

Review of Essex Minerals Local Plan 2014

Assessment of Candidate Sand and Gravel Sites

Appendix E

Archaeology Detailed RAG Assessment Methodology and Results

Introduction

These assessments consider the significance of heritage assets that may be impacted by the proposals. Heritage assets may include Scheduled Monuments, Registered Parks and Gardens, non-designated archaeological sites, Palaeolithic and palaeoenvironmental deposits, industrial archaeology, and built heritage structures. The assessments will consider the significance of direct impacts (physical changes to heritage assets) and indirect impacts through changes within their settings.

Methodology

The policy context for the assessments includes:

- The Ancient Monuments and Archaeological Areas Act 1979 provides the legislative framework for protection of Scheduled Monuments across Great Britain.
- NPPF 2021: Chapter 16 *Conserving and enhancing the historic environment*
- NPPG: *Historic environment*
- Historic England Advice Note 3: The Historic Environment and Site Allocations in Local Plans (HEAN3)
- Historic England Advice Note 12: Statements of Heritage Significance: Analysing Significance in Heritage Assets (HEAN12)
- Historic Environment Good Practice Advice in Planning Note 3 (Second Edition): The Setting of Heritage Assets (GPA3)

The methodology will consist of:

1. A detailed assessment of the Essex Historic Environment Record supported by appropriate cartographic research which will identify heritage assets that are affected by the potential site allocation (desk based using GIS data, aerial photography, historic mapping and list entries, some sites may require a site visit).
2. Assessment of the impact that the Site allocation will have on the heritage asset.
3. Specification of what mitigation requirements would be required for pre-application and/or post application stage.
4. Identification of the appropriate RAG grade.

Sensitivity Grade	Description	Possible Mitigation
Red	The impact or issue is so severe that information currently available suggests that a serious impact will result from the development of the Site which will be difficult to mitigate to an acceptable level.	Mitigation in order to make the Site acceptable is difficult.
Red-Amber	The impact or issue is major but this may be made acceptable by mitigation.	Likely to require high levels of mitigation in order to make the Site acceptable.
Amber	The impact or issue is moderate and this is likely be made acceptable by mitigation.	Likely to require medium levels of mitigation in order to make the Site acceptable.
Amber-Green	The impact or issue is minor and if mitigation is required to make the impact acceptable, this can easily be provided.	May require low levels of mitigation in order to make the Site acceptable.
Green	There are no impacts or issues that require mitigation.	Mitigation not required.

Candidate Site Reference A6 - Bradwell Quarry (a)

Amber

Key findings of the assessment are as follows:

- The Site lies within an area of archaeological features as identified through archaeological evaluation.
- The archaeological sites identified are limited in scale and are of local to regional significance.
- The listed buildings and existing moat at Woodhouse Farm will need mitigation to ensure there is no impact from quarrying activities.
- There are no identified sites within the area of archaeological evaluation which would require preservation in situ.
- Any areas which have not yet had archaeological evaluation will require archaeological trial trenching and assessment for the survival of WWII buildings or structures.
- Mitigation would comprise a programme of open area excavation targeted on the concentrations of any significant archaeological remains identified in the trial trenching and possible strip, map, and record in areas of dispersed archaeological remains.

Results of the technical RAG assessment

Much of the Site has been evaluated through an archaeological trial trench investigation, following a fieldwalking programme and geophysical survey. Concentrations of archaeological remains have been identified as well as indications of dispersed activity within the Site. The archaeological sites identified are limited in scale and are of local to regional significance. They are interpreted as constituting the remains of later prehistoric activity, Iron Age activity and possible farmstead, Late Iron Age/Early Roman farmstead, and medieval working areas/quarries.

Two historic farmsteads lie within the Site boundary, Allshots and Woodhouse Farm. Allshots Farm dates to the late 16th/early 17th century and Woodhouse farm dates to the early 17th century, both farmhouses and ancillary buildings are designated as listed buildings. Woodhouse Farm is surrounded by a moat and may be medieval in origin.

The Site lies at the edge of a WWII Airfield and ancillary airfield sites are located within and adjacent to the Site. A number of WWII buildings and structures may still be extant within the Site, many of which have had historic building records completed.

The impact of the quarrying would result in the total loss of the known non-designated heritage assets and any associated unknown heritage assets. There will

be an impact in terms of setting on the listed buildings within the Site. The existing moat at Woodhouse farm is highly sensitive to quarrying activities and there is a possibility of dewatering the feature.

Within the areas that have been previously evaluated through trial trenching mitigation would be required which included a programme of open area excavation and possible strip, map, and record in areas where there is no clear concentration of features. In areas where there has been no archaeological evaluation this would need to be completed through trial trenching and assessment of any surviving WWII structures or remains.

The Site will have a moderate impact on archaeology and will require medium levels of mitigation to make the Site acceptable. The level of mitigation is largely understood from the completion of a programme of archaeological trial trenching which has shown that there are no sites which would require preservation in situ.

Cumulative impact

There are no other Candidate Sites in proximate to Site A6 which could also impact on archaeological remains.

Candidate Site Reference A22 – Little Bullocks Farm, (a)

Amber-Green

Key findings of the assessment are as follows:

- The Site lies within an area known to contain multi-period archaeology from the Late Bronze Age to the medieval period situated close to the Pincey Brook. Excavations to the north show settlement evidence from the Bronze Age through to the post medieval period, both on and set back from the line of Stane Street the Roman road from Colchester to Braughing.
- A sequence of cropmarks are known from arial photography extending across the Site forming a large enclosure or early field system.
- Mitigation will comprise an initial desk based assessment and rectified aerial photographic assessment followed by a programme of trial trenching.

Results of the technical RAG assessment

The Essex Historic Environment Record shows that the Site lies within an area where extensive archaeological work has previously been undertaken to the north of the Site.

Within the area of the proposed Site there is evidence of cropmarks forming either an earlier enclosure or field pattern.

The impact of the quarrying would result in the total loss of the known heritage assets (multi-period archaeological deposits) within the Site.

Within the immediate vicinity extensive excavations have occurred with the new A120, Priors Green, Takeley urban expansion and Stansted Airport all showing multi-period sites from the Late Bronze Age through to the post medieval period.

Mitigation would be required which would comprise the production of a desk based archaeological assessment and rectified aerial photographic assessment followed by a programme of trial trenching.

The Site will have a low to moderate impact on known archaeology and will require a medium level of mitigation to make the Site acceptable.

Cumulative impact

There are anticipated to be no cumulative impacts with other existing and/or candidate mineral sites.

Candidate Site Reference A23 – Little Bullocks Farm, (b)

Amber-Green

Key findings of the assessment are as follows:

- The Site lies within an area known to contain multi-period archaeology from the Late Bronze Age to the medieval period situated close to the Pincey Brook. Excavations to the north show settlement evidence from the Bronze Age through to the post medieval period, both on and set back from the line of Stane Street, the Roman road from Colchester to Braughing.
- A sequence of cropmarks are known from aerial photography extending across the Site forming an earlier field system and potential woodland boundary.
- Mitigation will comprise an initial desk based assessment to support the planning application followed by rectified aerial photographic assessment and trial trenching. This will lead to excavation if significant deposits are identified.

Results of the technical RAG assessment

The Essex Historic Environment Record shows that the Site lies within an area where extensive archaeological work has previously been undertaken to the north of the Site.

Within the area of the proposed Site there is evidence of cropmarks forming an earlier field system.

Within the immediate vicinity extensive excavations have occurred with the new A120, Priors Green, Takeley urban expansion and Stansted Airport all showing multi-period sites from the Late Bronze Age through to the post medieval period.

The impact of the quarrying would result in the total loss of the known heritage assets (multi-period archaeological deposits) within the Site.

Mitigation will comprise an initial desk based assessment to support the planning application followed by rectified aerial photographic assessment and trial trenching. This will lead to excavation if significant deposits are identified.

The Site will have a low to moderate impact on known archaeology and will require a medium level of mitigation to make the Site acceptable.

Cumulative impact

There are anticipated to be no cumulative impacts with other existing and/or candidate mineral sites.

Candidate Site Reference A31 – Maldon Road

Amber

Key findings of the assessment are as follows:

- The Site lies within an extensive cropmark landscape. These include at least one enclosure, trackways, and ring ditches within the Site.
- A similar spread of crop marks is visible around the Site indicating a dispersed settlement pattern within the immediate area.
- Excavation in the adjacent area has identified multi-period archaeological deposits with settlements of Bronze Age through to medieval date.
- There is also the potential for Palaeolithic or Pleistocene deposits within the gravels.
- A pre-determination desk based archaeological assessment, and a geo-archaeological assessment and aerial rectification will be required as part of the supporting data for the planning application. Depending on the results of the desk based assessment this will potentially need to be followed by trial trenching to define the significance of archaeological deposits thought to be present to support the planning application.
- This would be followed by a programme of open area excavation targeted on the features identified in the trial trenching.

Results of the technical RAG assessment

The Essex Historic Environment Record shows that the Site lies within an area known to contain areas of archaeological features visible as cropmarks from the air. These include at least one enclosure, trackways, and ring ditches within the Site.

A similar spread of crop marks including a number enclosures are visible around the Site indicating a dispersed settlement pattern within the immediate area. Dating the enclosures is difficult although they are likely to be of prehistoric date.

The potential for the underlying Kesgrave deposits to contain Palaeolithic or Pleistocene remains. Gravels to north are recorded as having palaeolithic artifacts and possible lake deposits.

The impact of the quarrying would result in the total loss of the heritage assets (multi-period archaeological deposits) within the Site.

Mitigation would be required a desk based assessment and geoarchaeological assessment and aerial rectification will be required as part of the supporting data for the planning application. Depending on the results of the desk based assessment this will potentially need to be followed by trial trenching to define the significance of archaeological deposits thought to be present.

This would be followed by a programme of open area excavation targeted on the features identified in the trial trenching.

The Site will have a moderate impact on known archaeology and will require a medium level of mitigation to make the Site acceptable.

Cumulative impact

There are anticipated to be no cumulative impacts with other existing and/or candidate mineral sites.

Candidate Site Reference A47 – Bradwell – Monk’s Farm

Amber-Green

Key findings of the assessment are as follows:

- The Site lies within an area of archaeological features as identified through aerial photographic evidence.
- The Site contains evidence for an historic field boundary of unknown date and historic landscape features.
- There is potential for evidence for Medieval and later settlement along Pantlings Lane.
- Mitigation will comprise a programme of pre-determination archaeological evaluation comprising desk based assessment and geophysical survey.
- Dependant on the results of the geophysical survey, rectification of aerial photographic evidence and targeted trial trenching may be required to support any planning application to define the extent and significance of archaeological deposits on the Site.
- An archaeological evaluation will be required to be completed and would be followed by a programme of open area excavation targeted on any concentrations of significant archaeological remains identified in the trial trenching.

Results of the technical RAG assessment

The Site contains non-designated heritage assets as recorded on the Essex Historic Environment Record through aerial photographic evidence, their form suggests an historic field boundary of unknown date.

Further cropmark features in the surrounding area include ring-ditches, enclosures, linears and possible trackways. Numerous Roman coins have been reported from the fields both north and south of the Site and a postulated Roman road runs north south to the east of the Site.

The Site lies along Pantlings Lane which is likely of medieval, or earlier, origin. Excavations at Bradwell Quarry to the west have revealed evidence for medieval occupation in association with Pantlings Lane and the Chapman and Andre map of 1777 depict structures along Pantlings lane, opposite Monks Farm, within the Site. Further historic landscape features are preserved as trackways within the Site and likely associated with the historic park and garden surrounding Felix Hall.

No archaeological investigation has taken place within the Site however nearby archaeological investigations have revealed prehistoric, Late Iron Age, Roman and postmedieval activity including burial, industrial and settlement sites.

The impact of the quarrying would result in the total loss of the known non-designated heritage assets and any associated unknown heritage assets.

Mitigation will comprise a programme of pre-determination archaeological evaluation comprising desk based assessment and geophysical survey. Dependant on the results of the geophysical survey, rectification of aerial photographic evidence and targeted trial trenching may be required to support any planning application to define the extent and significance of archaeological deposits on the Site.

An archaeological evaluation will be required to be completed and would be followed by a programme of open area excavation targeted on any concentrations of significant archaeological remains identified in the trial trenching.

Based on current evidence the Site is likely to have a moderate/low impact on archaeology and is likely to require medium/low levels of mitigation to make the Site acceptable.

Cumulative impact

There are no other Candidate Sites in proximate to Site A47 which could also impact on archaeological remains.

Candidate Site Reference A48 – Bradwell – Grange Farm

Amber

Key findings of the assessment are as follows:

- The Site lies within an area of archaeological features as identified through aerial photographic evidence and archaeological trial trenching evaluation.
- Trial trenching evaluation has identified various concentrations of remains, indicative of archaeological sites of local to regional significance within the Site.
- There are no identified sites within the area of archaeological evaluation which would require preservation in situ.
- A Scheduled Monument lies within 1km of the Site.
- Mitigation would include a programme of open area excavation targeted on the concentrations of any significant archaeological remains identified in the trial trenching exercise and review of any updated information sources.

Results of the technical RAG assessment

The Site contains non-designated heritage assets as recorded on the Essex Historic Environment Record (EHER) through aerial photographic evidence, findspot data and archaeological trial trench evaluation.

An archaeological trial trench evaluation has been completed across the Site. This identified the presence of archaeological remains spread across all of the Site from small clusters of prehistoric activity closer to the river to concentrations of both medieval and Roman activity suggestive of settlement activity. The Early Roman evidence included burial activity. Remains of the former historic farmstead of Capons farm were located.

The EHER records further multi-period archaeological activity in the surrounding area with evidence for earthworks and enclosures along the river valley, some of potential ritual significance. A possible Roman road lies to the east of the Site which would link to Stane Street, the main Roman road to Colchester.

Designated heritage assets lie within close proximity to the Site, Curds hall Farm is a 17th century listed building and possibly an earlier medieval site. The Scheduled Monument of Coggeshall Abbey lies within 1km of the Site. The Abbey was founded c.1140.

The impact of the quarrying would result in the total loss of the known non-designated heritage assets and any associated unknown heritage assets.

Mitigation will include a programme of archaeological excavation and possible monitoring in areas where significant archaeological remains have been identified.

The Site is likely to have a moderate impact on archaeology and is likely to require medium levels of mitigation to make the Site acceptable.

Cumulative impact

There are no other Candidate Sites in proximate to Site A48 which could also impact on archaeological remains.

Candidate Site Reference A49 - Colemans Farm - Hill Broad Farm Full Site

Amber

Key findings of the assessment are as follows:

- The Site lies within an area of archaeological features as identified through aerial photographic evidence.
- In the northern area of the Site a circular enclosure is interpreted as being of prehistoric date and possibly a ritual monument.
- A series of linear features may represent possibly prehistoric or later land division along the river valley.
- A scheduled monument lies within 1km of the Site.
- Palaeolithic archaeological remains and Pleistocene faunal remains have been recovered from river gravels within the vicinity of the Site.
- Mitigation will comprise a programme of pre-determination archaeological and geoarchaeological evaluation comprising desk based assessment, rectification of aerial photographic evidence and geophysical survey.
- Dependant on the results of the geophysical survey, test pitting and targeted trial trenching may be required to support any planning application to define the extent and significance of archaeological and geoarchaeological deposits on the Site.
- An archaeological and geoarchaeological evaluation will be required to be completed and would be followed by a programme of geoarchaeological investigation and open area excavation targeted on any concentrations of significant archaeological and geoarchaeological remains identified in the trial trenching.

Results of the technical RAG assessment

The Site contains non-designated heritage assets as recorded on the Essex Historic Environment Record through aerial photographic evidence. The form of the heritage asset suggests prehistoric ritual activity and possibly prehistoric or later land division. No archaeological investigation has taken place within the Site however nearby archaeological investigations have revealed early prehistoric to medieval activity within close proximity and concentrated within the Blackwater valley. The scheduled site of a Neolithic monument lies within 1km of the Site and further evidence for prehistoric ritual activity along the river margins is recorded on the north bank of the river adjacent to the Site.

Palaeolithic flint implements have been recovered from the vicinity of Colemans Farm though none have yet been recorded from the south bank of the River Blackwater. In addition several mammalian fossils have been recovered from the

base of the gravels during quarrying operations at Colemans farm. Organic deposits have been observed in the river gravels which have potential to preserve Palaeolithic archaeological material as well as palaeoenvironmental remains and alluvial deposits within the valley would have potential to preserve a wide range of archaeological remains and palaeoenvironmental evidence.

The impact of the quarrying would result in the total loss of the known non-designated heritage assets and any associated unknown heritage assets.

Mitigation will comprise a programme of pre-determination archaeological and geoarchaeological evaluation comprising desk based assessment, rectification of aerial photographic evidence and geophysical survey. Dependant on the results of the geophysical survey, test pitting and targeted trial trenching may be required to support any planning application to define the extent and significance of archaeological and geoarchaeological deposits on the Site.

An archaeological and geoarchaeological evaluation will be required to be completed and would be followed by a programme of geoarchaeological investigation and open area excavation targeted on any concentrations of significant archaeological and geoarchaeological remains identified in the trial trenching.

The Site is likely to have a moderate impact on archaeology and is likely to require medium levels of mitigation to make the Site acceptable.

Cumulative impact

Other Candidate Sites in proximate to Site A49 which could also impact on archaeological remains are as follows:

- A50 (Colemans Farm – Eastern Extension (Appleford Farm))
- A52 (Colemans Farm – Southern Extension)

The cumulative impact of Site A49 and the above sites on archaeological remains would be the loss of further potential sites of prehistoric and later activity which favoured valley locations as sites of ritual significance.

