissions of greenhouse gases and increase adaptability to climate change	There will be positive impacts on this objective through appropriate consideration to the environment in terms of traffic impacts and associated emissions, appropriate mitigation measures where these do occur and opportunities have been taken to improve/enhance the environment. There will be positive long term impacts on this objective in accumulation with policies S12 and S3.	+	+	0
8) To minimise the impact on the historic environment, both above and below ground	There will be no impact on this objective where although appropriate consideration will be given to the historic environment and appropriate mitigation measures implemented where these are likely to occur, the MLP is not capable of improving the historic environment.	0	0	0
9) To protect and enhance the quality and character of the Metropolitan Green belt (and the Essex Landscape)	There will be positive impacts on this objective through appropriate consideration to the environment, appropriate mitigation measures where these do occur and opportunities have been taken to improve/enhance the environment. There will be a cumulative and long term strengthening of this policy in conjunction with restoration and after-use proposals in Policy S12.	+	+	+
10) To enable all sections of the community to participate fully at all stages of decision making in the Minerals Local Plan and in determining planning applications	There will be no direct impact on this objective.	0	0	0
11) To maximise opportunities for economic	There will be no direct impact on this objective.	0	0	0

development, including jobs, arising from minerals activities				
12) To improve the sustainable use of minerals	There will be no direct impact on this objective.	0	0	0
13) To achieve beneficial restoration and aftercare of all minerals sites	There will be no direct impact on this objective where conditions will not deteriorate in working that may jeopardise or hinder the restoration and/or after-use proposal. There will however be a cumulative and long term positive impact resulting from this policy in conjunction with restoration and after-use proposals in Policy S12.	0	0	0
14) To reduce transportation of minerals and road congestion, and promote sustainable transport	There will be no direct impact on this objective. There may be an indirect positive impact on this objective where traffic congestion is related to many negative environmental and social impacts.	0	0	0
15) To protect and enhance human health and well being	There will be positive impacts on this objective through appropriate consideration to the public health and safety, amenity and quality of life of nearby residents, appropriate mitigation measures where these do occur and opportunities have been taken to improve/enhance the environment. There may be a cumulative and long term strengthening of this policy in conjunction with restoration and after-use proposals in Policy S12.	+	+	+
16) To minimise nuisances and impact on local amenity	There will be positive impacts on this objective through appropriate consideration to the public health and safety, amenity and quality of life of nearby residents, appropriate mitigation measures where these do occur and opportunities have been taken to improve/enhance the environment. There may be a cumulative and long term strengthening of this policy in conjunction with restoration and after-use proposals in Policy S12.	+	+	+

2.3.11 Policy S11 Access and Transport

Proposals for minerals development shall be permitted where it is demonstrated that the development would not have unacceptable impacts on the efficiency and effective operation of the highway network, including safety and capacity, local amenity and the environment.

Proposals for the transportation of minerals by rail and/ or water will be encouraged subject to other policies in this Plan.

Where transportation by road is proposed, this will be permitted where the highway network is suitable for use by Heavy Goods Vehicles or can be improved to accommodate such vehicles. The following hierarchy of preference for transportation by road shall be applied:

(i) Access to a suitable existing junction with the main road network, as defined in Section 7, via a suitable section of an existing road, as short as possible, without causing a detrimental impact upon the safety and efficiency of the network.

(ii) Where (i) above is not feasible, direct access to the main road network involving the construction of a new access/ junction when there is no suitable existing access point or junction,

(iii) Where access to the main road network in accordance with (i) and (ii) above is not feasible, road access via a suitable existing road prior to gaining access onto the main road network will exceptionally be permitted, having regard to the scale of the development, the capacity of the road and an assessment of the impact on road safety.

Table 13: Appraisal of Policy S11 Access and Transport

Sustainability Objectives	Comment	S	M	L
1) To protect and enhance biodiversity throughout Essex	There will be no impact on this objective where proposals for minerals development shall be permitted where it is demonstrated that the development would not have unacceptable impacts on the environment. It is acknowledged that minerals development is unlikely to enhance biodiversity, which would warrant positive impacts.	0	0	0
2) To maintain and enhance water resources and quality	There will be no impact on this objective where proposals for minerals development shall be permitted where it is demonstrated that the development would not have unacceptable impacts on the environment. It is acknowledged that minerals development is unlikely to enhance water resources, which would warrant positive impacts	0	0	0
3) To minimise the risk of flooding	There will be no direct impact on this objective.	0	0	0
4) To encourage the sustainable use of land and protection of soils, including the best and most versatile agricultural land	There will be no direct impact on this objective.	0	0	0
5) To promote the minerals supply hierarchy and where mineral waste is produced, to promote the movement of minerals waste up the waste management hierarchy	There will be no direct impact on this objective.	0	0	0

6) To safeguard air quality	There will be positive impacts on this objective where proposals for the transportation of minerals by rail and/ or water will be encouraged, reducing comparative road vehicle emissions. In so far as road transportation is covered, the policy seeks to ensure that so far as is possible mineral transportation only occurs on the main road network. This again reduces the possibility of congestion as well as mitigating against the possibility that mineral traffic would have to travel through inhabited localities.	++	++	0
7) To minimise the net emissions of greenhouse gases and increase adaptability to climate change	There will be positive impacts on this objective where proposals for the transportation of minerals by rail and/ or water will be encouraged reducing comparative road vehicle emissions. In so far as road transportation is covered, the policy seeks to ensure that so far as is possible mineral transportation only occurs on the main road network. This again reduces the possibility of congestion.	+	+	0
8) To minimise the impact on the historic environment, both above and below ground	There will be no direct impact on this objective.	0	0	0
9) To protect and enhance the quality and character of the Metropolitan Green belt (and the Essex Landscape)	There will be no direct impact on this objective.	0	0	0
10) To enable all sections of the community to participate fully at all stages of decision making in the Minerals Local Plan and in determining planning applications	There will be no direct impact on this objective.	0	0	0
11) To maximise opportunities for economic development, including jobs, arising from minerals activities	There will be no direct impact on this objective.	0	0	0
12) To improve the sustainable use of minerals	There will be no direct impact on this objective.	0	0	0

