

Candidate Site Reference	Candidate Site Name	District	Existing use	Site Area (ha)	Potential Yield (million tonnes)
A90	Rayne Quarry - Northern Extension	Braintree	Agricultural	13.4	1

The Site is promoted as an extension to an existing mineral Site (Rayne Quarry) and is located north of Rayne Quarry and west of Pods Lane. The Site area is approximately 13.4 ha and is proposed for approximately 1 million tonnes of sand and gravel extraction with processing occurring from the existing Rayne Quarry processing plant. It is proposed that once granted consent mineral extraction would follow on from the consented extraction activities at Rayne Quarry. The adjoining uses include agricultural fields, woodland, and residential and farm buildings. The village of Rayne is located to the south east of the Site. Proposed access if via the existing access to Rayne Quarry which is off the B1256 (Dunmow Road), linking with the A120. See Appendix J for a detailed map of the Site.

Summary of RAG Assessment

The results of the technical and desktop RAG assessment are detailed below.

Landscape and Visual Sensitivity	Biodiversity	Historic Buildings	Archaeology	Flooding	Transport	Access	Public Rights of Way	Geo-Environmental	Hydrology, Hydrogeology and Drainage	Air Quality	Soil Quality	Services & Utilities	Health & Amenity	Green Belt	Airport Safeguarding Zones
Amber	Amber	Red/ Amber	Amber /Green	Amber	Amber	Green	Red/ Amber	Green	Amber	Green	Amber	Amber	Red	Green	Amber /Green

Key findings of the assessment are as follows:

- The Landscape Character Area (LCA) is Central Essex Farmlands (B1), the Site possesses limited characteristic features of this including an arable landscape of medium sized fields. Appropriate consideration is required to protect the characteristic features of the LCA.
- There is a veteran Oak tree located to the north-east of the Site on the boundary and another on the south-east of the Site on the boundary. Veteran trees are classed as irreplaceable habitat.
- The Site is bounded by Hedgerows and ditches (Priority habitat) on the northern and eastern boundaries. On the south and south-western boundary are plantation woodlands. Skylarks are present on-site which are a Priority species.
- The Site is graded Amber because ecological impacts could be moderate and are likely to require medium levels of mitigation to make the Site acceptable.

The Site could have moderate impacts upon irreplaceable habitats, i.e. the veteran trees. The Site could have a moderate impact upon Priority habitats and species including Hedgerows and disturbance and loss of habitat for Priority farmland species. This includes impacts to water quantity and quality of the watercourses.

- Any application would require demonstration that the operations would not
 affect the hydrology of the veteran trees, hedgerows, and other boundary
 habitats. Mitigation may include but not be limited to an adequate and
 appropriate buffer between the Site and these habitats, particularly the
 veteran trees, and prevention of deterioration to water quality to the
 watercourses. Water run-off from the Site should not be allowed to enter
 directly into watercourses. Compensatory habitat for Priority farmland species
 may be required.
- The allocation of the Site would likely result in 'less than substantial' harm at a mid-level to the significance of four Grade II listed buildings through change within their settings: Cottage on Opposite Side of Road and Approximately 70 Metres North West of Pound Farmhouse (List UID: 1122762); Pound Farmhouse (List UID: 1338151); Outbuilding Adjacent to Rear Left of Pound Farmhouse (List UID: 1122760); Pound Farmhouse (List UID: 1338151); Barn and Cartlodge Approximately 30 Metres North West of Pound Farm House and Adjacent to Road (List UID: 1122761).
- The allocation of the Site would likely result in 'less than substantial' harm at a
 low level to the significance of three Grade II listed buildings through change
 within their settings: Gould's Farmhouse (List UID: 1122764); Granary
 Approximately 4 Metres North of Gould's Farm House (List UID 1122765);
 Barn Approximately 12 Metres South west of Gould's Farmhouse (List UID:
 1147670).
- The undeveloped, agrarian landscape of the Site contributes to the setting and significance of these assets and the fundamental change in land use and land character would undermine the ability to understand and appreciate their significance.
- 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.
- The Site is assessed as having a 'high' potential for surface water flood risk as identified within the SFRA.
- The Site has been identified as having a 'low' groundwater flood risk.
- The Site is entirely within Flood Risk Zone 1 and therefore is not at risk from fluvial flooding.

 Access is proposed via an existing access serving Rayne Quarry onto the B1256 which is classified as a Secondary Distributor in Essex County Council's Development Management Route Hierarchy. This accords with (iii) in the methodology (see Appendix G Transport for full methodology):

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

- The A120 Trunk Road forms part of the Strategic Road Network managed by National Highways. Whilst an initial conversation has taken place with National Highways to inform this RAG grade it is imperative that they are formerly consulted at the appropriate time.
- 1 Public Right of Way crosses the Site. 1 Public Right of Way is within 100m of the Site. Appropriate consideration would be needed to mitigate potential impacts on these Public Rights of Way and high levels of mitigation may be required which is likely to include diversion especially with regard to the Public Right of Way crossing the Site.
- The Site is within Zone III Total Catchment Groundwater SPZ and has low groundwater vulnerability. The Site is within a Drinking Water Safeguard Zone (Surface Water). Appropriate consideration would be required to mitigate potential impacts on hydrology, hydrogeology, and drainage.
- The Site contains Grade 2 quality soil (very good quality agricultural land) which is BMV land. Appropriate consideration would be required to mitigate the impacts on soil quality and agricultural land this is likely to include removal of soils for stockpiling prior to reuse, potentially in site restoration.
- The Site contains 11kV overhead electricity lines within the Site boundary.
 The Site is within 250m of high pressure gas mains (National Grid Gas).
 Further investigation and consultation would be needed to determine appropriate mitigation measures to make the Site acceptable which may include diversion and/or protection of services and utilities.
- Two residential buildings are adjacent to the boundary of the Site (0m). Four residential buildings are outside the Site boundary less than or equal to 20m from the Site. Eight residential buildings and four farm buildings are more than 20m but less than or equal to 50m from the Site. Four residential buildings and six farm buildings are more than 50m but less than or equal to 250m from the Site. Given the proximity of sensitive receptors, mitigation would be required, however, the levels of mitigation required to ensure that there are no serious impacts on health and amenity would likely be difficult to achieve.
- The Site is within an Airport Safeguarding Zone (Rayne). Restoration proposals assume the Site would be returned to agricultural use and include nature conservation with low level restoration utilising indigenous

