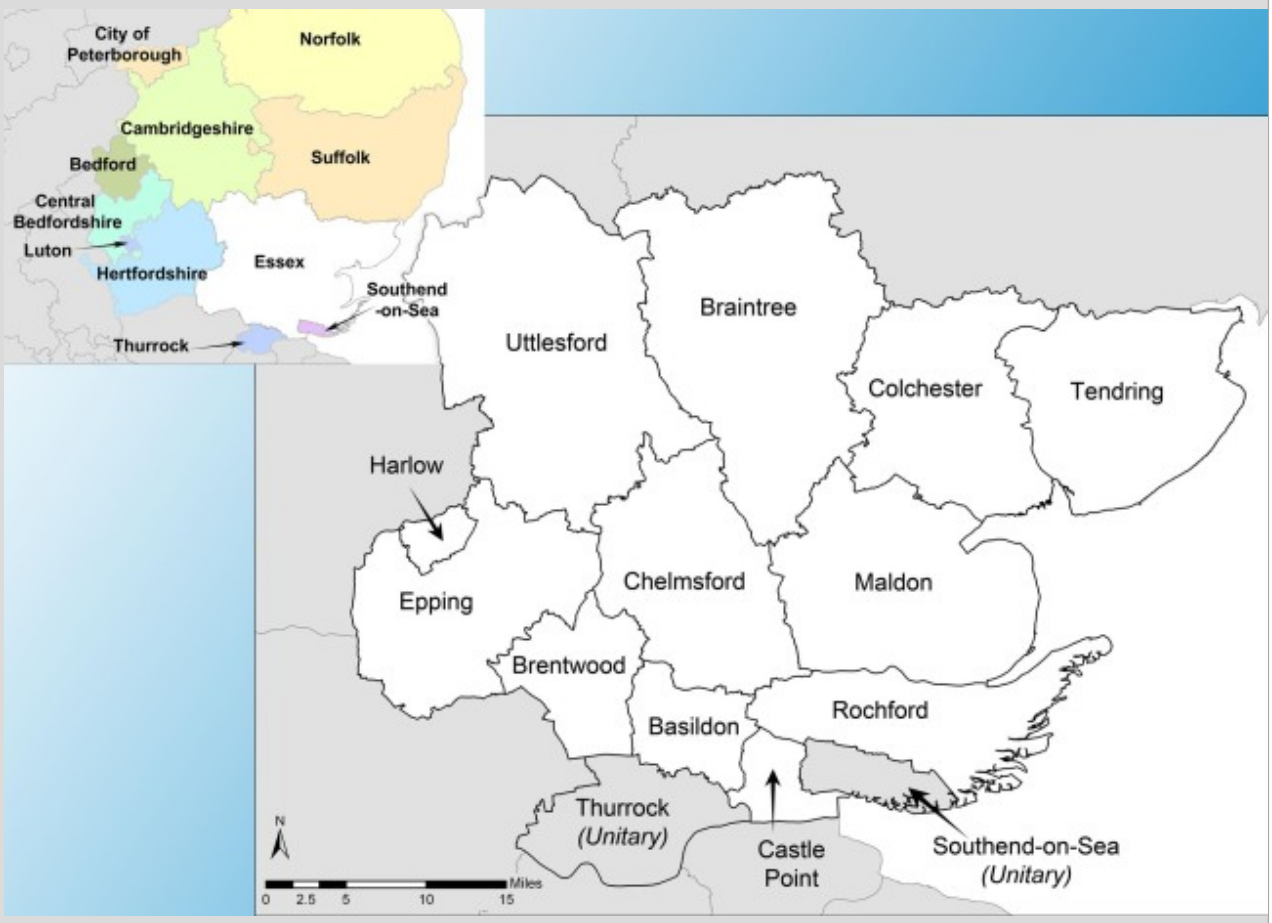
Appendices

1 INTRODUCTION

Background

1.1 The County Council is the minerals and waste planning authority for the County of Essex as defined in Map 1

Map 1: Essex Administrative Area



1.2 The County Council has a statutory responsibility to Plan for the future minerals supply and waste management and to determine mineral planning applications. It is fulfilling this responsibility by preparing separate Minerals and Waste Local Plans to support the achievement of sustainable development within the County.

1.3 This document is the Publication Proposed Submission version of the 'Essex Minerals Local Plan' (formerly called the Minerals Development Document) which the Authority will take to the Plan Examination stage. The County Council considers this to be a 'sound' plan, based

on all the evidence and extensive feedback received during the plan preparation process. For the sake of brevity, this Essex Minerals Local Plan will be referred to as "the Plan" throughout the rest of this document.

The Economic Importance of Minerals

1.4 Minerals underpin our entire way of life.They provide the construction materials for the homes we live in, our places of work, our transport infrastructure and the essential services, such as health, education and recreational facilities on which we all rely. They are essential to energy generation, agriculture, manufacturing and many other businesses. In short, we could not maintain our current way of life without them.

1.5 However, minerals are a finite natural resource and can only be worked - extracted from the ground - where they are found. It is vital we only extract what is needed and make best use of them to secure their long-term availability and conservation.

1.6 In monetary terms the value of all forms of on-shore minerals produced in the UK is about £3.5 billion a year, of which land-won sand and gravel represents about £630 million a year. This sector represents an extremely valuable economic resource [(1)] ,and the community of Essex is well placed to benefit from its mineral assets; in particular sand and gravel, silica sand, chalk, brickclay and brickearth, with sand and gravel being the largest contributor.

1.7 An adequate and steady supply of minerals is essential both for the national economy and to support the County's economic growth, whether by enabling vital new development to take place, supporting key manufacturing processes, or ensuring the maintenance and improvement of our existing built and natural environment.This plan sets out how our future mineral needs will be met.

1.8 Once adopted, the Plan will comprise an important part of the 'Development Plan' in Essex, for it sets out how we will provide for our future mineral needs – through local planning policies and land allocations - and provides the basis on which future planning applications for minerals development will be considered and determined. This provides greater certainty for both local communities and the minerals industry to where future minerals development might take place.

A Spatial Plan- a new form of local plan

1 United Kingdom Yearbook 2011, British Geological Survey

1.9 This is a positive 'spatial plan' which aims to deliver sustainable development. The Plan has a central role in supporting economic growth in the County through the delivery of land, buildings and infrastructure to meet our future needs. At the same time it ensures positive steps are taken to protect and enhance the County's unique natural, historic and environmental assets and resources. It also has a key role to play in supporting the strong, vibrant and healthy communities in Essex to make them sustainable for the future.

1.10 The Plan provides a clear policy framework for all parties involved in future minerals and minerals related development, as it provides a picture of how we see mineral development in the County taking place **up to 2029**, the steps needed to make this happen, and the measures necessary to assess our progress on the way.

1.11 The Plan is founded on an extensive evidence base and has been prepared following widespread and ongoing public consultation through the 'Issues and Options' and 'Preferred Approach' plan production stages. It has been produced in parallel with a Sustainability Appraisal which has informed each step of plan development, enabling alternatives to be considered and appropriately evaluated. 'Strategic Flood Risk Assessment' and 'Assessment under the Habitats Regulations' have informed both the Sustainability Appraisal and this Plan.

1.12 The Plan is consistent with the County Council's vision statement and corporate strategy, and with the Sustainable Community Strategies still active across Essex's District, Borough and City Councils. It is commensurate with local economic strategies developed across Essex, including the County Council's own Economic Growth Strategy, and is a critical component of Essex's suite of strategies which underpin the work of the South East Local Enterprise Partnership. Other forward planning documents of significance have also been considered during its preparation (including , the Local Transport Plan, the Development Plans prepared by Essex District, Borough and City Councils and the Environment Agency's flood management plans).

1.13 The policies and proposals in the Plan are considered to be consistent with the National Planning Policy Framework (NPPF) published March 2012. Particular regard has been paid to the NPPF's emphasis on supporting economic growth through the plan-led system, and its presumption in favour of sustainable development.

The Minerals Supply Hierachy

1.14 The Plan's overarching strategic ambition is to deliver the **mineral supply hierarchy** in Essex. This aims firstly to reduce as far as practicable the quantity of mineral used and waste generated, then to use as much secondary and recycled mineral as possible, before finally securing the remainder of mineral needed through new primary extraction safeguarding appropriate mineral facilities and resources. This supply hierarchy has underpinned all plan preparation work undertaken since 2005, and continues to provide a coherent and sound foundation for this Plan.

Main Plan Components

1.15 For ease of reference,the Plan has the following structure:-

Part One: Introduction (this part) – Provides a short introduction to the 'Essex Minerals Local Plan'. It explains the County Council's role in minerals planning, the purpose of the Plan, its statutory status, and the types of mineral development generally subject to the Plan's strategy, policies, and proposals.

Part Two: Spatial Portrait & Key Minerals Planning Issues – Paints a picture of the County of Essex, explaining the area's general location and character, the minerals resources that are found and worked here, and the factors which influence mineral demand and constrain the working and movement of minerals. It concludes with a summary of the Key Issues to be addressed by this Plan.

Part Three:The Plan's Strategy – Sets out the key policy principles that will guide the future use of mineral resources in construction, including the use of construction and demolition waste materials and the winning, working and handling of new land won minerals in the County. It includes the long-term vision for the area and the strategy's objectives, and strategic policies to deliver that vision. In particular, it sets out the broad locations where future mineral extraction and associated development will be preferred, and conversely areas where mineral extraction is discouraged. The main features of the strategy are illustrated diagrammatically on the supporting **Key Diagram.**

Part Four: Minerals Sites – Provides information on site-specific proposals (Preferred Sites) for future mineral extraction and associated development and mineral transhipment facilities proposed in the County. These proposals are considered suitable, deliverable, and will enable the achievement of the strategy. The proposals are illustrated geographically on a supporting **Policies Map** (Appendix 11). Detailed boundaries are shown on an Ordnance Survey base with the site profiles and a plan for each site being contained in Appendix 5.

Part Five: Development Management Policies – these are policies against which individual planning applications for mineral extraction and associated development will be considered and determined. The policies will be used to ensure that development takes place in a sustainable way at locations assessed as being appropriate for such activities; and will enable inappropriate development to be resisted .

Part Six: Implementation, Monitoring & Review – this section explains how the policies and proposals in the Plan will be delivered and by whom; how the Plan will be monitored over time so that its success can be measured and any necessary policy adjustments can be identified; and how the Plan will be updated, refreshed and rolled-forward over a longer time period so that it continues to be effective.

The Plan Area

1.16 This Plan applies to the whole of the administrative County of Essex (see Map 1).

The Plan Period

1.17 The plan-period covers 18 years between the **1 Jan 2012 – 31 Dec 2029 inclusive**.

The Plan's Legal Status

1.18 The Plan has been prepared to comply with the legal requirements of the Planning & Compulsory Purchase Act 2004, the Planning Act 2008, the Town and Country Planning (Local Planning) (England) Regulations 2012, and the Localism Act 2011. It has also been prepared to be in general conformity with the new National Planning Policy Framework (DCLG, March 2012).

1.19 The Plan should be read and interpreted in its entirety with due regard paid to all of the relevant policies and proposals included within it.

1.20 Under the two-tier system, the County Council is the 'local planning authority' for all minerals and waste planning matters for the whole of the County; whilst each of the twelve Essex District/ Borough/ City councils takes responsibility for the majority of other local planning decisions e.g., for housing, commercial, retail, recreational development etc. for their respective areas.

1.21 The Plan forms part of the statutory 'Development Plan' for Essex and should be read in conjunction with each of the Local Plans/Local Development Frameworks prepared by the twelve Essex district/borough/city planning authorities. Where policies in this Plan refer to the **Development Plan** this means:-

- all the policies in this Plan which are relevant; and
- Adopted Essex and Southend Waste Plan
- the relevant policies in the Local Plan/Local Development Framework prepared by the appropriate Essex district/ borough/ city council; adopted Waste Local Plan
- Until such time as the East of England Plan is revoked, the Regional Spatial Strategy

The Documents and Policies this Plan will replace

1.22 Once adopted, the Plan will replace the current Essex Minerals Local Plan (1997) in its entirety, a single 'saved' policy (MIN4) within the Essex and Southend-on-Sea Replacement Structure Plan (2001) , and minerals policy M1 within the adopted East of England Regional Plans as it applies to Essex. Further details of these cancelled policies are set out in Appendix One.

Marine Aggregate Provision

1.23 This Plan does not apply to the maritime coastal and estuarial areas which adjoin the County (measured from the level of mean high water at spring tides).These marine areas are administered separately under other legislation in the Maritime & Coastal Access Act 2009. Proposals for marine dredging of aggregates are decided by the Marine Management Organisation under these policy arrangements. They make decisions in accordance with national maritime policy set out in the UK Marine Policy Statement (March 2011).However in accordance with national policy the Plan does have a role in the safeguarding of transhipment sites, therefore it will safeguard marine wharves and the associated facilities.

Minerals Development Covered by Plan

1.24 Minerals are natural substances (solid and liquid) that can be extracted from the earth at surface level or underground by means of mining, quarrying and pumping. In Essex, the key minerals found and worked are sand and gravel, silica sand, brick-earth, brick clay, and chalk and all are worked at surface level. There are no underground mines in the County. Minerals development differs from other forms of development because minerals can only be worked where they occur.

1.25 The following definitions are provided for guidance:

- 'Mineral working' or 'mineral extraction' refers to the quarrying of mineral and the ancillary development associated with this such as processing plants, site offices and weighbridges,

- 'Mineral development' applies more generally to any development primarily involving the extraction, processing, storage, transportation or manufacture of minerals. It includes associated mineral development such as rail aggregate depots, facilities for aggregate

recycling, secondary processing facilities, e.g. asphalt and concrete plant and coastal wharves for mineral transhipment.

1.26 The Plan is applicable to all mineral development in the County. In particular, it covers the following minerals which can be extracted economically in Essex:

- **Aggregates** - This term encompasses Sand, gravel, crushed rock, and other bulk materials used by the construction industry, however only land won sand and gravel production is relevant to Essex. The County is one of the largest producers in the UK,
- **Silica Sand** – This is higher value sand which contains a high proportion of silica in the form of quartz and has a narrow grain size. Silica sand is used for a variety of industrial uses and is currently extracted from one site in the Plan Area, located in north-east Essex,
- **Brick Clay** – This is sedimentary material used in the industrial manufacture of bricks, roof tiles, and clay. There are two brick making sites in Essex, both of which extract brick clay,
- **Brickearth** – Historically, brickearth was used in Essex for the manufacture of bricks and tiles. Although not currently worked, most of the deposit is found in Rochford District,
- **Chalk** – A form of sedimentary limestone rock produced mostly for agriculture, but also used in small amounts in the pharmaceutical industry. Chalk outcrops only occur in the north-west of the County,where currently only one extraction site produces white chalk.

Background Context to Plan Preparation

1.27 Preparation of the Plan has been underpinned by a number of different but inter-related processes. Appendix 2 gives a brief explanation of the matters that have shaped and influenced the preparation of the Plan. In particular, it covers the technical evidence base, environmental assessments, public and stakeholder involvement, national and other policy guidance, and the Duty to Co-operate. Further background information is provided by Appendices 3 and 4.

Other Useful Information

Web based information and guidance

1.28 Useful information concerning the preparation of the Plan is available to view and download from the County Council's website (see www.essex.gov.uk/replacementMLP). This website has a copy of the 'Annual Monitoring Report' and the 'Local Aggregate Assessment' which gives useful data and commentary about minerals planning in Essex. These are updated annually. The website also has a copy of the adopted Essex Statement of Community Involvement (SCI) which,

- Explains the community engagement processes which have underpinned the preparation of the Plan, and
- Details the Mineral Planning Authority's requirements/ standards for community consultation and engagement for planning applications proposing mineral development.

1.29 The internet is an invaluable tool which can help improve the quality of planning applications for minerals and minerals-related development, and encourage the achievement of best practice right across the extraction, recycling and construction industries.

The County Council encourages all potential applicants to consult internet resources and to seek the early advice of the Mineral Planning Authority when formulating their future proposals.

1.30 Some of the most useful internet websites e.g. Environment Agency, Natural England, British Geological Survey (BGS), WRAP, English Heritage etc. are signposted from the County Council's website.

2 SPATIAL PORTRAIT AND KEY MINERALS PLANNING ISSUES

Essex at a Glance

2.1 It is necessary to understand the characteristics of Essex and key drivers for for future development.

ESSEX AT A GLANCE

Population and Economy

- Essex is one of the largest counties in England in terms of land-area and has a resident population of 1,415,000 persons and growing (ONS, 2010 mid-year).
- There are three national growth areas in Essex: the Thames Gateway, Haven Gateway and West Essex Alliance respectively; and four growth centres at Basildon, Chelmsford, Colchester, and Harlow.
- The Adopted East of England Plan (May 2008) proposed the construction of 80,000 new homes in Essex from 2006 to 2021 to serve the County's needs. The revisions to the East of England Plan (March 2010) proposed the construction of 100,000 new homes in Essex from 2011 to 2031.
- There is a substantial employment base including major manufacturing enterprises, service sector functions, logistics and international transport gateways.
- While mineral production represents a small proportion of economic output (quarrying provides several hundred jobs) it plays a vital strategic role in facilitating the County's economic growth and regeneration.

Transport Infrastructure

- The strategic road and rail network forms a 'wheel and spoke' pattern reflecting the economic dominance of London, and the importance of the main distribution networks
- Trunk roads and rail routes all suffer from congestion and capacity limitations

Environment

- 70% of the 369,394 ha. land-area of Essex is productive farmland. Half of this land is graded as Grade 1, 2 or 3a under the Agricultural Land Classification, meaning it is of high quality.
- Much of the 180 mile long coastline is of international/national biodiversity importance and subject to development pressures.
- 29 species and 15 habitats are classed as vulnerable or in need of protection or safeguarding.
- There are 14,000 Listed Buildings, 296 ScheduledMonuments, 37 Historic Parks & Gardens and 21,000 recorded archaeological sites.
- An extensive part of the south and west of the County is covered by the Metropolitan Green Belt. There is one Area of Outstanding Natural Beauty at Dedham Vale in the north east.
- This County expects to face challenges arising from changes in climatic conditions, including flood events, droughts and sea level rise.

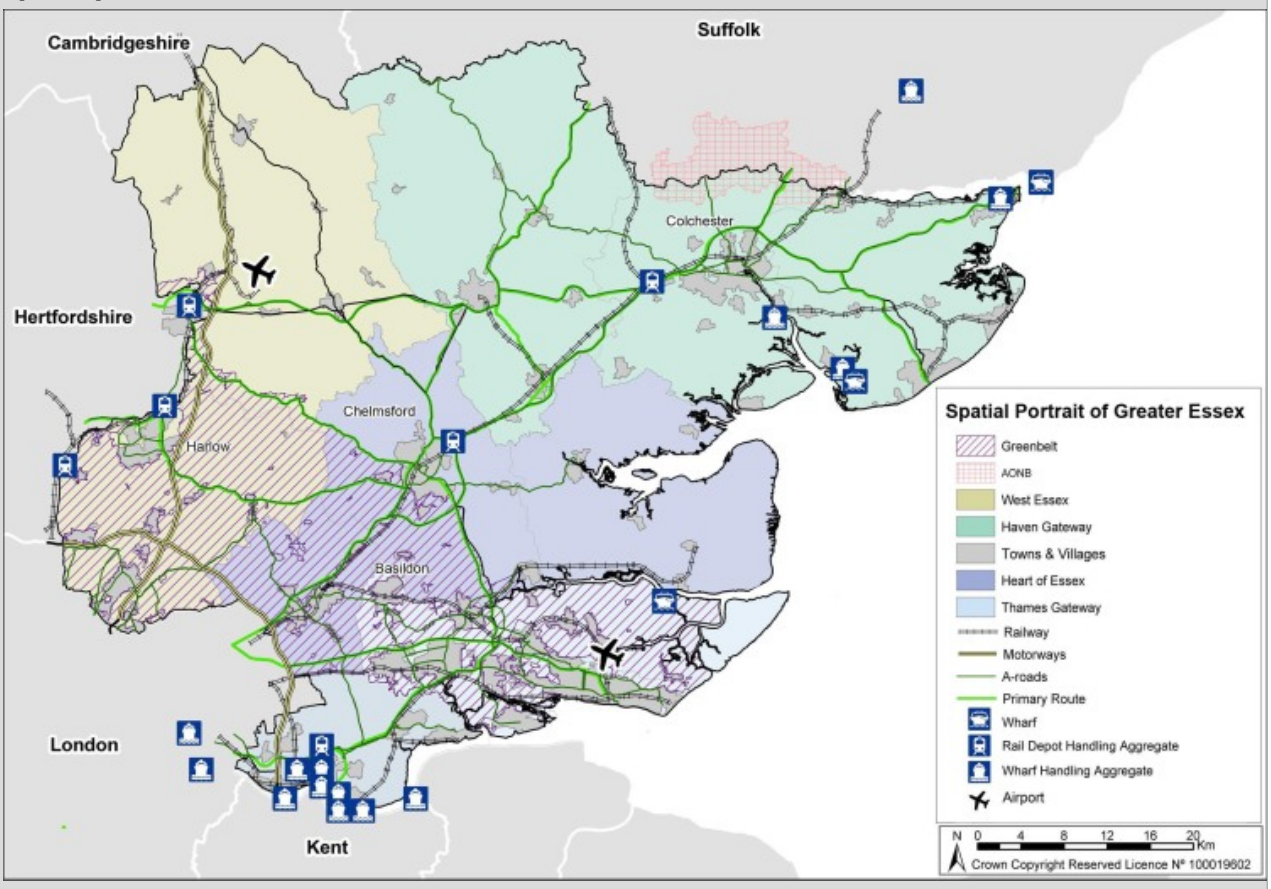
Geology & Mineral Infrastructure

- Essex has extensive deposits of sand and gravel Kesgrave formation.
- There are more localised deposits of silica sand, chalk, brick earth and brick clay.

- Marine dredging takes place in the extraction regions of the Thames Estuary and the East Coast, whilst aggregate is landed at marine wharves located in east London, north Kent, Thurrock, and Suffolk. Essex has no landing wharves of its own.
- There are no hard rock deposits in the County so this material must be imported into Essex currently by rail to the existing rail depots at Harlow and Chelmsford.
- Essex is the largest producer and consumer of sand & gravel in the East of England.
- There are 18 active sand & gravel sites (including 1 silica sand site, 2 for brick clay, and 1 chalk site.
- There are 2 marine wharves and 4 rail depots capable of handling aggregate.
- Construction, demolition and excavation waste is also recycled at 25 dedicated and active aggregate recycling sites (2010).
- Aggregate is both imported into Essex (hard rock) and exported (sand and gravel primarily to London), Figure 4 shows the movement of aggregate in and out of Essex.

Spatial Portrait of Greater Essex

Map 2 Spatial Portrait of Greater Essex (2)



Spatial Portrait

County of Essex

2.2 The County of Essex is located to the north-east of London, and is bordered to the east by the North Sea and to the south by the River Thames. The County's northern boundary is provided by the River Stour for much of its length adjoining Suffolk; and to the west the boundary is defined by the River Lea for much of its length, adjoining Hertfordshire. The River Lea extends south to London.

2 While the Plan area does not include the unitary authorities of Southend-on-Sea and Thurrock, given the inter-relationships with the County, they are shown for indicative purposes

2.3 The South East Local Economic Partnership was established in 2011 to promote economic and business performance in the combined area of East Sussex, Essex, Kent, Medway, Southend and Thurrock. Local Economic Partnerships (LEP) were bought in to replace Regional Development Agencies and feature representatives of both local authorities and local businesses working together to promote business growth and employment in their respective areas.

2.4 The County itself holds an excellent strategic location in the prosperous south-east of England and has access to large domestic markets, proximity to London, and good transport connections to mainland Europe. The north of Essex is close to the world leading academic, research & development, and life sciences cluster in the Cambridge area.

2.5 Essex is well connected to these economic markets by both road and rail. The M25, M11, A12, A127, A120, and A13 provide the main road arteries. These road corridors, with the exception of the London orbital M25 motorway, are also matched by national rail corridors providing for passengers and freight (London to Cambridge; London to Norwich; and London to Southend).

2.6 Harwich International Port, one the UK's most important sea ports, is located to the north-east of the County and provides regular services to the continent. In north-west Essex, Stansted Airport on the M11 motorway is London's third largest airport for passengers and freight. The recently extended Southend Airport in south-east Essex is developing its role as a regional airport serving Essex, London and the South East.

2.7 The southern part of Essex is heavily urbanised with a complex pattern of large to medium-sized towns. Overall, this compact area accommodates over 660,000 residents with the main urban centre being Basildon (and with other major urban centres in neighbouring Southend, and Grays Thurrock). This area is notable for its large economic base and strong focus on port and logistics activities. London Gateway port is under development . This area forms part of the Thames Gateway which is a national growth area and the largest regeneration project in western Europe.

2.8 Further north in the County there is a well scattered pattern of settlements with three major urban centres widely separated by extensive rural areas containing smaller towns and villages. The major centres are Chelmsford and Colchester both located on the A12/Great Eastern rail corridor with over 100,000 residents each; and Harlow located on the M11/West Anglia rail corridor currently with approximately 80,000 residents, but identified for further major growth.

2.9 Braintree, Colchester and Tendring in north-east Essex are, along with parts of neighbouring Suffolk, within the national growth area of Haven Gateway. They are associated with significant urban growth, major ports and logistics activities, information and communications technology (ICT) and research & development activities.

2.10 Rural areas, which comprise three-quarters of County's administrative area, contain environmental assets of considerable importance. There are extensive areas of high quality agricultural farmland (within grades 1, 2 and 3a) of which much is underlain by sand and gravel; a network of ancient woodland; and major sites of international and national importance for biodiversity. There are numerous historic towns and villages as well as many archaeological sites and heritage features of national significance.

2.11 Dedham Vale in north Essex/south Suffolk is the only designated Area of Outstanding Natural Beauty (AONB) in the County. There are however proposals to extend the Suffolk Coast & Heaths AONB to cover the Tendring side of the Stour estuary in Essex.

2.12 Several important rivers and parts of river systems meander through the low-lying, gently undulating topography of Essex. These are associated with local designations of valued landscape worthy of protection and enhancement. The undeveloped Essex coast is subject to stringent policy protection from future development because of its biodiversity, landscape, and heritage importance.

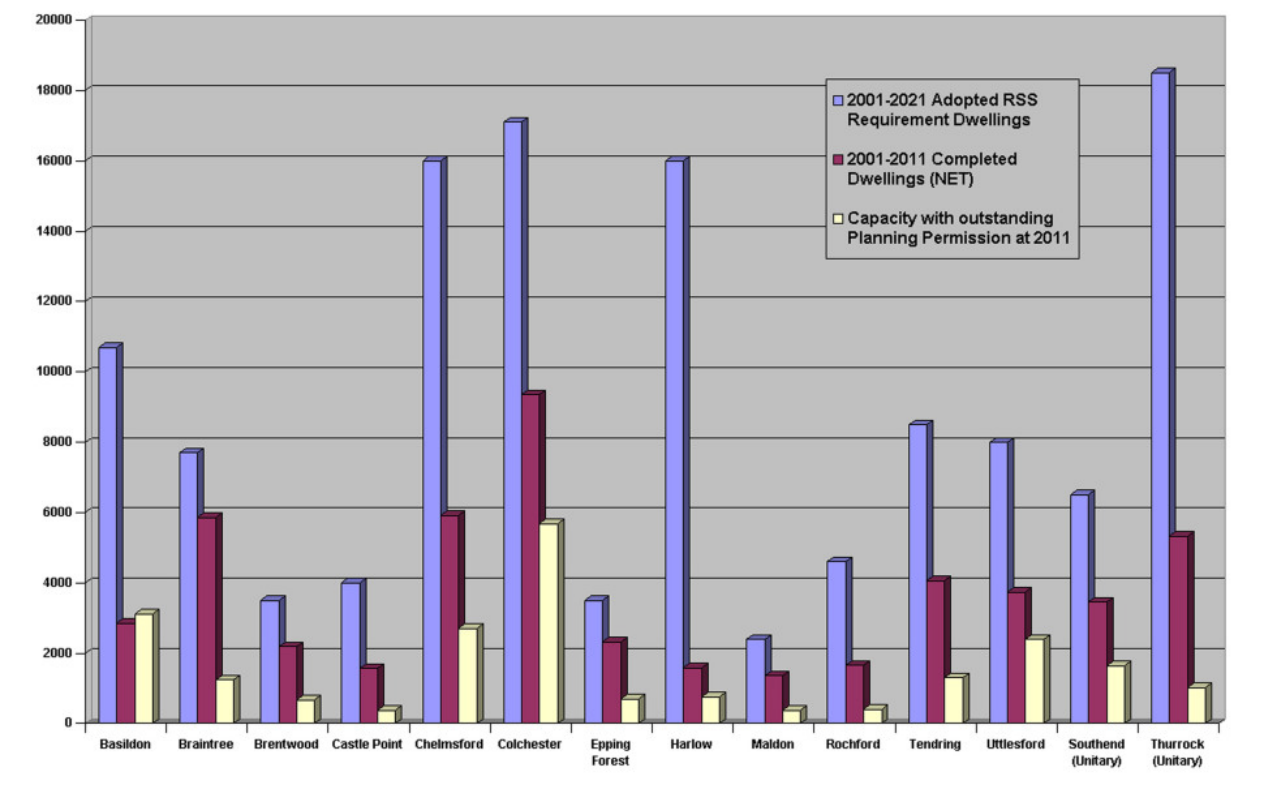
2.13 The Metropolitan Green Belt extends over substantial parts of the western, central, and southern parts of the County. The stated purpose of the green belt is to avert urban sprawl by, for example, limiting the outward spread of London, preventing the joining together of existing settlements and safeguarding the countryside from urban encroachment. The Green Belt prevents urban sprawl by ensuring that land within designated Green Belt boundaries is kept permanently open. The NPPF states that mineral development need not be inappropriate development in the Green Belt so long as the openness of the Green Belt is preserved and proposals do not conflict with the purpose of including land in the Green Belt.

2.14 Essex is likely to face challenges arising from future changes in climatic conditions including flood events, droughts, and sea level rise. The County must adapt and mitigate for these impacts, and all proposed new development, including mineral development, must be mindful of this. Further details about the risks are set out in 'Essex County Council's Climate Change Adaptation Plan' (July 2011).

Future Growth

2.15 In Essex, all districts will experience growth up to 2029 as indicated in Figure 1 below. However, the majority of future growth, development and change will be strongly focussed on the main urban centres of Basildon, Chelmsford, Colchester, and Harlow. These have been identified as the 'key centres for development & change' for accommodating future growth in the East of England Plan a status now reflected in adopted Local Development Plans prepared by the Districts/Boroughs/City Authorities. For brevity they are referred to as 'Key Centres' throughout the remainder of this Plan.

Figure 1: Indicative Housing Growth in Essex up to 2029



2.16 These Key Centres will be the main drivers of significant economic and housing growth in Essex. They will be the focus for employment, retailing and other commercial activities, education, health care, administration, culture and tourism. They will continue to provide good access to interchange facilities for public transport serving both urban and inter-urban travel. More limited growth will be focussed on the market towns and coastal towns elsewhere in the County.

2.17 This strategic pattern of growth is being planned for through the Local Plans/Local Development Framework documents prepared by the Essex district/ borough/city councils. As of April 2012, Local Plans (core strategies) had been adopted by Braintree, Chelmsford, Colchester and Rochford. Some of these core strategies also have related site allocations and

action area DPDs in place. Local Plan documents are in preparation for the remaining Essex districts/boroughs. This future pattern of growth is expected to influence where the future local demand for minerals will predominantly arise within the County.

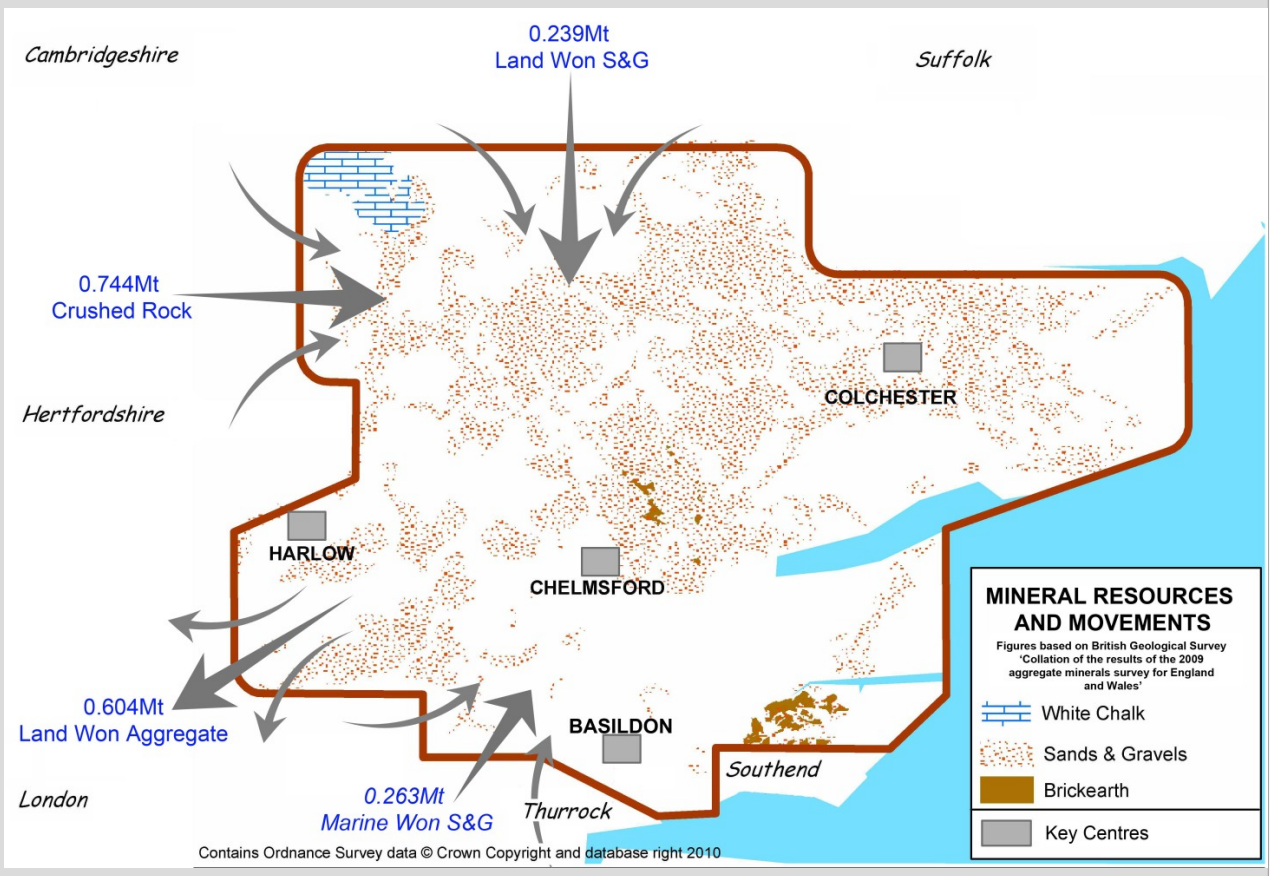
Planned Major Infrastructure Schemes

2.18 There are several major infrastructure projects located in Essex or in neighbouring areas which may require aggregates for their construction. These projects include,

- A Government commitment to the construction of a new Lower Thames Crossing between Greater Essex and Kent,
- The current construction of Crossrail across Greater London between Maidenhead (Berkshire) in the west and Shenfield, Brentwood in the east,
- Bradwell (in Maldon district) has been identified as a potentially suitable location for the construction of a new nuclear power station,
- At London Gateway (Shellhaven, Thurrock) planning approvals have been given for major infrastructure development on 283 hectares including the UK's largest container port (with an annual throughput of 3.5 million TEU[3]), other port facilities for roll-on/roll-off and bulk traffic, a major business park and logistics centre (947,000 square metres of commercial space), and on an adjoining site for a major new power station (900 MW, combined cycle gas turbine),
- At Bathside Bay in Harwich planning approval has been granted for the construction of one of the largest container terminals in the UK with an annual throughput of 2.1 million TEU.

3 TEU refers to twenty foot equivalent unit, a description of a standard container size

Map 3: Spatial Pattern of Mineral Resources in Essex



County Mineral Resources

2.19 Map 3 denotes the spatial supply pattern and movement of aggregates into and out of Essex. This is explained below.

Sand & Gravel

2.20 Essex has extensive Kesgrave formation sand and gravel which were laid down during the Ice Age and on river terraces. The river terrace deposits are found not only along current river valleys, but in historic river channels that are now dry.

2.21 The sand and gravel resources in Essex are:

- Significant in national, sub-national and local terms - Essex is one of the largest producers in the UK
- Most geographically extensive and significant mixed deposit within the centre and north of Essex – namely the districts of Uttlesford, Braintree, Chelmsford, Colchester, and Tendring;

- Least extensive in south-east Essex where deposits appear smallest and least workable – the districts of Maldon and Rochford;
- Present along the River Lea valley terraces adjoining Harlow and in Epping Forest district;
- Mixed deposits capable of being processed to supply a range of construction products - building sand, sharp sands and gravel;
- Used as a raw material to produce concrete, mortar, asphalt and construction fill which is used in the construction industry and for roads.

2.22 The majority of the sand & gravel produced in Essex (about 78%) is used within the County itself. This position looks unlikely to change over the long-term. Consequently the main factor influencing production of sand & gravel in the future will be the need to meet the minerals demand for the whole of Essex created by major development and new infrastructure projects within Essex itself (see also Provision for sand and gravel section).

Silica Sand

2.23 Silica sand is another significant mineral resource found in Essex. It is classed as an 'industrial sand' and its distinction from construction sand is based on its applications/ uses and market specification. Silica sand contains a high proportion of silica in the form of quartz and has a narrow grain size distribution compared to other sand in Essex.

2.24 The silica sand resources in Essex are:

- Processed for industrial purposes at Ardleigh from a mixed resource, north-east of Colchester. Industrial uses include glassmaking, foundry casting, ceramics, chemicals and water filtration,
- Capable of reaching selling prices some 20 times above that of regular construction aggregates, allowing them to serve a wider geographical market as the relatively high price off-sets transport costs.

Brickearth and Brick Clay

2.25 Brick clay is currently used in the small-scale manufacture of bricks, roof tiles and clay materials, at two sites in Essex – Bulmer Brickworks in north Essex and Marks Tey west of Colchester.

2.26 Brickearth is found in shallow seams in south-east Essex particularly in Rochford district although this is not currently worked. There is no compelling reason why this material should not be extracted economically at some point in the future, so the resource needs continued protection.

2.27 The brick clay and brickearth resources in Essex are:

- Capable of economic use in the small-scale manufacture of bricks, roof tiles and clay materials,
- Present in isolated and localised pockets within the County – their geographic presence is very limited to a few key locations,
- Used for specialist uses such as the construction and restoration of buildings and serving markets of a more sub-national and local character,
- Worthy of safeguarding to conserve their continued availability for future generations.

Chalk

2.28 Chalk is one of the mainstays of 'solid geology' under Essex and is the oldest rock exposed at the surface. The chalk resources in Essex are:

- Extensive under the surface, but outcrop only in the north-west particularly in Uttlesford district,
- Currently extracted at only one site in the form of white chalk at Newport Quarry,
- Used mostly for agricultural use, although small quantities are used by the pharmaceutical industry,
- Chalk is not associated with a landbank in Essex as it is extracted as an industrial mineral rather than as an aggregate.

Mineral Links with other areas

Hard rock

2.29 Essex does not have any indigenous hard rock so it imports this into the County predominantly by rail from elsewhere. Over 0.5mtpa is imported from the East Midlands and South West regions. Igneous hard rock is imported from the East Midlands and limestone from the South West with some imports from outside England. This mineral arrives by train at rail depots in Harlow and Chelmsford.

Marine dredged aggregates

2.30 Marine dredged aggregates provide an important additional source of material for construction aggregates, beach replenishment, and some industrial processes. This material is sourced from the seabed off Britain which is controlled and licensed by the Marine Management Organisation.

2.31 No marine dredged aggregates are landed in Essex, but there are marine landing points located in neighbouring authorities in north Kent, east London, Thurrock, and Suffolk (Ipswich) which are able to serve parts of Essex and contribute to the overall supply coming into Essex

What mineral resources do we export?

2.32 Approximately 0.6mtpa (22%) of land-won sand and gravel production in Essex is exported to other parts of the country. London is the largest market for land-won sand and gravel produced in Essex. Other nearby external markets include Southend-on-Sea and Thurrock.

How are our minerals transported?

2.33 Most aggregate produced in Essex is transported within the County by heavy goods vehicles (HGV's) on the road network. Only certain roads are appropriate for HGV traffic and the Highway Authority has defined a main road network where such traffic is acceptable. Rail and water-borne transport are more commonly used to transport bulk minerals over longer distances for importing hard rock and exporting sand and gravel .

2.34 Aggregate is exported by rail from rail transhipment facilities at Harlow and Marks Tey (near Colchester) and by barge from Fingringhoe Quarry. There are some cross-boundary movements of aggregate by road into and from neighbouring areas (excluding London). Evidence suggests it is more efficient to transport aggregate by road over short distances of up to 60 km (36 miles), and therefore this pattern is expected to continue. The export of sand and gravel to London is undertaken by road, rail transfer and water.

2.35 There is an extensive road and rail network in Essex, but the rail network is considerably less flexible for practical aggregate movement around the County. The movement of people takes much of the available rail capacity. Compared to neighbouring areas such as London, Thurrock, north Kent, and Suffolk, the County has a limited water-based transport network and loading/unloading facilities.

Key Mineral Issues to be addressed by this plan

2.36 The character of the County, policy and guidance, the evidence base, and consultation feedback has identified fourteen 'Key Issues' to be addressed by this Plan. Their role in promoting the three main components of sustainable development - economic, social and environmental, is identified at the end of each issue in brackets. They are presented below:

2.37 The plan needs to:

1. maintain a plan-led approach to future provision, providing reassurance for the Essex residents, minerals industry, key stakeholders and future developers that future needs can be met, and a degree of certainty as to where minerals development might take place, (social, economic)

2. contribute positively to climate change mitigation and adaptation, (environmental)

3. identify and safeguard potentially important mineral resources for future use, avoiding unnecessary mineral sterilisation, (economic, environmental)

4. encourage the more prudent use of mineral resources, encouraging sustainable construction, mineral re-use, recycling, and minimising mineral waste, (economic, environmental)

5. encourage the production and use of recycled aggregate, (economic, environmental)

6. identify sufficient land-won minerals to meet our future needs to 2029 and to maintain appropriate landbanks (having regard to past levels of sales, likely future demand, the sub-national apportionment requirement and the views of the Aggregates Working Party as monitored through the Local Aggregates Assessment and Annual Monitoring Reports), (economic)

7. protect existing and Preferred Sites for extraction so their ability to supply essential resources is not compromised, (economic)

8. enable minerals to be processed to optimise the resource for sustainable development, (economic, environmental)

9. ensure mineral lorries travel on the most appropriate roads in the main road network, (environmental)

10. enable HGV distances to serve Essex are reduced to minimise carbon emissions, having regard to the locations of preferred extraction sites and the mineral demand, (economic, social and environmental)

11. safeguard rail and water mineral transhipment sites, essential to meet future needs, (economic, environmental)

12. manage the adverse impacts of mineral development, to ensure the environment, amenity and communities are protected, (social, environmental)

13. achieve positive benefits from the restoration and after-use of minerals sites, (social, environmental)

14. ensure prior extraction is considered when other necessary development might sterilise viable mineral resources, (economic)

2.38 These issues have been identified from the following sources:-

- National, regional and local policies which provide a background policy context about what the Plan's scope and content should cover,
- The technical evidence base and specialist assessments which have identified the issues to be addressed,
- The results of successive rounds of public consultation which have enabled stakeholders to express views about issues, different policy approaches, and relative priorities,
- Co-ordination with other forward planning documents which are relevant in influencing and shaping the Plan's content,
- Active engagement with the Essex district/ borough/ city councils, other mineral planning authorities, and other public bodies, including under the Duty to Co-operate and key stakeholders including the mineral industry and Aggregates Working Party.

3 THE STRATEGY

Spatial Vision

3.1 The Vision provides a picture of how mineral and mineral related development will be provided in the County during the period up to 2029. It is the MPA's view of sustainable mineral development in Essex.

Vision for Essex to 2029:

Table 1

(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 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 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 by to the potential detriment of 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 use – important though that remains - 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.

Aims and Strategic Objectives

3.2 The Vision outlined above will be expressed and delivered through the aims and objectives set out below. Individual objectives are cross-referenced (*in brackets*) to the three dimensions of sustainable development defined in paragraph 7 of the National Planning Policy Framework – namely economic, social, and environmental.

Aims and Strategic Objectives

Aims:	**Strategy 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 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, and human health and well-being.	6. To ensure that the 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 developments 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, brick earth, brick clay, and chalk reserves which have potential future economic and/or conservation value (i.e., 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 protect 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)*

Spatial Priorities for Minerals Development

Role of the strategic priorities

3.3 The strategic priorities in this Plan are designed to deliver the collective vision and agreed objectives for the County of Essex set out above. The strategic priorities have been prepared to support and encourage sustainable development, and they provide the essential framework to ensure the right amount of mineral development takes place in appropriate locations and at the right time, consistent with the constraints and opportunities provided by our unique environment. To this end, the Plan identifies Preferred Sites for future development. The strategy provides an investment, delivery, and decision-making framework for the minerals industry, our partner local authorities, public bodies, and other interested stakeholders.

Achieving sustainable development

3.4 'Sustainable development' has been defined at many levels. International, European Union, and national bodies define sustainable development "as meeting the needs of the present without compromising the ability of future generations to meet their own needs". The NPPF defines '*sustainable*' as 'ensuring that better lives for ourselves don't mean worse lives for future generations', with '*development'* defined as meaning 'growth'.

3.5 The need to achieve sustainable development is a key driver and the policies in the NPPF taken as a whole constitute the Government's view on what sustainable development in England means in practice for planning. In essence there are three dimensions to sustainable development, which give rise to the need for planning, and are all applicable to minerals planning. These three dimensions are as below:

- An economic dimension, including contributing to the economy, ensuring sufficient land is available in the right places and at the right time to support growth,
- A social dimension, including supporting strong, vibrant and healthy communities by providing the supply of housing to meet needs of the present and the future,
- An environmental dimension, contributing to protecting and enhancing our natural built and historic environment, and as part of this help to improve biodiversity, use natural resources prudently, minimise waste and pollution, and mitigate and adapt to climate change.

