Candidate Site Reference	Candidate Site Name	District	Existing use	Site Area (ha)	Potential Yield (million tonnes)
A80	Crown Quarry - South of Wick Lane	Tendring	Agricultural	5.88	0.26

The Site is promoted as an extension to Crown Quarry, located south of Wick Lane and west of Ardleigh. The Site area is approximately 5.88 ha and is proposed for 0.26 million tonnes of sand and gravel extraction with processing and distribution from the adjacent Crown Quarry processing plant. Extraction would not commence until after extraction at the existing quarry has been completed. The adjoining uses include agricultural fields, woodland, residential and farm buildings, and Crown Quarry. The village of Ardleigh is east of the Site. The Site is promoted as accessible via a new access track to connect to Crown Quarry and the use of the existing Crown Quarry site access to the highway network. Internal access to reach Old Ipswich Road would need to be considered further. 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 /Green	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 very characteristic of the Tendring Plain (E3) Landscape Character Area (LCA), comprising the large flat arable farmland plateau which is broken up by low trimmed hedgerows and woodland copses. 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, however the flat plateau and hedgerows limit potential views from the Site. Priority Habitats (Deciduous Woodland) are located along the northern boundary of the Site and require a buffer area to minimise potential harm to this area of woodland. Birch Wood Ancient Woodland is also located 0.5km to the north-west of the Site.
- Site A80 is within the Site of Special Scientific Interest (SSSI) minerals Impact Risk Zone for Bullock Wood (1.75km to the southwest). Bullock Wood SSSI is

on the opposite side of the A120; this road creates a substantial barrier to the movement of species. Ardleigh Gravel Pit is 2.3km from the Site; this is a geological SSSI and so ecological impacts are not considered further.

- It is considered possible that there would be hydrological connectivity between the Site and Ardleigh Reservoir. Water leaving the Reservoir feeds into Salary Brook (Main River) which, in turn, feeds into the River Colne. Given the distance and intervening reservoir it is not expected for there to be water quality impacts to the designated sites and Priority habitats downstream including Colne Estuary SSSI, Special Protection Area (SPA) and Ramsar site, Essex Estuaries Special Area of Conservation (SAC). Blackwater, Crouch, Roach and Colne Estuaries Marine Conservation Zone, Local Wildlife Sites and Local Nature Reserve, The potential for 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, but Likely Significant Effects from air and water quality impacts have been scoped out due to the distance and the intervening reservoir, based on professional judgement.
- There are two Local Wildlife Sites (LoWS) within 1 km. Birch Wood, Langham LoWS is c. 90 m north-west of the Site; this is an ancient woodland. The intervening landscape includes Lowland Mixed Deciduous Woodland Priority habitat and hedgerows, creating habitat connectivity.
- The Site sits within a relatively small arable field to the south of Wick Lane. Wick Lane is a narrow road with boundary hedgerows (Priority habitat) on either side. There is also a line of trees on the eastern boundary. The Hedgerows are Priority habitats. There is a small area of Lowland Mixed Deciduous Woodland Priority habitat 100 metres to the east of the Site. The Site would utilise the existing processing plant via a new internal access road. This access road would cross through the field to the south and would then have to cut through an area of Lowland Mixed Deciduous Woodland Priority habitat. This would result in the loss of a small section of woodland dissecting the two remaining segments.
- The Site is graded Amber because ecological impacts are likely to be moderate and is likely to require medium levels of mitigation to make the Site acceptable. The Site could have a major impact upon the natural environment including Ardleigh Reservoir and other surrounding waterbodies. The Site could have a moderate impact upon Priority habitats and species including the Lowland Mixed Deciduous Woodland and Hedgerow 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.
- Any application would require demonstration that the operations would not adversely affect the water quality of the nearby waterbodies, Hedgerows, 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.

- The allocation of the Site in conjunction with the existing active Crown Quarry site would likely result in less than substantial' harm at a mid-level to Wick Farmhouse (List UID: 1253913) and Barn Adjacent to Road at Wick Farm (List UID: 1253914),
- There would also be 'less than substantial' harm at a low level to the significance of Grade II listed Fountain Farmhouse (List UID: 1253912).
- The undeveloped, agrarian landscape of the Site contributes to the setting and significance of the listed buildings and the fundamental change in land use and land character would undermine the ability to understand and appreciate their significance.
- The cumulative impact of this proposal along with the proposed site allocation A79 Crown Quarry North of Wick Lane would likely represent a high level of 'less than substantial' harm to the setting and significance of Wick Farmhouse and Barn due to substantial curtailment of the agrarian landscape to the north and east of the farm.
- 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.
- 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 'high' groundwater flood risk.
- The Site is entirely within Flood Risk Zone 1 and therefore is not at risk from fluvial flooding.
- Access proposed via an existing access serving Crown Quarry onto the Old Ipswich Road which is classified as a Secondary Distributor in Essex County Council's Development Management Route Hierarchy. This corresponds 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 feasibility of access onto Wick Lane would need to be considered.

• The Site is within Zone III - Total Catchment Groundwater SPZ and medium to 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.
- One building of unknown use is within the Site boundary. Three farm buildings are more than 20m but less than or equal to 50m from the Site. Ten residential buildings and six farm buildings 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.