Candidate Site Reference A50 - Colemans Farm - Eastern Extension (Appleford Farm)

Amber

Key findings of the assessment are as follows:

- A Scheduled Monument lies within 200m of the Site.
- Historic England should be consulted at the earliest opportunity to assess the impact on the setting of the Scheduled Monument.
- The Site lies within an area of archaeological features as identified through aerial photographic evidence and archaeological investigation. The Site contains concentrations of multi-period archaeological features.
- The Site has potential to contain Palaeolithic archaeological remains and Pleistocene faunal and palaeoenvironmental remains.
- Archaeological evaluation has been completed across part of the Site which has identified concentrations of archaeological remains.
- Mitigation will comprise a programme of pre-determination archaeological evaluation comprising desk based assessment, aerial photographic rectification, trial trenching and test-pitting to support any planning application to define the extent and significance of archaeological and geoarchaeological deposits on areas of the Site which have not been evaluated.
- This would be followed by a programme of open area excavation which would be targeted on the concentrations of any significant archaeological or geoarchaeological remains identified in the trial trenching.

Results of the technical RAG assessment

The Site contains non-designated heritage assets as recorded on the Essex Historic Environment Record through aerial photographic evidence. The form of the heritage assets indicates prehistoric ritual activity, possible associated settlement, and field boundaries.

Archaeological evaluation has been completed across part of the Site which identified concentrations of archaeological remains, the finds included prehistoric pottery and flints and Saxon pottery.

A designated heritage asset lies within 200m of the Site (SM 20757). The Scheduled Monument is classed as a long mortuary enclosure which is associated with human burials dated to the Neolithic period. Further possible mortuary enclosures lie within the adjacent field, investigation indicates one was in existence during the Bronze Age.

Palaeolithic flint implements have been recovered from the surrounding area, thought to be derived from the fluvial gravels. The Site lies close to mapped

lacustrine deposits which have high potential for preservation of palaeoenvironmental evidence. In addition mammalian fossils have been recovered from the base of the gravels during quarrying operations at Colemans farm. Organic deposits have been observed in the river gravels which have potential to preserve in situ Palaeolithic archaeological material as well as palaeoenvironmental remains.

There is evidence for the settlement or occupation of this area throughout prehistory, with Palaeolithic and Mesolithic flints to complex ritual monuments dating from the Neolithic to Bronze Age period. Later activity from the Iron Age to Roman has been revealed in the surrounding area.

The impact of the quarrying would result in the total loss of the known designated and non-designated heritage assets and any associated unknown heritage assets.

Mitigation would be required in areas that have not yet been investigated by trial trench evaluation. Mitigation would be required in advance of an application and would comprise a programme of geophysical survey to aid identification of unknown heritage assets, rectification of aerial photographic evidence to accurately locate known heritage assets and a programme of archaeological and geoarchaeological evaluation to identify the nature of the heritage assets and determine the potential for Palaeolithic and palaeoenvironmental remains.

This would be followed by a programme of open area excavation which would be targeted on the concentrations of any significant archaeological or geoarchaeological remains identified in the trial trenching.

The Site is likely to have a moderate impact on archaeology and is likely to require medium levels of mitigation to make the Site acceptable.

Cumulative impact

Other Candidate Sites in proximate to Site A50 which could also impact on archaeological remains are as follows:

- A49 (Colemans Farm - Hill Broad Farm (Full Site))
- A51 (Colemans farm – North extension)
- A52 (Colemans Farm – Southern Extension)
- A83 (Colemans farm – Hole Farm)

The cumulative impact of Site A50 and the above sites on archaeological remains would be the loss of further potential sites of prehistoric and later activity which favoured valley locations as sites of ritual significance.

Candidate Site Reference A51 – Colemans Farm – North extension (Hill Broad Farm)

Amber

Key findings of the assessment are as follows:

- The Site lies within an area of archaeological features as identified through aerial photographic evidence.
- In the northern area of the Site a circular enclosure is interpreted as being of prehistoric date and possibly a ritual monument.
- A series of linear features may represent possibly prehistoric or later land division along the river valley.
- A Scheduled Monument lies within 1km of the Site.
- Palaeolithic archaeological remains and Pleistocene faunal remains have been recovered from river gravels within the vicinity of the Site.
- Mitigation will comprise a programme of pre-determination archaeological evaluation comprising desk based assessment, geophysics, and aerial photographic rectification. Targeted trial trenching and geoarchaeological assessment may also be required to support any planning application to define the extent and significance of archaeological deposits on the Site.
- An archaeological and geoarchaeological evaluation will be required to be completed and would be followed by a programme of geoarchaeological investigation and open area excavation targeted on any concentrations of significant archaeological and geoarchaeological remains identified in the trial trenching.

Results of the technical RAG assessment

The Site contains non-designated heritage assets as recorded on the Essex Historic Environment Record through aerial photographic evidence. The form of the heritage asset suggests prehistoric ritual activity and possibly prehistoric or later land division. No archaeological investigation has taken place within the Site however nearby archaeological investigations have revealed early prehistoric to medieval activity within close proximity and concentrated within the Blackwater valley. The scheduled site of a Neolithic monument lies within 1km of the Site and further evidence for prehistoric ritual activity along the river margins is recorded on the north bank of the river adjacent to the Site.

Palaeolithic flint implements have been recovered from the vicinity of Colemans Farm though none have yet been recorded from the south bank of the River Blackwater. In addition several mammalian fossils have been recovered from the base of the gravels during quarrying operations at Colemans farm. Organic deposits have been observed in the river gravels which have potential to preserve Palaeolithic

archaeological material as well as palaeoenvironmental remains and alluvial deposits within the valley would have potential to preserve a wide range of archaeological remains and palaeoenvironmental evidence.

The impact of the quarrying would result in the total loss of the known non-designated heritage assets and any associated unknown heritage assets.

Mitigation will comprise a programme of pre-determination archaeological evaluation comprising desk based assessment, geophysics, and aerial photographic rectification. Dependant on the results of these a programme of and trial trenching and geoarchaeological assessment may be required to support any planning application to define the extent and significance of archaeological and geoarchaeological deposits on the Site.

An archaeological and geoarchaeological evaluation will be required to be completed and would be followed by a programme of geoarchaeological investigation and open area excavation targeted on any concentrations of significant archaeological and geoarchaeological remains identified in the trial trenching.

The Site is likely to have a moderate impact on archaeology and is likely to require medium levels of mitigation to make the Site acceptable.

Cumulative impact

Other Candidate Sites in proximate to Site A51 which could also impact on archaeological remains are as follows:

- A49 (Colemans Farm - Hill Broad Farm (Full Site))
- A50 (Colemans Farm – Eastern Extension (Appleford Farm))
- A52 (Colemans Farm – Southern Extension)

The cumulative impact of Site A51 and the above sites on archaeological remains would be the loss of further potential sites of prehistoric and later activity which favoured valley locations as sites of ritual significance.

Candidate Site Reference A52 – Colemans Farm – Southern Extension

Amber

Key findings of the assessment are as follows:

- The Site lies within an area of recorded multi-period archaeological activity as revealed by aerial photographic evidence and archaeological investigations in the surrounding fields.
- There are recorded alluvial deposits within the Site which have high potential for preservation of waterlogged deposits and palaeoenvironmental evidence.
- Palaeolithic archaeological remains and Pleistocene faunal remains have been recovered from river gravels within the vicinity of the Site.
- Mitigation will comprise a programme of pre-determination archaeological evaluation comprising desk based assessment and geophysical survey. The results of this would inform on the level of further evaluation required to support any planning application to define the extent and significance of archaeological and geoarchaeological deposits on the Site.
- Further archaeological evaluation is likely to be required by archaeological trial trenching and geoarchaeological test pitting.
- This would be followed by a programme of geoarchaeological investigation and open area excavation targeted on the concentrations of any significant archaeological or geoarchaeological remains identified in the trial trenching.

Results of the technical RAG assessment

The Site lies within an area of cropmark features as recorded through aerial photography. To the north a possible long barrow monument is recorded with evidence of dense pitting surrounding the ritual monument and along the river valley. Linear features extend into the Site boundary in the northeast and beyond lies evidence of a trackway leading to the river.

An archaeological evaluation has been completed on land directly adjacent to the Site which confirmed the presence of the possible long barrow monument which is considered to have been in existence by the Bronze Age period. The trenching and subsequent excavations have revealed survival of a Romano-British field system and medieval field system to the north.

Palaeolithic flint implements have been recovered from the vicinity of Colemans Farm though none have yet been recorded from within the Site. In addition, several mammalian fossils have been recovered from the base of the gravels during quarrying operations at Colemans farm. Organic deposits have been observed in the river gravels which have potential to preserve Palaeolithic archaeological material as well as palaeoenvironmental remains and alluvial deposits within the valley would

have potential to preserve a wide range of archaeological remains and palaeoenvironmental evidence.

The impact of the quarrying would result in the total loss of the known non-designated heritage assets and any associated unknown heritage assets.

Mitigation would be required pre-determination which included a desk based assessment and geophysical survey. The results of which would inform on the requirement for further archaeological evaluation in advance of a planning application. A programme of archaeological and geoarchaeological evaluation will be required to identify the nature of any archaeological remains and determine the potential for Palaeolithic and palaeoenvironmental remains.

This would be followed by a programme of open area excavation targeted on the concentrations of any significant archaeological or geoarchaeological remains identified in the trial trenching.

The Site is likely to have a moderate impact on archaeology and is likely to require medium levels of mitigation to make the Site acceptable.

Cumulative impact

Other Candidate Sites in proximate to Site A52 which could also impact on archaeological remains are as follows:

- A49 (Colemans Farm - Hill Broad Farm (Full Site))
- A50 (Colemans Farm – Eastern Extension (Appleford Farm))
- A51 (Colemans Farm – North Extension (Hill Broad Farm))

The cumulative impact of Site A52 and the above sites on archaeological remains would be the loss of further potential sites of prehistoric and later activity which favoured valley locations as sites of ritual significance and potential loss of waterlogged deposits which would be more prevalent in floodplain locations and have potential for the preservation of a wide range of archaeological and palaeoenvironmental evidence.

Candidate Site Reference A54 – Whiteheads

Amber-Green

Key findings of the assessment are as follows:

- The Site lies within an area of discreet recorded multi-period archaeological activity as revealed by archaeological investigations within the Site and adjacent quarry.
- There is a high probability for the continuation of postmedieval ditches into the Site which represent historic field boundaries.
- Middle Iron Age and Medieval settlement activity may continue into areas of the Site which have received no previous archaeological investigation.
- Mitigation would comprise a programme of archaeological trial trenching within the unquarried area. This would be followed by a programme of open area excavation targeted on the concentrations of any significant archaeological remains identified in the trial trenching.

Results of the technical RAG assessment

The Site lies within an area which incorporates an existing agricultural reservoir and processing plant identified as Faulkebourne Farm.

Archaeological evaluation has been undertaken in association with the application for the agricultural reservoir which covers much of the proposed Site. This revealed prehistoric worked flint, Middle Iron Age features and a small amount of Late Iron Age/Roman pottery.

In addition a programme of archaeological fieldwalking was completed in the adjacent field in advance of an agricultural reservoir followed by targeted archaeological trial trenching which recovered evidence for short lived medieval settlement activity.

Evidence for Middle Iron Age settlement activity and postmedieval field boundaries have been recorded within close proximity to the Site. There is clear evidence that postmedieval field boundaries are likely to continue into the areas of the Site which have not been evaluated and there is a moderate potential that further discreet evidence for both Middle Iron Age and medieval activity may survive. Medieval activity may also be revealed in relation to the former historic road which formed a branch off the Crossing Road to the south and terminates adjacent to the southwestern boundary of the Site.

The impact of the quarrying would result in the total loss of the known non-designated heritage assets and any associated unknown heritage assets.

Mitigation would be required which included a programme of archaeological evaluation to identify the nature of any archaeological remains. In the first instance an archaeological desk based assessment should be provided.

The Site is likely to have a low to moderate impact on archaeology and is likely to require low to medium levels of mitigation to make the Site acceptable. This would only be required in areas which have not yet been evaluated for archaeology and so is restricted to the field south east of the existing lagoons.

Cumulative impact

There are no other Candidate Sites in proximate to the Site A54 which could also impact on archaeological remains.

Candidate Site Reference A55 – Sheepcotes – Southern

Amber

Key findings of the assessment are as follows:

- The Site lies within an area known to contain areas of multi-period archaeology from the Late Bronze Age to the medieval period.
- Archaeological evaluation and excavation on the adjacent quarry to the north of the Site identified a late Bronze Age/Early Iron Age cremation as well as other features and Late Iron Age/Roman features indicative of settlement activity in the area.
- Aerial photographic evidence shows the presence of two large irregular enclosures in the eastern part of the Site. These have been tentatively interpreted as being of late prehistoric date, based on their shape and comparison to other settlement sites of a similar shape and size which have been excavated.
- Mitigation will comprise a programme of pre-determination desk based assessment and trial trenching to support any planning application to define the extent and significance of archaeological deposits on the Site.
- The above would be followed by a programme of either open area excavation targeted on the features identified in the trial trenching or if significant and complex deposits are identified discussions to preserve these deposits in situ.

Results of the technical RAG assessment

The Essex Historic Environment Record shows that the Site lies adjacent to an area where archaeological work has previously been undertaken.

Trial trenching and excavation on the earlier parts of Sheepcotes Quarry have recovered evidence of Late Bronze Age to Roman occupation in the form of a burial and sequences of pits. The presence of the burial indicates settlement in the immediate vicinity.

Aerial Photographic evidence of two enclosures is present within the Site, both being sub rectangular, one potentially being connected to a trackway leading to the east. A number of enclosures of this type have been excavated in the area some containing settlement evidence of the Late Bronze Age through to the Late Iron Age.

To the south recent evaluation has identified a large Roman settlement so it is possible that the features excavated to the north on the existing quarry are agricultural features related to the settlement.

The impact of the quarrying would result in the total loss of the heritage assets (multi-period archaeological deposits) within the Site.

Mitigation will comprise a programme of desk based assessment and trial trenching to support any planning application to define the extent and significance of archaeological deposits on the Site.

The above trial trenching would be followed by a programme of either open area excavation targeted on the features identified in the trial trenching or if significant and complex deposits are identified discussions to preserve these deposits in situ.

The Site will have a moderate impact on known archaeology and will require a medium level of mitigation to make the Site acceptable. This may involve removing the areas of the heritage assets from the development red line.

Cumulative impact

Other Candidate Sites in proximate to Site A55 which could also impact on archaeological remains are as follows:

Site 56 Sheepcotes – Western will result in further loss of potential archaeological deposits within this area.

Candidate Site Reference A56 – Sheepcotes – Western

Amber-Green

Key findings of the assessment are as follows:

- The Site lies within an area known to contain areas of multi-period archaeology from the Late Bronze Age to the medieval period.
- Archaeological evaluation and excavation on the adjacent quarry to the east of the Site identified a late Bronze Age/Early Iron Age cremation as well as other features and Late Iron Age/Roman features indicative of settlement activity in the area.
- Aerial photographic evidence shows the presence of two large irregular enclosures to the south-east of the Site within Site A55. These have been tentatively interpreted as being of late prehistoric date, based on their shape and comparison to other settlement sites of a similar shape and size which have been excavated.
- Immediately to the south of the Site aerial photographic evidence has identified two irregular pond or quarry features.
- Mitigation will comprise a programme of initial desk top assessment to support the planning application. This will be followed by trial trenching with open area excavation targeted on the features identified in the trial trenching.

Results of the technical RAG assessment

The Essex Historic Environment Record shows that the Site lies adjacent to an area where archaeological work has previously been undertaken.

Trial trenching and excavation on the earlier parts of Sheepcotes Quarry to the east have recovered evidence of Late Bronze Age to Roman occupation in the form of a burial and sequences of pits.

Aerial photographic evidence of two enclosures is present to the south-east of the Site, both being sub rectangular. A number of enclosures of this type have been excavated in the area some containing settlement evidence of Late Bronze Age date through to the Late Iron Age.

The impact of the quarrying would result in the total loss of the heritage assets (multi-period archaeological deposits) within the Site.

Mitigation will comprise a programme of initial desk top assessment to support the planning application. This will be followed by trial trenching with open area excavation targeted on the features identified in the trial trenching secured by archaeological conditions.

The Site will have a moderate impact on known archaeology and will require a low level of mitigation to make the Site acceptable.

Cumulative impact

Other Candidate Sites in proximate to Site A56 which could also impact on archaeological remains are as follows:

Site 55 Sheepcotes – Western will result in further loss of potential archaeological deposits within this area.

Candidate Site Reference A57 – Chalk End

Amber

Key findings of the assessment are as follows:

- The Site lies within an area known to contain areas of multi-period archaeology with extensive Roman deposits present immediately adjacent to this Site.
- Archaeological evaluation on the adjacent quarry application to the south-west of the Site has identified extensive Roman occupation. The archaeological work is ongoing and will require extensive excavation if the development proceeds.
- The Scheduled Roman villa at Chignall St James lies to the west of the Site.
- The Site lies within a landscape with extensive cropmark evidence. A number of enclosures, potentially of prehistoric date are recorded in the area.
- Two moated medieval sites are located in close proximity to the Site.
- Mitigation will comprise a programme of pre-determination archaeological evaluation comprising desk based assessment, geophysical survey, and trial trenching to support any planning application to define the extent and significance of archaeological deposits on the Site.
- The above would be followed by a programme of either open area excavation targeted on the features identified in the trial trenching or if significant and complex deposits are identified discussions to preserve these deposits in situ.