13) To achieve beneficial restoration and aftercare of all minerals sites	There will be no direct impact on this objective.	0	0	0
14) To reduce transportation of minerals and road congestion, and promote sustainable transport	There will be positive impacts on this objective where proposals for the transportation of minerals by rail and/ or water will be encouraged. In so far as road transportation is covered, the policy seeks to ensure that so far as is possible mineral transportation only occurs on the main road network. This again reduces the possibility of congestion as well as mitigating against the possibility that mineral traffic would have to travel through inhabited localities.	++	++	0
15) To protect and enhance human health and well being	There will be positive impacts on this objective where proposals for the transportation of minerals by rail and/ or water will be encouraged. In so far as road transportation is covered, the policy seeks to ensure that so far as is possible mineral transportation only occurs on the main road network. This again reduces the possibility of congestion as well as mitigating against the possibility that mineral traffic would have to travel through inhabited localities thus minimising the health and well-being implications associated with traffic.	+	+	0
16) To minimise nuisances and impact on local amenity	There will be positive impacts on this objective where proposals for the transportation of minerals by rail and/ or water will be encouraged. In so far as road transportation is covered, the policy seeks to ensure that so far as is possible mineral transportation only occurs on the main road network. This again reduces the possibility of congestion as well as mitigating against the possibility that mineral traffic would have to travel through inhabited localities thus minimising nuisances associated with traffic.	+	+	0

2.3.12 Policy S12 Mineral Site Restoration and After Use

Proposals for minerals development will be permitted provided that it can be demonstrated that the land is capable of being restored at the earliest opportunity to an acceptable environmental condition and beneficial after-uses, with positive benefits to the environment, biodiversity and/or local communities.

Mineral extraction sites shall:

1. Be restored using phased, progressive working and restoration techniques,

2. Provide biodiversity gain following restoration, demonstrating their contribution to priority habitat creation and integration with local ecological networks,

3. Be restored in the following order of preference,

(i) At low level with no landfill (including restoration to water bodies),

(ii) If (i) above is not feasible then at low level but with no more landfill than is essential and necessary, to achieve satisfactory restoration,

(iii) If neither of these are feasible and the site is a Preferred Site as may be determined by the Waste Local Plan, then by means of landfill.

4. Provide a scheme of aftercare and maintenance of the restored land for a period of not less than five years to ensure the land is capable of sustaining an appropriate after-use,

5. Where appropriate, proposals shall demonstrate the best available techniques to ensure that:

a) Soil resources are retained, conserved and handled appropriately during operations and restoration,

b) In the case of minerals development affecting the best and most versatile agricultural land, the land is capable of being restored back to best and most versatile land,

c) Hydrological and hydro-geological conditions are preserved, maintained, and where appropriate, managed to prevent adverse impacts on the adjacent land's groundwater conditions and elsewhere,

d) Flood risk is not increased,

e) Important geological features are maintained and preserved,

f) Adverse effects on the integrity of internationally or nationally important wildlife sites are avoided.

Proposals shall demonstrate that there will not be an unacceptable adverse impact on groundwater conditions, surface water drainage and the capacity of soils for future use. Proposals shall also have regard to any relevant Surface Water or Shoreline Management Plans. Proposals will also demonstrate that the working and restoration scheme is appropriate and the implementation and completion of restoration is feasible.

Table 14: Appraisal of Policy S12 Mineral Site Restoration and After Use

Sustainability Objectives	Comment	S	M	L
1) To protect and enhance biodiversity throughout Essex	There will be significant long term impacts on biodiversity as a result of this policy. The Policy seeks to provide biodiversity gain and where possible restoration should contribute towards achieving a possible 200ha of new habitat creation from preferred sites. In addition to this, biodiversity enhancement will be integrated into all development sites. There will be be positive cumulative impacts in conjunction with policies S10 and DM1 in the short-medium term.	0	0	++
2) To maintain and enhance water resources and quality	There will be significant positive impacts on water resources where hydrological and hydro-geological conditions are preserved, maintained, and where appropriate, managed to prevent adverse impacts on the adjacent land's groundwater conditions and elsewhere. In addition to this, proposals shall demonstrate that there will not be an unacceptable adverse impact on groundwater conditions, surface water drainage and the capacity of	0	0	++