3.6 For minerals development in Essex these three dimensions can be briefly interpreted and summarised as follows:

Table 2 Sustainable Mineral Development in Essex

Dimension:	**Key features**:
Economic	• Safeguarding sand and gravel, brick earth, brick clay and chalk. • Safeguarding strategic mineral facilities. • Making planned provision for a steady supply of aggregates and other minerals to meet identified requirements.

	• Providing an effective county-wide network of mineral extraction sites and related mineral development. • Supporting major development, key centres, growth and regeneration (e.g., Basildon, Colchester, Chelmsford and Harlow) and major infrastructure projects with an adequate supply of mineral products.
Social	• Ensuring there are adequate reserves available to meet the County's needs for housing, commerce, transport, community infrastructure etc. on which we depend for our way of life. • Promoting public health, well being, and safety. • Encouraging the people and businesses of Essex to influence decisions on mineral development and shape their communities. • Using mineral proposals, site restoration and after-care schemes to deliver benefits to local communities (e.g., outdoor recreation, environmental assets, biodiversity, green infrastructure and landscape enhancement etc.).
Environmental	• Reducing greenhouse gas emissions by minimising the distance of mineral extraction to markets and adapting to climate change impacts. • Promoting the mineral supply hierarchy to reduce the need for the primary extraction of minerals. • Minimising the environmental impacts of mineral development and encouraging minerals development to reach high environmental standards. • Protecting communities from adverse environmental impacts. • Using mineral proposals, site restoration and after-care schemes to deliver positive environmental enhancement and new assets (e.g., biodiversity and habitats, green infrastructure, landscape enhancement etc.).

3.7 This plan jointly applies these three dimension in guiding development.

Presumption in favour of sustainable development

3.8 At the heart of the National Planning Policy Framework (NPPF) is a 'presumption in favour of sustainable development' which should be seen as a golden thread running through both plan-making and decision-taking. The wording of the presumption is set out in paragraph 14 of the NPPF.

3.9 The policies and allocations included in this Plan will deliver what is considered to be sustainable development in Essex.

3.10 The strategic policy below has been included to clarify the operational relationship between national policy in the NPPF and this Local Plan. The NPPF is a material consideration in the determination of planning applications.

Policy S1- Presumption in favour of sustainable development

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.**

Spatial Vision: Policy links to the delivery of themes A

Strategic Objectives: Policy links to the delivery of objectives 1, 2 and 3

Preferred Approach: Policy related to Preferred Approaches 3, 9 and 14

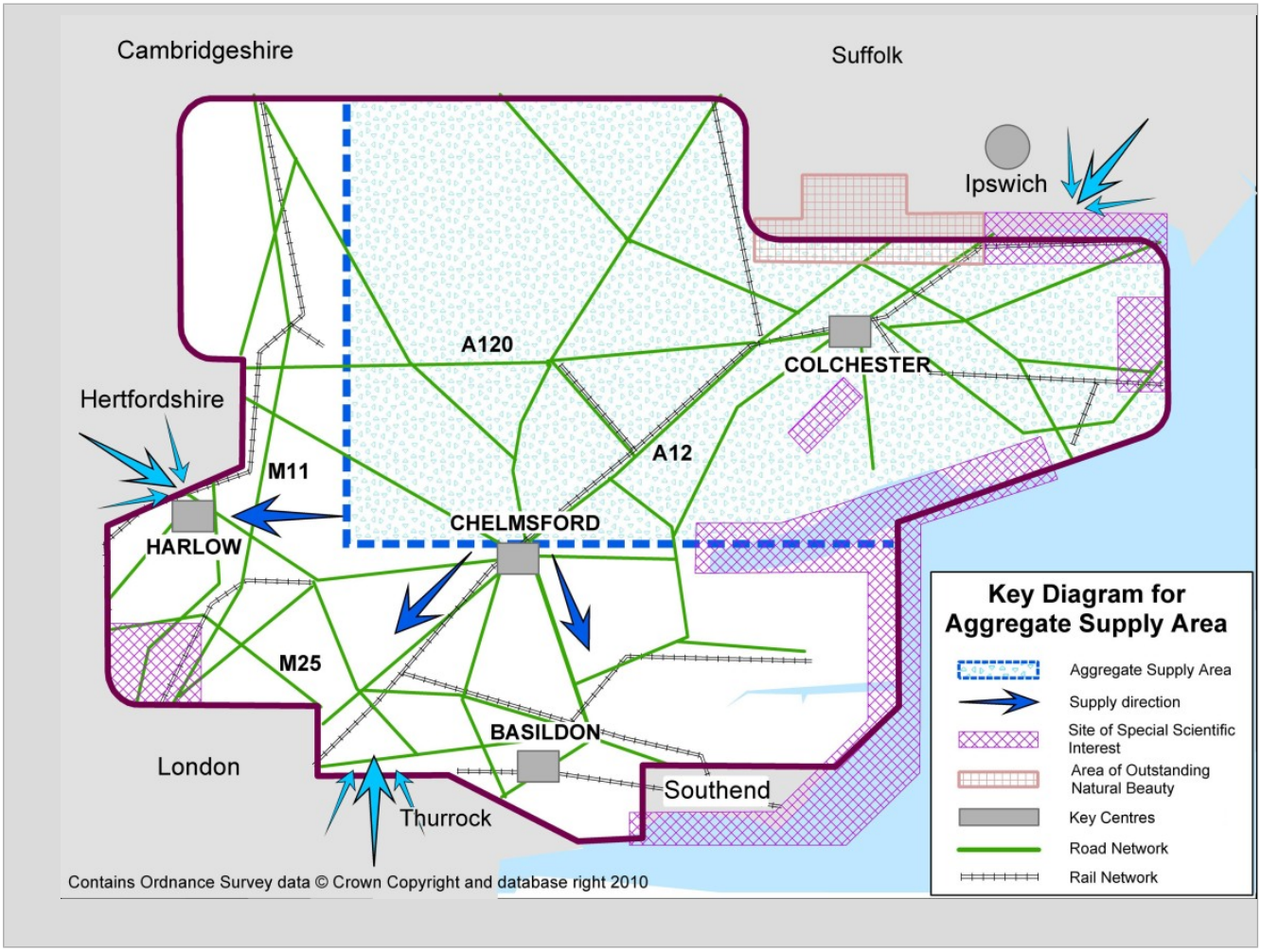
The Strategy

3.11 The Strategy is underpinned by the Presumption in favour of sustainable 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 northern eastern parts of the County (to support key areas of growth and development and minimising mineral miles) with a focus on extending existing extraction sites with primary processing plant, and reducing reliance on restoration by landfill.

3.12 The strategic priorities to achieve this aim are set out in Policy S2 below and the broad locations for new mineral development are set out in Map 4 below.

Map 4 Key Diagram



Policy S2- Strategic priorities for minerals development

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 the encouragement of 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, and minerals transhipment and strategic aggregate recycling 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 and 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 for high quality restoration of mineral extraction developments so as to:-

• significantly reduce reliance upon the use of landfill materials and;

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

• 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 of non-indigenous minerals to Essex, and for the exportation of indigenous minerals.

Spatial Vision: Policy links to the delivery of all themes

Strategic Objectives: Policy links to the delivery of all objectives

Preferred Approach: Policy related to Preferred Approaches 3, 9 and 14

Adapting to climate change

3.13 Climate refers to average weather conditions such as rainfall, temperature and humidity expected at a particular place. In recent years our climate and weather patterns have become more disrupted and unpredictable; and long-term projections suggest further climatic changes.

3.14 These include milder and wetter winters; and hotter, drier summers. By 2080 sea levels may have risen by 36cm on the Essex coast altering the physical extent of unprotected coastlines. There are likely to be more frequent severe weather conditions (such as storms, flood events, strong winds, or extreme hot or cold temperatures). Drought periods may become more commonplace with implications for the availability of water supplies and impacts on water tables and river levels.

Key policy drivers

3.15 The key policy drivers to reduce greenhouse gas (GHGs) emissions and build adaptation and resilience to the effects of climate change are the Kyoto Protocol, the Climate Change Act 2008, the UK Low Carbon Transition Plan, the Civil Contingencies Act 2004, the Flood and Water Management Act 2010, and the National Planning Policy Framework.

How can minerals development adapt?

3.16 Proposals for minerals development should consider the need to reduce GHG emissions and build-in resilience and adaptability to climate change effects. Possible measures will vary depending on the particular circumstances of each mineral development proposal. Nevertheless, there are a number of key ways that minerals development can respond to climate change issues.

3.17 **Greenhouse Gas emissions** – Increased GHG emissions contribute to global climate change effects. Minerals development should be located and designed to help reduce GHG emissions, wherever possible, through good design and fuel efficient and well maintained processing plant and vehicles.

3.18 All 'Transport Assessments' and 'Site Transport Plans' submitted in support of planning applications should provide information on the consideration given to the sustainable transport of minerals, and to the measures proposed to achieve reduced GHG emissions.

3.19 **Energy supplies –** Developers should consider whether the use of renewable and low carbon energy generation on-site is feasible and viable for their mineral development. Proposals may provide the potential to generate electricity to meet some or all of their energy needs e.g., through solar panels.

3.20 **Water efficiency** – Where appropriate, mineral site operators should install plant and devices, make use of water recycling and storage facilities, and use best practice methods to improve water efficiency.

3.21 **Sustainable drainage systems (SuDS)** – The Flood & Water Management Act 2010 requires all new development to incorporate SuDS to be approved by the SuDS Approval Body. The appropriate use of SuDS encourages the provision of more sustainable water and drainage systems. This brings potential benefits including reducing water demand, through recycling and re-use, to flood alleviation and minimising flood impacts if they do occur.

3.22 Surface water drainage systems should always be designed in accordance with current policy (with regard to both national and local principles and standards) and good practice.

3.23 **Unexpected climatic events** – Proposals for mineral development should consider the adaptation measures required to deal with the possible impacts of excess heat and drought, storm events, and high winds. Site operators should consider these factors to ensure on site resilience.

3.24 **Coastal change** – Historically, mineral developments have been located close to the Essex coast, and there remain some active mineral sites located there. Future mineral development close to the coast must have regard to coastal change issues. These include sea level rise (for flooding, erosion, and physical changes), coastal storm events, and the risk of coastal flooding, erosion and subsidence. In coastal areas, developers should have regard to the UK Marine Policy Statement and marine plans, shoreline management plans, coastal change management plans, strategic flood risk assessments, and relevant local plan policy guidance.

3.25 **Restoration and after-use** – Restoration and after-use schemes for mineral workings provide new opportunities to adapt to climate change. Examples include through the provision of flood water storage and alleviation measures, biodiversity and habitat creation, and the provision of natural landscape features and tree planting. Trees can also act as living carbon sinks. Any feature which absorbs carbon from the atmosphere is known as a carbon sink, acting as a reservoir which can accumulate and store carbon compounds for an indefinite period. Living carbon sinks are natural examples of these, and as well as trees, include the absorption of carbon dioxide from the atmosphere by plants and reed beds.

Consideration of mineral proposals

3.26 Proposals for mineral development should demonstrate to the Mineral Planning Authority (MPA) whether they can contribute towards a reduction in GHG emissions and provide for resilience and adaptability in responding to the effects of climatic change. The information supplied and the measures to be incorporated/ implemented should be proportionate to the scale and nature of the proposals, such that large-scale mineral proposals will provide more information and be expected to show greater mitigation and adaptation measures, than small-scale mineral proposals. Where proposals are subject to the Environmental Impact Assessment (EIA) Regulations some information regarding climate change will be provided through this procedure, and this need not be duplicated.

3.27 Proposals for minerals development, including extraction and ancillary development, should demonstrate that they have been designed to ensure that any adverse impact on climate change is minimised. Opportunities for reducing non-renewable energy and water consumption and maximising energy efficiency should be considered as well as reducing the amount of mineral waste, other wastes and waste-water during site construction/ preparation and thereafter for the life of the development/ operations. Mitigating the impact of climate change by designing into schemes measures to offset greenhouse gas emissions and environmental damage such as, but not exclusively, tree and shrub planting, renewable energy sources, habitat creation/ ecological enhancement, biomass crop production and SuDS should also be considered.

3.28 The following strategic policy provides the framework for the MPA's consideration and determination of mineral development proposals in relation to climate change issues:

Policy S3- Climate change

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. 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) and meet national and local principles/standards for SuDS Design;

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.

Spatial Vision: Policy links to the delivery of themes C, D and E

Strategic Objectives: Policy links to the delivery of objective 5

Preferred Approach: Policy related to Preferred Approaches 3, 9 and 14

Reducing the use of mineral resources

3.29 The Plan aims to reduce the demand for, and use of, mineral resources through the minimising of the amount of mineral waste created from the extraction, processing and transportation of minerals as well as through the construction process. It also intends that as much demolition, construction, and excavation waste is re-used or recycled as possible at development/ redevelopment sites, in order to provide a supply of recycled mineral products into the future. The promotion of recycling over waste disposal has direct links to the waste hierarchy, a key feature of Essex County Council Waste Policy.

3.30 In this regard, the Plan is consistent with:-

- **National waste policy and legislation** – This aims to minimise waste; increase re-use; and for waste that cannot be re-used, prioritise recycling, then treatment and recovery of

value (including energy from waste) in order to divert more waste from landfill; and planning for net self-sufficiency in waste management.

- **Essex & Southend-on-Sea Waste Local Plan** – (Currently in preparation.) Its preferred approach is to actively promote waste reduction, re-use of waste, waste recycling, composting, energy recovery from waste, and waste disposal in that priority order. Also, to work in partnership with Essex district/ borough/ city councils, Environment Agency, industrial and commercial organisations, and the voluntary sector to minimise use of raw materials, reduce waste, and re-use and recycle materials.

3.31 These national and local aims are directly relevant to the Plan in terms of applying the 'mineral supply hierarchy' and in significantly reducing the volume of inert waste available for landfill during mineral restoration.

Conserving primary mineral resources

3.32 Minerals are a finite natural resource which should be conserved prudently for the benefit of future generations, and they should not be needlessly consumed by unsustainable practises. The key approach to reduce the demand for minerals in new developments by encouraging and supporting aggregate recycling complements the waste hierarchy used for waste management.

National schemes

3.33 There are already a number of national schemes in place to promote the policy approaches above; and this Plan does not need to duplicate them. They include the following:

- Trade association best practice,
- 'Code for Sustainable Homes' and the BREEAM building standards,
- 'Waste and Recycling Action Programme' (WRAP),
- Aggregate Levy,
- Landfill Tax,
- EU Mining Waste Directive (2006/21/EC,
- Environmental Management Standard ISO 14001.

3.34 These national policy initiatives collectively promote the minimisation of waste in mineral extraction, processing, and transportation; encourage the use of alternative building materials in development and construction; and provide for the increased use of recycled and secondary materials. The County Council supports these different national initiatives; and further details are provided on the County Council website with signposts to useful contacts and sources of information.

On-site re-use and recycling at redevelopment sites

3.35 Mobile crushing and screening plant are now commonly used on demolition and construction sites where redevelopment is taking place. The recycled aggregate material produced may be re-used in the new development or used on nearby sites, saving primary aggregates for other higher quality uses. The approach varies between redevelopment sites due to the nature of the previous development, on-site practicality and other environmental constraints.

3.36 On-site recycling and re-use is most common in existing urban areas and is considered a major source of recycled aggregates.

3.37 The use of mobile plant is strictly controlled and subject to suitable safeguards imposed by the Environment Agency and environmental health departments of local councils. Proposals should not cause unacceptable impacts or harm to neighbouring land-uses by virtue of noise, vibration, dust, light pollution or heavy road traffic.

3.38 Essex district/ borough/ city councils should promote this policy for on-site recycling in their Local Plans, and in development management decisions on planning applications, where appropriate.

Local action

3.39 All Essex planning authorities have an important role to play in promoting waste reduction, re-use and recycling, sustainable building design, and the use of sustainable materials in development.

3.40 To reduce the amount of construction, demolition and excavation (CDE) waste further, all types of development proposals should provide information on how CDE wastes will be reduced, re-used or recycled during construction and operation of the premises, at an appropriate level of detail as part of a planning application. This requirement for sustainable construction should be addressed and promoted through LDF/ Local Plan policies.

3.41 This policy applies to all development across Essex and should be applied by all local planning authorities to promote a reduction in mineral use when determining planning applications for housing, commercial and other development in their area. For example, conditions might be imposed on planning consents requiring,

- De-construction to take place on redevelopment sites to preserve building materials for future re-use;
- On-site recycling and re-use of construction, demolition and excavation wastes on redevelopment sites, where this is environmentally achievable.

3.42 Several Essex district/ borough/ city councils have LDF/ Local Plan policies and supporting Supplementary Planning Documents (SPD) promoting high standards of sustainable building design. Others have formally adopted the sustainable design and construction guidance which appears in the 'Essex Urban Place Supplement'. The County Council as the Minerals Planning Authority will continue to work jointly with district/ borough/city council colleagues to promote these local policy initiatives.

3.43 The County Council intends to reduce its own mineral use and has recently adopted an 'Environmental Policy Statement' (2011) containing a vision and objectives for managing its own environmental performance and working jointly with strategic partners.The strategic partners include the local authorities and the South East LEPs. The Council is a significant commissioner of new development and construction in capital terms whether for schools, highways, libraries or other public services. The Council also carries out significant maintenance work on the highways network and our existing infrastructure and intend to lead by example.

3.44 All developers have the potential to reduce over-ordering of construction materials and encourage more sustainable construction practices through their own procurement practices.

3.45 The policies of the Plan promote the reduction of mineral use by all parties involved in development in Essex, in particular by:

- **Mineral sites** – Reducing the volume of mineral waste produced at mineral sites during the extraction, processing, and transportation of mineral products through effective pre-application discussions and the imposition of planning conditions and legal agreements on planning consents,
- **Redevelopment sites** – Encouraging the re-use and recycling of construction, demolition, and excavation wastes on-site,
- **Recycling facilities** – Where on-site recycling is not environmentally acceptable, ensuring developers have access to alternative recycling facilities within reasonable proximity,

3.46 The following strategic policy is designed to increase the rate of aggregate re-use and recycling in Essex and provide the necessary mineral facilities to help achieve these aims. These are complementary to the approach set out above and they are relevant to all developments and district, borough and city local plans .

Policy S4- Reducing the use of mineral resources

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.

Spatial Vision: Policy links to the delivery of themes A and F.

Strategic Objectives: Policy links to the delivery of objective 8.

Preferred Approach: Policy related to Preferred Approach 3.

Creating a network of aggregate recycling facilities

The importance of aggregate recycling

3.47 The sustainable re-use and recycling of 'construction, demolition, and excavation' (CDE) waste makes an important contribution to the Essex economy, ensures a balanced supply of aggregates for the County and helps reduce the amount of re-usable 'materials' from being wasted and disposed to landfill. It avoids unnecessary primary mineral extraction and the disturbance that this entails.

3.48 The EU Waste Framework Directive [4] both require waste management authorities to plan on the basis that over time there should be a significant reduction in the amount of CDE waste that is sent for disposal to landfill. This is a key policy driver behind increasing the proportion of CDE waste that must be re-used and recycled.

3.49 However, it is accepted that re-used, recycled and secondary aggregates cannot always remove the need for new land-won and marine dredged aggregates, or new industrial mineral supplies.

3.50 The County Council as both the minerals and waste planning authority positively encourages the re-use and recycling of CDE wastes through its development plan and operational policies, including through this Plan and the separate Waste Local Plan. It is essential that this Plan enables and encourages the construction industry and minerals industry to provide enough investment in creating and maintaining an effective network of aggregate recycling facilities/ sites across the County to meet demand.

Recycled and secondary aggregates

3.51 Recycled aggregates are recovered from road, rail, construction, and demolition sites e.g., damaged bricks, broken concrete, brickwork, masonry, spent rail ballast, and tarmac etc. The materials are recycled to be used in new developments rather than being disposed of in landfill. Aggregate can be recycled to form new materials including concrete, brick, plasterboard and ceramic items.

3.52 Secondary aggregates are created as a by-product of a construction or industrial process. Examples include power station ash resulting from combustion (fly ash) which can be turned into bricks and cement, and slag from iron smelting which can be manufactured into mineral wool and subsequently be used as a heating pipe insulator.

3.53 The 'National and Sub-National Guidelines for Aggregate Provision in England 2005-2020' (DCLG, June 2009) propose that the East of England region should provide 117 million tonnes (mt.) of alternative aggregate materials from 2005-2020 (at 7.8 mt. per year). This is equivalent to 31% of the region's total aggregate supply, so the re-use of recycled and secondary aggregate is a major feature of mineral supply.

3.54 Re-used and recycled aggregate forms only part of the CDE waste stream which spans a greater range of materials as discussed below.

Construction, demolition and excavation (CDE) waste

3.55 Construction, demolition and excavation waste (CDE waste) is mainly inert material such as concrete, brick rubble and soils. Some of the harder materials can be recovered using mobile crushing plant and screeners, either on the development site itself or at a nearby permitted aggregate recycling site. Higher quality recycled aggregate can be produced on larger aggregate recycling sites which have the necessary processing and washing equipment, and where it is more economical to install such plant/ equipment.

4 EU Waste Framework Directive, 2008/98/EC, article 11, item2b

3.56 A small proportion of CDE waste comprises wood, plastics, metals etc. These can be dealt with at non-hazardous waste management facilities. Policies for these particular waste streams are not included in this Plan, but will appear in the separate Waste Local Plan which is currently being prepared.

Construction Demolition and Excavation (CDE) waste recycling capacity in Essex

3.57 The available capacity of existing CDE waste recycling facilities in Essex/ Southend is estimated at 1.738 million tonnes per annum (mtpa) of permitted capacity, of which about 1.370 mtpa was operational at October 2011 **(5)**. Of this total capacity about 60% is permanent capacity with the remaining 40% located in temporary facilities on existing mineral working sites.

3.58 Unless new permissions are granted for additional CDE recycling facilities, there will be a reduction in this total permitted capacity in CDE recycling facilities during the period up to 2029 as temporary permissions expire.

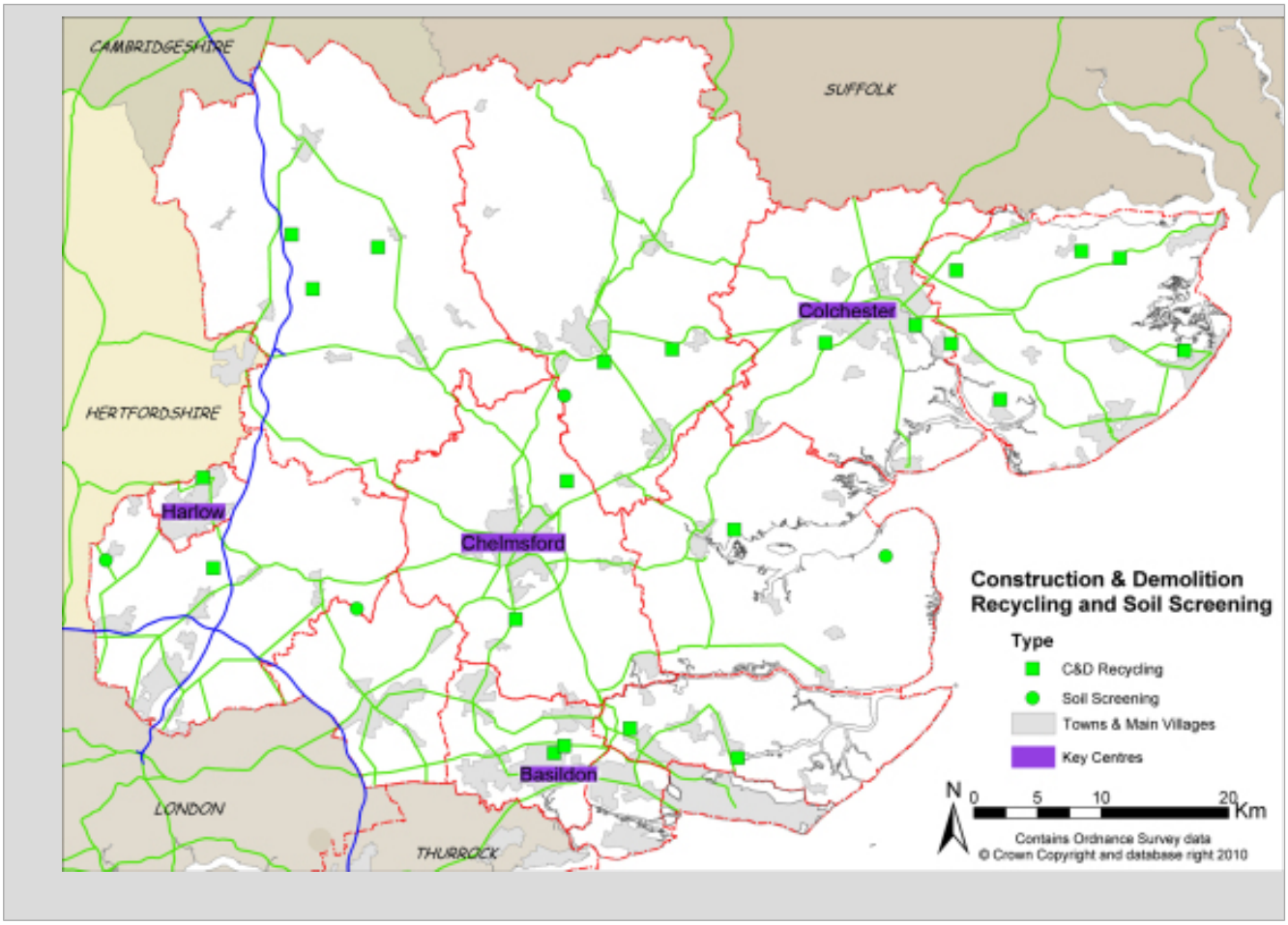
3.59 A 'capacity gap' is estimated to arise from 2020/ 2021 onwards between the permitted capacity of CDE recycling facilities and the volume of CDE waste which must be recycled as temporary permissions expire.[5] An approximate 0.484mtpa of additional CDE recycling capacity, including for aggregate recycling, will be needed in the plan area to achieve increased recycling and re-use of material from this waste stream up to 2029.

Creating and Safeguarding an effective County-wide aggregate recycling network

3.60 The distribution of existing aggregate recycling facilities in Essex is shown in Map 5 below. Some of these facilities are temporary, and many are smaller-scale enterprises only capable of producing a basic product. Most local councils in Essex, have some existing aggregate recycling capacity with planning approval.

Map 6: Aggregate Recycling Facilities in Essex:

5 Waste Development Document: Capacity Report Update - Revised (Oct.2011, ECC and Southend on Sea BC



3.61 New and improved facilities will be needed to achieve sufficient aggregates recycling capacity in the County up to 2029. There needs to be a major step change in the quality of aggregate recycling facilities available in Essex in order to:-

- See a significant reduction in the amount of CDE waste sent to landfill,
- Increase the general availability of recycled aggregate products,
- Ensure high quality aggregate products that meet industry standards and protocols are produced in sufficient quantity,
- Provide for more certainty for both producers and consumers,
- Provide a geographic distribution of facilities to support the future strategic pattern of development and growth in Essex up to 2029, having regard to the short distances travelled by CDE waste and the availability of other facilities over the County's borders.

3.62 The opportunity for the provision of larger, more sophisticated aggregate recycling facilities is considered feasible in areas where the volume of CDE waste arisings will be greatest. This is considered to be where major regeneration/ redevelopment is planned, and therefore proximity and appropriate road access to the 'Key Centres' - proposed to be the focus for the majority of the major development and growth in Essex up to 2029 - is important.

Future site requirements and approach to safeguarding

3.63 There are broadly three positive policy approaches to promoting a County network of aggregate recycling facilities :-

- on-site re-use and recycling at redevelopment sites
- the development of non-strategic recycling facilities
- the development of strategic aggregate recycling sites

On-site re-use and recycling at redevelopment sites

3.64 The use of mobile crushing and screening plant is discussed earlier in relation to Policy S4 (Reducing Mineral Use) above.

Non-strategic aggregate recycling facilities

3.65 Non-strategic aggregate recycling sites have a capacity of less than 100,000 tonnes per annum. Their recycling activities typically take place in the open air as smaller-scale operations which are static, dedicated, and with permanent or temporary planning consent. The majority of these temporary sites are located within existing mineral workings. They are less able to generate the additional capital necessary to provide washing plant or to locate plant inside buildings.

3.66 This Plan does not intend to safeguard existing non-strategic aggregate recycling facilities in the County. These are very disparate in terms of their location, operational plant and activities, and relationship with neighbouring land-uses and the main highway network. Therefore, a general safeguarding policy for all such facilities across the County in the Plan would be inappropriate.

3.67 Any proposals for their expansion, removal, or redevelopment for other land-uses is best dealt with in on a case by case basis having regard to Local Plan Reviews or the development management process, since detailed local circumstances can be taken into account with each proposal considered in relation to its individual merits.

Strategic Aggregate Recycling Sites (SARS)

3.68 Strategic Aggregate Recycling Sites (SARS) are static with a capacity to recycle at least 100,000 tonnes per annum as a minimum, and have the following characteristics:

- A permanent and dedicated facility, or a temporary dedicated facility with permission which extends to the end of the plan-period,
- Of sufficient size to accommodate a washing plant, in addition to a crushing and screening plant, with dedicated storage areas for feed waste, processing plant, and stockpiles of raw and processed material,
- Located in proximity to Key Centres for development and change in the County, which are expected to generate the majority of future CDE waste arisings during the plan-period, and be the focus of the Essex market for recycled aggregate products,
- Compatible with existing and permitted neighbouring land-uses so there are no issues of noise, vibration, pollution, disturbance, loss of amenity, or serious adverse environmental or amenity impact,
- With good road connections to the main highway network in the County, and/ or with access to rail or waterborne transport, for the receipt of CDE waste and subsequent distribution of recycled products.

3.69 There are three existing SARS operating in the County, located at:

- Purdey's Industrial Estate (in Rochford well placed to serve south-east Essex)
- Bulls Lodge Quarry (temporary permission in Boreham well placed to serve central Essex), and
- Stanway Quarry (temporary permission in Colchester well placed to serve north-east Essex). The continuation of a temporary permission would be subject to a planning application being considered within the context of the criteria set out in policy S5.

3.70 SARS should have a long term status or permanence during the plan-period, as either permanent permissions or long term temporary permission within mineral workings and occupy suitable sites/ buildings in both planning and transport terms. It is often difficult in planning terms to find suitable sites for these activities should they cease and have to be replaced with capacity elsewhere. They make a significant contribution to aggregate recycling capacity in the County and the availability of quality recycled products. Therefore, the Plan intends that they should be positively safeguarded to protect their current purpose, wherever possible. Redevelopment for non-mineral development on safeguarded sites should only be approved in exceptional circumstances.

3.71 Having regard to the implementation of CDE/ aggregate recycling targets and the emerging 'capacity gap' mentioned above, the background evidence points to a need for the provision of more SARS in the County during the plan-period to 2029. This Plan considers that SARS would be most appropriately located:-

- within permanent waste management sites
- in commercial areas used for general industrial or storage purposes (subject to compatibility with existing neighbouring land-uses)
- on previously developed land

- at mineral extraction sites (on a temporary basis but which extends to the end of the plan period)
- at landfill sites (on a temporary basis but which extends to the end of the plan period)
- within major planned development areas

Plan-led approach

3.72 The Waste Local Plan will be setting targets for CDE waste diversion and the evidence base is still being developed based on the limited data available. It would therefore be inappropriate for the Plan to set a numerical policy target for aggregate recycling capacity in the County during the plan-period, or to identify any site-specific proposals for new aggregate recycling facilities. The broad approach of the Plan is to:

- Safeguard the County's existing network of SARS from redevelopment for non-minerals development to maintain their aggregate recycling capacity into the future, and
- Set out positive policy criteria to enable developers to bring forward proposals for new SARS in appropriate locations in response to the market.

3.73 Proposals should not cause unacceptable impacts or harm to neighbouring land-uses by virtue of noise, vibration, dust, light pollution, or heavy road traffic. Given the volume of material being handled and the heavy vehicle traffic associated with this activity, proposals would need to be well located in relation to the main highway network and minimising road traffic impacts.

Policy S5 Creating a network of aggregate recycling facilities

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 7 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 and 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).

Spatial Vision: Policy links to the delivery of theme F.

Strategic Objectives: Policy links to the delivery of objective 8.

Preferred Approach: Policy related to Preferred Approach 4.

Provision of primary minerals

3.74 The MPA is required to plan for a steady and adequate supply of aggregates. This Plan provides the framework for identifying new mineral sites to meet these requirements and the Landbank provides the mechanisms for securing and maintaining mineral supplies at the County level. They work by reflecting the time taken to obtain planning permissions and bring sites into production. The extent of the landbank provides a useful indicator for deciding when new permissions for extraction are needed.

3.75 A 'landbank' is a stock of planning permissions for the winning and working of minerals into the future. The size of a landbank is measured in terms of number of 'years'. It is calculated by working out,

- the total capacity (in tonnes) of all permitted mineral reserves with planning permission, and then,
- dividing this total capacity by the annual rate of mineral supply provision (in tonnes) proposed in this Plan for the plan-period; and then
- expressing this calculated figure in terms of years' equivalent (e.g., the landbank is say 8.4 years).

3.76 Policies providing for the maintenance of sufficient landbanks are an important feature of this Plan. They enable the minerals industry to respond to changes in market demand, and also provide a secure long-term,steady and adequate supply of permitted mineral reserves to justify capital investment in plant, machinery and manufacturing capacity. They also enable the wider planning and environmental consequences of long term provision to be considered in an orderly, timely, and effective way through periodic reviews of this Plan.

National policy on landbanks

3.77 The NPPF provides guidance on the minimum length of mineral landbanks, as follows:-

Aggregate minerals:

- At least seven years for sand & gravel, whilst ensuring that the capacity of operations to supply a wide range of materials is not compromised. Longer periods may be appropriate to take account of the need to supply a range of aggregates, locations of permitted reserves relative to markets, and productive capacity of permitted sites.
- Ensure that large landbanks bound up in very few sites do not stifle market competition.

Industrial minerals:

- At least ten years for individual silica sand sites; or at least fifteen years for silica sand sites where significant new capital is required.
- At least 25 years for brick clay.
- Where relevant, take account of the need for the provision of brick clay from a number of different sources to enable appropriate blends to be made.

The Plan's approach to landbanks

3.78 This Plan includes policy to maintain and monitor the Essex landbanks for land-won sand & gravel, silica sand, and brick clay. This will ensure the respective landbanks do not fall below their required levels and will help avoid an over-supply of minerals contrary to the achievement of the minerals supply hierarchy. It is considered unnecessary and impractical to maintain separate landbanks for County sub-areas or to distinguish between building sand and concreting aggregates.

3.79 The Plan maintains a single County-wide landbank of at least 7 years for sand and gravel based on plan provision up to 2029; and also site-specific landbanks of at least 10 years for silica sand (at Martells Quarry, Park Farm, Ardleigh) and at least 25 years for brick clay (to serve both Bulmer Brickfield and Marks Tey, respectively).

3.80 At 31 December 2011, the combined Essex &Thurrock updated landbank for sand and gravel was 8.3 years. If planning permission is secured for the Preferred Sites identified in this Plan, then the permitted landbank will be increased further and rolled-forward.

3.81 The Plan will be monitored annually and regularly reviewed to ensure that the Essex sand and gravel landbank is maintained to at least 7 years throughout the plan period to 2029. This will be monitored through the Annual Monitoring Report and annual Local Aggregate Assessment, which includes a rolling 10 year average assessment of sales. In addition a five yearly plan review will be undertaken as part of a "plan, monitor, and manage" approach, or if the landbank shows signs of falling below the 7 years' requirement, whichever comes sooner (see policy IMR1). The proposed annual monitoring and commitment to a five yearly review provide sufficient flexibility in the plan, removing the need to plan for further additional resources at the end of the plan period, which may potentially amount to over-provision contrary to the mineral supply hierarchy.

Plan provision for sand and gravel

Links with neighbours

3.82 Essex's strategic location to the north-east of London means there will always be some market demand for the County's mineral resources from neighbouring areas. The Local Aggregate Assessment concluded that 22% of sand & gravel extracted within Essex is exported outside of the greater Essex area, 14% of which is exported outside the East of England with London likely being the largest consumer.

3.83 The Greater London conurbation is highly urbanised and relies on imported minerals for its development, growth, and regeneration. The adopted London Plan (2011) confirms the capital will continue to rely on imported aggregates delivered by sustainable transport modes (i.e., rail, water). Inter-regional movements into London have already been accounted for in the sand & gravel apportionment targets prepared by DCLG Aggregate Working Parties in England.

3.84 The National & Sub-National Guidelines (2005-2020) state that the majority of Greater London's future sand and gravel requirement will be provided by imported marine-dredged aggregate and alternative (recycled) materials, rather than being obtained from land-won sources from within its own administrative area or other areas located outside London. The latter will continue to provide for only a small proportion of London's overall aggregate requirement. The Local Aggregate Assessment and data received from the British Geological Survey will allow for the monitoring of sales of sand and gravel within Essex to ascertain whether sales begin to reduce in light of the above.

3.85 Whilst supplying London is not an explicit aim of this Plan, the Plan safeguards all aggregate transhipment facilities in Essex, some of which currently serve the Greater London area.

3.86 All the neighbouring Mineral Planning Authorities (MPAs) in the East of England – Thurrock Unitarty Authority, Cambridgeshire County Council (in partnership with Peterborough City Council), Suffolk, Hertfordshire and Norfolk County Councils and Bedfordshire authorities, and Kent County Council in the South East – are planning to meet their sub-national apportionment targets for sand and gravel. Since like Essex they are planning for their own national and local need, there is no need or requirement for the County to make any specific provision to serve these neighbouring areas. Nevertheless, all these MPAs recognise that there will be some cross-boundary movement of mineral supply, as this is the nature of the market.

Self-sufficiency of the County

3.87 The majority of sand & gravel extracted within the County will serve the local Essex market. The Local Aggregate Assessment estimates the proportion at about 78% and this is considered unlikely to significantly change over the long-term. The main economic drivers of future production will be the mineral demands created by major development and new infrastructure projects in Essex, and the ongoing need for building and infrastructure maintenance and repair.

3.88 The majority of future development will be focused spatially to supply a dispersed market having regard to the national growth areas of South Essex Thames Gateway and Haven Gateway (Essex), and the Key Centres of Basildon, Chelmsford, Colchester and Harlow. There are also Key Centres in the neighbouring areas of Southend-on-Sea and Thurrock which will experience significant growth and development. The Spatial Portrait identifies some of the major infrastructure projects which may also create a demand for minerals.

National guidelines on aggregate supply provision

3.89 The NPPF requires the MPA to plan for a steady and adequate supply of aggregates by:

- Preparing an annual 'Local Aggregate Assessment' based on a rolling average of 10 years sales data and other relevant local information, and an assessment of all supply options (including marine dredged, secondary and recycled sources),
- Taking part in the operation of the relevant Aggregate Working Party (East of England AWP) and taking the advice of the Working Party into account when preparing the Local Aggregate Assessment,
- Making provision for land-won and other elements of the Local Aggregate Assessment in the Mineral Local Plan, having taken into account of the advice of the Aggregate Working Party and the National Aggregate Coordinating Group,
- Taking account of the published National and Sub-National Guidelines on future provision, and using this guideline when planning for future aggregate demand and supply.

Sub-National Aggregate Apportionment

3.90 The 'National and Sub-National Guidelines for Aggregates Provision in England 2005-2020' (DCLG, June 2009) set out how much aggregate should be provided in each of the English regions. For the East of England the following million tonnes to 2020 are required.

Table 3

Guidelines for land-won production		Key assumptions:		
Land-won sand & gravel	**Land-won crushed rock**	**Marine sand & gravel**	**Alternative materials**	**Net imports to England**
236	8	14	117	7

Notes:

1. Marine dredged sand and gravel is to be supplied to the extent that environmentally acceptable sources can be identified and exploited, within the principles of sustainable development.
2. Alternative materials include recycled construction and demolition waste.

3.91 These sub-national supply guidelines for land-won sand & gravel were spatially distributed to the individual mineral planning authorities within the East of England (by a process of 'apportionment'). This process was completed by the former Regional Planning Body (the East of England Regional Assembly) on the advice of the East of England Aggregate Working Party (EEAWP). The latter comprises representatives from each of the mineral planning authorities (MPAs) in the East of England, including Essex.

3.92 There is no EEAWP apportionment available for either land-won crushed rock or alternative materials. The crushed rock resource in the East of England is very limited and is not of sufficient high quality for it to be economic to transport any significant distance. As such, it is not considered a truly regional resource; and Essex does not have any local resource of sufficient economic significance (see Part 3, Spatial Portrait). The EEAWP was unable to apportion 'alternative materials' within the region due in part to the limited data available, as explained earlier.

3.93 The Greater Essex land-won sand and gravel apportionment figure of **4.45 mtpa** has been divided as follows:

4.31 mtpa to Essex and
0.14 mtpa to Thurrock.

For information, Southend-on-Sea is unable to make a contribution to mineral supply because of its tightly defined and built-up administrative area and lack of mineral resource.

3.94 In summary, this sub-national apportionment process has been approved by the EEAWP, the former East of England Regional Assembly (March 2010), and all the mineral planning authorities and local authorities in the former region; and with the appropriate MPA shares having been subsequently agreed between Essex County Council and Thurrock Council.

Land Won Sand and Gravel Sales

3.95 Information on aggregate sales is collected on an annual basis for all MPAs in the East of England by the AWP, and this information is included in individual MPA Annual Monitoring Reports and Local Aggregates Assessments.

3.96 The Local Aggregate Assessment includes the latest ten year rolling average of aggregate sales for the period 2002-2011, recorded as 3.76 mtpa for Greater Essex (Essex, Southend-on-Sea and Thurrock. This is below the 3.9mtpa recorded across Greater Essex for the period 2001-2010, and below the Greater Essex apportionment figure of 4.45 mtpa.

3.97 Between 2001-2007 when the economy was more buoyant the sales figure regularly exceeded 4mtpa, but there were lower figures from 2008 onwards reflecting economic recession and a very large fall in construction activity, and so this reduced the ten-year rolling average figure. Paragraph 174 of the NPPF makes it clear the Plan should 'facilitate development throughout the economic cycle.'

Plan provision for future sand and gravel extraction

3.98 This Plan has been prepared to provide 4.31mtpa of sand and gravel during the plan-period, to be provided by existing sites with permission and Preferred Sites proposed by the Plan in site-specific terms. The 4.31mtpa provision figure for the County is consistent with the sub-national aggregate apportionment figure and with the policy approaches of the other MPAs in the East of England. Although recent sales figures in Essex/ Thurrock combined are below this sub-national apportionment figure, this reflects a recessionary period in the national economy and is untypical in the context of historic performance in recent decades. In addition, taking a longer term view to 2029, it is anticipated that the UK economy will recover with higher sales volumes being the outcome.

3.99 The numerical difference between the sub-regional apportionment figure and the sales figures provides for flexibility in the Plan. If future sales do not approach the sub-regional apportionment figure then plan-provision made now can be rolled-forward in a local plan review to cover the period extending beyond 2029. Conversely, if the sales figures 'bounce back' to higher volumes closer to recent pre-recessionary experience, then the Plan will be able to deal with this outcome effectively and provide certainty to local communities and the minerals industry about where mineral development will take place.

3.100 The Essex provision figure of 4.31 mtpa for sand and gravel equates to a total plan provision of 77.58 mtpa over the eighteen year plan-period of 2012-2029 inclusive (excluding existing permissions). After deductions for existing permitted reserves at the base date (37.014 million tonnes at 31 Dec. 2011) [6], and planning permissions for additional sites granted after the base date, the planning requirement for primary extraction from new site allocations on Preferred Sites in Essex is estimated at 40.67 million tonnes.

3.101 The Plan needs to identify an additional 40.67 million tonnes from Preferred Sites for Land Won Sand and Gravel

3.102 Part Four of this Plan identifies the Preferred Sites for sand and gravel extraction in the County on a site-specific basis which will achieve this overall scale of provision up to 2029.

MPA consideration of non-Preferred Sites

3.103 To ensure future sand and gravel extraction is clearly focused on the Spatial Strategy and the identified Preferred Sites in this Plan, other proposals for sand and gravel extraction at locations situated outside of the areas identified for future working will normally be resisted by the Mineral Planning Authority (MPA). There may, however, be circumstances where an 'over-riding justification' and/ or over-riding benefit for mineral development can be demonstrated. One example is where extraction would enable other necessary development to take place and prevent sterilisation.

3.104 Proposals for mineral extraction on these 'non-Preferred Sites' may occur in relation to:

- Agricultural irrigation reservoirs – where mineral is extracted and exported to create the reservoir landform
- Borrow pits – where extraction takes place over a limited period for the exclusive use of a specific construction project (e.g., road scheme)
- Prior extraction to prevent mineral sterilisation – this may be required on occasion where significant development takes place (on a site of over 5 hectares for sand and gravel) and where a workable mineral resource could otherwise be permanently lost through sterilisation.

3.105 Such proposals will be considered on their own individual merits and the MPA will pay particular regard to the justification/ need that is cited by applicants when determining planning applications. The MPA must be satisfied that there are exceptional reasons for permitting such applications, after having considered all the relevant circumstances so as not to prejudice the overall strategy of the document. All proposals will be considered against policies in the Development Plan.

6 37.434 represents the combined Essex, Thurrock and Southend-on-Sea permitted sand, silica sand and gravel reserves

3.106 Where proposals are put forward on the basis of fulfilling some form of 'mineral need' for minerals extraction, then the MPA will always require consideration of the whole of the County (i.e., the plan-area) for the purposes of estimating the adequacy of the landbank or the sufficiency of the Plan's provision. The MPA does not consider that information about mineral supply in specific County sub-areas or the individual commercial business need of a mineral operator to continue production at a particular mineral extraction site to be relevant or material to its decisions in respect of non-Preferred Sites.

3.107 No allowance for non-Preferred Sites coming forward has been made in determining the Plan's provision up to 2029. This is because the location and timing of these sites cannot be predicted, and they would therefore not contribute to meeting the spatial strategy which is central to this Plan.

3.108 A plan-led approach excluding such an allowance and identifying Preferred Sites, provides greater certainty for local communities and the minerals industry about what minerals development will take place over the long-term. In any event, the Plan will be reviewed at regular intervals, the emergence of any non-Preferred Sites can be taken account of as the Plan is updated and rolled-forward over a further time period.

Policy S6 - Provision for sand and gravel extraction

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 agreed by national policy based on 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) to enable:

- **This scale of provision to be achieved up to 2029, and**
- **The maintenance of at least a 7 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.**

Spatial Vision: Policy links to the delivery of theme B.

Strategic Objectives: Policy links to the delivery of objectives 10.

Preferred Approach: Related to Preferred Approaches 2, 8 and 11.