Results of the technical RAG assessment

The Essex Historic Environment Record shows that the Site lies adjacent to an area where archaeological work has previously been undertaken.

Archaeological evaluation has recently occurred on the adjacent quarry application to the south-west of the Site which has identified extensive Roman occupation. The archaeological work is ongoing and if the development proceeds will require extensive excavation. Likely to be a settlement site. The only known archaeological deposits on this site comprised cropmarks of post medieval field boundaries.

To the north-west (c. 2.5km) lies the Scheduled Roman villa at Chignall St James, which is a large villa recorded from aerial photographic evidence which would have had a large estate associated with it.

The Site lies within a landscape of extensive cropmark complexes of probably multi-period origin. These include a number of sub rectangular enclosures, potentially of prehistoric date some of which have evidence of internal features.

Two medieval moated sites are located to the south-west and east of the Site. These attest to the dispersed settlement pattern of the area in the medieval period.

The impact of the quarrying would result in the total loss of the heritage assets (multi-period archaeological deposits) within the Site.

Mitigation will comprise a programme of pre-determination archaeological evaluation comprising desk based assessment, geophysical survey, and trial trenching to support any planning application which would define the extent and significance of archaeological deposits on the Site.

The above would be followed by a programme of either open area excavation targeted on the features identified in the trial trenching or if significant and complex deposits are identified discussions to preserve these deposits in situ.

The Site will have a moderate impact on known archaeology and will require a medium level of mitigation to make the Site acceptable.

Cumulative impact

There are no other Candidate Sites in proximate to the Site A57 which could also impact on archaeological remains.

Candidate Site Reference A58 – Little Smiths

Amber-Green

Key findings of the assessment are as follows:

- The Essex Historic Environment Record records the presence of cropmarks within the Site.
- Evidence from aerial photographs indicates the presence of a potential trackway and enclosure.
- The enclosure may be related to the historic woodland or be of earlier date.
- Mitigation will comprise a desk based assessment to support the planning application, with the need to rectify the cropmarks in advance of a programme of trial trenching followed by appropriate excavation of significant archaeological deposits identified.

Results of the technical RAG assessment

The Historic Environment Record shows the presence of a series of cropmarks, comprising a track way and enclosure. Immediately to the south of the trackway is a ring ditch (potential Bronze Age burial mound).

To the north of Thrift Wood there are extensive cropmarks indicative of a road, settlement and enclosures of unknown date extending into the woodland area. A further enclosure is recorded on the western side of Thrift Wood, just to the north of the Site.

The enclosures may be related to the woodland or alternatively be of earlier date and related to the ring ditch.

Mitigation will comprise a desk based assessment to support the planning application, with the need to rectify the cropmarks in advance of a programme of trial trenching followed by appropriate excavation of significant archaeological deposits identified.

The Site is likely to have a minor impact on known archaeology and is likely to require low levels of mitigation to make the Site acceptable.

Cumulative impact

There are no other Candidate Sites in proximate to the Site A58 which could also impact on archaeological remains.

Candidate Site Reference A59 – Lowleys Farm

Amber

Key findings of the assessment are as follows:

- The western edge of the Site abuts the Roman Road from Chelmsford to Braintree. Archaeological evaluation has shown the presence of Late Iron Age and Roman occupation to the south of the Site.
- The northern part of the Site lies within an area known to contain areas of cropmark complexes. A series of enclosures are recorded both within and outside the Site.
- A farmstead is recorded on the first edition OS maps, which is no longer extant.
- The historic field pattern, although suffering some boundary loss probably has its origins in the medieval period and is unchanged on all the available historic maps.
- Mitigation will comprise an initial desk based assessment and geophysical survey report followed by a programme of targeted trial trenching to support any planning application to define the extent and significance of archaeological deposits on the Site.
- The above would be followed by a full programme of trial trenching followed by open area excavation targeted on the features identified in the trial trenching or if significant and complex deposits are identified discussions to preserve these deposits in situ.

Results of the technical RAG assessment

The Essex Historic Environment Record shows that the Site lies adjacent to an area where archaeological work has previously been undertaken with one of the south-western fields already being trial trenched as part of the Chelmsford North Eastern bypass evaluation.

The western edge of the Site abuts the Roman Road from Chelmsford to Braintree. Archaeological evaluation for the Chelmsford North East bypass extended into the Site and has shown the presence of both Late Iron Age and Roman occupation on the southern boundary of the Site.

The northern part of the Site lies within an area which is shown on the Essex Historic Environment Record to contain areas of cropmarks comprising a series of enclosures and former field boundaries. These features lie on the valley slopes of the River Ter extending along the valley sides to the east of the Site. The cropmarks outside the Site include a number of ring ditches, potentially the remains of ploughed out prehistoric burial mounds.

A farmstead (Gallys Farm) is recorded on the First Edition OS maps, now no longer extant.

The historic field pattern, although suffering some boundary loss probably has its origins in the medieval period and is unchanged on all the available historic maps. The impact of the quarrying would result in the total loss of the heritage assets (multi-period archaeological deposits) within the Site.

Mitigation will comprise an initial desk based assessment and geophysical report followed by a programme of targeted trial trenching to support any planning application to define the extent and significance of archaeological deposits on the Site.

The above would be followed by full programme of trial trenching which would be followed by a programme of either open area excavation targeted on the features identified in the trial trenching or if significant and complex deposits are identified discussions to preserve these deposits in situ.

The Site will have a moderate impact on known archaeology and will require a medium level of mitigation to make the Site acceptable. This may involve removing the areas of the heritage assets from the development red line.

Cumulative impact

This site along with the Chelmsford North East bypass will have a cumulative impact on the archaeological deposits in this area.

Candidate Site Reference A60a - Shellow Cross Farm (A60a) – Chelmsford

Red-Amber

Key findings of the assessment are as follows:

- The Site lies within an area known to contain areas of multi-period archaeology with extensive Roman and medieval deposits likely to be present within areas of this Site.
- Archaeological evaluation on the northern part of the quarry proposal has identified extensive Roman occupation. The archaeological work is ongoing and will require extensive large scale excavation if development proceeds.
- Within the southern part of the Site two probable moated sites, likely to be of medieval date are located within the Site.
- Two scheduled moats located, one immediately west of Skreens Lodge lies on the opposite side of Shellow Road from the Site, the second lies to the south west of the proposed Site.
- Other cropmarks indicate the presence of further enclosures of an unknown date. Immediately to the south and north of the Site further cropmark complexes are recorded with track ways and field systems indicative of potential medieval occupation.
- The access road bisects a range of archaeological deposits known from cropmark evidence.
- Mitigation will comprise a programme of pre-determination archaeological evaluation comprising desk based assessment, aerial photographic rectification, geophysical survey, and trial trenching to support any planning application to define the extent and significance of archaeological deposits on the Site.
- The above would be followed by a programme of either open area excavation targeted on the features identified in the trial trenching or if significant and complex deposits are identified discussions to preserve these deposits in situ.

Results of the technical RAG assessment

The Essex Historic Environment Record shows extensive cropmark evidence, within the Site and its immediate vicinity.

Archaeological trial trenching in the northern area has shown the presence of extensive Roman archaeology within the existing approved area which will require large scale open area excavation in advance of quarrying. Within the Site aerial photographic evidence has shown the presence of two probable moated sites, likely to be of medieval date comprising of wide ditched enclosures either adjacent or set back from the road.

The scheduled moated site to the West of Skreens Lodge will be impacted by any proposals within this Site. The setting of the moat would need to be protected as well as the probable waterlogged deposits within the moat. Historic England would need to be involved with any discussions relating to development of the present Site. A further Scheduled Moat lies to the southwest of the Site at Shellow Hall moated site. Both are part of a dispersed settlement pattern characterised by moated enclosures, many of which have their origins in the 12th and 13th century.

Other cropmarks both to the north and south of the Site comprise sequences of track ways and field systems potentially indicative of medieval occupation.

Within the Site further cropmark evidence of enclosures are present although their shape makes it difficult to suggest a date.

The access road running to the north bisects a range of archaeological deposits known from cropmark evidence as well as an evaluation at its northern end where an extensive Roman site has recently been identified during evaluation within an approved quarry area. The archaeological work is ongoing and if the development proceeds will require extensive excavation.

The impact of the quarrying would result in the total loss of the heritage assets (multi-period archaeological deposits) within the Site.

Mitigation will comprise a programme of pre-determination archaeological evaluation comprising desk based assessment, aerial photographic rectification, geophysical survey, and trial trenching to support any planning application to define the extent and significance of archaeological deposits on the Site.

The above would be followed by a programme of either open area excavation targeted on the features identified in the trial trenching or if significant and complex deposits are identified discussions to preserve these deposits in situ.

The Site will have a major impact on the known archaeology and will require a high level of mitigation to make the Site acceptable.

Cumulative impact

This site along with A60b will have a cumulative impact on the area.

Candidate Site Reference A60b - Shellow Cross Farm (A60b) – Chelmsford

Red-Amber

Key findings of the assessment are as follows:

- The Site lies within an area known to contain areas of multi-period archaeology with extensive Roman and medieval deposits likely to be present within areas of this Site.
- Archaeological evaluation on the northern part of the quarry proposal has identified extensive Roman occupation. The archaeological work is ongoing and will require extensive large-scale excavation if development proceeds.
- Within the southern part of the Site two probable moated sites, likely to be of medieval date are located within the Site.
- Two scheduled moats located, one immediately west of Skreens Lodge lies on the opposite side of Shellow Road from the Site, the second lies to the south west of the proposed Site.
- Other cropmarks indicate the presence of further enclosures of an unknown date. Immediately to the south and north of the Site further cropmark complexes are recorded with track ways and field systems indicative of potential medieval occupation.
- The access road bisects a range of archaeological deposits known from cropmark evidence.
- Mitigation will comprise a programme of pre-determination archaeological evaluation comprising desk based assessment, aerial photographic rectification, geophysical survey, and trial trenching to support any planning application to define the extent and significance of archaeological deposits on the Site.
- The above would be followed by a programme of either open area excavation targeted on the features identified in the trial trenching or if significant and complex deposits are identified discussions to preserve these deposits in situ.

Results of the technical RAG assessment

The Essex Historic Environment Record shows extensive cropmark evidence, within the Site and its immediate vicinity.

Archaeological trial trenching in the northern area has shown the presence of extensive Roman archaeology within the existing approved area which will require large scale open area excavation in advance of quarrying. Within the Site aerial photographic evidence has shown the presence of two probable moated sites, likely to be of medieval date comprising of wide ditched enclosures either adjacent or set back from the road.

The scheduled moated site to the West of Skreens Lodge will be impacted by any proposals within this Site. The setting of the moat would need to be protected as well as the probable waterlogged deposits within the moat. Historic England would need to be involved with any discussions relating to development of the present Site. A further Scheduled Moat lies to the south west of the Site at Shellow Hall moated site. Both are part of a dispersed settlement pattern characterised by moated enclosures, many of which have their origins in the 12th and 13th century.

Other cropmarks both to the north and south of the Site comprise sequences of track ways and field systems potentially indicative of medieval occupation.

Within the Site further cropmark evidence of enclosures are present although their shape makes it difficult to suggest a date.

The access road running to the north bisects a range of archaeological deposits known from cropmark evidence as well as an evaluation at its northern end where an extensive Roman site has recently been identified during evaluation within an approved quarry area. The archaeological work is ongoing and if the development proceeds will require extensive excavation.

The impact of the quarrying would result in the total loss of the heritage assets (multi-period archaeological deposits) within the Site.

Mitigation will comprise a programme of pre-determination archaeological evaluation comprising desk based assessment, aerial photographic rectification, geophysical survey, and trial trenching to support any planning application to define the extent and significance of archaeological deposits on the Site.

The above would be followed by a programme of either open area excavation targeted on the features identified in the trial trenching or if significant and complex deposits are identified discussions to preserve these deposits in situ.

The Site will have a major impact on the known archaeology and will require a high level of mitigation to make the Site acceptable.

Cumulative impact

This site along with A60A will have a cumulative impact on the area.

Candidate Site Reference A61 – Heckfordbridge – Site 1

Amber

Key findings of the assessment are as follows:

- The Site lies within an extensive cropmark landscape. These include at least one enclosure and a trackway within the Site.
- A similar spread of crop marks is visible around the Site indicating a dispersed settlement pattern within the immediate area.
- Metal detecting finds include items of prehistoric, early medieval, and medieval date.
- Historic farm complexes are located just outside the north-western side of the Site, comprising the historic Bokingham Hall and Walnuttree Farm.
- The Site has potential for Palaeolithic or Pleistocene deposits within the gravels.
- A pre-determination desk based archaeological assessment, and a geoarchaeological assessment and aerial rectification will be required as part of the supporting data for the planning application. Depending on the results of the desk based assessment this will potentially need to be followed by trial trenching to define the significance of archaeological deposits thought to be present to support the planning application.
- This would be followed by a programme of open area excavation targeted on the features identified in the trial trenching.

Results of the technical RAG assessment

The Essex Historic Environment Record shows that the Site lies within an area known to contain areas of archaeological features visible as cropmarks from the air. These include at least one enclosure and a trackway within the Site.

A similar spread of crop marks including a number enclosures are visible around the Site indicating a dispersed settlement pattern within the immediate area. Dating the enclosures is difficult although they are likely to be of prehistoric or medieval date.

Metal detecting finds recorded on the portable Antiquities scheme include items of prehistoric, early medieval, and medieval date.

Historic farm complexes are located just outside the north western side of the Site, comprising Bokingham Hall and Walnuttree Farm. The listed buildings within these complexes date from the fifteenth to the nineteenth century.

The impact of the quarrying would result in the total loss of the heritage assets (multi-period archaeological deposits) within the Site.

There is potential for the underlying Kesgrave deposits to contain Palaeolithic or Pleistocene remains. Gravels to the north are recorded as having palaeolithic artifacts and possible lake deposits.

A pre-determination desk based archaeological assessment, and a geoarchaeological assessment and aerial rectification will be required as part of the supporting data for the planning application. Depending on the results of the desk based assessment this will potentially need to be followed by trial trenching to define the significance of archaeological deposits thought to be present to support the planning application.

This would be followed by a programme of open area excavation targeted on the features identified in the trial trenching.

The Site will have a moderate impact on known archaeology and will require a medium level of mitigation to make the Site acceptable.

Cumulative impact

This site along with A62 will have a cumulative impact on the area.

Candidate Site Reference A62 – Heckfordbridge – Site 2

Amber

Key findings of the assessment are as follows:

- The Site lies within an area known to contain areas of archaeological features visible as cropmarks from the air. These include at least one enclosure and a trackway within the Site.
- A sequence of crop marks is visible immediately to the south of the Site indicating a complex site with multiple enclosures. The cropmarks indicate a dispersed settlement pattern of probable multi-period date.
- Metal detecting finds include items of prehistoric, early medieval, and medieval date.
- Historic farm complexes are located just outside the north-western side of the Site, comprising the historic Bokingham Hall and Walnuttree Farm, and to the south-west at Beckingham Hall.
- There is potential for Palaeolithic or Pleistocene deposits within the gravels.
- A pre-determination desk based archaeological assessment, and a geoarchaeological assessment and aerial rectification will be required as part of the supporting data for the planning application. Depending on the results of the desk based assessment this will potentially need to be followed by trial trenching to define the significance of archaeological deposits thought to be present to support the planning application.
- This would be followed by a programme of open area excavation targeted on the features identified in the trial trenching.

Results of the technical RAG assessment

The Essex Historic Environment Record shows that the Site lies within an area known to contain areas of archaeological features visible as cropmarks from the air. These include at least one enclosure and a trackway within the Site.

A similar spread of crop marks including a number enclosures are visible around the Site indicating a dispersed settlement pattern within the immediate area. Dating the enclosures is difficult although they are likely to be of prehistoric or medieval date.

Metal detecting finds recorded on the portable Antiquities scheme include items of prehistoric, early medieval, and medieval date.

Historic farm complexes are located just outside the north-western side of the Site, comprising Bokingham Hall and Walnuttree Farm. The listed buildings within these complexes date from the fifteenth to the nineteenth century. Those at Beckingham Hall to the south west are of Seventeenth century date.

The impact of the quarrying would result in the total loss of the heritage assets (multi-period archaeological deposits) within the Site.

The potential for the underlying Kersgrave deposits to contain Palaeolithic or Pleistocene remains. Gravels to north are recorded as having Palaeolithic artifacts and possible lake deposits.

A pre-determination desk based archaeological assessment, and a geoarchaeological assessment and aerial rectification will be required as part of the supporting data for the planning application. Depending on the results of the desk based assessment this will potentially need to be followed by trial trenching to define the significance of archaeological deposits thought to be present to support the planning application.

The Site will have a moderate impact on known archaeology and will require a medium level of mitigation to make the Site acceptable.

Cumulative impact

This site along with A61 will have a cumulative impact on the area.

Candidate Site Reference A63 – Patch Park, Abridge

Red-Amber

Key findings of the assessment are as follows:

- The Site contains a wide range of archaeological deposits identified from aerial photography.
- In the far western corner two enclosures are recorded interpreted as being of potential prehistoric date. One is a double ditched enclosure.
- On the northern edge a series of rectilinear enclosures are recorded, potentially either settlement enclosures or a field system.
- In the central part of the Site a minimum of 4 large ring ditches, probably representative of a Bronze Age cemetery of barrows. Also in this sequence a rectangular enclosure which may also be funerary or potentially a settlement enclosure.
- Mitigation will comprise a programme of pre-determination archaeological evaluation comprising desk based assessment, aerial photographic rectification, geophysical survey, and trial trenching to support any planning application to define the extent and significance of archaeological deposits on the Site.
- The above would be followed by a programme of either open area excavation targeted on the features identified in the trial trenching or if significant and complex deposits are identified discussions to preserve these deposits in situ.