	soils for future use and will have regard to any relevant Surface Water or Shoreline Management Plans. Proposals shall also demonstrate that the working and restoration scheme is appropriate and the implementation and completion of restoration is feasible which, although there will be no impact, is beneficial in the short and medium term. There will be therefore be positive cumulative impacts in conjunction with policies S10 and DM1 in the short-medium term.			
3) To minimise the risk of flooding	There will be short to long term positive impacts in accordance with the statement that where appropriate, proposals shall demonstrate the best available techniques to ensure that flood risk is not increased. This directly adheres with this objective, acknowledging that conditions are unlikely to even be improved by the majority of development.	+	+	+
4) To encourage the sustainable use of land and protection of soils, including the best and most versatile agricultural land	There will be positive impacts on encouraging the sustainable use of land and protection of soils. The policy ensures that proposals shall demonstrate the best available techniques to ensure that soil resources are retained, conserved and handled appropriately for site operations and restoration. Similarly, proposals shall demonstrate that where development affects the best and most versatile agricultural land, the land is capable of being restored to at least its former quality if proposed for an agricultural after-use. Despite these positive impacts, there is no guarantee that agricultural land will be restored post minerals workings, however in line with the spatial strategy and direction of minerals development in the County, restoration to alternative after-uses that benefit environmental and social criteria is welcomed and viewed as a sustainable use of land in terms of this objective.	+	+	+
5) To promote the minerals supply hierarchy and where mineral waste is produced, to promote the movement of minerals waste up the waste management hierarchy	There will be no direct impact on this objective.	0	0	0
6) To safeguard air quality	There will be no direct impact on this objective.	0	0	0
7) To minimise the net emissions of greenhouse gases and increase adaptability to climate change	There will be small positive impacts on this objective where supporting text highlights that there may be some element of adaptation to climate change impacts, where relevant, in after-use.	0	0	+

8) To minimise the impact on the historic environment, both above and below ground	There will be small positive impacts on this objective where supporting text highlights that there may be some element of heritage conservation, where relevant, involved in after-use. This presumably implies that historic environment will be safeguarded in the working of sites and as a result of minerals development, which will see positive impacts in the short to long term. There will be therefore be positive cumulative impacts in conjunction with policies S10 and DM1 in the short-medium term.	+	+	+
9) To protect and enhance the quality and character of the Metropolitan Green belt (and the Essex Landscape)	Although landscape implications are not specifically mentioned within the policy, supporting text highlights that some element of landscape enhancement will be sought, where relevant, in after-use. A hierarchical approach to restoration with low level restoration preferred above the use of varying degrees of inert landfill material will also have positive impacts on this objective, although positive impacts are limited due to a degree of unavoidable uncertainty until sites are determined in the Waste Local Plan. There will be also be positive cumulative impacts in conjunction with policies S10 and DM1 in the short-medium term.	0	0	+
10) To enable all sections of the community to participate fully at all stages of decision making in the Minerals Local Plan and in determining planning applications	There will be no direct impact on this objective.	0	0	0
11) To maximise opportunities for economic development, including jobs, arising from minerals activities	There will be no direct impact on this objective.	0	0	0
12) To improve the sustainable use of minerals	There will be no direct impact on this objective.	0	0	0
13) To achieve beneficial restoration and aftercare of all minerals sites	There will be significant positive impacts on this objective through a detailed policy that seeks to establish significant environmental and social gain through minerals development restoration and after-use. The policy seeks to offset possible disruption from essential minerals development with the long term improvement and enhancement of a number of different habitats and social amenities on a spatial and local level.	0	0	++

14) To reduce transportation of minerals and road congestion, and promote sustainable transport	There will be no direct impact on this development.	0	0	0
15) To protect and enhance human health and well being	There will be a long term positive impact on this objective in those instances where restoration is to amenity or recreational after-use.	0	0	+
16) To minimise nuisances and impact on local amenity	There will be long term positive impacts on this objective in those instances where restoration is to amenity or recreational after-use.	0	0	++

2.4 Development Management Policies

2.4.1 Policy DM1 Development Management Criteria

Proposals for minerals development will be permitted subject to it being demonstrated that the development would not have an unacceptable impact, including cumulative impact with other developments, upon:

1. Local amenity (including demonstrating that the impacts of noise levels, air quality and dust emissions, light pollution and vibration are acceptable);

2. The health of local residents adjoining the site;

3. The quality and quantity of water within water courses, groundwater and surface water;

4. Drainage systems;

5. The soil resource from the best and most versatile agricultural land;

6. Farming, horticulture and forestry

7. Aircraft safety due to the risk of bird strike;

8. The safety and capacity of the highway network;

9. Public Open Space, the definitive Public Rights of Way network and outdoor recreation facilities;

10. The appearance, quality and character of the landscape, countryside and visual environment and any local features that contribute to its local distinctiveness;

11. Land stability;

12. The natural and geological environment (including biodiversity and ecological conditions for habitats and species);

13. The historic environment including heritage and archaeological assets.

Table 15: Appraisal of Policy DM1 Development Management Criteria

Sustainability Objectives	Comment	S	M	L
1) To protect and enhance biodiversity throughout Essex	There will be positive impacts on biodiversity where proposals for minerals development will be permitted subject to it being demonstrated that the development would not have an unacceptable impact upon the natural and geological environment including biodiversity and ecological conditions for habitats and species.	+	+	+
2) To maintain and enhance water resources and quality	There will be positive impacts on water resources and quality where proposals for minerals development will be permitted subject to it being demonstrated that the development would not have an unacceptable impact on the quality and quantity of water within water courses, groundwater and surface water.	+	+	+
3) To minimise the risk of flooding	There will be positive impacts on flood risk minimisation and quality where proposals for minerals development will be permitted subject to it being demonstrated that the development would not have an unacceptable impact on surface water and drainage systems.	+	+	+
4) To encourage the sustainable use of land and protection of soils, including the best and most versatile agricultural land	There will be positive impacts on the protection of soils including the best and most versatile agricultural land where proposals for minerals development will be permitted subject to it being demonstrated that the development would not have an unacceptable impact on the soil resource from the best and most versatile agricultural land.	+	+	+
5) To promote the minerals supply hierarchy and where mineral waste is produced, to promote the movement of minerals waste up the waste management hierarchy	There will be no direct impact on this objective.	0	0	0
6) To safeguard air quality	There will be positive impacts on air quality where proposals for minerals development will be permitted subject to it being demonstrated that the development would not have an unacceptable impact on air quality and the capacity of the highway network.	+	+	+
7) To minimise the net emissions of greenhouse gases and increase adaptability to	There will be positive impacts on this objective where proposals for minerals development will be permitted subject to it being demonstrated that the development would not have an unacceptable impact on air quality and the capacity of the highway network. Although operational emissions are not directly mentioned in the policy, their	+	+	+

