

LOCAL GEOLOGICAL SITES

UTTLESFORD DISTRICT



UfdG29 Radwinter Road Chalk Quarry

Site location: On the north side of Radwinter Road, Saffron Walden (just east of Tesco supermarket).

Grid reference: TL 553 385

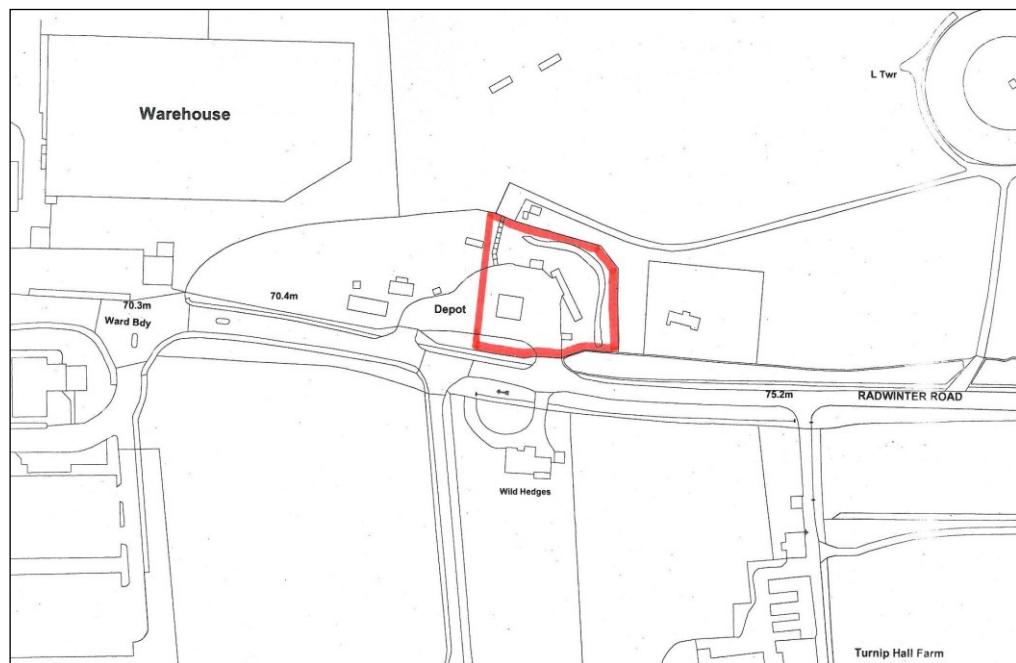
Status: Privately owned

Summary of the geological interest:

The disused chalk quarry on Radwinter Road has a fine exposure of Upper Chalk. The site is in use as a fuel storage depot but the Chalk face can be seen from the pavement on Radwinter Road.

Chalk is a special type of limestone formed on the floor of a tropical sea about 80 million years ago during the Cretaceous period. The Chalk Sea is thought to have covered most of northern Europe, the purity of the chalk being evidence that coastlines were then far away and sea level was very high. At this time the European continent had not yet separated from North America. Chalk underlies the whole of the Saffron Walden area but exposures are very rare.

In the early twentieth century, when the quarry was being worked, six species of fossils were recorded from here by the quarry workmen.



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 cliff face at the Radwinter Road Quarry appears to be in the *Micraster coranguinum* zone of the Upper Chalk. The Chalk is about 200 metres (nearly 700 feet) thick and so this cliff represents a very small part of the total thickness of Chalk beneath our feet.

In 1904 it was reported that the following fossils had been obtained here by the workmen (Jukes-Brown 1904):

- Coscinopora quincuncialis* (sponge)
- Parasmilia centralis* (coral)
- Bourgueticrinus ellipticus* (crinoid)
- Cidaris sceptrifera* (echinoid)
- Actinocamax?* (belemnite)
- Scapanorhynchus raphiodon* (shark's tooth)

The quarry is also referred to in the Geological Survey Memoir for the Saffron Walden district (Osborne White 1932), which reports the occurrence in the quarry of stout pieces of the bivalve shell *Inoceramus* in profusion. The survey memoir also states that by then (1932) the quarry was disused.

Disused chalk quarries in north-west Essex are very rare and this small quarry is a fine example. It is of scientific importance. It is also of historical importance as an example of a long extinct industry.

Other information

The site is in use as a fuel storage depot with no public access.

References

- JUKES-BROWNE, A.J. 1904. **The Cretaceous Rocks of Britain**. Memoirs of the Geological Survey. Vol. 3. Page 239.
- OSBORNE WHITE, H.J. 1932 **The Geology of the Country near Saffron Walden**. Memoirs of the Geological Survey, England and Wales. Explanation of Sheet 205. Pages 41-42.



View of Radwinter Road Chalk Quarry from Radwinter Road. Photo: G. Lucy