Results of the technical RAG assessment

The Essex Historic Environment Record shows extensive cropmark evidence, within the Site and its immediate vicinity.

Within the Site aerial photographic evidence has shown the presence of two enclosures located in the western part of the Site. The shape and location has resulted in these being interpreted as being of probable prehistoric date. One is a double ditched enclosure.

On the northern edge to the east of the enclosures a series of rectilinear enclosures are recorded, potentially either settlement enclosures or a field system. Their date is unclear, from the shape potentially of Roman or medieval date.

In the central part of the Site a minimum of 4 large ring ditches up to 26m across, probably representative of a Bronze Age cemetery of barrows. In the same sequence of cropmarks there is a rectangular enclosure which may also be funerary or potentially a settlement enclosure. Adjacent to this is a further circular features again potentially a further barrow.

To the north-west of the Site further archaeological features are recorded from cropmarks, these comprising a large ring ditch with a diameter of 60m probably representative of a settlement site.

The impact of the quarrying would result in the total loss of the heritage assets (multi-period archaeological deposits) within the Site.

Mitigation will comprise a programme of pre-determination archaeological evaluation comprising desk based assessment, aerial photographic rectification, geophysical survey, and trial trenching to support any planning application to define the extent and significance of archaeological deposits on the Site.

The above would be followed by a programme of either open area excavation targeted on the features identified in the trial trenching or if significant and complex deposits are identified discussions to preserve these deposits in situ.

The Site will have a major impact on the known archaeology and will require a high level of mitigation to make the Site acceptable.

Cumulative impact

There are no other Candidate Sites in proximate to the Site A63 which could also impact on archaeological remains.

Candidate Site Reference A64 – Land East of Asheldham Quarry

Amber

Key findings of the assessment are as follows:

- The Site lies adjacent to an area known to contain extensive areas of archaeological features identified through previous archaeological excavation.
- To the west of the Site archaeological evaluation and excavation has shown the presence of extensive Late Iron Age and Roman occupation.
- Excavation has also identified the presence of Saxon occupation. Both this and the earlier occupation will extend into the new Site area.
- Within the Site cropmarks from aerial photography indicate a sequence of linear features being present, their date at present is unclear but is probably similar to those already identified to the west.
- There is high potential for Palaeolithic archaeological remains and palaeoenvironmental remains.
- Mitigation will comprise a programme of pre-determination archaeological and geoarchaeological evaluation comprising desk based assessment, aerial photographic rectification, trial trenching and geoarchaeological evaluation to support any planning application to define the extent and significance of archaeological and geoarchaeological deposits on the Site.
- This would be followed by a programme of open area excavation targeted on the features identified in the trial trenching.

Results of the technical RAG assessment

The Essex Historic Environment Record shows that the Site lies within an area known to contain extensive areas of archaeological features excavated in earlier phases of the quarry.

To the west of the Site archaeological evaluation and excavation has shown the presence of extensive Late Iron Age and Roman occupation. Excavation has shown the presence of extensive settlement and field systems of various phases of occupation.

The excavation has also identified the presence of Saxon occupation in a number of areas indicating potential continuation from the Roman occupation. Both this and the earlier occupation has the potential to extend into the Site area.

Within the Site aerial photographic evidence indicate a sequence of linear cropmarks being present, their date at present is unclear but is probably similar to those already excavated to the west.

The Site lies within an area of mapped gravel deposits of high potential for Palaeolithic archaeological remains. The gravels were laid down by the former course of the Thames when it was diverted by the Anglian ice sheet and joined the Medway River which flowed from Kent. The gravels have been demonstrated to contain abundant records of Palaeolithic finds.

The impact of the quarrying would result in the total loss of the heritage assets (multi-period archaeological deposits) within the Site.

Mitigation will comprise a programme of pre-determination archaeological evaluation comprising desk based assessment, aerial photographic rectification, and trial trenching to support any planning application to define the extent and significance of archaeological deposits on the Site.

This would be followed by a programme of open area excavation targeted on the features identified in the trial trenching.

The Site will have a moderate impact on known archaeology and will require a medium level of mitigation to make the Site acceptable.

Cumulative impact

This allocation will continue with extensive quarrying within this area and will continue to result in the loss of the heritage resource along with allocation A65.

Candidate Site Reference A65 – Land South of Asheldham Quarry

Amber

Key findings of the assessment are as follows:

- The Site lies adjacent to an area known to contain extensive areas of archaeological features identified through aerial photographic cropmarks and previous archaeological excavation.
- The Site lies within an extensive cropmark complex a large part of which has been excavated. The archaeological evaluation and follow-on excavation has shown the presence of extensive Late Iron Age and Roman occupation.
- Within the Site cropmarks from aerial photography indicate potential enclosures, probably of a similar date to the areas already excavated.
- The Site lies to the west of the medieval church of St Lawrence which is designated at Grade II dating to the fourteenth century. Historically this would have formed a church/hall complex with Asheldham Hall.
- There is high potential for Palaeolithic archaeological remains and palaeoenvironmental remains.
- Mitigation will comprise a programme of pre-determination archaeological evaluation and geoarchaeological comprising desk-based assessment, aerial photographic rectification, and trial trenching to support any planning application to define the extent and significance of archaeological deposits on the Site.
- This would be followed by a programme of open area excavation targeted on the features identified in the trial trenching.

Results of the technical RAG assessment

The Essex Historic Environment Record shows that the Site lies within an area known to contain extensive areas of archaeological features, many excavated in earlier phases of the quarry.

To the north of the Site archaeological evaluation and excavation has shown the presence of extensive Late Iron Age and Roman occupation. Excavation has shown the presence of extensive settlement and field systems with various phases of occupation.

The Excavation has also identified the presence of Saxon occupation in a number of areas indicating potential continuation from the Roman occupation. Both this and the earlier occupation has the potential to extend into the Site area.

Within the Site cropmarks from aerial photography indicate potential enclosures, either of a similar date to the areas already excavated to the north or associated with the adjacent church.

The Site lies to the west of the medieval church of St Lawrence which is designated at Grade II dating to the fourteenth century. Historically this would have formed a church/hall complex with Asheldham Hall. This would have formed part of a dispersed settlement pattern, set within a rural agricultural landscape.

The Site lies within an area of mapped gravel deposits of high potential for Palaeolithic archaeological remains. The gravels were laid down by the former course of the Thames when it was diverted by the Anglian ice sheet and joined the Medway River which flowed from Kent. The gravels have been demonstrated to contain abundant records of Palaeolithic finds.

The impact of the quarrying would result in the total loss of the heritage assets (multi-period archaeological deposits) within the Site.

Mitigation will comprise a programme of pre-determination archaeological and geoarchaeological evaluation comprising desk-based assessment, aerial photographic rectification, and trial trenching to support any planning application to define the extent and significance of archaeological deposits on the Site.

This would be followed by a programme of open area excavation targeted on the features identified in the trial trenching.

The Site will have a moderate impact on known archaeology and will require a medium level of mitigation to make the Site acceptable.

Cumulative impact

This allocation will continue with extensive quarrying within this area and will continue to result in the loss of the heritage resource along with allocation A64.

Candidate Site Reference A66 – White House Farm

Red-Amber

Key findings of the assessment are as follows:

- The Site abuts the Scheduled Monument of Woodham Walter Hall which lies on the south-western corner of the Site. The Nationally important site will need to be carefully considered in any submission and will require discussions with Historic England to assess if this Site with its present red line is viable.
- Documentary evidence indicates a deer park was located to the east of the Scheduled Hall which would place the Site within it.
- The northern part of the Site lies within an extensive cropmark landscape with large enclosures, probably containing settlement evidence, which extends into the Site.
- A double circular enclosure is recorded in the centre of the Site. From the shape and dimensions this is likely to be of prehistoric date.
- To the north of the Site lies a further Scheduled Monument comprising a cropmark complex including a triple ditched enclosure, probably of Late Iron Age date. This sits within a much wider area of cropmarks located to the north of the Site.
- Historic England should be consulted at the earliest opportunity as the quarrying will impact on the setting of the Scheduled monuments and may have a direct impact on drying out of deposits.
- Mitigation will comprise a programme of pre-determination archaeological evaluation comprising desk based assessment, aerial photographic rectification, and trial trenching to support any planning application to define the extent and significance of archaeological deposits on the Site.
- The above would be followed by a programme of either open area excavation targeted on the features identified in the trial trenching or if significant and complex deposits are identified discussions to preserve these deposits in situ.

Results of the technical RAG assessment

The Essex Historic Environment Record shows that the Site lies within an area known to contain extensive areas of archaeological features, with a Scheduled Monument abutting the south western corner of the Site.

The Site abuts the Scheduled Monument of Woodham Walter Hall which lies on the south- western corner of the Site. The Site comprises the remains of an early sixteenth century house, house platform and associated garden earthworks; it also includes the buried remains of Woodham Walter old church, and a section of road to the north of that, both of which appear on aerial photographs. The Nationally

important site will need to be carefully considered in any submission and will require discussions with Historic England to assess if this Site with its present red line is viable.

Documentary evidence indicates a deer park was located to the east of the scheduled hall which would place the Site within it.

The National Mapping project has shown extensive cropmark complexes located within and to the north of the Site. The northern part of the Site lies within an extensive cropmark landscape with large enclosures, probably containing settlement evidence, which extends into the Site. A double circular enclosure is recorded in the centre of the Site. From the shape and dimensions this is likely to be of prehistoric date. To the north of the Site lies a further Scheduled Monument comprising a cropmark complex including a triple ditched enclosure, probably of Late Iron Age date. This sits within a much wider area of cropmarks located to the north of the Site.

The impact of the quarrying would result in the total loss of the heritage assets (multi-period archaeological deposits) within the Site. It also has the potential to impact the setting of the scheduled monuments especially Woodham Walter Hall.

Mitigation will comprise a programme of pre-determination archaeological evaluation comprising desk based assessment, aerial photographic rectification, and trial trenching to support any planning application to define the extent and significance of archaeological deposits on the Site.

The above would be followed by a programme of either open area excavation targeted on the features identified in the trial trenching or if significant and complex deposits are identified discussions to preserve these deposits in situ.

The Site has the potential to have a major impact on known archaeology and will require a high level of mitigation to make the Site acceptable.

Cumulative impact

There are no other Candidate Sites in proximate to the Site A66 which could also impact on archaeological remains.

Candidate Site Reference A67 – Church Farm

Amber

Key findings of the assessment are as follows:

- The Site lies within an area of archaeological features as identified through aerial photographic evidence.
- In the northern area of the Site a circular enclosure is interpreted as being of prehistoric date and possibly a ritual monument. Further possible ring ditches are recorded within the Site.
- A scheduled monument lies within 200m to the south of the Site.
- Historic England should be consulted at the earliest opportunity to assess the impact on the setting of the Scheduled monument.
- The Site has potential to contain Palaeolithic archaeological remains.
- Mitigation would comprise a programme of pre-determination desk based assessment, geophysical survey, and rectification of aerial photographic evidence. This would determine the extent of archaeological and geoarchaeological evaluation required to support a planning application.
- Archaeological trial trenching and geoarchaeological investigation will be required. This would be followed by a programme of open area excavation targeted on the concentrations of any significant archaeological or geoarchaeological remains identified in the trial trenching and further geoarchaeological investigation.

Results of the technical RAG assessment

The Site contains non-designated heritage assets as recorded on the Essex Historic Environment Record through aerial photographic evidence. The form of the heritage asset suggests prehistoric ritual activity comprising a ring ditch with central pit, possibly indicating the location of a burial, further possible ring ditches are recorded within the Site.

Further evidence for ritual activity in the local area includes a Bronze Age cinerary urn to the west and Iron Age cremation to the north. Proximity to water is often a factor in the location of prehistoric ritual sites.

To the south, less than 200m from the Site boundary lies a scheduled monument site comprising the ruins of St Peters Church (SM 1019881) which is thought to have originated in the 12th century. Evidence for an associated medieval settlement has been recovered to the west of the church and adjacent to the Site. The Nationally important site will need to be carefully considered in any submission and will require discussions with Historic England to assess if this Site with its present red line is viable.

In the wider area a Roman villa site has been identified close to the Creek at Arlesford Lodge, with possible later Saxon activity indicated by finds of an iron spearhead and axe.

No archaeological investigation has taken place within the Site however nearby archaeological investigations have revealed evidence for prehistoric, Roman, and medieval activity.

At Wivenhoe, Palaeolithic flint implements have been recovered from sediments laid down by the ancestral Thames prior to its diversion during the Anglian glacial period. The geological deposits within the Site have potential to contain some of the earliest evidence from the Palaeolithic period.

The impact of the quarrying would result in the total loss of the known non-designated heritage assets and any associated unknown heritage assets.

Mitigation would comprise a programme of pre-determination desk based assessment, geophysical survey, and rectification of aerial photographic evidence. This would determine the extent of archaeological and geoarchaeological evaluation required to support a planning application.

Archaeological trial trenching and geoarchaeological investigation will be required. This would be followed by a programme of open area excavation targeted on the concentrations of any significant archaeological or geoarchaeological remains identified in the trial trenching and geoarchaeological investigation.

The Site is likely to have a moderate impact on archaeology and is likely to require medium levels of mitigation to make the Site acceptable.

Cumulative impact

Other Candidate Sites in proximate to Site A67 which could also impact on archaeological remains are as follows:

- A71 Lodge Farm – Arlesford (A19)

The cumulative impact of Site A67 and the above site on archaeological and geoarchaeological remains would be the loss of further potential sites of possible early prehistoric and later activity which favoured valley locations as sites of ritual significance.

Candidate Site Reference A68 – Crabtree Farm

Red-Amber

Key findings of the assessment are as follows:

- The Site lies within an area of archaeological features as identified through aerial photographic evidence.
- Complex probable multi-period archaeological remains are densely concentrated along the boundary with Bentley Brook including potential prehistoric ritual monuments and settlement evidence.
- Evidence for prehistoric, Roman, and Medieval settlement and activity to the south of the Site has been confirmed through archaeological investigation.
- Mitigation will comprise a programme of pre-determination archaeological evaluation comprising desk based assessment, aerial photographic rectification, geophysics, and targeted trial trenching to support any planning application to define the extent and significance of archaeological deposits on the Site.
- An archaeological evaluation will be required to be completed across the Site and would be followed by a programme of open area excavation targeted on any concentrations of significant archaeological remains identified in the trial trenching. If significant and complex deposits are identified there may be a requirement to preserve these deposits in situ.

Results of the technical RAG assessment

The Site contains non-designated heritage assets as recorded on the Essex Historic Environment Record through aerial photographic evidence. The form of the heritage asset suggests prehistoric ritual activity, settlement, and agricultural activity. The cropmarks are concentrated along the western boundary in proximity to the Bentley Brook.

Targeted archaeological evaluation has been carried out on some selected cropmark features on the boundary and south of the Site. A hengiform cropmark is interpreted as the Site of a medieval windmill. A smaller ring-ditch produced Bronze Age pottery and was confirmed as a ploughed out barrow. Finds found within the immediate area include a Neolithic axe, worked, and burnt flint, prehistoric, Roman, medieval, and post-Medieval pottery.

No archaeological investigation has taken place within the Site however nearby archaeological investigations have revealed evidence for prehistoric, Roman, and medieval activity.

The impact of the quarrying would result in the total loss of the known non-designated heritage assets and any associated unknown heritage assets.

Mitigation will comprise a programme of pre-determination archaeological evaluation comprising desk based assessment, aerial photographic rectification, geophysics, and trial trenching to support any planning application to define the extent and significance of archaeological deposits on the Site.

An archaeological evaluation will be required to be completed across the Site and would be followed by a programme of open area excavation targeted on any concentrations of significant archaeological remains identified in the trial trenching. If significant and complex deposits are identified there may be a requirement to preserve these deposits in situ.

The Site is likely to have a moderate to high impact on archaeology and is likely to require medium/high levels of mitigation to make the Site acceptable.

Cumulative impact

There are no other Candidate Sites in proximate to Site A68 which could also impact on archaeological remains.

Candidate Site Reference A69 – Frating Hall

Amber

Key findings of the assessment are as follows:

- The Site contains a wide range of archaeological deposits identified from aerial photography.
- In the southern area of the Site two enclosures are recorded interpreted as being of potential prehistoric date.
- On the western and central areas a series of rectilinear enclosures are recorded, potentially either settlement enclosures or a field system. Aerial photographs show a large number of pit like features in at least two of the fields within the Site.
- To the west of the Site lies the historic church/hall complex at Frating Hall. The setting of a number of heritage assets will be affected. The Frating church to the west of the south western corner of the Site has the potential to have occupation of medieval date in its vicinity.
- Mitigation will comprise a programme of pre-determination archaeological evaluation comprising desk based assessment, aerial photographic rectification, geophysical survey, and targeted trial trenching to support any planning application to define the extent and significance of archaeological deposits on the Site.
- The above would be followed by a programme of full trial trenching followed by either open area excavation targeted on the features identified in the trial trenching or if significant and complex deposits are identified discussions to preserve these deposits in situ.

Results of the technical RAG assessment

The Essex Historic Environment Record shows extensive cropmark evidence, within the Site and its immediate vicinity.

In the southern area of the Site two enclosures are recorded interpreted as being of potential prehistoric date. These are very different to each other with the largest being 120 m in diameter and the smaller being only 30 m. The larger may well be a prehistoric settlement.