climate change	minimisation is likely to be relevant to achieving a number of other environmental criteria.			
8) To minimise the impact on the historic environment, both above and below ground	There will be positive impacts on the historic environment where proposals for minerals development will be permitted subject to it being demonstrated that the development would not have an unacceptable impact on the historic environment including heritage and archaeological assets. Also, where applicable, positive impacts may be associated with minimising impacts on farming, horticulture and forestry where these are linked to historic field boundaries and ancient woodland.	+	+	+
9) To protect and enhance the quality and character of the Metropolitan Green belt (and the Essex Landscape)	There will be positive impacts on landscapes where proposals for minerals development will be permitted subject to it being demonstrated that the development would not have an unacceptable impact on the appearance, quality and character of the landscape, countryside and visual environment and any local features that contribute to its local distinctiveness.	+	+	+
10) To enable all sections of the community to participate fully at all stages of decision making in the Minerals Local Plan and in determining planning applications	There will be no direct impact on this objective.	0	0	0
11) To maximise opportunities for economic development, including jobs, arising from minerals activities	There will be no direct impact on this objective.	0	0	0
12) To improve the sustainable use of minerals	There will be no direct impact on this objective.	0	0	0
13) To achieve beneficial restoration and aftercare of all minerals sites	There will be positive long term impacts on this objective where environmental conditions are not disrupted, or impacts are minimised that may jeapordise the validity or quality of restoration schemes and after-uses.	0	0	+
14) To reduce transportation of minerals and road congestion, and promote sustainable transport	There will be positive impacts on road congestion where proposals for minerals development will be permitted subject to it being demonstrated that the development would not have an unacceptable impact on the capacity of the highway network.	+	+	+

15) To protect and enhance human health and well being	There will be positive impacts on human health and well-being where proposals for minerals development will be permitted subject to it being demonstrated that the development would not have an unacceptable impact on the health of local residents adjoining the site, the safety and capacity of the highway network, Public Open Space, the definitive public rights of way network and outdoor recreation facilities and also local amenity, including demonstrating that the impacts of noise levels, air quality and dust emissions, light pollution and vibration are acceptable.	+	+	+
16) To minimise nuisances and impact on local amenity	There will be positive impacts on human health and well-being where proposals for minerals development will be permitted subject to it being demonstrated that the development would not have an unacceptable impact on the safety and capacity of the highway network, landscape, heritage, Public Open Space, the definitive public rights of way network and outdoor recreation facilities and also local amenity, including demonstrating that the impacts of noise levels, air quality and dust emissions, light pollution and vibration are acceptable.	+	+	+

2.4.2 Policy DM2 Planning Conditions and Legal Agreements

When granting planning permission for minerals developments the Minerals Planning Authority will impose conditions and/ or require legal agreements to mitigate and control the effects of the development and to enhance the environment.

Table 16: Appraisal of Policy DM2 Planning Conditions and Legal Agreements

Sustainability Objectives	Comment	S	M	L
1) To protect and enhance biodiversity throughout Essex	There will be no additional impacts on any of the sustainability objectives, where the policy is essentially raising awareness of the use of conditions and obligations required for minimising impacts from proposals and delivering a number of the other policies.	0	0	0
2) To maintain and enhance water resources and quality	There will be no additional impacts on any of the sustainability objectives, where the policy is essentially raising awareness of the use of conditions and obligations required for minimising impacts from proposals and delivering a number of the other policies.	0	0	0
3) To minimise the risk of flooding	There will be no additional impacts on any of the sustainability objectives, where the policy is essentially raising awareness of the use of conditions and obligations required for minimising impacts from proposals and delivering a number of the other policies.	0	0	0

4) To encourage the sustainable use of land and protection of soils, including the best and most versatile agricultural land	There will be no additional impacts on any of the sustainability objectives, where the policy is essentially raising awareness of the use of conditions and obligations required for minimising impacts from proposals and delivering a number of the other policies.	0	0	0
5) To promote the minerals supply hierarchy and where mineral waste is produced, to promote the movement of minerals waste up the waste management hierarchy	There will be no additional impacts on any of the sustainability objectives, where the policy is essentially raising awareness of the use of conditions and obligations required for minimising impacts from proposals and delivering a number of the other policies.	0	0	0
6) To safeguard air quality	There will be no additional impacts on any of the sustainability objectives, where the policy is essentially raising awareness of the use of conditions and obligations required for minimising impacts from proposals and delivering a number of the other policies.	0	0	0
7) To minimise the net emissions of greenhouse gases and increase adaptability to climate change	There will be no additional impacts on any of the sustainability objectives, where the policy is essentially raising awareness of the use of conditions and obligations required for minimising impacts from proposals and delivering a number of the other policies.	0	0	0
8) To minimise the impact on the historic environment, both above and below ground	There will be no additional impacts on any of the sustainability objectives, where the policy is essentially raising awareness of the use of conditions and obligations required for minimising impacts from proposals and delivering a number of the other policies.	0	0	0
9) To protect and enhance the quality and character of the Metropolitan Green belt (and the Essex Landscape)	There will be no additional impacts on any of the sustainability objectives, where the policy is essentially raising awareness of the use of conditions and obligations required for minimising impacts from proposals and delivering a number of the other policies.	0	0	0
10) To enable all sections of the community to participate fully at all stages of decision making in the Minerals Local Plan and in determining planning applications	There will be no additional impacts on any of the sustainability objectives, where the policy is essentially raising awareness of the use of conditions and obligations required for minimising impacts from proposals and delivering a number of the other policies.	0	0	0