soil resources only meaning the nature of the Site is unlikely to attract birds and therefore is likely to have a minor impact on aircraft safety and should not increase the risk of bird strike for aircrafts. This would need to be considered further at the Further Assessment Phase.

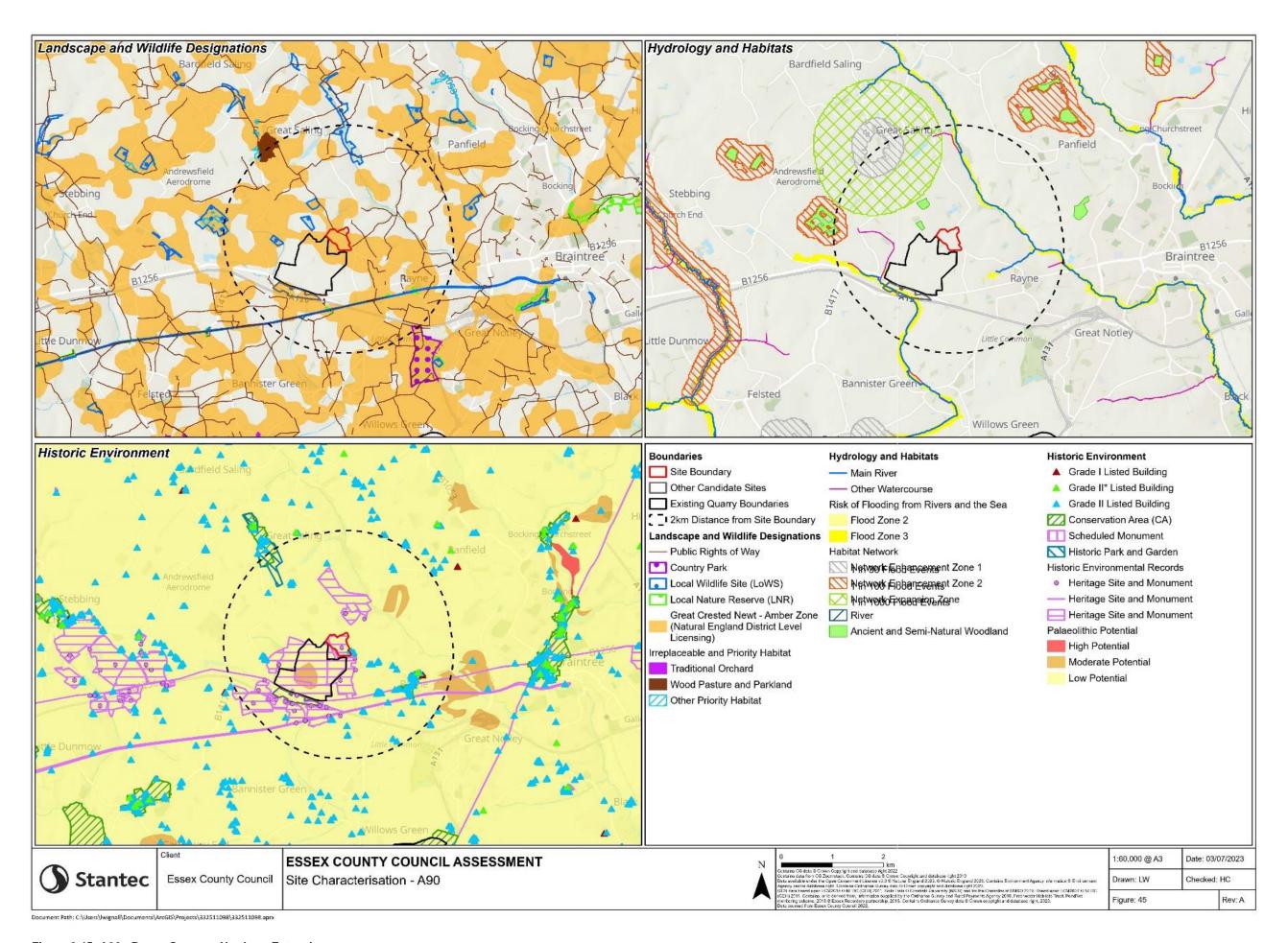


Figure 3.45: A90 - Rayne Quarry - Northern Extension

The information and maps above represent a summary of the site assessment. You are encouraged to view the methodology and more detailed assessment for each site within appendices B-I. These can be found on the Candidate Sites Assessment webpage on our consultation pages:

www.essex.gov.uk/minerals-review

Appendix B - Landscape and Visual Sensitivity

Appendix C - Biodiversity

Appendix D - Historic Buildings

Appendix E - Archaeology

Appendix F - Flooding

Appendix G - Transport

Appendix H – Access

Appendix I - Public Rights of Way, Geo-Environmental, Hydrology, Hydrogeology & Drainage, Air Quality, Soil Quality, Services & Utilities, Health & Amenity, Green Belt, and Airport Safeguarding Zones