

LOCAL GEOLOGICAL SITES

THURROCK DISTRICT



ThG16 Turners Farm Gravel Pit

Site location: Turners Farm Gravel Pit, Walton's Hall Road, Mucking

Grid reference: TQ 677 801

Status: Private land

Summary of the geological interest:

A disused gravel pit next to Turners Farm on Walton's Hall Road (opposite Walton's Hall Museum) has a fine section through the Mucking Gravel, representing the bed of the Thames during the Ice Age some 200,000 years ago.

The east face of the pit is about 5 metres high and provides one of the best vertical sections through Thames Terrace gravel to be seen in the Thames Valley.



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Site Assessment. Local Geological Sites (LoGS) in Essex are assessed using criteria based on DEFRA guidance. An assessment form is used which asks key questions under four value categories: scientific, educational, historical and aesthetic. This site has been assessed and qualifies under these criteria.

Scientific interest and site importance

The Thames was diverted to roughly its present course by the ice sheet during the coldest period of the Ice Age, some 450,000 years ago. It was then a much larger river and its course extended across a wide area, depositing huge amounts of gravel, forming wide floodplains as far north as Hornchurch.

Subsequent glacial/interglacial cycles saw the river cut down through its floodplain to create another floodplain at a lower level, and leaving fragments of the former floodplain as terraces each side of the valley. This process was repeated several times leaving us with a complex sequence of terraces of different ages along the Thames valley, each one providing valuable information about the climate, flora and fauna of Britain during the Ice Age.

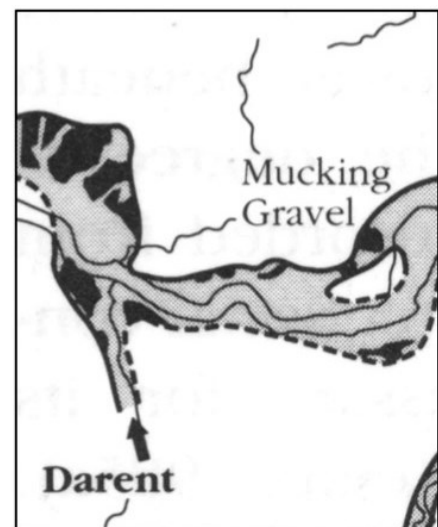
The disused gravel pit next to Turners Farm on Walton's Hall Road has a fine section through the Mucking Gravel, representing the floodplain of the Thames some 200,000 years ago.

The east face of the pit is one of the best vertical sections through Thames Terrace gravel to be seen in the Thames Valley and it is important to retain it for scientific study. It is slowly being invaded by vegetation but could be easily cleared. It could also be easily incorporated into any future use for the site



200,000 year old Thames gravel (Mucking Gravel) exposed in the east face of Turners Farm Gravel Pit.

Photo: © G. Lucy



200,000 years ago

The route of the Thames through what is now Thurrock during deposition of the Mucking Gravel.

The existing course of the Thames is shown and the outcrops of the gravel are shown in black (map extracted from Bridgland 1994).

References:

BRIDGLAND, D.R. 1988. **The Pleistocene fluvial stratigraphy and palaeogeography of Essex.** *Proceedings of the Geologists' Association*. Vol. 99. Page 304.

BRIDGLAND, D.R. 1994. **The Quaternary of the Thames.** Chapman and Hall. Geological Conservation Review Series.