11) To maximise opportunities for economic development, including jobs, arising from minerals activities	There will be no additional impacts on any of the sustainability objectives, where the policy is essentially raising awareness of the use of conditions and obligations required for minimising impacts from proposals and delivering a number of the other policies.	0	0	0
12) To improve the sustainable use of minerals	There will be no additional impacts on any of the sustainability objectives, where the policy is essentially raising awareness of the use of conditions and obligations required for minimising impacts from proposals and delivering a number of the other policies.	0	0	0
13) To achieve beneficial restoration and aftercare of all minerals sites	There will be no additional impacts on any of the sustainability objectives, where the policy is essentially raising awareness of the use of conditions and obligations required for minimising impacts from proposals and delivering a number of the other policies.	0	0	0
14) To reduce transportation of minerals and road congestion, and promote sustainable transport	There will be no additional impacts on any of the sustainability objectives, where the policy is essentially raising awareness of the use of conditions and obligations required for minimising impacts from proposals and delivering a number of the other policies.	0	0	0
15) To protect and enhance human health and well being	There will be no additional impacts on any of the sustainability objectives, where the policy is essentially raising awareness of the use of conditions and obligations required for minimising impacts from proposals and delivering a number of the other policies.	0	0	0
16) To minimise nuisances and impact on local amenity	There will be no additional impacts on any of the sustainability objectives, where the policy is essentially raising awareness of the use of conditions and obligations required for minimising impacts from proposals and delivering a number of the other policies.	0	0	0

2.4.3 Policy DM3 Primary Processing Plant

Proposals for minerals extraction will be permitted where the primary processing plant and equipment is located within the limits of the mineral site's boundary and the plant would not have any unacceptable impact on local amenity and/ or the surrounding environment.

Proposals for extension sites shall be expected to include the location of the existing processing plant and access arrangements within the planning application.

Where it is demonstrated that the positioning of the primary processing plant within the boundary of the mineral site is not feasible, the exportation of mineral from the site shall not have an unacceptable impact upon amenity and/ or the safety, efficiency and capacity of the highway network.

Minerals shall only be imported to a minerals site, from non-indigenous sources, when it is demonstrated that there are exceptional circumstances or overriding benefits from doing so.

In all cases permission will only be granted for a temporary duration so as not to delay restoration of the site.

Table 17: Appraisal of Policy DM3 Primary Processing Plant

Sustainability Objectives	Comment	S	M	L
1) To protect and enhance biodiversity throughout Essex	There will be no additional impact on this objective where proposals for minerals extraction will be permitted where the primary processing plant and equipment is located within the limits of the mineral site's boundary and the plant would not have any unacceptable impact on local amenity and/ or the surrounding environment. This approach is consistent with other strategic and development management policies	0	0	0
2) To maintain and enhance water resources and quality	There will be no additional impact on this objective where proposals for minerals extraction will be permitted where the primary processing plant and equipment is located within the limits of the mineral site's boundary and the plant would not have any unacceptable impact on local amenity and/ or the surrounding environment. This approach is consistent with other strategic and development management policies	0	0	0
3) To minimise the risk of flooding	There will be no additional impact on this objective where proposals for minerals extraction will be permitted where the primary processing plant and equipment is located within the limits of the mineral site's boundary and the plant would not have any unacceptable impact on local amenity and/ or the surrounding environment. This approach is consistent with other strategic and development management policies	0	0	0
4) To encourage the sustainable use of land and protection of soils, including the best and most versatile agricultural land	There will be no additional impact on this objective where proposals for minerals extraction will be permitted where the primary processing plant and equipment is located within the limits of the mineral site's boundary and the plant would not have any unacceptable impact on local amenity and/ or the surrounding environment. This approach is consistent with other strategic and development management policies. There will be positive impacts however where in addition to this, the policy encourages the sustainable use of land by stating that minerals shall only be imported to a minerals site, from non-indigenous sources, when it is demonstrated that there are exceptional circumstances or overriding benefits for doing so. This effectively sets a precedent that stops industrial uses in inappropriate rural areas by linking processing to the primary extraction on-site and within the timescales of that permission.	+	+	0