On the western and central areas a series of rectilinear enclosures are recorded, potentially either settlement enclosures or a field system. Assessing the aerial photography on google earth it show a large number of pit like features in at least two of the fields within the Site. Other features previously unrecorded are visible on these images.

To the west of the Site lies the historic church/hall complex at Frating Hall. The setting of a number of heritage assets will be affected. The Frating church to the

west of the south western corner of the Site has the potential to have occupation of medieval date in its vicinity.

Mitigation will comprise a programme of pre-determination archaeological evaluation comprising desk based assessment, aerial photographic rectification, geophysical survey on those areas with no aerial data and targeted trial trenching to support any planning application to define the extent and significance of archaeological deposits on the Site.

The above would be followed by a full programme of trial trenches followed by either open area excavation targeted on the features identified in the trial trenching or if significant and complex deposits are identified discussions to preserve these deposits in situ.

The Site will have a moderate impact on the known archaeology and will require a moderate level of mitigation to make the Site acceptable.

Cumulative impact

There are no other Candidate Sites in proximate to the Site A69 which could also impact on archaeological remains.

Candidate Site Reference A71 – Lodge Farm

Amber

Key findings of the assessment are as follows:

- The Site lies within an area of archaeological features as identified through aerial photographic evidence.
- In the southern area of the Site an enclosure, possible trackway, and pits, recorded as cropmark features, suggest archaeological activity.
- A scheduled monument lies within 500m to the east of the Site.
- The Site has high potential to contain Palaeolithic archaeological remains.
- Mitigation will comprise a programme of pre-determination archaeological and geoarchaeological evaluation comprising desk based assessment, rectification of aerial photographic evidence and geophysical survey.
- Dependant on the results of the geophysical survey, test pitting and targeted trial trenching may be required to support any planning application to define the extent and significance of archaeological and geoarchaeological deposits on the Site.
- An archaeological and geoarchaeological evaluation will be required to be completed and would be followed by a programme of geoarchaeological investigation and open area excavation targeted on any concentrations of significant archaeological and geoarchaeological remains identified in the trial trenching.

Results of the technical RAG assessment

The Site contains non-designated heritage assets as recorded on the Essex Historic Environment Record through aerial photographic evidence. The form of the heritage asset suggests settlement and/or agricultural activity of unknown date.

In the surrounding area there is evidence for prehistoric ritual monuments recorded through aerial photography. Further evidence for ritual activity is demonstrated by the recovery of a Bronze Age cinerary urn and Iron Age cremation to the north. Proximity to water is often a factor in the location of prehistoric ritual sites and would have been a valuable resource for food and transport.

A Roman villa site has been identified c.250m south of the Site at Arlesford Lodge, with possible later Saxon activity indicated by finds of an iron spearhead and axe.

To the east, less than 500m from the Site boundary lies a scheduled monument site comprising the ruins of St Peters Church (SM 1019881) which is thought to have originated in the 12th century. Evidence for an associated medieval settlement has been recovered to the west of the church.

No archaeological investigation has taken place within the Site however nearby archaeological investigations have revealed evidence for prehistoric, Roman, and medieval activity.

At Wivenhoe, Palaeolithic flint implements have been recovered from sediments laid down by the ancestral Thames prior to its diversion during the Anglian glacial period. The geological deposits within the Site have potential to contain some of the earliest evidence from the Palaeolithic period.

The impact of the quarrying would result in the total loss of the known non-designated heritage assets and any associated unknown heritage assets.

Mitigation will comprise a programme of pre-determination archaeological and geoarchaeological evaluation comprising desk based assessment, rectification of aerial photographic evidence and geophysical survey. Dependant on the results of the geophysical survey, test pitting and targeted trial trenching may be required to support any planning application to define the extent and significance of archaeological and geoarchaeological deposits on the Site.

An archaeological and geoarchaeological evaluation will be required to be completed and would be followed by a programme of geoarchaeological investigation and open area excavation targeted on any concentrations of significant archaeological and geoarchaeological remains identified in the trial trenching.

The Site is likely to have a moderate impact on archaeology and is likely to require medium levels of mitigation to make the Site acceptable.

Cumulative impact

Other Candidate Sites in proximate to Site A71 which could also impact on archaeological remains are as follows:

- A67 Church Farm – Arlesford (A16)

The cumulative impact of Site A71 and the above site on archaeological and geoarchaeological remains would be the loss of further potential sites of possible early prehistoric and later activity which favoured proximity to water courses as sites of ritual significance.

Candidate Site Reference A72 – Martells – Southern Extension

Amber

Key findings of the assessment are as follows:

- The Site lies within an area of archaeological features as identified through aerial photographic evidence.
- The Site contains evidence for a possible Roman road and further linear features, some of which represent historic agricultural features.
- The Site lies within 1km of a Scheduled Monument.
- The Site has potential to contain Palaeolithic archaeological remains.
- Mitigation will comprise a programme of pre-determination archaeological and geoarchaeological evaluation comprising desk based assessment, rectification of aerial photographic evidence and geophysical survey.
- Dependant on the results of the geophysical survey, test pitting and targeted trial trenching may be required to support any planning application to define the extent and significance of archaeological and geoarchaeological deposits on the Site.
- An archaeological and geoarchaeological evaluation will be required to be completed and would be followed by a programme of geoarchaeological investigation and open area excavation targeted on any concentrations of significant archaeological and geoarchaeological remains identified in the trial trenching.

Results of the technical RAG assessment

The Site contains non-designated heritage assets as recorded on the Essex Historic Environment Record through aerial photographic evidence. The form of the heritage asset suggests a possible Roman road and further linear features, some of which represent historic field boundaries. In addition historic mapping reveals a former road crosses the Site which was taken out of use following the construction of the A120 road. The road is depicted on the Chapman and Andre map and pre-dates 1777.

Archaeological evaluation at the adjacent quarry site (Western extension) revealed possible prehistoric, Roman, and postmedieval activity. A circular feature was revealed which had been identified in the geophysical survey as a possible barrow. East of Slough Lane archaeological evaluation revealed evidence for Roman settlement and ritual activity. Finds from the Roman period comprised a wide range of materials including slag, roof tile, human bone, animal bone, imported and locally produced pottery, including two semi-complete vessels, and iron nails.

Within 1km of the Site lies a Scheduled Monument comprising a cropmark complex. Excavation within the scheduled area has identified it as an extensive Bronze Age

burial site. The Scheduled area (SM1002146) also contains evidence of Bronze Age, Iron Age and Roman trackways, field-systems and enclosures and Saxon activity.

No archaeological investigation has taken place within the Site however nearby archaeological investigations have revealed evidence for prehistoric, Roman, and medieval activity.

Geoarchaeological assessment at the adjacent quarry identified a sequence of brickearth deposits overlying Kesgrave gravels which were laid down by the ancestral Thames prior to diversion during the Anglian glacial period. There is potential for the gravels to yield palaeoenvironmental material or humanly worked Palaeolithic archaeological material at depth.

The impact of the quarrying would result in the total loss of the known non-designated heritage assets and any associated unknown heritage assets.

Mitigation will comprise a programme of pre-determination archaeological and geoarchaeological evaluation comprising desk based assessment, rectification of aerial photographic evidence and geophysical survey. Dependant on the results of the geophysical survey, test pitting and targeted trial trenching may be required to support any planning application to define the extent and significance of archaeological and geoarchaeological deposits on the Site.

An archaeological and geoarchaeological evaluation will be required to be completed and would be followed by a programme of geoarchaeological investigation and open area excavation targeted on any concentrations of significant archaeological and geoarchaeological remains identified in the trial trenching.

The Site is likely to have a moderate impact on archaeology and is likely to require medium levels of mitigation to make the Site acceptable.

Cumulative impact

Other Candidate Sites in proximate to Site A72 which could also impact on archaeological remains are as follows:

- A73 Martells – Western extension

The cumulative impact of Site A72 and the above site on archaeological and geoarchaeological remains would be the loss of further potential sites of possible early prehistoric and later activity.

Candidate Site Reference A73 – Martells – Western Extension

Amber-Green

Key findings of the assessment are as follows:

- There are no non-designated or designated heritage assets recorded within the Site.
- The Site lies within an area of multi-period archaeological features as identified through aerial photographic evidence and archaeological investigation.
- The Site lies within 700m of a Scheduled Monument.
- The Site has potential to contain Palaeolithic archaeological remains and Pleistocene palaeoenvironmental remains.
- Mitigation will comprise a programme of pre-determination archaeological evaluation comprising desk based assessments and geophysical survey. Targeted trial trenching may be required to support any planning application to define the extent and significance of any archaeological deposits identified from the geophysical survey.
- A programme of archaeological and geoarchaeological evaluation will be required which would be followed by open area excavation targeted on the concentrations of any significant archaeological or geoarchaeological remains identified in the trial trenching.

Results of the technical RAG assessment

There are no non-designated or designated heritage assets recorded within the Site. Archaeological evaluation at the adjacent quarry site (Western extension) revealed possible prehistoric, Roman, and postmedieval activity. A circular feature was revealed which had been identified in the geophysical survey as a possible barrow. East of Slough Lane archaeological evaluation revealed evidence for Roman settlement and ritual activity. Finds from the Roman period comprised a wide range of materials including slag, roof tile, human bone, animal bone, imported and locally produced pottery, including two semi-complete vessels, and iron nails.

Within 0.7km of the Site lies a Scheduled Monument comprising a cropmark complex. Excavation within the scheduled area has identified it as an extensive Bronze Age burial site. The Scheduled area (SM1002146) also contains evidence of Bronze Age, Iron Age and Roman trackways, field-systems and enclosures and Saxon activity.

No archaeological investigation has taken place within the Site however nearby archaeological investigations have revealed evidence for prehistoric, Roman, and medieval activity.

Geoarchaeological assessment at the adjacent quarry identified a sequence of coverloam overlying Kesgrave gravels which were laid down by the ancestral Thames prior to diversion during the Anglian glacial period. There is potential for the gravels to yield palaeoenvironmental material or humanly worked Palaeolithic archaeological material at depth. Adjacent to the Site significant Pleistocene deposits have been recorded which have been designated as sites of specialist scientific interest.

The impact of the quarrying would result in the total loss of the known non-designated heritage assets and any associated unknown heritage assets.

Mitigation will comprise a programme of pre-determination archaeological evaluation comprising desk based assessments and geophysical survey. Targeted trial trenching may be required to support any planning application to define the extent and significance of any archaeological deposits identified from the geophysical survey.

A programme of archaeological and geoarchaeological evaluation will be required to identify the nature of the heritage assets and determine the potential for Palaeolithic and palaeoenvironmental remains. This would be followed by open area excavation and geoarchaeological investigation in areas where significant archaeological/geoarchaeological remains are identified.

Based on existing evidence the Site is likely to have a low to moderate impact on archaeology and is likely to require medium levels of mitigation to make the Site acceptable.

Cumulative impact

Other Candidate Sites in proximate to Site A73 which could also impact on archaeological remains are as follows:

- A72 Martells – Southern extension

The cumulative impact of Site A73 and the above site on archaeological and geoarchaeological remains would be the loss of further potential sites of possible early prehistoric and later activity.

Candidate Site Reference A74 – Thorrington Hall

Amber

Key findings of the assessment are as follows:

- The Site contains a wide range of archaeological deposits identified from aerial photography.
- On the western area of the Site a sequence of small enclosures and two possible ploughed flat burial mounds are present along with former field boundaries.
- On the eastern area of the Site a series of linear features located at right angles to a probable trackway are recorded.
- Within the surrounding area a range of other cropmark sites are recorded comprising a similar mix of circular features possibly representing barrows, enclosures, and linear features.
- The church/hall complex of Thorrington Hall lies to the northeast of the Site.
- Mitigation will comprise a programme of pre-determination archaeological evaluation comprising desk based assessment, geophysical assessment, aerial photographic rectification, and targeted trial trenching to support any planning application to define the extent and significance of archaeological deposits on the Site.
- The above would be followed by a full programme of trial trenching followed by a programme of either open area excavation targeted on the features identified in the trial trenching or preservation in situ.

Results of the technical RAG assessment

The Essex Historic Environment Record shows dispersed cropmark evidence, within the Site and its immediate vicinity.

On the western area of the Site a sequence of small enclosures and two possible ploughed flat burial mounds are present along with former field boundaries. The circular features are located in the corner of fields suggesting some antiquity to the field systems.

On the eastern area of the Site a series of linear features located at right angles to a probable trackway are plotted. These are difficult to interpret, possible lane with property boundaries off it, but cannot define clearly.

Within the surrounding area a similar range of other cropmark sites are recorded comprising a similar mix of circular features possibly representing barrows, enclosures, and linear features.

The church/hall complex of Thorrington Hall lies to the northeast of the Site. The church of St Mary Magdalene is fourteenth century in origin with the present hall dating to the sixteenth century.

Mitigation will comprise a programme of pre-determination archaeological evaluation comprising desk based assessment, geophysical assessment, aerial photographic rectification, and targeted trial trenching to support any planning application to define the extent and significance of archaeological deposits on the Site.

The above would be followed by a full programme of trial trenching followed by a programme of open area excavation targeted on the features identified in the trial trenching or preservation in situ.

The Site will have a moderate impact on the known archaeology and will require a moderate level of mitigation to make the Site acceptable.

Cumulative impact

There are no other Candidate Sites in proximate to the Site A74 which could also impact on archaeological remains.

Candidate Site Reference A75 – Land at Orford

Amber-Green

Key findings of the assessment are as follows:

- The Essex Historic Environment Record records one known area of archaeological deposits impacted comprising a series of former field boundaries.
- Cartographic evidence shows the Site lies to the immediate south of the historic complex at Orsett House, whose grounds historically extended into this area.
- Mitigation should initially comprise a targeted desk based assessment to support the planning application. This will be followed by a programme of trial trenching (on present evidence at the post determination stage).

Results of the technical RAG assessment

The Essex Historic Environment Record shows that the Site lies within an area where little archaeological work has previously been undertaken. Aerial photographic evidence (EHER 46546) has identified a number of former field boundaries as buried features.

The impact of the quarrying would result in the total loss of any unknown heritage assets within the Site.

Mitigation would be required which would include a programme of field investigation in advance of quarrying activity on the Site.

The Site is likely to have a low impact on known archaeology and is likely to require a low to medium level of mitigation to make the Site acceptable.

Cumulative impact

There are no other Candidate Sites in proximate to the Site A75 which could also impact on archaeological remains.

Candidate Site Reference A76 – Elsenham

Amber-Green

Key findings of the assessment are as follows:

- The Site lies within an area known to contain extensive areas of multi-period archaeology from the Late Bronze Age to the medieval period.
- The Site has been previously evaluated in 2011 identifying dispersed evidence of Late Bronze Age to medieval remains.
- The evidence indicates the potential for Roman and medieval settlement surviving with the Site.
- Mitigation will comprise a programme of open area excavation targeted on the concentrations of occupation identified in the evaluation report.

Results of the technical RAG assessment

The Essex Historic Environment Record shows that the Site lies within an area where extensive archaeological work has previously been undertaken. The expansion of the present quarrying with Site A76 will extend the quarry to the edge of the historic settlement at Pledgdon Green.

Within the area of the proposed Site archaeological evaluation was completed in 2011 by Northamptonshire Archaeology.

The evidence recorded from the evaluation trenches showed features were clustered and formed defined zones of interest within the Site. The features were dated from the Bronze Age through to the Roman period and indicated the area had been farmed throughout this period.

Four trenches revealed prehistoric features scattered across the Site, indicating dispersed activity. Eight trenches contained Roman features with the main concentration being in the south-west corner of the development area. This consisted of a potential enclosure ditch with associated gullies and pits. The evidence from medieval features was moderately poorly represented with only one focus of likely settlement in the north-east corner of the Site.

The impact of the quarrying would result in the total loss of the known heritage assets (multi-period archaeological deposits) within the Site.

Mitigation would be required which would include a programme of open area excavation targeted on those trial trenches containing archaeological features. This work can be undertaken in advance of quarrying activity on the Site secured as a condition.

The Site will have a minor impact on known archaeology and will require a level of mitigation to make the Site acceptable.

Cumulative impact

The Site will result in further loss of heritage assets within the Elsenham area as the quarrying expands.

Candidate Site Reference A77 – Westward Extension to Highwood Quarry

Amber-Green

Key findings of the assessment are as follows:

- The Site lies within an area known to contain areas of multi-period archaeology from the Late Bronze Age to the medieval period.
- Archaeological evaluation on the existing quarry area has found evidence of Late Prehistoric and medieval occupation. This worked proved there was limited impact from the later development of the Site as an airfield.
- The Site lies within a medieval deer park associated with Little Easton Manor that was redeveloped into an airfield in the Second World War.
- Mitigation would be required initially comprising a desk based assessment to support the planning application. This would be followed by an initial programme of trial trenching followed by open area excavation on those areas that were found to contain archaeological deposits.

Results of the technical RAG assessment

The Essex Historic Environment Record shows that the Site lies adjacent to an area where archaeological work has previously been undertaken.

Trial trenching and excavation on the earlier parts of Highwood Quarry have recovered evidence of Iron Age occupation in the form of a number of roundhouses with associated features. It was interpreted as an unenclosed settlement dating to the mid to Late Iron Age.

A number of Roman ditches were identified during the excavation at Highwood Quarry, which are likely to relate to the agricultural exploitation of the area located on the west of the Roman settlement at Great Dunmow.

The Site lies within a former Deer Park associated with Easton Manor. The Site and much of Highwood Quarry are located within the park area, with a number of medieval features recovered during the initial excavations on Phase 1 of the quarry.

