



Candidate Site Reference	Candidate Site Name	District	Existing use	Site Area (ha)	Potential Yield (million tonnes)
A79	Crown Quarry – North of Wick Lane	Tendring	Agricultural	23.19	1

The Site is promoted as an extension to Crown Quarry, located north of Wick Lane and west of Ardleigh. The Site area is approximately 23.19 ha and is proposed for 1 million tonnes of sand and gravel extraction with processing and distribution from the adjacent Crown processing plant. Extraction would not commence until after extraction at the existing quarry has been completed. The adjoining uses include agricultural fields, woodland, and residential and farm buildings. The village of Ardleigh is east of the Site. The Site is promoted as accessible via the use of the existing Crown Quarry site access to the highway network and through creating a new crossing point to allow vehicles to cross Wicks Lane through the internal access road at Crown Quarry. The feasibility of crossing Wick Lane would need to be explored with the Highway Authority. 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	Amber	Amber	Red/ Amber	Green	Green	Red/ Amber	Green	Amber	Red	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 0.5k to the north-west of the Site.

- Site A79 is within the Site of Special Scientific Interest (SSSI) minerals Impact Risk Zone for Bullock Wood, and Cattawade Marshes SSSI and Stour Estuary Special Protection Area (SPA) and Ramsar site. Ardleigh Gravel Pit is 2.3km from the Site; this is a geological SSSI and so ecological impacts are not considered further. Bullock Wood SSSI is on the opposite side of the A120; this road creates a substantial barrier to the movement of species, except birds. Lapwing and Brent Goose are both listed on the waterbird assemblage for the Stour Estuary Special Protection Area and it is possible that the Site could be used by these species as functionally linked land for the SPA. However, the SPA is c4.7km to the northeast and there are numerous fields in between, and so the likelihood of the Site being used by a significant proportion of the population (greater than 1%) is considered to be low.
- There is 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 also an ancient woodland; the intervening landscape includes Lowland Mixed Deciduous Woodland Priority habitat and hedgerows creating habitat connectivity.
- The Site is predominantly an arable field bordered by hedgerows which are mostly Priority habitat. Lowland Mixed Deciduous Woodland Priority habitat is adjacent to the northern Site boundary. A small area of Lowland Mixed Deciduous Woodland and a pond are on the Site in the north-east corner. It appears from the Block Proposals Plan that these would be retained. There is a Hedgerow (Priority habitat) which protrudes into the field and would be lost to the development. There are several mature Oak trees on the boundaries which are Notable or significant boundary features of the Site. The southern boundary runs along Wick Lane; this is a narrow road with boundary hedgerows (Priority habitat) on either side. The Site would require a road crossing point, including visibility splays, across Wick Lane, which would require removal of sections of Hedgerow Priority habitat.
- 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 Priority habitats and species, including the

direct loss of Hedgerow Priority habitat. This also includes impacts to water quantity and quality of the watercourses on and near to the Site; to Priority Hedgerow habitat and adjacent Lowland Mixed Deciduous Woodland Priority habitat. 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 Ardleigh Reservoir, the watercourses and associated habitats, Hedgerows mature 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.
- 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 the significance of Grade II listed 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 mid-level to Bloomfields Farmhouse (List UID: 1253915) and Barn Approximately 40 Metres North East of Bloomfields Farmhouse (List UID: 1261548), and to Fountain Farmhouse (List UID: 1253912) at the lowest level.
- 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 A80 Crown Quarry – South 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 'medium' 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.

- Access proposed via an existing access serving Crown Quarry onto Old Ipswich Road. This is acceptable in principle. Any access via Wick Lane would need to be considered further in consultation with the Highway Authority.
- The proposal would require a new crossing point either side of Wick Lane to enable the existing site access to be used to export minerals by HGV. No details provided.
- The Site is within Zone III Total Catchment Groundwater SPZ and unproductive/medium to low groundwater vulnerability. The Site is within a Drinking Water Safeguard Zone (Surface Water). A water course is 10m north east of the Site and another water course is 190m south east. Appropriate consideration would be required to mitigate the potential impacts on hydrology, hydrogeology, and drainage – high levels of mitigation may be required.
- 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 contains high pressure gas mains (Cadent Gas) within the Site boundary. Further investigation and consultation would be needed to determine appropriate mitigation measures to make the Site acceptable which would likely include diversion and/or protection. Diversion/protection may not be possible and/or may be cost prohibitive.
- One residential building is within the Site boundary, two residential buildings and two farm buildings are adjacent to the boundary of the Site (0m). Four residential buildings and one farm building are outside the Site boundary less than or equal to 20m from the Site. Two residential buildings are more than 20m but less than or equal to 50m from the Site. Four residential buildings,

one building of unknown use 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 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: <u>www.essex.gov.uk/minerals-review</u>

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