5) To promote the minerals supply hierarchy and where mineral waste is produced, to promote the movement of minerals waste up the waste management hierarchy	There will be a positive impact on this objective through a non-restrictive policy on the extraction and processing of primary minerals and the extension of existing sites.	++	++	0
6) To safeguard air quality	There will be no additional impact on this objective where proposals for minerals extraction will be permitted where the primary processing plant and equipment is located within the limits of the mineral site's boundary and the plant would not have any unacceptable impact on local amenity and/ or the surrounding environment. This approach is consistent with other strategic and development management policies.	0	0	0
7) To minimise the net emissions of greenhouse gases and increase adaptability to climate change	There will be no additional impact on this objective where proposals for minerals extraction will be permitted where the primary processing plant and equipment is located within the limits of the mineral site's boundary and the plant would not have any unacceptable impact on local amenity and/ or the surrounding environment. This approach is consistent with other strategic and development management policies.	0	0	0
8) To minimise the impact on the historic environment, both above and below ground	There will be no additional impact on this objective where proposals for minerals extraction will be permitted where the primary processing plant and equipment is located within the limits of the mineral site's boundary and the plant would not have any unacceptable impact on local amenity and/ or the surrounding environment. This approach is consistent with other strategic and development management policies.	0	0	0
9) To protect and enhance the quality and character of the Metropolitan Green belt (and the Essex Landscape)	There will be no additional impact on this objective where proposals for minerals extraction will be permitted where the primary processing plant and equipment is located within the limits of the mineral site's boundary and the plant would not have any unacceptable impact on local amenity and/ or the surrounding environment. This approach is consistent with other strategic and development management policies.	0	0	0
10) To enable all sections of the community to participate fully at all stages of decision making in the Minerals Local Plan and in determining planning	There will be no direct impact on this objective.	0	0	0

applications				
11) To maximise opportunities for economic development, including jobs, arising from minerals activities	There will be no direct impact on this objective.	0	0	0
12) To improve the sustainable use of minerals	There will be a positive impact on this objective through a non-restrictive policy on the extraction and processing of primary minerals and the extension of existing sites. The policy will have further positive impacts by linking processing to the primary extraction on-site and within the timescales of that permission.	++	++	0
13) To achieve beneficial restoration and aftercare of all minerals sites	There will be positive impacts on this objective where in all cases permission will only be granted for a temporary duration so as not to delay the restoration of the site. In addition to this the policy states that minerals shall only be imported to a minerals site, from non-indigenous sources, when it is demonstrated that there are exceptional circumstances or overriding benefits for doing so. This effectively sets a precedent linking processing to the primary extraction on-site and within the timescales of that permission.	0	0	+
14) To reduce transportation of minerals and road congestion, and promote sustainable transport	There will be no additional impacts where the policy states that minerals shall only be imported to a minerals site, from non-indigenous sources, when it is demonstrated that there are exceptional circumstances or overriding benefits for doing so. This is a positive approach as it effectively sets a precedent that comparatively reduces mineral miles by linking processing to the primary extraction on-site and within the timescales of that permission.	0	0	0
15) To protect and enhance human health and well being	There will be no additional impact on this objective where proposals for minerals extraction will be permitted where the primary processing plant and equipment is located within the limits of the mineral site's boundary and the plant would not have any unacceptable impact on local amenity and/ or the surrounding environment. This approach is consistent with other strategic and development management policies.	0	0	0
16) To minimise nuisances and impact on local amenity	There will be no additional impact on this objective where proposals for minerals extraction will be permitted where the primary processing plant and equipment is located within the limits of the mineral site's boundary and the plant would not have any unacceptable impact on local amenity and/ or the surrounding environment. This approach is consistent with other strategic and development management policies.	0	0	0

2.4.4 Policy DM4 Secondary Processing Plant

Proposals for the secondary processing and/ or treatment of minerals will only be permitted at mineral sites where it can be demonstrated that there would be no unacceptable impact upon amenity and/ or the local environment and/ or the safety, efficiency and capacity of the highway network.

The minerals for secondary processing and/or treatment shall be sourced from within the boundary of the mineral working within which the plant is located unless it is demonstrated that there are exceptional circumstances or overriding benefits from sourcing materials from elsewhere to supplement indigenous supply, subject to no unacceptable adverse impacts.

In all cases permission will only be granted for a temporary duration so as not to delay restoration of the site.

Table 18: Appraisal of Policy DM4 Secondary Processing Plant

Sustainability Objectives	Comment	S	M	L
1) To protect and enhance biodiversity throughout Essex	There will be no additional impact on this objective where proposals for secondary processing and/or treatment of minerals will only be permitted at mineral sites where it can be demonstrated that there would be no unacceptable impact upon the local environment. In addition to this the sourcing of minerals from outside the boundary of the mineral working would only be permitted subject to no unacceptable adverse impact on the local environment. This approach is consistent with other strategic and development management policies.	0	0	0
2) To maintain and enhance water resources and quality	There will be no additional impact on this objective where proposals for secondary processing and/or treatment of minerals will only be permitted at mineral sites where it can be demonstrated that there would be no unacceptable impact upon the local environment. In addition to this the sourcing of minerals from outside the boundary of the mineral working would only be permitted subject to no unacceptable adverse impact on the local environment. This approach is consistent with other strategic and development management policies.	0	0	0
3) To minimise the risk of flooding	There will be no additional impact on this objective where proposals for secondary processing and/or treatment of minerals will only be permitted at mineral sites where it can be demonstrated that there would be no unacceptable impact upon the local environment. In addition to this the sourcing of minerals from outside the boundary of the mineral working would only be permitted subject to no unacceptable adverse impact on the local environment. This approach is consistent with other strategic and development management policies.	0	0	0
4) To encourage the sustainable use of land and protection	There will be no additional impact on this objective where proposals for secondary processing and/or treatment of minerals will only be permitted at mineral sites where it can	+	+	0