Plan provision for industrial minerals

Silica sand

3.109 Silica sand is extracted at one site in Essex at Martells Quarry from the raw material in Ardleigh. Permissions have been granted at the site providing for a proportionate split between silica sand (54%) and aggregate (46%). The annual throughput of this site for silica sand is assumed to be 45,000 tonnes per annum, a calculation based on the proportion of the silica sand resource and permitted plant capacity during the plan-period to 2029.

3.110 The NPPF requires the maintenance of at least a ten year landbank to safeguard investment and continued production at existing silica sand extraction sites. After making allowance for the already permitted reserves at Martells Quarry, more resources should be identified to maintain the landbank. This would be in the form of a site extension to provide for an additional 390,000 tonnes of total capacity for silica sand.

The Plan needs to identify an additional 0.39 million tonnes from Preferred Sites for Silica Sand

Brick clay

3.111 Brick clay is extracted at two sites in the County at Bulmer Brickfield and Marks Tey, respectively. It is important that an adequate and steady supply of brick making clay remains available to support development in the County and preserve its heritage assets.

3.112 The NPPF requires the maintenance of at least a 25 year landbank at both sites. The operators at Marks Tey have confirmed that there is already enough permitted capacity on their site to provide for the necessary landbank during the plan-period.

3.113 Both Marks Tey and Bulmer Brickworks have previously been granted permissions for sufficient provision to achieve the required landbank. As such, no further provision is required over the period covered by this Plan.

Brickearth

3.114 There is no extraction of brickearth within the County at the present time but there is no compelling reason why it could not be extracted economically at some point in the future. The Plan does not make any site-specific allocations for this mineral.

Chalk

3.115 Chalk is currently extracted at only one site in Essex, in the form of white chalk at Newport Quarry for agricultural and pharmaceutical purposes. There is only limited interest in chalk extraction in the County and there is no national policy requirement to maintain a landbank for this type of mineral. The Plan does not make any site-specific proposals for this mineral to be extracted.

3.116 Although this existing chalk extraction site in Essex is considered to be sufficient to meet current and future demand, new proposals for the small-scale extraction of chalk may still be promoted during the plan-period. Therefore a policy framework that allows planning applications to be considered on their individual merits is still necessary.

Conclusion

3.117 Proposals for the extraction of industrial minerals in the County – silica sand, brick clay, brickearth, and chalk – may come forward on other 'non-identified sites' during the plan period. Such proposals will be considered on their own individual merits, having regard to the economic need for the mineral concerned and the relevant policies in the Development Plan.

Policy S7 - Provision for industrial minerals

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.**

Spatial Vision: Policy links to the delivery of theme B.

Strategic Objectives: Policy links to the delivery of objectives 10.

Preferred Approach: Related to Preferred Approaches 2, 8 and 11.

Safeguarding mineral resources and mineral reserves and avoiding their sterilisation

Background

3.118 Minerals are a finite natural resource which must be used prudently and conserved so that there are adequate resources for future generations. Known locations of mineral resources of national and local importance need to be protected and safeguarded to ensure long-term security of minerals supply, and to ensure their presence is factored into decisions about future land-use when proposals for other development arise.

3.119 'Sterilisation' is the term used when development or land-use change take place that permanently prevent the extraction of minerals from the ground. By protecting mineral resources from unnecessary sterilisation the Minerals Planning Authority can ensure that,

- mineral resources remain available to meet the needs of future generations,
- Local flexibility is retained to identify new extraction sites in areas which have the least impact on people, communities and the environment,
- There is the opportunity to consider the merits of prior extraction of the minerals, where this is environmentally and socially acceptable and practical to do so.

3.120 'Safeguarding' is a process used in the planning system to ensure protection of mineral resources for these purposes.

Mineral Safeguarding Areas (MSAs)

3.121 The National Planning Policy Framework requires Minerals Planning Authorities to define Mineral Safeguarding Areas and adopt appropriate policies within their local plans. This is so that known locations of specific minerals are not needlessly sterilised by other forms of development, whilst acknowledging that this does not create a presumption that the resources defined will ever be worked. The MPA can also define Mineral Consultation Areas based on these Mineral Safeguarding Areas.

What minerals are of national and local importance in Essex?

3.122 The British Geological Survey (BGS) Mineral Resource Maps provide the best available geological and resource based information on the broad extent of minerals resources in Essex. Where BGS survey work is not available, the mineral resource has been inferred from other evidence held by the County Council.

3.123 Following consultation with the mineral industry, other stakeholders, the Coal Authority, English Heritage, British Geological Survey, and neighbouring MPAs the following Mineral Safeguarding Areas have been established – namely for sand and gravel, silica sand, chalk, brick earth and brick clay.

Consultation between district, borough, and city planning authorities and the Minerals Planning Authority

Consultation within Mineral Safeguarding Areas

3.124 Local government in Essex operates within a two-tier structure and it is important that there is policy dialogue between the tiers. Mineral Safeguarding Areas (MSAs) and Mineral Consultation Areas (MCAs) provide a means to ensure that appropriate policy consultation takes place between Essex district/ borough/ city councils and the Minerals Planning Authority when local planning decisions are made.

3.125 Where a proposal is made for development within a MSA or MCA identified in this Plan, then the district/ borough/ city council as the local planning authority must formally consult the County Council for its views before making a planning decision about the proposal, and must subsequently take these views into account.

3.126 The definition of MSAs for each of these individual mineral types, and the threshold upon which consultation is expected to occur, is as follows:

Table 3 Definitions of Mineral Safeguarding Areas:

Table 4

Mineral Type	Geographic Definition of MSA Extent	Consultation Threshold

Sand & Gravel (including silica sand)	All glacial sand and gravel resources, glaciofluvial sand and gravel resources and river terrace deposits as identified from BGS mapping and other supplementary sources of evidence.	All potential developments greater than five hectares
Brickearth	The same boundary for the Minerals Consultation Area as identified in the Essex Minerals Local Plan (adopted January 1997) has been used, with any areas already known to have been worked out omitted.	All potential developments greater than one dwelling
Brick Clay	These deposits are very localised and have been identified from BGS mapping.	All potential developments greater than one dwelling.
Chalk	Only higher purity (upper chalk) is currently worked, and only this mineral resource area has been identified (predominantly in Uttlesford district).	All potential developments greater than three hectares.

3.127 In this Plan, the spatial location and broad extent of MSAs in Essex is shown on the MSAs Policies Map included in Appendix 10. District, borough, and city planning authorities will in turn include these MSAs on their own Policies Maps.

3.128 If it proves necessary for development to take place within an MSA, then the presence of mineral resources or the potential for prior extraction of minerals should be considered. Where considered appropriate, prior extraction should be undertaken before development takes place.

3.129 Further to the thresholds expressed above, additional limits are placed on the consultation process as some types of development are of little significance to minerals planning. Appendix 9 sets out the types of planning application or proposal within MSAs for which it is not appropriate to consult the County Council. It follows that consultation should take place in respect of all development proposals in MSAs which are not defined as being excluded by the Appendix.

Mineral Consultation Areas

3.130 In addition, Mineral Consultation Areas (MCAs) have been defined around all the Mineral Safeguarding Areas as defined on the MSAs Policies Map and tin Appendix 10. They exclude the land contained within the MSA itself, but include all adjoining land extending for a further distance of 250 metres outwards from the outer boundary of the MSA.

3.131 MCAs ensure that, should mineral extraction have to take place within and up to the MSA boundary, that development proposed on adjacent land beyond the MSA boundary would not prevent or compromise the possibility of mineral resources being extracted in future from land within the MSA itself. In this regard, the Mineral Planning Authority should be consulted by Essex district/ borough/ city councils about all development proposals within these MCAs, as even minor development occurring within such MCAs may have the potential to significantly impact upon the future working of mineral resources situated within MSAs.

Safeguarding mineral workings and mineral reserves

3.132 Mineral workings may create local impacts on their immediate surroundings and local communities through, for example, dust or noise emissions or vehicle movements. Development that is sensitive to such impacts and therefore potentially incompatible in close proximity to mineral development can include facilities such as hospitals and clinics, retirement homes, residential areas, schools, offices, horticultural production, food retailing, and certain types of industry such as high-tech, painting and furnishing, and food processing. The Technical Guidance accompanying the National Planning Policy Framework provides examples of high, medium, and low sensitivity land-uses.

3.133 It is necessary to safeguard existing mineral workings and Preferred Sites to prevent the possibility of new incompatible neighbours being established and ultimately restricting their activities. Incompatible/ sensitive development should not be located in such close proximity that it puts constraints or limits upon current or future use for mineral production. Proposed development (even a single dwelling) on the edge of, or in proximity to a mineral site or haul road, can prevent part of that site from being worked. Compromising the planned working of a mineral can sterilise the resource and prejudice its steady supply.

3.134 The following are also defined as 'safeguarded sites' for the purposes of protecting mineral workings and existing mineral reserves:

- mineral extraction sites and their associated facilities with planning permission that are currently in active mineral use
- mineral extraction sites with unimplemented planning permission for minerals extraction (including 'dormant' sites with extant planning permission for mineral extraction that have remained unimplemented for some years)
- Preferred Sites proposed in this Plan for future mineral extraction

3.135 Mineral Consultation Areas (MCAs) apply for a distance of 250 metres outwards from each of these 'safeguarded sites' in the County with the extent being defined by the site boundary within their planning permission. The location of the MCAs for these safeguarded sites is shown

on the Policies Map. The Essex district/ borough/ city councils shall consult the Mineral Planning Authority (the County Council) for its views and take them into account, before determining any proposal for development located within such a MCA.

3.136 As previously stated, for clarity and consistency, Essex district/ borough/ city councils should identify any safeguarded sites on their own Policies Map for their relevant administrative area.

Decision making

3.137 Planning law requires that applications for planning permission must be determined in accordance with the development plan unless material considerations indicate otherwise.

3.138 In addition, Essex borough/ district/ city councils are responsible for the spatial planning of most land-uses within their areas. In doing so, they should not include policies and proposals in their own Local Plans which would require development in MSAs, unless there has been effective prior consultation with the Mineral Planning Authority.

3.139 When consulted on development proposals within MSAs or MCAs, the Mineral Planning Authority will be able to provide the local planning authority with its views regarding whether it is considered that a proposed development would cause unacceptable sterilisation of a proven mineral resource within a MSA, or would prevent or prejudice the operation of a safeguarded mineral site. In some circumstances, a strategic objection may be raised to the proposed development. This process would be done on a case by case basis with all proposals being considered on their own individual merits.

3.140 It would be necessary for the development proposal to include a mineral resource assessment to enable the economic importance of the resource to be evaluated.

3.141 Each decision would take into account factors such as the mineral importance of the MSA resource, the particular use of a safeguarded mineral site, the nature of the proposed development, and the compatibility or degree of conflict. Any mitigation which could address any adverse impacts might also be relevant.

Policy S8 - Safeguarding mineral resources and mineral reserves

Policy S8 Safeguarding Mineral Resources and Reserves

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, by applying Mineral Safeguarding Areas (MSAs) and Mineral Consultation Areas (MCAs).

Mineral Safeguarding Areas

Mineral Safeguarding Areas are designated for the 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.

Except for the excluded development identified in Appendix 7 of the Plan, the Mineral Planning Authority shall be consulted and its views taken account of before planning decisions are made with regard to the need for prior extraction in respect of:

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

Non Mineral proposals that meet 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 Mineral Planning Authority, surface development should be permitted, consideration will be given to the prior extraction of the minerals to the extent that such extraction would not be likely to render the site unsuitable for the development proposed, and that the deposit is, or may, become economically significant.

Mineral Consultation Areas

The MPA shall be consulted on proposed developments within the Mineral Consultation Areas (MCAs). In addition, MCAs have been designated for an area extending for 250 metres from each safeguarded permitted mineral working and Preferred Site Allocation in the Minerals Local Plan as shown on the Policies Map and defined on the maps in Appendix 10. The Mineral Planning Authority shall be consulted and its views taken into account before planning decisions are made to ensure that such mineral sites are protected, for:

1. Any planning application for development on a site located within an MCA, and

2. Any land-use policy or proposal relating to land within an MCA that is being considered through local plan preparation and,

3. Existing permitted sites.

Proposals which potentially sterilise or conflict with the effective workings of permitted mineral working or Preferred Mineral Site allocation shall be opposed.

Spatial Vision: Policy links to the delivery of theme G.

Strategic Objectives: Policy links to the delivery of objective 9.

Preferred Approach: Policy related to Preferred Approach 5.

Mineral transhipment sites and secondary processing facilities

3.142 The National Planning Policy Framework (March 2012) states that MPAs when preparing their local plans should include policies to safeguard:

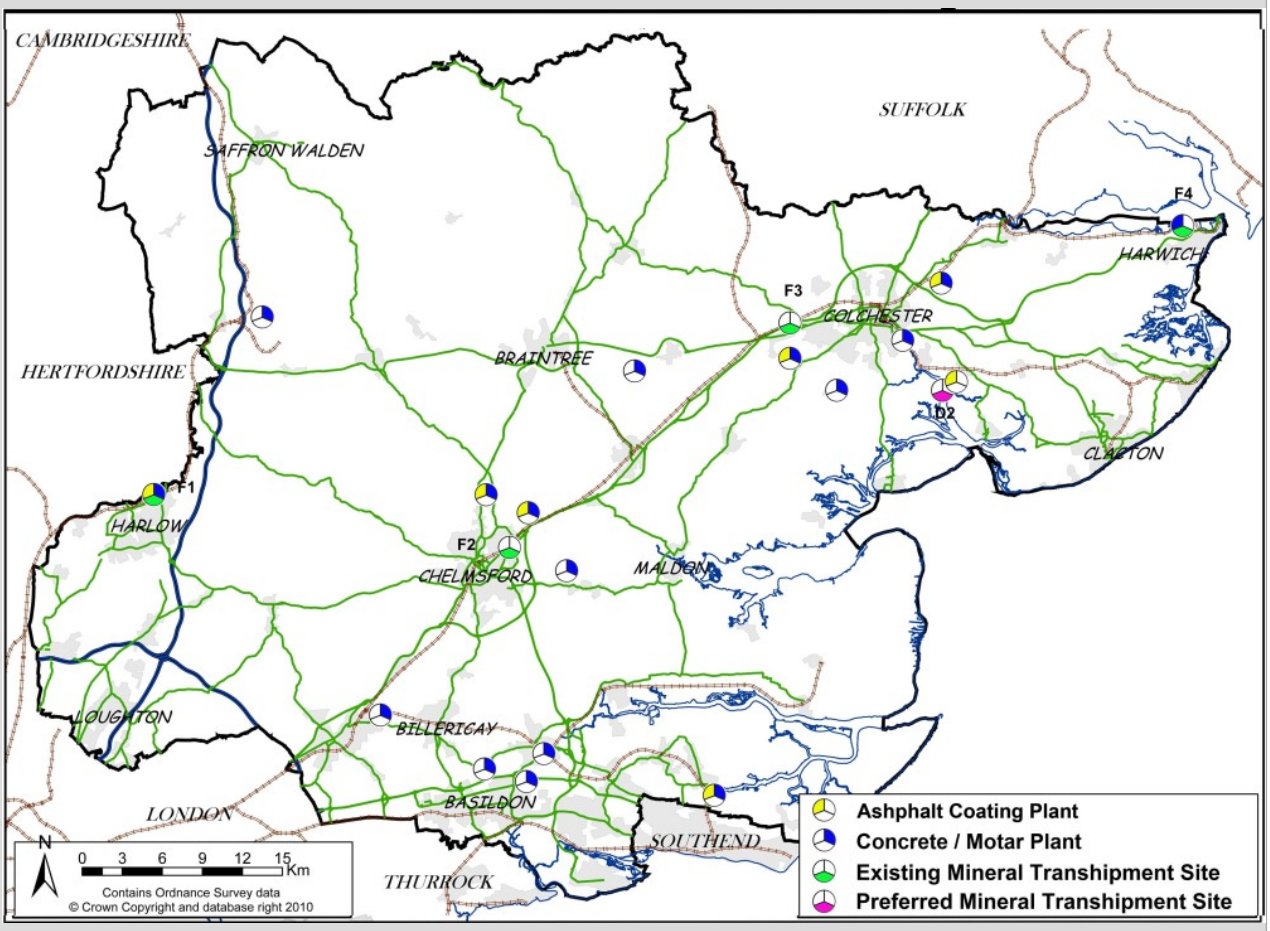
- Existing, planned and potential rail heads, rail links to quarries, wharfage and associated storage, handling and processing facilities for the bulk transport by rail, sea or inland waterways of minerals, including recycled, secondary and marine-dredged materials, and
- Existing, planned and potential sites for concrete batching, the manufacture of coated materials, and other concrete products and the handling, processing and distribution of recycled and secondary aggregate material.

Mineral transhipment sites

3.143 Essex has no deposits of hard rock, so it relies on imported supplies to serve the County's needs. Most imported mineral comes from the East Midlands and South West regions, and the existing mineral infrastructure which makes this importation possible is a vital feature of the County's mineral supply network. The MPA has established, as far as it is able, that these imported supplies will continue to arrive through the plan period.

3.144 A proportion of the sand and gravel produced in Essex will continue to be exported for use elsewhere, particularly in London, East of England and South East. Given the proximity of London – a large consumer with limited indigenous supplies of its own – aggregates produced in Essex will serve this market and beyond for the foreseeable future. This factor is accounted for in the National and Sub-National Guidelines for Aggregate Provision in England 2005-2020.

Map 6: Mineral transhipment sites and coated stone plants in Essex



3.145 Mineral transhipment sites provide for the movement of minerals over longer distances by sustainable transport modes, and rail depots and marine wharves are vital strategic mineral facilities. There are mineral transhipment sites at the following locations:-

- Chelmsford Rail Depot – used for both the import of limestone and the export of sand and gravel
- Harlow Mill Rail Station – used for both the import of limestone and the export of sand and gravel
- Marks Tey Rail Depot – used for the export of sand and gravel
- Ballast Quay, Fingringhoe – a marine wharf used for the export of sand and gravel originating from Fingringhoe quarry only to the London market and beyond.

3.146 It would be inappropriate to continue safeguarding Ballast Quay, Fingringhoe once extraction at Fingringhoe Quarry is finished. This marine wharf is poorly connected to the strategic highway network and so is not suitable for export of minerals from other extraction sites or for the import of minerals into Essex.

3.147 The Adopted Essex Minerals Local Plan (1996) identified the possibility of providing for a large new aggregate import facility at Parkeston Quay East, Harwich Port Authority, in the form of a marine wharf. To date, this proposal has not materialised. However, in this Plan it is proposed to continue to safeguard this area for this purpose during the plan-period to ensure that this potential remains available. The small naval yard area is to be excluded from the safeguarded area as this is now under new ownership and offers no likelihood of mineral transhipment.

3.148 There are other small wharves which tranship a range of products including minerals which will need to be considered and safeguarded by the respective LPAs

3.149 No new transhipment sites which would be suitable in the future for establishing rail depots or marine wharves have come forward in the evidence base analysis or following public consultation. This may be an indication of the difficulty of finding such sites given the demanding criteria that would need to be fulfilled. Currently there is evidence of marine wharves in neighbouring areas providing for some of Essex's aggregate needs, with wharves located in Thurrock, north Kent, east London and Suffolk having the potential to supply Essex.

3.150 Existing rail depots and marine wharves contain mineral infrastructure that is of vital strategic importance for the future supply of aggregates needed in Essex. As such, their safeguarding needs to be continued to prevent their redevelopment for other land-uses. This possibility will occur given development pressures experienced in recent years, the scarcity of sites for commercial uses, and the policy emphasis on focussing the majority of new development on the main urban areas.

3.151 In accordance with national policy, and given local circumstances in Essex, it is entirely reasonable to continue to safeguard mineral transhipment infrastructure as the consequences of their loss would be significant and irreversible. Safeguarding applies to the rail depots and marine wharves themselves, and also to the storage, handling and processing facilities associated with them.

Secondary processing facilities

3.152 The future growth and development of Essex will require considerable quantities of concrete and asphalt. These products are produced and manufactured at secondary processing facilities across Essex. These kind of facilities include coated stone plant (asphalt), concrete batching plant, mortar plant, and bagging plant.

3.153 In Essex a 'strategic' plant for coated stone is considered to be a facility essential to the delivery of a critically important service and/ or one which enables delivery of an essential infrastructure project over the longer term. Smaller plant are considered non-strategic in importance. Of the following types of secondary processing facilities, only coated stone plants as described above are considered to be 'strategic'.

(a) Coated Stone Plant (Asphalt)

3.154 Asphalt is a vital product as it is used in many different applications. These include road construction and maintenance, pavements, airport runways, school playgrounds, car parks, most footpaths and cycleways, and the roofing of buildings.

3.155 There are seven coated stone plants in current operation and these provide strong spatial coverage across Essex. They are located at Suttons Wharf (Rochford District), Stanway (Colchester Borough), Wivenhoe (Tendring Borough), Bulls Lodge (Chelmsford City), Essex Regiment Way (Chelmsford City), and two sites within the transhipment site at Harlow Mill Rail Station. The sites at Harlow Mill Rail Station, Essex Regiment Way and SuttonsWharf are located outside existing mineral workings and have permanent planning permissions. The Plants within existing quarries have temporary permissions which will cease upon completion of the mineral working.

3.156 These seven coated stone plants are considered to be of 'strategic importance' in policy terms due to:

- The limited number in serving Essex,
- Their locational significance for promoting sustainable transport and distribution patterns (i.e., relative to the strategic road network and reducing transport distances),
- The relative difficulty of providing for new alternative facilities because of environmental issues.

3.157 The Mineral Planning Authority (MPA) will safeguard these seven plants because of their strategic importance. However, safeguarded plant within a mineral development would not be allowed to remain beyond the life of the existing planning permission for extraction. Safeguarding is not a means of retaining an 'industrial' use permanently in the countryside.

3.158 On the basis of evidence base material and the results of public consultations it is considered that there are no additional new sites for coated stone plant which would warrant site-specific allocation in the Plan. However, if proposals do come forward in the form of planning applications they will be determined on their merits and in relation to criteria-based policy (Policy

DM4). The safeguarding of any new strategic plant would occur for the lifetime of the planning permission for the plant. Safeguarding would ensure effective operation of the plant is not compromised by other incompatible development proposed in its vicinity.

(b) Concrete and Mortar Products

3.159 Concrete is a similarly vital economic product used in a widespread manner across the construction sector; and is one of the world's most consumed products, being used for road construction, bridges, buildings, and many other physical structures.

3.160 There are twenty-four concrete batching or mortar plants in Essex. Some are located on existing mineral workings whilst others are standalone facilities on industrial estates in urban areas. The numbers involved do not suggest that any individual plant is critical in its own right. In addition, most have permanent planning permission and are physically re-locatable. Consequently, these existing sites are considered non-strategic and will not be safeguarded by the Mineral Planning Authority. The site and plants on industrial estates have been separately determined as non county matters by the respective district/ borough/ city local planning authority and would need to be considered for safeguarding in their own local plans as required by the NPPF.

3.161 The provision of any new non-strategic sites in the future will be addressed through criteria-based policies in this Plan and in the respective Local Plans/ LDFs prepared by Essex district/ borough/ city councils. In respect of permissions granted by the County Council these facilities will not be specifically safeguarded.

(c) Bagging Plants

3.162 It is sometimes necessary to package aggregates at facilities. This serves to protect the product and allows easier transportation. Bagging plants include machinery that range from simple units which are manually operated, to automated systems that fill and seal bags and then stack them onto pallets. There are seven bagging plants in Essex, of which four are located within Chelmsford Borough and Colchester District. In terms of type of location, four are sited at extraction sites (and are of a temporary nature), two are on industrial estates and one is at a transhipment site.

3.163 These existing facilities are small-scale, widely distributed to serve Essex, and co-located with other facilities. As such they are considered non-strategic and will not be safeguarded.

3.164 The provision of any new sites in the future will be addressed through criteria-based policies and will not be specifically safeguarded.

Mineral Consultation Area

3.165 It is important that the continued operation and economic viability of mineral transhipment sites and 'strategic' coated stone plant are not compromised by incompatible development taking place in their vicinity. The explanatory text for Policy SS6 (Safeguarding Mineral Resources and Mineral Reserves) above defines what is meant by incompatible development.

3.166 Therefore, a mineral consultation area will apply for a distance of 250 metres from any existing or approved (with planning permission) mineral transhipment site or 'strategic' coated stone plant. An existing minerals site is only safeguarded for a temporary period for the life of the temporary minerals planning permission and where it is not a permanent facility. The local planning authority should consult the MPA for its views on planning applications or land-use proposals within such a mineral consultation area, before making a planning decision.

Policy S9 - Safeguarding mineral transhipment sites and secondary processing facilities

Policy S9 Safeguarding Mineral Transhipment Sites and Coated Stone Plant

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 the site.

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.

Spatial Vision: Policy links to the delivery of theme G.

Strategic Objectives: Policy links to the delivery of objectives 10.

Preferred Approach: Policy related to Preferred Approaches 6, 7 and 11.

Protecting and enhancing our amenity and the environment

Background

3.167 Mineral development can be an environmentally intrusive activity which can have a significant effect on the environment and the people who live and work in Essex. Mineral working can potentially cause the alteration of topography, landscape and localised hydrology (e.g. the creation or alteration of waterways), noise, dust and traffic impacts, and the loss of both tranquillity and visual amenity. This can result in severance and disruption of landscape, habitat loss, adverse impacts on local host communities including health and amenity impacts as well as impacts on sites of nature conservation, archaeological and cultural heritage value. Also, due to the concentration of mineral resources in certain parts of the county, further working can cause cumulative impacts.

3.168 The capacity of a local area to accommodate mineral working is heavily dependent on the proximity of the development, the type of operations proposed, how they are planned for and mitigated, and the programme of implementation and monitoring. For example the issue of flood risk is covered by the Development Management chapter, in particular policy DM1, which includes a consideration of the potential for minerals development to provide additional flood storage capacity to provide protection for areas downstream that are vulnerable to flooding and buffer any likely impact of climate change on flood risk. Restoration schemes that incorporate flood storage capacity will be appropriate where a need or opportunity is identified through the Strategic Flood Risk Assessment/ Flood Risk Assessment process.

3.169 Similarly any proposals for mineral development will be expected to show compliance with the Habitat Regulations Assessment. Where a proposal would result in an increase of 200 daily HGV movements within 200m of a Natura 2000 site it will be required to undertake and submit an air quality analysis compliant with Environment Agency guidelines as part of the proposal.

3.170 Proposals should consider the wider context of possible adverse impacts and the possible cumulative effect with other development within the vicinity of the site. The proposed scheme of mineral development, including processing, transportation and the impact of ancillary structures associated with minerals development, all need to be fully considered and addressed at the earliest stage of the planning process in order to ensure that any adverse impacts are reduced to an acceptable minimum.

3.171 Although mineral workings are traditionally associated with a range of negative environmental impacts, sensitive working and restoration schemes can make an important contribution to improving the quality of the environment. In accordance with the NPPF, emphasis is placed on the importance of community involvement in the planning process. Mineral operators are encouraged to have effective consultation and liaison with the local community and stakeholders. This is expected both before planning applications are submitted and during the operation, restoration and aftercare of sites. The MPA's strategic approach is set out in Policy S10. More detailed aspects on protecting amenity and the environment such as specific designations and topics e.g. pollution and the water environment are included in policies in the Development Management chapter.

Policy S10- Protecting and enhancing the environment and local amenity

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; and appropriate mitigation measures shall be included in the proposed scheme of development, and

b. No unacceptable adverse impacts would arise and;

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

Spatial Vision: Policy links to the delivery of themes D, H and J.

Strategic Objectives: Policy links to the delivery of objectives 3, 4, 5, 6 and 7.

Preferred Approach: Related to Preferred Approaches 12 and 13.

Access and Transportation

3.172 The transportation of minerals and associated traffic is one of the most significant impacts relating to mineral workings and is what usually causes most concern to communities.

3.173 The MPA promotes and supports sustainable transportation methods within and across Essex. Over short distances, the use of conveyors or pipelines can be effective alternatives to lorries. They are most commonly used to transport minerals within sites or from one site to another for processing. The use of private haul routes within sites may be an alternative to use of public roads if circumstances allow for their use.

3.174 The transportation of minerals over long distances would be more sustainable by rail and water, however the scope for this within Essex remains limited. That said, the safeguarding of wharves and rail head facilities will enable the long distance haulage of aggregate imported to and exported from Essex to continue.

3.175 The nature of the market in Essex, with over 78% of the minerals used in Essex, means that the majority of minerals are and will continue to be distributed across Essex by lorries as the most effective and economic means of transport. The use of lorries is generally disliked, because they are noisier and more intimidating than other ordinary traffic and may add to congestion.

3.176 The MPA considers that the promotion of sustainable mineral transport can best be served by seeking to reduce the road mileage associated with mineral movements. It is recognised that there are distances beyond which it is not economic to transport minerals by road; the typical maximum distance for aggregates is 60 km (37 miles), and the average road delivery distances for ready-mix concrete and asphalt is 42 km (26 miles). The spatial strategy adopted by this Plan aims to ensure that minerals can be dispersed primarily by the main highway network and, whilst it is not for the Minerals Planning Authority to restrict the market that minerals may be sold to, the spatial strategy ensures that the mineral sites as a whole are well placed to serve all of Essex. The aim of the spatial strategy is to support the key growth areas and reduce minerals miles, whilst respecting that minerals can only be extracted where they occur and that there are specific localised constraints which will inhibit mineral developments in certain localities.

3.177 The strategy will be achieved by directing lorries onto suitable routes, optimising the efficient use of the main road network and applying the route hierarchy. The route hierarchy catalogues roads by capacity, and mineral traffic will be expected to use those roads in the upper tiers, defined as trunk roads (including motorways), strategic routes and main distributors, and in some circumstances appropriate suitable secondary distributors. This is in line with the Transport policies contained within the Essex Transport Strategy, Policy 6 Freight movement and the Essex Highway Authority's Functional Route Hierarchy as set out in the Highways Development Management Policies, (February 2011).

3.178 The policies and strategy of the highway authority effectively guide all developments involving heavy goods vehicles and freight movement towards locations with access to the main road network (as defined above), to ensure that mineral related traffic utilise appropriate routes. The use of Trunk Roads (including motorways), Strategic Routes or Main Distributors are the appropriate roads for the movement of freight and should be used for the majority of mineral transportation with other suitable roads only being used for short distances to enable connection to main roads.

3.179 It is of utmost importance when permitting new mineral related developments (including new extraction sites, extensions to existing sites and transhipment sites) that lorries use these routes. To locate sites far away from the main highway network such that other routes would need to be used cannot be justified.

3.180 The transportation policy is a hierarchical policy for sustainable transportation and applies three tiers for transportation by road, which will be used overwhelmingly in the majority of cases.

3.181 The Highway Authority has reviewed the Preferred Sites with their preference being for sites which utilise and make the most effective use of the upper tiers of the route hierarchy, in order to keep traffic away from unsuitable minor roads. Ideally sites should be chosen which support the spatial strategy and where access would utilise the upper tier of the route hierarchy, subject to performance under all other criteria relevant to site assessment. Should insufficient acceptable sites be found, sites which would access the second and third tiers of the route hierarchy would then be considered. In addition, regard has been had to the need to reduce carbon emissions from mineral transportation.

3.182 The three tiers of the hierarchical approach are equally applicable to any minerals related planning application, including new proposals for transhipment sites requiring connection to the road network.

3.183 The first tier seeks to ensure access to the main road network via a suitable existing access or junctions with short connections to the highway from the site, and these should be as short as possible and improved if required to the satisfaction of the Highway Authority. The second tier involves the creation of new access/ junctions direct on to the main road network, although instances should be minimised so as not to disturb the flow of traffic on the main roads. The third tier is then considered, which involves the use of a longer section of road to connect the mineral development to the main road network. This would only be acceptable if the section of road was of a suitable standard with available capacity as defined by the Highway Authority. This third tier involving the use of roads outside the main road network will also only be acceptable if there is no adverse impact on road safety and the environment, including local amenity.

3.184 It will continue to be unacceptable for new junctions to be created straight onto a trunk road, or for mineral traffic to use small and unsuitable roads for excessive distances. This approach should minimise Heavy Goods Vehicles (HVG) and Extra Long Vehicles (ELV) traffic on unsuitable roads to limit adverse impacts on communities and the environment. Achieving the access connection to the main road network may include significant road improvements, including junction improvements, road widening on short stretches of road, improvements to visibility around the access to a site or construction of a new access/ junction. It is important that mineral developments do not compromise highway safety and that where costs for improvements are incurred, these are met by the developer and not the community. Equally the needs of other road users including pedestrians, cyclists and horse riders should be considered, especially where the highway forms a link in the rights of way network.

3.185 The co-location of mineral related development, where this would reduce mineral journeys and bring environmental and community benefit and enable economies of scale, should be considered wherever practicable. An assessment of the cumulative impacts of mineral development would be necessary to support such an approach.

3.186 Planning applications for minerals related developments will be expected to show that alternatives to road based movements have been considered as part of a Transport Assessment, particularly the use of existing transhipment facilities . However, it is accepted that the majority of mineral extracted in Essex serves the local Essex market and is transported over shorter distances, therefore lorries are often the only practicable, cost effective option. The majority of the county is subject to growth and whilst a spread of sites has been sought to provide the opportunity to reduce the minerals miles travelled to market, it is recognised that planning should not seek to control the final market destination of the minerals and it is not practical, realistic or necessary to identify sub-markets below the local "countywide" level.

3.187 It is important to ensure that the effects of traffic on any local community, the environment and the local road network are carefully considered, including the cumulative impacts of these. Where Preferred Sites are extensions to existing quarries, these areas should be worked consecutively in order that mineral extraction in the existing quarry be completed prior to mineral extraction commencing in the new "extension area". This is to ensure that there is no cumulative increase in associated vehicle movements (such as by having two areas operational), and that workings are progressive. Furthermore the new extension areas should not involve an increase in vehicle movements at that site, when compared to the existing permissions.

3.188 Movement of minerals by road should be confined to the main road network and the potential impacts on these roads assessed as part of any transport assessment of the proposals. Where appropriate, consideration should be given to the need to manage the movement of traffic to the most appropriate routes and the mechanism available to achieve this, including voluntary sustainable Site Transport Plans and legal agreements in consultation with communities.

Policy S11 Access and Transportation

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 for transportation by road. The following hierarchy of preference for transportation by road shall be applied:

(i) Access to a suitable existing junction with the main road network (motorway, trunk road, strategic route or main distributor) as defined in the Essex County Council Development Management Policies 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 where 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 before gaining access onto the main road network will exceptionally be permitted following regard to the scale of the development, the capacity of the road and that there would be no undue impact on road safety.

Spatial Vision: Policy links to the delivery of theme D.

Strategic Objectives: Policy links to the delivery of objectives 3, 5, 7 and 14.

Preferred Approach: Related to Preferred Approaches 11 and 12.

Restoration and after-use of mineral extraction sites

Background

3.189 Unlike many other forms of development, mineral extraction is a temporary use of land, although on larger sites it may be a long-term activity. Careful restoration of the site to beneficial after-use(s), often in a phased manner, avoids any permanent adverse impacts on the local environment and will provide opportunities for positive enhancement of the local area.

3.190 Sustainable mineral development aims to preserve and enhance the land's long-term potential to support beneficial after-uses into the future through high standards of working and restoration. Achieving timely and high quality restoration and beneficial after-use(s) is integral to the consideration of all proposals for mineral extraction

3.191 The way land is restored and its subsequent after-use and management provides a unique opportunity to enhance the character of land taken for mineral extraction. Properly managed restoration to appropriate after-use will benefit communities and their local environment and ensure that valuable new assets are created to hand on to future generations.

3.192 It is an essential part of the spatial strategy to provide a strategic steer on how mineral extraction sites should be restored and put into beneficial after-use. More detailed policy appears later in the Plan to explain how applicants should prepare planning applications to achieve effective restoration and after-use. This includes the policy criteria that will be used by the Minerals Planning Authority in determining applications.

Restoration

3.193 The National Planning Policy Framework states that planning authorities should provide for site restoration and beneficial after-use at the earliest opportunity to be carried out to high environmental standards.

3.194 'Restoration' covers any operations designed to return the land to an acceptable landform, environmental condition and beneficial after-use(s). It includes events that take place before and during mineral extraction (stripping and protection of soils) and operations after extraction up until an after-use is established on site.

3.195 Formerly, infilling was a common part of the restoration process. However, since the volumes of infill materials have declined and are not expected to be substantial during the plan-period due to improvements in recycling, infilling is not going to be as prevalent as it was in the past. A reliance on infilling would mean that the time frame to complete a site restoration would be increased. It will become more important once extraction is complete, to ensure that the resulting slopes are blended into the landscape (for example, by sympathetic land contouring). Low level restoration may be the default position in some cases due to the difficulties in acquiring sufficient quantities of inert materials to back-fill to original contour levels. Opportunities for habitat creation will be considered, to promote biodiversity and geodiversity, but regard still needs to be had for the local landscape.

3.196 It is normal practice to work extraction sites in phases and to restore each phase in turn shortly after its exhaustion has taken place. Progressive working and restoration can lessen the overall impact of mineral working on the environment and minimise loss of land in agricultural production. The phasing and direction of working can be particularly relevant to minimising the impact on residential and local amenity.

After-use proposals

3.197 'After-use' means the land-use or land-uses that a former mineral working is placed into following its restoration. Once mineral extraction has been completed, a site may be returned to its former land-use or to a number of different new 'after-uses'. In all cases, site restoration will involve the removal of temporary buildings, plant and equipment previously associated with the mineral extraction, unless a further extension site obtains planning permission that requires this to remain.

3.198 There is increased recognition that a greater range of potential after-uses should be considered since this may provide opportunities to enhance the variety and quality of environmental features and increase the wider benefits available to communities. This Plan requires both applicants and the Mineral Planning Authority to consider the range of benefits that mineral restoration and after-use proposals might deliver.

Agriculture

3.199 The National Planning Policy Framework requires restoration to safeguard the long-term potential of the best and most versatile agricultural land and provide for the conservation of soil resources. There is a policy preference for restoration to agricultural use where the extraction site is located on higher quality agricultural land (Grades 1, 2 and 3a). However, there is also an expectation that any poorer quality areas of land contained within broad areas of high quality will be devoted to complementary environmental and amenity purposes.

3.200 Agriculture and biodiversity enhancement/ habitat creation need not be incompatible land uses. A balance should be achieved between current and future agricultural need, site-specific biodiversity value and/ or potential, and other considerations. Well-designed agricultural restoration can still deliver significant benefits for 'farmland' biodiversity in the form of hedgerows, lakes and ponds, habitat features and small woodlands. Moreover, many UK Biodiversity Action Plan grasslands such as Lowland Meadows or Floodplain Grazing Marsh can be compatible with commercial livestock systems.

3.201 Water features in agricultural restoration can contribute to agricultural irrigation, biodiversity, flood alleviation and storage and landscape enhancement in a multi-functional way, and should all be considered. Essex County Council now has a strategic role in overseeing the management of local flood risk, that is flooding from surface water runoff, groundwater and ordinary watercourses, and works with the Environment Agency and the Water Companies on strategies to tackle this issue. In particular the Surface Water Management Plan that outlines the preferred surface water management strategy in a given location and any proposal should have regard to this.

Biodiversity Enhancement and Habitat Creation

3.202 There is much greater encouragement of biodiversity enhancement, including through Government policy and Environmental Stewardship Schemes, and for climate change adaptation through the provision of natural landscape features. This includes bio-diversity offsetting for other development schemes being used to incentivise biodiversity afteruse at mineral sites. The minerals industry has always taken a leading role in this regard and is encouraged to continue to do so. This is recognised in the Mineral Working and Active Landfill Site Award Scheme. [7]

7 The primary objective of the award scheme is to encourage the minerals and landfill industries to devote appropriate attention to minimising the impact of operations on the environment and also to acknowledge where a high standard of care is evident- outside of that normally controlled through the planning permission.

3.203 Wherever possible, mineral site restoration should contribute towards the conservation of priority habitats[8] in order for ECC as the MPA to be compliant with the 'duty' placed upon it by the Natural Environment and Rural Communities Act 2006. The Plan proposes an ambitious target for the creation of a minimum of 200 hectares of priority habitat creation in Essex from the preferred sites which will contribute to the wider county targets. Six UK BAP habitats have been selected reflecting local conservation priorities as well as the geological and hydrological character of the Preferred Sites:

- Coastal and Floodplain Grazing Marsh
- Lowland Dry Acid Grassland
- Lowland Heathland
- Lowland Meadows
- Open Mosaic Habitats on Previously Developed Land
- Reedbeds

3.204 The 200ha MLP target will be achieved through:

- New large, terrestrial habitat areas in Essex
- The integration of biodiversity enhancement into all development sites
- Biodiversity offsetting i.e. contributions to support off-site enhancements such as the creation or restoration of priority habitats in proximity to a mineral extraction proposal where positive benefits cannot be secured on site
- The integration of priority habitats into agricultural restoration.

3.205 For instance the preferred sites in Appendix 5 at Bradwell Quarry (Rivenhall), A9 Broadfield Farm (Rayne), Sunnymead (Alresford), Maldon Road (Birch) and Land at Colemans Farm (Witham) provide opportunities for new large habitat areas.

3.206 There is encouragement of biodiversity enhancement through national policy and Environmental Stewardship Schemes. This includes biodiversity offsetting for other development schemes to incentivise biodiversity afteruse at mineral sites.

3.207 There is also potential opportunities for informal outdoor recreation, public rights of way, landscape enhancement, heritage and geological conservation, improved water management and measures to promote mitigation and adaptation to climate change impacts.

Outdoor recreation

3.208 Improved public access to the natural environment can be provided by creating enhanced access as well as new leisure and amenity areas. This may include the creation of new green spaces (such as parks, green corridors or green wedges and woodlands), improvements to the strategic rights of way network, increased public access, provision of footpaths and cycleways and other outdoor recreation uses.

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8 Priority Habitats are defined in the NPPF as being the Habitats of Principle Importance included in the England Biodiversity List published by the Secretary of State under section 41 of the Natural Environment and Rural Communities Act 2006. They are habitats identified as requiring action in the UK Biodiversity Action Plan (UK BAP) and continue to be regarded as conservation priorities.

3.209 In preparing their planning applications, developers should have regard to Natural England's guidance set out in their 'Accessible Natural Greenspace Standard' and 'Nature Nearby' (2010) report.

3.210 From 2013 onwards, local authorities will be responsible for promoting the health and well being of the population in their areas (see 'Healthy People, Healthy Lives: Public Health White Paper, December 2010). The provision of new opportunities for outdoor recreation in site restoration proposals will support this new role by providing greater opportunities for increased physical activity and improved mental health.

Landscape enhancement

3.211 Opportunities may exist to provide new natural landscape features to enhance the local landscape or contribute to existing landscape character. Such features may include water bodies, woodland, copses, hedgerows and grassland areas. Restoration and after-use schemes should be integrated with green infrastructure projects at a wider spatial scale (for example at the sub-regional or district-wide scale), as this would create wider community and environmental benefits in terms of, for example, more robust biodiversity networks, improved corridors or linkages for open space, natural areas, biodiversity and public rights of way, as well as improved opportunities for outdoor recreation.

Heritage

3.212 Site restoration may enable improved access to historic sites, enhance the setting of historic features, or provide the opportunity to present the results of archaeological investigations to the general public. Arrangements for the conservation of geological or other features of interest should comply with best practice advice.

Climate Change

3.213 Site restoration provides an opportunity to create features that can help with mitigation or adaptation to the impacts of climate change (see Policy SS3: Climate Change). Restoration may incorporate water management schemes (such as sustainable drainage, flood water storage, flood alleviation, public water storage, irrigation); new areas of natural vegetation for carbon absorption; or the provision of natural landform or shade to promote 'urban cooling'. These possibilities should be explored to help build the future resilience of the County.

Other policy considerations

3.214 A site's after-use(s) should be in conformity with the policy framework set out in Local Plans/ LDFs prepared by Essex district/ borough/ city councils. The Mineral Planning Authority will consult the relevant local council for its views when determining planning applications for mineral development.

3.215 The main purpose of the Green Belt is to prevent urban sprawl and to preserve 'openness'. Whilst this does not prohibit minerals development, proposals would need to be carefully considered in light of their potential impacts, in line with the NPPF and Circular 02/09: The Town and Country Planning (Consultation) (England) Direction 2009. Minerals can only be worked where they occur, and where mineral development is situated in the Metropolitan Green Belt, the whole of the proposal (including after-use) shall comply with national policy.

3.216 Mineral workings restored by landfill materials or, particularly, to water uses or wetland habitat, may attract large numbers of birds. These may be a safety hazard to aircraft at sites close to airports and aerodromes because of bird strike. Applicants and planning authorities should consult airport operators and military base authorities for their views before finalising restoration and after-use proposals. This is covered separately by Policy DM1 (Development Management Criteria) and by Policy SS9 (Protecting and enhancing the environment and local amenity).

3.217 As well as minimising adverse impacts on the environment and communities, it is important that recognition is given to the opportunities mineral development may present, particularly through site restoration and after-use, to enhance and extend the natural environment, and increase the potential for its enjoyment. The weight accorded to environmental impacts must reflect the sensitivity and importance of the natural resource or environmental asset to be affected, and take account of the positive environmental, social and economic opportunities that development may present

Policy S12- Mineral Site Restoration and After-Use

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-use, 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 5 years to ensure the land is capable of sustaining an appropriate after-use,

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

1. Soil resources are retained, conserved and handled appropriately from site preparation during operations and restoration,

2. In the case of minerals development affecting 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 afteruse,

3. 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, and

4. Flood risk is not increased,

5. Important geological features are maintained and preserved, and

6. 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 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.

Spatial Vision: Policy links to the delivery of themes E, H and J.

Strategic Objectives: Policy links to the delivery of objectives 3, 7,12 and 13.

Preferred Approach: Related to Preferred Approaches 9, 12 and 14.

4 PREFERRED MINERAL SITES FOR PRIMARY MINERAL EXTRACTION

Sand and gravel

4.1 The Strategy sets out the plan requirements within the Provision of Primary Minerals for the County for the 18 year period covering 1st January 2012 to 31st December 2029. The provision made ensures an adequate and steady supply of minerals for land won sand and gravel and silica sand. Policies S8 and S9 provides the policy framework for this whilst the explanatory text presents the justification.

4.2 The additional Plan provision is:

40.67 million tonnes of sand and gravel; and

0.39 million tonnes for silica sand

4.3 After making allowance for past production rates and the mineral capacity of existing permitted sites from the 1 January 2012 onwards, the Plan proposes that additional site-specific land allocations for mineral extraction should be made in the form of new Preferred Sites (this includes site extensions and new sites).