During World War II the parkland was turned into an airfield by the Americans in 1942. Records show that all of the trees were cleared from the Site, many using dynamite. Excavations within the airfield to date shows that there is only limited disturbance caused by this construction.

The impact of the quarrying would result in the total loss of the heritage assets (multi-period archaeological deposits) within the Site.

Mitigation would be required initially comprising a desk based assessment to support the planning application. This would be followed by an initial programme of trial trenching followed by open area excavation on those areas that were found to

contain archaeological deposits. This work can be undertaken in advance of quarrying activity on the Site secured as a condition.

The Site will have a low impact on known archaeology and will require a low to medium level of mitigation to make the Site acceptable.

Cumulative impact

This and the previous quarrying activity is gradually removing sections of the present World War II airfield as well as elements of the deer park.

Candidate Site Reference A79 – Crown Quarry – North of Wick Lane

Amber

Key findings of the assessment are as follows:

- The Site lies within an area of archaeological features as identified through aerial photographic evidence.
- Evidence for Iron Age settlement and Roman activity has been recovered from the surrounding area.
- The Site has potential to contain Palaeolithic archaeological remains and Pleistocene faunal and palaeoenvironmental remains.
- Mitigation will comprise a programme of pre-determination archaeological and geoarchaeological evaluation comprising desk based assessment, rectification of aerial photographic evidence and geophysical survey.
- Dependant on the results of the geophysical survey, test pitting and targeted trial trenching may be required to support any planning application to define the extent and significance of archaeological and geoarchaeological deposits on the Site.
- An archaeological and geoarchaeological evaluation will be required to be completed across the Site and would be followed by a programme of geoarchaeological investigation and open area excavation targeted on any concentrations of significant archaeological and geoarchaeological remains identified in the trial trenching.

Results of the technical RAG assessment

The Site contains non-designated heritage assets as recorded on the Essex Historic Environment Record through aerial photographic evidence. The form of the heritage assets indicates historic field boundaries.

Late Iron Age remains have been excavated south of Wick Lane representing an extensive settlement, with evidence for craft and industrial activity. Scattered earlier prehistoric activity was also recorded. A Roman rectilinear field system with a well and a possible trackway were excavated closer to Old Ipswich Road which lies on the course of a Roman road. Cropmarks adjacent to the Site include linears, enclosures and possible pits which may be of Iron Age or Roman date. The Site lies along Wick Lane which is a historic route of possible medieval origin.

The Site lies close to mapped Kesgrave gravels which were laid down by the ancestral Thames prior to diversion by the Anglian ice sheet. Palaeolithic archaeological sites have been recorded from this time period and Palaeolithic flakes have been recovered from these gravels at Wivenhoe.

There is evidence for the settlement or occupation of this area from the Iron Age period. Roman activity possibly relating to settlement has also been revealed in the surrounding area.

The impact of the quarrying would result in the total loss of the known designated and non-designated heritage assets and any associated unknown heritage assets.

Mitigation will comprise a programme of pre-determination archaeological and geoarchaeological evaluation comprising desk based assessment, rectification of aerial photographic evidence and geophysical survey. Dependant on the results of the geophysical survey, test pitting and targeted trial trenching may be required to support any planning application to define the extent and significance of archaeological and geoarchaeological deposits on the Site.

An archaeological and geoarchaeological evaluation will be required to be completed across the Site and would be followed by a programme of geoarchaeological investigation and open area excavation targeted on any concentrations of significant archaeological and geoarchaeological remains identified in the trial trenching.

The Site is likely to have a moderate impact on archaeology and is likely to require medium levels of mitigation to make the Site acceptable.

Cumulative impact

Other Candidate Sites in proximate to Site A79 which could also impact on archaeological remains are as follows:

- A80 Crown Quarry - North of Wick Lane

The cumulative impact of Site A79 and the above sites on archaeological remains would be the loss of further potential archaeological remains.

Candidate Site Reference A80 – Crown Quarry – South of Wick Lane

Amber-Green

Key findings of the assessment are as follows:

- The Site lies within an area of archaeological features as identified through aerial photographic evidence.
- Evidence for Iron Age settlement and Roman activity has been recovered from the surrounding area.
- The Site has potential to contain Palaeolithic archaeological remains and Pleistocene faunal and palaeoenvironmental remains.
- Mitigation will comprise a programme of pre-determination archaeological and geoarchaeological evaluation comprising desk based assessment and geophysical survey.
- Dependant on the results of the geophysical survey, test pitting and targeted trial trenching may be required to support any planning application to define the extent and significance of archaeological and geoarchaeological deposits on the Site.
- An archaeological and geoarchaeological evaluation will be required to be completed and would be followed by a programme of geoarchaeological investigation and open area excavation targeted on any concentrations of significant archaeological and geoarchaeological remains identified in the trial trenching.

Results of the technical RAG assessment

The Site does not contain any designated or non-designated heritage assets as recorded on the Essex Historic Environment Record.

The surrounding area contains evidence for prehistoric to Medieval archaeological remains through aerial photographic evidence and archaeological investigations. Late Iron Age remains have been excavated south of Wick Lane representing an extensive settlement, with evidence for craft and industrial activity. Scattered earlier prehistoric activity was also recorded. A Roman rectilinear field system with a well and a possible trackway were excavated closer to Old Ipswich Road which lies on the course of a Roman road. Cropmarks adjacent to the Site include a large enclosure, linears, and possible pits which may be of Iron Age or Roman date. A moated site is recorded at Wick Farm, west of the Site which may be medieval in origin and suggests that Wick Lane may also be of medieval date.

The Site lies in an area of mapped Kesgrave gravels which were laid down by the ancestral Thames prior to diversion by the Anglian ice sheet. Palaeolithic archaeological sites have been recorded from this time period and Palaeolithic flakes have been recovered from these gravels at Wivenhoe.

There is evidence for the settlement or occupation of this area from the Iron Age period. Roman activity possibly relating to settlement has also been revealed in the surrounding area. Medieval settlement and activity are indicated in the existing road network and moated enclosure.

The impact of the quarrying would result in the total loss of the known designated and non-designated heritage assets and any associated unknown heritage assets.

Mitigation will comprise a programme of pre-determination archaeological and geoarchaeological evaluation comprising desk based assessment and geophysical survey. Dependant on the results of the geophysical survey, test pitting and targeted trial trenching may be required to support any planning application to define the extent and significance of archaeological and geoarchaeological deposits on the Site.

An archaeological and geoarchaeological evaluation will be required to be completed and would be followed by a programme of geoarchaeological investigation and open area excavation targeted on any concentrations of significant archaeological and geoarchaeological remains identified in the trial trenching.

The Site is likely to have a low to moderate impact on archaeology and is likely to require medium levels of mitigation to make the Site acceptable.

Cumulative impact

Other Candidate Sites in proximate to Site A80 which could also impact on archaeological remains are as follows:

- A79 Crown Quarry - North of Wick Lane

The cumulative impact of Site A80 and the above sites on archaeological remains would be the loss of further potential archaeological remains.

Candidate Site Reference A82 – Colemans Farm – Elm Springs Extension

Amber/Green

Key findings of the assessment are as follows:

- There are no designated or non-designated heritage assets recorded on the Essex Historic Environment Record (EHER) within the Site and little archaeological investigation has taken place within the area to inform on the potential for archaeological remains.
- The Site lies within an area of archaeological features as identified through aerial photographic evidence. These may indicate ritual and agricultural activity associated with nearby settlement.
- Palaeolithic archaeological remains and Pleistocene faunal remains have been recovered from river gravels within the vicinity of the Site.
- Mitigation will comprise a programme of pre-determination archaeological and geoarchaeological evaluation comprising desk based assessment and geophysical survey.
- Dependant on the results of the geophysical survey, test pitting and targeted trial trenching may be required to support any planning application to define the extent and significance of archaeological and geoarchaeological deposits on the Site.
- An archaeological and geoarchaeological evaluation will be required to be completed and would be followed by a programme of geoarchaeological investigation and open area excavation targeted on any concentrations of significant archaeological and geoarchaeological remains identified in the trial trenching.

Results of the technical RAG assessment

There are no designated or non-designated heritage assets recorded on the Essex Historic Environment Record within the Site.

No archaeological investigation has taken place within the Site however on the north side of the River Blackwater archaeological investigations have revealed early prehistoric to medieval activity. Prehistoric ritual activity is located within the river valley.

Cropmark evidence in the adjacent fields suggest a possible ring ditch, though there is less evidence for ritual activity compared to north of the river. Field and enclosure systems with interconnecting trackways suggest agricultural activity which may be connected to nearby settlement. Nearby Medieval settlement is indicated by the moated enclosure at Little Braxted Hall and 12th century Church.

Palaeolithic flint implements have been recovered from the vicinity of Colemans Farm though none have yet been recorded from the south bank of the River Blackwater. In addition, several mammalian fossils have been recovered from the base of the gravels during quarrying operations at Colemans farm. Organic deposits have been observed in the river gravels which have potential to preserve Palaeolithic archaeological material as well as palaeoenvironmental remains and alluvial deposits within the valley would have potential to preserve a wide range of archaeological remains and palaeoenvironmental evidence.

The impact of the quarrying would result in the total loss of the known non-designated heritage assets and any associated unknown heritage assets.

Mitigation will comprise a programme of pre-determination archaeological and geoarchaeological evaluation comprising desk based assessment and geophysical survey. Dependant on the results of the geophysical survey, test pitting and targeted trial trenching may be required to support any planning application to define the extent and significance of archaeological and geoarchaeological deposits on the Site.

An archaeological and geoarchaeological evaluation will be required to be completed and would be followed by a programme of geoarchaeological investigation and open area excavation targeted on any concentrations of significant archaeological and geoarchaeological remains identified in the trial trenching.

The Site is likely to have a low to moderate impact on archaeology and is likely to require medium levels of mitigation to make the Site acceptable.

Cumulative impact

Other Candidate Sites in proximate to Site A82 which could also impact on archaeological remains are as follows:

- A49 (Colemans Farm – Hill Broad Farm Full Site)
- A51 (Colemans Farm – North extension (Hill Broad Farm))

The cumulative impact of Site A82 and the above sites on archaeological remains would be the loss of further potential sites of prehistoric and later activity which favoured valley locations as sites of ritual significance.

Candidate Site Reference A83 – Colemans Farm – Hole Farm

Amber

Key findings of the assessment are as follows:

- The Site lies within an area of archaeological features as identified through aerial photographic evidence.
- The Site contains a circular cropmark feature and pits suggestive of ritual or settlement activity.
- An archaeological evaluation by trial trenching has been completed across part of the Site.
- The Site lies within 300m of a scheduled monument and further evidence for extensive prehistoric ritual activity.
- The Site has potential to contain Palaeolithic archaeological remains and Pleistocene faunal and palaeoenvironmental remains.
- Mitigation will be required in areas which have not been previously investigated.
- Mitigation will comprise a programme of pre-determination archaeological and geoarchaeological evaluation comprising desk based assessment, rectification of aerial photographic evidence and geophysical survey.
- Dependant on the results of the geophysical survey, test pitting and targeted trial trenching may be required to support any planning application to define the extent and significance of archaeological and geoarchaeological deposits on the Site.
- An archaeological and geoarchaeological evaluation will be required to be completed and would be followed by a programme of geoarchaeological investigation and open area excavation targeted on any concentrations of significant archaeological and geoarchaeological remains identified in the trial trenching.

Results of the technical RAG assessment

The Site contains non-designated heritage assets as recorded on the Essex Historic Environment Record through aerial photographic evidence. The form of the heritage assets indicates prehistoric ritual activity or settlement activity, comprising a ring-ditch with associated pits. Numerous finds are recorded through metal detecting within the Site ranging from Prehistoric to Post-medieval.

The Site was partly evaluated in advance of the widening of the A12-A120, a low level of archaeological features was identified close to the existing A12 and evidence for possible medieval agricultural practices, pits, and ditches.

Roman urns and cremations have been recorded in the vicinity of the A12 which follows the route of the Roman road.

Palaeolithic flint implements have been recovered from the surrounding area, thought to be derived from the fluvial gravels. The Site lies close to mapped lacustrine deposits which have high potential for preservation of palaeoenvironmental evidence. In addition, mammalian fossils have been recovered from the base of the gravels during quarrying operations at Colemans farm. Organic deposits have been observed in the river gravels which have potential to preserve in situ Palaeolithic archaeological material as well as palaeoenvironmental remains.

The impact of the quarrying would result in the total loss of the known non-designated heritage assets and any associated unknown heritage assets.

Mitigation will be required in areas which have not been previously investigated. Mitigation will comprise a programme of pre-determination archaeological and geoarchaeological evaluation comprising desk based assessment, rectification of aerial photographic evidence and geophysical survey. Dependant on the results of the geophysical survey, test pitting and targeted trial trenching may be required to support any planning application to define the extent and significance of archaeological and geoarchaeological deposits on the Site.

An archaeological and geoarchaeological evaluation will be required to be completed and would be followed by a programme of geoarchaeological investigation and open area excavation targeted on any concentrations of significant archaeological and geoarchaeological remains identified in the trial trenching.

The Site is likely to have a moderate impact on archaeology and is likely to require medium levels of mitigation to make the Site acceptable.

Cumulative impact

Other Candidate Sites in proximate to Site A83 which could also impact on archaeological remains are as follows:

- A84 (Colemans Farm – Appleford farm North Extension)

The cumulative impact of Site A83 and the above sites on archaeological remains would be the loss of further potential sites of prehistoric and later activity.

Candidate Site Reference A84 – Colemans Farm – Appleford Farm North Extension

Red

Key findings of the assessment are as follows:

- A scheduled monument lies within the Site. This Nationally important site will need to be carefully considered in any submission and will require discussions with Historic England to assess if this Site should be considered for the Minerals Plan.
- The Site lies within an area of archaeological features as identified through aerial photographic evidence and archaeological investigation. This includes a Neolithic ritual monument and later prehistoric activity forming a multi-period ritual landscape.
- The Site has potential to contain Palaeolithic archaeological remains and Pleistocene faunal and palaeoenvironmental remains.
- Historic England should be consulted at the earliest opportunity as the quarrying will impact on the monument and its setting and potential loss of further sites of high significance.
- Mitigation would require a programme of pre-determination archaeological and geoarchaeological evaluation comprising desk based assessment, geophysics, aerial photographic rectification, test pitting and trial trenching to support any planning application, however, the extent of the archaeological deposits which form an extension to the Scheduled Monument would be difficult to mitigate.
- Detailed discussions would need to be undertaken with Historic England prior to this Site being considered for the Mineral Plan.

Results of the technical RAG assessment

A designated heritage asset lies centrally within the Site (SM 20757). The scheduled monument is classed as a long mortuary enclosure which is associated with human burials dated to the Neolithic period. Fieldwalking and targeted evaluation recovered Mesolithic and Neolithic flint tools within the Site and possible evidence for nearby Neolithic settlement. A ring ditch monument was dated to the Neolithic period which may be contemporary with the scheduled monument.

The Site contains non-designated heritage assets as recorded on the Essex Historic Environment Record through aerial photographic evidence. The form of the heritage assets indicates further prehistoric ritual activity and possible associated settlement.

Palaeolithic flint implements have been recovered from the surrounding area, thought to be derived from the fluvial gravels. The Site lies close to mapped lacustrine deposits which have high potential for preservation of palaeoenvironmental evidence. In addition mammalian fossils have been recovered

from the base of the gravels during quarrying operations at Colemans farm. Organic deposits have been observed in the river gravels which have potential to preserve in situ Palaeolithic archaeological material as well as palaeoenvironmental remains.

There is evidence for the settlement or occupation of this area throughout prehistory, with Palaeolithic and Mesolithic flints to complex ritual monuments dating from the Neolithic to Bronze Age period. Later activity from the Iron Age to Roman has been revealed in the surrounding area.

The impact of the quarrying would result in the total loss of the known designated and non-designated heritage assets and any associated unknown heritage assets.

Mitigation would be difficult within the area and setting of the scheduled monument and Historic England should be involved at the earliest opportunity.

Mitigation would require a programme of pre-determination archaeological and geoarchaeological evaluation comprising desk based assessment, geophysics, aerial photographic rectification, test pitting and trial trenching to support any planning application, however, the extent of the archaeological deposits which form an extension to the Scheduled Monument would be difficult to mitigate.

Detailed discussions would need to be undertaken with Historic England prior to this Site being considered for the Mineral Plan.

The Site is likely to have a severe impact on archaeology and is likely to require high levels of mitigation to make the Site acceptable.

Cumulative impact

Other Candidate Sites in proximate to Site A84 which could also impact on archaeological remains are as follows:

- A49 (Colemans Farm - Hill Broad Farm (Full Site))
- A50 (Colemans Farm – Eastern Extension (Appleford Farm))
- A51 (Colemans farm – North extension)
- A52 (Colemans Farm – Southern Extension)
- A83 (Colemans farm – Hole Farm)

The cumulative impact of Site A84 and the above sites on archaeological remains would be the loss of further potential sites of prehistoric and later activity which favoured valley locations as sites of ritual significance.

Candidate Site Reference A85 – Martells – North of Frating Road (East)

Amber

Key findings of the assessment are as follows:

- The Site lies within 200m of a scheduled monument.
- The Site contains evidence associated with the scheduled monument recorded through aerial photography.
- The Site has potential to contain Palaeolithic archaeological remains and Pleistocene palaeoenvironmental remains.
- Mitigation will comprise a programme of pre-determination archaeological and geoarchaeological evaluation comprising desk based assessment, geophysics, aerial photographic rectification, test pitting and trial trenching to support any planning application to define the extent and significance of archaeological and geoarchaeological deposits on the Site.
- Further areas may be identified which could require preservation in situ. Where preservation in situ is not warranted a programme of open area excavation would be targeted on the concentrations of any significant archaeological or geoarchaeological remains identified in the trial trenching.