of soils, including the best and most versatile agricultural land	be demonstrated that there would be no unacceptable impact upon the local environment. In addition to this the sourcing of minerals from outside the boundary of the mineral working would only be permitted subject to no unacceptable adverse impact on the local environment. This approach is consistent with other strategic and development management policies. There will be positive impacts however where in addition to this, the policy encourages the sustainable use of land by stating that minerals for secondary processing and/or treatment shall be sourced from within the boundary of the mineral working within which the plant is located unless it is demonstrated that there are exceptional circumstances or overriding benefits from sourcing materials from elsewhere to supplement indigenous supply, subject to no unacceptable adverse impact on amenity and/ or the local environment. This effectively sets a precedent that stops inappropriate uses in certain areas, and only for a temporary duration.			
5) To promote the minerals supply hierarchy and where mineral waste is produced, to promote the movement of minerals waste up the waste management hierarchy	There will be positive impacts on this objective where the plan makes provision for sustainable processing plants for concrete batching, coated materials, block/ tile/ brick making and other concrete products on appropriate sites and in appropriate areas.	++	++	0
6) To safeguard air quality	There will be no additional impact on this objective where proposals for secondary processing and/or treatment of minerals will only be permitted at mineral sites where it can be demonstrated that there would be no unacceptable impact upon the local environment and the efficiency and capacity of the highway network. This approach is consistent with other strategic and development management policies.	0	0	0
7) To minimise the net emissions of greenhouse gases and increase adaptability to climate change	There will be no additional impact on this objective where proposals for secondary processing and/or treatment of minerals will only be permitted at mineral sites where it can be demonstrated that there would be no unacceptable impact upon the local environment and the efficiency and capacity of the highway network. This approach is consistent with other strategic and development management policies.	0	0	0
8) To minimise the impact on the historic environment, both above and below ground	There will be no additional impact on this objective where proposals for secondary processing and/or treatment of minerals will only be permitted at mineral sites where it can be demonstrated that there would be no unacceptable impact upon the local environment. In addition to this the sourcing of minerals from outside the boundary of the mineral working would only be permitted subject to no unacceptable adverse impact on the local environment.	0	0	0

	This approach is consistent with other strategic and development management policies.			
9) To protect and enhance the quality and character of the Metropolitan Green belt (and the Essex Landscape)	There will be no additional impact on this objective where proposals for secondary processing and/or treatment of minerals will only be permitted at mineral sites where it can be demonstrated that there would be no unacceptable impact upon the local environment. In addition to this the sourcing of minerals from outside the boundary of the mineral working would only be permitted subject to no unacceptable adverse impact on the local environment. This approach is consistent with other strategic and development management policies.	0	0	0
10) To enable all sections of the community to participate fully at all stages of decision making in the Minerals Local Plan and in determining planning applications	There will be no direct impact on this objective.	0	0	0
11) To maximise opportunities for economic development, including jobs, arising from minerals activities	There will be no direct impact on this objective.	0	0	0
12) To improve the sustainable use of minerals	There will be positive impacts on this objective where the plan makes provision for sustainable processing plants for concrete batching, coated materials, block/ tile/ brick making and other concrete products on appropriate sites and in appropriate areas. A more restrictive policy for determining applications can be seen to be in line with a preference for indigenous minerals.	++	++	0
13) To achieve beneficial restoration and aftercare of all minerals sites	There will be positive impacts on this objective where in all cases permission will only be granted for a temporary duration so as not to delay the restoration of the site. In addition to this proposals for secondary processing and/or treatment of minerals will only be permitted at mineral sites where it can be demonstrated that there would be no unacceptable impact upon the local environment. In addition to this the sourcing of minerals from outside the boundary of the mineral working would only be permitted subject to no unacceptable adverse impact on the local environment. This effectively leads to stable environmental conditions from which restoration and proposed after-uses can be based.	0	0	+

14) To reduce transportation of minerals and road congestion, and promote sustainable transport	There will be no additional impacts where the policy states that minerals for secondary processing and/or treatment shall be sourced from within the boundary of the mineral working within which the plant is located unless it is demonstrated that there are exceptional circumstances or overriding benefits from sourcing materials from elsewhere to supplement indigenous supply. This is a positive approach as it effectively seeks to reduce mineral miles in the first instance.	0	0	0
15) To protect and enhance human health and well being	There will be no additional impact on this objective where proposals for secondary processing and/or treatment of minerals will only be permitted at mineral sites where it can be demonstrated that there would be no unacceptable impact upon amenity and/or the local environment and/or the safety, efficiency and capacity of the highway network. In addition to this the sourcing of minerals from outside the boundary of the mineral working would only be permitted subject to no unacceptable adverse impact on amenity and/or the local environment. This approach is consistent with other strategic and development management policies.	0	0	0
16) To minimise nuisances and impact on local amenity	There will be no additional impact on this objective where proposals for secondary processing and/or treatment of minerals will only be permitted at mineral sites where it can be demonstrated that there would be no unacceptable impact upon amenity and/or the local environment and/or the safety, efficiency and capacity of the highway network. In addition to this the sourcing of minerals from outside the boundary of the mineral working would only be permitted subject to no unacceptable adverse impact on amenity and/or the local environment. This approach is consistent with other strategic and development management policies.	0	0	0

2.5 Implementation, Monitoring and Review

2.5.1 Policy IMR1 Monitoring and Review

The Plan will be monitored and reviewed within five years of adoption as part of a "plan, monitor, and manage" approach to forward planning, or should the landbank fall below the minimum requirement, whichever comes sooner.