4.4 The Preferred Sites as defined in Policies P1 and P2 provide for the following amount of mineral resource up to 2029,

40.824 million tonnes of sand and gravel extraction; and

0.39 million tonnes of silica sand

4.5 This is comprised from 16 allocations on 10 sites, of which 13 are extensions to existing quarries and 3 are new sites.

4.6 The approach to meeting the mineral supply needs of the County has necessitated a reliance on landowners and the mineral industry to come forward with site proposals for consideration. This ensures there is a high probability that the proposed sites will come forward as planning applications as they have been actively promoted by mineral operators and landowners. The number of sites that ultimately came forward substantially exceeded those that were needed and as such a robust process for site selection was developed. The policy principles and the site assessment and site selection process for identifying the location of Preferred Sites are set out in a separate technical report accompanying this Plan.

4.7 This built upon an extensive programme of testing and evaluation of the merits of potential alternative sites, and an analysis of the findings of public consultation and stakeholder engagement during several stages of plan preparation. The methodology (below) has been refined since previous consultations applied. A Sustainability Appraisal Report is also available as a supporting document explaining how Sustainability Appraisal/ Strategic Environmental Assessment (SA/ SEA) has informed and influenced the selection of the Preferred Sites.

4.8 The following considerations support the number and location of Preferred Sites identified in the Plan, in accordance with the spatial strategy, through a 5 stage site selection process as follows:

- The deliverability of the sites has been established, including the presence and quantity of the mineral resource and the capability of the site being worked, at least in part, within plan period i.e. by 2029. The ability to process the material on-site was also a factor taken into consideration.

- Sites have been chosen with regard to their environmental and social acceptability by avoiding imposing any unacceptable adverse impacts on public health and safety, amenity, the environment, local community or highways. Factors considered against all sites include the relevant planning background, ecology and designations, historic environment, agriculture, proximity to sensitive uses, water, hydrology and flood risk, traffic and transportation, recreation, amenity and pollution and restoration and after-use. These criteria were applied consistently across all the mineral sites based on a traffic light scoring system (e.g., Red - Amber - Green) where red meant that an impact was severe and could not be mitigated. Site which scored red for any criteria were not taken forward for further assessment. The testing of alternative site proposals revealed a preference towards providing for extensions to existing sites and this outcome is reflected in the choice of proposed sites

- The potential proximity to growth areas and efficiency in the dispersal of mineral supply in order to minimise mineral miles is also a feature of site selection. Mineral sites that were selected had to be well placed to disperse mineral supply via the main highway network to the key centres and areas of growth in particular (whilst acknowledging that ongoing development is expected across all Districts). This is consistent with the spatial strategy which seeks to reduce HGV mineral miles.

- An approach was also taken to identify sites within 250m of a settlement boundary and where a significant amount of the site were located within this distance it became a factor against the site being selected. This addresses the lack of consideration which was considered to be afforded to people and communities during previous consultations. It reflects a policy stance rather than a reflection of potential harm.
- Potential cumulative transport impacts were assessed to avoid situations whereby more than one site needing to make use of a particular stretch of road or a certain junction could result in adverse impacts.

- The potential for biodiversity, habitat creation, wider community benefit and restoration limitations were also considered. Those sites which could contribute to the achievement of biodiversity, habitat creation targets or wider community benefits performed strongly under this category which will provide the platform to delivering the habitat creation target under Policy S12. The availability of inert infill for restoration was also taken into account in that sites which might require significant quantities of material for restoration, e.g., for landscape or other environmental reasons, became a factor against such sites being selected due to the difficulties in acquiring sufficient quantities of inert materials to back-fill to original contour levels.

Policy P1 - Preferred Sites for Sand and Gravel Extraction

Policy P1 Preferred Sites for Primary Sand and Gravel Extraction

In the case of Preferred Sites for sand and gravel extraction the principle of extraction has been accepted and the need for the release of mineral proven.

The Mineral Planning Authority will grant planning permission for sand and gravel workings within the Preferred Sites, listed in Table 5 (Preferred Sites for land won Sand and Gravel Provision) and as shown on the Policies Map, subject to the proposal meeting the detailed development requirements set out in Appendix 5, other relevant policies of the Development Plan for Essex and any other material considerations.

Spatial Vision: Policy links to the delivery of themes A, B and G.

Strategic Objectives: Policy links to the delivery of objectives 9 and 10.

Preferred Approach: Policy related to Preferred Approach 8.

Table 5 Preferred Sites for Land Won Sand and Gravel Provision

Site No.	Location:	Proposer:	Area: ha.	Approx. tonnage (mt)	MPA comments:
A3	Bradwell Quarry, Rivenhall	Blackwater Aggregates	9	1.0	Extension to existing quarry. Working and restoration to be integrated with A4-A7.
A4	Bradwell Quarry, Rivenhall	Blackwater Aggregates	25.5	3.0	Extension to existing quarry. Working and restoration to be integrated with A3 & A5-A7.
A5	Bradwell Quarry, Rivenhall	Blackwater Aggregates	35	3.0	Extension to existing quarry. Working and restoration to be integrated with A3-A4 / A6-A7.
A6	Bradwell Quarry, Rivenhall	Blackwater Aggregates	37.5	2.5	Extension to existing quarry. Working and restoration to be integrated with A3-A5 / A7.

Site No.	Location:	Proposer:	Area: ha.	Approx. tonnage (mt)	MPA comments:
A7	Bradwell Quarry, Rivenhall	Blackwater Aggregates	95	6.5	Extension to existing quarry. Working and restoration to be integrated with A3-A6.
A9	Broadfield Farm, Rayne	Lafarge Aggregates	90	4.28	New Site
A13	Colchester Quarry, Fiveways	Tarmac	15.5	2.95	Extension to existing quarry.
A20	Sunnymead, Alresford	Lafarge Aggregates	65	4.67	Extension to existing quarry.
A22	Little Bullocks Farm, Little Canfield	Environ	6.9	0.65	Extension to existing quarry.
A23	Little Bullocks Farm, Little Canfield	Environ	5.5	0.06	Extension to existing quarry.
A31	Maldon Road, Birch	Hanson	25	4	Extension to existing quarry.
A38	Blackleys Quarry, Gt Leighs	Frank Lyons Plant Services	22	1.07	Extension to existing quarry.
A39	Blackleys Quarry, Gt Leighs	Frank Lyons Plant Services	21	0.75	Extension to existing quarry.
A40	Shellows Cross, Roxwell / Willingale	Lafarge Aggregates	105	3.5	New Site
A46	Colemans Farm	Simon Brice	46	2.5	New Site
B1	Slough Farm, Ardleigh	Aggregate Industries	11.6	0.39	Extension to existing quarry.
		Total Provision		**40.824MT**	

Notes:

1. Approximate tonnages are in millions of tonnes (mt).

4.9 The sites are listed above in Table 5 are in no order of preference.

Industrial minerals

4.10 Policy S9 sets out the commitment and requirement to plan for additional silica sand provision at Martells quarry. This will be met by a Preferred Site to be worked as an extension to the existing quarry.

- Martells Quarry, Ardleigh – 390,000 tonnes of silica sand extraction

4.11 All Preferred Sites are identified on the Policies Map whilst Appendix 5 contains a Site Profile for each site which sets out its development requirements.

Policy P2 - Preferred Sites for Industrial Minerals

Policy P2 Preferred Sites for Industrial Minerals

In the case of Preferred Sites for industrial minerals the principle of extraction has been accepted and the need for the release of mineral proven.

The Mineral Planning Authority will grant planning permission for industrial minerals workings within the Preferred Sites listed in Table 6 (Preferred Site for Silica Sand Provision) and as shown on the Policies Map, subject to the proposal meeting the detailed development requirements set out in Appendix 5, other relevant policies of the Development Plan for Essex and any other material considerations.

Spatial Vision: Policy links to the delivery of themes A, B and G

Strategic Objectives: Policy links to the delivery of objectives 9 and 10

Preferred Approach: Policy related to Preferred Approach 8

Table 6 Preferred Site for Silica Sand Provision

Table 6

Site No.	Location:	Proposer:	Area: ha.	Approx. tonnage (tonnes)	MPA comments:
B1	Slough Farm, Martells Quarry, Ardleigh	Aggregate Industries	11.66ha	0.86mt	54% Silica Sand 46% Sand and Gravel Maximum Annual Output 45000 tpa

Further Information about Preferred Areas

4.12 The Preferred Sites are site specific allocations and the site boundary delineated in the respective site profile is the maximum extent of the mineral proposal within a planning application. A planning application for mineral extraction beyond the boundary of the site profile would not be permitted.

4.13 Identification of a preferred site does not mean that planning permission will automatically be granted for mineral extraction. The Plan represents a broad view of the suitability of a Preferred Site and far more detailed information will need to be supplied to support any actual planning application. At that stage there could be the identification of an unforeseen environmental complication or other issue with the site which precludes the use of that site for mineral development.

4.14 Conditions will be imposed on planning permissions to protect features of importance and restrict operations to mitigate against impacts on the environment, local communities, and highways. Detailed matters relating to the operation of sites will be considered and addressed at the time a planning application is made.

5 DEVELOPMENT MANAGEMENT POLICIES

Background

5.1 Mineral development, particularly mineral extraction, can have a considerable impact on its surroundings which must be carefully considered. The impacts on the quality of life of local people and on the environment are key considerations when deciding where to locate new mineral development. A wide range of potential adverse impacts can arise and the specific nature of these impacts and the ways of addressing them will vary case by case. The planning policy framework provided by this Plan is considered flexible enough to deal with the variety of issues that may arise and also variations in local circumstances.

The Application Process

5.2 The Planning and Compulsory Purchase Act 2004 and Localism Act 2011 introduced major changes to the planning system, including greater public involvement throughout the planning process.

5.3 The MPA's Statement of Community Involvement states that pre-application discussions between the operator and MPA is good practice, and proposes that applicants with significant development proposals should carry out pre-application public consultation. This is supported within the relevant provisions of the Localism Act 2011.

5.4 In June 2008, the MPA adopted supplementary guidance on the requirements for the validation of planning applications submitted to the County Council (the Local Validation List), which is available on our website. The Local Validation List was subject to consultation prior to adoption and is stand-alone Guidance in its own right. It provides guidance on the types of information and assessment required in support of a planning application. It is recommended that applicants undertake pre-application discussions with the MPA, in accordance with the SCI, to ensure that the information required to determine an application is submitted with the application at the outset, thus avoiding the need for a request for further information. The Local Validation List and pre-application discussions would not prevent the MPA from requesting further information during the determination process and an application could still be deemed valid, and then refused on the grounds of inadequate information, if the documentation submitted was subsequently found to be inadequate.

5.5 As explained earlier in Section 4.5 and Section 4.6, the need to achieve sustainable development is a key driver and the policies in the NPPF taken as a whole constitute the Government's view on what sustainable development in England means in practice for planning. In essence there are three dimensions to sustainable development, the economic, the social and the environmental, as previously described throughout this report.

5.6 It is expected that applications for minerals development will provide information to demonstrate that the proposal provides net gains in all three of these dimensions. For example applicants will be encouraged to provide 'economic statements' in support of their proposals.

5.7 It is also considered that pre-application discussion will continue to be encouraged when not statutorily required. In respect of the submission of sufficient information, it is considered that a policy endorsing the application of the adopted Local Validation List is appropriate.

Environmental Impact Assessment

5.8 All planning applications are screened as part of the Environmental Impact Assessment (EIA) process to determine whether or not they require an Environmental Statement. This is required by EU and UK law. The screening process helps to identify whether a proposal is likely to have significant environmental effects; and if so, an Environmental Statement must accompany the planning application.

5.9 Proposals falling within Schedule 1 of the EIA Regulations must be accompanied by an Environmental Statement whilst proposals under Schedule 2 may require an Environmental Statement depending on detailed circumstances. The Environmental Statement will identify the likelihood of significant impacts occurring. It will show how these impacts can be avoided, mitigated and compensated for and consider alternative ways the development could be carried out.

5.10 In cases where an Environmental Statement is not required, the applicant must still consider all the impacts arising from the proposed mineral development and supply information to demonstrate that these have been addressed within their planning application.

5.11 Planning conditions are always attached to planning approvals to regulate the operation of the proposed mineral development. Planning conditions are used to agree specific details about the proposal (such as a landscape scheme) and to ensure the effects on local people and the environment are kept within acceptable levels (for example by limiting working hours). Where significant adverse effects cannot be adequately controlled or prevented, or insufficient evidence has been supplied to demonstrate whether impacts can be adequately mitigated, planning permission will be refused.

Review of old mineral permissions (ROMP)

5.12 Although a temporary use of land, mineral working can last for many years and have a profound impact on the environment. Some existing mineral sites were given planning permission several decades ago when standards of operation, restoration and after-use were much lower than today's modern standards. Legislation has now tackled this problem.

5.13 The Planning and Compensation Act 1991 required Interim Development Order (IDO) permissions granted between 1943-1948 to be registered with the Mineral Planning Authority (MPA). Subsequently, the Environment Act 1995 required the MPA to review mineral planning permissions granted between June 1948 and February 1982; and to impose periodic reviews of permissions granted after February 1982. The purpose being under the 1991 Act to enable the MPA to impose modern operating, restoration and after-use conditions on these 'old' permissions. This process operates as a rolling cycle, whereby each active site (including IDO's) must be reviewed every 15 years.

5.14 This ongoing updating process is known as the 'Review of Old Mineral Permissions' (ROMP). Like standard planning applications for mineral development, the ROMP applications for new schemes of conditions go through statutory consultation and administrative procedures before they are determined. Normally ROMP applications will be accompanied by an Environment Statement which assesses the likely environmental impact of the development.

Relevant issues to be considered

5.15 Whether proposals for mineral development come forward for determination in the form of standard planning applications, or as ROMP applications for new schemes of conditions, the impact of proposals on the environment and amenity must be carefully assessed and considered by the MPA. The following guidance is intended to assist developers in the preparation, design and submission of proposals which achieve high quality standards of development.

Transport

5.16 The transportation of minerals can potentially lead to substantial adverse impacts on the local environment. Once extracted, it is necessary to move minerals either to other sites for processing or to the customers who require them. Therefore, quarries within the Plan area are often generators of heavy goods vehicle (HGV) traffic, leading to noise, air pollution, vibration, dust and a potential road safety hazard. Mineral Planning Authorities should seek to encourage and, where practicable, enable the carrying of material by water and rail wherever possible. This would reduce carbon emissions from minerals transportation, and may help lessen the contribution of minerals transportation to climate change.

5.17 Proposals for minerals development that generate significant amounts of movement shall be required to be supported by a transport assessment of potential impacts, which should include the movement of minerals within and outside the site, emissions control, energy efficiency and local amenity including impacts on highways safety, congestion and demand management. Where necessary the provision of a Site Transport Plan setting out the developers' mechanisms to control traffic movements within the locality will be encouraged in consultation with local communities - that deals with issues including routing, hours of movement and considerate driving. This will help minimise the environmental impacts of transporting minerals. The mechanisms for managing traffic will be enforceable by the MPA. Developers should also have regard to the ECC Development Management Policies (February 2011).

Pollution and Amenity impacts

5.18 Mineral development can cause concern to residents and local communities because of noise, dust, fumes, vibration, illumination and debris on the highway from vehicle movements. When considering planning applications the MPA must be satisfied that those potential adverse impacts have all been satisfactorily investigated and addressed.

5.19 Levels of disturbance will vary according to the nature of the proposed development, the stage mineral operations have reached and the relationship to the surrounding area. Some sites operate with very little plant or equipment and cause minimal impacts. Other developments are more major and can produce significant potential impacts which must be fully understood and fully addressed by the applicant in any planning application.

5.20 Factors to be taken into account include:

- The proximity of proposed development to homes, schools and other sensitive and incompatible land-uses,
- The location and siting of plant and other ancillary development,
- The topography of the site and the surrounding area (including natural and man-made features which can reduce impacts, such as landscape features), and
- The site's relationship with roads, railways and waterways.

5.21 Local amenity can be protected by minimising work in sensitive areas and creating 'buffers' between residential areas and mineral workings. A minimum of a 100m 'buffer zone' from the extraction face to the wall of a residential property would normally be required to minimise the impact of working on local amenity.

5.22 Many potential pollution impacts can be overcome by using measures to remove or reduce emissions at source, or by adopting appropriate working practices. Examples of these measures include:

- Controlling working hours,
- locating plant away from neighbouring developments,
- housing machinery indoors or attaching silencers to plant,
- using water sprinklers to reduce dust, installing wheel washing for lorries and
- directing lighting downwards and away from properties.

However, the planning process should not seek to duplicate the requirements of the pollution control regime, which is managed by the Environment Agency and the Environmental Health Authority.

Health

5.23 A Health Impact Assessment (HIA) provides decision-makers with information about how a policy or proposal may impact, directly or indirectly, on people's health. HIA in this context will be used to assess the possible significant health effects of a mineral development site, and this will be affected by a variety of influences including transport routing, dust, noise, safety and local environment considerations. The HIA can then be analysed with its recommendations informing developers and the planning authority.

5.24 If any of these impacts can not be satisfactorily mitigated against, development should not proceed.

5.25 The HIA assessment will be required to connect with other impact assessments, including those associated with the environment and transport.

Flooding, water resources and water quality

5.26 Mineral development has the potential to impact upon surface water features (e.g., rivers, ditches, lakes etc), groundwater levels and groundwater movement and to affect areas at risk of flooding. It is important that all such potential impacts are investigated and addressed.

5.27 The Technical Guidance to the National Planning Policy Framework sets out national guidance to be followed in relation to flood risk. It requires the sequential and exception tests to be applied in relation to mineral development proposed in areas at risk from flooding, albeit that sand & gravel working is 'water compatible development' and mineral working and processing is 'less vulnerable' to flood risk. The MPA will apply this guidance when assessing and determining planning applications for proposed mineral and associated development in flood risk areas.

5.28 As stated earlier in the supporting text on policy S12, Essex County Council has a strategic role in overseeing the management of local flood risk, that is flooding from surface water runoff, groundwater and ordinary watercourses. Its powers now include working with organisations such as the Environment Agency and water companies and developing surface

water management plans for managing surface runoff, groundwater and ordinary watercourses throughout Essex. It must also be ensured that developments drain in a manner which does not increase flood risk elsewhere, as well as trying to reduce the overall risk of flooding wherever possible. A number of inter-related Flood & Water Management Strategies have been produced in Essex seeking to improve our understanding of surface water flood risk with the ultimate aim of reducing risk where possible. These include the Preliminary Flood Risk Assessment and Surface Water Management Plans.

5.29 The location of Preferred Sites for future mineral development proposed in this Plan has been informed at all stages by a Strategic Flood Risk Assessment (SFRA). Those proposing to develop in these Preferred Sites should refer to the SFRA and the Technical Guidance to the NPPF when preparing their proposals. It may be necessary to include flood management measures in the proposal, including an adequate surface water drainage strategy.

5.30 To prevent an increase in flood risk it is necessary to maintain the capacity of the floodplain and the free flow of floodwater. Increased risks of flooding associated with mineral working can be avoided by:

- Ensuring there is no net loss of floodplain storage area,
- Managing the rate of surface water run-off from the site and releasing surface water run-off at an appropriate rate and volume to a watercourse or sewer,
- Meeting the National and Local principles/standards for SuDS design,
- Ensuring that floodwater flows are not obstructed or impeded by earth bunds, ancillary structures and stockpiles.

There may also be the potential to provide additional flood storage areas and therefore reduce flood risk in the surrounding area.

5.31 Surface water and groundwater provide fresh water supplies which support the resident population, wildlife and the environment. This water is used for drinking, cooking, washing, agricultural and horticultural irrigation, manufacturing processes, recreational purposes and is essential for biodiversity and the landscape.

5.32 Essex on the whole has a very low vulnerability to water contamination, however, the north-western part of the County has a high vulnerability and is a designated Source Protection Zone. Mineral extraction, processing and aggregate recycling all have the potential to have adverse effects on the quality of groundwater, if not regulated correctly. If mineral extraction takes place in an area of high vulnerability, and de-watering is involved, this can have the direct effect of a loss of water from the local groundwater system, and a loss of storage capacity within the remaining saturated zone. Mineral processing and recycling can involve high usage of water, which can become contaminated and subsequently affect any nearby groundwater sources if not managed properly.

5.33 Measures must be taken to protect these natural assets from the adverse impact of mineral development by:-

- Ensuring there will be no significant change to groundwater or surface water levels. The process of ‘dewatering’ – whereby water is pumped out of a pit to allow dry working below the water table – must be carefully monitored, to ensure no adverse impacts on surrounding water availability.

- Carrying out detailed hydrological and hydro-geological assessments to establish the base line position and ensure operations are appropriately designed, monitored and managed;
- Preventing the pollution of ground and surface water by chemicals and other contaminants. A considerable amount of water can be used when processing aggregates. Drainage during site operations and any discharge to local watercourses, must be controlled to comply with standards set by the Environment Agency through licensing.

5.34 Mineral development in proximity to the coast may have the potential to impact upon flooding from the sea. Regard, in this respect, should be had to the Essex and South Suffolk Shoreline Management Plan.

Visual and landscape impact

5.35 Mineral working can result in significant changes to the local landscape, not only while mineral working is in progress, but also over the longer-term depending on local circumstances. Changes may appear adverse whilst operations are underway, but can be of benefit in the longer term if the working programme, restoration and after-use have been considered thoroughly. When excavation takes place over many years, impacts on the landscape will change as phased working progresses and as landscaping and screening grows and adapts. Whilst temporary landscape works such as bunds or earth mounds will affect the appearance of an area, they are usually essential to reduce local visual and noise impacts or allow valuable soils to be stockpiled for future use.

5.36 There is one Area of Outstanding Natural Beauty in Essex at Dedham Vale which is nationally important landscape. There are also important areas of ancient woodland across Essex, often with veteran trees.

5.37 The undeveloped Essex coast is a unique feature of the County and is important for its landscape quality as well as biodiversity and heritage features. The pattern of river valleys crossing Essex towards the coast is also a distinctive landscape feature. All of these landscape features will be strongly protected from any adverse impacts arising from mineral development. The intrinsic character and beauty of the Essex countryside should be recognised in preparing proposals for mineral development.

5.38 Mineral development in the countryside should pay particular regard to the local landscape and should aim to protect and enhance this, including through restoration and after-use. The landscape character assessments undertaken by the local planning authorities should be used by developers to inform the design and working programmes of their mineral proposals. Impacts on the landscape can be avoided, reduced or overcome by a variety of measures including:

- Safeguarding local features (such as significant topography, woodland, veteran trees, hedgerows and viewpoints) to retain biodiversity networks and provide part of the framework for restoration,
- Using planting schemes and landscaped bunds and mounds to screen mineral development,
- Early design and planting of appropriate native species to enhance landscape character, support biodiversity networks and provide mature features to be later incorporated into restoration proposals,
- The careful siting of plant and machinery, including providing this at low level and using colour recessive paint.

Biodiversity and geological conservation

5.39 There are numerous sites of biodiversity and geological interest in Essex and these will continue to be afforded strong protection. The County has important international and national designations – Special Areas of Conservation, Special Protection Areas, Ramsar Sites, National Nature Reserves and Sites of Special Scientific Interest. There are also important areas of ancient woodland and areas of particular geological significance, some of which are designated as Regionally Important Geological or Geomorphological Sites (RIGGS).

5.40 The degree of protection afforded will be consistent with the site's status in terms of its international, national or local importance; the presence and status of any protected species which may be affected; and the site's biodiversity and geological interest in the wider environment. The strongest protection will be given to internationally and nationally important sites. Development located some distance from a designated area can nevertheless have an adverse impact (e.g., through pollution, changes to water tables or drainage patterns, flooding, or transport movements) and assessment under the Conservation of Habitats and Species Regulations 2010 may be required to see if an 'Appropriate Assessment' is needed in relation to European Sites.

5.41 A baseline ecological survey will be necessary where biodiversity features are present on a proposed site. Flora and fauna of intrinsic local importance can also contribute to a wider network of habitats which are important for the health and viability of other flora, fauna and particular species. Such surveys are essential in identifying what exists on a mineral site and establishing whether such features should be retained and managed. The Essex Biodiversity Action Plan provides useful background information in this regard.

5.42 Mineral proposals must include measures to avoid or minimise adverse impacts on biodiversity and geological conservation interests; and should consider the scope to protect and enhance them in the long-term. Possible measures include maintaining existing habitats on or near the site during the duration of mineral working; proposals for habitat creation as part of restoration; and protecting key features during working (such as geological features or nesting grounds).

Heritage assets

5.43 Heritage, or the historic environment, includes archaeology, buildings and structures, areas of historic landscape, conservation areas, historic parks and gardens and battlefield sites. Essex's identity and sense of place is closely linked with its rich heritage. This is an irreplaceable resource which is vulnerable to damage or loss from development.

5.44 Listed buildings of historic, architectural and cultural importance, and their settings, will be protected from significant adverse impact. Conservation areas which contain groups of listed buildings and other areas of historic interest will be similarly protected. The emphasis will be on preserving the physical structure, visual setting and any features of special architectural or historic interest of a listed building, and to preserving or enhancing the character or appearance of a conservation area.

5.45 Applicants preparing proposals for mineral development should refer to Historic Environment and Historic Landscape Character Assessments, Local Plan/ LDF evidence base studies, English Heritage records and information held on the Scheduled Ancient Monument Record at the earliest opportunity.

5.46 Information on archaeological sites and material in Essex is held in the Historic Environment Record. However, not all archaeological remains are known about and recorded. To safeguard presently unknown remains, an archaeological assessment should be carried out by the developer if an area is likely to be of high archaeological potential (as implied by the Historic Environment Record). The assessment must be carried out before a planning application is submitted as this will help determine the suitability of the proposal, appropriate methods of working and suitable conditions if planning permission is granted.

Recreation and right of way network

5.47 Mineral development can affect public rights of way, open spaces and informal outdoor recreational land. Public access to such routes and areas may be restricted for health and safety reasons and to prevent criminal damage. Where rights of way are affected, arrangements for their temporary or permanent diversion must be put in place as part of proposals. This will apply to definitive routes used by cyclists, horse riders and walkers crossing or close to a site. Restoration of mineral workings may provide an opportunity to provide new or enhanced rights of way and outdoor recreational uses.

Land and soil resources

5.48 Rural land which supports farming, horticulture and forestry must be protected to ensure this valuable finite resource is available for future generations. In Essex the presence of mineral resources (especially sand and gravel) often contributes to the good quality of the agricultural land. The County contains extensive areas of grades 1, 2 and 3a farmland (known as the 'best and most versatile') which is considered an important national resource. Proposals for mineral working on higher grade agricultural land must protect these soils in order to enable the site to have the potential to revert back to productive agricultural use in the future.

5.49 Top-soil and sub-soil should be carefully removed and handled with care and stored separately during the preparation and working of a mineral site. This will support later land restoration to agriculture and other beneficial uses. The overall integrity of land and soil should be protected during working and long-term use of the site once it is fully restored.

5.50 Measures must be taken to ensure quarry sides are stable and will not result in subsidence either on or off site. Surrounding areas and properties must not be adversely affected by the effects of subsidence or land slippage. Where mineral sites adjoin roads, railways, bridges, or energy transmission routes, appropriate land margins must be provided to ensure the continued structural integrity of this vital infrastructure.

Potential hazard to aircraft from bird strike

5.51 Whilst the process of mineral extraction does not in itself attract bird populations, the restoration and after-use of workings may involve the creation of water features, nature reserves and berry producing plants all of which have the potential to attract flocks of birds. This can increase the risk of bird strike for aircraft in the vicinity of airports/ airfields leading to concern about aircraft damage or danger to life.

5.52 There are safeguarding areas around the Stansted and Southend airports which must be taken into account when considering future areas for development and these must be fully considered by potential developers. There are smaller airfields in Essex used for business aviation, recreational flying and military activities where similar safeguarding considerations also apply.

5.53 Proposals for site working, restoration and after-use must give careful consideration to the form of working and landscaping, planting and water features if located within an airport/ aerodrome/ or military safeguarding area.

Cumulative impact

5.54 Mineral development, especially primary extraction, can have a significant impact upon the environment and on communities. This impact can be magnified if there are a number of permissions granted for mineral development within close proximity, or if permission to extract is extended, resulting in many years of mining activity in one location.

5.55 Mineral development proposals which require an Environmental Statement (ES) to be supplied, can be required to address cumulative effects within an area. In addition to the direct effects of a development, the ES should also cover indirect, secondary, cumulative, short, medium and long-term, permanent and temporary, and positive and negative effects. A particular project may however give rise to a small number of significant effects, and therefore require full and detailed assessment in only one or two respects.

5.56 Applications for mineral extraction should address the issue of cumulative impacts. This would ensure the overall effects of a proposal are considered within the context of historic, existing, newly permitted and planned mineral operations within a locality. Cumulative impacts on the landscape, on residential amenity and on the highway network would be considered, and measures incorporated within the proposal to demonstrate how those impacts have been adequately addressed, mitigated or compensated for.

5.57 Mitigating measures might include such measures as the phasing of extraction operations so that one site is completed before a second commences, a restriction on the number of HGV movements or the timetabling of such movements, undertaking pre-extraction landscaping works to reduce cumulative visual impacts and addressing needed junction improvements.

5.58 Where cumulative impacts have not been, or are unable to be satisfactorily addressed through the application, the MPA could have grounds to refuse permission for that development.

5.59 Cumulative impacts could arise if mineral sites in proximity to one another were worked at the same time, or if working in a particular area was to continue over a long period of time. The Mineral Planning Authority has taken steps to minimise the cumulative impacts of future mineral working in the County through the spatial strategy and by choice of location and phasing of site working.

5.60 Potential applicants should consider what other existing and proposed development will take place under their control, or otherwise, in the area when formulating their own proposals to avoid unacceptable cumulative impacts. The MPA will normally require a primary site to have extraction completed and be undergoing restoration before a new extension area is prepared for extraction.

Planning Obligations and Conditions

5.61 Planning Obligations, or Section 106 agreements, are legal agreements negotiated between local authorities and developers or are unilateral undertakings made by developers. The use of planning obligations will be in line with the prevailing legislation, guidance and policies of the county. In contrast, planning conditions are the terms under which planning permission is granted.

5.62 The MPA will require developers to enter into such planning obligations to make a proposed development acceptable where planning conditions alone would not be appropriate.

Policy DM1 Development Management Criteria

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 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.

Spatial Vision: Policy links to the delivery of themes D and I.

Strategic Objectives: Policy links to the delivery of objectives 3, 5, 6, 10, 11 and 12.

Preferred Approach: Related to Preferred Approaches 12 and 13.

Policy DM2 Planning Conditions and Legal Agreements

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.

Spatial Vision: Policy links to the delivery of themes D and I.

Strategic Objectives: Policy links to the delivery of objectives 3, 5, 6, 10, 11 and 12.

Preferred Approach: Related to Preferred Approaches 12 and 13.

Primary Processing Plant

Mineral Processing and Aggregate Production

Primary Processing Plant

5.63 Primary processing enables a higher value use of aggregates. Technological improvements in recent years allow smaller and more mobile plant to be brought onto relatively small mineral sites. Encouraging such on site processing reduces the number of lorry movements on the highway network. The importation of non-indigenous material can increase vehicle movements and extend the overall life of a quarry. Restricting importation gives clarity to the working programme, life of quarry, and vehicle movements.

5.64 All applicants will be required to demonstrate how extracted mineral is to be used in an efficient way by making provision for on-site primary processing plant. Where there is an existing neighbouring processing plant, with permission and capacity to import and could process the additional material without impacting on its own working timetable, nor result in unacceptable adverse impacts, this too may be considered a sustainable option - subject to the majority of the material being processed at the neighbouring site continuing to be from indigenous sources and that the use of the processing plant remains temporary.

5.65 It is recognised that limited imports could enable the blending of minerals to produce a broader range of construction products. This, in itself, may be considered a way of making more efficient use of extracted mineral, however, there is a need to avoid the generation of additional and non-essential mineral movements to keep environmental and community impacts to a minimum.

5.66 Imports should continue to be justified on a site by site basis, and that, in all cases, the main use of the primary plant should be to continue to process the indigenous mineral that is extracted from within the site's boundary. The primary plant is at that location by virtue of the mineral extraction that is taking place there and it will be required to be removed upon completion

of the mineral workings. This is to ensure an industrial use is not developed, on a permanent basis, in a locality which would normally be considered inappropriate, such as in a largely rural location.

5.67 The movement of mineral between separate sites, purely to increase the range of products available for sale at any particular site, is normally not considered acceptable, especially given the impact the additional HGV movements would have.

5.68 Careful consideration will be given to the siting of plant and buildings. Normally processing plant ancillary to extraction does not need 'express planning permission' and is generally permitted by the General Permitted Development Order. Nonetheless, in exceptional circumstances, particularly in exposed or sensitive locations, these 'permitted development' rights may be removed to control the siting, location and impact of such plant at mineral sites.

5.69 Note: Where no primary processing plant is proposed details will be required of the proposed destination of the mineral for processing to demonstrate the material will be used in an efficient way.

Policy DM3 Primary Processing Plant

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.

Spatial Vision: Policy links to the delivery of themes A and D.

Strategic Objectives: Policy links to the delivery of objectives 3, 4, 11,12, and 13.

Preferred Approach: Related to Preferred Approaches 12 and 13.

Secondary Processing Plant

5.70 Secondary processing plant such as for mortar or concrete batching, the manufacture of coated materials (asphalt), block/ tile/ brick making and other concrete products appear on mineral, industrial and transhipment sites and are currently well spread across the County.

5.71 Where primary processing plant is proposed at mineral extraction sites, there may be justification for secondary plant provided that the plant is utilising mainly indigenous mineral sourced from within the site and/ or aggregates from the primary processing plant. Such secondary plant should be for a temporary duration and will be required to be removed from the land upon completion of mineral extraction, with the land subsequently restored to an appropriate after-use within a reasonable timescale following the completion of extraction. Normally, proposals for secondary processing/ treatment facilities within mineral sites will be considered against the relevant development plan policies for industrial uses in rural areas.

Policy DM4 Secondary Processing Plant

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.

Spatial Vision

: Policy links to the delivery of themes A and D.

Strategic Objectives Policy links to the delivery of objectives 3, 4, 11,12, and 13

Preferred Approach: Related to Preferred Approaches 12 and 13

6 IMPLEMENTATION, MONITORING AND REVIEW

Introduction

6.1 The Minerals Local Plan must show how the Vision, objectives and core strategy will be delivered, by whom and by when. It is important that all parties essential to the delivery of the plan, including landowners, mineral operating companies and developers are signed up to it.

6.2 The following table details the current mineral companies whom ECC will be required to work with, their sites, and whether the site is currently being worked or whether it was selected as a Preferred Site for future working.

6.3 The sites listed below denote existing permitted sites , the new Preferred Sites as allocated within this Plan and as set out in Section 5 and Tables 5 and 6, and the current mineral operator assigned with that site. The 'Preferred Sites' for future mineral extraction will only come about if brought forward by the respective mineral operator (with the landowners' support). The mineral operator's first task will be to secure full planning permission for mineral extraction from their site. The listing of a site as 'Preferred' in the following table does not equate to a permission to extract.

Table 7 Mineral Companies and their Associated Sites 2012

Site Operator	Sites	Existing or Preferred Site
Aggregate Industries	Martells Quarry, Ardleigh	Existing
	Park Farm, Ardleigh (B1) (Extension to Martells Quarry)	Preferred
Blackwater Aggregates	Bradwell Quarry, Rivenhall Airfield	Existing
	Bradwell Quarry, Rivenhall Airfield (Sites A2 – A7) (Extension to Bradwell Quarry)	Preferred
Brett Aggregates	Alresford Creek, Alresford	Existing
	Brightlingsea Quarry, Brightlingsea	Existing
	Elsenham Quarry	Existing
	Lufkins Farm, Thorrington	Existing
Carr and Bircher	Widdington Pit, Widdington	Existing
Danbury Aggregates	St Cleres, Danbury	Existing
	Royal Oak, Danbury	Existing
Dewicks	Curry Farm, Bradwell-on-Sea	Existing
Edviron	Crumps Farm, Great Canfield	Existing

	Little Bullock Farm, Gt & Lt Canfield (A22 & A23) (Extension to Crumps Farm)	Preferred
Frank Lyons Plant Services	Blackleys Quarry, Great Leighs	Existing
	Blackleys Quarry, Great Leighs (A38 & A39) (Extension to Blackleys Quarry)	Preferred
G&B Finch	Asheldham Quarry, Asheldham	Existing
Gent Fairhead & Co Ltd	Rivenhall Airfield (Waste Facility)	Existing
Hanson Aggregates	Birch Quarry, Birch	Existing
	Maldon Road, Birch (A31) (Extension to Birch Quarry)	Preferred
	Bulls Lodge Quarry, Boreham	Existing
Lafarge Aggregates	Wivenhoe Quarry, Wivenhoe	Existing
	Sunnymead, Elmstead and Heath Farm, Alresford (A20) (Extension to Wivenhoe Quarry)	Preferred
	Broadfield Farm, Rayne (A9) (New Site)	Preferred
	Shellow Cross Farm (A40) (New Site)	Preferred
Sewells Reservoir Construction	Cobbs Farm, Goldhanger	Existing
	Crown Quarry, Ardleigh	Existing
	Highwood Quarry, Little Easton	Existing
SR Brice	Colemans Farm, Rivenhall End (A46) (New Site)	Preferred
Tarmac	Colchester Quarry, Stanway	Existing
	Fiveways Fruit Farm (A13) (Extension to Colchester Quarry)	Preferred
Thames and ColneRiver Aggregates	Fingringhoe Quarry, Fingringhoe	Existing

Implementation

6.4 Subject to planning permission being granted, and based on the information provided by Site Promoters, the 'Preferred Sites' would come into operation in a phased manner across the plan period. This phasing information was provided to the Council by Site Promoters and is both outside of the control of the Council and subject to external market forces. However it is considered that the indicative phasing is such that sand and gravel will be available to serve the Essex market throughout the plan period.

6.5 The continued growth of the County should not be hindered by a lack of appropriate aggregates from Essex sources. The Council will seek to work closely with local stakeholders and the minerals and waste industry in order to provide appropriate advice prior to the submission of any application for new mineral extraction or aggregate recycling. The intent will be to ensure the efficient running of the planning process and guarantee that there is a continual flow of extracted mineral to facilitate growth supporting development.

6.6 Should mineral demand within Essex fall it is unlikely that this would result in a mass exportation of mineral outside of the county. Minerals are not economic to transport significant distances by road and due to the pattern of infrastructure within the county, there is a necessary reliance on the road network for mineral movements. For economic reasons it is also considered unlikely that a mineral operator would continue to excavate and subsequently stockpile mineral that could not be sold.

6.7 Key new infrastructure (e.g. new roads or railheads) is unlikely to be required to deliver the Vision and Objectives of the Core Strategy other than specific sites needing to put acceptable access arrangements in place. However, loss of port and/ or rail facilities for aggregate handling could hinder the delivery of the Plan, and so this will be monitored particularly carefully.

6.8 Other aspects of delivery include ensuring the greater use of recycled aggregate products through public sector procurement and restored minerals sites contributing to the achievement of Essex Biodiversity Action Plan targets. These matters have been discussed in detail in previous sections.

Monitoring and Review

6.9 Monitoring is important to understand the characteristics of an area, assessing the impact of policies upon this area and consequently whether the strategy is delivering sustainable development. The data collected through monitoring therefore allows for a review, and subsequently a potential modification, of the policies contained within this Plan.

6.10 The planned approach is based on the evidence available at the time of plan preparation. However, as the data that has informed plan preparation changes and is updated over time there will be a need to monitor what is happening and to respond in the most appropriate way.

6.11 The Council is required to produce an Annual Monitoring Report (AMR) to review the progress of Local Development Documents against the milestones set out in the Local Development Scheme and assess the extent to which the policies in the documents are being achieved.

6.12 A comprehensive suite of performance indicators and targets has been developed to help inform the monitoring process and these will provide the basis for the AMR. These will integrate with national indicators and targets as appropriate, whilst if national indicators change then the monitoring framework will be amended to adjust to the new indicators. Dialogue with, and Annual Monitoring Reports of, the district councils will be examined each year to assess whether the supply of aggregates might be restricting housing and/ or commercial developments, and if it is, the MPA's own AMR will consider how the problem could be rectified.

6.13 The proposed monitoring framework was consulted upon as part of the Minerals Development Document: Preferred Approach consultation that took place between November 2011 and January 2012. No significant issues arose with regard to the monitoring framework and no new indicators were suggested. As such the following monitoring framework remains

the same as that found In the Minerals Development Document: Preferred Approach December 2010. The one exception is the addition of a target to create a minimum of 200 hectares of UK priority habitat creation in Essex by 2029 through mineral site restoration or through contributions to support off-site enhancements in proximity to the extraction site. This is expressed in Policy SS11, with the 200ha figure itself being derived from a national habitat creation target as expressed Of this 200ha target, 60ha is to be comprised of open mosaic habitats (essentially a mixture of habitats) on previously developed land, 50ha is to be restored to lowland heath and lowland dry acid grassland and a further 50ha to reedbeds. Further information is contained within Appendix F of the Minerals Development Document: Preferred Approach 2010.

6.14 A full plan review will take place within five years of the date of adoption of the plan, and within five years of each previous review, as part of a monitor and manage approach to forward planning. Data gathered through the monitoring framework will be used to ascertain whether the plan is being effective in its contribution to facilitating sustainable growth and development. A second trigger is also in place; should annual monitoring show a fall in either the sand and gravel, silica sand or brick clay landbanks to below the national minimum requirement of seven years, ten years and 25 years respectively, a review of the plan will also be initiated.

6.15 Additionally, the NPPF introduced the requirement to produce a Local Aggregates Assessment (LAA) to assist in the planning of a steady and adequate supply of aggregates. The LAA produced to aid in the monitoring of the MLP includes an assessment of a rolling ten year's average of sand and gravel sales, and this will be updated annually. The resulting averages will be compared to our planned provision and Permitted Reserves to ensure that Essex continues to supply an appropriate amount of mineral to facilitate sustainable development. The assessments made by the LAA will be taken into account when the Minerals Local Plan itself is subjected to full review under the parameters set out in the preceding paragraph.

Table 8 Minerals Development Document Monitoring Framework

	Indicator	Related Objective	Target	Implementation	Data Source	Frequency of Monitoring	Responsibility
1	Production of primary land won aggregates by the MPA		The figure of 4.31mtpa is not a production target, but will be a factor in assessing the relationship with the sub-regional apportionment.	In industry control, influenced by market demands and the requirements of any windfall schemes.	Mineral industry returns.	Annually (via established annual survey for RAWP / DCLG).	ECC and mineral operators.
2	Production of secondary and recycled aggregates by MPA.		Ensuring a 'capacity gap' [(9)] after 2021 does not occur.	Through granting of planning permission (subject to environmental considerations).	Planning applications and decisions.	Annually through AMR.	ECC and waste/ mineral operators.
3	Size of landbank		At least 30mt at any time, with production potential of 4.31mtpa from permitted pits for a period of seven years.	Identification of sites to be promoted with mineral industry when landbank is in danger of falling below target level.	Mineral industry returns and details of new permissions.	Annually (via established annual survey for RAWP / DCLG).	ECC and mineral operators.
4	Locations of new recycling facilities in accordance with spatial strategy.		SARS in proximity to all key centres for growth and development.	Planning authority will support in principle applications in accordance with strategy.	Planning applications and decisions.	Annually through AMR.	ECC

9 ref: Waste Local Plan

5	Locations of new extractions in accordance with spatial strategy.		All permissions (other than windfalls) to be on identified sites in Essex	Planning authority will support in principle applications which accord with the strategy.	Planning applications and decisions.	Annually through AMR.	ECC
6	Number of safeguarded depots / wharves lost to other uses.		Nil.	Planning authority will raise objection to applications that would cause sites to be lost.	Planning applications and decisions.	Annually through AMR.	ECC and district councils.
7	Area of commercial mineral deposits sterilised by non-mineral development.		Nil.	MSAs to be identified by ECC, and objections raised to applications within them that would sterilise deposits.	Planning applications and decisions.	Annually through AMR.	ECC and district councils
8	Number of applications proposing non-road modes of transport of material (a) to or from the site (b) within the site		Maximisation.	Use of non-road modes to be encouraged through the DM process.	Planning applications and decisions.	Annually through AMR.	ECC
9	Amount of land newly restored for habitat creation.		To create a minimum of 200 hectares of UK priority habitat by 2029 through mineral site restoration or through contributions to support	ECC to promote through DM process and in subsequent site monitoring.	Planning applications and decisions, and on-site monitoring of progress.	Annually through AMR	ECC and site operators.

off-site enhancements in proximity to the extraction site.

Policy IMR1 Monitoring and Review

Policy IMR1 Monitoring and Review

The Plan will be monitored and reviewed to ensure that the County's sand and gravel landbank is maintained to at least seven years during the plan period to 2029 in accordance with national policy. This will be undertaken either by a plan review 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.

Spatial Vision

: Policy links to the delivery of theme B

Strategic Objectives: Policy links to the delivery of objectives 3,4 and 10

Preferred Approach:

Policy related to Preferred Approach 8

7 REFERENCE MATERIAL

This glossary of terms used in this Document is not intended as a source for statutory definitions, and should not be used as such. A more comprehensive planning glossary can be found at www.planningportal.gov.uk.

Also listed are links to some of the main legislation and guidance documents relevant to this Document.

Term	Definition
Aftercare (in terms of minerals and waste operations)	The steps to be taken following restoration to bring land to the required standard for its intended use once mineral working or landfill has taken place, and its subsequent maintenance.
Aggregates	Sand, gravel, crushed rock and other bulk materials used by the construction industry.
Ancient Woodland	Woodland that is believed to have existed from at least 1600AD.
Annual Monitoring Report	A yearly report submitted to the government by the local planning authority assessing progress with, and the effectiveness of, the Local Development Framework.
Apportionment (amount of minerals needed)	The splitting of national supply guidelines for minerals demand between Minerals Planning Authorities or sub regions.
Appropriate Assessment	The process and documentation associated with the statutory requirement under the EU Habitats and Species Directive.
Archaeological Assessment / Evaluation	An assessment of the potential archaeological interest of a site or building. This can be either a desk-based assessment or a field assessment, involving ground survey and small-scale pits or trial trenching carried out by professionally qualified archaeologist(s) looking for historical remains.
Archaeological Reserve	A non-statutory designation for protecting archaeological remains.
Area of Outstanding Natural Beauty	An area with statutory national landscape designation, the primary purpose of which is to conserve and enhance natural beauty. Together with National Parks, AONBs represent the nation's finest landscapes.

