

# LOCAL GEOLOGICAL SITES

## BRAINTREE DISTRICT



### BraG16 Moat Farm Sarsen Stone, Gestingthorpe

**Site location:** A large sarsen boulder outside Moat Farm, Gestingthorpe

**Grid Reference:** TL 816 367

**Status:** Public – on the verge at a road junction

#### **Summary of the geological interest:**

A very fine mamillated sarsen stone 1.2 metres by 1 metre (4 feet by 3 feet) in size sits near the road junction outside Moat Farm.

Sarsens are remarkably abundant in the area around Gestingthorpe village. Boswell (1929) mapped their distribution in the Sudbury district and stated that over sixty blocks of sarsen-stone were present in Gestingthorpe parish.



**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:**

Sarsens are extremely hard boulders of sandstone formed around 55 million years ago when the Sarsens are extremely hard boulders of sandstone that are often used as boundary or entrance markers having been dragged from nearby fields. They formed around 56 million years ago when the climate of Britain was hot and a layer of sand beneath the surface of the ground became cemented with quartz. Research has compared the conditions under which sarsens and puddingstones may have been formed with the present day climate in the Kalahari Desert and parts of Australia. They are thus very resistant to erosion and have survived the rigours of the Ice Age. They were weathered out of the geological strata where they were formed – the Lower Tertiary Upnor Formation, which outcrops locally.

The remarkable 'mamillated' surfaces on some sarsen stones are growth structures which were formed as the quartz slowly crystallised between the sand grains, spreading out from a central point.

**Reference:** Boswell 1929, Lucy 2003a



*Moat Farm Sarsen Stone – looking east, at junction outside Moat Farm (photo D Potts 2023)*