Table 19: Appraisal of Policy IMR1 Monitoring and Review

Sustainability Objectives	Comment	S	M	L
1) To protect and enhance biodiversity throughout Essex	It is acknowledged that the processes of monitoring and review as stipulated in the policy offers a flexible approach to the sand and gravel landbank which can adapt to future economic/market based changes. As a result of this, all impacts on the sustainability objectives	/	/	/

	will be uncertain at this stage.			
2) To maintain and enhance water resources and quality	It is acknowledged that the processes of monitoring and review as stipulated in the policy offers a flexible approach to the sand and gravel landbank which can adapt to future economic/market based changes. As a result of this, all impacts on the sustainability objectives will be uncertain at this stage.	/	/	/
3) To minimise the risk of flooding	It is acknowledged that the processes of monitoring and review as stipulated in the policy offers a flexible approach to the sand and gravel landbank which can adapt to future economic/market based changes. As a result of this, all impacts on the sustainability objectives will be uncertain at this stage.	/	/	/
4) To encourage the sustainable use of land and protection of soils, including the best and most versatile agricultural land	It is acknowledged that the processes of monitoring and review as stipulated in the policy offers a flexible approach to the sand and gravel landbank which can adapt to future economic/market based changes. As a result of this, all impacts on the sustainability objectives will be uncertain at this stage.	/	/	/
5) To promote the minerals supply hierarchy and where mineral waste is produced, to promote the movement of minerals waste up the waste management hierarchy	It is acknowledged that the processes of monitoring and review as stipulated in the policy offers a flexible approach to the sand and gravel landbank which can adapt to future economic/market based changes. As a result of this, all impacts on the sustainability objectives will be uncertain at this stage. Although it is possible that there will be future cumulative impacts on Policy S8 from Policy IMR1 in regards to this objective, at this stage it is impossible to determine whether these will be positive, negative or changeable from the current direction and methodology regarding the sand and gravel apportionment and landbank.	/	/	/
6) To safeguard air quality	It is acknowledged that the processes of monitoring and review as stipulated in the policy offers a flexible approach to the sand and gravel landbank which can adapt to future economic/market based changes. As a result of this, all impacts on the sustainability objectives will be uncertain at this stage.	/	/	/
7) To minimise the net emissions of greenhouse gases and increase adaptability to climate change	It is acknowledged that the processes of monitoring and review as stipulated in the policy offers a flexible approach to the sand and gravel landbank which can adapt to future economic/market based changes. As a result of this, all impacts on the sustainability objectives will be uncertain at this stage.	/	/	/
8) To minimise the impact on the historic environment, both above and below ground	It is acknowledged that the processes of monitoring and review as stipulated in the policy offers a flexible approach to the sand and gravel landbank which can adapt to future economic/market based changes. As a result of this, all impacts on the sustainability objectives	/	/	/

	will be uncertain at this stage.			
9) To protect and enhance the quality and character of the Metropolitan Green belt (and the Essex Landscape)	It is acknowledged that the processes of monitoring and review as stipulated in the policy offers a flexible approach to the sand and gravel landbank which can adapt to future economic/market based changes. As a result of this, all impacts on the sustainability objectives will be uncertain at this stage.	/	/	/
10) To enable all sections of the community to participate fully at all stages of decision making in the Minerals Local Plan and in determining planning applications	There will be no impact on this objective. It is recommended however that an effective way of disseminating information would be required to ensure that the public is aware of any potential changes to the landbank and the possible identification of sites.	/	/	/
11) To maximise opportunities for economic development, including jobs, arising from minerals activities	It is acknowledged that the processes of monitoring and review as stipulated in the policy offers a flexible approach to the sand and gravel landbank which can adapt to future economic/market based changes. As a result of this, all impacts on the sustainability objectives will be uncertain at this stage. Although it is possible that there will be future cumulative impacts on Policy S8 from Policy IMR1 in regards to this objective, at this stage it is impossible to determine whether these will be positive, negative or changeable from the current direction and methodology regarding the sand and gravel apportionment and landbank.	/	/	/
12) To improve the sustainable use of minerals	It is acknowledged that the processes of monitoring and review as stipulated in the policy offers a flexible approach to the sand and gravel landbank which can adapt to future economic/market based changes. As a result of this, all impacts on the sustainability objectives will be uncertain at this stage. Although it is possible that there will be future cumulative impacts on Policy S8 from Policy IMR1 in regards to this objective, at this stage it is impossible to determine whether these will be positive, negative or changeable from the current direction and methodology regarding the sand and gravel apportionment and landbank.	/	/	/
13) To achieve beneficial restoration and aftercare of all minerals sites	It is acknowledged that the processes of monitoring and review as stipulated in the policy offers a flexible approach to the sand and gravel landbank which can adapt to future economic/market based changes. As a result of this, all impacts on the sustainability objectives will be uncertain at this stage.	/	/	/
14) To reduce transportation of minerals and road congestion, and	It is acknowledged that the processes of monitoring and review as stipulated in the policy offers a flexible approach to the sand and gravel landbank which can adapt to future economic/market based changes. As a	/	/	/

promote sustainable transport	result of this, all impacts on the sustainability objectives will be uncertain at this stage.			
15) To protect and enhance human health and well being	It is acknowledged that the processes of monitoring and review as stipulated in the policy offers a flexible approach to the sand and gravel landbank which can adapt to future economic/market based changes. As a result of this, all impacts on the sustainability objectives will be uncertain at this stage.	/	/	/
16) To minimise nuisances and impact on local amenity	It is acknowledged that the processes of monitoring and review as stipulated in the policy offers a flexible approach to the sand and gravel landbank which can adapt to future economic/market based changes. As a result of this, all impacts on the sustainability objectives will be uncertain at this stage.	/	/	/

place services

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