Term	Definition
Article 4 Direction	Direction removing some or all permitted development rights, for example within a conservation area or curtilage of a listed building. Article 4 directions are issued by local planning authorities.
Authority	Used in the sense of “local authority” or “local planning authority” (LPA), this normally refers to the district, unitary or county council which has direct decision-making responsibilities for planning matters.
Aggregate Working Party	Established in the 1970's to identify and consider problems in the supply of aggregates. They provide technical advice in relation to the supply of, and demand for, aggregates (including sand, gravel and crushed rock) to the Secretary of State, local government and mineral planning authorities.
Best and Most Versatile Agricultural Land	Land identified by the Department for Environment, Food and Rural Affairs (Defra) as falling within classification grades 1, 2 or 3a, based on the physical characteristics of the land and the limits these impose upon its agricultural uses.
Biodiversity Action Plan	A strategy prepared for a local area aimed at conserving and enhancing biological diversity.
Borrow Pit	A temporary mineral working to supply material for a specific construction project.
Buffer Zone	An area of land separating certain types of development from adjoining sensitive land uses. Often used in relation to minerals and/ or waste development.
Bund	An artificial mound or embankment used to either screen a site from view, or reduce noise emissions.
Climate Change Adaptation	A response to the effects of climate change which seeks to reduce the vulnerability of both the biological and built environment to climate change effects
Community Strategy	A strategy prepared by a local authority/ local strategic partnership to improve local quality of life and aspirations, under the Local Government Act 2000.
Conservation Area	Areas of special architectural or historic interest, the character or appearance of which it is desirable to preserve or enhance.

Term	Definition
Construction, Demolition and Excavation Wastes	Controlled waste arising from the construction, repair, maintenance and demolition of buildings and structures and the excavation of minerals. It mostly includes brick, concrete, hardcore, subsoil and topsoil, but can include timber, metal, plastics and occasionally special hazardous waste materials.
Core Strategy (Minerals Core Strategy)	Sets out the long-term spatial vision for the local planning authority area and the strategic policies and proposals to deliver that vision.
County Council (Essex County Council)	The local authority responsible for waste and minerals planning functions in non-unitary, and non-national park, local authority areas. A county council may provide advice and proposals on strategic planning issues to the Regional Planning Body.
Cumulative Impact	A number of developments in a locality or a continuous activity over time that together may have an increased impact on the environment, local community or economy
Deconstruction	The selective dismantling of a building, specifically preserving mineral and other construction materials for re-use and recycling. It differs from demolition where a site is cleared of its building by the quickest and most cost effective means.
Department of Communities and Local Government	'Communities and Local Government' is the successor department to the Office of the Deputy Prime Minister (ODPM). It is an expanded department with a powerful new remit to promote community cohesion and equality, as well as responsibility for housing, urban regeneration, planning and local government. It provides policy guidance within Planning Policy Statements (PPSs), Minerals Policy Statements (MPSs) and Planning Policy Guidance (PPG) for example.
Development Documents including Minerals Development Documents (MDD's)	Development Documents are prepared by local planning authorities and outline the key development goals of the local development framework. Development Documents include the core strategy, development management policies, site-specific allocations of land and, where needed, area action plans. There will also be an adopted proposals map which illustrates the spatial extent of policies that must be prepared and maintained to accompany all MDDs and WDDs. All must be subject to rigorous procedures of community

Term	Definition
	involvement, consultation and independent examination, and adopted after receipt of the inspector's binding report. Once adopted, development control decisions must be made in accordance with them unless material considerations indicate otherwise. MDDs and WDDs form an essential part of the Local Development Framework.
Development Management	The process whereby a local planning authority manages development by considering the merits of a planning application and determines the application having regard to the development plan and all other material considerations.
East of England Aggregates Working Party	The Aggregates Working Party that Essex County Council is a member of through being the Minerals Planning Authority for the county.
Enforcement	Procedures by a local planning authority to ensure that the terms and conditions of a planning decision are carried out, or that development carried out without planning permission is brought under control.
English Heritage	Government advisors with responsibility for all aspects of protecting and promoting the historic environment. English Heritage is responsible for advising the government on the listing of historic buildings.
Environment Agency	A government body that aims to prevent or minimise the effects of pollution on the environment and issues permits to monitor and control activities that handle or produce waste. It also provides up-to-date information on waste management and deals with other matters such as water issues including flood protection advice.
Environmental Impact Assessment and Environmental Statement (ES)	Applicants for certain types of development, usually more significant schemes, are required to submit an environmental statement accompanying a planning application. This evaluates the likely environmental impacts of the development, together with an assessment of how the severity of the impacts could be mitigated.
Equality Impact Assessment	An assessment made on a policy document to ensure that the policies contained within would not discriminate against any groups categorised as being disadvantaged or vulnerable.

Term	Definition
Essex Rural Strategy	Document setting out the partnership priorities for the future of Rural Essex. A copy can be reviewed at http://www.essexcc.gov.uk/vip8/ecc/ECCWebsite/dis/guc.jsp?channelOid=27961&guideOid=32946&guideContentOid=32829
Examination in Public	A term given to the public examination of Development Plan Documents
Flood Risk Assessment	An assessment of the flooding risk in a particular area so that development needs and mitigation measures can be carefully considered.
General Permitted Development Order	A set of regulations made by the government which grants planning permission for specified limited or minor forms of development.
Groundwater	An important part of the natural water cycle present underground, within strata known as aquifers.
Habitats Directive	European legislation aiming to protect wild plants, animals and habitats making up our natural environment. For further information, see www.environment-agency.gov.uk/business/regulation/31913.aspx
Habitats Regulation Assessment	The assessment of the impacts of implementing a plan or policy on a Natura 2000 Site. It considers the impacts of a land use plan against the conservation objectives of the site and ascertains whether any impacts would adversely affect the integrity of the site.
Highways Agency	An executive agency of the Department of Transport. The Highways Agency is responsible for operating, maintaining and improving the motorway and trunk road network of England.
Issues & Options	The pre-submission stages of Development Document production.
Landbank	In the context of the MLP this is the stock of planning permissions for the winning and working of minerals.
Landscape Character	The distinct and recognisable pattern of elements that occur consistently in a particular type of landscape. It reflects particular combinations of geology, landform, soils, vegetation, land use and human settlement.
Lawful Development Certificate	A certificate issued by a local planning authority, on application, stating that an existing or proposed use or other forms of development can be considered as lawful for planning purposes.

Term	Definition
Listed Building	A building of special architectural or historic interest. Listed buildings are graded I, II* or II with grade I being the highest. English Heritage is responsible for designating buildings for listing in England. See also Planning (Listed Buildings & Conservation Areas) Act 1990 at www.opsi.gov.uk/acts/acts1990/Ukpga_19900009_en_1.htm
Living Carbon Sink	Carbon Sinks are reservoirs which accumulate and store carbon compounds for an indefinite period, including removing carbon dioxide from the atmosphere. Living Carbon Sinks are natural reservoirs and include forests and reedbeds.
Local Aggregate Assessment	Aids in the planning of a steady and adequate supply of minerals by assessing historic sales data and accounting for all potential supply options. The assessment is devised by the MPA and incorporates the advice of the relevant AWP.
Local Development Documents	These include Development Plan Documents (which form part of the statutory development plan) and Supplementary Planning Documents (which do not form part of the statutory development plan). LDDs collectively deliver the spatial planning strategy for the local planning authority's area.
Local Development Framework	The Local Development Framework (LDF) is a non-statutory term used to describe a folder of documents, which includes all the local planning authority's local development documents including the RSS, other relevant authorities development documents, the Annual Monitoring Report and the SCI.
Local Development Order	An order made by a local planning authority extending permitted development rights for certain forms of development, with regard to a relevant Local Development Document.
Local Economic Partnership	A partnership between local authorities and businesses which cover natural economic areas. Priorities include ensuring that planning and infrastructure investment supports business need, as well as supporting enterprise, global trade and inward investment.
Local Plan	A development plan prepared by district and other local planning authorities, including minerals and waste planning authorities, to guide development in their administrative area.
Local Plan Regulations 2012	Govern the process by which local councils prepare development plans and how these plans should be consulted upon.

Term	Definition
Local Planning Authority	The local authority or council that is empowered by law to exercise planning functions. Often the local borough or district council. County councils are the authority for waste and minerals matters.
Local Wildlife Sites	Areas of land with significant wildlife value locally. These were previously known as Sites of Importance for Nature Conservation (SINCs) and County Wildlife Sites (CWSs)
Localism Act 2011	The Localism Act seeks to give effect to the Government's ambitions to decentralise power away from Whitehall and back into the hands of local councils, communities and individuals to better work on local priorities.
Low Level Restoration	The re-establishment of land following mineral extraction, without infilling (filling the hole created by extraction).
Material Consideration	A matter that should be taken into account in deciding a planning application or on an appeal against a planning decision.
Mineral Consultation Area	An area identified in order to ensure consultation with the relevant minerals planning authority, on applications for non-mineral development in that area.
Mineral Development	Any development primarily involving the extraction, processing, storage, transportation or manufacture of minerals. It includes associated mineral development such as rail aggregate depots, facilities for aggregate recycling, secondary processing facilities and coastal wharves for mineral transhipment.
Mineral Extraction	Refers to the quarrying of mineral and the ancillary development associated with this such as processing plants, site offices and weighbridges.
Mineral Workings	Same as above.
Mineral Development Document	See Development Documents
Mineral Planning Authority	The planning authority responsible for planning control of minerals development. Essex County Council is the MPA for Essex.

Term	Definition
Mineral Planning Statement	Minerals Planning Statements are published by the Department for Communities and Local Government. Minerals Planning Statements will eventually replace Minerals Planning Guidance Notes.
Mineral Products Association	National trade association for companies involved in the supply of minerals such as sand and gravel. See www.qpa.org for more information.
Mineral Resource	A potential mineral deposit where the quality and quantity of material present has not been tested.
Mineral Reserves	Mineral deposits which have been tested to establish the quality and quantity of material present and which could be economically and technically exploited.
Mineral Safeguarding Area	An area designated by Minerals Planning Authorities which covers known deposits of minerals which are desired to be kept safeguarded from unnecessary sterilisation by non-mineral development.
Mineral Working Environmental Awards Scheme	Event set up every 2 years by ECC in conjunction with the Quarry Products Association, recognising sites judged to operate in the most environmentally-sensitive manner. See http://www.essexcc.gov.uk/vip8/ecc/ECCWebsite/dis/guc.jsp?channelOid=27961&guideOid=32942&guideContentOid=15986
Minerals & Waste Development Scheme	The programme for producing minerals and waste development documents.
Minerals Plan	A statutory development plan prepared by a minerals planning authority setting out policies for the control of development constituting of the winning and working of minerals or the deposit of mineral waste. Now being superseded by the MWDF.

Term	Definition
National Nature Reserves	Areas designated with the aim of securing protection and appropriate management of the most important areas of wildlife habitat, and to provide a resource for scientific research. All National Nature Reserves are Sites of Special Scientific Interest.
National Planning Policy Framework	Sets out the Government's planning policies for England and how these are expected to be applied. It provides a framework within which local people and their accountable councils can produce their own distinctive local and neighbourhood plans, which reflect the needs and priorities of their communities.
Natura 2000	An ecological network of protected sites, comprising of Special Protection Areas (sites important for bird populations) and Special Areas of Conservation (designated for all species other than birds, and their habitats).
Natural England	Body formed by bringing together English Nature, the landscape, access and recreation elements of the Countryside Agency and the environmental land management functions of the Rural Development Service. For further information, see http://www.naturalengland.org.uk/about/default.htm
Office of the Deputy Prime Minister	See Department of Communities & Local Government
Overburden	Soil and other material that overlay a mineral deposit, and which has to be excavated and either tipped or stockpiled to gain access to the underlying mineral.
Permitted Reserves	Mineral deposits with the benefit of planning permission for extraction.
Planning & Compulsory Purchase Act 2004	Requires the production of Local Development Frameworks within a local and regional structure. This requires Development Documents to have a positive spatial strategy and vision for the authority at the end of the plan period, as well as policies for Development Management. See www.opsi.gov.uk/acts/acts2004/20040005.htm for further information
Planning Inspectorate	The Planning Inspectorate is the government body responsible for: • the processing of planning and enforcement appeals

Term	Definition
	• holding inquiries into local development plans • listed building consent appeals • advertisement appeals • reporting on planning applications called in for decision by the Secretary of State. • examinations of development plan documents and statements of community involvement • various compulsory purchase orders, rights of way cases; and cases arising from the Environmental Protection and Water Acts and the Transport and Works Act and other highways legislation are also dealt with. The work is set in agreement with Department for Transport, the Department for Communities and Local Government and the National Assembly for Wales.
Planning Policy Statement	Issued by central government to replace the existing Planning Policy Guidance notes in order to provide greater clarity and to remove from national policy advice on practical implementation, which is better expressed as guidance rather than policy. These were cancelled upon introduction of the NPPF in March 2012 although being national policy they informed plan preparation up to that date.
Policies Map	A map of the area which the associated Development Plan covers which highlights spatially the operating extent of the policies contained within.
Preferred Areas	An area within a mineral consultation area containing mineral resources which can be identified with a high degree of provision and where there is a strong presumption in favour of extraction.
Preferred Approach	The stage of development document production following the Issues & Options stage and before the submission document is produced.
Primary Aggregates	Naturally occurring sand and gravel, and crushed rock, used for construction purposes. Crushed rock does not exist in economically viable deposits within Essex and needs to be imported.
Protected Species	Plants and animal species afforded protection under certain Acts and Regulations.
Public Right of Way	A public right of way is a highway over which the public have a right of access along the route.

Term	Definition
Ramsar Sites	Sites designated under the European Ramsar Convention to protect wetlands that are of international importance, particularly as waterfowl habitats.
Recycled Aggregates	Aggregates comprising waste materials (for example damaged bricks, broken concrete, brickwork, masonry and tarmac) from roads, construction and demolition sites that have been recovered and recycled in the form of manufactured materials such as concrete, brick, plasterboard and ceramic articles.
Regionally Important Geological and Geomorphological Site	A non-statutory regionally important geological or geo-morphological site (basically relating to rocks, the Earth's structure and landform).
Restoration (in terms. of minerals operations)	The method used to positively enhance the site once mineral extraction has ceased. This could be to restore the site to its original state or another suitable use, by filling the void to former levels, flooding the void or using low level restoration techniques using no or minimal fill.
Saved Policies / Saved Plan	Policies within unitary development plans, local plans and structure plans that are in force until such time as Local Development Documents are adopted.
Secondary Aggregates	Includes by-product wastes from industrial processes, synthetic materials and soft rock used with or without processing as aggregate or cement additives.
Secretary Of State for Communities and Local Government	The lead Minister for all policies relating to Town & Country Planning, having powers of intervention on Development Plans and Planning Casework under certain circumstances.
Site of Special Scientific Interest	A site identified under the Wildlife and Countryside Act 1981 (as amended by the Countryside and Rights of Way Act 2000) as an area of special interest by reason of any of its flora, fauna, geological or physiographical features (basically, plants, animals, and natural features relating to the Earth's structure).
Source Protection Zone	The Environment Agency identifies Source Protection Zones to protect groundwater (especially public water supply) from developments that may damage its quality.
Special Area Of Conservation	A site designated under the European Community Habitats Directive, to protect internationally important natural habitats and species.

Term	Definition
Soundness	A Development Plan Document is considered sound if it is based upon good evidence and has been prepared in accordance with all the necessary procedures including the measures set out in the authority's Statement of Community Involvement.
Spatial (Planning)	Spatial planning goes beyond traditional land use planning, bringing together and integrating policies for the development and use of land with other policies and programmes which influence the nature of places and how they function.
Special Protection Areas	Sites classified under the European Community Directive on Wild Birds to protect internationally important bird species.
Statement of Community Involvement	The Statement of Community Involvement sets out the processes to be used by the local authority in involving the community in the preparation, alteration and continuing review of all local development documents and development control decisions. The Statement of Community Involvement is an essential part of the new-look Local Development Frameworks.
Statement of Compliance	A report or statement issued by local planning authorities explaining how they have complied with their Statement of Community Involvement during consultation on Local Development Documents.
Statutory	Required by law (statute), usually through an Act of Parliament.
Statutory Body	A government-appointed body set up to give advice and be consulted for comment upon development plans and planning applications affecting matters of public interest. Examples of statutory bodies include: Countryside Agency, English Heritage, Environment Agency, Health & Safety Executive, Natural England, Regional Development Agency, and Sport England.
Statutory Undertakers	Bodies carrying out functions of a public character under a statutory power. They may either be in public or private ownership and include the Post Office, the Civil Aviation Authority, the Environment Agency and any water undertaker, public gas transporters and suppliers of electricity, amongst others.
Sterilisation	When development or land use changes prevent possible mineral exploitation in the foreseeable future.

Term	Definition
Strategic Environmental Assessment	SEAs integrate environmental considerations into the preperation and adoption of plans and programmes and emanate from a high level national and international commitment to sustainable development as per The European Directive 2000/42/EC "on the assessment of the effects of certain plans and programmes on the environment" (the SEA Directive). Government guidance considers that it is possible to satisfy the requirements for Sustainability Appraisal and SEA through a single approach provided that the requirements of the SEA Directive are met. The environmental, economic and social effects of the plan are presented in the form of an iterative Environmental Report which informs each consultation stage of the Minerals Local Plan's development.
Structure Plan	An old-style development plan, which sets out strategic planning policies for the County and forms the basis for detailed policies in local plans. These plans will continue to operate for a time after the commencement of the new development plan system, due to transitional provisions under planning reform. Most of the planning policies contained in the Adopted Structure Plan expired on the 27 September 2007 and are therefore no longer in effect. This is a consequence of the provisions of the Planning & Compulsory Purchase Act 2004. Most of the planning policies contained in the Essex Adopted Structure Plan expired on the 27 September 2007, however a number have been saved by the Secretary of State. Further Information can be found at: http://www.essexcc.gov.uk/vip8/ecc/ECCWebsite/dis/guc.jsp?channelOid=27961&guideOid=32938&guideContentOid=16002
Submission Document	A Development Plan Document submitted to the Secretary of State for independent examination by a government-appointed planning inspector.
Submission of Details	The formal submission of a scheme / information for the approval of the planning authority in order to address the requirements of a planning condition.
Supplementary Planning Document	A Supplementary Planning Document is a Local Development Document that may cover a range of issues, thematic or site specific, and provides further detail of policies and proposals in a parent Development Plan Document.

Term	Definition
Sustainable Drainage System	A drainage system which slows down rainwater run-off from a development and therefore minimising or preventing flooding events. Some SuDS can also remove pollutants from surface water run-off.
Sustainability Appraisal	Sustainability Appraisals examine the effects of proposed plans and programmes taking into account environmental, economic and social considerations in order to promote sustainable development in accordance with the Planning and Compulsory Purchase Act 2004 (as amended). Government guidance considers that it is possible to satisfy the requirements for SA and Strategic Environmental Assessment through a single approach provided that the requirements of the SEA Directive are met. The environmental, economic and social effects of the plan are presented in the form of an iterative Environmental Report which informs each consultation stage of the Minerals Local Plan's development.
Town & Country Planning (Local Development)(England) Regulations 2004	The formal regulations setting out the scope of local development documents and the process for preparing them, including consultation, the examination of DPDs, publication and notification arrangements. See www.opsi.gov.uk/si/si2004/20042204.htm
Traffic Assessment	The local validation check list states that a Transport Assessment (TA) is to be required where there is likely to be a significant amount of traffic generated. This is defined as generating in excess of 50pcu (passenger car units) in the peak hour. PCU's are a calculation of all types of vehicles as car equivalents: an HGV is 2 car units. Mineral sites generate few car movements, but often significant volumes of HGV traffic. This can have major impacts on neighbouring residents and businesses, and is often the cause of most local concern. A TA forms part of an Environmental Statement submitted with most applications requiring Environmental Impact Assessment (EIA). However smaller developments not requiring an EIA do not submit a TA.
Traffic Impact Assessment	An assessment of the effects upon the surrounding area by traffic as a result of a development, such as increased traffic flows that may require highway improvements.

Term	Definition
Traffic Statement	A short, straightforward document, dealing with impacts on the transport network accompanying planning applications without providing detailed capacity assessments. A TS is required by the new validation checklists (June 2008) for all development that fall beneath the threshold for a TA but still have some form of material impact on the highway
Tree Preservation Order	A mechanism for securing the preservation of single or groups of trees of acknowledged amenity value. A tree subject to a tree preservation order may not normally be topped, lopped or felled without the consent of the local planning authority.
Unauthorised Development	Development that has taken or is taking place without the benefit of planning permission. It may then risk being the subject of enforcement action.
Wildlife & Countryside Act (1981)	Mechanism for the legislative protection of wildlife in Great Britain. See www.jncc.gov.uk/page-1377 for more information.
Wildlife Corridor	Strips of land (for example, along a hedgerow) conserved and managed for wildlife, usually linking more extensive wildlife habitats.
Windfall Site	A site not specifically allocated for development in a development plan, but which becomes available for development during the lifetime of a plan.

Appendix One List Of Policies Which Will Be Cancelled When the Essex Minerals Plan is Adopted

Appendix One List Of Policies Which Will Be Cancelled When the Essex Minerals Plan is Adopted

Appendix One:

List of policies which will be cancelled when this Essex Minerals Local Plan is adopted

Essex Minerals Local Plan (adopted January 1997)

The Secretary of State issued a Direction on the 20 September 2007 to save the policies appearing in the Essex Minerals Local Plan (adopted January 1997) for an indefinite period. This Direction was issued under paragraph 1(3) of Schedule 8 to the Planning & Compulsory Purchase Act 2004.

However, once the new Essex Minerals Local Plan is adopted these existing policies will be cancelled. The existing policies are,

- Policy MLP1 – Mineral Reserves
- Policy MLP2 – Mineral Need
- Policy MLP3 – Transportation
- Policy MLP4 – Non-Preferred Sites
- Policy MLP5 – Aggregate Recycling
- Policy MLP6 – Rail Depots: Site Considerations
- Policy MLP7 – Marine Wharves, Dredged Materials
- Policy MLP8 – Site Restoration, Agriculture
- Policy MLP9 – Working and Restoration
- Policy MLP10 – Primary Processing Plant and Buildings
- Policy MLP11 – Secondary Processing Plant and Buildings
- Policy MLP12 – Programming, Site Working
- Policy MLP13 – Development Control, Policy Criteria

Essex and Southend-on-Sea Replacement Structure Plan (adopted April 2001)

On the 26 September 2007 the former Government Regional Office for the East of England wrote to Essex County Council to advise which existing Structure Plan policies should be saved for an indefinite period after 27 September 2007. A Direction was issued under Schedule 8 of the Planning & Compulsory Purchase Act 2004 identifying several saved policies. The policies included,

- Policy MIN4 – Sterilisation and Safeguarding of Mineral Sites

However, once the new Essex Minerals Local Plan is adopted this existing policy will be cancelled.

East of England Plan (Regional Spatial Strategy)

Policy M1 of the Approved East of England Plan (May 2008) and the Draft Revisions to that Plan (approved by the former East of England Regional Assembly in March 2010 and submitted to Government) both set out sub-regional apportionment figures for land-won sand and gravel and crushed rock for each mineral planning authority in the East of England.

The Coalition Government intends to abolish the East of England Plan in its entirety in due course. If this abolition does not happen before the new Essex Minerals Local Plan is adopted, then the adoption of the new Essex Minerals Local Plan will, in any event, make existing Policy M1 redundant and of no effect.

Appendix Two Background Context to Plan Preparation

Appendix Two Background Context to Plan Preparation

Appendix Two:

Background context to plan preparation

Introduction

This Appendix gives a brief explanation of the various matters that have helped shape and influence the preparation of the Plan. In particular, the technical evidence base, environmental assessments, public and stakeholder engagement, national and other policy guidance, and Duty to Co-operate.

Key processes supporting plan production

Minerals & Waste Development Scheme

The Plan has been prepared in line with the adopted 'Essex Minerals & Waste Development Scheme' (MWDS). This document explains the development plan documents the County Council is preparing for minerals & waste planning, their broad scope and content, and the timetable for key stages.

Technical Evidence Base

A large collection of technical evidence supports the preparation of the Plan. Appendix Three provides a list of the main evidence base documents. Key amongst these are:-

- Essex Minerals Annual Monitoring Reports
- Local Aggregate Assessment
- East of England Aggregate Working Party: Annual Monitoring Reports
- Contextual Baseline Report

Environmental Assessments

The Plan has been informed throughout its preparation by various environmental assessments. This meets the legal requirements of EU Directives, the Planning & Compulsory Purchase Act 2004, and national planning policy. The main assessments cover,

- Sustainability Appraisal (SA) – The SA framework has assessed the Plan's vision & key objectives, spatial strategy, site-specific proposals, and policies against a series of sustainability objectives. Where the SA process has recommended improvements to the Plan these have been incorporated.

- Strategic Environmental Assessment (SEA) – This must be carried out on proposals for certain types of major development. The County Council has followed Government guidance which recommends SEA be integrated into SA in one combined approach.

- Habitats Regulation Assessment (HRA) – Where a plan or development project could have a significant effect on a Natura 2000 site it must be the subject of an 'appropriate assessment'. HRA has been carried out on the Plan and where 'appropriate assessment' is considered necessary in relation to specific Preferred Sites, this has been identified.

- Strategic Flood Risk Assessment (SFRA) – A 'Level 1: Minerals and Waste Strategic Flood Risk Assessment' was completed to inform the Plan's preparation. This assessed the flood risk associated with potential minerals and waste site allocations in Essex and provided an overview of flood risk issues across all twelve districts in the County.

Public Consultation Process

The Plan has been prepared in line with the Statement of Community Involvement (SCI) adopted by the County Council. The SCI sets out the overall process and methods for public and stakeholder involvement during different stages of the Plan's preparation. The minerals industry, landowners, local councils, community organisations, members of the public, and key stakeholders have been fully involved throughout

The key stages of public consultation which have informed Plan preparation have been:-

- Core Strategy: Issues & Options paper (Dec. 2005)
- Development Control: Issues & Options paper (Dec. 2005)
- Site Allocations: Issues & Options paper (Dec. 2005)
- Additional Site Allocations: Issues & Options paper (March 2006)

- Further Issues & Options paper (Jan. 2009)
- Site Allocations: Issues & Options paper (Aug. 2009)
- Preferred Approach paper (Dec. 2010)
- Site Allocations: Issues & Options paper (Aug. 2011)

All public consultation responses have been carefully analysed following each stage, and used to inform preparation of the vision, strategic objectives, spatial planning strategy, strategic policies, site allocation proposals, and development management policies for the Plan.

Equality Impact Assessment

There is a general legal duty on the Council to prevent any unlawful discrimination in carrying out its local government functions, and promote equality of opportunity between men and women, different racial groups, and other equality groups. An Equality Impact Assessment (EqIA) has been carried out on the Plan.

The EqIA complies with all relevant legal, policy, and best practice guidance published by the Government; and is also in line with the County Council's own guidance on undertaking EqIAs. The EqIA concluded that the Plan raised no issues of concern and no further action is required.

Linkage to other plans

National planning policies

The Plan must be consistent with national planning policies set out in the National Planning Policy Framework (DCLG, 27 March 2012). The NPPF abolished over 1,000 pages of existing national planning policy guidance (used in the early stages of plan preparation) and replaced it with a single brief document of about 50 pages. The aim of the NPPF is to provide a clearer, simpler, more streamlined and coherent framework, which is easier to understand and put into practice. This Plan will be examined on the basis of its consistency with the NPPF.

The NPPF is supported by a separate interim report entitled 'Technical Guidance for the NPPF' published at the same time. This report provides guidance about managing flood risk and minerals policy. In particular, it covers controlling the environmental impacts of mineral working, the restoration and after-care of sites, and land-banks for industrial minerals.

Regional planning policies

The Localism Act 2011 contains proposals to abolish regional spatial strategies (RSS) in England including the East of England Plan. Until this is legally completed, at the time of writing, the East of England Plan remains part of the statutory development plan. Planning decisions have to be taken in accordance with the development plan unless material considerations indicate otherwise.

Consequently, the Plan has been prepared to be in general conformity with the East of England Plan. The main regional policies of relevance to the Plan include,

- Policies ENV7 and WM6 in the Approved East of England Plan (May 2008) which promote efficiency in the use of natural resources, more sustainable construction (including waste minimisation), making maximum use of recycled materials, and waste recovery and recycling arising from development.

- Policy WM2 in the draft Revisions (approved by the former East of England Regional Assembly in March 2010 and submitted to Government). This policy proposes a large reduction in the amount of 'construction, demolition, and excavation waste sent to landfill. Additional waste management facilities will be required to achieve increased recycling and re-use of material from this waste stream. Under the policy, waste planning authorities should identify sites for the processing and treatment of construction & demolition waste to achieve 90% diversion of this waste stream from landfill by 2031.

- Policy M1 in the Submitted East of England Plan (March 2010) updates the sub-regional apportionment of land-won sand & gravel and crushed rock in line with the revised National and Sub-national Guidelines 2005 - 2020 as agreed by the East of England Aggregates Working Party in March 2010. As directed by the NPPF, the Local Aggregate Assessment will now monitor the mineral provision made within this plan on an annual basis.

South East Local Enterprise Partnership

The South East LEP was established in 2011 to promote economic and business performance in the combined area of East Sussex, Essex, Kent, Medway, Southend and Thurrock. The LEP has established its vision, challenges, objectives, and key activities as an enabling body over the next few years. The Plan is in broad agreement with these matters throughout.

EssexWorks Corporate Plan 2012 - 2017

The EssexWorks Corporate Plan sets out the over-arching vision, priorities and preferred outcomes for the Council as a whole. The Minerals Local Plan is in agreement with the vision, priorities and outcomes relevant to mineral development.

Integrated CountyStrategy 2010

The Integrated County Strategy (ICS, December 2010) was produced on behalf of the Essex Chief Executives' Association with agreement from all 15 county, unitary and district authorities of Greater Essex. The ICS provides a vision for Greater Essex identifying the investment needed to maximise economic growth and directing this to a series of priority projects.

The strategic focus of the ICS includes Thames Gateway South Essex, KeyTowns and Low Carbon Energy with key development, growth and regeneration priorities identified under each theme. This Plan is in broad policy agreement with the ICS and supports the delivery of its key strategic priorities by providing for an adequate and steady supply of minerals to facilitate development.

The Essex Economic Growth Strategy 2012.

This strategy was produced by reviewing economic performance data and analysing the barriers and opportunities for economic growth in Essex. The strategy identifies activities that the Council can undertake to support economic growth in the County through a range of services including 'Enterprise and Innovation', 'Education, Skills and Employability' and 'Locations for Growth and Infrastructure'. The Council has shared the strategy with district, borough and city councils and will work with local authorities on shared priorities. The Minerals Local Plan will aid in the facilitation of these shared priorities which were originally conceptualised in the Integrated County Strategy 2010.

Sustainable community strategies

Sustainable community strategies (SCSs) set out the long-term vision and key outcomes to deliver a more sustainable pattern of development for the future. They tackle local needs and cover a wide range of themes for local communities. The Plan is in broad policy agreement with SCSs and helps deliver their vision and outcomes.

Full regard has been paid to:

- Essex County Council's vision statement and corporate strategy,
- The Essex Sustainable Community Strategy (including the Local Area Agreement), and
- The individual sustainable community strategies of the twelve Essex district councils.

Appendix Four provides an overview of the policy linkage between the Plan and the vision & aspirations of these other strategy documents. It confirms that there is close agreement between them in the following thematic areas,

- Achieving the sustainable and efficient use of natural resources
- Achieving the reduction of waste materials supported by increased recycling
- Promoting the recycling and re-use of materials
- Improving public health and well-being
- Improving the natural environment with increased opportunities for biodiversity creation and outdoor recreation and leisure
- Reducing the carbon footprint and adapting to climate change impacts.

In taking account of these aspects, the Plan contributes to the achievement of the local vision for Essex. Consideration of these other strategies has informed and shaped both the vision and strategic objectives of the Plan.

The Essex Local Transport Plan 2011

The Essex Local Transport Plan (ECC, June 2011) consists of two main parts,

1. The Essex Transport Strategy – which sets out the vision for transport, the outcomes to be achieved over a fifteen year period, the transport policies and the broad approach to delivering these,
2. An Implementation Plan – which sets out in greater detail how the outcomes of the strategy will be delivered and monitored; and the priorities for transport investment in the short-term.

The Essex Transport Strategy (2011-2026) seeks to achieve five broad outcomes, namely to:

- Provide connectivity for Essex communities and international gateways to support sustainable economic growth and regeneration,
- Reduce carbon dioxide emissions and improve air quality through lifestyle changes, innovation and technology,
- Improve safety on the transport network and enhance and promote a safe travelling environment,
- Secure and maintain all transport assets to an appropriate standard and ensure that the network is available for use,
- Provide sustainable access and travel choice for Essex residents to help create sustainable communities.

The County Council is the 'local highway authority' legally responsible for the management of highways within Essex (excluding motorways and trunk roads which are the responsibility of the Highways Agency). The Council works to the adopted 'Highways Development Management Policies' document (ECC, February 2011) which sets out, amongst other things, its transport policies which apply to all proposed land-use development within the County.

In preparing the Plan, full consideration has been given to the transport strategy and policies included in the Essex Transport Plan and the Highways Development Management Policies, and also to Highways Agency policy guidance.

District & borough local plans and LDFs

The Plan must be read in conjunction with the local policy guidance set out in separate Local Development Frameworks/ Local Plans being prepared by the twelve district/ borough/ city councils in Essex, where these carry weight or have been adopted. In the absence of an up-to-date and relevant LDF/ Local Plan, the detailed provisions of paragraphs 214, 215, and 216 of the National Planning Policy Framework will apply.

This Plan forms part of the Essex District/ Borough Local Development Framework/ Local Plan and its mineral policies should be taken into account when determining non-minerals related development. District and borough councils are required to include on their own Adopted Policies Map, any relevant minerals planning matters such as mineral safeguarding areas, safeguarded sites, and any mineral site allocations appearing in this Plan.

Duty to Co-operate

The Localism Act 2011 recently introduced a new 'Duty to Co-operate' to ensure that constructive and active engagement has taken place between local authorities and other public bodies during plan preparation. The County Council has fully complied with this duty in terms of both legal requirements and the tests of soundness when preparing the Plan. Full details of how compliance has been achieved is provided in a separate technical report which is available.

Appendix Three Main Evidence Base Documents

Appendix Three Main Evidence Base Documents

Appendix Three:

The main evidence base documents which have supported preparation of the Plan

Legislation

- Planning & Compulsory Purchase Act 2004,
- Town & Country Planning (Local Planning) (England) Regulations 2012,
- Localism Act 2011.

National Policy Documents

- National Planning Policy Framework, DCLG, March 2012,
- Draft National Planning Policy Framework, DCLG, July 2011 (including the supporting Impact Assessment, Consultation Report, and Ministerial Statement),
- The 'National and Regional Guidelines for Aggregates Provision in England 2005-2020' (DCLG, June 2009),
- Minerals Policy Statement 1: Planning and Minerals (MPS1, DCLG, 2006) – which set out the overall policy approach to minerals planning in England. It had annexes dealing with aggregates, brick clay, building stone, oil and gas,
- Planning and Minerals: Practice Guide (DCLG, 2006) – which provided examples and principles of good practice and background information in support of MPS1 for mineral planning authorities,
- Minerals Policy Statement 2: Controlling and Mitigating the Environmental Effects of Minerals Extraction in England (MPS2, DCLG, 2006) – which set out the policies and considerations that should be followed in determining planning applications,
- Minerals Planning Guidance note 7: Reclamation of Minerals Working (MPG7, DCLG, 1996) – which set out a policy approach towards the effective reclamation and after-use of mineral working,
- Minerals Planning Guidance note 15: Provision of Silica Sand in England (MPG15, DCLG, 1996) – which provided guidance on how an adequate and steady supply of silica sand can be maintained,
- Planning Policy Statement 1: Delivering Sustainable Development (DCLG, 2005) – which required planning to promote more sustainable patterns of development, avoiding flood risk and responding to the impacts of expected changes in climatic conditions. This PPS had a separate supporting supplement dealing with 'climate change' (DCLG, 2008) requiring planning to shape places with lower carbon emissions and resilient to changes in climatic conditions,
- Planning Policy Statement 25: Development and Flood Risk (DCLG, 2006) – which required planning to prevent inappropriate development in areas at flood risk.

Regional Planning

- Approved East of England Plan (DCLG, May 2008),
- Draft Revisions to the East of England Plan (approved by the former East of England Regional Assembly in March 2010 and submitted to Government).

EssexCounty Council Documents (General)

- Essex and Southend on Sea Replacement Structure Plan, April 2001,
- EssexWorks Commitment 2012-2017 (Essex County Council, Vision Statement),
- EssexWorks Corporate Plan 2012-2017, and associated annexes (Essex County Council),
- The 'Waste Development Document: Capacity Gap Compilation Report' (ECC and SouthendBC, Sept.2010),
- The Essex Local Transport Plan (ECC, June 2011),
- The Essex Economic Growth Strategy (ECC, September 2012)
- Development Management Policies: Transport (ECC, February 2011).

Essex Minerals Plan (MDD) Documents (in chronological order)

- Essex Minerals Local Plan (adopted January 1997).

<u>Phase 1 Consultation:</u>

- Minerals Development Document: Core Strategy: Issues & Options paper (Dec. 2005),
- Minerals Development Document: Site Allocations: Issues & Options paper (Dec. 2005),
- Minerals Development Document: Development Control: Issues & Options paper (Dec. 2005).

<u>Phase 2 Consultation</u>

- Minerals Development Document: Additional Site Allocations: Issues & Options paper (March 2006).

<u>Phase 3 Consultation</u>

- Minerals Development Document: Contextual Baseline Report (ECC, January 2009),
- Minerals Development Document: Contextual Baseline Report, Appendices (ECC, January 2009),

- Minerals Development Document: Further Issues & Options paper (Jan. 2009),
- Minerals Development Document: Further Issues & Options paper, Summary (Jan. 2009),
- Minerals Development Document: Further Issues & Options paper, Appendices (Jan. 2009).

Phase 4 Consultation

- Level 1: Minerals & Waste Strategic Flood Risk Assessment, ECC with Scott Wilson, Final Report (Sept. 2011),
- Preferred Approach: Habitat Regulations Assessment, Appropriate Assessment Report, ECC with Scott Wilson (Oct. 2010),
- Minerals Development Document: Preferred Approach paper (Dec. 2010),
- Minerals Development Document: Preferred Approach paper, Summary (Dec. 2010),
- Minerals Development Document: Preferred Approach paper, Appendices Volume 1 (Dec. 2010),
- Minerals Development Document: Preferred Approach paper, Appendices Volume 2 (Dec. 2010),
- Minerals Development Document: Preferred Approach paper, – Sustainability Appraisal And Strategic Environmental Assessment, Environmental Report (Dec. 2010),
- Minerals Development Document: Preferred Approach paper, – Sustainability Appraisal And Strategic Environmental Assessment, Environmental Report: Non-Technical Summary (Dec. 2010),
- Minerals Development Document: Preferred Approach paper, – Sustainability Appraisal And Strategic Environmental Assessment, Environmental Report: Appendices (Dec. 2010).

Phase 5 Consultation

- Minerals Development Document: Site Allocations: Issues & Options paper (Aug. 2011),
- Minerals Development Document: Site Allocations: Issues & Options paper (Aug. 2011) – Sustainability Appraisal And Strategic Environmental Assessment Statement on Additional Sites (Aug. 2011).

Sustainable Community Strategies

- The Essex Strategy 2008-2018 (Essex Partnership, Sustainable Community Strategy),
- The Local Area Agreement 2008-2011 (Essex Partnership),
- Basildon Sustainable Community Strategy 2008-2033,
- A Strategy for People and Places in the Braintree District 2026 (Joint publication of the SCS and draft Core Strategy),
- Brentwood Community Strategy 2004-2009,
- A Sustainable Community Strategy for Castle Point 2007-2012, version 2,
- Chelmsford Community Plan (Chelmsford Tomorrow 2021),
- Colchester Sustainable Community Strategy, October 2007,
- Epping Forest Community Strategy 2010,
- Harlow 2020 Vision, 2011,

- Maldon District's Sustainable Community Strategy, 2008,
- Rochford Sustainable Community Strategy, 2010-2015,
- Sustainable Community Strategy for Tendring,
- Futures Uttlesford, 2008.

Appendix Four Links with Sustainable Community Strategies and Other Vision Statements

Appendix Four Links with Sustainable Community Strategies and Other Vision Statements

Appendix Four:

Links with sustainable community strategies & other vision statements

Introduction

This appendix examines the linkage between the key themes in the plan relating to future mineral planning and the separate vision/ objective statements that appear in Sustainable Community Strategies and other Vision Statements.

Linked documents

The following documents are included in this review:

1. EssexWorks Commitment 2012-2017 (Essex County Council, Vision Statement)
2. EssexWorks Corporate Plan 2012-2017, and associated annexes (Essex County Council)
3. The Essex Strategy 2008-2018 (Essex Partnership, Sustainable Community Strategy)
4. Essex Urban Place Supplement
5. Environmental Statement 2012
6. The Local Area Agreement 2008-2011 (Essex Partnership)
7. Basildon Sustainable Community Strategy 2008-2033
8. A Strategy for People and Places in the Braintree District 2026 (Joint publication of the SCS and draft Core Strategy)
9. Brentwood Community Strategy 2004-2009
10. A Sustainable Community Strategy for Castle Point 2007-2012, version 2
11. Chelmsford Community Plan (Chelmsford Tomorrow 2021)
12. Colchester Sustainable Community Strategy, October 2007
13. Epping Forest Community Strategy 2010
14. Harlow 2020 Vision, 2011
15. Maldon District's Sustainable Community Strategy, 2008
16. Rochford Sustainable Community Strategy, 2010-2015
17. Sustainable Community Strategy for Tendring
18. Futures Uttlesford, 2008

The following section identifies where there are links between the documents listed above, and the key features of the plan.

Plan linkages

1. Sustainable construction

The preferred vision/ objectives in the plan state that sustainable construction will be promoted This provides for alignment and coordination with the following,

Essex Urban Place Supplement

- The Urban Place Supplement defines sustainable construction and highlights how material choice, modular build, passive energy savings, natural ventilation, water conservation and drainage, and biodiversity can improve the inherent sustainability of a development. Information on sustainability accreditation schemes such as BREEAM and the Green Point System is also provided.

Environmental Statement

- The Environmental Statement commits Essex County Council to promoting sustainable construction and design.

2. Efficient mineral use and re-use

The preferred vision/ objectives in the plan state that minerals will be used and re-used efficiently, to protect the valuable minerals resource and minimise waste. This provides for alignment and coordination with the following,

Environmental Statement

- The Environmental Statement commits Essex County Council to promoting sustainable construction and design.

-

The Local Area Agreement 2008-2011

- The LAA aims to promote the sustainable and efficient use of Essex's natural resources.

A Strategy for People and Places in the Braintree District 2026

- The Strategy encourages new developments that make the minimum use of scarce natural resources and energy, both in construction and everyday use.

Brentwood Community Strategy 2004-2009

- The Community Strategy includes aims for sustainable development, which includes minimising the use of natural resources.

A Sustainable Community Strategy for Castle Point 2007-2012, version 2

- The strategy aims to minimise the use of natural resources.

Epping Forest Community Strategy 2010

- The Strategy identified the sustainable use of natural resources as a key aim for the future of the area.

3. Promote high levels of construction and demolition waste re-use and recycling

The preferred vision/ objectives in the plan aim to promote high levels of re-use and recycling of construction and demolition waste. This provides for alignment and coordination with the following,

The Essex Strategy 2008-2018

- The Essex Strategy identifies waste disposal in Essex as a major environmental issue, and aims to reduce our environmental burden in Essex by increasing recycling and reducing the amount of waste produced.

The Local Area Agreement 2008-2011

- The LAA identifies the importance encouraging businesses to recycle more, and reduce their carbon footprint.

A Strategy for People and Places in the Braintree District 2026

- The Strategy aims to reduce the amount of waste being sent to land-fill by reducing waste and increasing the amount of recycling.

Brentwood Community Strategy 2004-2009

- The Strategy promotes the minimisation, reuse, and recycling of waste, and the sustainable disposal of waste from all sources.

A Sustainable Community Strategy for Castle Point 2007-2012, version 2

- The strategy aims to promote recycling.

Chelmsford Community Plan (Chelmsford Tomorrow 2021)

- The Plan aims to reduce waste through increased recycling.

Maldon District's Sustainable Community Strategy, 2008

- The Strategy aims to increase recycling rates and minimise waste production in the Maldon District.

Sustainable Community Strategy for Tendring

- A key objective of the Strategy is related to recycling initiatives.

Futures Uttlesford, 2008

- A key priority of the strategy is waste minimisation.

4. Promote re-use or recycling materials in all major construction projects

The preferred vision/ objectives in the plan aim to promote high levels of re-use and recycling in all major construction projects. This provides for alignment and coordination with the following,

The Essex Strategy 2008-2018

- The Essex Strategy identifies waste disposal in Essex as a major environmental issue, and aims to reduce our environmental burden in Essex by increasing recycling and reducing the amount of waste produced.

The Local Area Agreement 2008-2011

- The LAA identifies the importance encouraging businesses to recycle more, and reduce their carbon footprint.

Brentwood Community Strategy 2004-2009

- The Strategy promotes the minimisation, reuse, and recycling of waste, and the sustainable disposal of waste from all sources.

A Sustainable Community Strategy for Castle Point 2007-2012, version 2

- The strategy aims to promote recycling.

Chelmsford Community Plan (Chelmsford Tomorrow 2021)

- The Plan aims to reduce waste through increased recycling.

A Strategy for People and Places in the Braintree District 2026

- The Strategy aims to reduce the amount of waste being land-filled by reducing waste and increasing the amount of recycling.

Maldon District's Sustainable Community Strategy, 2008

- The Strategy aims to increase recycling rates and minimise waste production in the Maldon District.

Sustainable Community Strategy for Tendring

- A key objective of the Strategy is related to recycling initiatives.

Futures Uttlesford, 2008

- A key priority of the strategy is waste minimisation.

5. Minimal sterilisation of mineral resources

No links identified in any of the documents.

6. Safeguard minerals reserves from new development

No links identified in any of the documents.

7. Safeguard minerals related infrastructure

No links identified in any of the documents.

8. Primary minerals provision

No links identified in any of the documents.

9. Restoration and after-use

Through the restoration of minerals sites, the preferred vision/ objectives in the plan aim to enhance the local environment by increasing the provision of biodiversity and geodiversity, and encourage active recreation by creating more public rights of way. This provides for alignment and coordination with the following,

<u>EssexWorks Corporate Plan 2012-2017</u>

- The corporate plan aims to improve public health and wellbeing by protecting and enhancing the environment in Essex, and encouraging healthy and active lifestyles to tackle the wider causes of ill health.
- The Corporate Plan aims to improve public health and wellbeing by reducing the County's environmental impact and securing improvements to Essex's natural environment.