Results of the technical RAG assessment

The Site contains non-designated heritage assets as recorded on the Essex Historic Environment Record through aerial photographic evidence. The Site lies within 200m of a scheduled monument and contains features that are associated with the scheduled monument. The Site lies in close proximity to a Roman road and Roman coins have been recovered from within the Site.

The Scheduled area (SM1002146) covers the known extent of an extensive Bronze Age cemetery. The scheduled monument also contains evidence of Bronze Age, Iron Age and Roman trackways, field-systems and enclosures and Saxon activity. The form of the heritage assets within the Site suggests multiperiod archaeological activity associated with the scheduled site.

No archaeological investigation has taken place within the Site however nearby archaeological investigations within the scheduled monument have revealed evidence for significant prehistoric, Roman, medieval, and later activity.

The Site lies within an area of mapped Brickearth deposits which have low potential for Palaeolithic archaeology, these are likely to overlie gravel deposits deposited by the ancestral Thames prior to its diversion by the ice sheets during the Anglian glacial period. A geoarchaeological assessment of the Kesgrave gravels within a nearby quarry indicates potential for the gravels to yield palaeoenvironmental material or humanly worked Palaeolithic artefacts. The gravels are likely to be

present beneath the brickearth deposits and have potential for Palaeolithic archaeological remains and palaeoenvironmental evidence.

The impact of the quarrying would result in the total loss of the known non-designated heritage assets and any associated unknown heritage assets.

Mitigation will comprise a programme of pre-determination archaeological and geoarchaeological evaluation comprising desk based assessment, geophysics, aerial photographic rectification, test pitting and trial trenching to support any planning application to define the extent and significance of archaeological and geoarchaeological deposits on the Site.

Further areas may be identified which could require preservation in situ. Where preservation in situ is not warranted a programme of open area excavation would be targeted on the concentrations of any significant archaeological or geoarchaeological remains identified in the trial trenching.

The Site is likely to have a moderate impact on archaeology and is likely to require medium levels of mitigation to make the Site acceptable.

Cumulative impact

Other Candidate Sites in proximate to Site A85 which could also impact on archaeological remains are as follows:

- A86 Martells - North of Frating Road (West)
- A87 Martells – East of Slough Lane

The cumulative impact of Site A85 and the above site on archaeological remains would be the loss of archaeological remains associated with the scheduled monument and the impact on the setting of the scheduled monument.

Candidate Site Reference A86 – Martells – North of Frating Road (West)

Red

Key findings of the assessment are as follows:

- The Site lies adjacent to a scheduled monument and Historic England should be consulted prior to this Site being considered.
- The Site lies within an area of dense archaeological features as identified through aerial photographic evidence.
- The Site contains evidence for trackways and land division which extend from a multi-period archaeological site containing evidence for ritual, settlement, and industrial activity.
- The Site has potential to contain Palaeolithic archaeological remains and Pleistocene palaeoenvironmental remains.
- Mitigation would require a programme of pre-determination archaeological and geoarchaeological evaluation comprising desk based assessment, geophysics, aerial photographic rectification, test pitting and trial trenching to support any planning application, however, the extent of the archaeological deposits which form an extension to the Scheduled Monument would be difficult to mitigate.
- Detailed discussions would need to be undertaken with Historic England prior to this Site being considered for the Mineral Plan.

Results of the technical RAG assessment

The Site contains non-designated heritage assets as recorded on the Essex Historic Environment Record through aerial photographic evidence. The southern boundary and south-eastern section of the Site lies adjacent to a scheduled monument. The Scheduled area (SM1002146) covers the known extent of an extensive Bronze Age cemetery. The scheduled monument also contains evidence of Bronze Age, Iron Age and Roman trackways, field-systems and enclosures and Saxon activity. The form of the heritage assets within the Site suggests multiperiod archaeological activity associated with the scheduled site.

No archaeological investigation has taken place within the Site however nearby archaeological investigations have revealed evidence for significant prehistoric, Roman, medieval activity and later activity.

The Site lies within an area of mapped Brickearth deposits which have low potential for Palaeolithic archaeology, these are likely to overlie gravel deposits deposited by the ancestral Thames prior to its diversion by the ice sheets during the Anglian glacial period. A geoarchaeological assessment of the Kesgrave gravels within a nearby quarry indicates potential for the gravels to yield palaeoenvironmental material or humanly worked Palaeolithic artefacts. The gravels are likely to be

present beneath the brickearth deposits and have potential for Palaeolithic archaeological remains and palaeoenvironmental evidence.

The impact of the quarrying would result in the total loss of the known non-designated heritage assets and any associated unknown heritage assets.

Mitigation would require a programme of pre-determination archaeological and geoarchaeological evaluation comprising desk based assessment, geophysics, aerial photographic rectification, test pitting and trial trenching to support any planning application, however, the extent of the archaeological deposits which form an extension to the Scheduled Monument would be difficult to mitigate.

Detailed discussions would need to be undertaken with Historic England prior to this Site being considered for the Mineral Plan.

The Site is likely to have a moderate/high impact on archaeology and is likely to require medium/high levels of mitigation to make the Site acceptable.

Cumulative impact

Other Candidate Sites in proximate to Site A86 which could also impact on archaeological remains are as follows:

- A87 Martells – East of Slough Lane

The cumulative impact of Site A86 and the above site on archaeological remains would be the loss of archaeological remains of possible national significance associated with the scheduled monument and the impact on the setting of the scheduled monument.

Candidate Site Reference A87 – Martells – East of Slough Lane

Amber

Key findings of the assessment are as follows:

- The Site lies within an area of archaeological features as identified through aerial photographic evidence.
- The Site contains evidence for a probable Roman road and linear features.
- The Site lies adjacent to a scheduled monument and is likely to contain archaeological remains associated with the Scheduled Monument.
- The Site has potential to contain Palaeolithic archaeological remains and Pleistocene palaeoenvironmental remains
- Historic England should be consulted prior to this Site being included within the Mineral Plan.
- Mitigation will comprise a programme of pre-determination archaeological and geoarchaeological evaluation comprising desk based assessment and geophysical survey.
- Dependant on the results of the geophysical survey aerial photographic rectification, test pitting and targeted trial trenching may be required to support any planning application to define the extent and significance of archaeological and geoarchaeological deposits on the Site.
- This would be followed by a programme of open area excavation which would be targeted on the concentrations of any significant archaeological or geoarchaeological remains identified in the trial trenching.

Results of the technical RAG assessment

Historic England should be consulted prior to this Site being included within the Mineral Plan.

The Site contains non-designated heritage assets as recorded on the Essex Historic Environment Record through aerial photographic evidence. The form of the heritage assets suggests a probable Roman road, a possible further trackway, and linear features of probable agricultural origin.

The Site lies immediately adjacent to a scheduled monument comprising a cropmark complex. Excavation within the scheduled area has identified it as an extensive Bronze Age burial site. The Scheduled area (SM1002146) also contains evidence of Bronze Age, Iron Age and Roman trackways, field-systems and enclosures and Saxon activity.

Archaeological evaluation at the adjacent quarry sites have revealed prehistoric, Roman, and later activity. Observations at the quarry face recorded Bronze Age

urns. Small scale excavations uncovered a possible hearth and a cremation/ pyre deposit which may indicate Bronze Age exploitation extended into the area. Closer to Slough Lane archaeological evaluation revealed evidence for Roman settlement and ritual activity. Finds from the Roman period comprised a wide range of materials including slag, roof tile, human bone, animal bone, imported and locally produced pottery, including two semi-complete vessels, and iron nails.

No archaeological investigation has taken place within the Site however nearby archaeological investigations have revealed evidence for significant prehistoric, Roman, medieval activity and later activity.

Geoarchaeological assessment west of Slough Lane indicates potential for the gravels to yield palaeoenvironmental material or humanly worked Palaeolithic archaeological material at depth. The Site lies adjacent to a site of specialist scientific interest (SSSi) for the presence of significant Pleistocene stratigraphy which have potential to contain Palaeolithic remains and Pleistocene deposits of palaeoenvironmental value for the Palaeolithic period.

The impact of the quarrying would result in the total loss of the known non-designated heritage assets and any associated unknown heritage assets.

Mitigation will comprise a programme of pre-determination archaeological and geoarchaeological evaluation comprising desk based assessment and geophysical survey which would inform on the requirement for intrusive archaeological investigation.

This would be followed by a programme of open area excavation which would be targeted on the concentrations of any significant archaeological or geoarchaeological remains identified in the trial trenching.

The Site is likely to have a moderate impact on archaeology and is likely to require medium levels of mitigation to make the Site acceptable.

Cumulative impact

Other Candidate Sites in proximate to Site A87 which could also impact on archaeological remains are as follows:

- A86 Martells – North of Frating Road (West)

The cumulative impact of Site A87 and the above site on archaeological remains would be the loss of archaeological remains of possible national significance associated with the scheduled monument and the impact on the setting of the scheduled monument.

Candidate Site Reference A88 – Gurnhams Farm

Amber-Green

Key findings of the assessment are as follows:

- The Site lies within an area which contains extensive cropmarks, those within the Site comprises a track way and linear features.
- To the north and north-east of the Site a wide range of enclosures are recorded from aerial photography tentatively interpreted as being of prehistoric date.
- The historic field pattern has suffered considerable boundary loss since the late 20th century.
- Mitigation will comprise an initial desk based assessment potentially followed by a programme of trial trenching to support any planning application to define the extent and significance of archaeological deposits on the Site.
- The above would be followed by a programme of either open area excavation targeted on the features identified in the trial trenching or if significant and complex deposits are identified discussions to preserve these deposits *in situ*.

Results of the technical RAG assessment

The Site lies within an area which contains extensive cropmarks. Within the Site, towards its southern boundary a series of crop marks are recorded. These comprise a double ditched trackway and a field boundary.

To the north and north- east of the Site a number of cropmark complexes are recorded a number of which contain enclosures in a range of shapes and sizes. These have been recorded from aerial photography with many tentatively interpreted as being of prehistoric date.

The historic field pattern has suffered considerable boundary loss since the late 20th century.

At present little recorded information is available about the Site.

Mitigation will comprise an initial desk based assessment potentially followed by a programme of trial trenching to support any planning application to define the extent and significance of archaeological deposits on the Site.

The above would be followed by a programme of either open area excavation targeted on the features identified in the trial trenching or if significant and complex deposits are identified discussions will be required regarding preservation *in situ*.

On existing information, the Site will have a low impact on known archaeology and will require a medium to low level of mitigation to make the Site acceptable.

Cumulative impact

This site along with the Chelmsford North East bypass will have a cumulative impact on the archaeological deposits in this area.

Candidate Site Reference A89 – Covenbrooke Hall Farm

Amber-Green

Key findings of the assessment are as follows:

- The Site contains evidence recorded on the Essex Historic Environment Record (EHER) through aerial photography for historic field boundaries and historic quarrying and a modern military related structure is recorded within the Site.
- The Site lies along a Roman road.
- The Site has potential to contain Palaeolithic archaeological remains and Pleistocene faunal and palaeoenvironmental remains.
- Mitigation will comprise a programme of pre-determination archaeological and geoarchaeological evaluation comprising desk based assessment and geophysical survey.
- The results of the geophysical survey will inform of the requirement for further investigation that may be required to support any planning application to define the extent and significance of archaeological and geoarchaeological deposits on the Site.
- A programme of archaeological trial trenching and geoarchaeological test pitting will be required across the Site. This would be followed by a programme of geoarchaeological investigation and open area excavation should any significant archaeological or geoarchaeological remains be identified in the evaluation.
- Remains of a Cold War structure would require assessment and possible building recording should they survive within the Site.

Results of the technical RAG assessment

The Site contains non-designated heritage assets as recorded on the EHER through aerial photography. The form of the features suggest historic quarrying and adjoining boundary ditches, located adjacent to the Roman road. A Cold War military related structure identified as an Orlit Post and ROC (Royal Observer Corps) Site was reported within the Site. Later inspection indicates the structure may be damaged with little above ground remains surviving.

No archaeological investigation has taken place within the Site or the surrounding area and cropmark evidence records largely agricultural activity and the Site of a possible mill in the vicinity. Medieval settlement lies to the north of the Site, Jenkins Farm dates from the 14th century. Further evidence for Roman and medieval is likely to survive within the Site.

The Site lies within an area of mapped Kesgrave gravels which were deposited by the ancestral Thames prior to diversion by an ice sheet in the Anglian period. Few Palaeolithic finds have been recovered from these gravels however any Palaeolithic

finds would relate to the earliest occupation by humans and be of significance. In addition Pleistocene faunal remains and palaeoenvironmental evidence may be preserved within the deposits.

The impact of the quarrying would result in the total loss of the known non-designated heritage assets and any associated unknown heritage assets.

Mitigation will comprise a programme of pre-determination archaeological and geoarchaeological evaluation comprising desk based assessment and geophysical survey. The archaeological desk based assessment should include a walkover survey to determine the survival of the Cold War structure.

The results of the geophysical survey will inform of the requirement for further investigation that may be required to support any planning application to define the extent and significance of archaeological and geoarchaeological deposits on the Site.

A programme of archaeological trial trenching and geoarchaeological test pitting will be required across the Site. This would be followed by a programme of geoarchaeological investigation and open area excavation should any significant archaeological or geoarchaeological remains be identified in the evaluation.

Remains of the Cold War structure would require assessment and possible building recording should they survive within the Site.

The Site is likely to have a low to moderate impact on archaeology and is likely to require medium levels of mitigation to make the Site acceptable.

Cumulative impact

There are no other Candidate Sites in proximate to Site A89 which could also impact on archaeological remains.

Candidate Site Reference A90 – Rayne Quarry – Northern Extension

Amber-Green

Key findings of the assessment are as follows:

- The Site contains evidence recorded through aerial photography for historic field boundaries.
- Prehistoric, Late Iron Age/Roman, and Roman settlement activity is recorded in the surrounding area.
- Mitigation will comprise a programme of pre-determination archaeological evaluation comprising desk based assessment and geophysical survey.
- Dependant on the results of the geophysical survey, aerial photographic rectification and targeted trial trenching may be required to support any planning application to define the extent and significance of archaeological deposits on the Site.
- An archaeological evaluation will be required to be completed and would be followed by a programme of open area excavation targeted on any concentrations of significant archaeological remains identified in the trial trenching.

Results of the technical RAG assessment

The Site contains non-designated heritage assets as recorded on the Essex Historic Environment Record through aerial photographic evidence. The nature of the features recorded indicate agricultural activity and represent historic field boundaries.

No archaeological investigation has taken place within the Site however nearby archaeological investigations have revealed evidence for prehistoric, Roman, medieval activity and later activity. Evaluation has been completed over part of the adjacent quarry which has identified discreet areas of Late Bronze Age/ Early Iron Age activity and Late Iron Age/Early Roman settlement and agricultural remains. Roman activity was concentrated closer to the Roman road and included two inhumations.

North of the Site lies the medieval moated site at Old Hall and many of the field boundaries recorded as cropmarks are likely to be medieval (or earlier) in origin.

The impact of the quarrying would result in the total loss of the known non-designated heritage assets and any associated unknown heritage assets.

Mitigation will comprise a programme of pre-determination archaeological evaluation comprising desk based assessment and geophysical survey. Dependant on the results of the geophysical survey, aerial photographic rectification and targeted trial trenching may be required to support any planning application to define the extent and significance of archaeological deposits on the Site.

An archaeological evaluation will be required to be completed across the Site and would be followed by a programme of open area excavation targeted on any concentrations of significant archaeological remains identified in the trial trenching.

The Site is likely to have a low to moderate impact on archaeology and is likely to require medium levels of mitigation to make the Site acceptable.

Cumulative impact

There are no other Candidate Sites in proximate to Site A90 which could also impact on archaeological remains.

Candidate Site Reference A91 – Land at Chignal St James

Amber

Key findings of the assessment are as follows:

- To the north-west of the Site lies a Scheduled Roman Villa; one of the few masonry villas within Essex. The detail of this site has been identified from cropmark evidence. The Site sits within the landscape associated with the villa.
- Within the Site fieldwalking has identified the presence of a large concentration of Roman roof tile and some brick. This evidence may represent a further building within this area.
- Also identified were a wide range of flint artifacts including a hand axe and other pottery of a prehistoric date.
- Immediately to the south-west of the Site excavations identified a middle to late Iron Age settlement.
- Mitigation will comprise a programme of pre-determination archaeological evaluation comprising desk based assessment, aerial photographic rectification, geophysical survey, and trial trenching to support any planning application to define the extent and significance of archaeological deposits on the Site.
- The impact on the setting of the villa will have to be carefully assessed to identify if this can be mitigated and early consultation with Historic England will be required.
- The above would be followed by a programme of either open area excavation targeted on the features identified in the trial trenching or if significant and complex deposits are identified discussions to preserve these deposits in situ.

Results of the technical RAG assessment

The Essex Historic Environment Record shows to the north west of the Site lies the Scheduled Roman villa at Chignal St James, one of the few masonry villas within Essex. The detail of the winged corridor villa has been identified from cropmark evidence. A large area to the south of the villa has been excavated showing elements of the estate surviving in good condition. The Site would have formed part of the villa estate.

Within the Site fieldwalking has identified the presence of a large concentration of Roman roof tile and some brick. This is recorded as being located in the northern part of the field, and it is possible that this may represent a further building associated with the main villa.

