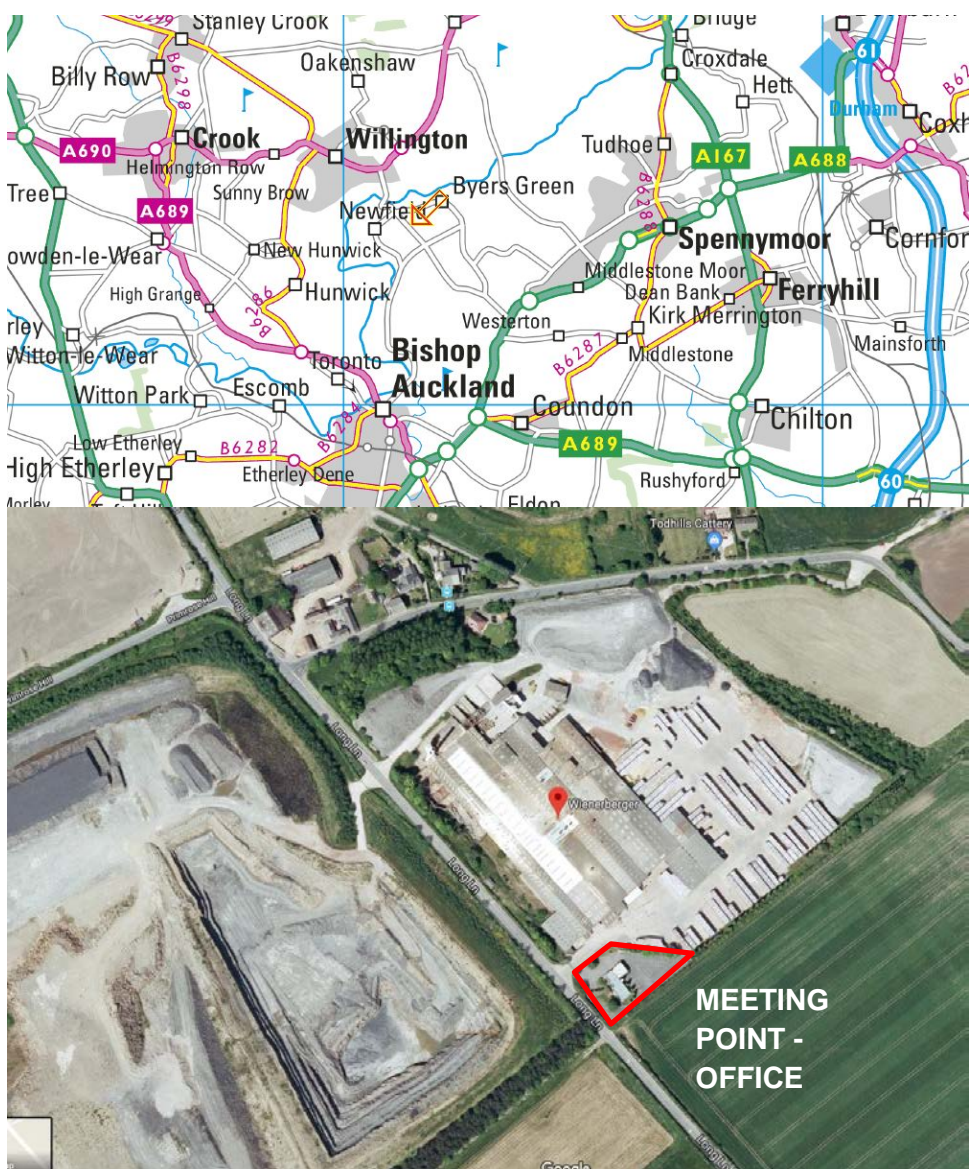
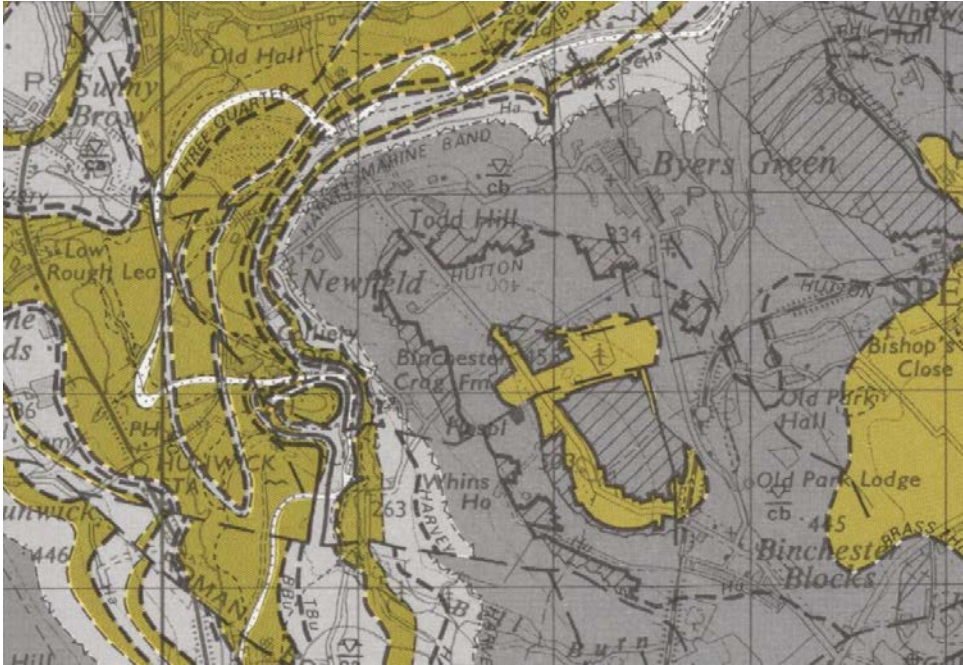