<u>The Essex Strategy 2008-2018</u>

- The Essex Strategy identifies the need to enhance biodiversity to assist in mitigating the affects of climate change.

The Local Area Agreement 2008-2011

- The LAA includes an indicator to identify improvements in local biodiversity, and increase access to and use of the natural environment to support healthy and active lifestyles.

Basildon Sustainable Community Strategy 2008-2033

- The SCS aims to create a more attractive environment that is safe, clean and tidy, as well as being a more healthy and diverse natural environment.
- The SCS also aims to improve health and wellbeing by stimulating participation in recreational and leisure activities.

A Strategy for People and Places in the Braintree District 2026

- The Strategy aims to enhance biodiversity and enable the provision of accessible high quality green spaces which meet the recreational needs of all sections of the community.

Brentwood Community Strategy 2004-2009

- The Community Strategy aims to improve the availability of high quality and accessible leisure, recreational and cultural opportunities
- The Strategy also aims to improve the environment and visual amenity of the Borough through the appropriate maintenance of parks, trees, verges and open spaces.

Chelmsford Community Plan (Chelmsford Tomorrow 2021)

- Plan aims to enhance public open space for the benefit of biodiversity.

Maldon District's Sustainable Community Strategy, 2008

- The Strategy aims to encourage the sustainable management of Maldon's natural and built heritage.

10. Climate change mitigation and adaptation

The preferred vision/objectives in the plan aim to ensure that minerals development will be planned, located and operated having regard to the need to mitigate and adapt to the impacts of climate change. This provides for alignment and coordination with the following,

The Essex Strategy 2008-2018

- The Essex Strategy identifies mitigating climate change as a 'wicked issue' which requires Essex to undertake a number of key measures to ensure residents can maintain a good quality of life. Key aims of the Strategy are to reduce the carbon footprint of Essex and adapt to climate change.

The Local Area Agreement 2008-2011

- The LAA identifies reducing or limiting the carbon footprint of Essex as a key priority. The LAA uses indicators to identify progress being made towards mitigating and adapting to the potential effects of climate change.

A Strategy for People and Places in the Braintree District 2026

- The Strategy aims to reduce the need to travel long distances to access required services and facilities.

Brentwood Community Strategy 2004-2009

- The Strategy aims to raise the awareness of environmental issues in the Borough across all age groups and reduce the number, length and time of journeys.

Chelmsford Community Plan (Chelmsford Tomorrow 2021)

- Plan aims to mitigate the impact of climate change on the borough.

Futures Uttlesford, 2008

- The Strategy aims to reduce the carbon footprint of local businesses, mitigate the impact of climate change and adapt to future changes.

Rochford Sustainable Community Strategy, 2010-2015

- The Strategy aims to address the causes of climate change at the local level and minimise the risks associated with climate change.

Appendix Five Site Profiles for Preferred Sites

Appendix Five Site Profiles for Preferred Sites

Site profiles for Preferred Sites

This Appendix contains a complete set of individual Site Profiles for each of the proposed Preferred Sites subject to Policy MPS1. Each Site Profile covers the site location, site boundaries, site characteristics, and any detailed development requirements associated with mineral working at each site. In particular, the Mineral Planning Authority would expect these development requirements to be fully addressed at each site when planning applications are prepared and submitted.

A3 Bradwell Quarry, Rivenhall

A4 Bradwell Quarry, Rivenhall

A5 Bradwell Quarry, Rivenhall

A6 Bradwell Quarry, Rivenhall

A7 Bradwell Quarry, Rivenhall

A9 Broadfield Farm, Rayne

A13 Colchester Quarry, Fiveways

A20 Sunnymead, Alresford

A22 Little Bullocks Farm, Little Canfield

A23 Little Bullocks Farm, Little Canfield

A31 Maldon Road, Birch

A38 Blackleys Quarry, Gt Leighs

A39 Blackleys Quarry, Gt Leighs

A40 Shellows Cross, Roxwell / Willingale

B1 Slough Farm, Martells

Sites have been assessed for low level restoration (unless specified to the contrary). Details on landfilling proposals are set out in the Essex and Southend-on-Sea Waste Local Plan.

Site Profiles

A3 Bradwell Quarry, Rivenhall Airfield

Table 9

Site	A3
Address	Bradwell Quarry, Rivenhall Airfield
District	Braintree
Estimated Yield	1.0mt
Area:	9 ha
Estimated life	1 year
Method of exportation	Road
Method of Restoration	Low level restoration
After-use	Restoration to a range of managed habitats (Inc. arable).

Specific issues to be addressed

Site A3 lies to the east of and is adjacent to the current mineral extraction site at Bradwell Quarry;

1. The working and restoration of site A3 and any other Bradwell extension sites, would need to be integrated with and not compromise the permitted strategic waste management facilities at Rivenhall.
2. Mineral traffic would use the existing main site access, and HGV movements would be restricted in line with current levels of working to avoid adverse impacts to the A120. The phasing of site working would need to reflect HGV movement limitations. A Transport Assessment would be required.
3. Mineral from the site would be processed through the existing processing plant;
4. Improvements to the crossing points at Ash Lane and Church Road would be required.
5. There has been a long history of settlement and occupation within this landscape. An historic environment assessment would be required with any application / EIA.
6. PROW bridleway Kelvedon 40 crosses the site and would require temporary diversion during operations.
7. This site comprises the best quality Grade 2 agricultural soils and it is expected that these would be retained on site during restoration.
8. A Masterplan would be required covering the Bradwell Quarry in its entirety. This would ensure all pre-extraction activity, site working and restoration is considered as a whole and restoration potential is maximised including the opportunity for significant biodiversity enhancement and habitat creation on site. The first Preferred Site for Bradwell Quarry for which there is an application should provide indicative phasing, restoration levels and afteruses for all the Bradwell Quarry Preferred Sites as part of the Masterplan and the

developer shall be expected to enter into a legal agreement to ensure that any subsequent applications for Preferred Sites at Bradwell Quarry shall be in accordance with the Masterplan. Careful consideration must be given to the final low-level restoration contours to ensure the final landform blends with the surrounding topography and could blend with the levels and planting of the strategic waste management development (Ref ESS/37/08/BTE) if implemented.

A4 Bradwell Quarry, Rivenhall Airfield

Table 10

Site	A4
Address	Bradwell Quarry, Rivenhall Airfield
District	Braintree
Estimated Yield	3.0mt
Area:	25.5 ha
Estimated life	3 years
Method of exportation	Road
Method of Restoration	Low level restoration
After-use	Restoration to a range of managed habitats (Inc. arable).

Specific issues to be addressed

Site A4 lies north east of and is adjacent to the current mineral extraction site at Bradwell Quarry;

1. Rivenhall Airfield received planning permissions in 2009 & 2010 for the development of a strategic waste management facility. The working and restoration of site A4 and any other Bradwell extension sites, would need to be integrated with / not compromise permitted waste development

2. Mineral from the site would be processed through the existing processing plan.

3. Mineral traffic would use the existing main site access and HGV movements would be restricted in line with current levels of working to avoid adverse impacts to the A120. The phasing of site working would need to reflect HGV movement limitations. A Transport Assessment would be required.

4. Improvements to the crossing points at Ash Lane and Church Road would be required.

5. There has been a long history of settlement and occupation within this landscape. An historic environment assessment would be required with any application / EIA.

6. Adequate stand-off distances / bunding / screening would be required to protect Herons Farm and Deeks Cottage on the northern boundary of the site and Haywards Cottage.

7. Appropriate bunding would be required to reduce the impact on the Protected Lane on the northern boundary (Cuthedge Lane).
8. PROW footpaths Bradwell 53 and 68 and bridleways Bradwell 24, 70 and 81 cross the site and would require temporary diversion during operations. It is envisaged that footpaths would be upgraded to bridleway (i.e., east to west across the site).

9. This site comprises the best quality Grade 2 agricultural soils and it is expected that these would be retained on site during restoration.
10. A Masterplan would be required covering the Bradwell Quarry site in its entirety. This would ensure all pre-extraction activity, site working and restoration is considered as a whole and restoration potential is maximised including the opportunity for significant biodiversity enhancement and habitat creation on site. The first Preferred Site for Bradwell Quarry for which there is an application should provide indicative phasing, restoration levels and afteruses for all the Bradwell Quarry Preferred Sites as part of the Masterplan and the developer shall be expected to enter into a legal agreement to ensure that any subsequent applications for Preferred sites at Bradwell Quarry shall be in accordance with the Masterplan. Careful consideration must be given to the final low-level restoration contours to ensure the final landform blends with the surrounding topography and could blend with the levels and planting of the strategic waste management development (Ref ESS/37/08/BTE) if implemented.

A5 Bradwell Quarry, Rivenhall Airfield

Table 11

Site	A5
Address	Bradwell Quarry, Rivenhall Airfield
District	Braintree
Estimated Yield	3.0mt
Area:	35 ha
Estimated life	3 years
Method of exportation	Road
Method of Restoration	Low level restoration
After-use	Restoration to a range of managed habitats (Inc. arable).

Specific issues to be addressed

Site A5 lies to the south of the proposed extension Site A2. Sheepcotes Farm, which is a Listed Building, occupied the north-western corner;

1. Rivenhall has recently received planning permissions for the development of a strategic waste management facility. The working and restoration of site A5 and any other Bradwell extension sites, would need to be integrated with / not compromise permitted waste development;
2. Mineral from the site would be processed through the existing processing plant;
3. Mineral traffic would use the existing main site access and HGV movements would be restricted in line with current levels of working to avoid adverse impacts to the A120. The phasing of site working would need to reflect HGV movement limitations. A Transport Assessment would be required;
4. Improvements to the crossing points at Ash Lane and Church Road would be required;
5. Existing vegetation screen around Sheepcotes Farm to be protected and retained
6. There has been a long history of settlement and occupation within this landscape. The site lies in close proximity to a Listed Building, a historic environment assessment which includes details of appropriate restoration to protect the setting of the Listed Buildings must be agreed as part of any application/EIA.
7. Storeys Wood Local Wildlife Site (Bra 178) abuts the south-east boundary. Adequate stand-off / buffering must be provided to prevent damage to this site;
8. The site is visible from properties on the edge of Silver End. Measures should be taken to reduce this impact through bunding / screening;
9. PROW footpaths Silver End 54, 55 and 57 cross the site and would require temporary diversion during operations;
10. This site comprises the best quality Grade 2 agricultural soils and it is expected that these would be retained on site for restoration.

11. A Masterplan would be required covering the Bradwell quarry site in its entirety. This would ensure all pre-extraction activity, site working and restoration is considered as a whole and restoration potential is maximised including the opportunity for significant biodiversity enhancement and habitat creation on site. The first Preferred Site for Bradwell Quarry for which there is an application should provide indicative phasing, restoration levels and afteruses for all the Bradwell Quarry Preferred Sites as part of the Masterplan and the developer shall be expected to enter into a legal agreement to ensure that any subsequent applications for Preferred sites at Bradwell Quarry shall be in accordance with the Masterplan. Careful consideration must be given to the final low-level restoration contours to ensure the final landform blends with the surrounding topography and could blend with the levels and planting of the strategic waste management development (Ref ESS/37/08/BTE) if implemented.
12. Extraction area should be kept away from Sheepcotes Farm or thick advance screen planting required

A6 Bradwell Quarry, Rivenhall Airfield

Table 12

Site	A6
Address	Bradwell Quarry, Rivenhall Airfield
District	Braintree
Estimated Yield	2.5 mt
Area:	37.5 ha
Estimated life	2.5 years
Method of exportation	Road
Method of Restoration	Predominately Low level restoration
After-use	Strategic Waste Management facility on the western side. Restoration to a range of managed habitats (Inc. arable) elsewhere.

Specific issues to be addressed

Site A6 lies to the east of proposed extension Sites A2 / A5 and south of Site A3. The site encompasses Woodhouse Farm and barn and Allshots Farm and barn (all Grade 2 Listed), a scrapyard and a residential property. The Polish Site is excluded, though surrounded on three sides by the site;

1. Mineral from the site would be processed through the existing processing plant.
2. Rivenhall has recently received planning permissions for the development of a strategic waste management facility, part of which covers the north-western corner of this site. The working and restoration of site A6, and any other Bradwell extension sites, would need to be integrated with / not compromise permitted waste development.
3. Mineral traffic would use the existing main site access and HGV movements would be restricted in line with current levels of working to avoid adverse impacts to the A120. The phasing of site working would need to reflect HGV movement limitations. A Transport Assessment would be required.
4. Improvements to the crossing points at Ash Lane and Church Road would be required.
5. There has been a long history of settlement and occupation within this landscape. The existing moat at Woodhouse Farm is considered highly sensitive to quarrying activities and measures must be taken to ensure this is not affected, including by dewatering. A basic record of any WW II buildings and structures which survive or may remain within the site should be carried out. An historic environment assessment would be required with any application / EIA.

6. The site lies in close proximity to a Listed Building, a historic environment assessment which includes details of appropriate restoration to protect the setting of the Listed Buildings must be agreed as part of any application / EIA.
7. Storeys Wood Local Wildlife Site (Bra 178) adjoins the southern boundary. A buffer of at least 100m would be required around this woodland and protection afforded to the woodland contained to the south and west of the site.
8. The ecological compensation area for A2 and strategic waste management facilities within site A6 should be removed from extraction area.
9. PROW footpath Kelvedon 8 crosses the site and would require temporary diversion during operations.
10. This site comprises the best quality Grade 2 agricultural soils and it is expected that these would be retained on site during restoration.
11. A Masterplan would be required covering the Bradwell quarry site in its entirety. This would ensure all pre-extraction activity, site working and restoration is considered as a whole and restoration potential is maximised including the opportunity for significant biodiversity enhancement and habitat creation on site. The first Preferred Site for Bradwell Quarry for which there is an application should provide indicative phasing, restoration levels and afteruses for all the Bradwell Quarry Preferred Sites as part of the Masterplan and the developer shall be expected to enter into a legal agreement to ensure that any subsequent applications for Preferred Sites at Bradwell Quarry shall be in accordance with the Masterplan. Careful consideration must be given to the final low level restoration contours to ensure the final landform blends with the surrounding topography and could blend with the levels and planting of the strategic waste management development (Ref ESS/37/08/BTE) if implemented.

A7 Bradwell Quarry, Rivenhall Airfield

Table 13

Site	A7
Address	Bradwell Quarry, Rivenhall Airfield
District	Braintree
Estimated Yield	6.5 mt
Area:	95 ha
Estimated life	6.5 years
Method of exportation	Road
Method of Restoration	Low level restoration
After-use	Restoration to a range of managed habitats (Inc. arable).

Specific issues to be addressed

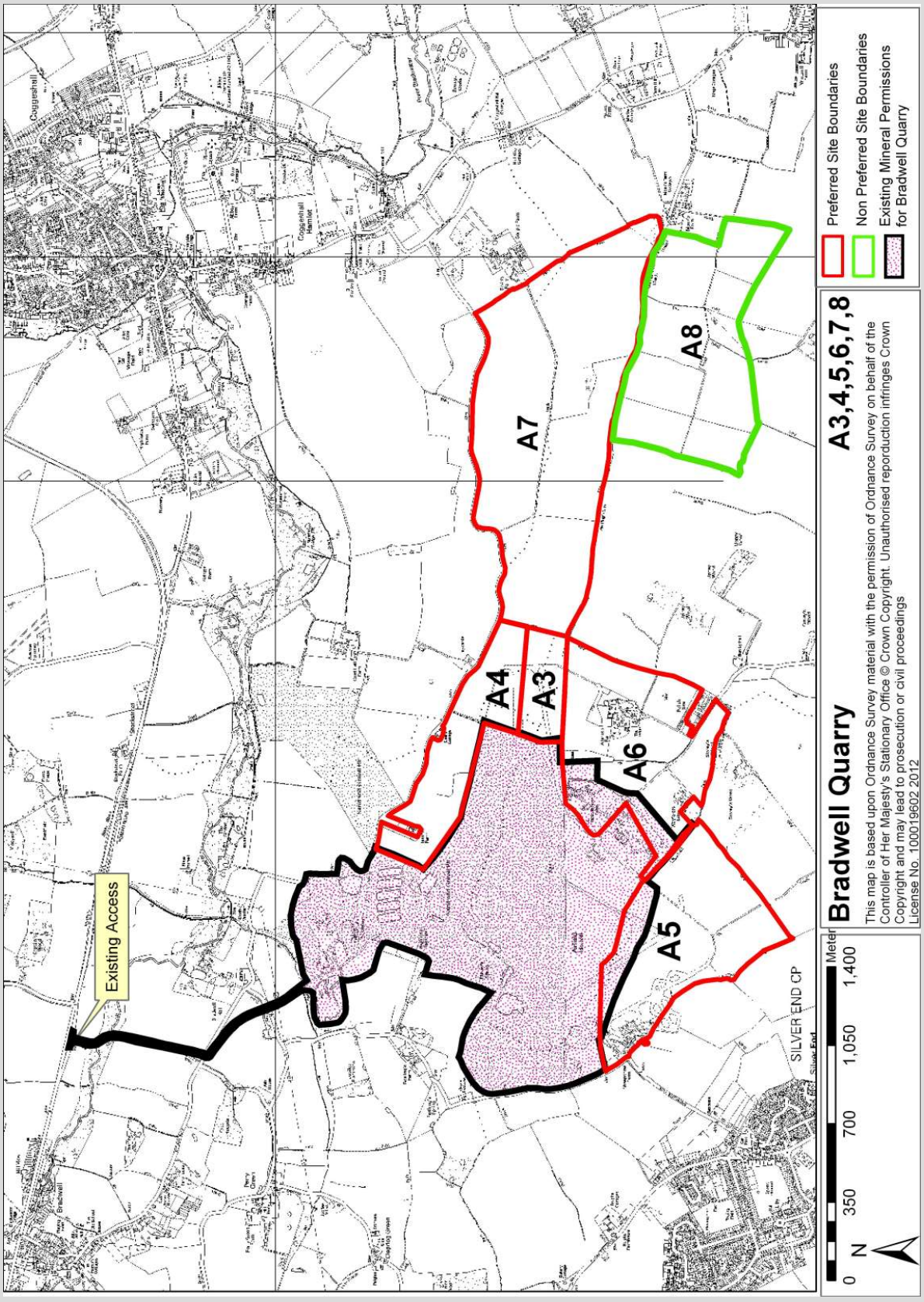
Site A7 extends southwards from the Protected Lane (Cuthedge Lane) and eastwards from Sites A3 & A4. The site is not contiguous with current workings but at 6.5 million tonnes it is the largest suggested extension area;

1. Mineral from the site would be processed through the existing processing plant.
2. Rivenhall has planning permissions for the development of a strategic waste management facility. The working and restoration of site A7 and any other Bradwell extension sites, would need to be integrated with / not compromise permitted waste development.
3. Mineral traffic would use the existing main site access and HGV movements would be restricted in line with current levels of working to avoid adverse impacts to the A120. The phasing of site working would need to reflect HGV movement limitations. A Transport Assessment would be required.
4. Improvements to the crossing points at Ash Lane and Church Road would be required.
5. There is a long history of settlement and occupation within this landscape and there is a high probability of remains of a Roman date surviving to the east of the site. An historic environment assessment would be required with any application / EIA.
6. This open site would be overlooked from the Protected Lane along the northern boundary (Cuthedge Lane) and there are a few long views of the site from further north, though generally these are limited because of the landform. The pleasant character of the bridleway along the southern boundary could be significantly affected by the works. Bunding / screening would be required on both the northern and southern boundaries.
7. Monks Farm Cottages (Listed Building), located just beyond the south-east corner of the site would require protection, including retention of existing trees to NW and provision of additional screening.
8. PROW footpaths Kelvedon 2 and 7 cross the site and would require temporary diversion during operations. Bridleway Kelvedon 1 would be protected as detailed above. It is

envisaged that footpaths would be upgraded to bridleway (i.e., east to west across the site).

9. This site comprises the best quality Grade 2 agricultural soils and it is expected that these would be retained on site during restoration.
10. A Masterplan would be required covering the Bradwell quarry site in its entirety. This would ensure all pre-extraction activity, site working and restoration is considered as a whole and restoration potential is maximised including the opportunity for significant biodiversity enhancement and habitat creation on site. The first Preferred Site for Bradwell Quarry for which there is an application should provide indicative phasing, restoration levels and afteruses for all the Bradwell Quarry Preferred Sites as part of the Masterplan and the developer shall be expected to enter into a legal agreement to ensure that any subsequent applications for Preferred sites at Bradwell Quarry shall be in accordance with the Masterplan. Careful consideration must be given to the final low-level restoration contours to ensure the final landform blends with the surrounding topography and could blend with the levels and planting of the strategic waste management development (Ref ESS/37/08/BTE) if implemented.

Bradwell Quarry, Rivenhall Airfield Site Map:



A9 Broadfield Farm, Rayne

Table 14

Site	A9
Address	Broadfield Farm, Rayne
District	Braintree
Estimated Yield	4.2 mt
Area:	90 ha
Estimated life	14 years
Method of exportation	Road
Method of Restoration	Low level restoration
After-use	Restoration to a range of managed habitats (Inc. arable).

Specific issues to be addressed

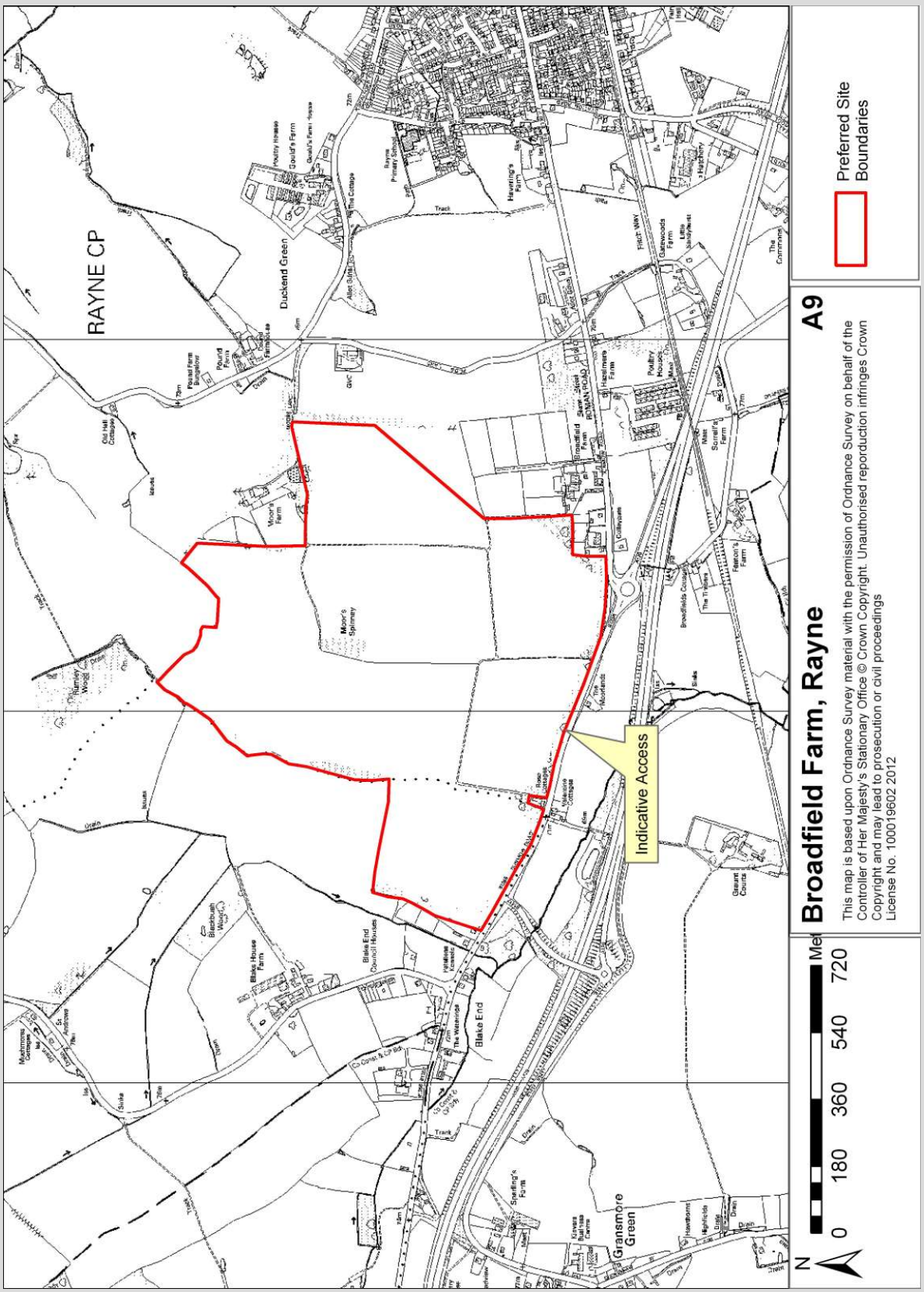
A new site located to the west of Rayne and east of Blake End

It has been demonstrated that a satisfactory junction arrangement could be provided to serve this site from the B1256. There are no HGV restrictions on the B1256 and westbound vehicles could access the A120 at Great Dunmow. Eastbound vehicles have more direct access to the A120. A very small section of the south-west of the site is within Flood Zones 2 and 3 but extraction is considered compatible with the fluvial flood risk;

1. Advance planting is well established on the southern boundary and provides effective screening which would increase with time. The northern area is currently very open and would require appropriate bunding/screening.
2. Rumley Wood Local Wildlife Site lies 60m beyond the northern boundary and Blackbush Wood LoWS 300m to the north-west. Both sites must be protected from the impacts of extraction e.g. through appropriate buffering.
3. There is evidence of and potential for protected and notable species on site. An ecological assessment based on appropriate survey work would be required with any application/EIA.
4. A minimum of 100m stand-off distance from the extraction area must be maintained from the closest residential properties, most of which are on the Dunmow Road.
5. There is a high possibility for disturbance of below ground level remains within close proximity to the Roman road, including possible remains of a high status Roman villa and prehistoric and Palaeolithic archaeology. A historic environment assessment would be required with any application/EIA.
6. A number of water abstraction points lie within close vicinity to the site. A hydro-geological assessment would be required with any application / EIA.

7. Careful consideration must be given to the final low-level restoration contours to ensure the final landform blends with the surrounding topography and best quality Grade 2 agricultural soils are retained on site.
8. While the site promoter has suggested predominantly agriculture or amenity after use, restoration provides the opportunity for significant biodiversity enhancement and habitat creation on site and the addition of a new public right of way from Blake End to Moors Lane.

A9 Broadfield Farm, Rayne Site Map:



A13 Colchester Quarry, Fiveways

Table 15

Site	A13
Address	Colchester Quarry, Fiveways
District	Colchester
Estimated Yield	2.95 mt
Area	15.5ha
Estimated life	6 years
Method of exportation	Road and Rail
Method of Restoration	Part low level, part former levels Predominantly low level
After-use	Green infrastructure & amenity in line with Colchester DPD.

Specific issues to be addressed

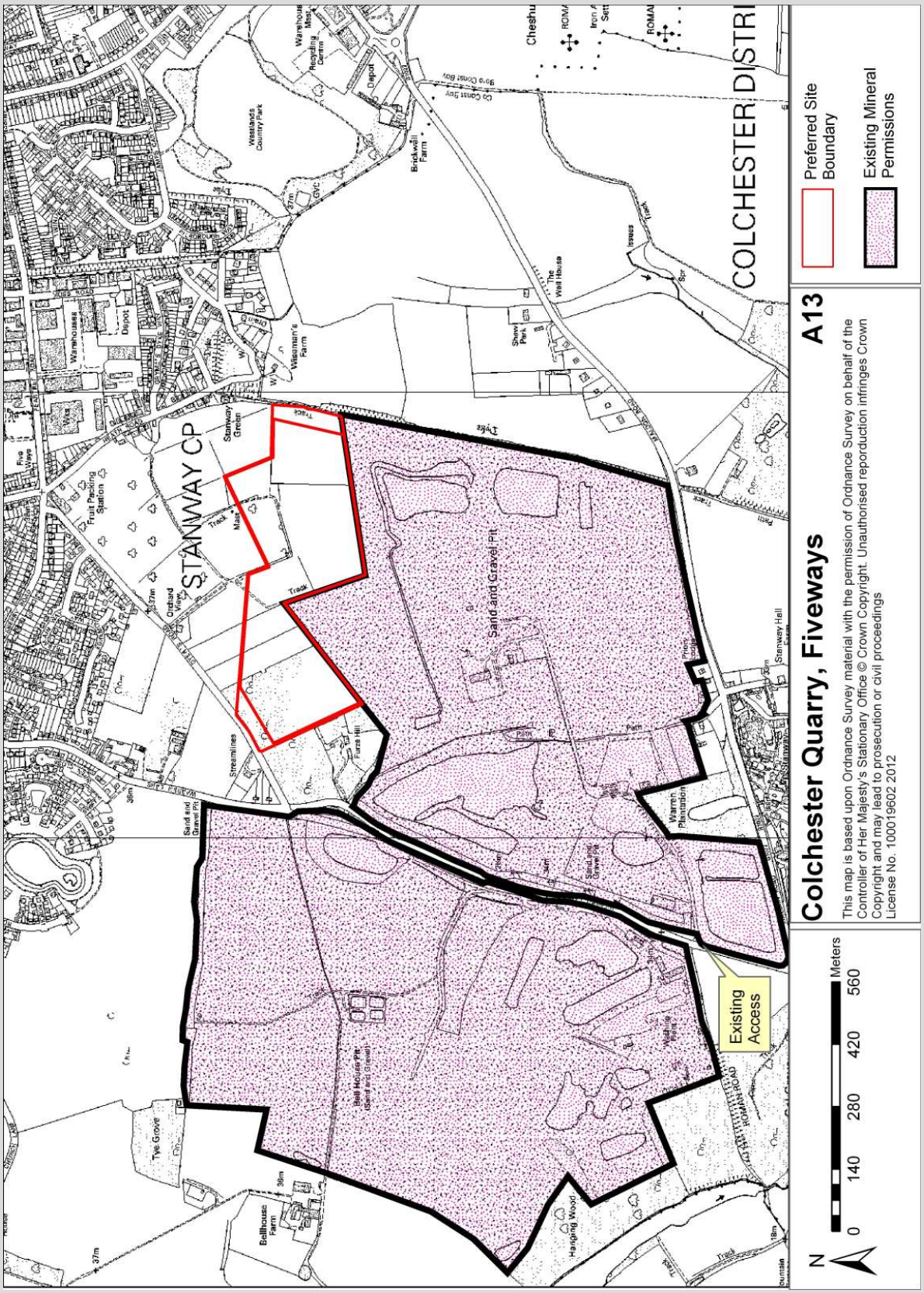
This site would be a northward extension of the existing extraction site at Colchester Quarry (Stanway). Mineral would be exported via the existing access onto Warren Lane and onward movement would be by road or rail, via Marks Tey rail siding:

1. This site bounds the existing quarry void and if worked would need to be integrated with the restoration of the wider quarry;
2. Planning permission for a Strategic Waste Facility has been given at Stanway (Ref: ESS/63/06/COL). The working of this quarry extension must not compromise the effective implementation of this waste permission, the site of which is safeguarded in the Waste Local Plan;
3. Additional housing land had been identified in the vicinity of Fiveways Fruit Farm in Colchester Borough Council's adopted Core Strategy and Site Allocation DPD. The quarry extension site would need to be worked ahead of any housing development located in close proximity and not comprise the achievement of the additional housing proposed for the Colchester plan period (end date 2021);
4. A Transport Assessment would be required. The Eight Ash Green interchange (A12 J26) is currently experiencing peak hour capacity problems so it is important that expansion of the Colchester Quarry site be managed so that the impact to the trunk road network is not worsened and adequate mitigation is provided;
5. Warren Lane LoWS lies adjacent to the site and would require protection e.g. through buffering;
6. The site has potential for protected and notable species. An ecological assessment based on appropriate survey work would be required with any application/EIA;
7. The site lies in a sensitive area of archaeological deposits. Early consultation with English Heritage would be required to discuss the setting of the earthworks at Grymes Dyke

scheduled monument which lies immediately to the east. An historic environment assessment would be required with any application/EIA;

8. An ALC and Soil Resources Study should be undertaken, and in the event of the site comprises best and most versatile land (Grades 1, 2 or 3a), then proposals should be formulated for the sustainable use of the soil resources at the Fiveways Fruit Farm site;
9. The site has been allocated as Open space under Policy SA STA5 of the Colchester Site Allocations October 2010. It is expected that the restoration of this site will be in conformity with this policy.

A13 Colchester Quarry, Fiveways Site Map:



A20 Sunnymead, Alresford

Table 16

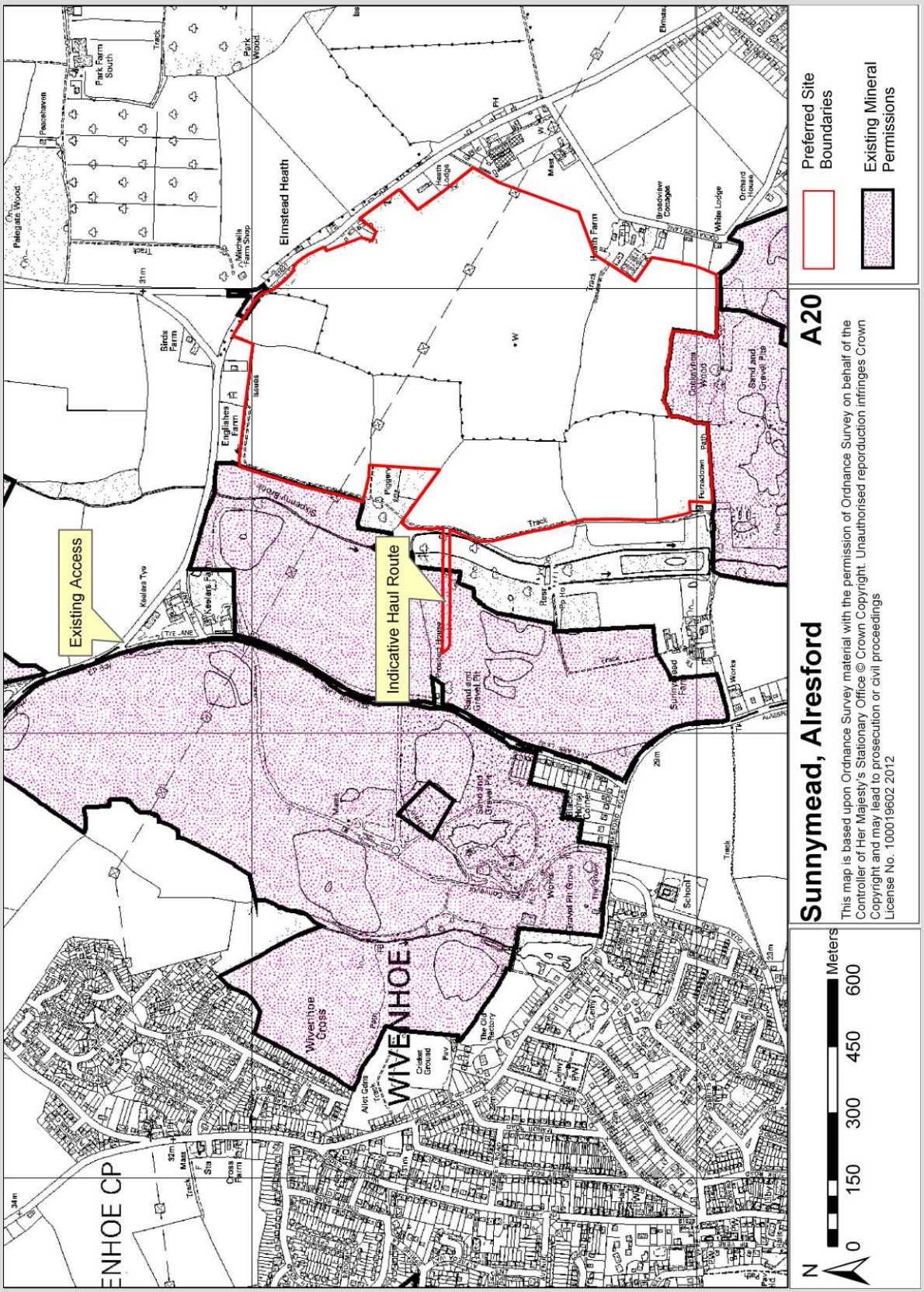
Site	A20
Address	Sunnymead, Alresford
District	Tendring
Estimated Yield	4.6 mt
Area	65 ha
Estimated life	8 years
Method of exportation	Road
Method of Restoration	Assessed for predominantly low level restoration*
After-use	Restoration to a range of managed habitats (Inc. arable).

Specific issues to be addressed

1. The site would be an extension to the existing Wivenhoe Quarry, linked by a haul route to the existing processing plant and utilising the existing highway access onto the B1027;
2. The existing underpass under Keelars Lane would be utilised
3. A Transport Assessment would be required with any application/EIA. Expectation that HGV movements would not exceed current levels;
4. Cockaynes Wood LoWS adjoins the southern boundary and would require protection during operations e.g through buffering;
5. There is evidence of and potential for protected and notable species on site. An ecological assessment based on appropriate survey work would be required with any application/EIA;
6. There are 26 residential properties located within 100m of the proposed extraction area, most of them along the north-eastern boundary. A minimum of 100m stand-off should be provided for all residential properties and effective buffering/screening provided to screen views of the site;
7. The area has potential for multi-period archaeological deposits within it. A historic environment assessment would be required with any application/EIA;
8. PROW footpath Elmstead 24 crosses the site from north to south and though excluded from the extraction area, abuts it on both sides. Sufficient stand-off distance and protection of this route would be required during operations and satisfactory crossing point(s) provided for quarry vehicles. Footpaths Elmstead 19 and Alresford 2 also run along the southern boundary and through Cockaynes Wood and need protection during operations. The ability to reinstate these fully needs to be investigated as part of the suggested restoration scheme;
9. (*) Although the site promoter has promoted infilling using imported inert waste it is considered that this will need to be subject to policies in the Waste Local Plan and for this reason low level restoration is preferred except in relation to point 8 (above).

10. Careful consideration must be given to the final predominantly low-level restoration contours to ensure the final landform blends with the surrounding topography and best quality Grade 2 agricultural soils are retained on site.
11. While the site promoter has suggested agriculture, restoration provides the opportunity for significant biodiversity enhancement and habitat creation on site.

A20 Sunnymead Site Map:



A22 Little Bullocks Farm, Little Canfield

Table 17

Site	A22
Address	Little Bullocks Farm, Little Canfield
District	Uttlesford
Estimated Yield	0.64 mt
Area	6.9 ha
Estimated life	12 years
Method of exportation	Road
Method of Restoration	Low level restoration
After-use	Agriculture, amenity and nature conservation

Specific issues to be addressed

1. A southerly extension site of the existing Crumps Farm Quarry, located south of the B1256, to the east of Hope End Green.
2. Mineral would be processed utilising mobile plant and exported via the existing site access.
3. A Transport Assessment would be required.
4. Extraction would not commence until after extraction at the existing quarry and all necessary restoration phases have been completed.
5. The eastern end of the site lies in a small secluded valley with a small river, nearby woodland and a Local Wildlife Site (ufd 180 – Canfield End pastures). Steps should be taken to screen views of the extraction area from this direction, including views from the PROW Lt Canfield 19.
6. The river and LoWS require protection e.g. through buffering and through the assessment of potential hydrological impacts. Existing vegetation to the south of the site should be protected and retained.
7. The site has potential for protected and notable species. An ecological assessment based on appropriate survey work would be required with any application/EIA.
8. The site lies in a potentially sensitive area for archaeology. An historic environment assessment would be required with any application/EIA.
9. The site layout should ensure a sequential approach is adopted whereby elements of greater vulnerability, such as buildings and stockpiles are located in Flood Zone 1. Given that the majority of the site is located in Flood Zone 1, this should be achievable. The flood risk associated with the ordinary watercourses should be assessed as part of a site specific Flood Risk Assessment and suitable mitigation measures adopted.
10. The site is low lying and within the Stansted 13km safeguarding zone. It therefore must be worked and restored without creating areas of standing water or employing putrescible waste for infill purposes as both would attract birds.
11. Careful consideration must be given to the final low-level restoration contours to ensure the final landform blends with the surrounding topography and (given the site contains best

quality Grade 2 agricultural soils) that restoration would be predominantly back to agricultural use.

12. The site is crossed by National Grid Underground pipeline, early liaison required with National Grid.

A23 Little Bullocks Farm, Little Canfield

Table 18

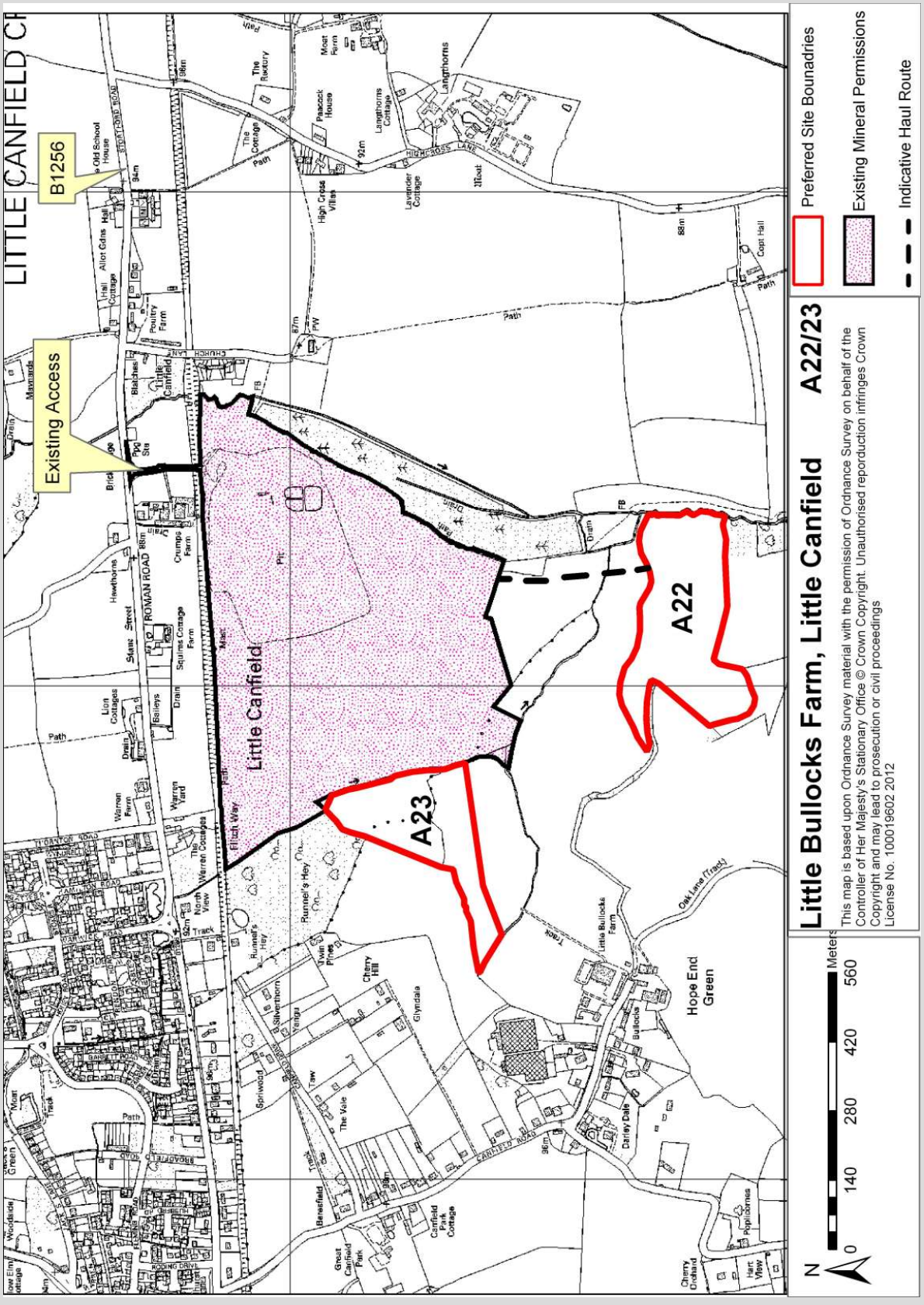
Site	A23
Address	Little Bullocks Farm, Little Canfield
District	Uttlesford
Estimated Yield	0.06 mt
Area	5.5 ha
Estimated life	2 years
Method of exportation	Road
Method of Restoration	Low level restoration
After-use	Agriculture, amenity and nature conservation.

Specific issues to be addressed

1. A small westerly extension site for the existing Crumps Farm Quarry, located south of the B1256, to the north-east of Hope End Green.
2. Mineral would be processed through the existing processing plant and exported via the existing site access.
3. A Transport Assessment would be required with any application/EIA
4. Extraction would not commence until after extraction at the existing quarry and all necessary restoration phases have been completed
5. A previous application for the creation of a fishing lake in this area (which would have involved the extraction of sand and gravel), was refused in 2004 on the grounds of need, proximity to Stansted airport, archaeology, proximity to a former landfill site, harm to an adjoining designated site and harm to landscape.
6. The site is adjacent to a Local Wildlife Site (Ufd 172 – Runnels Hey), and area of ancient woodland. This site must be protected e.g. through buffering. A hydrological assessment should accompany any application/EIA.
7. The site has potential for protected and notable species. An ecological assessment based on appropriate survey work would be required with any application/EIA.
8. The site lies in a potentially sensitive area overlooking a tributary of the River Roding with the possibility of archaeological deposits surviving. A historic environment assessment would be required with any application/EIA.
9. Residential property off Canfield Drive with views of the site should be protected by appropriate bunding/screening.
10. The site is low lying and within the Stansted 13km safeguarding zone. It therefore must be worked and restored without creating areas of standing water or employing putrescible waste for infill purposes as both would attract birds.

11. PRoW footpaths Great Canfield 2 and Little Canfield 8 cross the site and would require temporary diversion during operations.
12. Careful consideration must be given to the final low-level restoration contours to ensure the final landform blends with the surrounding topography and (given the site contains best quality Grade 2 agricultural soils) that restoration would be predominantly back to agricultural use.

A22 & 23 Little Bullocks Farm Site Map:



A31 Maldon Road, Birch

Table 19

Site	A31
Address	Maldon Road, Birch
District	Colchester
Estimated Yield	4 mt
Area	25 ha
Estimated life	13 years
Method of exportation	By conveyor to Birch Quarry and onward by road
Method of Restoration	Low level restoration
After-use	Restoration to a range of managed habitats (Inc. arable)*.

