Candidate Site Reference	Candidate Site Name	District	Existing use	Site Area (ha)	Potential Yield (million tonnes)
A85	Martells – North of Frating Road (East)	Tendring	Agricultural	26.12	1.9

The Site is promoted as an extension to an existing mineral Site (Martells Quarry) and is located north east of Martells Quarry, and immediately adjacent to Site A86. The Site area is approximately 26.12 ha and is proposed for approximately 1.9 million tonnes of sand and gravel extraction with processing and distribution occurring from Martells processing plant. It is proposed that once granted consent mineral extraction would follow on from the consented extraction activities at Martells Quarry, after extraction at Site A73, if allocated. Infrastructure would include crossing points on Morrow Lane and Frating Road. The adjoining uses include agricultural fields, woodland, Home Farm Reservoir and residential, farm and commercial buildings. The village of Ardleigh is located to the north west of the Site. Proposed access is via internal access to the highway network. See Appendix J for a detailed map of the Site.

## Summary of RAG Assessment

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	Heatth & Amenity	Green Belt	Airport Safeguarding Zones
Amber /Green	Amber /Green	Green	Amber	Amber	Amber	Red/ Amber	Red/ Amber	Green	Amber /Green	Green	Red	Amber	Red/ Amber	Green	Green

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

Key findings of the assessment are as follows:

- The Site is very characteristic of the Tendring Plan (E3) Landscape Character Area (LCA), comprising the large flat arable farmland plateau which is broken up by low trimmed hedgerows. Other characteristic features such as the woodland copses are not prevalent within this location. Whilst the Site is characteristic of the area, the level plateau and hedgerows reduce the sensitivity of the Site to mineral extraction.
- Dedham Vale Area of Outstanding Natural Beauty (AONB) is located 1km to the north of the Site, with the Stour and Orwell Estuaries Ramsar and Site of Special Scientific Interest (SSSI) located 2.5km to the north-east. The flat plateau and hedgerows limit potential views from the Site towards the Ramsar, AONB and SSSI.

- Footpath 28 (Ardleigh) runs through the centre of the Site, providing open views of the field. There will be an adverse effect on the public rights of way users and other receptors with regards visual impact.
- Site A85 is within the Site of Special Scientific Interest (SSSI) minerals Impact Risk Zone for Cattawade Marshes SSSI, Stour Estuary SSSI and Stour and Orwell Estuaries Special Protection Area (SPA) and Ramsar site. There is no known pollution pathway between Site A85 and these statutory sites. However, the potential for the likely significant effects to the Stour and Orwell SPA and Ramsar site would need to be considered further through the planlevel Habitats Regulations Assessment and any subsequent planning application. The access road passes next to Ardleigh Gravel Pit SSSI, which is a geological SSSI.
- There are two Local Wildlife Sites within 500 metres of the Site.
- The Site would be an extension to the existing Martells Quarry complex and comprises part of a large arable field which is partly bordered by hedgerows, mature trees, and woodland. The Site is bordered by Little Bromley Road and Morrow Lane; these have mature trees and hedgerows (Priority habitat) on either side. There is a patch of Woodland beyond the eastern boundary, which is believed to be plantation woodland.
- The internal access road would need to cross Morrow Lane into site A86 and be shared with this Site. This would require removing a section of hedgerow. The haul road continues southwards following the eastern boundary of the field to the south-west of A85, it crosses Frating Road, passes through another arable field and heads westwards, passing next to Ardleigh Gravel Pit SSSI and cutting through the field boundary trees and plantation woodland.
- The Site is graded Amber-Green because ecological impacts are likely to be minor and may require low levels of mitigation to make the Site acceptable. The Site could have a minor impact upon a national designation- i.e. Ardleigh Gravel Pit SSSI and moderate impact upon Priority habitats and species, including impacts to Priority Hedgerow habitat. The Site could also result in disturbance and loss of habitat for Priority farmland species.
- Any application would require demonstration that the operations would not adversely affect Ardleigh Gravel Pit SSSI, Hedgerows and other boundary habitats. Mitigation may include but not be limited to an adequate and appropriate buffer between the Site and hedgerows and tree lines. Compensatory habitat for Priority farmland species may be required.
- 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.
- The Site is assessed as having a 'medium' 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 Martells Quarry onto Slough Lane which is classified as a local road 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.

- For this further extension of the quarry the continued use of the private track access to the A120, via the lorry park, is required.
- The proposal would require a new crossing point either side of Frating Road to enable access to the existing site access and a haul road on the south side of Frating Road and would be shared with site A86.
- Access is proposed via an existing access serving Martells Quarry onto Slough Road, currently excludes a ghost island right turn lane. This is acceptable in principle.
- To export minerals by HGV via the existing access the Site would require a new crossing point of Frating Road (B1029) and Morrow Lane to enable access to the existing site access and a haul road on the south side of Frating Road, this would be shared with site A86. No detail provided.
- The proposal would impact on several PROW routes north and south of Frating Road; public footpath: 10, 31, 42 (Ardleigh\_158).
- 1 Public Right of Way crosses the Site. 2 Public Rights of Way are 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 medium to low groundwater vulnerability. The Site is likely to have a minor

impact on hydrology, hydrogeology, and drainage. Appropriate consideration would be required to mitigate potential impacts on hydrology, hydrogeology, and drainage.

- The Site contains Grade 1 quality soil (excellent quality agricultural land) which is BMV land. The Site would require mitigation on the impacts on soil quality and agricultural land to make the Site acceptable which would be difficult to achieve.
- The Site contains 33kV electric overhead lines and 11kV overhead lines within the Site boundary. 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, three commercial buildings, two farm buildings and an agricultural structure are outside the Site boundary less than or equal to 20m from the Site. One farm building and two residential buildings are more than 20m but less than or equal to 50m from the Site. Three residential buildings, one building of unknown use, commercial activity (industrial estate) and an agricultural structure are more than 50m but less than or equal to 250m from the Site. Given the proximity of sensitive receptors, high levels of mitigation are likely to be required to make the Site acceptable in terms of impacts on health and amenity e.g. high level noise screening and extensive dust suppression measures.

