Candidate Site Reference	Candidate Site Name	District	Existing use	Site Area (ha)	Potential Yield (million tonnes)
A73	Martells - Western Extension	Tendring	Agricultural	13.28	0.25

The Site is promoted as an extension to the existing minerals site (Martells Quarry) and is located to the west and north west of Martells Quarry. The Site area is approximately 13.28 ha and is proposed for 0.25 million tonnes of sand and gravel extraction with processing and distribution from the Martells Quarry processing plant. Site operations to commence in sequence to the permitted Martells Quarry Western Extension Area. The adjoining uses include the existing Martells Quarry, Slough Lane, eight waterbodies, agricultural fields, woodland, commercial buildings, and a railway line. The village of Ardleigh is located to the north of the Site. This Site would be accessible via A120 using the existing Martells Quarry access. 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	Green	Green	Amber	Green	Amber	Green	Red	Green	Green

Key findings of the assessment are as follows:

- The Site is located in Landscape Character Area (LCA) Tendring Plain (E3), and possesses a number of characteristic features, including the large flat arable plateau, straight regular field pattern, low trimmed hedgerows, and woodland copses. Appropriate consideration is required to protect the characteristic features of the LCA and mitigate the impacts on the landscape.
- Site A73 is within the Site of Special Scientific Interest (SSSI) minerals Impact Risk Zone for Bullock Wood, which is located c.2km to the south-west. Bullock Wood SSSI is an ancient woodland site. There is habitat connectivity between the Site and Bullock Wood SSSI but this connectivity is reduced by intervening roads. The haul road would travel over part of Ardleigh Gravel Pit SSSI, which is a geological SSSI situated within another part of Martells Quarry and waste site complex.
- The Site is adjacent to Salary Brook (Main River) which, in turn, feeds into the River Colne. The Site is c.10km upstream of the Colne Estuary SSSI, Special Protection Area (SPA) and Ramsar site and the Essex Estuaries Special Area

of Conservation (SAC). In addition, Upper Colne Marshes Special Scientific Interest (SSSI) is c. 7km downstream and the Blackwater, Crouch, Roach, and Colne Estuaries Marine Conservation Zone is c.5.2 km downstream of the Site. Most of Salary Brook downstream of the Site also passes through a number of Local Wildlife Sites and a Local Nature Reserve and the River Colne passes through more Local Wildlife Sites. There is a potential for the Site to impact water quality and quality of Salary Brook, the River Colne, and their associated Priority habitats (Mudflats, Coastal Saltmarsh and Coastal and Floodplain Grazing Marsh). The potential for the likely significant effects to the Colne Estuary SPA and Ramsar site and the Essex Estuaries SAC would need to be considered further through a plan-level Habitats Regulations Assessment and any subsequent planning application.

- Walls Wood is the closest Local Wildlife Site to the Site and is c.220m southwest of it. This consists of probably ancient streamside woodland with younger woodland blocks. Ancient Woodland is irreplaceable habitat. A small component of the Site is on the same side of the A120, connected by woodland and hedgerows. There are three other Local Wildlife Sites within 1km, one of which is also Special Roadside Verge.
- Site A73 comprises an arable field bounded by Hedgerows and lines of treesmost of which are Priority habitat-, and deciduous plantation woodland. The Site is partly within a Great Crested Newt Amber Risk Zone.
- There is a veteran tree on the eastern boundary. There is also a candidate a
 veteran tree near to this, which is likely to be ancient and another Candidate
 veteran tree on the southern boundary.
- 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. ancient and veteran trees, and candidate veteran trees. The Site could have a major impact upon Salary Brook and upon local designations, and other Priority habitats and species. This includes impacts to water quantity and quality of Walls Wood LoWS, the adjacent waterbodies, Traditional Orchard, and Lowland Mixed Deciduous Woodland Priority habitats. In addition, smothering of leaves by dust, disturbance e.g. by noise and lighting. The Site could also result in disturbance and loss of habitat for Priority farmland species, e.g. Skylarks.
- Any application would require demonstration that the operations would not adversely affect Ardleigh Gravel Pit SSSI, downstream LoWS, the hydrology of the Salary Brook and associated habitats, or the waterbodies, Hedgerows, veteran and ancient trees, and other boundary and nearby habitats. Mitigation may include but not be limited to an adequate and appropriate buffer between the Site and these habitats and prevention of deterioration to water quality to the watercourses and Salary Brook. Natural England should be consulted with respect to mitigation for the haul road continuing to run over one unit of Ardleigh Gravel Pit SSSI buried beneath it. Compensatory habitat for Priority farmland species may be required.

- The allocation of the Site in conjunction with the active Martells quarry site
 would likely result in 'less than substantial' harm at a mid-level to the
 significance of Grade II listed Hulls Farmhouse (List UID: 1112055).
- The undeveloped, agrarian landscape of the Site contributes to the setting and significance of the listed building and the fundamental change in land use and land character would undermine the ability to understand and appreciate its significance.
- The cumulative impact of this proposal along with the proposed site allocation A72 Martells Southern extension would likely represent a high level of 'less than substantial' harm to the setting and significance of Hulls Farmhouse due to substantial curtailment of the agrarian landscape.
- 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.
- The Site is assessed as having a 'low' potential for surface water flood risk as identified within the SFRA.
- The Site has been identified as having a 'medium' 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. Access to existing proposed sites and sequencing would need to be considered further.

- 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 Site is within Zone III Total Catchment Groundwater SPZ and has unproductive/medium to low groundwater vulnerability. The Site is within Drinking Water Protection Areas (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) and Grade 3 quality soil (good to moderate quality 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.
- Commercial activity (Martells Industrial Estate) is adjacent to the boundary of the Site (0m). One residential, four commercial buildings, and a railway line 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 be likely difficult to achieve.