Specific issues to be addressed

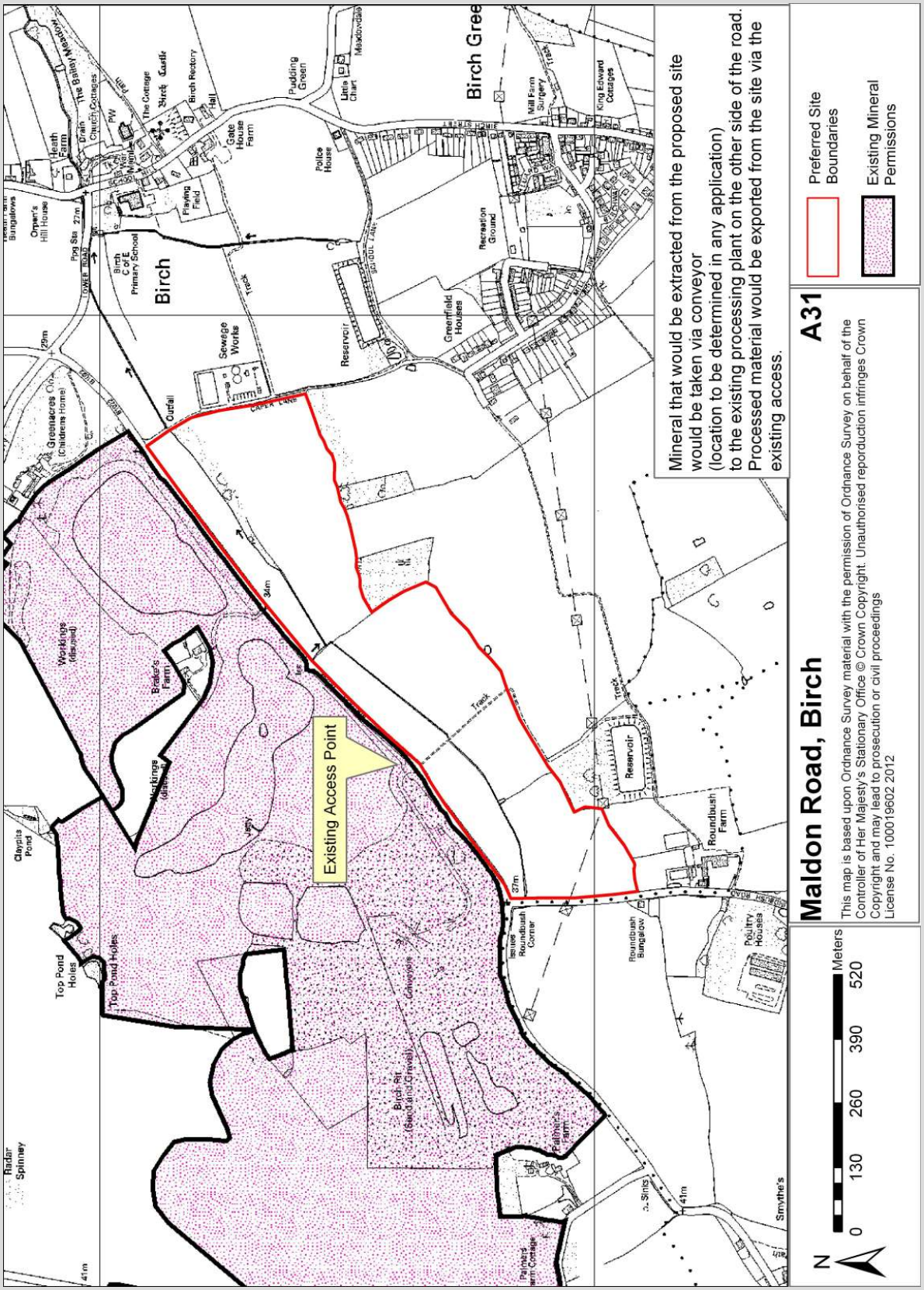
This is an extension for Birch Quarry, located on the southern side of Maldon Road, west of Birch. Mineral would be moved by conveyor under Maldon Road for processing and exported via the existing site access.

1. A Transport Assessment would be required with any application/EIA.
2. Extraction would not commence until after extraction at the existing quarry and all necessary restoration phases have been completed.
3. The eastern tree line is to be protected and retained with no extraction to the south.
4. There is evidence of protected and notable species on site. An ecological assessment based on appropriate survey work would be required with any application/EIA.
5. Whilst predominantly within Flood Zone 1, an area of Flood Zone 3 runs along the ditch line to the north east. Any buildings/stockpiles should be located within Flood Zone 1. A site specific Flood Risk Assessment will be required to address the management of surface water and drainage from the site, to reduce the overall level of flood risk to the area and beyond and ensure suitable mitigation measures are adopted.
6. An assessment and an appraisal of potential conflict with Cordon Sanitare WwTW would be assessed as part of any application/EIA.
7. The site is visible from the Maldon Road on the long northern boundary. Bunding/screening would be required to screen this view and the view from the footpath to the south (Birch 13). The opportunity exists for early advance planting.
8. A minimum 100m stand off distance and appropriate bunding/screening to be provided for Roundbush Bungalow on the south-west corner of the site.
9. Roundbush Farm to the south-west includes a group of Listed Buildings which must be protected. The site lies in what is expected to be a sensitive archaeological area. A historic

environment assessment must be agreed as part of any application/EIA. This should include details of appropriate restoration to protect the setting of the Listed Buildings.

10. (*) While the site promoter has suggested agriculture, amenity and lakes, restoration provides the opportunity for significant biodiversity enhancement and habitat creation on site.

A31 Maldon Road Birch Site Map:



A38 Blackleys Quarry, Great Leighs

Table 20

Site	A38
Address	Blackleys Quarry, Gt Leighs
District	Chelmsford
Estimated Yield	1.07 mt
Area	22 ha
Estimated life	12 years
Method of exportation	Road
Method of Restoration	Assessed for low level restoration*
After-use	Agriculture

Specific issues to be addressed

1. This would be an extension to the existing site at Blackleys Quarry and would make use of the existing haul road access to the junction on the A131.
2. A Transport Assessment would be required with any application/ EIA.
3. Extraction would not commence until after extraction at the existing quarry and all necessary restoration phases have been completed.
4. Site adjoins Great Leighs Racecourse the future of which is uncertain. Liaison with the City Council is recommended.
5. The site has records of protected and notable species. An ecological assessment based on appropriate survey work would be required with any application/EIA.
6. The site would have a visual impact upon Blackley Cottages, Blackley Lane, the A131 and footpaths to the south. Appropriate mitigation must be provided through bunding/advanced planting/screening.
7. Site has possibility for below ground remains relating to the nearby Roman Road. A detailed historic environment assessment which includes details of appropriate restoration to protect the setting of the Listed Buildings must be agreed as part of any application/EIA.
8. PRoW footpaths Great Leighs 2, 3 & 4 cross the site and would need to be temporarily diverted during operations.
9. Careful consideration must be given to the final low-level restoration contours to ensure the final landform blends with the surrounding topography and (given the site contains best quality Grade 2 agricultural soils) that restoration would be predominantly back to agricultural use.
10. Although the site promoter has promoted infilling using imported inert waste it is considered that this will need to be subject to policies in the Waste Plan and for this reason low level restoration is preferred.

A39 Blackleys Quarry, Great Leighs

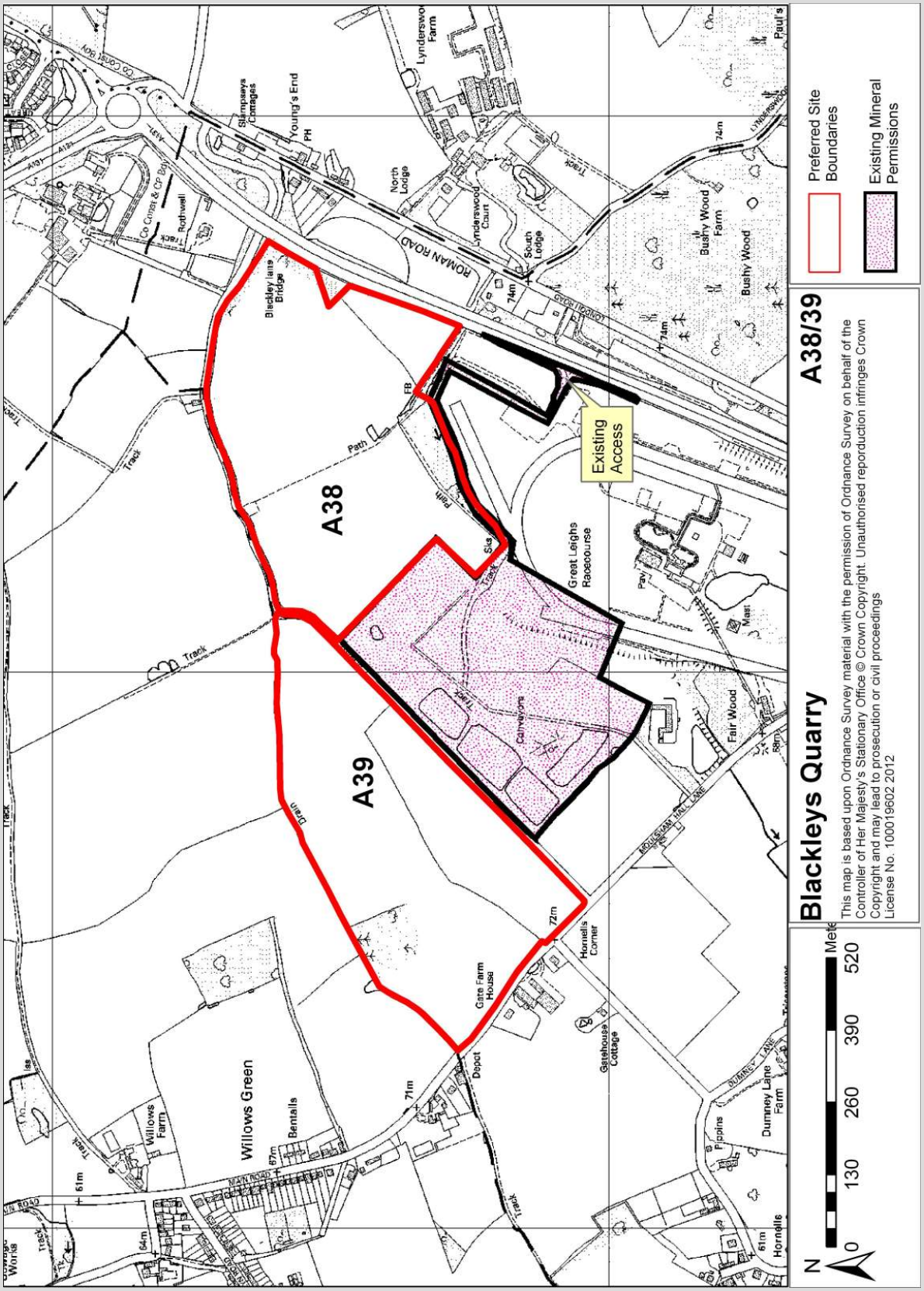
Table 21

Site	A39
Address	Blackleys Quarry, Gt Leighs
District	Chelmsford
Estimated Yield	0.75 mt
Area	21.2 ha
Estimated life	10 years
Method of exportation	Road
Method of Restoration	Assessed for predominantly low level restoration*
After-use	Agriculture

Specific issues to be addressed

1. The site would be an extension of the existing site at Blackleys Quarry and it is expected that extraction would begin after completion of A38. A new crossing would be required across Blackley Lane and retention of the existing haul road access to the junction on the A131.
2. Extraction would not commence until after extraction at the existing quarry and all necessary restoration phases have been completed.
3. A Transport Assessment would be required with any application/EIA.
4. Site adjoins Great Leighs Racecourse the future of which is uncertain. Liaison with the City Council is recommended.
5. The site has a high landscape sensitivity which would be affected by the removal of hedgerows containing oaks within the site.
6. The copse to the north of the site should be protected e.g. through buffering.
7. The site has records of protected and notable species. An ecological assessment based on appropriate survey work would be required with any application/EIA.
8. The site is likely to have a visual impact for a number of properties to the south-west on Moulsham Hall Lane, users of Blackley Lane and the footpath by the north-west boundary. This would require mitigation through appropriate bunding/ advanced planting/ screening.
9. (*) Although the site promoter has promoted infilling using imported inert waste it is considered that this will need to be subject to policies in the Waste Plan and for this reason low level restoration is preferred except in relation to point 11 (below).
10. The site lies in close proximity to a ListedBuilding, a historic environment assessment which includes details of appropriate restoration to protect the setting of the Listed Buildings must be agreed as part of any application / EIA.
11. Careful consideration must be given to the final low-level restoration contours to ensure the final landform blends with the surrounding topography and (given the site contains best quality Grade 2 agricultural soils) that restoration would be predominantly back to agricultural use.

A 38 & 39 Blackleys Quarry Site Map:



A40 Land at Shellows Cross Farm

Table 22

Site	A40
Address	Land at Shellows Cross Farm
District	Chelmsford and Epping
Estimated Yield	3.5 mt
Area	105 ha
Estimated life	14 years
Method of exportation	Road
Method of Restoration	Low level restoration
After-use	Agriculture and nature conservation.

Specific issues to be addressed

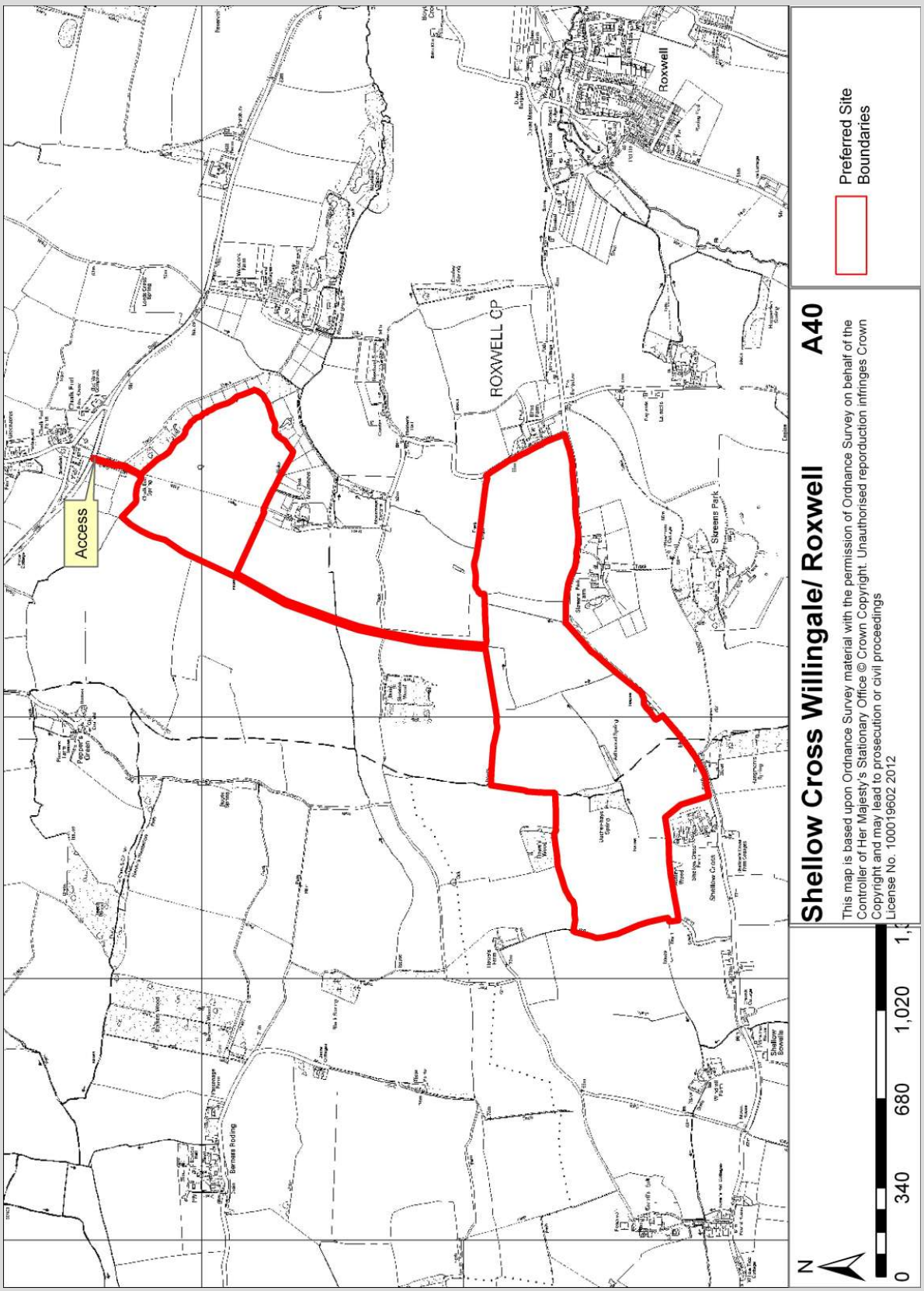
This would be a new site located to the west of Roxwell comprising two parcels of land linked by a cross-country haul route.

1. The processing plant would be located within the northern parcel of land and a new access created onto the A1060.
2. No access would be permitted from Elm Road to the south.
3. A Transport Assessment would be required with any application/EIA. The Highway boundary and land ownership needs to be further investigated and a speed check undertaken. A right-turn lane and road realignment would be required.
4. The landscape has a medium to high sensitivity to change and the southern area would have the greatest impact due to its size. Appropriate phasing of site working and restoration would be required to minimise this impact.
5. Appropriate buffering would need to be provided around Rowe's Wood LoWS and Bushey-hays/ Ashwood Spring LoWS. Operations should avoid simultaneous open void space on either side of the designated woodlands.
6. There is evidence of and potential for protected and notable species on site. An ecological assessment based on appropriate survey work would be required with any application/EIA.
7. The site is likely to have a visual impact on several properties on Elms Road to the south, properties with views of the northern area and footpaths that cross the site. Appropriate bunding/ screening would be required to reduce this impact. A minimum 100m stand-off should be maintained to all residential property.
8. The quarry lies within a potentially sensitive historic area. Early consultation with English Heritage would be needed as the proposal could affect a number of Listed Buildings and scheduled sites (including moated sites). A historic environment assessment which includes details of appropriate restoration to protect the setting of the Listed Buildings must be agreed as part of any application/EIA.
9. The risk of flooding associated with the small ditches and watercourses around the edge of the site would need to be assessed as part of site specific Flood Risk Assessment and

suitable mitigation measures adopted. A hydrological survey and assessment would need to inform any application/EIA.

10. PRoW footpaths Roxwell 2, 14 & 17 and a Bridleway Roxwell 68 cross the site and would need to be temporarily diverted during operations.
11. Careful consideration must be given to the final low-level restoration contours to ensure the final landform blends with the surrounding topography and (given the site contains best quality Grade 2 agricultural soils) that restoration would be predominantly back to agricultural use.
12. Revision of site area around Mountneys, pushing the boundary further to the north with additional/significant planting required along the eastern boundary.

A40 Shellow Cross Farm Site Map:



A46 Land at Colemans Farm

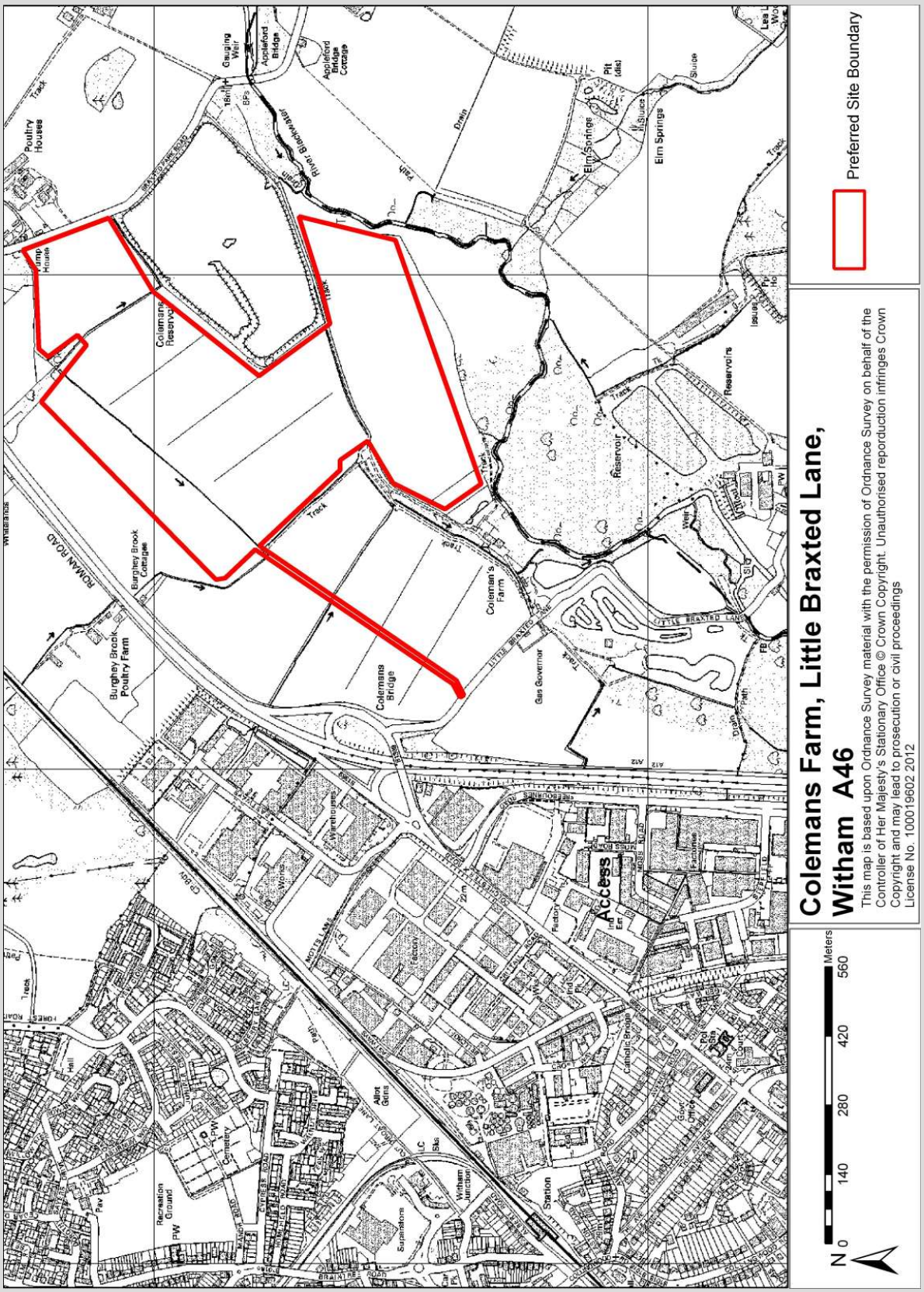
Table 23

Site	A46
Address	Land at Colemans Farm
District	Braintree
Estimated Yield	2.5 mt
Area	46 ha
Estimated life	14 years
Method of exportation	Road
Method of Restoration	Water
After-use	Recreation and nature conservation*

Specific issues to be addressed

1. The Blackwater valley provides an important wildlife corridor. Habitat Regulation Assessment identifies that Appropriate Assessment would be required.
2. As part of any EIA a detailed historic environment assessment will be required which will include intrusive evaluation by test pitting and trial trenching across the site.
3. Early consultation with English Heritage would be necessary. As part of any EIA a detailed historic environment assessment will be required which will include intrusive evaluation by test pitting and trial trenching across the site.
4. Site promoter to liaise with the Environment Agency prior to any application / EIA being submitted in order to discuss possible arrangements for water abstraction.
5. Flood risk assessment should be carried out and accompany any future application / EIA.
6. Prior consent from the EA required if any ditches or minor watercourses are to be diverted or modified.
7. A full hydrological and hydro-geological assessment will be required with any application / EIA.
8. A Transport Assessment would be required to be submitted with any application / EIA.
9. PROW Bridleway Rivenhall 29 crosses the site and would need to be temporarily diverted during operations.
10. (*) While the site promoter has suggested recreation, restoration also provides the opportunity for significant biodiversity enhancement and habitat creation on site.

A46 Colemans Farm Site Map:



B1 Slough Farm

Table 24

Site	B1
Address	Slough Farm
District	Colchester
Estimated Yield	0.86mt
Area	11.66 ha
Estimated life	10 years
Method of exportation	Road
Method of Restoration	Assessed for low level restoration*
After-use	Agriculture

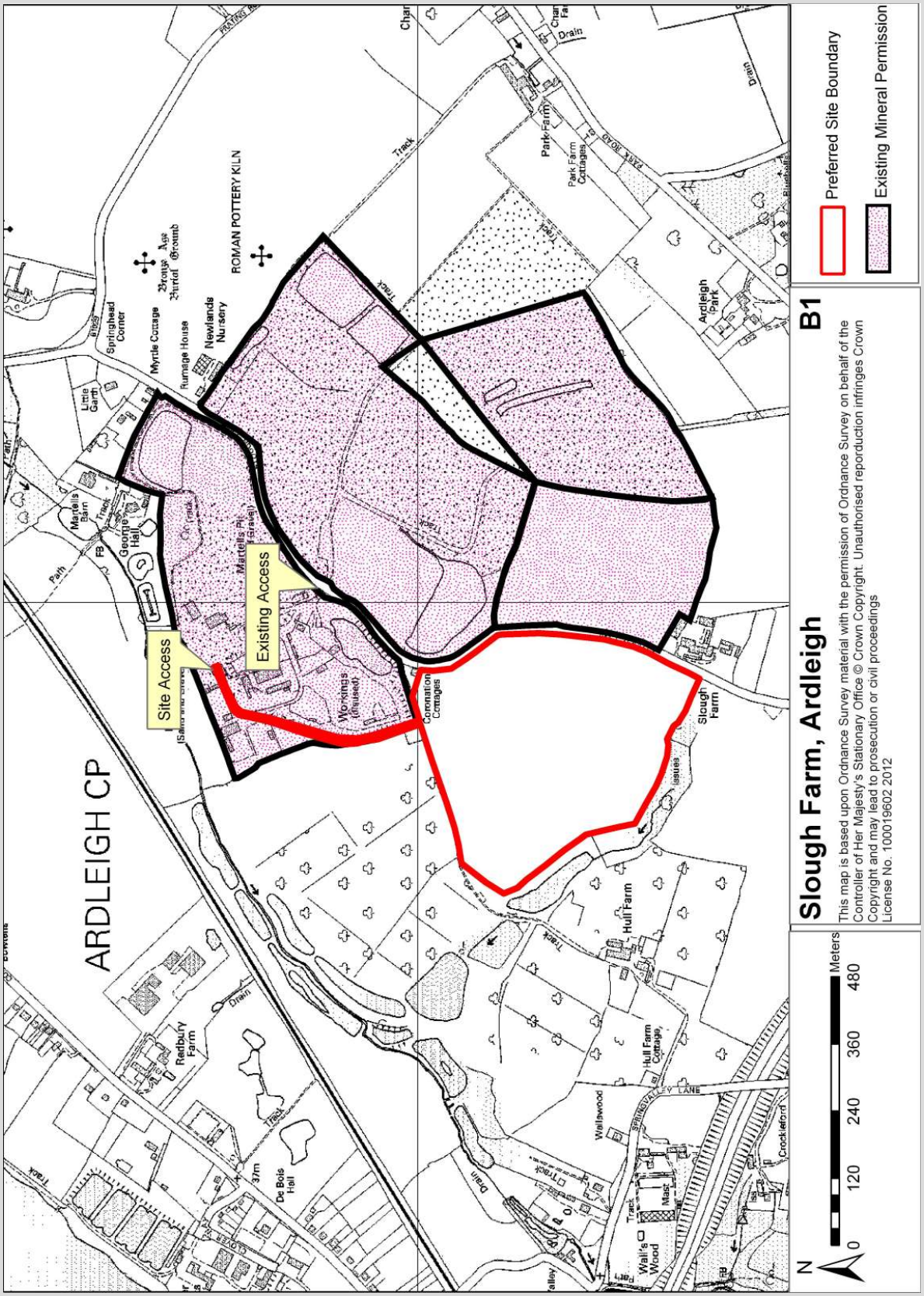
Specific issues to be addressed

This site would be an extension to the existing Martells Quarry and would make use of the existing access onto Slough Lane.

1. Extraction would not be able to commence until extraction and the necessary restoration has been completed on the latest extension area ref ESS/18/07/TEN.
2. Access to highway network to be by way of continued use of the private track access to the A120, via the lorry park.
3. Performance of the A120 junction to be monitored and any need to improve it to accommodate traffic from the proposed development to be identified as early as possible in the planning process.
4. Ability to access processing plant without increasing mineral traffic movements on Slough Lane needs to be demonstrated.
5. Trees which provide screening on the north, south and west boundaries to be protected from the effects of extraction.
6. There is evidence of and potential for protected and notable species on site. An ecological assessment based on appropriate survey work would be required with any application / EIA.
7. Site is nearby to a River and agricultural groundwater abstraction points. A hydrological survey and assessment would need to inform any application / EIA.
8. Excavation to commence at northern end of the site in order to reduce impact on properties. There should also be an appropriate buffer and bunding / screening for these properties.
9. Early consultation with English Heritage required to discuss the setting of the Scheduled Monument. Evidence of archaeological deposits, this suggests multi period occupation. A historic environment assessment would be required with any application / EIA.

10. (*) Although the site promoter has promoted infilling using imported waste it is considered that this will need to be subject to policies in the Waste Plan and for this reason low level restoration is preferred.
11. Careful consideration must be given to the final low-level restoration contours to ensure the final landform blends with the surrounding topography and (given the site contains best quality Grade 2 agricultural soils) that restoration would be predominantly back to agricultural use.

B1 Slough Farm Site Map:



Appendix Six Profiles for Existing and Proposed Transhipment Sites

Appendix Six Profiles for Existing and Proposed Transhipment Sites

This Appendix contains a complete set of individual Profiles for each of the transhipment sites subject to Policy S7. Those sites denoted with a 'D' are not yet safeguarded but as with the case of D2 has been developed. Those sites denoted with an 'F' were given safeguarded status in the Minerals Local Plan 1996. Each Site Profile covers the site location, site boundaries, site characteristics, and notes any detailed development requirements associated with operations at each site.

D2 Ballast Quay, Fingringhoe

F1 Chelmsford Rail Depot

F2 Harlow Mill Rail Station

F3 Marks Tey Rail Depot

F4 Port of Harwich

D2 Ballast Quarry, Fingringhoe

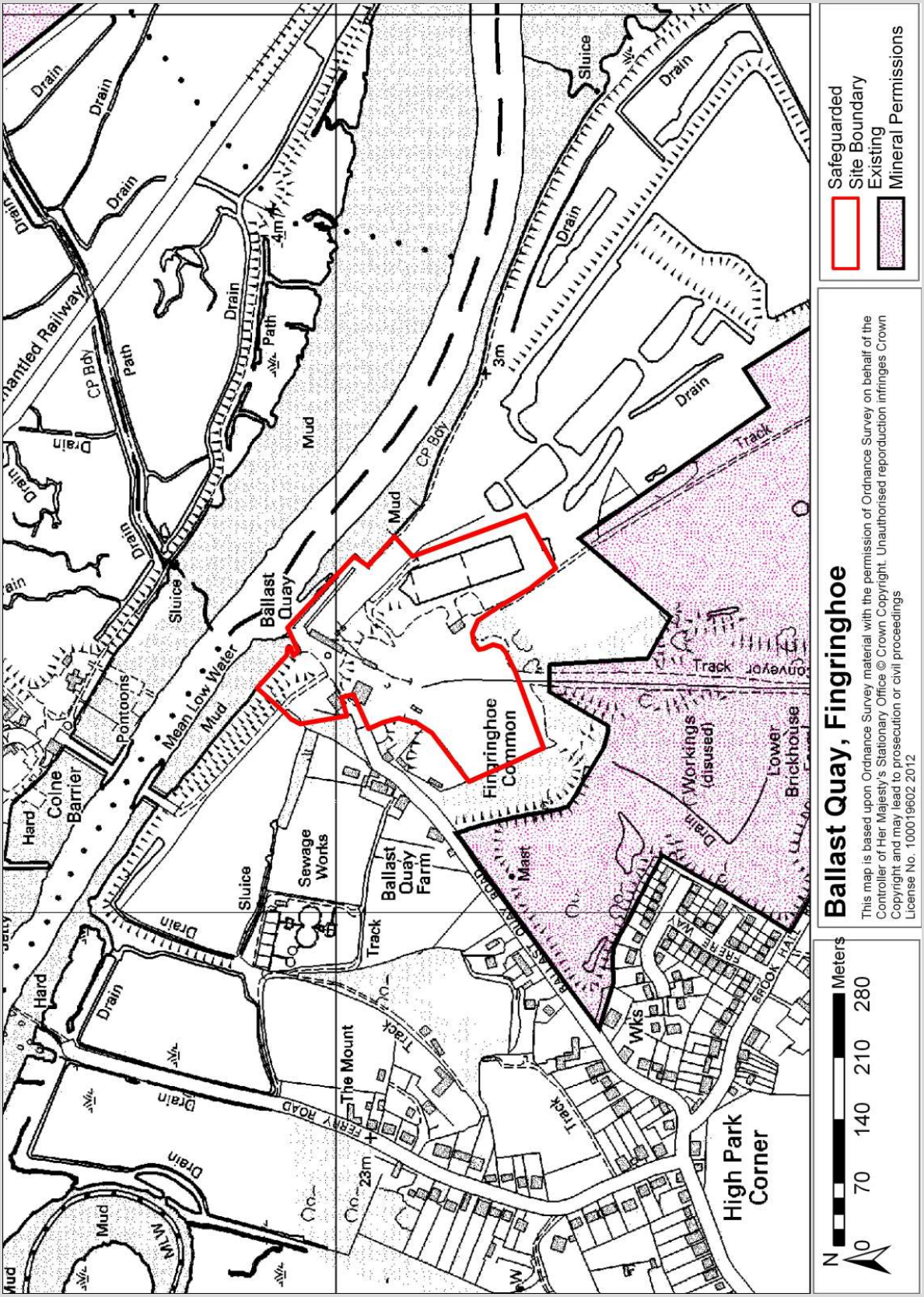
Table 25

Site	D2
Address	Ballast Quay, Fingringhoe
District	Colchester
Area	11.66 ha

Notes:

1. Safeguarded status is withdrawn once the current permitted mineral extraction at Fingringhoe Quarry is completed.
2. Only excavated mineral from Fringringhoe Quarry shall be exported by barge.
3. Not suitable for importation and onward distribution by road due to lack of suitable infrastructure.

D2 Ballast Quay:



F1 Harlow Mill Station

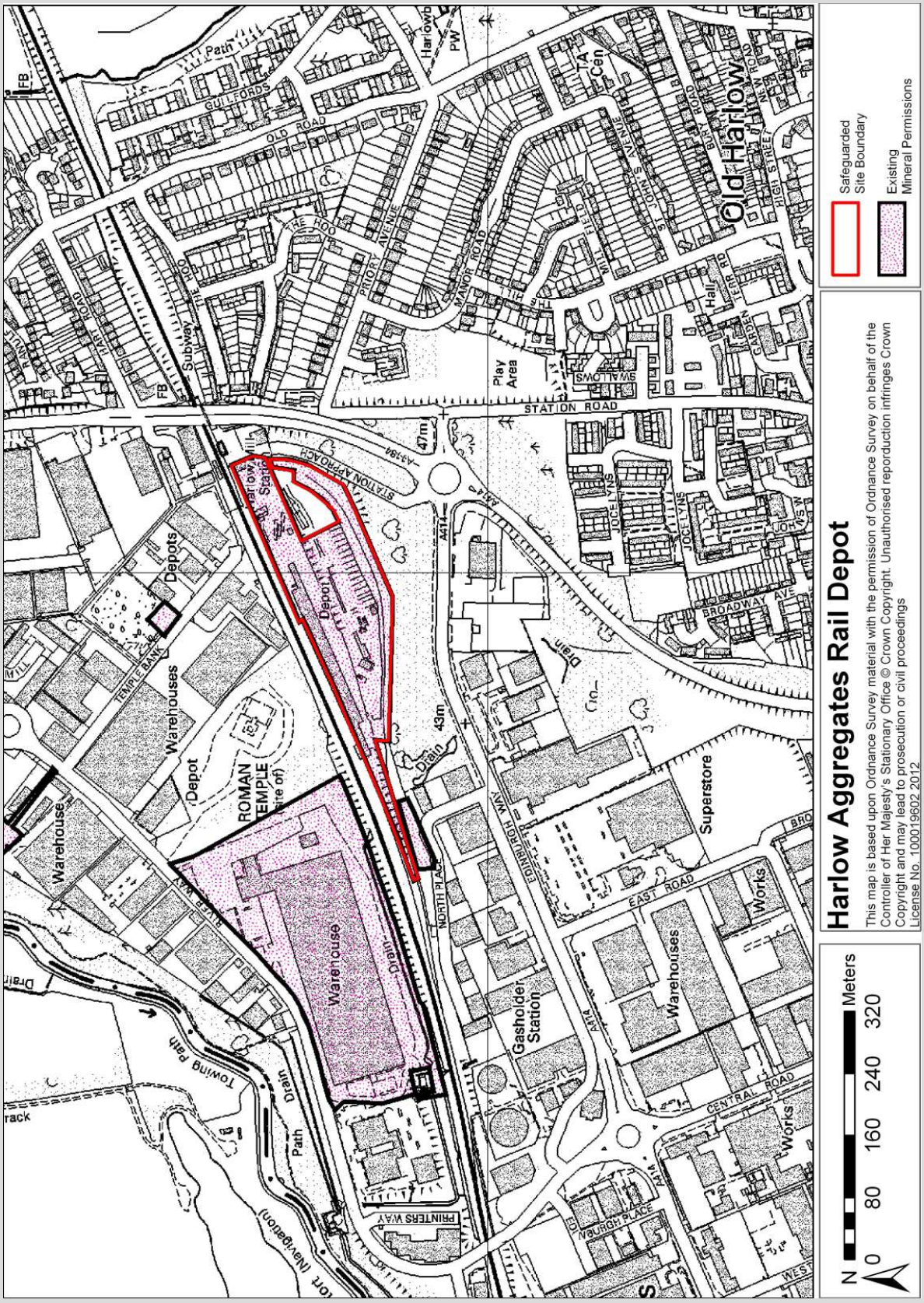
Table 26

Site	F1
Address	Harlow Mill Station
District	Harlow
Area	3.7ha

Notes

1. Harlow Mill site is located approximately 2.5km from Harlow town centre, on the northern edge of the town. It is located within the River Way Industrial Estate. The site is situated west of Cambridge Road (A1184) and north of Edinburgh Way (A414). Access is via Station Approach Road.
2. The area contains a coated roadstone plant and cement batching facility and it borders an aggregate unloading facility (Run by Tarmac). It is also bordered by a separately operated roadstone coating plant to the south (Aggregate Industries). Both sites are of the same use which is for the purpose of handling and processing aggregates for the manufacture and distribution of coated roadstone.

F1 Harlow Mill Station Site Map:



F2 Chelmsford Rail Sidings

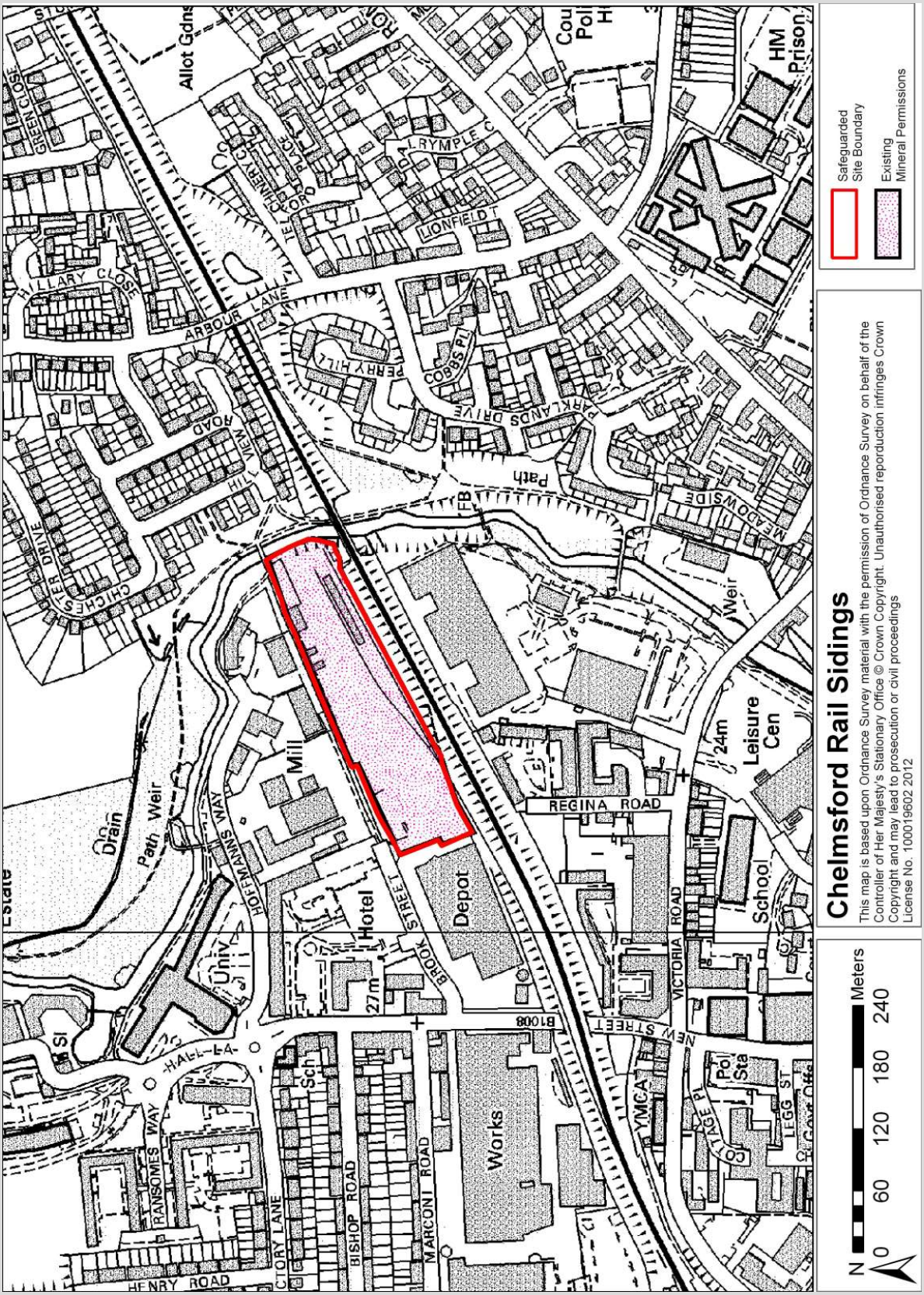
Table 27

Site	F2
Address	Chelmsford Rail Sidings
District	Chelmsford
Area	0.3ha

Notes

1. Site currently used by Lafarge Aggregates and the Brett Group to import and store aggregate delivered by both road and rail. The site is accessed via Brook Street which itself is accessed off New Street to the West of Chelmsford Town Centre with good access to major strategic routes including the A12.
2. The site is allocated as employment land within Chelmsford City Council's adopted 'Chelmsford Town Centre Area Action Plan' which forms part of the Council's adopted Local Development Framework. The northern half of the site is identified as the Railway sidings, Brook Street 'Opportunity Site'. Any proposal for development within this area will need to be resolved with both Local Plans.

F2 Chelmsford Rail Sidings Site Map:



F3 Marks Tey Rail Siding

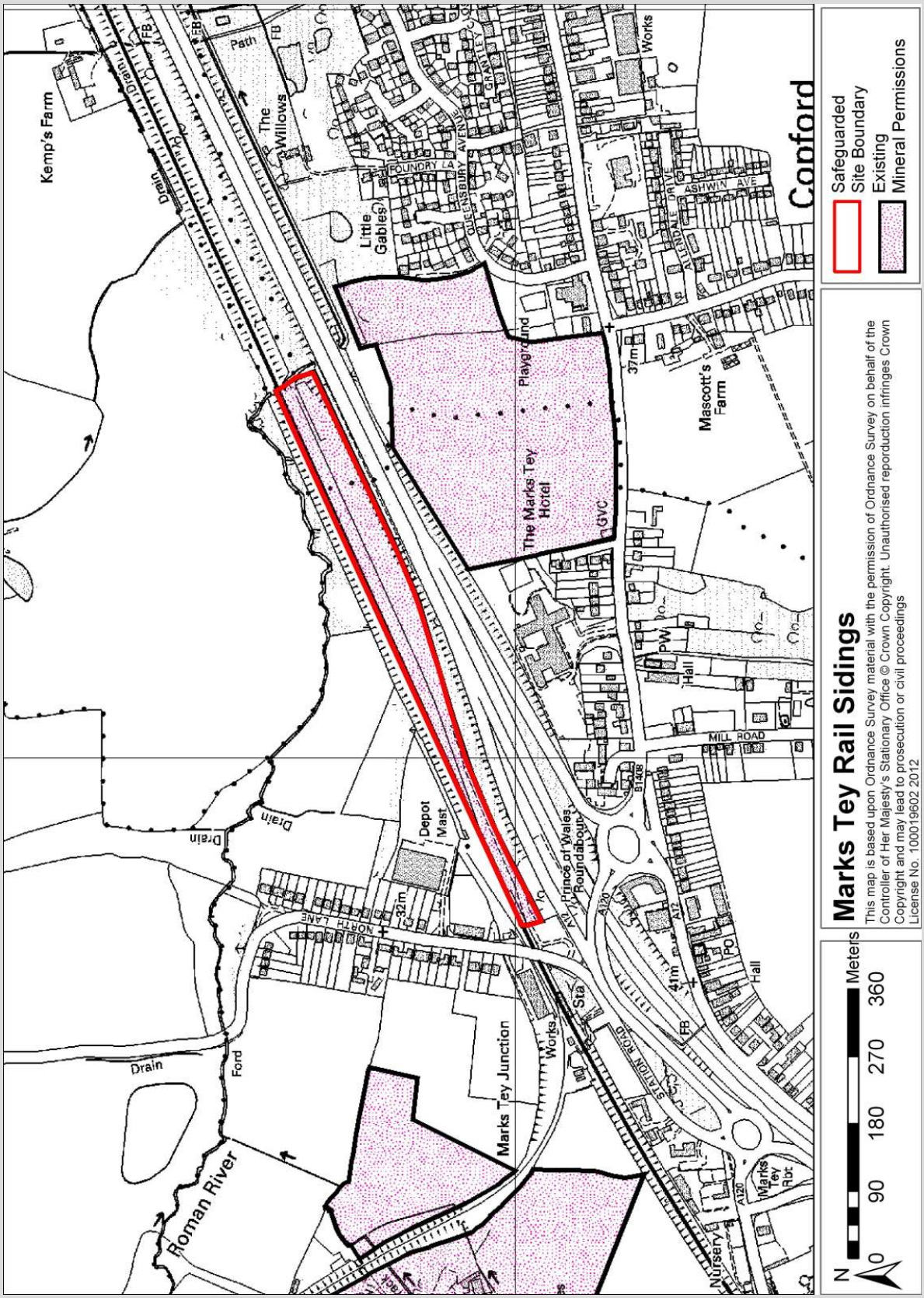
Table 28

Site	F3
Address	Marks Tey Rail Siding
District	Colchester
Area	0.3ha

Notes

1. The land including the sidings is leased by Tarmac Limited and used for the loading of sand and aggregates from their Stanway workings onto railway wagons for transport to London. The site comprises of little more than an access road and sidings with some limited aggregate area. Access is from Station Road which connects to the A120 and the site is reasonably well screened.
2. The facility remains in active use and it is proposed that the area should be safeguarded to ensure it remains available for mineral transhipment.