**EIG FIELD TRIP 2018****WEDNESDAY 12<sup>th</sup> SEPTEMBER 2018****Wienerberger Todhills Brickworks****Bishop Auckland  
Co. Durham**

<b>Location</b>	Wienerberger UK Todhills Works Newfield Bishop Auckland County Durham DL14 8BA Tel: 01388 604071
<b>Field Trip Leader</b>	Andrew Carp, Resource UK Ltd
<b>Contact &amp; Meeting Point</b>	Julie Hall, Technical Manager Main Office
<b>Website</b>	wienerberger.co.uk
<b>Objective</b>	Tour of brick production factory and quarry
<b>Time of arrival</b>	12 <sup>th</sup> September 2018 / 1pm
<b>Length of Visit</b>	(refreshments provided) 2-3 hours
<b>Max No</b>	n/a
<b>PPE required</b>	Helmet. Hi-Vis trousers and jacket/waistcoat. Eye Protection. Ear Defenders. Lace up safety boots (steel toecap)

<p><b>Location Map</b></p>	 <p>Access from Long Lane          BNG NZ 21385 33730          Car Park in red polygon</p>
<p><b>Outline of Trip</b></p>	<p>Tour of modern brickworks and associated brickclay / shale quarry (Long Lane Quarry).</p> <p>The works produce 30 million ‘frogged facing’ brick per year, manufactured from local quarried Coal Measures shale and imported fireclay</p> <p><b>History of the Works</b>          Todhills Brickworks was established in the mid 1930’s on the site of the old Todhills Railway Station.          The present No. 2 Works was built in 1964 and commissioned the following year as a single tunnel kiln plant.          No. 3 Works was built in 1968 to produce clay field drainage pipes.          In 1974, No. 2 Works had a second tunnel kiln commissioned and in 1977/78, No. 2 Works underwent a major re-building and refurbishment scheme.</p>

	<p>In 1980, No. 1 Works was commissioned to produce special shaped bricks to complement the production of No. 2 and No. 3 Works. The present No. 3 Works dates from 1983 when the De-Boer machine was commissioned.</p> <p>The site employs 60 people including contractors and staff.</p>
<p><b>Geology</b></p>	<p>Long Lane Quarry, adjacent to Todhills Works, extracts mudstone beds from strata near the base of the Pennine Middle Coal Measures from the Hutton Coal (largely worked historically) down to the Harvey Coal. In between is a sequence including shales and mudstones, sandstones and two very thin coals with underlying seat earths, all of which are used in the brickmaking process. Materials are extracted and laid in carefully controlled multi-layered stockpiles to ensure consistency. Some of the harder materials require a period of weathering before they are suitable for use in the factory.</p> <p>Long Lane is the third quarry at this site following on from Cobey Carr quarry to the North (now a landfill) and Clarence Farm to the North East which has been restored.</p>  <p>Excerpt from BGS map no. 26          Contains British Geological Survey materials © NERC 2018</p>
<p><b>Driving time to Durham University</b></p>	<p>10 miles /15 km          20 mins</p>