Fieldwalking has also identified a wide range of artifacts including a flint hand axe, other tools, and pottery of a prehistoric date. This along with rescue excavations

undertaken on a site immediately to the west of the Site which identified a Mid to Late Iron Age settlement show there is a long history of settlement in this area.

This occupation continues in the late medieval and post medieval periods with the construction of the dispersed settlement pattern of farmsteads. These include Chignall Hall Farm and Stevens Farm both to the south of the Site.

The access road running south cuts through a range of known archaeological deposits including prehistoric settlement evidence.

Mitigation will comprise a programme of pre-determination archaeological evaluation comprising desk based assessment, aerial photographic rectification, geophysical survey on those areas with no aerial data and trial trenching to support any planning application to define the extent and significance of archaeological deposits on the Site.

The impact on the setting of the villa will have to be carefully assessed to identify if this can be mitigated.

The above would be followed by a programme of either open area excavation targeted on the features identified in the trial trenching or if significant and complex deposits are identified discussions to preserve these deposits in situ.

The Site will have a moderate impact on the known archaeology and will require a moderate level of mitigation to make the Site acceptable.

Cumulative impact

There are no other Candidate Sites in proximate to the Site A91 which could also impact on archaeological remains, however, this will form an extension of previous quarrying within the area which has significantly impacted the estate of the Roman villa nearby.

Candidate Site Reference A92 - Land at Pattiswick Hall Farm – Small Site

Amber

Key findings of the assessment are as follows:

- The Site lies within an area of archaeological features as identified through aerial photographic evidence.
- The Site lies adjacent to a Roman road and contains cropmark evidence for possible settlement or ritual activity and agricultural activity.
- Mitigation will comprise a programme of pre-determination archaeological evaluation comprising desk based assessment and geophysical survey.
- Dependant on the results of the geophysical survey, rectification of aerial photographic evidence and targeted trial trenching may be required to support any planning application to define the extent and significance of archaeological deposits on the Site.
- An archaeological evaluation will be required to be completed and would be followed by a programme of open area excavation targeted on any concentrations of significant archaeological remains identified in the trial trenching.

Results of the technical RAG assessment

The Site contains non-designated heritage assets as recorded on the Essex Historic Environment Record through aerial photographic evidence. The form of the heritage assets suggest possible prehistoric ritual activity or settlement activity, land division, enclosures, and agricultural activity of unknown date.

The Site lies adjacent to a Roman road, Stane Street, linking the Roman town of Colchester to the small Roman town at Braintree. The cropmarks suggesting possible settlement evidence lie close to the road and may be contemporary.

No archaeological investigation has taken place within the Site and little archaeological investigation has taken place within the surrounding area to inform on the origin and nature of the cropmarks within the Site. The proximity to the Roman road and evidence for scattered medieval settlement within the surrounding landscape would indicate potential for Roman and medieval archaeological remains within the Site.

The impact of the quarrying would result in the total loss of the known non-designated heritage assets and any associated unknown heritage assets.

Mitigation will comprise a programme of pre-determination archaeological evaluation comprising desk based assessment and geophysical survey. Dependant on the results of the geophysical survey, rectification of aerial photographic evidence and

targeted trial trenching may be required to support any planning application to define the extent and significance of archaeological deposits on the Site.

An archaeological evaluation will be required to be completed and would be followed by a programme of open area excavation targeted on any concentrations of significant archaeological remains identified in the trial trenching.

The Site is likely to have a moderate impact on archaeology and is likely to require medium levels of mitigation to make the Site acceptable.

Cumulative impact

There are no other Candidate Sites in proximate to Site A92 which could also impact on archaeological remains.

Candidate Site Reference A93 - Land at Pattiswick Hall Farm – Full Site

Amber

Key findings of the assessment are as follows:

- The Site lies within an area of archaeological features as identified through aerial photographic evidence.
- The Site lies adjacent to a Roman road and contains cropmark evidence for possible settlement or ritual activity and agricultural activity.
- Mitigation will comprise a programme of pre-determination archaeological evaluation comprising desk based assessment and geophysical survey.
- Dependant on the results of the geophysical survey, rectification of aerial photographic evidence and targeted trial trenching may be required to support any planning application to define the extent and significance of archaeological deposits on the Site.
- An archaeological evaluation will be required to be completed and would be followed by a programme of open area excavation targeted on any concentrations of significant archaeological remains identified in the trial trenching.

Results of the technical RAG assessment

The Site contains non-designated heritage assets as recorded on the Essex Historic Environment Record through aerial photographic evidence. The form of the heritage assets suggest possible prehistoric ritual activity or settlement activity, land division, enclosures, and agricultural activity of unknown date.

The Site lies adjacent to a Roman road, Stane Street, linking the Roman town of Colchester to the small Roman town at Braintree. The cropmarks suggesting possible settlement evidence lie close to the road and may be contemporary.

Historic mapping shows the northern extent of the Site lies adjacent to the former Pattiswick Green. Settlement existed around the green which may be medieval in origin. Structures are depicted on historic mapping that lay within the Site, these are no longer extant, though below ground remains may survive. Further settlement may have existed on the periphery of the green.

No archaeological investigation has taken place within the Site and little archaeological investigation has taken place within the surrounding area to inform on the origin and nature of the cropmarks within the Site. The proximity to the Roman road and evidence for scattered medieval settlement within the surrounding landscape would indicate potential for Roman and medieval archaeological remains within the Site.

The impact of the quarrying would result in the total loss of the known non-designated heritage assets and any associated unknown heritage assets.

Mitigation will comprise a programme of pre-determination archaeological evaluation comprising desk based assessment and geophysical survey. Dependant on the results of the geophysical survey, rectification of aerial photographic evidence and targeted trial trenching may be required to support any planning application to define the extent and significance of archaeological deposits on the Site.

An archaeological evaluation will be required to be completed and would be followed by a programme of open area excavation targeted on any concentrations of significant archaeological remains identified in the trial trenching.

The Site is likely to have a moderate impact on archaeology and is likely to require medium levels of mitigation to make the Site acceptable.

Cumulative impact

There are no other Candidate Sites in proximate to Site A93 which could also impact on archaeological remains.

Candidate Site Reference A94 – Land at Highfields Farm

Red-Amber

Key findings of the assessment are as follows:

- The Site lies within an area of archaeological features as identified through aerial photographic evidence.
- The Site contains evidence for possible prehistoric ritual activity, settlement, and Roman industrial activity.
- The nationally important site of an Iron Age warrior may lie within the Site.
- The Site has potential to contain Palaeolithic archaeological remains and Pleistocene palaeoenvironmental remains.
- Mitigation will comprise a programme of pre-determination archaeological and geoarchaeological evaluation comprising desk based assessment, aerial photographic rectification, trial trenching and test pitting to support any planning application to define the extent and significance of archaeological deposits on the Site.
- This would be followed by a programme of geoarchaeological investigation and open area excavation targeted on any concentrations of significant archaeological and geoarchaeological remains identified in the evaluation. Any remains associated with the Iron Age warrior site may be required to be preserved in situ.

Results of the technical RAG assessment

The Site contains non-designated heritage assets as recorded on the Essex Historic Environment Record through aerial photographic evidence. The form of the heritage assets within the Site suggests possible prehistoric ritual activity and settlement activity.

A concentration of Roman pottery and tile suggests a probable tile kiln within the Site or near vicinity. Numerous finds have been recovered from metal detecting across the area of the Site and beyond which date from early prehistoric to the Postmedieval period and suggests the area has been occupied since prehistoric times. The disused Kelvedon to Tiptree railway line runs along the boundary of the Site.

An Iron Age warrior burial was revealed in a small gravel pit, the location and excavation were not accurately recorded, and the location is approximate. No human remains survived however the grave goods included weapons and vessels which indicated wealth and status. A possible satellite grave was recovered from nearby. The find is of national significance. The finds are considered to have come from within the Site and any associated finds or features would be of high significance.

No archaeological investigation has taken place within the Site however nearby archaeological investigations have revealed evidence for prehistoric, Roman, Saxon, medieval activity, and later activity. Prehistoric and Roman cremations have been identified in the adjacent fields, a Saxon loom weight and medieval to postmedieval building material recovered during evaluation in advance of the A12 – A120 widening.

The Site contains gravels laid down by the River Blackwater during the Pleistocene period, Palaeolithic flint tools have been found in association with the gravels in the vicinity. To the north interglacial lacustrine deposits have been mapped in association with the gravels, the extent of the lake deposits has been shown to be more extensive than mapped. There is potential for Palaeolithic archaeological remains and palaeoenvironmental evidence within the Site.

The impact of the quarrying would result in the total loss of the known non-designated heritage assets and any associated unknown heritage assets.

Mitigation will comprise a programme of pre-determination archaeological and geoarchaeological evaluation comprising desk based assessment, aerial photographic rectification, trial trenching and test pitting to support any planning application to define the extent and significance of archaeological and geoarchaeological deposits on the Site.

This would be followed by a programme of geoarchaeological investigation and open area excavation targeted on any concentrations of significant archaeological and geoarchaeological remains identified in the evaluation. Any remains associated with the Iron Age warrior site may be required to be preserved in situ.

The Site is likely to have a high to moderate impact on archaeology and is likely to require high to medium levels of mitigation to make the Site acceptable.

Cumulative impact

Other developments in proximate to Site A94 which could also impact on heritage assets are as follows:

- A12 to A120 widening scheme (NSIP).

The cumulative impact of Site A94 and the above developments on heritage assets is possible loss of the site of a nationally important find and other multi-period archaeological remains.

Candidate Site Reference A95 – Land at Bellhouse Farm South

Amber

Key findings of the assessment are as follows:

- The Site lies adjacent to an area which contains extensive cropmarks. The cropmarks comprise a series of enclosures probable of Late Iron Age or Roman date.
- The western edge of the Site abuts the route of a projected Roman road running from Colchester in a south westerly direction.
- The Site lies within the Valley of the Roman River with the potential for Palaeoenvironmental deposits within the valley bottom.
- To the north of the Site lies a farm complex dating to the late sixteenth or early seventeenth century containing a group of listed buildings.
- The Site has moderate potential for Pleistocene deposits with potential for Palaeolithic and palaeoenvironmental remains.
- Mitigation will comprise an initial desk based assessment to include geo-archaeological assessment followed by a programme of trial trenching to support any planning application to define the extent and significance of archaeological deposits on the Site.
- The above would be followed by a programme of either open area excavation targeted on the features identified in the trial trenching or if significant and complex deposits are identified discussions to preserve these deposits in situ.

Results of the technical RAG assessment

The Site lies adjacent to an area which contains extensive cropmarks. The cropmarks comprise a series of rectilinear enclosures all of which have been excavated as part of the exiting quarrying activity on the eastern side of the Site. The excavation has shown that the deposits are of Late Iron Age and Roman date.

The western edge of the Site abuts the route of a known Roman road running from Colchester in a south westerly direction. This is known from both cropmarks and existing field boundaries/foot paths. It is likely that the Site described above would have been linked to this road.

The Site lies within the Valley of the Roman River with the potential for Palaeoenvironmental deposits within the valley bottom. The Site also has moderate potential for Pleistocene deposits including the potential for finding of Palaeolithic implements.

To the north of the Site lies a farm complex dating to the late sixteenth or early seventeenth century containing a group of listed buildings. These include a timber

framed house of late sixteenth to seventeenth century date, and a timber framed barn of seventeenth century date.

Mitigation will comprise an initial desk based assessment to include geo-archaeological assessment followed by a programme of trial trenching to support any planning application to define the extent and significance of archaeological deposits on the Site.

The above would be followed by a programme of either open area excavation targeted on the features identified in the trial trenching or if significant and complex deposits are identified discussions to preserve these deposits in situ.

On existing information the Site will have a medium impact on known archaeology and will require a medium level of mitigation to make the Site acceptable.

Cumulative impact

Continuing expansion of the quarry will result in further loss of heritage assets in the area.

Candidate Site Reference A96 – Rayne Quarry – Southern Extension

Amber

Key findings of the assessment are as follows:

- The Site contains evidence recorded through aerial photography for historic field boundaries.
- The Site lies along a Roman road and Roman settlement and burial activity is recorded in the immediate area.
- Alluvial deposits associated with the River Ter have potential to preserve palaeoenvironmental remains and waterlogged deposits.
- Mitigation will comprise a programme of pre-determination archaeological evaluation comprising desk based assessment and geophysical survey.
- Dependant on the results of the geophysical survey, targeted trial trenching may be required to support any planning application to define the extent and significance of archaeological and palaeoenvironmental deposits on the Site.
- An archaeological evaluation will be required to be completed and would be followed by a programme of open area excavation targeted on any concentrations of significant archaeological remains identified in the trial trenching.

Results of the technical RAG assessment

The Site contains non-designated heritage assets as recorded on the Essex Historic Environment Record through aerial photographic evidence. The nature of the features recorded indicate agricultural activity and represent historic field boundaries.

No archaeological investigation has taken place within the Site however nearby archaeological investigations have revealed evidence for prehistoric, Late Iron Age/Roman, and later activity. The Site lies along a Roman road and archaeological investigation has identified Roman rural settlement immediately adjacent to the Site. A large quantity of flue tile recovered suggests the presence of a substantial villa in the vicinity. Roman activity associated with settlement was excavated at the adjacent quarry, concentrated along the Roman road, and included two inhumations. The presence of Late Bronze Age/ Early Iron Age pottery and scatters of burnt flint suggest an unlocated prehistoric site in the area.

The Site is crossed by the River Ter and has potential to contain alluvial deposits which may preserve palaeoenvironmental remains within waterlogged sediments.

The Site may have suffered from truncation or disturbance to the archaeological deposits associated with the construction of the A120 and Rayne bypass. The impact of the quarrying would result in the total loss of the known non-designated heritage assets and any associated unknown heritage assets.

Mitigation will comprise a programme of pre-determination archaeological evaluation comprising desk based assessment and geophysical survey. Dependant on the results of the geophysical survey, targeted trial trenching may be required to support any planning application to define the extent and significance of archaeological and palaeoenvironmental deposits on the Site.

An archaeological evaluation will be required to be completed and would be followed by a programme of open area excavation targeted on any concentrations of significant archaeological remains identified in the trial trenching.

The Site is likely to have a moderate impact on archaeology and is likely to require medium levels of mitigation to make the Site acceptable.

Cumulative impact

There are no other Candidate Sites in proximate to Site A96 which could also impact on archaeological remains.

Candidate Site Reference D7 – Land at Pond Farm

Amber

Key findings of the assessment are as follows:

- The Site contains evidence recorded on the Essex Historic Environment record for a possible settlement enclosure.
- Prehistoric, Late Iron Age/Roman, and Roman settlement activity is recorded in the surrounding area. The Site lies along a Roman road.
- The Site has potential to contain Palaeolithic archaeological remains and Pleistocene faunal and palaeoenvironmental remains.
- The Site has been part evaluated and archaeological mitigation has been agreed in the western section as part of the A12-A120 widening scheme.
- Mitigation will comprise a programme of pre-determination archaeological and geoarchaeological evaluation comprising desk based assessment and geophysical survey.
- Dependant on the results of the geophysical survey, targeted trial trenching and test pitting may be required to support any planning application to define the extent and significance of archaeological and geoarchaeological deposits on the Site.
- An archaeological and geoarchaeological evaluation will be required to be completed and would be followed by a programme of open area excavation targeted on any concentrations of significant archaeological or geoarchaeological remains identified in the evaluation.

Results of the technical RAG assessment

The Site contains non-designated heritage assets as recorded on the Essex Historic Environment Record. An enclosure has been identified from cartographic and historical research which is considered to denote a settlement site. The form of the features may indicate a late Roman, Saxon, or Medieval origin. The Site has been suggested as a possible location for the Witham Burh, founded by Edward the Elder in 912. Part of the Site has been evaluated in advance of the A12 -A120 widening scheme. Numerous evenly spaced ditches and pits were recorded, they are interpreted as possible irrigation ditches with some Roman pottery recovered from several of the ditches. The Site is proposed for excavation as part of the A12 main works.

Nearby archaeological investigations have revealed evidence for prehistoric, Roman, medieval activity and later activity. Trial trenching evaluation at the adjacent site has uncovered sparse prehistoric activity and substantial evidence for Roman activity including a cremation. The quantity and nature of the finds suggest nearby Roman settlement. The Site lies along a Roman road and further Roman activity has been

recorded to the south of the road including two high status Roman inhumations. Further north excavation has identified an extensive settlement with probable Early Iron Age origins, continuing into the Late Iron Age/early Roman transitional period.

Palaeolithic flint implements have been recovered from the surrounding area, thought to be derived from the fluvial gravels. The Site lies close to mapped lacustrine deposits which have high potential for preservation of palaeoenvironmental evidence.

The impact of the quarrying would result in the total loss of the known non-designated heritage assets and any associated unknown heritage assets.

Mitigation will comprise a programme of pre-determination archaeological and geoarchaeological evaluation comprising desk based assessment and geophysical survey. Dependant on the results of the geophysical survey, targeted trial trenching and test pitting may be required to support any planning application to define the extent and significance of archaeological and geoarchaeological deposits on the Site

An archaeological and geoarchaeological evaluation will be required to be completed and would be followed by a programme of open area excavation targeted on any concentrations of significant archaeological or geoarchaeological remains identified in the evaluation.

The Site is likely to have a moderate impact on archaeology and is likely to require medium levels of mitigation to make the Site acceptable.

Cumulative impact

There are no other Candidate Sites in proximate to Site D7 which could also impact on archaeological remains.