F3 Marks Tey Rail Siding Site Map:



F4 Port of Harwich

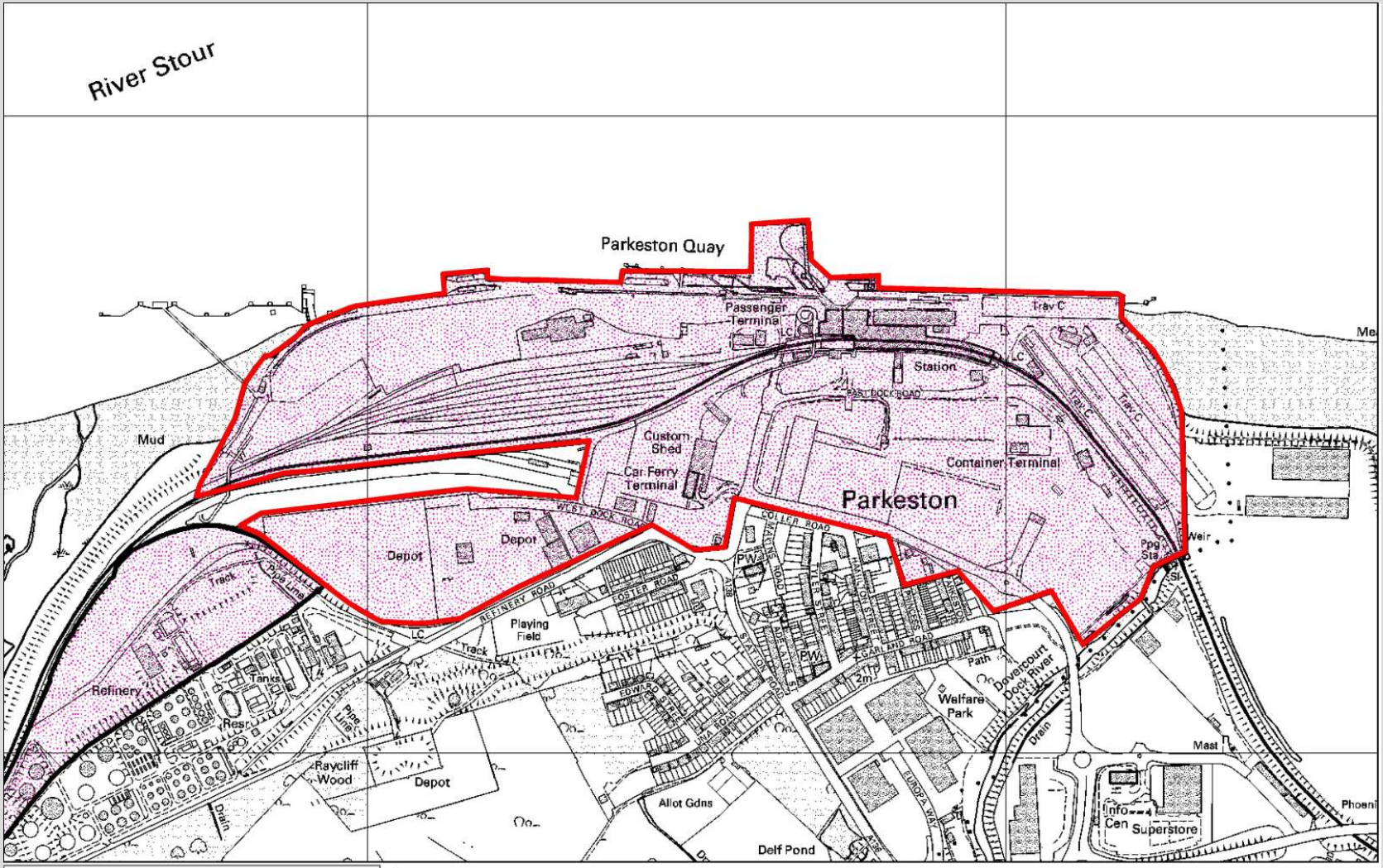
Table 29

Site	F4
Address	Port of Harwich
District	Tendring
Area	62ha

Notes

1. Site currently used by Aggregate Industries with all deliveries delivered via rail and sourced from Somerset (Limestone Type 1) and Acton, West London (spent rail ballast). The site is operated by virtue of it being rail-operational land used specifically for the purpose of the bulk handling of rail delivered aggregates.
2. The site, adjacent to HarwichInternationalPort, is accessed via West Dock Road with good access to major routes, primarily the A120. The site is allocated as an existing employment area within **Tendring District Council's Local Plan adopted 2007.**

F4 Parkston Quay, Harwich Site Map:



Appendix Seven Profiles for Strategic Aggregate Recycling Sites

Appendix Seven Profiles for Strategic Aggregate Recycling Sites

This Appendix contains a list of each of the strategic aggregate recycling sites subject to Policy S5:

1. Purdeys Industrial Estate, Rochford
2. Bulls Lodge, Chelmsford
3. Stanway, Colchester

Purdeys Industrial Estate SARS

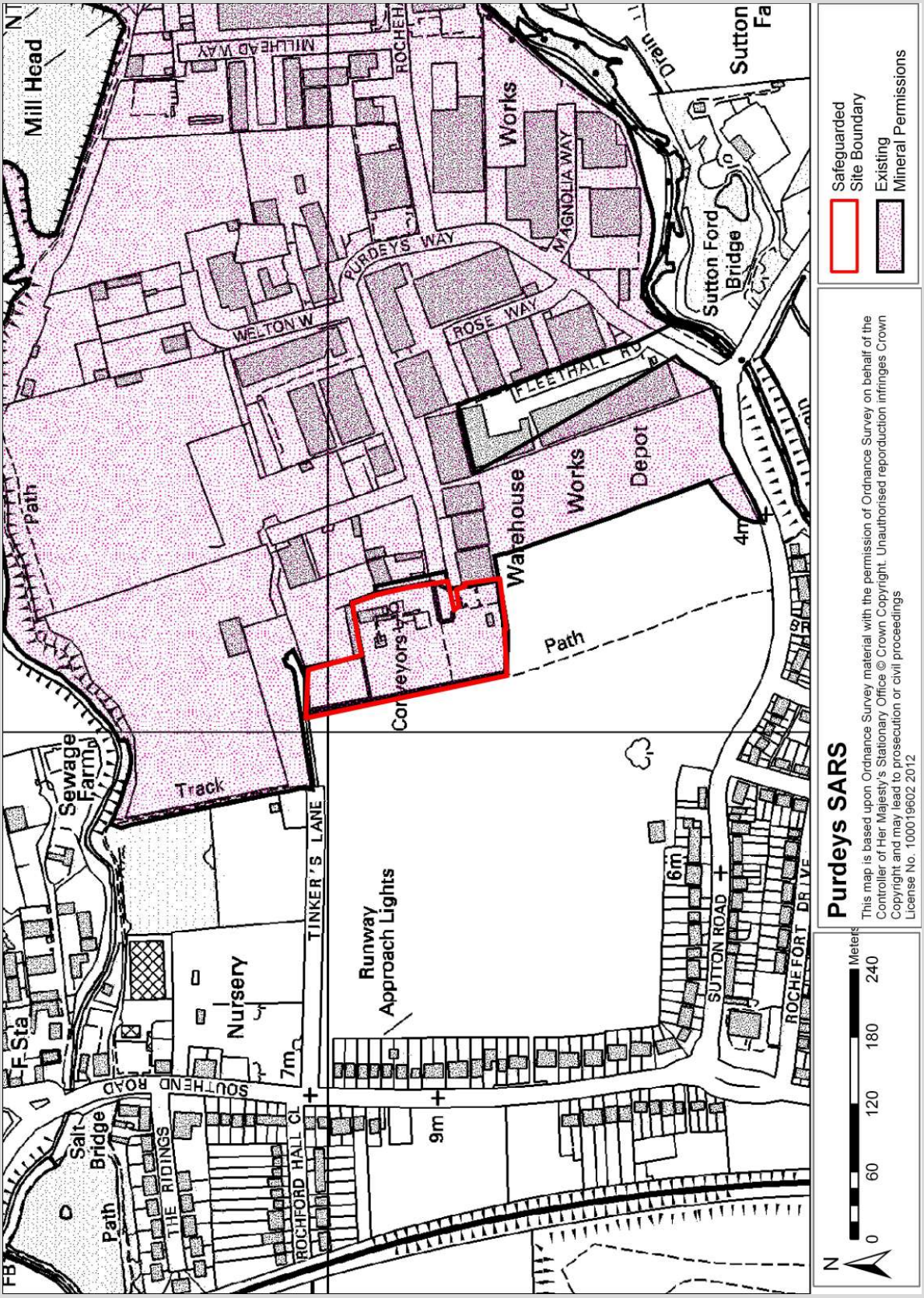
Table 30

Site	Purdeys Industrial Estate SARS
Address	Purdeys Industrial Estate
District	Rochford
Area	1.4ha

Notes:

1. This site located within Purdeys Industrial Estate is safeguarded for the life of the Plan, subject to planning permission (our ref: ESS/25/07/ROC) which is permanent.

Purdeys Industrial Estate SARS Site Map:



Bulls Lodge SARS

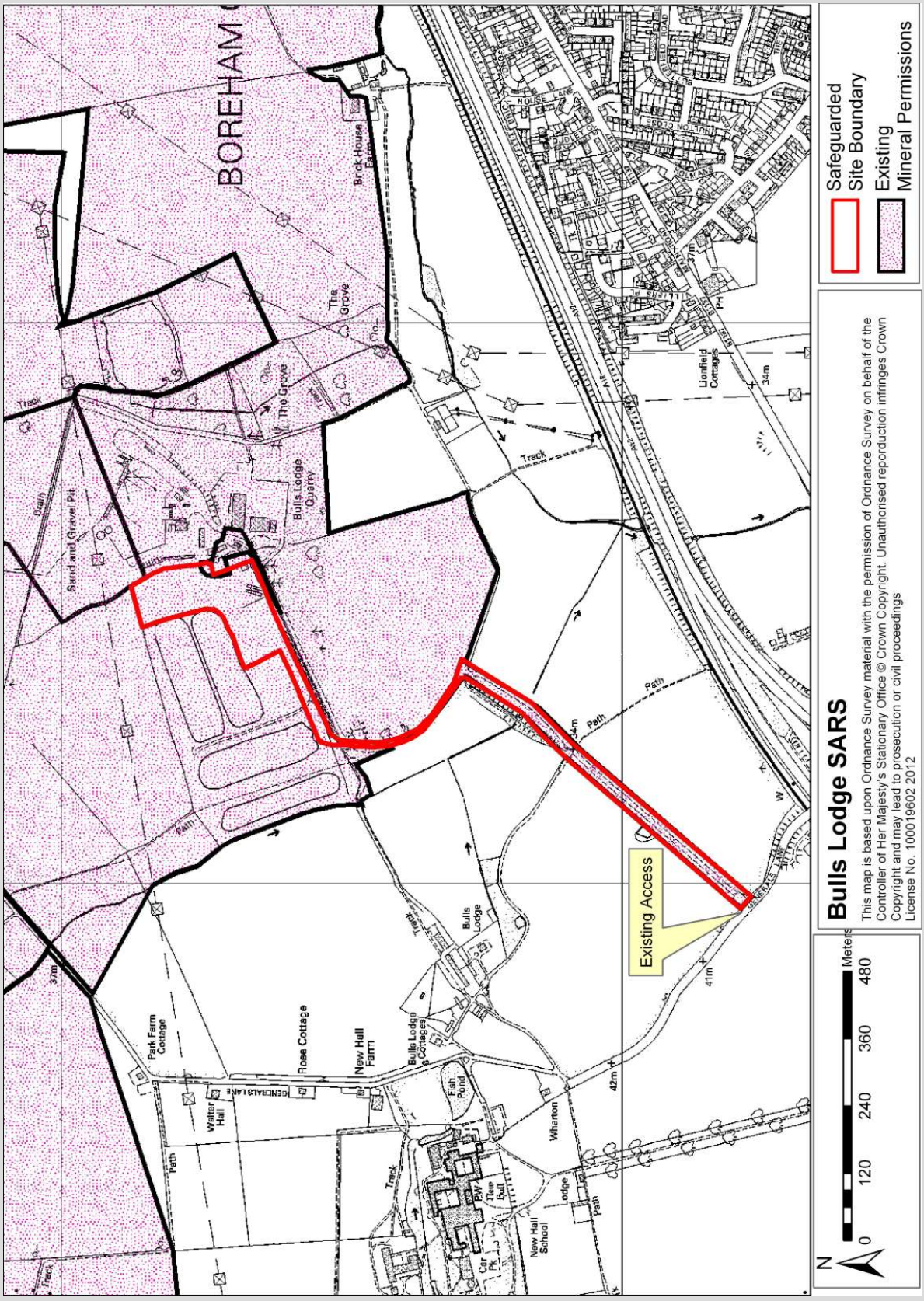
Table 31

Site	Bulls Lodge SARS
Address	Bulls Lodge Quarry
District	Chelmsford
Area	1.2ha

Notes:

The Aggregate Recycling Plant at Bulls Lodge Quarry is subject to temporary planning permission (ESS/25/08/CHL) with an expiry date of 30 June 2030.

Bulls Lodge SARS Site Map:



Stanway SARS

Table 32

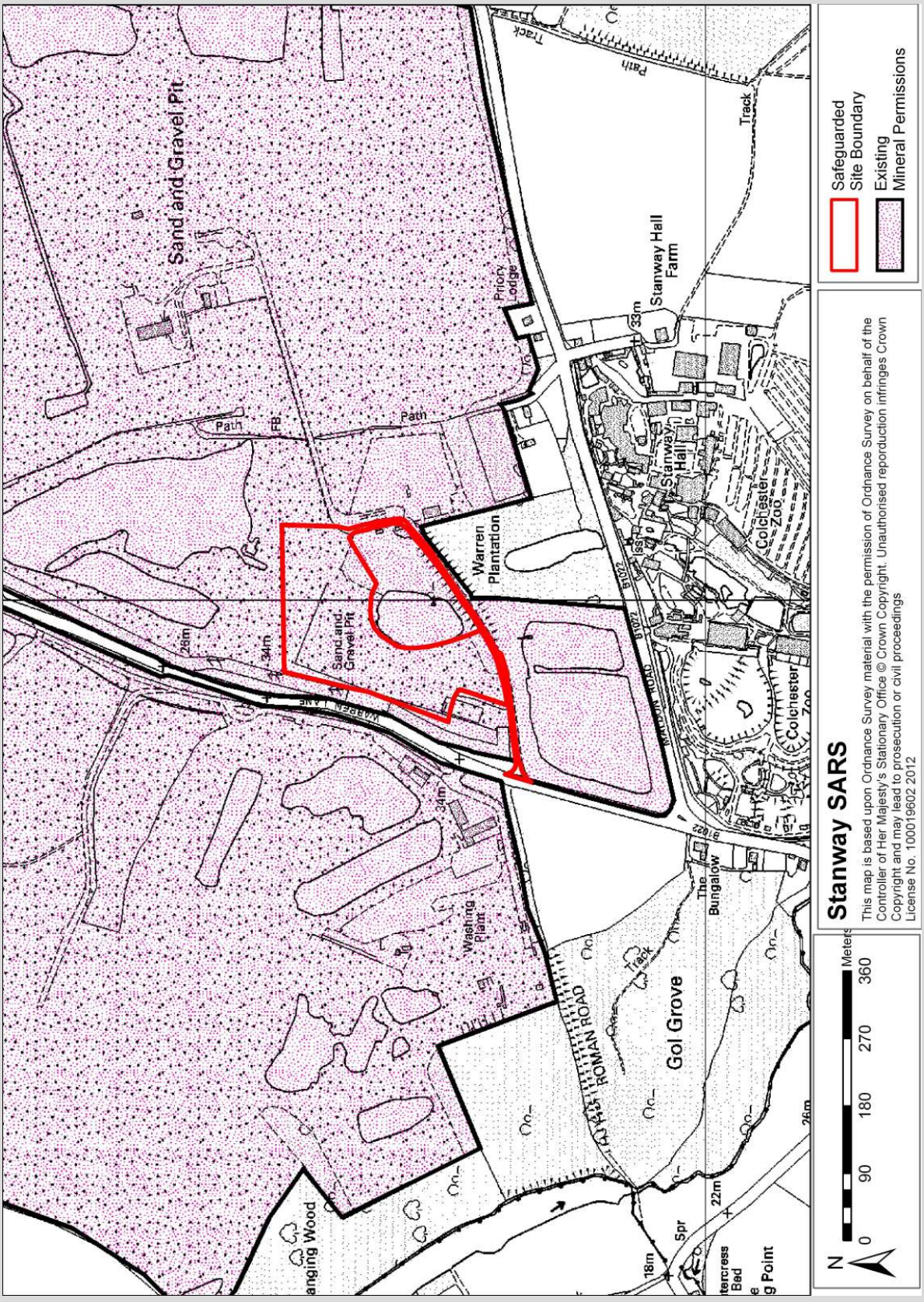
Site	Stanway SARS
Address	Warren Lane, Stanway
District	Colchester
Area	4ha

Notes:

1. Stanway is safeguarded subject to planning permission (our ref: ESS/17/05/COL).

2. Safeguarding status will be withdrawn on expiry of the permission on 11 January 2015 (as stipulated within condition 1) unless a new application is granted for continuation of the temporary activity.

Stanway SARS Site Map:



Appendix Eight Profiles of Safeguarded Coated Stone Plants (Asphalt)

Appendix Eight Profiles of Safeguarded Coated Stone Plants (Asphalt)

This Appendix contains the list of each of the safeguarded coated stone plants subject to Policy S9:

1. Suttons Wharf, Rochford
2. Stanway, Colchester
3. Wivenhoe Quarry, Colchester
4. Bulls Lodge, Chelmsford
5. Essex Regiment Way, Chelmsford
6. Harlow Mill Station, Harlow

Suttons Wharf Coated Stone Plant

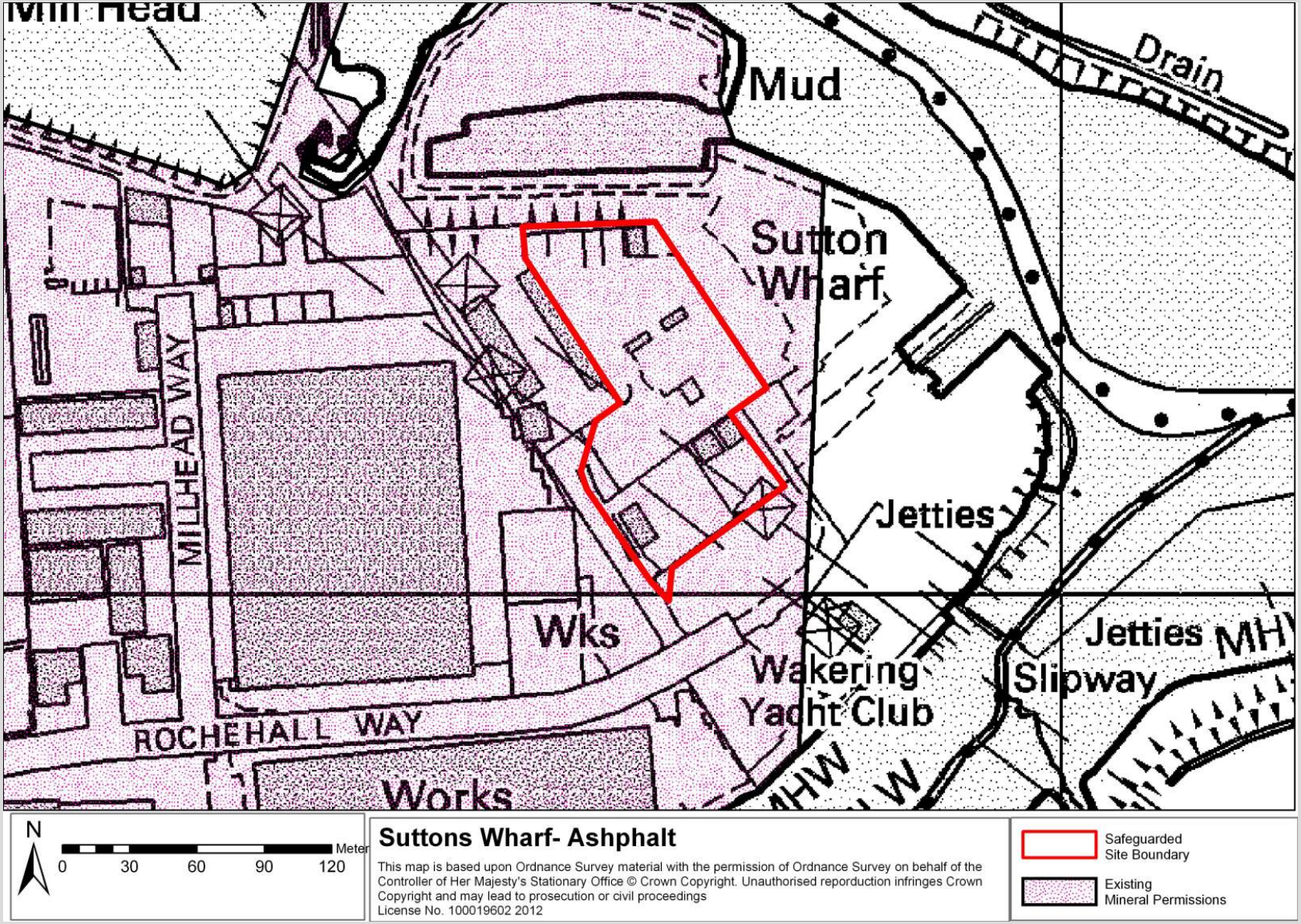
Table 33

Site	Sutton Wharf Coated Stone Plant
Address	Sutton Wharf
District	Rochford
Area	*1.0 HA*

Notes:

1. Safeguarded subject to the planning permission (ref: F/0602/95/ROC) for the replacement of the asphalt (coated stone) plant at Sutton Wharf, Purdeys Way, as granted by Rochford District Council in 1996.

Suttons Wharf Coated Stone Plant Site Map:



Wivenhoe Quarry Coated Stone Plant

Table 34

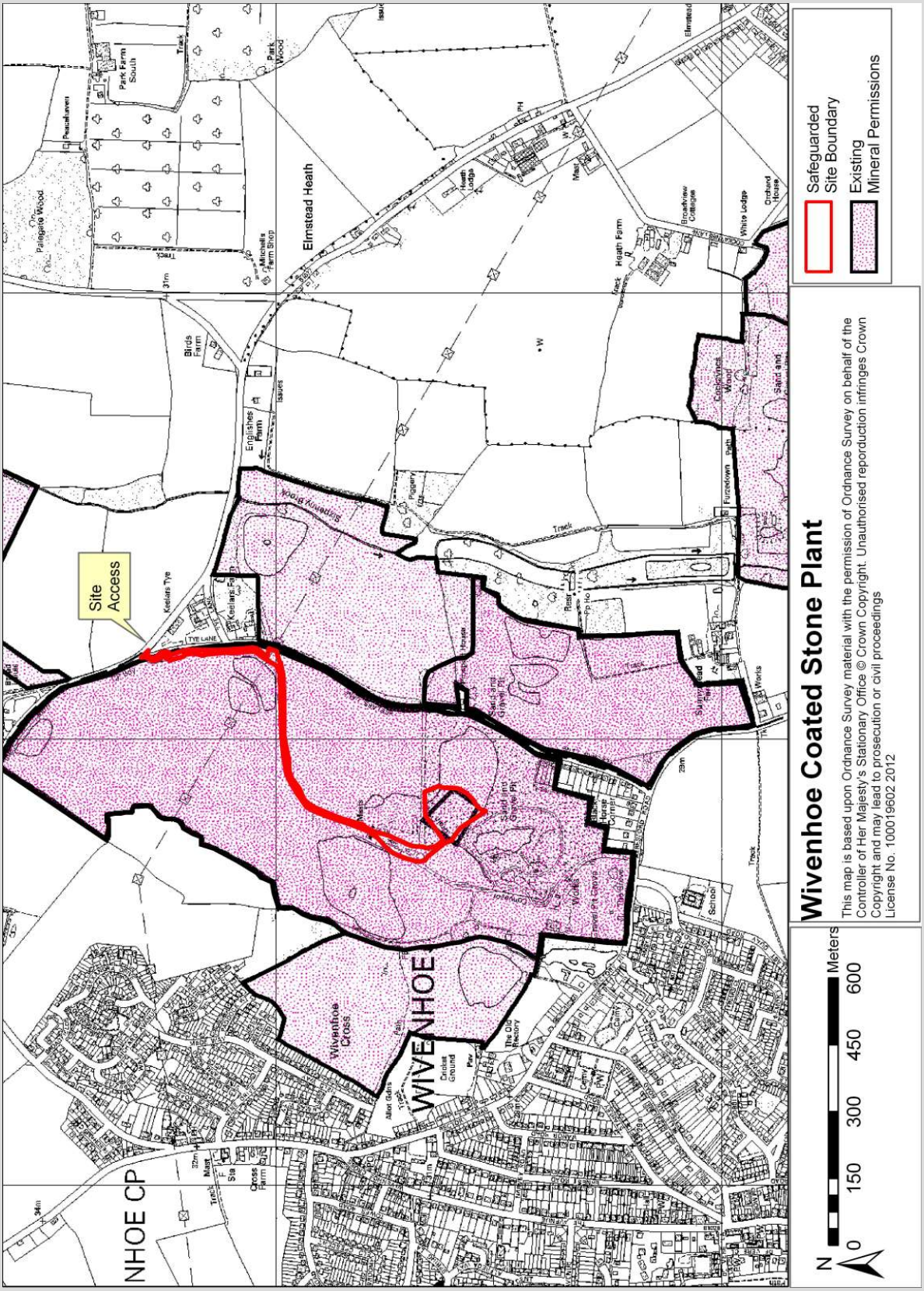
Site	Wivenhoe Quarry Coated Stone Plant
Address	Wivenhoe
District	Colchester
Area	2.1 ha

Notes:

1. The coated stone plant is located within Wivenhoe Quarry and is safeguarded subject to planning permission (our ref: ESS/42/12/TEN).

2. Safeguarding status will be withdrawn on expiry of the permission on 31 December 2015 unless a new application is granted for continuation of the temporary activity.

Wivenhoe Quarry Coated Stone Plant Site Map:



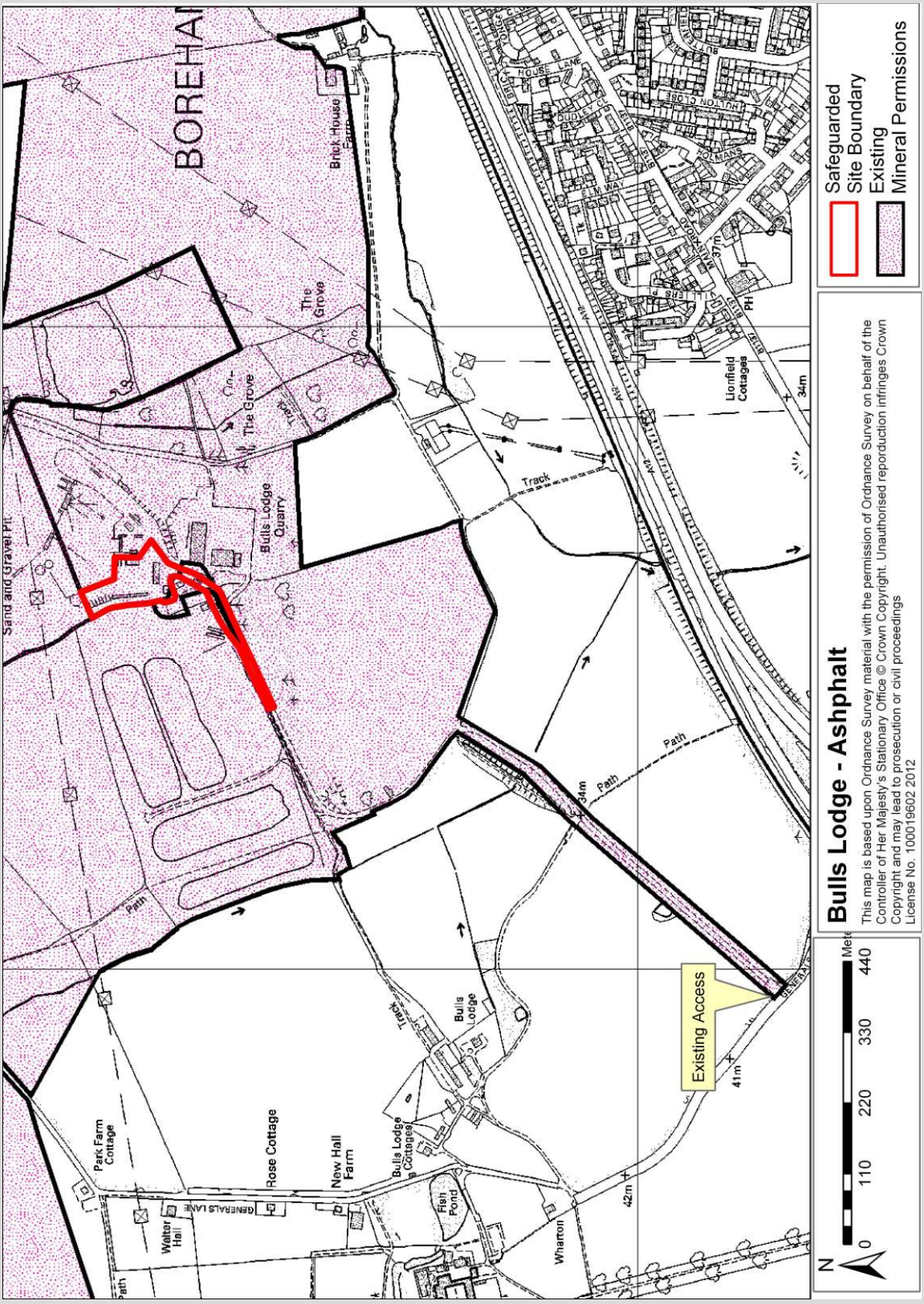
Bulls Lodge Quarry Coated Stone Plant

Table 35

Site	Bulls Lodge Coated Stone Plant
Address	Bulls Lodge Quarry
District	Chelmsford
Area	1.2ha

1. The coated stone plant is located within Bulls Lodge Quarry and safeguarded subject to planning permission (our ref: ESS/01/11/CHL). The planning permission expiry date is 31 December 2015.

Bulls Lodge Coated Stone Plant:



Essex Regiment Way Coated Stone Plant

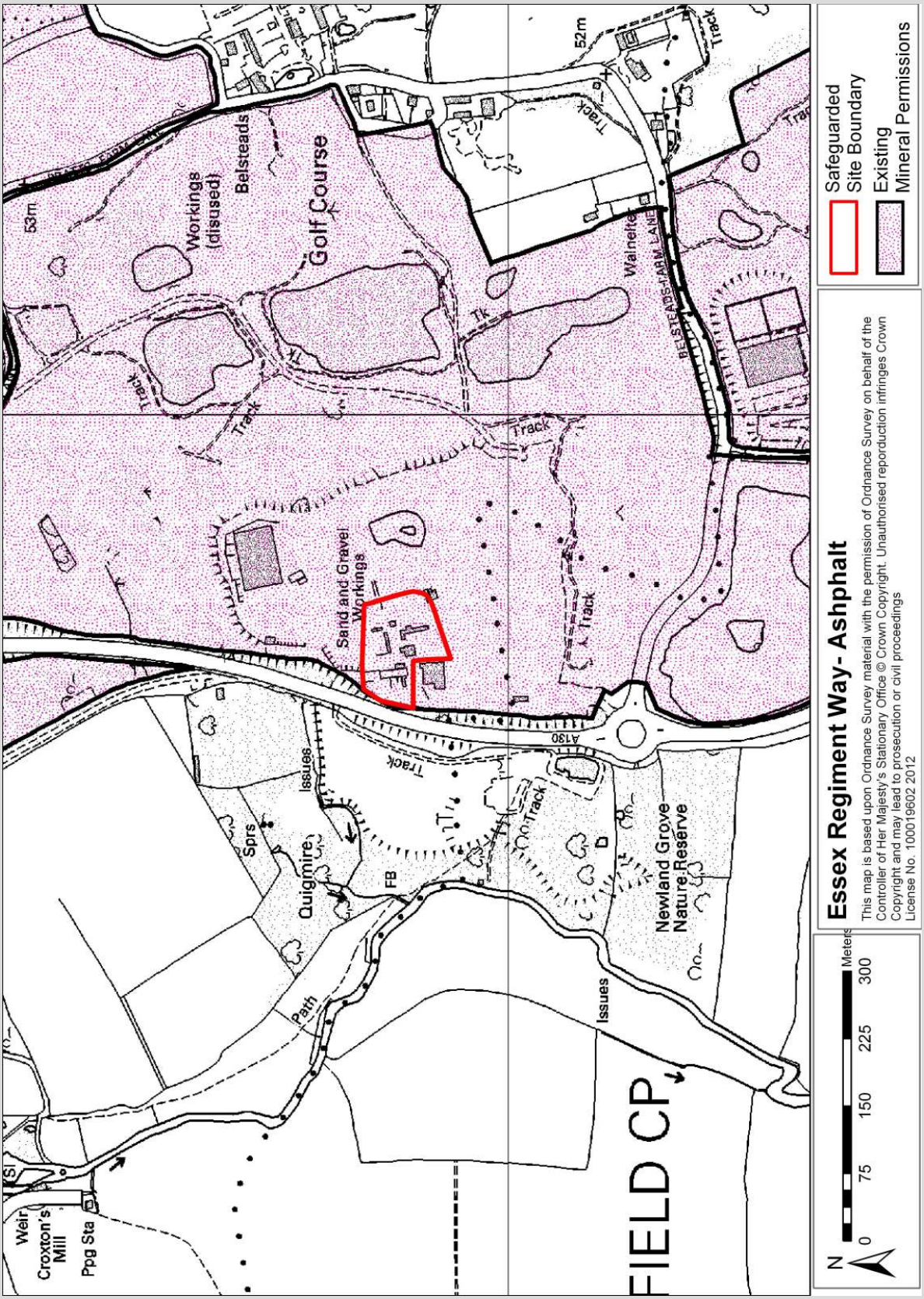
Table 36

Site	Essex Regiment Way Coated Stone Plant
Address	Essex Regiment Way (A130)
District	Chelmsford
Area	*0.85 ha*

Notes:

1. Safeguarded subject to the planning permission (ref: 08/00372/FUL) for the retention of existing urban coating plant in its current location within the Mid Essex Gravel site adjacent to Essex Regiment Way (A130), as granted by Chelmsford City Council in 2008.

Essex Regiment Way Coated Stone Plant Site Map:



Harlow Rail Coated Stone Plant

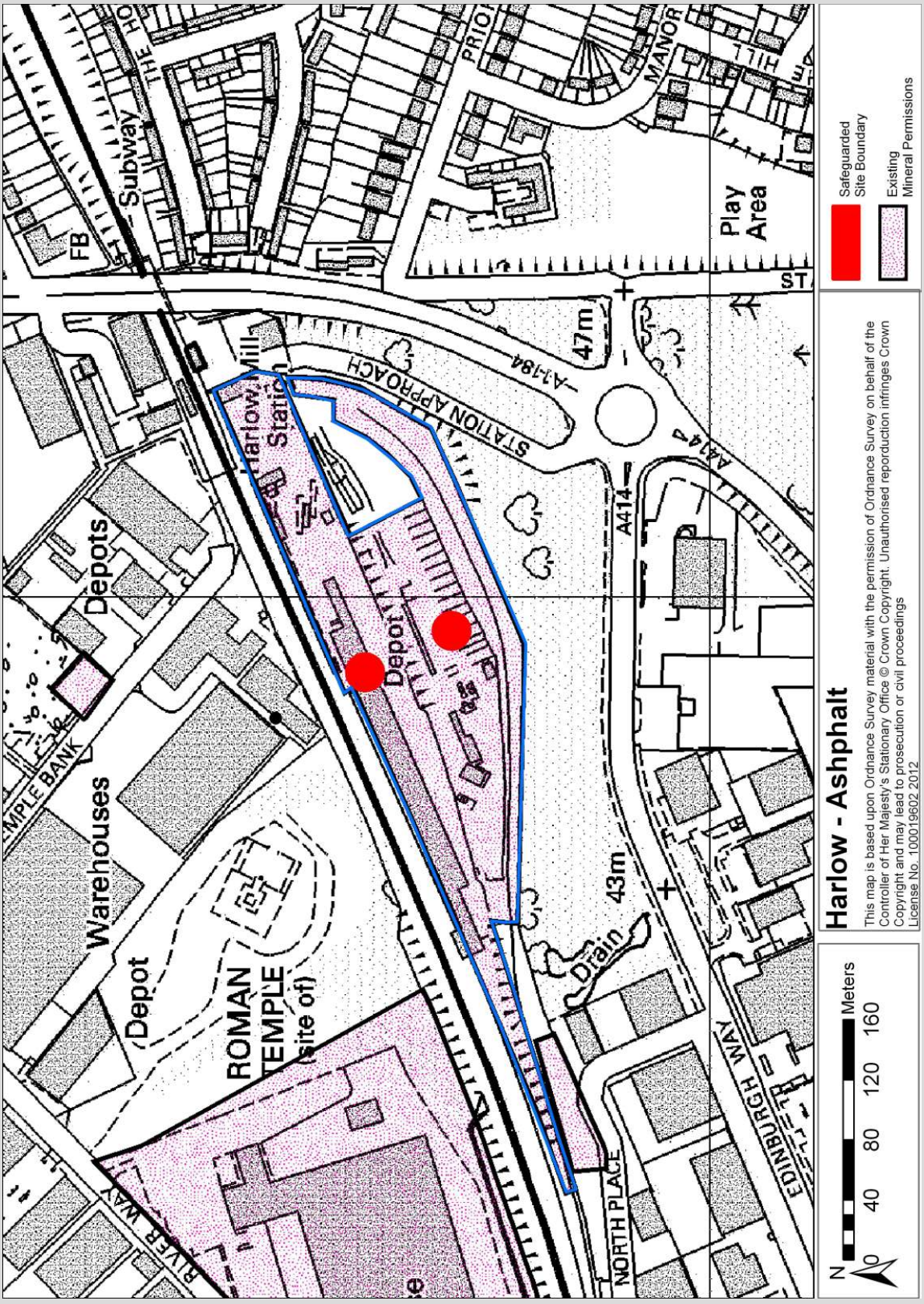
Table 37

Site	Harlow Rail Coated Stone Plant
Address	Harlow Mill Station
District	Harlow
Area	1.9ha

Notes:

1. The two coated roadstone plants are located in Harlow Mill Station, Harlow and are permanent facilities subject to planning permission (ref: ESS/05/11/HLW and ESS/23/08/HLW).

Harlow Rail Coated Stone Plant:



Appendix Nine Consultation Procedure for Mineral Safeguarding Areas

Appendix Nine Consultation Procedure for Mineral Safeguarding Areas

Appendix Nine:

Consultation procedure for Mineral Safeguarding Areas

In accordance with Spatial Strategy Policy S6 of the Plan, the Essex district/ borough/ city councils (as a local planning authority) should consult the Minerals Planning Authority (the County Council) on planning applications situated within Mineral Safeguarding Areas (MSAs) and Mineral Consultation Areas (MCAs) to ensure that specific mineral resources are not needlessly sterilised by future development.

However, some limitation and filtering needs to operate within the consultation process as it is neither practicable nor necessary for the Minerals Planning Authority to be consulted on all developments proposed in planning applications or being considered during Local Plan preparation. The following development below will be excluded from the consultation process.

A. Scale of Development Area

The Mineral Planning Authority will consider prior extraction in MSAs as a windfall before alternative development occurs on sites greater than,

- Five hectares for sand and gravel
- Three hectares for chalk
- Greater than a single residential curtilage for brick earth and brick clay

Therefore, there is no requirement on Essex district/ borough/ city councils (as a local planning authority) to consult the Minerals Planning Authority in respect of proposed development where the development area for the relevant kind of mineral is less than these size thresholds. This is excluded development within the terms of MSA consultation arrangements.

B. Types of Proposed Development

The following types of proposed development (listed below) will also be excluded from the MSA consultation arrangements:

Table 38

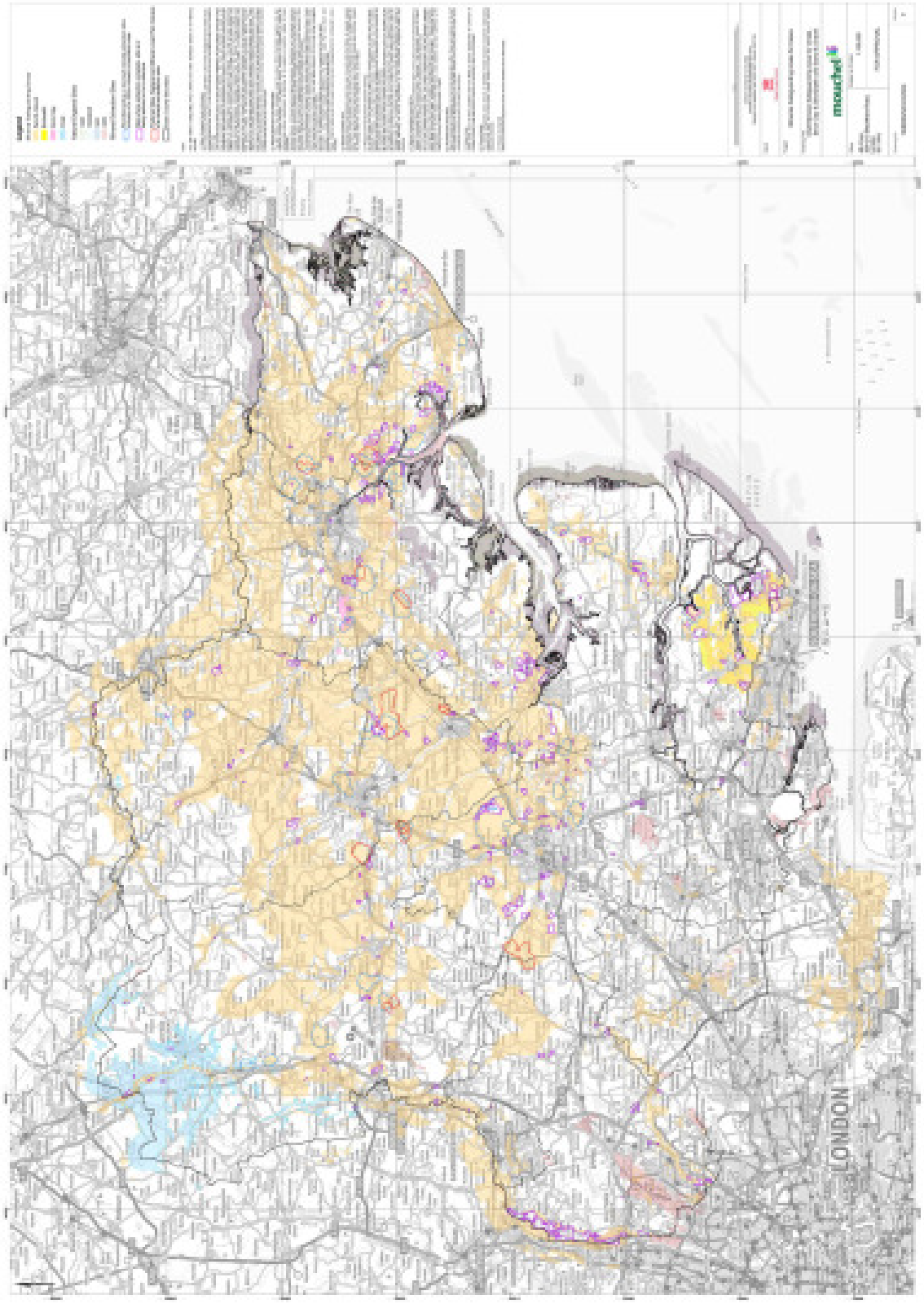
1.	Applications for development on land which is **already allocated** in adopted local development plan documents.
2.	Proposals for **minor infilling** of development within the defined settlement limits for towns, villages and hamlets identified in adopted local development plan documents.
3.	Applications for **minor householder development** including, ▪ Construction of a replacement dwelling where the new dwelling occupies the same or similar footprint to the building being replaced; ▪ Minor extensions to existing dwellings or properties where they lie within the immediate curtilage and would not bring the building closer to an existing or approved mineral working; ▪ Proposals for the provision of incidental and non-habitable structures lying within the curtilage of an existing dwelling (e.g., driveways, garages, car parks, hardstanding).
4.	Proposals for the erection of **agricultural buildings** immediately adjacent to an existing working farmstead.
5.	Applications for the **change of use of open land** which does not involve a building, but **not** proposals for outdoor recreation facilities (e.g., golf courses, allotments, country parks, village greens etc.) which must be consulted upon.
6.	Applications for **temporary buildings, structures, or uses** (for up to five years).
7.	Applications related to **existing permissions** such as for reserved matters, or for minor amendment to current permissions.

8.	Applications for **other kinds of consent** – advertisements; listed building consent; Conservation Area consent; proposals for work to trees or removal of hedgerows.
9.	Proposals for the **demolition** of a residential or other building.
10.	Proposals for **minor works** such as fencing or bus shelters.

Appendix Ten Maps of Mineral Safeguarding Areas

Appendix Ten Maps of Mineral Safeguarding Areas

Picture 1


LONDON

Note: A set of maps supplied by Mouchel defining the boundaries of the Mineral Safeguarding Areas on an Ordnance Survey base. To be enlarged to A3 for printed version of the document

Appendix Eleven Submissions policies

Appendix Eleven Submissions policies